OKEECHOBEE COUNTY

COMPREHENSIVE URBANIZED AREA STORMWATER MASTER PLAN

VOLUME I

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CAS PROJECT No. 00-0903-146

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OKEECHOBEE COUNTY
COMPREHENSIVE URBANIZED AREA
STORMWATER MASTER PLAN

SECTION 1

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1.0 Executive Summary

The Okeechobee County Board of County Commissioners (BOCC) has recognized the deficiencies and consequent needs of the County and the public at large with regard to stormwater and ensuing drainage issues that have arisen over the years. The Commissioners subsequently requested that a Stormwater Master Plan (Plan) be put together in order to identify the deficiencies of the current system and to outline suggested requirements to improve the drainage systems in order to meet current standards and alleviate flooding within the County-wide area.

The Commissioners took steps to insure stormwater improvements by directing Craig A. Smith & Associates (CAS) to prepare a Stormwater Master Plan. Areas of immediate concern were determined and a stormwater design criteria was established whereby existing conditions within the County could be evaluated and conceptual engineering designs could be completed.

Survey base maps were prepared with available survey data (supplemented with additional survey data by CAS) permit data research, and infrastructure data gathering within the County targeted areas and within City of Okeechobee targeted areas. Drainage basins were identified and conceptual analyses were performed on existing and proposed systems. Upon determination of stormwater solutions, based on established regulatory criteria, current competitive unit prices were utilized to prepare opinions of cost for each of the targeted areas.

Estimated opinions of costs for these areas are anticipated to be between $51.8M and $55.2M. The difference in the two costs is illustrated[1] in this Plan. There are two areas that have two possible options each. Both areas have an option to discharge via a gravity system or a pumped system. The construction costs include land acquisition at an assumed average unit price of $50,000.00 per acre. However, land acquisitions will be negotiated in accordance with fair market value assessments. It is also important to

[1] See Exhibits P1A, P1B, P5, & P6

note that depth of implementation is a factor to be solely decided by the BOCC in accordance to the level of annual funding the County deems feasible for the outlined capital improvements.

This report identifies funding mechanisms, including a stormwater utility, that can be utilized by the County and City, in part or a combination thereof, to meet financial goals on a long term or continuous basis. Through these funding sources the County and the City have an opportunity to help alleviate their stormwater needs with an immediate impact in the present or as a long-term goal for the future. With the Plan in place, the County and City have a tool with which to implement a long-term plan of action and obtain funding. In addition, it should be noted that the Plan is a living document that can be amended or updated the City or County chooses.

1.1 Background

Okeechobee County is one of the few remaining rural counties in peninsular Florida and encompasses over 774 square miles in area with a permanent population nearing 40,000. The rural description may soon no longer apply as the pace of development has been increasing. The more densely populated City, covering approximately 5 square miles, has seen its population increase to nearly 6,000 permanent residents. Both the City and the County have significant seasonal population increases, as is common throughout Florida. Fueled in large part by migration from coastal Florida, the landscapes of both the County and City of Okeechobee are on the verge of significant change.

Noting a variety of factors, including the coastal migration, the availability and relative affordability of land and housing, a pleasant climate and an enviable quality of life, it is anticipated that the population and rate of growth in the City and County will continue to increase. Development pressure will be strong and sustained over the next several decades. Along with the growth have come growing pains, including the realization that some of the existing infrastructure will not be sufficient to provide for the short term and longer term needs of the County. Some existing deficiencies in the City and County

stormwater management systems have already been identified and brought to the attention of all during the severe weather events of the last several years.

A point to be made is that the US Army Corps of Engineers, in its March 12, 1963[2] General Design Memorandum discussing the Lake Okeechobee Northeast Shore Area, projected that the land use pattern in Okeechobee County in 2010[3] would remain predominantly agricultural with very little urbanization. It can now be seen that the present day does not reflect what was projected more than 40 years ago. The City and County expect to do a better job of preparing for the impacts over the next 40 years.

The City and County wish to maintain the quality of life and the essence of their rural characters while providing a higher level of infrastructure to support the inevitable residential, commercial and industrial development. Correcting existing deficiencies while providing the framework for future improvements and the proper guidance for new development is of paramount importance. Also of significant importance are the preservation and enhancement of the natural environment while accommodating the growth and changing landscape that have already begun.

With past and current deficiencies in mind, the City and County have initiated plans to provide a better stormwater management system for the next generation. It is the goal of the City and County to better address the quality and quantity of stormwater runoff, to better protect the natural environment, to better serve the investment in the County and to better protect the residents of the County.

1.2 Proposition of Solution

Preliminary research has concluded that in order to achieve the previously mentioned goals of land utility maximization with regard to current residential and commercial needs in addition to the allowance of additional growth, a Stormwater Master Plan is essential to ensuring that these goals are met. The ultimate goal is to augment and

[2] See Exhibit E1 – US ACOE 1963 Land Use Map
[3] See Exhibit E2 – US ACOE 2010 projected Land Use Map

support areas in which pre-existing stormwater infrastructure and management procedures are in place and to construct stormwater improvements that will benefit the City and County equitably in areas of need.

1.3 Extent of Master Plan

In order to maximize the efficiency of the study, the scope of the geographical area was focused on the southern-most developed region of the County and includes the City of Okeechobee. Intentionally, these boundaries were selected due largely in part to their increased flooding tendencies. A large portion of stormwater issues fall disproportionately on the outlined region as would be expected due to its development. Causes of flooding are the direct result of undersized or underperforming drainage systems, unmaintained flowways, the close proximity of the region to Lake Okeechobee and its potential to inundate low lying lands, a high potential for growth within non-engineered subdivisions and the existing stormwater removal capacity of the South Florida Water Management District's (District) system. All in all, the environmental demands placed upon areas in which substantive growth is underway have continuously given way to socio-ecological clashes. In this instance, increased storm runoff is often the inevitable result of such coexistence in which growth has not been sufficiently planned for in advance.

Following the hurricanes of 2004 and 2005 along with year-round storms, Okeechobee County in conjunction with the District determined that a Stormwater Master Plan which would initially focus on the most distressed areas should be developed. Said plan aims to provide for a road map into the future to enhance the water resources of the County and better the quality of the Lake. Funding for this project was made possible by a Cooperative Agreement No. OT0601187 between the County and the District. Every effort to include the City of Okeechobee in this study is utilized. CAS is familiar with many of the designated flood prone areas under consideration due to its long-standing professional association with the County.

The primary objective of the plan is to identify and determine corrective and preventative actions required to resolve existing flooding conditions, to prioritize the target areas, to develop water quality solutions, and to develop cost estimates for present and future strategic planning. This is accomplished by utilizing Best Management Practices (BMP) and engineering design principles for the development of new retrofitted stormwater systems which address water quality and water quantity concerns to the maximum extent possible.

Current Federal, State, and County regulations and legislation (e.g. Northern Everglades and Estuary Act) have increased the need to create an overall Plan to address both the quantity and quality of runoff that is conveyed through gravity systems with ultimate discharge into nearby water bodies such as Lake Okeechobee. With current concerns for stormwater and environmental protection, municipalities are now finding themselves required to implement plans that preserve the water resources of the County and State by reducing off-site discharge, increasing water quality treatment, and enhancing groundwater recharge.[4]

Specifically, the Environmental Protection Agency (EPA) passed legislation as part of the Water Quality Act of 1987 in the final rule of the National Pollutant Discharge Elimination System (NPDES) Permit Regulations for Stormwater Discharges published in the November 16, 1990 Federal Register which required municipalities to obtain permits and provide and implement a plan to reduce pollutant loading from stormwater discharges. A second phase to the NPDES Permit is currently being regulated. On a local level, the stormwater discharges directly affect such pivotal issues as quality of groundwater recharge, primary waterways, and natural resources.

The purpose of the Plan is to inventory existing systems within the study area, evaluate needed stormwater conveyance systems, and recommend future improvements (as needed) to the existing stormwater management infrastructure within the City/County

[4] It should be noted that most rural areas are currently facing such issues as flood plain restoration and protection.

parameters; it should be noted that caution should also be taken in evaluating storage. This Plan is to serve as a tool to help the governing bodies manage its stormwater facilities effectively. By reducing unplanned off-site discharges, increasing water quality treatment techniques, and properly maintaining existing and proposed drainage networks, the City/County, through this study, can implement an efficient stormwater system that provides relief for critically flood-prone areas throughout the community in addition to allowing for extensive growth to take hold in the area in the near or distant future. The implementation of The Plan is to be used as a systematic approach to achieving these goals within the budgetary constraints of the project.

2.0 Data Compilation

Within the master plan boundaries, infrastructure information obtained from Tradewinds Professional Services, Inc. (TPS) via the previous HDR Engineering Inc. Stormwater Master Plan update was combined with infrastructure data obtained by CAS. Survey information obtained by TPS under the guidance of the HDR master plan update was utilized for water quantity analysis. For modeling input, missing channel sections were surveyed for SW 7th, SW 26th, and SW 32nd Avenues flowways including culvert crossings and combined with the survey data obtained by TPS. Additional channel survey data was obtained for a County ditch immediately upstream of the L-62 Canal and for the Airport ditch. Existing District permit information was obtained and mapped[5]. In the absence of available contour map data, USGS Quadrangle Maps were combined to create the requested Condensed Topographic Contour Map[6]. In addition, public involvement was included in the data collection process through a public workshop and community outreach survey described in further detail below.

2.1 Intent of Outreach Survey

The Planning Team for the Stormwater Study wished to collect data from the general public regarding the drainage issues in Okeechobee County and their reaction to

[5] See Exhibit J for DISTRICT Permitted Site Map
[6] See Exhibit G for USGS Condensed Topographic Map

potential solutions. One public workshop was conducted at the onset of the Plan. Another public workshop will be planned prior to final plan adoption. In addition, a survey was given wide distribution for all residents of the County.

The survey was intended to convey the thoughts of the general public regarding drainage issues. The public was asked questions about the severity of the problems and other questions regarding solutions. This survey was not intended to be a referendum regarding any issue, but rather an opportunity for the public to have input.

2.2 Question Development

The development of the survey instrument was a collaborative effort among all of the Planning Team. The first step was to determine the information required by the technical team members and to gain an insight regarding the potential Stormwater Fee issue. The survey was kept short to elicit more response from the public. The original version of the survey instrument was reviewed by the Administration and elected officials of Okeechobee County and the City of Okeechobee. Every effort was made to incorporate all concerns of the parties impacted by the issue.

2.3 Outreach Survey Distribution

The Planning Team attempted to distribute the survey in a manner that gave the widest opportunity for residents to provide input. Cooperation from the City of Okeechobee, Okeechobee County and the South Florida Water Management District was vital to the distribution efforts. The final distribution included the following:

- Public input meetings where residents were requested to complete the forms and return them to the Planning Team
- The survey was placed in the newspaper for wider distribution
- A website was produced where residents could complete the survey
- Surveys were placed in various public places with a collection opportunity

The public was able to return their completed surveys to a Planning Team member, through fax, in an e-mail or on the website.

2.4 Results

The completed surveys enabled the Planning Team to identify a variety of locations where stormwater is a problem. The persons who completed the survey were also able to offer their thoughts to the process and potential solutions.

There were several questions that led to important findings for the Planning Team. These questions are:

Have you noticed a drainage problem?

RESPONSE	NUMBER	PERCENTAGE
Yes	74	94.8
No	3	3.9
No Answer	1	1.3
TOTAL	78	100.0

Result:

A vast majority of the respondents believe that drainage problems exist.

Place of residence:

LOCATION	NUMBER	PERCENTAGE
City	16	20.5
County	59	75.6
No Answer	3	3.9
TOTAL	78	100.0

Result:

According to census data, the population of the City of Okeechobee is 14.2% of the population of Okeechobee County.

Occurrence of Drainage problems[7]:

OCCURENCE	NUMBER	PERCENTAGE
After a short rain of 1 hour (A)	12	15.4
After a short rain and an intense storm (A&C)	1	1.3
All rain events (A, B & C)	4	5.1
After a 2 hour rain event (B)	36	45.2
After a 2 hour rain and an intense storm (B & C)	6	7.7
Only after an intense storm (C)	15	19.2
No Answer	4	5.1
TOTAL	78	100.0

Result:

Most of the problems are observed during storm events with durations greater than or equal to 2 hours.

Would you be willing to pay a fee to address stormwater issues?

RESPONSE	NUMBER	PERCENTAGE
Yes	38	48.7
No	29	37.2
No Answer	11	14.1
TOTAL	78	100.0

Result:

[7] See Exhibit K for Questionnaire Location Map

The responses indicate that the general public is likely to be receptive to a Stormwater Fee.

3.0 Problem Area Identification

Within the designated area[8], three targeted areas[9] were selected in order to capture a confident assessment of the regional needs at large. Having compiled all available information within the County targeted areas and within City of Okeechobee targeted areas, drainage basins were identified and conceptual analysis were performed on existing and proposed systems. These areas have been labeled as:

3.1 The "Southwest Corridor"

It should be noted that this "Southwest Corridor" has faced the most flooding problems of the three sub regions. This area is approximately 4,800 acres in size and is located west of US Highway 441 and south of the SEC Railroad. This area also falls within the District's basin limits of the S-133 Pump station. In the Plan, four major flowways within this section of the County were identified. They are known as Whidden, Ferrell (City Limits), Wolf, and the FDOT flowways and are also known as SW 7th, SW 16th (NW 12th), SW 26th, and SW 32nd Avenue ditches. For the purposes of this report, three systems of conveyance will be defined as follows; primary, secondary, and tertiary systems. Primary conveyance systems are those operated by the District and/or ACOE such as the Rim Canal, secondary systems are those County and City flowways which discharge into the primary systems, and tertiary systems are those systems with the ability to collect and bring water to the secondary systems via roadside swales, catch basins, and culverts.

The Southwest Corridor is primarily controlled by the Rim Canal elevations and S-133 Pump Station. The S-133 Pump Station serves a 40 square-mile area in the southern

[8] See Exhibit A for Comprehensive Stormwater Master Plan Project Area.
[9] See Exhibit N for Targeted Areas

region of Okeechobee County per the District's Technical Publication of April 1992 (DRE-313). This station is the primary flood control structure for this basin and can remove 0.58" of runoff from the area in a day. It is turned on when headwater stage reaches 14.0' NGVD and is turned off when it declines to 13.0" NGVD. Highest headwater recorded to date was 18.0' NGVD (3/10/83). Other structures within the basin such as the S-193 and G-106 exist to provide access for boats to pass between Lake Okeechobee and Taylor Creek and to transfer water from Taylor Creek to the lower reaches of Mosquito Creek to improve water quality, respectively.

The SW 7th Avenue flowway limits are between SW 2nd Street and SR 78 and is approximately 3.25 miles long. The flowway serves the most urbanized areas of the County and City west of US Highway 441 including a stretch of US Highway 441. Structure and roadway flooding has been reported in these areas north of SW 32nd Street.

The SW 16th Avenue flowway limits are between NW 7th Court and about 2/10th of a mile south of NW 44th Lane where it then takes a western turn and connects to the SW 26th Avenue flowway. Note that within the City limits, SW 16th Avenue is identified as NW 12th Avenue and the flowway is identified as "City Limits Ditch."

The SW 26th Avenue flowway limits are between 3/10th of a mile north of SW 16th Street (Old Dixie) and Lemkin Creek and is approximately 3 miles long. The SW 32nd Avenue flowway limits are between SW 8th Street and Lemkin Creek and is about 2.75 miles long.

The apparent contributing drainage areas of these secondary conveyances consist of non-engineered platted subdivisions, undeveloped parcels, and a few stormwater engineered developments. The majority of the drainage systems consist of roadside swales and driveway culvert systems. While roadside swales typically provide adequate stormwater conveyance and water quality treatment for a road right-of-way, they are not adequate to serve the areas outside the right-of-way. Additionally,

impediments are sometimes created with undersized driveway culverts. The latter and the lack of surface water storage are the primary reasons for flooding in the area. Impediments or inefficiencies are also created when discharge culverts are improperly installed. Culverts installed one foot above ditch bottoms will not realize full flow capacity until conditions are severe enough to create full flow capacity.

3.2 Four Seasons

This northeastern region of the study area, comprising roughly 1,174 acres, is a largely residential development with some commercial areas. Four Seasons is an un-platted, subdivided, and non-engineered community. Challenges to the Plan for this area are created by the fact that some of the existing natural or man-made conveyances are located on private property such as Center Street ditch. In addition to flooding concerns, untreated runoff is discharged to the Lake via Mosquito Creek and its tributaries.

Four Seasons is primarily located within the District's C-59 (Taylor Creek-Nubbin Slough) Basin. Per the District's Technical Publication of November 1988, the C-59 Basin is approximately 187.9 square-miles in area lying in Okeechobee County (159.8 sq-mi.), St. Lucie County (9.4 sq-mi), and Martin County (18.7 sq-mi). There are three control structures regulating flow in the C-59 Basin: S-191, S-192, and the previously mentioned G-106. S-191 is a gated spillway located at the outlet of the C-59 Canal to Lake Okeechobee. The structure's function is to maintain optimum stages upstream in the C-59 Canal and in the L63N and L63S Canals and to prevent a hurricane tide on Lake Okeechobee from entering the C-59 Basin. The structure is operated to maintain a headwater stage of 19.0' NGVD and has a recorded peak stage of 23.08' NGVD (7/18/74). S-192 is a gated culvert and pump station located in L63N at the point the levee crosses Taylor Creek. The structure functions as a divide between the C-59 Basin and the S-133 Basin. The gates may be open to divert flows from Upper Taylor Creek and the L63N canal to Lower Taylor Creek to facilitate maintenance on the L63N Canal. The gates may also be opened to augment flows in lower Taylor Creek to

mitigate, by the effects of the stagnant water conditions that occurs in the lower portion of Taylor Creek.

Four Seasons is primarily a non-engineered subdivision and is served by passive roadside swale systems, sloughs that are tributary to Mosquito Creek, and man-made canals (Center Street ditch) and culvert crossings. At the time of this writing, there are two developments within 1,173 acre area that were issued permits from the District to date and cover less than 40 acres. They are Cedar Cove II and Tall Pine Estates (f.k.a. Armstrong Subdivision).

A flood control study of Four Seasons was performed by Briley, Wilds & Associates in December 1991 under DISTRICT Contract No. SF 91058-3 R. Based on the Briley Wilds study, storm runoff from about 1,300 acres east of NE 80th Avenue impacts Four Seasons. The impact is created when the storm runoff from this off-site area is trying to flow to Mosquito Creek via Four Seasons. The study determined existing peak flood stages and the improvements needed to alleviate the on-going flooding. The high costs of the recommended improvements and lack of funding prevented the County from going forward with the improvements. The study also considered detention ponds for water quality treatment but was not required to analyze the flood protection benefits that detention ponds would bring. Similar to the Southwest Corridor, the majority of the drainage systems consist of roadside swales and driveway culvert systems. While roadside swales typically provide adequate stormwater conveyance and water quality treatment for a road right-of-way, they are not adequate to serve the areas outside the right-of-way. Additionally, impediments are created with undersized driveway culverts. The latter and the lack of surface water storage combined with continued development near the tributaries sloughs are the primary reasons for flooding in the area.

3.3 A Designated "General" Region

For lack of a better name, the "General" Region comprises the northern limits of the study area and includes areas within the Taylor Creek and S-154 Basins. The divide

between the two District basins occurs about ¼ mile east of SR 98[10] with the limits of the S-154 Basin covering the Okeechobee County Airport, the Okeechobee County Airport Industrial Park, and about 2/3 of the Basswood Subdivision. CAS observed that while a hydraulic connection exists by way of 3-54" diameter RCP under SR 98 that would justify the inclusion of these areas to be in the S-154 Basin, portions of Basswood, and all of the airport and Industrial Park discharge into Taylor Creek via the airport and US Highway 441 ditch system. East of SR 98 this General Region includes US Highway 441, Basswood, and "City of Okeechobee Lots" non-engineered platted subdivisions. The airport and the Industrial Park have District permits and their systems are operational. Other areas include large undeveloped parcels or unplatted tracts of lands. West of SR 98 this General Region includes Royal Concrete Concepts (permitted and currently under construction), El Mira Sol, Okeechobee Parks, and Playland Park subdivisions as well as undeveloped parcels or unplatted tracts of lands. Flooding in Basswood was reported in the outreach survey and culvert blowouts have occurred east of US Highway 441 within the primary outfall ditch. Similar to the other areas, the majority of the drainage systems consist of roadside swales and driveway culvert systems. While roadside swales typically provide adequate stormwater conveyance and water quality treatment for a road right-of-way, they are not adequate to serve the areas outside the right-of-way. Additionally, impediments are sometimes created with undersized driveway culverts. The latter and the lack of surface water storage are the primary reasons for flooding in the area.

4.0 Modeling Software for Water Quality and Water Quantity

Per Task 4 of the contract, the intent of this task is to identify and utilize an appropriate existing hydrologic hydraulic model capable of simulating the existing project area features and alternative water management strategies. Model calibration and verification will be accomplished if sufficient data exists. The modeling program chosen should also be able to simulate water quality processes, and reuse of prior assembled

[10] See Exhibit C

data (as much as possible); moreover, water quality modeling may be accomplished in separate modeling software, typically acceptable to the District or State agencies.

4.1 Water Quality Summary

This section provides a summary of the water quality modeling. Details on the water quality modeling and supporting information can be located in Volume II of the Master Plan.

The GLEAMS model was used to simulate storm water discharge for Four Seasons and Okeechobee Southwest Corridor problem areas in Okeechobee County, Florida. The 50-yr (1931-80) daily precipitation record from Avon Park, Florida was selected for model applications since greater runoff events occurred during that period compared with that for 1956-2005. The 75-yr (1931-2005) record was used for frequency analyses to estimate 1-, 2-, and 3-day storm water discharge for 5-, 10-, 25-, 50-, and 100-yr recurrence intervals. A long-term record is needed to make valid frequency analyses for storm water discharge rates and volumes. The 75-yr Avon Park improves the estimates for 50-yr and 100-yr events. Avon Park is in the same climatic region. A climate generator, such as CLIGEN, could have been used to generate a long-term record, but it was considered better to use the long-term record at Avon Park, which is physically measured data. Stations closer to Okeechobee such as Okeechobee Hurricane gate 6 was terminated in the 1970's. The record at Fort Drum is short term and other readily available records are also short term.

Model simulations were made for residential and agricultural land uses in Four Seasons and Okeechobee Southwest Corridor problem areas. Average annual storm water, return flow, and total stream flow were estimated to determine water volumes to be considered in proposed storm water treatment areas (STA's) and/or drainage canals.

Total nitrogen and total phosphorus loads were determined for each sub-basin source in the problem areas. Unit masses of each element were calculated at sub-basin outlets,

and estimates were made for losses in channel conveyance systems and STA's. These estimates provide potential plant-nutrient loadings to Nubbin Slough, Mosquito Creek, and Lemkin Creek.

Average-annual unit-area storm flow in Four Seasons ranged from 6.46 in/ac for improved pasture to 9.65 in/ac for residential area. Average annual unit-area stream flow (storm flow + return flow) ranged from 9.69 in/ac to 12.53 in/ac for the same land uses. The 1-day 5-yr storm flow was 2.67 in/ac for improved pasture and the 100-yr storm flow was 5.99 in/ac. The 1-day storm flow for residential areas ranged from 3.08 to 6.37 in/ac for the 5-yr and 100-yr recurrence, respectively.

Average-annual unit-area total-nitrogen (TN) losses in storm flow at Four Seasons ranged from 2.82 to 4.78 lbs/ac while the unit area losses in stream flow ranged from 3.19 to 5.23 lbs/ac. Average annual unit area total phosphorus (TP) losses in storm flow ranged from 0.08 to 2.56 lbs/ac, and the losses in total stream flow was the same.

In the Okeechobee Southwest Corridor, average-annual unit-area storm flow ranged from 5.89 in/ac for a basin with improved pasture sod farms to 12.87 in/ac for a residential and municipal basin with relatively large impervious areas. The total stream flow ranged from 8.48 to 15.12 in/ac for the same basins. The 1-day storm flow for the agricultural basin was 2.51 in/ac for a 5-yr event and 5.52 in/ac for a 100-yr event. The corresponding values for the residential/municipal basin was 3.43 in/ac and 6.88 in/ac for the 5-yr and 100-year events, respectively.

In the Okeechobee Southwest Corridor, average annual unit area losses of TN in storm flow ranged from 2.05 to 4.29 lbs/ac, while that for total stream flow ranged from 2.29-8.05 lbs/ac. TP losses ranged from 0.08 to 2.56 lbs/ac for both storm flow and total stream flow.

Reductions of TN and TP in conveyance channels from literature were found to be approximately 60% and 15%, respectively. Reductions of TN and TP in wet detention

(STA's) were found to be 25% and 60% respectively. Total loads of TN and TP would be 10,229 lbs and 4,195 lbs, respectively, with channel losses of 6,137 lbs of TN and 629 lbs of TP for flow from Four Seasons basins into existing and proposed STA's[11]. The estimated losses for wet detention in the STA's would be 1,023 lbs for TN and 2,140 lbs for TP. Thus, the estimated loads discharging from the STA's would be 3,069 lbs of TN and 1,425 lbs of TP. Similar conveyance reductions for off-site basins OD-OF would be 689 lbs and 70 lbs for TN and TP, respectively, resulting in estimated loads entering Mosquito Creek would be 460 lbs TN and 403 lbs TP.

In the Okeechobee Southwest Corridor, where all the drainage canal flow is proposed to discharge into STA's or water management areas, the channel and wet detention reductions resulted in TN loads from 18,407 lbs to 5,522 lbs. Similar reductions for TP reduced the total source loads from 3,827 lbs to 1,301 lbs.

[11] Refer to Volume II of the Master Plan

4.2 Water Quantity Summary

In order to effectively evaluate system performance from a flood control standpoint, surface water management models of the targeted drainage areas were executed using Streamline Technologies' Advanced Inter-Connected Pond Routing (ICPR) model Version 3.0. ICPR is hydrodynamic numerical modeling software that approximates solutions to many equations governing flows. ICPR is a FEMA and District accepted modeling software for performing such analyses and is used by the majority of the consulting community.

Pre- and Post-mitigation analyses otherwise known as Existing and Proposed conditions were performed for the Southwest Corridor, Four Seasons, and the General Region areas. Design storms of magnitudes of the 5-yr, 1-day, 10-yr, 3-day, and the 25-yr, 3-day were utilized in the modeling per Task 4. While the status is unknown at this time, FEMA has undergone the remapping processes of the Flood Insurance Rate Maps[12] (FIRM) for the entire County. There are currently no FIRMs for the City of Okeechobee and the remapping process will correct this omission. Since the future map revisions extend beyond the Plan limits to include a revised 100-yr floodplain, the 100-yr, 3-day design storm event was not analyzed except for zero discharge flood stages for the Southwest Corridor and the General Region basins.

Flood benefits in the post-mitigation analyses were realized in terms of lowered peak flood stages and lower flood durations. All model input and output data are attached to this report. In the post-mitigation condition, the input file used in the pre-mitigation condition was modified and noted to represent expected improvements for District review.

4.3 Water Quantity Model (Pre & Post)

For the Southwest and General areas, simulations were executed for each design storm event. Due to its large complexity and the need to manipulate model data, as allowed

[12] See Exhibit F (Current Flood Zone Map)

by the ICPR model, the Southwest Corridor model was broken up into sub-groups; SW 7th, SW 16/12th, SW 26th, and SW 32nd groups. Basins were assigned to their appropriate sub-group. Due to the relatively flat topography, overland flow was assumed in some areas using best engineering judgment. Channel flood profiles were developed representing instantaneous peak stages. One group (General) was used in the simulation of the General Region area with similar modeling assumptions.

Through the Surface Water Improvement and Management (SWIM) Act and the Lake Okeechobee Protection (LOP) Act, the District, has constructed Stormwater Treatment Areas (STA) in an attempt to meet Total Maximum Daily Load limits for the requirement of phosphorus load reductions to Lake Okeechobee. Relevant to the Four Seasons Area is the Nubbin Slough STA, located about 3 miles south-southeast of Four Seasons, and the concept to restore the amount storm runoff to the STA tributaries to maximize/optimize treatment. This concept brought forward a feasibility study by PEER Consultants under District Contract No. C-15983-WO 01-05. The recommendation from the PEER study was to divert runoff from the intersection of NE 80th Avenue and Center Street ditch to the Nubbin Slough STA via the western and eastern branches of Nubbin Slough. Due to the prescribed scope, flood benefits from the flow diversion of the eastern branch were not analyzed. The intent of the current modeling effort was to combine the recommendations of the past two studies and evaluate the water quantity and water quality benefits. At the time of analyses, CAS performed these analyses with the intent that diverting storm runoff from the Center Street ditch to the STA was still desired by the District. A few minor modifications to the Briley Wilds study were made but generally kept the same. This involved recreating the analysis of the Briley Wilds & Associates study with the use of a detention pond, control structures, upsized culverts, improved ditches, and the flow diversion concept derived from the PEER study. The latter involved a different route to divert runoff but the concept remained generally the same[13]. Since an earlier version of ICPR model was used at the time in Briley Wilds study, the data was reviewed and recreated to run in the latest version of ICPR Version 3.0.

[13] See Exhibits O1 & O2

With regards to modeling the improvements for the Southwest Corridor, the primary focus was placed on downstream reservoir storage, upstream or intermediate detention pond storage, and channel and culvert improvements. Any model input data or simulation name prefixed by the term "PRO_" represents a proposed condition. Node nomenclature was set up so that nodes prefixed by a numeral 7 such as node 7N01 represents node 1 in the "SW 7 AVE" group, nodes prefixed by numeral 16 such as node 16N01 represents node 1 in the "SW 16/12 AVE" group, nodes prefixed by numeral 26 such as node 26N01 represents node 1 in the "SW 26 AVE" group, and nodes prefixed by numeral 32 such as node 32N01 represents node 1 in the "SW 32 AVE" group. Additionally, nodes prefixed by the letter G such as node GN05 represents node 5 in the "GENERAL" group. All other nodal data were either imported from other models or were created prior to establishing this naming convention.

Model assumptions for the targeted areas were made as follows and are shown in Table 1:

Existing land use: Area assumptions were made with respect to building areas, pavement/concrete areas and green areas for the model by visual observation or by existing permit.

Time of concentration (Tc): Due to very limited survey data, broad based assumptions were made for the Tc by applying methods for calculating times of concentration as shown in the FDOT Drainage Manual (Figure 5-19) for municipal-residential areas.

Peak Hydrograph Values: Undeveloped or unimproved parcels were assigned peak hydrograph values of 200 using the model's Gamma function while other developed parcels were assigned peak hydrograph values of 256.

Soil Conservation Service – Soil Storage/Curve Number (CN): For the purposes of the curve number determination and modeling, flatwoods soil storage was chosen.

Each basin was assigned an adjusted soil storage value that was based on the depth to the water table and the basin's percent pervious coverage. The soil storage value is then converted to a CN using SCS methods and entered in the model. The CN for each basin are shown in the following table with their respective times of concentration.

Design storms: Design storms of magnitudes of the 5-yr, 1-day, 10-yr, 3-day, and the 25-yr, 3-day were utilized in the modeling per Task 4 having rainfall values of 4.5", 7", and 9", respectively. Theoretical zero-discharge stages were also calculated for analytical purposes and are shown in the attached spreadsheet calculations including the 100-yr, 3-day design storm event.

Table 1: Hydrologic Input Data

BASIN NAME	GROUP	NODE	UNIT HYDROGRPAH	HYDROGRAPH PEAK FACTOR	TIME OF CONCENTRATION (MINUTES)	AREA (AC)	CURVE NUMBER (SOIL STORAGE)	COMMENTS
BASIN A	4 SEASONS	NA	Uh256	256.0	60.0	217.0	79.0	Hydrologic data was taken from the December 1991 study produced by BWA.
BASIN B	4 SEASONS	NB	Uh256	256.0	40.0	120.0	81.0	
BASIN C	4 SEASONS	NC	Uh256	256.0	40.0	60.0	80.0	
BASIN CC	4 SEASONS	NCC	Uh256	256.0	60.0	12.0	82.0	
BASIN D	4 SEASONS	ND	Uh256	256.0	60.0	76.0	81.0	
BASIN E	4 SEASONS	NE	Uh256	256.0	100.0	144.0	80.0	
BASIN F	4 SEASONS	NF	Uh256	256.0	100.0	147.0	79.0	
BASIN G	4 SEASONS	NG	Uh256	256.0	75.0	66.0	79.0	
BASIN H	4 SEASONS	NH	Uh256	256.0	120.0	120.0	85.0	RAISED CN FROM 80 TO 85
BASIN I	4 SEASONS	NI	Uh256	256.0	100.0	104.0	85.0	RAISED CN FROM 80 TO 85
BASIN J	4 SEASONS	NJ	Uh256	256.0	75.0	38.0	82.0	RAISED CN FROM 77 TO 82
BASIN JJ	4 SEASONS	NJJ	Uh256	256.0	10.0	3.9	85.0	RAISED CN FROM 80 TO 85
BASIN K	4 SEASONS	NK	Uh256	256.0	120.0	66.0	85.0	RAISED CN FROM 80 TO 85
BASIN OA	4 SEASONS	NOA	Uh256	256.0	150.0	190.0	80.0	
BASIN OB	4 SEASONS	NOB	Uh256	256.0	200.0	254.0	79.0	
BASIN OC	4 SEASONS	NOC	Uh256	256.0	430.0	578.0	79.0	
BASIN OD	4 SEASONS	NOD	Uh256	256.0	120.0	99.0	80.0	
BASIN OE	4 SEASONS	NOE	Uh256	256.0	150.0	109.0	79.0	
BASIN OF	4 SEASONS	NOF	Uh256	256.0	60.0	49.0	80.0	
BASIN 01	GENERAL	BASSWOOD	Uh256	256.0	226.0	1050.0	80.7	
BASIN 02	GENERAL	AIRP_INUDSTRIAL	Uh256	256.0	229.0	139.8	72.1	
BASIN 03	GENERAL	AIRPORT	Uh256	256.0	151.0	655.3	72.9	
BASIN 04	GENERAL	GN04	Uh256	256.0	253.0	840.0	73.0	AREA NW OF ROYAL CONCRETE CONCEPTS
BASIN 05	GENERAL	GN05	Uh256	256.0	66.0	95.7	82.3	AREA WEST OF US 98 & NORTH OF ROYAL CONCRETE CONCEPTS
BASIN 06	GENERAL	GN06	Uh256	256.0	194.0	683.5	68.2	AREA NORTH SR 70, SOUTH SCRR, & WEST OF COUNTY

BASIN NAME	GROUP	NODE	UNIT HYDROGRPAH	HYDROGRAPH PEAK FACTOR	TIME OF CONCENTRATION (MINUTES)	AREA (AC)	CURVE NUMBER (SOIL STORAGE)	COMMENTS
								DITCH
BASIN 07	GENERAL	GN07	GAMMA	200.0	151.0	424.0	84.4	AREA SOUTH SR 70, NORTH & WEST OF L-62 CANAL
BASIN 08	GENERAL	GN08	Uh256	256.0	94.0	242.0	78.2	AREA SOUTH OF SCRR, WEST OF US 98, EAST OF COUNTY DITCH, & NORTH SR 70
BASIN 09	GENERAL	GN09	Uh256	256.0	91.0	301.8	67.9	AREA WEST OF SR 15, SOUTH OF BASSWOOD, EAST OF AIRPORT, & NORTH AIRPORT DITCH. ACREAGE BEING HANDLED BY FDOT SYSTEM WAS REMOVED FROM THIS AREA.
BASIN 10	GENERAL	GN10	Uh256	256.0	66.0	394.0	67.9	AREA SOUTH AIRPOT DITCH, WEST OF SR 15, EAST OF US 98, & NORTH OF SCRR
BASIN 17C	SW 16/12 AVE	OUSLEY/P VLLG	Uh256	256.0	29.0	142.4	73.8	OUSLEY ESTATES & PALM VILLAGE WERE COMBINED AS ONE BASIN AS CONTROL STRUCTURE IN PALM VILLAGE COULD NOT BE LOCATED; PALM VILLAGE WAS ASSUMED TO BE CONTROLLED BY OUSLEY ESTATES STRUCTURE
BASIN 20	SW 16/12 AVE	N116	Uh256	256.0	151.0	324.0	73.0	
BASIN 21	SW 16/12 AVE	N117	Uh256	256.0	74.0	105.3	82.0	
BASIN 22	SW 16/12 AVE	N118	Uh256	256.0	72.7	320.0	83.0	
BASIN 23	SW 16/12 AVE	N119	Uh256	256.0	37.0	301.0	77.5	CN & TC WERE MODIFIED TO ACCOUNT FOR ADDITION OF 25 ACRE LAKE
BASIN 24	SW 16/12 AVE	N120	GAMMA	200.0	37.0	97.0	89.9	
BASIN 25A	SW 16/12 AVE	N121	GAMMA	200.0	151.0	366.7	87.7	UNDEVELOPED AREA W/MINING PITS
BASIN 25B	SW 26 AVE	EAGLE POINT SUB	Uh256	256.0	29.0	28.3	84.9	
BASIN 27	SW 26 AVE	N123	Uh256	256.0	29.0	246.0	68.2	

BASIN NAME	GROUP	NODE	UNIT HYDROGRPAH	HYDROGRAPH PEAK FACTOR	TIME OF CONCENTRATION (MINUTES)	AREA (AC)	CURVE NUMBER (SOIL STORAGE)	COMMENTS
BASIN 32	SW 26 AVE	RESERVOIR	Uh256	256.0	15.0	311.0	97.0	RESERVOIR REPRESENTS LAND CURRENTLY OWNED BY DISTRICT & COUNTY (150 AC) AND SURROUNDING PRIVATE PROPERTY RECOMMENDED FOR STORMWATER USE.
PRO_BASIN 26	SW 26 AVE	N122	GAMMA	200.0	140.0	233.0	82.8	SUBSTRACTED 20 ACRES FROM THIS BASIN TO BE COME PART OF RESERVOIR; LOWERED TC FROM 151 TO 140
BASIN 28	SW 32 AVE	N124	GAMMA	200.0	29.0	303.0	62.1	
BASIN 29	SW 32 AVE	N125	GAMMA	200.0	228.0	331.0	85.0	
BASIN 30	SW 32 AVE	N126	Uh256	256.0	74.0	353.0	80.3	
BASIN 31	SW 32 AVE	N127	GAMMA	200.0	43.0	72.0	80.8	
BASIN 11	SW 7 AVE	N101	Uh256	256.0	66.0	326.0	70.9	
BASIN 12	SW 7 AVE	N102	Uh256	256.0	66.0	274.0	74.5	
BASIN 13	SW 7 AVE	N103	Uh256	256.0	43.0	243.0	92.5	BASIN CN & TC WERE MODIFIED TO ACCOUNT FOR ADDITION OF 25 ACRE LAKE
BASIN 14	SW 7 AVE	N104	Uh256	256.0	66.0	203.0	78.2	
BASIN 15	SW 7 AVE	N105	GAMMA	200.0	69.0	78.2	84.6	
BASIN 16A	SW 7 AVE	N106	Uh256	256.0	14.0	4.3	73.5	
BASIN 16B	SW 7 AVE	N107	Uh256	256.0	20.0	34.6	72.2	OAKVIEW BAPTIST CHURCH
BASIN 16C	SW 7 AVE	N108	Uh256	256.0	20.0	10.9	90.7	
BASIN 16D	SW 7 AVE	N109	Uh256	256.0	14.0	3.1	62.1	
BASIN 16E	SW 7 AVE	N110	Uh256	256.0	14.0	6.7	66.2	
BASIN 16F	SW 7 AVE	N111	Uh256	256.0	6.0	1.4	78.5	
BASIN 16G	SW 7 AVE	N112	Uh256	256.0	16.0	4.4	82.0	
BASIN 17A	SW 7 AVE	N113	Uh256	256.0	66.0	65.3	78.2	
BASIN 17B	SW 7 AVE	SEMINOLE COVE	Uh256	256.0	14.0	53.2	90.1	
BASIN 18	SW 7 AVE	N114	Uh256	256.0	74.0	332.0	81.2	
BASIN 19	SW 7 AVE	N115	GAMMA	200.0	66.0	123.0	84.6	UNDEVELOPED PARCEL (PRIMARILY OUA SITE)

Basin Surface Storage: The Stage vs. Area method was used to develop surface storage by using the grading assumptions made in the calculations.

Existing Topography: USGS quadrangle maps[14] and elevations were used to develop stage-vs.-area relationships. Channel surveyed data supplied by others and CAS was used in the modeling as well.

Boundary Stage & Flow Conditions: USACOE S-133 design data and District Technical Publication were researched to develop tailwater history curves for each design storm event using best engineering judgment. For the Southwest Corridor, three tailwater conditions were created for SW 7th Avenue, SW 26th Avenue, and SW 32nd Avenue flowways. Where available, time vs. discharge hydrographs were used as boundary flows in the simulations to represent flows from previously permitted projects, such as Royal Concrete Concepts (LBFH – C. Rucks 2007) as shown on Figure 1.

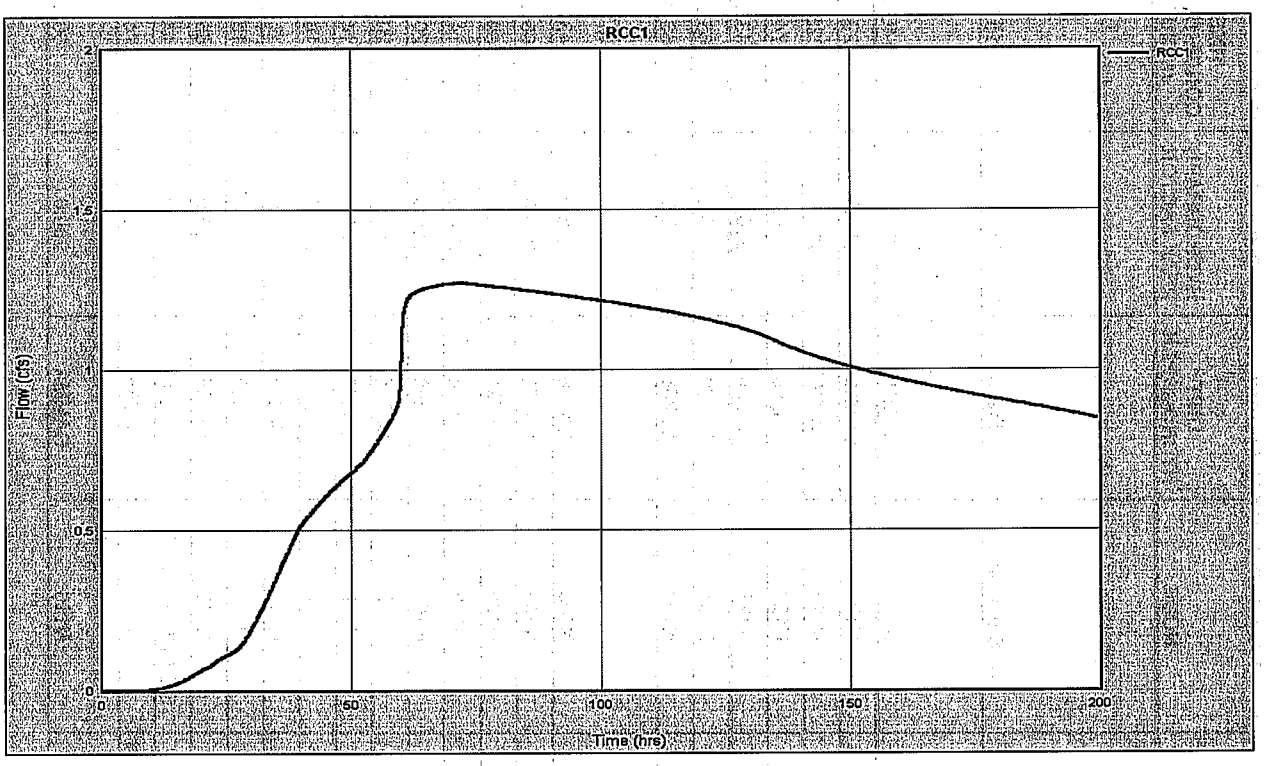


Figure 1: RCC- Flow vs. Time Curve

[14] See Exhibit G USGS Topographic Map

Other time vs. discharge hydrographs were developed from limited permit staff report data from FDOT projects such as SR 70 and US Highway 441 using best engineering judgment.

Model boundaries/Offsite areas: Basin boundaries were determined within the study limits. Although immediate basin limits have been defined for the purpose of the model and future permitting, additional off-site (surface/groundwater) flows, internal/external to the area, may affect model accuracy and the system's performance.

5.0 Development & Evaluation of Alternatives

Proposed improvements include the installation of gravity stormwater collection systems with the ability to capture, treat, store, and efficiently discharge storm runoff to the existing flowways. These improvements are also known as stormwater retrofit projects which seek improvements over existing conditions to the maximum extent possible.[15] Flowway improvements include channel slope modification or sediment removal and culvert replacement or modification. Planned for the Southwest Corridor and currently under design by others is the District's Lemkin Creek Stormwater Facility (LCSF) located west of SW 16th Avenue and north of SR 78. This 150 acre facility or reservoir will be used to provide limited flood protection, storage and treatment for the areas served by the SW 7th, SW 16th, and SW 26th Avenue flowways. The reservoir is planned to have a pumped inflow discharge with a gravity outfall to Lemkin Creek. The SW 7th Avenue flowway is planned to have flows diverted west to the reservoir by either gravity or by mechanical means. If by gravity, an east-west flowway will be constructed with a gravity diversion operable control structure[16]. Property acquisition or easement dedication will be needed to accommodate the right-of-way needed for the flowway. If by mechanical means, i.e., by pumping, a stormwater forcemain may be needed which would require less right-of-way[17]. The 7th Avenue connection could also contain an additional storage cell. The benefits of any option will be evaluated under a separate

[15] Retrofit projects are treated on a case by case basis.
[16] See Exhibit P1A & P1A1
[17] See Exhibit P1B & U4

scope of services by CAS. Inflows from the SW 16th and SW 26th Avenue flowways are directly north of the reservoir. Due to the large drainage area (4,210 acres) to be served by the 150 acre reservoir, additional reservoir area (+150 acres) adjacent to the LCSF was conceptualized in order to optimize flood control operations[18]. The following figures represent graphs of Stage vs. Time for the pre- and post-mitigation conditions at desired locations in the model.

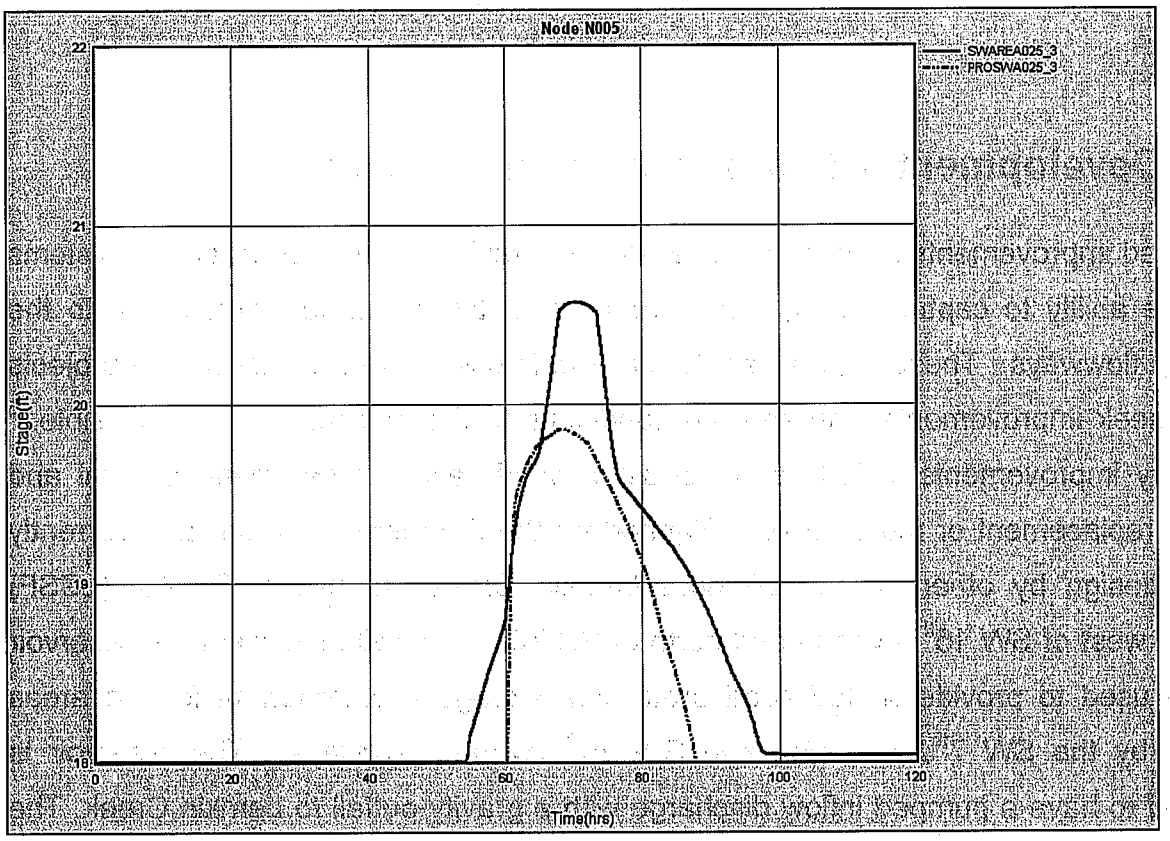


Figure 2: 25-Yr, 3-Day Pre & Post Stage @ SW 28th ST & SW 7TH AVENUE

[18] Actual locations for expansion to be determined at a late date.

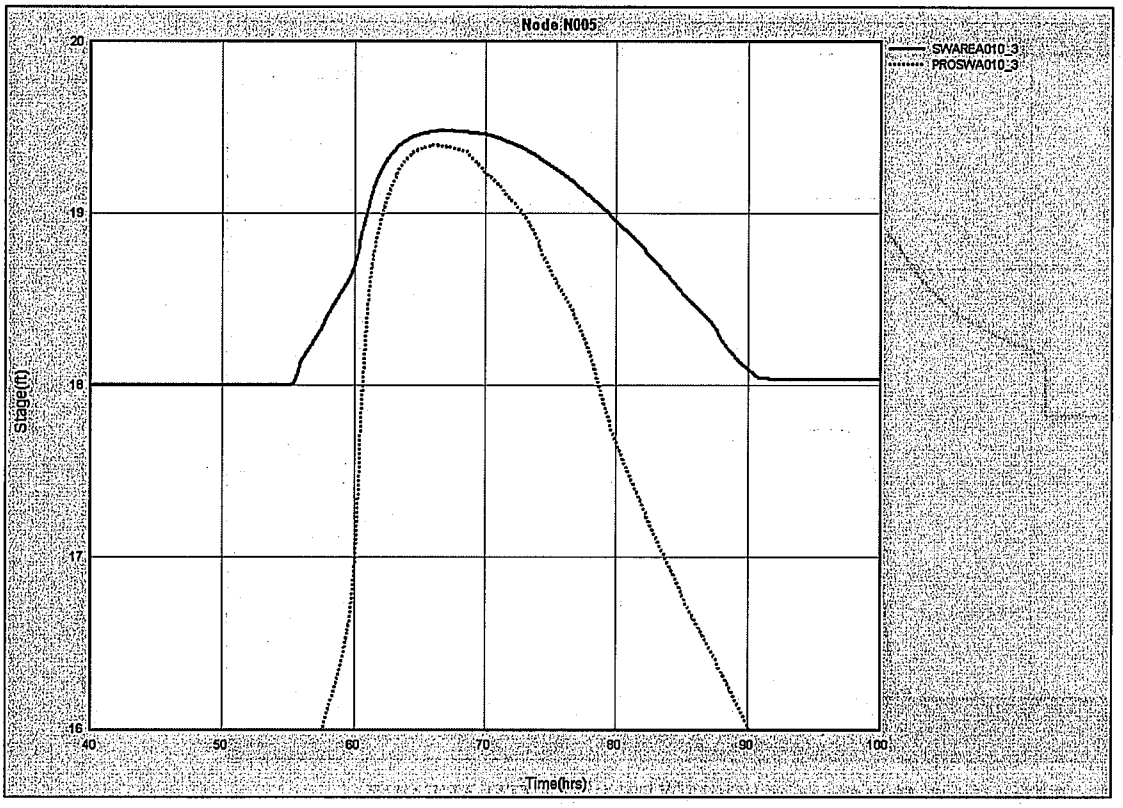


Figure 3: 10-Yr, 3-Day Pre & Post Stage @ SW 28th ST & SW 7TH AVENUE

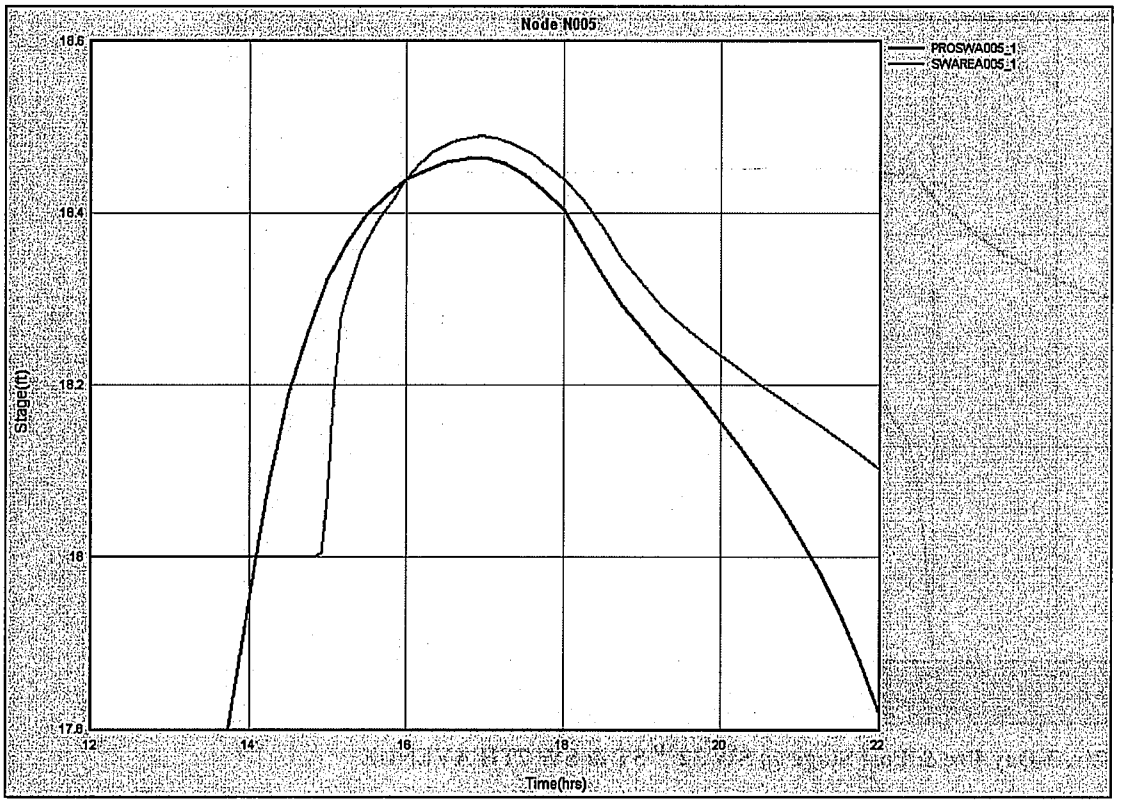


Figure 4: 5-Yr, 1-Day Pre & Post Stage @ SW 28th ST & SW 7TH AVENUE

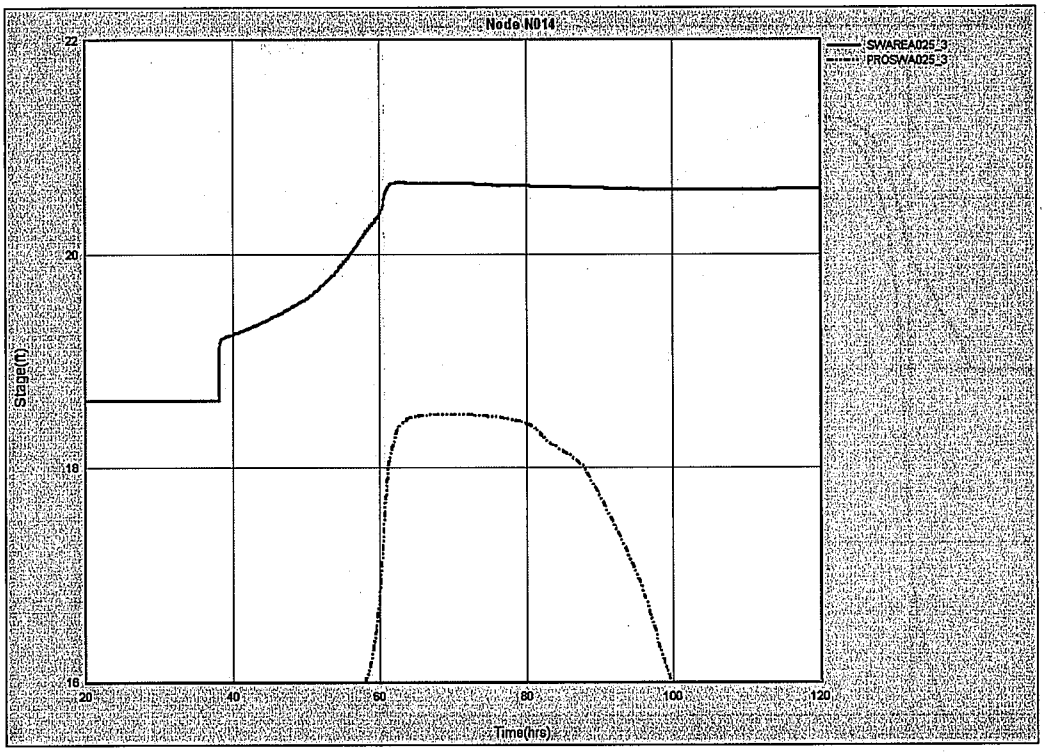


Figure 5: 25-Yr, 3-Day Pre & Post Stage @ SW 32ND ST & SW 7TH AVENUE

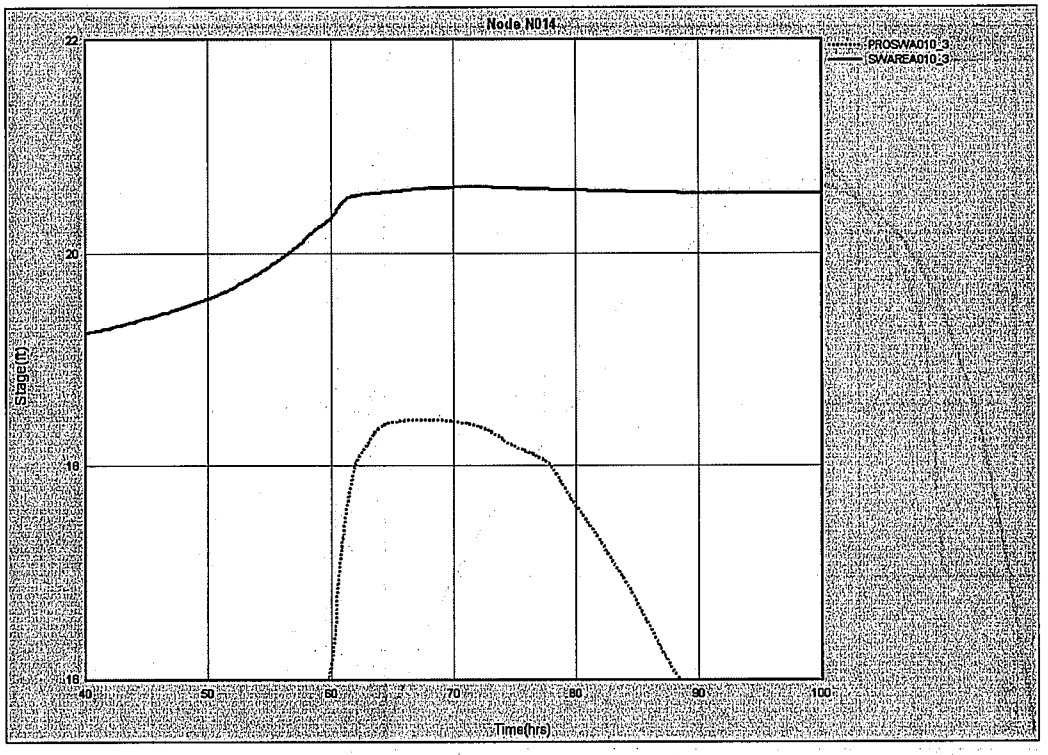


Figure 6: 10-Yr, 3-Day Pre & Post Stage @ SW 32ND ST & SW 7TH AVENUE

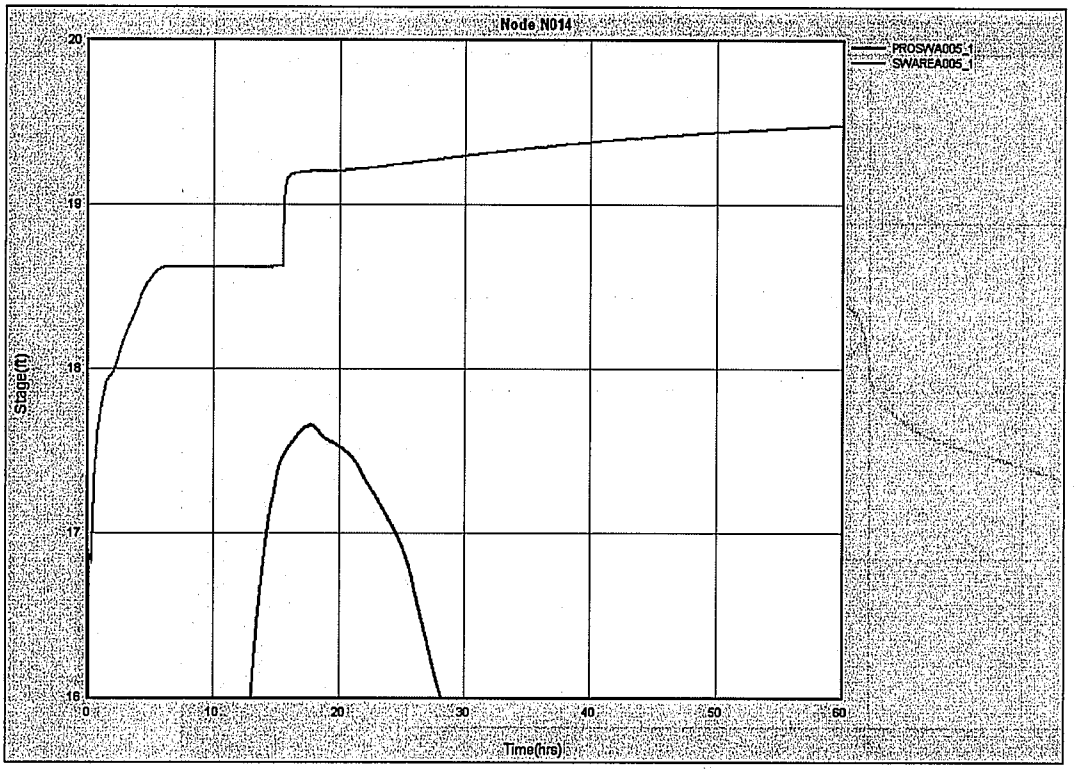


Figure 7: 5-Yr, 1-Day Pre & Post Stage @ SW 32ND ST & SW 7TH AVENUE

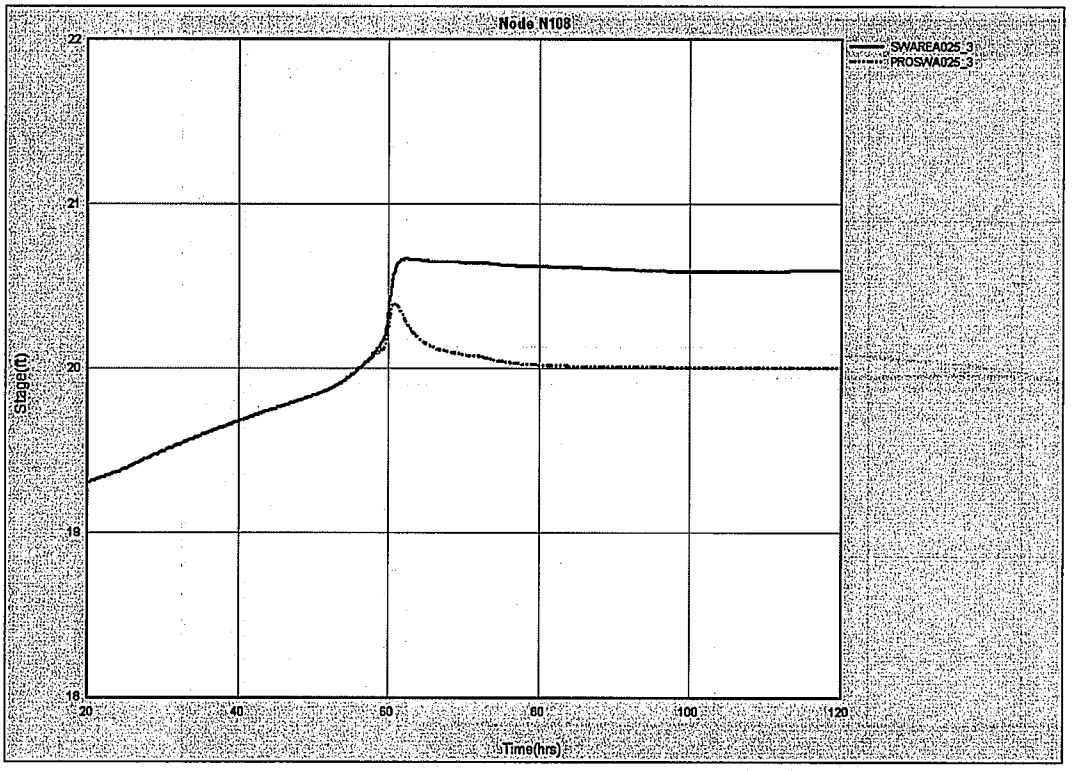


Figure 8: 25-yr, 3-day Pre & Post Stages @ North Lake Business Park Area

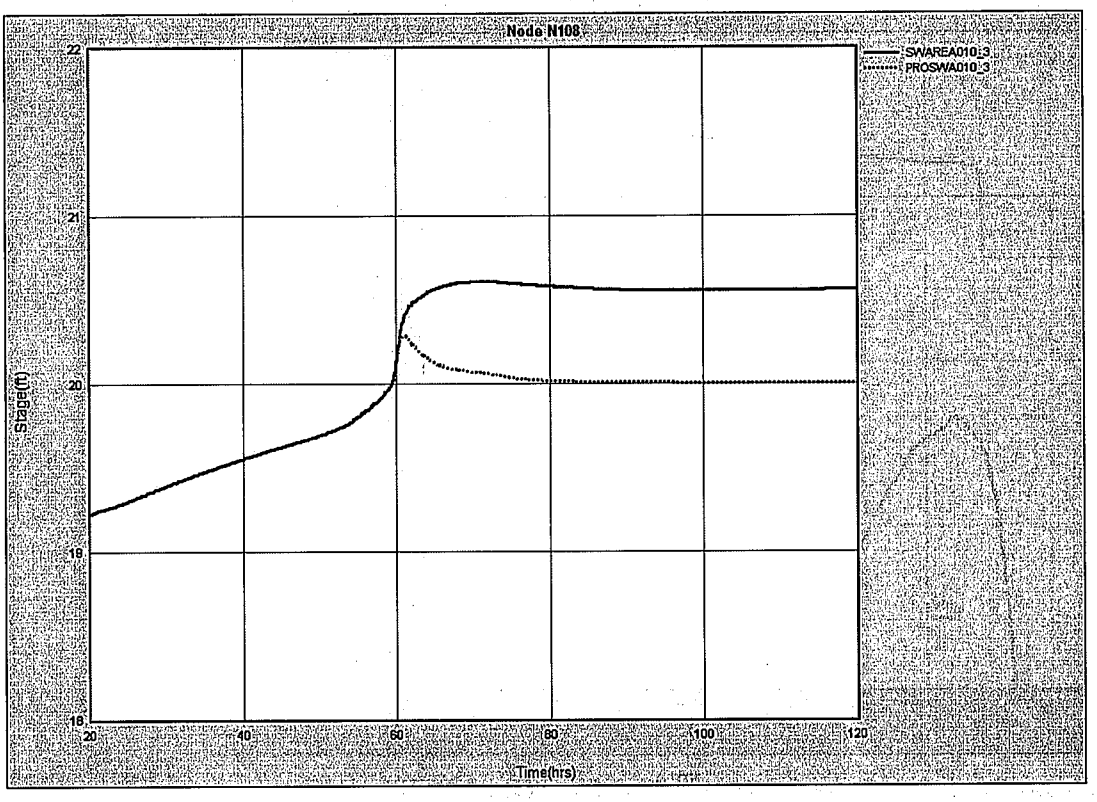


Figure 9: 10-yr, 3-day Pre & Post Stages @ North Lake Business Park Area

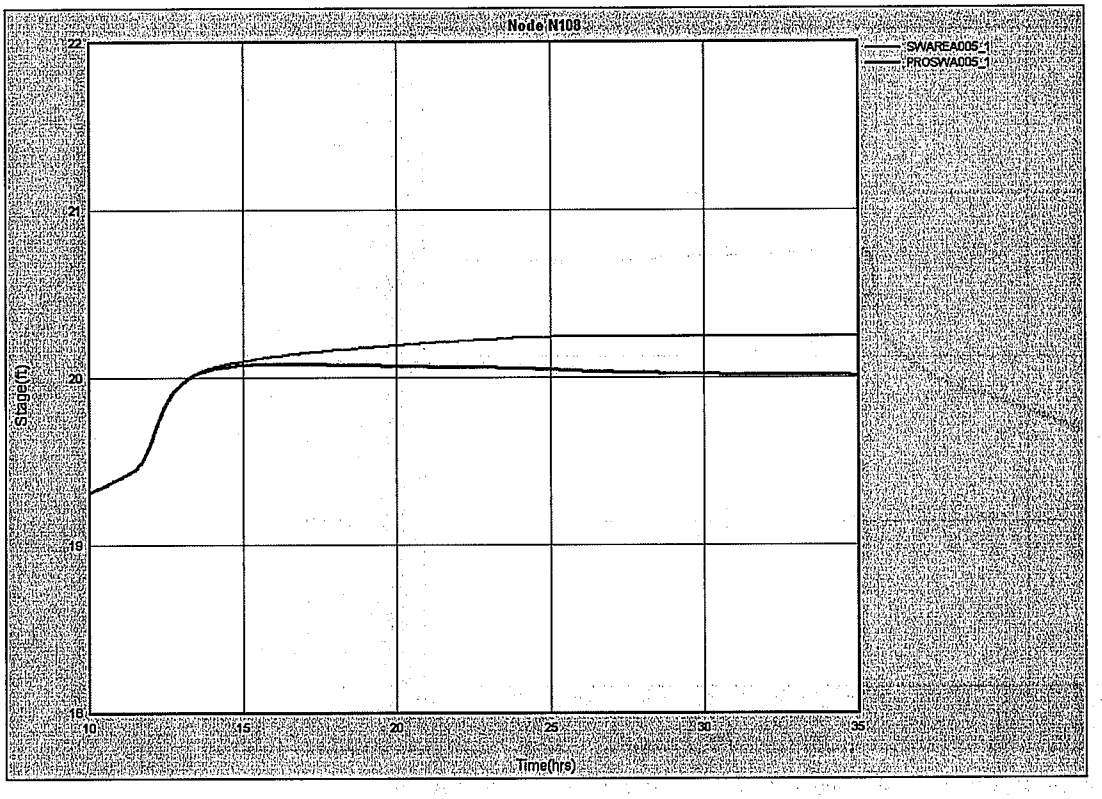


Figure 10: 5-yr, 1-day Pre & Post Stages @ North Lake Business Park Area

Improvements for areas west of SW 32nd Avenue flowway are planned to be independent of the LCSF at this time. Proposed improvements for this area are primarily located within the non-engineered Oak Park Subdivision and include the installation of gravity stormwater collection systems with the ability to capture, treat, store, and discharge storm runoff to the SW 32nd Avenue flowway. Two options[19] for this area include 1) the utilization of an existing pond for water quality treatment and for flood control with a gravity outfall or 2) a small stormwater pumping station without the use of the existing pond. Water quality treatment with the latter option can be provided within the roadside swales and in combination with alternative treatment devices.

As stated earlier in this report, the intent of the current modeling effort was to combine the recommendations of the past two studies in Four Seasons and evaluate the water quantity and water quality benefits. Improvements in Four Seasons involve flow diversion at Center Street Ditch and west of NE 80th Avenue via a fix weir structure. Culvert upsizing, channel improvements, detention pond storage were also considered for this area.

Due to limited data, improvements within the General Region were limited to improved western outfalls from Basswood and the addition of detention ponds east of US Highway 441[20]. The latter, in addition to water quality and water quantity benefits, will eliminate ditch failures which can lead to adjacent parking lot failures if not addressed. Basswood's drainage is served by non-engineered moderately deep ditches and culvert crossings. Basswood, as a subdivision, could benefit by the addition of detention areas. However, proper location of detention areas is necessary to optimize use. As such, additional topographic survey data is needed before additional recommendations are made. An option that would benefit the area or other non-engineered subdivisions is the use of on-lot retention[21]. The benefits of adopting an ordinance for on-lot retention

[19] See Exhibits P4-P6
[20] See Exhibit R
[21] The City of Hallandale Beach, Florida has this requirement in their Code of Ordinance, Sec. 32-885 (Retention of 5-yr, 1-hour Storm; 3.3 inches of rainfall).

are that water quality treatment would be addressed for private property lessoning the County's efforts to address water quality issues and attention to lot grading detail would be addressed as well. To make an impact, this option should be implemented significantly before a non-engineered subdivision reaches build-out. In addition, a revision to Article VII, Section 7.06.04 "Exemptions" (shown below) of the County's Land Development Regulations will be needed prior to implementation.

"7.06.04. Exemptions.

The following development activities are exempt from these stormwater management requirements, except that steps to control erosion and sedimentation must be taken for all development.

A. The construction of a single-family or duplex residential dwelling unit and accessory structures on a single parcel of land."

6.0 Conceptual Plan/Preliminary Design

Conceptual plans of preferred improvements were created for the purposes of developing opinions of construction costs and for future funding application opportunities. The Plan calls for flowway improvements, flowway diversions, and the installation of operable and non-operable (fixed) control structures. Improvements also include tertiary drainage systems (roadside stormwater collection systems) to be designed in accordance with the Florida Department of Transportation (FDOT) design guidelines. In addition, the Plan calls for the utilization of the District's Lemkin Creek Stormwater Facility and land acquisition to expand this facility as well as land acquisition to provide upstream attenuation and water quality treatment in wet detention areas. Said improvements were analyzed in the ICPR model. Not analyzed at this time were the tertiary drainage systems. These systems do not normally impede flow when properly sized and FDOT design criteria are implemented. Comparative model results are attached to this report.

One on-going project not located within the targeted areas was Douglas Park Neighborhood Drainage Improvements[22]. Due to limited Community Development

[22] See Exhibit Q1 & Q2

Block Grant (CDBG) funding, stormwater improvements include the (partial) installation of gravity collection systems on three County streets with partial water quality treatment provided by swales and by alternate treatment technologies[23]. Additional efforts are underway to provide additional water quality treatment via a detention pond after the land is acquired. Completing the collection system was made part of the Master Plan and to demonstrate the County's intent on improving existing infrastructure.

7.0 Board of County Commissioners

Advertising & notice to County for a future workshop for public input/questions has not been initiated at this time but will be initiated after District & County cursory reviews are completed.

8.0 Permitting and Easement Identification

8.1 Permitting

All non-maintenance type of improvements will require a Joint ACOE/District/FDEP Environmental Resource Permit (ERP). All proposed improvements will at least require the issuance of a Standard General ERP. This permit does not require Governing Board action from the District and therefore can be issued at the staff level. All permit applications are reviewed within 30 days of submittal and if deemed incomplete, a request for additional information letter is sent to the applicant's consultant. If satisfactorily complete, the District has within 60 days from the most recent submittal to issue/deny the permit. The District has within 90 days from the most recent submittal to issue/deny the permit if the permit, known as an Individual ERP, requires Governing Board action.

At this time, future potential projects consist of the flow diversion of SW 7th Avenue flowway[24] to the Lemkin Creek Stormwater Facility and the implementation of the

[23] Swirl Boxes/Sediment Traps
[24] See Exhibits P1A & P1B

drainage improvements[25] on SW 28th Street, SW 32nd Street, and SW 3rd Court between SW 7th Avenue and US Highway 441. The BOCC will decide which projects will be implemented and when.

8.2 Easement Identification

CAS observed that many of these existing flowways are located on private property and at the very minimum, the County needs to secure the maintenance and drainage easements necessary to insure long term positive drainage. Any flowway improvement not located on County property will require the approval of the property owner via a dedicated temporary construction easement.

At times, adjacent developments are normally asked to provide maintenance access in addition to the flowway drainage easements. This situation does not happen often but does benefit both parties by way of insuring positive drainage to upstream areas and to the proposed development by allowing the County to perform routine or emergency maintenance.

[25] See Exhibits P3

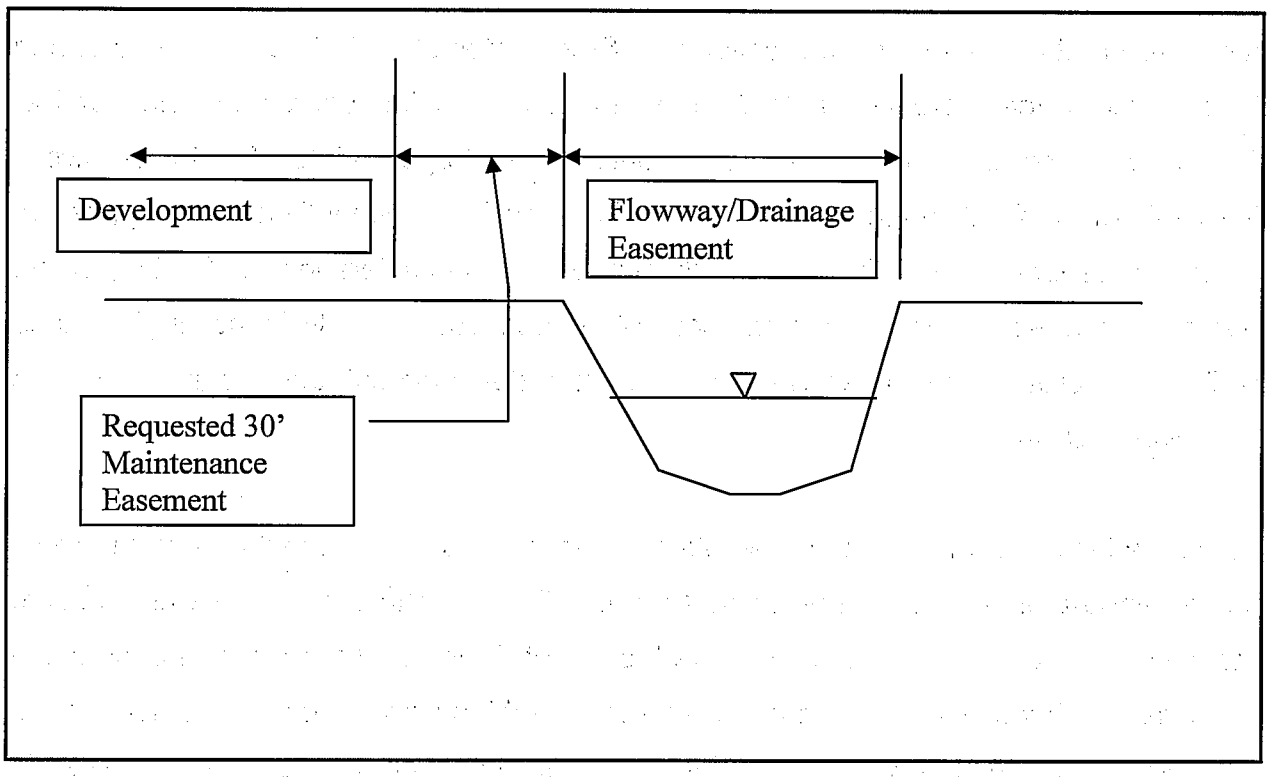


Figure 11: Example Easement Schematic

9.0 Funding Analysis

9.1 Alternative Funding Sources

The purpose of this section is to identify the potential mechanisms for funding the stormwater management program in Okeechobee County including, but not limited to, a possible Stormwater Utility system. The system used most often throughout the State of Florida is a Non-Ad Valorem Tax levy included on the property owner's annual tax bill. This system is not the only source of funds available to local units of government, nor the only mechanism available.

One of the sources of data regarding the potential funding alternatives for a Stormwater Utility is the "***Stormwater Services Funding Options***" prepared for Lee County Natural Resources Division in October 2005. A total of 14 funding mechanisms were

discussed and evaluated for application to a Stormwater Utility in Lee County. None of these alternatives were considered to be the sole funding source for the service. Rather, a combination of these sources would be most appropriate. For this analysis, the basis of the funding alternative analysis from the Lee County Study was applied to Okeechobee County and the City of Okeechobee for consideration for funding of the potential Stormwater Utility. As in the case of the Lee County analysis, no single source is likely to provide all necessary funds for the development and operation of the Stormwater Utility.

Since the inception of this study, the State of Florida has experienced a strong political movement that is focused on reducing Property Taxes in the State. Several concepts have been discussed that include a reduction of Property Taxes and the potential increase in Sales Taxes. Although several combinations of these methods have surfaced, no single plan can be considered as a likely final bill, at this time. However, is does appear certain that the ability of local governments to raise revenue will be reduced.

The impact of the tax reduction proposals on local governments such as Okeechobee County and the City of Okeechobee cannot be estimated, at this time. Any final decision on the funding alternative(s) for the Stormwater utility may have to wait the decisions by the Florida Legislature.

The potential mechanisms for funding Okeechobee's stormwater management program are varied and include the following:

- General Fund
- Property Taxes
- Dedicated property Tax Increments
- Sales Taxes
- Dedicated sales Tax Increments
- Special Purpose districts

- Homeowners/Condominium Owner Associations Fees
- Special assessments
- Fees, Licenses and permits
- Penalties and Fines
- Developer Contributions
- Impacts Fees
- Fee-in-Lieu-Of Payments
- Stormwater Service Fees

Okeechobee County could potentially use these funding sources singularly or in combination to meet the needs of the existing and/or expanded stormwater management program. In addition to the discussion of the potential sources of revenue, this memorandum also includes a review of possible grant scenarios available to the Stormwater Utility. These grants cannot be relied upon, at this time, nor would they be the primary source of funding.

(a) Evaluation Criteria

A set of criteria has been established to conduct the review of the potential funding sources for the Stormwater Utility in Okeechobee County. The criteria established for this purpose reflects the ability to meet the objectives of the system, the equity of the levy and the ease of implementation.

The five criteria are:

1. Revenue Generation Capacity – Does this source have the ability to generate the funds required to operate and construct the system?
2. Association of Cost with Benefit – Is there a nexus between the fee paid by any person or entity and the benefit attained?
3. Implementation – How difficult would it be to put this system into operation?
4. Public Approval – Is a referendum required?

5. Jurisdiction – Does the County and/or City currently have the power to enact this source?

There is no specific weighting of these criteria. Any decision to support any particular mechanism will include all of these points in the review. Table 2 contains the matrix identifying the strengths and weaknesses of the options. Table 3 lists the various alternatives and the best use of the funds generated from that source.

(b) Alternative Mechanisms

The following list of funding sources will serve as an identification of the methods considered in this review. In addition, the descriptions of the designated sources have culminated in assigned points that have led to a rating within the comparison matrix.

(I) General Fund:

Governmental Accounting is typically divided into General Fund and Enterprise Fund accounts for all governmental agencies. The General Fund represents the accounting for Revenue and Expenditures that are of a common (or general) nature for the agency. Enterprise Funds address special activities where Revenue is either earned or generated for a single purpose. The most common Enterprise Fund is a Water and Wastewater Utility.

Revenue sources for the General Fund include Ad Valorem Taxes, Franchise Fees, Utility Taxes and Intergovernmental Transfers such as State Shared Revenue and Gas Taxes. Any consideration of use of General Fund Revenues for Stormwater Utility purposes must recognize that ultimately the source of funding are those mentioned previously.

An allocation from the General Fund for stormwater purposes is the method used by local governmental agencies that do not have a specific Stormwater Utility. The functions are usually addressed through the Public Works Department, and are a recognized responsibility of the local government.

The General Fund Budgets of the County ($14.7 million) and City ($5.5 million) for FY 2006-2007 include a variety of revenue sources including Property Taxes, Franchise Fees, Utility Taxes, User Fees and other devices. Based on estimated annual costs of the Stormwater Utility of $4.7 million, the stress on the General Fund could be significant due to the competition for funding of other governmental services. In addition, the County and City may not be able to direct funds in a pro rata share from their current budgets.

Such a source would be easy to implement since no other authorization is required and the jurisdictions have the power to fund this system. Such a funding source will not be able to insure fairness and equity for the association of costs and benefits.

Strengths of this method:

- Ease of implementation with only a vote of the governing body required
- No public approval required

Weaknesses of this method:

- Other services provided by the local governments compete for funds
- Recurring commitments by the local government agencies account for much of the current budgets
- No direct association with fees paid and benefits received

Analysis:

The General Fund is typically a "catch-all" for general services provided by the local government. Additionally, services such as Public Safety and Administration consume a significant portion of the revenue generated. General Fund revenue has been used for special purposes by many local governments. However, this mechanism is typically used when the expenditures are not significant to the total budget, or as a temporary source until a stormwater utility fee can be fully implemented.

The annual budget for the proposed Stormwater Utility will be approximately 23% of the combined County/City General Fund, which will significantly hinder the operations of the local governments. A more likely solution is to use the General Fund to help establish the Stormwater Utility for Administrative purposes and generate revenue from other sources for the capital and operational issues.

(II) Property Taxes:

Use of Ad Valorem Tax levies for stormwater purposes can be accomplished through a designation of a portion of the funds generated by the millage rate for that function. The current property tax collections by the County and City account for approximately one-third of the total revenues for the General Fund. The ability to collect sufficient funds from this source is questionable, particularly in light of the Property Tax reduction initiatives in the Florida Legislature.

Any new development should not contribute more/higher peak discharge than from existing development due to Environmental Resource permitting. This method also does not associate the costs and benefits of the stormwater program. Since the levy is based on value of the property, high value parcels will pay a higher share regardless of the impact generated. This method

would be easy to implement since the jurisdictions have the power and no other authorization is required.

Strengths of this method:

- Ease in implementation
- No public approval required

Weaknesses of this method:

- No direct association with fees paid and benefits received
- Upper limit on millage rates exist
- Stormwater purposes must compete with other services

Analysis:

Property Taxes may not be a likely source of funding for specific governmental activities based on the Property Tax issues currently under discussion in the State. In addition, the use of this source does not provide a relationship between the impact generated by an individual parcel and the tax. Property owners will pay a fee based on value of their property and not the generation of stormwater run-off. Even if the local governments retain most of their ability to impose Property Taxes, the use of this method will require an increase of approximately 67% in the millage rates of the County and City.

Since Property Taxes are a large portion of the General Fund revenue, their inclusion in the overall funding mechanisms for a Stormwater Utility should follow the same concept of assisting in the establishment of the Utility, until permanent funding can be generated.

(III) Dedicated Property Tax Increments:

This method would function similar to the one above except that a specific millage rate will be identified and fixed for stormwater purposes only. To make such a method work properly, both the County and City would have to impose the same millage rate for the Fiscal Year.

The current Taxable Value for the entirety of Okeechobee County is $2,264,220,916. A dedicated levy of .1 mills will generate a total of $226,000 annually.

The strengths and weaknesses of this method are the same as in the previous source.

Analysis:
The principal difference of this option to the previous one is that the millage rate will be established exclusively for the Stormwater Utility purposes. The adoption of the annual millage rate is now divided into two segments: Operations and Debt Service. This proposal would include Stormwater Utility as a third. The increase in Property Taxes to cover all of the annual costs of the program would be 2.1 mills.

The restriction on the ability of the local governments to levy Property Taxes as previously discussed exists in this option as well.

(IV) Sales Taxes:
One of the principal discussions in the Lee County Study previously mentioned is the use of Sales Tax revenues for Stormwater Utility purposes. They note that "Many communities throughout the United States have elected to use a portion of their sales tax proceeds to fund their stormwater management program and construct/repair infrastructure". However, the principal on which this is based, local distribution and control of sales tax dollars, does not exist in Florida. Communities are permitted to levy an additional ½ Cent or 1 Cent that can be

used for special purposes. Okeechobee County has levied an additional 1 Cent for tourist related purposes.

State Sales Tax revenue is received in Okeechobee County from State Shared Revenues which is placed in the General Fund. These funds are from the ½ Cent that is allocated to the local jurisdictions from the State budget. The County and City could pledge a portion of these revenues for stormwater purposes. This source is funded primarily using population as a factor.

The County and City could allocate a portion of the funds for the special purposes and will not require authorization. The strengths and weaknesses are similar to the use of General Fund sources.

Analysis:
The Sales Tax option is not appropriate for use in Okeechobee County since the only mechanism to levy sales taxes at the local level is the additional ½ Cent or 1 Cent option. Okeechobee County has already used that option.

(V) Dedicated Sales Tax Increments:

The State Constitution does permit local jurisdictions to impose an additional 1 Cent to the Sales Tax (to 7%) for local improvements. Okeechobee County already has a levy of 1 Cent and cannot add additional Sales Taxes. Increased Sales Taxes are imposed based on the results of a referendum that states the increase considered and the specific use of these funds. The 1 Cent Sales Tax is defined in the original ordinance (92-14A), which was reaffirmed in 1999. This 1 Cent sales tax was dedicated for use for Tourist Development purposes as specified in Section 62-129.1 of the County Code. Since the referendum did not include a stormwater program, funds cannot be diverted for such a use.

The figures for the most recent year (2005) reveal that the Taxable Sales in Okeechobee County were $445,548,995. The additional Sales Tax revenue from the 1 Cent levy base on the sale of the first $5,000.00 is $1,950,000, with the major part of these funds coming from the unincorporated area of the County.

This source does raise a significant amount of funds. However, they are already allocated for the tourist development purposes stated in the referendum.

This method assumes the Stormwater Utility would be allocated the increase in Sales Taxes collected over the current amount. This system would be similar to Tax Increment Financing (TIF) used in CRAs and other special districts. The current Sales Tax revenues (and likely the increases) have been included in the budgetary process of the County and City. Removal of this source could have a significant impact.

Weaknesses of this method:

- Not permitted under State law and current increased Sales Tax commitment to tourism

Analysis:

The Sales Tax option is not appropriate for use in Okeechobee County since the only mechanism to levy sales taxes at the local level is the additional ½ Cent or 1 Cent option. Okeechobee County has already used that option.

(VI) Special Purpose Districts:

Income from a special purpose district or special assessment district is generally dedicated to that district. The area that is designated special, for whatever reason, would pay an additional tax or has an increased assessment. The justification for such levies is that many capital improvements enhance the value of the adjacent land, thereby providing a

potential benefit to property owners. The funds from the additional tax or assessment would be returned to that area and used for program administration, renewal/replacement, capital improvements, and water quality.

Districts of this type could be dependent (reporting to the establishing governmental entity) or independent (with its own governing board). If the entity is dependent, the district could be established without a referendum. Considering that the entity in Okeechobee County would include both the County and City governments, an independent district may be required. This type of entity would require a referendum.

The district could raise funds through either an ad valorem tax levy or a non-ad valorem fee. Placement of either fee on the annual Tax bill would be the simplest form and would be appropriate. This source does match the charge to the benefit received better than General Fund or similar sources since the revenue can only be used for the stated purpose.

Strengths of this method:

- Associates costs with benefits
- Relatively easy to implement
- No competition for funds from other sources

Weaknesses of this method:

- Administration requires strong coordination by both the County and City
- Public approval required

Analysis:

Use of Special Purpose Districts for funding of Stormwater activities has significant potential in that the district will be created only for the stated purpose of providing stormwater programs. Districts can be established

along Watersheds or other appropriate geographic designations. Since the funds raised can only be used in that district, there is a direct relationship between the fee and the benefit received.

The levy can be either an ad valorem or a non-ad valorem tax applied to the annual tax bill. This mechanism is similar to that used by many of the Improvement Districts and Water Control Districts in the State.

(VII) Homeowner/Condominium Owner Associations Fees:

Under this option, the source of funding would be the associations organized to represent specific residential, commercial or industrial areas. Each of these associations impose an annual fee for general operation and/or maintenance of the common properties of the development. A separate charge could be levied for the stormwater portion of the operation since many of the existing associations are responsible for maintenance and operation of drainage facilities, typically lakes or other waterways. The active maintenance that occurs typically addresses weed control or other conditions. They do not normally address drainage, flood control or maintenance issues.

This mechanism will directly allocate costs to the persons receiving benefit (the property owners). However, no county-wide system is likely. Drawbacks to the area-wide plan are:

- These entities are authorized to address the facilities that are within their geographic jurisdiction and cannot be used outside of the development
- Associations of this type are not universal throughout the County
- Most associations do not have sufficient authority through their Charter
- Coordination with all entities would be very difficult

Analysis:

The Homeowners/Condominium Owner Association alternative can be a useful source for funding programs within their geographic area only. These entities cannot pay for services provided to others.

(VIII) Special Assessment Districts:

Special assessments, typically in the form of municipal services taxing/benefit units, are a means of funding specialized activities that benefit a defined area(s) of the community. Special assessments are essentially a special purpose district that is operated by a municipality without an independent governing board, to provide what might be a standard community service in other communities.

This method is similar to the Special Purpose District with the option of a dependent district. The advantage over the other type of entity is that this district does not require a referendum, easing implementation.

Strengths and weaknesses are similar to Special Purpose Districts. However, public approval is not required.

Analysis:

Use of Special Purpose Districts for funding of Stormwater activities has significant potential in that the district will be created only for the stated purpose of providing stormwater programs. Districts can be established along Watersheds or other appropriate geographic designations. Since the funds raised can only be used in that district, there is a direct relationship between the fee and the benefit received.

(IX) Fees, Licenses, and Permits:

The local jurisdictions can impose a fee or charge for any lawful purpose. Assigning a charge for stormwater purposes does meet that designation. Both the County and City could impose this type of charge to generate sufficient funds to meet stormwater operations and capital.

The implementation process would not be complicated in that both jurisdictions have the power to impose such a charge. This method would also associate the costs to the property owners with the benefit received. Although the size of the charge and nexus to the property could vary, this method does offer equity.

The collection of the charges would prove to be the most difficult issue. If the charge is collected through an annual billing process, the payment by the property owner could be less certain. In addition, the cost associated with the establishment and operation of a billing system would increase the costs to the local jurisdictions.

Strengths of this method:

- Associates cost with benefits
- Ease in implementation

Weaknesses of this method:

- Not able to generate sufficient funds

Analysis:

This source is used typically only for recovery of costs associated with issuing the permits and licenses. The ability to generate significant revenue does not exist

(X) Penalties and Fines:

The underlying focus of this method is the association of a charge with an illegal activity. Any Penalties and Fines would also have to be associated with drainage issues so that a direct connection with the charge occurs. The first issue is the amount of revenue that can be collected from this source. The current amount of Penalties and Fines from all sources (Other than Traffic) is not significant. Projections of revenue from this source would be difficult, if not impossible, to estimate, particularly since it should be assumed that property owners would correct any problems in order that they may avoid further fines.

This source can be included as an adjunct to another funding mechanism. Any penalties or fines associated with stormwater issues could be added to the Stormwater Fund.

Strengths of this method:

- Ease in implementation

Weaknesses of this method:

- Not able to generate sufficient funds
- Additional enforcement costs for operation
- Association of costs and benefits not always attained

Analysis:

The revenues generated from penalties and fines typically can only recover the cost associated with the inspection process. Some fines can be assessed to pay for corrective action that is taken by the Stormwater Utility. These fines are charged when a substantial action is necessary.

(XI) Developer Contributions:

This mechanism could be a method to generate capital infusion to the Stormwater System. Developers would contribute funds that would be used to construct the required facilities and improve the overall drainage service. Since the developers will only be present during the planning and construction stage of the project, this source would not provide long-term financing unless sufficient funds were contributed up front to cover the long term operation and maintenance costs.

The method would be easy to implement since an ordinance form the jurisdictions is the only requirement. In addition, the method allocates costs to those generating the drainage issues. This method does not address the current problems from areas already developed and does not provide funds for on-going operations.

Strengths of this method:

- Associates cost with benefits
- Ease in implementation

Weaknesses of this method:

- Use for capital costs only
- Does not provide funding for county-wide uses

Analysis:

This mechanism can only be reasonably used for capital items in the stormwater program. The contributions would be used to complete infrastructure improvements that will benefit the property under development. Annual operations cannot be consistently funded from this source. Developers who are required to complete on-site retention and other drainage systems as part of their project will also object to such a fee since they will have already paid significant funds for drainage purposes on site.

(XII) Impact Fees:

There are currently no Impact Fees in Okeechobee County and the establishment of such a fee would require analysis and approval by both jurisdictions. Impact Fees have been established for drainage purposes in other jurisdictions. However, the most frequent use is for Roadways, Schools and Recreation. It is unlikely that Impact Fees for drainage will be imposed prior to inclusion of such fees for the other services. At present, neither Okeechobee County nor the City of Okeechobee is considering Impact Fees. This condition may change in the future based on growing needs and the potential limitation of revenue sources.

Data collected from the Okeechobee County Planning and Development Department was used to determine the amount of new development occurring in the County. The only data regarding the current or future development came from a report from CRW Associates listing the developments under consideration. A review of the current development approval applications in Okeechobee County reveals 88 projects. However, most of these projects are small in size and would not generate significant funds from Impact Fees. There are approximately 15 larger subdivisions considered for approval. However, all of these projects are large ranches and ranchettes that average approximately 10 acres per unit. These units will not have a significant impact on the stormwater issues in the County since the amount of impervious surfaces are minor compared to the total amount of land for the parcel.

It is anticipated that the future growth in the County and City would include more typical residential developments that may generate the opportunity for Impact Fees.

Strengths of this method:

- Associates cost with benefits

- Moderate implementation concerns

Weaknesses of this method:

- Use for capital costs only
- Not able to generate sufficient funds for maintenance and operation
- Does not provide funding for county-wide uses

Analysis:

This mechanism can only be reasonably used for capital items in the stormwater program. The contributions would be used to complete infrastructure improvements that will benefit the property under development. Annual operations cannot be funded from this source. Developers who are required to complete on-site retention and other drainage systems as part of their project will also object to such a fee since they will have already paid significant funds for drainage purposes.

(XIII) Fee-in-Lieu-of Payments:

An alternative to requiring developers to construct stormwater management facilities on their own property is to require them to pay an initial "front-end" charge for the capital improvements needed to regionally serve their development. Typically the fee-in-lieu-of payment is charged for the community's construction for larger localized or regional facilities to provide peak flow attenuation to reduce downstream flooding and/or provide off-site stormwater treatment in-lieu-of conventional on-site stormwater treatment requirements required by the State/Water Management Districts.

The charge would be representative of the development's contribution to the regional facility on the watershed. A fee-in-lieu-of is a technique to generate the funding needed for capital improvements in a watershed. The term is developed

from the case in which the developer is required to construct infrastructure including stormwater systems.

The strengths and weaknesses of this method are similar to those with Developer Contributions or Impact Fees.

Strengths of this method:

- Associates cost with benefits
- Ease in implementation

Weaknesses of this method:

- Use for capital costs only
- Not able to generate sufficient funds for maintenance and operation
- Does not provide funding for county-wide uses

Analysis:

This mechanism can only be reasonably used for capital items in the stormwater program. The contributions would be used to complete infrastructure improvements that will benefit the property under development. Annual operations cannot be funded from this source. Developers who are required to complete on-site retention and other drainage systems as part of their project will also object to such a fee since they will have already paid significant funds for drainage purposes.

(XIV) Stormwater Service Fees:

This method allocates costs to the property based on the service provided and is considered a user fee system. The implementation is not difficult since the jurisdictions have the authority. The only issue is how the service would be provided.

The allocation of the costs to build and operate the system is based on the run-off generated from each individual parcel. This process makes Stormwater Service Fees a more equitable method since all parties pay based on their impact to the system.

The key element of this method is a parcel-by-parcel allocation of costs requiring an identification of use for each property in the area. Okeechobee County has an advantage in that a Fire Fee has previously been imposed and is also levied on an individual parcel basis. Each parcel is identified by use and size and a fee applied. This current file will have to be modified slightly to add the potential of a Stormwater Utility Fee.

Many urban areas have such a process, where no on-site retention is required. The local government develops the facilities and charges the property owner for use of the system. The property owner for a large project has an option of using this program or providing their own retention.

Although a combination of several sources could be used to fund a stormwater program, the governing agency should identify a primary source of funds for the operation of the Stormwater Utility.

Strengths of this method:

- Associates costs with benefits
- Relatively easy to implement
- No competition for funds from other sources

Weaknesses of this method:

- Administration requires strong coordination by both the County and City

Analysis:

This alternative provides the most reasonable combination of allocating costs to those who cause impact as well as the ability to generate funds. The fact that a similar system is already in place in Okeechobee County makes application of this alternative easy to perform.

(B) Comparison Matrix

Table 2 contains the matrix where all of the means and methods are listed in accordance with their ease of attainment. Table 3 lists the potential use of the funds generated by each alternative.

(C) Governmental Grants

Grants cannot be guaranteed for future funding of the program. Grants may be available for some aspects of the program, especially in the start-up period. However, the long-term potential is not significant.

Non-local funding of stormwater programs/projects are exceptionally limited and have not been a priority for the Federal Government and the State of Florida as stormwater management has been relegated to the localities as an unfunded mandate; therefore the following section has been partitioned off from the majority of funding alternatives as the grants category is essentially a stand alone financial anomaly in and of itself that should not be solely relied upon for project solvability. Nevertheless, monies acquired from governmental grants remain a very real possibility that holds the potential to ease the project's financial burden and will be elaborated on accordingly.

One known source of direct funding for such programs/projects is known, the United States Environmental Protection Agency's (EPA) Section 319 Non-Point Source Management Implementation Grant. In the State of Florida, funds (approximately $9 million annually) are passed from EPA through the State of

Florida's Department of Environmental Protection. In this process, local projects must be submitted to the Florida DEP for consideration, ranking and selection.

Programs and/or projects funded through this program are required to provide a minimum of a 40% non-federal match to any funds awarded. Applications to the program must be submitted to the Florida DEP no later than July 1 for funding after July 1 of the following year. (example: an application submitted July 1, 2006 may be funded after July 1, 2007) A fact sheet regarding this program in included in the Appendix.

The only other identifiable source of financial assistance is Florida's State Bond Loan program by which money is loaned to a political subdivision of the State through the sale of Pollution Control Bonds. Terms of the loan are negotiated with repayment interest rates equal to those currently available to the State. The repayment period is negotiated based on the anticipated useful life of the project to be financed.

Beyond these funding/financing mechanisms, the other potential sources of funds are appropriations from the State or Water Management District for direct funding. These appropriations would require negotiation with the funding agencies and in the case of State appropriations, a request to the legislature through local delegation of state elected officials is required.

The County should also investigate non-traditional sources of funding by leveraging funds for other types of projects. Many projects to be undertaken by the County can have stormwater components designed as an integral part of the program. Therefore, by obtaining grants for the primary project, the stormwater components will also receive funding. Examples include funding for parks that may include detention/retention areas or roadway reconstruction or beautification with swales, curb and gutter, and drainage.

Such non-traditional sources of funding could provide some stormwater funding from parks and recreation sources such as the Florida Recreation Development Assistance Program (FRDAP) or the Land and Water Conservation Fund Program (LWCF) administered by the Florida Department of Environmental Protection or from roadway sources such as the National Economic Crossroads Transportation Efficiency Act (NEXTEA) enhancement funds or discretionary funding through the local district office of the Florida Department of Transportation.

(D) Recommendation

Based on the conditions that exist in Okeechobee County, a Stormwater Utility intended to fund the Capital Improvement projects as designated in this included Master Plan should address issues in both the County and City. This utility should be county-wide and cover both jurisdictions. The best mechanism for this requirement is a Special District that has the power to levy a charge for all properties in the County. This charge should be a Non-Ad Valorem levy attached to the annual property tax bill. The strengths of this method are:

- There is a direct relationship between the fee charged and the benefits received.
- A system is already in place with the Fire Fee in the County. This process must be adapted to include the City.
- The funds generated must be used only for the purposes of stormwater.

This recommendation follows a system that has been implemented throughout the State of Florida and been ratified.

9.3 Analysis of Alternative Funding Sources

The following section is intended to address the methodology and changes to be implemented in a proposed Okeechobee County and City Stormwater Utility. The utility will be an Equivalent Residential Unit (ERU) based charge. These units will be defined and proper methodology for computing multiple ERU sites will be provided. All charges will be based on an ERU which is equivalent to one (1) residential unit.

Okeechobee County contains varying types of property usages. Each type is unique and contributes differently to the stormwater system. Some uses have high coverage of impervious material while others may have minimal coverage of such areas. Commercial properties with large paved areas contribute high volumes. Meanwhile, agricultural properties are mostly pervious; however, they likely contribute nutrients to the system. Ultimately, regardless of property usage, the goal is to see stormwater runoff reduced dramatically across all uses.

Non-local funding of stormwater programs/projects are exceptionally limited and have not been a priority for the Federal Government and the State of Florida as stormwater management has been relegated to the localities as an unfunded mandate.

(A) Alternative Mechanisms for the Establishment of a Stormwater Fee

There are generally three structure types for the establishment of a Stormwater Fee. The selection of the specific type for this system should be based on the question of equity so that each property owner pays a charge based on the impact generated from their property. The three types of fee structures are:

- Flat Rate – where all properties are charged the same rate per ERU. Non-residential properties will be assessed based on their size and run-off coefficients.
- Multi-tier Rate – which acknowledges some of the special characteristics of large tracts with pervious surfaces (such as agriculture). Although these lands still add to the issue of drainage around roadways and other similar uses, they also hold water that

would otherwise need to be addressed through a stormwater program. Under this scenario, costs such as Administration and some regional services will be paid by all properties, and specific projects that exist in more urban areas are only paid by developed properties.

- Ad Valorem Millage – this option divides the total cost by the Taxable Value of the jurisdiction and the cost is allocation based on the value of the property.

(I) Flat Rate

The strength of the Flat Rate system is that it is easier to implement. All properties pay the same rate per ERU. After the number of ERUs is established for each parcel, the calculation is simple.

One of the major weaknesses of this system is that agricultural properties pay the same rate per ERU as developed property. Although the coefficients significantly reduce the number of ERUs per acre, the overall impact is that a large portion of the cost will be paid by agricultural properties, just because of the shear size of these parcels.

(II) Multi-tier Rate

The multi-tier rate could divide the costs into General Administrative, Regional Facilities and Sub-regional facilities. Under this concept, all parcels pay a rate that addresses the Administrative and Regional aspects of the program. All properties will benefit from these services and a region-wide fee is appropriate. Sub-regional facilities (such as those that serve more urban areas) will only be paid by those properties that have experienced development

and generate more stormwater that must be addressed. These costs will be allocated only over the parcels that contain these properties. Vacant resident, commercial and industrial properties will be included since they are within the developed area. However, the coefficients generate a smaller ERU for such properties. The name multi-tier denotes that the number of tiers could be any number. For this analysis, we assume that there are two tiers, agricultural and developed.

The principal weakness of this system is that the definition of the two tiers must be made and the distinction be made clear. Additionally, the costs associated with each tier must be clearly defined so that one tier does not pay for facilities and services they do not use.

(III) Ad Valorem Millage

The application of this method is the easiest of all three types. The Taxable Value is already known and a simple calculation will generate the millage rate.

The weaknesses are that the system allocates costs by value, not the amount of impact on the system, and the method also puts a significantly higher burden on agricultural lands. In addition, the proposed changes in the State Legislature may make this method moot.

Table 2: Comparison Matrix
FUNDING ALTERNATIVES - STORMWATER UTILITY

Method	Revenue Generation Capacity	Associate Cost with Users	Implementation Potential	Public Approval Required	Jurisdiction Locally
General Fund	Moderate	Low	Easy	No	Yes
Property Taxes	Good	Low	Easy	No	Yes
Dedicated Property Tax Increments	Good	Low	Easy	Yes	Yes
Sales Taxes	Very Low	None	Very Difficult	No	No
Dedicated Sales Tax Increments	Very Low	None	Very Difficult	Yes	No
Special Purpose Districts	Good	High	Easy	Yes	Yes
Homeowner/Condo Associations	Very Low	Good	Difficult	Yes	No
Special Assessment Districts	Good	High	Easy	No	Yes
Fees, Licenses and Permits	Low	Good	Easy	No	Yes
Penalties and Fines	Low	Uncertain	Easy	No	Yes
Developer Contributions	Capital Only	Good	Easy	No	Yes
Impact Fees	Capital Only	Good	Moderate	No	Yes
Fee-In-Lieu of Payments	Capital Only	Good	Easy	No	Yes
Stormwater Service Fees	Good	High	Easy	No	Yes

Table 3: POTENTIAL USE OF FUNDS
ALTERNATIVE FUNDING SOURCES

Funding Source	Program Administration	Planning	Engineering and Design	Regulation and Enforcement	Operations and Maintenance	Capital Facilities Construction	Water Quality Management
General Fund	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Property Tax	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Dedicated Property Tax Increment	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Sales Tax	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Dedicated Sales Tax Increment	Yes (If Specified)	Yes (If Specified)	Yes (If Specified)	Yes (If Specified)	Yes (If Specified)	Yes (If Specified)	Yes (If Specified)
Special Purpose Districts	Yes	Yes	Yes	Yes	Yes	Yes	Yes (If Specified)
Homeowner and Condominium Owner Associations Fees			Possibly		Yes Internally only	Yes Internally only	Yes Internally only
Special Assessment District	Yes (If Specified)	Yes (If Specified)	Yes (If Specified)	Yes (If Specified)	Yes (If Specified)	Yes (If Specified)	Yes (If Specified)
Fees, Licenses and Permits	Yes	Yes	Yes	Yes			
Penalties and Fines	Yes			Yes			Yes
Developer Contributions		Possibly	Possibly			Yes	
Impact Fees		Possibly	Possibly			Yes	
Fee-In-Lieu-of Payments	Possibly	Possibly	Possibly			Yes	Possibly
Stormwater Service Fees	Yes	Yes	Yes	Yes	Yes	Yes	Yes

9.4 Calculation of ERUs

An Equivalent Residential Unit (ERU) is a measure that represents the typical run-off from one single family housing unit. Typically, all residential units (single family, multi-family, condominium and mobile home) are defined as one (1) ERU. For non-residential properties, the number of ERUs is calculated based on the amount of square footage on the property.

The basic principle is that each residence will be designated as 1 ERU. For multi-family residences, the number of ERUs corresponds to the number of units in the structure. All mobile homes will also be 1 ERU.[26]

Commercial, Industrial and Institutional property is levied based on the relationship to a single residential unit. To determine the value of an ERU, all single family homes in Okeechobee County were identified along with the square footage of the unit. The average of all single family units is 1,800 square feet. Therefore, a commercial property will be calculated based on the square footage of the building is divided by 1,800 to determine the number of ERUs for that property. However, each parcel will be a minimum of 1 ERU.

For vacant and agricultural acreage, a factor was used to modify the size of the parcel. This accounts for percolation ability and lack of impervious surfaces. These factors have been previously developed in the Brevard County Stormwater Utility Analysis[27]. The soil conditions in the two counties are reasonably similar, so the same factors were employed for this analysis. The application of the adjustment factors result in a ratio of approximately 3 ERUs for each 10 acres of land.[28]

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[26] For a complete methodology of ERU and billing calculation, please reference page 24 of the attached Appendix which features an in depth calculation procedure as established Ordinance No. 95 in Brevard County.

[27] * Number of ERU's = Gross area of parcel in sq. feet x 0.03 x 0.4

1800 sq. feet

* Billing = Number of ERU's x $48 x Number of dwelling units or hook-ups

[28] See Exhibit 7.1 for further information regard the Fire Assessment Fee for 2006-2007.

Government properties, canals, rights-of-way and other similar properties were not levied an ERU.

The total number of ERUs is shown as follows:

Table 4: ERU Calculation

Category	Parcels	ERUs
Agriculture	3,014	154,248
Vacant Residential	14056	8,960
Residential	14,604	14,829
Vacant Commercial	188	121
Commercial	1007	2,927
Vacant Industrial	50	19
Industrial	164	451
Vacant Institutional	3	3
Institutional	243	571
Leaseholds	28	76
Canals R-O-W	136	0
Government	796	0
Non-Ag Acres	871	3,880
Total	**19,692**	**186,084**
Total Non-Ag	**16,678**	**31,836**

ERUs for the portion of Okeechobee County that lies within the St. Johns Water Management District have been estimated as 3,413 including all parcels. For agricultural properties, the ERU count is 3,331.

9.5 Revenue Generation

The typical stormwater utility fee throughout Florida is approximately $4 per month, or $48 annually. This average accounts for larger and small areas as well as urban and rural communities.

Based on the estimated budget of approximately $4.7 million annually, the Stormwater Fee can be estimated for each of the alternate fee structures discussed in this section.

The Flat Rate options include all parcels paying a fee at the full amount of ERUs. Under this scenario, the ERUs would generate an annual fee of $25.26 per ERU. For a residential unit, this equates to $25.26 per year. Based on the average size of an agricultural parcel, the typical fee would be $1,266 per year.

The system could eliminate the fee for agricultural lands and charge a Flat Rate of $147.63 for each ERU.

The Flat Rate system could put an undue burden on agricultural lands. However, some of the facilities do provide benefit for the agricultural properties. The development of a Multi-tier system would adjust for the impact that both property types have on the system. Under the Multi-tier Rate, the agricultural properties will only have to pay for a portion of the system. Based on the current plans, it is estimated that the agricultural lands will receive benefit from 1/4 to 1/3 of the facilities and programs. Methods 3 and 4 in Table 5 provide the annual fees for each land use type under the Multi-tier Rate. The agricultural properties will receive a fee of between $6.31 and $8.42 per ERU. Non-agricultural parcels will be charged a fee of between $106.83 and $117.03 per ERU. A further breakdown of the costs for the system must be prepared to assess the proper ratio for the Multi-tier Rate.

The Ad Valorem Millage Rate that must be imposed to generate sufficient funds is 2.1 mills.

Table 5: IMPACT OF RATE STRUCTURE ALTERNATIVES

Method	Agricultural Fee/ERU/Year	Non-Agricultural Fee/ERU/Year
1. Flat Rate all parcels at full ERUs	$25.26	$ 25.26
2. Flat Rate only Non-Agricultural parcels charged	$ 0.00	$147.63
3. Multi-Tier Rate (Agriculture at 25% of cost)	$ 6.31	$117.03
4. Multi-Tier Rate (Agriculture at 33.3% of cost)	$ 8.42	$106.83
5. Ad Valorem Millage	2.1 mills	2.1 mills

9.6 Recommendation

The best structure for the proposed Stormwater Utility System and the annual fee is the Multi-tier Rate. The exact allocation of costs must be determined, but it is expected that the cost to be allocated to Agricultural lands is between 25% and 33.3%. In addition, the other revenue systems identified earlier should also be used to establish and supplement the system. The use of these sources will reduce the estimated fee.

9.7 Programmatic Budget

It should be noted that until the BOCC approves the suggested stormwater fee at the designated ERU rate, that no official budgetary estimates can be provided. However, a tentative budget was made available through a statistical methodology employed in the related Stormwater Utility Feasibility Study, which evidences the proposed expenditures under an expanded Road and Bridge Department. Furthermore, line item appropriations for Master Plan Capital Improvement suggestions cannot be published until an annual budget is decided upon; likewise, the budget cannot be finalized until a stormwater fee amount is decided upon. Nevertheless, Tables 5 and 6 demonstrate a suggested budget which includes a line item Capital Improvements allotment, an item that is fully subjective based upon what the annual agreed upon expenditures are set at under the BOCC authority.

Table 6: FUTURE PROPOSED BUDGET
POST-ROAD AND BRIDGE DEPARTMENT RESTRUCTURING[29]

(Costs shown in thousands)

PERSONNEL		EST. (+/- %) CHANGE IN CURRENT ROAD DEPT. FUNDING
General Oversight		
Director of Public Works	$85,000.00	
Administrative Assistant	$35,000.00	
Capital Improvements Program Director (Contracts Manager)	$45,000.00	
Road Maintenance & Stormwater Director	$65,000.00	
Operations Scheduler	$35,000.00	
Natural Resources Director (Water Quality Monitoring)	$40,000.00	
Permitting (est. 1)	$40,000.00	
Custodian (est. 1)	$12,000.00	
Survey & Mapping		
Global Information System (GIS) Team (est. 1)	$50,000.00	
Registered Surveyor (est. 1)	$65,000.00	
Survey Team (est. 2)	$80,000.00	
Road Maintenance		
Assistant Director of Road Maintenance	$60,000.00	
Clerical/Accounting (est. 1)	$32,000.00	
Miscellaneous (est. 25; existing Road Dept. Personnel Expenditures)	$1,770,000.00	
Stormwater Management		
Assistant Director of Stormwater Management	$60,000.00	
Clerical/Accounting (est. 1)	$32,000.00	
Supervisor of Field Operations	$50,000.00	
Equipment Operators (est. 4)	$200,000.00	
Laborers (est. 6)	$120,000.00	
PERSONNEL TOTAL:	**$2,876,000.00**	**+ 168%**
OPERATING EXPENSES		
Oversight Administrative		
Office Supplies & Equipment	$ 15,000.00	
Utilities (Electric, Rent, Internet, etc.)	$ 80,000.00	
Survey & Mapping		
Equipment Operations (Gas, insurance, safety, etc.)	$100,000.00	
Equipment Repair	$10,000.00	
Miscellaneous	$350,000.00	
Road Maintenance		
Equipment Operations (Gas, insurance, safety, etc.)	$ 100,000.00	
Equipment Repair	$ 22,000.00	
Miscellaneous	$2,244,000.00	
Stormwater Management		
Equipment Operations (Gas, insurance, safety, etc.)	$ 167,000.00	
Equipment Repair	$ 37,000.00	
Miscellaneous	$ 330,000.00	
OPERATING EXPENSES TOTAL:	**$3,455,000.00**	**+ 132%**
CAPITAL IMPROVEMENTS		
Road Maintenance		
New Equipment	$ 320,000.00	
Miscellaneous	$1,824,000.00	
Stormwater Management		
New Equipment	$ 540,000.00	
Master Plan Project Implementations[30]	$2,500,000.00	
Drainage	$ 52,000.00	

[29] Furthermore, CAS reserves the rights to revise or make editions to the preliminary budget as information from the underway Master Plan continues to be received.

[30] It should be noted that this financial estimate is solely contingent upon the amount of revenue that the Board of County Commissioners is willing to allocate to the project and has the potential to vary considerably.

CAPITAL IMPROVEMENTS TOTAL:	**$5,236,000.00**	**+218%**
EST. TOTAL DEPARTMENT BUDGET:	**$11,567,000.00**	**+168%**

Table 7: FUTURE PROPOSED BUDGET STORMWATER RESTRUCTURING[31]

(Costs shown in thousands)[32]

	STORMWATER EXPENSES	EST. (+/- %) CHANGE IN CURRENT ROAD DEPT. FUNDING
STORMWATER RELATED PERSONNEL		
Stormwater General Oversight		
Director of Public Works	$46,750.00	
Administrative Assistant	$19,250.00	
Capital Improvements Program Director (Contracts Manager)	$24,750.00	
Road Maintenance & Stormwater Director	$35,750.00	
Operations Scheduler	$19,250.00	
Natural Resources Director (Water Quality Monitoring)	$22,000.00	
Permitting (est. 1)	$22,000.00	
Survey & Mapping		
Global Information System (GIS) Team (est. 1)	$27,500.00	
Registered Surveyor (est. 1)	$35,750.00	
Survey Team (est. 2)	$44,000.00	
Stormwater Management		
Assistant Director of Stormwater Management	$60,000.00	
Clerical/Accounting (est. 1)	$32,000.00	
Supervisor of Field Operations	$50,000.00	
Equipment Operators (est. 4)	$200,000.00	
Laborers (est. 6)	$120,000.00	
PERSONNEL TOTAL:	**$759,000.00**	**+175%**
STORMWATER OPERATING EXPENSES		
Stormwater Oversight Administrative		
Office Supplies & Equipment	$ 7,500.00	
Utilities (Electric, Rent, Internet, etc.)	$ 40,000.00	
Survey & Mapping		
Equipment Operations (Gas, insurance, safety, etc.)	$55,000.00	
Equipment Repair	$12,100.00	
Miscellaneous	$192,500.00	
Stormwater Management		
Equipment Operations (Gas, insurance, safety, etc.)	$ 167,000.00	
Equipment Repair	$ 38,000.00	
Miscellaneous	$ 330000.00	
OPERATING EXPENSES TOTAL:	**$ 842,100.00**	**+333%**
STORMWATER CAPITAL IMPROVEMENTS		
New Equipment	$ 540,000.00	
Master Plan Project Implementations[33]	$2,500,000.00	

[31] Please note that C.A.S. reserves the rights to revise or make editions to the preliminary budget as information from the underway Master Plan and input from the Board of County Commissions continues to be received. More importantly, it should be noted that a five percent (5%) inflation was built into this total to prevent budgetary shortages in the future due to unforeseen costs that may arise during the implementation process.

[32] Methodologically, the numbers in column two were calculated using a ".55 threshold"; for statistical purposes, it is assumed that all new staff positions not directly under the new stormwater sub-department's jurisdiction will be employed on stormwater related projects for 55% of the time. The original costs founds in Table 4.1 were then multiplied by the .55 threshold to attain the likely dollar amount to be allocated to stormwater purposes. This is synonymous with the 5% inflation rate referenced in Footnote 12.

[33] It should be noted that this financial estimate is solely contingent upon the amount of revenue that the Board of County Commissioners is willing to allocate to the project and has the potential to vary considerably.

Drainage	$ 52,000.00	
CAPITAL IMPROVEMENTS TOTAL:	**$3,092,000.00**	**+1203%**
EST. TOTAL STORMWATER RELATED BUDGET:	**$4,693,100.00**	**+499%**

9.7 Action Plan and Tentative Schedule

The following text details a specified plan of action that will enable this stormwater utility to manifest. As to be expected, any mention of explicit dates or timelines are tentative and subject to change and/or revision as either the County or City see fit. What follows is a brief overview of the perceived course of action:

- Contract Completion
- Presentation & Selection of Alternatives
- Public Hearing
- Creation of Selected Alternative
- Implementation of Needs

(A) Contract Completion:

Upon completion of the preliminary draft at hand, the feasibility project will go to both the City and County for further addendums, revisions, or change to any potential problems the body may find within the content of this study. With this draft to serve as an initial guideline for the overall body of the stormwater utility, it is expected that the City/County will collaborate the affected local municipalities to streamline the specifics of the project, as it is unlikely that an initial draft such as this will encompass all of the questions and concerns that either the governing bodies or the public at large may encounter.

The City/County will be asked to provide further insight, using the completed study at hand as a basic outline, to fill in any quantitative gaps or revise the report in such a way as to make the feasibility of the project all the more feasible. Ultimately, the idea is to tailor the implementation and practical workings of the

utility to the specific needs of the County, which necessitates further qualitative input for substantive output.

Immediately succeeding the aforementioned input phase, the report will be revised to any extent that is necessary to successfully incorporate the specific needs of the City and County governments and citizens. It should be noted that even at this stage of the utility development that a majority of budgetary estimates will remain in flux, pending successful passage of a municipal ordinance; however, the finalized slate of expenditures is not expected to vary greatly from the preliminary budgeting provided in this report, as variation has already been taken into account by building flexibility into the numbers that have been provided.

(B) Presentation & Selection of Alternatives

Following both the City and County staff input coupled with public revision processes, the report will then be delivered to the Board of County Commissioners (B. O. C. C.) for final inspection, revision, and approval. It is during this phase of the action plan in which final substantive concerns from the governing bodies will be incorporated into the report and developing Master Plan. It is at this point when finalized budgeting details will become available following the succeeding degrees of approval from the B. O. C. C. Comments will be considered and final quantitative revisions will be made before the project outline is presented to the affected public.

(C) Public Hearing

After the concerns brought forth by the Board of County Commissioners have been taken into account and incorporated into the revised project draft, the utility outline will go before several public hearings at locations and times to be decided. It is the intention that the multiple available occasions for public input

will allow for a greater comprehensiveness in utility specifics. Questions and concerns from the affected public will be welcomed and incorporated into the finalized project documents.

(D) Creation of Selected Alternative

Following both the public and private input stages of project development, a finalized feasibility document will be established and presented before its respective authorities. It is the expectation that a comprehensive and thorough outline to the proposed stormwater utility will result from these numerous and inclusive input phases.

(E) Implementation of Needs

Upon the finalization of the study at hand, it is expected that a stormwater utility ordinance will then be introduced, establishing the project as set forth within the agreed upon final documentation. This procedure will solidify the essential skeleton of the project including services to be provided as well as the organizational set up of the utility as well as its finalized operating procedure. It is expected that the following final two stages will include a financial solidification of budgetary formulae.

At this stage, a finalized Master Plan as well as a detailed listing of capital improvement requirements will be available and incorporated into the preliminary budget presented within the initial project drafts. The utility will be considerably closer to its execution date at this time and will have had several additional rounds of public and private input to determine the appropriate service level that will be necessitated by the current and projected growth of the stormwater demand level. Given this, it will now be possible to construct a working budget with precision, as well as to denote the locale for incoming project funds for both

the initial annual operations as well as detailed projections of upcoming fiscal years.

A finalized annual budget will then be constructed from the available array of information and used to relegate a definitive order for putting the various branches of the utility project in action in addition to witnessing the finalized establishment of a working timeline for accomplishing such an act.

Finally, the project will entail the creation of a stormwater division within the Road and Bridge department, as the existing stormwater services are currently performed under this jurisdiction therefore the department already possesses many of the necessary resources and stormwater knowledge. The stormwater division will be established according to the organization plan outlined in this report and as approved by public authorities. This will include a Division Director position to be filled; it should be noted that the Director will remain accountable to the City and County Administration as well as the Road and Bridge Department. While functioning as a separate and ultimately more efficient entity, the Stormwater Division will possess the resources needed to effectively combat the stormwater runoff issues that have plagued the region.

Accordingly, the personnel will be screened and brought on board to implement the outlined plans as set forth by the organizational outline. Following the genesis of the independently functioning stormwater utility, the division will operate autonomously and adopt a proactive approach to stormwater which entails proper maintenance and preventative environmental landscaping as well as possessing the regulatory authority to affect stormwater policies for both current and incoming commercial and residential developments.

10.0 Planning/Recommendations

Recommended is the adoption and implementation of the Stormwater Master Plan. Additional recommendations are as follows:

For quite some time, Okeechobee County has regulated land development projects through its Land Development Regulations (LDRs). Recommended is that Okeechobee County continues to enforce its LDRs for land development projects or existing sites proposed for redevelopment. Article VII of the LDRs establishes design storm criteria for a project's outfall and for minimum road crown and minimum finished floor elevations as follows:

"A. ***Hydraulic design criteria.***

1. ***Rainfall and runoff criteria.*** **The system shall be designed for "design floods" resulting from rainstorms of the following expected frequencies or greater:**

a. **Twenty-five-year three-day rainfall interval for allowable discharge[34] from project-development, however discharge from development shall not exceed predevelopment discharge.**

b. **Twenty-five-year frequency storm, 24-hour duration rainfall interval for major drainageways (over one square mile drainage area).**

c. **Five-year one-day rainfall interval for underground drainage utilizing storm sewers.**

d. **Ten-year one-day rainfall interval for all road crowns and all others. Rainfall intensity factors shall come from accepted meteorological and rainfall sources as applicable to Okeechobee County. Ultimate land usage shall be assumed for selection of proper runoff coefficients within the basins involved, whether within the subdivision or not. Weighted runoff coefficients shall be applied where different coefficients apply within the areas comprising the basins.**

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B. ***Minimum building elevations and adjoining grades.***

1. **The minimum elevation for all residential structures, non-residential structures and substantial improvements or additions located in a flood hazard area shall be at or above the base flood elevation or otherwise shall meet the minimum building elevation established by**

[34] The above requires more attenuation for projects located within the C-59 Basin which has a design storm of a 10-year, 3-day magnitude. Also, the ACOE Taylor Creek (S-133) Basin design was based on a 1-in-10 year flood and District and County regulations require 1-in-25 year flood attenuation.

the NFIP. All electrical, heating, ventilation, plumbing, air conditioning equipment, ductwork and other service facilities also shall be located at or above the base flood elevation, or shall be designed or located to prevent water from entering or accumulating within the components during conditions of flooding.

2. In addition to meeting the requirements of paragraph 1 above, when applicable, minimum building elevations shall be at least 18 inches above the crown of adjacent roadway and shall be at or above the 100 year three-day storm event, zero discharge, except that:

(a) When included with an engineered site plan that demonstrates compliance with drainage and runoff regulations, the minimum elevation for a principal structure within 200 feet of the adjacent roadway may be ten inches above the crown of the adjacent roadway, and shall be at or above the 100-year three-day storm event, zero discharge.

(b) When included with an engineered site plan that demonstrates compliance with drainage and runoff regulations, the minimum elevation of all structures that are 200 feet or more from the adjacent roadway shall be at least 24 inches above natural grade and shall be at or above the 100 year three-day storm event, zero discharge.

(c) When not included with an engineered site plan, the minimum elevation of all principal structures that are 200 feet or more from the adjacent roadway may shall be at least 30 inches above natural grade and shall be at or above the 100-year three-day storm event, zero discharge."

Per Article VII, Section 7.06.03, "..... the design and performance of all stormwater management systems shall comply with applicable state regulations regarding stormwater quality (chapter 17-25 and chapter 17-302, Florida Administrative Code) or rules of the South Florida Water Management District or the St. Johns River Water Management District, as appropriate."[35]

"A. *Performance standards.* All development must be designed, constructed and maintained to meet the following performance standards:

1. While development activity is underway and after it is completed, the characteristics of stormwater runoff shall approximate the rate, volume, quality, and timing of stormwater runoff that occurred under the site's natural unimproved or existing state, except that the first one inch or the total runoff of 2.5 times the percentage impervious, whichever is greater, of stormwater runoff shall be retained in an off-line dry or wet retention system or according to other best management practices.

2. The proposed development and development activity shall not violate the water quality standards as set forth in chapter 17-3, Florida Administrative Code.

[35] The LDRs contain performance standards for water quality treatment criteria for land development projects. Noted herein is that references to Chapter 17, Florida Administrative Code should be revised to reflect Chapter 62 where needed.

4. Dry retention and detention systems shall be designed with the wet season water table at least one foot below the bottom surface of the treatment area.

5. Wet detention systems shall have water depths no more than ten feet, unless specifically accepted by the county engineer, and side slopes of 4:1 from proposed finished grade to two feet below the control elevation.

These requirements set the standards for insuring that new developments must address water quantity and water quality treatment criteria. Recommended is a design policy or a Code revision regarding the design of tertiary drainage systems for both, City and County.

Tertiary drainage system design should, at a minimum, be based on FDOT design criteria as follows:

- Design storm for storm sewers should be based on a 1-in-3 year storm based on the rational formula of Q = CIA where Q = flow in cubic feet per second (CFS), C = land use ratio which takes into account pervious/impervious coverages, and I = Rainfall Intensity in inches per hour obtained from FDOT - Zone 8 Intensity-Duration-Frequency Curves from a given time of concentration.
- Minimum Starting Time of Concentration (Tc): 10-15 minutes; greater Tc can be used if justified.
- Minimum Tailwater should be based on a peak flood stage from a 3-year, 1-day design storm event for each storm sewer run.
- Catch basins should be spaced adequately in narrow rights-of-way to capture sufficient stormwater to prevent travel lane flooding.

The City of Okeechobee's Development Standards for water management which can be located in Chapter 78, Article IV, "Stormwater Management"[36] are limited to the following:

Sec. 78-101. Requirements.

[36] It is not clear in this Code if the developer is given the option of having to comply with (a), (b) or both. However based CAS experience, the requirement cited in part (a) is normally the route taken by developers for meeting water quality and water quantity criteria.

(a) Required stormwater management systems shall comply with state approved standards adopted by the South Florida Water Management District.

(b) Minimum stormwater management requirements are as follows:

(1) Stormwater treatment and disposal facilities shall be designed for a 25-year storm event of 24-hour duration.

(2) The first inch of stormwater runoff shall be treated on site.

(3) Post development runoff rates, volumes and pollutant loads shall not exceed predevelopment conditions.

(4) Erosion and sediment controls shall be used during construction.

(5) Minimum road elevation is the crown of the road or 100-year, three-day event, whichever is highest.[37]

Recommended is a revision to the City's Development standards to fall closer in line with the District's water quality treatment and water quantity requirements by either actual code revision or by reference of Chapter 40E-4 and portions of the District's "Basis of Review". The County's LDRs references Chapter 40E-4 by code. The City can choose to have non-conflicting standards that are stricter than District standards.

For the City and County, recommended is the adoption and implementation of on lot-retention for new construction on existing subdivided property. The volume of retention can be determined during code implementation.

One major component of a successful stormwater program is maintenance. All systems, private or public, should be inspected a minimum of twice a year and after a storm event equaling or exceeding a 3 inch rainfall. Recommended is the implementation of routine maintenance measures to insure system functionality for City and County owned secondary and tertiary systems. Systems on private property which serve regional areas are recommended for drainage and maintenance easement assignment to the City and/or the County. If necessary, reciprocal maintenance rights should be obtained in areas where systems located in the City's jurisdiction are either partially, primarily, or entirely serving areas within the County's jurisdictional limits or

[37] Minimum road elevations required in item 78-101 (b) (5) is unusual and appears difficult to regulate.

vice versa. Furthermore, coordination with the District, the Florida Department of Transportation and the CSX Railroad is recommended as it pertains to maintenance.

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OKEECHOBEE COUNTY
COMPREHENSIVE URBANIZED AREA
STORMWATER MASTER PLAN

SECTION 2

HYDROLOGIC AND HYDRAULIC CALCULATIONS

OKEECHOBEE COUNTY
COMPREHENSIVE URBANIZED AREA
STORMWATER MASTER PLAN

DRAINAGE BASIN
STAGE/ STORAGE CALCULATIONS

ASSUMED LAND USE BASED ON AERIAL MAP VISUAL OBSERVATION

% LAND USES WERE ASSUMED BASED VISUAL OBSERVATION VIA PROPERTY APPRAISER AERIALS OR BY PERMIT DATA

USED FDOT FIGURE 5-19 TO DETERMINE TIME OF CONCENTRATION FOR EACH BASIN FOR MUNICIPAL-RESIDENTIAL; SOME Tc WERE MANUALLY ENTERED

ASSUME TERRAIN SLOPE NO GREATER THAN 0.1% SUCH THAT AVG OVERLAND V = 35'/MIN

35

AREA	BASIN	ACREAGE	%LAKE/CANAL/ WETLAND	%BLDG	%PAVMT	%LAWN	ASSUMED RUNOFF LENGTH (FT)	
GENERAL GROUP (AIRPORT, IND PARK, BASSWOOD, MIRAL SOL (S-154)	BASIN 01	1050.00	10%	30%	25%	35%	7920	226.3
	BASIN 02	139.79	7%	25%	25%	43%	–	228.6
	BASIN 03	655.26	9%	25%	25%	41%	5280	150.9
	BASIN 04	840.00	1%	20%	25%	54%	8870	253.4
	BASIN 05	95.70	1%	21%	25%	53%	2300	65.7
	BASIN 06	683.50	2%	15%	15%	68%	6800	194.3
	BASIN 07	424.00	1%	0.100%	0.100%	99%	5280	150.9
	BASIN 08	242.00	1%	15%	15%	69%	3300	94.3
	BASIN 09	301.80	1%	15%	15%	69%	3168	90.5
	BASIN 10	394.00	1%	10%	20%	69%	2300	65.7
SW 7 AVENUE, SW 16/12 AVENUE, SW 26 AVENUE, SW 32 AVENUE GROUPS (S-133)	BASIN 11	326.00	0%	20%	20%	60%	2300	65.7
	BASIN 12	274.00	0%	25%	25%	50%	2300	65.7
	BASIN 13	243.00	1%	10%	10%	79%	2300	65.7
	BASIN 13B	243.00	10%	10%	10%	70%	1500	42.9
	BASIN 14	203.00	1%	10%	20%	69%	2300	65.7
	BASIN 15	78.20	1%	1%	1%	97%	2400	68.6
	BASIN 16A	4.27	0%	0%	60%	40%	500	14.3
	BASIN 16B	34.60	0%	9%	35%	56%	700	20.0
	BASIN 16C	10.87	0%	40%	45%	15%	700	20.0
	BASIN 16D	3.10	0%	1%	10%	89%	500	14.3
	BASIN 16E	6.66	0%	5%	21%	74%	500	14.3
	BASIN 16F	1.43	0%	20%	40%	40%	200	5.7
	BASIN 16G	4.37	0%	13%	55%	32%	550	15.7
	BASIN 17A	65.30	1%	10%	20%	69%	2300	65.7
	BASIN 17B	53.17	39%	20%	14%	27%	500	14.3
	BASIN 17C	142.37	8.0%	15%	12%	65%	1000	28.6
	BASIN 18	332.00	3%	20%	20%	57%	2600	74.3
	BASIN 19	123.00	1%	1%	1%	97%	2300	65.7
	BASIN 20	324.00	1%	25%	20%	54%	5280	150.9
	BASIN 21	105.30	1%	10%	15%	74%	2600	74.3
	BASIN 22	320.00	1%	15%	15%	69%	2600	74.3
	BASIN 23	301.00	2%	10%	10%	78%	2600	74.3
	BASIN 23B	301.00	8%	10%	10%	72%	1300	37.1
	BASIN 24	97.00	1%	1%	1%	97%	1300	37.1
	BASIN 25A	366.70	25%	0.005%	0.005%	75%	5280	150.9
	BASIN 25B	28.30	14%	11%	8%	67%	400	11.4
	BASIN 26	253.00	30%	0%	0%	70%	5280	150.9
	BASIN 27	246.00	2%	15%	15%	68%	1000	28.6
	BASIN 28	303.00	1%	5%	5%	89%	1000	28.6
	BASIN 29	331.00	6%	0%	0%	94%	8000	228.6
	BASIN 30	353.00	10%	10%	5%	75%	2600	74.3
	BASIN 30A	103.00	0%	20%	20%	60%	1726	49.3
	BASIN 31	72.00	20%	0%	0%	80%	1500	42.9
	BASIN 32	93.70	20%	2%	2%	76%	1125	32.1
	BASIN 33	160.00	30%	5%	1%	64%	1000	28.6

Adjusted soil storage calculation per SFWMD Volume IV, Page E-2 (4/5/01)

Depth to W.T (ft)	Flatwoods Storage (in) (NAS)	CN	75% reduction for compaction (DAS)	Adj. CN
1	0.6	94	0.45	96
2	2.5	80	1.875	84
3	5.4	65	4.05	71
4	9	53	6.85	59
5	12	45	9	53
6	14	42	10.5	49

BASIN NO.	ACREAGE	PERVIOUS ACREAGE	AVG SITE GRADE (FT-NGVD)	~WATER TABLE (FT-NGVD)	DWT (FT)	DAS (IN)	S (IN)	CN
BASIN 01	1050.00	367.50	32.00	28	4.00	6.85	2.40	80.7
BASIN 02	139.79	60.24	31.00	26	5.00	9.00	3.88	72.1
BASIN 03	655.26	270.03	31.00	26	5.00	9.00	3.71	72.9
BASIN 04	840.00	453.60	28.00	24	4.00	6.85	3.70	73.0
BASIN 05	95.70	50.72	27.00	24	3.00	4.05	2.15	82.3
BASIN 06	683.50	464.78	27.00	23	4.00	6.85	4.66	68.2
BASIN 07	424.00	418.91	29.00	27	2.00	1.88	1.85	84.4
BASIN 08	242.00	166.98	27.00	24	3.00	4.05	2.79	78.2
BASIN 09	301.80	208.24	27.00	23	4.00	6.85	4.73	67.9
BASIN 10	394.00	271.86	27.00	23	4.00	6.85	4.73	67.9
BASIN 11	326.00	195.60	27.00	23	4.00	6.85	4.11	70.9
BASIN 12	274.00	137.00	27.00	23	4.00	6.85	3.43	74.5
BASIN 13	243.00	191.97	21.00	19.5	1.50	1.16	0.92	91.6
BASIN 13B	243.00	169.40	21.00	19.5	1.50	1.16	0.81	92.5
BASIN 14	203.00	140.07	21.00	18	3.00	4.05	2.79	78.2
BASIN 15	78.20	75.85	20.00	18	2.00	1.88	1.82	84.6
BASIN 16A	4.27	1.71	20.00	15	5.00	9.00	3.60	73.5
BASIN 16B	34.60	19.49	19.00	15	4.00	6.85	3.86	72.2
BASIN 16C	10.87	1.63	19.00	15	4.00	6.85	1.03	90.7
BASIN 16D	3.10	2.76	19.00	15	4.00	6.85	6.10	62.1
BASIN 16E	6.66	4.96	21.00	17	4.00	6.85	5.10	66.2
BASIN 16F	1.43	0.57	21.00	17	4.00	6.85	2.74	78.5
BASIN 16G	4.37	1.40	20.00	16	4.00	6.85	2.19	82.0
BASIN 17A	65.30	45.06	18.00	15	3.00	4.05	2.79	78.2
BASIN 17B	53.17	14.36	18.00	15	3.00	4.05	1.09	90.1
BASIN 17C	142.37	92.54	18.00	14.5	3.50	5.45	3.54	73.8
BASIN 18	332.00	189.70	18.00	15	3.00	4.05	2.31	81.2
BASIN 19	123.00	119.31	17.00	15	2.00	1.88	1.82	84.6
BASIN 20	324.00	174.96	29.00	25	4.00	6.85	3.70	73.0
BASIN 21	105.30	77.92	30.00	27.5	2.50	2.96	2.19	82.0
BASIN 22	320.00	220.80	27.50	24	3.50	5.45	3.76	72.7
BASIN 23	301.00	234.78	22.50	19.5	3.00	4.05	3.16	76.0
BASIN 23B	301.00	215.80	22.50	19.5	3.00	4.05	2.90	77.5
BASIN 24	97.00	94.09	20.00	18.5	1.50	1.16	1.13	89.9
BASIN 25A	366.70	274.99	16.50	14.5	2.00	1.88	1.41	87.7
BASIN 25B	28.30	19.06	18.00	15.6	2.40	2.75	1.85	84.4
BASIN 26	253.00	177.10	17.00	14.5	2.50	2.96	2.07	82.8
BASIN 27	246.00	167.28	23.00	19	4.00	6.85	4.66	68.2
BASIN 28	303.00	269.67	25.00	21	4.00	6.85	6.10	62.1
BASIN 29	331.00	311.14	25.00	23	2.00	1.88	1.76	85.0
BASIN 30	353.00	264.75	17.00	14.5	2.50	2.96	2.22	81.8
BASIN 30A	103.00	61.80	17.00	14.5	2.50	2.96	1.78	84.9
BASIN 31	72.00	57.60	18.00	13.5	4.50	7.93	6.34	61.2

Adjusted soil storage calculation per SFWMD Volume IV, Page E-2 (4/5/01)

Depth to W.T (ft)	Flatwoods Storage (in) (NAS)	CN	75% reduction for compaction (DAS)	Adj. CN
1	0.6	94	0.45	96
2	2.5	80	1.875	84
3	5.4	65	4.05	71
4	9	53	6.85	59
5	12	45	9	53
6	14	42	10.5	49

BASIN NO.	ACREAGE	PERVIOUS ACREAGE	AVG SITE GRADE (FT-NGVD)	~WATER TABLE (FT-NGVD)	DWT (FT)	DAS (IN)	S (IN)	CN
BASIN 32	93.70	71.21	15.00	13.5	1.50	1.16	0.88	91.9
BASIN 33	160.00	102.40	15.00	13.5	1.50	1.16	0.74	93.1
TOTALS & AVERAGES	10732.4	6931.60	22.42	17.5	3.21	4.63	2.99	77.0

STAGE STORAGE CALCULATIONS
BASIN 01

Basin Grading Assumptions:

Total Project Area = 1050 ac.
Control Elevation = 28 ft-NGVD

Assumptions:

Land Use	%	Area (ac)	Stores Linearly From	To
Roads, Pads & Parking	25%	262.50	33.0	35.0
Building Area	30%	315.00		
Lake/Canal Area	10%	105.00	28.0	vertically
Green Area	35%	367.50	29.0	36.0

Stage (ft-NGVD)	Area (ac) Roads	Detention	Green	Total	Storage (ac-ft)
28.0	0.00	105.00	0.00	105.00	0.00
28.5	0.00	105.00	0.00	105.00	52.50
29.0	0.00	105.00	0.00	105.00	105.00
29.5	0.00	105.00	26.25	131.25	164.06
30.0	0.00	105.00	52.50	157.50	236.25
30.5	0.00	105.00	78.75	183.75	321.56
31.0	0.00	105.00	105.00	210.00	420.00
31.3	0.00	105.00	118.13	223.13	474.14
31.5	0.00	105.00	131.25	236.25	531.56
31.8	0.00	105.00	144.38	249.38	592.27
32.0	0.00	105.00	157.50	262.50	656.25
32.5	0.00	105.00	183.75	288.75	794.06
33.0	0.00	105.00	210.00	315.00	945.00
33.5	65.63	105.00	236.25	406.88	1125.47
34.0	131.25	105.00	262.50	498.75	1351.88
34.5	196.88	105.00	288.75	590.63	1624.22
35.0	262.50	105.00	315.00	682.50	1942.50

THE FOLLOWING REUSLTS ARE THEORETICAL PEAK FLOOD STAGES WITH NO OFF-SITE DISCHARGE.

100 - YEAR,3-DAY RAINFALL = 10 inches
Soil Storage = S = 2.40 inches

EXFILTRATION TRENCH VOLUME (XT Volume) 0 AC-FT

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 7.6 inches

Net Runoff Volume = V = v x Project Area/12 -XT \ 665.5 ac-ft

From Stage - Storage Table, Peak Stage = 32.03 ft_NGVD

10 - YEAR,3-DAY RAINFALL = 7 inches
Soil Storage = S = 2.40 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 4.8 inches

Net Runoff Volume = V = v x Project Area/12 -XT \ 417.2 ac-ft

From Stage - Storage Table, Peak Stage = 30.99 ft_NGVD

25 - YEAR, 3-DAY RAINFALL = 9 inches
Soil Storage = S = 2.40 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 6.6 inches

Net Runoff Volume = V = v x Project Area/12 -XT \ 581.8 ac-ft

From Stage - Storage Table, Peak Stage = 31.70 ft_NGVD

5 - YEAR, 1-DAY RAINFALL = 4.5 inches
Soil Storage = S = 2.40 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 2.5 inches

Net Runoff Volume = V = v x Project Area/12 -XT \ 220.4 ac-ft

From Stage - Storage Table, Peak Stage = 29.89 ft_NGVD

STAGE STORAGE CALCULATIONS
BASIN 02

Basin Grading Assumptions:

Total Project Area = 139.79 ac.
Control Elevation = 26 ft-NGVD

Assumptions:

Land Use	%	Area (ac)	Stores Linearly From	To
Roads, Pads & Parking	25%	34.72	28.0	33.0
Building Area	25%	34.72		
Lake/Canal Area	7%	10.12	27.0	vertically
Green Area	43%	60.24	28.0	33.0

Stage (ft-NGVD)	Area (ac) Roads	Detention	Green	Total	Storage (ac-ft)
26.0	0.00	0.00	0.00	0.00	0.00
26.5	0.00	0.00	0.00	0.00	0.00
27.0	0.00	10.12	0.00	10.12	2.53
27.5	0.00	10.12	0.00	10.12	7.59
28.0	0.00	10.12	0.00	10.12	12.65
28.5	3.47	10.12	6.02	19.62	20.08
29.0	6.94	10.12	12.05	29.11	32.27
29.3	8.68	10.12	15.06	33.86	40.14
29.5	10.41	10.12	18.07	38.61	49.19
29.8	12.15	10.12	21.08	43.35	59.44
30.0	13.89	10.12	24.10	48.10	70.87
30.5	17.36	10.12	30.12	57.60	97.30
31.0	20.83	10.12	36.14	67.09	128.47
31.5	24.30	10.12	42.17	76.59	164.39
32.0	27.77	10.12	48.19	86.08	205.06
32.5	31.24	10.12	54.22	95.58	250.47
33.0	34.72	10.12	60.24	105.08	300.64

THE FOLLOWING REUSLTS ARE THEORETICAL PEAK FLOOD STAGES WITH NO OFF-SITE DISCHARGE.

100 - YEAR,3-DAY RAINFALL = 10 inches
Soil Storage = S = 3.88 inches

EXFILTRATION TRENCH VOLUME (XT Volume) 0 AC-FT

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 6.5 inches

Net Runoff Volume = V = v x Project Area/12 -XT \ 75.6 ac-ft

From Stage - Storage Table, Peak Stage = 30.09 ft_NGVD

10 - YEAR,3-DAY RAINFALL = 7 inches
Soil Storage = S = 3.88 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 3.8 inches

Net Runoff Volume = V = v x Project Area/12 -XT V 44.7 ac-ft

From Stage - Storage Table, Peak Stage = 29.37 ft_NGVD

25 - YEAR, 3-DAY RAINFALL = 9 inches
Soil Storage = S = 3.88 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 5.6 inches

Net Runoff Volume = V = v x Project Area/12 -XT \ 65.1 ac-ft

From Stage - Storage Table, Peak Stage = 29.87 ft_NGVD

5 - YEAR, 1-DAY RAINFALL = 4.5 inches
Soil Storage = S = 3.88 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 1.8 inches

Net Runoff Volume = V = v x Project Area/12 -XT V 21.3 ac-ft

From Stage - Storage Table, Peak Stage = 28.55 ft_NGVD

STAGE STORAGE CALCULATIONS
BASIN 03

Basin Grading Assumptions:

Total Project Area = 655.26 ac.
Control Elevation = 26 ft-NGVD

Assumptions:

Land Use	%	Area (ac)	Stores Linearly From	To
Roads, Pads & Parking	25%	163.82	28.00	33.00
Building Area	25%	163.82		
Lake/Canal Area	9%	57.60	27.0	vertically
Green Area	41%	270.03	28.00	33.00

Stage (ft-NGVD)	Area (ac)				Storage (ac-ft)
	Roads	Detention	Green	Total	
26.0	0.00	0.00	0.00	0.00	0.00
26.5	0.00	0.00	0.00	0.00	0.00
27.0	0.00	57.60	0.00	57.60	14.40
27.5	0.00	57.60	0.00	57.60	43.20
28.0	0.00	57.60	0.00	57.60	72.00
28.5	16.38	57.60	27.00	100.98	111.65
29.0	32.76	57.60	54.01	144.37	172.98
29.3	40.95	57.60	67.51	166.06	211.79
29.5	49.14	57.60	81.01	187.75	256.02
29.8	57.34	57.60	94.51	209.45	305.67
30.0	65.53	57.60	108.01	231.14	360.74
30.5	81.91	57.60	135.02	274.52	487.15
31.0	98.29	57.60	162.02	317.91	635.26
31.5	114.67	57.60	189.02	361.29	805.06
32.0	131.05	57.60	216.02	404.68	996.55
32.5	147.43	57.60	243.03	448.06	1209.74
33.0	163.82	57.60	270.03	491.45	1444.61

THE FOLLOWING REUSLTS ARE THEORETICAL PEAK FLOOD STAGES WITH NO OFF-SITE DISCHARGE.

100 - YEAR,3-DAY RAINFALL = 10 inches
Soil Storage = S = 3.71 inches

EXFILTRATION TRENCH VOLUME (XT Volume) = 0 AC-FT

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 6.6 inches

Net Runoff Volume = V = v x Project Area/12 -XT Volume = 360.9 ac-ft

From Stage - Storage Table, Peak Stage = 30.00 ft_NGVD

10 - YEAR,3-DAY RAINFALL = 7 inches
Soil Storage = S = 3.71 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 3.9 inches

Net Runoff Volume = V = v x Project Area/12 -XT Volume 214.6 ac-ft

From Stage - Storage Table, Peak Stage = 29.25 ft_NGVD

25 - YEAR, 3-DAY RAINFALL = 9 inches
Soil Storage = S = 3.71 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 5.7 inches

Net Runoff Volume = V = v x Project Area/12 -XT Volume = 311.2 ac-ft

From Stage - Storage Table, Peak Stage = 29.78 ft_NGVD

5 - YEAR, 1-DAY RAINFALL = 4.5 inches
Soil Storage = S = 3.71 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 1.9 inches

Net Runoff Volume = V = v x Project Area/12 -XT Volume 103.3 ac-ft

From Stage - Storage Table, Peak Stage = 28.39 ft_NGVD

STAGE STORAGE CALCULATIONS
BASIN 04

Basin Grading Assumptions:

Total Project Area = 840 ac.
Control Elevation = 24 ft-NGVD

Assumptions:

Land Use	%	Area (ac)	Stores Linearly From	To
Roads, Pads & Parking	25%	210.00	25.0	32.0
Building Area	20%	168.00		
Lake/Canal Area	1%	8.40	24.0	vertically
Green Area	54%	453.60	25.0	31.0

Stage (ft-NGVD)	Area (ac) Roads	Detention	Green	Total	Storage (ac-ft)
24.0	0.00	8.40	0.00	8.40	0.00
24.5	0.00	8.40	0.00	8.40	4.20
25.0	0.00	8.40	0.00	8.40	8.40
25.5	15.00	8.40	37.80	61.20	25.80
26.0	30.00	8.40	75.60	114.00	69.60
26.5	45.00	8.40	113.40	166.80	139.80
27.0	60.00	8.40	151.20	219.60	236.40
27.3	67.50	8.40	170.10	246.00	294.60
27.5	75.00	8.40	189.00	272.40	359.40
27.8	82.50	8.40	207.90	298.80	430.80
28.0	90.00	8.40	226.80	325.20	508.80
28.5	105.00	8.40	264.60	378.00	684.60
29.0	120.00	8.40	302.40	430.80	886.80
29.5	135.00	8.40	340.20	483.60	1115.40
30.0	150.00	8.40	378.00	536.40	1370.40
30.5	165.00	8.40	415.80	589.20	1651.80
31.0	180.00	8.40	453.60	642.00	1959.60

THE FOLLOWING REUSLTS ARE THEORETICAL PEAK FLOOD STAGES WITH NO OFF-SITE DISCHARGE.

100 - YEAR,3-DAY RAINFALL = 10 inches
Soil Storage = S = 3.70 inches

EXFILTRATION TRENCH VOLUME (XT Volum 0 AC-FT

Runoff Depth = $v = \frac{(P-.2S)^2}{(P+.8S)}$ = 6.6 inches

Net Runoff Volume = V = v x Project Area/12 -XT 463.2 ac-ft

From Stage - Storage Table, Peak Stage = 27.85 ft_NGVD

10 - YEAR,3-DAY RAINFALL = 7 inches
Soil Storage = S = 3.70 inches

Runoff Depth = $v = \frac{(P-.2S)^2}{(P+.8S)}$ = 3.9 inches

Net Runoff Volume = V = v x Project Area/12 -XT V 275.5 ac-ft

From Stage - Storage Table, Peak Stage = 27.16 ft_NGVD

25 - YEAR, 3-DAY RAINFALL = 9 inches
Soil Storage = S = 3.70 inches

Runoff Depth = $v = \frac{(P-.2S)^2}{(P+.8S)}$ = 5.7 inches

Net Runoff Volume = V = v x Project Area/12 -XT 399.4 ac-ft

From Stage - Storage Table, Peak Stage = 27.64 ft_NGVD

5 - YEAR, 1-DAY RAINFALL = 4.5 inches
Soil Storage = S = 3.70 inches

Runoff Depth = $v = \frac{(P-.2S)^2}{(P+.8S)}$ = 1.9 inches

Net Runoff Volume = V = v x Project Area/12 -XT V 132.7 ac-ft

From Stage - Storage Table, Peak Stage = 26.45 ft_NGVD

STAGE STORAGE CALCULATIONS
BASIN 05

Basin Grading Assumptions:

Total Project Area = 95.7 ac.
Control Elevation = 24 ft-NGVD

Assumptions:

Land Use	%	Area (ac)	Stores Linearly From	To
Roads, Pads & Parking	25%	23.93	25.0	32.0
Building Area	21%	20.10		
Lake/Canal Area	1%	0.96	24.0	vertically
Green Area	53%	50.72	25.0	31.0

Stage (ft-NGVD)	Area (ac)				Storage (ac-ft)
	Roads	Detention	Green	Total	
24.0	0.00	0.96	0.00	0.96	0.00
24.5	0.00	0.96	0.00	0.96	0.48
25.0	0.00	0.96	0.00	0.96	0.96
25.5	1.71	0.96	4.23	6.89	2.92
26.0	3.42	0.96	8.45	12.83	7.85
26.5	5.13	0.96	12.68	18.76	15.75
27.0	6.84	0.96	16.91	24.70	26.61
27.3	7.69	0.96	19.02	27.67	33.16
27.5	8.54	0.96	21.13	30.64	40.45
27.8	9.40	0.96	23.25	33.60	48.48
28.0	10.25	0.96	25.36	36.57	57.25
28.5	11.96	0.96	29.59	42.51	77.02
29.0	13.67	0.96	33.81	48.44	99.76
29.5	15.38	0.96	38.04	54.38	125.46
30.0	17.09	0.96	42.27	60.31	154.13
30.5	18.80	0.96	46.49	66.25	185.77
31.0	20.51	0.96	50.72	72.19	220.38

THE FOLLOWING REUSLTS ARE THEORETICAL PEAK FLOOD STAGES WITH NO OFF-SITE DISCHARGE.

100 - YEAR,3-DAY RAINFALL = 10 inches
Soil Storage = S = 2.15 inches

EXFILTRATION TRENCH VOLUME (XT Volum 0 AC-FT

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 7.8 inches

Net Runoff Volume = V = v x Project Area/12 -XT 62.3 ac-ft

From Stage - Storage Table, Peak Stage = 28.13 ft_NGVD

10 - YEAR,3-DAY RAINFALL = 7 inches
Soil Storage = S = 2.15 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 5.0 inches

Net Runoff Volume = V = v x Project Area/12 -XT V 39.5 ac-ft

From Stage - Storage Table, Peak Stage = 27.47 ft_NGVD

25 - YEAR, 3-DAY RAINFALL = 9 inches
Soil Storage = S = 2.15 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 6.9 inches

Net Runoff Volume = V = v x Project Area/12 -XT 54.7 ac-ft

From Stage - Storage Table, Peak Stage = 27.92 ft_NGVD

5 - YEAR, 1-DAY RAINFALL = 4.5 inches
Soil Storage = S = 2.15 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 2.7 inches

Net Runoff Volume = V = v x Project Area/12 -XT V 21.3 ac-ft

From Stage - Storage Table, Peak Stage = 26.75 ft_NGVD

STAGE STORAGE CALCULATIONS
BASIN 06

Basin Grading Assumptions:

Total Project Area = 683.5 ac.
Control Elevation = 23 ft-NGVD

Assumptions:

Land Use	%	Area (ac)	Stores Linearly From	To
Roads, Pads & Parking	15%	102.53	24.0	30.0
Building Area	15%	102.53		
Lake/Canal Area	2%	13.67	23.0	vertically
Green Area	68%	464.78	24.0	29.0

Stage	Area (ac)				Storage
(ft-NGVD)	Roads	Detention	Green	Total	(ac-ft)
23.0	0.00	13.67	0.00	13.67	0.00
23.5	0.00	13.67	0.00	13.67	6.84
24.0	0.00	13.67	0.00	13.67	13.67
24.5	8.54	13.67	46.48	68.69	34.26
25.0	17.09	13.67	92.96	123.71	82.36
25.5	25.63	13.67	139.43	178.74	157.97
26.0	34.18	13.67	185.91	233.76	261.10
26.3	38.45	13.67	209.15	261.27	322.98
26.5	42.72	13.67	232.39	288.78	391.73
26.8	46.99	13.67	255.63	316.29	467.36
27.0	51.26	13.67	278.87	343.80	549.88
27.5	59.81	13.67	325.35	398.82	735.53
28.0	68.35	13.67	371.82	453.84	948.70
28.5	76.89	13.67	418.30	508.87	1189.38
29.0	85.44	13.67	464.78	563.89	1457.56
29.5	93.98	13.67	464.78	572.43	1741.64
30.0	102.53	13.67	464.78	580.98	2030.00

THE FOLLOWING REUSLTS ARE THEORETICAL PEAK FLOOD STAGES WITH NO OFF-SITE DISCHARGE.

100 - YEAR,3-DAY RAINFALL = 10 inches
Soil Storage = S = 4.66 inches

EXFILTRATION TRENCH VOLUME (XT Volum 0 AC-FT

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 6.0 inches

Net Runoff Volume = V = v x Project Area/12 -XT 341.2 ac-ft

From Stage - Storage Table, Peak Stage = 26.31 ft_NGVD

10 - YEAR,3-DAY RAINFALL = 7 inches
Soil Storage = S = 4.66 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 3.4 inches

Net Runoff Volume = V = v x Project Area/12 -XT V 195.5 ac-ft

From Stage - Storage Table, Peak Stage = 25.68 ft_NGVD

25 - YEAR, 3-DAY RAINFALL = 9 inches
Soil Storage = S = 4.66 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 5.1 inches

Net Runoff Volume = V = v x Project Area/12 -XT 291.4 ac-ft

From Stage - Storage Table, Peak Stage = 26.12 ft_NGVD

5 - YEAR, 1-DAY RAINFALL = 4.5 inches
Soil Storage = S = 4.66 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 1.5 inches

Net Runoff Volume = V = v x Project Area/12 -XT V 88.2 ac-ft

From Stage - Storage Table, Peak Stage = 25.04 ft_NGVD

STAGE STORAGE CALCULATIONS
BASIN 07

Basin Grading Assumptions:

Total Project Area = 424 ac.
Control Elevation = 24 ft-NGVD

Assumptions:

Land Use	%	Area (ac)	Stores Linearly From	To
Roads, Pads & Parking	0%	0.42	27.0	30.0
Building Area	0%	0.42		
Lake/Canal Area	1%	4.24	24.0	vertically
Green Area	99%	418.91	24.0	30.0

Stage (ft-NGVD)	Area (ac)				Storage (ac-ft)
	Roads	Detention	Green	Total	
24.0	0.00	4.24	0.00	4.24	0.00
24.5	0.00	4.24	34.91	39.15	10.85
25.0	0.00	4.24	69.82	74.06	39.15
25.5	0.00	4.24	104.73	108.97	84.91
26.0	0.00	4.24	139.64	143.88	148.12
26.5	0.00	4.24	174.55	178.79	228.78
27.0	0.00	4.24	209.46	213.70	326.90
27.3	0.04	4.24	226.91	231.19	382.51
27.5	0.07	4.24	244.37	248.68	442.50
27.8	0.11	4.24	261.82	266.17	506.85
28.0	0.14	4.24	279.27	283.66	575.58
28.5	0.21	4.24	314.18	318.64	726.15
29.0	0.28	4.24	349.09	353.62	894.22
29.5	0.35	4.24	384.00	388.60	1079.77
30.0	0.42	4.24	418.91	423.58	1282.81
30.5	0.42	4.24	418.91	423.58	1494.60
31.0	0.42	4.24	418.91	423.58	1706.39

THE FOLLOWING REUSLTS ARE THEORETICAL PEAK FLOOD STAGES WITH NO OFF-SITE DISCHARGE.

100 - YEAR,3-DAY RAINFALL = 10 inches
Soil Storage = S = 1.85 inches

EXFILTRATION TRENCH VOLUME (XT Volum 0 AC-FT

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 8.1 inches

Net Runoff Volume = V = v x Project Area/12 -XT 285.3 ac-ft

From Stage - Storage Table, Peak Stage = 26.79 ft_NGVD

10 - YEAR,3-DAY RAINFALL = 7 inches
Soil Storage = S = 1.85 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 5.2 inches

Net Runoff Volume = V = v x Project Area/12 -XT V 183.1 ac-ft

From Stage - Storage Table, Peak Stage = 26.22 ft_NGVD

25 - YEAR, 3-DAY RAINFALL = 9 inches
Soil Storage = S = 1.85 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 7.1 inches

Net Runoff Volume = V = v x Project Area/12 -XT 251.0 ac-ft

From Stage - Storage Table, Peak Stage = 26.61 ft_NGVD

5 - YEAR, 1-DAY RAINFALL = 4.5 inches
Soil Storage = S = 1.85 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 2.9 inches

Net Runoff Volume = V = v x Project Area/12 -XT V 100.7 ac-ft

From Stage - Storage Table, Peak Stage = 25.63 ft_NGVD

STAGE STORAGE CALCULATIONS
BASIN 08

Basin Grading Assumptions:

Total Project Area = 242 ac.
Control Elevation = 23 ft-NGVD

Assumptions:

Land Use	%	Area (ac)	Stores Linearly From	To
Roads, Pads & Parking	15%	36.30	25.0	30.0
Building Area	15%	36.30		
Lake/Canal Area	1%	2.42	23.0	vertically
Green Area	69%	166.98	24.0	30.0

Stage (ft-NGVD)	Area (ac) Roads	Detention	Green	Total	Storage (ac-ft)
23.0	0.00	2.42	0.00	2.42	0.00
23.5	0.00	2.42	0.00	2.42	1.21
24.0	0.00	2.42	0.00	2.42	2.42
24.5	0.00	2.42	13.92	16.34	7.11
25.0	0.00	2.42	27.83	30.25	18.76
25.5	3.63	2.42	41.75	47.80	38.27
26.0	7.26	2.42	55.66	65.34	66.55
26.3	9.08	2.42	62.62	74.11	83.98
26.5	10.89	2.42	69.58	82.89	103.61
26.8	12.71	2.42	76.53	91.66	125.42
27.0	14.52	2.42	83.49	100.43	149.44
27.5	18.15	2.42	97.41	117.98	204.04
28.0	21.78	2.42	111.32	135.52	267.41
28.5	25.41	2.42	125.24	153.07	339.56
29.0	29.04	2.42	139.15	170.61	420.48
29.5	32.67	2.42	153.07	188.16	510.17
30.0	36.30	2.42	166.98	205.70	608.63

THE FOLLOWING REUSLTS ARE THEORETICAL PEAK FLOOD STAGES WITH NO OFF-SITE DISCHARGE.

100 - YEAR,3-DAY RAINFALL = 10 inches
Soil Storage = S = 2.79 inches

EXFILTRATION TRENCH VOLUME (XT Volum 0 AC-FT

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 7.3 inches

Net Runoff Volume = V = v x Project Area/12 -XT 146.9 ac-ft

From Stage - Storage Table, Peak Stage = 26.97 ft_NGVD

10 - YEAR,3-DAY RAINFALL = 7 inches
Soil Storage = S = 2.79 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 4.5 inches

Net Runoff Volume = V = v x Project Area/12 -XT V 90.6 ac-ft

From Stage - Storage Table, Peak Stage = 26.32 ft_NGVD

25 - YEAR, 3-DAY RAINFALL = 9 inches
Soil Storage = S = 2.79 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 6.3 inches

Net Runoff Volume = V = v x Project Area/12 -XT 127.9 ac-ft

From Stage - Storage Table, Peak Stage = 26.76 ft_NGVD

5 - YEAR, 1-DAY RAINFALL = 4.5 inches
Soil Storage = S = 2.79 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 2.3 inches

Net Runoff Volume = V = v x Project Area/12 -XT V 46.5 ac-ft

From Stage - Storage Table, Peak Stage = 25.65 ft_NGVD

STAGE STORAGE CALCULATIONS
BASIN 09

Basin Grading Assumptions:

Total Project Area = 301.8 ac.
Control Elevation = 24 ft-NGVD

Assumptions:

Land Use	%	Area (ac)	Stores Linearly From	To
Roads, Pads & Parking	15%	45.27	25.0	30.0
Building Area	15%	45.27		
Lake/Canal Area	1%	3.02	24.0	vertically
Green Area	69%	208.24	25.0	30.0

Stage (ft-NGVD)	Area (ac)				Storage (ac-ft)
	Roads	Detention	Green	Total	
24.0	0.00	3.02	0.00	3.02	0.00
24.5	0.00	3.02	0.00	3.02	1.51
25.0	0.00	3.02	0.00	3.02	3.02
25.5	4.53	3.02	20.82	28.37	10.86
26.0	9.05	3.02	41.65	53.72	31.39
26.5	13.58	3.02	62.47	79.07	64.59
27.0	18.11	3.02	83.30	104.42	110.46
27.3	20.37	3.02	93.71	117.10	138.15
27.5	22.64	3.02	104.12	129.77	169.01
27.8	24.90	3.02	114.53	142.45	203.04
28.0	27.16	3.02	124.95	155.13	240.23
28.5	31.69	3.02	145.77	180.48	324.13
29.0	36.22	3.02	166.59	205.83	420.71
29.5	40.74	3.02	187.42	231.18	529.96
30.0	45.27	3.02	208.24	256.53	651.89
30.5	45.27	3.02	208.24	256.53	780.15
31.0	45.27	3.02	208.24	256.53	908.42

THE FOLLOWING REUSLTS ARE THEORETICAL PEAK FLOOD STAGES WITH NO OFF-SITE DISCHARGE.

100 - YEAR,3-DAY RAINFALL = 10 inches
Soil Storage = S = 4.73 inches

EXFILTRATION TRENCH VOLUME (XT Volum 0 AC-FT

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 5.9 inches

Net Runoff Volume = V = v x Project Area/12 -XT 149.6 ac-ft

From Stage - Storage Table, Peak Stage = 27.33 ft_NGVD

10 - YEAR,3-DAY RAINFALL = 7 inches
Soil Storage = S = 4.73 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 3.4 inches

Net Runoff Volume = V = v x Project Area/12 -XT V 85.5 ac-ft

From Stage - Storage Table, Peak Stage = 26.73 ft_NGVD

25 - YEAR, 3-DAY RAINFALL = 9 inches
Soil Storage = S = 4.73 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 5.1 inches

Net Runoff Volume = V = v x Project Area/12 -XT 127.7 ac-ft

From Stage - Storage Table, Peak Stage = 27.15 ft_NGVD

5 - YEAR, 1-DAY RAINFALL = 4.5 inches
Soil Storage = S = 4.73 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 1.5 inches

Net Runoff Volume = V = v x Project Area/12 -XT V 38.4 ac-ft

From Stage - Storage Table, Peak Stage = 26.11 ft_NGVD

STAGE STORAGE CALCULATIONS
BASIN 10

Basin Grading Assumptions:

Total Project Area = 394 ac.
Control Elevation = 24 ft-NGVD

Assumptions:

Land Use	%	Area (ac)	Stores Linearly From	To
Roads, Pads & Parking	20%	78.80	25.0	30.0
Building Area	10%	39.40		
Lake/Canal Area	1%	3.94	24.0	vertically
Green Area	69%	271.86	25.0	30.0

Stage	Area (ac)				Storage
(ft-NGVD)	Roads	Detention	Green	Total	(ac-ft)
24.0	0.00	3.94	0.00	3.94	0.00
24.5	0.00	3.94	0.00	3.94	1.97
25.0	0.00	3.94	0.00	3.94	3.94
25.5	7.88	3.94	27.19	39.01	14.68
26.0	15.76	3.94	54.37	74.07	42.95
26.5	23.64	3.94	81.56	109.14	88.75
27.0	31.52	3.94	108.74	144.20	152.08
27.3	35.46	3.94	122.34	161.74	190.33
27.5	39.40	3.94	135.93	179.27	232.95
27.8	43.34	3.94	149.52	196.80	279.96
28.0	47.28	3.94	163.12	214.34	331.35
28.5	55.16	3.94	190.30	249.40	447.29
29.0	63.04	3.94	217.49	284.47	580.76
29.5	70.92	3.94	244.67	319.53	731.76
30.0	78.80	3.94	271.86	354.60	900.29
30.5	78.80	3.94	271.86	354.60	1077.59
31.0	78.80	3.94	271.86	354.60	1254.89

THE FOLLOWING REUSLTS ARE THEORETICAL PEAK FLOOD STAGES WITH NO OFF-SITE DISCHARGE.

100 - YEAR,3-DAY RAINFALL = 10 inches
Soil Storage = S = 4.73 inches

EXFILTRATION TRENCH VOLUME (XT Volum 0 AC-FT

Runoff Depth = $v = \frac{(P-.2S)^2}{(P+.8S)}$ = 5.9 inches

Net Runoff Volume = V = v x Project Area/12 -XT 195.3 ac-ft

From Stage - Storage Table, Peak Stage = 27.27 ft_NGVD

10 - YEAR,3-DAY RAINFALL = 7 inches
Soil Storage = S = 4.73 inches

Runoff Depth = $v = \frac{(P-.2S)^2}{(P+.8S)}$ = 3.4 inches

Net Runoff Volume = V = v x Project Area/12 -XT V 111.6 ac-ft

From Stage - Storage Table, Peak Stage = 26.68 ft_NGVD

25 - YEAR, 3-DAY RAINFALL = 9 inches
Soil Storage = S = 4.73 inches

Runoff Depth = $v = \frac{(P-.2S)^2}{(P+.8S)}$ = 5.1 inches

Net Runoff Volume = V = v x Project Area/12 -XT 166.7 ac-ft

From Stage - Storage Table, Peak Stage = 27.09 ft_NGVD

5 - YEAR, 1-DAY RAINFALL = 4.5 inches
Soil Storage = S = 4.73 inches

Runoff Depth = $v = \frac{(P-.2S)^2}{(P+.8S)}$ = 1.5 inches

Net Runoff Volume = V = v x Project Area/12 -XT V 50.1 ac-ft

From Stage - Storage Table, Peak Stage = 26.08 ft_NGVD

STAGE STORAGE CALCULATIONS
BASIN 11

Basin Grading Assumptions:

Total Project Area = 326 ac.
Control Elevation = 23 ft-NGVD

Assumptions:

Land Use	%	Area (ac)	Stores Linearly From	To
Roads, Pads & Parking	20%	65.20	25.0	30.0
Building Area	20%	65.20		
Lake/Canal Area	0%	0.00	23.0	vertically
Green Area	60%	195.60	25.0	30.0

Stage (ft-NGVD)	Area (ac) Roads	Detention	Green	Total	Storage (ac-ft)
23.0	0.00	0.00	0.00	0.00	0.00
23.5	0.00	0.00	0.00	0.00	0.00
24.0	0.00	0.00	0.00	0.00	0.00
24.5	0.00	0.00	0.00	0.00	0.00
25.0	0.00	0.00	0.00	0.00	0.00
25.5	6.52	0.00	19.56	26.08	6.52
26.0	13.04	0.00	39.12	52.16	26.08
26.3	16.30	0.00	48.90	65.20	40.75
26.5	19.56	0.00	58.68	78.24	58.68
26.8	22.82	0.00	68.46	91.28	79.87
27.0	26.08	0.00	78.24	104.32	104.32
27.5	32.60	0.00	97.80	130.40	163.00
28.0	39.12	0.00	117.36	156.48	234.72
28.5	45.64	0.00	136.92	182.56	319.48
29.0	52.16	0.00	156.48	208.64	417.28
29.5	58.68	0.00	176.04	234.72	528.12
30.0	65.20	0.00	195.60	260.80	652.00

THE FOLLOWING REUSLTS ARE THEORETICAL PEAK FLOOD STAGES WITH NO OFF-SITE DISCHARGE.

100 - YEAR,3-DAY RAINFALL = 10 inches
Soil Storage = S = 4.11 inches

EXFILTRATION TRENCH VOLUME (XT Volum 0 AC-FT

Runoff Depth = $v = \frac{(P-.2S)^2}{(P+.8S)}$ = 6.3 inches

Net Runoff Volume = V = v x Project Area/12 -XT 172.2 ac-ft

From Stage - Storage Table, Peak Stage = 27.56 ft_NGVD

10 - YEAR,3-DAY RAINFALL = 7 inches
Soil Storage = S = 4.11 inches

Runoff Depth = $v = \frac{(P-.2S)^2}{(P+.8S)}$ = 3.7 inches

Net Runoff Volume = V = v x Project Area/12 -XT V 100.8 ac-ft

From Stage - Storage Table, Peak Stage = 26.96 ft_NGVD

25 - YEAR, 3-DAY RAINFALL = 9 inches
Soil Storage = S = 4.11 inches

Runoff Depth = $v = \frac{(P-.2S)^2}{(P+.8S)}$ = 5.4 inches

Net Runoff Volume = V = v x Project Area/12 -XT 147.9 ac-ft

From Stage - Storage Table, Peak Stage = 27.37 ft_NGVD

5 - YEAR, 1-DAY RAINFALL = 4.5 inches
Soil Storage = S = 4.11 inches

Runoff Depth = $v = \frac{(P-.2S)^2}{(P+.8S)}$ = 1.7 inches

Net Runoff Volume = V = v x Project Area/12 -XT V 47.2 ac-ft

From Stage - Storage Table, Peak Stage = 26.32 ft_NGVD

STAGE STORAGE CALCULATIONS
BASIN 12

Basin Grading Assumptions:

Total Project Area = 274 ac.
Control Elevation = 24 ft-NGVD

Assumptions:

Land Use	%	Area (ac)	Stores Linearly From	To
Roads, Pads & Parking	25%	68.50	25.0	29.0
Building Area	25%	68.50		
Lake/Canal Area	0%	0.00	24.0	vertically
Green Area	50%	137.00	25.0	29.0

Stage (ft-NGVD)	Area (ac) Roads	Detention	Green	Total	Storage (ac-ft)
24.0	0.00	0.00	0.00	0.00	0.00
24.5	0.00	0.00	0.00	0.00	0.00
25.0	0.00	0.00	0.00	0.00	0.00
25.5	8.56	0.00	17.13	25.69	6.42
26.0	17.13	0.00	34.25	51.38	25.69
26.5	25.69	0.00	51.38	77.06	57.80
27.0	34.25	0.00	68.50	102.75	102.75
27.3	38.53	0.00	77.06	115.59	130.04
27.5	42.81	0.00	85.63	128.44	160.55
27.8	47.09	0.00	94.19	141.28	194.26
28.0	51.38	0.00	102.75	154.13	231.19
28.5	59.94	0.00	119.88	179.81	314.67
29.0	68.50	0.00	137.00	205.50	411.00
29.5	68.50	0.00	137.00	205.50	513.75
30.0	68.50	0.00	137.00	205.50	616.50
30.5	68.50	0.00	137.00	205.50	719.25
31.0	68.50	0.00	137.00	205.50	822.00

THE FOLLOWING REUSLTS ARE THEORETICAL PEAK FLOOD STAGES WITH NO OFF-SITE DISCHARGE.

100 - YEAR,3-DAY RAINFALL = 10 inches
Soil Storage = S = 3.43 inches

EXFILTRATION TRENCH VOLUME (XT Volum 0 AC-FT

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 6.8 inches

Net Runoff Volume = V = v x Project Area/12 -XT 155.5 ac-ft

From Stage - Storage Table, Peak Stage = 27.46 ft_NGVD

10 - YEAR,3-DAY RAINFALL = 7 inches
Soil Storage = S = 3.43 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 4.1 inches

Net Runoff Volume = V = v x Project Area/12 -XT V 93.5 ac-ft

From Stage - Storage Table, Peak Stage = 26.90 ft_NGVD

25 - YEAR, 3-DAY RAINFALL = 9 inches
Soil Storage = S = 3.43 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 5.9 inches

Net Runoff Volume = V = v x Project Area/12 -XT 134.5 ac-ft

From Stage - Storage Table, Peak Stage = 27.27 ft_NGVD

5 - YEAR, 1-DAY RAINFALL = 4.5 inches
Soil Storage = S = 3.43 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 2.0 inches

Net Runoff Volume = V = v x Project Area/12 -XT V 45.9 ac-ft

From Stage - Storage Table, Peak Stage = 26.31 ft_NGVD

STAGE STORAGE CALCULATIONS
BASIN 13

Basin Grading Assumptions:

Total Project Area = 243 ac.
Control Elevation = 19.5 ft-NGVD

Assumptions:

Land Use	%	Area (ac)	Stores Linearly From	To
Roads, Pads & Parking	10%	24.30	20.0	24.0
Building Area	10%	24.30		
Lake/Canal Area	1%	2.43	19.5	vertically
Green Area	79%	191.97	20.0	24.0

Stage (ft-NGVD)	Area (ac)				Storage (ac-ft)
	Roads	Detention	Green	Total	
19.5	0.00	2.43	0.00	2.43	0.00
20.0	0.00	2.43	0.00	2.43	1.22
20.5	3.04	2.43	24.00	29.46	9.19
21.0	6.08	2.43	47.99	56.50	30.68
21.5	9.11	2.43	71.99	83.53	65.69
22.0	12.15	2.43	95.99	110.57	114.21
22.5	15.19	2.43	119.98	137.60	176.25
22.8	16.71	2.43	131.98	151.12	212.34
23.0	18.23	2.43	143.98	164.63	251.81
23.3	19.74	2.43	155.98	178.15	294.66
23.5	21.26	2.43	167.97	191.67	340.88
24.0	24.30	2.43	191.97	218.70	443.48
24.5	24.30	2.43	191.97	218.70	552.83
25.0	24.30	2.43	191.97	218.70	662.18
25.5	24.30	2.43	191.97	218.70	771.53
26.0	24.30	2.43	191.97	218.70	880.88
26.5	24.30	2.43	191.97	218.70	990.23

THE FOLLOWING REUSLTS ARE THEORETICAL PEAK FLOOD STAGES WITH NO OFF-SITE DISCHARGE.

100 - YEAR,3-DAY RAINFALL = 10 inches
Soil Storage = S = 0.92 inches

EXFILTRATION TRENCH VOLUME (XT Volum 0 AC-FT

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 9.0 inches

Net Runoff Volume = V = v x Project Area/12 -XT 181.8 ac-ft

From Stage - Storage Table, Peak Stage = 22.52 ft_NGVD

10 - YEAR,3-DAY RAINFALL = 7 inches
Soil Storage = S = 0.92 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 6.0 inches

Net Runoff Volume = V = v x Project Area/12 -XT V 121.6 ac-ft

From Stage - Storage Table, Peak Stage = 22.06 ft_NGVD

25 - YEAR, 3-DAY RAINFALL = 9 inches
Soil Storage = S = 0.92 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 8.0 inches

Net Runoff Volume = V = v x Project Area/12 -XT 161.7 ac-ft

From Stage - Storage Table, Peak Stage = 22.36 ft_NGVD

5 - YEAR, 1-DAY RAINFALL = 4.5 inches
Soil Storage = S = 0.92 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 3.6 inches

Net Runoff Volume = V = v x Project Area/12 -XT V 72.1 ac-ft

From Stage - Storage Table, Peak Stage = 21.57 ft_NGVD

STAGE STORAGE CALCULATIONS
BASIN 13B

Basin Grading Assumptions:

Total Project Area = 243 ac.
Control Elevation = 19.5 ft-NGVD

Assumptions:

Land Use	%	Area (ac)	Stores Linearly From	To
Roads, Pads & Parking	10%	24.30	20.0	24.0
Building Area	10%	24.30		
Lake/Canal Area	10%	25.00	19.5	vertically
Green Area	70%	169.40	20.0	24.0

Stage (ft-NGVD)	Area (ac) Roads	Detention	Green	Total	Storage (ac-ft)
19.5	0.00	25.00	0.00	25.00	0.00
20.0	0.00	25.00	0.00	25.00	12.50
20.5	3.04	25.00	21.18	49.21	31.05
21.0	6.08	25.00	42.35	73.43	61.71
21.5	9.11	25.00	63.53	97.64	104.48
22.0	12.15	25.00	84.70	121.85	159.35
22.5	15.19	25.00	105.88	146.06	226.33
22.8	16.71	25.00	116.46	158.17	264.36
23.0	18.23	25.00	127.05	170.28	305.41
23.3	19.74	25.00	137.64	182.38	349.49
23.5	21.26	25.00	148.23	194.49	396.60
24.0	24.30	25.00	169.40	218.70	499.90
24.5	24.30	25.00	169.40	218.70	609.25
25.0	24.30	25.00	169.40	218.70	718.60
25.5	24.30	25.00	169.40	218.70	827.95
26.0	24.30	25.00	169.40	218.70	937.30
26.5	24.30	25.00	169.40	218.70	1046.65

THE FOLLOWING REUSLTS ARE THEORETICAL PEAK FLOOD STAGES WITH NO OFF-SITE DISCHARGE.

100 - YEAR,3-DAY RAINFALL = 10 inches
Soil Storage = S = 0.81 inches

EXFILTRATION TRENCH VOLUME (XT Volum 0 AC-FT

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 9.1 inches

Net Runoff Volume = V = v x Project Area/12 -XT 184.1 ac-ft

From Stage - Storage Table, Peak Stage = 22.18 ft_NGVD

10 - YEAR,3-DAY RAINFALL = 7 inches
Soil Storage = S = 0.81 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 6.1 inches

Net Runoff Volume = V = v x Project Area/12 -XT V 123.8 ac-ft

From Stage - Storage Table, Peak Stage = 21.68 ft_NGVD

25 - YEAR, 3-DAY RAINFALL = 9 inches
Soil Storage = S = 0.81 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 8.1 inches

Net Runoff Volume = V = v x Project Area/12 -XT 163.9 ac-ft

From Stage - Storage Table, Peak Stage = 21.99 ft_NGVD

5 - YEAR, 1-DAY RAINFALL = 4.5 inches
Soil Storage = S = 0.81 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 3.7 inches

Net Runoff Volume = V = v x Project Area/12 -XT V 74.0 ac-ft

From Stage - Storage Table, Peak Stage = 21.14 ft_NGVD

STAGE STORAGE CALCULATIONS
BASIN 14

Basin Grading Assumptions:

Total Project Area = 203 ac.
Control Elevation = 18 ft-NGVD

Assumptions:

Land Use	%	Area (ac)	Stores Linearly From	To
Roads, Pads & Parking	20%	40.60	19.0	25.0
Building Area	10%	20.30		
Lake/Canal Area	1%	2.03	18.0	vertically
Green Area	69%	140.07	19.0	25.0

Stage (ft-NGVD)	Area (ac)				Storage (ac-ft)
	Roads	Detention	Green	Total	
18.0	0.00	2.03	0.00	2.03	0.00
18.5	0.00	2.03	0.00	2.03	1.02
19.0	0.00	2.03	0.00	2.03	2.03
19.5	3.38	2.03	11.67	17.09	6.81
20.0	6.77	2.03	23.35	32.14	19.12
20.5	10.15	2.03	35.02	47.20	38.95
21.0	13.53	2.03	46.69	62.25	66.31
21.3	15.23	2.03	52.53	69.78	82.82
21.5	16.92	2.03	58.36	77.31	101.20
21.8	18.61	2.03	64.20	84.84	121.47
22.0	20.30	2.03	70.04	92.37	143.62
22.5	23.68	2.03	81.71	107.42	193.57
23.0	27.07	2.03	93.38	122.48	251.04
23.5	30.45	2.03	105.05	137.53	316.05
24.0	33.83	2.03	116.73	152.59	388.58
24.5	37.22	2.03	128.40	167.64	468.63
25.0	40.60	2.03	140.07	182.70	556.22

THE FOLLOWING REUSLTS ARE THEORETICAL PEAK FLOOD STAGES WITH NO OFF-SITE DISCHARGE.

100 - YEAR,3-DAY RAINFALL = 10 inches
Soil Storage = S = 2.79 inches

EXFILTRATION TRENCH VOLUME (XT Volum 0 AC-FT

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 7.3 inches

Net Runoff Volume = V = v x Project Area/12 -XT 123.2 ac-ft

From Stage - Storage Table, Peak Stage = 21.77 ft_NGVD

10 - YEAR,3-DAY RAINFALL = 7 inches
Soil Storage = S = 2.79 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 4.5 inches

Net Runoff Volume = V = v x Project Area/12 -XT V 76.0 ac-ft

From Stage - Storage Table, Peak Stage = 21.15 ft_NGVD

25 - YEAR, 3-DAY RAINFALL = 9 inches
Soil Storage = S = 2.79 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 6.3 inches

Net Runoff Volume = V = v x Project Area/12 -XT 107.3 ac-ft

From Stage - Storage Table, Peak Stage = 21.53 ft_NGVD

5 - YEAR, 1-DAY RAINFALL = 4.5 inches
Soil Storage = S = 2.79 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 2.3 inches

Net Runoff Volume = V = v x Project Area/12 -XT V 39.0 ac-ft

From Stage - Storage Table, Peak Stage = 20.42 ft_NGVD

STAGE STORAGE CALCULATIONS
BASIN 15

Basin Grading Assumptions:

Total Project Area = 78.2 ac.
Control Elevation = 18.5 ft-NGVD

Assumptions:

Land Use	%	Area (ac)	Stores Linearly From	To
Roads, Pads & Parking	1%	0.78	18.5	21.0
Building Area	1%	0.78		
Lake/Canal Area	1%	0.78	18.5	vertically
Green Area	97%	75.85	18.5	21.0

Stage	Area (ac)				Storage
(ft-NGVD)	Roads	Detention	Green	Total	(ac-ft)
18.5	0.00	0.78	0.00	0.78	0.00
19.0	0.16	0.78	15.17	16.11	4.22
19.5	0.31	0.78	30.34	31.44	16.11
20.0	0.47	0.78	45.51	46.76	35.66
20.5	0.63	0.78	60.68	62.09	62.87
21.0	0.78	0.78	75.85	77.42	97.75
21.5	0.78	0.78	75.85	77.42	136.46
21.8	0.78	0.78	75.85	77.42	155.81
22.0	0.78	0.78	75.85	77.42	175.17
22.3	0.78	0.78	75.85	77.42	194.52
22.5	0.78	0.78	75.85	77.42	213.88
23.0	0.78	0.78	75.85	77.42	252.59
23.5	0.78	0.78	75.85	77.42	291.30
24.0	0.78	0.78	75.85	77.42	330.00
24.5	0.78	0.78	75.85	77.42	368.71
25.0	0.78	0.78	75.85	77.42	407.42
25.5	0.78	0.78	75.85	77.42	446.13

THE FOLLOWING REUSLTS ARE THEORETICAL PEAK FLOOD STAGES WITH NO OFF-SITE DISCHARGE.

100 - YEAR,3-DAY RAINFALL = 10 inches
Soil Storage = S = 1.82 inches

EXFILTRATION TRENCH VOLUME (XT Volum 0 AC-FT

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 8.1 inches

Net Runoff Volume = V = v x Project Area/12 -XT 52.8 ac-ft

From Stage - Storage Table, Peak Stage = 20.32 ft_NGVD

10 - YEAR,3-DAY RAINFALL = 7 inches
Soil Storage = S = 1.82 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 5.2 inches

Net Runoff Volume = V = v x Project Area/12 -XT V 33.9 ac-ft

From Stage - Storage Table, Peak Stage = 19.96 ft_NGVD

25 - YEAR, 3-DAY RAINFALL = 9 inches
Soil Storage = S = 1.82 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 7.1 inches

Net Runoff Volume = V = v x Project Area/12 -XT 46.5 ac-ft

From Stage - Storage Table, Peak Stage = 20.20 ft_NGVD

5 - YEAR, 1-DAY RAINFALL = 4.5 inches
Soil Storage = S = 1.82 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 2.9 inches

Net Runoff Volume = V = v x Project Area/12 -XT V 18.7 ac-ft

From Stage - Storage Table, Peak Stage = 19.57 ft_NGVD

STAGE STORAGE CALCULATIONS
BASIN 16A

Basin Grading Assumptions:

Total Project Area = 4.27 ac.
Control Elevation = 15 ft-NGVD

Assumptions:

Land Use	%	Area (ac)	Stores Linearly From	To
Roads, Pads & Parking	60%	2.56	15.0	17.0
Building Area	0%	0.00		
Lake/Canal Area	0%	0.00	15.0	vertically
Green Area	40%	1.71	16.0	17.0

Stage (ft-NGVD)	Area (ac) Roads	Detention	Green	Total	Storage (ac-ft)
15.0	0.00	0.00	0.00	0.00	0.00
15.5	0.64	0.00	0.00	0.64	0.16
16.0	1.28	0.00	0.00	1.28	0.64
16.5	1.92	0.00	0.85	2.78	1.65
17.0	2.56	0.00	1.71	4.27	3.42
17.5	2.56	0.00	1.71	4.27	5.55
18.0	2.56	0.00	1.71	4.27	7.69
18.3	2.56	0.00	1.71	4.27	8.75
18.5	2.56	0.00	1.71	4.27	9.82
18.8	2.56	0.00	1.71	4.27	10.89
19.0	2.56	0.00	1.71	4.27	11.96
19.5	2.56	0.00	1.71	4.27	14.09
20.0	2.56	0.00	1.71	4.27	16.23
20.5	2.56	0.00	1.71	4.27	18.36
21.0	2.56	0.00	1.71	4.27	20.50
21.5	2.56	0.00	1.71	4.27	22.63
22.0	2.56	0.00	1.71	4.27	24.77

THE FOLLOWING REUSLTS ARE THEORETICAL PEAK FLOOD STAGES WITH NO OFF-SITE DISCHARGE.

100 - YEAR,3-DAY RAINFALL = 10 inches
Soil Storage = S = 3.60 inches

EXFILTRATION TRENCH VOLUME (XT Volum 0 AC-FT

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 6.7 inches

Net Runoff Volume = V = v x Project Area/12 -XT 2.4 ac-ft

From Stage - Storage Table, Peak Stage = 16.76 ft_NGVD

10 - YEAR,3-DAY RAINFALL = 7 inches
Soil Storage = S = 3.60 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 4.0 inches

Net Runoff Volume = V = v x Project Area/12 -XT V 1.4 ac-ft

From Stage - Storage Table, Peak Stage = 16.38 ft_NGVD

25 - YEAR, 3-DAY RAINFALL = 9 inches
Soil Storage = S = 3.60 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 5.8 inches

Net Runoff Volume = V = v x Project Area/12 -XT 2.1 ac-ft

From Stage - Storage Table, Peak Stage = 16.61 ft_NGVD

5 - YEAR, 1-DAY RAINFALL = 4.5 inches
Soil Storage = S = 3.60 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 1.9 inches

Net Runoff Volume = V = v x Project Area/12 -XT V 0.7 ac-ft

From Stage - Storage Table, Peak Stage = 16.02 ft_NGVD

STAGE STORAGE CALCULATIONS
BASIN 16B
OAKVIEW BAPTIST CHURCH

Basin Grading Assumptions:

Total Project Area = 34.6 ac.
Control Elevation = 18 ft-NGVD

Assumptions:

Land Use	%	Area (ac)	Stores Linearly From	To
Roads, Pads & Parking	35%	12.11	19.0	21.0
Building Area	9%	3.00		
Lake/Canal Area	0%	2.00	18.0	vertically
Green Area	56%	19.49	19.0	21.0

Stage (ft-NGVD)	Area (ac) Roads	Detention	Green	Total	Storage (ac-ft)
18.0	0.00	2.00	0.00	2.00	0.00
18.5	0.00	2.00	0.00	2.00	1.00
19.0	0.00	2.00	0.00	2.00	2.00
19.5	3.03	2.00	4.87	9.90	4.98
20.0	6.06	2.00	9.75	17.80	11.90
20.5	9.08	2.00	14.62	25.70	22.78
21.0	12.11	2.00	19.49	33.60	37.60
21.3	12.11	2.00	19.49	33.60	46.00
21.5	12.11	2.00	19.49	33.60	54.40
21.8	12.11	2.00	19.49	33.60	62.80
22.0	12.11	2.00	19.49	33.60	71.20
22.5	12.11	2.00	19.49	33.60	88.00
23.0	12.11	2.00	19.49	33.60	104.80
23.5	12.11	2.00	19.49	33.60	121.60
24.0	12.11	2.00	19.49	33.60	138.40
24.5	12.11	2.00	19.49	33.60	155.20
25.0	12.11	2.00	19.49	33.60	172.00

THE FOLLOWING REUSLTS ARE THEORETICAL PEAK FLOOD STAGES WITH NO OFF-SITE DISCHARGE.

100 - YEAR,3-DAY RAINFALL = 10 inches
Soil Storage = S = 3.86 inches

EXFILTRATION TRENCH VOLUME (XT Volum 0 AC-FT

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 6.5 inches

Net Runoff Volume = V = v x Project Area/12 -XT 18.8 ac-ft

From Stage - Storage Table, Peak Stage = 20.32 ft_NGVD

10 - YEAR,3-DAY RAINFALL = 7 inches
Soil Storage = S = 3.86 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 3.8 inches

Net Runoff Volume = V = v x Project Area/12 -XT V 11.1 ac-ft

From Stage - Storage Table, Peak Stage = 19.94 ft_NGVD

25 - YEAR, 3-DAY RAINFALL = 9 inches
Soil Storage = S = 3.86 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 5.6 inches

Net Runoff Volume = V = v x Project Area/12 -XT 16.2 ac-ft

From Stage - Storage Table, Peak Stage = 20.20 ft_NGVD

5 - YEAR, 1-DAY RAINFALL = 4.5 inches
Soil Storage = S = 3.86 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 1.8 inches

Net Runoff Volume = V = v x Project Area/12 -XT V 5.3 ac-ft

From Stage - Storage Table, Peak Stage = 19.52 ft_NGVD

STAGE STORAGE CALCULATIONS
BASIN 16C
NORTH LAKE BUSINESS PARK

Basin Grading Assumptions:

Total Project Area = 10.87 ac.
Control Elevation = 19 ft-NGVD

Assumptions:

Land Use	%	Area (ac)	Stores Linearly From	To
Roads, Pads & Parking	45%	4.89	19.0	20.5
Building Area	40%	4.35		
Lake/Canal Area	0%	0.00	19.0	vertically
Green Area	15%	1.63	19.0	21.0

Stage (ft-NGVD)	Area (ac) Roads	Detention	Green	Total	Storage (ac-ft)
19.0	0.00	0.00	0.00	0.00	0.00
19.5	1.63	0.00	0.41	2.04	0.51
20.0	3.26	0.00	0.82	4.08	2.04
20.5	4.89	0.00	1.22	6.11	4.59
21.0	4.89	0.00	1.63	6.52	7.74
21.5	4.89	0.00	1.63	6.52	11.01
22.0	4.89	0.00	1.63	6.52	14.27
22.3	4.89	0.00	1.63	6.52	15.90
22.5	4.89	0.00	1.63	6.52	17.53
22.8	4.89	0.00	1.63	6.52	19.16
23.0	4.89	0.00	1.63	6.52	20.79
23.5	4.89	0.00	1.63	6.52	24.05
24.0	4.89	0.00	1.63	6.52	27.31
24.5	4.89	0.00	1.63	6.52	30.57
25.0	4.89	0.00	1.63	6.52	33.83
25.5	4.89	0.00	1.63	6.52	37.09
26.0	4.89	0.00	1.63	6.52	40.35

THE FOLLOWING REUSLTS ARE THEORETICAL PEAK FLOOD STAGES WITH NO OFF-SITE DISCHARGE.

100 - YEAR,3-DAY RAINFALL = 10 inches
Soil Storage = S = 1.03 inches

EXFILTRATION TRENCH VOLUME (XT Volum 0 AC-FT

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 8.9 inches

Net Runoff Volume = V = v x Project Area/12 -XT 8.0 ac-ft

From Stage - Storage Table, Peak Stage = 21.04 ft_NGVD

10 - YEAR,3-DAY RAINFALL = 7 inches
Soil Storage = S = 1.03 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 5.9 inches

Net Runoff Volume = V = v x Project Area/12 -XT V 5.3 ac-ft

From Stage - Storage Table, Peak Stage = 20.62 ft_NGVD

25 - YEAR, 3-DAY RAINFALL = 9 inches
Soil Storage = S = 1.03 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 7.9 inches

Net Runoff Volume = V = v x Project Area/12 -XT 7.1 ac-ft

From Stage - Storage Table, Peak Stage = 20.90 ft_NGVD

5 - YEAR, 1-DAY RAINFALL = 4.5 inches
Soil Storage = S = 1.03 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 3.5 inches

Net Runoff Volume = V = v x Project Area/12 -XT V 3.1 ac-ft

From Stage - Storage Table, Peak Stage = 20.22 ft_NGVD

STAGE STORAGE CALCULATIONS
BASIN 16D
MIMS

Basin Grading Assumptions:

Total Project Area = 3.1 ac.
Control Elevation = 18 ft-NGVD

Assumptions:

Land Use	%	Area (ac)	Stores Linearly From	To
Roads, Pads & Parking	10%	0.31	19.0	21.0
Building Area	1%	0.03		
Lake/Canal Area	0%	0.00	18.0	vertically
Green Area	89%	2.76	19.0	21.0

Stage	Area (ac)				Storage
(ft-NGVD)	Roads	Detention	Green	Total	(ac-ft)
18.0	0.00	0.00	0.00	0.00	0.00
18.5	0.00	0.00	0.00	0.00	0.00
19.0	0.00	0.00	0.00	0.00	0.00
19.5	0.08	0.00	0.69	0.77	0.19
20.0	0.16	0.00	1.38	1.53	0.77
20.5	0.23	0.00	2.07	2.30	1.73
21.0	0.31	0.00	2.76	3.07	3.07
21.3	0.31	0.00	2.76	3.07	3.84
21.5	0.31	0.00	2.76	3.07	4.60
21.8	0.31	0.00	2.76	3.07	5.37
22.0	0.31	0.00	2.76	3.07	6.14
22.5	0.31	0.00	2.76	3.07	7.67
23.0	0.31	0.00	2.76	3.07	9.21
23.5	0.31	0.00	2.76	3.07	10.74
24.0	0.31	0.00	2.76	3.07	12.28
24.5	0.31	0.00	2.76	3.07	13.81
25.0	0.31	0.00	2.76	3.07	15.35

THE FOLLOWING REUSLTS ARE THEORETICAL PEAK FLOOD STAGES WITH NO OFF-SITE DISCHARGE.

100 - YEAR,3-DAY RAINFALL = 10 inches
Soil Storage = S = 6.10 inches

EXFILTRATION TRENCH VOLUME (XT Volum 0 AC-FT

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 5.2 inches

Net Runoff Volume = V = v x Project Area/12 -XT 1.3 ac-ft

From Stage - Storage Table, Peak Stage = 20.30 ft_NGVD

10 - YEAR,3-DAY RAINFALL = 7 inches
Soil Storage = S = 6.10 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 2.8 inches

Net Runoff Volume = V = v x Project Area/12 -XT V 0.7 ac-ft

From Stage - Storage Table, Peak Stage = 19.96 ft_NGVD

25 - YEAR, 3-DAY RAINFALL = 9 inches
Soil Storage = S = 6.10 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 4.4 inches

Net Runoff Volume = V = v x Project Area/12 -XT 1.1 ac-ft

From Stage - Storage Table, Peak Stage = 20.19 ft_NGVD

5 - YEAR, 1-DAY RAINFALL = 4.5 inches
Soil Storage = S = 6.10 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 1.1 inches

Net Runoff Volume = V = v x Project Area/12 -XT V 0.3 ac-ft

From Stage - Storage Table, Peak Stage = 19.59 ft_NGVD

STAGE STORAGE CALCULATIONS
BASIN 16E
OKEECHOBEE MOTORS
(INCLUDING VACANT PARCEL OWNED BY SAME OWNER)
Basin Grading Assumptions:

Total Project Area = 6.66 ac.
Control Elevation = 17.5 ft-NGVD

Assumptions:

Land Use	%	Area (ac)	Stores Linearly From	To
Roads, Pads & Parking	21%	1.37	20.0	22.5
Building Area	5%	0.33		
Lake/Canal Area	0%	0.51	18.5	vertically
Green Area	74%	4.96	18.5	22.0

Stage (ft-NGVD)	Area (ac)				Storage (ac-ft)
	Roads	Detention	Green	Total	
17.5	0.00	0.00	0.00	0.00	0.00
18.0	0.00	0.00	0.00	0.00	0.00
18.5	0.00	0.51	0.00	0.51	0.13
19.0	0.00	0.51	0.71	1.22	0.56
19.5	0.00	0.51	1.42	1.93	1.35
20.0	0.00	0.51	2.13	2.64	2.49
20.5	0.27	0.51	2.83	3.62	4.05
20.8	0.41	0.51	3.19	4.11	5.02
21.0	0.55	0.51	3.54	4.60	6.11
21.3	0.69	0.51	3.90	5.09	7.32
21.5	0.82	0.51	4.25	5.58	8.65
22.0	1.10	0.51	4.96	6.57	11.69
22.5	1.37	0.51	4.96	6.84	15.04
23.0	1.37	0.51	4.96	6.84	18.46
23.5	1.37	0.51	4.96	6.84	21.88
24.0	1.37	0.51	4.96	6.84	25.30
24.5	1.37	0.51	4.96	6.84	28.72

THE FOLLOWING REUSLTS ARE THEORETICAL PEAK FLOOD STAGES WITH NO OFF-SITE DISCHARGE.

100 - YEAR,3-DAY RAINFALL = 10 inches
Soil Storage = S = 5.10 inches

EXFILTRATION TRENCH VOLUME (XT Volum 0 AC-FT

Runoff Depth = $v = \frac{(P-.2S)^2}{(P+.8S)}$ = 5.7 inches

Net Runoff Volume = V = v x Project Area/12 -XT 3.2 ac-ft

From Stage - Storage Table, Peak Stage = 20.22 ft_NGVD

10 - YEAR,3-DAY RAINFALL = 7 inches
Soil Storage = S = 5.10 inches

Runoff Depth = $v = \frac{(P-.2S)^2}{(P+.8S)}$ = 3.2 inches

Net Runoff Volume = V = v x Project Area/12 -XT V 1.8 ac-ft

From Stage - Storage Table, Peak Stage = 19.69 ft_NGVD

25 - YEAR, 3-DAY RAINFALL = 9 inches
Soil Storage = S = 5.10 inches

Runoff Depth = $v = \frac{(P-.2S)^2}{(P+.8S)}$ = 4.9 inches

Net Runoff Volume = V = v x Project Area/12 -XT 2.7 ac-ft

From Stage - Storage Table, Peak Stage = 20.07 ft_NGVD

5 - YEAR, 1-DAY RAINFALL = 4.5 inches
Soil Storage = S = 5.10 inches

Runoff Depth = $v = \frac{(P-.2S)^2}{(P+.8S)}$ = 1.4 inches

Net Runoff Volume = V = v x Project Area/12 -XT V 0.8 ac-ft

From Stage - Storage Table, Peak Stage = 19.14 ft_NGVD

STAGE STORAGE CALCULATIONS
BASIN 16F
HARBOUR FEDERAL

Basin Grading Assumptions:

Total Project Area = 1.43 ac.
Control Elevation = 18 ft-NGVD

Assumptions:

Land Use	%	Area (ac)	Stores Linearly From	To
Roads, Pads & Parking	40%	0.57	18.5	21.0
Building Area	20%	0.29		
Lake/Canal Area	0%	0.00	18.0	vertically
Green Area	40%	0.57	18.0	21.0

Stage	Area (ac)				Storage
(ft-NGVD)	Roads	Detention	Green	Total	(ac-ft)
18.0	0.00	0.00	0.00	0.00	0.00
18.5	0.00	0.00	0.10	0.10	0.02
19.0	0.11	0.00	0.19	0.31	0.12
19.5	0.23	0.00	0.29	0.51	0.33
20.0	0.34	0.00	0.38	0.72	0.64
20.5	0.46	0.00	0.48	0.93	1.05
21.0	0.57	0.00	0.57	1.14	1.57
21.3	0.57	0.00	0.57	1.14	1.86
21.5	0.57	0.00	0.57	1.14	2.15
21.8	0.57	0.00	0.57	1.14	2.43
22.0	0.57	0.00	0.57	1.14	2.72
22.5	0.57	0.00	0.57	1.14	3.29
23.0	0.57	0.00	0.57	1.14	3.86
23.5	0.57	0.00	0.57	1.14	4.43
24.0	0.57	0.00	0.57	1.14	5.01
24.5	0.57	0.00	0.57	1.14	5.58
25.0	0.57	0.00	0.57	1.14	6.15

THE FOLLOWING REUSLTS ARE THEORETICAL PEAK FLOOD STAGES WITH NO OFF-SITE DISCHARGE.

100 - YEAR,3-DAY RAINFALL = 10 inches
Soil Storage = S = 2.74 inches

EXFILTRATION TRENCH VOLUME (XT Volum 0 AC-FT

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 7.3 inches

Net Runoff Volume = V = v x Project Area/12 -XT 0.9 ac-ft

From Stage - Storage Table, Peak Stage = 20.28 ft_NGVD

10 - YEAR,3-DAY RAINFALL = 7 inches
Soil Storage = S = 2.74 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 4.5 inches

Net Runoff Volume = V = v x Project Area/12 -XT V 0.5 ac-ft

From Stage - Storage Table, Peak Stage = 19.84 ft_NGVD

25 - YEAR, 3-DAY RAINFALL = 9 inches
Soil Storage = S = 2.74 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 6.4 inches

Net Runoff Volume = V = v x Project Area/12 -XT 0.8 ac-ft

From Stage - Storage Table, Peak Stage = 20.15 ft_NGVD

5 - YEAR, 1-DAY RAINFALL = 4.5 inches
Soil Storage = S = 2.74 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 2.3 inches

Net Runoff Volume = V = v x Project Area/12 -XT V 0.3 ac-ft

From Stage - Storage Table, Peak Stage = 19.38 ft_NGVD

STAGE STORAGE CALCULATIONS
BASIN 16G
HOLIDAY INN

Basin Grading Assumptions:

Total Project Area = 4.37 ac.
Control Elevation = 18 ft-NGVD

Assumptions:

Land Use	%	Area (ac)	Stores Linearly From	To
Roads, Pads & Parking	55%	2.39	20.6	22.0
Building Area	13%	0.58		
Lake/Canal Area	0%	0.14	18.3	vertically
Green Area	32%	1.40	18.3	23.0

Stage (ft-NGVD)	Area (ac)				Storage (ac-ft)
	Roads	Detention	Green	Total	
18.0	0.00	0.00	0.00	0.00	0.00
18.5	0.00	0.14	0.06	0.20	0.05
19.0	0.00	0.14	0.21	0.35	0.19
19.5	0.00	0.14	0.36	0.50	0.40
20.0	0.00	0.14	0.51	0.65	0.68
20.5	0.00	0.14	0.66	0.80	1.04
21.0	0.68	0.14	0.80	1.63	1.65
21.3	1.11	0.14	0.88	2.13	2.12
21.5	1.54	0.14	0.95	2.63	2.71
21.8	1.96	0.14	1.03	3.13	3.43
22.0	2.39	0.14	1.10	3.63	4.28
22.5	2.39	0.14	1.25	3.78	6.13
23.0	2.39	0.14	1.40	3.93	8.06
23.5	2.39	0.14	1.40	3.93	10.03
24.0	2.39	0.14	1.40	3.93	11.99
24.5	2.39	0.14	1.40	3.93	13.96
25.0	2.39	0.14	1.40	3.93	15.92

THE FOLLOWING REUSLTS ARE THEORETICAL PEAK FLOOD STAGES WITH NO OFF-SITE DISCHARGE.

100 - YEAR,3-DAY RAINFALL = 10 inches
Soil Storage = S = 2.19 inches

EXFILTRATION TRENCH VOLUME (XT Volum 0 AC-FT

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 7.8 inches

Net Runoff Volume = V = v x Project Area/12 -XT 2.8 ac-ft

From Stage - Storage Table, Peak Stage = 21.54 ft_NGVD

10 - YEAR,3-DAY RAINFALL = 7 inches
Soil Storage = S = 2.19 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 4.9 inches

Net Runoff Volume = V = v x Project Area/12 -XT V 1.8 ac-ft

From Stage - Storage Table, Peak Stage = 21.07 ft_NGVD

25 - YEAR, 3-DAY RAINFALL = 9 inches
Soil Storage = S = 2.19 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 6.8 inches

Net Runoff Volume = V = v x Project Area/12 -XT 2.5 ac-ft

From Stage - Storage Table, Peak Stage = 21.32 ft_NGVD

5 - YEAR, 1-DAY RAINFALL = 4.5 inches
Soil Storage = S = 2.19 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 2.6 inches

Net Runoff Volume = V = v x Project Area/12 -XT V 1.0 ac-ft

From Stage - Storage Table, Peak Stage = 20.38 ft_NGVD

STAGE STORAGE CALCULATIONS
BASIN 17A

Basin Grading Assumptions:

Total Project Area = 65.30 ac.
Control Elevation = 17 ft-NGVD

Assumptions:

Land Use	%	Area (ac)	Stores Linearly From	To
Roads, Pads & Parking	20%	13.06	17.0	19.0
Building Area	10%	6.53		
Lake/Canal Area	1%	0.65	17.0	vertically
Green Area	69%	45.06	17.5	19.0

Stage	Area (ac)				Storage
(ft-NGVD)	Roads	Detention	Green	Total	(ac-ft)
17.0	0.00	0.65	0.00	0.65	0.00
17.5	3.27	0.65	0.00	3.92	1.14
18.0	6.53	0.65	15.02	22.20	7.67
18.5	9.80	0.65	30.04	40.49	23.34
19.0	13.06	0.65	45.06	58.77	48.16
19.5	13.06	0.65	45.06	58.77	77.54
20.0	13.06	0.65	45.06	58.77	106.93
20.3	13.06	0.65	45.06	58.77	121.62
20.5	13.06	0.65	45.06	58.77	136.31
20.8	13.06	0.65	45.06	58.77	151.01
21.0	13.06	0.65	45.06	58.77	165.70
21.5	13.06	0.65	45.06	58.77	195.08
22.0	13.06	0.65	45.06	58.77	224.47
22.5	13.06	0.65	45.06	58.77	253.85
23.0	13.06	0.65	45.06	58.77	283.24
23.5	13.06	0.65	45.06	58.77	312.62
24.0	13.06	0.65	45.06	58.77	342.01

THE FOLLOWING REUSLTS ARE THEORETICAL PEAK FLOOD STAGES WITH NO OFF-SITE DISCHARGE.

100 - YEAR,3-DAY RAINFALL = 10 inches
Soil Storage = S = 2.79 inches

EXFILTRATION TRENCH VOLUME (XT Volum 0 AC-FT

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 7.3 inches

Net Runoff Volume = V = v x Project Area/12 -XT 39.6 ac-ft

From Stage - Storage Table, Peak Stage = 18.83 ft_NGVD

10 - YEAR,3-DAY RAINFALL = 7 inches
Soil Storage = S = 2.79 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 4.5 inches

Net Runoff Volume = V = v x Project Area/12 -XT V 24.4 ac-ft

From Stage - Storage Table, Peak Stage = 18.52 ft_NGVD

25 - YEAR, 3-DAY RAINFALL = 9 inches
Soil Storage = S = 2.79 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 6.3 inches

Net Runoff Volume = V = v x Project Area/12 -XT 34.5 ac-ft

From Stage - Storage Table, Peak Stage = 18.72 ft_NGVD

5 - YEAR, 1-DAY RAINFALL = 4.5 inches
Soil Storage = S = 2.79 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 2.3 inches

Net Runoff Volume = V = v x Project Area/12 -XT V 12.5 ac-ft

From Stage - Storage Table, Peak Stage = 18.16 ft_NGVD

STAGE STORAGE CALCULATIONS
BASIN 17B

Basin Grading Assumptions:

Total Project Area = 53.17 ac.
Control Elevation = 15 ft-NGVD

Assumptions:

Land Use	%	Area (ac)	Stores Linearly From	To
Roads, Pads & Parking	14%	7.44	17.0	19.0
Building Area	20%	10.63		
Lake/Canal Area	39%	20.74	15.0	vertically
Green Area	27%	14.36	15.0	19.0

Stage (ft-NGVD)	Area (ac)				Storage (ac-ft)
	Roads	Detention	Green	Total	
15.0	0.00	20.74	0.00	20.74	0.00
15.5	0.00	20.74	1.79	22.53	10.82
16.0	0.00	20.74	3.59	24.33	22.53
16.5	0.00	20.74	5.38	26.12	35.14
17.0	0.00	20.74	7.18	27.91	48.65
17.5	1.86	20.74	8.97	31.57	63.52
18.0	3.72	20.74	10.77	35.23	80.22
18.3	4.65	20.74	11.66	37.05	89.25
18.5	5.58	20.74	12.56	38.88	98.75
18.8	6.51	20.74	13.46	40.71	108.70
19.0	7.44	20.74	14.36	42.54	119.10
19.5	7.44	20.74	14.36	42.54	140.37
20.0	7.44	20.74	14.36	42.54	161.64
20.5	7.44	20.74	14.36	42.54	182.90
21.0	7.44	20.74	14.36	42.54	204.17
21.5	7.44	20.74	14.36	42.54	225.44
22.0	7.44	20.74	14.36	42.54	246.71

THE FOLLOWING REUSLTS ARE THEORETICAL PEAK FLOOD STAGES WITH NO OFF-SITE DISCHARGE.

100 - YEAR,3-DAY RAINFALL = 10 inches
Soil Storage = S = 1.09 inches

EXFILTRATION TRENCH VOLUME (XT Volum 0 AC-FT

Runoff Depth = $v = \frac{(P-.2S)^2}{(P+.8S)}$ = 8.8 inches

Net Runoff Volume = V = v x Project Area/12 -XT 39.0 ac-ft

From Stage - Storage Table, Peak Stage = 16.64 ft_NGVD

10 - YEAR,3-DAY RAINFALL = 7 inches
Soil Storage = S = 1.09 inches

Runoff Depth = $v = \frac{(P-.2S)^2}{(P+.8S)}$ = 5.8 inches

Net Runoff Volume = V = v x Project Area/12 -XT V 25.9 ac-ft

From Stage - Storage Table, Peak Stage = 16.13 ft_NGVD

25 - YEAR, 3-DAY RAINFALL = 9 inches
Soil Storage = S = 1.09 inches

Runoff Depth = $v = \frac{(P-.2S)^2}{(P+.8S)}$ = 7.8 inches

Net Runoff Volume = V = v x Project Area/12 -XT 34.6 ac-ft

From Stage - Storage Table, Peak Stage = 16.48 ft_NGVD

5 - YEAR, 1-DAY RAINFALL = 4.5 inches
Soil Storage = S = 1.09 inches

Runoff Depth = $v = \frac{(P-.2S)^2}{(P+.8S)}$ = 3.4 inches

Net Runoff Volume = V = v x Project Area/12 -XT V 15.1 ac-ft

From Stage - Storage Table, Peak Stage = 15.68 ft_NGVD

STAGE STORAGE CALCULATIONS
BASIN 17C

Basin Grading Assumptions:

Total Project Area = 142.37 ac.
Control Elevation = 14.5 ft-NGVD

Assumptions:

Land Use	%	Area (ac)	Stores Linearly From	To
Roads, Pads & Parking	12%	17.08	17.0	19.0
Building Area	15%	21.36		
Lake/Canal Area	8%	11.39	14.5	vertically
Green Area	65%	92.54	15.0	19.0

Stage (ft-NGVD)	Area (ac) Roads	Detention	Green	Total	Storage (ac-ft)
14.5	0.00	11.39	0.00	11.39	0.00
15.0	0.00	11.39	0.00	11.39	5.69
15.5	0.00	11.39	11.57	22.96	14.28
16.0	0.00	11.39	23.14	34.52	28.65
16.5	0.00	11.39	34.70	46.09	48.81
17.0	0.00	11.39	46.27	57.66	74.74
17.5	4.27	11.39	57.84	73.50	107.53
17.8	6.41	11.39	63.62	81.42	126.90
18.0	8.54	11.39	69.41	89.34	148.24
18.3	10.68	11.39	75.19	97.26	171.57
18.5	12.81	11.39	80.97	105.18	196.87
19.0	17.08	11.39	92.54	121.01	253.42
19.5	17.08	11.39	92.54	121.01	313.93
20.0	17.08	11.39	92.54	121.01	374.43
20.5	17.08	11.39	92.54	121.01	434.94
21.0	17.08	11.39	92.54	121.01	495.45
21.5	17.08	11.39	92.54	121.01	555.95

THE FOLLOWING REUSLTS ARE THEORETICAL PEAK FLOOD STAGES WITH NO OFF-SITE DISCHARGE.

100 - YEAR,3-DAY RAINFALL = 10 inches
Soil Storage = S = 3.54 inches

EXFILTRATION TRENCH VOLUME (XT Volum 0 AC-FT

Runoff Depth = $v = \frac{(P-.2S)^2}{(P+.8S)}$ = 6.7 inches

Net Runoff Volume = V = v x Project Area/12 -XT 79.8 ac-ft

From Stage - Storage Table, Peak Stage = 17.08 ft_NGVD

10 - YEAR,3-DAY RAINFALL = 7 inches
Soil Storage = S = 3.54 inches

Runoff Depth = $v = \frac{(P-.2S)^2}{(P+.8S)}$ = 4.0 inches

Net Runoff Volume = V = v x Project Area/12 -XT V 47.8 ac-ft

From Stage - Storage Table, Peak Stage = 16.47 ft_NGVD

25 - YEAR, 3-DAY RAINFALL = 9 inches
Soil Storage = S = 3.54 inches

Runoff Depth = $v = \frac{(P-.2S)^2}{(P+.8S)}$ = 5.8 inches

Net Runoff Volume = V = v x Project Area/12 -XT 68.9 ac-ft

From Stage - Storage Table, Peak Stage = 16.89 ft_NGVD

5 - YEAR, 1-DAY RAINFALL = 4.5 inches
Soil Storage = S = 3.54 inches

Runoff Depth = $v = \frac{(P-.2S)^2}{(P+.8S)}$ = 2.0 inches

Net Runoff Volume = V = v x Project Area/12 -XT V 23.3 ac-ft

From Stage - Storage Table, Peak Stage = 15.81 ft_NGVD

STAGE STORAGE CALCULATIONS
BASIN 18

Basin Grading Assumptions:

Total Project Area = 332.00 ac.
Control Elevation = 14 ft-NGVD

Assumptions:

Land Use	%	Area (ac)	Stores Linearly From	To
Roads, Pads & Parking	20%	66.40	15.0	19.0
Building Area	20%	66.40		
Lake/Canal Area	3%	9.50	14.0	vertically
Green Area	57%	189.70	14.0	19.0

Stage (ft-NGVD)	Area (ac) Roads	Detention	Green	Total	Storage (ac-ft)
14.0	0.00	9.50	0.00	9.50	0.00
14.5	0.00	9.50	18.97	28.47	9.49
15.0	0.00	9.50	37.94	47.44	28.47
15.5	8.30	9.50	56.91	74.71	59.01
16.0	16.60	9.50	75.88	101.98	103.18
16.5	24.90	9.50	94.85	129.25	160.99
17.0	33.20	9.50	113.82	156.52	232.43
17.3	37.35	9.50	123.31	170.16	273.26
17.5	41.50	9.50	132.79	183.79	317.51
17.8	45.65	9.50	142.28	197.43	365.16
18.0	49.80	9.50	151.76	211.06	416.22
18.5	58.10	9.50	170.73	238.33	528.57
19.0	66.40	9.50	189.70	265.60	654.55
19.5	66.40	9.50	189.70	265.60	787.35
20.0	66.40	9.50	189.70	265.60	920.15
20.5	66.40	9.50	189.70	265.60	1052.95
21.0	66.40	9.50	189.70	265.60	1185.75

THE FOLLOWING REUSLTS ARE THEORETICAL PEAK FLOOD STAGES WITH NO OFF-SITE DISCHARGE.

100 - YEAR,3-DAY RAINFALL = 10 inches
Soil Storage = S = 2.31 inches

EXFILTRATION TRENCH VOLUME (XT Volum 0 AC-FT

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 7.7 inches

Net Runoff Volume = V = v x Project Area/12 -XT 212.3 ac-ft

From Stage - Storage Table, Peak Stage = 16.86 ft_NGVD

10 - YEAR,3-DAY RAINFALL = 7 inches
Soil Storage = S = 2.31 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 4.8 inches

Net Runoff Volume = V = v x Project Area/12 -XT V 133.6 ac-ft

From Stage - Storage Table, Peak Stage = 16.26 ft_NGVD

25 - YEAR, 3-DAY RAINFALL = 9 inches
Soil Storage = S = 2.31 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 6.7 inches

Net Runoff Volume = V = v x Project Area/12 -XT 185.8 ac-ft

From Stage - Storage Table, Peak Stage = 16.64 ft_NGVD

5 - YEAR, 1-DAY RAINFALL = 4.5 inches
Soil Storage = S = 2.31 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 2.6 inches

Net Runoff Volume = V = v x Project Area/12 -XT V 71.0 ac-ft

From Stage - Storage Table, Peak Stage = 15.64 ft_NGVD

STAGE STORAGE CALCULATIONS
BASIN 19

Basin Grading Assumptions:

Total Project Area = 123.00 ac.
Control Elevation = 13.5 ft-NGVD

Assumptions:

Land Use	%	Area (ac)	Stores Linearly From	To
Roads, Pads & Parking	1%	1.23	15.0	19.0
Building Area	1%	1.23		
Lake/Canal Area	1%	1.23	13.5	vertically
Green Area	97%	119.31	14.0	19.0

Stage (ft-NGVD)	Area (ac)				Storage (ac-ft)
	Roads	Detention	Green	Total	
13.5	0.00	1.23	0.00	1.23	0.00
14.0	0.00	1.23	0.00	1.23	0.62
14.5	0.00	1.23	11.93	13.16	4.21
15.0	0.00	1.23	23.86	25.09	13.78
15.5	0.15	1.23	35.79	37.18	29.34
16.0	0.31	1.23	47.72	49.26	50.95
16.5	0.46	1.23	59.66	61.35	78.60
16.8	0.54	1.23	65.62	67.39	94.70
17.0	0.62	1.23	71.59	73.43	112.30
17.3	0.69	1.23	77.55	79.47	131.41
17.5	0.77	1.23	83.52	85.52	152.04
18.0	0.92	1.23	95.45	97.60	197.81
18.5	1.08	1.23	107.38	109.69	249.64
19.0	1.23	1.23	119.31	121.77	307.50
19.5	1.23	1.23	119.31	121.77	368.39
20.0	1.23	1.23	119.31	121.77	429.27
20.5	1.23	1.23	119.31	121.77	490.16

THE FOLLOWING REUSLTS ARE THEORETICAL PEAK FLOOD STAGES WITH NO OFF-SITE DISCHARGE.

100 - YEAR,3-DAY RAINFALL = 10 inches
Soil Storage = S = 1.82 inches

EXFILTRATION TRENCH VOLUME (XT Volum 0 AC-FT

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 8.1 inches

Net Runoff Volume = V = v x Project Area/12 -XT 83.1 ac-ft

From Stage - Storage Table, Peak Stage = 16.57 ft_NGVD

10 - YEAR,3-DAY RAINFALL = 7 inches
Soil Storage = S = 1.82 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 5.2 inches

Net Runoff Volume = V = v x Project Area/12 -XT V 53.4 ac-ft

From Stage - Storage Table, Peak Stage = 16.04 ft_NGVD

25 - YEAR, 3-DAY RAINFALL = 9 inches
Soil Storage = S = 1.82 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 7.1 inches

Net Runoff Volume = V = v x Project Area/12 -XT 73.1 ac-ft

From Stage - Storage Table, Peak Stage = 16.38 ft_NGVD

5 - YEAR, 1-DAY RAINFALL = 4.5 inches
Soil Storage = S = 1.82 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 2.9 inches

Net Runoff Volume = V = v x Project Area/12 -XT V 29.4 ac-ft

From Stage - Storage Table, Peak Stage = 15.42 ft_NGVD

STAGE STORAGE CALCULATIONS
BASIN 20

Basin Grading Assumptions:

Total Project Area = 324.00 ac.
Control Elevation = 25 ft-NGVD

Assumptions:

Land Use	%	Area (ac)	Stores Linearly From	To
Roads, Pads & Parking	20%	64.80	27.0	30.0
Building Area	25%	81.00		
Lake/Canal Area	1%	3.24	25.0	vertically
Green Area	54%	174.96	26.0	31.0

Stage (ft-NGVD)	Area (ac) Roads	Detention	Green	Total	Storage (ac-ft)
25.0	0.00	3.24	0.00	3.24	0.00
25.5	0.00	3.24	0.00	3.24	1.62
26.0	0.00	3.24	0.00	3.24	3.24
26.5	0.00	3.24	17.50	20.74	9.23
27.0	0.00	3.24	34.99	38.23	23.98
27.5	10.80	3.24	52.49	66.53	50.17
28.0	21.60	3.24	69.98	94.82	90.50
28.3	27.00	3.24	78.73	108.97	115.98
28.5	32.40	3.24	87.48	123.12	144.99
28.8	37.80	3.24	96.23	137.27	177.54
29.0	43.20	3.24	104.98	151.42	213.62
29.5	54.00	3.24	122.47	179.71	296.41
30.0	64.80	3.24	139.97	208.01	393.34
30.5	64.80	3.24	157.46	225.50	501.71
31.0	64.80	3.24	174.96	243.00	618.84
31.5	64.80	3.24	174.96	243.00	740.34
32.0	64.80	3.24	174.96	243.00	861.84

THE FOLLOWING REUSLTS ARE THEORETICAL PEAK FLOOD STAGES WITH NO OFF-SITE DISCHARGE.

100 - YEAR,3-DAY RAINFALL = 10 inches
Soil Storage = S = 3.70 inches

EXFILTRATION TRENCH VOLUME (XT Volum 0 AC-FT

Runoff Depth = $v = \frac{(P-.2S)^2}{(P+.8S)}$ = 6.6 inches

Net Runoff Volume = V = v x Project Area/12 -XT 178.7 ac-ft

From Stage - Storage Table, Peak Stage = 28.75 ft_NGVD

10 - YEAR,3-DAY RAINFALL = 7 inches
Soil Storage = S = 3.70 inches

Runoff Depth = $v = \frac{(P-.2S)^2}{(P+.8S)}$ = 3.9 inches

Net Runoff Volume = V = v x Project Area/12 -XT V 106.2 ac-ft

From Stage - Storage Table, Peak Stage = 28.14 ft_NGVD

25 - YEAR, 3-DAY RAINFALL = 9 inches
Soil Storage = S = 3.70 inches

Runoff Depth = $v = \frac{(P-.2S)^2}{(P+.8S)}$ = 5.7 inches

Net Runoff Volume = V = v x Project Area/12 -XT 154.0 ac-ft

From Stage - Storage Table, Peak Stage = 28.57 ft_NGVD

5 - YEAR, 1-DAY RAINFALL = 4.5 inches
Soil Storage = S = 3.70 inches

Runoff Depth = $v = \frac{(P-.2S)^2}{(P+.8S)}$ = 1.9 inches

Net Runoff Volume = V = v x Project Area/12 -XT V 51.2 ac-ft

From Stage - Storage Table, Peak Stage = 27.51 ft_NGVD

STAGE STORAGE CALCULATIONS
BASIN 21

Basin Grading Assumptions:

Total Project Area = 105.30 ac.
Control Elevation = 25 ft-NGVD

Assumptions:

Land Use	%	Area (ac)	Stores Linearly From	To
Roads, Pads & Parking	15%	15.80	27.0	30.0
Building Area	10%	10.53		
Lake/Canal Area	1%	1.05	25.0	vertically
Green Area	74%	77.92	26.0	31.0

Stage (ft-NGVD)	Area (ac) Roads	Detention	Green	Total	Storage (ac-ft)
25.0	0.00	1.05	0.00	1.05	0.00
25.5	0.00	1.05	0.00	1.05	0.53
26.0	0.00	1.05	0.00	1.05	1.05
26.5	0.00	1.05	7.79	8.85	3.53
27.0	0.00	1.05	15.58	16.64	9.90
27.5	2.63	1.05	23.38	27.06	20.82
28.0	5.27	1.05	31.17	37.49	36.96
28.3	6.58	1.05	35.06	42.70	46.98
28.5	7.90	1.05	38.96	47.91	58.31
28.8	9.21	1.05	42.86	53.12	70.94
29.0	10.53	1.05	46.75	58.34	84.87
29.5	13.16	1.05	54.55	68.76	116.65
30.0	15.80	1.05	62.34	79.19	153.63
30.5	15.80	1.05	70.13	86.98	195.17
31.0	15.80	1.05	77.92	94.77	240.61
31.5	15.80	1.05	77.92	94.77	288.00
32.0	15.80	1.05	77.92	94.77	335.38

THE FOLLOWING REUSLTS ARE THEORETICAL PEAK FLOOD STAGES WITH NO OFF-SITE DISCHARGE.

100 - YEAR,3-DAY RAINFALL = 10 inches
Soil Storage = S = 2.19 inches

EXFILTRATION TRENCH VOLUME (XT Volum 0 AC-FT

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 7.8 inches

Net Runoff Volume = V = v x Project Area/12 -XT 68.3 ac-ft

From Stage - Storage Table, Peak Stage = 28.70 ft_NGVD

10 - YEAR,3-DAY RAINFALL = 7 inches
Soil Storage = S = 2.19 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 4.9 inches

Net Runoff Volume = V = v x Project Area/12 -XT V 43.2 ac-ft

From Stage - Storage Table, Peak Stage = 28.15 ft_NGVD

25 - YEAR, 3-DAY RAINFALL = 9 inches
Soil Storage = S = 2.19 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 6.8 inches

Net Runoff Volume = V = v x Project Area/12 -XT 59.8 ac-ft

From Stage - Storage Table, Peak Stage = 28.50 ft_NGVD

5 - YEAR, 1-DAY RAINFALL = 4.5 inches
Soil Storage = S = 2.19 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 2.6 inches

Net Runoff Volume = V = v x Project Area/12 -XT V 23.1 ac-ft

From Stage - Storage Table, Peak Stage = 27.57 ft_NGVD

STAGE STORAGE CALCULATIONS
BASIN 22

Basin Grading Assumptions:

Total Project Area = 320.00 ac.
Control Elevation = 24 ft-NGVD

Assumptions:

Land Use	%	Area (ac)	Stores Linearly From	To
Roads, Pads & Parking	15%	48.00	25.0	30.0
Building Area	15%	48.00		
Lake/Canal Area	1%	3.20	24.0	vertically
Green Area	69%	220.80	25.0	31.0

Stage	Area (ac)				Storage
(ft-NGVD)	Roads	Detention	Green	Total	(ac-ft)
24.0	0.00	3.20	0.00	3.20	0.00
24.5	0.00	3.20	0.00	3.20	1.60
25.0	0.00	3.20	0.00	3.20	3.20
25.5	4.80	3.20	18.40	26.40	10.60
26.0	9.60	3.20	36.80	49.60	29.60
26.5	14.40	3.20	55.20	72.80	60.20
27.0	19.20	3.20	73.60	96.00	102.40
27.3	21.60	3.20	82.80	107.60	127.85
27.5	24.00	3.20	92.00	119.20	156.20
27.8	26.40	3.20	101.20	130.80	187.45
28.0	28.80	3.20	110.40	142.40	221.60
28.5	33.60	3.20	128.80	165.60	298.60
29.0	38.40	3.20	147.20	188.80	387.20
29.5	43.20	3.20	165.60	212.00	487.40
30.0	48.00	3.20	184.00	235.20	599.20
30.5	48.00	3.20	202.40	253.60	721.40
31.0	48.00	3.20	220.80	272.00	852.80

THE FOLLOWING REUSLTS ARE THEORETICAL PEAK FLOOD STAGES WITH NO OFF-SITE DISCHARGE.

100 - YEAR,3-DAY RAINFALL = 10 inches
Soil Storage = S = 3.76 inches

EXFILTRATION TRENCH VOLUME (XT Volum 0 AC-FT

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 6.6 inches

Net Runoff Volume = V = v x Project Area/12 -XT 175.3 ac-ft

From Stage - Storage Table, Peak Stage = 27.65 ft_NGVD

10 - YEAR,3-DAY RAINFALL = 7 inches
Soil Storage = S = 3.76 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 3.9 inches

Net Runoff Volume = V = v x Project Area/12 -XT V 104.0 ac-ft

From Stage - Storage Table, Peak Stage = 27.01 ft_NGVD

25 - YEAR, 3-DAY RAINFALL = 9 inches
Soil Storage = S = 3.76 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 5.7 inches

Net Runoff Volume = V = v x Project Area/12 -XT 151.1 ac-ft

From Stage - Storage Table, Peak Stage = 27.41 ft_NGVD

5 - YEAR, 1-DAY RAINFALL = 4.5 inches
Soil Storage = S = 3.76 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 1.9 inches

Net Runoff Volume = V = v x Project Area/12 -XT V 49.9 ac-ft

From Stage - Storage Table, Peak Stage = 26.33 ft_NGVD

STAGE STORAGE CALCULATIONS
BASIN 23

Basin Grading Assumptions:

Total Project Area = 301.00 ac.
Control Elevation = 19.5 ft-NGVD

Assumptions:

Land Use	%	Area (ac)	Stores Linearly From	To
Roads, Pads & Parking	10%	30.10	21.0	23.0
Building Area	10%	30.10		
Lake/Canal Area	2%	6.02	19.5	vertically
Green Area	78%	234.78	21.0	24.0

Stage (ft-NGVD)	Area (ac)				Storage (ac-ft)
	Roads	Detention	Green	Total	
19.5	0.00	6.02	0.00	6.02	0.00
20.0	0.00	6.02	0.00	6.02	3.01
20.5	0.00	6.02	0.00	6.02	6.02
21.0	0.00	6.02	0.00	6.02	9.03
21.5	7.53	6.02	39.13	52.68	23.70
22.0	15.05	6.02	78.26	99.33	61.71
22.5	22.58	6.02	117.39	145.99	123.03
22.8	26.34	6.02	136.96	169.31	162.45
23.0	30.10	6.02	156.52	192.64	207.69
23.3	30.10	6.02	176.09	212.21	258.30
23.5	30.10	6.02	195.65	231.77	313.79
24.0	30.10	6.02	234.78	270.90	439.46
24.5	30.10	6.02	234.78	270.90	574.91
25.0	30.10	6.02	234.78	270.90	710.36
25.5	30.10	6.02	234.78	270.90	845.81
26.0	30.10	6.02	234.78	270.90	981.26
26.5	30.10	6.02	234.78	270.90	1116.71

THE FOLLOWING REUSLTS ARE THEORETICAL PEAK FLOOD STAGES WITH NO OFF-SITE DISCHARGE.

100 - YEAR,3-DAY RAINFALL = 10 inches
Soil Storage = S = 3.16 inches

EXFILTRATION TRENCH VOLUME (XT Volum 0 AC-FT

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 7.0 inches

Net Runoff Volume = V = v x Project Area/12 -XT 175.7 ac-ft

From Stage - Storage Table, Peak Stage = 22.81 ft_NGVD

10 - YEAR,3-DAY RAINFALL = 7 inches
Soil Storage = S = 3.16 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 4.3 inches

Net Runoff Volume = V = v x Project Area/12 -XT V 106.8 ac-ft

From Stage - Storage Table, Peak Stage = 22.37 ft_NGVD

25 - YEAR, 3-DAY RAINFALL = 9 inches
Soil Storage = S = 3.16 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 6.1 inches

Net Runoff Volume = V = v x Project Area/12 -XT 152.4 ac-ft

From Stage - Storage Table, Peak Stage = 22.67 ft_NGVD

5 - YEAR, 1-DAY RAINFALL = 4.5 inches
Soil Storage = S = 3.16 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 2.1 inches

Net Runoff Volume = V = v x Project Area/12 -XT V 53.4 ac-ft

From Stage - Storage Table, Peak Stage = 21.89 ft_NGVD

STAGE STORAGE CALCULATIONS
BASIN 23B

Basin Grading Assumptions:

Total Project Area = 301.00 ac.
Control Elevation = 19.5 ft-NGVD

Assumptions:

Land Use	%	Area (ac)	Stores Linearly From	To
Roads, Pads & Parking	10%	30.10	21.0	23.0
Building Area	10%	30.10		
Lake/Canal Area	8%	25.00	19.5	vertically
Green Area	72%	215.80	21.0	24.0

Stage (ft-NGVD)	Area (ac)				Storage (ac-ft)
	Roads	Detention	Green	Total	
19.5	0.00	25.00	0.00	25.00	0.00
20.0	0.00	25.00	0.00	25.00	12.50
20.5	0.00	25.00	0.00	25.00	25.00
21.0	0.00	25.00	0.00	25.00	37.50
21.5	7.53	25.00	35.97	68.49	60.87
22.0	15.05	25.00	71.93	111.98	105.99
22.5	22.58	25.00	107.90	155.48	172.86
22.8	26.34	25.00	125.88	177.22	214.44
23.0	30.10	25.00	143.87	198.97	261.47
23.3	30.10	25.00	161.85	216.95	313.46
23.5	30.10	25.00	179.83	234.93	369.94
24.0	30.10	25.00	215.80	270.90	496.40
24.5	30.10	25.00	215.80	270.90	631.85
25.0	30.10	25.00	215.80	270.90	767.30
25.5	30.10	25.00	215.80	270.90	902.75
26.0	30.10	25.00	215.80	270.90	1038.20
26.5	30.10	25.00	215.80	270.90	1173.65

THE FOLLOWING REUSLTS ARE THEORETICAL PEAK FLOOD STAGES WITH NO OFF-SITE DISCHARGE.

100 - YEAR,3-DAY RAINFALL = 10 inches
Soil Storage = S = 2.90 inches

EXFILTRATION TRENCH VOLUME (XT Volume) = 0 AC-FT

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 7.2 inches

Net Runoff Volume = V = v x Project Area/12 -XT Volume 180.6 ac-ft

From Stage - Storage Table, Peak Stage = 22.54 ft_NGVD

10 - YEAR,3-DAY RAINFALL = 7 inches
Soil Storage = S = 2.90 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 4.4 inches

Net Runoff Volume = V = v x Project Area/12 -XT V 110.9 ac-ft

From Stage - Storage Table, Peak Stage = 22.04 ft_NGVD

25 - YEAR, 3-DAY RAINFALL = 9 inches
Soil Storage = S = 2.90 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 6.3 inches

Net Runoff Volume = V = v x Project Area/12 -XT Volume 157.0 ac-ft

From Stage - Storage Table, Peak Stage = 22.33 ft_NGVD

5 - YEAR, 1-DAY RAINFALL = 4.5 inches
Soil Storage = S = 2.90 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 2.3 inches

Net Runoff Volume = V = v x Project Area/12 -XT V 56.5 ac-ft

From Stage - Storage Table, Peak Stage = 21.41 ft_NGVD

STAGE STORAGE CALCULATIONS
BASIN 24

Basin Grading Assumptions:

Total Project Area = 97.00 ac.
Control Elevation = 18.5 ft-NGVD

Assumptions:

Land Use	%	Area (ac)	Stores Linearly From	To
Roads, Pads & Parking	1%	0.97	19.0	21.0
Building Area	1%	0.97		
Lake/Canal Area	1%	0.97	18.5	vertically
Green Area	97%	94.09	18.5	22.0

Stage (ft-NGVD)	Area (ac)				Storage (ac-ft)
	Roads	Detention	Green	Total	
18.5	0.00	0.97	0.00	0.97	0.00
19.0	0.00	0.97	13.44	14.41	3.85
19.5	0.24	0.97	26.88	28.10	14.47
20.0	0.49	0.97	40.32	41.78	31.94
20.5	0.73	0.97	53.77	55.46	56.25
21.0	0.97	0.97	67.21	69.15	87.40
21.5	0.97	0.97	80.65	82.59	125.34
21.8	0.97	0.97	87.37	89.31	146.83
22.0	0.97	0.97	94.09	96.03	169.99
22.3	0.97	0.97	94.09	96.03	194.00
22.5	0.97	0.97	94.09	96.03	218.01
23.0	0.97	0.97	94.09	96.03	266.02
23.5	0.97	0.97	94.09	96.03	314.04
24.0	0.97	0.97	94.09	96.03	362.05
24.5	0.97	0.97	94.09	96.03	410.07
25.0	0.97	0.97	94.09	96.03	458.08
25.5	0.97	0.97	94.09	96.03	506.10

THE FOLLOWING REUSLTS ARE THEORETICAL PEAK FLOOD STAGES WITH NO OFF-SITE DISCHARGE.

100 - YEAR,3-DAY RAINFALL = 10 inches
Soil Storage = S = 1.13 inches

EXFILTRATION TRENCH VOLUME (XT Volum 0 AC-FT

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 8.8 inches

Net Runoff Volume = V = v x Project Area/12 -XT 70.8 ac-ft

From Stage - Storage Table, Peak Stage = 20.73 ft_NGVD

10 - YEAR,3-DAY RAINFALL = 7 inches
Soil Storage = S = 1.13 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 5.8 inches

Net Runoff Volume = V = v x Project Area/12 -XT V 46.9 ac-ft

From Stage - Storage Table, Peak Stage = 20.31 ft_NGVD

25 - YEAR, 3-DAY RAINFALL = 9 inches
Soil Storage = S = 1.13 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 7.8 inches

Net Runoff Volume = V = v x Project Area/12 -XT 62.9 ac-ft

From Stage - Storage Table, Peak Stage = 20.56 ft_NGVD

5 - YEAR, 1-DAY RAINFALL = 4.5 inches
Soil Storage = S = 1.13 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 3.4 inches

Net Runoff Volume = V = v x Project Area/12 -XT V 27.3 ac-ft

From Stage - Storage Table, Peak Stage = 19.87 ft_NGVD

STAGE STORAGE CALCULATIONS
BASIN 25A

Basin Grading Assumptions:

Total Project Area = 366.70 ac.
Control Elevation = 14.5 ft-NGVD

Assumptions:

Land Use	%	Area (ac)	Stores Linearly From	To
Roads, Pads & Parking	0%	0.02	16.0	21.0
Building Area	0%	0.02		
Lake/Canal Area	25%	91.68	14.5	vertically
Green Area	75%	274.99	15.0	21.0

Stage (ft-NGVD)	Area (ac) Roads	Detention	Green	Total	Storage (ac-ft)
14.5	0.00	91.68	0.00	91.68	0.00
15.0	0.00	91.68	0.00	91.68	45.84
15.5	0.00	91.68	22.92	114.59	97.40
16.0	0.00	91.68	45.83	137.51	160.43
16.5	0.00	91.68	68.75	160.42	234.91
17.0	0.00	91.68	91.66	183.34	320.85
17.5	0.01	91.68	114.58	206.26	418.25
17.8	0.01	91.68	126.04	217.72	471.25
18.0	0.01	91.68	137.49	229.18	527.11
18.3	0.01	91.68	148.95	240.64	585.84
18.5	0.01	91.68	160.41	252.09	647.43
19.0	0.01	91.68	183.33	275.01	779.21
19.5	0.01	91.68	206.24	297.93	922.44
20.0	0.01	91.68	229.16	320.85	1077.13
20.5	0.02	91.68	252.07	343.76	1243.29
21.0	0.02	91.68	274.99	366.68	1420.90
21.5	0.02	91.68	274.99	366.68	1604.24

THE FOLLOWING REUSLTS ARE THEORETICAL PEAK FLOOD STAGES WITH NO OFF-SITE DISCHARGE.

100 - YEAR,3-DAY RAINFALL = 10 inches
Soil Storage = S = 1.41 inches

EXFILTRATION TRENCH VOLUME (XT Volum 0 AC-FT

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 8.5 inches

Net Runoff Volume = V = v x Project Area/12 -XT 259.5 ac-ft

From Stage - Storage Table, Peak Stage = 16.64 ft_NGVD

10 - YEAR,3-DAY RAINFALL = 7 inches
Soil Storage = S = 1.41 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 5.6 inches

Net Runoff Volume = V = v x Project Area/12 -XT V 169.8 ac-ft

From Stage - Storage Table, Peak Stage = 16.06 ft_NGVD

25 - YEAR, 3-DAY RAINFALL = 9 inches
Soil Storage = S = 1.41 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 7.5 inches

Net Runoff Volume = V = v x Project Area/12 -XT 229.4 ac-ft

From Stage - Storage Table, Peak Stage = 16.43 ft_NGVD

5 - YEAR, 1-DAY RAINFALL = 4.5 inches
Soil Storage = S = 1.41 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 3.2 inches

Net Runoff Volume = V = v x Project Area/12 -XT V 96.7 ac-ft

From Stage - Storage Table, Peak Stage = 15.49 ft_NGVD

STAGE STORAGE CALCULATIONS
BASIN 25B

Basin Grading Assumptions:

Total Project Area = 28.30 ac.
Control Elevation = 15.6 ft-NGVD

Assumptions:

Land Use	%	Area (ac)	Stores Linearly From	To
Roads, Pads & Parking	8%	2.24	17.5	19.1
Building Area	11%	3.13		
Lake/Canal Area	14%	3.87	15.6	vertically
Green Area	67%	19.06	18.0	19.1

Stage (ft-NGVD)	Area (ac) Roads	Detention	Green	Total	Storage (ac-ft)
15.60	0.00	3.87	0.00	3.87	0.00
16.00	0.00	3.87	0.00	3.87	1.55
16.25	0.00	3.87	0.00	3.87	2.51
16.50	0.00	3.87	0.00	3.87	3.48
16.75	0.00	3.87	0.00	3.87	4.45
17.00	0.00	3.87	0.00	3.87	5.42
17.25	0.00	3.87	0.00	3.87	6.38
17.50	0.00	3.87	0.00	3.87	7.35
17.75	0.35	3.87	0.00	4.22	8.36
18.00	0.70	3.87	0.00	4.57	9.46
18.25	1.05	3.87	4.33	9.25	11.19
18.50	1.40	3.87	8.67	13.93	14.09
18.75	1.75	3.87	13.00	18.62	18.15
19.00	2.10	3.87	17.33	23.30	23.39
19.25	2.24	3.87	19.06	25.17	29.45
19.50	2.24	3.87	19.06	25.17	35.74
19.75	2.24	3.87	19.06	25.17	42.04

THE FOLLOWING REUSLTS ARE THEORETICAL PEAK FLOOD STAGES WITH NO OFF-SITE DISCHARGE.

100 - YEAR,3-DAY RAINFALL = 10 inches
Soil Storage = S = 1.85 inches

EXFILTRATION TRENCH VOLUME (XT Volum 0 AC-FT

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 8.1 inches

Net Runoff Volume = V = v x Project Area/12 -XT 19.1 ac-ft

From Stage - Storage Table, Peak Stage = 18.69 ft_NGVD

10 - YEAR,3-DAY RAINFALL = 7 inches
Soil Storage = S = 1.85 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 5.2 inches

Net Runoff Volume = V = v x Project Area/12 -XT V 12.2 ac-ft

From Stage - Storage Table, Peak Stage = 18.30 ft_NGVD

25 - YEAR, 3-DAY RAINFALL = 9 inches
Soil Storage = S = 1.85 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 7.1 inches

Net Runoff Volume = V = v x Project Area/12 -XT 16.8 ac-ft

From Stage - Storage Table, Peak Stage = 18.64 ft_NGVD

5 - YEAR, 1-DAY RAINFALL = 4.5 inches
Soil Storage = S = 1.85 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 2.9 inches

Net Runoff Volume = V = v x Project Area/12 -XT V 6.7 ac-ft

From Stage - Storage Table, Peak Stage = 17.34 ft_NGVD

STAGE STORAGE CALCULATIONS
BASIN 26

Basin Grading Assumptions:

Total Project Area = 253.00 ac.
Control Elevation = 14.5 ft-NGVD

Assumptions:

Land Use	%	Area (ac)	Stores Linearly From	To
Roads, Pads & Parking	0%	0.00	16.0	21.0
Building Area	0%	0.00		
Lake/Canal Area	30%	75.90	14.5	vertically
Green Area	70%	177.10	15.0	21.0

Stage (ft-NGVD)	Area (ac) Roads	Detention	Green	Total	Storage (ac-ft)
14.5	0.00	75.90	0.00	75.90	0.00
15.0	0.00	75.90	0.00	75.90	37.95
15.5	0.00	75.90	14.76	90.66	79.59
16.0	0.00	75.90	29.52	105.42	128.61
16.5	0.00	75.90	44.28	120.18	185.01
17.0	0.00	75.90	59.03	134.93	248.78
17.5	0.00	75.90	73.79	149.69	319.94
17.8	0.00	75.90	81.17	157.07	358.28
18.0	0.00	75.90	88.55	164.45	398.48
18.3	0.00	75.90	95.93	171.83	440.51
18.5	0.00	75.90	103.31	179.21	484.39
19.0	0.00	75.90	118.07	193.97	577.68
19.5	0.00	75.90	132.83	208.73	678.36
20.0	0.00	75.90	147.58	223.48	786.41
20.5	0.00	75.90	162.34	238.24	901.84
21.0	0.00	75.90	177.10	253.00	1024.65
21.5	0.00	75.90	177.10	253.00	1151.15

THE FOLLOWING REUSLTS ARE THEORETICAL PEAK FLOOD STAGES WITH NO OFF-SITE DISCHARGE.

100 - YEAR,3-DAY RAINFALL = 10 inches
Soil Storage = S = 2.07 inches

EXFILTRATION TRENCH VOLUME (XT Volum 0 AC-FT

Runoff Depth = $v = \frac{(P-.2S)^2}{(P+.8S)}$ = 7.9 inches

Net Runoff Volume = V = v x Project Area/12 -XT 166.1 ac-ft

From Stage - Storage Table, Peak Stage = 16.33 ft_NGVD

10 - YEAR,3-DAY RAINFALL = 7 inches
Soil Storage = S = 2.07 inches

Runoff Depth = $v = \frac{(P-.2S)^2}{(P+.8S)}$ = 5.0 inches

Net Runoff Volume = V = v x Project Area/12 -XT V 105.6 ac-ft

From Stage - Storage Table, Peak Stage = 15.77 ft_NGVD

25 - YEAR, 3-DAY RAINFALL = 9 inches
Soil Storage = S = 2.07 inches

Runoff Depth = $v = \frac{(P-.2S)^2}{(P+.8S)}$ = 6.9 inches

Net Runoff Volume = V = v x Project Area/12 -XT 145.8 ac-ft

From Stage - Storage Table, Peak Stage = 16.15 ft_NGVD

5 - YEAR, 1-DAY RAINFALL = 4.5 inches
Soil Storage = S = 2.07 inches

Runoff Depth = $v = \frac{(P-.2S)^2}{(P+.8S)}$ = 2.7 inches

Net Runoff Volume = V = v x Project Area/12 -XT V 57.1 ac-ft

From Stage - Storage Table, Peak Stage = 15.23 ft_NGVD

STAGE STORAGE CALCULATIONS
BASIN 27

Basin Grading Assumptions:

Total Project Area = 246.00 ac.
Control Elevation = 18.5 ft-NGVD

Assumptions:

Land Use	%	Area (ac)	Stores Linearly From	To
Roads, Pads & Parking	15%	36.90	21.0	23.0
Building Area	15%	36.90		
Lake/Canal Area	2%	4.92	18.5	vertically
Green Area	68%	167.28	21.0	24.0

Stage (ft-NGVD)	Area (ac)				Storage (ac-ft)
	Roads	Detention	Green	Total	
18.5	0.00	4.92	0.00	4.92	0.00
19.0	0.00	4.92	0.00	4.92	2.46
19.5	0.00	4.92	0.00	4.92	4.92
20.0	0.00	4.92	0.00	4.92	7.38
20.5	0.00	4.92	0.00	4.92	9.84
21.0	0.00	4.92	0.00	4.92	12.30
21.5	9.23	4.92	27.88	42.03	24.04
21.8	13.84	4.92	41.82	60.58	36.86
22.0	18.45	4.92	55.76	79.13	54.33
22.3	23.06	4.92	69.70	97.68	76.43
22.5	27.68	4.92	83.64	116.24	103.17
23.0	36.90	4.92	111.52	153.34	170.56
23.5	36.90	4.92	139.40	181.22	254.20
24.0	36.90	4.92	167.28	209.10	351.78
24.5	36.90	4.92	167.28	209.10	456.33
25.0	36.90	4.92	167.28	209.10	560.88
25.5	36.90	4.92	167.28	209.10	665.43

THE FOLLOWING REUSLTS ARE THEORETICAL PEAK FLOOD STAGES WITH NO OFF-SITE DISCHARGE.

100 - YEAR,3-DAY RAINFALL = 10 inches
Soil Storage = S = 4.66 inches

EXFILTRATION TRENCH VOLUME (XT Volum 0 AC-FT

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 6.0 inches

Net Runoff Volume = V = v x Project Area/12 -XT 122.8 ac-ft

From Stage - Storage Table, Peak Stage = 22.65 ft_NGVD

10 - YEAR,3-DAY RAINFALL = 7 inches
Soil Storage = S = 4.66 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 3.4 inches

Net Runoff Volume = V = v x Project Area/12 -XT V 70.4 ac-ft

From Stage - Storage Table, Peak Stage = 22.16 ft_NGVD

25 - YEAR, 3-DAY RAINFALL = 9 inches
Soil Storage = S = 4.66 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 5.1 inches

Net Runoff Volume = V = v x Project Area/12 -XT 104.9 ac-ft

From Stage - Storage Table, Peak Stage = 22.43 ft_NGVD

5 - YEAR, 1-DAY RAINFALL = 4.5 inches
Soil Storage = S = 4.66 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 1.5 inches

Net Runoff Volume = V = v x Project Area/12 -XT V 31.7 ac-ft

From Stage - Storage Table, Peak Stage = 21.65 ft_NGVD

STAGE STORAGE CALCULATIONS
BASIN 27

Basin Grading Assumptions:

Total Project Area = 246.00 ac.
Control Elevation = 21 ft-NGVD

Assumptions:

Land Use	%	Area (ac)	Stores Linearly From	To
Roads, Pads & Parking	15%	36.90	24.0	29.0
Building Area	15%	36.90		
Lake/Canal Area	2%	4.92	21.0	vertically
Green Area	68%	167.28	24.0	29.0

Stage (ft-NGVD)	Area (ac)				Storage (ac-ft)
	Roads	Detention	Green	Total	
21.0	0.00	4.92	0.00	4.92	0.00
21.5	0.00	4.92	0.00	4.92	2.46
22.0	0.00	4.92	0.00	4.92	4.92
22.5	0.00	4.92	0.00	4.92	7.38
23.0	0.00	4.92	0.00	4.92	9.84
23.5	0.00	4.92	0.00	4.92	12.30
24.0	0.00	4.92	0.00	4.92	14.76
24.3	1.85	4.92	8.36	15.13	17.27
24.5	3.69	4.92	16.73	25.34	22.32
24.8	5.54	4.92	25.09	35.55	29.94
25.0	7.38	4.92	33.46	45.76	40.10
25.5	11.07	4.92	50.18	66.17	68.08
26.0	14.76	4.92	66.91	86.59	106.27
26.5	18.45	4.92	83.64	107.01	154.67
27.0	22.14	4.92	100.37	127.43	213.28
27.5	25.83	4.92	117.10	147.85	282.10
28.0	29.52	4.92	133.82	168.26	361.13

THE FOLLOWING REUSLTS ARE THEORETICAL PEAK FLOOD STAGES WITH NO OFF-SITE DISCHARGE.

100 - YEAR,3-DAY RAINFALL = 10 inches
Soil Storage = S = 4.66 inches

EXFILTRATION TRENCH VOLUME (XT Volum 0 AC-FT

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 6.0 inches

Net Runoff Volume = V = v x Project Area/12 -XT 122.8 ac-ft

From Stage - Storage Table, Peak Stage = 26.17 ft_NGVD

10 - YEAR,3-DAY RAINFALL = 7 inches
Soil Storage = S = 4.66 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 3.4 inches

Net Runoff Volume = V = v x Project Area/12 -XT V 70.4 ac-ft

From Stage - Storage Table, Peak Stage = 25.53 ft_NGVD

25 - YEAR, 3-DAY RAINFALL = 9 inches
Soil Storage = S = 4.66 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 5.1 inches

Net Runoff Volume = V = v x Project Area/12 -XT 104.9 ac-ft

From Stage - Storage Table, Peak Stage = 25.98 ft_NGVD

5 - YEAR, 1-DAY RAINFALL = 4.5 inches
Soil Storage = S = 4.66 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 1.5 inches

Net Runoff Volume = V = v x Project Area/12 -XT V 31.7 ac-ft

From Stage - Storage Table, Peak Stage = 24.76 ft_NGVD

STAGE STORAGE CALCULATIONS
BASIN 29

Basin Grading Assumptions:

Total Project Area = 331.00 ac.
Control Elevation = 23 ft-NGVD

Assumptions:

Land Use	%	Area (ac)	Stores Linearly From	To
Roads, Pads & Parking	0%	0.00	24.0	27.0
Building Area	0%	0.00		
Lake/Canal Area	6%	19.86	22.0	vertically
Green Area	94%	311.14	22.0	27.0

Stage (ft-NGVD)	Area (ac)				Storage (ac-ft)
	Roads	Detention	Green	Total	
23.0	0.00	19.86	62.23	82.09	0.00
23.5	0.00	19.86	93.34	113.20	48.82
24.0	0.00	19.86	124.46	144.32	113.20
24.5	0.00	19.86	155.57	175.43	193.14
25.0	0.00	19.86	186.68	206.54	288.63
25.5	0.00	19.86	217.80	237.66	399.68
26.0	0.00	19.86	248.91	268.77	526.29
26.3	0.00	19.86	264.47	284.33	595.43
26.5	0.00	19.86	280.03	299.89	668.45
26.8	0.00	19.86	295.58	315.44	745.37
27.0	0.00	19.86	311.14	331.00	826.18
27.5	0.00	19.86	311.14	331.00	991.68
28.0	0.00	19.86	311.14	331.00	1157.18
28.5	0.00	19.86	311.14	331.00	1322.68
29.0	0.00	19.86	311.14	331.00	1488.18
29.5	0.00	19.86	311.14	331.00	1653.68
30.0	0.00	19.86	311.14	331.00	1819.18

THE FOLLOWING REUSLTS ARE THEORETICAL PEAK FLOOD STAGES WITH NO OFF-SITE DISCHARGE.

100 - YEAR,3-DAY RAINFALL = 10 inches
Soil Storage = S = 1.76 inches

EXFILTRATION TRENCH VOLUME (XT Volum 0 AC-FT

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 8.2 inches

Net Runoff Volume = V = v x Project Area/12 -XT 225.0 ac-ft

From Stage - Storage Table, Peak Stage = 24.67 ft_NGVD

10 - YEAR,3-DAY RAINFALL = 7 inches
Soil Storage = S = 1.76 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 5.3 inches

Net Runoff Volume = V = v x Project Area/12 -XT V 144.9 ac-ft

From Stage - Storage Table, Peak Stage = 24.20 ft_NGVD

25 - YEAR, 3-DAY RAINFALL = 9 inches
Soil Storage = S = 1.76 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 7.2 inches

Net Runoff Volume = V = v x Project Area/12 -XT 198.1 ac-ft

From Stage - Storage Table, Peak Stage = 24.53 ft_NGVD

5 - YEAR, 1-DAY RAINFALL = 4.5 inches
Soil Storage = S = 1.76 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 2.9 inches

Net Runoff Volume = V = v x Project Area/12 -XT V 80.3 ac-ft

From Stage - Storage Table, Peak Stage = 23.74 ft_NGVD

STAGE STORAGE CALCULATIONS
BASIN 30

Basin Grading Assumptions:

Total Project Area = 353.00 ac.
Control Elevation = 14.5 ft-NGVD

Assumptions:

Land Use	%	Area (ac)	Stores Linearly From	To
Roads, Pads & Parking	5%	17.65	21.0	24.0
Building Area	10%	35.30		
Lake/Canal Area	10%	35.30	14.5	vertically
Green Area	75%	264.75	20.0	24.0

Stage (ft-NGVD)	Area (ac) Roads	Detention	Green	Total	Storage (ac-ft)
14.5	0.00	35.30	0.00	35.30	0.00
15.0	0.00	35.30	0.00	35.30	17.65
15.5	0.00	35.30	0.00	35.30	35.30
16.0	0.00	35.30	0.00	35.30	52.95
16.5	0.00	35.30	0.00	35.30	70.60
17.0	0.00	35.30	0.00	35.30	88.25
17.5	0.00	35.30	0.00	35.30	105.90
17.8	0.00	35.30	0.00	35.30	114.73
18.0	0.00	35.30	0.00	35.30	123.55
18.3	0.00	35.30	0.00	35.30	132.38
18.5	0.00	35.30	0.00	35.30	141.20
19.0	0.00	35.30	0.00	35.30	158.85
19.5	0.00	35.30	0.00	35.30	176.50
20.0	0.00	35.30	0.00	35.30	194.15
20.5	0.00	35.30	33.09	68.39	220.07
21.0	0.00	35.30	66.19	101.49	262.54
21.5	2.94	35.30	99.28	137.52	322.30

THE FOLLOWING REUSLTS ARE THEORETICAL PEAK FLOOD STAGES WITH NO OFF-SITE DISCHARGE.

100 - YEAR,3-DAY RAINFALL = 10 inches
Soil Storage = S = 2.22 inches

EXFILTRATION TRENCH VOLUME (XT Volume) = 0 AC-FT

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 7.8 inches

Net Runoff Volume = V = v x Project Area/12 -XT Volume 228.1 ac-ft

From Stage - Storage Table, Peak Stage = 20.59 ft_NGVD

10 - YEAR,3-DAY RAINFALL = 7 inches
Soil Storage = S = 2.22 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 4.9 inches

Net Runoff Volume = V = v x Project Area/12 -XT V 144.0 ac-ft

From Stage - Storage Table, Peak Stage = 18.58 ft_NGVD

25 - YEAR, 3-DAY RAINFALL = 9 inches
Soil Storage = S = 2.22 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 6.8 inches

Net Runoff Volume = V = v x Project Area/12 -XT Volume 199.8 ac-ft

From Stage - Storage Table, Peak Stage = 20.11 ft_NGVD

5 - YEAR, 1-DAY RAINFALL = 4.5 inches
Soil Storage = S = 2.22 inches

Runoff Depth = v = $\frac{(P-.2S)^2}{(P+.8S)}$ = 2.6 inches

Net Runoff Volume = V = v x Project Area/12 -XT V 77.1 ac-ft

From Stage - Storage Table, Peak Stage = 16.68 ft_NGVD

OKEECHOBEE COUNTY
COMPREHENSIVE URBANIZED AREA
STORMWATER MASTER PLAN

SW CORRIDOR PRE AND POST STAGES FOR 5-YR 1-DAY DESIGN STORM EVENT RESULTS

Southwest Corridor Nodal Comparison of Maxim 're & Post Mitigation Stages for 5-yr, 1-day Design Storm Event

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
16N01	SW 16/12 AVE	PROSWA005_1	20.32	16.255	17.000	0.0003	49143	17.67	254.412	17.80	251.586
16N01	SW 16/12 AVE	SWAREA005_1	12.00	16.999	17.000	0.0000	51867	16.07	137.607	16.07	138.210
16N02	SW 16/12 AVE	PROSWA005_1	20.27	16.275	17.000	0.0000	107777	16.33	139.036	16.70	126.726
16N02	SW 16/12 AVE	SWAREA005_1	12.01	17.000	17.000	0.0000	113485	17.11	123.781	17.13	125.157
16N03	SW 16/12 AVE	PROSWA005_1	18.80	17.226	19.000	0.0001	53128	16.57	141.851	16.71	139.851
16N03	SW 16/12 AVE	SWAREA005_1	15.70	17.561	19.000	0.0001	55885	16.83	134.812	16.93	135.158
16N04	SW 16/12 AVE	PROSWA005_1	17.50	17.821	19.000	0.0002	14558	16.50	142.364	16.57	141.851
16N04	SW 16/12 AVE	SWAREA005_1	16.38	18.331	19.000	0.0001	15593	16.72	134.830	16.82	134.998
16N05	SW 16/12 AVE	PROSWA005_1	17.21	18.572	18.000	0.0025	16089	16.43	142.676	16.50	142.364
16N05	SW 16/12 AVE	SWAREA005_1	16.48	18.819	18.000	0.0030	16629	16.61	134.751	16.72	134.830
16N06	SW 16/12 AVE	PROSWA005_1	17.17	18.706	21.000	-0.0002	14393	16.35	143.021	16.43	142.676
16N06	SW 16/12 AVE	SWAREA005_1	16.51	19.212	21.000	-0.0021	13673	16.51	134.727	16.61	134.751
16N07	SW 16/12 AVE	PROSWA005_1	16.62	19.219	20.000	-0.1000	15058	16.25	143.320	16.35	143.021
16N07	SW 16/12 AVE	SWAREA005_1	16.49	19.712	20.000	0.0006	14955	16.37	125.358	16.46	125.329
16N08	SW 16/12 AVE	PROSWA005_1	16.61	19.229	21.000	0.0008	7937	16.00	135.170	16.04	134.871
16N08	SW 16/12 AVE	SWAREA005_1	16.42	21.180	21.000	0.0072	10138	16.25	125.411	16.37	125.358
16N09	SW 16/12 AVE	PROSWA005_1	16.34	19.804	22.000	0.0001	31642	15.87	135.901	16.00	135.170
16N09	SW 16/12 AVE	SWAREA005_1	16.41	21.263	22.000	0.0001	33408	15.94	122.861	16.15	122.220
16N10	SW 16/12 AVE	PROSWA005_1	16.18	20.285	22.000	0.0001	26381	15.74	136.499	15.87	135.901
16N10	SW 16/12 AVE	SWAREA005_1	16.33	21.533	22.000	0.0002	28374	13.43	127.240	15.94	122.861
16N11	SW 16/12 AVE	PROSWA005_1	16.13	20.400	22.000	0.0001	7229	15.70	136.691	15.74	136.499
16N11	SW 16/12 AVE	SWAREA005_1	16.30	21.589	22.000	0.0036	7881	15.86	128.382	15.88	128.206
16N12	SW 16/12 AVE	PROSWA005_1	16.05	20.539	21.000	0.0002	6634	15.60	132.422	15.63	132.208
16N12	SW 16/12 AVE	SWAREA005_1	16.27	21.645	21.000	0.0003	7339	13.64	126.021	15.86	125.787
16N13	SW 16/12 AVE	PROSWA005_1	15.97	20.643	22.000	0.0006	10638	15.50	126.931	15.54	126.507
16N13	SW 16/12 AVE	SWAREA005_1	16.23	21.683	22.000	0.0019	11980	14.95	123.996	15.06	123.520
16N14	SW 16/12 AVE	PROSWA005_1	15.22	21.515	22.000	0.0031	6514	14.14	132.391	14.14	132.326
16N14	SW 16/12 AVE	SWAREA005_1	15.69	22.083	22.000	0.0031	7267	14.31	127.258	14.34	126.994
16N15	SW 16/12 AVE	PROSWA005_1	14.94	21.967	22.000	0.0041	3221	14.20	160.768	14.20	160.732
16N15	SW 16/12 AVE	SWAREA005_1	15.50	22.483	22.000	0.0041	3471	14.12	155.137	14.15	154.979

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
16N16	SW 16/12 AVE	SWAREA005_1	15.37	22.681	22.000	0.0006	6952	14.14	134.667	14.18	134.430
16N17	SW 16/12 AVE	PROSWA005_1	14.43	22.636	22.000	0.0003	7512	14.25	114.095	14.28	114.066
16N17	SW 16/12 AVE	SWAREA005_1	15.19	22.869	22.000	0.0003	7837	14.19	111.346	14.28	111.152
16N18	SW 16/12 AVE	PROSWA005_1	14.40	22.846	22.000	0.0002	10604	14.27	95.124	14.32	95.095
16N18	SW 16/12 AVE	SWAREA005_1	15.04	23.026	22.000	0.0002	10814	14.20	93.230	14.30	93.013
16N19	SW 16/12 AVE	PROSWA005_1	14.38	23.015	22.000	0.0009	7470	14.26	90.807	14.29	90.785
16N19	SW 16/12 AVE	SWAREA005_1	14.92	23.164	22.000	0.0008	7575	14.17	89.164	14.23	89.013
16N20	SW 16/12 AVE	PROSWA005_1	14.30	24.168	23.000	0.0009	5237	14.18	89.366	14.24	89.337
16N20	SW 16/12 AVE	SWAREA005_1	14.50	24.262	23.000	0.0009	5286	14.09	87.798	14.18	87.670
16N21	SW 16/12 AVE	PROSWA005_1	14.30	24.206	25.000	-0.0006	8616	14.35	52.999	14.46	53.050
16N21	SW 16/12 AVE	SWAREA005_1	14.50	24.296	25.000	-0.0006	8749	14.39	52.763	14.49	52.735
16N22	SW 16/12 AVE	PROSWA005_1	14.31	24.265	25.000	0.0086	3789	14.45	46.730	14.50	46.765
16N22	SW 16/12 AVE	SWAREA005_1	14.50	24.349	25.000	0.0086	3837	14.46	46.532	14.52	46.531
16N23	SW 16/12 AVE	PROSWA005_1	14.34	24.448	25.000	-0.0051	1253	14.54	45.599	14.56	45.615
16N23	SW 16/12 AVE	SWAREA005_1	14.50	24.531	25.000	-0.0051	1271	14.54	45.331	14.57	45.335
16N24	SW 16/12 AVE	PROSWA005_1	14.36	24.555	25.000	0.0005	3675	14.47	45.567	14.54	45.599
16N24	SW 16/12 AVE	SWAREA005_1	14.51	24.626	25.000	0.0005	3728	14.47	45.332	14.54	45.331
16N25	SW 16/12 AVE	PROSWA005_1	14.37	24.709	26.000	-0.0004	2470	14.43	45.556	14.47	45.567
16N25	SW 16/12 AVE	SWAREA005_1	14.50	24.768	26.000	-0.0005	2499	14.42	45.340	14.47	45.332
16N26	SW 16/12 AVE	PROSWA005_1	14.44	25.408	26.000	0.0051	1954	14.28	45.809	14.47	45.411
16N26	SW 16/12 AVE	SWAREA005_1	14.48	25.414	26.000	0.0051	1956	14.48	45.608	14.46	45.164
16N27	SW 16/12 AVE	PROSWA005_1	14.44	25.408	26.000	0.0003	6711	12.16	7.876	12.15	7.835
16N27	SW 16/12 AVE	SWAREA005_1	14.48	25.414	26.000	0.0003	6718	12.16	7.876	12.15	7.834
16N28	SW 16/12 AVE	PROSWA005_1	14.45	25.413	26.000	0.0003	5148	12.16	7.919	18.02	8.591
16N28	SW 16/12 AVE	SWAREA005_1	14.48	25.419	26.000	0.0004	5152	12.16	7.918	18.11	8.529
16N29	SW 16/12 AVE	PROSWA005_1	14.45	25.418	27.000	0.0003	1979	12.17	7.939	12.16	7.919
16N29	SW 16/12 AVE	SWAREA005_1	14.48	25.423	27.000	0.0004	1980	12.17	7.939	12.16	7.918
16N30	SW 16/12 AVE	PROSWA005_1	14.45	25.419	27.000	0.0003	1874	12.18	7.958	12.17	7.939
16N30	SW 16/12 AVE	SWAREA005_1	14.48	25.425	27.000	0.0004	1875	12.18	7.957	12.17	7.939
16N31	SW 16/12 AVE	PROSWA005_1	14.44	25.429	27.000	0.0003	3020	12.20	7.980	12.18	7.958
16N31	SW 16/12 AVE	SWAREA005_1	14.48	25.434	27.000	0.0003	3022	12.19	7.980	12.18	7.957

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
16N32	SW 16/12 AVE	PROSWA005_1	14.44	25.437	26.000	0.0003	3614	12.16	7.996	12.20	7.980
16N32	SW 16/12 AVE	SWAREA005_1	14.48	25.442	26.000	0.0003	3619	12.16	7.996	12.19	7.980
16N33	SW 16/12 AVE	PROSWA005_1	14.33	25.570	27.000	0.0002	1134	12.15	7.997	12.16	7.996
16N33	SW 16/12 AVE	SWAREA005_1	14.37	25.573	27.000	0.0001	1135	12.15	7.997	12.16	7.996
16N34A	SW 16/12 AVE	PROSWA005_1	13.98	25.882	28.000	-0.5000	237	12.10	7.997	12.15	7.998
16N34A	SW 16/12 AVE	SWAREA005_1	14.01	25.883	28.000	-0.5000	237	12.10	7.997	12.15	7.998
16N34B	SW 16/12 AVE	PROSWA005_1	14.27	25.627	28.000	-0.1000	260	12.15	7.998	12.15	7.997
16N34B	SW 16/12 AVE	SWAREA005_1	14.31	25.630	28.000	-0.1000	261	12.15	7.998	12.15	7.997
16N35	SW 16/12 AVE	PROSWA005_1	12.13	26.768	28.000	-0.6000	214	12.12	7.998	12.10	7.997
16N35	SW 16/12 AVE	SWAREA005_1	12.13	26.768	28.000	-0.6000	214	12.12	7.998	12.10	7.997
16N36	SW 16/12 AVE	PROSWA005_1	12.12	26.981	30.000	0.0003	1160	12.10	7.998	12.12	7.998
16N36	SW 16/12 AVE	SWAREA005_1	12.12	26.981	30.000	0.0003	1160	12.10	7.998	12.12	7.998
16N37	SW 16/12 AVE	PROSWA005_1	12.12	27.019	30.000	0.0002	1332	12.07	8.002	12.10	7.998
16N37	SW 16/12 AVE	SWAREA005_1	12.12	27.019	30.000	0.0002	1332	12.07	8.002	12.10	7.998
16N38	SW 16/12 AVE	PROSWA005_1	12.11	27.126	30.000	0.0003	556	12.07	8.995	12.08	8.993
16N38	SW 16/12 AVE	SWAREA005_1	12.11	27.126	30.000	0.0003	556	12.07	8.995	12.08	8.993
16N39	SW 16/12 AVE	PROSWA005_1	12.09	27.526	30.000	0.0001	2385	12.05	21.446	12.09	21.437
16N39	SW 16/12 AVE	SWAREA005_1	12.09	27.526	30.000	0.0001	2385	12.05	21.446	12.09	21.437
16N40	SW 16/12 AVE	PROSWA005_1	12.08	27.782	30.000	0.0001	2555	12.00	21.472	12.05	21.446
16N40	SW 16/12 AVE	SWAREA005_1	12.08	27.782	30.000	0.0001	2555	12.00	21.472	12.05	21.446
16N41	SW 16/12 AVE	PROSWA005_1	12.08	27.781	30.000	0.0001	2249	184.96	1.719	58.40	1.799
16N41	SW 16/12 AVE	SWAREA005_1	12.08	27.781	30.000	0.0001	2249	150.00	1.561	150.00	1.565
16N42	SW 16/12 AVE	PROSWA005_1	33.90	27.593	31.000	-0.0010	1008	184.97	1.718	184.96	1.719
16N42	SW 16/12 AVE	SWAREA005_1	33.90	27.593	31.000	-0.0010	1008	150.00	1.561	150.00	1.561
16N43	SW 16/12 AVE	PROSWA005_1	43.83	27.589	31.000	0.0000	150	63.38	0.002	70.99	0.000
16N43	SW 16/12 AVE	SWAREA005_1	43.89	27.589	31.000	0.0000	150	46.93	0.002	71.57	0.000
16N44	SW 16/12 AVE	PROSWA005_1	43.83	27.589	31.000	-0.0002	258	153.72	0.079	63.38	0.002
16N44	SW 16/12 AVE	SWAREA005_1	43.89	27.589	31.000	-0.0002	258	54.60	0.030	46.93	0.002
16N45	SW 16/12 AVE	PROSWA005_1	43.83	27.589	31.000	-0.0003	296	153.62	0.295	153.72	0.079
16N45	SW 16/12 AVE	SWAREA005_1	43.75	27.589	31.000	-0.0002	296	124.50	0.132	54.60	0.030

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
16N46	SW 16/12 AVE	PROSWA005_1	44.07	27.589	31.000	-0.0002	433	14.81	0.049	153.62	0.295
16N46	SW 16/12 AVE	SWAREA005_1	44.01	27.589	31.000	-0.0002	433	14.81	0.049	124.50	0.132
16N47	SW 16/12 AVE	PROSWA005_1	44.00	27.589	31.000	-0.0004	521	153.62	0.378	14.81	0.049
16N47	SW 16/12 AVE	SWAREA005_1	44.12	27.589	31.000	-0.0004	521	44.23	0.161	14.81	0.049
16N48	SW 16/12 AVE	PROSWA005_1	44.12	27.589	31.000	-0.0001	2013	18.27	1.013	0.00	1.539
16N48	SW 16/12 AVE	SWAREA005_1	44.07	27.589	31.000	-0.0002	2013	18.27	1.013	0.00	1.539
16N49	SW 16/12 AVE	PROSWA005_1	44.11	27.589	31.000	-0.0001	2077	16.41	0.729	16.62	0.677
16N49	SW 16/12 AVE	SWAREA005_1	44.10	27.589	31.000	-0.0002	2077	16.41	0.729	16.62	0.677
16N50	SW 16/12 AVE	PROSWA005_1	44.12	27.589	31.000	-0.0005	1918	17.52	0.914	17.70	0.879
16N50	SW 16/12 AVE	SWAREA005_1	44.12	27.589	31.000	-0.0005	1918	17.52	0.914	17.70	0.879
16N51	SW 16/12 AVE	PROSWA005_1	44.35	27.589	31.000	0.0008	1355	17.41	0.937	17.52	0.914
16N51	SW 16/12 AVE	SWAREA005_1	44.35	27.589	31.000	0.0008	1355	17.41	0.937	17.52	0.914
16N52	SW 16/12 AVE	PROSWA005_1	44.35	27.589	31.000	0.0005	2174	18.54	1.380	18.58	1.353
16N52	SW 16/12 AVE	SWAREA005_1	44.34	27.589	31.000	0.0006	2174	18.54	1.380	18.58	1.353
16N53	SW 16/12 AVE	PROSWA005_1	44.35	27.589	31.000	-1.3000	2782	0.00	0.000	45.46	0.031
16N53	SW 16/12 AVE	SWAREA005_1	44.34	27.589	31.000	-1.3000	2782	0.00	0.000	46.62	0.030
26@~LEMKIN CK	SW 26 AVE	PROSWA005_1	12.00	17.000	18.000	0.0000	0	92.20	93.094	0.00	0.000
26@~LEMKIN CK	SW 26 AVE	SWAREA005_1	12.00	17.000	18.000	0.0000	4454	15.04	191.114	0.00	0.000
26N01	SW 26 AVE	PROSWA005_1	0.00	13.500	18.000	0.0000	17550	0.00	0.000	0.00	0.000
26N01	SW 26 AVE	SWAREA005_1	12.00	17.000	18.000	0.0008	21727	15.04	190.862	15.04	191.114
26N02	SW 26 AVE	PROSWA005_1	0.00	13.500	18.000	0.0000	37933	0.00	0.000	0.00	0.000
26N02	SW 26 AVE	SWAREA005_1	12.00	17.000	18.000	-0.0005	37969	15.04	190.423	15.04	190.862
26N03	SW 26 AVE	PROSWA005_1	0.00	13.500	18.000	0.0000	38478	0.00	0.000	0.00	0.000
26N03	SW 26 AVE	SWAREA005_1	12.00	17.000	18.000	0.0004	38712	15.04	189.975	15.04	190.423
26N04	SW 26 AVE	PROSWA005_1	0.00	13.500	18.000	0.0000	30755	0.00	0.000	0.00	0.000
26N04	SW 26 AVE	SWAREA005_1	12.00	17.000	18.000	0.0005	30827	15.04	189.619	15.04	189.975
26N05	SW 26 AVE	PROSWA005_1	0.00	13.500	18.000	0.0000	30875	0.00	0.000	0.00	0.000
26N05	SW 26 AVE	SWAREA005_1	12.00	16.999	18.000	0.0005	31603	15.04	189.253	15.04	189.619
26N06	SW 26 AVE	PROSWA005_1	0.00	13.500	18.000	0.0000	31124	0.00	0.000	0.00	0.000
26N06	SW 26 AVE	SWAREA005_1	12.00	17.000	18.000	-0.0006	34141	37.06	194.305	15.04	189.253
26N07	SW 26 AVE	PROSWA005_1	0.00	13.500	18.000	0.0000	10614	0.00	0.000	0.00	0.000

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
26N07	SW 26 AVE	SWAREA005_1	12.00	16.999	18.000	0.0004	40546	15.04	188.393	37.06	194.305
26N08	SW 26 AVE	PROSWA005_1	20.33	16.241	18.000	0.0003	89497	15.51	261.756	14.63	250.000
26N08	SW 26 AVE	SWAREA005_1	12.00	16.999	18.000	-0.0001	120893	15.04	187.006	15.04	188.393
26N09	SW 26 AVE	PROSWA005_1	20.33	16.241	18.000	0.0007	8241	15.24	56.702	15.24	55.661
26N09	SW 26 AVE	SWAREA005_1	12.00	16.999	18.000	0.0002	8652	14.79	63.307	14.79	63.406
26N10	SW 26 AVE	PROSWA005_1	20.36	16.257	18.000	-0.0002	11694	15.25	58.248	15.24	56.702
26N10	SW 26 AVE	SWAREA005_1	13.89	17.018	18.000	0.0000	12446	14.78	63.166	14.79	63.307
26N11	SW 26 AVE	PROSWA005_1	20.38	16.266	18.000	-0.0000	26569	15.24	61.130	15.25	58.248
26N11	SW 26 AVE	SWAREA005_1	14.08	17.047	18.000	0.0000	29588	14.74	62.850	14.78	63.166
26N12	SW 26 AVE	PROSWA005_1	20.42	16.295	18.000	0.0001	24412	15.20	62.720	15.24	61.130
26N12	SW 26 AVE	SWAREA005_1	14.34	17.140	18.000	0.0000	28544	14.66	65.490	14.72	65.735
26N13	SW 26 AVE	PROSWA005_1	20.43	16.310	18.000	0.0000	40809	15.06	66.052	15.20	62.720
26N13	SW 26 AVE	SWAREA005_1	14.44	17.245	18.000	0.0000	45328	14.53	65.232	14.66	65.490
26N14	SW 26 AVE	PROSWA005_1	20.43	16.312	18.000	0.0000	47684	14.77	70.825	15.06	66.052
26N14	SW 26 AVE	SWAREA005_1	14.44	17.252	18.000	0.0000	51618	14.38	65.209	14.53	65.232
26N15	SW 26 AVE	PROSWA005_1	20.41	16.329	18.000	-0.0003	16778	14.57	72.679	14.77	70.825
26N15	SW 26 AVE	SWAREA005_1	14.43	17.323	18.000	-0.0001	18014	14.32	65.277	14.38	65.209
26N16	SW 26 AVE	PROSWA005_1	20.41	16.330	18.000	0.0004	29102	14.31	76.085	14.57	72.246
26N16	SW 26 AVE	SWAREA005_1	14.43	17.324	18.000	0.0001	31128	14.21	65.798	14.31	65.559
26N17	SW 26 AVE	PROSWA005_1	20.41	16.330	18.000	-0.0005	28007	14.20	80.946	14.46	76.745
26N17	SW 26 AVE	SWAREA005_1	14.43	17.326	18.000	-0.0001	28936	14.16	83.557	14.24	83.256
26N18	SW 26 AVE	PROSWA005_1	20.41	16.330	18.000	0.0004	14195	14.12	83.311	14.20	80.946
26N18	SW 26 AVE	SWAREA005_1	14.43	17.327	18.000	-0.0001	14948	14.13	83.753	14.16	83.557
26N19	SW 26 AVE	PROSWA005_1	20.41	16.330	18.000	0.0002	4675	14.00	62.957	14.02	62.203
26N19	SW 26 AVE	SWAREA005_1	14.42	17.329	18.000	0.0001	5416	14.01	62.729	14.02	62.625
26N20	SW 26 AVE	PROSWA005_1	20.36	16.347	18.000	0.0002	3877	14.00	63.180	14.00	62.957
26N20	SW 26 AVE	SWAREA005_1	14.30	17.471	18.000	-0.0000	4434	13.99	62.809	14.01	62.729
26N21	SW 26 AVE	PROSWA005_1	14.00	17.430	18.000	0.0002	5556	13.97	63.188	14.00	63.180
26N21	SW 26 AVE	SWAREA005_1	14.15	17.746	18.000	-0.0000	5817	13.95	62.896	13.99	62.809
26N22	SW 26 AVE	PROSWA005_1	13.98	17.923	18.000	0.0002	11045	13.90	63.224	13.97	63.188
26N22	SW 26 AVE	SWAREA005_1	14.07	18.072	18.000	0.0000	11393	13.88	63.030	13.95	62.896

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
26N23	SW 26 AVE	PROSWA005_1	13.96	18.130	18.000	0.0002	12722	13.81	63.327	13.90	63.224
26N23	SW 26 AVE	SWAREA005_1	14.03	18.246	18.000	0.0000	12978	13.79	63.225	13.88	63.030
26N24	SW 26 AVE	PROSWA005_1	13.92	18.384	19.000	0.0001	10508	13.72	63.467	13.81	63.327
26N24	SW 26 AVE	SWAREA005_1	13.98	18.471	19.000	0.0001	10729	13.70	63.419	13.79	63.225
26N25	SW 26 AVE	PROSWA005_1	13.85	18.712	19.000	0.0001	11975	13.60	63.678	13.72	63.467
26N25	SW 26 AVE	SWAREA005_1	13.89	18.768	19.000	0.0001	12124	13.59	63.655	13.70	63.419
26N26	SW 26 AVE	PROSWA005_1	13.75	19.317	21.000	0.0001	9501	13.51	63.839	13.60	63.678
26N26	SW 26 AVE	SWAREA005_1	13.76	19.344	21.000	0.0001	9558	13.51	63.816	13.59	63.655
26N27	SW 26 AVE	PROSWA005_1	13.59	20.196	22.000	0.0001	11224	13.43	63.933	13.51	63.839
26N27	SW 26 AVE	SWAREA005_1	13.59	20.203	22.000	0.0001	11243	13.43	63.909	13.51	63.816
26N28	SW 26 AVE	PROSWA005_1	13.45	21.295	22.000	0.0037	7180	13.39	63.948	13.43	63.933
26N28	SW 26 AVE	SWAREA005_1	13.45	21.296	22.000	0.0037	7183	13.39	63.924	13.43	63.909
32@~LEMKIN CK	SW 32 AVE	PROSWA005_1	12.00	17.000	18.000	0.0000	18604	17.76	34.811	0.00	0.000
32@~LEMKIN CK	SW 32 AVE	SWAREA005_1	12.00	17.000	18.000	0.0000	18604	16.30	27.134	0.00	0.000
32N01	SW 32 AVE	PROSWA005_1	12.00	17.000	18.000	0.0000	30865	17.76	34.450	17.76	34.811
32N01	SW 32 AVE	SWAREA005_1	12.00	17.000	18.000	0.0000	30865	16.30	26.773	16.30	27.134
32N02	SW 32 AVE	PROSWA005_1	12.00	16.999	18.000	0.0001	11058	17.76	34.323	17.76	34.450
32N02	SW 32 AVE	SWAREA005_1	12.00	16.999	18.000	0.0001	11058	16.30	26.645	16.30	26.773
32N03	SW 32 AVE	PROSWA005_1	16.58	17.312	18.000	0.0001	4439	17.72	34.272	17.76	34.323
32N03	SW 32 AVE	SWAREA005_1	15.69	17.151	18.000	-0.0001	4439	16.27	26.594	16.30	26.645
32N04	SW 32 AVE	PROSWA005_1	16.58	17.313	18.000	0.0000	19697	17.54	34.063	17.72	34.272
32N04	SW 32 AVE	SWAREA005_1	15.69	17.151	18.000	-0.0000	19697	16.13	26.398	16.27	26.594
32N05	SW 32 AVE	PROSWA005_1	16.58	17.313	18.000	0.0000	29005	16.91	38.608	17.07	38.745
32N05	SW 32 AVE	SWAREA005_1	15.69	17.152	18.000	-0.0000	29005	15.84	27.833	15.99	27.969
32N06	SW 32 AVE	PROSWA005_1	16.58	17.314	18.000	0.0000	29387	16.75	38.521	16.91	38.608
32N06	SW 32 AVE	SWAREA005_1	15.69	17.152	18.000	0.0000	29387	15.68	27.789	15.84	27.833
32N07	SW 32 AVE	PROSWA005_1	16.58	17.314	18.000	0.0000	29081	16.58	38.494	16.75	38.521
32N07	SW 32 AVE	SWAREA005_1	15.69	17.152	18.000	-0.0000	29081	15.52	27.848	15.68	27.789
32N08	SW 32 AVE	PROSWA005_1	16.58	17.314	18.000	0.0000	33186	16.37	38.541	16.58	38.494
32N08	SW 32 AVE	SWAREA005_1	15.69	17.152	18.000	0.0000	33147	15.35	28.044	15.52	27.848

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
32N09	SW 32 AVE	PROSWA005_1	16.58	17.315	18.000	0.0000	23597	16.19	38.636	16.37	38.541
32N09	SW 32 AVE	SWAREA005_1	15.69	17.153	18.000	0.0000	23339	15.24	28.261	15.35	28.044
32N10	SW 32 AVE	PROSWA005_1	16.58	17.317	18.000	0.0000	17480	15.99	38.753	16.19	38.636
32N10	SW 32 AVE	SWAREA005_1	15.69	17.154	18.000	0.0000	17310	15.17	28.461	15.24	28.261
32N11	SW 32 AVE	PROSWA005_1	16.58	17.318	18.000	0.0000	6567	15.82	38.825	15.99	38.753
32N11	SW 32 AVE	SWAREA005_1	15.68	17.155	18.000	0.0000	6549	15.14	28.546	15.17	28.461
32N12	SW 32 AVE	PROSWA005_1	16.25	17.984	18.000	0.0000	45950	15.08	40.428	15.82	38.825
32N12	SW 32 AVE	SWAREA005_1	15.35	17.510	18.000	0.0000	44302	14.67	29.922	15.14	28.546
32N13	SW 32 AVE	PROSWA005_1	16.25	17.995	18.000	-0.0001	50254	14.58	44.435	15.08	40.428
32N13	SW 32 AVE	SWAREA005_1	15.34	17.518	18.000	0.0001	48415	53.15	42.600	14.67	29.922
32N14	SW 32 AVE	PROSWA005_1	16.24	17.995	18.000	-0.0013	2519	14.56	44.680	14.58	44.435
32N14	SW 32 AVE	SWAREA005_1	15.34	17.518	18.000	-0.0013	2448	50.09	34.189	53.15	42.600
32N15	SW 32 AVE	PROSWA005_1	16.24	17.996	18.000	0.0004	7798	14.51	45.457	14.56	44.680
32N15	SW 32 AVE	SWAREA005_1	15.34	17.519	18.000	0.0004	7572	14.26	33.768	50.09	34.189
32N16	SW 32 AVE	PROSWA005_1	16.24	17.997	18.000	0.0002	9437	14.45	46.437	14.51	45.457
32N16	SW 32 AVE	SWAREA005_1	15.33	17.519	18.000	-0.0002	9213	19.04	36.911	14.26	33.768
32N17	SW 32 AVE	PROSWA005_1	16.24	17.997	18.000	0.0001	20021	14.34	48.643	14.45	46.437
32N17	SW 32 AVE	SWAREA005_1	15.33	17.519	18.000	0.0001	19677	14.13	36.242	19.04	36.911
32N18	SW 32 AVE	PROSWA005_1	16.24	17.997	18.000	0.0000	28098	14.23	51.939	14.34	48.643
32N18	SW 32 AVE	SWAREA005_1	15.33	17.519	18.000	0.0000	27475	14.03	38.821	14.13	36.242
32N19	SW 32 AVE	PROSWA005_1	16.21	18.012	18.000	-0.0001	7266	14.20	52.777	14.23	51.939
32N19	SW 32 AVE	SWAREA005_1	15.29	17.532	18.000	-0.0001	6891	14.01	39.468	14.03	38.821
32N20	SW 32 AVE	PROSWA005_1	15.01	18.486	18.000	0.0001	5229	14.15	53.421	14.20	52.777
32N20	SW 32 AVE	SWAREA005_1	14.64	17.800	18.000	0.0001	4853	13.96	39.952	14.01	39.468
32N21	SW 32 AVE	PROSWA005_1	14.99	18.502	18.000	0.0000	13930	14.01	52.699	14.15	50.751
32N21	SW 32 AVE	SWAREA005_1	14.61	17.832	18.000	0.0000	12802	13.96	56.372	14.06	55.175
32N22	SW 32 AVE	PROSWA005_1	14.99	18.502	18.000	0.0000	14124	24.99	2.841	24.98	4.039
32N22	SW 32 AVE	SWAREA005_1	14.61	17.832	18.000	0.0000	13009	19.10	2.071	19.10	2.931
32N23	SW 32 AVE	PROSWA005_1	14.99	18.502	19.000	0.0000	13132	24.99	1.774	24.99	2.841
32N23	SW 32 AVE	SWAREA005_1	14.61	17.832	19.000	0.0000	11999	19.10	1.295	19.10	2.071
32N24	SW 32 AVE	PROSWA005_1	14.99	18.502	21.000	0.0000	13537	15.30	0.738	24.99	1.774

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
32N24	SW 32 AVE	SWAREA005_1	14.61	17.832	21.000	0.0000	12379	19.10	0.498	19.10	1.295
32N25	SW 32 AVE	PROSWA005_1	14.99	18.502	21.000	0.0001	8390	0.00	0.990	15.30	0.738
32N25	SW 32 AVE	SWAREA005_1	14.62	17.832	21.000	0.0001	7700	0.00	0.990	19.10	0.498
32N26	SW 32 AVE	PROSWA005_1	14.99	18.502	22.000	-0.0000	1949	0.00	0.000	0.00	0.990
32N26	SW 32 AVE	SWAREA005_1	0.00	18.000	22.000	-0.0000	1949	0.00	0.000	0.00	0.990
32N27	SW 32 AVE	PROSWA005_1	0.00	18.000	22.000	0.0000	8681	0.00	0.000	0.00	0.000
32N27	SW 32 AVE	SWAREA005_1	0.00	18.000	22.000	0.0000	8681	0.00	0.000	0.00	0.000
32N28	SW 32 AVE	PROSWA005_1	0.00	18.000	22.000	0.0000	8807	0.00	0.000	0.00	0.000
32N28	SW 32 AVE	SWAREA005_1	0.00	18.000	22.000	0.0000	8807	0.00	0.000	0.00	0.000
32N29	SW 32 AVE	PROSWA005_1	0.00	18.000	23.000	0.0000	5439	0.00	0.000	0.00	0.000
32N29	SW 32 AVE	SWAREA005_1	0.00	18.000	23.000	0.0000	5439	0.00	0.000	0.00	0.000
32N30	SW 32 AVE	PROSWA005_1	0.00	18.000	23.000	0.0000	5822	0.00	0.000	0.00	0.000
32N30	SW 32 AVE	SWAREA005_1	0.00	18.000	23.000	0.0000	5822	0.00	0.000	0.00	0.000
32N31	SW 32 AVE	PROSWA005_1	0.00	18.000	23.000	0.0000	5130	0.00	0.000	0.00	0.000
32N31	SW 32 AVE	SWAREA005_1	0.00	18.000	23.000	0.0000	5130	0.00	0.000	0.00	0.000
32N32	SW 32 AVE	PROSWA005_1	0.00	18.000	23.000	0.0000	2464	0.00	0.000	0.00	0.000
32N32	SW 32 AVE	SWAREA005_1	0.00	18.000	23.000	0.0000	2464	0.00	0.000	0.00	0.000
7MH01	SW 7 AVE	PROSWA005_1	0.00	24.000	28.000	0.0000	130	0.00	0.000	0.00	0.000
7MH01	SW 7 AVE	SWAREA005_1	0.00	24.000	28.000	0.0000	130	0.00	0.000	0.00	0.000
7N01	SW 7 AVE	PROSWA005_1	12.01	16.999	16.000	0.0000	11655	150.00	23.293	150.00	23.348
7N01	SW 7 AVE	SWAREA005_1	12.04	16.998	16.000	0.0000	11654	17.56	102.253	17.57	102.387
7N02	SW 7 AVE	PROSWA005_1	12.01	16.999	16.000	0.0000	53820	150.01	23.118	150.00	23.293
7N02	SW 7 AVE	SWAREA005_1	12.04	16.998	16.000	0.0000	53829	17.53	101.672	17.56	102.253
7N03	SW 7 AVE	PROSWA005_1	20.31	16.291	16.000	0.0000	82326	15.29	138.344	15.14	128.277
7N03	SW 7 AVE	SWAREA005_1	15.98	17.028	16.000	0.0000	54258	17.22	102.258	17.28	102.765
7N04	SW 7 AVE	PROSWA005_1	20.30	16.296	15.000	0.0000	22759	15.31	141.282	15.29	138.344
7N04	SW 7 AVE	SWAREA005_1	16.01	17.033	15.000	0.0000	22913	17.19	102.050	17.22	102.258
7N05	SW 7 AVE	PROSWA005_1	20.28	16.316	16.000	0.0000	27128	15.32	144.643	15.31	141.282
7N05	SW 7 AVE	SWAREA005_1	16.09	17.051	16.000	0.0000	26552	17.16	101.816	17.19	102.050
7N06	SW 7 AVE	PROSWA005_1	20.22	16.378	16.000	-0.0000	35407	15.33	148.544	15.32	144.643
7N06	SW 7 AVE	SWAREA005_1	16.28	17.121	16.000	0.0000	34619	17.11	101.536	17.16	101.816

Southwest Corridor Nodal Comparison of Maximum Pre & : Mitigation Stages for 5-yr, 1-day Design Storm Event

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
7N07	SW 7 AVE	PROSWA005_1	20.16	16.423	16.000	-0.0000	25068	15.32	151.100	15.33	148.544
7N07	SW 7 AVE	SWAREA005_1	16.34	17.159	16.000	0.0000	24982	17.07	101.348	17.11	101.536
7N08	SW 7 AVE	PROSWA005_1	20.16	16.427	15.000	-0.0000	23296	15.38	153.282	15.40	150.942
7N08	SW 7 AVE	SWAREA005_1	16.35	17.161	15.000	0.0000	24120	16.98	110.693	17.02	110.858
7N09	SW 7 AVE	PROSWA005_1	18.10	17.007	19.000	0.0001	16358	15.36	154.108	15.38	153.282
7N09	SW 7 AVE	SWAREA005_1	16.58	17.452	19.000	0.0001	17223	16.94	110.602	16.98	110.693
7N10	SW 7 AVE	PROSWA005_1	17.69	17.505	18.000	0.0003	17990	15.28	155.067	15.36	154.108
7N10	SW 7 AVE	SWAREA005_1	16.69	17.763	18.000	0.0006	17779	16.86	110.526	16.93	110.601
7N11	SW 7 AVE	PROSWA005_1	17.04	18.127	19.000	-0.0002	19610	15.60	134.529	15.68	134.131
7N11	SW 7 AVE	SWAREA005_1	16.79	18.338	19.000	0.0009	17203	16.82	93.488	16.91	93.500
7N12	SW 7 AVE	PROSWA005_1	16.93	18.461	19.000	0.0007	9162	16.20	117.412	16.27	117.318
7N12	SW 7 AVE	SWAREA005_1	16.94	18.489	19.000	0.0055	8519	18.95	81.554	18.89	81.810
7N13	SW 7 AVE	PROSWA005_1	16.88	18.613	19.000	-0.0002	8672	16.13	116.255	16.19	116.163
7N13	SW 7 AVE	SWAREA005_1	17.02	18.615	19.000	0.0000	7818	19.06	81.090	19.02	81.275
7N14	SW 7 AVE	PROSWA005_1	16.75	19.077	20.000	0.0002	12105	16.07	116.418	16.13	116.255
7N14	SW 7 AVE	SWAREA005_1	17.20	19.177	20.000	0.0001	11132	19.11	80.552	19.06	81.090
7N15	SW 7 AVE	PROSWA005_1	16.61	19.618	19.000	0.0015	307	13.93	100.900	13.93	100.864
7N15	SW 7 AVE	SWAREA005_1	17.30	19.799	19.000	0.0011	9302	19.39	78.463	19.38	78.681
7N16	SW 7 AVE	PROSWA005_1	16.07	19.735	20.000	0.0110	4408	15.56	64.713	15.59	64.600
7N16	SW 7 AVE	SWAREA005_1	17.29	19.959	20.000	-1.1000	3864	17.22	39.515	17.28	38.699
7N17	SW 7 AVE	PROSWA005_1	15.89	19.801	20.000	-0.1000	4336	12.89	76.329	12.90	75.373
7N17	SW 7 AVE	SWAREA005_1	17.13	19.998	20.000	0.0003	4286	13.75	54.013	13.74	53.315
7N18	SW 7 AVE	PROSWA005_1	15.78	19.946	21.000	-0.1000	5394	12.88	77.943	12.89	76.329
7N18	SW 7 AVE	SWAREA005_1	16.87	20.302	21.000	-0.0007	5813	13.79	54.727	13.75	54.013
7N19	SW 7 AVE	PROSWA005_1	15.74	20.019	21.000	-0.4900	5392	12.79	79.305	12.88	77.943
7N19	SW 7 AVE	SWAREA005_1	16.87	20.320	21.000	0.0004	5891	13.81	55.425	13.79	54.727
7N20	SW 7 AVE	PROSWA005_1	15.68	20.169	21.000	-0.5000	2878	12.78	80.995	12.79	79.305
7N20	SW 7 AVE	SWAREA005_1	16.79	20.511	21.000	0.0003	3029	13.81	55.593	13.81	55.425
7N21	SW 7 AVE	PROSWA005_1	15.66	20.197	21.000	-0.0009	2849	12.78	82.676	12.78	80.995
7N21	SW 7 AVE	SWAREA005_1	16.78	20.523	21.000	-0.1000	2723	13.82	55.740	13.81	55.593

Southwest Corridor Nodal Comparison of Maximum Pre & Mitigation Stages for 5-yr, 1-day Design Storm Event

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
7N22	SW 7 AVE	PROSWA005_1	15.11	20.354	21.000	-0.0006	2552	12.78	84.088	12.78	82.676
7N22	SW 7 AVE	SWAREA005_1	16.72	20.816	21.000	0.0001	2410	13.82	55.851	13.82	55.740
7N23	SW 7 AVE	PROSWA005_1	15.08	20.381	21.000	-0.0014	2533	12.78	85.470	12.78	84.088
7N23	SW 7 AVE	SWAREA005_1	16.71	20.830	21.000	0.0001	2412	13.81	55.959	13.82	55.851
7N24	SW 7 AVE	PROSWA005_1	14.93	20.552	21.000	0.0008	6944	12.78	88.960	12.78	85.470
7N24	SW 7 AVE	SWAREA005_1	16.62	21.213	21.000	0.0001	6722	13.76	56.504	13.81	55.959
7N25	SW 7 AVE	PROSWA005_1	14.86	20.645	21.000	-0.0012	6782	12.77	92.227	12.78	88.960
7N25	SW 7 AVE	SWAREA005_1	16.60	21.271	21.000	0.0001	6340	13.84	59.892	13.88	59.456
7N26	SW 7 AVE	PROSWA005_1	14.74	20.827	21.000	0.0022	1116	12.77	92.829	12.77	92.227
7N26	SW 7 AVE	SWAREA005_1	16.57	21.361	21.000	0.0001	1112	13.83	59.963	13.84	59.892
7N27	SW 7 AVE	PROSWA005_1	14.73	20.842	22.000	0.0022	1118	12.77	94.333	12.77	92.829
7N27	SW 7 AVE	SWAREA005_1	16.57	21.369	22.000	0.0001	1157	13.82	60.037	13.83	59.963
7N28	SW 7 AVE	PROSWA005_1	14.63	21.037	21.000	-0.1000	7058	12.77	96.829	12.77	94.333
7N28	SW 7 AVE	SWAREA005_1	14.72	21.929	21.000	0.0001	7546	13.69	60.587	13.82	60.037
7N29	SW 7 AVE	PROSWA005_1	14.56	21.176	23.000	-0.0006	6922	12.76	99.528	12.77	96.829
7N29	SW 7 AVE	SWAREA005_1	14.60	22.064	23.000	-0.0001	6362	13.71	64.431	13.78	64.022
7N30	SW 7 AVE	PROSWA005_1	14.51	21.278	22.000	0.0031	1626	12.76	102.403	12.76	101.806
7N30	SW 7 AVE	SWAREA005_1	14.48	22.286	22.000	-0.0002	1372	13.99	84.107	14.00	84.053
7N31	SW 7 AVE	PROSWA005_1	14.50	21.283	23.000	-0.0049	1359	14.03	21.807	0.00	35.692
7N31	SW 7 AVE	SWAREA005_1	14.46	22.297	23.000	0.0001	1246	14.07	22.819	14.09	22.780
7N32	SW 7 AVE	PROSWA005_1	14.45	21.319	23.000	0.0022	817	14.02	21.849	14.03	21.807
7N32	SW 7 AVE	SWAREA005_1	14.38	22.359	23.000	-0.0003	800	14.07	22.844	14.07	22.819
7N33	SW 7 AVE	PROSWA005_1	14.44	21.323	23.000	0.0013	804	14.02	21.892	14.02	21.849
7N33	SW 7 AVE	SWAREA005_1	14.37	22.365	23.000	-0.0007	804	14.06	22.868	14.07	22.844
7N34	SW 7 AVE	PROSWA005_1	14.39	21.364	23.000	0.0029	1635	0.00	37.137	14.02	21.892
7N34	SW 7 AVE	SWAREA005_1	14.30	22.455	23.000	0.0005	1670	14.04	22.918	14.06	22.868
7N35	SW 7 AVE	PROSWA005_1	14.37	21.383	24.000	-0.0017	1573	13.98	22.065	0.00	37.137
7N35	SW 7 AVE	SWAREA005_1	14.28	22.483	24.000	0.0002	1506	14.02	22.964	14.04	22.918
7N36	SW 7 AVE	PROSWA005_1	14.35	21.426	24.000	0.0028	1342	0.00	51.643	0.00	20.239
7N36	SW 7 AVE	SWAREA005_1	14.27	22.542	24.000	0.0001	1194	14.13	17.220	14.16	17.201
7N37	SW 7 AVE	PROSWA005_1	14.34	21.448	25.000	-0.0035	1315	14.06	16.928	0.00	51.643

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
7N37	SW 7 AVE	SWAREA005_1	14.26	22.600	25.000	-0.1000	1127	14.10	17.240	14.13	17.220
7N38	SW 7 AVE	PROSWA005_1	14.30	21.539	25.000	-0.0016	560	14.04	16.949	14.06	16.928
7N38	SW 7 AVE	SWAREA005_1	14.19	22.888	25.000	0.0004	534	14.09	17.246	14.10	17.240
7N39	SW 7 AVE	PROSWA005_1	14.29	21.547	25.000	-0.0016	516	14.03	16.969	14.04	16.949
7N39	SW 7 AVE	SWAREA005_1	14.19	22.902	25.000	0.0004	499	14.08	17.251	14.09	17.246
7N40	SW 7 AVE	PROSWA005_1	14.24	21.663	25.000	-0.0057	551	14.02	16.988	14.03	16.969
7N40	SW 7 AVE	SWAREA005_1	14.16	23.049	25.000	0.0007	561	14.07	17.257	14.08	17.251
7N41	SW 7 AVE	PROSWA005_1	14.24	21.674	25.000	0.0071	543	0.02	17.761	14.02	16.988
7N41	SW 7 AVE	SWAREA005_1	14.16	23.063	25.000	0.0010	594	14.06	17.263	14.07	17.257
7N42	SW 7 AVE	PROSWA005_1	14.23	21.683	25.000	0.0076	684	0.00	61.940	0.02	17.761
7N42	SW 7 AVE	SWAREA005_1	14.16	23.074	25.000	0.0009	755	14.05	5.752	14.07	5.743
7N43	SW 7 AVE	PROSWA005_1	0.00	22.000	26.000	-0.0066	731	0.00	21.148	0.00	61.940
7N43	SW 7 AVE	SWAREA005_1	14.15	23.080	26.000	-0.0004	672	14.04	5.760	14.05	5.752
7N44	SW 7 AVE	PROSWA005_1	0.00	22.000	25.000	-0.0004	1225	0.00	19.055	0.00	21.148
7N44	SW 7 AVE	SWAREA005_1	14.13	23.124	25.000	0.0002	927	14.02	5.772	14.04	5.760
7N45	SW 7 AVE	PROSWA005_1	0.00	22.055	26.000	0.0017	1119	0.00	23.900	0.00	19.055
7N45	SW 7 AVE	SWAREA005_1	14.08	23.289	26.000	-0.5000	673	14.03	5.809	14.02	5.772
7N46	SW 7 AVE	PROSWA005_1	0.00	22.600	28.000	-0.0025	1492	0.01	9.634	0.00	23.900
7N46	SW 7 AVE	SWAREA005_1	14.08	23.289	28.000	-0.0001	727	15.07	0.269	15.07	0.332
7N47	SW 7 AVE	PROSWA005_1	0.00	22.387	27.000	0.0014	1300	0.01	4.703	0.01	9.634
7N47	SW 7 AVE	SWAREA005_1	14.08	23.289	27.000	0.0001	775	15.07	0.203	15.07	0.269
7N48	SW 7 AVE	PROSWA005_1	0.01	22.412	26.000	0.0010	1100	0.00	12.488	0.01	4.703
7N48	SW 7 AVE	SWAREA005_1	14.08	23.289	26.000	0.0000	742	15.07	0.140	15.07	0.203
7N49	SW 7 AVE	PROSWA005_1	0.00	22.600	28.000	-0.0010	1000	0.00	0.000	0.00	12.488
7N49	SW 7 AVE	SWAREA005_1	14.08	23.289	28.000	0.0001	651	15.07	0.088	15.07	0.140
7N50	SW 7 AVE	PROSWA005_1	0.00	22.200	28.000	0.0000	115	0.00	0.000	0.00	0.000
7N50	SW 7 AVE	SWAREA005_1	14.08	23.289	28.000	0.0001	706	15.07	0.064	15.07	0.088
7N51	SW 7 AVE	PROSWA005_1	0.00	23.100	28.000	0.0000	115	0.00	0.000	0.00	0.000
7N51	SW 7 AVE	SWAREA005_1	14.08	23.289	28.000	0.0000	483	0.00	0.000	15.07	0.064
7N52	SW 7 AVE	PROSWA005_1	0.00	23.400	28.000	-0.0002	284	219.83	0.004	0.00	0.000
7N52	SW 7 AVE	SWAREA005_1	0.00	23.400	28.000	-0.0002	284	143.23	0.004	0.00	0.000

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
7N53	SW 7 AVE	PROSWA005_1	220.00	23.252	28.000	0.0002	321	162.99	0.001	219.83	0.004
7N53	SW 7 AVE	SWAREA005_1	149.99	23.250	28.000	0.0002	320	149.13	0.001	143.23	0.004
7N54	SW 7 AVE	PROSWA005_1	220.00	23.252	28.000	0.0000	179	14.05	0.000	162.99	0.001
7N54	SW 7 AVE	SWAREA005_1	150.00	23.250	28.000	0.0000	179	14.05	0.000	149.13	0.001
7N55	SW 7 AVE	PROSWA005_1	14.05	23.611	26.000	0.0000	232	156.75	0.046	14.05	0.000
7N55	SW 7 AVE	SWAREA005_1	14.05	23.611	26.000	0.0000	232	13.81	0.020	14.05	0.000
7N56	SW 7 AVE	PROSWA005_1	14.05	23.611	26.000	-0.0000	532	8.07	0.000	156.75	0.046
7N56	SW 7 AVE	SWAREA005_1	14.05	23.611	26.000	-0.0000	532	8.07	0.000	13.81	0.020
7N57	SW 7 AVE	PROSWA005_1	8.07	23.619	28.000	0.0000	1034	4.01	0.001	8.07	0.000
7N57	SW 7 AVE	SWAREA005_1	8.07	23.619	28.000	0.0000	1034	4.01	0.001	8.07	0.000
7N58	SW 7 AVE	PROSWA005_1	2.69	23.812	28.000	0.0001	433	127.93	0.171	4.01	0.001
7N58	SW 7 AVE	SWAREA005_1	2.69	23.812	28.000	-0.0000	433	124.96	0.088	4.01	0.001
7N59	SW 7 AVE	PROSWA005_1	2.69	23.812	28.000	-0.0001	494	0.38	0.003	127.93	0.171
7N59	SW 7 AVE	SWAREA005_1	2.69	23.812	28.000	0.0000	494	0.38	0.003	124.96	0.088
7N60	SW 7 AVE	PROSWA005_1	0.39	24.216	28.000	0.0000	1046	0.06	0.040	0.38	0.003
7N60	SW 7 AVE	SWAREA005_1	0.39	24.216	28.000	0.0000	1046	0.06	0.040	0.38	0.003
7N61	SW 7 AVE	PROSWA005_1	0.06	24.217	28.000	0.0001	1033	0.00	0.308	0.06	0.040
7N61	SW 7 AVE	SWAREA005_1	0.06	24.217	28.000	0.0001	1033	0.00	0.308	0.06	0.040
7N62	SW 7 AVE	PROSWA005_1	0.00	24.500	28.000	-0.0002	143	0.00	0.000	0.00	0.308
7N62	SW 7 AVE	SWAREA005_1	0.00	24.500	28.000	-0.0002	143	0.00	0.000	0.00	0.308
7N63	SW 7 AVE	PROSWA005_1	0.00	24.500	28.000	0.0000	116	0.00	0.000	0.00	0.000
7N63	SW 7 AVE	SWAREA005_1	0.00	24.500	28.000	0.0000	116	0.00	0.000	0.00	0.000
7N64	SW 7 AVE	PROSWA005_1	0.00	24.000	28.000	0.0000	125	0.00	0.000	0.00	0.000
7N64	SW 7 AVE	SWAREA005_1	0.00	24.000	28.000	0.0000	125	0.00	0.000	0.00	0.000
7N65	SW 7 AVE	PROSWA005_1	0.00	24.000	28.000	0.0000	117	0.00	0.000	0.00	0.000
7N65	SW 7 AVE	SWAREA005_1	0.00	24.000	28.000	0.0000	117	0.00	0.000	0.00	0.000
7N66	SW 7 AVE	PROSWA005_1	0.00	24.000	28.000	0.0000	120	0.00	0.000	0.00	0.000
7N66	SW 7 AVE	SWAREA005_1	0.00	24.000	28.000	0.0000	120	0.00	0.000	0.00	0.000
7N67	SW 7 AVE	PROSWA005_1	0.00	25.100	29.000	0.0000	136	0.00	0.000	0.00	0.000
7N67	SW 7 AVE	SWAREA005_1	0.00	25.100	29.000	0.0000	136	0.00	0.000	0.00	0.000

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
7N68	SW 7 AVE	PROSWA005_1	0.00	25.100	28.000	0.0000	122	0.00	0.000	0.00	0.000
7N68	SW 7 AVE	SWAREA005_1	0.00	25.100	28.000	0.0000	122	0.00	0.000	0.00	0.000
7N69	SW 7 AVE	PROSWA005_1	0.00	25.300	28.000	0.0000	132	0.00	0.000	0.00	0.000
7N69	SW 7 AVE	SWAREA005_1	0.00	25.300	28.000	0.0000	132	0.00	0.000	0.00	0.000
7N70	SW 7 AVE	PROSWA005_1	0.00	25.300	28.000	0.0000	121	0.00	0.000	0.00	0.000
7N70	SW 7 AVE	SWAREA005_1	0.00	25.300	28.000	0.0000	121	0.00	0.000	0.00	0.000
7N71	SW 7 AVE	PROSWA005_1	0.00	25.300	28.000	0.0000	115	0.00	0.000	0.00	0.000
7N71	SW 7 AVE	SWAREA005_1	0.00	25.300	28.000	0.0000	115	0.00	0.000	0.00	0.000
7N72	SW 7 AVE	PROSWA005_1	0.00	25.300	28.000	0.0000	115	0.00	0.000	0.00	0.000
7N72	SW 7 AVE	SWAREA005_1	0.00	25.300	28.000	0.0000	115	0.00	0.000	0.00	0.000
7N73	SW 7 AVE	PROSWA005_1	0.00	26.000	28.000	0.0000	115	0.00	0.000	0.00	0.000
7N73	SW 7 AVE	SWAREA005_1	0.00	26.000	28.000	0.0000	115	0.00	0.000	0.00	0.000
7N74	SW 7 AVE	PROSWA005_1	0.00	26.400	29.000	0.0000	115	0.00	0.000	0.00	0.000
7N74	SW 7 AVE	SWAREA005_1	0.00	26.400	29.000	0.0000	115	0.00	0.000	0.00	0.000
7N75	SW 7 AVE	PROSWA005_1	0.00	26.700	30.000	0.0000	115	0.00	0.000	0.00	0.000
7N75	SW 7 AVE	SWAREA005_1	0.00	26.700	30.000	0.0000	115	0.00	0.000	0.00	0.000
7N76	SW 7 AVE	PROSWA005_1	0.00	26.800	29.500	0.0000	117	0.00	0.000	0.00	0.000
7N76	SW 7 AVE	SWAREA005_1	0.00	26.800	29.500	0.0000	117	0.00	0.000	0.00	0.000
CN001	SW 7 AVE	PROSWA005_1	0.00	17.200	21.000	*********	113	0.00	0.000	0.00	0.000
CN001	SW 7 AVE	SWAREA005_1	16.94	18.489	21.000	0.0000	1686	18.51	0.275	18.51	0.343
CN002	SW 7 AVE	PROSWA005_1	0.00	17.000	21.000	*********	113	0.00	0.000	0.00	0.000
CN002	SW 7 AVE	SWAREA005_1	16.94	18.489	21.000	0.0000	719	18.51	0.207	18.51	0.237
CN003	SW 7 AVE	PROSWA005_1	0.00	17.600	21.000	-0.0000	120	0.00	0.000	0.00	0.000
CN003	SW 7 AVE	SWAREA005_1	16.94	18.489	21.000	0.0000	963	18.51	0.123	18.51	0.161
CN004	SW 7 AVE	PROSWA005_1	0.00	17.920	21.000	-0.4200	113	0.00	0.000	0.00	0.000
CN004	SW 7 AVE	SWAREA005_1	16.94	18.489	21.000	-0.4200	1273	18.54	0.007	18.51	0.054
CN006	SW 7 AVE	PROSWA005_1	0.00	17.330	21.000	-0.3300	113	0.00	0.000	0.00	0.000
CN006	SW 7 AVE	SWAREA005_1	16.79	18.338	21.000	-0.3300	304	0.00	1.091	0.04	0.274
CN007	SW 7 AVE	PROSWA005_1	0.00	18.340	21.000	-0.0900	261	0.00	0.000	0.00	0.000
CN007	SW 7 AVE	SWAREA005_1	0.01	18.260	21.000	0.0001	1212	0.00	0.796	0.00	0.000
CN008	SW 7 AVE	PROSWA005_1	0.00	18.300	21.000	*********	113	0.00	0.000	0.00	0.000

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
CN008	SW 7 AVE	SWAREA005_1	0.00	18.300	21.000	-0.0002	969	0.04	0.000	0.00	0.796
CN009	SW 7 AVE	PROSWA005_1	0.00	18.510	21.500	-0.0100	160	0.00	0.000	0.00	0.000
CN009	SW 7 AVE	SWAREA005_1	0.00	18.510	21.500	-0.0100	161	0.00	0.000	0.00	0.000
CN010	SW 7 AVE	PROSWA005_1	0.00	19.800	22.000	0.0000	217	0.00	0.000	0.00	0.000
CN010	SW 7 AVE	SWAREA005_1	0.00	19.800	22.000	-0.0001	279	0.14	0.000	0.00	0.000
CN011	SW 7 AVE	PROSWA005_1	0.00	16.500	21.000	*********	113	0.00	0.000	0.00	0.000
CN011	SW 7 AVE	SWAREA005_1	16.82	18.013	21.000	-0.0001	1731	78.87	9.779	78.90	9.779
CN012	SW 7 AVE	PROSWA005_1	0.00	16.900	21.000	*********	113	0.00	0.000	0.00	0.000
CN012	SW 7 AVE	SWAREA005_1	78.84	18.398	21.000	-0.0003	1899	78.78	9.779	78.83	9.779
CN014	SW 7 AVE	PROSWA005_1	0.00	16.600	21.000	*********	113	0.00	0.000	0.00	0.000
CN014	SW 7 AVE	SWAREA005_1	78.79	18.818	21.000	-0.3000	1093	78.71	9.779	78.74	9.779
CN015	SW 7 AVE	PROSWA005_1	0.00	16.600	21.000	*********	113	0.00	0.000	0.00	0.000
CN015	SW 7 AVE	SWAREA005_1	78.74	19.517	21.000	-0.0400	771	15.13	20.358	15.55	10.228
CN016	SW 7 AVE	PROSWA005_1	0.00	18.000	20.000	0.0000	113	0.00	0.000	0.00	0.000
CN016	SW 7 AVE	SWAREA005_1	0.00	18.000	20.000	-0.0000	3434	0.20	0.009	0.00	0.738
EAGLE POINT SUB	SW 26 AVE	PROSWA005_1	24.76	17.252	22.000	0.0000	168577	12.25	34.869	26.45	0.510
EAGLE POINT SUB	SW 26 AVE	SWAREA005_1	24.91	17.362	22.000	0.0000	168577	12.25	34.869	54.86	0.480
GBC01	SW 16/12 AVE	PROSWA005_1	20.32	16.253	18.000	-0.0001	84604	17.80	251.586	18.00	247.240
GBC01	SW 16/12 AVE	SWAREA005_1	12.00	16.999	18.000	0.0000	88268	16.07	138.210	16.05	139.236
GBC02	SW 16/12 AVE	PROSWA005_1	20.32	16.245	18.000	0.0001	152867	17.90	237.489	18.23	230.542
GBC02	SW 16/12 AVE	SWAREA005_1	12.00	16.999	18.000	0.0000	158975	16.20	123.563	16.20	125.415
N001	SW 7 AVE	PROSWA005_1	0.00	17.000	21.000	0.0000	223	0.00	0.000	0.00	0.000
N001	SW 7 AVE	SWAREA005_1	16.94	18.489	21.000	0.0000	2110	18.51	0.343	18.50	0.429
N002	SW 7 AVE	PROSWA005_1	0.00	17.000	21.000	0.0000	223	0.00	0.000	0.00	0.000
N002	SW 7 AVE	SWAREA005_1	16.94	18.489	21.000	0.0000	913	18.51	0.237	18.51	0.275
N003	SW 7 AVE	PROSWA005_1	193.28	17.005	21.000	0.0000	223	0.00	0.000	0.00	0.000
N003	SW 7 AVE	SWAREA005_1	16.94	18.489	21.000	0.0001	1165	18.51	0.161	18.51	0.207
N004	SW 7 AVE	PROSWA005_1	0.00	17.200	21.000	0.0000	218	0.00	0.000	0.00	0.000
N004	SW 7 AVE	SWAREA005_1	16.94	18.489	21.000	0.0000	1750	18.51	0.054	18.51	0.123
N005	SW 7 AVE	PROSWA005_1	16.92	18.465	21.000	-0.0011	267	16.23	1.252	0.00	10.379
N005	SW 7 AVE	SWAREA005_1	16.94	18.489	21.000	0.0000	164	0.00	0.000	18.54	0.007

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
N006	SW 7 AVE	PROSWA005_1	0.00	17.400	21.000	0.0000	240	0.00	0.000	0.00	0.000
N006	SW 7 AVE	SWAREA005_1	16.79	18.338	21.000	0.0001	455	0.04	0.274	0.15	0.132
N007	SW 7 AVE	PROSWA005_1	0.00	18.000	21.000	0.0000	558	0.00	0.000	0.00	0.000
N007	SW 7 AVE	SWAREA005_1	16.79	18.338	21.000	-0.0001	783	0.00	0.000	0.00	1.091
N008	SW 7 AVE	PROSWA005_1	0.00	18.000	21.000	0.0000	254	0.00	0.000	0.00	0.000
N008	SW 7 AVE	SWAREA005_1	0.04	18.231	21.000	0.0003	435	0.00	0.000	0.04	0.000
N009	SW 7 AVE	PROSWA005_1	0.00	20.660	21.500	0.0000	148	0.00	0.000	0.00	0.000
N009	SW 7 AVE	SWAREA005_1	0.00	20.660	21.500	0.0000	148	0.00	0.000	0.00	0.000
N010	SW 7 AVE	PROSWA005_1	0.00	18.000	21.000	*********	113	0.00	0.000	0.00	0.000
N010	SW 7 AVE	SWAREA005_1	0.14	19.651	21.000	-1.4200	165	0.00	0.000	0.14	0.000
N011	SW 7 AVE	PROSWA005_1	0.00	15.520	18.500	0.0000	113	0.00	0.000	0.00	0.000
N011	SW 7 AVE	SWAREA005_1	16.74	17.865	18.500	0.0001	1676	78.54	10.044	78.58	10.044
N012	SW 7 AVE	PROSWA005_1	0.00	16.500	21.000	*********	113	0.00	0.000	0.00	0.000
N012	SW 7 AVE	SWAREA005_1	78.85	18.277	21.000	0.0002	1546	78.83	9.779	78.87	9.779
N013	SW 7 AVE	PROSWA005_1	0.00	16.040	21.000	*********	113	0.00	0.000	0.00	0.000
N013	SW 7 AVE	SWAREA005_1	78.83	18.521	21.000	0.0005	1205	78.74	9.779	78.78	9.779
N014	SW 7 AVE	PROSWA005_1	17.72	17.656	21.000	-0.0009	259	79.84	10.339	0.00	10.459
N014	SW 7 AVE	SWAREA005_1	78.74	19.511	21.000	0.0005	789	15.55	10.228	78.71	9.779
N015	SW 7 AVE	PROSWA005_1	0.00	16.760	21.000	*********	113	0.00	0.000	0.00	0.000
N015	SW 7 AVE	SWAREA005_1	15.55	20.813	21.000	-0.0079	117	78.61	9.779	15.13	20.358
N016	SW 7 AVE	PROSWA005_1	77.85	22.702	21.000	-0.0014	131	124.14	11.396	79.84	10.076
N016	SW 7 AVE	SWAREA005_1	78.64	22.998	21.000	0.0007	115	78.67	10.813	78.61	9.779
N017	SW 7 AVE	PROSWA005_1	0.00	17.500	20.000	0.0000	113	0.00	0.000	0.00	0.000
N017	SW 7 AVE	SWAREA005_1	0.30	17.666	20.000	0.0001	1477	0.00	0.738	0.30	0.340
N018	SW 7 AVE	PROSWA005_1	0.00	17.830	20.000	0.0000	113	0.00	0.000	0.00	0.000
N018	SW 7 AVE	SWAREA005_1	0.09	17.934	20.000	0.0000	215	0.00	0.000	0.20	0.009
N019	SW 7 AVE	PROSWA005_1	77.87	22.719	21.500	-0.0008	113	12.00	15.372	12.00	15.363
N019	SW 7 AVE	SWAREA005_1	78.55	23.015	21.500	-0.0004	113	12.00	13.813	12.00	13.806
N101	SW 7 AVE	PROSWA005_1	13.85	25.209	25.000	0.0018	513874	12.75	136.431	12.77	101.638
N101	SW 7 AVE	SWAREA005_1	13.92	25.222	25.000	0.0018	540477	12.75	136.431	12.73	100.417

Southwest Corridor Nodal Comparison of Maximum Pre & Mitigation Stages for 5-yr, 1-day Design Storm Event

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
N102	SW 7 AVE	PROSWA005_1	14.03	25.255	25.000	0.0001	603167	12.75	136.373	12.75	111.190
N102	SW 7 AVE	SWAREA005_1	14.24	25.366	25.000	0.0002	835972	12.75	136.373	13.00	81.282
N103	SW 7 AVE	PROSWA005_1	18.04	20.071	25.000	0.0000	1239093	12.75	193.330	20.01	0.043
N103	SW 7 AVE	SWAREA005_1	18.39	21.381	25.000	-0.0000	3358284	12.75	219.542	26.78	39.891
N104	SW 7 AVE	PROSWA005_1	16.78	19.669	25.000	-0.0001	966827	12.75	118.367	12.86	78.677
N104	SW 7 AVE	SWAREA005_1	17.25	19.948	25.000	0.0001	1331969	12.75	119.460	14.58	37.353
N105	SW 7 AVE	PROSWA005_1	14.49	18.910	22.000	-0.0001	581550	12.75	49.923	14.78	34.376
N105	SW 7 AVE	SWAREA005_1	14.52	18.899	22.000	-0.0001	566756	12.75	49.923	13.88	33.439
N106	SW 7 AVE	PROSWA005_1	16.07	19.735	17.000	0.0003	186001	12.25	4.405	21.89	12.135
N106	SW 7 AVE	SWAREA005_1	17.29	19.959	17.000	0.0001	186001	12.25	4.405	27.12	14.368
N107	SW 7 AVE	PROSWA005_1	24.77	19.516	21.000	0.0000	419600	12.25	30.829	24.77	0.279
N107	SW 7 AVE	SWAREA005_1	24.77	19.516	21.000	0.0000	419600	12.25	30.829	24.77	0.279
N108	SW 7 AVE	PROSWA005_1	16.23	20.079	20.500	0.0000	191763	12.25	18.141	16.23	1.252
N108	SW 7 AVE	SWAREA005_1	26.00	20.241	20.500	0.0000	220292	12.25	18.141	0.00	0.000
N109	SW 7 AVE	PROSWA005_1	77.90	22.701	21.000	-0.0001	133729	12.25	1.764	166.18	2.551
N109	SW 7 AVE	SWAREA005_1	78.70	22.998	21.000	0.0000	133729	12.25	1.764	150.00	1.408
N110	SW 7 AVE	PROSWA005_1	78.13	22.718	22.000	-0.0004	275735	12.25	4.859	162.71	3.097
N110	SW 7 AVE	SWAREA005_1	78.79	23.015	22.000	0.0001	275735	12.25	4.859	150.00	2.416
N111	SW 7 AVE	PROSWA005_1	24.75	19.393	21.000	0.0000	20359	12.00	2.754	0.00	0.000
N111	SW 7 AVE	SWAREA005_1	24.75	19.393	21.000	0.0000	20359	12.00	2.754	0.00	0.000
N112	SW 7 AVE	PROSWA005_1	138.83	21.590	22.000	0.0001	120189	12.25	6.003	170.70	0.326
N112	SW 7 AVE	SWAREA005_1	144.31	21.683	22.000	0.0001	128344	12.25	6.003	150.00	0.074
N113	SW 7 AVE	PROSWA005_1	20.27	16.277	21.000	0.0004	22486	12.75	38.076	13.14	35.989
N113	SW 7 AVE	SWAREA005_1	13.36	17.469	21.000	0.0000	161870	12.75	31.322	13.44	21.698
N114	SW 7 AVE	PROSWA005_1	31.25	15.661	17.000	0.0000	3636007	12.75	199.450	0.00	0.000
N114	SW 7 AVE	SWAREA005_1	31.25	15.673	17.000	0.0000	3665342	12.75	199.450	0.00	0.000
N115	SW 7 AVE	PROSWA005_1	33.75	15.499	17.000	0.0000	1618083	12.75	81.218	0.00	0.000
N115	SW 7 AVE	SWAREA005_1	33.75	15.545	17.000	0.0000	1666653	12.75	81.218	0.00	0.000
N116	SW 16/12 AVE	PROSWA005_1	35.72	27.590	30.000	0.0000	3119293	13.75	81.145	183.87	1.228
N116	SW 16/12 AVE	SWAREA005_1	35.72	27.590	30.000	0.0000	3119293	13.75	81.145	150.00	1.117
N116_TC	SW 16/12 AVE	PROSWA005_1	12.00	19.000	29.000	-11.5000	16	0.00	0.000	0.00	0.000

Southwest Corridor Nodal Comparison of Maximum Pre & t Mitigation Stages for 5-yr, 1-day Design Storm Event

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
N116_TC	SW 16/12 AVE	SWAREA005_1	12.00	19.000	29.000	-11.5000	16	0.00	0.000	0.00	0.000
N117	SW 16/12 AVE	PROSWA005_1	44.78	27.589	29.000	0.0000	1259346	12.75	65.187	19.04	1.876
N117	SW 16/12 AVE	SWAREA005_1	44.77	27.589	29.000	0.0000	1259347	12.75	65.186	19.04	1.876
N118	SW 16/12 AVE	PROSWA005_1	14.47	25.541	28.000	-0.0001	1233644	12.75	209.336	14.56	114.620
N118	SW 16/12 AVE	SWAREA005_1	14.49	25.545	28.000	0.0001	1242043	12.75	209.336	14.54	113.378
N119	SW 16/12 AVE	PROSWA005_1	18.31	21.114	24.000	0.0000	1519116	13.10	125.723	20.25	52.679
N119	SW 16/12 AVE	SWAREA005_1	18.85	21.843	24.000	0.0001	3688829	13.10	125.774	28.50	55.496
N120	SW 16/12 AVE	PROSWA005_1	14.89	19.544	22.000	0.0000	1276325	12.50	110.729	14.89	21.706
N120	SW 16/12 AVE	SWAREA005_1	14.89	19.544	22.000	0.0000	1276325	12.50	110.729	14.89	21.706
N121	SW 16/12 AVE	PROSWA005_1	33.54	14.712	18.000	0.0000	3993613	14.00	142.905	33.20	1.232
N121	SW 16/12 AVE	SWAREA005_1	70.49	15.395	18.000	0.0000	4782093	14.00	142.905	84.76	6.688
N122	SW 26 AVE	PROSWA005_1	46.50	15.262	18.000	0.0000	3642791	14.00	83.479	0.00	0.000
N122	SW 26 AVE	SWAREA005_1	46.50	15.243	18.000	0.0000	3619005	14.00	83.479	0.00	0.000
N123	SW 26 AVE	PROSWA005_1	13.65	20.707	22.000	0.0001	214317	12.25	146.976	13.65	62.444
N123	SW 26 AVE	SWAREA005_1	13.65	20.707	22.000	0.0001	214317	12.25	146.976	13.65	62.444
N124	SW 32 AVE	PROSWA005_1	13.43	22.013	27.000	-0.0221	214477	12.50	119.275	13.39	63.948
N124	SW 32 AVE	SWAREA005_1	13.43	22.013	27.000	-0.0221	214477	12.50	119.275	13.39	63.924
N125	SW 32 AVE	PROSWA005_1	31.74	23.655	25.000	-0.0014	5351128	15.25	85.452	31.74	7.442
N125	SW 32 AVE	SWAREA005_1	31.74	23.655	25.000	-0.0014	5351133	15.25	85.452	31.74	7.442
N126	SW 32 AVE	PROSWA005_1	52.80	15.876	21.000	0.0000	1537776	12.75	207.915	87.55	14.393
N126	SW 32 AVE	SWAREA005_1	32.30	16.398	21.000	0.0000	1537764	12.75	207.914	71.66	15.316
N127	SW 32 AVE	PROSWA005_1	30.50	13.800	20.000	0.0000	2200459	12.50	56.570	0.00	0.000
N127	SW 32 AVE	SWAREA005_1	30.50	13.800	20.000	0.0000	2200459	12.50	56.570	0.00	0.000
N129	SW 16/12 AVE	PROSWA005_1	28.50	19062.694	18.000	*********	113	12.25	232.965	0.00	0.000
N129	SW 16/12 AVE	SWAREA005_1	28.50	19062.694	18.000	*********	113	12.25	232.965	0.00	0.000
OUSLEY/P VLLG	SW 16/12 AVE	PROSWA005_1	24.81	15.921	18.000	0.0000	1423880	12.25	113.825	27.39	4.700
OUSLEY/P VLLG	SW 16/12 AVE	SWAREA005_1	32.99	16.301	18.000	0.0000	1806973	12.25	113.824	53.48	5.319
PRO_16N01B	SW 16/12 AVE	PROSWA005_1	20.31	16.272	18.000	-0.0001	75722	15.14	128.277	18.06	122.720
PRO_7N03B	SW 7 AVE	PROSWA005_1	12.01	16.999	18.000	0.0000	45956	150.02	22.358	150.01	22.501
PRO_7N15B	SW 7 AVE	PROSWA005_1	16.66	19.397	0.000	-14.3000	10742	15.96	116.553	16.07	116.418

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Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
RC_SW 7 AVE	SW 7 AVE	PROSWA005_1	12.00	17.000	19.000	0.0000	50	150.00	23.348	0.00	0.000
RC_SW 7 AVE	SW 7 AVE	SWAREA005_1	12.00	17.000	19.000	0.0000	50	17.57	102.387	0.00	0.000
RESERVOIR	SW 26 AVE	PROSWA005_1	68.14	15.557	18.000	-0.0000	13136941	14.63	250.000	92.20	93.094
SEMINOLE COVE	SW 7 AVE	PROSWA005_1	25.92	15.784	19.000	0.0000	1016967	12.00	101.152	27.28	0.837
SEMINOLE COVE	SW 7 AVE	SWAREA005_1	36.75	16.217	19.000	0.0000	1085480	12.00	101.151	53.66	1.935

OKEECHOBEE COUNTY
COMPREHENSIVE URBANIZED AREA
STORMWATER MASTER PLAN

SW CORRIDOR PRE AND POST STAGES FOR 10-YR 3-DAY DESIGN STORM EVENT RESULTS

Southwest Corridor Nodal Comparison of Maximum & Post Mitigation Stages for 10-yr, 3-day Design Storm Event

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
16N01	SW 16/12 AVE	PROSWA010_3	67.81	17.786	17.000	0.0003	53622	61.82	284.079	61.81	272.599
16N01	SW 16/12 AVE	SWAREA010_3	63.78	18.503	17.000	-0.0000	55109	95.21	103.616	95.44	104.798
16N02	SW 16/12 AVE	PROSWA010_3	67.81	17.800	17.000	0.0000	119186	62.07	175.663	62.12	151.047
16N02	SW 16/12 AVE	SWAREA010_3	66.00	18.508	17.000	-0.0000	122814	67.32	109.782	95.21	111.389
16N03	SW 16/12 AVE	PROSWA010_3	67.33	18.309	19.000	0.0001	60624	62.16	175.919	62.17	171.076
16N03	SW 16/12 AVE	SWAREA010_3	67.24	18.731	19.000	0.0001	63320	67.21	129.568	67.26	129.566
16N04	SW 16/12 AVE	PROSWA010_3	66.61	19.979	19.000	0.0002	18885	62.56	178.728	62.16	175.966
16N04	SW 16/12 AVE	SWAREA010_3	67.22	19.756	19.000	0.0001	18488	67.12	133.489	67.21	133.467
16N05	SW 16/12 AVE	PROSWA010_3	66.57	20.200	18.000	0.0025	18592	62.57	181.243	62.56	178.728
16N05	SW 16/12 AVE	SWAREA010_3	67.20	19.921	18.000	0.0030	18455	67.04	133.539	67.12	133.489
16N06	SW 16/12 AVE	PROSWA010_3	66.47	20.674	21.000	-0.0002	18139	62.56	183.616	62.57	181.243
16N06	SW 16/12 AVE	SWAREA010_3	67.14	20.634	21.000	-0.0021	16491	66.95	133.625	67.04	133.539
16N07	SW 16/12 AVE	PROSWA010_3	66.43	20.844	20.000	-0.1000	18819	62.54	185.510	62.56	183.616
16N07	SW 16/12 AVE	SWAREA010_3	67.10	20.778	20.000	0.0006	17947	65.84	118.384	66.04	118.137
16N08	SW 16/12 AVE	PROSWA010_3	66.43	20.848	21.000	0.0008	10232	62.65	172.316	62.68	171.323
16N08	SW 16/12 AVE	SWAREA010_3	66.87	22.147	21.000	0.0072	10738	65.68	118.553	65.84	118.384
16N09	SW 16/12 AVE	PROSWA010_3	66.35	21.041	22.000	0.0001	35969	62.60	174.942	62.65	172.316
16N09	SW 16/12 AVE	SWAREA010_3	66.86	22.186	22.000	0.0001	36584	65.48	124.508	65.72	123.839
16N10	SW 16/12 AVE	PROSWA010_3	66.14	21.326	22.000	0.0002	29598	62.53	176.544	62.60	174.942
16N10	SW 16/12 AVE	SWAREA010_3	66.82	22.334	22.000	0.0002	30923	65.44	125.073	65.48	124.508
16N11	SW 16/12 AVE	PROSWA010_3	66.08	21.393	22.000	0.0002	8091	62.50	176.952	62.53	176.544
16N11	SW 16/12 AVE	SWAREA010_3	66.81	22.365	22.000	0.0036	8557	63.62	132.200	65.44	131.963
16N12	SW 16/12 AVE	PROSWA010_3	65.98	21.473	21.000	0.0003	7371	62.52	170.785	62.55	170.453
16N12	SW 16/12 AVE	SWAREA010_3	66.80	22.398	21.000	0.0004	7947	62.95	132.519	63.00	132.234
16N13	SW 16/12 AVE	PROSWA010_3	65.89	21.532	22.000	0.0006	11828	62.54	160.103	62.57	159.613
16N13	SW 16/12 AVE	SWAREA010_3	66.79	22.421	22.000	0.0019	12985	62.66	136.443	62.75	135.938
16N14	SW 16/12 AVE	PROSWA010_3	65.06	22.094	22.000	0.0031	7243	62.54	150.054	62.55	149.906
16N14	SW 16/12 AVE	SWAREA010_3	66.52	22.647	22.000	0.0031	7940	62.49	141.245	62.53	141.002
16N15	SW 16/12 AVE	PROSWA010_3	64.29	22.583	22.000	0.0041	3527	62.25	171.665	62.26	171.580
16N15	SW 16/12 AVE	SWAREA010_3	65.06	23.058	22.000	0.0041	3765	62.09	164.899	62.11	164.753

Southwest Corridor Nodal Comparison of Maximu e & Post Mitigation Stages for 10-yr, 3-day Design St.m Event

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
16N16	SW 16/12 AVE	PROSWA010_3	64.01	22.805	22.000	0.0006	7095	62.24	150.069	62.28	149.939
16N16	SW 16/12 AVE	SWAREA010_3	64.75	23.187	22.000	0.0006	7528	62.11	144.694	62.17	144.451
16N17	SW 16/12 AVE	PROSWA010_3	63.66	23.017	22.000	0.0003	8034	62.30	125.199	62.33	125.090
16N17	SW 16/12 AVE	SWAREA010_3	64.45	23.320	22.000	0.0003	8450	62.21	121.196	62.27	120.978
16N18	SW 16/12 AVE	PROSWA010_3	63.33	23.192	22.000	0.0002	11002	62.32	105.803	62.37	105.682
16N18	SW 16/12 AVE	SWAREA010_3	64.23	23.443	22.000	0.0002	11291	62.26	102.757	62.35	102.510
16N19	SW 16/12 AVE	PROSWA010_3	63.13	23.349	22.000	0.0009	7692	62.29	101.390	62.35	101.311
16N19	SW 16/12 AVE	SWAREA010_3	64.00	23.561	22.000	0.0008	7839	62.23	98.594	62.30	98.432
16N20	SW 16/12 AVE	PROSWA010_3	62.61	24.758	23.000	0.0009	5546	62.22	99.087	62.31	99.019
16N20	SW 16/12 AVE	SWAREA010_3	62.89	24.867	23.000	0.0009	5602	62.13	96.318	62.23	96.189
16N21	SW 16/12 AVE	PROSWA010_3	62.62	24.790	25.000	-0.0006	9472	62.56	64.478	62.70	64.485
16N21	SW 16/12 AVE	SWAREA010_3	62.88	24.894	25.000	-0.0006	9625	62.56	63.206	62.68	63.131
16N22	SW 16/12 AVE	PROSWA010_3	62.62	24.837	25.000	0.0086	4162	62.70	56.174	62.76	56.187
16N22	SW 16/12 AVE	SWAREA010_3	62.88	24.935	25.000	0.0086	4231	62.59	54.916	62.66	54.886
16N23	SW 16/12 AVE	PROSWA010_3	62.66	25.254	25.000	-0.0051	1460	62.92	52.804	62.97	52.820
16N23	SW 16/12 AVE	SWAREA010_3	62.84	25.334	25.000	-0.0051	1482	62.66	51.368	62.69	51.359
16N24	SW 16/12 AVE	PROSWA010_3	62.66	25.303	25.000	0.0005	4235	62.76	52.773	62.92	52.804
16N24	SW 16/12 AVE	SWAREA010_3	62.83	25.377	25.000	0.0005	4290	62.55	51.402	62.66	51.368
16N25	SW 16/12 AVE	PROSWA010_3	62.67	25.387	26.000	-0.0005	2794	62.67	52.767	62.76	52.773
16N25	SW 16/12 AVE	SWAREA010_3	62.82	25.450	26.000	-0.0004	2824	62.47	51.432	62.55	51.402
16N26	SW 16/12 AVE	PROSWA010_3	62.71	25.838	26.000	0.0051	2085	62.96	51.272	63.04	51.286
16N26	SW 16/12 AVE	SWAREA010_3	62.78	25.853	26.000	0.0051	2089	62.50	49.778	62.56	49.763
16N27	SW 16/12 AVE	PROSWA010_3	62.71	25.838	26.000	0.0003	7226	76.29	12.239	76.03	12.376
16N27	SW 16/12 AVE	SWAREA010_3	62.77	25.854	26.000	0.0003	7245	76.82	12.133	76.67	12.245
16N28	SW 16/12 AVE	PROSWA010_3	62.71	25.843	26.000	0.0003	5445	68.53	13.182	68.52	14.072
16N28	SW 16/12 AVE	SWAREA010_3	62.78	25.859	26.000	0.0004	5454	68.75	13.221	68.74	14.098
16N29	SW 16/12 AVE	PROSWA010_3	62.72	25.852	27.000	0.0003	2053	68.53	12.837	68.53	13.182
16N29	SW 16/12 AVE	SWAREA010_3	62.79	25.867	27.000	0.0004	2054	68.75	12.881	68.75	13.221
16N30	SW 16/12 AVE	PROSWA010_3	62.72	25.854	27.000	0.0003	1973	68.54	12.518	68.53	12.837
16N30	SW 16/12 AVE	SWAREA010_3	62.79	25.869	27.000	0.0005	1976	68.75	12.567	68.75	12.881

Southwest Corridor Nodal Comparison of Maximum Pre & Post Mitigation Stages for 10-yr, 3-day Design Storm Event

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
16N31	SW 16/12 AVE	PROSWA010_3	62.73	25.867	27.000	0.0004	3227	73.31	12.344	68.54	12.518
16N31	SW 16/12 AVE	SWAREA010_3	62.80	25.882	27.000	0.0004	3234	73.22	12.346	68.75	12.567
16N32	SW 16/12 AVE	PROSWA010_3	62.73	25.877	26.000	0.0005	4028	72.93	12.297	73.31	12.344
16N32	SW 16/12 AVE	SWAREA010_3	62.80	25.892	26.000	0.0004	4042	72.97	12.297	73.22	12.346
16N33	SW 16/12 AVE	PROSWA010_3	62.75	25.962	27.000	0.0000	1286	72.92	12.297	72.93	12.297
16N33	SW 16/12 AVE	SWAREA010_3	62.83	25.974	27.000	0.0000	1291	72.97	12.297	72.97	12.297
16N34A	SW 16/12 AVE	PROSWA010_3	62.83	26.199	28.000	-0.5000	245	72.68	12.301	72.91	12.301
16N34A	SW 16/12 AVE	SWAREA010_3	62.93	26.206	28.000	-0.5000	245	72.56	12.300	72.97	12.302
16N34B	SW 16/12 AVE	PROSWA010_3	62.78	26.015	28.000	-0.1000	282	72.91	12.299	72.92	12.297
16N34B	SW 16/12 AVE	SWAREA010_3	62.85	26.027	28.000	-0.1000	283	72.97	12.299	72.97	12.297
16N35	SW 16/12 AVE	PROSWA010_3	72.80	27.045	28.000	-0.6000	223	72.91	12.299	72.68	12.301
16N35	SW 16/12 AVE	SWAREA010_3	72.97	27.045	28.000	-0.6000	223	72.87	12.300	72.56	12.300
16N36	SW 16/12 AVE	PROSWA010_3	72.90	27.209	30.000	0.0002	1229	72.89	12.299	72.91	12.299
16N36	SW 16/12 AVE	SWAREA010_3	72.92	27.209	30.000	0.0002	1229	72.87	12.300	72.87	12.300
16N37	SW 16/12 AVE	PROSWA010_3	72.90	27.262	30.000	0.0001	1396	72.88	12.299	72.89	12.299
16N37	SW 16/12 AVE	SWAREA010_3	72.91	27.262	30.000	0.0001	1396	72.87	12.300	72.87	12.300
16N38	SW 16/12 AVE	PROSWA010_3	72.89	27.416	30.000	0.0002	536	72.88	13.897	72.88	13.897
16N38	SW 16/12 AVE	SWAREA010_3	72.90	27.416	30.000	0.0002	536	72.87	13.898	72.87	13.898
16N39	SW 16/12 AVE	PROSWA010_3	72.88	27.919	30.000	0.0000	2607	72.86	31.008	72.88	31.008
16N39	SW 16/12 AVE	SWAREA010_3	72.88	27.919	30.000	0.0000	2607	72.86	31.008	72.88	31.008
16N40	SW 16/12 AVE	PROSWA010_3	72.87	28.172	30.000	0.0001	2772	71.05	32.093	72.86	31.008
16N40	SW 16/12 AVE	SWAREA010_3	72.87	28.172	30.000	0.0001	2772	71.05	31.381	72.86	31.008
16N41	SW 16/12 AVE	PROSWA010_3	72.88	28.172	30.000	0.0002	2509	180.05	4.121	180.16	4.129
16N41	SW 16/12 AVE	SWAREA010_3	72.88	28.172	30.000	0.0002	2509	180.06	4.121	180.14	4.129
16N42	SW 16/12 AVE	PROSWA010_3	76.96	28.231	31.000	-0.0010	1396	180.09	4.120	180.05	4.121
16N42	SW 16/12 AVE	SWAREA010_3	76.95	28.231	31.000	-0.0010	1396	180.07	4.120	180.06	4.121
16N43	SW 16/12 AVE	PROSWA010_3	80.29	28.232	31.000	-0.0001	329	157.72	0.094	126.35	0.085
16N43	SW 16/12 AVE	SWAREA010_3	80.31	28.232	31.000	-0.0000	329	134.62	0.091	126.45	0.085
16N44	SW 16/12 AVE	PROSWA010_3	80.31	28.232	31.000	0.0002	320	213.14	0.236	157.72	0.094
16N44	SW 16/12 AVE	SWAREA010_3	80.37	28.232	31.000	-0.0002	320	159.04	0.164	134.62	0.091

Southwest Corridor Nodal Comparison of Maxim re & Post Mitigation Stages for 10-yr, 3-day Design Storm Event

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
16N45	SW 16/12 AVE	PROSWA010_3	80.20	28.232	31.000	-0.0006	344	213.20	0.749	213.14	0.236
16N45	SW 16/12 AVE	SWAREA010_3	80.38	28.232	31.000	-0.0002	344	178.97	0.450	159.04	0.164
16N46	SW 16/12 AVE	PROSWA010_3	80.35	28.232	31.000	-0.0004	548	214.68	0.137	213.20	0.749
16N46	SW 16/12 AVE	SWAREA010_3	80.36	28.232	31.000	-0.0002	548	130.76	0.097	178.97	0.450
16N47	SW 16/12 AVE	PROSWA010_3	80.38	28.232	31.000	0.0004	601	213.20	0.738	214.68	0.137
16N47	SW 16/12 AVE	SWAREA010_3	80.38	28.232	31.000	-0.0004	601	84.83	0.275	130.76	0.097
16N48	SW 16/12 AVE	PROSWA010_3	80.54	28.231	31.000	-0.0003	2281	214.68	1.829	0.00	1.539
16N48	SW 16/12 AVE	SWAREA010_3	80.54	28.231	31.000	-0.0002	2281	62.93	1.693	0.00	1.539
16N49	SW 16/12 AVE	PROSWA010_3	80.52	28.231	31.000	0.0002	2330	74.38	0.695	214.68	1.397
16N49	SW 16/12 AVE	SWAREA010_3	80.51	28.231	31.000	-0.0002	2330	74.34	0.695	74.48	0.690
16N50	SW 16/12 AVE	PROSWA010_3	80.55	28.231	31.000	-0.0005	2191	61.99	1.090	62.15	0.989
16N50	SW 16/12 AVE	SWAREA010_3	80.55	28.231	31.000	-0.0005	2191	61.99	1.090	62.15	0.989
16N51	SW 16/12 AVE	PROSWA010_3	80.56	28.231	31.000	0.0008	1625	61.95	1.162	61.99	1.090
16N51	SW 16/12 AVE	SWAREA010_3	80.58	28.231	31.000	0.0008	1625	61.95	1.162	61.99	1.090
16N52	SW 16/12 AVE	PROSWA010_3	80.95	28.231	31.000	0.0005	2695	62.53	2.201	62.61	2.106
16N52	SW 16/12 AVE	SWAREA010_3	80.95	28.231	31.000	0.0006	2695	62.53	2.201	62.61	2.106
16N53	SW 16/12 AVE	PROSWA010_3	80.89	28.231	31.000	-1.3000	3315	0.00	0.000	215.18	0.091
16N53	SW 16/12 AVE	SWAREA010_3	80.88	28.231	31.000	-1.3000	3315	0.00	0.000	84.77	0.094
26@~LEMKIN CK	SW 26 AVE	PROSWA010_3	60.00	18.500	18.000	0.0000	0	114.87	200.726	0.00	0.000
26@~LEMKIN CK	SW 26 AVE	SWAREA010_3	60.00	18.500	18.000	0.0000	4454	73.88	164.163	0.00	0.000
26N01	SW 26 AVE	PROSWA010_3	0.00	13.500	18.000	0.0000	17550	0.00	0.000	0.00	0.000
26N01	SW 26 AVE	SWAREA010_3	63.37	18.500	18.000	0.0009	21727	86.77	208.958	73.88	164.163
26N02	SW 26 AVE	PROSWA010_3	0.00	13.500	18.000	0.0000	37933	0.00	0.000	0.00	0.000
26N02	SW 26 AVE	SWAREA010_3	63.37	18.501	18.000	-0.0005	37969	73.88	262.632	86.77	208.958
26N03	SW 26 AVE	PROSWA010_3	0.00	13.500	18.000	0.0000	38478	0.00	0.000	0.00	0.000
26N03	SW 26 AVE	SWAREA010_3	63.37	18.501	18.000	-0.0005	38712	93.09	224.386	73.88	262.632
26N04	SW 26 AVE	PROSWA010_3	0.00	13.500	18.000	0.0000	30755	0.00	0.000	0.00	0.000
26N04	SW 26 AVE	SWAREA010_3	63.37	18.501	18.000	-0.0008	30827	73.88	241.582	93.09	224.386
26N05	SW 26 AVE	PROSWA010_3	0.00	13.500	18.000	0.0000	30875	0.00	0.000	0.00	0.000
26N05	SW 26 AVE	SWAREA010_3	63.37	18.501	18.000	0.0009	31603	93.09	226.929	73.88	241.582

Southwest Corridor Nodal Comparison of Maximum & Post Mitigation Stages for 10-yr, 3-day Design Storm Event

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
26N06	SW 26 AVE	PROSWA010_3	0.00	13.500	18.000	0.0000	31124	0.00	0.000	0.00	0.000
26N06	SW 26 AVE	SWAREA010_3	63.37	18.502	18.000	-0.0010	34141	73.88	323.135	93.09	226.929
26N07	SW 26 AVE	PROSWA010_3	0.00	13.500	18.000	0.0000	10614	0.00	0.000	0.00	0.000
26N07	SW 26 AVE	SWAREA010_3	63.37	18.502	18.000	0.0008	40822	92.63	160.327	73.88	323.135
26N08	SW 26 AVE	PROSWA010_3	67.80	17.777	18.000	0.0004	96602	68.89	272.132	60.56	250.000
26N08	SW 26 AVE	SWAREA010_3	63.37	18.502	18.000	0.0002	127319	103.92	114.220	92.63	160.327
26N09	SW 26 AVE	PROSWA010_3	67.80	17.777	18.000	0.0007	9065	62.27	65.582	62.45	63.721
26N09	SW 26 AVE	SWAREA010_3	63.22	18.502	18.000	0.0002	9308	62.84	52.916	62.84	52.915
26N10	SW 26 AVE	PROSWA010_3	67.64	17.800	18.000	0.0002	13209	62.20	68.286	62.27	65.582
26N10	SW 26 AVE	SWAREA010_3	62.85	18.575	18.000	0.0000	13973	62.83	52.917	62.84	52.916
26N11	SW 26 AVE	PROSWA010_3	67.60	17.804	18.000	0.0000	32335	62.14	74.173	62.20	68.286
26N11	SW 26 AVE	SWAREA010_3	62.84	18.583	18.000	0.0000	35286	62.80	52.926	62.83	52.917
26N12	SW 26 AVE	PROSWA010_3	67.44	17.824	18.000	0.0000	31947	62.13	78.519	62.14	74.173
26N12	SW 26 AVE	SWAREA010_3	62.83	18.617	18.000	0.0000	35853	62.76	69.297	62.80	69.276
26N13	SW 26 AVE	PROSWA010_3	67.05	17.868	18.000	0.0000	48336	62.05	85.962	62.13	78.519
26N13	SW 26 AVE	SWAREA010_3	62.80	18.736	18.000	0.0000	52534	62.66	69.392	62.76	69.297
26N14	SW 26 AVE	PROSWA010_3	67.02	17.871	18.000	0.0000	54197	61.93	94.731	62.05	85.962
26N14	SW 26 AVE	SWAREA010_3	62.80	18.741	18.000	-0.0000	57749	62.56	69.609	62.66	69.392
26N15	SW 26 AVE	PROSWA010_3	66.70	17.899	18.000	-0.0003	18710	61.90	97.464	61.93	94.731
26N15	SW 26 AVE	SWAREA010_3	62.74	18.826	18.000	-0.0002	19772	62.50	69.726	62.56	69.609
26N16	SW 26 AVE	PROSWA010_3	66.70	17.900	18.000	0.0004	32284	61.79	101.826	61.90	96.989
26N16	SW 26 AVE	SWAREA010_3	62.74	18.827	18.000	0.0002	34152	62.41	75.159	62.50	74.884
26N17	SW 26 AVE	PROSWA010_3	66.69	17.901	18.000	-0.0005	29470	62.10	114.562	62.19	110.419
26N17	SW 26 AVE	SWAREA010_3	62.74	18.829	18.000	-0.0003	30298	62.38	115.580	62.46	115.315
26N18	SW 26 AVE	PROSWA010_3	66.69	17.901	18.000	0.0004	15378	62.05	116.732	62.10	114.562
26N18	SW 26 AVE	SWAREA010_3	62.74	18.830	18.000	0.0003	15968	62.34	115.745	62.38	115.580
26N19	SW 26 AVE	PROSWA010_3	66.68	17.902	18.000	0.0002	5646	61.93	87.192	61.94	86.417
26N19	SW 26 AVE	SWAREA010_3	62.73	18.831	18.000	0.0003	6031	62.25	85.175	62.27	85.098
26N20	SW 26 AVE	PROSWA010_3	66.22	17.968	18.000	0.0001	4625	61.91	87.644	61.93	87.192
26N20	SW 26 AVE	SWAREA010_3	62.66	18.913	18.000	-0.0001	4930	62.23	85.237	62.25	85.175

Southwest Corridor Nodal Comparison of Maximum Pre & Post Mitigation Stages for 10-yr, 3-day Design Storm Event

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
26N21	SW 26 AVE	PROSWA010_3	65.71	18.142	18.000	0.0001	6156	61.90	87.632	61.91	87.644
26N21	SW 26 AVE	SWAREA010_3	62.45	19.511	18.000	-0.0000	7420	62.18	85.347	62.23	85.237
26N22	SW 26 AVE	PROSWA010_3	61.88	18.379	18.000	0.0001	11992	61.81	87.649	61.90	87.632
26N22	SW 26 AVE	SWAREA010_3	62.43	19.605	18.000	0.0000	14488	62.06	85.619	62.18	85.347
26N23	SW 26 AVE	PROSWA010_3	61.87	18.599	18.000	0.0001	13570	61.73	87.710	61.81	87.649
26N23	SW 26 AVE	SWAREA010_3	62.41	19.668	18.000	0.0000	14987	61.92	86.009	62.06	85.619
26N24	SW 26 AVE	PROSWA010_3	61.84	18.871	19.000	0.0001	11723	61.65	87.788	61.73	87.710
26N24	SW 26 AVE	SWAREA010_3	62.38	19.748	19.000	0.0000	13226	61.79	86.454	61.92	86.009
26N25	SW 26 AVE	PROSWA010_3	61.78	19.224	19.000	0.0001	13314	61.55	87.902	61.65	87.788
26N25	SW 26 AVE	SWAREA010_3	62.33	19.866	19.000	0.0000	14388	61.51	87.106	61.79	86.454
26N26	SW 26 AVE	PROSWA010_3	61.68	19.842	21.000	-0.0001	10486	61.46	87.993	61.55	87.902
26N26	SW 26 AVE	SWAREA010_3	62.18	20.194	21.000	0.0000	11103	61.43	87.523	61.51	87.106
26N27	SW 26 AVE	PROSWA010_3	61.56	20.689	22.000	-0.0001	12506	61.38	88.066	61.46	87.993
26N27	SW 26 AVE	SWAREA010_3	61.88	20.806	22.000	-0.0001	12821	61.36	87.744	61.43	87.523
26N28	SW 26 AVE	PROSWA010_3	61.43	21.725	22.000	0.0037	7866	61.33	88.085	61.38	88.066
26N28	SW 26 AVE	SWAREA010_3	61.50	21.745	22.000	0.0037	7936	61.32	87.786	61.36	87.744
32@~LEMKIN CK	SW 32 AVE	PROSWA010_3	60.00	18.500	18.000	0.0000	18604	65.50	55.463	0.00	0.000
32@~LEMKIN CK	SW 32 AVE	SWAREA010_3	60.00	18.500	18.000	0.0000	18604	93.58	43.523	0.00	0.000
32N01	SW 32 AVE	PROSWA010_3	65.50	18.500	18.000	-0.0002	30878	65.42	52.095	65.50	55.463
32N01	SW 32 AVE	SWAREA010_3	67.66	18.500	18.000	-0.0001	30878	92.63	41.421	93.58	43.523
32N02	SW 32 AVE	PROSWA010_3	65.42	18.500	18.000	0.0003	11097	145.77	27.233	65.42	52.095
32N02	SW 32 AVE	SWAREA010_3	64.88	18.500	18.000	-0.0002	11097	136.85	28.114	92.63	41.421
32N03	SW 32 AVE	PROSWA010_3	65.50	18.539	18.000	0.0010	4439	71.82	53.345	145.77	27.233
32N03	SW 32 AVE	SWAREA010_3	64.88	18.519	18.000	0.0007	4439	79.95	37.343	136.85	28.114
32N04	SW 32 AVE	PROSWA010_3	65.42	18.539	18.000	-0.0003	19697	92.21	30.385	71.82	53.345
32N04	SW 32 AVE	SWAREA010_3	64.88	18.519	18.000	-0.0002	19697	136.74	27.852	79.95	37.343
32N05	SW 32 AVE	PROSWA010_3	65.50	18.540	18.000	0.0001	29005	64.97	63.763	65.50	70.318
32N05	SW 32 AVE	SWAREA010_3	64.88	18.519	18.000	-0.0000	29005	64.81	58.973	64.85	58.433
32N06	SW 32 AVE	PROSWA010_3	65.42	18.540	18.000	-0.0002	29387	75.80	69.066	64.97	63.763
32N06	SW 32 AVE	SWAREA010_3	64.88	18.520	18.000	0.0000	29387	64.78	58.947	64.81	58.973

Southwest Corridor Nodal Comparison of Maximum & Post Mitigation Stages for 10-yr, 3-day Design Storm Event

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
32N07	SW 32 AVE	PROSWA010_3	65.42	18.540	18.000	0.0001	29081	65.11	62.924	75.80	69.066
32N07	SW 32 AVE	SWAREA010_3	64.88	18.520	18.000	0.0000	29081	64.74	58.958	64.78	58.947
32N08	SW 32 AVE	PROSWA010_3	65.42	18.541	18.000	0.0001	33419	65.11	62.852	65.11	62.924
32N08	SW 32 AVE	SWAREA010_3	64.88	18.521	18.000	0.0000	33416	64.70	58.969	64.74	58.958
32N09	SW 32 AVE	PROSWA010_3	65.42	18.542	18.000	0.0000	25126	65.11	62.836	65.11	62.852
32N09	SW 32 AVE	SWAREA010_3	64.88	18.521	18.000	0.0000	25109	64.66	58.980	64.70	58.969
32N10	SW 32 AVE	PROSWA010_3	65.42	18.544	18.000	0.0000	18356	65.09	62.832	65.11	62.836
32N10	SW 32 AVE	SWAREA010_3	64.88	18.523	18.000	0.0000	18343	64.64	58.989	64.66	58.980
32N11	SW 32 AVE	PROSWA010_3	65.42	18.545	18.000	-0.0000	6654	65.07	62.831	65.09	62.832
32N11	SW 32 AVE	SWAREA010_3	64.87	18.525	18.000	0.0000	6652	64.63	58.992	64.64	58.989
32N12	SW 32 AVE	PROSWA010_3	65.12	20.303	18.000	0.0000	48705	63.34	63.322	65.07	62.831
32N12	SW 32 AVE	SWAREA010_3	64.65	20.074	18.000	0.0000	48473	63.37	59.951	64.63	58.992
32N13	SW 32 AVE	PROSWA010_3	65.11	20.311	18.000	-0.0001	56966	62.02	68.680	63.34	63.322
32N13	SW 32 AVE	SWAREA010_3	64.64	20.082	18.000	-0.0001	56269	62.35	66.795	63.37	59.951
32N14	SW 32 AVE	PROSWA010_3	65.10	20.315	18.000	0.0018	2367	65.21	124.059	62.02	68.680
32N14	SW 32 AVE	SWAREA010_3	64.64	20.085	18.000	-0.0014	2355	77.62	81.377	62.35	66.795
32N15	SW 32 AVE	PROSWA010_3	65.12	20.316	18.000	-0.0010	8719	63.88	129.915	65.21	124.059
32N15	SW 32 AVE	SWAREA010_3	64.64	20.086	18.000	-0.0009	8685	76.64	83.795	77.62	81.377
32N16	SW 32 AVE	PROSWA010_3	65.12	20.317	18.000	0.0011	10121	65.21	217.042	63.88	129.915
32N16	SW 32 AVE	SWAREA010_3	64.64	20.087	18.000	-0.0007	10114	77.62	113.091	76.64	83.795
32N17	SW 32 AVE	PROSWA010_3	65.12	20.317	18.000	-0.0005	21394	66.91	99.130	65.21	217.042
32N17	SW 32 AVE	SWAREA010_3	64.64	20.087	18.000	0.0004	21373	62.25	74.293	77.62	113.091
32N18	SW 32 AVE	PROSWA010_3	65.12	20.317	18.000	0.0002	30790	61.72	80.503	66.91	99.130
32N18	SW 32 AVE	SWAREA010_3	64.64	20.087	18.000	0.0002	30647	62.21	79.855	62.25	74.293
32N19	SW 32 AVE	PROSWA010_3	65.09	20.322	18.000	0.0001	8774	61.71	81.936	61.72	80.503
32N19	SW 32 AVE	SWAREA010_3	64.63	20.093	18.000	0.0000	8662	62.21	81.392	62.21	79.855
32N20	SW 32 AVE	PROSWA010_3	62.55	21.457	18.000	0.0002	6455	61.63	83.268	61.71	81.936
32N20	SW 32 AVE	SWAREA010_3	62.59	21.217	18.000	0.0000	6327	62.14	82.851	62.21	81.392
32N21	SW 32 AVE	PROSWA010_3	62.54	21.464	18.000	0.0001	16776	61.59	88.086	61.63	77.928
32N21	SW 32 AVE	SWAREA010_3	62.58	21.235	18.000	0.0000	16587	61.94	114.239	62.15	107.363

Southwest Corridor Nodal Comparison of Maxim re & Post Mitigation Stages for 10-yr, 3-day Design Storm Event

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
32N22	SW 32 AVE	PROSWA010_3	62.54	21.465	18.000	0.0001	17363	62.22	33.762	62.24	33.348
32N22	SW 32 AVE	SWAREA010_3	62.58	21.236	18.000	0.0000	17144	62.48	31.140	62.51	30.868
32N23	SW 32 AVE	PROSWA010_3	62.54	21.466	19.000	0.0001	17924	62.19	34.231	62.22	33.762
32N23	SW 32 AVE	SWAREA010_3	62.58	21.237	19.000	0.0000	17558	62.43	31.582	62.48	31.140
32N24	SW 32 AVE	PROSWA010_3	62.53	21.468	21.000	0.0001	18668	62.16	34.773	62.19	34.231
32N24	SW 32 AVE	SWAREA010_3	62.58	21.239	21.000	0.0000	18272	62.30	32.512	62.43	31.582
32N25	SW 32 AVE	PROSWA010_3	62.52	21.470	21.000	-0.0001	11448	62.14	35.137	62.16	34.773
32N25	SW 32 AVE	SWAREA010_3	62.57	21.241	21.000	0.0001	11212	62.18	34.294	62.30	32.512
32N26	SW 32 AVE	PROSWA010_3	62.52	21.471	22.000	0.0004	8035	62.13	35.410	62.14	35.137
32N26	SW 32 AVE	SWAREA010_3	62.57	21.242	22.000	0.0001	7799	62.15	36.168	62.18	34.294
32N27	SW 32 AVE	PROSWA010_3	62.30	21.550	22.000	0.0002	17169	62.07	35.979	62.13	35.410
32N27	SW 32 AVE	SWAREA010_3	62.37	21.376	22.000	0.0001	16770	62.14	36.430	62.15	36.168
32N28	SW 32 AVE	PROSWA010_3	62.29	21.558	22.000	0.0002	16061	62.00	36.755	62.07	35.979
32N28	SW 32 AVE	SWAREA010_3	62.36	21.384	22.000	0.0001	15715	62.12	36.715	62.14	36.430
32N29	SW 32 AVE	PROSWA010_3	62.28	21.567	23.000	-0.0002	11310	61.93	37.550	62.00	36.755
32N29	SW 32 AVE	SWAREA010_3	62.34	21.393	23.000	0.0001	11067	62.10	36.981	62.12	36.715
32N30	SW 32 AVE	PROSWA010_3	62.27	21.573	23.000	-0.0003	9302	61.84	38.513	61.93	37.550
32N30	SW 32 AVE	SWAREA010_3	62.32	21.401	23.000	-0.0001	9139	61.89	37.946	62.10	36.981
32N31	SW 32 AVE	PROSWA010_3	62.26	21.576	23.000	0.0003	10383	61.64	40.478	61.84	38.513
32N31	SW 32 AVE	SWAREA010_3	62.30	21.404	23.000	0.0001	10130	61.64	40.206	61.89	37.946
32N32	SW 32 AVE	PROSWA010_3	62.25	21.586	23.000	-0.0002	5842	61.36	43.036	61.64	40.478
32N32	SW 32 AVE	SWAREA010_3	62.22	21.416	23.000	0.0001	5681	61.36	43.112	61.64	40.206
7MH01	SW 7 AVE	PROSWA010_3	64.03	25.060	28.000	-0.0005	176	214.50	0.281	64.20	0.149
7MH01	SW 7 AVE	SWAREA010_3	63.19	25.605	28.000	-0.0001	196	65.10	0.740	65.10	0.755
7N01	SW 7 AVE	PROSWA010_3	72.00	18.429	16.000	0.0000	12448	96.23	51.190	96.21	51.323
7N01	SW 7 AVE	SWAREA010_3	67.33	18.469	16.000	-0.0000	12455	87.58	122.870	87.58	123.007
7N02	SW 7 AVE	PROSWA010_3	72.00	18.394	16.000	0.0000	59015	96.07	51.595	96.23	51.190
7N02	SW 7 AVE	SWAREA010_3	67.33	18.454	16.000	-0.0000	59106	87.54	122.256	87.58	122.870
7N03	SW 7 AVE	PROSWA010_3	67.83	17.807	16.000	0.0000	89942	62.59	135.722	73.65	125.522
7N03	SW 7 AVE	SWAREA010_3	67.32	18.460	16.000	0.0000	55574	83.53	74.809	83.59	75.226

Southwest Corridor Nodal Comparison of Maximum & Post Mitigation Stages for 10-yr, 3-day Design Storm Event

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
7N04	SW 7 AVE	PROSWA010_3	67.83	17.810	15.000	0.0000	23051	62.52	140.412	62.59	135.722
7N04	SW 7 AVE	SWAREA010_3	67.32	18.461	15.000	0.0000	23028	83.50	74.637	83.53	74.809
7N05	SW 7 AVE	PROSWA010_3	67.84	17.817	16.000	0.0000	28052	62.12	146.204	62.52	140.412
7N05	SW 7 AVE	SWAREA010_3	67.28	18.462	16.000	0.0000	27762	83.47	74.432	83.50	74.637
7N06	SW 7 AVE	PROSWA010_3	67.84	17.840	16.000	0.0000	36829	62.08	153.715	62.12	146.204
7N06	SW 7 AVE	SWAREA010_3	67.27	18.469	16.000	0.0000	36257	83.22	72.936	83.26	73.191
7N07	SW 7 AVE	PROSWA010_3	67.84	17.862	16.000	0.0000	25770	62.06	158.803	62.08	153.715
7N07	SW 7 AVE	SWAREA010_3	67.24	18.487	16.000	0.0000	25664	67.15	99.597	67.16	99.597
7N08	SW 7 AVE	PROSWA010_3	67.84	17.863	15.000	0.0000	24758	62.34	165.809	62.47	161.348
7N08	SW 7 AVE	SWAREA010_3	67.23	18.488	15.000	0.0000	25128	66.24	116.981	66.25	116.976
7N09	SW 7 AVE	PROSWA010_3	67.78	18.147	19.000	0.0001	18053	62.30	167.758	62.34	165.809
7N09	SW 7 AVE	SWAREA010_3	66.61	18.633	19.000	0.0001	18791	66.22	116.984	66.24	116.981
7N10	SW 7 AVE	PROSWA010_3	67.46	18.616	18.000	0.0003	20528	62.23	170.054	62.30	167.758
7N10	SW 7 AVE	SWAREA010_3	66.36	18.989	18.000	0.0004	20205	66.16	118.143	66.21	118.139
7N11	SW 7 AVE	PROSWA010_3	66.62	18.955	19.000	-0.0002	22207	63.17	155.887	63.43	154.892
7N11	SW 7 AVE	SWAREA010_3	66.29	19.260	19.000	0.0007	19960	66.10	102.429	66.18	102.424
7N12	SW 7 AVE	PROSWA010_3	66.35	19.384	19.000	0.0007	9934	65.97	132.444	66.01	132.416
7N12	SW 7 AVE	SWAREA010_3	66.89	19.479	19.000	0.0055	9691	68.19	95.058	68.25	94.974
7N13	SW 7 AVE	PROSWA010_3	66.34	19.475	19.000	0.0003	9098	66.16	130.620	66.19	130.608
7N13	SW 7 AVE	SWAREA010_3	66.96	19.561	19.000	0.0000	8880	68.12	94.921	68.15	94.933
7N14	SW 7 AVE	PROSWA010_3	66.26	20.064	20.000	0.0003	12753	66.08	130.644	66.16	130.620
7N14	SW 7 AVE	SWAREA010_3	67.37	20.369	20.000	0.0001	12081	68.04	94.906	68.12	94.921
7N15	SW 7 AVE	PROSWA010_3	66.22	20.446	19.000	0.0015	227	65.40	106.968	65.40	106.966
7N15	SW 7 AVE	SWAREA010_3	67.40	20.664	19.000	0.0011	10437	67.54	88.574	67.67	88.578
7N16	SW 7 AVE	PROSWA010_3	65.75	20.620	20.000	0.0110	4838	63.98	79.020	64.01	78.866
7N16	SW 7 AVE	SWAREA010_3	66.68	20.947	20.000	-1.1000	4430	66.41	38.848	66.08	37.755
7N17	SW 7 AVE	PROSWA010_3	65.63	20.662	20.000	-0.1000	4809	62.63	88.337	62.66	88.004
7N17	SW 7 AVE	SWAREA010_3	66.63	20.962	20.000	0.0003	4736	61.50	48.385	61.50	47.885
7N18	SW 7 AVE	PROSWA010_3	65.14	20.854	21.000	-0.1000	5957	62.56	88.768	62.63	88.337
7N18	SW 7 AVE	SWAREA010_3	65.96	21.266	21.000	-0.0007	6135	61.33	49.255	61.50	48.385

Southwest Corridor Nodal Comparison of Maxim re & Post Mitigation Stages for 10-yr, 3-day Design Storm Event

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
7N19	SW 7 AVE	PROSWA010_3	65.02	20.904	21.000	-0.4900	5960	62.44	89.200	62.56	88.768
7N19	SW 7 AVE	SWAREA010_3	65.94	21.273	21.000	0.0003	6182	61.31	50.424	61.33	49.255
7N20	SW 7 AVE	PROSWA010_3	64.64	21.113	21.000	-0.5000	3192	62.35	89.456	62.44	89.200
7N20	SW 7 AVE	SWAREA010_3	65.41	21.603	21.000	0.0001	3184	61.29	51.031	61.31	50.424
7N21	SW 7 AVE	PROSWA010_3	64.61	21.133	21.000	-0.0009	3162	62.30	89.719	62.35	89.456
7N21	SW 7 AVE	SWAREA010_3	65.41	21.607	21.000	-0.1000	3018	61.28	51.584	61.29	51.031
7N22	SW 7 AVE	PROSWA010_3	64.28	21.352	21.000	0.0006	2847	62.24	89.968	62.30	89.719
7N22	SW 7 AVE	SWAREA010_3	65.15	21.950	21.000	0.0000	2745	61.25	52.110	61.28	51.584
7N23	SW 7 AVE	PROSWA010_3	64.25	21.371	21.000	-0.0014	2826	62.19	90.223	62.24	89.968
7N23	SW 7 AVE	SWAREA010_3	65.14	21.958	21.000	-0.0000	2746	61.42	53.362	61.46	53.010
7N24	SW 7 AVE	PROSWA010_3	63.96	21.606	21.000	0.0008	7816	61.98	91.014	62.19	90.223
7N24	SW 7 AVE	SWAREA010_3	64.79	22.436	21.000	0.0000	7721	61.13	55.134	61.42	53.362
7N25	SW 7 AVE	PROSWA010_3	63.90	21.672	21.000	-0.0012	7642	62.15	96.714	62.28	96.065
7N25	SW 7 AVE	SWAREA010_3	64.74	22.467	21.000	0.0000	7315	61.17	63.583	61.22	61.588
7N26	SW 7 AVE	PROSWA010_3	63.68	21.938	21.000	0.0022	1253	62.12	96.830	62.15	96.714
7N26	SW 7 AVE	SWAREA010_3	64.17	22.748	21.000	0.0001	1253	61.17	63.931	61.17	63.583
7N27	SW 7 AVE	PROSWA010_3	63.67	21.948	22.000	0.0022	1255	62.10	96.947	62.12	96.830
7N27	SW 7 AVE	SWAREA010_3	64.16	22.753	22.000	-0.0001	1277	61.16	64.297	61.17	63.931
7N28	SW 7 AVE	PROSWA010_3	63.49	22.234	21.000	-0.1000	8008	60.20	97.822	62.10	96.947
7N28	SW 7 AVE	SWAREA010_3	63.37	23.527	21.000	0.0000	8001	61.11	66.823	61.16	64.297
7N29	SW 7 AVE	PROSWA010_3	63.45	22.319	23.000	-0.0006	7587	61.94	102.402	62.13	101.692
7N29	SW 7 AVE	SWAREA010_3	63.34	23.572	23.000	-0.0001	7434	61.11	74.965	61.14	72.843
7N30	SW 7 AVE	PROSWA010_3	63.27	22.810	22.000	0.0031	1631	62.62	124.679	62.64	124.601
7N30	SW 7 AVE	SWAREA010_3	63.19	23.934	22.000	-0.0004	1606	62.08	108.023	62.09	107.869
7N31	SW 7 AVE	PROSWA010_3	63.27	22.821	23.000	-0.0049	1608	62.76	63.925	62.78	63.869
7N31	SW 7 AVE	SWAREA010_3	63.18	23.946	23.000	0.0001	1531	62.19	58.563	62.21	58.455
7N32	SW 7 AVE	PROSWA010_3	63.05	23.547	23.000	0.0022	1011	62.75	63.962	62.76	63.925
7N32	SW 7 AVE	SWAREA010_3	62.80	24.539	23.000	0.0001	1011	62.17	58.640	62.19	58.563
7N33	SW 7 AVE	PROSWA010_3	63.05	23.551	23.000	0.0013	1011	62.73	64.002	62.75	63.962
7N33	SW 7 AVE	SWAREA010_3	62.79	24.544	23.000	-0.0001	1011	62.15	58.722	62.17	58.640

Southwest Corridor Nodal Comparison of Maximum Pre & Post Mitigation Stages for 10-yr, 3-day Design Storm Event

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
7N34	SW 7 AVE	PROSWA010_3	62.95	24.285	23.000	0.0029	2243	62.68	64.104	62.73	64.002
7N34	SW 7 AVE	SWAREA010_3	62.60	25.149	23.000	0.0001	2230	62.09	58.941	62.15	58.722
7N35	SW 7 AVE	PROSWA010_3	62.95	24.294	24.000	-0.0017	2243	62.63	64.228	62.68	64.104
7N35	SW 7 AVE	SWAREA010_3	62.60	25.159	24.000	0.0001	2205	62.05	59.218	62.09	58.941
7N36	SW 7 AVE	PROSWA010_3	63.01	24.511	24.000	0.0028	2017	0.00	51.643	63.86	35.545
7N36	SW 7 AVE	SWAREA010_3	62.59	25.274	24.000	0.0002	1896	65.03	30.357	65.73	33.079
7N37	SW 7 AVE	PROSWA010_3	63.01	24.514	25.000	-0.0035	2014	63.68	35.207	0.00	51.643
7N37	SW 7 AVE	SWAREA010_3	62.59	25.278	25.000	-0.1000	1789	64.99	30.149	65.03	30.357
7N38	SW 7 AVE	PROSWA010_3	63.04	24.769	25.000	-0.0016	754	63.52	60.625	63.68	35.207
7N38	SW 7 AVE	SWAREA010_3	62.58	25.377	25.000	0.0004	667	64.98	30.075	64.99	30.149
7N39	SW 7 AVE	PROSWA010_3	63.06	24.770	25.000	-0.0016	744	63.68	35.079	63.52	60.625
7N39	SW 7 AVE	SWAREA010_3	62.58	25.379	25.000	0.0004	665	64.96	30.005	64.98	30.075
7N40	SW 7 AVE	PROSWA010_3	63.10	25.018	25.000	-0.0057	814	63.61	35.092	63.68	35.079
7N40	SW 7 AVE	SWAREA010_3	62.55	25.506	25.000	0.0007	743	64.93	29.913	64.96	30.005
7N41	SW 7 AVE	PROSWA010_3	63.09	25.019	25.000	0.0071	810	63.58	34.872	63.61	35.092
7N41	SW 7 AVE	SWAREA010_3	62.55	25.508	25.000	0.0010	779	61.24	30.165	64.93	29.913
7N42	SW 7 AVE	PROSWA010_3	63.11	25.158	25.000	0.0076	1099	0.00	61.940	63.35	27.874
7N42	SW 7 AVE	SWAREA010_3	62.50	25.583	25.000	0.0009	1071	64.78	23.353	64.80	23.461
7N43	SW 7 AVE	PROSWA010_3	63.11	25.160	26.000	-0.0066	1143	63.26	27.796	0.00	61.940
7N43	SW 7 AVE	SWAREA010_3	62.50	25.584	26.000	0.0003	1072	64.76	23.248	64.78	23.353
7N44	SW 7 AVE	PROSWA010_3	63.12	25.302	25.000	0.0006	2024	63.14	27.994	63.26	27.796
7N44	SW 7 AVE	SWAREA010_3	62.47	25.618	25.000	0.0003	1742	64.74	23.091	64.76	23.248
7N45	SW 7 AVE	PROSWA010_3	63.12	25.304	26.000	0.0017	1943	63.16	28.822	63.14	27.994
7N45	SW 7 AVE	SWAREA010_3	62.46	25.632	26.000	-0.5000	1490	61.95	23.478	64.74	23.091
7N46	SW 7 AVE	PROSWA010_3	63.12	25.304	28.000	-0.0025	2487	0.01	9.634	0.00	23.900
7N46	SW 7 AVE	SWAREA010_3	62.46	25.632	28.000	0.0001	1848	65.76	5.675	65.76	6.136
7N47	SW 7 AVE	PROSWA010_3	63.12	25.304	27.000	0.0014	2366	0.01	4.703	0.01	9.634
7N47	SW 7 AVE	SWAREA010_3	62.46	25.631	27.000	0.0001	1887	65.76	5.211	65.76	5.675
7N48	SW 7 AVE	PROSWA010_3	63.12	25.304	26.000	0.0010	2057	0.00	12.488	0.01	4.703
7N48	SW 7 AVE	SWAREA010_3	62.47	25.631	26.000	0.0001	1753	65.76	4.779	65.76	5.211

Southwest Corridor Nodal Comparison of Maxim re & Post Mitigation Stages for 10-yr, 3-day Design Storm Event

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
7N49	SW 7 AVE	PROSWA010_3	63.12	25.304	28.000	-0.0010	1979	64.78	3.360	0.00	12.488
7N49	SW 7 AVE	SWAREA010_3	62.47	25.630	28.000	0.0001	1670	65.77	4.381	65.76	4.779
7N50	SW 7 AVE	PROSWA010_3	63.12	25.304	28.000	0.0005	1614	64.76	3.006	64.78	3.360
7N50	SW 7 AVE	SWAREA010_3	62.47	25.630	28.000	0.0003	1756	65.77	3.963	65.77	4.381
7N51	SW 7 AVE	PROSWA010_3	63.12	25.304	28.000	0.0002	1417	64.74	2.717	64.76	3.006
7N51	SW 7 AVE	SWAREA010_3	62.47	25.629	28.000	0.0001	1562	65.77	3.616	65.77	3.963
7N52	SW 7 AVE	PROSWA010_3	63.13	25.304	28.000	-0.0002	837	64.73	2.549	64.74	2.717
7N52	SW 7 AVE	SWAREA010_3	62.48	25.627	28.000	-0.0002	922	65.77	3.414	65.77	3.616
7N53	SW 7 AVE	PROSWA010_3	63.13	25.303	28.000	0.0002	969	64.71	2.351	64.73	2.549
7N53	SW 7 AVE	SWAREA010_3	62.48	25.626	28.000	0.0002	1048	65.66	3.188	65.77	3.414
7N54	SW 7 AVE	PROSWA010_3	63.14	25.303	28.000	0.0002	2725	64.59	1.881	64.71	2.351
7N54	SW 7 AVE	SWAREA010_3	62.49	25.623	28.000	0.0001	3058	65.59	2.620	65.66	3.188
7N55	SW 7 AVE	PROSWA010_3	63.14	25.302	26.000	0.0001	2420	64.59	1.511	64.59	1.881
7N55	SW 7 AVE	SWAREA010_3	62.49	25.620	26.000	0.0000	2741	65.32	2.193	65.59	2.620
7N56	SW 7 AVE	PROSWA010_3	63.14	25.302	26.000	-0.0006	1710	64.58	1.232	64.59	1.511
7N56	SW 7 AVE	SWAREA010_3	62.49	25.620	26.000	-0.0004	1887	65.29	1.892	65.32	2.193
7N57	SW 7 AVE	PROSWA010_3	63.14	25.302	28.000	0.0007	1834	64.20	0.962	64.58	1.232
7N57	SW 7 AVE	SWAREA010_3	62.49	25.619	28.000	0.0004	1971	65.26	1.570	65.29	1.892
7N58	SW 7 AVE	PROSWA010_3	63.14	25.301	28.000	-0.0005	594	63.61	4.269	64.20	0.962
7N58	SW 7 AVE	SWAREA010_3	62.49	25.616	28.000	0.0001	621	65.25	1.466	65.26	1.570
7N59	SW 7 AVE	PROSWA010_3	63.14	25.302	28.000	0.0004	687	64.46	0.687	63.61	4.269
7N59	SW 7 AVE	SWAREA010_3	62.49	25.616	28.000	0.0001	715	65.23	1.346	65.25	1.466
7N60	SW 7 AVE	PROSWA010_3	63.15	25.300	28.000	0.0001	1447	64.28	0.460	64.46	0.687
7N60	SW 7 AVE	SWAREA010_3	62.98	25.612	28.000	0.0001	1541	65.18	1.107	65.23	1.346
7N61	SW 7 AVE	PROSWA010_3	63.15	25.299	28.000	0.0001	1376	0.00	0.308	64.28	0.460
7N61	SW 7 AVE	SWAREA010_3	62.98	25.612	28.000	0.0001	1467	65.13	0.890	65.18	1.107
7N62	SW 7 AVE	PROSWA010_3	63.15	25.297	28.000	0.0003	462	64.20	0.204	0.00	0.308
7N62	SW 7 AVE	SWAREA010_3	63.03	25.611	28.000	-0.0002	530	65.11	0.821	65.13	0.890
7N63	SW 7 AVE	PROSWA010_3	63.15	25.296	28.000	0.0002	451	64.20	0.149	64.20	0.204
7N63	SW 7 AVE	SWAREA010_3	63.05	25.610	28.000	0.0001	526	65.10	0.755	65.11	0.821

Southwest Corridor Nodal Comparison of Maximum Pre & Post Mitigation Stages for 10-yr, 3-day Design Storm Event

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
7N64	SW 7 AVE	PROSWA010_3	64.03	25.060	28.000	0.0001	1805	64.20	0.095	214.50	0.281
7N64	SW 7 AVE	SWAREA010_3	63.20	25.605	28.000	0.0001	2400	65.10	0.557	65.10	0.740
7N65	SW 7 AVE	PROSWA010_3	64.03	25.060	28.000	0.0001	1838	64.20	0.045	64.20	0.095
7N65	SW 7 AVE	SWAREA010_3	63.20	25.605	28.000	0.0001	2441	65.09	0.376	65.10	0.557
7N66	SW 7 AVE	PROSWA010_3	64.03	25.060	28.000	0.0001	1680	0.00	0.000	64.20	0.045
7N66	SW 7 AVE	SWAREA010_3	63.21	25.604	28.000	0.0001	2621	65.02	0.188	65.09	0.376
7N67	SW 7 AVE	PROSWA010_3	0.00	25.100	29.000	0.0000	136	0.00	0.000	0.00	0.000
7N67	SW 7 AVE	SWAREA010_3	63.22	25.604	29.000	0.0000	1986	64.98	0.122	65.02	0.188
7N68	SW 7 AVE	PROSWA010_3	0.00	25.100	28.000	0.0000	122	0.00	0.000	0.00	0.000
7N68	SW 7 AVE	SWAREA010_3	63.24	25.599	28.000	0.0000	1322	64.93	0.081	64.98	0.122
7N69	SW 7 AVE	PROSWA010_3	0.00	25.300	28.000	0.0000	132	0.00	0.000	0.00	0.000
7N69	SW 7 AVE	SWAREA010_3	63.27	25.593	28.000	0.0000	1300	64.23	0.045	64.93	0.081
7N70	SW 7 AVE	PROSWA010_3	0.00	25.300	28.000	0.0000	121	0.00	0.000	0.00	0.000
7N70	SW 7 AVE	SWAREA010_3	63.72	25.567	28.000	0.0000	640	64.23	0.030	64.23	0.045
7N71	SW 7 AVE	PROSWA010_3	0.00	25.300	28.000	0.0000	115	0.00	0.000	0.00	0.000
7N71	SW 7 AVE	SWAREA010_3	63.72	25.567	28.000	0.0000	629	64.23	0.016	64.23	0.030
7N72	SW 7 AVE	PROSWA010_3	0.00	25.300	28.000	0.0000	115	0.00	0.000	0.00	0.000
7N72	SW 7 AVE	SWAREA010_3	63.72	25.567	28.000	0.0000	677	0.00	0.000	64.23	0.016
7N73	SW 7 AVE	PROSWA010_3	0.00	26.000	28.000	0.0000	115	0.00	0.000	0.00	0.000
7N73	SW 7 AVE	SWAREA010_3	0.00	26.000	28.000	0.0000	115	0.00	0.000	0.00	0.000
7N74	SW 7 AVE	PROSWA010_3	0.00	26.400	29.000	0.0000	115	0.00	0.000	0.00	0.000
7N74	SW 7 AVE	SWAREA010_3	0.00	26.400	29.000	0.0000	115	0.00	0.000	0.00	0.000
7N75	SW 7 AVE	PROSWA010_3	0.00	26.700	30.000	0.0000	115	0.00	0.000	0.00	0.000
7N75	SW 7 AVE	SWAREA010_3	0.00	26.700	30.000	0.0000	115	0.00	0.000	0.00	0.000
7N76	SW 7 AVE	PROSWA010_3	0.00	26.800	29.500	0.0000	117	0.00	0.000	0.00	0.000
7N76	SW 7 AVE	SWAREA010_3	0.00	26.800	29.500	0.0000	117	0.00	0.000	0.00	0.000
CN001	SW 7 AVE	PROSWA010_3	0.00	17.200	21.000	*********	113	0.00	0.000	0.00	0.000
CN001	SW 7 AVE	SWAREA010_3	66.89	19.479	21.000	0.0000	2709	87.64	0.220	87.63	0.275
CN002	SW 7 AVE	PROSWA010_3	0.00	17.000	21.000	*********	113	0.00	0.000	0.00	0.000
CN002	SW 7 AVE	SWAREA010_3	66.89	19.479	21.000	-0.0000	1043	87.64	0.164	77.19	0.331

Southwest Corridor Nodal Comparison of Maximu re & Post Mitigation Stages for 10-yr, 3-day Design Storm Event

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
CN003	SW 7 AVE	PROSWA010_3	0.00	17.600	21.000	-0.0000	120	0.00	0.000	0.00	0.000
CN003	SW 7 AVE	SWAREA010_3	66.89	19.479	21.000	0.0000	1771	79.65	0.097	73.89	0.136
CN004	SW 7 AVE	PROSWA010_3	0.00	17.920	21.000	-0.4200	113	0.00	0.000	0.00	0.000
CN004	SW 7 AVE	SWAREA010_3	66.89	19.479	21.000	-0.4200	2758	73.89	0.022	67.15	0.065
CN006	SW 7 AVE	PROSWA010_3	0.00	17.330	21.000	-0.3300	113	0.00	0.000	0.00	0.000
CN006	SW 7 AVE	SWAREA010_3	69.19	19.313	21.000	-0.3300	427	72.61	1.992	72.63	1.996
CN007	SW 7 AVE	PROSWA010_3	0.00	18.340	21.000	-0.0900	261	0.00	0.000	0.00	0.000
CN007	SW 7 AVE	SWAREA010_3	70.65	19.433	21.000	0.0001	4516	72.26	1.959	72.49	1.978
CN008	SW 7 AVE	PROSWA010_3	0.00	18.300	21.000	*********	113	0.00	0.000	0.00	0.000
CN008	SW 7 AVE	SWAREA010_3	70.67	19.435	21.000	-0.0002	1995	72.19	1.954	72.26	1.959
CN009	SW 7 AVE	PROSWA010_3	0.00	18.510	21.500	-0.0100	160	0.00	0.000	0.00	0.000
CN009	SW 7 AVE	SWAREA010_3	71.11	19.491	21.500	-0.0100	918	72.13	1.949	72.16	1.951
CN010	SW 7 AVE	PROSWA010_3	0.00	19.800	22.000	0.0000	217	0.00	0.000	0.00	0.000
CN010	SW 7 AVE	SWAREA010_3	0.00	19.800	22.000	-0.0001	279	0.14	0.000	0.00	0.000
CN011	SW 7 AVE	PROSWA010_3	0.00	16.500	21.000	*********	113	0.00	0.000	0.00	0.000
CN011	SW 7 AVE	SWAREA010_3	66.74	19.146	21.000	-0.0001	2478	113.54	12.632	113.01	12.632
CN012	SW 7 AVE	PROSWA010_3	0.00	16.900	21.000	*********	113	0.00	0.000	0.00	0.000
CN012	SW 7 AVE	SWAREA010_3	67.09	19.285	21.000	-0.0003	2195	113.87	12.632	113.72	12.632
CN014	SW 7 AVE	PROSWA010_3	0.00	16.600	21.000	*********	113	0.00	0.000	0.00	0.000
CN014	SW 7 AVE	SWAREA010_3	68.02	19.509	21.000	-0.3000	1419	113.98	12.633	113.95	12.632
CN015	SW 7 AVE	PROSWA010_3	0.00	16.600	21.000	*********	113	0.00	0.000	0.00	0.000
CN015	SW 7 AVE	SWAREA010_3	72.15	20.619	21.000	-0.0400	905	37.48	20.909	117.23	13.388
CN016	SW 7 AVE	PROSWA010_3	0.00	18.000	20.000	0.0000	113	0.00	0.000	0.00	0.000
CN016	SW 7 AVE	SWAREA010_3	66.84	18.522	20.000	-0.0001	4450	88.84	0.081	0.00	0.738
EAGLE POINT SUB	SW 26 AVE	PROSWA010_3	72.70	18.280	22.000	0.0000	427608	60.25	48.472	73.30	0.702
EAGLE POINT SUB	SW 26 AVE	SWAREA010_3	69.23	18.569	22.000	0.0000	663543	60.25	48.472	75.85	2.477
GBC01	SW 16/12 AVE	PROSWA010_3	67.81	17.785	18.000	-0.0002	92061	61.81	272.599	73.59	261.915
GBC01	SW 16/12 AVE	SWAREA010_3	63.72	18.503	18.000	-0.0000	95271	95.44	104.798	95.44	106.981
GBC02	SW 16/12 AVE	PROSWA010_3	67.80	17.780	18.000	0.0001	165305	61.42	247.294	73.73	246.587
GBC02	SW 16/12 AVE	SWAREA010_3	63.47	18.502	18.000	0.0000	169281	95.44	98.320	95.31	103.051

Southwest Corridor Nodal Comparison of Maximum & Post Mitigation Stages for 10-yr, 3-day Design Storm Event

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
N001	SW 7 AVE	PROSWA010_3	0.00	17.000	21.000	0.0000	223	0.00	0.000	0.00	0.000
N001	SW 7 AVE	SWAREA010_3	66.88	19.479	21.000	-0.0000	3222	87.63	0.275	87.63	0.345
N002	SW 7 AVE	PROSWA010_3	0.00	17.000	21.000	0.0000	223	0.00	0.000	0.00	0.000
N002	SW 7 AVE	SWAREA010_3	66.89	19.479	21.000	-0.0000	1269	77.19	0.331	87.64	0.220
N003	SW 7 AVE	PROSWA010_3	193.28	17.005	21.000	0.0000	223	0.00	0.000	0.00	0.000
N003	SW 7 AVE	SWAREA010_3	66.89	19.479	21.000	0.0000	1946	73.89	0.136	87.64	0.164
N004	SW 7 AVE	PROSWA010_3	0.00	17.200	21.000	0.0000	218	0.00	0.000	0.00	0.000
N004	SW 7 AVE	SWAREA010_3	66.89	19.479	21.000	0.0000	3071	67.15	0.065	79.65	0.097
N005	SW 7 AVE	PROSWA010_3	66.23	19.392	21.000	-0.0011	288	61.03	8.539	0.00	10.379
N005	SW 7 AVE	SWAREA010_3	66.87	19.479	21.000	-0.0000	120	0.00	0.000	73.89	0.022
N006	SW 7 AVE	PROSWA010_3	0.00	17.400	21.000	0.0000	240	0.00	0.000	0.00	0.000
N006	SW 7 AVE	SWAREA010_3	69.11	19.308	21.000	0.0001	626	72.63	1.996	72.65	2.001
N007	SW 7 AVE	PROSWA010_3	0.00	18.000	21.000	0.0000	558	0.00	0.000	0.00	0.000
N007	SW 7 AVE	SWAREA010_3	70.21	19.387	21.000	-0.0001	2040	72.49	1.978	72.61	1.992
N008	SW 7 AVE	PROSWA010_3	0.00	18.000	21.000	0.0000	254	0.00	0.000	0.00	0.000
N008	SW 7 AVE	SWAREA010_3	70.75	19.445	21.000	0.0003	1158	72.16	1.951	72.19	1.954
N009	SW 7 AVE	PROSWA010_3	0.00	20.660	21.500	0.0000	148	0.00	0.000	0.00	0.000
N009	SW 7 AVE	SWAREA010_3	0.00	20.660	21.500	0.0000	148	0.00	0.000	0.00	0.000
N010	SW 7 AVE	PROSWA010_3	0.00	18.000	21.000	*********	113	0.00	0.000	0.00	0.000
N010	SW 7 AVE	SWAREA010_3	0.14	19.651	21.000	-1.4200	165	0.00	0.000	0.14	0.000
N011	SW 7 AVE	PROSWA010_3	0.00	15.520	18.500	0.0000	113	0.00	0.000	0.00	0.000
N011	SW 7 AVE	SWAREA010_3	66.68	19.121	18.500	0.0001	2418	112.84	12.946	111.23	12.948
N012	SW 7 AVE	PROSWA010_3	0.00	16.500	21.000	*********	113	0.00	0.000	0.00	0.000
N012	SW 7 AVE	SWAREA010_3	67.02	19.260	21.000	0.0002	1960	113.72	12.632	113.54	12.632
N013	SW 7 AVE	PROSWA010_3	0.00	16.040	21.000	*********	113	0.00	0.000	0.00	0.000
N013	SW 7 AVE	SWAREA010_3	67.53	19.429	21.000	0.0005	1448	113.95	12.632	113.87	12.632
N014	SW 7 AVE	PROSWA010_3	67.75	18.431	21.000	-0.0009	274	99.99	12.979	99.70	12.975
N014	SW 7 AVE	SWAREA010_3	72.15	20.617	21.000	0.0005	921	113.98	12.633	113.98	12.633
N015	SW 7 AVE	PROSWA010_3	0.00	16.760	21.000	*********	113	0.00	0.000	0.00	0.000
N015	SW 7 AVE	SWAREA010_3	117.88	22.209	21.000	-0.0081	117	117.22	13.388	37.48	20.909

Southwest Corridor Nodal Comparison of Maximum Pre & Post Mitigation Stages for 10-yr, 3-day Design Storm Event

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
N016	SW 7 AVE	PROSWA010_3	122.39	27.102	21.000	-0.0014	131	126.96	14.070	100.02	12.663
N016	SW 7 AVE	SWAREA010_3	117.35	27.092	21.000	0.0010	115	117.14	15.063	117.22	13.388
N017	SW 7 AVE	PROSWA010_3	0.00	17.500	20.000	0.0000	113	0.00	0.000	0.00	0.000
N017	SW 7 AVE	SWAREA010_3	66.69	18.608	20.000	0.0001	3150	0.00	0.738	0.30	0.340
N018	SW 7 AVE	PROSWA010_3	0.00	17.830	20.000	0.0000	113	0.00	0.000	0.00	0.000
N018	SW 7 AVE	SWAREA010_3	80.49	18.246	20.000	0.0000	253	88.84	0.079	88.84	0.081
N019	SW 7 AVE	PROSWA010_3	122.24	27.118	21.500	-0.0008	163	60.00	18.303	60.00	18.291
N019	SW 7 AVE	SWAREA010_3	117.29	27.109	21.500	-0.0003	163	60.00	18.168	60.00	18.156
N101	SW 7 AVE	PROSWA010_3	62.07	25.693	25.000	0.0018	1575753	60.50	266.798	61.88	151.270
N101	SW 7 AVE	SWAREA010_3	62.26	25.709	25.000	0.0018	1611723	60.50	266.798	61.86	149.430
N102	SW 7 AVE	PROSWA010_3	63.27	25.832	25.000	0.0004	1861976	60.50	242.844	60.18	114.098
N102	SW 7 AVE	SWAREA010_3	63.66	25.924	25.000	0.0002	2069028	60.50	242.844	66.92	86.370
N103	SW 7 AVE	PROSWA010_3	68.85	20.712	25.000	0.0001	2591402	60.25	352.766	73.81	6.006
N103	SW 7 AVE	SWAREA010_3	70.31	21.907	25.000	-0.0000	4596853	60.50	276.337	76.71	49.827
N104	SW 7 AVE	PROSWA010_3	66.63	20.505	25.000	-0.0001	2062260	60.50	198.619	60.37	81.863
N104	SW 7 AVE	SWAREA010_3	68.20	20.811	25.000	-0.0000	2463853	60.50	200.330	73.88	47.545
N105	SW 7 AVE	PROSWA010_3	62.70	19.104	22.000	-0.0002	840037	60.75	71.310	61.19	38.288
N105	SW 7 AVE	SWAREA010_3	64.84	19.294	22.000	-0.0001	1094897	60.75	71.310	61.06	24.147
N106	SW 7 AVE	PROSWA010_3	65.75	20.620	17.000	0.0003	186001	60.00	8.784	78.35	17.607
N106	SW 7 AVE	SWAREA010_3	66.68	20.947	17.000	0.0001	186001	60.00	8.784	87.85	11.594
N107	SW 7 AVE	PROSWA010_3	72.93	19.949	21.000	0.0000	699219	60.00	56.821	77.95	0.318
N107	SW 7 AVE	SWAREA010_3	73.06	19.956	21.000	0.0000	703313	60.00	56.821	95.39	0.317
N108	SW 7 AVE	PROSWA010_3	61.03	20.285	20.500	0.0000	228201	60.00	23.771	61.03	8.539
N108	SW 7 AVE	SWAREA010_3	72.13	20.607	20.500	0.0000	269959	60.00	23.771	72.08	0.565
N109	SW 7 AVE	PROSWA010_3	122.28	27.102	21.000	0.0000	133729	60.00	4.778	199.83	4.636
N109	SW 7 AVE	SWAREA010_3	117.40	27.092	21.000	0.0000	133729	60.00	4.778	200.00	3.341
N110	SW 7 AVE	PROSWA010_3	122.39	27.117	22.000	0.0001	275735	60.00	11.549	206.61	6.541
N110	SW 7 AVE	SWAREA010_3	117.46	27.109	22.000	0.0001	275735	60.00	11.549	202.05	6.198
N111	SW 7 AVE	PROSWA010_3	72.75	19.857	21.000	0.0000	28740	60.00	4.180	0.00	0.000
N111	SW 7 AVE	SWAREA010_3	72.75	19.857	21.000	0.0000	28740	60.00	4.180	0.00	0.000

Southwest Corridor Nodal Comparison of Maximum & Post Mitigation Stages for 10-yr, 3-day Design Storm Event

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
N112	SW 7 AVE	PROSWA010_3	205.43	22.599	22.000	0.0000	162724	60.00	9.758	220.00	0.176
N112	SW 7 AVE	SWAREA010_3	201.01	22.613	22.000	0.0001	162882	60.00	9.759	220.00	0.186
N113	SW 7 AVE	PROSWA010_3	68.66	17.681	21.000	0.0003	459568	60.50	62.173	60.84	45.203
N113	SW 7 AVE	SWAREA010_3	63.63	18.249	21.000	-0.0001	1363450	60.50	31.879	105.18	8.636
N114	SW 7 AVE	PROSWA010_3	84.60	17.961	17.000	0.0000	9100354	60.75	307.225	94.12	56.312
N114	SW 7 AVE	SWAREA010_3	80.53	18.243	17.000	0.0000	9771657	60.75	307.225	91.60	78.186
N115	SW 7 AVE	PROSWA010_3	81.75	16.259	17.000	0.0000	2418168	60.50	115.300	0.00	0.000
N115	SW 7 AVE	SWAREA010_3	99.17	17.445	17.000	0.0000	3667075	60.50	115.300	104.82	7.444
N116	SW 16/12 AVE	PROSWA010_3	77.47	28.240	30.000	0.0000	4723285	61.50	158.053	74.31	5.470
N116	SW 16/12 AVE	SWAREA010_3	77.47	28.240	30.000	0.0000	4723284	61.50	158.053	74.31	5.470
N116_TC	SW 16/12 AVE	PROSWA010_3	60.00	21.500	29.000	-11.5000	16	0.00	0.000	0.00	0.000
N116_TC	SW 16/12 AVE	SWAREA010_3	60.00	21.500	29.000	-11.5000	16	0.00	0.000	0.00	0.000
N117	SW 16/12 AVE	PROSWA010_3	84.74	28.229	29.000	0.0000	1840922	60.75	98.641	62.86	3.894
N117	SW 16/12 AVE	SWAREA010_3	84.74	28.229	29.000	0.0000	1840922	60.75	98.641	62.86	3.894
N118	SW 16/12 AVE	PROSWA010_3	62.74	25.964	28.000	-0.0010	2087235	60.75	307.308	62.90	141.742
N118	SW 16/12 AVE	SWAREA010_3	62.78	25.973	28.000	-0.0010	2106820	60.75	307.308	62.79	139.434
N119	SW 16/12 AVE	PROSWA010_3	68.17	22.009	24.000	0.0001	4912103	60.25	455.665	76.48	84.386
N119	SW 16/12 AVE	SWAREA010_3	69.02	22.484	24.000	-0.0000	6295841	60.75	255.926	78.26	57.579
N120	SW 16/12 AVE	PROSWA010_3	62.56	19.764	22.000	0.0000	1538297	60.25	142.935	62.56	30.717
N120	SW 16/12 AVE	SWAREA010_3	62.56	19.764	22.000	0.0000	1538297	60.25	142.935	62.56	30.717
N121	SW 16/12 AVE	PROSWA010_3	84.05	15.935	18.000	0.0000	5859729	61.75	201.765	87.69	14.745
N121	SW 16/12 AVE	SWAREA010_3	103.27	17.281	18.000	0.0000	8547923	61.75	201.765	144.74	30.922
N122	SW 26 AVE	PROSWA010_3	116.26	16.879	18.000	0.0000	5722543	61.50	126.796	0.00	0.000
N122	SW 26 AVE	SWAREA010_3	117.69	16.919	18.000	0.0000	5773773	61.75	130.386	0.00	0.000
N123	SW 26 AVE	PROSWA010_3	62.76	21.577	22.000	0.0001	2078263	60.25	311.081	61.05	110.300
N123	SW 26 AVE	SWAREA010_3	61.55	21.518	22.000	0.0001	1887721	60.25	311.082	61.55	111.851
N124	SW 32 AVE	PROSWA010_3	61.36	24.332	27.000	-0.0221	804833	60.25	303.120	61.35	131.119
N124	SW 32 AVE	SWAREA010_3	61.36	24.333	27.000	-0.0221	807633	60.25	303.129	61.35	130.893
N125	SW 32 AVE	PROSWA010_3	79.54	24.031	25.000	-0.0014	6370612	62.50	130.839	79.54	9.770
N125	SW 32 AVE	SWAREA010_3	79.54	24.031	25.000	-0.0014	6370612	62.50	130.839	79.54	9.770

Southwest Corridor Nodal Comparison of Maxim re & Post Mitigation Stages for 10-yr, 3-day Design Storm Event

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
N126	SW 32 AVE	PROSWA010_3	85.82	17.945	21.000	0.0000	1537714	60.75	326.809	146.15	23.104
N126	SW 32 AVE	SWAREA010_3	73.17	19.054	21.000	0.0000	1537715	60.75	326.808	83.01	27.523
N127	SW 32 AVE	PROSWA010_3	78.50	14.066	20.000	0.0000	2204934	60.25	85.056	0.00	0.000
N127	SW 32 AVE	SWAREA010_3	78.50	14.066	20.000	0.0000	2204934	60.25	85.056	0.00	0.000
N129	SW 16/12 AVE	PROSWA010_3	0.00	13.500	18.000	*********	113	0.00	0.000	0.00	0.000
N129	SW 16/12 AVE	SWAREA010_3	76.50	31690.625	18.000	*********	113	60.25	278.541	0.00	0.000
OUSLEY/P VLLG	SW 16/12 AVE	PROSWA010_3	79.02	16.812	18.000	0.0000	2322184	60.25	203.889	88.54	15.244
OUSLEY/P VLLG	SW 16/12 AVE	SWAREA010_3	92.42	17.714	18.000	0.0000	3496505	60.25	203.889	134.36	16.195
PRO_16N01B	SW 16/12 AVE	PROSWA010_3	67.83	17.800	18.000	-0.0001	83679	73.65	125.522	73.71	127.722
PRO_7N03B	SW 7 AVE	PROSWA010_3	71.92	18.394	18.000	0.0000	47251	2.48	31.771	2.48	30.427
PRO_7N15B	SW 7 AVE	PROSWA010_3	66.24	20.255	0.000	-14.3000	11816	65.96	124.402	66.04	124.367
RC_SW 7 AVE	SW 7 AVE	PROSWA010_3	60.00	18.500	19.000	0.0000	50	96.21	51.323	0.00	0.000
RC_SW 7 AVE	SW 7 AVE	SWAREA010_3	60.00	18.500	19.000	0.0000	50	87.58	123.007	0.00	0.000
RESERVOIR	SW 26 AVE	PROSWA010_3	102.32	17.462	18.000	0.0000	13200742	60.00	1025.118	114.87	200.726
SEMINOLE COVE	SW 7 AVE	PROSWA010_3	80.09	16.751	19.000	0.0000	1170210	60.00	139.246	84.25	5.190
SEMINOLE COVE	SW 7 AVE	SWAREA010_3	88.82	18.023	19.000	0.0000	1538680	60.00	139.247	108.80	10.235

OKEECHOBEE COUNTY
COMPREHENSIVE URBANIZED AREA
STORMWATER MASTER PLAN

SW CORRIDOR PRE AND POST STAGES FOR 25-YR 3-DAY DESIGN STORM EVENT RESULTS

Southwest Corridor Nodal Comparison of Maxim re & Post Mitigation Stages for 25-yr, 3-day Design Storm Event

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
16N01	SW 16/12 AVE	PROSWA025_3	68.65	18.200	17.000	0.0003	54505	61.38	294.385	61.37	281.861
16N01	SW 16/12 AVE	SWAREA025_3	65.00	18.505	17.000	0.0000	55115	103.27	139.358	103.27	139.935
16N02	SW 16/12 AVE	PROSWA025_3	68.66	18.214	17.000	0.0001	121477	61.41	182.733	71.07	158.542
16N02	SW 16/12 AVE	SWAREA025_3	67.94	18.512	17.000	0.0000	122908	70.32	127.623	89.23	129.052
16N03	SW 16/12 AVE	PROSWA025_3	68.72	18.653	19.000	0.0001	62695	63.27	182.525	63.46	177.180
16N03	SW 16/12 AVE	SWAREA025_3	70.04	18.778	19.000	0.0001	63561	70.09	144.159	70.15	144.164
16N04	SW 16/12 AVE	PROSWA025_3	68.72	20.513	19.000	0.0002	19199	61.86	186.587	63.39	184.080
16N04	SW 16/12 AVE	SWAREA025_3	70.09	20.042	19.000	0.0001	18946	70.01	148.227	70.10	148.222
16N05	SW 16/12 AVE	PROSWA025_3	68.71	20.694	18.000	0.0025	18697	61.86	190.275	68.60	190.064
16N05	SW 16/12 AVE	SWAREA025_3	70.08	20.204	18.000	0.0030	18608	69.95	148.482	70.02	148.471
16N06	SW 16/12 AVE	PROSWA025_3	68.66	21.275	21.000	-0.0002	19405	61.84	193.794	61.86	190.275
16N06	SW 16/12 AVE	SWAREA025_3	70.02	21.086	21.000	-0.0021	17405	69.84	148.503	69.95	148.482
16N07	SW 16/12 AVE	PROSWA025_3	68.63	21.406	20.000	-0.1000	20076	61.82	196.684	61.84	193.794
16N07	SW 16/12 AVE	SWAREA025_3	69.97	21.192	20.000	0.0006	18911	64.93	121.209	65.41	120.763
16N08	SW 16/12 AVE	PROSWA025_3	68.63	21.409	21.000	0.0008	10911	64.21	181.335	64.42	180.990
16N08	SW 16/12 AVE	SWAREA025_3	69.22	22.596	21.000	0.0072	10840	64.67	121.496	64.93	121.209
16N09	SW 16/12 AVE	PROSWA025_3	68.49	21.547	22.000	0.0001	36803	62.31	183.931	64.21	181.335
16N09	SW 16/12 AVE	SWAREA025_3	69.21	22.626	22.000	0.0001	37964	64.30	128.291	65.04	127.271
16N10	SW 16/12 AVE	PROSWA025_3	68.26	21.772	22.000	0.0001	30673	62.09	186.445	62.31	183.931
16N10	SW 16/12 AVE	SWAREA025_3	69.13	22.741	22.000	0.0002	32023	63.46	129.280	64.30	128.291
16N11	SW 16/12 AVE	PROSWA025_3	68.20	21.825	22.000	0.0001	8467	62.08	187.105	62.09	186.445
16N11	SW 16/12 AVE	SWAREA025_3	69.10	22.766	22.000	0.0036	8906	63.48	136.635	63.80	136.342
16N12	SW 16/12 AVE	PROSWA025_3	68.12	21.890	21.000	-0.0002	7707	62.15	180.887	62.17	180.345
16N12	SW 16/12 AVE	SWAREA025_3	69.07	22.792	21.000	0.0003	8264	63.11	138.426	63.28	138.114
16N13	SW 16/12 AVE	PROSWA025_3	68.06	21.937	22.000	0.0006	12372	62.33	169.950	62.38	169.183
16N13	SW 16/12 AVE	SWAREA025_3	69.04	22.810	22.000	0.0019	13523	62.87	143.128	63.04	142.578
16N14	SW 16/12 AVE	PROSWA025_3	67.62	22.377	22.000	0.0031	7586	62.51	159.445	62.53	159.195
16N14	SW 16/12 AVE	SWAREA025_3	68.59	22.981	22.000	0.0031	8322	62.79	148.358	62.85	148.081
16N15	SW 16/12 AVE	PROSWA025_3	64.88	22.905	22.000	0.0041	3691	62.50	178.012	62.51	177.888
16N15	SW 16/12 AVE	SWAREA025_3	66.17	23.416	22.000	0.0041	3951	62.44	170.889	62.48	170.730

Southwest Corridor Nodal Comparison of Maximu[illegible]e & Post Mitigation Stages for 25-yr, 3-day Design Storm Event

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
16N16	SW 16/12 AVE	PROSWA025_3	64.66	23.087	22.000	0.0005	7416	62.54	156.434	62.57	156.235
16N16	SW 16/12 AVE	SWAREA025_3	65.95	23.520	22.000	0.0006	7907	62.49	150.710	62.55	150.436
16N17	SW 16/12 AVE	PROSWA025_3	64.45	23.267	22.000	0.0003	8375	62.62	131.379	62.69	131.205
16N17	SW 16/12 AVE	SWAREA025_3	65.57	23.630	22.000	0.0003	8869	62.58	127.036	62.65	126.777
16N18	SW 16/12 AVE	PROSWA025_3	64.28	23.424	22.000	0.0002	11268	62.66	111.746	62.76	111.552
16N18	SW 16/12 AVE	SWAREA025_3	65.36	23.735	22.000	0.0002	11625	62.60	108.371	62.72	108.070
16N19	SW 16/12 AVE	PROSWA025_3	64.12	23.571	22.000	0.0009	7839	62.63	107.291	62.69	107.165
16N19	SW 16/12 AVE	SWAREA025_3	65.17	23.842	22.000	0.0008	8026	62.56	104.162	62.63	103.962
16N20	SW 16/12 AVE	PROSWA025_3	63.35	25.125	23.000	0.0009	5739	62.52	104.483	62.63	104.380
16N20	SW 16/12 AVE	SWAREA025_3	63.77	25.265	23.000	0.0009	5800	62.41	101.335	62.52	101.171
16N21	SW 16/12 AVE	PROSWA025_3	63.34	25.153	25.000	-0.0006	10005	62.93	70.835	63.10	70.770
16N21	SW 16/12 AVE	SWAREA025_3	63.75	25.288	25.000	-0.0006	10197	62.78	69.029	62.94	68.866
16N22	SW 16/12 AVE	PROSWA025_3	63.34	25.193	25.000	0.0086	4406	62.97	61.009	63.01	60.979
16N22	SW 16/12 AVE	SWAREA025_3	63.74	25.321	25.000	0.0086	4495	62.70	59.102	62.82	59.020
16N23	SW 16/12 AVE	PROSWA025_3	63.27	25.670	25.000	-0.0051	1573	62.87	56.165	62.93	56.151
16N23	SW 16/12 AVE	SWAREA025_3	63.52	25.757	25.000	-0.0051	1596	62.56	54.086	62.62	54.049
16N24	SW 16/12 AVE	PROSWA025_3	63.26	25.705	25.000	0.0005	4549	62.73	56.216	62.87	56.165
16N24	SW 16/12 AVE	SWAREA025_3	63.51	25.786	25.000	0.0005	4615	62.41	54.207	62.56	54.086
16N25	SW 16/12 AVE	PROSWA025_3	63.25	25.762	26.000	-0.0004	2960	62.66	56.236	62.73	56.195
16N25	SW 16/12 AVE	SWAREA025_3	63.49	25.834	26.000	-0.0005	2992	62.28	54.254	62.37	54.160
16N26	SW 16/12 AVE	PROSWA025_3	63.20	26.140	26.000	0.0051	2176	62.69	53.357	62.76	53.335
16N26	SW 16/12 AVE	SWAREA025_3	63.32	26.161	26.000	0.0051	2181	62.05	51.278	62.15	51.205
16N27	SW 16/12 AVE	PROSWA025_3	63.20	26.140	26.000	0.0003	7600	77.26	13.393	77.03	13.513
16N27	SW 16/12 AVE	SWAREA025_3	63.32	26.162	26.000	0.0003	7627	77.79	13.233	77.47	13.327
16N28	SW 16/12 AVE	PROSWA025_3	63.21	26.143	26.000	0.0003	5650	70.98	15.129	70.97	15.979
16N28	SW 16/12 AVE	SWAREA025_3	63.33	26.165	26.000	0.0004	5667	71.47	15.097	71.47	15.916
16N29	SW 16/12 AVE	PROSWA025_3	63.25	26.156	27.000	0.0003	2101	70.98	14.800	70.98	15.129
16N29	SW 16/12 AVE	SWAREA025_3	63.37	26.178	27.000	0.0004	2106	71.47	14.780	71.47	15.097
16N30	SW 16/12 AVE	PROSWA025_3	63.25	26.158	27.000	0.0003	2039	70.98	14.497	70.98	14.800
16N30	SW 16/12 AVE	SWAREA025_3	63.38	26.180	27.000	0.0004	2043	71.47	14.488	71.47	14.780

Southwest Corridor Nodal Comparison of Maximu :e & Post Mitigation Stages for 25-yr, 3-day Design Storm Event

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
16N31	SW 16/12 AVE	PROSWA025_3	63.28	26.170	27.000	0.0003	3391	70.97	14.045	70.98	14.497
16N31	SW 16/12 AVE	SWAREA025_3	63.42	26.192	27.000	0.0003	3403	71.47	14.052	71.47	14.488
16N32	SW 16/12 AVE	PROSWA025_3	63.31	26.178	26.000	0.0003	4311	72.33	13.655	70.97	14.045
16N32	SW 16/12 AVE	SWAREA025_3	63.44	26.200	26.000	0.0003	4332	72.38	13.656	71.47	14.052
16N33	SW 16/12 AVE	PROSWA025_3	63.46	26.231	27.000	0.0000	1389	72.30	13.655	72.33	13.655
16N33	SW 16/12 AVE	SWAREA025_3	63.62	26.251	27.000	0.0000	1396	72.38	13.656	72.38	13.656
16N34A	SW 16/12 AVE	PROSWA025_3	64.58	26.414	28.000	-0.5000	252	72.10	13.676	72.33	13.676
16N34A	SW 16/12 AVE	SWAREA025_3	64.61	26.431	28.000	-0.5000	252	72.04	13.674	72.38	13.677
16N34B	SW 16/12 AVE	PROSWA025_3	63.64	26.272	28.000	-0.1000	290	72.33	13.657	72.30	13.655
16N34B	SW 16/12 AVE	SWAREA025_3	63.83	26.292	28.000	-0.1000	290	72.38	13.658	72.38	13.656
16N35	SW 16/12 AVE	PROSWA025_3	72.14	27.125	28.000	-0.6000	225	72.30	13.674	72.10	13.676
16N35	SW 16/12 AVE	SWAREA025_3	72.31	27.125	28.000	-0.6000	225	72.25	13.674	72.04	13.674
16N36	SW 16/12 AVE	PROSWA025_3	72.24	27.282	30.000	0.0002	1250	72.29	13.674	72.30	13.674
16N36	SW 16/12 AVE	SWAREA025_3	72.31	27.282	30.000	0.0002	1250	72.24	13.674	72.25	13.674
16N37	SW 16/12 AVE	PROSWA025_3	72.26	27.339	30.000	0.0001	1414	72.28	13.674	72.29	13.674
16N37	SW 16/12 AVE	SWAREA025_3	72.30	27.339	30.000	0.0001	1414	72.24	13.674	72.24	13.674
16N38	SW 16/12 AVE	PROSWA025_3	72.26	27.505	30.000	0.0002	537	72.27	15.393	72.27	15.393
16N38	SW 16/12 AVE	SWAREA025_3	72.29	27.505	30.000	0.0002	537	72.24	15.393	72.24	15.393
16N39	SW 16/12 AVE	PROSWA025_3	72.27	28.034	30.000	0.0000	2671	72.24	34.032	72.27	34.032
16N39	SW 16/12 AVE	SWAREA025_3	72.27	28.034	30.000	0.0000	2671	72.23	34.032	72.26	34.032
16N40	SW 16/12 AVE	PROSWA025_3	72.26	28.287	30.000	0.0001	2836	72.20	34.032	72.24	34.032
16N40	SW 16/12 AVE	SWAREA025_3	72.25	28.287	30.000	0.0001	2836	72.19	34.032	72.23	34.032
16N41	SW 16/12 AVE	PROSWA025_3	72.27	28.288	30.000	0.0002	2589	173.74	5.789	173.73	5.796
16N41	SW 16/12 AVE	SWAREA025_3	72.27	28.288	30.000	0.0002	2589	173.68	5.789	173.73	5.796
16N42	SW 16/12 AVE	PROSWA025_3	76.14	28.552	31.000	-0.0010	1575	173.70	5.788	173.74	5.789
16N42	SW 16/12 AVE	SWAREA025_3	76.14	28.552	31.000	-0.0010	1575	173.67	5.788	173.68	5.789
16N43	SW 16/12 AVE	PROSWA025_3	80.02	28.587	31.000	-0.0001	421	102.10	0.302	102.21	0.302
16N43	SW 16/12 AVE	SWAREA025_3	80.01	28.587	31.000	-0.0000	421	101.92	0.302	102.10	0.302
16N44	SW 16/12 AVE	PROSWA025_3	80.05	28.588	31.000	-0.0002	365	200.20	0.349	102.10	0.302
16N44	SW 16/12 AVE	SWAREA025_3	80.09	28.588	31.000	-0.0002	365	102.29	0.302	101.92	0.302

Southwest Corridor Nodal Comparison of Maximu e & Post Mitigation Stages for 25-yr, 3-day Design Storm Event

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
16N45	SW 16/12 AVE	PROSWA025_3	80.09	28.588	31.000	0.0005	366	200.68	0.942	200.20	0.349
16N45	SW 16/12 AVE	SWAREA025_3	80.09	28.588	31.000	0.0002	366	200.61	0.727	107.42	0.300
16N46	SW 16/12 AVE	PROSWA025_3	80.09	28.588	31.000	-0.0003	606	105.95	0.300	200.68	0.942
16N46	SW 16/12 AVE	SWAREA025_3	80.09	28.588	31.000	-0.0002	606	102.61	0.301	200.61	0.727
16N47	SW 16/12 AVE	PROSWA025_3	80.19	28.589	31.000	-0.0004	639	200.68	0.748	105.95	0.300
16N47	SW 16/12 AVE	SWAREA025_3	80.20	28.589	31.000	-0.0004	639	82.94	0.514	102.61	0.301
16N48	SW 16/12 AVE	PROSWA025_3	80.29	28.589	31.000	-0.0002	2399	61.78	2.295	61.89	1.944
16N48	SW 16/12 AVE	SWAREA025_3	80.31	28.589	31.000	-0.0002	2399	61.78	2.295	61.89	1.944
16N49	SW 16/12 AVE	PROSWA025_3	80.29	28.589	31.000	0.0002	2454	71.49	0.889	200.20	1.519
16N49	SW 16/12 AVE	SWAREA025_3	80.27	28.589	31.000	-0.0002	2454	71.48	0.889	143.76	1.099
16N50	SW 16/12 AVE	PROSWA025_3	80.26	28.589	31.000	-0.0005	2345	61.48	1.274	61.57	1.139
16N50	SW 16/12 AVE	SWAREA025_3	80.29	28.589	31.000	-0.0005	2345	61.48	1.274	61.57	1.139
16N51	SW 16/12 AVE	PROSWA025_3	80.30	28.589	31.000	0.0008	1760	61.45	1.372	61.48	1.274
16N51	SW 16/12 AVE	SWAREA025_3	80.31	28.589	31.000	0.0008	1760	61.45	1.372	61.48	1.274
16N52	SW 16/12 AVE	PROSWA025_3	80.58	28.588	31.000	0.0005	2983	61.94	2.954	61.97	2.814
16N52	SW 16/12 AVE	SWAREA025_3	80.57	28.588	31.000	0.0006	2983	61.94	2.954	61.97	2.814
16N53	SW 16/12 AVE	PROSWA025_3	80.53	28.588	31.000	-1.3000	3611	0.00	0.000	201.94	0.143
16N53	SW 16/12 AVE	SWAREA025_3	80.54	28.588	31.000	-1.3000	3611	0.00	0.000	83.63	0.140
26@~LEMKIN CK	SW 26 AVE	PROSWA025_3	60.00	18.500	18.000	0.0000	0	105.04	284.104	0.00	0.000
26@~LEMKIN CK	SW 26 AVE	SWAREA025_3	60.00	18.500	18.000	0.0000	4454	105.98	178.511	0.00	0.000
26N01	SW 26 AVE	PROSWA025_3	0.00	13.500	18.000	0.0000	17550	0.00	0.000	0.00	0.000
26N01	SW 26 AVE	SWAREA025_3	64.86	18.501	18.000	0.0009	21727	88.63	227.775	105.98	178.511
26N02	SW 26 AVE	PROSWA025_3	0.00	13.500	18.000	0.0000	37933	0.00	0.000	0.00	0.000
26N02	SW 26 AVE	SWAREA025_3	64.86	18.501	18.000	-0.0006	37969	88.77	276.721	88.63	227.775
26N03	SW 26 AVE	PROSWA025_3	0.00	13.500	18.000	0.0000	38478	0.00	0.000	0.00	0.000
26N03	SW 26 AVE	SWAREA025_3	64.86	18.502	18.000	0.0006	38712	88.70	247.486	88.77	276.721
26N04	SW 26 AVE	PROSWA025_3	0.00	13.500	18.000	0.0000	30755	0.00	0.000	0.00	0.000
26N04	SW 26 AVE	SWAREA025_3	64.86	18.502	18.000	-0.0007	30827	88.70	253.840	88.70	247.486
26N05	SW 26 AVE	PROSWA025_3	0.00	13.500	18.000	0.0000	30875	0.00	0.000	0.00	0.000
26N05	SW 26 AVE	SWAREA025_3	64.86	18.502	18.000	-0.0010	31603	92.65	248.900	88.70	253.840

Southwest Corridor Nodal Comparison of Maximum Pre & Post Mitigation Stages for 25-yr, 3-day Design Storm Event

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
26N06	SW 26 AVE	PROSWA025_3	0.00	13.500	18.000	0.0000	31124	0.00	0.000	0.00	0.000
26N06	SW 26 AVE	SWAREA025_3	64.86	18.503	18.000	-0.0010	34141	92.43	404.619	92.65	248.900
26N07	SW 26 AVE	PROSWA025_3	0.00	13.500	18.000	0.0000	10614	0.00	0.000	0.00	0.000
26N07	SW 26 AVE	SWAREA025_3	64.86	18.503	18.000	0.0008	40822	92.35	197.562	92.43	404.619
26N08	SW 26 AVE	PROSWA025_3	68.63	18.194	18.000	0.0005	97972	61.41	273.242	59.32	250.000
26N08	SW 26 AVE	SWAREA025_3	64.86	18.504	18.000	0.0002	127324	97.85	182.436	92.35	197.562
26N09	SW 26 AVE	PROSWA025_3	68.63	18.194	18.000	0.0005	9241	62.15	66.999	62.20	65.137
26N09	SW 26 AVE	SWAREA025_3	64.84	18.504	18.000	0.0003	9308	63.42	65.329	63.42	65.328
26N10	SW 26 AVE	PROSWA025_3	68.11	18.253	18.000	0.0002	13656	62.00	69.778	62.15	66.999
26N10	SW 26 AVE	SWAREA025_3	63.46	18.615	18.000	0.0000	14012	63.41	65.331	63.42	65.329
26N11	SW 26 AVE	PROSWA025_3	68.06	18.261	18.000	0.0001	34077	61.91	76.259	62.00	69.778
26N11	SW 26 AVE	SWAREA025_3	63.45	18.627	18.000	-0.0000	35467	63.37	65.339	63.41	65.331
26N12	SW 26 AVE	PROSWA025_3	67.89	18.297	18.000	0.0001	34273	62.46	81.893	62.59	77.206
26N12	SW 26 AVE	SWAREA025_3	63.43	18.673	18.000	0.0000	36123	63.33	82.053	63.37	82.038
26N13	SW 26 AVE	PROSWA025_3	67.36	18.403	18.000	0.0000	50923	61.86	90.592	62.46	81.893
26N13	SW 26 AVE	SWAREA025_3	63.38	18.840	18.000	-0.0000	53036	63.19	82.115	63.33	82.053
26N14	SW 26 AVE	PROSWA025_3	67.34	18.408	18.000	0.0000	56376	61.71	101.025	61.86	90.592
26N14	SW 26 AVE	SWAREA025_3	63.38	18.846	18.000	-0.0000	58190	63.01	82.275	63.19	82.115
26N15	SW 26 AVE	PROSWA025_3	67.06	18.466	18.000	-0.0002	19334	61.66	104.367	61.71	101.025
26N15	SW 26 AVE	SWAREA025_3	63.30	18.980	18.000	-0.0002	19966	62.92	82.375	63.01	82.275
26N16	SW 26 AVE	PROSWA025_3	67.06	18.467	18.000	0.0003	33417	61.52	109.055	61.61	103.092
26N16	SW 26 AVE	SWAREA025_3	63.30	18.981	18.000	0.0003	34464	62.76	88.099	62.88	87.836
26N17	SW 26 AVE	PROSWA025_3	67.06	18.468	18.000	-0.0003	29997	62.28	127.527	62.57	123.089
26N17	SW 26 AVE	SWAREA025_3	63.30	18.982	18.000	-0.0004	30422	62.73	130.886	62.84	130.636
26N18	SW 26 AVE	PROSWA025_3	67.05	18.469	18.000	-0.0003	15802	62.08	130.007	62.28	127.527
26N18	SW 26 AVE	SWAREA025_3	63.30	18.984	18.000	0.0004	16024	62.67	131.047	62.73	130.886
26N19	SW 26 AVE	PROSWA025_3	67.05	18.470	18.000	0.0004	5882	61.69	92.506	61.73	91.535
26N19	SW 26 AVE	SWAREA025_3	63.29	18.985	18.000	0.0005	6094	62.70	91.927	62.74	91.868
26N20	SW 26 AVE	PROSWA025_3	66.76	18.542	18.000	0.0001	4770	61.66	93.109	61.69	92.506
26N20	SW 26 AVE	SWAREA025_3	63.24	19.072	18.000	-0.0001	4998	62.67	91.977	62.70	91.927

Southwest Corridor Nodal Comparison of Maximum Pre & Post Mitigation Stages for 25-yr, 3-day Design Storm Event

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
26N21	SW 26 AVE	PROSWA025_3	66.28	18.777	18.000	0.0001	6699	61.72	93.364	61.66	93.109
26N21	SW 26 AVE	SWAREA025_3	62.99	19.770	18.000	-0.0000	7575	62.57	92.066	62.67	91.977
26N22	SW 26 AVE	PROSWA025_3	65.99	18.913	18.000	0.0001	13113	61.75	93.648	61.72	93.364
26N22	SW 26 AVE	SWAREA025_3	62.97	19.857	18.000	0.0000	14934	62.40	92.297	62.57	92.066
26N23	SW 26 AVE	PROSWA025_3	64.85	19.014	18.000	0.0001	14154	61.75	93.894	61.75	93.648
26N23	SW 26 AVE	SWAREA025_3	62.95	19.917	18.000	0.0000	15302	62.18	92.633	62.40	92.297
26N24	SW 26 AVE	PROSWA025_3	64.74	19.184	19.000	0.0001	12455	61.74	94.056	61.75	93.894
26N24	SW 26 AVE	SWAREA025_3	62.92	19.988	19.000	0.0000	13556	61.99	93.027	62.18	92.633
26N25	SW 26 AVE	PROSWA025_3	64.55	19.430	19.000	0.0001	13830	61.70	94.183	61.74	94.056
26N25	SW 26 AVE	SWAREA025_3	62.87	20.092	19.000	0.0000	14681	61.77	93.535	61.99	93.027
26N26	SW 26 AVE	PROSWA025_3	62.35	19.973	21.000	-0.0001	10735	61.65	94.247	61.70	94.183
26N26	SW 26 AVE	SWAREA025_3	62.72	20.381	21.000	-0.0000	11410	61.64	93.875	61.77	93.535
26N27	SW 26 AVE	PROSWA025_3	61.78	20.810	22.000	-0.0001	12823	61.57	94.288	61.65	94.247
26N27	SW 26 AVE	SWAREA025_3	62.36	20.935	22.000	-0.0001	13161	61.55	94.062	61.64	93.875
26N28	SW 26 AVE	PROSWA025_3	61.63	21.832	22.000	0.0037	8037	61.53	94.299	61.57	94.288
26N28	SW 26 AVE	SWAREA025_3	61.70	21.847	22.000	0.0037	8102	61.52	94.082	61.55	94.062
32@~LEMKIN CK	SW 32 AVE	PROSWA025_3	60.00	18.500	18.000	0.0000	18604	66.77	58.219	0.00	0.000
32@~LEMKIN CK	SW 32 AVE	SWAREA025_3	60.00	18.500	18.000	0.0000	18604	74.01	47.638	0.00	0.000
32N01	SW 32 AVE	PROSWA025_3	66.77	18.500	18.000	-0.0002	30878	75.20	56.344	66.77	58.219
32N01	SW 32 AVE	SWAREA025_3	63.95	18.500	18.000	-0.0001	30878	74.00	47.210	74.01	47.638
32N02	SW 32 AVE	PROSWA025_3	66.77	18.500	18.000	0.0003	11097	126.55	34.824	75.20	56.344
32N02	SW 32 AVE	SWAREA025_3	65.68	18.500	18.000	-0.0002	11097	121.30	39.425	74.00	47.210
32N03	SW 32 AVE	PROSWA025_3	65.81	18.575	18.000	0.0007	4439	61.26	41.884	126.55	34.824
32N03	SW 32 AVE	SWAREA025_3	65.68	18.561	18.000	0.0001	4439	121.26	39.376	121.30	39.425
32N04	SW 32 AVE	PROSWA025_3	65.81	18.575	18.000	0.0002	19697	126.42	34.558	61.26	41.884
32N04	SW 32 AVE	SWAREA025_3	65.68	18.561	18.000	0.0000	19697	121.04	39.161	121.26	39.376
32N05	SW 32 AVE	PROSWA025_3	65.81	18.576	18.000	-0.0001	29005	65.69	68.377	65.76	68.374
32N05	SW 32 AVE	SWAREA025_3	65.68	18.561	18.000	0.0000	29005	65.57	66.270	73.09	66.333
32N06	SW 32 AVE	PROSWA025_3	65.81	18.577	18.000	0.0001	29387	65.63	68.383	65.69	68.377
32N06	SW 32 AVE	SWAREA025_3	65.68	18.562	18.000	-0.0000	29387	65.51	66.278	65.57	66.270

Southwest Corridor Nodal Comparison of Maxim re & Post Mitigation Stages for 25-yr, 3-day Design Storm Event

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
32N07	SW 32 AVE	PROSWA025_3	65.81	18.577	18.000	-0.0001	29081	65.55	68.393	65.63	68.383
32N07	SW 32 AVE	SWAREA025_3	65.68	18.562	18.000	0.0000	29081	65.45	66.290	65.51	66.278
32N08	SW 32 AVE	PROSWA025_3	65.81	18.577	18.000	0.0000	33423	65.47	68.408	65.55	68.393
32N08	SW 32 AVE	SWAREA025_3	65.68	18.563	18.000	0.0000	33421	65.37	66.309	65.45	66.290
32N09	SW 32 AVE	PROSWA025_3	65.81	18.578	18.000	0.0000	25157	65.40	68.423	65.47	68.408
32N09	SW 32 AVE	SWAREA025_3	65.67	18.564	18.000	0.0000	25145	65.31	66.328	65.37	66.309
32N10	SW 32 AVE	PROSWA025_3	65.80	18.581	18.000	0.0000	18381	65.35	68.436	65.40	68.423
32N10	SW 32 AVE	SWAREA025_3	65.67	18.566	18.000	0.0000	18371	65.27	66.344	65.31	66.328
32N11	SW 32 AVE	PROSWA025_3	65.80	18.583	18.000	0.0000	6657	65.33	68.442	65.35	68.436
32N11	SW 32 AVE	SWAREA025_3	65.67	18.568	18.000	0.0000	6655	65.26	66.350	65.27	66.344
32N12	SW 32 AVE	PROSWA025_3	65.39	20.669	18.000	0.0000	48896	64.43	68.964	65.33	68.442
32N12	SW 32 AVE	SWAREA025_3	65.30	20.528	18.000	0.0000	48841	64.35	66.993	65.26	66.350
32N13	SW 32 AVE	PROSWA025_3	65.38	20.676	18.000	-0.0001	57539	61.79	72.883	64.43	68.964
32N13	SW 32 AVE	SWAREA025_3	65.30	20.536	18.000	-0.0001	57376	61.86	72.237	64.35	66.993
32N14	SW 32 AVE	PROSWA025_3	65.38	20.681	18.000	0.0021	2387	66.77	146.748	61.79	72.883
32N14	SW 32 AVE	SWAREA025_3	65.30	20.540	18.000	0.0019	2379	74.01	130.935	61.86	72.237
32N15	SW 32 AVE	PROSWA025_3	65.38	20.682	18.000	-0.0010	8774	69.35	130.901	66.77	146.748
32N15	SW 32 AVE	SWAREA025_3	65.29	20.541	18.000	-0.0010	8753	74.07	121.796	74.01	130.935
32N16	SW 32 AVE	PROSWA025_3	65.38	20.682	18.000	0.0012	10133	67.37	235.629	69.35	130.901
32N16	SW 32 AVE	SWAREA025_3	65.29	20.541	18.000	0.0013	10129	73.95	217.588	74.07	121.796
32N17	SW 32 AVE	PROSWA025_3	65.38	20.682	18.000	-0.0005	21400	69.35	103.295	67.37	235.629
32N17	SW 32 AVE	SWAREA025_3	65.29	20.541	18.000	-0.0005	21400	74.07	95.069	73.95	217.588
32N18	SW 32 AVE	PROSWA025_3	65.38	20.683	18.000	0.0002	30859	61.27	85.802	69.35	103.295
32N18	SW 32 AVE	SWAREA025_3	65.29	20.542	18.000	0.0002	30856	61.54	88.794	74.07	95.069
32N19	SW 32 AVE	PROSWA025_3	65.37	20.688	18.000	0.0001	8881	61.26	87.412	61.27	85.802
32N19	SW 32 AVE	SWAREA025_3	65.29	20.547	18.000	0.0001	8872	61.54	90.767	61.54	88.794
32N20	SW 32 AVE	PROSWA025_3	63.81	21.932	18.000	0.0001	6512	61.16	88.935	61.26	87.412
32N20	SW 32 AVE	SWAREA025_3	63.36	21.753	18.000	0.0001	6495	61.43	92.925	61.54	90.767
32N21	SW 32 AVE	PROSWA025_3	63.79	21.937	18.000	0.0001	17142	61.07	95.806	61.16	83.595
32N21	SW 32 AVE	SWAREA025_3	63.31	21.765	18.000	0.0001	17015	61.31	127.887	61.45	116.168

Southwest Corridor Nodal Comparison of Maximum & Post Mitigation Stages for 25-yr, 3-day Design Storm Event

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
32N22	SW 32 AVE	PROSWA025_3	63.77	21.939	18.000	0.0001	17785	62.12	63.073	62.16	62.483
32N22	SW 32 AVE	SWAREA025_3	63.30	21.767	18.000	0.0001	17632	62.27	63.054	62.31	62.582
32N23	SW 32 AVE	PROSWA025_3	63.73	21.941	19.000	0.0001	18497	62.07	63.718	62.12	63.073
32N23	SW 32 AVE	SWAREA025_3	63.27	21.770	19.000	0.0001	18293	62.23	63.578	62.27	63.054
32N24	SW 32 AVE	PROSWA025_3	63.68	21.944	21.000	0.0001	19462	62.03	64.435	62.07	63.718
32N24	SW 32 AVE	SWAREA025_3	63.23	21.775	21.000	0.0001	19180	62.19	64.173	62.23	63.578
32N25	SW 32 AVE	PROSWA025_3	63.61	21.948	21.000	-0.0001	11941	62.00	64.896	62.03	64.435
32N25	SW 32 AVE	SWAREA025_3	63.19	21.780	21.000	0.0001	11767	62.16	64.564	62.19	64.173
32N26	SW 32 AVE	PROSWA025_3	63.58	21.950	22.000	0.0004	8562	61.98	65.238	62.00	64.896
32N26	SW 32 AVE	SWAREA025_3	63.17	21.783	22.000	-0.0001	8393	62.14	64.856	62.16	64.564
32N27	SW 32 AVE	PROSWA025_3	62.78	22.050	22.000	0.0002	18254	61.92	65.857	61.98	65.238
32N27	SW 32 AVE	SWAREA025_3	62.59	21.928	22.000	0.0001	17977	62.08	65.356	62.14	64.856
32N28	SW 32 AVE	PROSWA025_3	62.72	22.065	22.000	0.0002	17071	61.85	66.516	61.92	65.857
32N28	SW 32 AVE	SWAREA025_3	62.55	21.946	22.000	0.0001	16833	62.00	65.944	62.08	65.356
32N29	SW 32 AVE	PROSWA025_3	62.67	22.083	23.000	0.0002	12035	61.79	67.049	61.85	66.516
32N29	SW 32 AVE	SWAREA025_3	62.52	21.967	23.000	0.0001	11871	61.93	66.470	62.00	65.944
32N30	SW 32 AVE	PROSWA025_3	62.62	22.097	23.000	-0.0002	9796	61.73	67.551	61.79	67.049
32N30	SW 32 AVE	SWAREA025_3	62.49	21.983	23.000	-0.0001	9688	61.85	67.023	61.93	66.470
32N31	SW 32 AVE	PROSWA025_3	62.60	22.104	23.000	0.0002	11160	61.64	68.245	61.73	67.551
32N31	SW 32 AVE	SWAREA025_3	62.48	21.991	23.000	0.0001	10994	61.70	67.953	61.85	67.023
32N32	SW 32 AVE	PROSWA025_3	62.55	22.124	23.000	0.0003	6346	61.55	68.748	61.64	68.245
32N32	SW 32 AVE	SWAREA025_3	62.44	22.013	23.000	0.0001	6241	61.55	68.798	61.70	67.953
7MH01	SW 7 AVE	PROSWA025_3	63.03	25.952	28.000	-0.0003	199	67.04	0.934	67.04	0.953
7MH01	SW 7 AVE	SWAREA025_3	63.27	26.034	28.000	-0.0002	198	68.62	0.779	68.62	0.795
7N01	SW 7 AVE	PROSWA025_3	72.00	18.430	16.000	-0.0000	12448	93.44	57.381	93.44	57.514
7N01	SW 7 AVE	SWAREA025_3	72.00	18.487	16.000	0.0000	12459	90.55	168.920	90.56	169.057
7N02	SW 7 AVE	PROSWA025_3	72.01	18.395	16.000	0.0000	59017	93.49	57.836	93.44	57.381
7N02	SW 7 AVE	SWAREA025_3	72.00	18.481	16.000	-0.0000	59146	90.51	168.323	90.55	168.920
7N03	SW 7 AVE	PROSWA025_3	68.67	18.214	16.000	0.0001	91980	77.19	152.387	77.35	153.574
7N03	SW 7 AVE	SWAREA025_3	72.01	18.492	16.000	0.0000	55584	88.56	106.918	88.61	107.404

Southwest Corridor Nodal Comparison of Maximum Pre & Post Mitigation Stages for 25-yr, 3-day Design Storm Event

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
7N04	SW 7 AVE	PROSWA025_3	68.68	18.216	15.000	0.0001	23051	77.11	152.096	77.19	152.387
7N04	SW 7 AVE	SWAREA025_3	72.02	18.493	15.000	0.0000	23031	88.54	106.718	88.56	106.918
7N05	SW 7 AVE	PROSWA025_3	68.68	18.220	16.000	0.0001	28050	61.40	152.086	77.11	152.096
7N05	SW 7 AVE	SWAREA025_3	72.02	18.496	16.000	0.0000	27791	88.50	106.482	88.54	106.718
7N06	SW 7 AVE	PROSWA025_3	68.69	18.233	16.000	0.0000	36871	61.39	160.330	61.40	152.086
7N06	SW 7 AVE	SWAREA025_3	72.03	18.507	16.000	0.0000	36302	88.51	104.753	88.57	105.056
7N07	SW 7 AVE	PROSWA025_3	68.70	18.252	16.000	0.0000	25909	61.39	166.095	61.39	160.330
7N07	SW 7 AVE	SWAREA025_3	72.03	18.531	16.000	0.0000	25685	73.74	119.132	73.67	119.304
7N08	SW 7 AVE	PROSWA025_3	68.70	18.254	15.000	0.0000	25045	61.83	173.366	61.86	168.374
7N08	SW 7 AVE	SWAREA025_3	72.03	18.532	15.000	0.0000	25158	68.48	132.685	68.50	132.679
7N09	SW 7 AVE	PROSWA025_3	68.75	18.506	19.000	0.0001	18527	61.80	175.596	61.83	173.366
7N09	SW 7 AVE	SWAREA025_3	72.04	18.707	19.000	0.0001	18879	68.48	132.788	68.50	132.784
7N10	SW 7 AVE	PROSWA025_3	68.85	19.031	18.000	0.0003	21202	61.73	178.280	61.80	175.596
7N10	SW 7 AVE	SWAREA025_3	68.73	19.162	18.000	0.0006	20592	68.41	134.064	68.47	134.059
7N11	SW 7 AVE	PROSWA025_3	68.88	19.324	19.000	-0.0002	22804	62.52	170.864	62.57	169.499
7N11	SW 7 AVE	SWAREA025_3	68.65	19.470	19.000	0.0009	20530	68.41	118.430	68.49	118.426
7N12	SW 7 AVE	PROSWA025_3	68.54	19.845	19.000	0.0007	9967	68.04	146.087	68.08	146.058
7N12	SW 7 AVE	SWAREA025_3	69.36	19.768	19.000	0.0055	9798	69.91	110.660	69.94	110.671
7N13	SW 7 AVE	PROSWA025_3	68.51	19.920	19.000	-0.0002	9197	67.92	143.806	67.96	143.776
7N13	SW 7 AVE	SWAREA025_3	69.43	19.847	19.000	0.0000	8974	69.81	106.733	69.83	106.741
7N14	SW 7 AVE	PROSWA025_3	68.35	20.634	20.000	0.0002	13015	67.83	143.854	67.92	143.806
7N14	SW 7 AVE	SWAREA025_3	69.68	20.870	20.000	0.0001	12422	69.71	106.728	69.81	106.733
7N15	SW 7 AVE	PROSWA025_3	68.28	20.980	19.000	0.0015	227	66.59	118.699	66.59	118.697
7N15	SW 7 AVE	SWAREA025_3	69.67	21.117	19.000	0.0011	10945	69.54	100.413	69.62	100.407
7N16	SW 7 AVE	PROSWA025_3	67.49	21.141	20.000	0.0110	4957	64.22	78.826	64.29	78.667
7N16	SW 7 AVE	SWAREA025_3	69.01	21.414	20.000	-1.1000	4681	68.00	40.172	67.40	38.921
7N17	SW 7 AVE	PROSWA025_3	67.37	21.167	20.000	-0.1000	4927	61.89	90.311	61.95	89.767
7N17	SW 7 AVE	SWAREA025_3	68.97	21.424	20.000	0.0003	4891	60.99	47.100	61.00	46.484
7N18	SW 7 AVE	PROSWA025_3	66.67	21.346	21.000	-0.1000	6124	61.84	91.020	61.89	90.311
7N18	SW 7 AVE	SWAREA025_3	67.92	21.727	21.000	-0.0005	6206	60.91	48.042	60.99	47.100

Southwest Corridor Nodal Comparison of Maximum Pre & Post Mitigation Stages for 25-yr, 3-day Design Storm Event

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
7N19	SW 7 AVE	PROSWA025_3	66.55	21.378	21.000	-0.4900	6178	61.80	91.721	61.84	91.020
7N19	SW 7 AVE	SWAREA025_3	67.90	21.733	21.000	0.0003	6206	60.91	49.154	60.91	48.042
7N20	SW 7 AVE	PROSWA025_3	65.96	21.573	21.000	-0.5000	3269	61.77	92.114	61.80	91.721
7N20	SW 7 AVE	SWAREA025_3	67.05	22.059	21.000	0.0001	3221	60.91	49.814	60.91	49.154
7N21	SW 7 AVE	PROSWA025_3	65.93	21.587	21.000	-0.0009	3268	61.74	92.512	61.77	92.114
7N21	SW 7 AVE	SWAREA025_3	67.04	22.062	21.000	-0.1000	3132	60.86	50.440	60.91	49.814
7N22	SW 7 AVE	PROSWA025_3	65.45	21.793	21.000	0.0005	2909	61.71	92.886	61.74	92.512
7N22	SW 7 AVE	SWAREA025_3	66.62	22.402	21.000	0.0000	2878	60.83	51.077	60.86	50.440
7N23	SW 7 AVE	PROSWA025_3	65.42	21.807	21.000	-0.0014	2909	62.05	94.732	62.09	94.497
7N23	SW 7 AVE	SWAREA025_3	66.62	22.408	21.000	-0.0000	2878	61.66	54.019	61.69	53.695
7N24	SW 7 AVE	PROSWA025_3	65.02	22.052	21.000	0.0008	7970	61.92	95.462	62.05	94.732
7N24	SW 7 AVE	SWAREA025_3	66.21	22.944	21.000	-0.0000	7868	61.57	55.007	61.66	54.019
7N25	SW 7 AVE	PROSWA025_3	64.96	22.104	21.000	-0.0012	7925	61.93	102.464	62.08	101.802
7N25	SW 7 AVE	SWAREA025_3	66.19	22.968	21.000	-0.0000	7644	61.61	64.250	63.39	63.819
7N26	SW 7 AVE	PROSWA025_3	64.61	22.391	21.000	0.0022	1286	61.90	102.587	61.93	102.464
7N26	SW 7 AVE	SWAREA025_3	65.86	23.277	21.000	0.0001	1285	61.60	64.408	61.61	64.250
7N27	SW 7 AVE	PROSWA025_3	64.60	22.399	22.000	0.0022	1291	61.87	102.717	61.90	102.587
7N27	SW 7 AVE	SWAREA025_3	65.86	23.280	22.000	-0.0001	1287	60.79	64.734	61.60	64.408
7N28	SW 7 AVE	PROSWA025_3	64.28	22.708	21.000	-0.1000	8107	61.66	103.785	61.87	102.717
7N28	SW 7 AVE	SWAREA025_3	64.93	24.127	21.000	-0.0001	8059	60.72	68.242	60.79	64.734
7N29	SW 7 AVE	PROSWA025_3	64.22	22.774	23.000	-0.0006	7741	61.62	109.780	61.77	108.681
7N29	SW 7 AVE	SWAREA025_3	64.87	24.157	23.000	0.0002	7608	60.71	77.501	60.72	74.244
7N30	SW 7 AVE	PROSWA025_3	63.83	23.357	22.000	0.0031	1638	62.37	136.566	62.42	136.492
7N30	SW 7 AVE	SWAREA025_3	64.54	24.522	22.000	-0.0007	1633	61.56	113.760	61.59	113.557
7N31	SW 7 AVE	PROSWA025_3	63.82	23.366	23.000	-0.0049	1627	62.55	77.878	62.58	77.820
7N31	SW 7 AVE	SWAREA025_3	64.53	24.530	23.000	-0.0001	1615	61.68	65.682	61.72	65.541
7N32	SW 7 AVE	PROSWA025_3	63.27	24.434	23.000	0.0022	1011	62.53	77.916	62.55	77.878
7N32	SW 7 AVE	SWAREA025_3	63.93	25.201	23.000	0.0002	1011	61.65	65.783	61.68	65.682
7N33	SW 7 AVE	PROSWA025_3	63.27	24.437	23.000	0.0013	1011	62.50	77.956	62.53	77.916
7N33	SW 7 AVE	SWAREA025_3	63.92	25.204	23.000	-0.0002	1011	61.62	65.893	61.65	65.783

Southwest Corridor Nodal Comparison of Maximum Pre & Post Mitigation Stages for 25-yr, 3-day Design Storm Event

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
7N34	SW 7 AVE	PROSWA025_3	63.06	25.522	23.000	0.0029	2243	62.43	78.054	62.50	77.956
7N34	SW 7 AVE	SWAREA025_3	63.38	25.894	23.000	-0.0001	2243	61.54	66.209	61.62	65.893
7N35	SW 7 AVE	PROSWA025_3	63.06	25.527	24.000	-0.0017	2243	62.34	78.172	62.43	78.054
7N35	SW 7 AVE	SWAREA025_3	63.37	25.900	24.000	0.0001	2243	61.50	66.623	61.54	66.209
7N36	SW 7 AVE	PROSWA025_3	63.07	25.619	24.000	0.0028	2019	0.00	51.643	67.08	36.441
7N36	SW 7 AVE	SWAREA025_3	63.36	25.931	24.000	0.0003	1992	60.74	28.351	69.27	30.142
7N37	SW 7 AVE	PROSWA025_3	63.07	25.619	25.000	-0.0035	2021	67.02	35.635	0.00	51.643
7N37	SW 7 AVE	SWAREA025_3	63.36	25.931	25.000	-0.1000	1940	60.75	29.574	60.74	28.351
7N38	SW 7 AVE	PROSWA025_3	63.06	25.724	25.000	-0.0016	807	63.05	99.775	67.02	35.635
7N38	SW 7 AVE	SWAREA025_3	63.34	25.966	25.000	0.0002	716	63.36	40.924	60.75	29.574
7N39	SW 7 AVE	PROSWA025_3	63.06	25.729	25.000	-0.0016	804	66.99	35.350	63.05	99.775
7N39	SW 7 AVE	SWAREA025_3	63.34	25.969	25.000	0.0002	715	60.76	30.485	63.36	40.924
7N40	SW 7 AVE	PROSWA025_3	63.04	25.830	25.000	-0.0057	865	63.04	79.051	66.99	35.350
7N40	SW 7 AVE	SWAREA025_3	63.31	26.003	25.000	0.0004	788	60.76	30.949	60.76	30.485
7N41	SW 7 AVE	PROSWA025_3	63.04	25.834	25.000	0.0071	864	66.95	35.055	63.04	79.051
7N41	SW 7 AVE	SWAREA025_3	63.31	26.004	25.000	0.0007	824	60.77	31.439	60.76	30.949
7N42	SW 7 AVE	PROSWA025_3	63.02	25.891	25.000	0.0076	1162	0.00	61.940	66.83	27.713
7N42	SW 7 AVE	SWAREA025_3	63.27	26.019	25.000	0.0008	1132	60.79	23.314	60.78	22.626
7N43	SW 7 AVE	PROSWA025_3	63.02	25.892	26.000	-0.0066	1164	66.80	27.403	0.00	61.940
7N43	SW 7 AVE	SWAREA025_3	63.27	26.019	26.000	-0.0004	1126	60.81	24.011	60.79	23.314
7N44	SW 7 AVE	PROSWA025_3	63.00	25.951	25.000	-0.0004	2050	61.47	28.078	66.80	27.403
7N44	SW 7 AVE	SWAREA025_3	63.24	26.032	25.000	0.0006	1859	60.82	25.056	60.81	24.011
7N45	SW 7 AVE	PROSWA025_3	63.00	25.952	26.000	0.0017	2020	61.46	29.217	61.47	28.078
7N45	SW 7 AVE	SWAREA025_3	63.24	26.033	26.000	-0.5000	1621	60.83	25.829	60.82	25.056
7N46	SW 7 AVE	PROSWA025_3	63.00	25.952	28.000	-0.0025	2670	0.01	9.634	0.00	23.900
7N46	SW 7 AVE	SWAREA025_3	63.24	26.033	28.000	0.0001	2032	69.29	5.802	69.29	6.282
7N47	SW 7 AVE	PROSWA025_3	63.00	25.952	27.000	0.0014	2578	67.56	6.962	0.01	9.634
7N47	SW 7 AVE	SWAREA025_3	63.24	26.033	27.000	0.0001	2069	69.30	5.321	69.29	5.802
7N48	SW 7 AVE	PROSWA025_3	63.00	25.952	26.000	0.0010	2267	0.00	12.488	67.56	6.962
7N48	SW 7 AVE	SWAREA025_3	63.24	26.033	26.000	0.0001	1916	69.09	4.911	69.30	5.321

Southwest Corridor Nodal Comparison of Maximu[illegible]e & Post Mitigation Stages for 25-yr, 3-day Design Storm Event

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
7N49	SW 7 AVE	PROSWA025_3	63.00	25.952	28.000	-0.0010	2190	67.46	5.462	0.00	12.488
7N49	SW 7 AVE	SWAREA025_3	63.24	26.033	28.000	0.0001	1837	69.07	4.538	69.09	4.911
7N50	SW 7 AVE	PROSWA025_3	63.00	25.952	28.000	0.0006	1893	67.44	4.979	67.46	5.462
7N50	SW 7 AVE	SWAREA025_3	63.24	26.033	28.000	0.0003	1927	69.06	4.147	69.07	4.538
7N51	SW 7 AVE	PROSWA025_3	63.01	25.952	28.000	0.0003	1706	67.42	4.578	67.44	4.979
7N51	SW 7 AVE	SWAREA025_3	63.24	26.033	28.000	0.0001	1742	69.04	3.818	69.06	4.147
7N52	SW 7 AVE	PROSWA025_3	63.01	25.952	28.000	0.0003	1006	67.41	4.344	67.42	4.578
7N52	SW 7 AVE	SWAREA025_3	63.24	26.033	28.000	-0.0002	1027	68.91	3.628	69.04	3.818
7N53	SW 7 AVE	PROSWA025_3	63.01	25.952	28.000	0.0003	1121	67.39	4.074	67.41	4.344
7N53	SW 7 AVE	SWAREA025_3	63.24	26.033	28.000	0.0002	1139	68.90	3.417	68.91	3.628
7N54	SW 7 AVE	PROSWA025_3	63.01	25.952	28.000	0.0003	3366	67.35	3.375	67.39	4.074
7N54	SW 7 AVE	SWAREA025_3	63.24	26.033	28.000	0.0001	3404	68.87	2.857	68.90	3.417
7N55	SW 7 AVE	PROSWA025_3	63.01	25.952	26.000	0.0002	3044	67.32	2.806	67.35	3.375
7N55	SW 7 AVE	SWAREA025_3	63.24	26.033	26.000	0.0001	3098	68.84	2.388	68.87	2.857
7N56	SW 7 AVE	PROSWA025_3	63.01	25.952	26.000	0.0003	2052	67.28	2.402	67.32	2.806
7N56	SW 7 AVE	SWAREA025_3	63.24	26.033	26.000	-0.0004	2084	68.82	2.053	68.84	2.388
7N57	SW 7 AVE	PROSWA025_3	63.01	25.952	28.000	0.0005	2115	67.23	1.976	67.28	2.402
7N57	SW 7 AVE	SWAREA025_3	63.24	26.033	28.000	0.0004	2149	68.79	1.694	68.82	2.053
7N58	SW 7 AVE	PROSWA025_3	63.01	25.952	28.000	0.0006	649	66.77	6.228	67.23	1.976
7N58	SW 7 AVE	SWAREA025_3	63.25	26.034	28.000	0.0001	655	68.78	1.578	68.79	1.694
7N59	SW 7 AVE	PROSWA025_3	63.01	25.952	28.000	-0.0005	741	67.19	1.687	66.77	6.228
7N59	SW 7 AVE	SWAREA025_3	63.25	26.033	28.000	0.0001	746	68.76	1.444	68.78	1.578
7N60	SW 7 AVE	PROSWA025_3	63.02	25.952	28.000	0.0001	1640	67.14	1.387	67.19	1.687
7N60	SW 7 AVE	SWAREA025_3	63.26	26.034	28.000	0.0001	1663	68.72	1.180	68.76	1.444
7N61	SW 7 AVE	PROSWA025_3	63.02	25.952	28.000	0.0001	1565	67.08	1.119	67.14	1.387
7N61	SW 7 AVE	SWAREA025_3	63.25	26.034	28.000	0.0001	1588	68.66	0.941	68.72	1.180
7N62	SW 7 AVE	PROSWA025_3	63.02	25.952	28.000	0.0003	603	67.06	1.034	67.08	1.119
7N62	SW 7 AVE	SWAREA025_3	63.25	26.034	28.000	0.0002	620	68.65	0.866	68.66	0.941
7N63	SW 7 AVE	PROSWA025_3	63.02	25.952	28.000	0.0002	601	67.04	0.953	67.06	1.034
7N63	SW 7 AVE	SWAREA025_3	63.26	26.034	28.000	0.0001	619	68.62	0.795	68.65	0.866

Southwest Corridor Nodal Comparison of Maximum Pre & Post Mitigation Stages for 25-yr, 3-day Design Storm Event

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
7N64	SW 7 AVE	PROSWA025_3	63.03	25.952	28.000	0.0001	2645	67.04	0.711	67.04	0.934
7N64	SW 7 AVE	SWAREA025_3	63.27	26.034	28.000	0.0001	2702	68.62	0.593	68.62	0.779
7N65	SW 7 AVE	PROSWA025_3	63.03	25.952	28.000	0.0001	2687	66.43	0.496	67.04	0.711
7N65	SW 7 AVE	SWAREA025_3	63.27	26.034	28.000	0.0001	2745	64.81	0.502	68.62	0.593
7N66	SW 7 AVE	PROSWA025_3	63.03	25.952	28.000	0.0001	2936	66.17	0.336	66.43	0.496
7N66	SW 7 AVE	SWAREA025_3	63.27	26.034	28.000	0.0001	3010	64.59	0.448	64.81	0.502
7N67	SW 7 AVE	PROSWA025_3	63.03	25.952	29.000	0.0001	2323	66.13	0.231	66.17	0.336
7N67	SW 7 AVE	SWAREA025_3	63.27	26.034	29.000	0.0001	2402	67.03	0.229	67.06	0.328
7N68	SW 7 AVE	PROSWA025_3	63.03	25.952	28.000	0.0001	1583	66.10	0.162	66.13	0.231
7N68	SW 7 AVE	SWAREA025_3	63.27	26.034	28.000	0.0001	1642	67.02	0.163	67.03	0.229
7N69	SW 7 AVE	PROSWA025_3	63.03	25.952	28.000	0.0001	1536	66.05	0.095	66.10	0.162
7N69	SW 7 AVE	SWAREA025_3	63.27	26.034	28.000	0.0001	1588	66.94	0.099	67.02	0.163
7N70	SW 7 AVE	PROSWA025_3	63.03	25.952	28.000	0.0000	750	66.05	0.064	66.05	0.095
7N70	SW 7 AVE	SWAREA025_3	63.27	26.034	28.000	0.0000	772	66.93	0.069	66.94	0.099
7N71	SW 7 AVE	PROSWA025_3	63.03	25.952	28.000	0.0000	737	66.04	0.033	66.05	0.064
7N71	SW 7 AVE	SWAREA025_3	63.27	26.034	28.000	0.0000	758	66.92	0.038	66.93	0.069
7N72	SW 7 AVE	PROSWA025_3	63.03	25.952	28.000	0.0001	794	0.00	0.000	66.04	0.033
7N72	SW 7 AVE	SWAREA025_3	63.27	26.034	28.000	0.0001	975	64.58	0.022	66.92	0.038
7N73	SW 7 AVE	PROSWA025_3	0.00	26.000	28.000	0.0000	115	0.00	0.000	0.00	0.000
7N73	SW 7 AVE	SWAREA025_3	63.27	26.034	28.000	0.0000	815	0.00	0.000	64.58	0.022
7N74	SW 7 AVE	PROSWA025_3	0.00	26.400	29.000	0.0000	115	0.00	0.000	0.00	0.000
7N74	SW 7 AVE	SWAREA025_3	0.00	26.400	29.000	0.0000	115	0.00	0.000	0.00	0.000
7N75	SW 7 AVE	PROSWA025_3	0.00	26.700	30.000	0.0000	115	0.00	0.000	0.00	0.000
7N75	SW 7 AVE	SWAREA025_3	0.00	26.700	30.000	0.0000	115	0.00	0.000	0.00	0.000
7N76	SW 7 AVE	PROSWA025_3	0.00	26.800	29.500	0.0000	117	0.00	0.000	0.00	0.000
7N76	SW 7 AVE	SWAREA025_3	0.00	26.800	29.500	0.0000	117	0.00	0.000	0.00	0.000
CN001	SW 7 AVE	PROSWA025_3	0.00	17.200	21.000	*********	113	0.00	0.000	0.00	0.000
CN001	SW 7 AVE	SWAREA025_3	69.45	19.784	21.000	0.0000	3041	71.35	3.956	71.35	3.963
CN002	SW 7 AVE	PROSWA025_3	0.00	17.000	21.000	*********	113	0.00	0.000	0.00	0.000
CN002	SW 7 AVE	SWAREA025_3	69.86	19.893	21.000	-0.0000	1161	71.31	3.950	71.33	3.952

Southwest Corridor Nodal Comparison of Maximum & Post Mitigation Stages for 25-yr, 3-day Design Storm Event

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
CN003	SW 7 AVE	PROSWA025_3	0.00	17.600	21.000	-0.0000	120	0.00	0.000	0.00	0.000
CN003	SW 7 AVE	SWAREA025_3	70.08	19.991	21.000	-0.0000	2141	71.16	3.940	71.24	3.944
CN004	SW 7 AVE	PROSWA025_3	0.00	17.920	21.000	-0.4200	113	0.00	0.000	0.00	0.000
CN004	SW 7 AVE	SWAREA025_3	70.21	20.092	21.000	-0.4200	3316	70.49	3.927	70.93	3.932
CN006	SW 7 AVE	PROSWA025_3	0.00	17.330	21.000	-0.3300	113	0.00	0.000	0.00	0.000
CN006	SW 7 AVE	SWAREA025_3	65.25	19.671	21.000	-0.3300	484	64.44	3.312	64.47	3.309
CN007	SW 7 AVE	PROSWA025_3	0.00	18.340	21.000	-0.0900	261	0.00	0.000	0.00	0.000
CN007	SW 7 AVE	SWAREA025_3	64.85	19.936	21.000	0.0001	5103	62.92	3.437	64.20	3.335
CN008	SW 7 AVE	PROSWA025_3	0.00	18.300	21.000	*********	113	0.00	0.000	0.00	0.000
CN008	SW 7 AVE	SWAREA025_3	64.84	19.939	21.000	-0.0002	2190	62.58	3.537	62.92	3.437
CN009	SW 7 AVE	PROSWA025_3	0.00	18.510	21.500	-0.0100	160	0.00	0.000	0.00	0.000
CN009	SW 7 AVE	SWAREA025_3	64.77	19.968	21.500	-0.0100	1031	62.36	3.667	62.41	3.611
CN010	SW 7 AVE	PROSWA025_3	0.00	19.800	22.000	0.0000	217	0.00	0.000	0.00	0.000
CN010	SW 7 AVE	SWAREA025_3	0.00	19.800	22.000	-0.0001	279	0.14	0.000	0.00	0.000
CN011	SW 7 AVE	PROSWA025_3	0.00	16.500	21.000	*********	113	0.00	0.000	0.00	0.000
CN011	SW 7 AVE	SWAREA025_3	68.78	19.306	21.000	-0.0001	2562	115.13	12.741	114.31	12.740
CN012	SW 7 AVE	PROSWA025_3	0.00	16.900	21.000	*********	113	0.00	0.000	0.00	0.000
CN012	SW 7 AVE	SWAREA025_3	68.78	19.427	21.000	-0.0003	2216	115.76	12.741	115.58	12.741
CN014	SW 7 AVE	PROSWA025_3	0.00	16.600	21.000	*********	113	0.00	0.000	0.00	0.000
CN014	SW 7 AVE	SWAREA025_3	68.73	19.634	21.000	-0.3000	1449	115.97	12.742	115.90	12.742
CN015	SW 7 AVE	PROSWA025_3	0.00	16.600	21.000	*********	113	0.00	0.000	0.00	0.000
CN015	SW 7 AVE	SWAREA025_3	62.52	20.667	21.000	-0.0400	909	37.44	20.909	123.19	14.300
CN016	SW 7 AVE	PROSWA025_3	0.00	18.000	20.000	0.0000	113	0.00	0.000	0.00	0.000
CN016	SW 7 AVE	SWAREA025_3	72.14	18.595	20.000	-0.0000	4544	95.98	0.035	0.00	0.738
EAGLE POINT SUB	SW 26 AVE	PROSWA025_3	69.44	18.525	22.000	0.0001	627515	60.25	64.437	70.90	2.871
EAGLE POINT SUB	SW 26 AVE	SWAREA025_3	68.36	18.814	22.000	0.0000	862893	60.25	64.437	70.82	4.875
GBC01	SW 16/12 AVE	PROSWA025_3	68.64	18.200	18.000	-0.0001	93965	61.37	281.861	74.84	279.752
GBC01	SW 16/12 AVE	SWAREA025_3	64.99	18.505	18.000	0.0000	95280	103.27	139.935	103.27	140.919
GBC02	SW 16/12 AVE	PROSWA025_3	68.64	18.196	18.000	0.0002	167945	75.88	260.998	76.31	262.548
GBC02	SW 16/12 AVE	SWAREA025_3	64.90	18.504	18.000	-0.0000	169285	104.62	147.526	104.62	149.296

Southwest Corridor Nodal Comparison of Maximu re & Post Mitigation Stages for 25-yr, 3-day Design Storm Event

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
N001	SW 7 AVE	PROSWA025_3	0.00	17.000	21.000	0.0000	223	0.00	0.000	0.00	0.000
N001	SW 7 AVE	SWAREA025_3	69.43	19.780	21.000	-0.0000	3551	71.35	3.963	72.90	3.978
N002	SW 7 AVE	PROSWA025_3	0.00	17.000	21.000	0.0000	223	0.00	0.000	0.00	0.000
N002	SW 7 AVE	SWAREA025_3	69.86	19.892	21.000	-0.0000	1425	71.33	3.952	71.35	3.956
N003	SW 7 AVE	PROSWA025_3	193.28	17.005	21.000	0.0000	223	0.00	0.000	0.00	0.000
N003	SW 7 AVE	SWAREA025_3	70.08	19.987	21.000	0.0000	2226	71.24	3.944	71.31	3.950
N004	SW 7 AVE	PROSWA025_3	0.00	17.200	21.000	0.0000	218	0.00	0.000	0.00	0.000
N004	SW 7 AVE	SWAREA025_3	70.21	20.084	21.000	-0.0000	3664	70.93	3.932	71.16	3.940
N005	SW 7 AVE	PROSWA025_3	68.49	19.859	21.000	-0.0011	298	60.85	13.518	60.86	13.444
N005	SW 7 AVE	SWAREA025_3	70.28	20.569	21.000	-0.0000	116	70.46	3.927	70.49	3.927
N006	SW 7 AVE	PROSWA025_3	0.00	17.400	21.000	0.0000	240	0.00	0.000	0.00	0.000
N006	SW 7 AVE	SWAREA025_3	65.27	19.663	21.000	0.0001	698	64.47	3.309	64.52	3.304
N007	SW 7 AVE	PROSWA025_3	0.00	18.000	21.000	0.0000	558	0.00	0.000	0.00	0.000
N007	SW 7 AVE	SWAREA025_3	64.88	19.912	21.000	-0.0001	2477	64.20	3.335	64.44	3.312
N008	SW 7 AVE	PROSWA025_3	0.00	18.000	21.000	0.0000	254	0.00	0.000	0.00	0.000
N008	SW 7 AVE	SWAREA025_3	64.80	19.958	21.000	0.0003	1315	62.41	3.611	62.58	3.537
N009	SW 7 AVE	PROSWA025_3	0.00	20.660	21.500	0.0000	148	0.00	0.000	0.00	0.000
N009	SW 7 AVE	SWAREA025_3	0.00	20.660	21.500	0.0000	148	0.00	0.000	0.00	0.000
N010	SW 7 AVE	PROSWA025_3	0.00	18.000	21.000	*********	113	0.00	0.000	0.00	0.000
N010	SW 7 AVE	SWAREA025_3	0.14	19.651	21.000	-1.4200	165	0.00	0.000	0.14	0.000
N011	SW 7 AVE	PROSWA025_3	0.00	15.520	18.500	0.0000	113	0.00	0.000	0.00	0.000
N011	SW 7 AVE	SWAREA025_3	68.77	19.287	18.500	0.0001	2528	114.08	13.079	111.86	13.080
N012	SW 7 AVE	PROSWA025_3	0.00	16.500	21.000	*********	113	0.00	0.000	0.00	0.000
N012	SW 7 AVE	SWAREA025_3	68.78	19.410	21.000	0.0002	1981	115.58	12.741	115.13	12.741
N013	SW 7 AVE	PROSWA025_3	0.00	16.040	21.000	*********	113	0.00	0.000	0.00	0.000
N013	SW 7 AVE	SWAREA025_3	68.75	19.578	21.000	0.0005	1481	115.90	12.742	115.76	12.741
N014	SW 7 AVE	PROSWA025_3	69.45	18.501	21.000	-0.0009	275	114.16	13.674	113.83	13.670
N014	SW 7 AVE	SWAREA025_3	62.51	20.665	21.000	0.0005	923	115.97	12.742	115.97	12.742
N015	SW 7 AVE	PROSWA025_3	0.00	16.760	21.000	*********	113	0.00	0.000	0.00	0.000
N015	SW 7 AVE	SWAREA025_3	123.38	22.481	21.000	-0.0081	117	123.17	14.300	37.44	20.909

Southwest Corridor Nodal Comparison of Maximu[illegible]e & Post Mitigation Stages for 25-yr, 3-day Design Storm Event

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
N016	SW 7 AVE	PROSWA025_3	134.11	28.277	21.000	-0.0014	131	114.16	15.172	114.17	13.337
N016	SW 7 AVE	SWAREA025_3	123.22	28.052	21.000	-0.0013	115	148.53	16.158	123.17	14.300
N017	SW 7 AVE	PROSWA025_3	0.00	17.500	20.000	0.0000	113	0.00	0.000	0.00	0.000
N017	SW 7 AVE	SWAREA025_3	72.07	18.679	20.000	0.0001	3285	0.00	0.738	0.30	0.340
N018	SW 7 AVE	PROSWA025_3	0.00	17.830	20.000	0.0000	113	0.00	0.000	0.00	0.000
N018	SW 7 AVE	SWAREA025_3	78.45	18.393	20.000	0.0000	248	95.92	0.033	95.98	0.035
N019	SW 7 AVE	PROSWA025_3	134.06	28.292	21.500	-0.0008	178	60.00	18.237	60.00	18.223
N019	SW 7 AVE	SWAREA025_3	123.18	28.069	21.500	0.0006	175	60.00	18.173	60.00	18.158
N101	SW 7 AVE	PROSWA025_3	62.73	25.995	25.000	0.0018	2260286	60.50	381.402	61.47	189.150
N101	SW 7 AVE	SWAREA025_3	63.17	26.052	25.000	0.0018	2390514	60.50	381.402	61.14	178.470
N102	SW 7 AVE	PROSWA025_3	64.00	26.179	25.000	0.0004	2639450	60.50	340.060	59.96	109.305
N102	SW 7 AVE	SWAREA025_3	64.30	26.258	25.000	-0.0003	2814570	60.50	340.060	64.38	89.706
N103	SW 7 AVE	PROSWA025_3	71.44	21.281	25.000	0.0001	3791569	60.25	457.669	72.85	20.746
N103	SW 7 AVE	SWAREA025_3	73.56	22.286	25.000	-0.0000	5488849	60.50	359.995	84.19	56.392
N104	SW 7 AVE	PROSWA025_3	68.94	21.090	25.000	-0.0001	2829862	60.50	276.428	74.46	75.844
N104	SW 7 AVE	SWAREA025_3	70.29	21.315	25.000	-0.0000	3124463	60.50	278.222	76.08	64.591
N105	SW 7 AVE	PROSWA025_3	69.36	19.333	22.000	-0.0001	1147119	60.75	95.074	62.27	43.341
N105	SW 7 AVE	SWAREA025_3	65.28	19.499	22.000	-0.0001	1368599	60.75	95.074	61.30	25.775
N106	SW 7 AVE	PROSWA025_3	67.49	21.141	17.000	0.0003	186001	60.00	12.309	86.54	13.619
N106	SW 7 AVE	SWAREA025_3	69.01	21.414	17.000	0.0001	186001	60.00	12.309	96.25	11.600
N107	SW 7 AVE	PROSWA025_3	73.05	20.221	21.000	0.0000	874214	60.00	80.516	87.92	0.340
N107	SW 7 AVE	SWAREA025_3	73.17	20.226	21.000	0.0000	877700	60.00	80.516	99.11	0.340
N108	SW 7 AVE	PROSWA025_3	60.85	20.388	20.500	0.0000	246288	60.00	31.033	60.85	13.518
N108	SW 7 AVE	SWAREA025_3	62.36	20.662	20.500	0.0000	271955	60.00	31.033	61.80	3.323
N109	SW 7 AVE	PROSWA025_3	134.16	28.278	21.000	-0.0000	133729	60.00	7.205	199.90	4.635
N109	SW 7 AVE	SWAREA025_3	123.27	28.052	21.000	0.0000	133729	60.00	7.206	200.60	4.208
N110	SW 7 AVE	PROSWA025_3	134.22	28.292	22.000	0.0000	275735	60.00	16.911	211.64	6.953
N110	SW 7 AVE	SWAREA025_3	123.35	28.069	22.000	0.0000	275735	60.00	16.911	203.95	6.778
N111	SW 7 AVE	PROSWA025_3	72.75	20.162	21.000	0.0000	34327	60.00	5.679	0.00	0.000
N111	SW 7 AVE	SWAREA025_3	73.28	20.513	21.000	0.0000	40742	60.00	5.679	73.39	0.076

Southwest Corridor Nodal Comparison of Maximu re & Post Mitigation Stages for 25-yr, 3-day Design Storm Event

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
N112	SW 7 AVE	PROSWA025_3	214.19	22.905	22.000	0.0000	166196	60.00	13.137	220.00	0.114
N112	SW 7 AVE	SWAREA025_3	207.61	22.896	22.000	0.0001	166092	60.00	13.137	220.00	0.154
N113	SW 7 AVE	PROSWA025_3	70.21	17.910	21.000	0.0004	824126	60.50	79.660	60.65	44.748
N113	SW 7 AVE	SWAREA025_3	63.47	18.352	21.000	0.0000	1527945	60.50	51.877	105.23	14.023
N114	SW 7 AVE	PROSWA025_3	79.08	18.186	17.000	0.0000	9636620	60.75	415.573	87.80	70.940
N114	SW 7 AVE	SWAREA025_3	78.48	18.390	17.000	0.0000	10119801	60.75	415.574	96.31	85.708
N115	SW 7 AVE	PROSWA025_3	88.56	16.958	17.000	0.0000	3154636	60.50	153.879	0.00	0.000
N115	SW 7 AVE	SWAREA025_3	93.18	17.677	17.000	0.0000	3911514	60.50	153.879	104.45	12.411
N116	SW 16/12 AVE	PROSWA025_3	76.67	28.605	30.000	0.0000	5622175	61.50	223.636	74.06	9.220
N116	SW 16/12 AVE	SWAREA025_3	76.67	28.605	30.000	0.0000	5622189	61.50	223.636	74.07	9.220
N116_TC	SW 16/12 AVE	PROSWA025_3	60.00	21.500	29.000	-11.5000	16	0.00	0.000	0.00	0.000
N116_TC	SW 16/12 AVE	SWAREA025_3	60.00	21.500	29.000	-11.5000	16	0.00	0.000	0.00	0.000
N117	SW 16/12 AVE	PROSWA025_3	84.06	28.586	29.000	0.0000	2165080	60.75	132.961	62.33	5.922
N117	SW 16/12 AVE	SWAREA025_3	84.06	28.586	29.000	0.0000	2165085	60.75	132.961	62.33	5.922
N118	SW 16/12 AVE	PROSWA025_3	63.17	26.262	28.000	-0.0010	2690761	60.75	412.402	62.99	164.052
N118	SW 16/12 AVE	SWAREA025_3	63.25	26.274	28.000	-0.0010	2715381	60.75	412.402	62.92	160.776
N119	SW 16/12 AVE	PROSWA025_3	69.70	22.412	24.000	0.0001	6437499	60.25	618.554	75.43	89.529
N119	SW 16/12 AVE	SWAREA025_3	71.44	22.868	24.000	-0.0000	7856594	60.75	361.369	77.34	69.989
N120	SW 16/12 AVE	PROSWA025_3	62.59	19.951	22.000	0.0000	1761937	60.25	187.015	62.59	39.194
N120	SW 16/12 AVE	SWAREA025_3	62.59	19.951	22.000	0.0000	1761937	60.25	187.015	62.59	39.194
N121	SW 16/12 AVE	PROSWA025_3	91.09	16.665	18.000	0.0000	7316649	61.50	266.347	98.04	26.929
N121	SW 16/12 AVE	SWAREA025_3	97.00	17.510	18.000	0.0000	9005470	61.50	266.347	120.11	34.660
N122	SW 26 AVE	PROSWA025_3	111.76	17.336	18.000	0.0000	6309626	61.50	170.690	117.11	5.194
N122	SW 26 AVE	SWAREA025_3	113.14	17.411	18.000	0.0000	6405422	61.75	175.499	119.89	6.900
N123	SW 26 AVE	PROSWA025_3	64.68	21.997	22.000	0.0001	3438080	60.25	449.183	60.70	120.533
N123	SW 26 AVE	SWAREA025_3	63.91	21.871	22.000	0.0001	3031033	60.25	449.185	61.22	127.666
N124	SW 32 AVE	PROSWA025_3	61.55	24.820	27.000	-0.0221	1673281	60.25	457.429	61.55	163.046
N124	SW 32 AVE	SWAREA025_3	61.55	24.821	27.000	-0.0221	1674850	60.25	457.449	61.55	162.878
N125	SW 32 AVE	PROSWA025_3	79.93	24.335	25.000	-0.0014	7193992	62.50	174.807	79.93	11.742
N125	SW 32 AVE	SWAREA025_3	79.93	24.335	25.000	-0.0014	7193992	62.50	174.807	79.93	11.742

Southwest Corridor Nodal Comparison of Maxim re & Post Mitigation Stages for 25-yr, 3-day Design Storm Event

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
N126	SW 32 AVE	PROSWA025_3	79.72	19.535	21.000	0.0001	1537713	60.75	443.255	86.62	37.616
N126	SW 32 AVE	SWAREA025_3	73.93	20.613	21.000	0.0000	3156415	60.75	443.256	81.43	48.100
N127	SW 32 AVE	PROSWA025_3	78.50	14.288	20.000	0.0000	2208668	60.25	115.320	0.00	0.000
N127	SW 32 AVE	SWAREA025_3	78.50	14.288	20.000	0.0000	2208668	60.25	115.320	0.00	0.000
N129	SW 16/12 AVE	PROSWA025_3	0.00	13.500	18.000	*********	113	0.00	0.000	0.00	0.000
N129	SW 16/12 AVE	SWAREA025_3	76.50	41859.393	18.000	*********	113	60.25	361.192	0.00	0.000
OUSLEY/P VLLG	SW 16/12 AVE	PROSWA025_3	85.43	17.307	18.000	0.0000	2934659	60.25	285.070	101.33	21.939
OUSLEY/P VLLG	SW 16/12 AVE	SWAREA025_3	87.39	17.901	18.000	0.0000	3755397	60.25	285.071	132.93	17.699
PRO_16N01B	SW 16/12 AVE	PROSWA025_3	68.67	18.210	18.000	0.0001	85815	77.35	153.574	77.58	154.754
PRO_7N03B	SW 7 AVE	PROSWA025_3	72.01	18.395	18.000	0.0000	47251	215.37	28.433	215.57	28.436
PRO_7N15B	SW 7 AVE	PROSWA025_3	68.31	20.786	0.000	-14.3000	12101	67.66	137.565	67.75	137.513
RC_SW 7 AVE	SW 7 AVE	PROSWA025_3	60.00	18.500	19.000	0.0000	50	93.44	57.514	0.00	0.000
RC_SW 7 AVE	SW 7 AVE	SWAREA025_3	60.00	18.500	19.000	0.0000	50	90.56	169.057	0.00	0.000
RESERVOIR	SW 26 AVE	PROSWA025_3	102.11	17.877	18.000	0.0000	13214654	60.00	1312.750	105.04	284.104
SEMINOLE COVE	SW 7 AVE	PROSWA025_3	85.65	17.393	19.000	0.0000	1335923	60.00	181.936	93.59	9.017
SEMINOLE COVE	SW 7 AVE	SWAREA025_3	88.27	18.236	19.000	0.0000	1607286	60.00	181.938	106.40	12.106

OKEECHOBEE COUNTY
COMPREHENSIVE URBANIZED AREA
STORMWATER MASTER PLAN

FOUR SEASONS PRE AND POST STAGES FOR 5-YR 1-DAY DESIGN STORM EVENT RESULTS

Four Seasons Nodal Comparison of Maximum & Post Mitigation Stages for 5-yr, 1-day Design Storm Event

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
NA	4 SEASONS	4S_05Y1DPROF	17.79	32.536	31.800	0.0020	762310	12.75	137.680	13.14	60.923
NA	4 SEASONS	4S_05Y_1DAY	20.21	32.676	31.800	0.0029	762305	12.75	137.674	12.25	27.975
NA2	4 SEASONS	4S_05Y1DPROF	23.85	31.420	31.600	0.0009	419180	16.65	14.588	26.52	14.054
NA2	4 SEASONS	4S_05Y_1DAY	29.34	31.701	31.600	0.0023	419180	17.30	15.066	39.83	13.139
NB	4 SEASONS	4S_05Y1DPROF	17.85	32.529	31.000	0.0050	318112	12.50	140.196	17.76	17.578
NB	4 SEASONS	4S_05Y_1DAY	20.15	32.676	31.000	0.0021	318027	12.50	118.957	20.15	8.190
NC	4 SEASONS	4S_05Y1DPROF	15.58	28.521	28.900	0.0011	240625	12.50	51.199	17.47	25.080
NC	4 SEASONS	4S_05Y_1DAY	28.41	30.538	28.900	0.0024	653442	12.50	51.195	39.58	22.365
NC2	4 SEASONS	4S_05Y1DPROF	15.48	28.462	29.100	0.0041	4623	17.47	25.080	17.47	25.127
NC2	4 SEASONS	4S_05Y_1DAY	27.45	30.521	29.100	0.0049	81361	39.58	22.365	41.03	335.958
NCC	4 SEASONS	4S_05Y1DPROF	30.56	27.174	27.920	-0.0030	26966	18.97	177.280	19.05	177.267
NCC	4 SEASONS	4S_05Y_1DAY	27.43	30.517	27.920	0.0041	111236	41.03	408.220	27.28	138.825
NCH1	4 SEASONS	4S_05Y1DPROF	31.25	22.591	23.770	-0.0029	27389	31.12	103.060	31.25	103.051
NCH1	4 SEASONS	4S_05Y_1DAY	26.77	26.850	23.770	0.0028	517563	20.02	228.527	26.77	160.950
NCH10	4 SEASONS	4S_05Y1DPROF	19.64	33.676	33.200	-0.0050	182387	18.88	149.428	19.08	148.036
NCH10	4 SEASONS	4S_05Y_1DAY	21.27	33.994	33.200	0.0050	182381	18.90	148.578	19.07	141.015
NCH2	4 SEASONS	4S_05Y1DPROF	31.28	26.057	25.300	0.0043	16712	31.22	102.194	31.28	102.192
NCH2	4 SEASONS	4S_05Y_1DAY	26.04	27.834	25.300	0.0029	114935	20.95	164.775	23.35	163.103
NCH3	4 SEASONS	4S_05Y1DPROF	31.49	27.096	25.600	0.0006	2182796	15.29	224.855	31.58	101.265
NCH3	4 SEASONS	4S_05Y_1DAY	26.24	28.531	25.600	0.0035	31668	27.46	143.448	27.49	143.540
NCH4	4 SEASONS	4S_05Y1DPROF	0.00	23.210	25.710	0.0000	488	0.00	0.000	0.00	0.000
NCH4	4 SEASONS	4S_05Y_1DAY	27.28	29.506	25.710	0.0042	28181	28.01	141.303	28.11	141.383
NCH5	4 SEASONS	4S_05Y1DPROF	0.00	21.700	24.200	0.0000	558	0.00	0.000	0.00	0.000
NCH5	4 SEASONS	4S_05Y_1DAY	27.51	29.993	24.200	0.0050	338707	24.71	142.254	28.01	141.303
NCH6	4 SEASONS	4S_05Y1DPROF	19.21	28.153	27.900	-0.0027	142762	17.74	155.384	19.25	152.298
NCH6	4 SEASONS	4S_05Y_1DAY	25.80	31.173	27.900	0.0031	480574	18.30	160.837	21.98	145.582
NCH7	4 SEASONS	4S_05Y1DPROF	20.09	30.335	28.700	0.0012	51852	19.96	111.623	20.21	111.622
NCH7	4 SEASONS	4S_05Y_1DAY	23.87	31.700	28.700	0.0030	191094	21.50	133.604	22.31	131.542
NCH8	4 SEASONS	4S_05Y1DPROF	19.92	32.873	31.400	0.0030	36120	19.71	99.662	19.93	99.576
NCH8	4 SEASONS	4S_05Y_1DAY	21.46	33.738	31.400	0.0048	96728	20.23	133.521	21.04	131.654

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Four Seasons Nodal Comparison of Maximum . & Post Mitigation Stages for 5-yr, 1-day Design Storm Event

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
NCH9	4 SEASONS	4S_05Y1DPROF	19.85	33.318	31.500	-0.0078	198255	19.08	148.036	19.82	145.701
NCH9	4 SEASONS	4S_05Y_1DAY	21.35	33.926	31.500	-0.0064	182179	19.07	141.015	20.23	133.521
ND	4 SEASONS	4S_05Y1DPROF	23.82	31.415	31.100	0.0042	419188	12.75	49.320	23.82	16.912
ND	4 SEASONS	4S_05Y_1DAY	29.34	31.700	31.100	0.0039	419180	12.50	52.137	39.73	18.688
ND2	4 SEASONS	4S_05Y1DPROF	23.85	29.973	31.100	0.0010	2850	23.82	16.912	23.85	16.912
ND2	4 SEASONS	4S_05Y_1DAY	25.81	31.174	31.100	0.0045	49543	39.73	18.688	39.66	48.898
NE	4 SEASONS	4S_05Y1DPROF	20.92	31.077	31.500	0.0011	210678	13.00	66.075	13.06	60.093
NE	4 SEASONS	4S_05Y_1DAY	25.33	31.813	31.500	0.0029	210678	13.00	66.074	18.93	74.432
NE2	4 SEASONS	4S_05Y1DPROF	20.92	31.077	30.490	0.0029	210680	13.06	60.093	16.95	17.302
NE2	4 SEASONS	4S_05Y_1DAY	25.33	31.814	30.490	0.0033	210680	18.93	74.432	42.99	14.148
NF	4 SEASONS	4S_05Y1DPROF	14.62	31.220	31.500	0.0019	146728	13.25	64.780	14.09	47.394
NF	4 SEASONS	4S_05Y_1DAY	14.71	31.222	31.500	-0.0023	146728	13.25	64.780	14.09	47.400
NG	4 SEASONS	4S_05Y1DPROF	14.63	31.218	31.000	0.0017	436966	13.84	72.533	14.63	64.960
NG	4 SEASONS	4S_05Y_1DAY	14.73	31.219	31.000	0.0017	437666	13.84	72.543	14.51	64.129
NH	4 SEASONS	4S_05Y1DPROF	13.41	31.064	32.200	0.0036	308928	13.25	58.206	13.41	57.850
NH	4 SEASONS	4S_05Y_1DAY	14.07	31.063	32.200	0.0028	234113	13.25	48.311	14.07	56.147
NI	4 SEASONS	4S_05Y1DPROF	13.13	30.867	29.010	0.0042	2184	13.00	57.484	13.13	57.194
NI	4 SEASONS	4S_05Y_1DAY	13.20	29.946	29.010	0.0050	2158	13.00	47.720	13.20	47.659
NJ	4 SEASONS	4S_05Y1DPROF	13.02	28.079	28.800	0.0013	8990	12.75	23.279	13.01	22.701
NJ	4 SEASONS	4S_05Y_1DAY	26.27	28.531	28.800	-0.0029	55454	12.75	19.047	13.02	18.681
NJ2	4 SEASONS	4S_05Y1DPROF	31.49	27.096	27.000	0.0028	9188	13.01	22.701	13.14	22.324
NJ2	4 SEASONS	4S_05Y_1DAY	26.27	28.531	27.000	-0.0049	145923	13.02	18.681	12.99	17.721
NJJ	4 SEASONS	4S_05Y1DPROF	31.30	26.131	25.560	0.0050	1504	31.43	101.652	31.44	101.653
NJJ	4 SEASONS	4S_05Y_1DAY	26.01	27.895	25.560	0.0028	30497	25.93	151.336	25.95	151.266
NK	4 SEASONS	4S_05Y1DPROF	13.37	31.081	31.500	-0.0046	323411	13.25	32.013	13.59	46.043
NK	4 SEASONS	4S_05Y_1DAY	13.77	31.081	31.500	-0.0050	316176	13.25	26.571	13.77	42.477
NK2	4 SEASONS	4S_05Y1DPROF	16.20	28.769	29.380	0.0036	415755	13.59	46.043	16.20	17.548
NK2	4 SEASONS	4S_05Y_1DAY	15.96	28.672	29.380	0.0049	415701	13.77	42.477	15.96	15.896
NOA	4 SEASONS	4S_05Y1DPROF	13.76	43.731	43.900	-0.0049	2213	13.75	64.874	13.76	64.858
NOA	4 SEASONS	4S_05Y_1DAY	13.75	43.731	43.900	-0.0049	2213	13.75	64.872	13.75	64.859

Four Seasons Nodal Comparison of Maximum & Post Mitigation Stages for 5-yr, 1-day Design Storm Event

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
NOA2	4 SEASONS	4S_05Y1DPROF	18.57	43.186	44.000	0.0011	588898	13.76	64.858	14.14	58.914
NOA2	4 SEASONS	4S_05Y_1DAY	18.57	43.186	44.000	0.0023	588898	13.75	64.859	14.14	58.920
NOB	4 SEASONS	4S_05Y1DPROF	18.69	43.067	42.200	-0.0029	588833	14.25	125.073	18.69	69.348
NOB	4 SEASONS	4S_05Y_1DAY	18.69	43.067	42.200	-0.0031	588833	14.25	125.077	18.69	69.364
NOB2	4 SEASONS	4S_05Y1DPROF	19.14	41.805	42.200	-0.0016	72825	18.69	69.348	19.14	68.705
NOB2	4 SEASONS	4S_05Y_1DAY	19.14	41.806	42.200	0.0023	72830	18.69	69.364	19.14	68.697
NOC	4 SEASONS	4S_05Y1DPROF	18.94	34.915	33.200	-0.0041	192953	18.75	149.617	18.88	149.428
NOC	4 SEASONS	4S_05Y_1DAY	19.57	34.934	33.200	-0.0045	192945	18.75	149.618	18.90	148.578
NOD	4 SEASONS	4S_05Y1DPROF	13.47	31.106	31.700	-0.0036	414178	13.25	39.857	13.72	51.031
NOD	4 SEASONS	4S_05Y_1DAY	13.47	31.106	31.700	-0.0048	414178	13.25	39.857	13.72	51.037
NOD2	4 SEASONS	4S_05Y1DPROF	17.13	28.977	29.240	-0.0020	413779	13.72	51.031	17.13	18.759
NOD2	4 SEASONS	4S_05Y_1DAY	17.13	28.977	29.240	0.0017	413779	13.72	51.037	17.13	18.758
NOE	4 SEASONS	4S_05Y1DPROF	31.14	24.069	24.900	-0.0010	33500	30.99	103.069	31.12	103.060
NOE	4 SEASONS	4S_05Y_1DAY	26.10	27.781	24.900	-0.0043	423877	20.83	175.203	49.47	211.067
NOF	4 SEASONS	4S_05Y1DPROF	12.82	25.043	25.500	-0.0044	161213	12.75	32.293	12.82	31.457
NOF	4 SEASONS	4S_05Y_1DAY	26.77	26.849	25.500	0.0041	212178	12.75	32.292	20.02	59.665
NSLOUGH_SEC28	4 SEASONS	4S_05Y1DPROF	0.00	28.000	32.000	0.0000	3920	21.33	43.811	0.00	0.000
PRO_8ST&80AV_S	4 SEASONS	4S_05Y1DPROF	21.24	31.544	33.000	0.0013	492	20.33	21.416	20.34	21.404
PRO__8ST&80AV_N	4 SEASONS	4S_05Y1DPROF	21.16	31.616	33.000	0.0013	14480	20.03	21.808	20.33	21.416
PRO_CENTERST_CS	4 SEASONS	4S_05Y1DPROF	19.87	33.158	34.000	-0.2300	15735	19.74	121.448	19.80	121.413
PRO_JUNC OF E&W	4 SEASONS	4S_05Y1DPROF	21.33	31.482	33.000	0.0006	124096	20.17	45.685	21.33	43.811
TW_MOSQUITO_CK	4 SEASONS	4S_05Y1DPROF	0.00	18.000	20.500	0.0000	240	31.25	103.051	0.00	0.000
TW_MOSQUITO_CK	4 SEASONS	4S_05Y_1DAY	0.00	18.000	20.500	0.0000	8	26.77	160.950	0.00	0.000

OKEECHOBEE COUNTY
COMPREHENSIVE URBANIZED AREA
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FOUR SEASONS PRE AND POST STAGES FOR 10-YR 3-DAY DESIGN STORM EVENT RESULTS

Four Seasons Nodal Comparison of Maximum P[illegible] Post Mitigation Stages for 10-yr, 3-day Design Storm Event

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
NA	4 SEASONS	4S_10Y3DPROF	62.71	32.501	31.800	0.0016	762310	60.50	224.675	64.85	121.355
NA	4 SEASONS	4S_10Y_3DAY	62.46	33.698	31.800	0.0027	762305	60.50	224.670	62.55	96.134
NA2	4 SEASONS	4S_10Y3DPROF	65.48	31.667	31.600	-0.0024	419180	61.95	13.592	66.00	8.977
NA2	4 SEASONS	4S_10Y_3DAY	68.09	33.095	31.600	0.0017	419180	62.44	108.876	62.59	44.659
NB	4 SEASONS	4S_10Y3DPROF	62.05	31.773	31.000	0.0023	318021	60.25	210.944	62.05	128.275
NB	4 SEASONS	4S_10Y_3DAY	62.46	33.698	31.000	0.0021	318001	60.25	158.309	62.46	33.310
NC	4 SEASONS	4S_10Y3DPROF	65.74	30.944	28.900	0.0015	653432	61.20	166.705	65.99	153.787
NC	4 SEASONS	4S_10Y_3DAY	72.70	32.332	28.900	0.0014	653432	60.25	89.531	84.86	42.523
NC2	4 SEASONS	4S_10Y3DPROF	65.26	30.009	29.100	0.0049	81364	65.99	153.787	75.03	340.537
NC2	4 SEASONS	4S_10Y_3DAY	72.70	32.334	29.100	-0.0046	81361	84.86	42.523	102.54	341.509
NCC	4 SEASONS	4S_10Y3DPROF	71.81	29.579	27.920	-0.0030	93107	68.77	532.032	66.06	371.251
NCC	4 SEASONS	4S_10Y_3DAY	72.69	32.331	27.920	0.0043	453662	70.82	429.212	71.87	225.229
NCH1	4 SEASONS	4S_10Y3DPROF	71.78	25.064	23.770	-0.0029	242674	71.15	284.467	71.78	283.969
NCH1	4 SEASONS	4S_10Y_3DAY	76.70	28.295	23.770	0.0025	517557	65.89	296.719	76.70	224.116
NCH10	4 SEASONS	4S_10Y3DPROF	65.57	34.842	33.200	-0.0050	182381	64.06	311.846	64.82	296.747
NCH10	4 SEASONS	4S_10Y_3DAY	64.71	35.103	33.200	-0.0050	182381	64.09	311.063	64.73	306.616
NCH2	4 SEASONS	4S_10Y3DPROF	71.44	27.629	25.300	0.0012	21020	71.41	270.143	71.45	270.140
NCH2	4 SEASONS	4S_10Y_3DAY	76.37	28.476	25.300	-0.0029	127642	64.48	232.342	64.44	229.272
NCH3	4 SEASONS	4S_10Y3DPROF	72.47	29.472	25.600	0.0013	2485025	62.17	436.347	73.20	235.525
NCH3	4 SEASONS	4S_10Y_3DAY	75.72	29.279	25.600	-0.0019	35080	75.55	201.043	75.42	200.925
NCH4	4 SEASONS	4S_10Y3DPROF	0.00	23.210	25.710	0.0000	488	0.00	0.000	0.00	0.000
NCH4	4 SEASONS	4S_10Y_3DAY	75.01	31.249	25.710	0.0046	108705	84.78	265.128	74.77	200.156
NCH5	4 SEASONS	4S_10Y3DPROF	0.00	21.700	24.200	0.0000	558	0.00	0.000	0.00	0.000
NCH5	4 SEASONS	4S_10Y_3DAY	74.88	31.605	24.200	-0.0031	567938	72.52	222.871	84.78	265.128
NCH6	4 SEASONS	4S_10Y3DPROF	68.78	29.855	27.900	0.0031	160075	63.90	247.379	65.08	240.054
NCH6	4 SEASONS	4S_10Y_3DAY	71.40	32.782	27.900	0.0034	828109	65.20	286.799	88.74	271.569
NCH7	4 SEASONS	4S_10Y3DPROF	66.89	31.391	28.700	0.0024	166160	65.85	171.018	66.53	167.901
NCH7	4 SEASONS	4S_10Y_3DAY	68.67	33.304	28.700	0.0028	521517	64.74	321.703	66.94	247.609
NCH8	4 SEASONS	4S_10Y3DPROF	65.91	34.252	31.400	0.0031	169207	64.91	163.833	65.81	156.043
NCH8	4 SEASONS	4S_10Y_3DAY	64.58	34.858	31.400	0.0034	498313	64.80	307.512	64.76	316.313

Four Seasons Nodal Comparison of Maximum & Post Mitigation Stages for 10-yr, 3-day Design Storm Event

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
NCH9	4 SEASONS	4S_10Y3DPROF	65.63	34.782	31.500	-0.0078	206466	64.82	296.747	65.19	290.675
NCH9	4 SEASONS	4S_10Y_3DAY	64.70	35.053	31.500	-0.0064	182388	64.73	306.616	64.80	307.512
ND	4 SEASONS	4S_10Y3DPROF	65.47	31.666	31.100	-0.0038	419188	60.26	74.174	65.47	18.820
ND	4 SEASONS	4S_10Y_3DAY	68.10	33.095	31.100	0.0017	419180	60.38	83.007	67.34	25.872
ND2	4 SEASONS	4S_10Y3DPROF	68.78	30.177	31.100	-0.0011	3356	65.47	18.820	65.25	18.805
ND2	4 SEASONS	4S_10Y_3DAY	71.39	32.781	31.100	-0.0050	49543	67.34	25.872	88.74	143.396
NE	4 SEASONS	4S_10Y3DPROF	68.74	32.654	31.500	0.0017	210678	61.00	107.034	61.01	62.152
NE	4 SEASONS	4S_10Y_3DAY	72.24	33.556	31.500	0.0024	210678	61.00	107.040	67.32	84.083
NE2	4 SEASONS	4S_10Y3DPROF	68.74	32.654	30.490	0.0018	210680	61.01	62.152	62.41	21.759
NE2	4 SEASONS	4S_10Y_3DAY	72.24	33.556	30.490	0.0024	210680	67.32	84.083	100.94	19.777
NF	4 SEASONS	4S_10Y3DPROF	61.68	31.488	31.500	-0.0016	146728	61.00	107.417	61.26	96.801
NF	4 SEASONS	4S_10Y_3DAY	71.40	32.783	31.500	0.0013	146728	61.00	107.423	61.41	97.302
NG	4 SEASONS	4S_10Y3DPROF	61.69	31.481	31.000	-0.0015	437956	61.00	149.557	61.69	133.549
NG	4 SEASONS	4S_10Y_3DAY	71.40	32.783	31.000	0.0013	529228	61.00	148.819	61.44	136.741
NH	4 SEASONS	4S_10Y3DPROF	61.30	31.097	32.200	-0.0010	308928	61.25	85.004	61.30	84.486
NH	4 SEASONS	4S_10Y_3DAY	74.88	31.605	32.200	-0.0011	308928	61.25	78.826	61.29	78.440
NI	4 SEASONS	4S_10Y3DPROF	61.00	32.092	29.010	0.0050	2182	61.00	83.312	61.00	83.307
NI	4 SEASONS	4S_10Y_3DAY	61.22	32.127	29.010	0.0050	2180	61.00	77.307	61.00	77.202
NJ	4 SEASONS	4S_10Y3DPROF	72.65	29.475	28.800	-0.0032	191628	60.75	35.379	62.50	46.117
NJ	4 SEASONS	4S_10Y_3DAY	75.76	29.279	28.800	-0.0029	191628	60.75	32.532	61.07	22.315
NJ2	4 SEASONS	4S_10Y3DPROF	72.65	29.474	27.000	0.0027	191524	62.50	46.117	61.19	29.025
NJ2	4 SEASONS	4S_10Y_3DAY	75.76	29.279	27.000	-0.0047	191460	61.07	22.315	113.18	14.888
NJJ	4 SEASONS	4S_10Y3DPROF	71.53	27.821	25.560	0.0050	1984	72.00	249.419	72.00	249.423
NJJ	4 SEASONS	4S_10Y_3DAY	76.20	28.568	25.560	-0.0028	33731	75.60	210.407	75.64	210.334
NK	4 SEASONS	4S_10Y3DPROF	60.60	31.081	31.500	-0.0047	315227	61.25	46.752	60.87	54.905
NK	4 SEASONS	4S_10Y_3DAY	60.72	31.081	31.500	0.0020	315226	61.25	43.354	60.98	53.710
NK2	4 SEASONS	4S_10Y3DPROF	64.36	29.076	29.380	0.0024	415924	60.87	54.905	64.36	23.071
NK2	4 SEASONS	4S_10Y_3DAY	64.33	29.006	29.380	0.0018	415886	60.98	53.710	64.33	21.792
NOA	4 SEASONS	4S_10Y3DPROF	63.09	44.628	43.900	-0.0049	2184	61.50	106.941	61.51	106.895
NOA	4 SEASONS	4S_10Y_3DAY	63.09	44.628	43.900	-0.0047	2184	61.50	106.944	61.52	106.897

Four Seasons Nodal Comparison of Maximum [illegible] & Post Mitigation Stages for 10-yr, 3-day Design Storm Event

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
NOA2	4 SEASONS	4S_10Y3DPROF	63.50	43.467	44.000	0.0008	588784	61.51	106.895	61.55	84.284
NOA2	4 SEASONS	4S_10Y_3DAY	63.50	43.467	44.000	0.0011	588784	61.52	106.897	61.55	84.286
NOB	4 SEASONS	4S_10Y3DPROF	63.47	43.336	42.200	-0.0025	588804	61.75	193.592	63.47	175.432
NOB	4 SEASONS	4S_10Y_3DAY	63.46	43.336	42.200	0.0026	588804	61.75	193.593	63.46	175.436
NOB2	4 SEASONS	4S_10Y3DPROF	63.51	42.114	42.200	-0.0049	253047	63.47	175.432	63.51	175.380
NOB2	4 SEASONS	4S_10Y_3DAY	63.51	42.114	42.200	0.0050	253047	63.46	175.436	63.51	175.384
NOC	4 SEASONS	4S_10Y3DPROF	64.36	35.236	33.200	-0.0045	252981	63.95	313.185	64.06	311.846
NOC	4 SEASONS	4S_10Y_3DAY	64.43	35.252	33.200	-0.0049	252981	63.96	313.187	64.09	311.063
NOD	4 SEASONS	4S_10Y3DPROF	60.64	31.111	31.700	-0.0021	414178	61.25	65.032	60.85	65.697
NOD	4 SEASONS	4S_10Y_3DAY	60.64	31.111	31.700	0.0012	414178	61.25	65.032	60.85	65.680
NOD2	4 SEASONS	4S_10Y3DPROF	65.41	29.611	29.240	-0.0031	414092	60.85	65.697	65.41	25.874
NOD2	4 SEASONS	4S_10Y_3DAY	65.41	29.611	29.240	-0.0021	414092	60.85	65.680	65.41	25.875
NOE	4 SEASONS	4S_10Y3DPROF	71.25	25.938	24.900	0.0017	46906	70.15	283.094	70.27	282.887
NOE	4 SEASONS	4S_10Y_3DAY	76.49	28.419	24.900	-0.0045	436410	63.46	268.229	63.04	258.908
NOF	4 SEASONS	4S_10Y3DPROF	60.60	25.079	25.500	0.0035	161388	60.50	51.594	60.60	50.369
NOF	4 SEASONS	4S_10Y_3DAY	76.70	28.295	25.500	-0.0025	212178	60.50	51.593	82.98	62.704
NSLOUGH_SEC28	4 SEASONS	4S_10Y3DPROF	0.00	28.000	32.000	0.0000	3920	66.75	122.577	0.00	0.000
PRO_8ST&80AV_S	4 SEASONS	4S_10Y3DPROF	66.71	33.080	33.000	-0.0050	527	66.05	56.263	66.28	59.650
PRO__8ST&80AV_N	4 SEASONS	4S_10Y3DPROF	66.62	33.354	33.000	0.0026	22826	65.65	57.553	66.05	56.263
PRO_CENTERST_CS	4 SEASONS	4S_10Y3DPROF	65.82	34.458	34.000	-0.2300	23003	65.07	220.525	65.14	219.277
PRO_JUNC OF E&W	4 SEASONS	4S_10Y3DPROF	66.75	33.044	33.000	0.0031	152705	65.96	130.412	66.75	122.577
TW_MOSQUITO_CK	4 SEASONS	4S_10Y3DPROF	0.00	18.000	20.500	0.0000	240	71.78	283.969	0.00	0.000
TW_MOSQUITO_CK	4 SEASONS	4S_10Y_3DAY	0.00	18.000	20.500	0.0000	8	76.70	224.116	0.00	0.000

OKEECHOBEE COUNTY
COMPREHENSIVE URBANIZED AREA
STORMWATER MASTER PLAN

FOUR SEASONS PRE AND POST STAGES FOR 25-YR 3-DAY DESIGN STORM EVENT RESULTS

Four Seasons Nodal Comparison of Maximum & Post Mitigation Stages for 25-yr, 3-day Design Storm Event

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
NA	4 SEASONS	4S_25Y3DPROF	62.96	33.006	31.800	0.0021	762310	60.50	307.109	61.92	148.855
NA	4 SEASONS	4S_25Y_3DAY	61.31	33.908	31.800	0.0030	762305	60.50	307.113	61.35	218.354
NA2	4 SEASONS	4S_25Y3DPROF	68.50	32.117	31.600	-0.0026	419180	61.54	15.381	65.75	8.246
NA2	4 SEASONS	4S_25Y_3DAY	63.23	33.404	31.600	0.0030	419180	61.29	220.372	63.02	118.055
NB	4 SEASONS	4S_25Y3DPROF	62.93	32.984	31.000	0.0041	318001	60.57	282.740	62.03	174.492
NB	4 SEASONS	4S_25Y_3DAY	61.31	33.908	31.000	0.0030	318000	60.50	153.711	61.31	113.493
NC	4 SEASONS	4S_25Y3DPROF	68.93	31.413	28.900	0.0020	653412	60.68	222.083	62.55	168.770
NC	4 SEASONS	4S_25Y_3DAY	68.77	32.945	28.900	0.0023	653411	61.18	173.399	74.12	197.558
NC2	4 SEASONS	4S_25Y3DPROF	70.57	30.763	29.100	-0.0048	81364	62.55	168.770	63.33	390.401
NC2	4 SEASONS	4S_25Y_3DAY	68.77	32.943	29.100	0.0049	81361	74.12	197.558	107.83	342.294
NCC	4 SEASONS	4S_25Y3DPROF	70.57	30.761	27.920	-0.0032	115702	63.33	708.836	63.07	465.667
NCC	4 SEASONS	4S_25Y_3DAY	68.77	32.945	27.920	0.0033	453662	64.74	623.335	68.40	452.820
NCH1	4 SEASONS	4S_25Y3DPROF	70.50	26.182	23.770	0.0029	247318	69.15	389.297	70.50	383.042
NCH1	4 SEASONS	4S_25Y_3DAY	75.38	30.938	23.770	0.0025	517547	74.20	545.588	75.38	318.797
NCH10	4 SEASONS	4S_25Y3DPROF	64.52	35.316	33.200	-0.0043	182381	63.62	440.825	63.81	431.939
NCH10	4 SEASONS	4S_25Y_3DAY	64.56	35.339	33.200	-0.0040	182381	63.65	440.307	63.77	437.409
NCH2	4 SEASONS	4S_25Y3DPROF	69.99	28.327	25.300	0.0028	22978	69.89	360.551	69.94	360.538
NCH2	4 SEASONS	4S_25Y_3DAY	75.32	30.968	25.300	0.0030	272190	69.19	402.591	69.25	380.335
NCH3	4 SEASONS	4S_25Y3DPROF	71.39	30.418	25.600	0.0021	2484768	62.86	628.234	71.87	314.112
NCH3	4 SEASONS	4S_25Y_3DAY	73.62	31.392	25.600	-0.0050	298589	68.63	461.735	68.50	446.348
NCH4	4 SEASONS	4S_25Y3DPROF	0.00	23.210	25.710	0.0000	488	0.00	0.000	0.00	0.000
NCH4	4 SEASONS	4S_25Y_3DAY	69.29	32.447	25.710	0.0047	111830	68.70	472.811	68.72	472.562
NCH5	4 SEASONS	4S_25Y3DPROF	0.00	21.700	24.200	0.0000	558	0.00	0.000	0.00	0.000
NCH5	4 SEASONS	4S_25Y_3DAY	68.84	32.891	24.200	-0.0037	568979	68.36	475.664	68.70	472.811
NCH6	4 SEASONS	4S_25Y3DPROF	70.13	30.975	27.900	0.0031	485818	65.93	342.763	66.38	320.980
NCH6	4 SEASONS	4S_25Y_3DAY	68.23	33.363	27.900	0.0030	829820	64.51	625.851	66.20	459.761
NCH7	4 SEASONS	4S_25Y3DPROF	66.46	32.542	28.700	0.0022	518871	64.88	303.004	66.23	259.165
NCH7	4 SEASONS	4S_25Y_3DAY	66.72	34.445	28.700	0.0028	524118	64.36	430.809	66.50	395.383
NCH8	4 SEASONS	4S_25Y3DPROF	64.46	34.887	31.400	0.0028	498303	64.93	260.833	64.88	286.291
NCH8	4 SEASONS	4S_25Y_3DAY	66.01	35.170	31.400	0.0031	498313	63.81	434.788	63.98	414.982

Four Seasons Nodal Comparison of Maximum & Post Mitigation Stages for 25-yr, 3-day Design Storm Event

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
NCH9	4 SEASONS	4S_25Y3DPROF	64.53	35.240	31.500	-0.0078	209066	63.81	431.939	64.86	427.956
NCH9	4 SEASONS	4S_25Y_3DAY	65.16	35.266	31.500	-0.0064	182388	63.77	437.409	63.81	434.788
ND	4 SEASONS	4S_25Y3DPROF	68.50	32.117	31.100	0.0050	419180	60.07	76.157	64.75	21.235
ND	4 SEASONS	4S_25Y_3DAY	63.24	33.391	31.100	0.0030	419180	61.26	158.897	63.21	151.639
ND2	4 SEASONS	4S_25Y3DPROF	70.12	31.028	31.100	-0.0049	49543	64.75	21.235	78.28	46.896
ND2	4 SEASONS	4S_25Y_3DAY	68.23	33.362	31.100	-0.0048	49543	63.21	151.639	64.51	268.375
NE	4 SEASONS	4S_25Y3DPROF	66.21	33.819	31.500	0.0030	210678	61.00	145.742	74.26	117.592
NE	4 SEASONS	4S_25Y_3DAY	66.72	34.446	31.500	0.0028	210678	61.00	145.741	64.60	203.862
NE2	4 SEASONS	4S_25Y3DPROF	66.21	33.818	30.490	0.0032	210680	74.26	117.592	66.19	38.806
NE2	4 SEASONS	4S_25Y_3DAY	66.73	34.446	30.490	0.0028	210680	64.60	203.862	66.92	44.637
NF	4 SEASONS	4S_25Y3DPROF	61.59	31.733	31.500	-0.0021	146728	61.00	146.957	61.25	134.750
NF	4 SEASONS	4S_25Y_3DAY	68.23	33.364	31.500	0.0018	146728	61.00	146.955	61.20	137.916
NG	4 SEASONS	4S_25Y3DPROF	61.60	31.722	31.000	-0.0019	438542	61.00	208.509	61.60	187.354
NG	4 SEASONS	4S_25Y_3DAY	68.23	33.363	31.000	0.0018	529228	61.00	211.964	61.34	192.176
NH	4 SEASONS	4S_25Y3DPROF	61.84	31.146	32.200	0.0028	308928	61.25	113.309	61.59	125.092
NH	4 SEASONS	4S_25Y_3DAY	68.84	32.891	32.200	0.0023	308928	61.25	107.378	61.26	102.768
NI	4 SEASONS	4S_25Y3DPROF	61.00	32.179	29.010	0.0050	2182	61.00	111.016	61.00	111.009
NI	4 SEASONS	4S_25Y_3DAY	61.00	32.222	29.010	0.0050	2180	61.00	105.257	61.00	105.244
NJ	4 SEASONS	4S_25Y3DPROF	71.80	30.423	28.800	-0.0031	191628	60.75	47.693	60.70	72.451
NJ	4 SEASONS	4S_25Y_3DAY	74.00	31.392	28.800	-0.0029	191628	60.75	44.894	61.07	35.867
NJ2	4 SEASONS	4S_25Y3DPROF	71.76	30.423	27.000	0.0044	191631	60.70	72.451	60.17	23.931
NJ2	4 SEASONS	4S_25Y_3DAY	74.00	31.392	27.000	-0.0050	191631	61.07	35.867	93.23	26.942
NJJ	4 SEASONS	4S_25Y3DPROF	70.14	28.583	25.560	0.0050	2191	70.95	331.999	70.97	332.006
NJJ	4 SEASONS	4S_25Y_3DAY	74.32	31.271	25.560	0.0037	298590	68.96	418.795	69.41	391.951
NK	4 SEASONS	4S_25Y3DPROF	61.33	31.067	31.500	-0.0031	416178	61.25	62.320	61.27	61.834
NK	4 SEASONS	4S_25Y_3DAY	74.35	31.271	31.500	0.0020	416178	61.25	59.058	61.27	58.683
NK2	4 SEASONS	4S_25Y3DPROF	64.63	29.374	29.380	0.0035	416087	61.27	61.834	64.63	28.745
NK2	4 SEASONS	4S_25Y_3DAY	74.33	31.271	29.380	-0.0030	416180	61.27	58.683	64.15	27.365
NOA	4 SEASONS	4S_25Y3DPROF	62.10	45.010	43.900	0.0049	2184	61.50	145.870	61.50	145.566
NOA	4 SEASONS	4S_25Y_3DAY	62.10	45.010	43.900	0.0049	2184	61.50	145.866	61.50	145.566

Four Seasons Nodal Comparison of Maximum & Post Mitigation Stages for 25-yr, 3-day Design Storm Event

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
NOA2	4 SEASONS	4S_25Y3DPROF	62.83	43.663	44.000	0.0020	588784	61.50	145.566	62.79	118.388
NOA2	4 SEASONS	4S_25Y_3DAY	62.83	43.663	44.000	0.0012	588784	61.50	145.566	62.79	118.391
NOB	4 SEASONS	4S_25Y3DPROF	62.87	43.497	42.200	-0.0034	588804	62.50	271.087	62.87	267.224
NOB	4 SEASONS	4S_25Y_3DAY	62.87	43.497	42.200	0.0024	588804	62.50	271.091	62.87	267.229
NOB2	4 SEASONS	4S_25Y3DPROF	62.92	42.176	42.200	-0.0042	253047	62.87	267.224	62.92	267.128
NOB2	4 SEASONS	4S_25Y_3DAY	62.92	42.176	42.200	0.0048	253047	62.87	267.229	62.92	267.134
NOC	4 SEASONS	4S_25Y3DPROF	64.11	35.435	33.200	-0.0045	252981	63.50	442.302	63.62	440.825
NOC	4 SEASONS	4S_25Y_3DAY	64.00	35.447	33.200	0.0042	252981	63.50	442.300	63.65	440.307
NOD	4 SEASONS	4S_25Y3DPROF	61.56	31.130	31.700	-0.0017	414178	61.25	88.588	61.30	86.660
NOD	4 SEASONS	4S_25Y_3DAY	61.56	31.131	31.700	0.0014	414178	61.25	88.587	61.30	86.659
NOD2	4 SEASONS	4S_25Y3DPROF	65.73	30.192	29.240	-0.0033	414190	61.30	86.660	65.73	33.092
NOD2	4 SEASONS	4S_25Y_3DAY	76.08	30.968	29.240	-0.0038	414180	61.30	86.659	65.36	33.471
NOE	4 SEASONS	4S_25Y3DPROF	70.09	26.859	24.900	0.0019	53365	68.88	383.430	69.03	382.757
NOE	4 SEASONS	4S_25Y_3DAY	75.37	30.950	24.900	-0.0047	577518	69.14	403.553	69.70	351.954
NOF	4 SEASONS	4S_25Y3DPROF	70.50	26.182	25.500	0.0026	212178	60.50	70.193	60.98	75.828
NOF	4 SEASONS	4S_25Y_3DAY	75.38	30.939	25.500	-0.0026	212178	60.50	70.194	76.08	218.763
NSLOUGH_SEC28	4 SEASONS	4S_25Y3DPROF	0.00	28.000	32.000	0.0000	3920	65.28	162.998	0.00	0.000
NSLOUGH_SEC28	4 SEASONS	4S_25Y_3DAY	0.00	28.000	32.000	0.0000	1568	0.00	0.000	0.00	0.000
PRO_8ST&80AV_S	4 SEASONS	4S_25Y3DPROF	65.26	33.645	33.000	0.0050	583	64.44	78.504	64.60	83.973
PRO_8ST&80AV_S	4 SEASONS	4S_25Y_3DAY	0.00	29.000	33.000	0.0000	120	0.00	0.000	0.00	0.000
PRO__8ST&80AV_N	4 SEASONS	4S_25Y3DPROF	64.88	34.359	33.000	0.0033	27723	63.82	84.865	64.44	78.504
PRO__8ST&80AV_N	4 SEASONS	4S_25Y_3DAY	0.00	29.000	33.000	0.0000	120	0.00	0.000	0.00	0.000
PRO_CENTERST_CS	4 SEASONS	4S_25Y3DPROF	64.52	35.183	34.000	-0.2300	27264	64.86	336.886	64.87	337.920
PRO_CENTERST_CS	4 SEASONS	4S_25Y_3DAY	0.00	30.000	34.000	-2.0000	113	0.00	0.000	0.00	0.000
PRO_JUNC OF E&W	4 SEASONS	4S_25Y3DPROF	65.28	33.611	33.000	0.0029	163077	64.60	176.119	65.28	162.998
PRO_JUNC OF E&W	4 SEASONS	4S_25Y_3DAY	0.00	29.000	33.000	0.0000	1681	0.00	0.000	0.00	0.000
TW_MOSQUITO_CK	4 SEASONS	4S_25Y3DPROF	0.00	18.000	20.500	0.0000	240	70.50	383.042	0.00	0.000
TW_MOSQUITO_CK	4 SEASONS	4S_25Y_3DAY	0.00	18.000	20.500	0.0000	8	75.38	318.797	0.00	0.000

OKEECHOBEE COUNTY
COMPREHENSIVE URBANIZED AREA
STORMWATER MASTER PLAN

GENERAL REGION PRE AND POST STAGES FOR 5-YR 1-DAY DESIGN STORM EVENT RESULTS

General Region Nodal Comparison of Maximum Pre & Post Mitigation Stages for 5-yr, 1-day Design Storm Event

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
4A_01	GENERAL	G_05YR_1D	18.65	20.497	25.000	0.0003	10033	18.76	148.584	18.78	148.593
4A_01	GENERAL	PRO_G05Y_1D	18.88	20.549	25.000	0.0004	10100	18.98	157.211	18.99	157.219
4A_02	GENERAL	G_05YR_1D	19.10	20.563	24.000	0.0004	25806	26.55	73.332	26.55	73.546
4A_02	GENERAL	PRO_G05Y_1D	19.48	20.632	24.000	0.0004	26086	30.47	94.212	30.45	94.337
4A_03	GENERAL	G_05YR_1D	23.96	21.652	27.000	0.0004	23088	26.48	73.275	26.55	73.332
4A_03	GENERAL	PRO_G05Y_1D	28.70	21.891	27.000	0.0000	24210	30.41	94.178	30.47	94.212
4A_04	GENERAL	G_05YR_1D	25.41	21.947	25.000	0.0006	29530	26.36	73.234	26.48	73.275
4A_04	GENERAL	PRO_G05Y_1D	29.60	22.245	25.000	0.0001	30898	30.30	94.155	30.41	94.178
4A_05	GENERAL	G_05YR_1D	25.46	21.971	19.500	0.0006	13280	26.31	73.218	26.36	73.234
4A_05	GENERAL	PRO_G05Y_1D	29.63	22.275	19.500	0.0001	13632	30.25	94.146	30.30	94.155
4A_06_BC_SR70	GENERAL	G_05YR_1D	25.66	22.075	28.000	0.0006	3055	26.30	73.215	26.31	73.218
4A_06_BC_SR70	GENERAL	PRO_G05Y_1D	29.74	22.377	28.000	-0.0006	3165	30.24	94.144	30.25	94.146
4A_07	GENERAL	G_05YR_1D	25.84	22.221	23.000	-0.1300	14307	26.25	73.206	26.30	73.215
4A_07	GENERAL	PRO_G05Y_1D	29.85	22.520	23.000	-0.1300	15024	30.19	94.139	30.24	94.144
4A_08	GENERAL	G_05YR_1D	26.16	22.968	28.000	0.0006	27597	26.13	73.205	26.25	73.206
4A_08	GENERAL	PRO_G05Y_1D	30.09	23.285	28.000	0.0001	29310	30.07	94.137	30.19	94.139
4A_09	GENERAL	G_05YR_1D	26.14	23.355	24.000	0.0006	29167	25.99	73.210	26.13	73.205
4A_09	GENERAL	PRO_G05Y_1D	30.08	23.725	24.000	0.0001	30755	29.93	94.141	30.07	94.137
4A_10	GENERAL	G_05YR_1D	26.09	23.413	23.000	0.0006	16701	25.30	68.877	25.39	68.855
4A_10	GENERAL	PRO_G05Y_1D	30.05	23.793	23.000	0.0001	17323	29.64	89.334	29.74	89.325
AIRP_INUDSTRIAL	GENERAL	G_05YR_1D	24.68	27.715	33.000	0.0004	442339	13.80	24.248	24.68	0.010
AIRP_INUDSTRIAL	GENERAL	PRO_G05Y_1D	24.52	27.716	33.000	-0.0002	442337	13.81	24.370	24.52	0.010
AIRPORT	GENERAL	G_05YR_1D	24.63	27.704	33.000	0.0004	2510898	13.75	163.373	23.43	47.678
AIRPORT	GENERAL	PRO_G05Y_1D	24.47	27.706	33.000	-0.0002	2510880	13.75	163.328	23.21	45.808
APD_01	GENERAL	G_05YR_1D	18.89	20.894	28.000	0.0002	15993	21.32	128.616	21.35	128.677
APD_01	GENERAL	PRO_G05Y_1D	18.15	20.381	28.000	0.0002	15083	21.02	127.124	21.04	127.274
APD_02	GENERAL	G_05YR_1D	20.12	21.029	24.000	-0.0002	15268	24.39	96.405	24.00	96.480
APD_02	GENERAL	PRO_G05Y_1D	18.53	20.604	24.000	-0.0002	14478	24.18	94.651	24.00	94.759
APD_03	GENERAL	G_05YR_1D	21.65	21.251	28.000	-0.0002	9886	24.38	96.381	24.39	96.405
APD_03	GENERAL	PRO_G05Y_1D	20.82	20.936	28.000	0.0001	9427	24.18	94.610	24.18	94.651

Craig A. Smith & Associates Project No. 00-0903-146
Note: Improvements were limited to detention pond addition east of SR 15 and Basswood culvert upsizing prior to crossing SR 98.

General Region Nodal Comparison of Maximum & Post Mitigation Stages for 5-yr, 1-day Design Storm Event

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
APD_04	GENERAL	G_05YR_1D	22.50	21.439	25.000	-0.0007	3917	24.76	73.455	24.76	73.465
APD_04	GENERAL	PRO_G05Y_1D	22.32	21.196	25.000	-0.0008	3716	24.57	71.638	24.59	71.650
APD_05	GENERAL	G_05YR_1D	23.28	21.657	26.000	0.0013	1931	24.75	73.452	24.76	73.455
APD_05	GENERAL	PRO_G05Y_1D	23.39	21.510	26.000	0.0014	1883	24.57	71.635	24.57	71.638
APD_06	GENERAL	G_05YR_1D	24.47	21.822	25.500	-0.0002	1576	24.74	73.451	24.75	73.452
APD_06	GENERAL	PRO_G05Y_1D	24.95	21.806	25.500	-0.0002	1569	24.56	71.636	24.57	71.635
APD_07	GENERAL	G_05YR_1D	24.68	22.302	26.000	-0.0002	2234	24.74	73.451	24.74	73.451
APD_07	GENERAL	PRO_G05Y_1D	24.68	22.285	26.000	0.0002	2227	24.56	71.636	24.56	71.636
APD_08	GENERAL	G_05YR_1D	24.88	22.798	26.000	0.0023	3218	24.92	66.293	24.93	66.293
APD_08	GENERAL	PRO_G05Y_1D	24.78	22.772	26.000	0.0023	3202	24.78	64.463	24.80	64.463
APD_09	GENERAL	G_05YR_1D	24.91	22.991	27.000	0.0003	2371	24.95	58.946	24.96	58.946
APD_09	GENERAL	PRO_G05Y_1D	24.80	22.959	27.000	0.0003	2361	24.81	57.163	24.82	57.163
APD_10	GENERAL	G_05YR_1D	24.99	24.271	28.000	-0.2000	1235	24.99	58.004	24.99	58.004
APD_10	GENERAL	PRO_G05Y_1D	24.90	24.229	28.000	-0.2000	1230	24.89	56.215	24.90	56.215
APD_11	GENERAL	G_05YR_1D	24.99	24.281	28.000	0.0008	6711	24.99	58.005	24.99	58.004
APD_11	GENERAL	PRO_G05Y_1D	24.90	24.239	28.000	0.0008	6673	24.85	56.216	24.89	56.215
APD_12	GENERAL	G_05YR_1D	24.99	24.341	27.500	0.0031	10485	24.99	44.057	24.99	44.055
APD_12	GENERAL	PRO_G05Y_1D	24.91	24.297	27.500	0.0031	10412	24.94	42.254	24.94	42.255
APD_13	GENERAL	G_05YR_1D	24.99	24.370	30.000	0.0002	11213	25.18	17.770	25.74	17.781
APD_13	GENERAL	PRO_G05Y_1D	24.93	24.322	30.000	0.0001	11148	25.10	15.946	25.11	15.956
APD_14	GENERAL	G_05YR_1D	25.02	24.402	29.000	0.0002	23315	24.89	17.768	25.18	17.770
APD_14	GENERAL	PRO_G05Y_1D	24.94	24.351	29.000	0.0000	23171	24.72	15.938	25.10	15.946
APD_15	GENERAL	G_05YR_1D	24.92	26.744	32.000	0.0001	37598	24.71	17.772	24.89	17.768
APD_15	GENERAL	PRO_G05Y_1D	24.76	26.715	32.000	0.0000	37444	24.55	15.941	24.72	15.938
APD_16	GENERAL	G_05YR_1D	24.72	27.509	32.000	0.0004	23361	24.42	17.770	24.71	17.762
APD_16	GENERAL	PRO_G05Y_1D	24.54	27.542	32.000	0.0001	23424	24.24	15.938	24.55	15.931
BASSWOOD	GENERAL	G_05YR_1D	34.21	29.751	33.000	0.0001	6471630	14.75	267.965	34.21	12.772
BASSWOOD	GENERAL	PRO_G05Y_1D	28.14	29.285	33.000	0.0000	5374114	14.75	267.965	28.14	57.215
GC1	GENERAL	G_05YR_1D	18.00	20.005	16.000	0.0011	4127	21.76	133.751	21.71	133.809
GC1	GENERAL	PRO_G05Y_1D	0.00	13.500	16.000	*********	113	0.00	0.000	0.00	0.000

Craig A. Smith & Associates Project No. 00-0903-146
Note: Improvements were limited to detention pond addition east of SR 15 and Basswood culvert upsizing prior to crossing SR 98.

General Region Nodal Comparison of Maximum & Post Mitigation Stages for 5-yr, 1-day Design Storm Event

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
GC2	GENERAL	G_05YR_1D	18.00	20.018	18.000	-0.0006	9184	21.59	133.672	21.76	133.751
GC2	GENERAL	PRO_G05Y_1D	0.00	13.500	18.000	*********	113	0.00	0.000	0.00	0.000
GC3	GENERAL	G_05YR_1D	18.22	20.668	21.000	-0.3000	6984	21.39	134.243	20.72	153.994
GC3	GENERAL	PRO_G05Y_1D	0.00	13.500	21.000	*********	113	0.00	0.000	0.00	0.000
GC4	GENERAL	G_05YR_1D	18.33	20.706	23.000	-0.9600	4562	21.69	133.516	21.39	134.243
GC4	GENERAL	PRO_G05Y_1D	150.00	44525.747	23.000	*********	113	60.00	16.000	0.00	0.000
GC5	GENERAL	G_05YR_1D	18.56	20.784	22.000	0.0006	7978	21.35	128.677	21.45	128.728
GC5	GENERAL	PRO_G05Y_1D	18.07	20.205	22.000	0.0001	7496	21.04	127.274	21.04	127.368
GC6A	GENERAL	G_05YR_1D	18.28	20.663	23.000	-0.1000	2717	20.72	153.994	21.76	133.713
GC6A	GENERAL	PRO_G05Y_1D	0.00	13.500	23.000	*********	113	0.00	0.000	0.00	0.000
GC6B	GENERAL	G_05YR_1D	18.00	20.028	22.000	-0.2000	3940	21.76	133.713	21.59	133.672
GC6B	GENERAL	PRO_G05Y_1D	0.00	13.500	22.000	*********	113	0.00	0.000	0.00	0.000
GN04	GENERAL	G_05YR_1D	25.12	25.848	28.000	0.0002	4146933	15.25	141.758	25.00	64.482
GN04	GENERAL	PRO_G05Y_1D	29.49	26.162	28.000	0.0000	5551215	15.75	162.318	29.37	84.984
GN05	GENERAL	G_05YR_1D	30.75	26.768	28.000	0.0001	955774	12.75	65.196	0.00	0.000
GN05	GENERAL	PRO_G05Y_1D	30.72	26.768	28.000	0.0000	955770	12.75	65.196	0.00	0.000
GN06	GENERAL	G_05YR_1D	33.19	25.822	28.000	0.0003	3440096	14.50	111.044	33.19	4.884
GN06	GENERAL	PRO_G05Y_1D	33.19	25.822	28.000	0.0000	3440082	14.50	111.044	33.19	4.884
GN07	GENERAL	G_05YR_1D	17.58	24.976	29.000	0.0001	3152508	14.00	148.084	17.58	93.695
GN07	GENERAL	PRO_G05Y_1D	17.58	24.976	29.000	0.0000	3152501	14.00	148.084	17.58	93.694
GN08	GENERAL	G_05YR_1D	33.25	26.611	28.000	0.0000	3779746	13.00	109.135	0.00	0.000
GN08	GENERAL	PRO_G05Y_1D	33.25	26.611	28.000	0.0000	3779745	13.00	109.135	0.00	0.000
GN09	GENERAL	G_05YR_1D	21.13	25.842	28.000	-0.0032	1823510	13.00	84.529	21.81	16.532
GN09	GENERAL	PRO_G05Y_1D	21.14	25.842	28.000	-0.0032	1823499	13.00	84.529	21.14	16.486
GN10	GENERAL	G_05YR_1D	19.77	25.812	28.000	-0.0009	2558151	12.75	140.178	19.77	22.559
GN10	GENERAL	PRO_G05Y_1D	19.77	25.812	28.000	-0.0004	2558121	12.75	140.178	19.77	22.558
PRO_POND	GENERAL	PRO_G05Y_1D	18.03	20.101	21.000	0.0000	436250	21.04	127.368	21.20	133.313
RCC1	GENERAL	G_05YR_1D	25.12	25.817	27.000	0.0006	7881	25.00	65.647	25.04	65.646
RCC1	GENERAL	PRO_G05Y_1D	29.49	26.128	27.000	0.0000	8165	29.35	86.134	29.38	86.133
RCC2	GENERAL	G_05YR_1D	25.20	25.523	29.000	0.0005	8380	25.04	65.646	25.07	65.645

Craig A. Smith & Associates Project No. 00-0903-146
Note: Improvements were limited to detention pond addition east of SR 15 and Basswood culvert upsizing prior to crossing SR 98.

General Region Nodal Comparison of Maximum & Post Mitigation Stages for 5-yr, 1-day Design Storm Event

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
RCC2	GENERAL	PRO_G05Y_1D	29.56	25.822	29.000	0.0000	8983	29.38	86.133	29.42	86.131
RCC3	GENERAL	G_05YR_1D	25.24	25.394	28.000	0.0006	6951	25.07	65.645	25.09	65.644
RCC3	GENERAL	PRO_G05Y_1D	29.58	25.707	28.000	0.0000	7338	29.42	86.131	29.46	86.130
RCC4	GENERAL	G_05YR_1D	25.34	25.133	28.000	0.0006	9758	25.09	67.643	25.13	67.640
RCC4	GENERAL	PRO_G05Y_1D	29.65	25.469	28.000	0.0000	10150	29.43	88.111	29.48	88.108
RCC5	GENERAL	G_05YR_1D	25.36	25.046	24.000	0.0005	12470	25.13	68.891	25.19	68.887
RCC5	GENERAL	PRO_G05Y_1D	29.66	25.400	24.000	0.0000	12785	29.46	89.341	29.52	89.338
RCC6	GENERAL	G_05YR_1D	25.39	24.946	27.000	-0.0017	7464	25.19	68.887	25.22	68.884
RCC6	GENERAL	PRO_G05Y_1D	29.68	25.300	27.000	-0.0017	7827	29.52	89.338	29.56	89.337
RCC7A	GENERAL	G_05YR_1D	25.45	24.797	28.000	0.0011	7560	25.22	68.884	25.25	68.882
RCC7A	GENERAL	PRO_G05Y_1D	29.72	25.102	28.000	0.0011	7762	29.56	89.337	29.60	89.336
RCC7B	GENERAL	G_05YR_1D	25.59	24.537	28.000	0.0006	6022	25.25	68.882	25.28	68.879
RCC7B	GENERAL	PRO_G05Y_1D	29.80	24.835	28.000	-0.0001	6522	29.60	89.336	29.62	89.335
SBRR	GENERAL	G_05YR_1D	25.64	24.455	29.000	0.0006	5331	25.28	68.879	25.30	68.877
SBRR	GENERAL	PRO_G05Y_1D	29.84	24.711	29.000	-0.0002	5782	29.62	89.335	29.64	89.334
TC_E_AIRPORT	GENERAL	G_05YR_1D	12.00	20.000	21.000	0.0001	630	21.71	133.809	0.00	0.000
TC_E_AIRPORT	GENERAL	PRO_G05Y_1D	12.00	20.000	21.000	0.0001	0	21.20	133.313	0.00	0.000
TW_ L62N	GENERAL	G_05YR_1D	12.00	20.000	25.000	0.0000	9681	18.76	150.352	0.00	0.000
TW_ L62N	GENERAL	PRO_G05Y_1D	12.00	20.000	25.000	0.0000	9681	18.97	158.962	0.00	0.000

Craig A. Smith & Associates Project No. 00-0903-146
Note: Improvements were limited to detention pond addition east of SR 15 and Basswood culvert upsizing prior to crossing SR 98.

OKEECHOBEE COUNTY
COMPREHENSIVE URBANIZED AREA
STORMWATER MASTER PLAN

GENERAL REGION PRE AND POST STAGES FOR 10-YR 3-DAY DESIGN STORM EVENT RESULTS

General Region Nodal Comparison of Maximum & Post Mitigation Stages for 10-yr, 3-day Design Storm Event

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
4A_01	GENERAL	G_10YR_3D	67.75	21.450	25.000	0.0003	11554	67.74	252.379	67.75	252.379
4A_01	GENERAL	PRO_G10Y_3D	68.47	21.487	25.000	0.0003	11603	68.46	264.336	68.47	264.336
4A_02	GENERAL	G_10YR_3D	68.88	21.521	24.000	0.0004	28932	74.55	119.571	74.62	119.747
4A_02	GENERAL	PRO_G10Y_3D	69.88	21.576	24.000	0.0004	29179	78.80	139.338	78.76	139.507
4A_03	GENERAL	G_10YR_3D	72.63	22.484	27.000	0.0001	27491	74.46	119.499	74.55	119.571
4A_03	GENERAL	PRO_G10Y_3D	74.13	22.649	27.000	0.0002	28267	78.76	139.271	78.80	139.338
4A_04	GENERAL	G_10YR_3D	73.22	22.777	25.000	0.0001	33427	74.36	119.441	74.46	119.499
4A_04	GENERAL	PRO_G10Y_3D	75.20	22.979	25.000	0.0002	34294	78.69	139.217	78.76	139.271
4A_05	GENERAL	G_10YR_3D	73.26	22.810	19.500	0.0001	14255	74.31	119.418	74.36	119.441
4A_05	GENERAL	PRO_G10Y_3D	75.29	23.017	19.500	0.0002	14485	78.67	139.195	78.69	139.217
4A_06_BC_SR70	GENERAL	G_10YR_3D	73.35	22.889	28.000	-0.0006	3351	74.30	119.414	74.31	119.418
4A_06_BC_SR70	GENERAL	PRO_G10Y_3D	75.53	23.103	28.000	-0.0006	3430	78.67	139.191	78.67	139.195
4A_07	GENERAL	G_10YR_3D	73.49	23.004	23.000	-0.1300	16134	74.23	119.395	74.30	119.414
4A_07	GENERAL	PRO_G10Y_3D	75.85	23.225	23.000	-0.1300	16671	78.64	139.171	78.67	139.191
4A_08	GENERAL	G_10YR_3D	73.91	23.702	28.000	0.0001	31575	74.09	119.384	74.23	119.395
4A_08	GENERAL	PRO_G10Y_3D	77.10	23.953	28.000	0.0001	32915	78.54	139.154	78.64	139.171
4A_09	GENERAL	G_10YR_3D	74.02	24.170	24.000	0.0001	32681	74.01	119.383	74.09	119.384
4A_09	GENERAL	PRO_G10Y_3D	77.50	24.456	24.000	0.0002	33873	78.36	139.148	78.54	139.154
4A_10	GENERAL	G_10YR_3D	74.02	24.242	23.000	0.0001	18052	74.11	111.586	74.15	111.591
4A_10	GENERAL	PRO_G10Y_3D	77.55	24.534	23.000	0.0004	18292	78.82	131.826	78.83	131.836
AIRP_INUDSTRIAL	GENERAL	G_10YR_3D	71.85	28.569	33.000	-0.0001	911807	61.64	50.630	71.85	0.942
AIRP_INUDSTRIAL	GENERAL	PRO_G10Y_3D	71.49	28.552	33.000	-0.0002	897562	61.63	50.494	71.49	0.912
AIRPORT	GENERAL	G_10YR_3D	71.58	28.537	33.000	-0.0001	4539707	61.50	322.024	70.56	85.608
AIRPORT	GENERAL	PRO_G10Y_3D	71.21	28.518	33.000	-0.0002	4466907	61.50	319.783	70.21	81.660
APD_01	GENERAL	G_10YR_3D	70.41	22.165	28.000	0.0002	18253	70.51	227.768	70.55	227.769
APD_01	GENERAL	PRO_G10Y_3D	70.59	22.132	28.000	0.0002	18194	70.37	224.575	70.38	224.571
APD_02	GENERAL	G_10YR_3D	70.78	22.270	24.000	-0.0002	17578	72.15	156.821	72.24	156.954
APD_02	GENERAL	PRO_G10Y_3D	70.63	22.236	24.000	-0.0002	17514	71.29	153.460	71.29	153.469
APD_03	GENERAL	G_10YR_3D	70.85	22.436	28.000	0.0001	11525	71.52	156.806	72.15	156.821
APD_03	GENERAL	PRO_G10Y_3D	70.63	22.400	28.000	0.0001	11475	71.29	153.455	71.29	153.460

Craig A. Smith & Associates Project No. 00-0903-146
Note: Improvements were limited to detention pond addition east of SR 15 and Basswood culvert upsizing prior to crossing SR 98.

General Region Nodal Comparison of Maximum & Post Mitigation Stages for 10-yr, 3-day Design Storm Event

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
APD_04	GENERAL	G_10YR_3D	71.08	22.551	25.000	0.0006	4825	71.73	123.972	72.14	123.992
APD_04	GENERAL	PRO_G10Y_3D	71.04	22.514	25.000	-0.0006	4795	71.54	120.577	71.55	120.581
APD_05	GENERAL	G_10YR_3D	71.15	22.668	26.000	0.0011	2241	71.73	123.970	71.73	123.972
APD_05	GENERAL	PRO_G10Y_3D	71.13	22.630	26.000	0.0012	2229	71.54	120.576	71.54	120.577
APD_06	GENERAL	G_10YR_3D	71.28	22.746	25.500	0.0002	1792	71.73	123.969	71.73	123.970
APD_06	GENERAL	PRO_G10Y_3D	71.20	22.708	25.500	0.0002	1782	71.53	120.575	71.54	120.576
APD_07	GENERAL	G_10YR_3D	71.29	23.041	26.000	0.0002	2501	71.73	123.969	71.73	123.969
APD_07	GENERAL	PRO_G10Y_3D	71.29	23.002	26.000	0.0002	2487	71.53	120.575	71.53	120.575
APD_08	GENERAL	G_10YR_3D	71.73	23.443	26.000	0.0023	3634	72.02	112.821	72.16	112.823
APD_08	GENERAL	PRO_G10Y_3D	71.50	23.403	26.000	0.0023	3608	71.62	109.407	71.63	109.408
APD_09	GENERAL	G_10YR_3D	71.74	23.697	27.000	0.0003	2602	72.01	105.564	72.03	105.564
APD_09	GENERAL	PRO_G10Y_3D	71.55	23.654	27.000	0.0003	2587	71.63	102.098	71.64	102.098
APD_10	GENERAL	G_10YR_3D	72.03	25.178	28.000	-0.2000	1334	72.02	102.731	72.03	102.731
APD_10	GENERAL	PRO_G10Y_3D	71.67	25.114	28.000	-0.2000	1327	71.67	99.261	71.67	99.261
APD_11	GENERAL	G_10YR_3D	72.03	25.190	28.000	0.0008	7538	71.99	102.732	72.02	102.731
APD_11	GENERAL	PRO_G10Y_3D	71.67	25.127	28.000	0.0008	7481	71.63	99.262	71.67	99.261
APD_12	GENERAL	G_10YR_3D	72.04	25.248	27.500	0.0031	11977	72.14	73.452	72.24	73.455
APD_12	GENERAL	PRO_G10Y_3D	71.68	25.184	27.500	0.0031	11870	71.79	70.395	71.88	70.399
APD_13	GENERAL	G_10YR_3D	72.06	25.280	30.000	0.0001	12432	72.27	34.124	72.78	34.144
APD_13	GENERAL	PRO_G10Y_3D	71.70	25.212	30.000	0.0001	12342	71.91	31.389	72.46	31.403
APD_14	GENERAL	G_10YR_3D	72.07	25.313	29.000	0.0001	25744	71.91	34.123	72.27	34.124
APD_14	GENERAL	PRO_G10Y_3D	71.71	25.243	29.000	0.0000	25542	71.56	31.386	71.91	31.389
APD_15	GENERAL	G_10YR_3D	71.96	27.058	32.000	0.0000	40472	71.66	34.129	71.91	34.123
APD_15	GENERAL	PRO_G10Y_3D	71.61	27.010	32.000	0.0000	40191	71.31	31.393	71.56	31.386
APD_16	GENERAL	G_10YR_3D	71.67	28.153	32.000	0.0001	25645	71.36	33.192	71.64	33.187
APD_16	GENERAL	PRO_G10Y_3D	71.28	28.178	32.000	0.0001	25659	71.02	30.486	71.30	30.481
BASSWOOD	GENERAL	G_10YR_3D	79.45	30.693	33.000	0.0001	8687194	62.50	445.452	79.45	36.647
BASSWOOD	GENERAL	PRO_G10Y_3D	74.98	30.041	33.000	0.0000	7153795	62.50	445.453	74.98	98.373
GC1	GENERAL	G_10YR_3D	70.39	21.510	16.000	0.0012	4197	70.35	242.611	70.39	242.604

Craig A. Smith & Associates Project No. 00-0903-146
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General Region Nodal Comparison of Maximum & Post Mitigation Stages for 10-yr, 3-day Design Storm Event

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
GC1	GENERAL	PRO_G10Y_3D	0.00	13.500	16.000	*********	113	0.00	0.000	0.00	0.000
GC2	GENERAL	G_10YR_3D	70.35	21.541	18.000	-0.0006	9692	70.42	242.808	70.35	242.611
GC2	GENERAL	PRO_G10Y_3D	0.00	13.500	18.000	*********	113	0.00	0.000	0.00	0.000
GC3	GENERAL	G_10YR_3D	70.39	21.810	21.000	-0.3000	7679	70.35	243.610	71.77	260.722
GC3	GENERAL	PRO_G10Y_3D	0.00	13.500	21.000	*********	113	0.00	0.000	0.00	0.000
GC4	GENERAL	G_10YR_3D	70.37	21.870	23.000	-0.9600	5095	70.39	242.595	70.35	243.610
GC4	GENERAL	PRO_G10Y_3D	200.00	39519.425	23.000	*********	113	60.00	16.000	0.00	0.000
GC5	GENERAL	G_10YR_3D	70.40	22.030	22.000	0.0005	9047	70.55	227.769	70.56	227.787
GC5	GENERAL	PRO_G10Y_3D	70.63	21.997	22.000	0.0002	9019	70.38	224.571	70.38	224.569
GC6A	GENERAL	G_10YR_3D	70.35	21.801	23.000	-0.1000	2935	71.77	260.722	70.35	243.019
GC6A	GENERAL	PRO_G10Y_3D	0.00	13.500	23.000	*********	113	0.00	0.000	0.00	0.000
GC6B	GENERAL	G_10YR_3D	70.42	21.556	22.000	-0.2000	4362	70.35	243.019	70.42	242.808
GC6B	GENERAL	PRO_G10Y_3D	0.00	13.500	22.000	*********	113	0.00	0.000	0.00	0.000
GN04	GENERAL	G_10YR_3D	73.96	26.484	28.000	0.0001	6989865	63.00	282.258	75.78	102.469
GN04	GENERAL	PRO_G10Y_3D	78.43	26.854	28.000	0.0000	8647135	63.25	323.391	80.26	125.549
GN05	GENERAL	G_10YR_3D	64.97	27.165	28.000	0.0001	1161521	60.50	97.522	64.97	18.833
GN05	GENERAL	PRO_G10Y_3D	64.97	27.165	28.000	0.0000	1161520	60.50	97.523	64.97	18.833
GN06	GENERAL	G_10YR_3D	71.55	26.395	28.000	0.0001	4452654	62.25	247.582	71.55	77.453
GN06	GENERAL	PRO_G10Y_3D	71.55	26.395	28.000	0.0000	4452649	62.25	247.582	71.55	77.452
GN07	GENERAL	G_10YR_3D	64.39	25.183	29.000	0.0000	3782180	61.75	223.646	64.39	160.664
GN07	GENERAL	PRO_G10Y_3D	64.39	25.183	29.000	0.0000	3782174	61.75	223.646	64.39	160.663
GN08	GENERAL	G_10YR_3D	81.49	27.075	28.000	0.0000	4488801	61.00	181.776	0.00	0.000
GN08	GENERAL	PRO_G10Y_3D	81.44	27.075	28.000	0.0000	4488800	61.00	181.776	0.00	0.000
GN09	GENERAL	G_10YR_3D	69.28	26.421	28.000	-0.0032	2992639	61.00	184.236	68.92	21.849
GN09	GENERAL	PRO_G10Y_3D	69.27	26.420	28.000	-0.0032	2991977	61.00	184.236	69.14	21.889
GN10	GENERAL	G_10YR_3D	67.15	26.355	28.000	-0.0009	4158244	60.50	299.247	67.15	32.886
GN10	GENERAL	PRO_G10Y_3D	67.15	26.355	28.000	-0.0004	4158227	60.50	299.249	67.15	32.886
PRO_POND	GENERAL	PRO_G10Y_3D	70.68	21.840	21.000	0.0002	436250	70.38	224.569	73.16	230.786
RCC1	GENERAL	G_10YR_3D	73.89	26.449	27.000	-0.0002	8505	73.69	107.921	73.73	107.919

Craig A. Smith & Associates Project No. 00-0903-146
Note: Improvements were limited to detention pond addition east of SR 15 and Basswood culvert upsizing prior to crossing SR 98.

General Region Nodal Comparison of Maximum & Post Mitigation Stages for 10-yr, 3-day Design Storm Event

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
RCC1	GENERAL	PRO_G10Y_3D	78.40	26.816	27.000	0.0003	8910	77.99	128.185	78.04	128.181
RCC2	GENERAL	G_10YR_3D	73.96	26.157	29.000	-0.0002	9664	73.73	107.919	73.78	107.915
RCC2	GENERAL	PRO_G10Y_3D	78.44	26.573	29.000	0.0001	10498	78.04	128.181	78.13	128.176
RCC3	GENERAL	G_10YR_3D	73.98	26.063	28.000	-0.0002	7765	73.78	107.915	73.81	107.912
RCC3	GENERAL	PRO_G10Y_3D	78.45	26.508	28.000	0.0003	8233	78.13	128.176	78.22	128.173
RCC4	GENERAL	G_10YR_3D	74.01	25.851	28.000	-0.0005	10593	73.81	110.060	73.87	110.056
RCC4	GENERAL	PRO_G10Y_3D	78.47	26.348	28.000	0.0002	11146	78.22	130.308	78.33	130.304
RCC5	GENERAL	G_10YR_3D	74.02	25.795	24.000	-0.0002	13137	73.87	111.592	73.94	111.588
RCC5	GENERAL	PRO_G10Y_3D	78.47	26.307	24.000	0.0004	13576	78.33	131.823	78.41	131.820
RCC6	GENERAL	G_10YR_3D	74.03	25.699	27.000	-0.0017	8202	73.94	111.588	73.97	111.587
RCC6	GENERAL	PRO_G10Y_3D	78.47	26.235	27.000	-0.0017	8579	78.41	131.820	78.61	131.821
RCC7A	GENERAL	G_10YR_3D	74.04	25.443	28.000	0.0011	7931	73.97	111.587	74.01	111.586
RCC7A	GENERAL	PRO_G10Y_3D	78.46	25.850	28.000	0.0011	7891	78.61	131.821	78.69	131.823
RCC7B	GENERAL	G_10YR_3D	74.05	25.195	28.000	0.0001	6942	74.01	111.586	74.07	111.585
RCC7B	GENERAL	PRO_G10Y_3D	78.44	25.648	28.000	0.0005	7082	78.69	131.823	78.79	131.825
SBRR	GENERAL	G_10YR_3D	74.04	25.004	29.000	0.0001	6222	74.07	111.585	74.11	111.586
SBRR	GENERAL	PRO_G10Y_3D	78.39	25.201	29.000	0.0010	6426	78.79	131.825	78.82	131.826
TC_E_AIRPORT	GENERAL	G_10YR_3D	60.00	21.500	21.000	-0.0000	630	70.39	242.604	0.00	0.000
TC_E_AIRPORT	GENERAL	PRO_G10Y_3D	60.00	21.500	21.000	0.0001	0	73.16	230.786	0.00	0.000
TW_ L62N	GENERAL	G_10YR_3D	60.00	21.000	25.000	-0.0000	10944	67.69	254.884	0.00	0.000
TW_ L62N	GENERAL	PRO_G10Y_3D	60.00	21.000	25.000	0.0000	10945	68.43	266.797	0.00	0.000

Craig A. Smith & Associates Project No. 00-0903-146
Note: Improvements were limited to detention pond addition east of SR 15 and Basswood culvert upsizing prior to crossing SR 98.

OKEECHOBEE COUNTY
COMPREHENSIVE URBANIZED AREA
STORMWATER MASTER PLAN

GENERAL REGION PRE AND POST STAGES FOR 25-YR 3-DAY DESIGN STORM EVENT RESULTS

General Region Nodal Comparison of Maximum & Post Mitigation Stages for 25-yr, 3-day Design Storm Event

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
4A_01	GENERAL	G_25YR_3D	67.96	21.943	25.000	0.0003	12174	67.95	395.354	67.96	395.354
4A_01	GENERAL	PRO_G25Y_3D	67.77	21.973	25.000	0.0003	12212	67.75	403.328	67.77	403.327
4A_02	GENERAL	G_25YR_3D	68.14	22.013	24.000	0.0004	30496	75.14	143.232	75.17	143.676
4A_02	GENERAL	PRO_G25Y_3D	67.93	22.048	24.000	0.0004	30623	81.16	154.061	80.75	154.393
4A_03	GENERAL	G_25YR_3D	69.27	22.841	27.000	0.0001	29342	75.10	143.075	75.14	143.232
4A_03	GENERAL	PRO_G25Y_3D	69.38	22.894	27.000	0.0002	29581	81.20	153.960	81.16	154.061
4A_04	GENERAL	G_25YR_3D	70.14	23.122	25.000	0.0001	34695	75.05	142.944	75.10	143.075
4A_04	GENERAL	PRO_G25Y_3D	70.45	23.190	25.000	0.0002	34866	81.18	153.881	81.20	153.960
4A_05	GENERAL	G_25YR_3D	70.24	23.156	19.500	0.0001	14607	74.98	142.891	75.05	142.944
4A_05	GENERAL	PRO_G25Y_3D	70.54	23.226	19.500	0.0002	14667	81.18	153.848	81.18	153.881
4A_06_BC_SR70	GENERAL	G_25YR_3D	70.47	23.233	28.000	-0.0006	3476	74.96	142.879	74.98	142.891
4A_06_BC_SR70	GENERAL	PRO_G25Y_3D	70.79	23.307	28.000	-0.0006	3504	81.18	153.841	81.18	153.848
4A_07	GENERAL	G_25YR_3D	70.80	23.342	23.000	-0.1300	16926	74.93	142.830	74.96	142.879
4A_07	GENERAL	PRO_G25Y_3D	71.43	23.420	23.000	-0.1300	17120	81.16	153.812	81.18	153.841
4A_08	GENERAL	G_25YR_3D	72.98	24.031	28.000	0.0001	33343	74.90	142.784	74.93	142.830
4A_08	GENERAL	PRO_G25Y_3D	77.27	24.138	28.000	0.0001	33906	81.08	153.784	81.16	153.812
4A_09	GENERAL	G_25YR_3D	73.78	24.528	24.000	0.0001	34182	74.75	142.758	74.90	142.784
4A_09	GENERAL	PRO_G25Y_3D	78.64	24.661	24.000	0.0002	34721	80.93	153.770	81.08	153.784
4A_10	GENERAL	G_25YR_3D	73.96	24.604	23.000	0.0001	18323	75.66	134.313	75.77	134.341
4A_10	GENERAL	PRO_G25Y_3D	78.81	24.741	23.000	0.0004	18381	81.66	146.457	81.86	146.472
AIRP_INUDSTRIAL	GENERAL	G_25YR_3D	72.78	29.085	33.000	0.0002	1338139	61.65	72.430	72.78	1.782
AIRP_INUDSTRIAL	GENERAL	PRO_G25Y_3D	72.38	29.061	33.000	-0.0002	1318745	61.65	72.129	72.38	1.749
AIRPORT	GENERAL	G_25YR_3D	72.42	29.035	33.000	0.0001	6422484	61.50	458.618	70.91	110.808
AIRPORT	GENERAL	PRO_G25Y_3D	71.89	29.008	33.000	-0.0002	6318477	61.50	454.532	70.85	106.436
APD_01	GENERAL	G_25YR_3D	71.31	22.393	28.000	-0.0002	18664	71.27	267.514	72.23	267.572
APD_01	GENERAL	PRO_G25Y_3D	71.32	22.348	28.000	0.0002	18582	71.21	264.194	71.23	264.190
APD_02	GENERAL	G_25YR_3D	71.44	22.530	24.000	-0.0002	18063	72.34	197.104	72.34	197.208
APD_02	GENERAL	PRO_G25Y_3D	71.44	22.485	24.000	0.0002	17979	72.25	193.574	72.46	193.696
APD_03	GENERAL	G_25YR_3D	71.79	22.737	28.000	-0.0004	11929	72.25	197.053	72.34	197.104
APD_03	GENERAL	PRO_G25Y_3D	71.68	22.692	28.000	0.0001	11866	72.25	193.528	72.25	193.574

Craig A. Smith & Associates Project No. 00-0903-146
Note: Improvements were limited to detention pond addition east of SR 15 and Basswood culvert upsizing prior to crossing SR 98.

General Region Nodal Comparison of Maximum & Post Mitigation Stages for 25-yr, 3-day Design Storm Event

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
APD_04	GENERAL	G_25YR_3D	71.95	22.867	25.000	0.0009	5081	72.45	157.941	72.45	157.964
APD_04	GENERAL	PRO_G25Y_3D	71.78	22.822	25.000	-0.0007	5045	72.26	154.395	72.34	154.419
APD_05	GENERAL	G_25YR_3D	71.95	22.996	26.000	0.0014	2339	72.45	157.932	72.45	157.941
APD_05	GENERAL	PRO_G25Y_3D	71.86	22.953	26.000	0.0013	2325	72.26	154.388	72.26	154.395
APD_06	GENERAL	G_25YR_3D	71.95	23.084	25.500	0.0005	1873	72.45	157.926	72.45	157.932
APD_06	GENERAL	PRO_G25Y_3D	71.86	23.041	25.500	-0.0002	1862	72.21	154.382	72.26	154.388
APD_07	GENERAL	G_25YR_3D	72.04	23.391	26.000	-0.0003	2630	72.45	157.920	72.45	157.926
APD_07	GENERAL	PRO_G25Y_3D	71.95	23.349	26.000	0.0002	2614	72.18	154.379	72.21	154.382
APD_08	GENERAL	G_25YR_3D	72.14	23.802	26.000	0.0023	3869	72.76	143.832	72.76	143.837
APD_08	GENERAL	PRO_G25Y_3D	72.08	23.761	26.000	0.0023	3842	72.21	140.263	72.26	140.266
APD_09	GENERAL	G_25YR_3D	72.21	24.076	27.000	-0.0003	2721	72.75	136.511	72.76	136.514
APD_09	GENERAL	PRO_G25Y_3D	72.11	24.033	27.000	0.0003	2707	72.20	132.894	72.21	132.895
APD_10	GENERAL	G_25YR_3D	73.28	25.668	28.000	-0.2000	1387	72.76	132.552	72.76	132.551
APD_10	GENERAL	PRO_G25Y_3D	73.01	25.615	28.000	-0.2000	1381	72.20	128.931	72.20	128.930
APD_11	GENERAL	G_25YR_3D	73.27	25.681	28.000	0.0008	7981	72.74	132.560	72.76	132.552
APD_11	GENERAL	PRO_G25Y_3D	73.01	25.628	28.000	0.0008	7933	72.19	128.935	72.20	128.931
APD_12	GENERAL	G_25YR_3D	73.26	25.738	27.500	0.0031	12779	72.76	92.027	72.76	92.015
APD_12	GENERAL	PRO_G25Y_3D	73.01	25.684	27.500	0.0031	12690	72.27	89.060	72.28	89.054
APD_13	GENERAL	G_25YR_3D	73.26	25.770	30.000	0.0002	13090	72.82	44.640	72.81	44.636
APD_13	GENERAL	PRO_G25Y_3D	73.01	25.714	30.000	0.0001	13014	72.33	42.115	72.35	42.110
APD_14	GENERAL	G_25YR_3D	73.24	25.805	29.000	0.0002	27091	72.83	44.649	72.82	44.640
APD_14	GENERAL	PRO_G25Y_3D	73.01	25.747	29.000	0.0000	26920	72.25	42.125	72.33	42.115
APD_15	GENERAL	G_25YR_3D	72.88	27.287	32.000	0.0001	42301	72.50	44.661	72.83	44.649
APD_15	GENERAL	PRO_G25Y_3D	72.34	27.240	32.000	0.0000	42041	72.01	42.133	72.25	42.125
APD_16	GENERAL	G_25YR_3D	72.54	28.455	32.000	0.0001	26814	72.29	42.885	72.48	42.880
APD_16	GENERAL	PRO_G25Y_3D	71.98	28.483	32.000	0.0001	26839	71.76	40.388	71.98	40.384
BASSWOOD	GENERAL	G_25YR_3D	78.92	31.321	33.000	0.0001	10164555	62.50	606.160	78.92	55.304
BASSWOOD	GENERAL	PRO_G25Y_3D	74.77	30.623	33.000	0.0000	8522609	62.50	606.161	74.77	137.211
GC1	GENERAL	G_25YR_3D	71.27	21.514	16.000	0.0012	4197	72.20	282.613	72.27	282.672

Craig A. Smith & Associates Project No. 00-0903-146
Note: Improvements were limited to detention pond addition east of SR 15 and Basswood culvert upsizing prior to crossing SR 98.

General Region Nodal Comparison of Maximum & Post Mitigation Stages for 25-yr, 3-day Design Storm Event

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
GC1	GENERAL	PRO_G25Y_3D	0.00	13.500	16.000	*********	113	0.00	0.000	0.00	0.000
GC2	GENERAL	G_25YR_3D	71.30	21.556	18.000	-0.0006	9694	72.29	282.584	72.20	282.613
GC2	GENERAL	PRO_G25Y_3D	0.00	13.500	18.000	*********	113	0.00	0.000	0.00	0.000
GC3	GENERAL	G_25YR_3D	71.34	21.945	21.000	-0.3000	7749	72.20	283.326	73.44	299.978
GC3	GENERAL	PRO_G25Y_3D	0.00	13.500	21.000	*********	113	0.00	0.000	0.00	0.000
GC4	GENERAL	G_25YR_3D	71.30	22.018	23.000	-0.9600	5008	72.18	282.242	72.20	283.326
GC4	GENERAL	PRO_G25Y_3D	200.00	39519.425	23.000	*********	113	60.00	16.000	0.00	0.000
GC5	GENERAL	G_25YR_3D	71.30	22.234	22.000	-0.0006	8763	72.23	267.572	72.26	267.638
GC5	GENERAL	PRO_G25Y_3D	71.44	22.187	22.000	0.0003	8723	71.23	264.190	74.39	268.691
GC6A	GENERAL	G_25YR_3D	71.30	21.933	23.000	-0.1000	2943	73.44	299.978	72.20	282.741
GC6A	GENERAL	PRO_G25Y_3D	0.00	13.500	23.000	*********	113	0.00	0.000	0.00	0.000
GC6B	GENERAL	G_25YR_3D	71.27	21.575	22.000	-0.2000	4367	72.20	282.741	72.29	282.584
GC6B	GENERAL	PRO_G25Y_3D	0.00	13.500	22.000	*********	113	0.00	0.000	0.00	0.000
GN04	GENERAL	G_25YR_3D	75.10	26.950	28.000	0.0001	9076649	63.00	402.403	78.14	126.239
GN04	GENERAL	PRO_G25Y_3D	80.92	27.406	28.000	0.0000	11111552	63.00	460.664	74.53	147.264
GN05	GENERAL	G_25YR_3D	63.09	27.312	28.000	0.0001	1237632	60.50	131.421	63.09	48.906
GN05	GENERAL	PRO_G25Y_3D	81.21	27.368	28.000	0.0000	1266581	60.50	131.423	63.09	48.906
GN06	GENERAL	G_25YR_3D	68.03	26.650	28.000	0.0001	4902562	62.00	360.677	68.03	155.953
GN06	GENERAL	PRO_G25Y_3D	68.03	26.650	28.000	0.0001	4902555	62.00	360.677	68.03	155.952
GN07	GENERAL	G_25YR_3D	67.14	25.457	29.000	0.0000	4614751	64.20	302.964	67.14	265.963
GN07	GENERAL	PRO_G25Y_3D	67.14	25.457	29.000	0.0000	4614742	64.20	302.963	67.14	265.962
GN08	GENERAL	G_25YR_3D	81.50	27.416	28.000	0.0001	5010946	61.00	249.462	0.00	0.000
GN08	GENERAL	PRO_G25Y_3D	81.45	27.416	28.000	0.0000	5010943	61.00	249.463	0.00	0.000
GN09	GENERAL	G_25YR_3D	70.48	26.821	28.000	-0.0032	3802464	60.75	267.800	69.56	25.276
GN09	GENERAL	PRO_G25Y_3D	70.46	26.821	28.000	-0.0032	3801725	60.75	267.800	69.68	25.318
GN10	GENERAL	G_25YR_3D	68.56	26.717	28.000	-0.0009	5224348	60.50	435.941	68.56	39.680
GN10	GENERAL	PRO_G25Y_3D	68.56	26.717	28.000	-0.0004	5224329	60.50	435.947	68.56	39.680
PRO_POND	GENERAL	PRO_G25Y_3D	71.57	21.971	21.000	0.0003	436096	74.39	268.691	73.32	270.959
RCC1	GENERAL	G_25YR_3D	75.04	26.914	27.000	-0.0002	9022	74.75	130.603	74.87	130.600

Craig A. Smith & Associates Project No. 00-0903-146
Note: Improvements were limited to detention pond addition east of SR 15 and Basswood culvert upsizing prior to crossing SR 98.

General Region Nodal Comparison of Maximum & Post Mitigation Stages for 25-yr, 3-day Design Storm Event

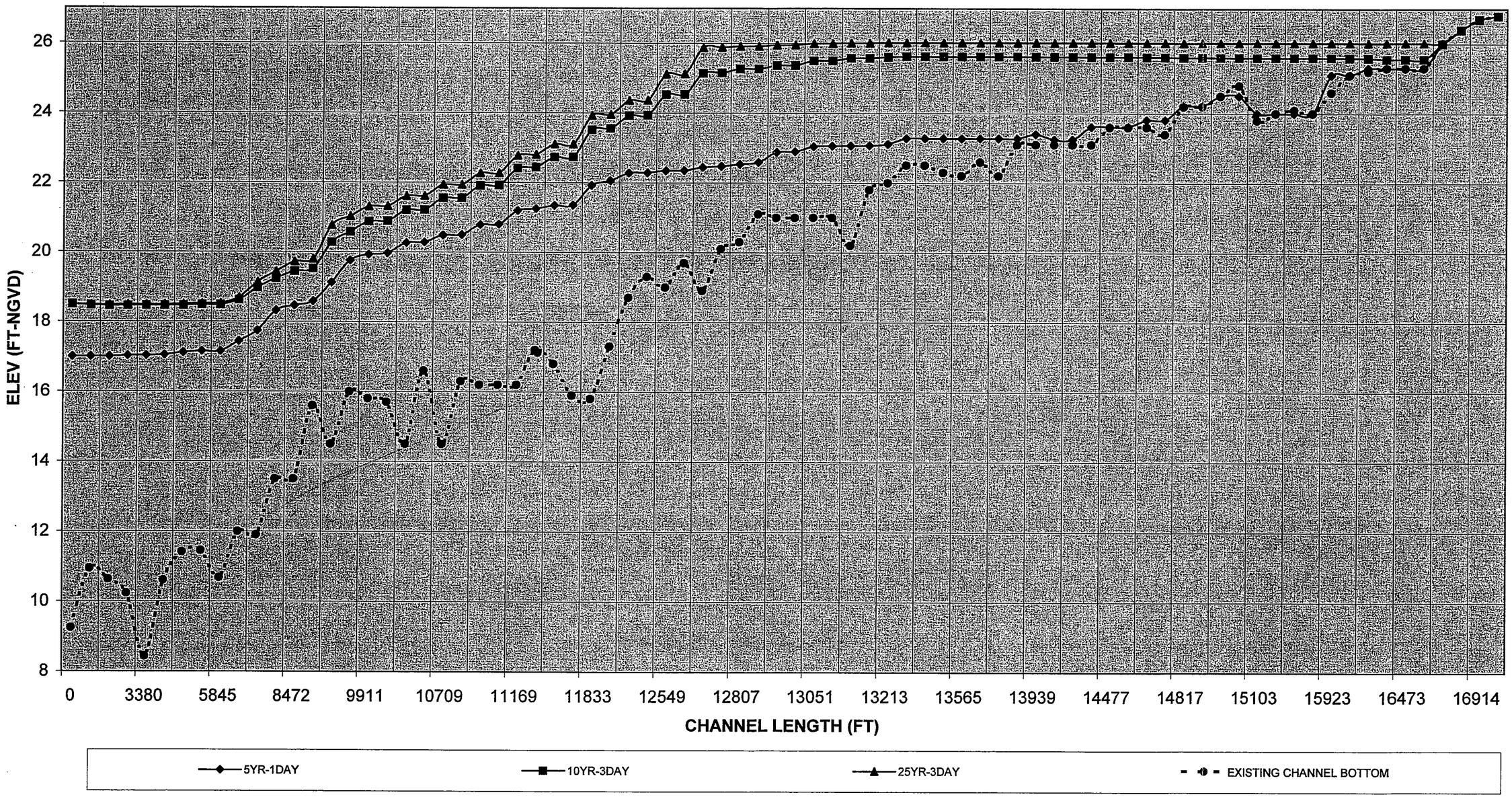
Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
RCC1	GENERAL	PRO_G25Y_3D	81.02	27.368	27.000	0.0003	9651	81.19	142.915	81.23	142.803
RCC2	GENERAL	G_25YR_3D	75.05	26.692	29.000	-0.0004	10736	74.87	130.600	74.97	130.596
RCC2	GENERAL	PRO_G25Y_3D	81.03	27.217	29.000	-0.0001	11784	81.23	142.803	81.23	142.804
RCC3	GENERAL	G_25YR_3D	75.05	26.635	28.000	-0.0004	8367	74.97	130.596	75.11	130.596
RCC3	GENERAL	PRO_G25Y_3D	81.03	27.182	28.000	0.0003	8938	81.23	142.804	81.23	142.805
RCC4	GENERAL	G_25YR_3D	75.05	26.493	28.000	-0.0004	11307	75.11	132.740	75.24	132.744
RCC4	GENERAL	PRO_G25Y_3D	81.03	27.087	28.000	0.0002	11971	81.23	144.931	81.24	144.932
RCC5	GENERAL	G_25YR_3D	75.05	26.457	24.000	-0.0002	13697	75.24	134.275	75.43	134.285
RCC5	GENERAL	PRO_G25Y_3D	81.03	27.063	24.000	0.0004	14182	81.24	146.439	81.41	146.442
RCC6	GENERAL	G_25YR_3D	75.04	26.394	27.000	-0.0017	8706	75.43	134.285	75.55	134.296
RCC6	GENERAL	PRO_G25Y_3D	81.02	27.022	27.000	-0.0017	9210	81.41	146.442	81.58	146.446
RCC7A	GENERAL	G_25YR_3D	74.97	25.924	28.000	0.0011	7909	75.55	134.296	75.58	134.302
RCC7A	GENERAL	PRO_G25Y_3D	80.85	26.204	28.000	0.0011	7979	81.58	146.446	81.61	146.450
RCC7B	GENERAL	G_25YR_3D	74.90	25.733	28.000	0.0002	7108	75.58	134.302	75.66	134.309
RCC7B	GENERAL	PRO_G25Y_3D	80.76	26.039	28.000	0.0005	7203	81.61	146.450	81.66	146.455
SBRR	GENERAL	G_25YR_3D	74.60	25.235	29.000	0.0002	6435	75.66	134.309	75.66	134.313
SBRR	GENERAL	PRO_G25Y_3D	79.97	25.334	29.000	0.0010	6460	81.66	146.455	81.66	146.457
TC_E_AIRPORT	GENERAL	G_25YR_3D	60.00	21.500	21.000	-0.0000	630	72.27	282.672	0.00	0.000
TC_E_AIRPORT	GENERAL	PRO_G25Y_3D	60.00	21.500	21.000	0.0001	0	73.32	270.959	0.00	0.000
TW_ L62N	GENERAL	G_25YR_3D	60.00	21.000	25.000	-0.0000	10956	67.95	399.331	0.00	0.000
TW_ L62N	GENERAL	PRO_G25Y_3D	60.00	21.000	25.000	0.0000	10960	67.76	407.314	0.00	0.000

Craig A. Smith & Associates Project No. 00-0903-146
Note: Improvements were limited to detention pond addition east of SR 15 and Basswood culvert upsizing prior to crossing SR 98.

OKEECHOBEE COUNTY
COMPREHENSIVE URBANIZED AREA
STORMWATER MASTER PLAN

CHANNEL PROFILES

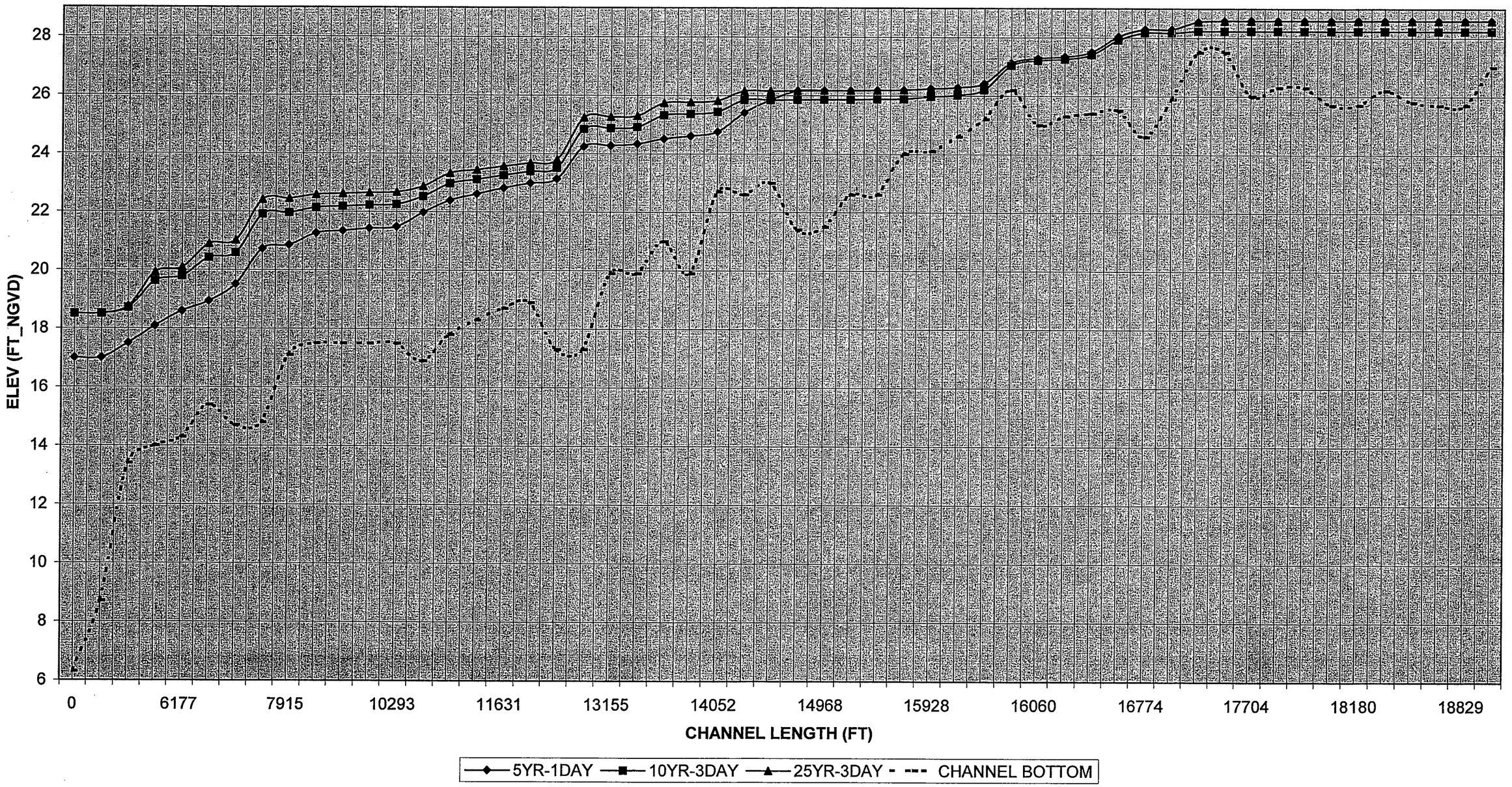
SW 7 AVENUE EXISTING CHANNEL PROFILES



Craig A. Smith Associates
05/30/2007

Stages shown are instantaneous peak stages

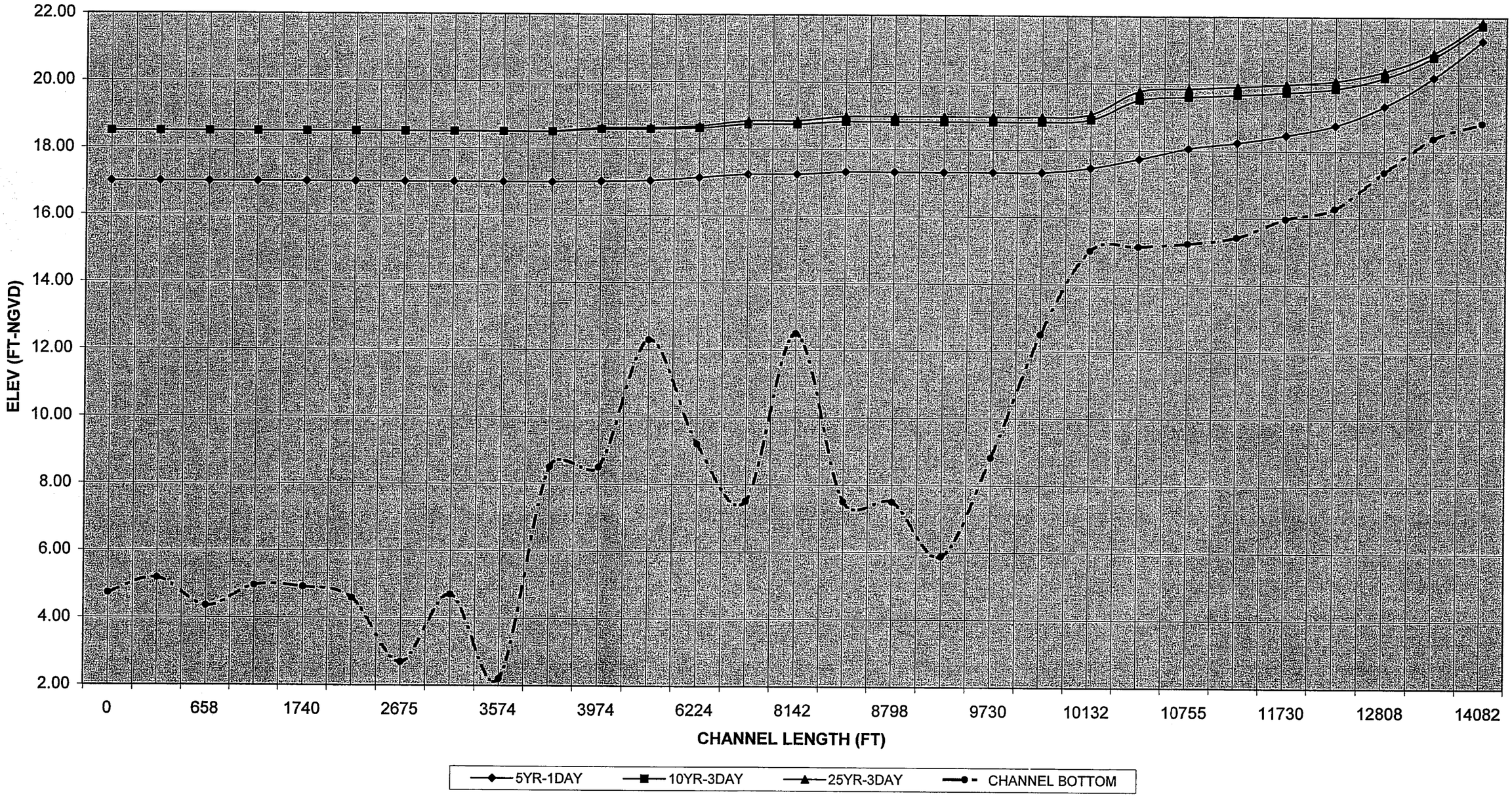
SW 16 AVENUE EXISTING CHANNEL PROFILES



Craig A. Smith Associates
05/30/2007

Stages shown are instantaneous peak stages

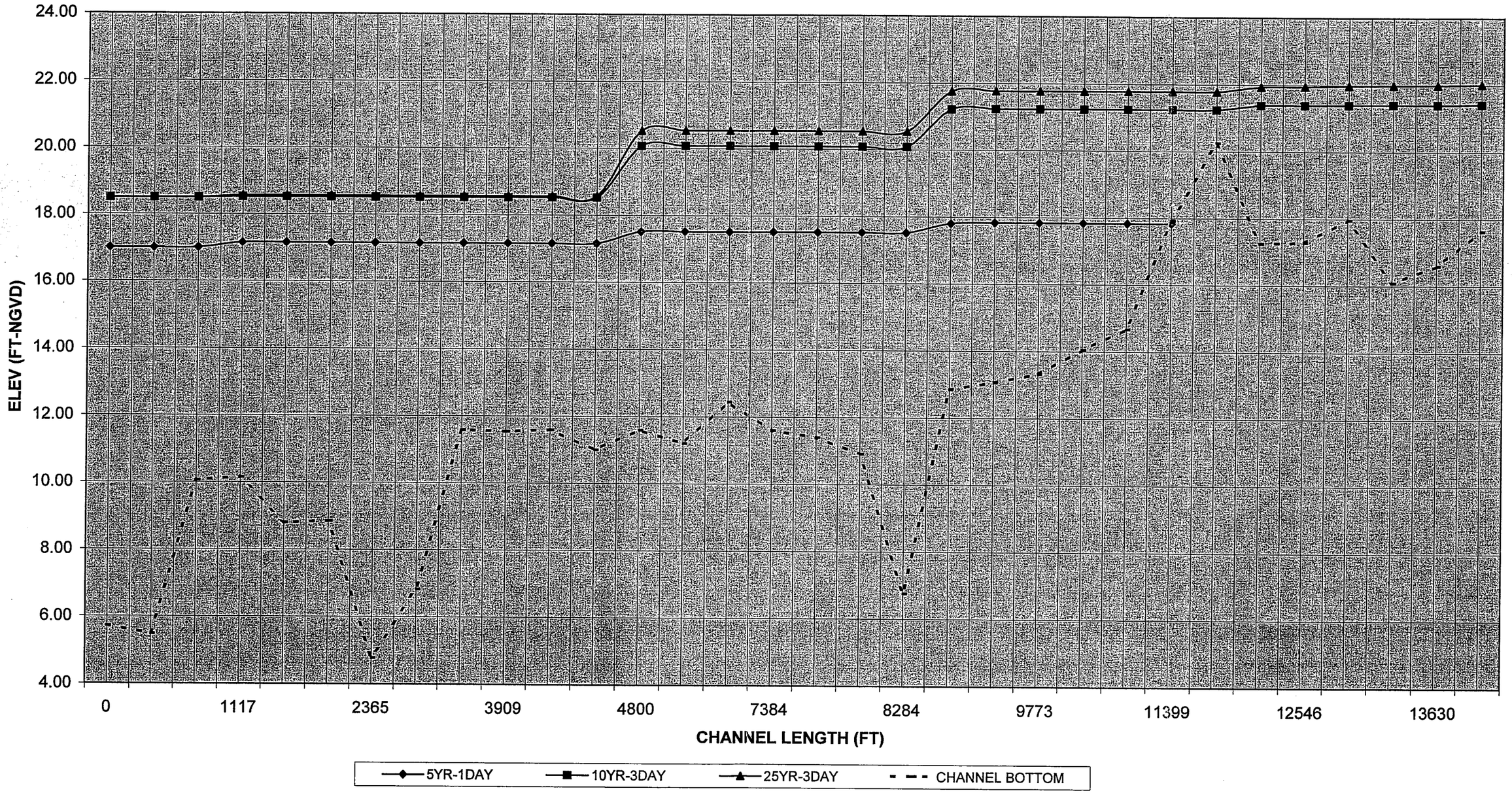
SW 26 AVE EXISTING CHANNEL PROFILES



Craig A. Smith Associates
05/30/2007

Stages shown are instantaneous peak stages

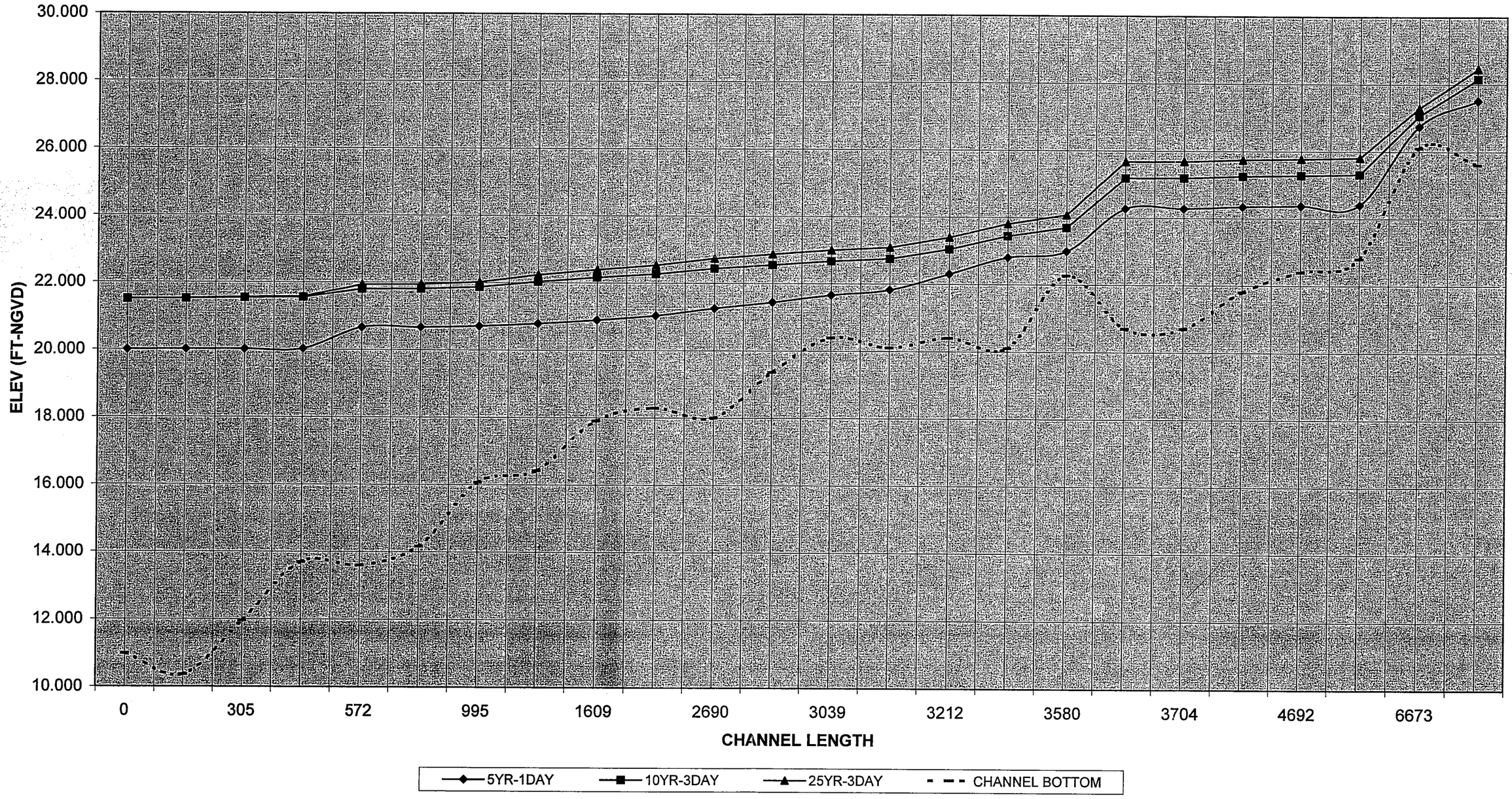
SW 32 AVE EXISTING CHANNEL PROFILES



Craig A. Smith Associates
05/30/2007

Stages shown are instantaneous peak stages

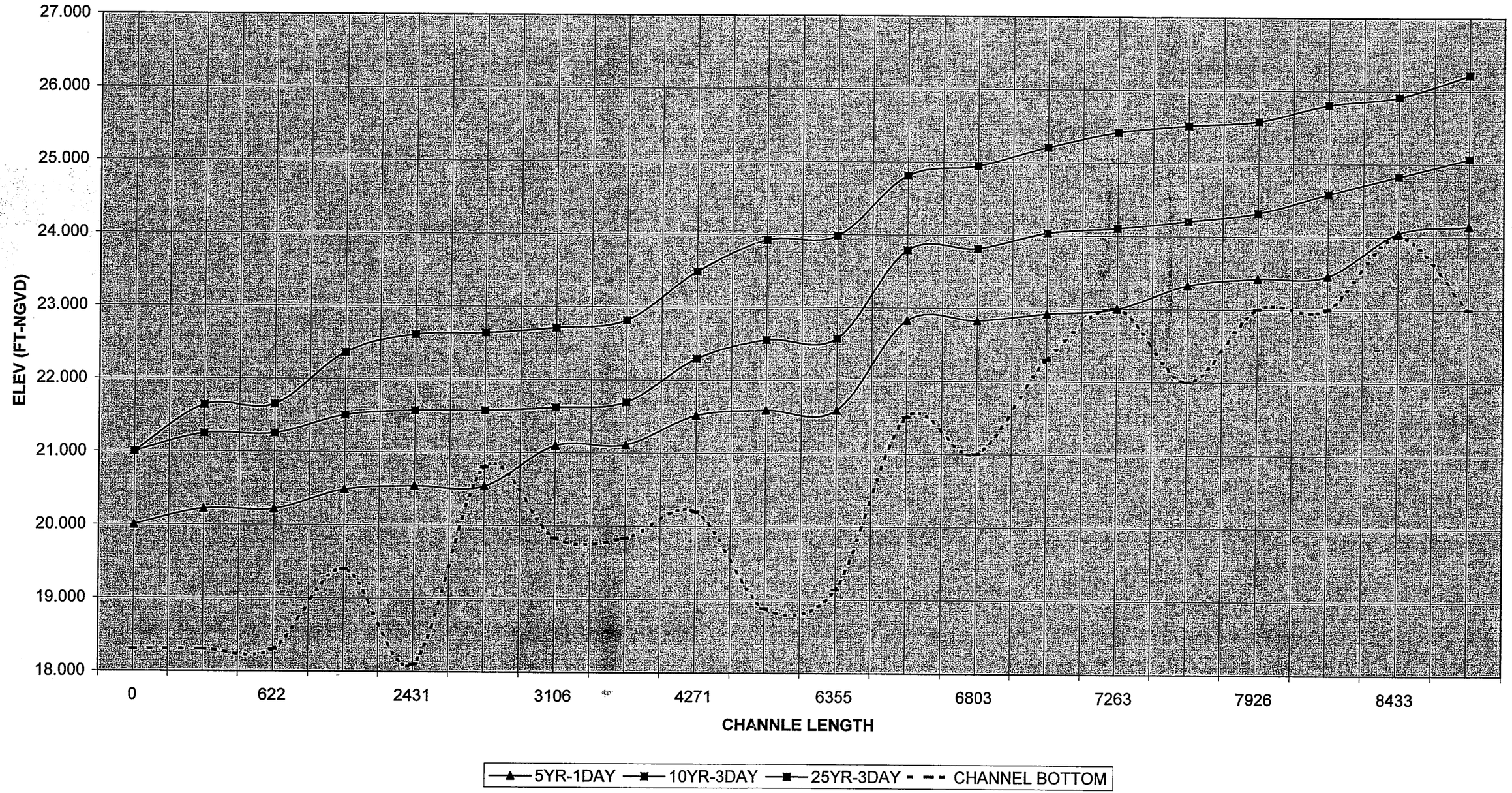
AIRPORT- SR 15 EXISTING CHANNEL PROFILES



Craig A. Smith Associates
05/30/2007

Stages shown are instantaneous peak stages

DITCH US OF L64 EXISTING CHANNEL PROFILES (GENERAL REGION)

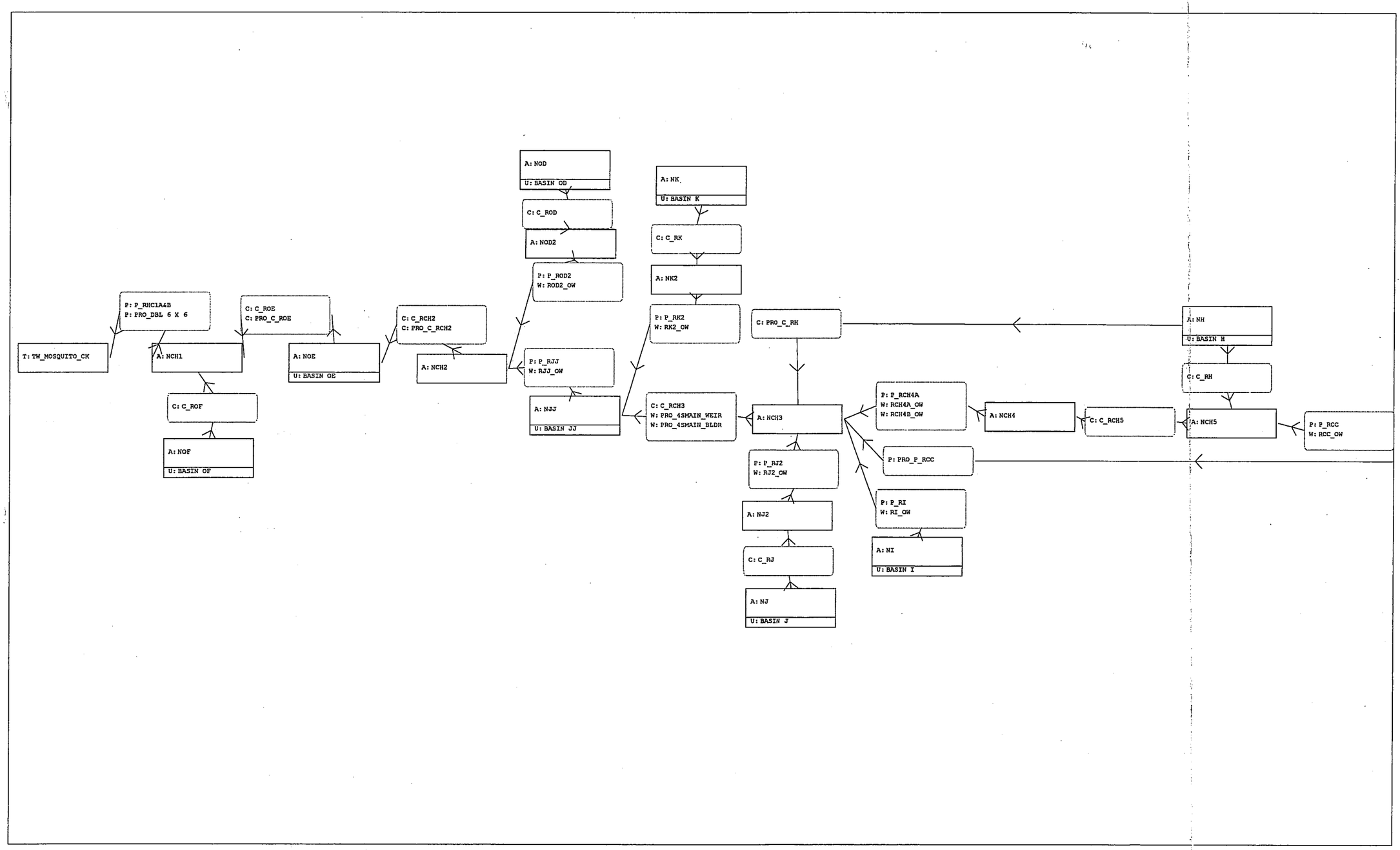


Craig A. Smith Associates
05/30/2007

Stages shown are instantaneous peak stages

OKEECHOBEE COUNTY
COMPREHENSIVE URBANIZED AREA
STORMWATER MASTER PLAN

ICPR BASIN MODEL

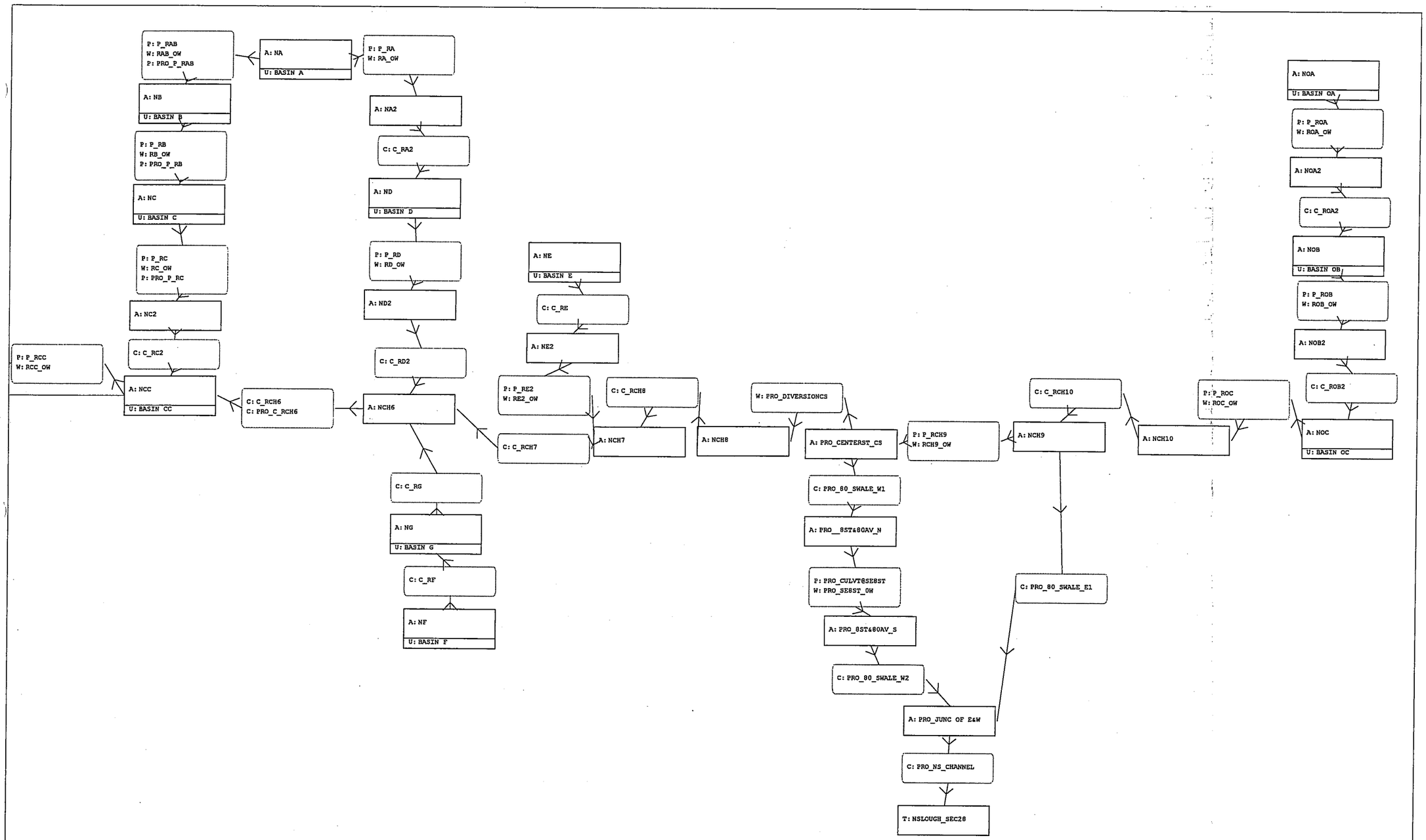


Nodes
A Stage/Area
V Stage/Volume
T Time/Stage
M Manhole

Basins
O Overland Flow
U SCS Unit Hydro
S Santa Barbara

Links
P Pipe
W Weir
C Channel
D Drop Structure
B Bridge
R Rating Curve
H Breach

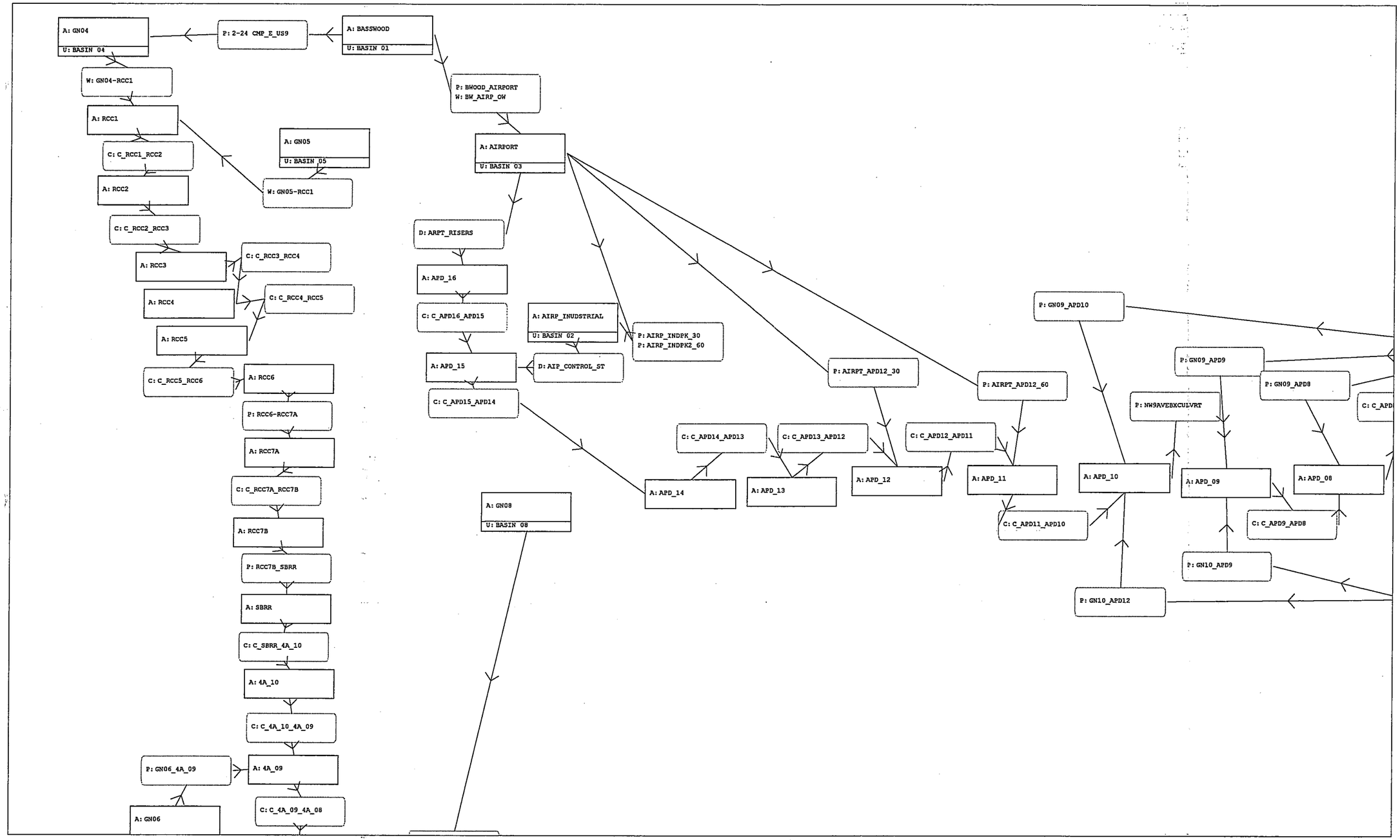
Interconnected Channel and Pond Routing Model (ICPR) ©2002 Streamline Technologies, Inc.



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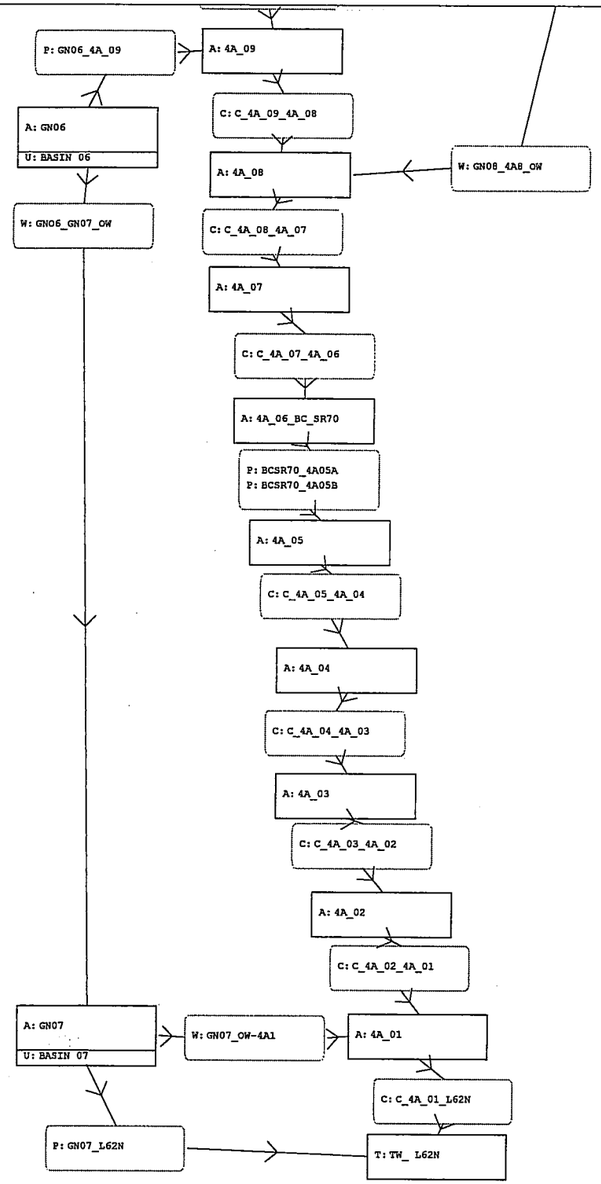


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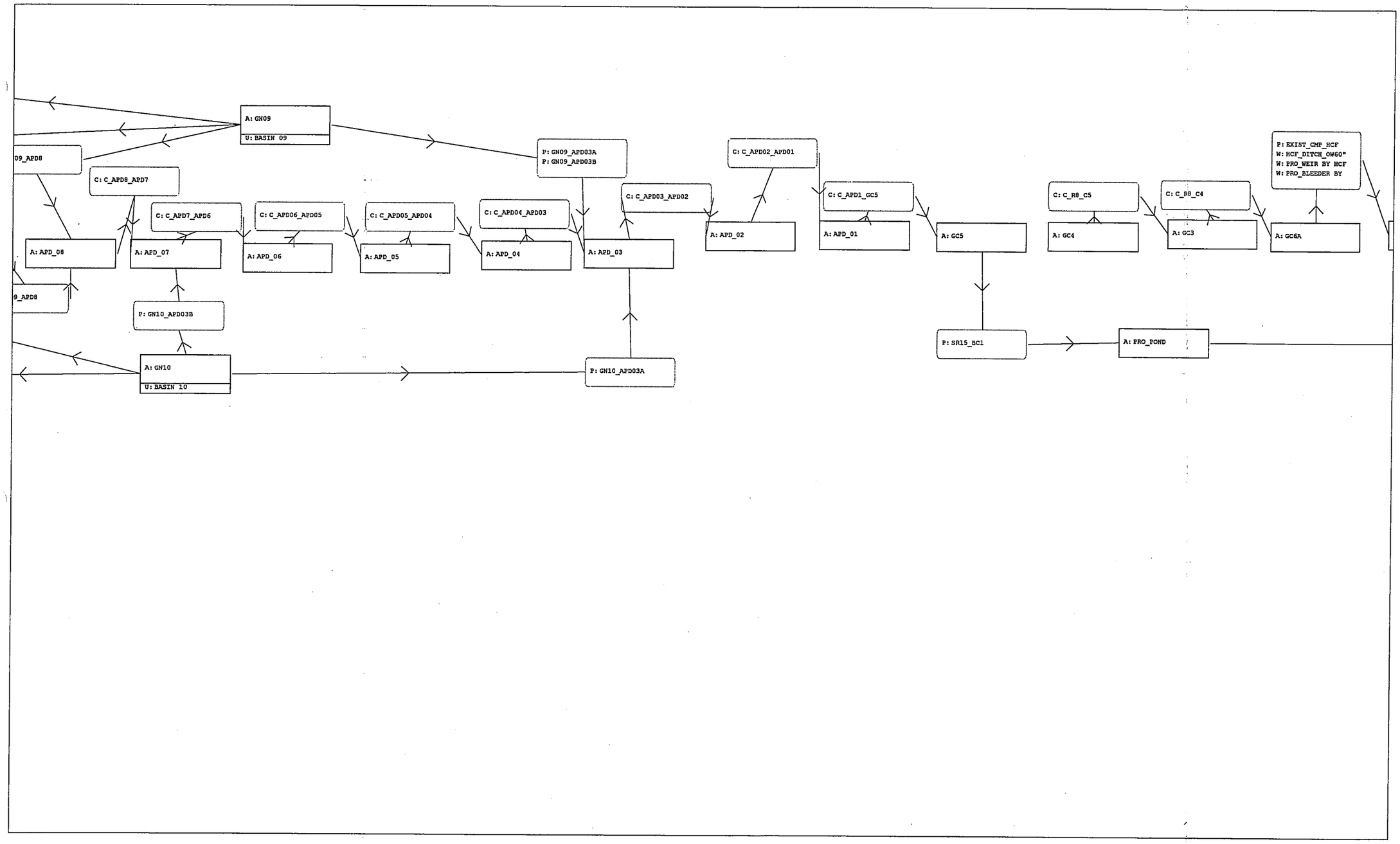
Interconnected Channel and Pond Routing Model (ICPR) ©2002 Streamline Technologies, Inc.



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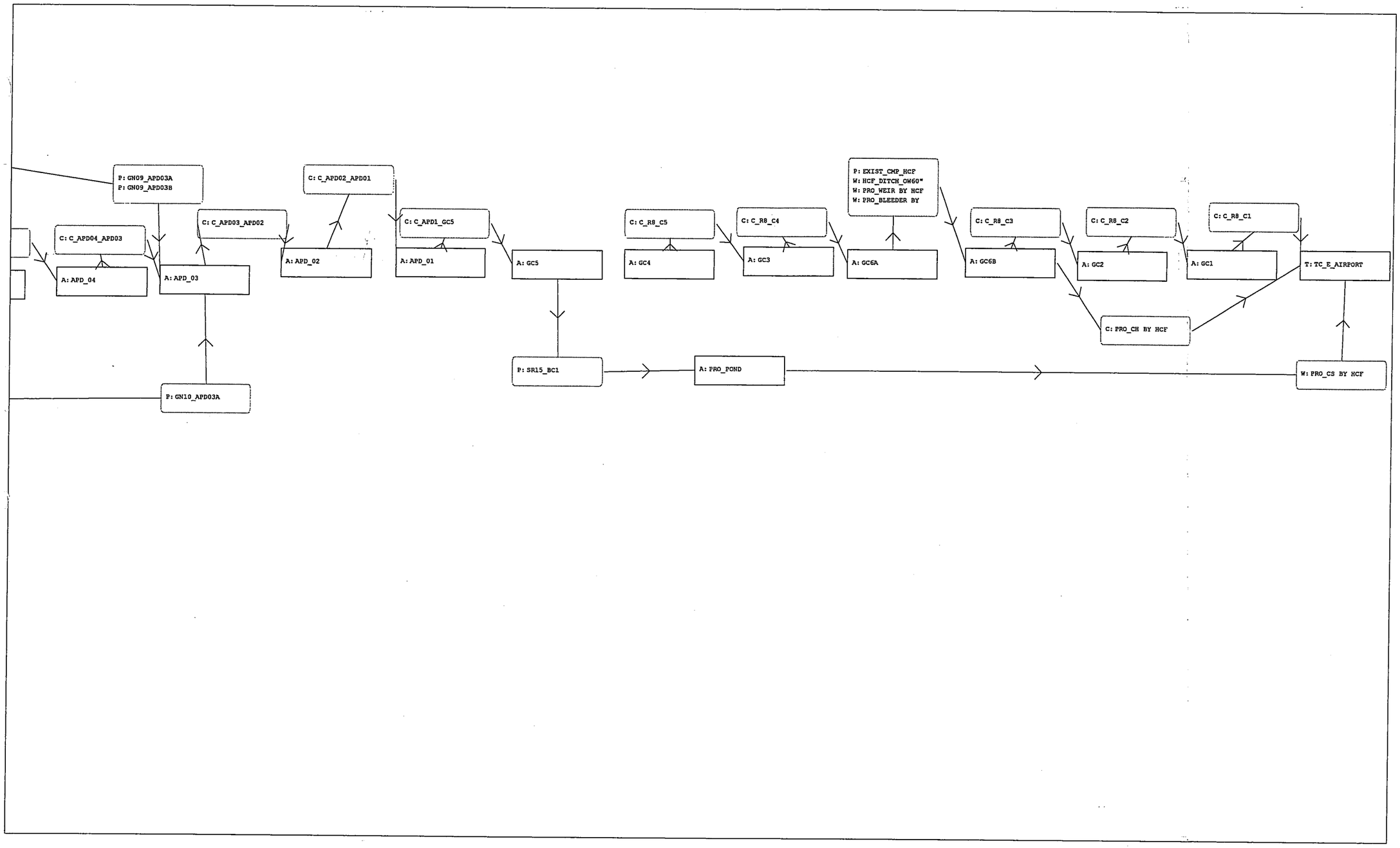


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P Pipe
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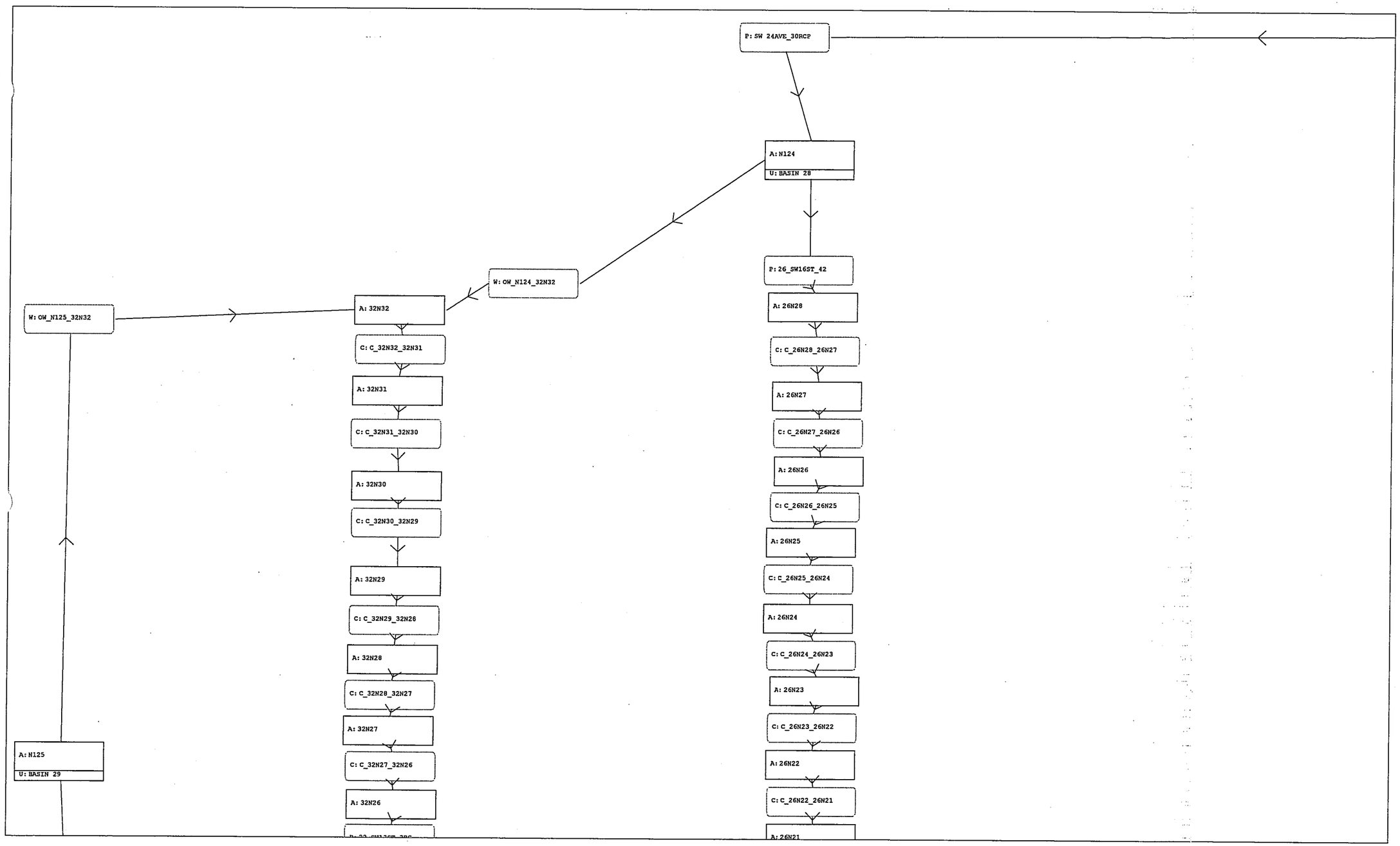


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P Pipe
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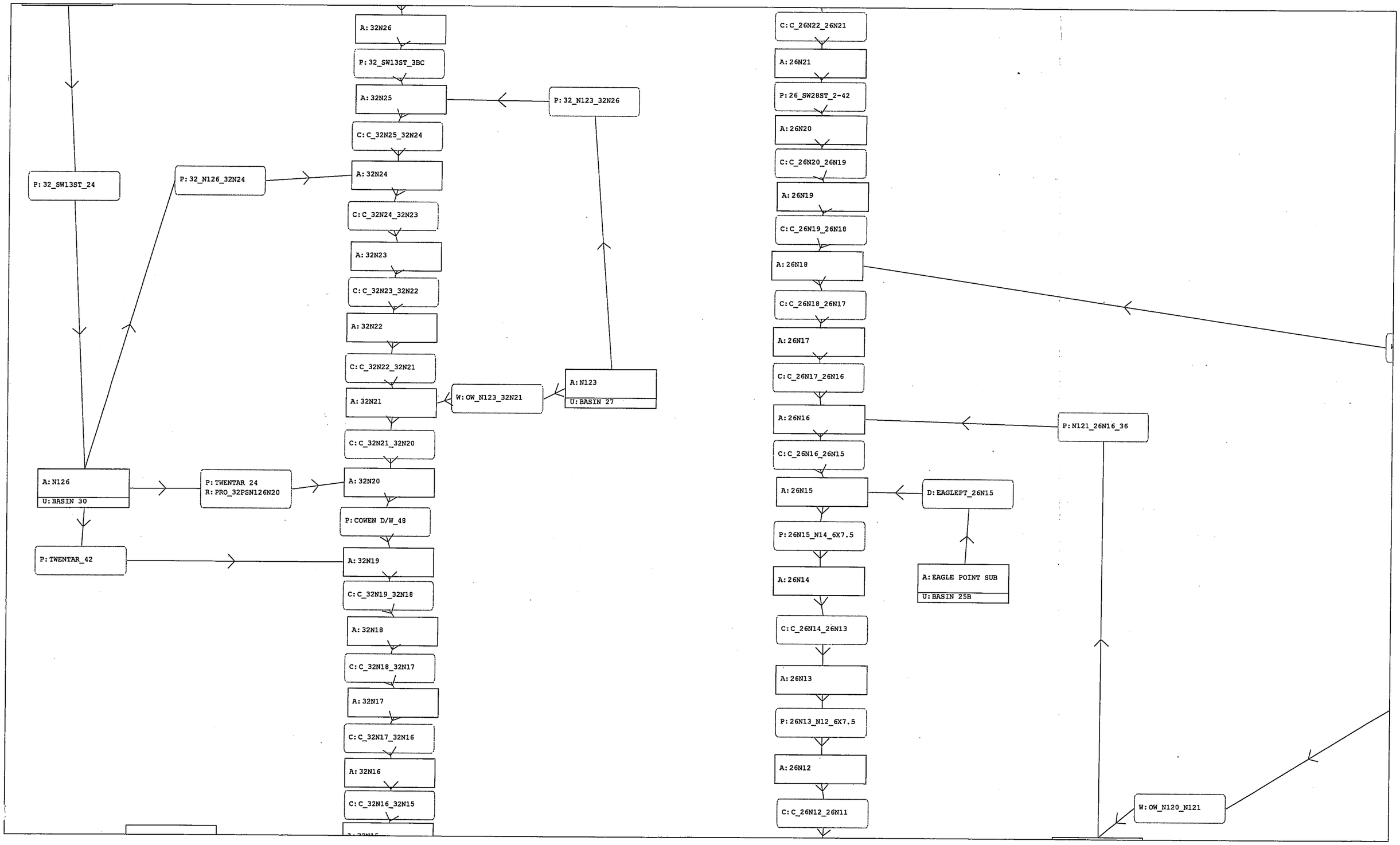


Nodes
A Stage/Area
V Stage/Volume
T Time/Stage
M Manhole

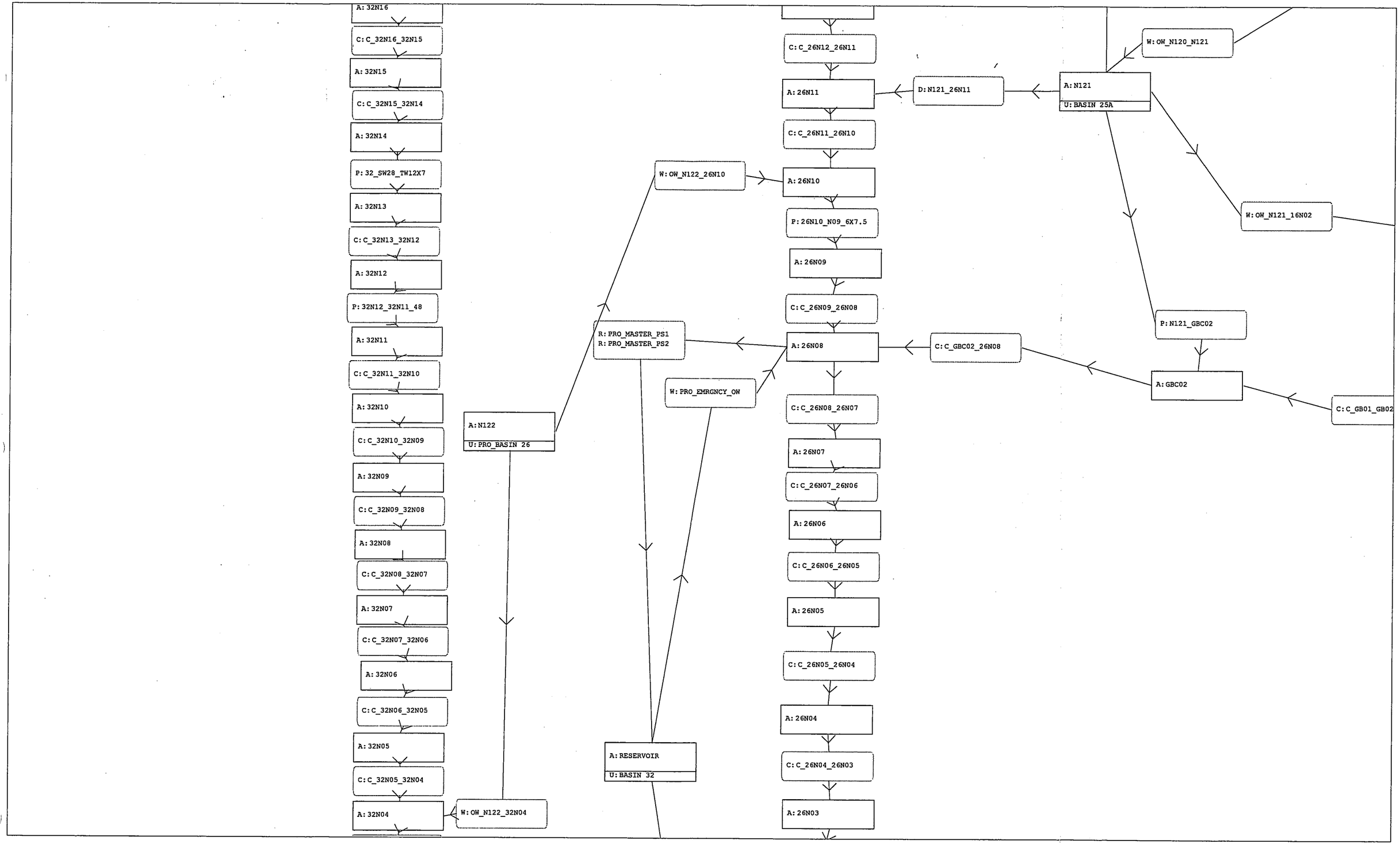
Basins
O Overland Flow
U SCS Unit Hydro
S Santa Barbara

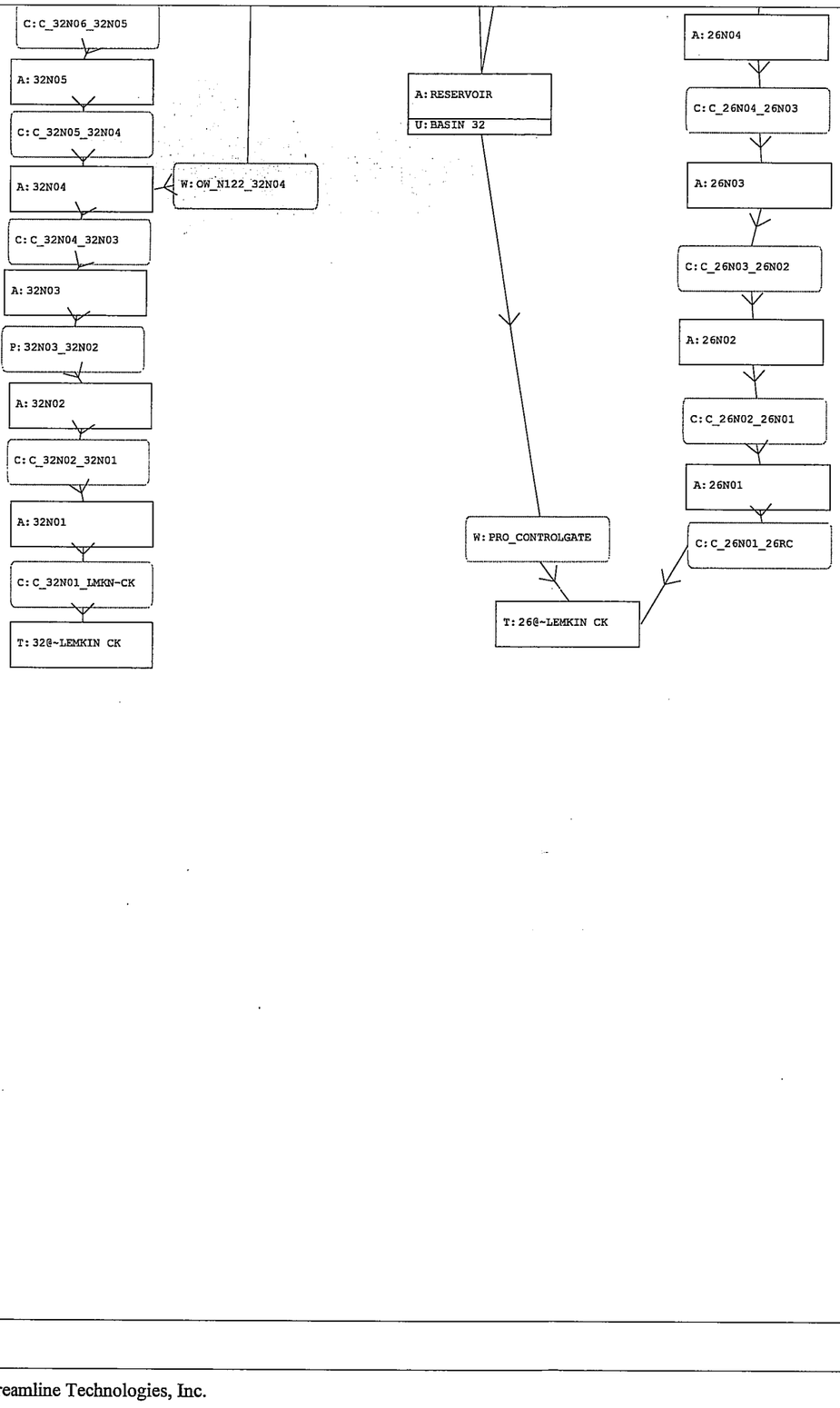
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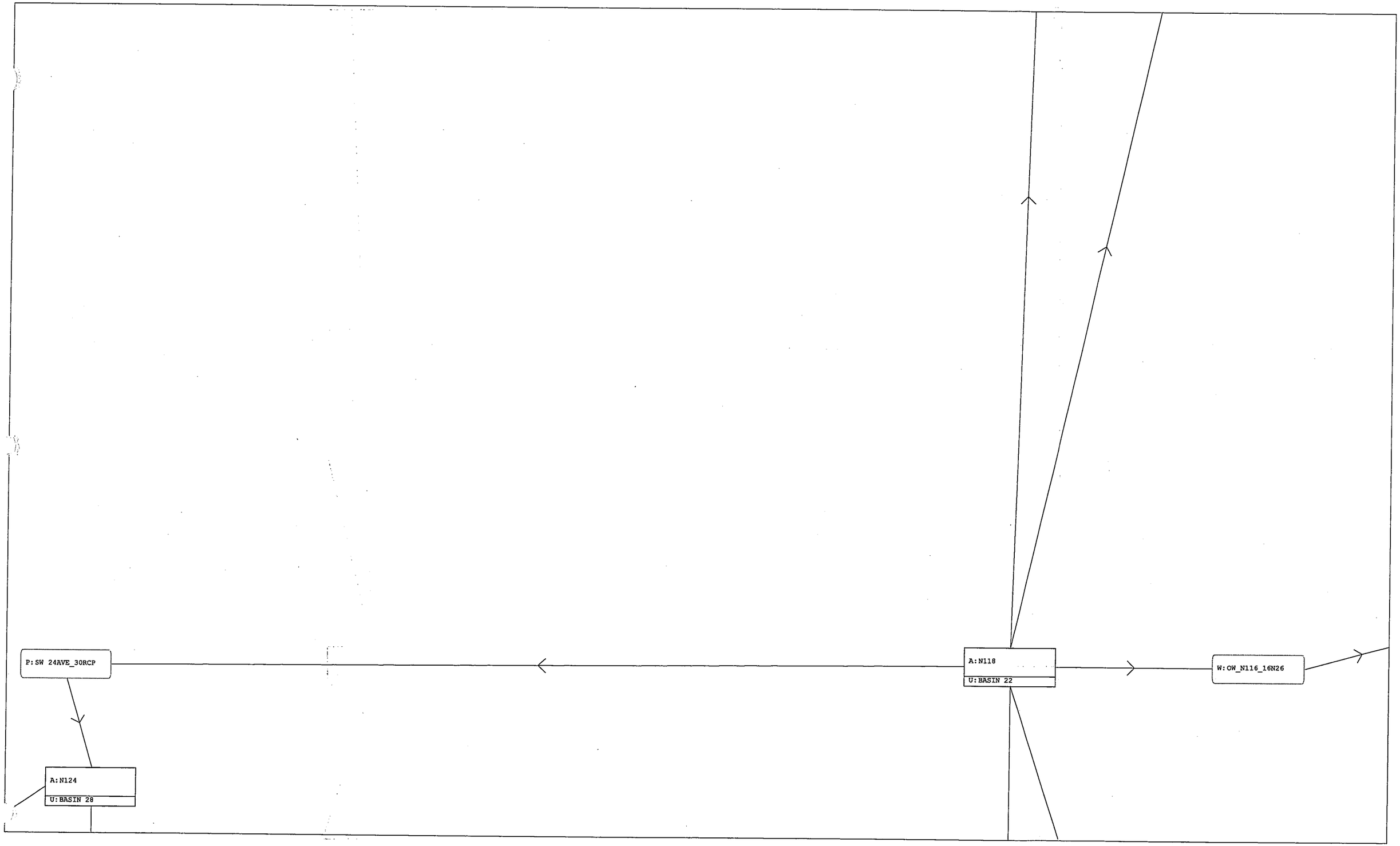


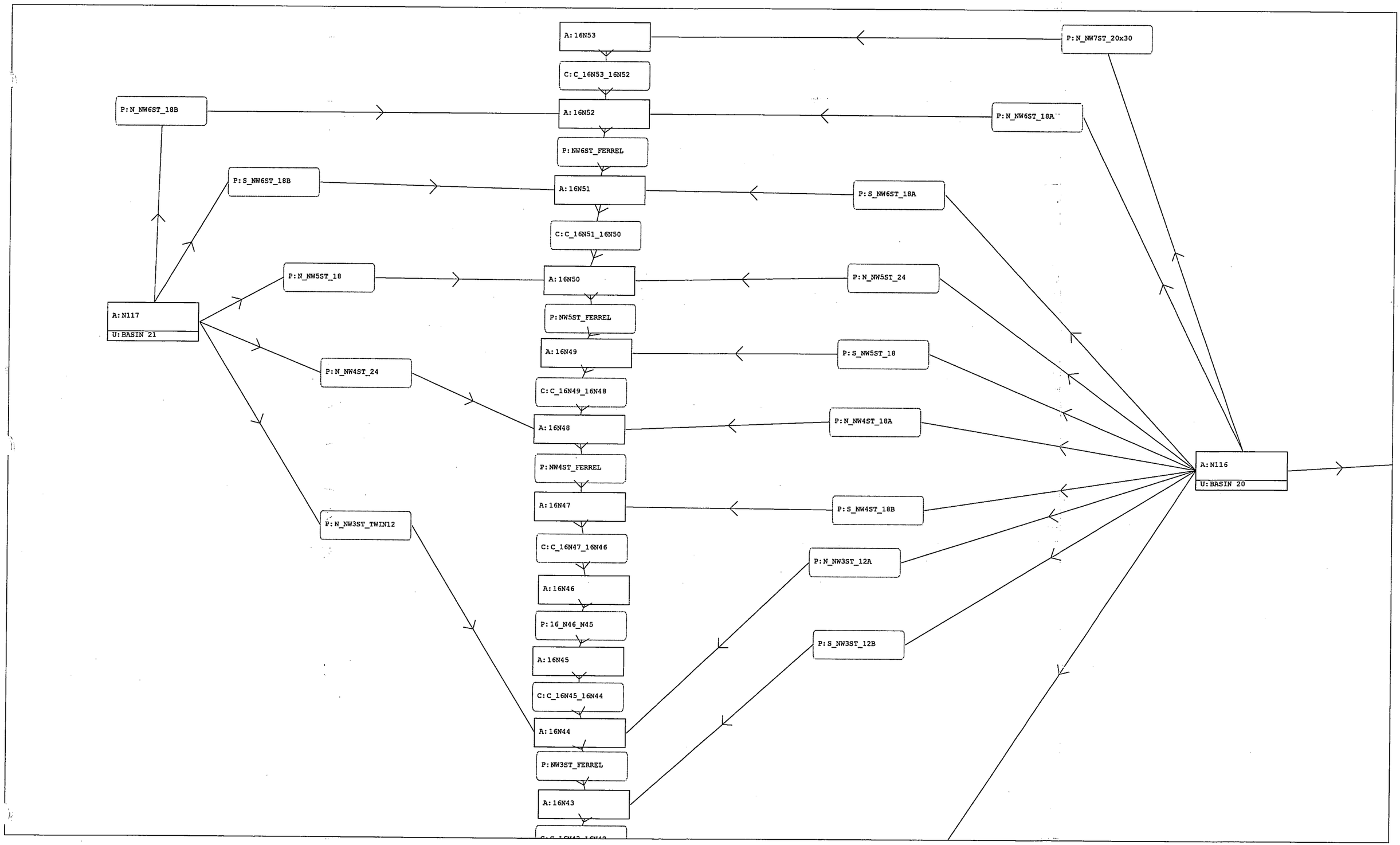
Interconnected Channel and Pond Routing Model (ICPR) ©2002 Streamline Technologies, Inc.


A: 32N16
C: C_32N16_32N15
A: 32N15
C: C_32N15_32N14
A: 32N14
P: 32_SW28_TW12X7
A: 32N13
C: C_32N13_32N12
A: 32N12
P: 32N12_32N11_48
A: 32N11
C: C_32N11_32N10
A: 32N10
C: C_32N10_32N09
A: 32N09
C: C_32N09_32N08
A: 32N08
C: C_32N08_32N07
A: 32N07
C: C_32N07_32N06
A: 32N06
C: C_32N06_32N05
A: 32N05
C: C_32N05_32N04
A: 32N04
W: OW_N122_32N04
A: N122
U: PRO_BASIN 26
R: PRO_MASTER_PS1
R: PRO_MASTER_PS2
W: PRO_EMRGNCY_OW
A: RESERVOIR
U: BASIN 32
W: OW_N122_26N10
C: C_26N12_26N11
A: 26N11
D: N121_26N11
C: C_26N11_26N10
A: 26N10
P: 26N10_N09_6X7.5
A: 26N09
C: C_26N09_26N08
A: 26N08
C: C_GBC02_26N08
C: C_26N08_26N07
A: 26N07
C: C_26N07_26N06
A: 26N06
C: C_26N06_26N05
A: 26N05
C: C_26N05_26N04
A: 26N04
C: C_26N04_26N03
A: 26N03
A: N121
U: BASIN 25A
W: OW_N120_N121
W: OW_N121_16N02
P: N121_GBC02
A: GBC02
C: C_GB01_GB02

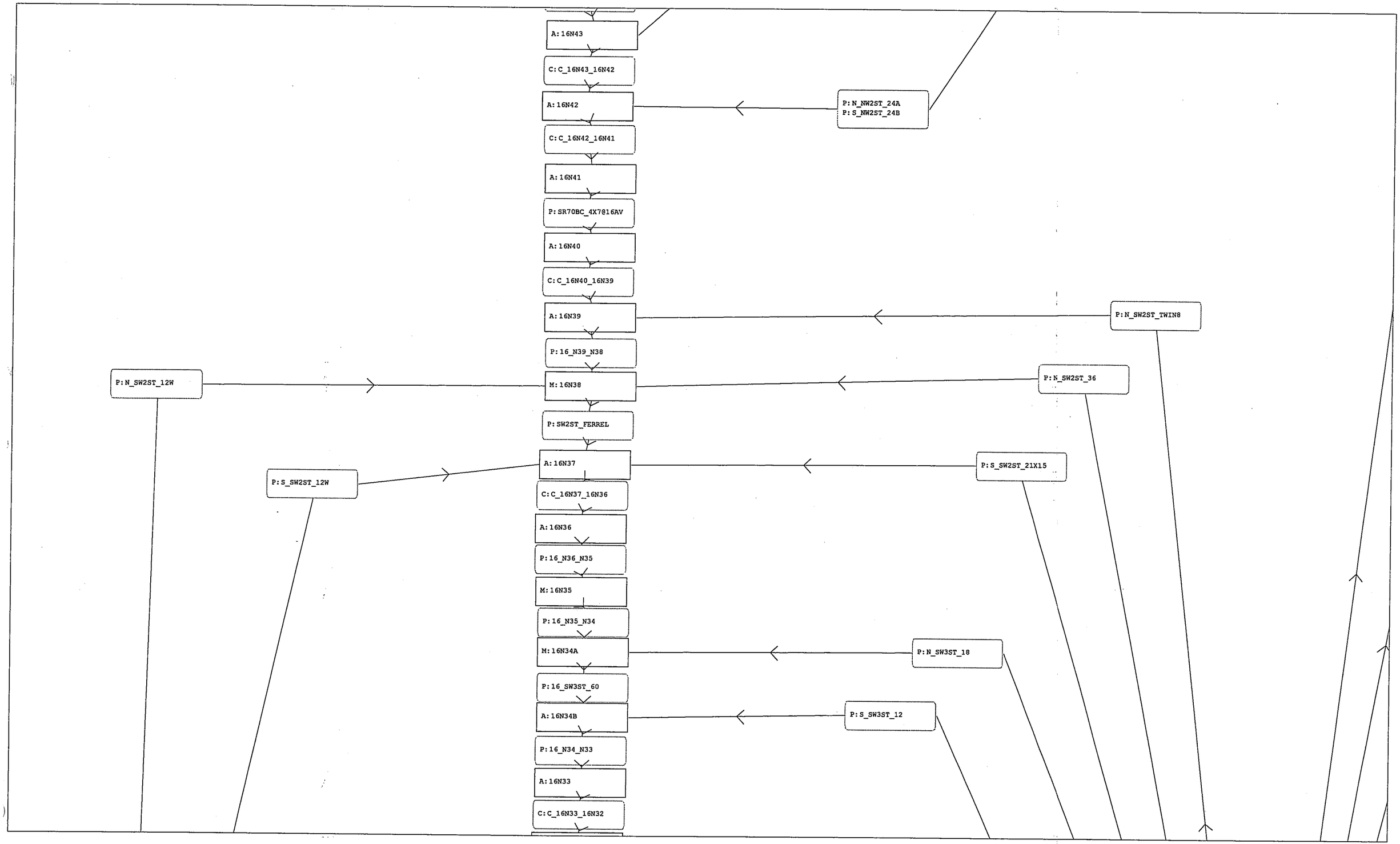


Interconnected Channel and Pond Routing Model (ICPR) ©2002 Streamline Technologies, Inc.

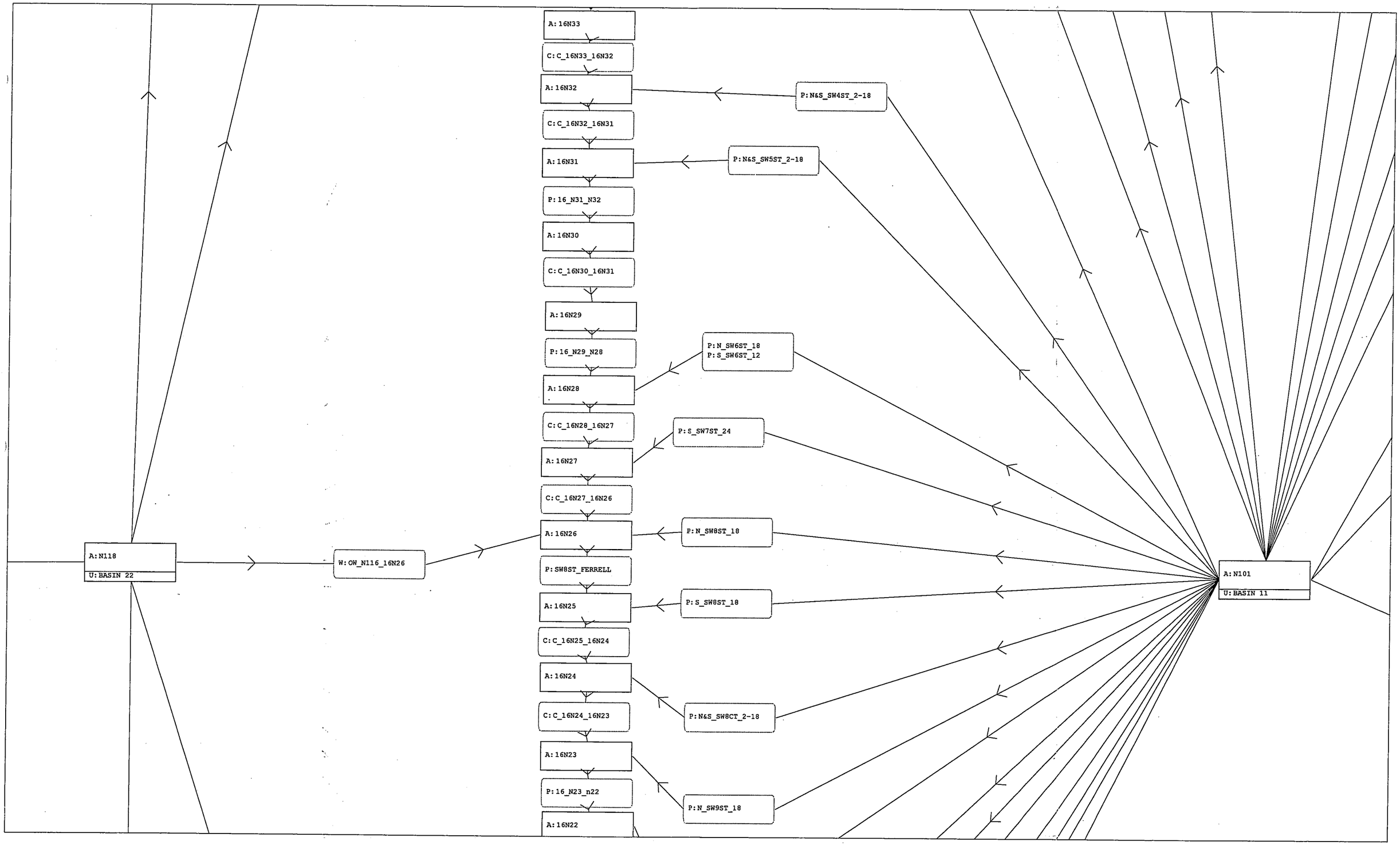

P: SW 24AVE_30RCP
A: N124
U: BASIN 28
A: N118
U: BASIN 22
W: OW_N116_16N26

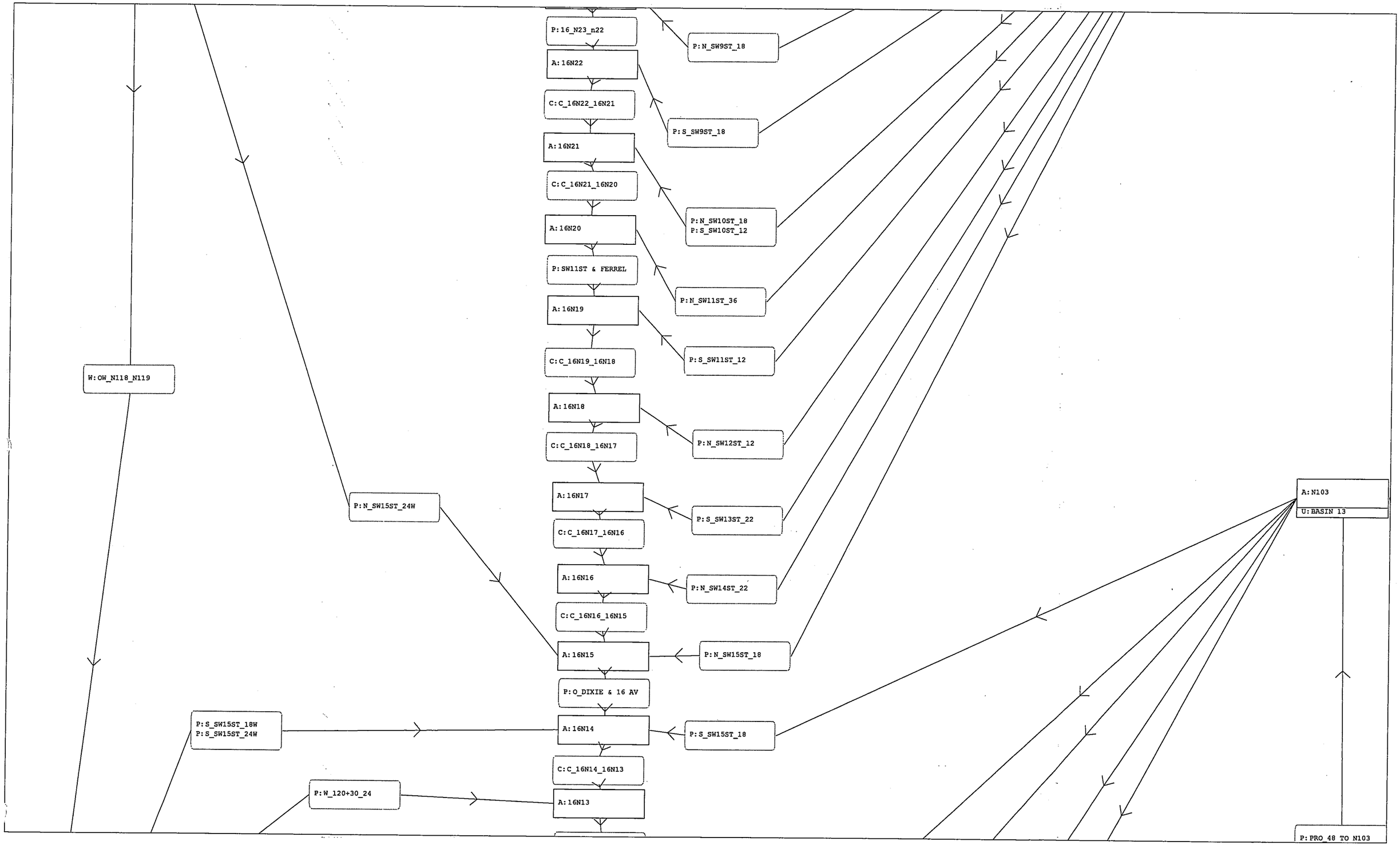


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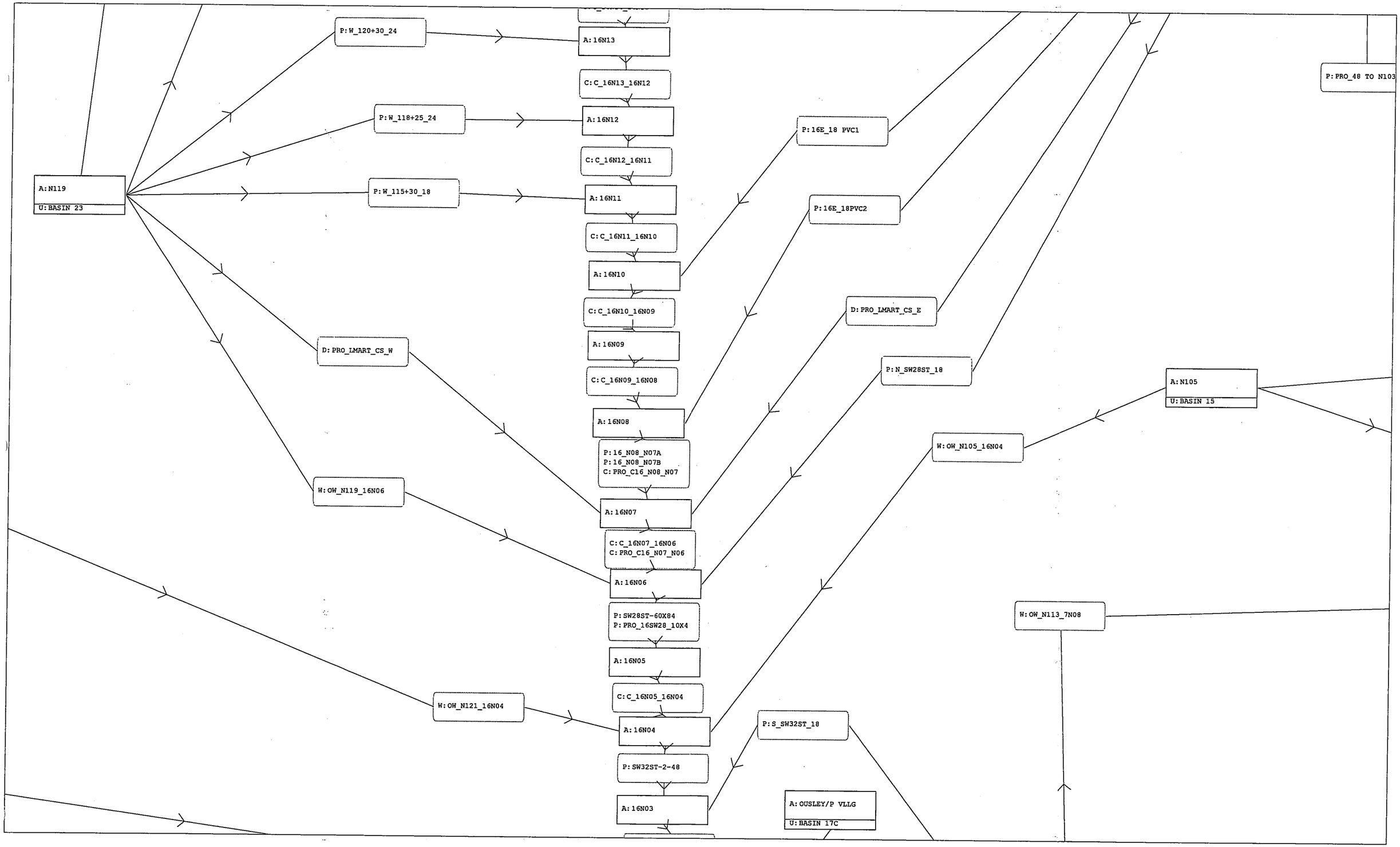


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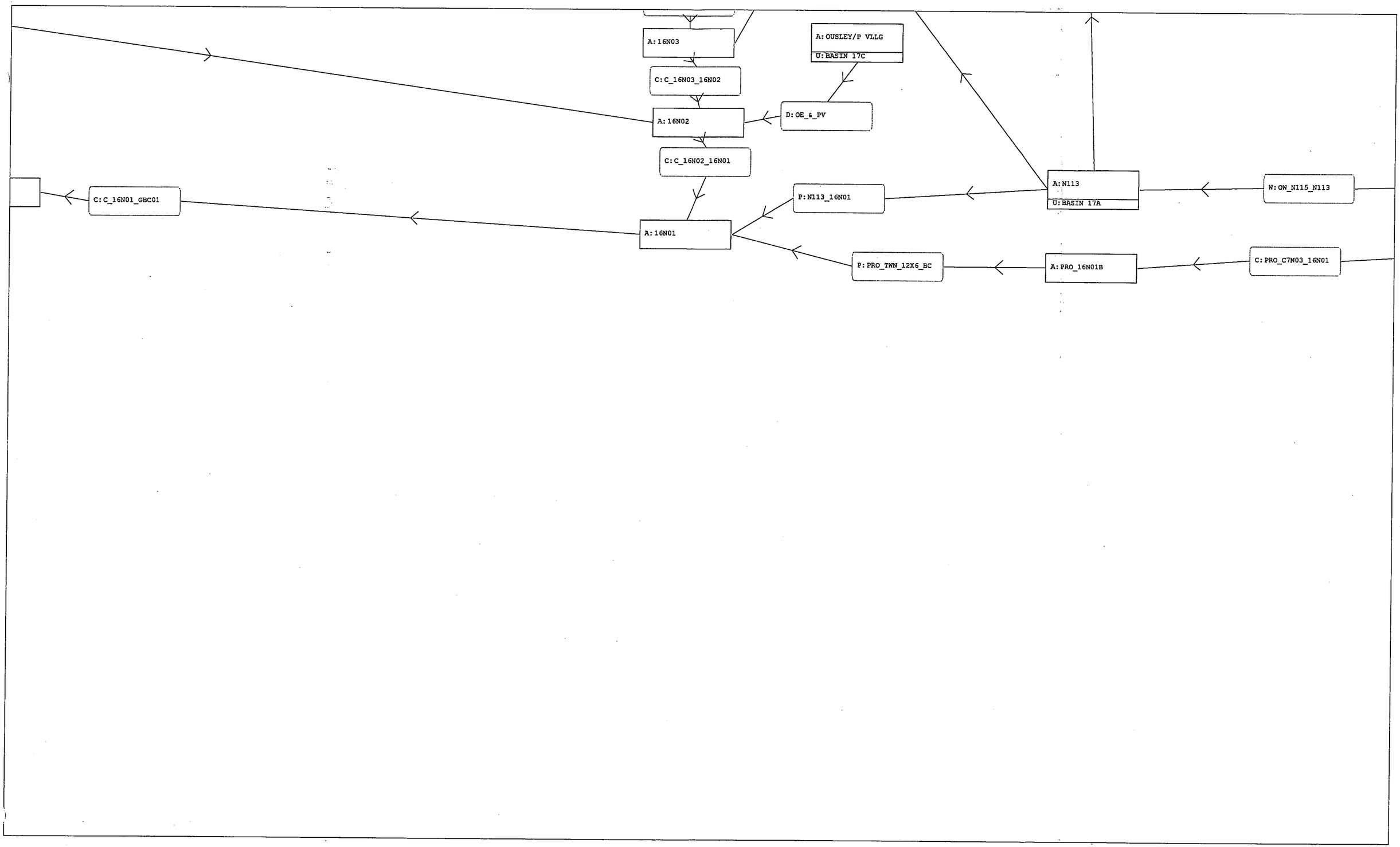

A:16N33
C:C_16N33_16N32
A:16N32
C:C_16N32_16N31
A:16N31
P:16_N31_N32
A:16N30
C:C_16N30_16N31
A:16N29
P:16_N29_N28
A:16N28
C:C_16N28_16N27
A:16N27
C:C_16N27_16N26
A:16N26
P:SW8ST_FERRELL
A:16N25
C:C_16N25_16N24
A:16N24
C:C_16N24_16N23
A:16N23
P:16_N23_n22
A:16N22
P:N&S_SW4ST_2-18
P:N&S_SW5ST_2-18
P:N_SW6ST_18
P:S_SW6ST_12
P:S_SW7ST_24
P:N_SW8ST_18
P:S_SW8ST_18
P:N&S_SW8CT_2-18
P:N_SW9ST_18
A:N118
U:BASIN 22
W:OW_N116_16N26
A:N101
U:BASIN 11

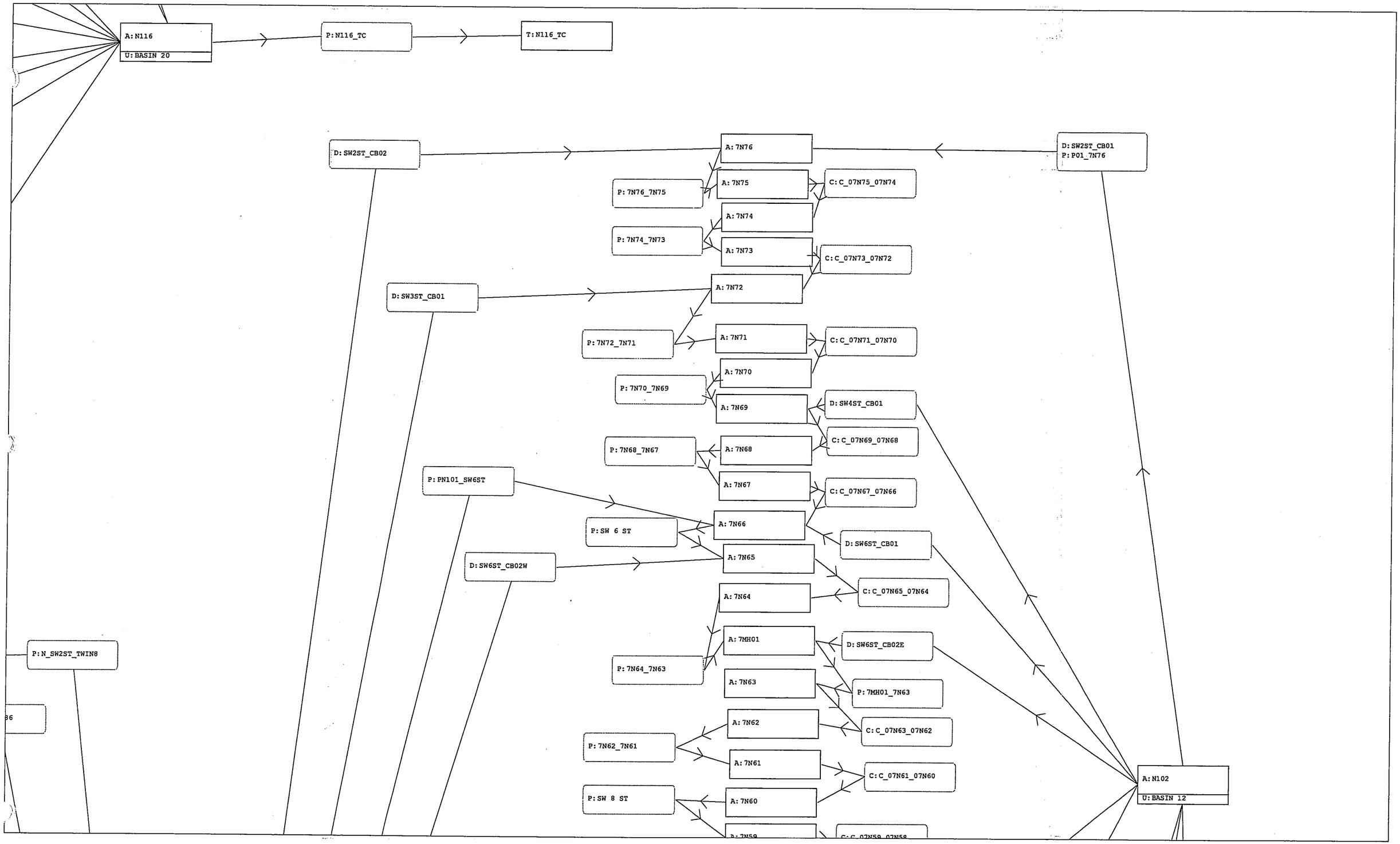


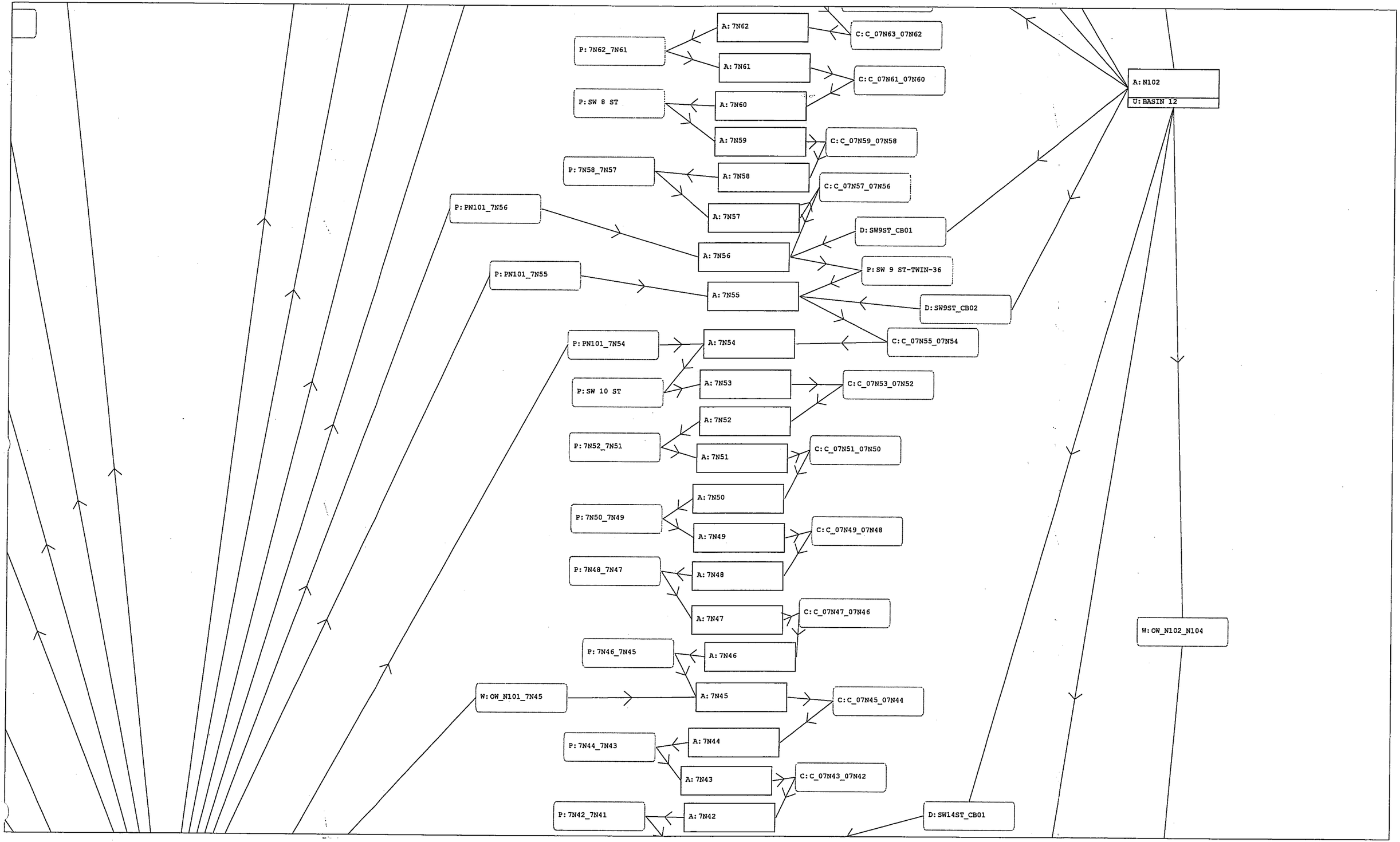
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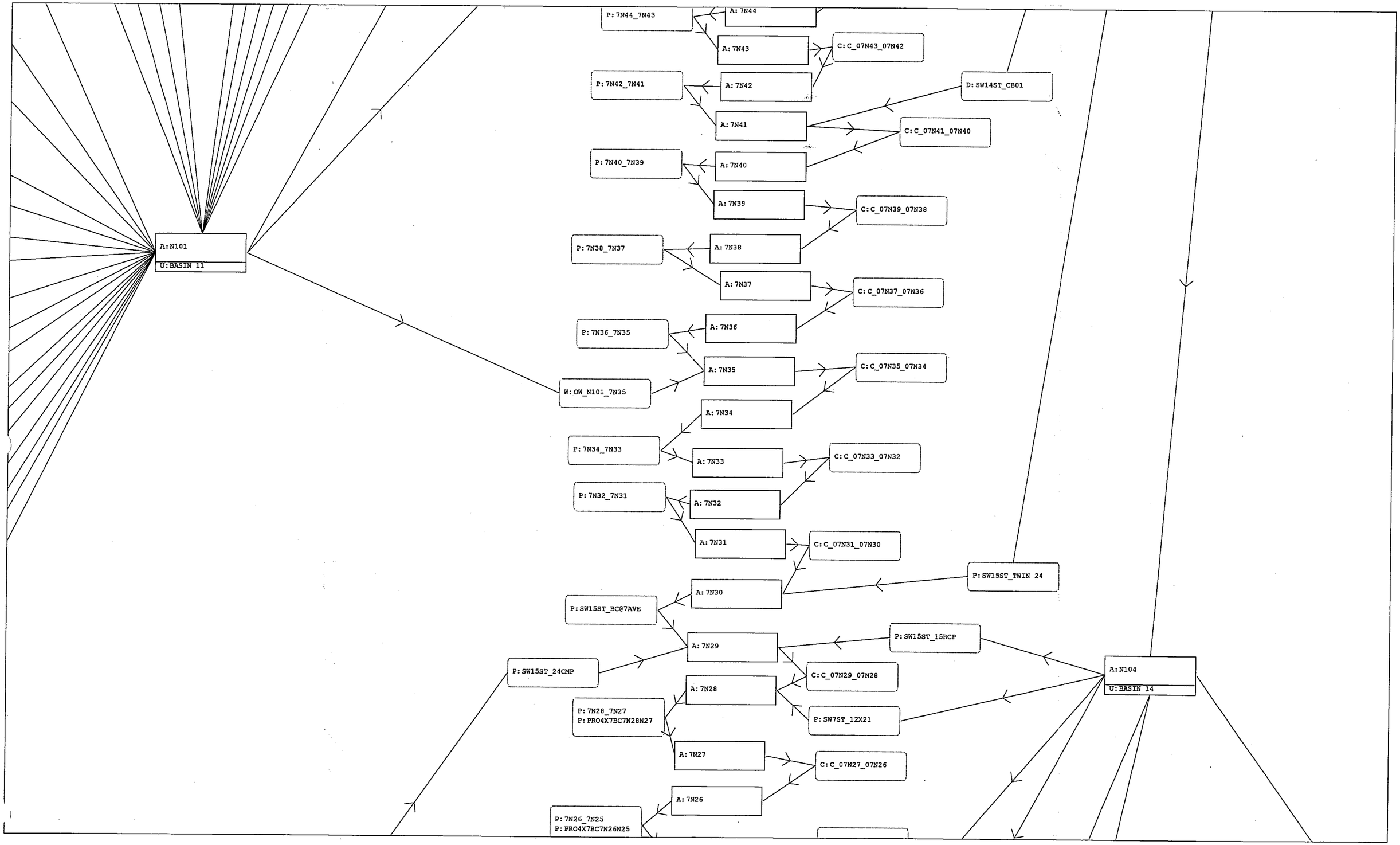
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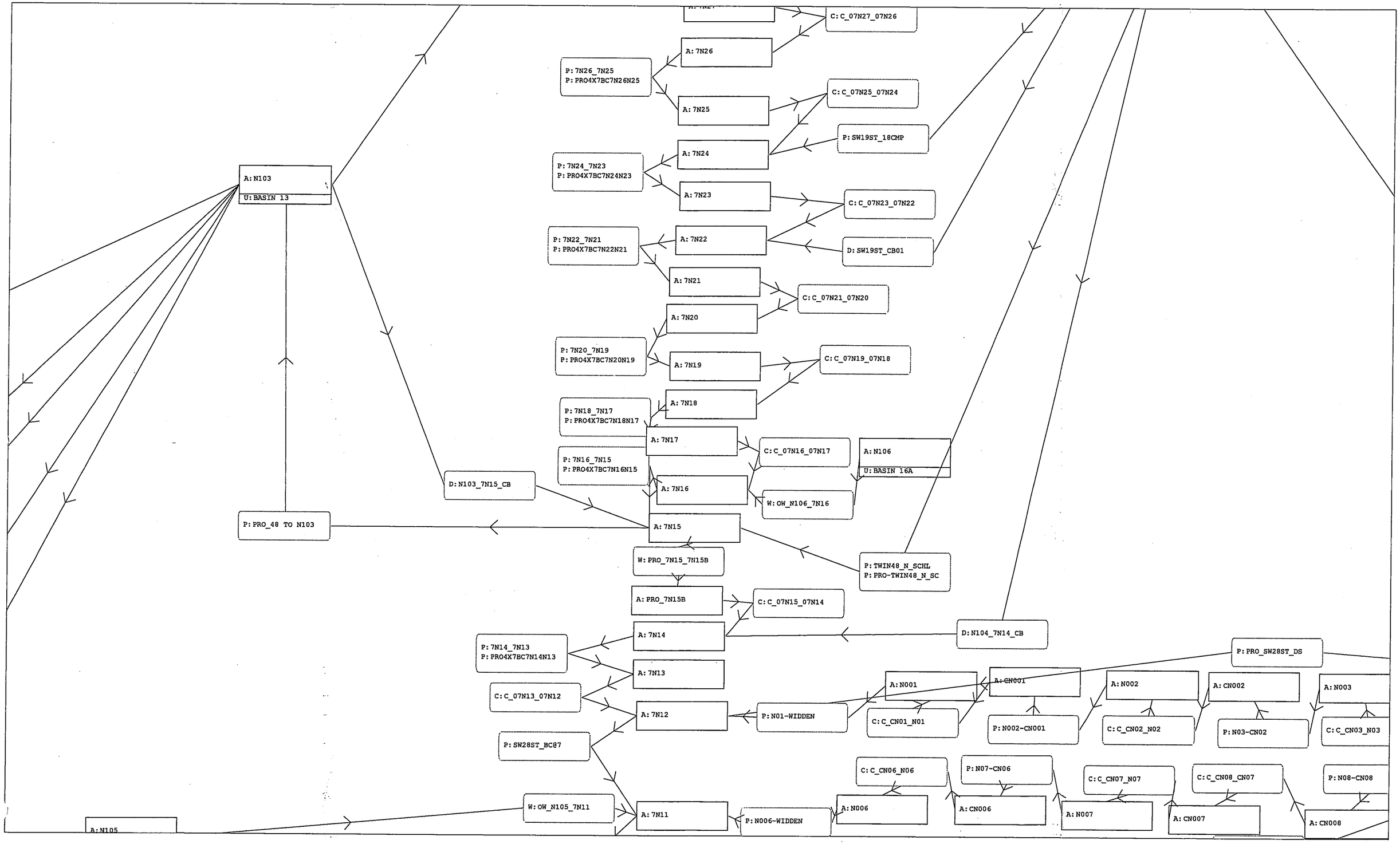

A: 16N03
A: OUSLEY/P VLLG
U: BASIN 17C
C: C_16N03_16N02
A: 16N02
D: OE_&_PV
C: C_16N02_16N01
C: C_16N01_GBC01
A: 16N01
P: N113_16N01
A: N113
U: BASIN 17A
W: OW_N115_N113
P: PRO_TWN_12X6_BC
A: PRO_16N01B
C: PRO_C7N03_16N01

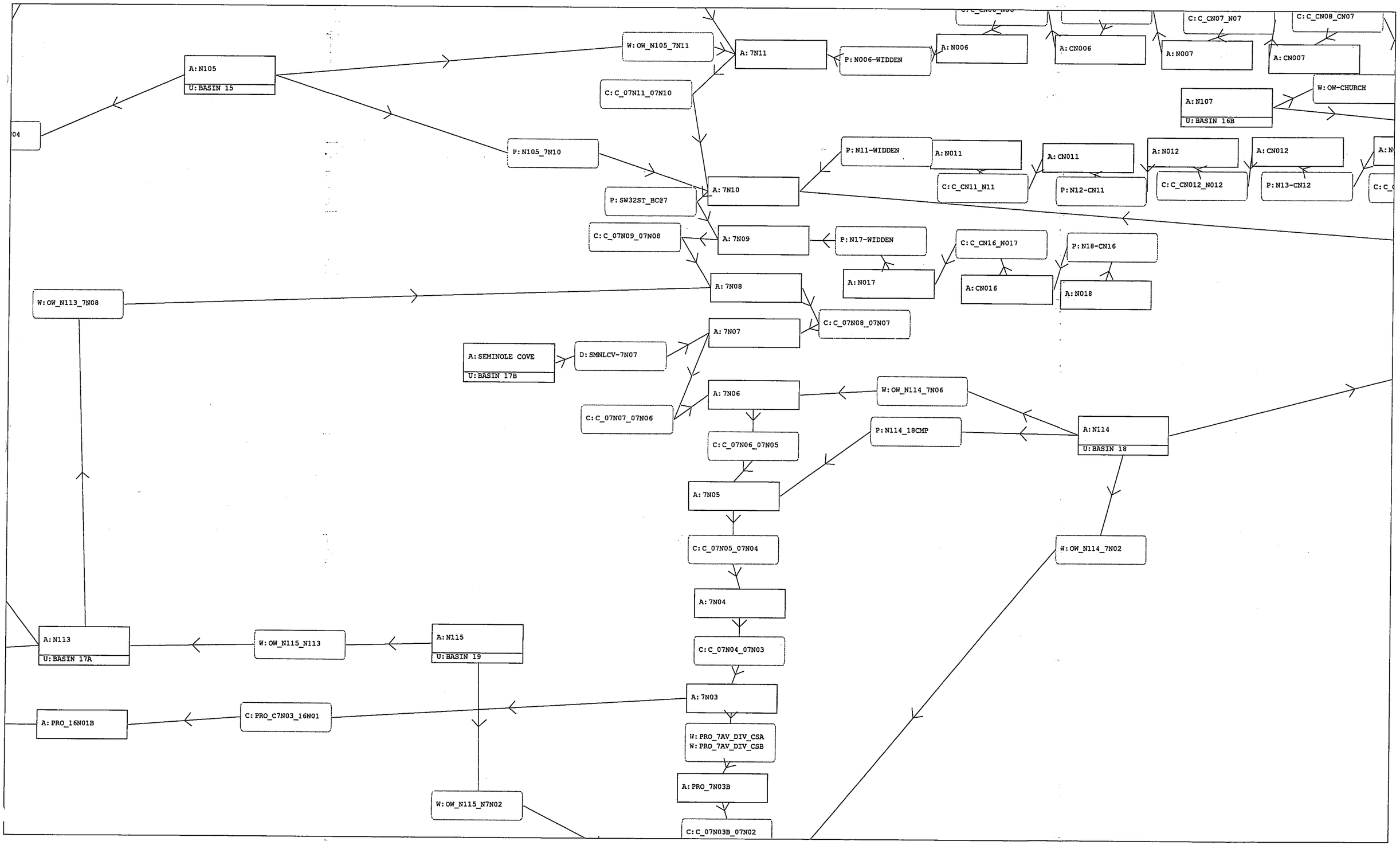

A: N116
U: BASIN 20
P: N116_TC
T: N116_TC
D: SW2ST_CB02
A: 7N76
D: SW2ST_CB01
P: P01_7N76
P: 7N76_7N75
A: 7N75
C: C_07N75_07N74
A: 7N74
P: 7N74_7N73
A: 7N73
C: C_07N73_07N72
D: SW3ST_CB01
A: 7N72
P: 7N72_7N71
A: 7N71
C: C_07N71_07N70
A: 7N70
P: 7N70_7N69
A: 7N69
D: SW4ST_CB01
C: C_07N69_07N68
P: 7N68_7N67
A: 7N68
A: 7N67
C: C_07N67_07N66
P: PN101_SW6ST
P: SW 6 ST
A: 7N66
D: SW6ST_CB01
D: SW6ST_CB02W
A: 7N65
C: C_07N65_07N64
A: 7N64
A: 7MH01
D: SW6ST_CB02E
P: 7N64_7N63
A: 7N63
P: 7MH01_7N63
A: 7N62
C: C_07N63_07N62
P: 7N62_7N61
A: 7N61
C: C_07N61_07N60
P: SW 8 ST
A: 7N60
P: N_SW2ST_TWIN8
A: N102
U: BASIN 12

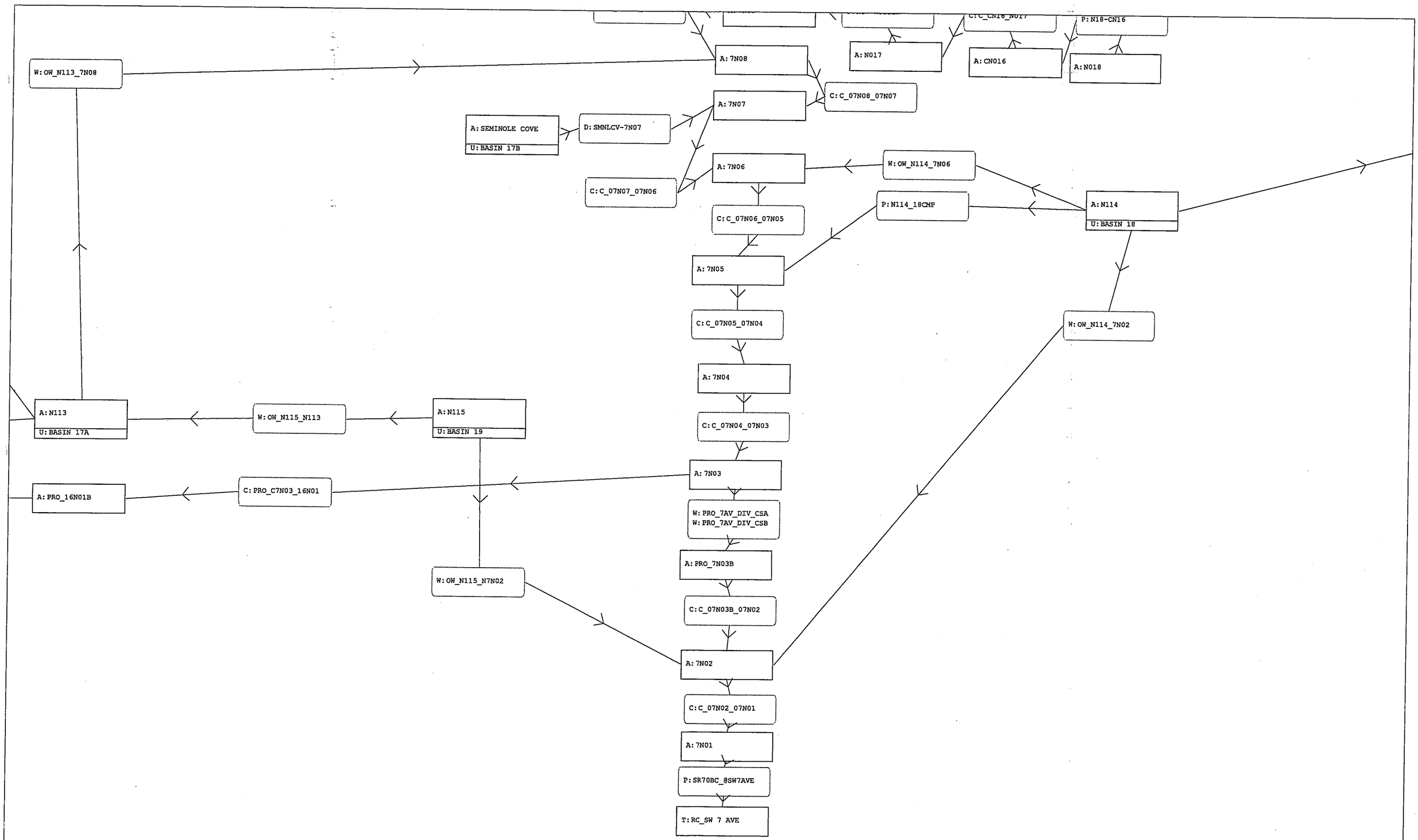


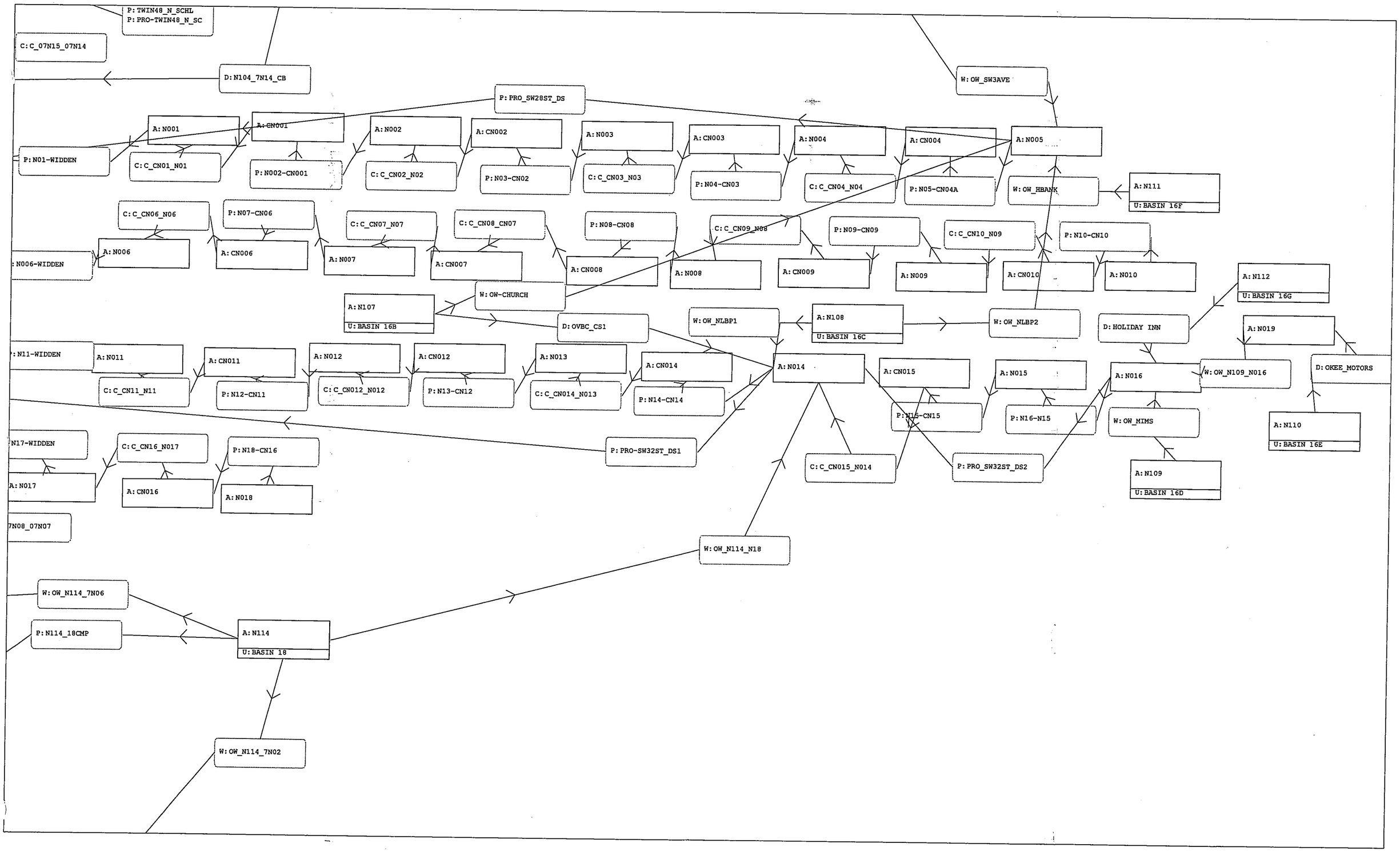
Interconnected Channel and Pond Routing Model (ICPR) ©2002 Streamline Technologies, Inc.


A: N101
U: BASIN 11
P: 7N44_7N43
A: 7N44
A: 7N43
C: C_07N43_07N42
P: 7N42_7N41
A: 7N42
D: SW14ST_CB01
A: 7N41
C: C_07N41_07N40
P: 7N40_7N39
A: 7N40
A: 7N39
C: C_07N39_07N38
P: 7N38_7N37
A: 7N38
A: 7N37
C: C_07N37_07N36
P: 7N36_7N35
A: 7N36
A: 7N35
C: C_07N35_07N34
W: OW_N101_7N35
A: 7N34
P: 7N34_7N33
A: 7N33
C: C_07N33_07N32
P: 7N32_7N31
A: 7N32
A: 7N31
C: C_07N31_07N30
P: SW15ST_TWIN 24
A: 7N30
P: SW15ST_BC87AVE
P: SW15ST_15RCP
A: 7N29
P: SW15ST_24CMP
C: C_07N29_07N28
A: N104
U: BASIN 14
A: 7N28
P: 7N28_7N27
P: PRO4X7BC7N28N27
P: SW7ST_12X21
A: 7N27
C: C_07N27_07N26
A: 7N26
P: 7N26_7N25
P: PRO4X7BC7N26N25


A: N103
U: BASIN 13
P: PRO_48 TO N103
A: N105
W: OW_N105_7N11
A: 7N11
P: N006-WIDDEN
A: N006
C: C_CN06_N06
A: CN006
P: N07-CN06
A: N007
C: C_CN07_N07
A: CN007
C: C_CN08_CN07
A: CN008
P: N08-CN08
P: SW28ST_BC@7
A: 7N12
P: N01-WIDDEN
A: N001
C: C_CN01_N01
A: CN001
P: N002-CN001
A: N002
C: C_CN02_N02
A: CN002
P: N03-CN02
A: N003
C: C_CN03_N03
P: PRO_SW28ST_DS
C: C_07N13_07N12
P: 7N14_7N13
P: PRO4X7BC7N14N13
A: 7N14
A: 7N13
C: C_07N15_07N14
A: PRO_7N15B
W: PRO_7N15_7N15B
A: 7N15
D: N103_7N15_CB
P: 7N16_7N15
P: PRO4X7BC7N16N15
A: 7N16
C: C_07N16_07N17
W: OW_N106_7N16
A: N106
U: BASIN 16A
P: TWIN48_N_SCHL
P: PRO-TWIN48_N_SC
D: N104_7N14_CB
P: 7N18_7N17
P: PRO4X7BC7N18N17
A: 7N17
A: 7N18
C: C_07N19_07N18
P: 7N20_7N19
P: PRO4X7BC7N20N19
A: 7N19
A: 7N20
C: C_07N21_07N20
P: 7N22_7N21
P: PRO4X7BC7N22N21
A: 7N21
A: 7N22
C: C_07N23_07N22
D: SW19ST_CB01
P: 7N24_7N23
P: PRO4X7BC7N24N23
A: 7N23
A: 7N24
C: C_07N25_07N24
P: SW19ST_18CMP
P: 7N26_7N25
P: PRO4X7BC7N26N25
A: 7N25
A: 7N26
C: C_07N27_07N26


A: N105
U: BASIN 15
W: OW_N105_7N11
P: N105_7N10
C: C_07N11_07N10
A: 7N11
P: N006-WIDDEN
A: N006
A: CN006
C: C_CN07_N07
A: N007
C: C_CN08_CN07
A: CN007
W: OW-CHURCH
A: N107
U: BASIN 16B
P: N11-WIDDEN
A: N011
C: C_CN11_N11
A: CN011
P: N12-CN11
A: N012
C: C_CN012_N012
A: CN012
P: N13-CN12
A: 7N10
P: SW32ST_BC@7
C: C_07N09_07N08
A: 7N09
P: N17-WIDDEN
A: N017
C: C_CN16_N017
A: CN016
P: N18-CN16
A: N018
W: OW_N113_7N08
A: 7N08
C: C_07N08_07N07
A: 7N07
A: SEMINOLE COVE
U: BASIN 17B
D: SMNLCV-7N07
C: C_07N07_07N06
A: 7N06
W: OW_N114_7N06
P: N114_18CMP
A: N114
U: BASIN 18
C: C_07N06_07N05
A: 7N05
C: C_07N05_07N04
A: 7N04
C: C_07N04_07N03
A: 7N03
W: PRO_7AV_DIV_CSA
W: PRO_7AV_DIV_CSB
A: PRO_7N03B
C: C_07N03B_07N02
W: OW_N114_7N02
A: N113
U: BASIN 17A
W: OW_N115_N113
A: N115
U: BASIN 19
A: PRO_16N01B
C: PRO_C7N03_16N01
W: OW_N115_N7N02


W: OW_N113_7N08
A: 7N08
A: N017
C: CN16_N017
P: N18-CN16
A: CN016
A: N018
C: C_07N08_07N07
A: 7N07
A: SEMINOLE COVE
U: BASIN 17B
D: SMNLCV-7N07
A: 7N06
W: OW_N114_7N06
C: C_07N07_07N06
C: C_07N06_07N05
P: N114_18CMP
A: N114
U: BASIN 18
A: 7N05
C: C_07N05_07N04
W: OW_N114_7N02
A: 7N04
A: N113
U: BASIN 17A
W: OW_N115_N113
A: N115
U: BASIN 19
C: C_07N04_07N03
A: 7N03
W: PRO_7AV_DIV_CSA
W: PRO_7AV_DIV_CSB
A: PRO_16N01B
C: PRO_C7N03_16N01
A: PRO_7N03B
W: OW_N115_N7N02
C: C_07N03B_07N02
A: 7N02
C: C_07N02_07N01
A: 7N01
P: SR70BC_@SW7AVE
T: RC_SW 7 AVE



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OKEECHOBEE COUNTY
COMPREHENSIVE URBANIZED AREA
STORMWATER MASTER PLAN

SW CORRIDOR
MODEL INPUT DATA

== Basins ==

Name: BASIN 11 | Node: N101 | Status: Onsite
Group: SW 7 AVE | Type: SCS Unit Hydrograph

Unit Hydrograph:	Uh256	Peaking Factor:	256.0
Rainfall File:	Sfwmd72	Storm Duration(hrs):	72.00
Rainfall Amount(in):	7.000	Time of Conc(min):	66.00
Area(ac):	326.000	Time Shift(hrs):	0.00
Curve Number:	70.90	Max Allowable Q(cfs):	999999.000
DCIA(%):	0.00		

Name: BASIN 12 | Node: N102 | Status: Onsite
Group: SW 7 AVE | Type: SCS Unit Hydrograph

Unit Hydrograph:	Uh256	Peaking Factor:	256.0
Rainfall File:	Sfwmd72	Storm Duration(hrs):	72.00
Rainfall Amount(in):	7.000	Time of Conc(min):	66.00
Area(ac):	274.000	Time Shift(hrs):	0.00
Curve Number:	74.50	Max Allowable Q(cfs):	999999.000
DCIA(%):	0.00		

Name: BASIN 13 | Node: N103 | Status: Onsite
Group: SW 7 AVE | Type: SCS Unit Hydrograph

Unit Hydrograph:	Uh256	Peaking Factor:	256.0
Rainfall File:	Sfwmd72	Storm Duration(hrs):	72.00
Rainfall Amount(in):	7.000	Time of Conc(min):	43.00
Area(ac):	243.000	Time Shift(hrs):	0.00
Curve Number:	92.50	Max Allowable Q(cfs):	999999.000
DCIA(%):	0.00		

BASIN CN & TC WERE MODIFIED TO ACCOUNT FOR ADDITION OF 25 ACRE LAKE

Name: BASIN 14 | Node: N104 | Status: Onsite
Group: SW 7 AVE | Type: SCS Unit Hydrograph

Unit Hydrograph:	Uh256	Peaking Factor:	256.0
Rainfall File:	Sfwmd72	Storm Duration(hrs):	72.00
Rainfall Amount(in):	7.000	Time of Conc(min):	66.00
Area(ac):	203.000	Time Shift(hrs):	0.00
Curve Number:	78.20	Max Allowable Q(cfs):	999999.000
DCIA(%):	0.00		

Name: BASIN 15 | Node: N105 | Status: Onsite
Group: SW 7 AVE | Type: SCS Unit Hydrograph

Unit Hydrograph:	GAMMA	Peaking Factor:	200.0
Rainfall File:	Sfwmd72	Storm Duration(hrs):	72.00
Rainfall Amount(in):	7.000	Time of Conc(min):	69.00
Area(ac):	78.200	Time Shift(hrs):	0.00
Curve Number:	84.60	Max Allowable Q(cfs):	999999.000

DCIA(%): 0.00

Name: BASIN 16A
Group: SW 7 AVE
Node: N106
Type: SCS Unit Hydrograph
Status: Onsite

Unit Hydrograph: Uh256
Rainfall File: Sfwmd72
Rainfall Amount(in): 7.000
Area(ac): 4.270
Curve Number: 73.50
DCIA(%): 0.00
Peaking Factor: 256.0
Storm Duration(hrs): 72.00
Time of Conc(min): 14.00
Time Shift(hrs): 0.00
Max Allowable Q(cfs): 999999.000

Name: BASIN 16B
Group: SW 7 AVE
Node: N107
Type: SCS Unit Hydrograph
Status: Onsite

Unit Hydrograph: Uh256
Rainfall File: Sfwmd72
Rainfall Amount(in): 7.000
Area(ac): 34.600
Curve Number: 72.20
DCIA(%): 0.00
Peaking Factor: 256.0
Storm Duration(hrs): 72.00
Time of Conc(min): 20.00
Time Shift(hrs): 0.00
Max Allowable Q(cfs): 999999.000

OAKVIEW BAPTIST CHURCH

Name: BASIN 16C
Group: SW 7 AVE
Node: N108
Type: SCS Unit Hydrograph
Status: Onsite

Unit Hydrograph: Uh256
Rainfall File: Sfwmd72
Rainfall Amount(in): 7.000
Area(ac): 10.870
Curve Number: 90.70
DCIA(%): 0.00
Peaking Factor: 256.0
Storm Duration(hrs): 72.00
Time of Conc(min): 20.00
Time Shift(hrs): 0.00
Max Allowable Q(cfs): 999999.000

Name: BASIN 16D
Group: SW 7 AVE
Node: N109
Type: SCS Unit Hydrograph
Status: Onsite

Unit Hydrograph: Uh256
Rainfall File: Sfwmd72
Rainfall Amount(in): 7.000
Area(ac): 3.100
Curve Number: 62.10
DCIA(%): 0.00
Peaking Factor: 256.0
Storm Duration(hrs): 72.00
Time of Conc(min): 14.00
Time Shift(hrs): 0.00
Max Allowable Q(cfs): 999999.000

Name: BASIN 16E
Group: SW 7 AVE
Node: N110
Type: SCS Unit Hydrograph
Status: Onsite

Unit Hydrograph: Uh256
Rainfall File: Sfwmd72
Rainfall Amount(in): 7.000
Area(ac): 6.660
Curve Number: 66.20
Peaking Factor: 256.0
Storm Duration(hrs): 72.00
Time of Conc(min): 14.00
Time Shift(hrs): 0.00
Max Allowable Q(cfs): 999999.000

DCIA(%): 0.00

Name: BASIN 16F
Group: SW 7 AVE
Node: N111
Type: SCS Unit Hydrograph
Status: Onsite

Unit Hydrograph: Uh256
Rainfall File: Sfwmd72
Rainfall Amount(in): 7.000
Area(ac): 1.430
Curve Number: 78.50
DCIA(%): 0.00
Peaking Factor: 256.0
Storm Duration(hrs): 72.00
Time of Conc(min): 6.00
Time Shift(hrs): 0.00
Max Allowable Q(cfs): 999999.000

Name: BASIN 16G
Group: SW 7 AVE
Node: N112
Type: SCS Unit Hydrograph
Status: Onsite

Unit Hydrograph: Uh256
Rainfall File: Sfwmd72
Rainfall Amount(in): 7.000
Area(ac): 4.370
Curve Number: 82.00
DCIA(%): 0.00
Peaking Factor: 256.0
Storm Duration(hrs): 72.00
Time of Conc(min): 16.00
Time Shift(hrs): 0.00
Max Allowable Q(cfs): 999999.000

Name: BASIN 17A
Group: SW 7 AVE
Node: N113
Type: SCS Unit Hydrograph
Status: Onsite

Unit Hydrograph: Uh256
Rainfall File: Sfwmd72
Rainfall Amount(in): 7.000
Area(ac): 65.300
Curve Number: 78.20
DCIA(%): 0.00
Peaking Factor: 256.0
Storm Duration(hrs): 72.00
Time of Conc(min): 66.00
Time Shift(hrs): 0.00
Max Allowable Q(cfs): 999999.000

Name: BASIN 17B
Group: SW 7 AVE
Node: SEMINOLE COVE
Type: SCS Unit Hydrograph
Status: Onsite

Unit Hydrograph: Uh256
Rainfall File: Sfwmd72
Rainfall Amount(in): 7.000
Area(ac): 53.170
Curve Number: 90.10
DCIA(%): 0.00
Peaking Factor: 256.0
Storm Duration(hrs): 72.00
Time of Conc(min): 14.00
Time Shift(hrs): 0.00
Max Allowable Q(cfs): 999999.000

Name: BASIN 17C
Group: SW 16/12 AVE
Node: OUSLEY/P VLLG
Type: SCS Unit Hydrograph
Status: Onsite

Unit Hydrograph: Uh256
Rainfall File: Sfwmd72
Rainfall Amount(in): 7.000
Area(ac): 142.370
Curve Number: 73.80
Peaking Factor: 256.0
Storm Duration(hrs): 72.00
Time of Conc(min): 29.00
Time Shift(hrs): 0.00
Max Allowable Q(cfs): 999999.000

DCIA(%): 0.00

OUSLEY ESTATES & PLAM VILLAGE WERE COMBINED AS ONE BASIN AS CONTROL STRUCTURE IN PALM VILLAGE COULD NOT BE LOCATED; PALM VILLAGE WAS ASSUMED TO BE CONTROLLED BY OUSLEY ESTATS STRUCTURE

Name: BASIN 18 | Node: N114 | Status: Onsite
Group: SW 7 AVE | Type: SCS Unit Hydrograph

Unit Hydrograph: Uh256 | Peaking Factor: 256.0
Rainfall File: Sfwmd72 | Storm Duration(hrs): 72.00
Rainfall Amount(in): 7.000 | Time of Conc(min): 74.00
Area(ac): 332.000 | Time Shift(hrs): 0.00
Curve Number: 81.20 | Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: BASIN 19 | Node: N115 | Status: Onsite
Group: SW 7 AVE | Type: SCS Unit Hydrograph

Unit Hydrograph: GAMMA | Peaking Factor: 200.0
Rainfall File: Sfwmd72 | Storm Duration(hrs): 72.00
Rainfall Amount(in): 7.000 | Time of Conc(min): 66.00
Area(ac): 123.000 | Time Shift(hrs): 0.00
Curve Number: 84.60 | Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

UNDEVELOPED PARCEL (PRIMARILY OUA SITE)

Name: BASIN 20 | Node: N116 | Status: Onsite
Group: SW 16/12 AVE | Type: SCS Unit Hydrograph

Unit Hydrograph: Uh256 | Peaking Factor: 256.0
Rainfall File: Sfwmd72 | Storm Duration(hrs): 72.00
Rainfall Amount(in): 7.000 | Time of Conc(min): 151.00
Area(ac): 324.000 | Time Shift(hrs): 0.00
Curve Number: 73.00 | Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: BASIN 21 | Node: N117 | Status: Onsite
Group: SW 16/12 AVE | Type: SCS Unit Hydrograph

Unit Hydrograph: Uh256 | Peaking Factor: 256.0
Rainfall File: Sfwmd72 | Storm Duration(hrs): 72.00
Rainfall Amount(in): 7.000 | Time of Conc(min): 74.00
Area(ac): 105.300 | Time Shift(hrs): 0.00
Curve Number: 82.00 | Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: BASIN 22 | Node: N118 | Status: Onsite
Group: SW 16/12 AVE | Type: SCS Unit Hydrograph

Unit Hydrograph: Uh256 | Peaking Factor: 256.0
Rainfall File: Sfwmd72 | Storm Duration(hrs): 72.00
Rainfall Amount(in): 7.000 | Time of Conc(min): 72.70
Area(ac): 320.000 | Time Shift(hrs): 0.00

Curve Number: 83.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: BASIN 23 Node: N119 Status: Onsite
Group: SW 16/12 AVE Type: SCS Unit Hydrograph

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Sfwmd72 Storm Duration(hrs): 72.00
Rainfall Amount(in): 7.000 Time of Conc(min): 37.00
Area(ac): 301.000 Time Shift(hrs): 0.00
Curve Number: 77.50 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

CN & TC WERE MODIFIED TO ACCOUNT FOR ADDITION OF 25 ACRE LAKE

Name: BASIN 24 Node: N120 Status: Onsite
Group: SW 16/12 AVE Type: SCS Unit Hydrograph

Unit Hydrograph: GAMMA Peaking Factor: 200.0
Rainfall File: Sfwmd72 Storm Duration(hrs): 72.00
Rainfall Amount(in): 7.000 Time of Conc(min): 37.00
Area(ac): 97.000 Time Shift(hrs): 0.00
Curve Number: 89.90 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: BASIN 25A Node: N121 Status: Onsite
Group: SW 16/12 AVE Type: SCS Unit Hydrograph

Unit Hydrograph: GAMMA Peaking Factor: 200.0
Rainfall File: Sfwmd72 Storm Duration(hrs): 72.00
Rainfall Amount(in): 7.000 Time of Conc(min): 151.00
Area(ac): 366.700 Time Shift(hrs): 0.00
Curve Number: 87.70 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

UNDEVELOPED AREA W/MINING PITS

Name: BASIN 25B Node: EAGLE POINT SUB Status: Onsite
Group: SW 26 AVE Type: SCS Unit Hydrograph

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Sfwmd72 Storm Duration(hrs): 72.00
Rainfall Amount(in): 7.000 Time of Conc(min): 29.00
Area(ac): 28.300 Time Shift(hrs): 0.00
Curve Number: 84.90 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: BASIN 27 Node: N123 Status: Onsite
Group: SW 26 AVE Type: SCS Unit Hydrograph

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Sfwmd72 Storm Duration(hrs): 72.00
Rainfall Amount(in): 7.000 Time of Conc(min): 29.00
Area(ac): 246.000 Time Shift(hrs): 0.00

Curve Number: 68.20
DCIA(%): 0.00
Max Allowable Q(cfs): 999999.000

Name: BASIN 28
Group: SW 32 AVE
Node: N124
Type: SCS Unit Hydrograph
Status: Onsite

Unit Hydrograph: GAMMA
Rainfall File: Sfwmd72
Rainfall Amount(in): 7.000
Area(ac): 303.000
Curve Number: 62.10
DCIA(%): 0.00
Peaking Factor: 200.0
Storm Duration(hrs): 72.00
Time of Conc(min): 29.00
Time Shift(hrs): 0.00
Max Allowable Q(cfs): 999999.000

Name: BASIN 29
Group: SW 32 AVE
Node: N125
Type: SCS Unit Hydrograph
Status: Onsite

Unit Hydrograph: GAMMA
Rainfall File: Sfwmd72
Rainfall Amount(in): 7.000
Area(ac): 331.000
Curve Number: 85.00
DCIA(%): 0.00
Peaking Factor: 200.0
Storm Duration(hrs): 72.00
Time of Conc(min): 228.00
Time Shift(hrs): 0.00
Max Allowable Q(cfs): 999999.000

Name: BASIN 30
Group: SW 32 AVE
Node: N126
Type: SCS Unit Hydrograph
Status: Onsite

Unit Hydrograph: Uh256
Rainfall File: Sfwmd72
Rainfall Amount(in): 7.000
Area(ac): 353.000
Curve Number: 80.30
DCIA(%): 0.00
Peaking Factor: 256.0
Storm Duration(hrs): 72.00
Time of Conc(min): 74.00
Time Shift(hrs): 0.00
Max Allowable Q(cfs): 999999.000

Name: BASIN 31
Group: SW 32 AVE
Node: N127
Type: SCS Unit Hydrograph
Status: Onsite

Unit Hydrograph: GAMMA
Rainfall File: Sfwmd72
Rainfall Amount(in): 7.000
Area(ac): 72.000
Curve Number: 80.80
DCIA(%): 0.00
Peaking Factor: 200.0
Storm Duration(hrs): 72.00
Time of Conc(min): 43.00
Time Shift(hrs): 0.00
Max Allowable Q(cfs): 999999.000

Name: BASIN 32
Group: SW 26 AVE
Node: RESERVOIR
Type: SCS Unit Hydrograph
Status: Onsite

Unit Hydrograph: Uh256
Rainfall File: Sfwmd72
Rainfall Amount(in): 7.000
Area(ac): 311.000
Peaking Factor: 256.0
Storm Duration(hrs): 72.00
Time of Conc(min): 15.00
Time Shift(hrs): 0.00

Curve Number: 97.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

RESERVOIR REPRESENTS LAND CURRENTLY OWNED BY SFWMD & COUNTY (150 AC) AND SURROUNDING PRIVATE PROPERTY RECOMMENDED FOR STORMWATER USE.

Name: PRO_BASIN 26 Node: N122 Status: Onsite
Group: SW 26 AVE Type: SCS Unit Hydrograph

Unit Hydrograph: GAMMA Peaking Factor: 200.0
Rainfall File: Sfwmd72 Storm Duration(hrs): 72.00
Rainfall Amount(in): 7.000 Time of Conc(min): 140.00
Area(ac): 233.000 Time Shift(hrs): 0.00
Curve Number: 82.80 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

SUBSTRACTED 20 ACRES FROM THIS BASIN TO BE COME PART OF RESERVOIR; LOWERED TC FROM 151 TO 140

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==== Nodes ==========
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Name: 16N01 Base Flow(cfs): 0.000 Init Stage(ft): 13.500
Group: SW 16/12 AVE Warn Stage(ft): 17.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 16N02 Base Flow(cfs): 0.000 Init Stage(ft): 13.500
Group: SW 16/12 AVE Warn Stage(ft): 17.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 16N03 Base Flow(cfs): 0.000 Init Stage(ft): 14.000
Group: SW 16/12 AVE Warn Stage(ft): 19.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 16N04 Base Flow(cfs): 0.000 Init Stage(ft): 14.000
Group: SW 16/12 AVE Warn Stage(ft): 19.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 16N05 Base Flow(cfs): 0.000 Init Stage(ft): 14.300
Group: SW 16/12 AVE Warn Stage(ft): 18.000

Type: Stage/Area

Stage(ft)	Area(ac)

Name: 16N06 Base Flow(cfs): 0.000 Init Stage(ft): 15.400
Group: SW 16/12 AVE Warn Stage(ft): 21.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 16N07 Base Flow(cfs): 0.000 Init Stage(ft): 14.700
Group: SW 16/12 AVE Warn Stage(ft): 20.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 16N08 Base Flow(cfs): 0.000 Init Stage(ft): 14.800
Group: SW 16/12 AVE Warn Stage(ft): 21.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 16N09 Base Flow(cfs): 0.000 Init Stage(ft): 17.100
Group: SW 16/12 AVE Warn Stage(ft): 22.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 16N10 Base Flow(cfs): 0.000 Init Stage(ft): 17.100
Group: SW 16/12 AVE Warn Stage(ft): 22.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 16N11 Base Flow(cfs): 0.000 Init Stage(ft): 17.500
Group: SW 16/12 AVE Warn Stage(ft): 22.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 16N12 Base Flow(cfs): 0.000 Init Stage(ft): 17.500
Group: SW 16/12 AVE Warn Stage(ft): 21.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 16N13 Base Flow(cfs): 0.000 Init Stage(ft): 17.500
Group: SW 16/12 AVE Warn Stage(ft): 22.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 16N14 Base Flow(cfs): 0.000 Init Stage(ft): 16.900
Group: SW 16/12 AVE Warn Stage(ft): 22.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 16N15 Base Flow(cfs): 0.000 Init Stage(ft): 16.700
Group: SW 16/12 AVE Warn Stage(ft): 22.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 16N16 Base Flow(cfs): 0.000 Init Stage(ft): 18.300
Group: SW 16/12 AVE Warn Stage(ft): 22.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 16N17 Base Flow(cfs): 0.000 Init Stage(ft): 18.700
Group: SW 16/12 AVE Warn Stage(ft): 22.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 16N18 Base Flow(cfs): 0.000 Init Stage(ft): 18.900
Group: SW 16/12 AVE Warn Stage(ft): 22.000

Type: Stage/Area

Stage(ft)	Area(ac)

Name: 16N19 Base Flow(cfs): 0.000 Init Stage(ft): 18.700
Group: SW 16/12 AVE Warn Stage(ft): 22.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 16N20 Base Flow(cfs): 0.000 Init Stage(ft): 18.300
Group: SW 16/12 AVE Warn Stage(ft): 23.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 16N21 Base Flow(cfs): 0.000 Init Stage(ft): 19.900
Group: SW 16/12 AVE Warn Stage(ft): 25.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 16N22 Base Flow(cfs): 0.000 Init Stage(ft): 19.900
Group: SW 16/12 AVE Warn Stage(ft): 25.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 16N23 Base Flow(cfs): 0.000 Init Stage(ft): 22.000
Group: SW 16/12 AVE Warn Stage(ft): 25.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 16N24 Base Flow(cfs): 0.000 Init Stage(ft): 22.000
Group: SW 16/12 AVE Warn Stage(ft): 25.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 16N25 Base Flow(cfs): 0.000 Init Stage(ft): 22.700
Group: SW 16/12 AVE Warn Stage(ft): 26.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 16N26 Base Flow(cfs): 0.000 Init Stage(ft): 22.600
Group: SW 16/12 AVE Warn Stage(ft): 26.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 16N27 Base Flow(cfs): 0.000 Init Stage(ft): 23.000
Group: SW 16/12 AVE Warn Stage(ft): 26.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 16N28 Base Flow(cfs): 0.000 Init Stage(ft): 23.000
Group: SW 16/12 AVE Warn Stage(ft): 26.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 16N29 Base Flow(cfs): 0.000 Init Stage(ft): 23.000
Group: SW 16/12 AVE Warn Stage(ft): 27.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 16N30 Base Flow(cfs): 0.000 Init Stage(ft): 23.000
Group: SW 16/12 AVE Warn Stage(ft): 27.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 16N31 Base Flow(cfs): 0.000 Init Stage(ft): 23.000
Group: SW 16/12 AVE Warn Stage(ft): 27.000

Type: Stage/Area

Stage(ft)	Area(ac)

Name: 16N32 Base Flow(cfs): 0.000 Init Stage(ft): 23.000
Group: SW 16/12 AVE Warn Stage(ft): 26.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 16N33 Base Flow(cfs): 0.000 Init Stage(ft): 24.000
Group: SW 16/12 AVE Warn Stage(ft): 27.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 16N34A Base Flow(cfs): 0.000 Init Stage(ft): 24.000
Group: SW 16/12 AVE Plunge Factor: 1.00 Warn Stage(ft): 28.000
Type: Manhole, Flat Floor

Stage(ft)	Area(ac)

Name: 16N34B Base Flow(cfs): 0.000 Init Stage(ft): 24.000
Group: SW 16/12 AVE Warn Stage(ft): 28.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 16N35 Base Flow(cfs): 0.000 Init Stage(ft): 25.000
Group: SW 16/12 AVE Plunge Factor: 1.00 Warn Stage(ft): 28.000
Type: Manhole, Flat Floor

Stage(ft)	Area(ac)

Name: 16N36 Base Flow(cfs): 0.000 Init Stage(ft): 25.000
Group: SW 16/12 AVE Warn Stage(ft): 30.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 16N37	Base Flow(cfs): 0.000	Init Stage(ft): 25.300
Group: SW 16/12 AVE		Warn Stage(ft): 30.000
Type: Stage/Area		

Stage(ft)	Area(ac)

Name: 16N38	Base Flow(cfs): 0.000	Init Stage(ft): 25.000
Group: SW 16/12 AVE	Plunge Factor: 1.00	Warn Stage(ft): 30.000
Type: Manhole, Flat Floor		

Stage(ft)	Area(ac)

Name: 16N39	Base Flow(cfs): 0.000	Init Stage(ft): 25.400
Group: SW 16/12 AVE		Warn Stage(ft): 30.000
Type: Stage/Area		

Stage(ft)	Area(ac)

Name: 16N40	Base Flow(cfs): 0.000	Init Stage(ft): 25.500
Group: SW 16/12 AVE		Warn Stage(ft): 30.000
Type: Stage/Area		

THIS NODE WILL TAKE IN FLOWS FROM FDOT SR 70 47-00504-P VIA BOUNDARY FLOWS OBTAINED FROM PERMIT STAFF REPORT DATA

Stage(ft)	Area(ac)

Name: 16N41	Base Flow(cfs): 0.000	Init Stage(ft): 25.500
Group: SW 16/12 AVE		Warn Stage(ft): 30.000
Type: Stage/Area		

Stage(ft)	Area(ac)

Name: 16N42	Base Flow(cfs): 0.000	Init Stage(ft): 27.500
Group: SW 16/12 AVE		Warn Stage(ft): 31.000
Type: Stage/Area		

Stage(ft)	Area(ac)

Name: 16N43	Base Flow(cfs): 0.000	Init Stage(ft): 27.500

Group: SW 16/12 AVE
Type: Stage/Area
Warn Stage(ft): 31.000

Stage(ft)	Area(ac)

Name: 16N44
Group: SW 16/12 AVE
Type: Stage/Area
Base Flow(cfs): 0.000
Init Stage(ft): 27.500
Warn Stage(ft): 31.000

Stage(ft)	Area(ac)

Name: 16N45
Group: SW 16/12 AVE
Type: Stage/Area
Base Flow(cfs): 0.000
Init Stage(ft): 27.500
Warn Stage(ft): 31.000

Stage(ft)	Area(ac)

Name: 16N46
Group: SW 16/12 AVE
Type: Stage/Area
Base Flow(cfs): 0.000
Init Stage(ft): 27.500
Warn Stage(ft): 31.000

Stage(ft)	Area(ac)

Name: 16N47
Group: SW 16/12 AVE
Type: Stage/Area
Base Flow(cfs): 0.000
Init Stage(ft): 27.500
Warn Stage(ft): 31.000

Stage(ft)	Area(ac)

Name: 16N48
Group: SW 16/12 AVE
Type: Stage/Area
Base Flow(cfs): 0.000
Init Stage(ft): 27.500
Warn Stage(ft): 31.000

Stage(ft)	Area(ac)

Name: 16N49
Group: SW 16/12 AVE
Type: Stage/Area
Base Flow(cfs): 0.000
Init Stage(ft): 27.500
Warn Stage(ft): 31.000

Stage(ft)	Area(ac)

Name: 16N50 Base Flow(cfs): 0.000 Init Stage(ft): 27.500
Group: SW 16/12 AVE Warn Stage(ft): 31.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 16N51 Base Flow(cfs): 0.000 Init Stage(ft): 25.700
Group: SW 16/12 AVE Warn Stage(ft): 31.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 16N52 Base Flow(cfs): 0.000 Init Stage(ft): 25.700
Group: SW 16/12 AVE Warn Stage(ft): 31.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 16N53 Base Flow(cfs): 0.000 Init Stage(ft): 25.700
Group: SW 16/12 AVE Warn Stage(ft): 31.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 26@~LEMKIN CK Base Flow(cfs): 0.000 Init Stage(ft): 13.500
Group: SW 26 AVE Warn Stage(ft): 18.000
Type: Time/Stage

Time(hrs)	Stage(ft)
0.00	13.500
200.00	13.500

Name: 26N01 Base Flow(cfs): 0.000 Init Stage(ft): 13.500
Group: SW 26 AVE Warn Stage(ft): 18.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 26N02 Base Flow(cfs): 0.000 Init Stage(ft): 13.500
Group: SW 26 AVE Warn Stage(ft): 18.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 26N03 Base Flow(cfs): 0.000 Init Stage(ft): 13.500
Group: SW 26 AVE Warn Stage(ft): 18.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 26N04 Base Flow(cfs): 0.000 Init Stage(ft): 13.500
Group: SW 26 AVE Warn Stage(ft): 18.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 26N05 Base Flow(cfs): 0.000 Init Stage(ft): 13.500
Group: SW 26 AVE Warn Stage(ft): 18.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 26N06 Base Flow(cfs): 0.000 Init Stage(ft): 13.500
Group: SW 26 AVE Warn Stage(ft): 18.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 26N07 Base Flow(cfs): 0.000 Init Stage(ft): 13.500
Group: SW 26 AVE Warn Stage(ft): 18.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 26N08 Base Flow(cfs): 0.000 Init Stage(ft): 13.500
Group: SW 26 AVE Warn Stage(ft): 18.000
Type: Stage/Area

POINT IMMEDIATELY SOUTH OF THE CONFLUENCE BETWEEN THE 26 AVE CANAL & GOODBREAD CANAL

Stage(ft)	Area(ac)

Name: 26N09 Base Flow(cfs): 0.000 Init Stage(ft): 13.500
Group: SW 26 AVE Warn Stage(ft): 18.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 26N10 Base Flow(cfs): 0.000 Init Stage(ft): 13.500
Group: SW 26 AVE Warn Stage(ft): 18.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 26N11 Base Flow(cfs): 0.000 Init Stage(ft): 13.500
Group: SW 26 AVE Warn Stage(ft): 18.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 26N12 Base Flow(cfs): 0.000 Init Stage(ft): 13.500
Group: SW 26 AVE Warn Stage(ft): 18.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 26N13 Base Flow(cfs): 0.000 Init Stage(ft): 13.500
Group: SW 26 AVE Warn Stage(ft): 18.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 26N14 Base Flow(cfs): 0.000 Init Stage(ft): 13.500
Group: SW 26 AVE Warn Stage(ft): 18.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 26N15 Base Flow(cfs): 0.000 Init Stage(ft): 13.500
Group: SW 26 AVE Warn Stage(ft): 18.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 26N16 Base Flow(cfs): 0.000 Init Stage(ft): 13.500
Group: SW 26 AVE Warn Stage(ft): 18.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 26N17 Base Flow(cfs): 0.000 Init Stage(ft): 13.500
Group: SW 26 AVE Warn Stage(ft): 18.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 26N18 Base Flow(cfs): 0.000 Init Stage(ft): 13.500
Group: SW 26 AVE Warn Stage(ft): 18.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 26N19 Base Flow(cfs): 0.000 Init Stage(ft): 13.500
Group: SW 26 AVE Warn Stage(ft): 18.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 26N20 Base Flow(cfs): 0.000 Init Stage(ft): 13.500
Group: SW 26 AVE Warn Stage(ft): 18.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 26N21 Base Flow(cfs): 0.000 Init Stage(ft): 15.130
Group: SW 26 AVE Warn Stage(ft): 18.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 26N22 Base Flow(cfs): 0.000 Init Stage(ft): 15.230
Group: SW 26 AVE Warn Stage(ft): 18.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 26N23 Base Flow(cfs): 0.000 Init Stage(ft): 15.420
Group: SW 26 AVE Warn Stage(ft): 18.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 26N24 Base Flow(cfs): 0.000 Init Stage(ft): 16.000
Group: SW 26 AVE Warn Stage(ft): 19.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 26N25 Base Flow(cfs): 0.000 Init Stage(ft): 16.300
Group: SW 26 AVE Warn Stage(ft): 19.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 26N26 Base Flow(cfs): 0.000 Init Stage(ft): 17.400
Group: SW 26 AVE Warn Stage(ft): 21.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 26N27 Base Flow(cfs): 0.000 Init Stage(ft): 18.400
Group: SW 26 AVE Warn Stage(ft): 22.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 26N28 Base Flow(cfs): 0.000 Init Stage(ft): 18.900
Group: SW 26 AVE Warn Stage(ft): 22.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 32@~LEMKIN CK Base Flow(cfs): 0.000 Init Stage(ft): 13.500
Group: SW 32 AVE Warn Stage(ft): 18.000
Type: Time/Stage

Time(hrs)	Stage(ft)
0.00	13.500
200.00	13.500

Name: 32N01 Base Flow(cfs): 0.000 Init Stage(ft): 13.500
Group: SW 32 AVE Warn Stage(ft): 18.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 32N02 Base Flow(cfs): 0.000 Init Stage(ft): 13.500
Group: SW 32 AVE Warn Stage(ft): 18.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 32N03 Base Flow(cfs): 0.000 Init Stage(ft): 13.500
Group: SW 32 AVE Warn Stage(ft): 18.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 32N04 Base Flow(cfs): 0.000 Init Stage(ft): 13.500
Group: SW 32 AVE Warn Stage(ft): 18.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 32N05 Base Flow(cfs): 0.000 Init Stage(ft): 13.500
Group: SW 32 AVE Warn Stage(ft): 18.000

Type: Stage/Area

Stage(ft)	Area(ac)

Name: 32N06 Base Flow(cfs): 0.000 Init Stage(ft): 13.500
Group: SW 32 AVE Warn Stage(ft): 18.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 32N07 Base Flow(cfs): 0.000 Init Stage(ft): 13.500
Group: SW 32 AVE Warn Stage(ft): 18.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 32N08 Base Flow(cfs): 0.000 Init Stage(ft): 13.500
Group: SW 32 AVE Warn Stage(ft): 18.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 32N09 Base Flow(cfs): 0.000 Init Stage(ft): 13.500
Group: SW 32 AVE Warn Stage(ft): 18.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 32N10 Base Flow(cfs): 0.000 Init Stage(ft): 13.500
Group: SW 32 AVE Warn Stage(ft): 18.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 32N11 Base Flow(cfs): 0.000 Init Stage(ft): 13.500
Group: SW 32 AVE Warn Stage(ft): 18.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 32N12	Base Flow(cfs): 0.000	Init Stage(ft): 13.500
Group: SW 32 AVE		Warn Stage(ft): 18.000
Type: Stage/Area		

Stage(ft)	Area(ac)

Name: 32N13	Base Flow(cfs): 0.000	Init Stage(ft): 13.500
Group: SW 32 AVE		Warn Stage(ft): 18.000
Type: Stage/Area		

Stage(ft)	Area(ac)

Name: 32N14	Base Flow(cfs): 0.000	Init Stage(ft): 13.500
Group: SW 32 AVE		Warn Stage(ft): 18.000
Type: Stage/Area		

Stage(ft)	Area(ac)

Name: 32N15	Base Flow(cfs): 0.000	Init Stage(ft): 13.500
Group: SW 32 AVE		Warn Stage(ft): 18.000
Type: Stage/Area		

Stage(ft)	Area(ac)

Name: 32N16	Base Flow(cfs): 0.000	Init Stage(ft): 13.500
Group: SW 32 AVE		Warn Stage(ft): 18.000
Type: Stage/Area		

Stage(ft)	Area(ac)

Name: 32N17	Base Flow(cfs): 0.000	Init Stage(ft): 13.500
Group: SW 32 AVE		Warn Stage(ft): 18.000
Type: Stage/Area		

Stage(ft)	Area(ac)

Name: 32N18	Base Flow(cfs): 0.000	Init Stage(ft): 13.500
Group: SW 32 AVE		Warn Stage(ft): 18.000

Type: Stage/Area

Stage(ft)	Area(ac)

Name: 32N19 Base Flow(cfs): 0.000 Init Stage(ft): 13.500
Group: SW 32 AVE Warn Stage(ft): 18.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 32N20 Base Flow(cfs): 0.000 Init Stage(ft): 13.500
Group: SW 32 AVE Warn Stage(ft): 18.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 32N21 Base Flow(cfs): 0.000 Init Stage(ft): 13.500
Group: SW 32 AVE Warn Stage(ft): 18.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 32N22 Base Flow(cfs): 0.000 Init Stage(ft): 13.500
Group: SW 32 AVE Warn Stage(ft): 18.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 32N23 Base Flow(cfs): 0.000 Init Stage(ft): 14.100
Group: SW 32 AVE Warn Stage(ft): 19.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 32N24 Base Flow(cfs): 0.000 Init Stage(ft): 14.700
Group: SW 32 AVE Warn Stage(ft): 21.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 32N25 Base Flow(cfs): 0.000 Init Stage(ft): 15.800
Group: SW 32 AVE Warn Stage(ft): 21.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 32N26 Base Flow(cfs): 0.000 Init Stage(ft): 18.000
Group: SW 32 AVE Warn Stage(ft): 22.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 32N27 Base Flow(cfs): 0.000 Init Stage(ft): 18.000
Group: SW 32 AVE Warn Stage(ft): 22.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 32N28 Base Flow(cfs): 0.000 Init Stage(ft): 18.000
Group: SW 32 AVE Warn Stage(ft): 22.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 32N29 Base Flow(cfs): 0.000 Init Stage(ft): 18.000
Group: SW 32 AVE Warn Stage(ft): 23.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 32N30 Base Flow(cfs): 0.000 Init Stage(ft): 18.000
Group: SW 32 AVE Warn Stage(ft): 23.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 32N31 Base Flow(cfs): 0.000 Init Stage(ft): 18.000
Group: SW 32 AVE Warn Stage(ft): 23.000

Type: Stage/Area

Stage(ft)	Area(ac)

Name: 32N32 Base Flow(cfs): 0.000 Init Stage(ft): 18.000
Group: SW 32 AVE Warn Stage(ft): 23.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 7MH01 Base Flow(cfs): 0.000 Init Stage(ft): 24.000
Group: SW 7 AVE Warn Stage(ft): 28.000
Type: Stage/Area

Stage(ft)	Area(ac)
24.000	0.0010
28.000	0.0010

Name: 7N01 Base Flow(cfs): 0.000 Init Stage(ft): 13.500
Group: SW 7 AVE Warn Stage(ft): 16.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 7N02 Base Flow(cfs): 0.000 Init Stage(ft): 13.500
Group: SW 7 AVE Warn Stage(ft): 16.000
Type: Stage/Area

TIME-DISCHARGE CURVE INTRODUCED AT THIS NODE TO REPRESENT PERMITTED PROJECT - NEW OKEECHOBEE (THE GRAND) (REF. LBFH)

Stage(ft)	Area(ac)

Name: 7N03 Base Flow(cfs): 0.000 Init Stage(ft): 13.500
Group: SW 7 AVE Warn Stage(ft): 16.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 7N04 Base Flow(cfs): 0.000 Init Stage(ft): 13.500
Group: SW 7 AVE Warn Stage(ft): 15.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 7N05 Base Flow(cfs): 0.000 Init Stage(ft): 13.500
Group: SW 7 AVE Warn Stage(ft): 16.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 7N06 Base Flow(cfs): 0.000 Init Stage(ft): 13.500
Group: SW 7 AVE Warn Stage(ft): 16.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 7N07 Base Flow(cfs): 0.000 Init Stage(ft): 13.500
Group: SW 7 AVE Warn Stage(ft): 16.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 7N08 Base Flow(cfs): 0.000 Init Stage(ft): 13.500
Group: SW 7 AVE Warn Stage(ft): 15.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 7N09 Base Flow(cfs): 0.000 Init Stage(ft): 13.500
Group: SW 7 AVE Warn Stage(ft): 19.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 7N10 Base Flow(cfs): 0.000 Init Stage(ft): 13.500
Group: SW 7 AVE Warn Stage(ft): 18.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 7N11 Base Flow(cfs): 0.000 Init Stage(ft): 14.400
Group: SW 7 AVE Warn Stage(ft): 19.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 7N12 Base Flow(cfs): 0.000 Init Stage(ft): 13.500
Group: SW 7 AVE Warn Stage(ft): 19.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 7N13 Base Flow(cfs): 0.000 Init Stage(ft): 14.500
Group: SW 7 AVE Warn Stage(ft): 19.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 7N14 Base Flow(cfs): 0.000 Init Stage(ft): 14.500
Group: SW 7 AVE Warn Stage(ft): 20.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 7N15 Base Flow(cfs): 0.000 Init Stage(ft): 16.000
Group: SW 7 AVE Warn Stage(ft): 19.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 7N16 Base Flow(cfs): 0.000 Init Stage(ft): 14.500
Group: SW 7 AVE Warn Stage(ft): 20.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 7N17 Base Flow(cfs): 0.000 Init Stage(ft): 14.500
Group: SW 7 AVE Warn Stage(ft): 20.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 7N18 Base Flow(cfs): 0.000 Init Stage(ft): 14.500
Group: SW 7 AVE Warn Stage(ft): 21.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 7N19 Base Flow(cfs): 0.000 Init Stage(ft): 14.500
Group: SW 7 AVE Warn Stage(ft): 21.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 7N20 Base Flow(cfs): 0.000 Init Stage(ft): 14.500
Group: SW 7 AVE Warn Stage(ft): 21.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 7N21 Base Flow(cfs): 0.000 Init Stage(ft): 16.200
Group: SW 7 AVE Warn Stage(ft): 21.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 7N22 Base Flow(cfs): 0.000 Init Stage(ft): 16.200
Group: SW 7 AVE Warn Stage(ft): 21.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 7N23 Base Flow(cfs): 0.000 Init Stage(ft): 16.300
Group: SW 7 AVE Warn Stage(ft): 21.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 7N24 Base Flow(cfs): 0.000 Init Stage(ft): 16.200
Group: SW 7 AVE Warn Stage(ft): 21.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 7N25 Base Flow(cfs): 0.000 Init Stage(ft): 17.200
Group: SW 7 AVE Warn Stage(ft): 21.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 7N26 Base Flow(cfs): 0.000 Init Stage(ft): 16.800
Group: SW 7 AVE Warn Stage(ft): 21.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 7N27 Base Flow(cfs): 0.000 Init Stage(ft): 15.900
Group: SW 7 AVE Warn Stage(ft): 22.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 7N28 Base Flow(cfs): 0.000 Init Stage(ft): 15.800
Group: SW 7 AVE Warn Stage(ft): 21.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 7N29 Base Flow(cfs): 0.000 Init Stage(ft): 18.300
Group: SW 7 AVE Warn Stage(ft): 23.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 7N30 Base Flow(cfs): 0.000 Init Stage(ft): 18.300
Group: SW 7 AVE Warn Stage(ft): 22.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 7N31 Base Flow(cfs): 0.000 Init Stage(ft): 19.300
Group: SW 7 AVE Warn Stage(ft): 23.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 7N32 Base Flow(cfs): 0.000 Init Stage(ft): 19.000
Group: SW 7 AVE Warn Stage(ft): 23.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 7N33 Base Flow(cfs): 0.000 Init Stage(ft): 19.000
Group: SW 7 AVE Warn Stage(ft): 23.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 7N34 Base Flow(cfs): 0.000 Init Stage(ft): 19.000
Group: SW 7 AVE Warn Stage(ft): 23.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 7N35 Base Flow(cfs): 0.000 Init Stage(ft): 20.100
Group: SW 7 AVE Warn Stage(ft): 24.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 7N36 Base Flow(cfs): 0.000 Init Stage(ft): 20.300
Group: SW 7 AVE Warn Stage(ft): 24.000
Type: Stage/Area

Stage(ft)	Area(ac)

```
-------------------------------------------------------------------------------------------
      Name: 7N37                Base Flow(cfs): 0.000          Init Stage(ft): 21.000
     Group: SW 7 AVE                                         Warn Stage(ft): 25.000
      Type: Stage/Area


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

-------------------------------------------------------------------------------------------
      Name: 7N38                Base Flow(cfs): 0.000          Init Stage(ft): 21.000
     Group: SW 7 AVE                                         Warn Stage(ft): 25.000
      Type: Stage/Area


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

-------------------------------------------------------------------------------------------
      Name: 7N39                Base Flow(cfs): 0.000          Init Stage(ft): 21.000
     Group: SW 7 AVE                                         Warn Stage(ft): 25.000
      Type: Stage/Area


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

-------------------------------------------------------------------------------------------
      Name: 7N40                Base Flow(cfs): 0.000          Init Stage(ft): 21.000
     Group: SW 7 AVE                                         Warn Stage(ft): 25.000
      Type: Stage/Area


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

-------------------------------------------------------------------------------------------
      Name: 7N41                Base Flow(cfs): 0.000          Init Stage(ft): 20.200
     Group: SW 7 AVE                                         Warn Stage(ft): 25.000
      Type: Stage/Area


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

-------------------------------------------------------------------------------------------
      Name: 7N42                Base Flow(cfs): 0.000          Init Stage(ft): 20.600
     Group: SW 7 AVE                                         Warn Stage(ft): 25.000
      Type: Stage/Area


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

-------------------------------------------------------------------------------------------
      Name: 7N43                Base Flow(cfs): 0.000          Init Stage(ft): 22.000
     Group: SW 7 AVE                                         Warn Stage(ft): 26.000
      Type: Stage/Area
```

Stage(ft)	Area(ac)

Name: 7N44 Base Flow(cfs): 0.000 Init Stage(ft): 22.000
Group: SW 7 AVE Warn Stage(ft): 25.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 7N45 Base Flow(cfs): 0.000 Init Stage(ft): 22.000
Group: SW 7 AVE Warn Stage(ft): 26.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 7N46 Base Flow(cfs): 0.000 Init Stage(ft): 22.600
Group: SW 7 AVE Warn Stage(ft): 28.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 7N47 Base Flow(cfs): 0.000 Init Stage(ft): 22.300
Group: SW 7 AVE Warn Stage(ft): 27.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 7N48 Base Flow(cfs): 0.000 Init Stage(ft): 22.300
Group: SW 7 AVE Warn Stage(ft): 26.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 7N49 Base Flow(cfs): 0.000 Init Stage(ft): 22.600
Group: SW 7 AVE Warn Stage(ft): 28.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 7N50 Base Flow(cfs): 0.000 Init Stage(ft): 22.200
Group: SW 7 AVE Warn Stage(ft): 28.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 7N51 Base Flow(cfs): 0.000 Init Stage(ft): 23.100
Group: SW 7 AVE Warn Stage(ft): 28.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 7N52 Base Flow(cfs): 0.000 Init Stage(ft): 23.400
Group: SW 7 AVE Warn Stage(ft): 28.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 7N53 Base Flow(cfs): 0.000 Init Stage(ft): 23.100
Group: SW 7 AVE Warn Stage(ft): 28.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 7N54 Base Flow(cfs): 0.000 Init Stage(ft): 23.100
Group: SW 7 AVE Warn Stage(ft): 28.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 7N55 Base Flow(cfs): 0.000 Init Stage(ft): 23.600
Group: SW 7 AVE Warn Stage(ft): 26.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 7N56 Base Flow(cfs): 0.000 Init Stage(ft): 23.600
Group: SW 7 AVE Warn Stage(ft): 26.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 7N57 Base Flow(cfs): 0.000 Init Stage(ft): 23.600
Group: SW 7 AVE Warn Stage(ft): 28.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 7N58 Base Flow(cfs): 0.000 Init Stage(ft): 23.800
Group: SW 7 AVE Warn Stage(ft): 28.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 7N59 Base Flow(cfs): 0.000 Init Stage(ft): 23.800
Group: SW 7 AVE Warn Stage(ft): 28.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 7N60 Base Flow(cfs): 0.000 Init Stage(ft): 24.200
Group: SW 7 AVE Warn Stage(ft): 28.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 7N61 Base Flow(cfs): 0.000 Init Stage(ft): 24.200
Group: SW 7 AVE Warn Stage(ft): 28.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 7N62 Base Flow(cfs): 0.000 Init Stage(ft): 24.500
Group: SW 7 AVE Warn Stage(ft): 28.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 7N63 Base Flow(cfs): 0.000 Init Stage(ft): 24.500
Group: SW 7 AVE Warn Stage(ft): 28.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 7N64 Base Flow(cfs): 0.000 Init Stage(ft): 24.000
Group: SW 7 AVE Warn Stage(ft): 28.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 7N65 Base Flow(cfs): 0.000 Init Stage(ft): 24.000
Group: SW 7 AVE Warn Stage(ft): 28.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 7N66 Base Flow(cfs): 0.000 Init Stage(ft): 24.000
Group: SW 7 AVE Warn Stage(ft): 28.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 7N67 Base Flow(cfs): 0.000 Init Stage(ft): 25.100
Group: SW 7 AVE Warn Stage(ft): 29.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 7N68 Base Flow(cfs): 0.000 Init Stage(ft): 25.100
Group: SW 7 AVE Warn Stage(ft): 28.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 7N69 Base Flow(cfs): 0.000 Init Stage(ft): 25.300
Group: SW 7 AVE Warn Stage(ft): 28.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 7N70 Base Flow(cfs): 0.000 Init Stage(ft): 25.300
Group: SW 7 AVE Warn Stage(ft): 28.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 7N71 Base Flow(cfs): 0.000 Init Stage(ft): 25.300
Group: SW 7 AVE Warn Stage(ft): 28.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 7N72 Base Flow(cfs): 0.000 Init Stage(ft): 25.300
Group: SW 7 AVE Warn Stage(ft): 28.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 7N73 Base Flow(cfs): 0.000 Init Stage(ft): 26.000
Group: SW 7 AVE Warn Stage(ft): 28.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 7N74 Base Flow(cfs): 0.000 Init Stage(ft): 26.400
Group: SW 7 AVE Warn Stage(ft): 29.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 7N75 Base Flow(cfs): 0.000 Init Stage(ft): 26.700
Group: SW 7 AVE Warn Stage(ft): 30.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 7N76 Base Flow(cfs): 0.000 Init Stage(ft): 26.800
Group: SW 7 AVE Warn Stage(ft): 29.500
Type: Stage/Area

Stage(ft)	Area(ac)

Name: CN001 Base Flow(cfs): 0.000 Init Stage(ft): 17.200
Group: SW 7 AVE Warn Stage(ft): 21.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: CN002 Base Flow(cfs): 0.000 Init Stage(ft): 17.000
Group: SW 7 AVE Warn Stage(ft): 21.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: CN003 Base Flow(cfs): 0.000 Init Stage(ft): 17.600
Group: SW 7 AVE Warn Stage(ft): 21.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: CN004 Base Flow(cfs): 0.000 Init Stage(ft): 17.500
Group: SW 7 AVE Warn Stage(ft): 21.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: CN006 Base Flow(cfs): 0.000 Init Stage(ft): 17.000
Group: SW 7 AVE Warn Stage(ft): 21.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: CN007 Base Flow(cfs): 0.000 Init Stage(ft): 18.250
Group: SW 7 AVE Warn Stage(ft): 21.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: CN008 Base Flow(cfs): 0.000 Init Stage(ft): 18.300
Group: SW 7 AVE Warn Stage(ft): 21.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: CN009 Base Flow(cfs): 0.000 Init Stage(ft): 18.500
Group: SW 7 AVE Warn Stage(ft): 21.500
Type: Stage/Area

Stage(ft)	Area(ac)

Name: CN010 Base Flow(cfs): 0.000 Init Stage(ft): 19.800
Group: SW 7 AVE Warn Stage(ft): 22.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: CN011 Base Flow(cfs): 0.000 Init Stage(ft): 16.500
Group: SW 7 AVE Warn Stage(ft): 21.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: CN012 Base Flow(cfs): 0.000 Init Stage(ft): 16.900
Group: SW 7 AVE Warn Stage(ft): 21.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: CN014 Base Flow(cfs): 0.000 Init Stage(ft): 16.600
Group: SW 7 AVE Warn Stage(ft): 21.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: CN015 Base Flow(cfs): 0.000 Init Stage(ft): 16.600
Group: SW 7 AVE Warn Stage(ft): 21.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: CN016 Base Flow(cfs): 0.000 Init Stage(ft): 18.000
Group: SW 7 AVE Warn Stage(ft): 20.000
Type: Stage/Area

Stage(ft)	Area(ac)
0.000	0.0010
18.000	0.0010

Name: EAGLE POINT SUB Base Flow(cfs): 0.000 Init Stage(ft): 15.600
Group: SW 26 AVE Warn Stage(ft): 22.000
Type: Stage/Area

Stage(ft)	Area(ac)
15.600	3.8700
16.000	3.8700
16.250	3.8700
16.500	3.8700
16.750	3.8700
17.000	3.8700
17.250	3.8700
17.500	3.8700
17.750	4.2200
18.000	4.5700
18.250	9.2500
18.500	13.9300
18.750	18.6200
19.000	23.3000
19.250	25.1700
19.500	25.1700

Name: GBC01 Base Flow(cfs): 0.000 Init Stage(ft): 13.500
Group: SW 16/12 AVE Warn Stage(ft): 18.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: GBC02 Base Flow(cfs): 0.000 Init Stage(ft): 13.500
Group: SW 16/12 AVE Warn Stage(ft): 18.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: N001 Base Flow(cfs): 0.000 Init Stage(ft): 17.000
Group: SW 7 AVE Warn Stage(ft): 21.000
Type: Stage/Area

Stage(ft)	Area(ac)
16.900	0.0050
21.000	0.0100

Name: N002 Base Flow(cfs): 0.000 Init Stage(ft): 17.000
Group: SW 7 AVE Warn Stage(ft): 21.000
Type: Stage/Area

Stage(ft)	Area(ac)
16.900	0.0050
21.000	0.0100

Name: N003 Base Flow(cfs): 0.000 Init Stage(ft): 17.000
Group: SW 7 AVE Warn Stage(ft): 21.000
Type: Stage/Area

Stage(ft)	Area(ac)
16.900	0.0050
21.000	0.0100

Name: N004 Base Flow(cfs): 0.000 Init Stage(ft): 17.200
Group: SW 7 AVE Warn Stage(ft): 21.000
Type: Stage/Area

Stage(ft)	Area(ac)
17.200	0.0050
21.000	0.0100

Name: N005 Base Flow(cfs): 0.000 Init Stage(ft): 18.000
Group: SW 7 AVE Warn Stage(ft): 21.000
Type: Stage/Area

Stage(ft)	Area(ac)
12.000	0.0010
20.000	0.0050

Name: N006 Base Flow(cfs): 0.000 Init Stage(ft): 17.400
Group: SW 7 AVE Warn Stage(ft): 21.000
Type: Stage/Area

Stage(ft)	Area(ac)
17.000	0.0050
21.000	0.0100

Name: N007 Base Flow(cfs): 0.000 Init Stage(ft): 18.000
Group: SW 7 AVE Warn Stage(ft): 21.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: N008 Base Flow(cfs): 0.000 Init Stage(ft): 18.000
Group: SW 7 AVE Warn Stage(ft): 21.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: N009 Base Flow(cfs): 0.000 Init Stage(ft): 20.660
Group: SW 7 AVE Warn Stage(ft): 21.500
Type: Stage/Area

Stage(ft)	Area(ac)

Name: N010 Base Flow(cfs): 0.000 Init Stage(ft): 18.000
Group: SW 7 AVE Warn Stage(ft): 21.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: N011 Base Flow(cfs): 0.000 Init Stage(ft): 15.520
Group: SW 7 AVE Warn Stage(ft): 18.500
Type: Stage/Area

Stage(ft)	Area(ac)
15.520	0.0010
19.000	0.0010

Name: N012 Base Flow(cfs): 0.000 Init Stage(ft): 16.500

Group: SW 7 AVE
Type: Stage/Area

Warn Stage(ft): 21.000

Stage(ft)	Area(ac)

Name: N013
Group: SW 7 AVE
Type: Stage/Area

Base Flow(cfs): 0.000

Init Stage(ft): 16.040
Warn Stage(ft): 21.000

Stage(ft)	Area(ac)

Name: N014
Group: SW 7 AVE
Type: Stage/Area

Base Flow(cfs): 0.000

Init Stage(ft): 16.900
Warn Stage(ft): 21.000

Stage(ft)	Area(ac)
11.500	0.0010
21.000	0.0050

Name: N015
Group: SW 7 AVE
Type: Stage/Area

Base Flow(cfs): 0.000

Init Stage(ft): 16.760
Warn Stage(ft): 21.000

Stage(ft)	Area(ac)

Name: N016
Group: SW 7 AVE
Type: Stage/Area

Base Flow(cfs): 0.000

Init Stage(ft): 17.260
Warn Stage(ft): 21.000

Stage(ft)	Area(ac)
17.260	0.0010
21.000	0.0010

Name: N017
Group: SW 7 AVE
Type: Stage/Area

Base Flow(cfs): 0.000

Init Stage(ft): 17.500
Warn Stage(ft): 20.000

Stage(ft)	Area(ac)
17.500	0.0010
21.000	0.0010

Name: N018 Base Flow(cfs): 0.000 Init Stage(ft): 17.830
Group: SW 7 AVE Warn Stage(ft): 20.000
Type: Stage/Area

Stage(ft)	Area(ac)
17.830	0.0010
21.000	0.0010

Name: N019 Base Flow(cfs): 0.000 Init Stage(ft): 17.500
Group: SW 7 AVE Warn Stage(ft): 21.500
Type: Stage/Area

Stage(ft)	Area(ac)
17.500	0.0010
21.000	0.0020

Name: N101 Base Flow(cfs): 0.000 Init Stage(ft): 18.300
Group: SW 7 AVE Warn Stage(ft): 25.000
Type: Stage/Area

Stage(ft)	Area(ac)
18.300	0.0010
24.000	0.5000
24.500	1.0000
25.000	1.5000
25.500	26.0800
26.000	52.1600
26.250	65.2000
26.500	78.2400
26.750	91.2800
27.000	104.3200
27.500	130.4000
28.000	156.4800
28.500	182.5600
29.000	208.6400
29.500	234.7200
30.000	260.8000

Name: N102 Base Flow(cfs): 0.000 Init Stage(ft): 18.650
Group: SW 7 AVE Warn Stage(ft): 25.000
Type: Stage/Area

Stage(ft)	Area(ac)
18.500	0.0010
24.000	0.5000
24.500	0.7500
25.000	1.5000
25.500	25.6900
26.000	51.3800
26.500	77.0600

27.000	102.7500
27.250	115.5900
27.500	128.4400
27.750	141.2800
28.000	154.1300
28.500	179.8100
29.000	205.5000
29.500	205.5000

Name: N103 Base Flow(cfs): 0.000 Init Stage(ft): 19.500
Group: SW 7 AVE Warn Stage(ft): 25.000
Type: Stage/Area

NODE DATA WAS MODIFIED TO ACCOUNT FOR ADDITIONAL 25 ACRE LAKE STORAGE

Stage(ft)	Area(ac)
14.000	0.0500
19.500	25.0000
20.000	25.0000
20.500	49.2100
21.000	73.4300
21.500	97.6400
22.000	121.8500
22.500	146.0600
22.750	158.1700
23.000	170.2800
23.250	182.3800
23.500	194.4900
24.000	218.7000
24.500	218.7000

Name: N104 Base Flow(cfs): 0.000 Init Stage(ft): 18.000
Group: SW 7 AVE Warn Stage(ft): 25.000
Type: Stage/Area

Stage(ft)	Area(ac)
15.000	0.1000
18.000	2.0300
19.000	2.0300
19.500	17.0900
20.000	32.1400
20.500	47.2000
21.000	62.2500
21.250	69.7800
21.500	77.3100
21.750	84.8400
22.000	92.3700
22.500	107.4200
23.000	122.4800
23.500	137.5300
24.000	152.5900
24.500	167.6400
25.000	182.7000

Name: N105 Base Flow(cfs): 0.000 Init Stage(ft): 18.500
Group: SW 7 AVE Warn Stage(ft): 22.000
Type: Stage/Area

Stage(ft)	Area(ac)
16.300	0.0010
18.500	0.7800
19.000	16.1100
19.500	31.4400
20.000	46.7600
20.500	62.0900
21.000	77.4200
22.500	77.4200

Name: N106 Base Flow(cfs): 0.000 Init Stage(ft): 15.000
Group: SW 7 AVE Warn Stage(ft): 17.000
Type: Stage/Area

Stage(ft)	Area(ac)
15.000	0.0010
15.500	0.6400
16.000	1.2800
16.500	2.7800
17.000	4.2700
18.500	4.2700

Name: N107 Base Flow(cfs): 0.000 Init Stage(ft): 18.000
Group: SW 7 AVE Warn Stage(ft): 21.000
Type: Stage/Area

Stage(ft)	Area(ac)
18.000	2.0000
19.000	2.0000
19.500	9.4000
20.000	16.8000
20.500	24.2000
21.000	31.6000
21.250	31.6000

Name: N108 Base Flow(cfs): 0.000 Init Stage(ft): 19.000
Group: SW 7 AVE Warn Stage(ft): 20.500
Type: Stage/Area

Stage(ft)	Area(ac)
19.000	0.0000
19.500	2.0400
20.000	4.0800
20.500	6.1100
21.000	6.5200
21.500	6.5200

Name: N109 Base Flow(cfs): 0.000 Init Stage(ft): 18.000
Group: SW 7 AVE Warn Stage(ft): 21.000

Type: Stage/Area

Stage(ft)	Area(ac)
18.000	0.0000
19.500	0.7700
20.000	1.5300
20.500	2.3000
21.000	3.0700
21.250	3.0700

Name: N110 Base Flow(cfs): 0.000 Init Stage(ft): 17.500
Group: SW 7 AVE Warn Stage(ft): 22.000
Type: Stage/Area

Stage(ft)	Area(ac)
17.500	0.0000
18.000	0.0000
18.500	0.5100
19.000	1.1500
19.500	1.7800
20.000	2.4200
20.500	3.3300
20.750	3.7800
21.000	4.2400
21.250	4.6900
21.500	5.1500
22.000	6.0600
22.500	6.3300
23.000	6.3300

Name: N111 Base Flow(cfs): 0.000 Init Stage(ft): 18.000
Group: SW 7 AVE Warn Stage(ft): 21.000
Type: Stage/Area

Stage(ft)	Area(ac)
18.000	0.0000
18.500	0.1000
19.000	0.3100
19.500	0.5100
20.000	0.7200
20.500	0.9300
21.000	1.1400
21.250	1.1400

Name: N112 Base Flow(cfs): 0.000 Init Stage(ft): 17.300
Group: SW 7 AVE Warn Stage(ft): 22.000
Type: Stage/Area

Stage(ft)	Area(ac)
17.300	0.0010

18.000	0.0020
18.500	0.0500
19.000	0.1800
19.500	0.5100
20.000	0.6500
20.500	0.7800
21.000	1.6000
21.250	2.0900
21.500	2.5800
21.750	3.0800
22.000	3.5700
22.500	3.7100
23.000	3.8400
23.500	3.8400

Name: N113 Base Flow(cfs): 0.000 Init Stage(ft): 13.500
Group: SW 7 AVE Warn Stage(ft): 21.000
Type: Stage/Area

Stage(ft)	Area(ac)
13.500	0.0010
17.000	0.6500
17.500	3.9200
18.000	22.2000
18.500	40.4900
19.000	58.7700
21.000	58.7700

Name: N114 Base Flow(cfs): 0.000 Init Stage(ft): 14.000
Group: SW 7 AVE Warn Stage(ft): 17.000
Type: Stage/Area

Stage(ft)	Area(ac)
14.000	9.5000
14.500	28.4700
15.000	47.4400
15.500	74.7100
16.000	101.9800
16.500	129.2500
17.000	156.5200
17.250	170.1600
17.500	183.7900
17.750	197.4300
18.000	211.0600
18.500	238.3300
19.000	265.6000
19.500	265.6000

Name: N115 Base Flow(cfs): 0.000 Init Stage(ft): 13.500
Group: SW 7 AVE Warn Stage(ft): 17.000
Type: Stage/Area

Stage(ft)	Area(ac)

13.500	1.2300
14.000	1.2300
14.500	13.1600
15.000	25.0900
15.500	37.1800
16.000	49.2600
16.500	61.3500
16.750	67.3900
17.000	73.4300
17.250	79.4700
17.500	85.5200
18.000	97.6000
18.500	109.6900
19.000	121.7700
19.500	121.7700

Name: N116 Base Flow(cfs): 0.000 Init Stage(ft): 25.000
Group: SW 16/12 AVE Warn Stage(ft): 30.000
Type: Stage/Area

Stage(ft)	Area(ac)
24.000	0.0100
25.000	3.2400
26.000	3.2400
26.500	20.7400
27.000	38.2300
27.500	66.5300
28.000	94.8200
28.250	108.9700
28.500	123.1200
28.750	137.2700
29.000	151.4200
29.500	179.7100
30.000	208.0100
30.500	225.5000
31.000	243.0000
31.500	243.0000

Name: N116_TC Base Flow(cfs): 0.000 Init Stage(ft): 25.000
Group: SW 16/12 AVE Warn Stage(ft): 29.000
Type: Time/Stage

Time(hrs)	Stage(ft)
0.00	13.500
200.00	13.500

Name: N117 Base Flow(cfs): 0.000 Init Stage(ft): 25.000
Group: SW 16/12 AVE Warn Stage(ft): 29.000
Type: Stage/Area

Stage(ft)	Area(ac)
24.000	0.0100
25.000	1.0500

26.000	1.0500
26.500	8.8500
27.000	16.6400
27.500	27.0600
28.000	37.4900
28.250	42.7000
28.500	47.9100
28.750	53.1200
29.000	58.3400
29.500	68.7600
30.000	79.1900
30.500	86.9800
31.000	94.7700
31.500	94.7700

Name: N118 Base Flow(cfs): 0.000 Init Stage(ft): 24.000
Group: SW 16/12 AVE Warn Stage(ft): 28.000
Type: Stage/Area

Stage(ft)	Area(ac)
20.000	0.1000
24.000	3.2000
25.000	3.2000
25.500	26.4000
26.000	49.6000
26.500	72.8000
27.000	96.0000
27.250	107.6000
27.500	119.2000
27.750	130.8000
28.000	142.4000
28.500	165.6000
29.000	188.8000
29.500	212.0000
30.000	235.2000
30.500	253.6000
31.000	272.0000

Name: N119 Base Flow(cfs): 0.000 Init Stage(ft): 19.500
Group: SW 16/12 AVE Warn Stage(ft): 24.000
Type: Stage/Area

STAGE STORAGE WAS MODIFIED TO ACCOUNT FOR ADDITION OF 25 ACRE LAKE

Stage(ft)	Area(ac)
16.000	0.0100
19.500	25.0000
21.000	25.0000
21.500	68.4900
22.000	111.9800
22.500	155.4800
22.750	177.2200
23.000	198.9700
23.250	216.9500
23.500	234.9300
24.000	270.9000
24.500	270.9000

Name: N120 Base Flow(cfs): 0.000 Init Stage(ft): 18.500
Group: SW 16/12 AVE Warn Stage(ft): 22.000
Type: Stage/Area

Stage(ft)	Area(ac)
18.500	0.9700
19.000	14.4100
19.500	28.1000
20.000	41.7800
20.500	55.4600
21.000	69.1500
21.500	82.5900
21.750	89.3100
22.000	96.0300
22.250	96.0300

Name: N121 Base Flow(cfs): 0.000 Init Stage(ft): 13.500
Group: SW 16/12 AVE Warn Stage(ft): 18.000
Type: Stage/Area

Stage(ft)	Area(ac)
0.000	1.0000
14.500	91.6800
15.000	91.6800
15.500	114.5900
16.000	137.5100
16.500	160.4200
17.000	183.3400
17.500	206.2600
17.750	217.7200
18.000	229.1800
18.250	240.6400
18.500	252.0900
19.000	275.0100
19.500	297.9300
20.000	320.8500
20.500	343.7600
21.000	366.6800
21.500	366.6800

Name: N122 Base Flow(cfs): 0.000 Init Stage(ft): 14.500
Group: SW 26 AVE Warn Stage(ft): 18.000
Type: Stage/Area

Stage(ft)	Area(ac)
14.500	75.9000
15.000	75.9000
15.500	90.6600
16.000	105.4200
16.500	120.1800
17.000	134.9300
17.500	149.6900
17.750	157.0700
18.000	164.4500

18.250	171.8300
18.500	179.2100
19.000	193.9700
19.500	208.7300
20.000	223.4800
20.500	238.2400
21.000	253.0000
21.500	253.0000

Name: N123 Base Flow(cfs): 0.000 Init Stage(ft): 18.500
Group: SW 26 AVE Warn Stage(ft): 22.000
Type: Stage/Area

Stage(ft)	Area(ac)
18.500	4.9200
19.000	4.9200
19.500	4.9200
20.000	4.9200
20.500	4.9200
21.000	4.9200
21.500	42.0300
21.750	60.5800
22.000	79.1300
22.250	97.6800
22.500	116.2400
23.000	153.3400
23.500	181.2200
24.000	209.1000
24.500	209.1000

Name: N124 Base Flow(cfs): 0.000 Init Stage(ft): 21.000
Group: SW 32 AVE Warn Stage(ft): 27.000
Type: Stage/Area

Stage(ft)	Area(ac)
21.000	4.9200
24.000	4.9200
24.250	15.1300
24.500	25.3400
24.750	35.5500
25.000	45.7600
25.500	66.1700
26.000	86.5900
26.500	107.0100
27.000	127.4300
27.500	147.8500
28.000	168.2600

Name: N125 Base Flow(cfs): 0.000 Init Stage(ft): 23.000
Group: SW 32 AVE Warn Stage(ft): 25.000
Type: Stage/Area

Stage(ft)	Area(ac)

23.000	82.0900
23.500	113.2000
24.000	144.3200
24.500	175.4300
25.000	206.5400
25.500	237.6600
26.000	268.7700
26.250	284.3300
26.500	299.8900
26.750	315.4400
27.000	331.0000
27.500	331.0000

Name: N126 Base Flow(cfs): 0.000 Init Stage(ft): 13.500
Group: SW 32 AVE Warn Stage(ft): 21.000
Type: Stage/Area

Stage(ft)	Area(ac)
11.000	2.0000
14.500	35.3000
20.000	35.3000
20.500	63.9800
21.000	101.4900
21.500	137.5200

Name: N127 Base Flow(cfs): 0.000 Init Stage(ft): 13.500
Group: SW 32 AVE Warn Stage(ft): 20.000
Type: Stage/Area

Stage(ft)	Area(ac)
13.500	50.4000
20.500	53.1000

Name: N129 Base Flow(cfs): 0.000 Init Stage(ft): 13.500
Group: SW 16/12 AVE Warn Stage(ft): 18.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: OUSLEY/P VLLG Base Flow(cfs): 0.000 Init Stage(ft): 14.500
Group: SW 16/12 AVE Warn Stage(ft): 18.000
Type: Stage/Area

Stage(ft)	Area(ac)
8.000	2.0000
14.500	11.3900
15.000	11.3900
15.500	22.9600
16.000	34.5200

16.500	46.0900
17.000	57.6600
17.500	73.5000
17.750	81.4200
18.000	89.3400
18.250	97.2600
18.500	105.1800
19.000	121.0100
19.500	121.0100

Name: PRO_16N01B Base Flow(cfs): 0.000 Init Stage(ft): 13.500
Group: SW 16/12 AVE Warn Stage(ft): 18.000
Type: Stage/Area

Stage(ft)	Area(ac)
10.000	0.0100
18.000	0.0500

Name: PRO_7N03B Base Flow(cfs): 0.000 Init Stage(ft): 13.500
Group: SW 7 AVE Warn Stage(ft): 18.000
Type: Stage/Area

Stage(ft)	Area(ac)
10.000	0.0010
18.000	0.0010

Name: PRO_7N15B Base Flow(cfs): 0.000 Init Stage(ft): 0.000
Group: SW 7 AVE Warn Stage(ft): 0.000
Type: Stage/Area

NODE WAS ADDED TO INSTALL A CONTROL GATE TO DIVERT WATER TO THE PROPOSED 25 ACRE LAKE

Stage(ft)	Area(ac)

Name: RC_SW 7 AVE Base Flow(cfs): 0.000 Init Stage(ft): 13.500
Group: SW 7 AVE Warn Stage(ft): 19.000
Type: Time/Stage

DISCHARGE POINT (NEAR RIM CANAL) FOR SR 70 BOX CULVERT ON SW 7 AVE FLOWWAY

Time(hrs)	Stage(ft)
0.00	13.400
200.00	13.400

Name: RESERVOIR Base Flow(cfs): 0.000 Init Stage(ft): 13.500
Group: SW 26 AVE Warn Stage(ft): 18.000
Type: Stage/Area

Stage(ft)	Area(ac)

8.000	75.0000
13.500	300.0000
20.000	305.0000
22.000	305.0000

Name: SEMINOLE COVE Base Flow(cfs): 0.000 Init Stage(ft): 15.000
Group: SW 7 AVE Warn Stage(ft): 19.000
Type: Stage/Area

Stage(ft)	Area(ac)
10.000	1.0000
15.000	20.5000
15.500	22.3200
16.000	24.1300
16.500	25.9500
17.000	27.7700
17.500	31.4600
18.000	35.1500
18.250	37.0000
18.500	38.8400
18.750	40.6900
19.000	42.5400
19.500	42.5400

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==== Cross Sections ====

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Name: 16TPS-001+20 Group: SW 16/12 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENT 5) DITCH BETWEEN SW 16/12 AVE "FERREL DITCH" & 26 AVE AS PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

Station(ft)	Elevation(ft)	Manning's N
0.000	16.200	0.033000
26.000	9.400	0.033000
47.000	6.700	0.033000
68.000	9.700	0.033000
108.000	20.000	0.033000

Name: 16TPS-023+16 Group: SW 16/12 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENTS 1-4) SW 16/12 AVE "FERREL DITCH" & S PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

Station(ft)	Elevation(ft)	Manning's N
0.000	16.900	0.033000

14.000	9.700	0.033000
24.000	6.300	0.033000
36.000	8.800	0.033000
60.000	20.000	0.033000

Name: 16TPS-033+00 Group: SW 16/12 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENT 5) DITCH BETWEEN SW 16/12 AVE "FERREL DITCH" & 26 AVE AS PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

Station(ft)	Elevation(ft)	Manning's N
0.000	18.000	0.033000
30.000	6.700	0.033000
54.000	2.700	0.033000
78.000	6.700	0.033000
108.000	18.600	0.033000

Name: 16TPS-034+00 Group: SW 16/12 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENTS 1-4) SW 16/12 AVE "FERREL DITCH" & S PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

Station(ft)	Elevation(ft)	Manning's N
0.000	17.100	0.033000
12.000	11.000	0.033000
24.000	8.700	0.033000
38.000	11.000	0.033000
56.000	20.000	0.033000

Name: 16TPS-049+00 Group: SW 16/12 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENTS 1-4) SW 16/12 AVE "FERREL DITCH" & S PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

Station(ft)	Elevation(ft)	Manning's N
0.000	20.800	0.033000
14.000	11.500	0.033000
34.000	10.800	0.033000
60.000	19.100	0.033000

Name: 16TPS-074+00 Group: SW 16/12 AVE

Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENTS 1-4) SW 16/12 AVE "FERREL DITCH" & S PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

Station(ft)	Elevation(ft)	Manning's N
0.000	20.800	0.033000
12.000	14.000	0.033000
26.000	14.000	0.033000
40.000	20.000	0.033000

Name: 16TPS-074+54 Group: SW 16/12 AVE

Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENTS 1-4) SW 16/12 AVE "FERREL DITCH" & S PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

Station(ft)	Elevation(ft)	Manning's N
0.000	20.800	0.033000
8.000	14.000	0.033000
16.000	14.100	0.033000
32.000	20.000	0.033000

Name: 16TPS-086+75 Group: SW 16/12 AVE

Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENTS 1-4) SW 16/12 AVE "FERREL DITCH" & S PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

Station(ft)	Elevation(ft)	Manning's N
0.000	19.100	0.033000
8.000	14.300	0.033000
20.000	15.000	0.033000
30.000	19.700	0.033000

Name: 16TPS-087+80 Group: SW 16/12 AVE

Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENTS 1-4) SW 16/12 AVE "FERREL DITCH" & S PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

Station(ft)	Elevation(ft)	Manning's N
0.000	22.000	0.033000
14.000	15.400	0.033000
24.000	15.400	0.033000
34.000	21.800	0.033000

Name: 16TPS-098+48 Group: SW 16/12 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENTS 1-4) SW 16/12 AVE "FERREL DITCH" & S PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

USE IE = 14.7

Station(ft)	Elevation(ft)	Manning's N
0.000	21.100	0.033000
8.000	17.100	0.033000
14.000	14.800	0.033000
22.000	17.000	0.033000
38.000	21.700	0.033000

Name: 16TPS-098+80 Group: SW 16/12 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENTS 1-4) SW 16/12 AVE "FERREL DITCH" & S PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

Station(ft)	Elevation(ft)	Manning's N
0.000	21.100	0.033000
8.000	17.100	0.033000
14.000	14.800	0.033000
22.000	17.000	0.033000
38.000	21.700	0.033000

Name: 16TPS-107+83 Group: SW 16/12 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENTS 1-4) SW 16/12 AVE "FERREL DITCH" & S PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

Station(ft)	Elevation(ft)	Manning's N
0.000	22.600	0.033000
8.000	17.100	0.033000

24.000	17.200	0.033000
34.000	22.700	0.033000

Name: 16TPS-126+80 Group: SW 16/12 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENTS 1-4) SW 16/12 AVE "FERREL DITCH" & S PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

USE IE 18.1

Station(ft)	Elevation(ft)	Manning's N
0.000	23.000	0.033000
10.000	18.000	0.033000
15.000	16.700	0.033000
20.000	17.800	0.033000
28.000	23.400	0.033000

Name: 16TPS-127+30 Group: SW 16/12 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENTS 1-4) SW 16/12 AVE "FERREL DITCH" & S PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

Station(ft)	Elevation(ft)	Manning's N
0.000	23.000	0.033000
10.000	18.000	0.033000
15.000	16.700	0.033000
20.000	17.800	0.033000
28.000	23.400	0.033000

Name: 16TPS-133+78 Group: SW 16/12 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENTS 1-4) SW 16/12 AVE "FERREL DITCH" & S PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

Station(ft)	Elevation(ft)	Manning's N
0.000	24.400	0.033000
14.000	18.800	0.033000
19.000	18.700	0.033000
28.000	24.300	0.033000

Name: 16TPS-140+50 Group: SW 16/12 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENTS 1-4) SW 16/12 AVE "FERREL DITCH" & S PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

Station(ft)	Elevation(ft)	Manning's N
0.000	26.300	0.033000
6.000	19.600	0.033000
12.000	17.300	0.033000
22.000	19.600	0.033000
28.000	25.200	0.033000

Name: 16TPS-144+80 Group: SW 16/12 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENTS 1-4) SW 16/12 AVE "FERREL DITCH" & S PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

Station(ft)	Elevation(ft)	Manning's N
0.000	26.200	0.033000
10.000	20.200	0.033000
12.000	19.900	0.033000
16.000	20.800	0.033000
30.000	27.100	0.033000

Name: 16TPS-148+75 Group: SW 16/12 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENTS 1-4) SW 16/12 AVE "FERREL DITCH" & S PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

Station(ft)	Elevation(ft)	Manning's N
0.000	28.300	0.033000
10.000	21.600	0.033000
12.000	19.900	0.033000
18.000	21.200	0.033000
30.000	27.600	0.033000

Name: 16TPS-153+20 Group: SW 16/12 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENTS 1-4) SW 16/12 AVE "FERREL DITCH" & S PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

USE IE = 22.7

Station(ft)	Elevation(ft)	Manning's N
0.000	29.000	0.033000
10.000	22.600	0.033000
16.000	22.600	0.033000
18.000	22.600	0.033000
26.000	27.500	0.033000

Name: 16TPS-153+60 Group: SW 16/12 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENTS 1-4) SW 16/12 AVE "FERREL DITCH" & S PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

Station(ft)	Elevation(ft)	Manning's N
0.000	29.000	0.033000
10.000	22.600	0.033000
16.000	22.600	0.033000
18.000	22.600	0.033000
26.000	27.500	0.033000

Name: 16TPS-159+80 Group: SW 16/12 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENTS 1-4) SW 16/12 AVE "FERREL DITCH" & S PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

USE IE = 21.4

Station(ft)	Elevation(ft)	Manning's N
0.000	29.700	0.033000
8.000	23.800	0.033000
12.000	22.500	0.033000
18.000	23.100	0.033000
23.000	30.100	0.033000

Name: 16TPS-160+25 Group: SW 16/12 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENTS 1-4) SW 16/12 AVE "FERREL DITCH" & S PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

USE IE = 21.5

Station(ft)	Elevation(ft)	Manning's N

0.000	29.700	0.033000
8.000	23.800	0.033000
12.000	22.500	0.033000
18.000	23.100	0.033000
23.000	30.100	0.033000

Name: 16TPS-162+60 Group: SW 16/12 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENTS 1-4) SW 16/12 AVE "FERREL DITCH" & S PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

USE IE = 22.6

Station(ft)	Elevation(ft)	Manning's N
0.000	29.700	0.033000
8.000	23.800	0.033000
12.000	22.500	0.033000
18.000	23.100	0.033000
23.000	30.100	0.033000

Name: 16TPS-163+00 Group: SW 16/12 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENTS 1-4) SW 16/12 "FERREL DITCH" & S PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND E THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

Station(ft)	Elevation(ft)	Manning's N
0.000	29.700	0.033000
8.000	23.800	0.033000
12.000	22.500	0.033000
18.000	23.100	0.033000
23.000	30.100	0.033000

Name: 16TPS-169+68 Group: SW 16/12 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENTS 1-4) SW 16/12 AVE "FERREL DITCH" & S PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

Station(ft)	Elevation(ft)	Manning's N
0.000	32.200	0.033000
10.000	25.100	0.033000
12.000	24.100	0.033000
16.000	25.100	0.033000

24.000	30.400	0.033000

Name: 16TPS-174+34 Group: SW 16/12 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENTS 1-4) SW 16/12 AVE "FERREL DITCH" & S PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

Station(ft)	Elevation(ft)	Manning's N
0.000	32.500	0.033000
8.000	26.600	0.033000
14.000	25.300	0.033000
18.000	26.500	0.033000
24.000	31.500	0.033000

Name: 16TPS-179+60 Group: SW 16/12 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENTS 1-4) SW 16/12 AVE "FERREL DITCH" & S PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

USE IE = 25.5

Station(ft)	Elevation(ft)	Manning's N
0.000	31.900	0.033000
7.000	27.100	0.033000
12.000	25.900	0.033000
16.000	27.400	0.033000
23.000	31.700	0.033000

Name: 16TPS-180+00 Group: SW 16/12 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENTS 1-4) SW 16/12 AVE "FERREL DITCH" & S PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

Station(ft)	Elevation(ft)	Manning's N
0.000	31.900	0.033000
7.000	27.100	0.033000
12.000	25.900	0.033000
16.000	27.400	0.033000
23.000	31.700	0.033000

Name: 16TPS-188+14 Group: SW 16/12 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENTS 1-4) SW 16/12 AVE "FERREL DITCH" & S PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

US IE = 27.5

Station(ft)	Elevation(ft)	Manning's N
0.000	31.200	0.033000
7.000	27.000	0.033000
14.000	25.700	0.033000
16.000	21.100	0.033000
26.000	32.100	0.033000

Name: 16TPS-188+34 Group: SW 16/12 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENTS 1-4) SW 16/12 AVE "FERREL DITCH" & S PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

US IE = 27.2

Station(ft)	Elevation(ft)	Manning's N
0.000	31.200	0.033000
7.000	27.000	0.033000
14.000	25.700	0.033000
16.000	21.100	0.033000
26.000	32.100	0.033000

Name: 16TPS-189+50 Group: SW 16/12 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENTS 1-4) SW 16/12 AVE "FERREL DITCH" & S PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

US IE = 26.0

Station(ft)	Elevation(ft)	Manning's N
0.000	31.200	0.033000
7.000	27.000	0.033000
14.000	25.700	0.033000
16.000	21.100	0.033000
26.000	32.100	0.033000

Name: 16TPS-190+00 Group: SW 16/12 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENTS 1-4) SW 16/12 AVE "FERREL DITCH" & S PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

US IE = 26.3

Station(ft)	Elevation(ft)	Manning's N
0.000	31.200	0.033000
7.000	27.000	0.033000
14.000	25.700	0.033000
16.000	21.100	0.033000
26.000	32.100	0.033000

Name: 16TPS-192+70 Group: SW 16/12 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENTS 1-4) SW 16/12 AVE "FERREL DITCH" & S PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

Station(ft)	Elevation(ft)	Manning's N
0.000	31.200	0.033000
7.000	27.000	0.033000
14.000	25.700	0.033000
16.000	21.100	0.033000
26.000	32.100	0.033000

Name: 16TPS-193+30 Group: SW 16/12 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENTS 1-4) SW 16/12 AVE "FERREL DITCH" & S PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

Station(ft)	Elevation(ft)	Manning's N
0.000	31.200	0.033000
7.000	27.000	0.033000
14.000	25.700	0.033000
16.000	25.700	0.033000
26.000	32.100	0.033000

Name: 16TPS-196+00 Group: SW 16/12 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENTS 1-4) SW 16/12 AVE "FERREL DITCH" & S PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

Station(ft)	Elevation(ft)	Manning's N
0.000	32.400	0.033000
8.000	26.900	0.033000

16.000	25.800	0.033000
20.000	26.900	0.033000
28.000	31.900	0.033000

Name: 16TPS-196+60 Group: SW 16/12 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENTS 1-4) SW 16/12 AVE "FERREL DITCH" & S PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

Station(ft)	Elevation(ft)	Manning's N
0.000	32.400	0.033000
8.000	26.900	0.033000
16.000	25.800	0.033000
20.000	26.900	0.033000
28.000	31.900	0.033000

Name: 16TPS-199+45 Group: SW 16/12 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENTS 1-4) SW 16/12 AVE "FERREL DITCH" & S PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

Station(ft)	Elevation(ft)	Manning's N
0.000	32.000	0.033000
9.000	29.400	0.033000
16.000	25.700	0.033000
18.000	27.200	0.033000
24.000	31.400	0.033000

Name: 16TPS-200+00 Group: SW 16/12 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENTS 1-4) SW 16/12 AVE "FERREL DITCH" & S PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

Station(ft)	Elevation(ft)	Manning's N
0.000	32.000	0.033000
9.000	29.400	0.033000
16.000	25.700	0.033000
18.000	27.200	0.033000
24.000	31.400	0.033000

Name: 16TPS-205+33 Group: SW 16/12 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENTS 1-4) SW 16/12 AVE "FERREL DITCH" & S PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

Station(ft)	Elevation(ft)	Manning's N
0.000	31.900	0.033000
6.000	27.000	0.033000
16.000	26.600	0.033000
24.000	31.000	0.033000

Name: 26TPS-000+00S Group: SW 26 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENT 6A) SW 26 AVE AS PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

Station(ft)	Elevation(ft)	Manning's N
0.000	18.600	0.033000
12.000	6.700	0.033000
36.000	2.200	0.033000
62.000	7.200	0.033000
92.000	17.700	0.033000

Name: 26TPS-003+36N Group: SW 26 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENT 6B) SW 26 AVE AS PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

Station(ft)	Elevation(ft)	Manning's N
0.000	18.200	0.033000
10.000	12.200	0.033000
20.000	8.900	0.033000
34.000	12.400	0.033000
44.000	19.800	0.033000

Name: 26TPS-004+00N Group: SW 26 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENT 6B) SW 26 AVE AS PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

Station(ft)	Elevation(ft)	Manning's N
0.000	20.700	0.033000
10.000	12.300	0.033000
20.000	8.500	0.033000

34.000	12.400	0.033000
44.000	19.100	0.033000

Name: 26TPS-006+28S Group: SW 26 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENT 6A) SW 26 AVE AS PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

Station(ft)	Elevation(ft)	Manning's N
0.000	17.000	0.033000
20.000	7.200	0.033000
44.000	4.700	0.033000
74.000	10.700	0.033000
90.000	16.100	0.033000

Name: 26TPS-011+54N Group: SW 26 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENT 6B) SW 26 AVE AS PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

Station(ft)	Elevation(ft)	Manning's N
0.000	20.700	0.033000
10.000	12.300	0.033000
15.000	12.300	0.033000
20.000	12.400	0.033000
28.000	19.100	0.033000

Name: 26TPS-026+50N Group: SW 26 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENT 6B) SW 26 AVE AS PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

Station(ft)	Elevation(ft)	Manning's N
0.000	19.100	0.033000
20.000	12.800	0.033000
26.000	11.900	0.033000
27.000	12.400	0.033000
66.000	20.500	0.033000

Name: 26TPS-027+08N Group: SW 26 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENT 6B) SW 26 AVE AS PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

Station(ft)	Elevation(ft)	Manning's N
0.000	20.500	0.033000
22.000	10.500	0.033000
26.000	7.500	0.033000
30.000	10.500	0.033000
66.000	21.400	0.033000

Name: 26TPS-045+76N Group: SW 26 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENT 6B) SW 26 AVE AS PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

Station(ft)	Elevation(ft)	Manning's N
0.000	20.500	0.033000
18.000	10.500	0.033000
30.000	7.500	0.033000
48.000	10.500	0.033000
74.000	21.400	0.033000

Name: 26TPS-046+20N Group: SW 26 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENT 6B) SW 26 AVE AS PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

Station(ft)	Elevation(ft)	Manning's N
0.000	20.500	0.033000
18.000	10.500	0.033000
30.000	7.500	0.033000
48.000	10.500	0.033000
74.000	21.400	0.033000

Name: 26TPS-052+26N Group: SW 26 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENT 6B) SW 26 AVE AS PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

Station(ft)	Elevation(ft)	Manning's N
0.000	20.500	0.033000
18.000	10.500	0.033000
30.000	7.500	0.033000
48.000	10.500	0.033000
74.000	21.400	0.033000

Name: GB CANAL X-01 Group: SW 16/12 AVE
Encroachment: No

JUST WEST OF SW 16/12 AVE FLOWWAY

Station(ft)	Elevation(ft)	Manning's N
0.000	20.000	0.033000
26.000	8.800	0.033000
52.000	6.300	0.033000
78.000	9.700	0.033000
108.000	20.000	0.033000

Name: GB CANAL X-02 Group: SW 16/12 AVE
Encroachment: No

JUST EAST OF SW 26 AVE FLOWWAY

Station(ft)	Elevation(ft)	Manning's N
0.000	18.000	0.033000
30.000	6.700	0.033000
54.000	2.700	0.033000
78.000	6.700	0.033000
106.000	18.600	0.033000

Name: NDR1 Group: SW 7 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
0.000	20.000	0.035000
8.000	15.600	0.035000
16.000	19.710	0.035000

Name: NDR2 Group: SW 7 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
0.000	20.500	0.035000
8.000	16.000	0.035000
16.000	19.500	0.035000

Name: NDR3 Group: SW 7 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
0.000	19.680	0.035000
6.000	16.500	0.035000
12.000	19.800	0.035000

Name: NDR4 Group: SW 7 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
0.000	20.000	0.035000
8.000	16.900	0.035000
16.000	19.300	0.035000

Name: NDR5 Group: SW 7 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
0.000	19.700	0.035000
5.000	16.600	0.035000
10.000	19.200	0.035000

Name: NDR6 Group: SW 7 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
0.000	19.700	0.035000
5.000	16.600	0.035000
10.000	19.200	0.035000

Name: NDR7 Group: SW 7 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
0.000	20.600	0.035000
12.000	16.900	0.035000
18.000	19.200	0.035000

Name: NDR8 Group: SW 7 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
0.000	20.800	0.035000
11.000	16.600	0.035000
18.000	18.880	0.035000

Name: NWR1 Group: SW 7 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
0.000	20.660	0.035000
14.000	16.940	0.035000
22.000	20.600	0.035000

Name: NWR2 Group: SW 7 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
0.000	20.600	0.035000
12.000	17.170	0.035000
19.000	20.400	0.035000

Name: NWR3 Group: SW 7 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
0.000	20.220	0.035000
9.000	16.870	0.035000
16.000	19.850	0.035000

Name: NWR4 Group: SW 7 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
0.000	20.600	0.035000
10.000	17.000	0.035000
17.000	19.640	0.035000

Name: NWR5 Group: SW 7 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
0.000	19.850	0.035000
9.000	17.390	0.035000
14.000	19.540	0.035000

Name: NWR6 Group: SW 7 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
0.000	20.800	0.035000
12.000	17.590	0.035000
20.000	20.000	0.035000

Name: NWR7 Group: SW 7 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
0.000	20.160	0.035000
10.000	17.200	0.035000
15.000	19.700	0.035000

Name: NWR8 Group: SW 7 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
0.000	20.300	0.035000
10.000	17.900	0.035000
15.000	19.400	0.035000

Name: PRO_TPS-073+50 Group: SW 7 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENT 7) BETWEEN SW 2 ST & SW 32 ST PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

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Station(ft)	Elevation(ft)	Manning's N
0.000	20.400	0.050000
15.000	14.500	0.050000
20.000	14.500	0.050000
30.000	21.600	0.050000

Name: R1_10+22.80 Group: SW 7 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
8.700	17.600	0.050000
20.700	12.160	0.050000
34.000	10.940	0.050000
40.000	16.580	0.050000

Name: R1_14+21.72 Group: SW 7 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
4.300	18.000	0.050000
15.500	10.770	0.050000
38.500	12.100	0.050000
48.600	19.370	0.050000

Name: R1_17+19.49 Group: SW 7 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
3.800	18.280	0.050000
20.400	10.630	0.050000
34.500	10.910	0.050000
48.400	20.740	0.050000

Name: R1_22+64.21 Group: SW 7 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
3.700	17.220	0.050000
17.300	11.290	0.050000
35.200	10.010	0.050000
47.300	17.500	0.050000

Name: R1_27+85.24 Group: SW 7 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
7.700	17.330	0.050000
14.500	11.580	0.050000
36.900	10.450	0.050000
48.000	16.590	0.050000

Name: R1_32+88.13 Group: SW 7 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
9.400	16.070	0.050000
17.200	11.130	0.050000
38.000	11.970	0.050000
44.800	17.220	0.050000

Name: R1_38+44.46 Group: SW 7 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
16.300	16.860	0.050000
21.500	10.230	0.050000
42.000	11.700	0.050000
48.400	16.080	0.050000

Name: R1_38+64.32 Group: SW 7 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
16.000	16.860	0.050000
21.300	10.230	0.050000
56.100	11.280	0.050000
61.700	16.240	0.050000

Name: R1_38+64.32 mod Group: SW 7 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
16.000	16.860	0.050000
21.300	10.230	0.050000
55.050	10.230	0.050000
61.700	16.240	0.050000

Name: R1_42+03.00 Group: SW 7 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
9.800	16.590	0.050000
19.100	10.360	0.050000
38.200	8.430	0.050000
59.300	11.490	0.050000
68.600	15.320	0.050000

Name: R1_45+35.76 Group: SW 7 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
11.200	16.590	0.050000
21.400	10.360	0.050000
60.400	10.670	0.050000
67.000	15.160	0.050000

Name: R1_47+12.26 Group: SW 7 AVE

Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
11.900	18.740	0.050000
22.400	10.600	0.050000
38.500	11.060	0.050000
48.100	16.900	0.050000

Name: R1_51+32.97 Group: SW 7 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
3.100	19.140	0.050000
17.300	11.350	0.050000
34.200	11.790	0.050000
45.700	16.690	0.050000

Name: R1_56+63.89 Group: SW 7 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
5.700	19.020	0.050000
15.900	11.410	0.050000
32.800	11.740	0.050000
42.300	16.380	0.050000

Name: R1_56+86.81 Group: SW 7 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
5.900	19.020	0.050000
15.900	11.410	0.050000
48.000	11.770	0.050000
57.600	16.130	0.050000

Name: R1_59+94.34 Group: SW 7 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
8.100	18.080	0.050000
15.800	10.800	0.050000
64.000	10.950	0.050000
71.700	16.070	0.050000

Name: R1_65+97.58 Group: SW 7 AVE

Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
11.500	19.020	0.050000
18.500	11.450	0.050000
61.400	11.640	0.050000
67.800	16.960	0.050000

Name: R1_66+68.49 Group: SW 7 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
14.200	17.930	0.050000
23.900	10.720	0.050000
44.700	10.680	0.050000
54.500	15.530	0.050000

Name: R1_72+24.59 Group: SW 7 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
1.500	19.780	0.050000
12.300	11.910	0.050000
24.900	11.890	0.050000
39.000	19.250	0.050000

Name: R1_79+51+98 Group: SW 7 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
4.900	20.070	0.050000
15.900	11.840	0.050000
25.200	12.590	0.050000
33.600	19.900	0.050000

Name: R2_10+10.47 Group: SW 26 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
22.300	13.420	0.033000
40.200	5.200	0.033000
57.100	4.730	0.033000
76.500	6.520	0.033000
93.600	13.170	0.033000

Name: R2_11+39.30 Group: SW 26 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
28.000	13.130	0.033000
37.900	5.370	0.033000
57.400	5.180	0.033000
78.000	5.860	0.033000
90.700	11.880	0.033000

Name: R2_16+68.26 Group: SW 26 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
21.400	13.070	0.033000
38.000	5.060	0.033000
60.100	4.350	0.033000
82.100	6.200	0.033000
97.000	11.580	0.033000

Name: R2_21+66.95 Group: SW 26 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
21.500	13.850	0.033000
36.100	5.000	0.033000
50.400	4.960	0.033000
77.200	7.020	0.033000
94.700	12.170	0.033000

Name: R2_27+49.88 Group: SW 26 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
25.200	12.450	0.033000
36.200	5.460	0.033000
52.400	4.920	0.033000
73.100	5.730	0.033000
82.600	11.410	0.033000

Name: R2_31+84.12 Group: SW 26 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
30.700	13.760	0.033000
46.000	6.460	0.033000

65.800	4.590	0.033000
81.500	5.850	0.033000
95.000	10.620	0.033000

Name: R2_36+85.00 Group: SW 26 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
44.800	14.850	0.033000
62.700	7.870	0.033000
89.900	2.690	0.033000
110.900	6.980	0.033000
137.900	15.020	0.033000

Name: R3_10+19.34 Group: SW 26 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
2.900	18.890	0.033000
16.600	10.840	0.033000
63.500	10.840	0.033000
76.000	19.220	0.033000

Name: R3_15+20.56 Group: SW 26 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
10.300	19.980	0.033000
23.600	9.240	0.033000
44.200	7.650	0.033000
61.100	9.900	0.033000
73.900	19.290	0.033000

Name: R3_20+48.00 Group: SW 26 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
6.800	16.340	0.033000
16.200	9.490	0.033000
44.300	5.880	0.033000
58.800	9.180	0.033000
75.600	21.140	0.033000

Name: R3_25+38.02 Group: SW 26 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
6.500	18.560	0.033000
21.000	11.210	0.033000
45.300	8.820	0.033000
55.800	10.930	0.033000
71.700	22.380	0.033000

Name: R3_25+66.89 Group: SW 26 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
7.700	17.340	0.070000
17.800	12.500	0.070000
26.200	12.640	0.070000
43.300	21.650	0.070000

Name: R3_29+40.51 Group: SW 26 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
9.000	19.810	0.070000
17.000	12.880	0.070000
27.300	13.500	0.070000
36.500	20.640	0.070000

Name: R3_29+85.53 Group: SW 26 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
8.600	19.450	0.033000
16.800	15.130	0.033000
27.000	15.330	0.033000
33.900	19.870	0.033000

Name: R3_30+66.89 Group: SW 26 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
9.800	19.400	0.033000
19.000	14.380	0.033000
27.300	14.710	0.033000
38.000	20.380	0.033000

Name: R3_35+63.96 Group: SW 26 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
12.500	19.830	0.033000
22.000	15.230	0.033000
32.000	15.650	0.033000
40.600	20.050	0.033000

Name: R3_40+48.18 Group: SW 26 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
3.400	21.440	0.033000
16.600	15.780	0.033000
33.100	15.420	0.033000
39.400	18.350	0.033000

Name: R3_45+38.68 Group: SW 26 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
1.200	22.760	0.033000
20.900	16.270	0.033000
28.800	15.970	0.033000
36.600	19.180	0.033000

Name: R3_50+13.18 Group: SW 26 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
2.500	21.610	0.033000
13.900	16.570	0.033000
25.500	16.290	0.033000
34.400	19.400	0.033000

Name: R3_56+17.08 Group: SW 26 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
8.800	22.370	0.033000
15.600	17.370	0.033000
26.100	17.600	0.033000
35.000	22.850	0.033000

Name: R3_61+02.80 Group: SW 26 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
6.400	24.510	0.033000
16.700	18.730	0.033000
26.900	18.380	0.033000
38.700	22.960	0.033000

Name: R3_64+42.43 Group: SW 26 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
12.700	23.610	0.033000
17.100	18.770	0.033000
30.000	18.710	0.033000
36.400	23.510	0.033000

Name: R3_68+91.38 Group: SW 26 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
5.400	23.650	0.033000
13.600	19.060	0.033000
22.900	18.840	0.033000
31.000	23.000	0.033000

Name: R4_010+36.34 Group: SW 32 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
16.200	14.870	0.033000
22.100	10.810	0.033000
40.900	5.720	0.033000
67.700	10.480	0.033000
80.500	16.940	0.033000

Name: R4_016+28.68 Group: SW 32 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
14.400	14.940	0.033000
21.700	11.100	0.033000
36.700	5.480	0.033000
60.100	10.340	0.033000
72.900	16.450	0.033000

Name: R4_021+08.56 Group: SW 32 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
17.100	17.160	0.033000
25.700	10.840	0.033000
56.300	10.920	0.033000
58.600	14.420	0.033000

Name: R4_021+17.67 Group: SW 32 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
25.200	16.240	0.033000
31.000	10.850	0.033000
44.100	10.850	0.033000
50.700	16.390	0.033000

Name: R4_021+60.06 Group: SW 32 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
18.600	15.890	0.033000
27.100	10.460	0.033000
43.900	10.150	0.033000
49.000	15.870	0.033000

Name: R4_021+76.18 Group: SW 32 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
13.400	16.320	0.033000
19.100	10.980	0.033000
36.400	8.250	0.033000
52.800	10.500	0.033000
60.900	17.540	0.033000

Name: R4_023+97.28 Group: SW 32 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
11.000	15.910	0.033000
17.900	11.210	0.033000
38.100	8.800	0.033000
52.400	10.730	0.033000
65.700	17.000	0.033000

Name: R4_028+95.76 Group: SW 32 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
9.700	16.080	0.033000
20.600	9.740	0.033000
40.300	8.850	0.033000
53.400	11.040	0.033000
67.200	15.980	0.033000

Name: R4_034+08.34 Group: SW 32 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
8.700	15.710	0.033000
15.900	8.980	0.033000
36.300	4.780	0.033000
56.400	10.470	0.033000
66.200	15.310	0.033000

Name: R4_039+25.16 Group: SW 32 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
10.300	16.470	0.033000
20.200	10.570	0.033000
31.200	6.830	0.033000
57.000	10.840	0.033000
63.000	16.020	0.033000

Name: R4_044+53.40 Group: SW 32 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
0.800	16.490	0.033000
24.600	11.580	0.033000
50.500	11.660	0.033000
70.500	15.770	0.033000

Name: R4_049+51.91 Group: SW 32 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
8.100	18.870	0.033000
22.700	11.560	0.033000
44.800	11.540	0.033000

56.600	18.020	0.033000

Name: R4_054+54.24 Group: SW 32 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
8.800	19.440	0.033000
21.300	11.860	0.033000
41.200	11.590	0.033000
53.400	17.220	0.033000

Name: R4_057+83.34 Group: SW 32 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
10.600	16.750	0.033000
25.100	12.120	0.033000
43.500	11.940	0.033000
52.400	15.400	0.033000

Name: R4_057+98.33 Group: SW 32 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
13.800	17.040	0.033000
29.600	11.930	0.033000
38.600	12.050	0.033000
50.100	16.530	0.033000

Name: R4_058+42.42 Group: SW 32 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
10.300	18.290	0.033000
27.200	11.960	0.033000
35.500	11.730	0.033000
46.600	17.560	0.033000

Name: R4_058+55.67 Group: SW 32 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
7.300	18.010	0.033000
20.800	11.940	0.033000
42.500	12.240	0.033000

50.800	16.710	0.033000

Name: R4_059+28.57 Group: SW 32 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
5.400	19.380	0.033000
20.300	13.780	0.033000
40.400	11.630	0.033000
55.400	17.950	0.033000

Name: R4_064+57.24 Group: SW 32 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
4.800	19.620	0.033000
17.800	9.530	0.033000
40.100	10.190	0.033000
53.900	18.460	0.033000

Name: R4_069+82.26 Group: SW 32 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
7.300	19.770	0.033000
19.700	9.580	0.033000
28.500	8.150	0.033000
40.400	9.870	0.033000
52.800	19.180	0.033000

Name: R4_075+27.11 Group: SW 32 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
7.800	21.120	0.033000
19.300	9.480	0.033000
45.600	11.410	0.033000
55.900	19.470	0.033000

Name: R4_080+25.17 Group: SW 32 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
11.000	20.710	0.033000
24.700	10.680	0.033000

34.400	8.370	0.033000
45.900	10.930	0.033000
61.000	21.270	0.033000

Name: R4_082+92.21 Group: SW 32 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
18.800	21.800	0.033000
31.100	12.080	0.033000
53.200	11.880	0.033000
70.600	20.390	0.033000

Name: R4_083+30.92 Group: SW 32 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
20.500	21.210	0.033000
30.900	12.440	0.033000
52.500	12.470	0.033000
68.300	20.060	0.033000

Name: R4_084+24.66 Group: SW 32 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
15.100	19.930	0.033000
28.400	12.440	0.033000
56.900	11.600	0.033000
67.500	21.060	0.033000

Name: R4_084+47.92 Group: SW 32 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
14.800	19.930	0.033000
27.500	12.440	0.033000
69.300	11.400	0.033000
78.000	18.410	0.033000

Name: R4_085+44.67 Group: SW 32 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
14.000	19.930	0.033000

24.000	11.440	0.033000
70.300	10.910	0.033000
78.000	19.780	0.033000

Name: R4_091+17.97 Group: SW 32 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
18.300	20.390	0.033000
30.700	10.270	0.033000
53.500	6.760	0.033000
69.700	10.740	0.033000
80.300	19.970	0.033000

Name: R4_095+52.53 Group: SW 32 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
19.200	21.520	0.033000
33.300	12.760	0.033000
38.600	12.110	0.033000
53.100	20.080	0.033000

Name: R4_095+97.80 Group: SW 32 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
16.800	20.570	0.033000
32.600	13.680	0.033000
37.300	13.450	0.033000
44.800	19.050	0.033000

Name: R4_096+23.79 Group: SW 32 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
16.600	21.670	0.033000
29.900	12.860	0.033000
37.300	12.940	0.033000
39.700	16.210	0.033000
41.200	19.200	0.033000

Name: R4_100+91.96 Group: SW 32 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N

16.300	22.260	0.033000
31.600	13.060	0.033000
40.900	13.060	0.033000
52.300	18.950	0.033000

Name: R4_106+32.93 Group: SW 32 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
11.700	23.730	0.033000
27.900	13.320	0.033000
38.600	13.540	0.033000
46.600	19.110	0.033000

Name: R4_111+68.98 Group: SW 32 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
7.800	23.360	0.033000
28.200	14.050	0.033000
38.200	14.320	0.033000
45.300	21.480	0.033000

Name: R4_117+10.73 Group: SW 32 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
6.000	24.920	0.033000
23.200	15.960	0.033000
38.000	14.670	0.033000
49.500	24.990	0.033000

Name: R4_122+59.02 Group: SW 32 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
8.100	25.270	0.033000
21.900	16.820	0.033000
42.100	15.780	0.033000
60.800	23.670	0.033000

Name: R4_123+85.24 Group: SW 32 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N

20.900	25.210	0.033000
29.800	20.250	0.033000
50.700	20.930	0.033000
59.500	25.160	0.033000

Name: R4_129+46.94 Group: SW 32 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
7.100	27.760	0.033000
24.400	17.250	0.033000
39.400	17.370	0.033000
59.600	26.140	0.033000

Name: R4_134+94.74 Group: SW 32 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
0.600	27.420	0.033000
19.000	17.280	0.033000
33.900	17.330	0.033000
49.000	24.550	0.033000

Name: R4_139+73.36 Group: SW 32 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
3.700	28.100	0.033000
26.600	17.960	0.033000
41.300	18.010	0.033000
53.600	27.020	0.033000

Name: R4_142+78.00 Group: SW 32 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
27.400	22.390	0.033000
36.400	16.090	0.033000
52.000	16.230	0.033000
63.800	24.580	0.033000

Name: R4_145+79.32 Group: SW 32 AVE
Encroachment: No

Station(ft) Elevation(ft) Manning's N

11.600	24.320	0.033000
26.800	16.950	0.033000
35.500	16.590	0.033000
56.000	26.070	0.033000

Name: R4_149+83.52 Group: SW 32 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
8.800	25.310	0.033000
37.100	17.900	0.033000
47.200	17.630	0.033000
52.900	23.460	0.033000

Name: SDR1 Group: SW 7 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
0.000	20.000	0.050000
5.000	17.500	0.050000
10.000	20.000	0.050000

Name: SDR2 Group: SW 7 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
0.000	18.600	0.050000
5.000	18.000	0.050000
10.000	19.500	0.050000

Name: SWR1 Group: SW 7 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
0.000	21.000	0.050000
6.000	17.400	0.050000
12.000	20.700	0.050000

Name: SWR2 Group: SW 7 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
0.000	20.160	0.050000
6.000	17.330	0.050000

12.000	20.310	0.050000

Name: SWR3 Group: SW 7 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
0.000	19.990	0.050000
5.000	17.220	0.050000
10.000	20.240	0.050000

Name: SWR4 Group: SW 7 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
0.000	19.590	0.050000
9.000	18.340	0.050000
15.000	19.750	0.050000

Name: SWR5 Group: SW 7 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
0.000	19.600	0.050000
7.000	17.560	0.050000
17.000	20.370	0.050000

Name: SWR6 Group: SW 7 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
0.000	19.700	0.050000
7.000	17.680	0.050000
17.000	20.250	0.050000

Name: SWR7 Group: SW 7 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
0.000	19.700	0.050000
5.000	18.510	0.050000
10.000	19.500	0.050000

Name: SWR8 Group: SW 7 AVE

Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
0.000	21.000	0.050000
5.000	19.990	0.050000
10.000	20.400	0.050000

Name: SWR9 Group: SW 7 AVE
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
0.000	21.000	0.050000
5.000	19.460	0.050000
10.000	20.230	0.050000

Name: TPS-001+30 Group: SW 7 AVE
Encroachment: No

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Station(ft)	Elevation(ft)	Manning's N
0.000	29.600	0.050000
10.000	26.700	0.050000
16.000	26.700	0.050000
22.000	30.000	0.050000

Name: TPS-002+84 Group: SW 7 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENT 7) BETWEEN SW 2 ST & SW 32 ST PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

Station(ft)	Elevation(ft)	Manning's N
0.000	29.600	0.050000
10.000	26.400	0.050000
16.000	26.400	0.050000
22.000	30.000	0.050000

Name: TPS-003+25 Group: SW 7 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENT 7) BETWEEN SW 2 ST & SW 32 ST PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

Station(ft)	Elevation(ft)	Manning's N
0.000	29.600	0.050000
10.000	26.000	0.050000
16.000	26.000	0.050000

22.000	30.000	0.050000

Name: TPS-005+30 Group: SW 7 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENT 7) BETWEEN SW 2 ST & SW 32 ST PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

Station(ft)	Elevation(ft)	Manning's N
0.000	29.600	0.050000
10.000	25.300	0.050000
16.000	25.300	0.050000
22.000	30.000	0.050000

Name: TPS-005+70 Group: SW 7 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENT 7) BETWEEN SW 2 ST & SW 32 ST PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

Station(ft)	Elevation(ft)	Manning's N
0.000	29.600	0.050000
10.000	25.300	0.050000
16.000	25.300	0.050000
22.000	30.000	0.050000

Name: TPS-007+10 Group: SW 7 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENT 7) BETWEEN SW 2 ST & SW 32 ST PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

Station(ft)	Elevation(ft)	Manning's N
0.000	29.600	0.050000
10.000	25.300	0.050000
16.000	25.300	0.050000
22.000	30.000	0.050000

Name: TPS-007+60 Group: SW 7 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENT 7) BETWEEN SW 2 ST & SW 32 ST PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

Station(ft)	Elevation(ft)	Manning's N
0.000	29.600	0.050000
10.000	25.300	0.050000
16.000	25.300	0.050000
22.000	30.000	0.050000

Name: TPS-010+80 Group: SW 7 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENT 7) BETWEEN SW 2 ST & SW 32 ST PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

Station(ft)	Elevation(ft)	Manning's N
0.000	29.600	0.050000
10.000	25.500	0.050000
16.000	25.100	0.050000
28.000	30.000	0.050000

Name: TPS-011+18 Group: SW 7 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENT 7) BETWEEN SW 2 ST & SW 32 ST PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

Station(ft)	Elevation(ft)	Manning's N
0.000	29.600	0.050000
10.000	25.500	0.050000
16.000	25.100	0.050000
28.000	30.000	0.050000

Name: TPS-015+30 Group: SW 7 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENT 7) BETWEEN SW 2 ST & SW 32 ST PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

Station(ft)	Elevation(ft)	Manning's N
0.000	29.600	0.050000
8.000	25.300	0.050000
14.000	24.000	0.050000
20.000	25.300	0.050000
30.000	29.600	0.050000

Name: TPS-016+10 Group: SW 7 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENT 7) BETWEEN SW 2 ST & SW 32 ST PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

Station(ft)	Elevation(ft)	Manning's N
0.000	29.600	0.050000
8.000	25.300	0.050000
14.000	24.000	0.050000
20.000	25.300	0.050000
30.000	29.600	0.050000

Name: TPS-019+50 Group: SW 7 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENT 7) BETWEEN SW 2 ST & SW 32 ST PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

Station(ft)	Elevation(ft)	Manning's N
0.000	29.600	0.050000
8.000	25.300	0.050000
14.000	24.000	0.050000
20.000	25.300	0.050000
30.000	29.600	0.050000

Name: TPS-020+60 Group: SW 7 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENT 7) BETWEEN SW 2 ST & SW 32 ST PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

Station(ft)	Elevation(ft)	Manning's N
0.000	29.000	0.050000
20.000	24.500	0.050000
24.000	24.500	0.050000
32.000	29.000	0.050000

Name: TPS-021+26 Group: SW 7 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENT 7) BETWEEN SW 2 & SW 32 ST PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

Station(ft)	Elevation(ft)	Manning's N
0.000	29.000	0.050000
20.000	24.500	0.050000
24.000	24.500	0.050000
32.000	29.000	0.050000

Name: TPS-021+50 Group: SW 7 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENT 7) BETWEEN SW 2 ST & SW 32 ST PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

Station(ft)	Elevation(ft)	Manning's N
0.000	29.000	0.050000
12.000	24.200	0.050000
24.000	24.200	0.050000
30.000	29.000	0.050000

Name: TPS-023+00 Group: SW 7 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENT 7) BETWEEN SW 2 & SW 32 ST PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

Station(ft)	Elevation(ft)	Manning's N
0.000	29.000	0.050000
12.000	24.200	0.050000
24.000	24.200	0.050000
30.000	29.000	0.050000

Name: TPS-023+70 Group: SW 7 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENT 7) BETWEEN SW 2 ST & SW 32 ST PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

Station(ft)	Elevation(ft)	Manning's N
0.000	29.000	0.050000
12.000	23.600	0.050000
24.000	23.600	0.050000
30.000	29.000	0.050000

Name: TPS-024+20 Group: SW 7 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENT 7) BETWEEN SW 2 ST & SW 32 ST PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

Station(ft)	Elevation(ft)	Manning's N
0.000	29.000	0.050000
12.000	23.600	0.050000
24.000	23.600	0.050000
30.000	29.000	0.050000

Name: TPS-024+50 Group: SW 7 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENT 7) BETWEEN SW 2 ST & SW 32 ST PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

Station(ft)	Elevation(ft)	Manning's N
0.000	29.000	0.050000
12.000	23.600	0.050000
24.000	23.600	0.050000
30.000	29.000	0.050000

Name: TPS-026+52 Group: SW 7 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENT 7) BETWEEN SW 2 ST & SW 32 ST PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

Station(ft)	Elevation(ft)	Manning's N
0.000	30.100	0.050000
14.000	24.100	0.050000
18.000	23.600	0.050000

20.000	24.300	0.050000
30.000	26.400	0.050000

Name: TPS-027+18 Group: SW 7 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENT 7) BETWEEN SW 2 ST & SW 32 ST PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

Station(ft)	Elevation(ft)	Manning's N
0.000	30.100	0.050000
14.000	24.100	0.050000
18.000	23.600	0.050000
20.000	24.300	0.050000
30.000	26.400	0.050000

Name: TPS-030+20 Group: SW 7 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENT 7) BETWEEN SW 2 ST & SW 32 ST PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

USE IE=23.1'

Station(ft)	Elevation(ft)	Manning's N
0.000	30.100	0.050000
14.000	24.100	0.050000
18.000	23.600	0.050000
20.000	24.300	0.050000
30.000	26.400	0.050000

Name: TPS-031+00 Group: SW 7 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENT 7) BETWEEN SW 2 ST & SW 32 ST PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

Station(ft)	Elevation(ft)	Manning's N
0.000	29.000	0.050000
12.000	23.100	0.050000
14.000	23.100	0.050000
30.000	28.000	0.050000

Name: TPS-032+00 Group: SW 7 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENT 7) BETWEEN SW 2 ST & SW 32 ST PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

Station(ft)	Elevation(ft)	Manning's N
0.000	29.000	0.050000
12.000	23.100	0.050000
14.000	23.100	0.050000

30.000	28.000	0.050000

Name: TPS-032+30 Group: SW 7 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENT 7) BETWEEN SW 2 ST & SW 32 ST PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

Station(ft)	Elevation(ft)	Manning's N
0.000	29.000	0.050000
12.000	23.100	0.050000
14.000	23.100	0.050000
30.000	28.000	0.050000

Name: TPS-034+00 Group: SW 7 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENT 7) BETWEEN SW 2 ST & SW 32 ST PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

USE IE=22.2

Station(ft)	Elevation(ft)	Manning's N
0.000	29.000	0.050000
12.000	23.100	0.050000
14.000	23.100	0.050000
30.000	28.000	0.050000

Name: TPS-034+24 Group: SW 7 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENT 7) BETWEEN SW 2 ST & SW 32 ST PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

USE IE=22.6

Station(ft)	Elevation(ft)	Manning's N
0.000	29.000	0.050000
10.000	23.100	0.050000
18.000	23.100	0.050000
30.000	28.000	0.050000

Name: TPS-035+88 Group: SW 7 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENT 7) BETWEEN SW 2 ST & SW 32 ST PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

USE IE=22.2

Station(ft)	Elevation(ft)	Manning's N

0.000	29.000	0.050000
10.000	23.100	0.050000
18.000	23.100	0.050000
30.000	28.000	0.050000

Name: TPS-036+20 Group: SW 7 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENT 7) BETWEEN SW 2 ST & SW 32 ST PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

USE IE=22.3

Station(ft)	Elevation(ft)	Manning's N
0.000	29.000	0.050000
10.000	23.100	0.050000
18.000	23.100	0.050000
30.000	28.000	0.050000

Name: TPS-038+00 Group: SW 7 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENT 7) BETWEEN SW 2 ST & SW 32 ST PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

IE=22.5

Station(ft)	Elevation(ft)	Manning's N
0.000	29.000	0.050000
10.000	23.100	0.050000
18.000	23.100	0.050000
30.000	28.000	0.050000

Name: TPS-039+46 Group: SW 7 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENT 7) BETWEEN SW 2 ST & SW 32 ST PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

Station(ft)	Elevation(ft)	Manning's N
0.000	26.500	0.050000
4.000	22.000	0.050000
12.000	22.000	0.050000
30.000	26.200	0.050000

Name: TPS-039+70 Group: SW 7 AVE
Encroachment: No

S INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENT 7) BETWEEN SW 2 & SW 32 ST PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

Station(ft)	Elevation(ft)	Manning's N
0.000	26.500	0.050000
4.000	22.000	0.050000
12.000	22.000	0.050000
30.000	26.200	0.050000

Name: TPS-040+40 Group: SW 7 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENT 7) BETWEEN SW 2 ST & SW 32 ST PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

Station(ft)	Elevation(ft)	Manning's N
0.000	26.500	0.050000
4.000	20.200	0.050000
12.000	20.200	0.050000
30.000	26.200	0.050000

Name: TPS-040+62 Group: SW 7 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENT 7) BETWEEN SW 2 ST & SW 32 ST PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

Station(ft)	Elevation(ft)	Manning's N
0.000	26.500	0.050000
4.000	20.200	0.050000
12.000	20.200	0.050000
30.000	26.200	0.050000

Name: TPS-041+12 Group: SW 7 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENT 7) BETWEEN SW 2 ST & SW 32 ST PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

USE IE = 21

Station(ft)	Elevation(ft)	Manning's N
0.000	26.500	0.050000
4.000	20.200	0.050000
12.000	20.200	0.050000
30.000	26.200	0.050000

Name: TPS-041+40 Group: SW 7 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENT 7) BETWEEN SW ST & SW 32 ST PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

USE IE=21

Station(ft)	Elevation(ft)	Manning's N
0.000	26.500	0.050000
4.000	20.200	0.050000
12.000	20.200	0.050000
30.000	26.200	0.050000

Name: TPS-041+86 Group: SW 7 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENT 7) BETWEEN SW 2 ST & SW 32 ST PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

USE IE=21

Station(ft)	Elevation(ft)	Manning's N
0.000	26.500	0.050000
4.000	20.200	0.050000
12.000	20.200	0.050000
30.000	26.200	0.050000

Name: TPS-042+34 Group: SW 7 AVE
Encroachment: No

S INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENT 7) BETWEEN SW 2 & SW 32 ST PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

Station(ft)	Elevation(ft)	Manning's N
0.000	26.500	0.050000
9.000	21.100	0.050000
16.000	21.100	0.050000
28.000	26.200	0.050000

Name: TPS-043+70 Group: SW 7 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENT 7) BETWEEN SW 2 ST & SW 32 ST PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

USE IE=20.3

Station(ft)	Elevation(ft)	Manning's N
0.000	26.500	0.050000
9.000	21.100	0.050000
16.000	21.100	0.050000
28.000	26.200	0.050000

Name: TPS-044+00 Group: SW 7 AVE

Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENT 7) BETWEEN SW ST & SW 32 ST PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

USE IE=20.1

Station(ft)	Elevation(ft)	Manning's N
0.000	26.500	0.050000
9.000	21.100	0.050000
16.000	21.100	0.050000
28.000	26.200	0.050000

Name: TPS-045+52 Group: SW 7 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENT 7) BETWEEN SW 2 ST & SW 32 ST PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

USE IE= 18.9

Station(ft)	Elevation(ft)	Manning's N
0.000	26.500	0.050000
9.000	21.100	0.050000
16.000	21.100	0.050000
28.000	26.200	0.050000

Name: TPS-045+80 Group: SW 7 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENT 7) BETWEEN SW 2 ST & SW 32 ST PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

USE IE= 18.7

Station(ft)	Elevation(ft)	Manning's N
0.000	26.500	0.050000
9.000	21.100	0.050000
16.000	21.100	0.050000
28.000	26.200	0.050000

Name: TPS-046+40 Group: SW 7 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENT 7) BETWEEN SW 2 ST & SW 32 ST PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

USE IE= 19

Station(ft)	Elevation(ft)	Manning's N
0.000	26.500	0.050000
9.000	21.100	0.050000
16.000	21.100	0.050000
28.000	26.200	0.050000

Name: TPS-046+62 Group: SW 7 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENT 7) BETWEEN SW 2 ST & SW 32 ST PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

USE IE= 19.3

Station(ft)	Elevation(ft)	Manning's N
0.000	26.500	0.050000
9.000	21.100	0.050000
16.000	21.100	0.050000
28.000	26.200	0.050000

Name: TPS-047+70 Group: SW 7 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENT 7) BETWEEN SW 2 ST & SW 32 ST PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

Station(ft)	Elevation(ft)	Manning's N
0.000	22.600	0.050000
14.000	18.900	0.050000
15.000	18.700	0.050000
20.000	18.900	0.050000
28.000	23.700	0.050000

Name: TPS-048+72 Group: SW 7 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENT 7) BETWEEN SW 2 ST & SW 32 ST PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

Station(ft)	Elevation(ft)	Manning's N
0.000	26.300	0.050000
12.000	18.200	0.050000
16.000	18.300	0.050000
20.000	18.400	0.050000
30.000	23.400	0.050000

Name: TPS-054+16 Group: SW 7 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENT 7) BETWEEN SW 2 ST & SW 32 ST PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

Station(ft)	Elevation(ft)	Manning's N
0.000	22.200	0.050000
10.000	15.800	0.050000
20.000	15.800	0.050000
30.000	22.000	0.050000

Name: TPS-054+64 Group: SW 7 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENT 7) BETWEEN SW ST & SW 32 ST PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

USE IE=15.9

Station(ft)	Elevation(ft)	Manning's N
0.000	22.200	0.050000
10.000	15.800	0.050000
20.000	15.800	0.050000
30.000	22.000	0.050000

Name: TPS-055+42 Group: SW 7 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENT 7) BETWEEN SW 2 ST & SW 32 ST PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

USE IE= 16.8

Station(ft)	Elevation(ft)	Manning's N
0.000	22.200	0.050000
10.000	15.800	0.050000
20.000	15.800	0.050000

30.000	22.000	0.050000

Name: TPS-055+66 Group: SW 7 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENT 7) BETWEEN SW 2 ST & SW 32 ST PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

USE IE=17.2

Station(ft)	Elevation(ft)	Manning's N
0.000	22.200	0.050000
10.000	15.800	0.050000
20.000	15.800	0.050000
30.000	22.000	0.050000

Name: TPS-060+90 Group: SW 7 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENT 7) BETWEEN SW 2 ST & SW 32 ST PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

USE IE= 16.2

Station(ft)	Elevation(ft)	Manning's N
0.000	22.200	0.050000
10.000	15.800	0.050000
20.000	15.800	0.050000
30.000	22.000	0.050000

Name: TPS-061+34 Group: SW 7 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENT 7) BETWEEN SW 2 ST & SW 32 ST PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

USE IE= 16.2

Station(ft)	Elevation(ft)	Manning's N
0.000	22.200	0.050000
10.000	15.800	0.050000
20.000	15.800	0.050000
30.000	22.000	0.050000

Name: TPS-063+20 Group: SW 7 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENT 7) BETWEEN SW 2 ST & SW 32 ST PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

USE IE= 16.2

Station(ft)	Elevation(ft)	Manning's N
0.000	22.200	0.050000
10.000	15.800	0.050000
20.000	15.800	0.050000
30.000	22.000	0.050000

Name: TPS-063+70 Group: SW 7 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENT 7) BETWEEN SW 2 ST & SW 32 ST PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

USE IE= 16.3

Station(ft)	Elevation(ft)	Manning's N
0.000	22.200	0.050000
10.000	15.800	0.050000
20.000	15.800	0.050000
30.000	22.000	0.050000

Name: TPS-065+80 Group: SW 7 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENT 7) BETWEEN SW 2 ST & SW 32 ST PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

USE IE= 16.1

Station(ft)	Elevation(ft)	Manning's N
0.000	22.200	0.050000
10.000	15.800	0.050000
20.000	15.800	0.050000
30.000	22.000	0.050000

Name: TPS-069+50 Group: SW 7 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENT 7) BETWEEN SW 2 ST & SW 32 ST PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

Station(ft)	Elevation(ft)	Manning's N
0.000	20.400	0.050000
12.000	16.400	0.050000
14.000	14.500	0.050000
21.000	16.400	0.050000
32.000	21.600	0.050000

Name: TPS-069+86 Group: SW 7 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENT 7) BETWEEN SW 2 ST & SW 32 ST PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

Station(ft)	Elevation(ft)	Manning's N
0.000	20.400	0.050000
10.000	16.400	0.050000
20.000	14.500	0.050000
30.000	21.600	0.050000

Name: TPS-073+14 Group: SW 7 AVE
Encroachment: No

S INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENT 7) BETWEEN SW 2 & SW 32 ST PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

USE IE=15.8

Station(ft)	Elevation(ft)	Manning's N
0.000	20.400	0.050000
10.000	16.400	0.050000
20.000	14.500	0.050000
30.000	21.600	0.050000

Name: TPS-073+50 Group: SW 7 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENT 7) BETWEEN SW 2 ST & SW 32 ST PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

USE IE=16

Station(ft)	Elevation(ft)	Manning's N
0.000	20.400	0.050000
10.000	16.400	0.050000
20.000	14.500	0.050000
30.000	21.600	0.050000

Name: TPS-081+42 Group: SW 7 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENT 7) BETWEEN SW ST & SW 32 ST PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

Station(ft)	Elevation(ft)	Manning's N
0.000	19.400	0.050000
16.000	14.600	0.050000
17.000	14.500	0.050000
26.000	14.600	0.050000
34.000	21.800	0.050000

Name: TPS-082+22 Group: SW 7 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENT 7) BETWEEN SW 2 ST & SW 32 ST PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

Station(ft)	Elevation(ft)	Manning's N
0.000	19.400	0.050000
16.000	14.600	0.050000
17.000	14.500	0.050000
26.000	14.600	0.050000
34.000	21.800	0.050000

Name: TPS-087+52 Group: SW 7 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENT 7) BETWEEN SW 2 ST & SW 32 ST PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

Station(ft)	Elevation(ft)	Manning's N
0.000	20.400	0.050000
18.000	14.900	0.050000
24.000	14.400	0.050000
28.000	15.100	0.050000
38.000	20.600	0.050000

Name: TPS-100+64 Group: SW 7 AVE
Encroachment: No

THIS INFORMATION WAS TAKEN FROM TRADEWINDS PROFESSIONAL SERVICES (TPS) SURVEY (SEGMENT 7) BETWEEN SW 2 ST & SW 32 ST PROVIDED BY SFWMD. TOP OF BANK DATA WAS NOT AVAILABLE @ ALL DESIRED POINTS AND WERE THEREFORE ESTIMATED BASED ON EITHER UPSTREAM/DOWNSTREAM AVAILABLE CROSS SECTION DATA.

Station(ft)	Elevation(ft)	Manning's N
0.000	18.100	0.050000
8.000	12.400	0.050000
14.000	11.900	0.050000
18.000	13.700	0.050000
34.000	19.500	0.050000

==== Operating Tables ====

Name: 100 CFS PUMP Group: SW 26 AVE
Type: Rating Curve
Function: Time vs. Discharge

Time(hrs)	Discharge(cfs)
0.00	100.00
300.00	100.00

Name: 50 CFS PUMP Group: SW 26 AVE
Type: Rating Curve
Function: Time vs. Discharge

Time(hrs)	Discharge(cfs)
0.00	50.00
300.00	50.00

Name: OAKPARK_PS Group: SW 32 AVE
Type: Rating Curve
Function: Time vs. Discharge

Time(hrs)	Discharge(cfs)
0.00	2.67
250.00	2.67

Name: SFWMD_SWTF1 Group: SW 26 AVE
Type: Rating Curve
Function: Family of Tailwater-Headwater-Discharge Relationships

Tailwater(ft)	Headwater(ft)	Discharge(cfs)
13.500	8.00	0.00
13.500	13.50	0.00
13.500	13.60	0.00
13.500	13.60	30.00
13.500	18.51	30.00

==== Pipes ==========

Name: 16_N08_N07A
Group: SW 16/12 AVE
From Node: 16N08
To Node: 16N07
Length(ft): 30.00
Count: 1
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: None
Entrance Loss Coef: 0.75
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	54.00	54.00
Rise(in):	54.00	54.00
Invert(ft):	14.800	14.700
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

PIPE IS REPLACED W/NEW CHANNEL SECTION

Name: 16_N08_N07B
Group: SW 16/12 AVE
From Node: 16N08
To Node: 16N07
Length(ft): 30.00
Count: 1
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: None
Entrance Loss Coef: 0.75
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	24.00	24.00
Rise(in):	24.00	24.00
Invert(ft):	17.700	18.000
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

PIPE IS REPLACED W/NEW CHANNEL SECTION

Name: 16_N23_n22
Group: SW 16/12 AVE
From Node: 16N23
To Node: 16N22
Length(ft): 50.00
Count: 1
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.75
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	54.00	54.00
Rise(in):	54.00	54.00
Invert(ft):	19.900	19.900
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
:cular CMP: Projecting

Name: 16_N29_N28 From Node: 16N29 Length(ft): 42.00
Group: SW 16/12 AVE To Node: 16N28 Count: 1
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.75
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	54.00	54.00
Rise(in):	54.00	54.00
Invert(ft):	21.500	21.400
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Name: 16_N31_N32 From Node: 16N31 Length(ft): 42.00
Group: SW 16/12 AVE To Node: 16N30 Count: 1
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.75
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	54.00	54.00
Rise(in):	54.00	54.00
Invert(ft):	22.500	22.600
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Name: 16_N34_N33 From Node: 16N34B Length(ft): 30.00
Group: SW 16/12 AVE To Node: 16N33 Count: 1
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.75
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	54.00	54.00
Rise(in):	54.00	54.00
Invert(ft):	24.100	24.100
Manning's N:	0.024000	0.024000
p Clip(in):	0.000	0.000
ot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name: 16_N35_N34 From Node: 16N35 Length(ft): 22.00
Group: SW 16/12 AVE To Node: 16N34A Count: 1
Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.75
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	48.00	48.00
Rise(in):	48.00	48.00
Invert(ft):	25.600	25.200
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name: 16_N36_N35 From Node: 16N36 Length(ft): 20.00
Group: SW 16/12 AVE To Node: 16N35 Count: 2
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.75
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	48.00	48.00
Rise(in):	48.00	48.00
Invert(ft):	24.900	26.200
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name: 16_N39_N38 From Node: 16N39 Length(ft): 100.00
Group: SW 16/12 AVE To Node: 16N38 Count: 1
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.75
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	60.00	60.00
Rise(in):	60.00	60.00
Invert(ft):	25.400	25.400

Manning's N:	0.024000	0.024000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
t Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Name:	16_N46_N45	From Node: 16N46	Length(ft):	40.00
Group:	SW 16/12 AVE	To Node: 16N45	Count:	1
			Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Automatic
Geometry:	Circular	Circular	Flow:	Both
Span(in):	36.00	36.00	Entrance Loss Coef:	0.75
Rise(in):	36.00	36.00	Exit Loss Coef:	0.00
Invert(ft):	26.300	26.300	Bend Loss Coef:	0.00
Manning's N:	0.024000	0.024000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

nstream FHWA Inlet Edge Description:
rcular CMP: Projecting

Name:	16_SW3ST_60	From Node: 16N34A	Length(ft):	40.00
Group:	SW 16/12 AVE	To Node: 16N34B	Count:	1
			Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Automatic
Geometry:	Circular	Circular	Flow:	Both
Span(in):	60.00	60.00	Entrance Loss Coef:	0.75
Rise(in):	60.00	60.00	Exit Loss Coef:	0.00
Invert(ft):	24.500	24.600	Bend Loss Coef:	0.00
Manning's N:	0.024000	0.024000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

LENGTH & US INVERT ASSUMED

Name:	16E_18 PVC1	From Node: N103	Length(ft):	30.00
Group:	SW 16/12 AVE	To Node: 16N10	Count:	1
			Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Automatic

Geometry:	Circular	Circular
Span(in):	18.00	18.00
Rise(in):	18.00	18.00
Invert(ft):	19.200	19.200
Manning's N:	0.012000	0.012000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Flow: None
Entrance Loss Coef: 0.75
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

LENGTH & US INVERT ASSUMED

LINK TURNED OFF IN PROPOSED CONDITION AND REPLACED WITH ADDITION OF LAKE & CONTROL STRUCTURE

Name: 16E_18PVC2 From Node: N103 Length(ft): 40.00
Group: SW 16/12 AVE To Node: 16N08 Count: 1
Friction Equation: Automatic
Solution Algorithm: Automatic

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	18.00	18.00
Rise(in):	18.00	18.00
Invert(ft):	17.900	17.100
Manning's N:	0.012000	0.012000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Flow: None
Entrance Loss Coef: 0.75
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

LINK TURNED OFF IN PROPOSED CONDITION AND REPLACED WITH ADDITION OF LAKE & CONTROL STRUCTURE

Name: 26_SW16ST_42 From Node: N124 Length(ft): 50.00
Group: SW 26 AVE To Node: 26N28 Count: 1
Friction Equation: Average Conveyance
Solution Algorithm: Automatic

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	42.00	42.00
Rise(in):	42.00	42.00
Invert(ft):	17.820	17.780
Manning's N:	0.012000	0.012000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Flow: Both
Entrance Loss Coef: 0.75
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name: 26_SW28ST_2-42 From Node: 26N21 Length(ft): 45.00
Group: SW 26 AVE To Node: 26N20 Count: 2
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.75
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	42.00	42.00
Rise(in):	42.00	42.00
Invert(ft):	15.000	15.000
Manning's N:	0.012000	0.012000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name: 26N10_N09_6X7.5 From Node: 26N10 Length(ft): 64.00
Group: SW 26 AVE To Node: 26N09 Count: 1
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.75
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Horz Ellipse	Horz Ellipse
Span(in):	90.00	90.00
Rise(in):	72.00	72.00
Invert(ft):	8.200	8.500
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Elliptical Inlet Face: Tapered inlet-thin edge projecting

Downstream FHWA Inlet Edge Description:
Elliptical Inlet Face: Tapered inlet-thin edge projecting

Name: 26N13_N12_6X7.5 From Node: 26N13 Length(ft): 50.00
Group: SW 26 AVE To Node: 26N12 Count: 1
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.75
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Horz Ellipse	Horz Ellipse
Span(in):	90.00	90.00
Rise(in):	72.00	72.00
Invert(ft):	7.700	9.200
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Horizontal Ellipse Concrete: Square edge with headwall

Downstream FHWA Inlet Edge Description:
Horizontal Ellipse Concrete: Square edge with headwall

Name: 26N15_N14_6X7.5 From Node: 26N15 Length(ft): 50.00
Group: SW 26 AVE To Node: 26N14 Count: 1
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.75
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Horz Ellipse	Horz Ellipse
Span(in):	90.00	90.00
Rise(in):	72.00	72.00
Invert(ft):	12.500	12.500
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Horizontal Ellipse Concrete: Square edge with headwall

Downstream FHWA Inlet Edge Description:
Horizontal Ellipse Concrete: Square edge with headwall

Name: 32_N123_32N26 From Node: N123 Length(ft): 40.00
Group: SW 32 AVE To Node: 32N25 Count: 1
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.75
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	18.00	18.00
Rise(in):	18.00	18.00
Invert(ft):	23.000	23.000
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

NEEDS VERFICATION

Name: 32_N126_32N24 From Node: N126 Length(ft): 50.00
Group: SW 32 AVE To Node: 32N24 Count: 1
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.75
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	18.00	18.00
Rise(in):	18.00	18.00
Invert(ft):	23.000	23.000
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

tream FHWA Inlet Edge Description:
ircular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Name:	32_SW13ST_24	From Node:	N125	Length(ft):	50.00
Group:	SW 32 AVE	To Node:	N126	Count:	1
				Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Automatic
Geometry:	Circular	Circular		Flow:	Both
Span(in):	24.00	24.00		Entrance Loss Coef:	0.75
Rise(in):	24.00	24.00		Exit Loss Coef:	0.00
Invert(ft):	22.000	22.000		Bend Loss Coef:	0.00
Manning's N:	0.024000	0.024000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Name:	32_SW13ST_3BC	From Node:	32N26	Length(ft):	37.00
Group:	SW 32 AVE	To Node:	32N25	Count:	3
				Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Automatic
Geometry:	Rectangular	Rectangular		Flow:	Both
Span(in):	128.40	128.40		Entrance Loss Coef:	0.75
Rise(in):	60.00	60.00		Exit Loss Coef:	0.00
Invert(ft):	17.920	17.920		Bend Loss Coef:	0.00
Manning's N:	0.013000	0.013000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Rectangular Box: 0° wingwall flares

Downstream FHWA Inlet Edge Description:
Rectangular Box: 0° wingwall flares

TRIPLEX BOX CULVERT AVERAGING 128.4" IN WIDTH.

Name:	32_SW28_TW12X7	From Node:	32N14	Length(ft):	41.00
Group:	SW 32 AVE	To Node:	32N13	Count:	2
				Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Automatic
Geometry:	Rectangular	Rectangular		Flow:	Both
Span(in):	144.00	144.00		Entrance Loss Coef:	0.75
Rise(in):	84.00	84.00		Exit Loss Coef:	0.00
Invert(ft):	11.200	11.200		Bend Loss Coef:	0.00

Manning's N:	0.013000	0.013000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Rectangular Box: 0° wingwall flares

Downstream FHWA Inlet Edge Description:
Rectangular Box: 0° wingwall flares

Name:	32N03_32N02	From Node: 32N03	Length(ft): 45.00
Group:	SW 32 AVE	To Node: 32N02	Count: 1
			Friction Equation: Average Conveyance
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Automatic
Geometry:	Circular	Circular	Flow: Both
Span(in):	42.00	42.00	Entrance Loss Coef: 0.75
Rise(in):	42.00	42.00	Exit Loss Coef: 0.00
Invert(ft):	9.580	10.060	Bend Loss Coef: 0.00
Manning's N:	0.024000	0.024000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Name:	32N12_32N11_48	From Node: 32N12	Length(ft): 45.00
Group:	SW 32 AVE	To Node: 32N11	Count: 1
			Friction Equation: Average Conveyance
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Automatic
Geometry:	Circular	Circular	Flow: Both
Span(in):	42.00	42.00	Entrance Loss Coef: 0.75
Rise(in):	42.00	42.00	Exit Loss Coef: 0.00
Invert(ft):	11.000	11.000	Bend Loss Coef: 0.00
Manning's N:	0.024000	0.024000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Name:	7MH01_7N63	From Node: 7MH01	Length(ft): 40.00
Group:	SW 7 AVE	To Node: 7N63	Count: 1
			Friction Equation: Average Conveyance
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Automatic

Geometry:	Circular	Circular
Span(in):	36.00	36.00
Rise(in):	36.00	36.00
Invert(ft):	24.800	24.800
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Flow: Both
Entrance Loss Coef: 0.50
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Name: 7N14_7N13 From Node: 7N14 Length(ft): 82.00
Group: SW 7 AVE To Node: 7N13 Count: 2
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: None
Entrance Loss Coef: 0.50
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Horz Ellipse	Horz Ellipse
Span(in):	52.00	52.00
Rise(in):	32.00	32.00
Invert(ft):	15.600	15.600
Manning's N:	0.013000	0.013000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Horizontal Ellipse Concrete: Square edge with headwall

Downstream FHWA Inlet Edge Description:
Horizontal Ellipse Concrete: Square edge with headwall

LINK TURNED OFF AND REPLACED W/4 X7 BOX CULVERT

Name: 7N16_7N15 From Node: 7N16 Length(ft): 35.00
Group: SW 7 AVE To Node: 7N15 Count: 1
Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: None
Entrance Loss Coef: 0.50
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	48.00	48.00
Rise(in):	48.00	48.00
Invert(ft):	15.600	16.000
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

K TURNED OFF AND REPLACED W/4 X7 BOX CULVERT

Name: 7N18_7N17 From Node: 7N18 Length(ft): 32.00
Group: SW 7 AVE To Node: 7N17 Count: 1
Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: None
Entrance Loss Coef: 0.50
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	48.00	48.00
Rise(in):	48.00	48.00
Invert(ft):	15.500	15.700
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

LINK TURNED OFF AND REPLACED W/4 X7 BOX CULVERT

Name: 7N20_7N19 From Node: 7N20 Length(ft): 32.00
Group: SW 7 AVE To Node: 7N19 Count: 1
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: None
Entrance Loss Coef: 0.50
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	48.00	48.00
Rise(in):	48.00	48.00
Invert(ft):	16.100	16.600
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

LINK TURNED OFF AND REPLACED W/4 X7 BOX CULVERT

Name: 7N22_7N21 From Node: 7N22 Length(ft): 32.00
Group: SW 7 AVE To Node: 7N21 Count: 1
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: None
Entrance Loss Coef: 0.50
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	48.00	48.00
Rise(in):	48.00	48.00
Invert(ft):	16.200	16.300
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

LINK TURNED OFF AND REPLACED W/4 X7 BOX CULVERT

Name:	7N24_7N23	From Node:	7N24	Length(ft):	32.00
Group:	SW 7 AVE	To Node:	7N23	Count:	1
				Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Automatic
Geometry:	Circular	Circular		Flow:	None
Span(in):	48.00	48.00		Entrance Loss Coef:	0.50
Rise(in):	48.00	48.00		Exit Loss Coef:	0.00
Invert(ft):	16.200	16.200		Bend Loss Coef:	0.00
Manning's N:	0.024000	0.024000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

LINK TURNED OFF AND REPLACED W/4 X7 BOX CULVERT

Name:	7N26_7N25	From Node:	7N26	Length(ft):	18.00
Group:	SW 7 AVE	To Node:	7N25	Count:	1
				Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Automatic
Geometry:	Circular	Circular		Flow:	None
Span(in):	56.00	56.00		Entrance Loss Coef:	0.50
Rise(in):	56.00	56.00		Exit Loss Coef:	0.00
Invert(ft):	16.800	17.200		Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

D.I.P.
LINK TURNED OFF AND REPLACED W/4 X7 BOX CULVERT

Name:	7N28_7N27	From Node:	7N28	Length(ft):	44.00
Group:	SW 7 AVE	To Node:	7N27	Count:	1
				Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Automatic
Geometry:	Circular	Circular		Flow:	None
Span(in):	48.00	48.00		Entrance Loss Coef:	0.50
Rise(in):	48.00	48.00		Exit Loss Coef:	0.00
Invert(ft):	15.800	15.900		Bend Loss Coef:	0.00
Manning's N:	0.024000	0.024000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

LINK TURNED OFF AND REPLACED W/4 X7 BOX CULVERT

Name:	7N32_7N31	From Node:	7N32	Length(ft): 20.00
Group:	SW 7 AVE	To Node:	7N31	Count: 1
				Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm: Automatic
Geometry:	Circular	Circular		Flow: Both
Span(in):	48.00	48.00		Entrance Loss Coef: 0.50
Rise(in):	48.00	48.00		Exit Loss Coef: 0.00
Invert(ft):	17.700	17.700		Bend Loss Coef: 0.00
Manning's N:	0.024000	0.024000		Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

LOWERED PIPE INVERTS @ SLOPE OF 0.0036 FT/FT BETWEEN NODES 7N30 & 7N49.

Name:	7N34_7N33	From Node:	7N34	Length(ft): 20.00
Group:	SW 7 AVE	To Node:	7N33	Count: 1
				Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm: Automatic
Geometry:	Circular	Circular		Flow: Both
Span(in):	48.00	48.00		Entrance Loss Coef: 0.50
Rise(in):	48.00	48.00		Exit Loss Coef: 0.00
Invert(ft):	18.000	18.000		Bend Loss Coef: 0.00
Manning's N:	0.024000	0.024000		Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

LOWERED PIPE INVERTS @ SLOPE OF 0.0036 FT/FT BETWEEN NODES 7N30 & 7N49.

Name:	7N36_7N35	From Node:	7N36	Length(ft): 22.00
Group:	SW 7 AVE	To Node:	7N35	Count: 1
				Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm: Automatic
Geometry:	Circular	Circular		Flow: Both
Span(in):	48.00	48.00		Entrance Loss Coef: 0.50
Rise(in):	48.00	48.00		Exit Loss Coef: 0.00
Invert(ft):	18.700	18.700		Bend Loss Coef: 0.00
Manning's N:	0.024000	0.024000		Outlet Ctrl Spec: Use dc or tw

Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

LOWERED PIPE INVERTS @ SLOPE OF 0.0036 FT/FT BETWEEN NODES 7N30 & 7N49.

Name:	7N38_7N37	From Node: 7N38	Length(ft): 40.00
Group:	SW 7 AVE	To Node: 7N37	Count: 1
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Automatic
Geometry:	Circular	Circular	Flow: Both
Span(in):	48.00	48.00	Entrance Loss Coef: 0.50
Rise(in):	48.00	48.00	Exit Loss Coef: 0.00
Invert(ft):	19.300	19.200	Bend Loss Coef: 0.00
Manning's N:	0.024000	0.024000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

LOWERED PIPE INVERTS @ SLOPE OF 0.0036 FT/FT BETWEEN NODES 7N30 & 7N49.

Name:	7N40_7N39	From Node: 7N40	Length(ft): 22.00
Group:	SW 7 AVE	To Node: 7N39	Count: 1
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Automatic
Geometry:	Circular	Circular	Flow: Both
Span(in):	48.00	48.00	Entrance Loss Coef: 0.75
Rise(in):	48.00	48.00	Exit Loss Coef: 0.00
Invert(ft):	19.600	19.500	Bend Loss Coef: 0.00
Manning's N:	0.024000	0.024000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

LOWERED PIPE INVERTS @ SLOPE OF 0.0036 FT/FT BETWEEN NODES 7N30 & 7N49.

Name:	7N42_7N41	From Node: 7N42	Length(ft): 20.00
Group:	SW 7 AVE	To Node: 7N41	Count: 1
			Friction Equation: Average Conveyance
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Automatic
Geometry:	Circular	Circular	Flow: Both

Span(in):	48.00	48.00	Entrance Loss Coef:	0.50
Rise(in):	48.00	48.00	Exit Loss Coef:	0.00
Invert(ft):	19.800	19.800	Bend Loss Coef:	0.00
Manning's N:	0.024000	0.024000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

LOWERED PIPE INVERTS @ SLOPE OF 0.0036 FT/FT BETWEEN NODES 7N30 & 7N49.

Name:	7N44_7N43	From Node: 7N44	Length(ft):	22.00
Group:	SW 7 AVE	To Node: 7N43	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Automatic
Geometry:	Circular	Circular	Flow:	Both
Span(in):	48.00	48.00	Entrance Loss Coef:	0.50
Rise(in):	48.00	48.00	Exit Loss Coef:	0.00
Invert(ft):	20.200	20.100	Bend Loss Coef:	0.00
Manning's N:	0.024000	0.024000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

LOWERED PIPE INVERTS @ SLOPE OF 0.0036 FT/FT BETWEEN NODES 7N30 & 7N49.

Name:	7N46_7N45	From Node: 7N46	Length(ft):	22.00
Group:	SW 7 AVE	To Node: 7N45	Count:	1
			Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Automatic
Geometry:	Circular	Circular	Flow:	Both
Span(in):	48.00	48.00	Entrance Loss Coef:	0.50
Rise(in):	48.00	48.00	Exit Loss Coef:	0.00
Invert(ft):	20.700	20.600	Bend Loss Coef:	0.00
Manning's N:	0.024000	0.024000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

LOWERED PIPE INVERTS @ SLOPE OF 0.0036 FT/FT BETWEEN NODES 7N30 & 7N49.

Name: 7N48_7N47 From Node: 7N48 Length(ft): 20.00

Group: SW 7 AVE To Node: 7N47 Count: 1
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.50
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	48.00	48.00
Rise(in):	48.00	48.00
Invert(ft):	21.400	21.400
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

LOWERED PIPE INVERTS @ SLOPE OF 0.0036 FT/FT BETWEEN NODES 7N30 & 7N49.

Name: 7N50_7N49 From Node: 7N50 Length(ft): 20.00
Group: SW 7 AVE To Node: 7N49 Count: 1
Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.50
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	48.00	48.00
Rise(in):	48.00	48.00
Invert(ft):	22.200	22.600
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000
t Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Name: 7N52_7N51 From Node: 7N52 Length(ft): 20.00
Group: SW 7 AVE To Node: 7N51 Count: 1
Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.50
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	48.00	48.00
Rise(in):	48.00	48.00
Invert(ft):	23.400	23.100
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

nstream FHWA Inlet Edge Description:
cular CMP: Projecting

Name:	7N58_7N57	From Node:	7N58	Length(ft):	20.00
Group:	SW 7 AVE	To Node:	7N57	Count:	1
				Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Automatic
Geometry:	Circular	Circular		Flow:	Both
Span(in):	48.00	48.00		Entrance Loss Coef:	0.50
Rise(in):	48.00	48.00		Exit Loss Coef:	0.00
Invert(ft):	23.800	23.600		Bend Loss Coef:	0.00
Manning's N:	0.024000	0.024000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Name:	7N62_7N61	From Node:	7N62	Length(ft):	30.00
Group:	SW 7 AVE	To Node:	7N61	Count:	1
				Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Automatic
Geometry:	Circular	Circular		Flow:	Both
Span(in):	48.00	48.00		Entrance Loss Coef:	0.50
Rise(in):	48.00	48.00		Exit Loss Coef:	0.00
Invert(ft):	24.200	24.200		Bend Loss Coef:	0.00
Manning's N:	0.024000	0.024000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Name:	7N64_7N63	From Node:	7N64	Length(ft):	20.00
Group:	SW 7 AVE	To Node:	7MH01	Count:	1
				Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Automatic
Geometry:	Circular	Circular		Flow:	Both
Span(in):	36.00	36.00		Entrance Loss Coef:	0.50
Rise(in):	36.00	36.00		Exit Loss Coef:	0.00
Invert(ft):	23.900	23.800		Bend Loss Coef:	0.00
Manning's N:	0.024000	0.024000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Name:	7N68_7N67	From Node:	7N68	Length(ft):	34.00
Group:	SW 7 AVE	To Node:	7N67	Count:	1
				Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Automatic
Geometry:	Circular	Circular		Flow:	Both
Span(in):	24.00	24.00		Entrance Loss Coef:	0.50
Rise(in):	24.00	24.00		Exit Loss Coef:	0.00
Invert(ft):	25.100	24.600		Bend Loss Coef:	0.00
Manning's N:	0.024000	0.024000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Name:	7N70_7N69	From Node:	7N70	Length(ft):	56.00
Group:	SW 7 AVE	To Node:	7N69	Count:	1
				Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Automatic
Geometry:	Circular	Circular		Flow:	Both
Span(in):	24.00	24.00		Entrance Loss Coef:	0.50
Rise(in):	24.00	24.00		Exit Loss Coef:	0.00
Invert(ft):	25.300	25.200		Bend Loss Coef:	0.00
Manning's N:	0.024000	0.024000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Name:	7N72_7N71	From Node:	7N72	Length(ft):	42.00
Group:	SW 7 AVE	To Node:	7N71	Count:	1
				Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Automatic
Geometry:	Circular	Circular		Flow:	Both
Span(in):	24.00	24.00		Entrance Loss Coef:	0.50
Rise(in):	24.00	24.00		Exit Loss Coef:	0.00
Invert(ft):	25.300	25.300		Bend Loss Coef:	0.00
Manning's N:	0.024000	0.024000		Outlet Ctrl Spec:	Use dc or tw
p Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
ot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Name: 7N74_7N73 From Node: 7N74 Length(ft): 40.00
Group: SW 7 AVE To Node: 7N73 Count: 1
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.50
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	24.00	24.00
Rise(in):	24.00	24.00
Invert(ft):	26.400	26.000
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Name: 7N76_7N75 From Node: 7N76 Length(ft): 40.00
Group: SW 7 AVE To Node: 7N75 Count: 1
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.50
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	24.00	24.00
Rise(in):	24.00	24.00
Invert(ft):	26.800	26.700
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Name: COWEN D/W_48 From Node: 32N20 Length(ft): 45.00
Group: SW 32 AVE To Node: 32N19 Count: 1
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.75
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	48.00	48.00
Rise(in):	48.00	48.00
Invert(ft):	13.030	12.280

Manning's N:	0.024000	0.024000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Name: N&S_SW4ST_2-18 From Node: N101 Length(ft): 30.00
Group: SW 16/12 AVE To Node: 16N32 Count: 2
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.75
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	18.00	18.00
Rise(in):	18.00	18.00
Invert(ft):	27.700	27.700
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

LENGTH & US INVERT ASSUMED

Name: N&S_SW5ST_2-18 From Node: N101 Length(ft): 30.00
Group: SW 16/12 AVE To Node: 16N31 Count: 2
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.75
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	18.00	18.00
Rise(in):	18.00	18.00
Invert(ft):	26.000	26.000
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

LENGTH & US INVERT ASSUMED

Name: N&S_SW8CT_2-18 From Node: N101 Length(ft): 30.00
Group: SW 16/12 AVE To Node: 16N24 Count: 2
Friction Equation: Average Conveyance
Solution Algorithm: Automatic

UPSTREAM DOWNSTREAM

Geometry:	Circular	Circular
Span(in):	18.00	18.00
Rise(in):	18.00	18.00
Invert(ft):	25.900	25.900
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Flow:	Both
Entrance Loss Coef:	0.75
Exit Loss Coef:	0.00
Bend Loss Coef:	0.00
Outlet Ctrl Spec:	Use dc or tw
Inlet Ctrl Spec:	Use dn
Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Name: N002-CN001 From Node: N002 Length(ft): 65.00
Group: SW 7 AVE To Node: CN001 Count: 1
Friction Equation: Automatic
Solution Algorithm: Automatic

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	24.00	24.00
Rise(in):	24.00	24.00
Invert(ft):	16.870	17.170
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Flow:	None
Entrance Loss Coef:	0.75
Exit Loss Coef:	0.00
Bend Loss Coef:	0.00
Outlet Ctrl Spec:	Use dc or tw
Inlet Ctrl Spec:	Use dn
Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

LINK TURNED OFF AND IS REPLACED W/NEW STORMWATER COLLECTION SYSTEM FOR SW 28 ST, SW 32 ST, AND SW 3 TER

Name: N006-WIDDEN From Node: N006 Length(ft): 35.00
Group: SW 7 AVE To Node: 7N11 Count: 1
Friction Equation: Automatic
Solution Algorithm: Automatic

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	18.00	18.00
Rise(in):	18.00	18.00
Invert(ft):	17.400	17.130
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Flow:	None
Entrance Loss Coef:	0.75
Exit Loss Coef:	1.00
Bend Loss Coef:	0.00
Outlet Ctrl Spec:	Use dc or tw
Inlet Ctrl Spec:	Use dn
Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

LINK TURNED OFF AND IS REPLACED W/NEW STORMWATER COLLECTION SYSTEM FOR SW 28 ST, SW 32 ST, AND SW 3 TER

Name:	N01-WIDDEN	From Node: N001	Length(ft): 74.00
Group:	SW 7 AVE	To Node: 7N12	Count: 1
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Automatic
Geometry:	Circular	Circular	Flow: None
Span(in):	36.00	36.00	Entrance Loss Coef: 0.75
Rise(in):	36.00	36.00	Exit Loss Coef: 0.00
Invert(ft):	16.910	16.130	Bend Loss Coef: 0.00
Manning's N:	0.024000	0.024000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

LINK TURNED OFF AND IS REPLACED W/NEW STORMWATER COLLECTION SYSTEM FOR SW 28 ST, SW 32 ST, AND SW 3 TER

Name:	N03-CN02	From Node: N003	Length(ft): 50.00
Group:	SW 7 AVE	To Node: CN002	Count: 1
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Automatic
Geometry:	Circular	Circular	Flow: None
Span(in):	24.00	24.00	Entrance Loss Coef: 0.75
Rise(in):	24.00	24.00	Exit Loss Coef: 0.00
Invert(ft):	17.390	17.010	Bend Loss Coef: 0.00
Manning's N:	0.024000	0.024000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

LINK TURNED OFF AND IS REPLACED W/NEW STORMWATER COLLECTION SYSTEM FOR SW 28 ST, SW 32 ST, AND SW 3 TER

Name:	N04-CN03	From Node: N004	Length(ft): 50.00
Group:	SW 7 AVE	To Node: CN003	Count: 1
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Automatic
Geometry:	Circular	Circular	Flow: None
Span(in):	24.00	24.00	Entrance Loss Coef: 0.75
Rise(in):	24.00	24.00	Exit Loss Coef: 0.00
Invert(ft):	17.200	17.590	Bend Loss Coef: 0.00
Manning's N:	0.024000	0.024000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:

Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

LINK TURNED OFF AND IS REPLACED W/NEW STORMWATER COLLECTION SYSTEM FOR SW 28 ST, SW 32 ST, AND SW 3 TER

Name:	N05-CN04A	From Node:	N005	Length(ft):	72.00
Group:	SW 7 AVE	To Node:	CN004	Count:	1
				Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Automatic
Geometry:	Circular	Circular		Flow:	None
Span(in):	18.00	18.00		Entrance Loss Coef:	0.75
Rise(in):	18.00	18.00		Exit Loss Coef:	0.00
Invert(ft):	17.970	18.030		Bend Loss Coef:	0.00
Manning's N:	0.024000	0.024000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

LINK TURNED OFF AND IS REPLACED W/NEW STORMWATER COLLECTION SYSTEM FOR SW 28 ST, SW 32 ST, AND SW 3 TER
SW 3 AVE CULVERT CROSSING

Name:	N07-CN06	From Node:	N007	Length(ft):	48.00
Group:	SW 7 AVE	To Node:	CN006	Count:	1
				Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Automatic
Geometry:	Circular	Circular		Flow:	None
Span(in):	18.00	18.00		Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00		Exit Loss Coef:	0.00
Invert(ft):	17.220	17.330		Bend Loss Coef:	0.00
Manning's N:	0.024000	0.024000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular CMP: Headwall

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

LINK TURNED OFF AND IS REPLACED W/NEW STORMWATER COLLECTION SYSTEM FOR SW 28 ST, SW 32 ST, AND SW 3 TER

Name:	N08-CN08	From Node:	N008	Length(ft):	75.00
Group:	SW 7 AVE	To Node:	CN008	Count:	1
				Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Automatic
Geometry:	Circular	Circular		Flow:	None
Span(in):	30.00	30.00		Entrance Loss Coef:	0.75
Rise(in):	30.00	30.00		Exit Loss Coef:	0.00

Invert(ft):	17.680	17.560	Bend Loss Coef: 0.00
Manning's N:	0.024000	0.024000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular CMP: Mitered to slope

Downstream FHWA Inlet Edge Description:
Circular CMP: Mitered to slope

LINK TURNED OFF AND IS REPLACED W/NEW STORMWATER COLLECTION SYSTEM FOR SW 28 ST, SW 32 ST, AND SW 3 TER

Name: N09-CN09 | From Node: N009 | Length(ft): 22.00
Group: SW 7 AVE | To Node: CN009 | Count: 1
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: None
Entrance Loss Coef: 0.00
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	12.00	12.00
Rise(in):	12.00	12.00
Invert(ft):	20.660	20.310
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Circular CMP: Mitered to slope

Downstream FHWA Inlet Edge Description:
Circular CMP: Mitered to slope

LINK TURNED OFF AND IS REPLACED W/NEW STORMWATER COLLECTION SYSTEM FOR SW 28 ST, SW 32 ST, AND SW 3 TER

Name: N10-CN10 | From Node: N010 | Length(ft): 98.00
Group: SW 7 AVE | To Node: CN010 | Count: 1
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: None
Entrance Loss Coef: 0.75
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	18.00	18.00
Rise(in):	18.00	18.00
Invert(ft):	19.420	19.460
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Circular CMP: Mitered to slope

Downstream FHWA Inlet Edge Description:
Circular CMP: Mitered to slope

SW 3RD TERRACE CROSSING
LINK TURNED OFF AND IS REPLACED W/NEW STORMWATER COLLECTION SYSTEM FOR SW 28 ST, SW 32 ST, AND SW 3 TER

Name: N105_7N10 From Node: N105 Length(ft): 16.00
Group: SW 7 AVE To Node: 7N10 Count: 1
Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.75
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	18.00	18.00
Rise(in):	18.00	18.00
Invert(ft):	16.300	15.800
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Name: N11-WIDDEN From Node: N011 Length(ft): 80.00
Group: SW 7 AVE To Node: 7N10 Count: 1
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: None
Entrance Loss Coef: 0.50
Exit Loss Coef: 1.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	36.00	36.00
Rise(in):	36.00	36.00
Invert(ft):	15.250	15.520
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

LINK TURNED OFF AND IS REPLACED W/NEW STORMWATER COLLECTION SYSTEM FOR SW 28 ST, SW 32 ST, AND SW 3 TER

Name: N113_16N01 From Node: N113 Length(ft): 74.00
Group: SW 16/12 AVE To Node: 16N01 Count: 1
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.75
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	36.00	36.00
Rise(in):	36.00	36.00
Invert(ft):	12.100	11.500
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

EXISTING CULVERT WHERE 16 AVE DITCH BEGINS TO GO THE WEST

Name:	N114_18CMP	From Node:	N114	Length(ft): 15.00
Group:	SW 7 AVE	To Node:	7N05	Count: 1
				Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm: Automatic
Geometry:	Circular	Circular		Flow: Both
Span(in):	18.00	18.00		Entrance Loss Coef: 0.75
Rise(in):	18.00	18.00		Exit Loss Coef: 0.00
Invert(ft):	17.640	16.830		Bend Loss Coef: 0.00
Manning's N:	0.024000	0.024000		Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

PIPE FROM RV SITE; PUMP HOUSE EXISTING BUT NO RECORD OF PUMP INFO AVAILABLE-ASSUME FOR IRRIGATION USE

Name:	N116_TC	From Node:	N116	Length(ft): 250.00
Group:	SW 16/12 AVE	To Node:	N116_TC	Count: 1
				Friction Equation: Average Conveyance
	UPSTREAM	DOWNSTREAM		Solution Algorithm: Automatic
Geometry:	Circular	Circular		Flow: Both
Span(in):	30.00	30.00		Entrance Loss Coef: 0.75
Rise(in):	30.00	30.00		Exit Loss Coef: 0.00
Invert(ft):	29.000	27.000		Bend Loss Coef: 0.00
Manning's N:	0.024000	0.024000		Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

NW 7 STREET SYSTEM ASSUMED TO DISCHARGE TO THE EAST TO TAYLOR CREEK AS WELL AS TO THE WEST TO 16/12 AVE DITCH; HOWEVER, NO TOPO OF NW 7 ST DITCH AVAILBALE TO ACCURATELY VERIFY TRUE DIRECTION OF FLOW AT THIS TIME.

Name:	N12-CN11	From Node:	N012	Length(ft): 115.00
Group:	SW 7 AVE	To Node:	CN011	Count: 1
				Friction Equation: Average Conveyance
	UPSTREAM	DOWNSTREAM		Solution Algorithm: Automatic
Geometry:	Circular	Circular		Flow: None
Span(in):	36.00	36.00		Entrance Loss Coef: 0.50
Rise(in):	36.00	36.00		Exit Loss Coef: 0.00
Invert(ft):	16.500	16.500		Bend Loss Coef: 0.00
Manning's N:	0.024000	0.024000		Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec: Use dn

Bot Clip(in): 0.000 0.000 Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular CMP: Mitered to slope

Downstream FHWA Inlet Edge Description:
Circular CMP: Mitered to slope

LINK TURNED OFF AND IS REPLACED W/NEW STORMWATER COLLECTION SYSTEM FOR SW 28 ST, SW 32 ST, AND SW 3 TER
PIPE INVERTS NEED VERIFICATION

Name:	N121_26N16_36	From Node: N121	Length(ft):	44.00
Group:	SW 26 AVE	To Node: 26N16	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Automatic
Geometry:	Circular	Circular	Flow:	Both
Span(in):	36.00	36.00	Entrance Loss Coef:	0.75
Rise(in):	36.00	36.00	Exit Loss Coef:	0.00
Invert(ft):	15.300	15.100	Bend Loss Coef:	0.00
Manning's N:	0.024000	0.024000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

CULVERT AT THE SE INTERSECTION OF SW 32ST AND 26 AVE FLOWWAY

Name:	N121_GBC02	From Node: N121	Length(ft):	34.00
Group:	SW 16/12 AVE	To Node: GBC02	Count:	1
			Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Automatic
Geometry:	Circular	Circular	Flow:	Both
Span(in):	24.00	24.00	Entrance Loss Coef:	0.75
Rise(in):	24.00	24.00	Exit Loss Coef:	0.00
Invert(ft):	14.200	13.700	Bend Loss Coef:	0.00
Manning's N:	0.024000	0.024000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Name:	N13-CN12	From Node: N013	Length(ft):	120.00
Group:	SW 7 AVE	To Node: CN012	Count:	1
			Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Automatic

Geometry:	Circular	Circular	Flow:	None
Span(in):	36.00	36.00	Entrance Loss Coef:	0.50
Rise(in):	36.00	36.00	Exit Loss Coef:	0.00
Invert(ft):	16.040	16.150	Bend Loss Coef:	0.00
Manning's N:	0.024000	0.024000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular CMP: Mitered to slope

Downstream FHWA Inlet Edge Description:
Circular CMP: Mitered to slope

LINK TURNED OFF AND IS REPLACED W/NEW STORMWATER COLLECTION SYSTEM FOR SW 28 ST, SW 32 ST, AND SW 3 TER

Name:	N14-CN14	From Node: N014	Length(ft):	97.00
Group:	SW 7 AVE	To Node: CN014	Count:	1
			Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Automatic
Geometry:	Circular	Circular	Flow:	None
Span(in):	24.00	24.00	Entrance Loss Coef:	0.75
Rise(in):	24.00	24.00	Exit Loss Coef:	0.00
Invert(ft):	16.900	16.900	Bend Loss Coef:	0.00
Manning's N:	0.024000	0.024000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

LINK TURNED OFF AND IS REPLACED W/NEW STORMWATER COLLECTION SYSTEM FOR SW 28 ST, SW 32 ST, AND SW 3 TER

Name:	N15-CN15	From Node: N015	Length(ft):	30.00
Group:	SW 7 AVE	To Node: CN015	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Automatic
Geometry:	Circular	Circular	Flow:	None
Span(in):	24.00	24.00	Entrance Loss Coef:	0.75
Rise(in):	24.00	24.00	Exit Loss Coef:	0.00
Invert(ft):	16.760	16.640	Bend Loss Coef:	0.00
Manning's N:	0.024000	0.204000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

LINK TURNED OFF AND IS REPLACED W/NEW STORMWATER COLLECTION SYSTEM FOR SW 28 ST, SW 32 ST, AND SW 3
TER

Name:	N16-N15	From Node:	N016	Length(ft):	60.00
Group:	SW 7 AVE	To Node:	N015	Count:	1
				Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Automatic
Geometry:	Circular	Circular		Flow:	None
Span(in):	18.00	18.00		Entrance Loss Coef:	0.75
Rise(in):	18.00	18.00		Exit Loss Coef:	0.00
Invert(ft):	17.260	17.260		Bend Loss Coef:	0.00
Manning's N:	0.024000	0.024000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

LINK TURNED OFF AND IS REPLACED W/NEW STORMWATER COLLECTION SYSTEM FOR SW 28 ST, SW 32 ST, AND SW 3
TER
ASSUMED DOWNSTREAM INVERT.

Name:	N17-WIDDEN	From Node:	N017	Length(ft):	26.00
Group:	SW 7 AVE	To Node:	7N09	Count:	1
				Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Automatic
Geometry:	Circular	Circular		Flow:	None
Span(in):	18.00	18.00		Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00		Exit Loss Coef:	1.00
Invert(ft):	17.390	16.840		Bend Loss Coef:	0.00
Manning's N:	0.024000	0.024000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

LINK TURNED OFF AND IS REPLACED W/NEW STORMWATER COLLECTION SYSTEM FOR SW 28 ST, SW 32 ST, AND SW 3
TER

Name:	N18-CN16	From Node:	N018	Length(ft):	215.00
Group:	SW 7 AVE	To Node:	CN016	Count:	1
				Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Automatic
Geometry:	Circular	Circular		Flow:	None
Span(in):	18.00	18.00		Entrance Loss Coef:	0.75
Rise(in):	18.00	18.00		Exit Loss Coef:	0.00
Invert(ft):	17.830	17.110		Bend Loss Coef:	0.00
Manning's N:	0.024000	0.024000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

tream FHWA Inlet Edge Description:
Circular CMP: Mitered to slope

Downstream FHWA Inlet Edge Description:
Circular CMP: Mitered to slope

LINK TURNED OFF AND IS REPLACED W/NEW STORMWATER COLLECTION SYSTEM FOR SW 28 ST, SW 32 ST, AND SW 3
TER
3 - CULVERTS COMBINED INTO 1

Name:	N_NW2ST_24A	From Node: N116	Length(ft):	30.00
Group:	SW 16/12 AVE	To Node: 16N42	Count:	1
			Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Automatic
Geometry:	Circular	Circular	Flow:	Both
Span(in):	24.00	24.00	Entrance Loss Coef:	0.75
Rise(in):	24.00	24.00	Exit Loss Coef:	0.00
Invert(ft):	27.900	27.900	Bend Loss Coef:	0.00
Manning's N:	0.024000	0.024000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

LENGTH & US INVERT ASSUMED

Name:	N_NW3ST_12A	From Node: N116	Length(ft):	30.00
Group:	SW 16/12 AVE	To Node: 16N44	Count:	1
			Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Automatic
Geometry:	Circular	Circular	Flow:	Both
Span(in):	12.00	12.00	Entrance Loss Coef:	0.75
Rise(in):	12.00	12.00	Exit Loss Coef:	0.00
Invert(ft):	30.000	30.000	Bend Loss Coef:	0.00
Manning's N:	0.024000	0.024000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

LENGTH & US INVERT ASSUMED

Name:	N_NW3ST_TWIN12	From Node: N117	Length(ft):	30.00
Group:	SW 16/12 AVE	To Node: 16N44	Count:	2
			Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Automatic
Geometry:	Circular	Circular	Flow:	Both
Span(in):	12.00	12.00	Entrance Loss Coef:	0.75

Rise(in):	12.00	12.00	Exit Loss Coef:	0.00
Invert(ft):	28.500	28.500	Bend Loss Coef:	0.00
Manning's N:	0.024000	0.024000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

LENGTH & US INVERT ASSUMED

Name: N_NW4ST_18A From Node: N116 Length(ft): 30.00
Group: SW 16/12 AVE To Node: 16N48 Count: 1
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.75
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	18.00	18.00
Rise(in):	18.00	18.00
Invert(ft):	27.400	27.400
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Name: N_NW4ST_24 From Node: N117 Length(ft): 30.00
Group: SW 16/12 AVE To Node: 16N48 Count: 1
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.75
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	24.00	24.00
Rise(in):	24.00	24.00
Invert(ft):	27.000	27.000
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

LENGTH & US INVERT ASSUMED

Name: N_NW5ST_18 From Node: N117 Length(ft): 30.00
Group: SW 16/12 AVE To Node: 16N50 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	18.00	18.00
Rise(in):	18.00	18.00
Invert(ft):	28.400	28.400
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.75
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

LENGTH & US INVERT ASSUMED

Name: N_NW5ST_24 From Node: N116 Length(ft): 30.00
Group: SW 16/12 AVE To Node: 16N50 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	18.00	18.00
Rise(in):	18.00	18.00
Invert(ft):	29.200	29.200
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000
?t Clip(in):	0.000	0.000

Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.75
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

LENGTH & US INVERT ASSUMED

Name: N_NW6ST_18A From Node: N116 Length(ft): 30.00
Group: SW 16/12 AVE To Node: 16N52 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	18.00	18.00
Rise(in):	18.00	18.00
Invert(ft):	29.400	29.400
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.75
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

nstream FHWA Inlet Edge Description:
cular CMP: Projecting

LENGTH & US INVERT ASSUMED

Name: N_NW6ST_18B From Node: N117 Length(ft): 30.00
Group: SW 16/12 AVE To Node: 16N52 Count: 1
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.75
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	18.00	18.00
Rise(in):	18.00	18.00
Invert(ft):	26.600	26.600
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

LENGTH & US INVERT ASSUMED

Name: N_NW7ST_20x30 From Node: N116 Length(ft): 30.00
Group: SW 16/12 AVE To Node: 16N53 Count: 1
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.75
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Horz Ellipse	Horz Ellipse
Span(in):	30.00	30.00
Rise(in):	20.00	20.00
Invert(ft):	29.400	29.400
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Elliptical Inlet Face: Tapered inlet-thin edge projecting

Downstream FHWA Inlet Edge Description:
Elliptical Inlet Face: Tapered inlet-thin edge projecting

LENGTH & US INVERT ASSUMED

Name: N_SW10ST_18 From Node: N101 Length(ft): 30.00
Group: SW 16/12 AVE To Node: 16N21 Count: 1
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.75
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	18.00	18.00
Rise(in):	18.00	18.00
Invert(ft):	24.000	24.000
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

LENGTH & US INVERT ASSUMED

Name:	N_SW11ST_36	From Node:	N101	Length(ft):	30.00
Group:	SW 16/12 AVE	To Node:	16N20	Count:	1
				Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Automatic
Geometry:	Circular	Circular		Flow:	Both
Span(in):	36.00	36.00		Entrance Loss Coef:	0.75
Rise(in):	36.00	36.00		Exit Loss Coef:	0.00
Invert(ft):	18.300	18.300		Bend Loss Coef:	0.00
Manning's N:	0.024000	0.024000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

LENGTH & US INVERT ASSUMED

Name:	N_SW12ST_12	From Node:	N101	Length(ft):	30.00
Group:	SW 16/12 AVE	To Node:	16N18	Count:	1
				Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Automatic
Geometry:	Circular	Circular		Flow:	Both
Span(in):	12.00	12.00		Entrance Loss Coef:	0.75
Rise(in):	12.00	12.00		Exit Loss Coef:	0.00
Invert(ft):	20.900	20.900		Bend Loss Coef:	0.00
Manning's N:	0.024000	0.024000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

LENGTH & US INVERT ASSUMED

Name:	N_SW14ST_22	From Node:	N101	Length(ft):	30.00
Group:	SW 16/12 AVE	To Node:	16N16	Count:	1
				Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Automatic
Geometry:	Circular	Circular		Flow:	Both
Span(in):	22.00	22.00		Entrance Loss Coef:	0.75
Rise(in):	22.00	22.00		Exit Loss Coef:	0.00
Invert(ft):	20.100	20.100		Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

LENGTH & US INVERT ASSUMED

DIP

Name:	N_SW15ST_18	From Node:	N101	Length(ft):	232.00
Group:	SW 16/12 AVE	To Node:	16N15	Count:	1
				Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Automatic
Geometry:	Circular	Circular		Flow:	Both
Span(in):	18.00	18.00		Entrance Loss Coef:	0.75
Rise(in):	18.00	18.00		Exit Loss Coef:	0.00
Invert(ft):	19.600	19.600		Bend Loss Coef:	0.00
Manning's N:	0.024000	0.024000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Name:	N_SW15ST_24W	From Node:	N118	Length(ft):	176.00
Group:	SW 16/12 AVE	To Node:	16N15	Count:	1
				Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Automatic
Geometry:	Circular	Circular		Flow:	Both
Span(in):	24.00	24.00		Entrance Loss Coef:	0.75
Rise(in):	24.00	24.00		Exit Loss Coef:	0.00
Invert(ft):	19.300	18.000		Bend Loss Coef:	0.00
Manning's N:	0.024000	0.024000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Name:	N_SW28ST_18	From Node:	N103	Length(ft):	40.00
Group:	SW 16/12 AVE	To Node:	16N06	Count:	1
				Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Automatic
Geometry:	Circular	Circular		Flow:	None
Span(in):	18.00	18.00		Entrance Loss Coef:	0.75
Rise(in):	18.00	18.00		Exit Loss Coef:	0.00

Invert(ft):	18.500	18.500	Bend Loss Coef:	0.00
Manning's N:	0.024000	0.024000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

LINK TURNED OFF IN PROPOSED CONDITION AND REPLACED WITH ADDITION OF LAKE & CONTROL STRUCTURE

Name:	N_SW2ST_12W	From Node: N118	Length(ft):	100.00
Group:	SW 16/12 AVE	To Node: 16N38	Count:	1
			Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Automatic
Geometry:	Circular	Circular	Flow:	Both
Span(in):	12.00	12.00	Entrance Loss Coef:	0.75
Rise(in):	12.00	12.00	Exit Loss Coef:	0.00
Invert(ft):	26.300	26.300	Bend Loss Coef:	0.00
Manning's N:	0.024000	0.024000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

LENGTH & US INVERT ASSUMED

Name:	N_SW2ST_36	From Node: N101	Length(ft):	30.00
Group:	SW 16/12 AVE	To Node: 16N38	Count:	1
			Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Automatic
Geometry:	Circular	Circular	Flow:	Both
Span(in):	36.00	36.00	Entrance Loss Coef:	0.75
Rise(in):	36.00	36.00	Exit Loss Coef:	0.00
Invert(ft):	25.500	25.500	Bend Loss Coef:	0.00
Manning's N:	0.024000	0.024000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

LENGTH & US INVERT ASSUMED

Name:	N_SW2ST_TWIN8	From Node: N101	Length(ft):	30.00
Group:	SW 16/12 AVE	To Node: 16N39	Count:	1
			Friction Equation:	Average Conveyance

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	8.00	8.00
Rise(in):	8.00	8.00
Invert(ft):	29.500	29.500
Manning's N:	0.012000	0.012000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.75
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

LENGTH & US INVERT ASSUMED

Name: N_SW3ST_18 From Node: N101 Length(ft): 30.00
Group: SW 16/12 AVE To Node: 16N34A Count: 1
Friction Equation: Average Conveyance

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	18.00	18.00
Rise(in):	18.00	18.00
Invert(ft):	28.800	28.800
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.75
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

LENGTH & US INVERT ASSUMED

Name: N_SW6ST_18 From Node: N101 Length(ft): 30.00
Group: SW 16/12 AVE To Node: 16N28 Count: 1
Friction Equation: Average Conveyance

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	18.00	18.00
Rise(in):	18.00	18.00
Invert(ft):	25.300	25.300
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.75
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

LENGTH & US INVERT ASSUMED

Name: N_SW8ST_18 From Node: N101 Length(ft): 30.00
Group: SW 16/12 AVE To Node: 16N26 Count: 1
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.75
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	18.00	18.00
Rise(in):	18.00	18.00
Invert(ft):	26.000	26.000
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

LENGTH & US INVERT ASSUMED

Name: N_SW9ST_18 From Node: N101 Length(ft): 30.00
Group: SW 16/12 AVE To Node: 16N23 Count: 1
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.75
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	18.00	18.00
Rise(in):	18.00	18.00
Invert(ft):	26.300	26.300
anning's N:	0.024000	0.024000
op Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

LENGTH & US INVERT ASSUMED

Name: NW3ST_FERREL From Node: 16N44 Length(ft): 22.00
Group: SW 16/12 AVE To Node: 16N43 Count: 1
Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.75
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	36.00	36.00
Rise(in):	36.00	36.00
Invert(ft):	27.200	27.500
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
cular CMP: Projecting

Downstream FHWA Inlet Edge Description:

Circular CMP: Projecting

Name:	NW4ST_FERREL	From Node:	16N48	Length(ft): 50.00
Group:	SW 16/12 AVE	To Node:	16N47	Count: 1
				Friction Equation: Average Conveyance
	UPSTREAM	DOWNSTREAM		Solution Algorithm: Automatic
Geometry:	Circular	Circular		Flow: Both
Span(in):	36.00	36.00		Entrance Loss Coef: 0.75
Rise(in):	36.00	36.00		Exit Loss Coef: 0.00
Invert(ft):	25.700	25.700		Bend Loss Coef: 0.00
Manning's N:	0.024000	0.024000		Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Name:	NW5ST_FERREL	From Node:	16N50	Length(ft): 52.00
Group:	SW 16/12 AVE	To Node:	16N49	Count: 1
				Friction Equation: Average Conveyance
	UPSTREAM	DOWNSTREAM		Solution Algorithm: Automatic
Geometry:	Circular	Circular		Flow: Both
Span(in):	36.00	36.00		Entrance Loss Coef: 0.75
Rise(in):	36.00	36.00		Exit Loss Coef: 0.00
Invert(ft):	25.800	26.200		Bend Loss Coef: 0.00
Manning's N:	0.024000	0.024000		Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Name:	NW6ST_FERREL	From Node:	16N52	Length(ft): 42.00
Group:	SW 16/12 AVE	To Node:	16N51	Count: 1
				Friction Equation: Average Conveyance
	UPSTREAM	DOWNSTREAM		Solution Algorithm: Automatic
Geometry:	Circular	Circular		Flow: Both
Span(in):	36.00	36.00		Entrance Loss Coef: 0.75
Rise(in):	36.00	36.00		Exit Loss Coef: 0.00
Invert(ft):	25.700	25.700		Bend Loss Coef: 0.00
Manning's N:	0.024000	0.024000		Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Name: O_DIXIE & 16 AV From Node: 16N15 Length(ft): 40.00
Group: SW 16/12 AVE To Node: 16N14 Count: 1
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.75
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Rectangular	Rectangular
Span(in):	120.00	120.00
Rise(in):	48.00	48.00
Invert(ft):	16.700	16.900
Manning's N:	0.012000	0.012000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Rectangular Box: 0° wingwall flares

Downstream FHWA Inlet Edge Description:
Rectangular Box: 0° wingwall flares

Name: P01_7N76 From Node: N102 Length(ft): 60.00
Group: SW 7 AVE To Node: 7N76 Count: 1
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.50
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	18.00	18.00
Rise(in):	18.00	18.00
Invert(ft):	27.000	27.000
Manning's N:	0.013000	0.013000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Downstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Name: PN101_7N54 From Node: N101 Length(ft): 20.00
Group: SW 7 AVE To Node: 7N54 Count: 1
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.50
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	15.00	15.00
Rise(in):	15.00	15.00
Invert(ft):	26.700	26.100
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000

Bot Clip(in): 0.000 0.000 Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Name: PN101_7N55 From Node: N101 Length(ft): 20.00
Group: SW 7 AVE To Node: 7N55 Count: 1
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.50
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	18.00	18.00
Rise(in):	18.00	18.00
Invert(ft):	26.400	26.300
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name: PN101_7N56 From Node: N101 Length(ft): 20.00
Group: SW 7 AVE To Node: 7N56 Count: 1
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.50
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	18.00	18.00
Rise(in):	18.00	18.00
Invert(ft):	26.400	26.300
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Name: PN101_SW6ST From Node: N101 Length(ft): 100.00
Group: SW 7 AVE To Node: 7N66 Count: 1
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.50

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	18.00	18.00

Rise(in):	18.00	18.00
Invert(ft):	26.100	26.100
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular CMP: Mitered to slope

Name: PRO-SW32ST_DS1 From Node: N014
Group: SW 7 AVE To Node: 7N10

Length(ft): 1400.00
Count: 1
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.50
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	24.00	42.00
Rise(in):	24.00	42.00
Invert(ft):	13.000	12.500
Manning's N:	0.012000	0.012000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

NEW LINK REPRESENTS /NEW STORMWATER COLLECTION SYSTEM FOR SW 28 ST, SW 32 ST, AND SW 3 TER, INLETS ASSUMED TO NOT CONTROL FLOW AND ARE NOT MODELED AS STRUCTURES

Name: PRO-TWIN48_N_SC From Node: N104
Group: SW 7 AVE To Node: 7N15

Length(ft): 50.00
Count: 2
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.75
Exit Loss Coef: 1.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	48.00	48.00
Rise(in):	48.00	48.00
Invert(ft):	16.000	15.800
Manning's N:	0.013000	0.013000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

REPLACED CULVERTS W/48 RCPS AND LOWERED INVERTS

Name: PRO4X7BC7N14N13 From Node: 7N14 Length(ft): 80.00

Group: SW 7 AVE To Node: 7N13

	UPSTREAM	DOWNSTREAM
Geometry:	Rectangular	Rectangular
Span(in):	84.00	84.00
Rise(in):	48.00	48.00
Invert(ft):	13.600	13.600
Manning's N:	0.012000	0.012000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Count: 1
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.50
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Rectangular Box: 0° wingwall flares

Downstream FHWA Inlet Edge Description:
Rectangular Box: 0° wingwall flares

REPLACED EXISTING DBL ELLP 32X52 CMPS

Name: PRO4X7BC7N16N15 From Node: 7N16
Group: SW 7 AVE To Node: 7N15

	UPSTREAM	DOWNSTREAM
Geometry:	Rectangular	Rectangular
Span(in):	84.00	84.00
Rise(in):	48.00	48.00
Invert(ft):	14.300	14.300
Manning's N:	0.012000	0.012000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Length(ft): 35.00
Count: 1
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.50
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Rectangular Box: 0° wingwall flares

Downstream FHWA Inlet Edge Description:
Rectangular Box: 0° wingwall flares

REPLACED EXISTING 48"CMP

Name: PRO4X7BC7N18N17 From Node: 7N18
Group: SW 7 AVE To Node: 7N17

	UPSTREAM	DOWNSTREAM
Geometry:	Rectangular	Rectangular
Span(in):	84.00	84.00
Rise(in):	48.00	48.00
Invert(ft):	14.600	14.600
Manning's N:	0.012000	0.012000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Length(ft): 35.00
Count: 1
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.50
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Rectangular Box: 0° wingwall flares

Downstream FHWA Inlet Edge Description:
Rectangular Box: 0° wingwall flares

REPLACED EXISTING 48"CMP

Name: PRO4X7BC7N20N19 From Node: 7N20 Length(ft): 35.00
Group: SW 7 AVE To Node: 7N19 Count: 1
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.50
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Rectangular	Rectangular
Span(in):	84.00	84.00
Rise(in):	48.00	48.00
Invert(ft):	15.000	15.000
Manning's N:	0.012000	0.012000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Rectangular Box: 0° wingwall flares

Downstream FHWA Inlet Edge Description:
Rectangular Box: 0° wingwall flares

REPLACED EXISTING 48"CMP

Name: PRO4X7BC7N22N21 From Node: 7N22 Length(ft): 35.00
Group: SW 7 AVE To Node: 7N21 Count: 1
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.50
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Rectangular	Rectangular
Span(in):	84.00	84.00
Rise(in):	48.00	48.00
Invert(ft):	15.200	15.200
Manning's N:	0.012000	0.012000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Rectangular Box: 0° wingwall flares

Downstream FHWA Inlet Edge Description:
Rectangular Box: 0° wingwall flares

REPLACED EXISTING 48"CMP

Name: PRO4X7BC7N24N23 From Node: 7N24 Length(ft): 35.00
Group: SW 7 AVE To Node: 7N23 Count: 1
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.50
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Rectangular	Rectangular
Span(in):	84.00	84.00
Rise(in):	48.00	48.00
Invert(ft):	15.400	15.400
Manning's N:	0.012000	0.012000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Rectangular Box: 0° wingwall flares

Downstream FHWA Inlet Edge Description:
Rectangular Box: 0° wingwall flares

REPLACED EXISTING 48"CMP

Name: PRO4X7BC7N26N25 From Node: 7N26
Group: SW 7 AVE To Node: 7N25

	UPSTREAM	DOWNSTREAM
Geometry:	Rectangular	Rectangular
Span(in):	84.00	84.00
Rise(in):	48.00	48.00
Invert(ft):	15.900	15.900
Manning's N:	0.012000	0.012000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Length(ft): 16.00
Count: 1
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.50
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Rectangular Box: 0° wingwall flares

Downstream FHWA Inlet Edge Description:
Rectangular Box: 0° wingwall flares

REPLACED EXISTING 56" DIP

Name: PRO4X7BC7N28N27 From Node: 7N28
Group: SW 7 AVE To Node: 7N27

	UPSTREAM	DOWNSTREAM
Geometry:	Rectangular	Rectangular
Span(in):	84.00	84.00
Rise(in):	48.00	48.00
Invert(ft):	15.900	15.900
Manning's N:	0.012000	0.012000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Length(ft): 44.00
Count: 1
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.50
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Rectangular Box: 0° wingwall flares

Downstream FHWA Inlet Edge Description:
Rectangular Box: 0° wingwall flares

REPLACED EXISTING 48" CMP

Name: PRO_16SW28_10X4 From Node: 16N06
Group: SW 16/12 AVE To Node: 16N05

	UPSTREAM	DOWNSTREAM
Geometry:	Rectangular	Rectangular
Span(in):	120.00	120.00
Rise(in):	48.00	48.00
Invert(ft):	14.800	14.800
Manning's N:	0.012000	0.012000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Length(ft): 60.00
Count: 1
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.50
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

stream FHWA Inlet Edge Description:
ctangular Box: 0° wingwall flares

Downstream FHWA Inlet Edge Description:
Rectangular Box: 0° wingwall flares

Name: PRO_48 TO N103 From Node: 7N15 Length(ft): 975.00
Group: SW 7 AVE To Node: N103 Count: 1
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.50
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	48.00	48.00
Rise(in):	48.00	48.00
Invert(ft):	15.000	15.000
Manning's N:	0.012000	0.012000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

PROPOSED PIPE TO CAPTURE & DIVERT WATER FROM SW 7 AVE SYSTEM JUST NORTH OF SCHOOL PROPERTY

Name: PRO_SW28ST_DS From Node: N005 Length(ft): 1400.00
Group: SW 7 AVE To Node: 7N12 Count: 1
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.50
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	24.00	42.00
Rise(in):	24.00	42.00
Invert(ft):	13.500	13.500
Manning's N:	0.012000	0.012000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

NEW LINK REPRESENTS /NEW STORMWATER COLLECTION SYSTEM FOR SW 28 ST, SW 32 ST, AND SW 3 TER, INLETS ASSUMED TO NOT CONTROL FLOW AND ARE NOT MODELED AS STRUCTURES

Name: PRO_SW32ST_DS2 From Node: N016 Length(ft): 550.00
Group: SW 7 AVE To Node: N014 Count: 1
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.50
Exit Loss Coef: 0.00

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	15.00	18.00
Rise(in):	15.00	18.00

Invert(ft):	13.500	13.500
Manning's N:	0.012000	0.012000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

NEW LINK REPRESENTS /NEW STORMWATER COLLECTION SYSTEM FOR SW 28 ST, SW 32 ST, AND SW 3 TER, INLETS ASSUMED TO NOT CONTROL FLOW AND ARE NOT MODELED AS STRUCTURES

Name: PRO_TWN_12X6_BC
Group: SW 16/12 AVE
From Node: PRO_16N01B
To Node: 16N01
Length(ft): 60.00
Count: 2
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.50
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Rectangular	Rectangular
Span(in):	144.00	144.00
Rise(in):	72.00	72.00
Invert(ft):	9.000	9.000
Manning's N:	0.012000	0.012000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Rectangular Box: 0° wingwall flares

Downstream FHWA Inlet Edge Description:
Rectangular Box: 0° wingwall flares

PROPOSED CULVERT CROSSING UNDER 16 AVE TO CONNECT PROPOSED CANAL TO EXIST GOODBREAD CANAL

1ST TRY - 2_10 X 5

Name: S_NW2ST_24B
Group: SW 16/12 AVE
From Node: N116
To Node: 16N42
Length(ft): 30.00
Count: 1
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.75
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	24.00	24.00
Rise(in):	24.00	24.00
Invert(ft):	26.200	26.200
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

LENGTH & US INVERT ASSUMED

Name: S_NW3ST_12B From Node: N116 Length(ft): 30.00
Group: SW 16/12 AVE To Node: 16N43 Count: 1
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.75
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	12.00	12.00
Rise(in):	12.00	12.00
Invert(ft):	30.000	30.000
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

LENGTH & US INVERT ASSUMED

Name: S_NW4ST_18B From Node: N116 Length(ft): 30.00
Group: SW 16/12 AVE To Node: 16N47 Count: 1
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.75
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	18.00	18.00
Rise(in):	18.00	18.00
Invert(ft):	26.500	26.500
Manning's N:	0.024000	0.024000
)p Clip(in):	0.000	0.000
ot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

LENGTH & US INVERT ASSUMED

Name: S_NW5ST_18 From Node: N116 Length(ft): 30.00
Group: SW 16/12 AVE To Node: 16N49 Count: 1
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.75
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	18.00	18.00
Rise(in):	18.00	18.00
Invert(ft):	26.900	26.900
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

)nstream FHWA Inlet Edge Description:
Circular CMP: Projecting

LENGTH & US INVERT ASSUMED

Name:	S_NW6ST_18A	From Node: N116	Length(ft):	30.00	
Group:	SW 16/12 AVE	To Node: 16N51	Count:	1	
			Friction Equation:	Average Conveyance	
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Automatic	
Geometry:	Circular	Circular	Flow:	Both	
Span(in):	18.00	18.00	Entrance Loss Coef:	0.75	
Rise(in):	18.00	18.00	Exit Loss Coef:	0.00	
Invert(ft):	26.800	26.800	Bend Loss Coef:	0.00	
Manning's N:	0.024000	0.024000	Outlet Ctrl Spec:	Use dc or tw	
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn	
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None	

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

LENGTH & US INVERT ASSUMED

Name:	S_NW6ST_18B	From Node: N117	Length(ft):	30.00	
Group:	SW 16/12 AVE	To Node: 16N51	Count:	1	
			Friction Equation:	Average Conveyance	
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Automatic	
Geometry:	Circular	Circular	Flow:	Both	
Span(in):	18.00	18.00	Entrance Loss Coef:	0.75	
Rise(in):	18.00	18.00	Exit Loss Coef:	0.00	
Invert(ft):	29.200	29.200	Bend Loss Coef:	0.00	
Manning's N:	0.024000	0.024000	Outlet Ctrl Spec:	Use dc or tw	
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn	
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None	

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

LENGTH & US INVERT ASSUMED

Name:	S_SW10ST_12	From Node: N101	Length(ft):	30.00	
Group:	SW 16/12 AVE	To Node: 16N21	Count:	1	
			Friction Equation:	Average Conveyance	
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Automatic	
Geometry:	Circular	Circular	Flow:	Both	
Span(in):	12.00	12.00	Entrance Loss Coef:	0.75	
Rise(in):	12.00	12.00	Exit Loss Coef:	0.00	
Invert(ft):	14.100	14.100	Bend Loss Coef:	0.00	
Manning's N:	0.024000	0.024000	Outlet Ctrl Spec:	Use dc or tw	
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn	
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None	

Upstream FHWA Inlet Edge Description:

Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

LENGTH & US INVERT ASSUMED

Name:	S_SW11ST_12	From Node:	N101	Length(ft):	30.00
Group:	SW 16/12 AVE	To Node:	16N19	Count:	1
				Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Automatic
Geometry:	Circular	Circular		Flow:	Both
Span(in):	12.00	12.00		Entrance Loss Coef:	0.75
Rise(in):	12.00	12.00		Exit Loss Coef:	0.00
Invert(ft):	24.200	24.200		Bend Loss Coef:	0.00
Manning's N:	0.024000	0.024000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

LENGTH & US INVERT ASSUMED

Name:	S_SW13ST_22	From Node:	N101	Length(ft):	30.00
Group:	SW 16/12 AVE	To Node:	16N17	Count:	1
				Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Automatic
Geometry:	Circular	Circular		Flow:	Both
Span(in):	22.00	22.00		Entrance Loss Coef:	0.75
Rise(in):	22.00	22.00		Exit Loss Coef:	0.00
Invert(ft):	20.600	20.600		Bend Loss Coef:	0.00
Manning's N:	0.024000	0.024000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

LENGTH & US INVERT ASSUMED

DIP

Name:	S_SW15ST_18	From Node:	N103	Length(ft):	30.00
Group:	SW 16/12 AVE	To Node:	16N14	Count:	1
				Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Automatic
Geometry:	Circular	Circular		Flow:	Both
Span(in):	18.00	18.00		Entrance Loss Coef:	0.75
Rise(in):	18.00	18.00		Exit Loss Coef:	0.00
Invert(ft):	19.700	19.700		Bend Loss Coef:	0.00
Manning's N:	0.024000	0.024000		Outlet Ctrl Spec:	Use dc or tw

Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

LENGTH & US INVERT ASSUMED

Name: S_SW15ST_18W From Node: N119 Length(ft): 20.00
Group: SW 16/12 AVE To Node: 16N14 Count: 1
Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.75
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	18.00	18.00
Rise(in):	18.00	18.00
Invert(ft):	20.000	19.100
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Name: S_SW15ST_24W From Node: N119 Length(ft): 20.00
Group: SW 16/12 AVE To Node: 16N14 Count: 1
Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.75
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	24.00	24.00
Rise(in):	24.00	24.00
Invert(ft):	19.000	18.100
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Name: S_SW2ST_12W From Node: N118 Length(ft): 22.00
Group: SW 16/12 AVE To Node: 16N37 Count: 1
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular

Span(in):	12.00	12.00	Entrance Loss Coef:	0.75
Rise(in):	12.00	12.00	Exit Loss Coef:	0.00
Invert(ft):	26.300	26.300	Bend Loss Coef:	0.00
Manning's N:	0.024000	0.024000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

LENGTH & US INVERT ASSUMED

Name:	S_SW2ST_21X15	From Node: N101	Length(ft):	30.00
Group:	SW 16/12 AVE	To Node: 16N37	Count:	1
			Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Automatic
Geometry:	Horz Ellipse	Horz Ellipse	Flow:	Both
Span(in):	21.00	21.00	Entrance Loss Coef:	0.75
Rise(in):	15.00	15.00	Exit Loss Coef:	0.00
Invert(ft):	29.700	29.700	Bend Loss Coef:	0.00
Manning's N:	0.024000	0.024000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

tream FHWA Inlet Edge Description:
rizontal Ellipse Concrete: Groove end projecting

Downstream FHWA Inlet Edge Description:
Horizontal Ellipse Concrete: Groove end projecting

LENGTH & US INVERT ASSUMED

Name:	S_SW32ST_18	From Node: N113	Length(ft):	68.00
Group:	SW 16/12 AVE	To Node: 16N03	Count:	1
			Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Automatic
Geometry:	Circular	Circular	Flow:	Both
Span(in):	18.00	18.00	Entrance Loss Coef:	0.75
Rise(in):	18.00	18.00	Exit Loss Coef:	0.00
Invert(ft):	17.200	17.200	Bend Loss Coef:	0.00
Manning's N:	0.024000	0.024000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Name: S_SW3ST_12 From Node: N101 Length(ft): 30.00

Group: SW 16/12 AVE To Node: 16N34B Count: 1
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.75
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	12.00	12.00
Rise(in):	12.00	12.00
Invert(ft):	25.800	25.800
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

LENGTH & US INVERT ASSUMED

Name: S_SW6ST_12 From Node: N101 Length(ft): 30.00
Group: SW 16/12 AVE To Node: 16N28 Count: 1
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.75
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	12.00	12.00
Rise(in):	12.00	12.00
Invert(ft):	25.700	25.700
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

LENGTH & US INVERT ASSUMED

Name: S_SW7ST_24 From Node: N101 Length(ft): 30.00
Group: SW 16/12 AVE To Node: 16N27 Count: 1
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.75
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	24.00	24.00
Rise(in):	24.00	24.00
Invert(ft):	23.600	23.600
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Name: S_SW8ST_18 From Node: N101 Length(ft): 30.00
Group: SW 16/12 AVE To Node: 16N25 Count: 1
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.75
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	18.00	18.00
Rise(in):	18.00	18.00
Invert(ft):	24.900	24.900
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

LENGTH & US INVERT ASSUMED

Name: S_SW9ST_18 From Node: N101 Length(ft): 30.00
Group: SW 16/12 AVE To Node: 16N22 Count: 1
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.75
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	18.00	18.00
Rise(in):	18.00	18.00
Invert(ft):	24.500	24.500
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

LENGTH & US INVERT ASSUMED

Name: SR70BC_4X7@16AV From Node: 16N41 Length(ft): 98.40
Group: SW 16/12 AVE To Node: 16N40 Count: 1
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.75
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Rectangular	Rectangular
Span(in):	84.00	84.00
Rise(in):	48.00	48.00
Invert(ft):	25.500	24.600
Manning's N:	0.012000	0.012000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

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

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

EXISTING TWIN 24" CMP WERE REPLACED BY SR70 FDOT PROJECT

Name:	SR70BC_@SW7AVE	From Node:	7N01	Length(ft):	200.00
Group:	SW 7 AVE	To Node:	RC_SW 7 AVE	Count:	1
				Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Automatic
Geometry:	Rectangular	Rectangular		Flow:	Both
Span(in):	120.00	120.00		Entrance Loss Coef:	0.50
Rise(in):	84.00	84.00		Exit Loss Coef:	1.00
Invert(ft):	9.240	9.240		Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Rectangular Box: 0° wingwall flares

Downstream FHWA Inlet Edge Description:
Rectangular Box: 0° wingwall flares

Name:	SW 10 ST	From Node:	7N54	Length(ft):	90.00
Group:	SW 7 AVE	To Node:	7N53	Count:	1
				Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Automatic
Geometry:	Circular	Circular		Flow:	Both
Span(in):	42.00	48.00		Entrance Loss Coef:	0.50
Rise(in):	42.00	48.00		Exit Loss Coef:	0.00
Invert(ft):	23.100	23.100		Bend Loss Coef:	0.00
Manning's N:	0.024000	0.024000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

REPRESENTING 2 PIPES IN SERIES MODELED AS 1 PIPE DUE TO CLOSENESS

Name:	SW 24AVE_30RCP	From Node:	N118	Length(ft):	200.00
Group:	SW 16/12 AVE	To Node:	N124	Count:	1
				Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Automatic
Geometry:	Circular	Circular		Flow:	Both
Span(in):	30.00	30.00		Entrance Loss Coef:	0.75
Rise(in):	30.00	30.00		Exit Loss Coef:	0.00
Invert(ft):	25.000	25.000		Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

stream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

EXISTING CROSS CULVERT 0.15 MILES SOUTH OF SW 8 ST WHICH TIES INTO DITCH THAT CONNECTS TO THE SW 26 AVE DITCH. DIMENSIONS & ELEVATIONS ASSUMED BASED ON FIELD OBSERVATION

Name:	SW 6 ST	From Node:	7N66	Length(ft):	48.00
Group:	SW 7 AVE	To Node:	7N65	Count:	1
				Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Automatic
Geometry:	Circular	Circular		Flow:	Both
Span(in):	36.00	36.00		Entrance Loss Coef:	0.50
Rise(in):	36.00	36.00		Exit Loss Coef:	0.00
Invert(ft):	24.700	24.100		Bend Loss Coef:	0.00
Manning's N:	0.013000	0.013000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	SW 8 ST	From Node:	7N60	Length(ft):	68.00
Group:	SW 7 AVE	To Node:	7N59	Count:	1
				Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Automatic
Geometry:	Circular	Circular		Flow:	Both
Span(in):	48.00	48.00		Entrance Loss Coef:	0.50
Rise(in):	48.00	48.00		Exit Loss Coef:	0.00
Invert(ft):	24.200	23.400		Bend Loss Coef:	0.00
Manning's N:	0.024000	0.024000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

REPRESENTING 2 PIPES IN SERIES MODELED AS 1 PIPE DUE TO CLOSENESS

Name:	SW 9 ST-TWIN-36	From Node:	7N56	Length(ft):	46.00
Group:	SW 7 AVE	To Node:	7N55	Count:	2
				Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Automatic
Geometry:	Circular	Circular		Flow:	Both
Span(in):	36.00	36.00		Entrance Loss Coef:	0.40
Rise(in):	36.00	36.00		Exit Loss Coef:	0.00

Invert(ft):	23.100	23.100
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name: SW11ST & FERREL From Node: 16N20
Group: SW 16/12 AVE To Node: 16N19

Length(ft): 42.00
Count: 1
Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.75
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	54.00	54.00
Rise(in):	54.00	54.00
Invert(ft):	18.600	17.300
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Name: SW15ST_15RCP From Node: N104
Group: SW 7 AVE To Node: 7N29

Length(ft): 46.00
Count: 1
Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.75
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	15.00	15.00
Rise(in):	15.00	15.00
Invert(ft):	20.400	19.300
Manning's N:	0.013000	0.013000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Downstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Name: SW15ST_24CMP From Node: N103
Group: SW 7 AVE To Node: 7N29

Length(ft): 28.00
Count: 1
Friction Equation: Automatic

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	24.00	24.00
Rise(in):	24.00	24.00
Invert(ft):	19.700	19.100
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.50
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Name: SW15ST_BC@7AVE
Group: SW 7 AVE
From Node: 7N30
To Node: 7N29
Length(ft): 44.00
Count: 1
Friction Equation: Average Conveyance

	UPSTREAM	DOWNSTREAM
Geometry:	Rectangular	Rectangular
Span(in):	84.00	84.00
Rise(in):	48.00	48.00
Invert(ft):	17.300	17.300
Manning's N:	0.012000	0.012000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.50
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Rectangular Box: 0° wingwall flares

Downstream FHWA Inlet Edge Description:
Rectangular Box: 0° wingwall flares

Name: SW15ST_TWIN 24
Group: SW 7 AVE
From Node: N102
To Node: 7N30
Length(ft): 48.00
Count: 2
Friction Equation: Average Conveyance

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	24.00	24.00
Rise(in):	24.00	24.00
Invert(ft):	18.650	18.650
Manning's N:	0.013000	0.013000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.50
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name: SW19ST_18CMP From Node: N104 Length(ft): 50.00
Group: SW 7 AVE To Node: 7N24 Count: 1
Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.75
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	18.00	18.00
Rise(in):	18.00	18.00
Invert(ft):	19.600	18.600
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name: SW28ST-60X84 From Node: 16N06 Length(ft): 60.00
Group: SW 16/12 AVE To Node: 16N05 Count: 1
Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: None
Entrance Loss Coef: 0.50
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Horz Ellipse	Horz Ellipse
Span(in):	84.00	84.00
Rise(in):	60.00	60.00
Invert(ft):	14.200	14.300
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Horizontal Ellipse Concrete: Groove end projecting

Downstream FHWA Inlet Edge Description:
Horizontal Ellipse Concrete: Groove end projecting

CULVERT CROSSING ON SW 16 AVE DITCH & SW 28ST

TURNED OFF LINK AND REPLACED W/10X4 BOX CULVERT

Name: SW28ST_BC@7 From Node: 7N12 Length(ft): 40.00
Group: SW 7 AVE To Node: 7N11 Count: 1
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.50
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Rectangular	Rectangular
Span(in):	96.00	96.00
Rise(in):	48.00	48.00
Invert(ft):	13.500	13.500
Manning's N:	0.012000	0.012000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Rectangular Box: 0° wingwall flares

Downstream FHWA Inlet Edge Description:
:tangular Box: 0° wingwall flares

Name: SW2ST_FERREL From Node: 16N38 Length(ft): 48.00
Group: SW 16/12 AVE To Node: 16N37 Count: 1
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.75
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	60.00	60.00
Rise(in):	60.00	60.00
Invert(ft):	24.900	25.300
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

ALSO KNOWN AS 7TH ST

Name: SW32ST-2-48 From Node: 16N04 Length(ft): 50.00
Group: SW 16/12 AVE To Node: 16N03 Count: 2
Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.50
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	48.00	48.00
Rise(in):	48.00	48.00
Invert(ft):	13.700	13.400
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

CULVERT CROSSING ON SW 16 AVE DITCH & SW 32ST

Name: SW32ST_BC@7 From Node: 7N10 Length(ft): 64.00
Group: SW 7 AVE To Node: 7N09 Count: 1
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.50
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Rectangular	Rectangular
Span(in):	96.00	96.00
Rise(in):	48.00	48.00
Invert(ft):	12.000	12.000
Manning's N:	0.012000	0.012000
p Clip(in):	0.000	0.000
ot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Rectangular Box: 0° wingwall flares

Downstream FHWA Inlet Edge Description:
Rectangular Box: 0° wingwall flares

Name: SW7ST_12X21 | From Node: N104 | Length(ft): 44.00
Group: SW 7 AVE | To Node: 7N28 | Count: 1
Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.75
Exit Loss Coef: 1.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Horz Ellipse	Horz Ellipse
Span(in):	21.00	21.00
Rise(in):	12.00	12.00
Invert(ft):	20.300	18.600
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Elliptical Inlet Face: Tapered inlet-beveled edges

Downstream FHWA Inlet Edge Description:
Elliptical Inlet Face: Tapered inlet-beveled edges

Name: SW8ST_FERRELL | From Node: 16N26 | Length(ft): 44.00
Group: SW 16/12 AVE | To Node: 16N25 | Count: 1
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.75
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Horz Ellipse	Horz Ellipse
Span(in):	54.00	54.00
Rise(in):	45.00	45.00
Invert(ft):	22.600	22.700
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Horizontal Ellipse Concrete: Square edge with headwall

Downstream FHWA Inlet Edge Description:
Horizontal Ellipse Concrete: Square edge with headwall

Name: TWENTAR 24 | From Node: N126 | Length(ft): 55.00
Group: SW 32 AVE | To Node: 32N20 | Count: 1
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Positive
Entrance Loss Coef: 0.75
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	24.00	24.00
Rise(in):	24.00	24.00
Invert(ft):	14.740	14.910

Manning's N:	0.024000	0.024000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

ALLOW ONLY POSITIVE FLOW UNDER PUMP CONDITION

Name:	TWENTAR_42	From Node: N126	Length(ft):	42.00
Group:	SW 32 AVE	To Node: 32N19	Count:	1
			Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Automatic
Geometry:	Circular	Circular	Flow:	Positive
Span(in):	42.00	42.00	Entrance Loss Coef:	0.75
Rise(in):	42.00	42.00	Exit Loss Coef:	1.00
Invert(ft):	11.060	11.580	Bend Loss Coef:	0.00
Manning's N:	0.024000	0.024000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

TWENTAR INC OUTFALL FROM EXISTING LAKE/PIT

Name:	TWIN48_N_SCHL	From Node: N104	Length(ft):	50.00
Group:	SW 7 AVE	To Node: 7N15	Count:	2
			Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Automatic
Geometry:	Circular	Circular	Flow:	None
Span(in):	48.00	48.00	Entrance Loss Coef:	0.75
Rise(in):	48.00	48.00	Exit Loss Coef:	1.00
Invert(ft):	17.200	17.300	Bend Loss Coef:	0.00
Manning's N:	0.024000	0.024000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

TURNED OFF LINK AND REPLACED W/48 RCP'S

Name:	W_115+30_18	From Node: N119	Length(ft):	20.00
Group:	SW 16/12 AVE	To Node: 16N11	Count:	1
			Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Automatic

Geometry:	Circular	Circular	Flow:	Both
Span(in):	18.00	18.00	Entrance Loss Coef:	0.75
Rise(in):	18.00	18.00	Exit Loss Coef:	0.00
Invert(ft):	17.600	17.600	Bend Loss Coef:	0.00
Manning's N:	0.024000	0.024000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Name: W_118+25_24 From Node: N119 Length(ft): 20.00
Group: SW 16/12 AVE To Node: 16N12 Count: 1
Friction Equation: Automatic
Solution Algorithm: Automatic

	UPSTREAM	DOWNSTREAM		
Geometry:	Circular	Circular	Flow:	Both
Span(in):	24.00	24.00	Entrance Loss Coef:	0.75
Rise(in):	24.00	24.00	Exit Loss Coef:	0.00
Invert(ft):	19.400	18.500	Bend Loss Coef:	0.00
Manning's N:	0.024000	0.024000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Name: W_120+30_24 From Node: N119 Length(ft): 20.00
Group: SW 16/12 AVE To Node: 16N13 Count: 1
Friction Equation: Automatic
Solution Algorithm: Automatic

	UPSTREAM	DOWNSTREAM		
Geometry:	Circular	Circular	Flow:	Both
Span(in):	24.00	24.00	Entrance Loss Coef:	0.75
Rise(in):	24.00	24.00	Exit Loss Coef:	0.00
Invert(ft):	18.600	18.400	Bend Loss Coef:	0.00
Manning's N:	0.024000	0.024000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

==== Channels ==========

Name: C_07N02_07N01 From Node: 7N02 Length(ft): 727.00
Group: SW 7 AVE To Node: 7N01 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	10.630	10.940
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	R1_17+19.49	R1_10+22.80
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.100
Expansion Coef: 0.300
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Name: C_07N03B_07N02 From Node: PRO_7N03B Length(ft): 2114.00
Group: SW 7 AVE To Node: 7N02 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	10.430	10.630
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	R1_38+64.32 mod	R1_17+19.49
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.600
Expansion Coef: 0.800
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

SLIGHTLY MODIFIED US SECTION.

Name: C_07N04_07N03 From Node: 7N04 Length(ft): 339.00
Group: SW 7 AVE To Node: 7N03 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	8.430	8.400
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	R1_42+03.00	R1_38+64.32
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.600
Expansion Coef: 0.800
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Aux XSec2:	
Top Width(ft):	
Depth(ft):	
Bot Width(ft):	
LtSdSlp(h/v):	
RtSdSlp(h/v):	

LOWERED CROSS SECTION @ A SLOPE OF 0.00864 BETWEEN 7N03 AND 7N29.

Name: C_07N05_07N04 From Node: 7N05 Length(ft): 509.00
Group: SW 7 AVE To Node: 7N04 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	9.130	8.690
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	R1_47+12.26	R1_42+03.00
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation:	Automatic
Solution Algorithm:	Automatic
Flow:	Both
Contraction Coef:	0.600
Expansion Coef:	0.800
Entrance Loss Coef:	0.000
Exit Loss Coef:	0.000
Outlet Ctrl Spec:	Use dc or tw
Inlet Ctrl Spec:	Use dn
Stabilizer Option:	None

LOWERED CROSS SECTION @ A SLOPE OF 0.00864 BETWEEN 7N03 AND 7N29.

Name: C_07N06_07N05 From Node: 7N06 Length(ft): 952.00
Group: SW 7 AVE To Node: 7N05 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	9.950	9.130
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	R1_56+63.89	R1_47+12.26
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation:	Average Conveyance
Solution Algorithm:	Automatic
Flow:	Both
Contraction Coef:	0.100
Expansion Coef:	0.300
Entrance Loss Coef:	0.000
Exit Loss Coef:	0.000
Outlet Ctrl Spec:	Use dc or tw
Inlet Ctrl Spec:	Use dn
Stabilizer Option:	None

LOWERED CROSS SECTION @ A SLOPE OF 0.00864 BETWEEN 7N03 AND 7N29.

Name: C_07N07_07N06 From Node: 7N07 Length(ft): 934.00
Group: SW 7 AVE To Node: 7N06 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	10.760	9.950
TClpInitZ(ft):	9999.000	9999.000

Friction Equation:	Automatic
Solution Algorithm:	Automatic
Flow:	Both
Contraction Coef:	0.600

Manning's N:			Expansion Coef:	0.800
Top Clip(ft):	0.000	0.000	Entrance Loss Coef:	0.000
Bot Clip(ft):	0.000	0.000	Exit Loss Coef:	0.000
Main XSec:	R1_65+97.58	R1_56+63.89	Outlet Ctrl Spec:	Use dc or tw
AuxElev1(ft):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Aux XSec1:			Stabilizer Option:	None
AuxElev2(ft):	0.000	0.000		
Aux XSec2:				
Top Width(ft):				
Depth(ft):				
Bot Width(ft):				
LtSdSlp(h/v):				
RtSdSlp(h/v):				

LOWERED CROSS SECTION @ A SLOPE OF 0.00864 BETWEEN 7N03 AND 7N29.

Name:	C_07N08_07N07	From Node: 7N08	Length(ft):	70.00
Group:	SW 7 AVE	To Node: 7N07	Count:	1

	UPSTREAM	DOWNSTREAM		
Geometry:	Irregular	Irregular	Friction Equation:	Automatic
Invert(ft):	10.820	10.760	Solution Algorithm:	Automatic
TClpInitZ(ft):	9999.000	9999.000	Flow:	Both
Manning's N:			Contraction Coef:	0.600
Top Clip(ft):	0.000	0.000	Expansion Coef:	0.800
Bot Clip(ft):	0.000	0.000	Entrance Loss Coef:	0.000
Main XSec:	R1_66+68.49	R1_65+97.58	Exit Loss Coef:	0.000
AuxElev1(ft):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
Aux XSec1:			Inlet Ctrl Spec:	Use dn
AuxElev2(ft):	0.000	0.000	Stabilizer Option:	None
Aux XSec2:				
p Width(ft):				
Depth(ft):				
Bot Width(ft):				
LtSdSlp(h/v):				
RtSdSlp(h/v):				

LOWERED CROSS SECTION @ A SLOPE OF 0.00864 BETWEEN 7N03 AND 7N29.

Name:	C_07N09_07N08	From Node: 7N09	Length(ft):	1284.00
Group:	SW 7 AVE	To Node: 7N08	Count:	1

	UPSTREAM	DOWNSTREAM		
Geometry:	Irregular	Irregular	Friction Equation:	Automatic
Invert(ft):	11.930	10.820	Solution Algorithm:	Automatic
TClpInitZ(ft):	9999.000	9999.000	Flow:	Both
Manning's N:			Contraction Coef:	0.600
Top Clip(ft):	0.000	0.000	Expansion Coef:	0.800
Bot Clip(ft):	0.000	0.000	Entrance Loss Coef:	0.000
Main XSec:	R1_79+51+98	R1_66+68.49	Exit Loss Coef:	0.000
AuxElev1(ft):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
Aux XSec1:			Inlet Ctrl Spec:	Use dn
AuxElev2(ft):	0.000	0.000	Stabilizer Option:	None
Aux XSec2:				
Top Width(ft):				
Depth(ft):				
Bot Width(ft):				
LtSdSlp(h/v):				
RtSdSlp(h/v):				

RED CROSS SECTION @ A SLOPE OF 0.00864 BETWEEN 7N03 AND 7N29.

Name: C_07N11_07N10 From Node: 7N11 Length(ft): 1239.00
Group: SW 7 AVE To Node: 7N10 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	13.060	11.990
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	TPS-087+52	TPS-100+64
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.600
Expansion Coef: 0.800
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

LOWERED CROSS SECTION @ A SLOPE OF 0.00864 BETWEEN 7N03 AND 7N29.

Name: C_07N13_07N12 From Node: 7N13 Length(ft): 530.00
Group: SW 7 AVE To Node: 7N12 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	13.550	13.090
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	TPS-082+22	TPS-087+52
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.100
Expansion Coef: 0.300
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

LOWERED CROSS SECTION @ A SLOPE OF 0.00864 BETWEEN 7N03 AND 7N29.

Name: C_07N15_07N14 From Node: PRO_7N15B Length(ft): 792.00
Group: SW 7 AVE To Node: 7N14 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	14.300	13.620
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	PRO_TPS-073+50	TPS-081+42
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.600
Expansion Coef: 0.800
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Bot Width(ft):
LtSdSlp(h/v):
RtSdSlp(h/v):

LOWERED CROSS SECTION @ A SLOPE OF 0.00864 BETWEEN 7N03 AND 7N29.

Name: C_07N16_07N17 From Node: 7N17 Length(ft): 328.00
Group: SW 7 AVE To Node: 7N16 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	14.620	14.330
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	TPS-069+86	TPS-073+14
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.100
Expansion Coef: 0.300
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

LOWERED CROSS SECTION @ A SLOPE OF 0.00864 BETWEEN 7N03 AND 7N29.

Name: C_07N19_07N18 From Node: 7N19 Length(ft): 406.00
Group: SW 7 AVE To Node: 7N18 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	14.990	14.640
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	TPS-065+80	TPS-069+86
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.600
Expansion Coef: 0.800
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Name: C_07N21_07N20 From Node: 7N21 Length(ft): 210.00
Group: SW 7 AVE To Node: 7N20 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	15.200	15.000
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.100
Expansion Coef: 0.300
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000

Main XSec:	TPS-063+70	TPS-065+80
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

LOWERED CROSS SECTION @ A SLOPE OF 0.00864 BETWEEN 7N03 AND 7N29.

Name: C_07N23_07N22 From Node: 7N23 Length(ft): 186.00
Group: SW 7 AVE To Node: 7N22 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	15.390	15.230
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	TPS-061+34	TPS-063+20
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.100
Expansion Coef: 0.300
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

LOWERED CROSS SECTION @ A SLOPE OF 0.00864 BETWEEN 7N03 AND 7N29.

Name: C_07N25_07N24 From Node: 7N25 Length(ft): 524.00
Group: SW 7 AVE To Node: 7N24 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	15.870	15.420
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	TPS-055+66	TPS-060+90
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.100
Expansion Coef: 0.300
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

LOWERED CROSS SECTION @ A SLOPE OF 0.00864 BETWEEN 7N03 AND 7N29.

Name: C_07N27_07N26 From Node: 7N27 Length(ft): 78.00
Group: SW 7 AVE To Node: 7N26 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	15.950	15.890
ClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	TPS-054+64	TPS-055+42
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation:	Automatic
Solution Algorithm:	Automatic
Flow:	Both
Contraction Coef:	0.100
Expansion Coef:	0.300
Entrance Loss Coef:	0.000
Exit Loss Coef:	0.000
Outlet Ctrl Spec:	Use dc or tw
Inlet Ctrl Spec:	Use dn
Stabilizer Option:	None

LOWERED CROSS SECTION @ A SLOPE OF 0.00864 BETWEEN 7N03 AND 7N29.

Name:	C_07N29_07N28	From Node:	7N29	Length(ft):	544.00
Group:	SW 7 AVE	To Node:	7N28	Count:	1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	16.500	16.000
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	TPS-048+72	TPS-054+16
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation:	Automatic
Solution Algorithm:	Automatic
Flow:	Both
Contraction Coef:	0.600
Expansion Coef:	0.800
Entrance Loss Coef:	0.000
Exit Loss Coef:	0.000
Outlet Ctrl Spec:	Use dc or tw
Inlet Ctrl Spec:	Use dn
Stabilizer Option:	None

LOWERED CROSS SECTION @ A SLOPE OF 0.00864 BETWEEN 7N03 AND 7N29.

Name:	C_07N31_07N30	From Node:	7N31	Length(ft):	108.00
Group:	SW 7 AVE	To Node:	7N30	Count:	1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	17.700	17.300
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	TPS-046+62	TPS-047+70
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
t Width(ft):		
tSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation:	Automatic
Solution Algorithm:	Automatic
Flow:	Both
Contraction Coef:	0.600
Expansion Coef:	0.800
Entrance Loss Coef:	0.000
Exit Loss Coef:	0.000
Outlet Ctrl Spec:	Use dc or tw
Inlet Ctrl Spec:	Use dn
Stabilizer Option:	None

LOWERED INVERTS @ SLOPE OF 0.0036 FT/FT BETWEEN NODES 7N30 & 7N49.

Name:	C_07N33_07N32	From Node:	7N33	Length(ft):	64.00
Group:	SW 7 AVE	To Node:	7N32	Count:	1

	UPSTREAM	DOWNSTREAM		
Geometry:	Irregular	Irregular	Friction Equation:	Average Conveyance
Invert(ft):	18.000	17.700	Solution Algorithm:	Automatic
TClpInitZ(ft):	9999.000	9999.000	Flow:	Both
Manning's N:			Contraction Coef:	0.100
Top Clip(ft):	0.000	0.000	Expansion Coef:	0.300
Bot Clip(ft):	0.000	0.000	Entrance Loss Coef:	0.000
Main XSec:	TPS-046+40	TPS-046+40	Exit Loss Coef:	0.000
AuxElev1(ft):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
Aux XSec1:			Inlet Ctrl Spec:	Use dn
AuxElev2(ft):	0.000	0.000	Stabilizer Option:	None
Aux XSec2:				
Top Width(ft):				
Depth(ft):				
Bot Width(ft):				
LtSdSlp(h/v):				
RtSdSlp(h/v):				

LOWERED INVERTS @ SLOPE OF 0.0036 FT/FT BETWEEN NODES 7N30 & 7N49.

Name:	C_07N35_07N34	From Node:	7N35	Length(ft):	152.00
Group:	SW 7 AVE	To Node:	7N34	Count:	1

	UPSTREAM	DOWNSTREAM		
Geometry:	Irregular	Irregular	Friction Equation:	Automatic
Invert(ft):	18.600	18.100	Solution Algorithm:	Automatic
TClpInitZ(ft):	9999.000	9999.000	Flow:	Both
Manning's N:			Contraction Coef:	0.100
Top Clip(ft):	0.000	0.000	Expansion Coef:	0.300
Bot Clip(ft):	0.000	0.000	Entrance Loss Coef:	0.000
Main XSec:	TPS-044+00	TPS-045+52	Exit Loss Coef:	0.000
AuxElev1(ft):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
Aux XSec1:			Inlet Ctrl Spec:	Use dn
AuxElev2(ft):	0.000	0.000	Stabilizer Option:	None
Aux XSec2:				
Top Width(ft):				
Depth(ft):				
Bot Width(ft):				
LtSdSlp(h/v):				
RtSdSlp(h/v):				

LOWERED INVERTS @ SLOPE OF 0.0036 FT/FT BETWEEN NODES 7N30 & 7N49.

Name:	C_07N37_07N36	From Node:	7N37	Length(ft):	136.00
Group:	SW 7 AVE	To Node:	7N36	Count:	1

	UPSTREAM	DOWNSTREAM		
Geometry:	Irregular	Irregular	Friction Equation:	Automatic
Invert(ft):	19.200	18.700	Solution Algorithm:	Automatic
TClpInitZ(ft):	9999.000	9999.000	Flow:	Both
Manning's N:			Contraction Coef:	0.100
Top Clip(ft):	0.000	0.000	Expansion Coef:	0.300
Bot Clip(ft):	0.000	0.000	Entrance Loss Coef:	0.000
Main XSec:	TPS-042+34	TPS-043+70	Exit Loss Coef:	0.000
AuxElev1(ft):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
Aux XSec1:			Inlet Ctrl Spec:	Use dn
			Stabilizer Option:	None

AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

LOWERED INVERTS @ SLOPE OF 0.0036 FT/FT BETWEEN NODES 7N30 & 7N49.

Name: C_07N39_07N38 From Node: 7N39 Length(ft): 46.00
Group: SW 7 AVE To Node: 7N38 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	19.500	19.300
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	TPS-041+40	TPS-041+86
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.100
Expansion Coef: 0.300
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

'ERED INVERTS @ SLOPE OF 0.0036 FT/FT BETWEEN NODES 7N30 & 7N49.

Name: C_07N41_07N40 From Node: 7N41 Length(ft): 50.00
Group: SW 7 AVE To Node: 7N40 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	19.600	19.500
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	TPS-040+62	TPS-041+12
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.600
Expansion Coef: 0.800
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

LOWERED INVERTS @ SLOPE OF 0.0036 FT/FT BETWEEN NODES 7N30 & 7N49.

Name: C_07N43_07N42 From Node: 7N43 Length(ft): 70.00
Group: SW 7 AVE To Node: 7N42 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	20.100	19.800

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both

TClpInitZ(ft):	9999.000	9999.000	Contraction Coef:	0.600
Manning's N:			Expansion Coef:	0.800
Top Clip(ft):	0.000	0.000	Entrance Loss Coef:	0.000
Bot Clip(ft):	0.000	0.000	Exit Loss Coef:	0.000
Main XSec:	TPS-039+70	TPS-040+40	Outlet Ctrl Spec:	Use dc or tw
AuxElev1(ft):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Aux XSec1:			Stabilizer Option:	None
AuxElev2(ft):	0.000	0.000		
Aux XSec2:				
Top Width(ft):				
Depth(ft):				
Bot Width(ft):				
LtSdSlp(h/v):				
RtSdSlp(h/v):				

LOWERED INVERTS @ SLOPE OF 0.0036 FT/FT BETWEEN NODES 7N30 & 7N49.

Name:	C_07N45_07N44	From Node:	7N45	Length(ft):	130.00
Group:	SW 7 AVE	To Node:	7N44	Count:	1

	UPSTREAM	DOWNSTREAM		
Geometry:	Irregular	Irregular	Friction Equation:	Automatic
Invert(ft):	20.600	20.200	Solution Algorithm:	Automatic
TClpInitZ(ft):	9999.000	9999.000	Flow:	Both
Manning's N:			Contraction Coef:	0.600
Top Clip(ft):	0.000	0.000	Expansion Coef:	0.800
Bot Clip(ft):	0.000	0.000	Entrance Loss Coef:	0.000
Main XSec:	TPS-038+00	TPS-039+46	Exit Loss Coef:	0.000
AuxElev1(ft):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
Aux XSec1:			Inlet Ctrl Spec:	Use dn
AuxElev2(ft):	0.000	0.000	Stabilizer Option:	None
Aux XSec2:				
Top Width(ft):				
Depth(ft):				
Bot Width(ft):				
LtSdSlp(h/v):				
RtSdSlp(h/v):				

LOWERED INVERTS @ SLOPE OF 0.0036 FT/FT BETWEEN NODES 7N30 & 7N49.

SECTION TPS 38+00 WAS WIDENED

Name:	C_07N47_07N46	From Node:	7N47	Length(ft):	180.00
Group:	SW 7 AVE	To Node:	7N46	Count:	1

	UPSTREAM	DOWNSTREAM		
Geometry:	Irregular	Irregular	Friction Equation:	Average Conveyance
Invert(ft):	21.400	20.700	Solution Algorithm:	Automatic
TClpInitZ(ft):	9999.000	9999.000	Flow:	Both
Manning's N:			Contraction Coef:	0.100
Top Clip(ft):	0.000	0.000	Expansion Coef:	0.300
Bot Clip(ft):	0.000	0.000	Entrance Loss Coef:	0.000
Main XSec:	TPS-036+20	TPS-038+00	Exit Loss Coef:	0.000
AuxElev1(ft):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
Aux XSec1:			Inlet Ctrl Spec:	Use dn
AuxElev2(ft):	0.000	0.000	Stabilizer Option:	None
Aux XSec2:				
Top Width(ft):				
Depth(ft):				
Bot Width(ft):				
LtSdSlp(h/v):				
RtSdSlp(h/v):				

LOWERED INVERTS @ SLOPE OF 0.0036 FT/FT BETWEEN NODES 7N30 & 7N49.

CTION TPS 36+20 WAS WIDENED

Name: C_07N49_07N48 From Node: 7N49 Length(ft): 164.00
Group: SW 7 AVE To Node: 7N48 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	22.000	21.400
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	TPS-034+24	TPS-035+88
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.100
Expansion Coef: 0.300
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

LOWERED INVERTS @ SLOPE OF 0.0036 FT/FT BETWEEN NODES 7N30 & 7N49.

Name: C_07N51_07N50 From Node: 7N51 Length(ft): 170.00
Group: SW 7 AVE To Node: 7N50 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	23.100	22.200
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	TPS-032+30	TPS-034+00
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.100
Expansion Coef: 0.300
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Name: C_07N53_07N52 From Node: 7N53 Length(ft): 100.00
Group: SW 7 AVE To Node: 7N52 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	23.100	23.100
lpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000

Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.100
Expansion Coef: 0.300
Entrance Loss Coef: 0.000

Bot Clip(ft):	0.000	0.000
Main XSec:	TPS-031+00	TPS-032+00
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Name: C_07N55_07N54 From Node: 7N55 Length(ft): 302.00
Group: SW 7 AVE To Node: 7N54 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	23.600	23.100
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	TPS-027+18	TPS-030+20
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.100
Expansion Coef: 0.300
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Name: C_07N57_07N56 From Node: 7N57 Length(ft): 202.00
Group: SW 7 AVE To Node: 7N56 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	23.600	23.600
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	TPS-024+50	TPS-026+52
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.600
Expansion Coef: 0.800
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Name: C_07N59_07N58 From Node: 7N59 Length(ft): 50.00
Group: SW 7 AVE To Node: 7N58 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	23.600	23.600
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	TPS-023+70	TPS-024+20
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.100
Expansion Coef: 0.300
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Name: C_07N61_07N60 From Node: 7N61 Length(ft): 150.00
Group: SW 7 AVE To Node: 7N60 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	24.200	24.200
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	TPS-021+50	TPS-023+00
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.100
Expansion Coef: 0.300
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Name: C_07N63_07N62 From Node: 7N63 Length(ft): 66.00
Group: SW 7 AVE To Node: 7N62 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	24.500	24.500
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	TPS-020+60	TPS-021+26
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		

Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.100
Expansion Coef: 0.300
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

RtSdSlp(h/v):

Name: C_07N65_07N64 From Node: 7N65 Length(ft): 340.00
Group: SW 7 AVE To Node: 7N64 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	24.000	24.000
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	TPS-016+10	TPS-019+50
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.100
Expansion Coef: 0.300
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Name: C_07N67_07N66 From Node: 7N67 Length(ft): 412.00
Group: SW 7 AVE To Node: 7N66 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	25.100	24.000
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	TPS-011+18	TPS-015+30
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.600
Expansion Coef: 0.800
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Name: C_07N69_07N68 From Node: 7N69 Length(ft): 320.00
Group: SW 7 AVE To Node: 7N68 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	25.300	25.100
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	TPS-007+60	TPS-010+80
AuxElev1(ft):	0.000	0.000

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.600
Expansion Coef: 0.800
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn

Aux XSec1:			Stabilizer Option: None
AuxElev2(ft):	0.000	0.000	
Aux XSec2:			
Top Width(ft):			
Depth(ft):			
Bot Width(ft):			
LtSdSlp(h/v):			
RtSdSlp(h/v):			

Name:	C_07N71_07N70	From Node:	7N71	Length(ft):	140.00
Group:	SW 7 AVE	To Node:	7N70	Count:	1

	UPSTREAM	DOWNSTREAM		
Geometry:	Irregular	Irregular	Friction Equation:	Average Conveyance
Invert(ft):	25.300	25.300	Solution Algorithm:	Automatic
TClpInitZ(ft):	9999.000	9999.000	Flow:	Both
Manning's N:			Contraction Coef:	0.100
Top Clip(ft):	0.000	0.000	Expansion Coef:	0.300
Bot Clip(ft):	0.000	0.000	Entrance Loss Coef:	0.000
Main XSec:	TPS-005+70	TPS-007+10	Exit Loss Coef:	0.000
AuxElev1(ft):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
Aux XSec1:			Inlet Ctrl Spec:	Use dn
AuxElev2(ft):	0.000	0.000	Stabilizer Option:	None
Aux XSec2:				
Top Width(ft):				
Depth(ft):				
Bot Width(ft):				
LtSdSlp(h/v):				
RtSdSlp(h/v):				

Name:	C_07N73_07N72	From Node:	7N73	Length(ft):	205.00
Group:	SW 7 AVE	To Node:	7N72	Count:	1

	UPSTREAM	DOWNSTREAM		
Geometry:	Irregular	Irregular	Friction Equation:	Automatic
Invert(ft):	26.000	25.300	Solution Algorithm:	Automatic
TClpInitZ(ft):	9999.000	9999.000	Flow:	Both
Manning's N:			Contraction Coef:	0.600
Top Clip(ft):	0.000	0.000	Expansion Coef:	0.800
Bot Clip(ft):	0.000	0.000	Entrance Loss Coef:	0.000
Main XSec:	TPS-003+25	TPS-005+30	Exit Loss Coef:	0.000
AuxElev1(ft):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
Aux XSec1:			Inlet Ctrl Spec:	Use dn
AuxElev2(ft):	0.000	0.000	Stabilizer Option:	None
Aux XSec2:				
Top Width(ft):				
Depth(ft):				
Bot Width(ft):				
LtSdSlp(h/v):				
RtSdSlp(h/v):				

Name:	C_07N75_07N74	From Node:	7N75	Length(ft):	154.00
Group:	SW 7 AVE	To Node:	7N74	Count:	1

	UPSTREAM	DOWNSTREAM		
Geometry:	Irregular	Irregular	Friction Equation:	Average Conveyance
			Solution Algorithm:	Automatic

Invert(ft):	26.700	26.400
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	TPS-001+30	TPS-002+84
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Flow:	Both
Contraction Coef:	0.100
Expansion Coef:	0.300
Entrance Loss Coef:	0.000
Exit Loss Coef:	0.000
Outlet Ctrl Spec:	Use dc or tw
Inlet Ctrl Spec:	Use dn
Stabilizer Option:	None

Name: C_16N01_GBC01 From Node: 16N01 Length(ft): 300.00
Group: SW 16/12 AVE To Node: GBC01 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	6.300	6.300
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	16TPS-023+16	GB CANAL X-01
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation:	Automatic
Solution Algorithm:	Automatic
Flow:	Both
Contraction Coef:	0.600
Expansion Coef:	0.800
Entrance Loss Coef:	0.000
Exit Loss Coef:	0.000
Outlet Ctrl Spec:	Use dc or tw
Inlet Ctrl Spec:	Use dn
Stabilizer Option:	None

STABILITY ISSUES; INCREASED LINK FROM 100' TO 300'. SHORTENED USTREAM LINK BY 200'. (C_16N02_16N01)

Name: C_16N02_16N01 From Node: 16N02 Length(ft): 1606.00
Group: SW 16/12 AVE To Node: 16N01 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	8.700	6.300
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	16TPS-034+00	16TPS-023+16
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation:	Automatic
Solution Algorithm:	Automatic
Flow:	Both
Contraction Coef:	0.100
Expansion Coef:	0.300
Entrance Loss Coef:	0.000
Exit Loss Coef:	0.000
Outlet Ctrl Spec:	Use dc or tw
Inlet Ctrl Spec:	Use dn
Stabilizer Option:	None

UPSTREAM SEC 34+00 PROJECTED TO STATION 41+22

Name: C_16N03_16N02 From Node: 16N03 Length(ft): 3300.00
Group: SW 16/12 AVE To Node: 16N02 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	14.000	8.700
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	16TPS-074+00	16TPS-034+00
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.600
Expansion Coef: 0.800
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Name: C_16N05_16N04 From Node: 16N05 Length(ft): 1221.00
Group: SW 16/12 AVE To Node: 16N04 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	14.300	14.000
lpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	16TPS-086+75	16TPS-074+54
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.100
Expansion Coef: 0.300
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Name: C_16N07_16N06 From Node: 16N07 Length(ft): 1068.00
Group: SW 16/12 AVE To Node: 16N06 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	14.700	15.400
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	16TPS-098+48	16TPS-087+80
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: None
Contraction Coef: 0.600
Expansion Coef: 0.800
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

```
 Top Width(ft):
     Depth(ft):
 Bot Width(ft):
  LtSdSlp(h/v):
  RtSdSlp(h/v):

LINK TURNED OFF & REPLACED W/NEW TRAP SECTION

--------------------------------------------------------------------------------
          Name: C_16N09_16N08       From Node: 16N09          Length(ft): 580.00
         Group: SW 16/12 AVE          To Node: 16N08               Count: 1

                UPSTREAM        DOWNSTREAM
      Geometry: Irregular       Irregular       Friction Equation: Automatic
    Invert(ft): 17.100          14.800          Solution Algorithm: Automatic
 TClpInitZ(ft): 9999.000        9999.000                      Flow: Both
   Manning's N:                                  Contraction Coef: 0.600
  Top Clip(ft): 0.000           0.000                Expansion Coef: 0.800
  Bot Clip(ft): 0.000           0.000           Entrance Loss Coef: 0.000
     Main XSec: 16TPS-107+83    16TPS-098+80        Exit Loss Coef: 0.000
  AuxElev1(ft): 0.000           0.000          Outlet Ctrl Spec: Use dc or tw
     Aux XSec1:                                   Inlet Ctrl Spec: Use dn
  AuxElev2(ft): 0.000           0.000          Stabilizer Option: None
     Aux XSec2:
 Top Width(ft):
     Depth(ft):
 Bot Width(ft):
  LtSdSlp(h/v):
  RtSdSlp(h/v):

USED US CROSSECTION FOR PIPE INFLOW POINT

LOWERD US INVERT FROM  17.1 TO 15.3 BASED ON SLOPE 0.000914 BTWN OLD  DIXIE INVERT AND EXISTING 54"
INVERT

--------------------------------------------------------------------------------
          Name: C_16N10_16N09       From Node: 16N10          Length(ft): 1636.00
         Group: SW 16/12 AVE          To Node: 16N09               Count: 1

                UPSTREAM        DOWNSTREAM
      Geometry: Irregular       Irregular       Friction Equation: Automatic
    Invert(ft): 16.830          15.300          Solution Algorithm: Automatic
 TClpInitZ(ft): 9999.000        9999.000                      Flow: Both
   Manning's N:                                  Contraction Coef: 0.100
  Top Clip(ft): 0.000           0.000                Expansion Coef: 0.300
  Bot Clip(ft): 0.000           0.000           Entrance Loss Coef: 0.000
     Main XSec: 16TPS-107+83    16TPS-107+83        Exit Loss Coef: 0.000
  AuxElev1(ft): 0.000           0.000          Outlet Ctrl Spec: Use dc or tw
     Aux XSec1:                                   Inlet Ctrl Spec: Use dn
  AuxElev2(ft): 0.000           0.000          Stabilizer Option: None
     Aux XSec2:
 Top Width(ft):
     Depth(ft):
 Bot Width(ft):
  LtSdSlp(h/v):
  RtSdSlp(h/v):

USED US/DS CROSSECTION FOR PIPE INFLOW POINT

LOWERD DS INVERT FROM  17.1 TO 15.3 BASED ON SLOPE 0.000914 BTWN OLD  DIXIE INVERT AND EXISTING 54"
INVERT
LOWERD US INVERT FROM  17.1 TO 16,83  BASED ON SLOPE 0.000914 BTWN OLD  DIXIE INVERT AND EXISTING 54"
INVERT

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```
         Name: C_16N11_16N10       From Node: 16N11          Length(ft): 250.00
        Group: SW 16/12 AVE          To Node: 16N10               Count: 1

                UPSTREAM       DOWNSTREAM
      Geometry: Irregular      Irregular          Friction Equation: Average Conveyance
    Invert(ft): 17.060         16.830           Solution Algorithm: Automatic
 TClpInitZ(ft): 9999.000       9999.000                      Flow: Both
   Manning's N:                                  Contraction Coef: 0.100
  Top Clip(ft): 0.000          0.000              Expansion Coef: 0.300
  Bot Clip(ft): 0.000          0.000          Entrance Loss Coef: 0.000
     Main XSec: 16TPS-107+83   16TPS-107+83       Exit Loss Coef: 0.000
  AuxElev1(ft): 0.000          0.000            Outlet Ctrl Spec: Use dc or tw
     Aux XSec1:                                   Inlet Ctrl Spec: Use dn
  AuxElev2(ft): 0.000          0.000           Stabilizer Option: None
     Aux XSec2:
 Top Width(ft):
     Depth(ft):
 Bot Width(ft):
  LtSdSlp(h/v):
  RtSdSlp(h/v):

USED US/DS CROSSECTION FOR PIPE INFLOW POINT

LOWERD DS INVERT FROM  17.5 TO 16.83 BASED ON SLOPE 0.000914 BTWN OLD  DIXIE INVERT AND EXISTING 54"
INVERT
LOWERD US INVERT FROM  17.5 TO 17.06 BASED ON SLOPE 0.000914 BTWN OLD  DIXIE INVERT AND EXISTING 54"
INVERT

--------------------------------------------------------------------------------------------------------

         Name: C_16N12_16N11       From Node: 16N12          Length(ft): 282.00
        Group: SW 16/12 AVE          To Node: 16N11               Count: 1

                UPSTREAM       DOWNSTREAM
      Geometry: Irregular      Irregular          Friction Equation: Automatic
    Invert(ft): 17.300         17.060           Solution Algorithm: Automatic
 TClpInitZ(ft): 9999.000       9999.000                      Flow: Both
   Manning's N:                                  Contraction Coef: 0.100
  Top Clip(ft): 0.000          0.000              Expansion Coef: 0.300
  Bot Clip(ft): 0.000          0.000          Entrance Loss Coef: 0.000
     Main XSec: 16TPS-107+83   16TPS-107+83       Exit Loss Coef: 0.000
  AuxElev1(ft): 0.000          0.000            Outlet Ctrl Spec: Use dc or tw
     Aux XSec1:                                   Inlet Ctrl Spec: Use dn
  AuxElev2(ft): 0.000          0.000           Stabilizer Option: None
     Aux XSec2:
 Top Width(ft):
     Depth(ft):
 Bot Width(ft):
  LtSdSlp(h/v):
  RtSdSlp(h/v):

USED US/DS CROSSECTION FOR PIPE INFLOW POINT

LOWERD DS INVERT FROM  17.5 TO 17.06 BASED ON SLOPE 0.000914 BTWN OLD  DIXIE INVERT AND EXISTING 54"
INVERT
LOWERD US INVERT FROM  17.5 TO 17.3 BASED ON SLOPE 0.000914 BTWN OLD  DIXIE INVERT AND EXISTING 54"
INVERT

--------------------------------------------------------------------------------------------------------

         Name: C_16N13_16N12       From Node: 16N13          Length(ft): 210.00
        Group: SW 16/12 AVE          To Node: 16N12               Count: 1

                UPSTREAM       DOWNSTREAM
      Geometry: Irregular      Irregular          Friction Equation: Automatic
    Invert(ft): 17.500         17.300           Solution Algorithm: Automatic
 TClpInitZ(ft): 9999.000       9999.000                      Flow: Both
                                                 Contraction Coef: 0.100
```

Manning's N:			Expansion Coef:	0.300
Top Clip(ft):	0.000	0.000	Entrance Loss Coef:	0.000
Bot Clip(ft):	0.000	0.000	Exit Loss Coef:	0.000
Main XSec:	16TPS-107+83	16TPS-107+83	Outlet Ctrl Spec:	Use dc or tw
AuxElev1(ft):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Aux XSec1:			Stabilizer Option:	None
AuxElev2(ft):	0.000	0.000		
Aux XSec2:				
Top Width(ft):				
Depth(ft):				
Bot Width(ft):				
LtSdSlp(h/v):				
RtSdSlp(h/v):				

USED US/DS CROSSECTION FOR PIPE INFLOW POINT

LOWERD DS INVERT FROM 17.5 TO 17.3 BASED ON SLOPE 0.000914 BTWN OLD DIXIE INVERT AND EXISTING 54" INVERT

Name: C_16N14_16N13 From Node: 16N14 Length(ft): 650.00
Group: SW 16/12 AVE To Node: 16N13 Count: 1

	UPSTREAM	DOWNSTREAM		
Geometry:	Irregular	Irregular	Friction Equation:	Automatic
Invert(ft):	18.100	17.500	Solution Algorithm:	Automatic
TClpInitZ(ft):	9999.000	9999.000	Flow:	Both
Manning's N:			Contraction Coef:	0.600
Top Clip(ft):	0.000	0.000	Expansion Coef:	0.800
Bot Clip(ft):	0.000	0.000	Entrance Loss Coef:	0.000
Main XSec:	16TPS-126+80	16TPS-107+83	Exit Loss Coef:	0.000
AuxElev1(ft):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
Aux XSec1:			Inlet Ctrl Spec:	Use dn
AuxElev2(ft):	0.000	0.000	Stabilizer Option:	None
Aux XSec2:				
Top Width(ft):				
Depth(ft):				
Bot Width(ft):				
LtSdSlp(h/v):				
RtSdSlp(h/v):				

Name: C_16N16_16N15 From Node: 16N16 Length(ft): 308.00
Group: SW 16/12 AVE To Node: 16N15 Count: 1

	UPSTREAM	DOWNSTREAM		
Geometry:	Irregular	Irregular	Friction Equation:	Average Conveyance
Invert(ft):	18.300	17.800	Solution Algorithm:	Automatic
TClpInitZ(ft):	9999.000	9999.000	Flow:	Both
Manning's N:			Contraction Coef:	0.100
Top Clip(ft):	0.000	0.000	Expansion Coef:	0.300
Bot Clip(ft):	0.000	0.000	Entrance Loss Coef:	0.000
Main XSec:	16TPS-127+30	16TPS-127+30	Exit Loss Coef:	0.000
AuxElev1(ft):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
Aux XSec1:			Inlet Ctrl Spec:	Use dn
AuxElev2(ft):	0.000	0.000	Stabilizer Option:	None
Aux XSec2:				
Top Width(ft):				
Depth(ft):				
Bot Width(ft):				
LtSdSlp(h/v):				
RtSdSlp(h/v):				

Name: C_16N17_16N16 From Node: 16N17 Length(ft): 340.00
Group: SW 16/12 AVE To Node: 16N16 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	18.700	18.300
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	16TPS-133+78	16TPS-127+30
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.600
Expansion Coef: 0.800
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

USED US/DS CROSSECTION FOR PIPE INFLOW POINT

Name: C_16N18_16N17 From Node: 16N18 Length(ft): 380.00
Group: SW 16/12 AVE To Node: 16N17 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	18.900	18.700
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	16TPS-140+50	16TPS-133+78
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.600
Expansion Coef: 0.800
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

USED US/DS CROSSECTION FOR PIPE INFLOW POINT

Name: C_16N19_16N18 From Node: 16N19 Length(ft): 672.00
Group: SW 16/12 AVE To Node: 16N18 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	17.300	18.900
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	16TPS-140+50	16TPS-140+50
AuxElev1(ft):	0.000	0.000
Aux XSec1:		

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.100
Expansion Coef: 0.300
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

USED US/DS CROSSECTION FOR PIPE INFLOW POINT

Name: C_16N21_16N20 From Node: 16N21 Length(ft): 430.00
Group: SW 16/12 AVE To Node: 16N20 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	19.900	17.300
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	16TPS-144+80	16TPS-140+50
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.600
Expansion Coef: 0.800
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Name: C_16N22_16N21 From Node: 16N22 Length(ft): 395.00
Group: SW 16/12 AVE To Node: 16N21 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	19.900	19.900
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	16TPS-148+75	16TPS-144+80
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.100
Expansion Coef: 0.300
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Name: C_16N24_16N23 From Node: 16N24 Length(ft): 162.00
Group: SW 16/12 AVE To Node: 16N23 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	22.000	21.000

Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both

TClpInitZ(ft):	9999.000	9999.000	Contraction Coef:	0.100
Manning's N:			Expansion Coef:	0.300
Top Clip(ft):	0.000	0.000	Entrance Loss Coef:	0.000
Bot Clip(ft):	0.000	0.000	Exit Loss Coef:	0.000
Main XSec:	16TPS-148+75	16TPS-148+75	Outlet Ctrl Spec:	Use dc or tw
AuxElev1(ft):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Aux XSec1:			Stabilizer Option:	None
AuxElev2(ft):	0.000	0.000		
Aux XSec2:				
Top Width(ft):				
Depth(ft):				
Bot Width(ft):				
LtSdSlp(h/v):				
RtSdSlp(h/v):				

USED US/DS CROSSECTION FOR PIPE INFLOW POINT

Name:	C_16N25_16N24	From Node:	16N25	Length(ft):	290.00
Group:	SW 16/12 AVE	To Node:	16N24	Count:	1

	UPSTREAM	DOWNSTREAM		
Geometry:	Irregular	Irregular	Friction Equation:	Automatic
Invert(ft):	22.700	19.900	Solution Algorithm:	Automatic
TClpInitZ(ft):	9999.000	9999.000	Flow:	Both
Manning's N:			Contraction Coef:	0.600
Top Clip(ft):	0.000	0.000	Expansion Coef:	0.800
Bot Clip(ft):	0.000	0.000	Entrance Loss Coef:	0.000
Main XSec:	16TPS-153+20	16TPS-148+75	Exit Loss Coef:	0.000
AuxElev1(ft):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
Aux XSec1:			Inlet Ctrl Spec:	Use dn
AuxElev2(ft):	0.000	0.000	Stabilizer Option:	None
Aux XSec2:				
Top Width(ft):				
Depth(ft):				
Bot Width(ft):				
LtSdSlp(h/v):				
RtSdSlp(h/v):				

USED US/DS CROSSECTION FOR PIPE INFLOW POINT

Name:	C_16N27_16N26	From Node:	16N27	Length(ft):	210.00
Group:	SW 16/12 AVE	To Node:	16N26	Count:	1

	UPSTREAM	DOWNSTREAM		
Geometry:	Irregular	Irregular	Friction Equation:	Automatic
Invert(ft):	23.000	22.600	Solution Algorithm:	Automatic
TClpInitZ(ft):	9999.000	9999.000	Flow:	Both
Manning's N:			Contraction Coef:	0.100
Top Clip(ft):	0.000	0.000	Expansion Coef:	0.300
Bot Clip(ft):	0.000	0.000	Entrance Loss Coef:	0.000
Main XSec:	16TPS-153+60	16TPS-153+60	Exit Loss Coef:	0.000
AuxElev1(ft):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
Aux XSec1:			Inlet Ctrl Spec:	Use dn
AuxElev2(ft):	0.000	0.000	Stabilizer Option:	None
Aux XSec2:				
Top Width(ft):				
Depth(ft):				
Bot Width(ft):				
LtSdSlp(h/v):				
RtSdSlp(h/v):				

USED US/DS CROSSECTION FOR PIPE INFLOW POINT

Name: C_16N28_16N27 From Node: 16N28 Length(ft): 620.00
Group: SW 16/12 AVE To Node: 16N27 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	21.400	23.000
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	16TPS-159+80	16TPS-153+60
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.100
Expansion Coef: 0.300
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

USED US/DS CROSSECTION FOR PIPE INFLOW POINT

Name: C_16N30_16N31 From Node: 16N30 Length(ft): 235.00
Group: SW 16/12 AVE To Node: 16N29 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	22.600	21.500
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	16TPS-162+60	16TPS-160+25
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.100
Expansion Coef: 0.300
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Name: C_16N32_16N31 From Node: 16N32 Length(ft): 430.00
Group: SW 16/12 AVE To Node: 16N31 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	22.600	22.600
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	16TPS-169+68	16TPS-163+00
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		

Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.600
Expansion Coef: 0.800
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Depth(ft):
Bot Width(ft):
LtSdSlp(h/v):
RtSdSlp(h/v):

USED US/DS CROSSECTION FOR PIPE INFLOW POINT

Name: C_16N33_16N32 From Node: 16N33 Length(ft): 253.00
Group: SW 16/12 AVE To Node: 16N32 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	24.000	24.000
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	16TPS-169+68	16TPS-169+68
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.100
Expansion Coef: 0.300
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Name: C_16N37_16N36 From Node: 16N37 Length(ft): 206.00
Group: SW 16/12 AVE To Node: 16N36 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	25.300	25.000
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	16TPS-174+34	16TPS-169+68
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.100
Expansion Coef: 0.300
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Name: C_16N40_16N39 From Node: 16N40 Length(ft): 360.00
Group: SW 16/12 AVE To Node: 16N39 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	25.500	25.500
lpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000

Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.100
Expansion Coef: 0.300
Entrance Loss Coef: 0.000

Bot Clip(ft):	0.000	0.000
Main XSec:	16TPS-179+60	16TPS-179+60
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Name: C_16N42_16N41 From Node: 16N42 Length(ft): 430.00
Group: SW 16/12 AVE To Node: 16N41 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	26.200	25.900
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	16TPS-188+14	16TPS-180+00
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.600
Expansion Coef: 0.800
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

USED US/DS CROSSECTION FOR PIPE INFLOW POINT

Name: C_16N43_16N42 From Node: 16N43 Length(ft): 380.00
Group: SW 16/12 AVE To Node: 16N42 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	27.500	27.500
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	16TPS-188+14	16TPS-188+14
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.100
Expansion Coef: 0.300
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

USED US/DS CROSSECTION FOR PIPE INFLOW POINT

Name: C_16N45_16N44 From Node: 16N45 Length(ft): 116.00
Group: SW 16/12 AVE To Node: 16N44 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	26.000	26.000
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	16TPS-189+50	16TPS-188+34
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.100
Expansion Coef: 0.300
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Name: C_16N47_16N46 From Node: 16N47 Length(ft): 270.00
Group: SW 16/12 AVE To Node: 16N46 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	25.700	26.300
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	16TPS-192+70	16TPS-190+00
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.100
Expansion Coef: 0.300
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Name: C_16N49_16N48 From Node: 16N49 Length(ft): 270.00
Group: SW 16/12 AVE To Node: 16N48 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	25.800	25.700
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	16TPS-196+00	16TPS-193+30
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		

Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.100
Expansion Coef: 0.300
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

RtSdSlp(h/v):

Name: C_16N51_16N50 From Node: 16N51 Length(ft): 285.00
Group: SW 16/12 AVE To Node: 16N50 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	25.700	25.800
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	16TPS-199+45	16TPS-196+60
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.600
Expansion Coef: 0.800
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Name: C_16N53_16N52 From Node: 16N53 Length(ft): 533.00
Group: SW 16/12 AVE To Node: 16N52 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	27.000	25.700
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	16TPS-205+33	16TPS-200+00
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.600
Expansion Coef: 0.800
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Name: C_26N01_26RC From Node: 26N01 Length(ft): 128.83
Group: SW 26 AVE To Node: 26@~LEMKIN CK Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	5.180	4.730
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	R2_11+39.30	R2_10+10.47
AuxElev1(ft):	0.000	0.000

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: None
Contraction Coef: 0.100
Expansion Coef: 0.300
Entrance Loss Coef: 0.000
Exit Loss Coef: 1.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn

Aux XSec1:			Stabilizer Option: None
AuxElev2(ft):	0.000	0.000	
Aux XSec2:			
op Width(ft):			
Depth(ft):			
Bot Width(ft):			
LtSdSlp(h/v):			
RtSdSlp(h/v):			

THIS LINK IS TURNED OFF AS IT IS REPLACED WITH THE PROPOSED CONCEPTUAL RESEVOIR

Name:	C_26N02_26N01	From Node:	26N02	Length(ft):	529.00
Group:	SW 26 AVE	To Node:	26N01	Count:	1

	UPSTREAM	DOWNSTREAM		
Geometry:	Irregular	Irregular	Friction Equation:	Automatic
Invert(ft):	4.350	5.180	Solution Algorithm:	Automatic
TClpInitZ(ft):	9999.000	9999.000	Flow:	Both
Manning's N:			Contraction Coef:	0.600
Top Clip(ft):	0.000	0.000	Expansion Coef:	0.800
Bot Clip(ft):	0.000	0.000	Entrance Loss Coef:	0.000
Main XSec:	R2_16+68.26	R2_11+39.30	Exit Loss Coef:	0.000
AuxElev1(ft):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
Aux XSec1:			Inlet Ctrl Spec:	Use dn
AuxElev2(ft):	0.000	0.000	Stabilizer Option:	None
Aux XSec2:				
Top Width(ft):				
Depth(ft):				
Bot Width(ft):				
LtSdSlp(h/v):				
RtSdSlp(h/v):				

Name:	C_26N03_26N02	From Node:	26N03	Length(ft):	499.00
Group:	SW 26 AVE	To Node:	26N02	Count:	1

	UPSTREAM	DOWNSTREAM		
Geometry:	Irregular	Irregular	Friction Equation:	Automatic
Invert(ft):	4.960	4.350	Solution Algorithm:	Automatic
TClpInitZ(ft):	9999.000	9999.000	Flow:	Both
Manning's N:			Contraction Coef:	0.600
Top Clip(ft):	0.000	0.000	Expansion Coef:	0.800
Bot Clip(ft):	0.000	0.000	Entrance Loss Coef:	0.000
Main XSec:	R2_21+66.95	R2_16+68.26	Exit Loss Coef:	0.000
AuxElev1(ft):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
Aux XSec1:			Inlet Ctrl Spec:	Use dn
AuxElev2(ft):	0.000	0.000	Stabilizer Option:	None
Aux XSec2:				
Top Width(ft):				
Depth(ft):				
Bot Width(ft):				
LtSdSlp(h/v):				
RtSdSlp(h/v):				

Name:	C_26N04_26N03	From Node:	26N04	Length(ft):	583.00
Group:	SW 26 AVE	To Node:	26N03	Count:	1

	UPSTREAM	DOWNSTREAM		
Geometry:	Irregular	Irregular	Friction Equation:	Automatic
			Solution Algorithm:	Automatic

Invert(ft):	4.920	4.960
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	R2_27+49.88	R2_21+66.95
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Flow:	Both
Contraction Coef:	0.600
Expansion Coef:	0.800
Entrance Loss Coef:	0.000
Exit Loss Coef:	0.000
Outlet Ctrl Spec:	Use dc or tw
Inlet Ctrl Spec:	Use dn
Stabilizer Option:	None

Name: C_26N05_26N04 From Node: 26N05 Length(ft): 434.00
Group: SW 26 AVE To Node: 26N04 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	4.590	4.920
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	R2_31+84.12	R2_27+49.88
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation:	Automatic
Solution Algorithm:	Automatic
Flow:	Both
Contraction Coef:	0.600
Expansion Coef:	0.800
Entrance Loss Coef:	0.000
Exit Loss Coef:	0.000
Outlet Ctrl Spec:	Use dc or tw
Inlet Ctrl Spec:	Use dn
Stabilizer Option:	None

Name: C_26N06_26N05 From Node: 26N06 Length(ft): 501.00
Group: SW 26 AVE To Node: 26N05 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	2.690	4.590
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	R2_36+85.00	R2_31+84.12
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation:	Automatic
Solution Algorithm:	Automatic
Flow:	Both
Contraction Coef:	0.600
Expansion Coef:	0.800
Entrance Loss Coef:	0.000
Exit Loss Coef:	0.000
Outlet Ctrl Spec:	Use dc or tw
Inlet Ctrl Spec:	Use dn
Stabilizer Option:	None

Name: C_26N07_26N06 From Node: 26N07 Length(ft): 271.00
Group: SW 26 AVE To Node: 26N06 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	4.700	2.690
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	26TPS-006+28S	R2_36+85.00
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.600
Expansion Coef: 0.800
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Name: C_26N08_26N07 From Node: 26N08 Length(ft): 628.00
Group: SW 26 AVE To Node: 26N07 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	2.200	4.700
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	26TPS-000+00S	26TPS-006+28S
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: None
Contraction Coef: 0.600
Expansion Coef: 0.800
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

POINT IMMEDIATELY SOUTH OF THE CONFLUENCE BETWEEN THE 26 AVE CANAL & GOODBREAD CANAL;

THIS LINK IS TURNED OFF AS IT IS REPLACED BY THE PROPOSED RESERVOIR SYSTEM.

Name: C_26N09_26N08 From Node: 26N09 Length(ft): 336.00
Group: SW 26 AVE To Node: 26N08 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	8.900	2.200
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	26TPS-003+36N	26TPS-000+00S
AuxElev1(ft):	0.000	0.000
Aux XSec1:		

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.600
Expansion Coef: 0.800
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Name: C_26N11_26N10 From Node: 26N11 Length(ft): 754.00
Group: SW 26 AVE To Node: 26N10 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	12.300	8.500
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	26TPS-011+54N	26TPS-004+00N
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.600
Expansion Coef: 0.800
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Name: C_26N12_26N11 From Node: 26N12 Length(ft): 1496.00
Group: SW 26 AVE To Node: 26N11 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	11.900	12.300
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	26TPS-026+50N	26TPS-011+54N
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.600
Expansion Coef: 0.800
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Name: C_26N14_26N13 From Node: 26N14 Length(ft): 1868.00
Group: SW 26 AVE To Node: 26N13 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	7.500	7.500

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both

TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	26TPS-045+76N	26TPS-027+08N
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Contraction Coef: 0.600
Expansion Coef: 0.800
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Name: C_26N16_26N15 From Node: 26N16 Length(ft): 606.00
Group: SW 26 AVE To Node: 26N15 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	7.500	7.500
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	26TPS-052+26N	26TPS-046+20N
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.100
Expansion Coef: 0.300
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Name: C_26N17_26N16 From Node: 26N17 Length(ft): 442.00
Group: SW 26 AVE To Node: 26N16 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	5.880	7.500
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	R3_20+48.00	26TPS-052+26N
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.600
Expansion Coef: 0.800
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Name: C_26N18_26N17 From Node: 26N18 Length(ft): 490.00
Group: SW 26 AVE To Node: 26N17 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	8.820	5.880
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	R3_25+38.02	R3_20+48.00
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.600
Expansion Coef: 0.800
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Name: C_26N19_26N18 From Node: 26N19 Length(ft): 29.00
Group: SW 26 AVE To Node: 26N18 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	12.500	8.820
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	R3_25+66.89	R3_25+38.02
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.600
Expansion Coef: 0.800
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

SIGNIFICANT CHANGE IN CHANNEL BOTTOM ELEVATION

Name: C_26N20_26N19 From Node: 26N20 Length(ft): 373.62
Group: SW 26 AVE To Node: 26N19 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	12.880	12.500
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	R3_29+40.51	R3_25+66.89
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.600
Expansion Coef: 0.800
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Depth(ft):
Bot Width(ft):
LtSdSlp(h/v):
RtSdSlp(h/v):

Name: C_26N22_26N21 From Node: 26N22 Length(ft): 578.00
Group: SW 26 AVE To Node: 26N21 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	15.230	15.130
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	R3_35+63.96	R3_29+85.53
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.600
Expansion Coef: 0.800
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Name: C_26N23_26N22 From Node: 26N23 Length(ft): 484.00
Group: SW 26 AVE To Node: 26N22 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	15.420	15.230
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	R3_40+48.18	R3_35+63.96
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.600
Expansion Coef: 0.800
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Name: C_26N24_26N23 From Node: 26N24 Length(ft): 490.50
Group: SW 26 AVE To Node: 26N23 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	15.970	15.420
lpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.600
Expansion Coef: 0.800
Entrance Loss Coef: 0.000

Bot Clip(ft):	0.000	0.000
Main XSec:	R3_45+38.68	R3_40+48.18
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Name: C_26N25_26N24 From Node: 26N25 Length(ft): 474.50
Group: SW 26 AVE To Node: 26N24 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	16.290	15.970
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	R3_50+13.18	R3_45+38.68
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.600
Expansion Coef: 0.800
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Name: C_26N26_26N25 From Node: 26N26 Length(ft): 603.80
Group: SW 26 AVE To Node: 26N25 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	17.370	16.290
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	R3_56+17.08	R3_50+13.18
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.600
Expansion Coef: 0.800
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Name: C_26N27_26N26 From Node: 26N27 Length(ft): 486.00
Group: SW 26 AVE To Node: 26N26 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	18.380	17.370
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	R3_61+02.80	R3_56+17.08
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.600
Expansion Coef: 0.800
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Name: C_26N28_26N27 From Node: 26N28 Length(ft): 788.00
Group: SW 26 AVE To Node: 26N27 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	18.840	18.380
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	R3_68+91.38	R3_61+02.80
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.600
Expansion Coef: 0.800
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Name: C_32N01_LMKN-CK From Node: 32N01 Length(ft): 592.00
Group: SW 32 AVE To Node: 32@~LEMKIN CK Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	5.480	5.720
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	R4_016+28.68	R4_010+36.34
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.600
Expansion Coef: 0.800
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

RtSdSlp(h/v):

Name: C_32N02_32N01 From Node: 32N02 Length(ft): 480.00
Group: SW 32 AVE To Node: 32N01 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	10.840	5.480
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	R4_021+08.56	R4_016+28.68
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.600
Expansion Coef: 0.800
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Name: C_32N04_32N03 From Node: 32N04 Length(ft): 237.00
Group: SW 32 AVE To Node: 32N03 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	8.800	10.150
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	R4_023+97.28	R4_021+60.06
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.600
Expansion Coef: 0.800
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Name: C_32N05_32N04 From Node: 32N05 Length(ft): 499.00
Group: SW 32 AVE To Node: 32N04 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	8.850	8.800
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	R4_028+95.76	R4_023+97.28
AuxElev1(ft):	0.000	0.000

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.100
Expansion Coef: 0.300
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn

Aux XSec1:			Stabilizer Option: None
AuxElev2(ft):	0.000	0.000	
Aux XSec2:			
Top Width(ft):			
Depth(ft):			
Bot Width(ft):			
LtSdSlp(h/v):			
RtSdSlp(h/v):			

Name: C_32N06_32N05 From Node: 32N06 Length(ft): 512.00
Group: SW 32 AVE To Node: 32N05 Count: 1

	UPSTREAM	DOWNSTREAM		
Geometry:	Irregular	Irregular	Friction Equation:	Automatic
Invert(ft):	4.780	8.850	Solution Algorithm:	Automatic
TClpInitZ(ft):	9999.000	9999.000	Flow:	Both
Manning's N:			Contraction Coef:	0.600
Top Clip(ft):	0.000	0.000	Expansion Coef:	0.800
Bot Clip(ft):	0.000	0.000	Entrance Loss Coef:	0.000
Main XSec:	R4_034+08.34	R4_028+95.76	Exit Loss Coef:	0.000
AuxElev1(ft):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
Aux XSec1:			Inlet Ctrl Spec:	Use dn
AuxElev2(ft):	0.000	0.000	Stabilizer Option:	None
Aux XSec2:				
Top Width(ft):				
Depth(ft):				
Bot Width(ft):				
LtSdSlp(h/v):				
RtSdSlp(h/v):				

Name: C_32N07_32N06 From Node: 32N07 Length(ft): 517.00
Group: SW 32 AVE To Node: 32N06 Count: 1

	UPSTREAM	DOWNSTREAM		
Geometry:	Irregular	Irregular	Friction Equation:	Automatic
Invert(ft):	6.830	4.780	Solution Algorithm:	Automatic
TClpInitZ(ft):	9999.000	9999.000	Flow:	Both
Manning's N:			Contraction Coef:	0.600
Top Clip(ft):	0.000	0.000	Expansion Coef:	0.800
Bot Clip(ft):	0.000	0.000	Entrance Loss Coef:	0.000
Main XSec:	R4_039+25.16	R4_034+08.34	Exit Loss Coef:	0.000
AuxElev1(ft):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
Aux XSec1:			Inlet Ctrl Spec:	Use dn
AuxElev2(ft):	0.000	0.000	Stabilizer Option:	None
Aux XSec2:				
Top Width(ft):				
Depth(ft):				
Bot Width(ft):				
LtSdSlp(h/v):				
RtSdSlp(h/v):				

Name: C_32N08_32N07 From Node: 32N08 Length(ft): 528.00
Group: SW 32 AVE To Node: 32N07 Count: 1

	UPSTREAM	DOWNSTREAM		
Geometry:	Irregular	Irregular	Friction Equation:	Automatic
			Solution Algorithm:	Automatic

Invert(ft):	11.580	6.830
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	R4_044+53.40	R4_039+25.16
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Flow:	Both
Contraction Coef:	0.600
Expansion Coef:	0.800
Entrance Loss Coef:	0.000
Exit Loss Coef:	0.000
Outlet Ctrl Spec:	Use dc or tw
Inlet Ctrl Spec:	Use dn
Stabilizer Option:	None

Name: C_32N09_32N08 From Node: 32N09 Length(ft): 499.00
Group: SW 32 AVE To Node: 32N08 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	11.540	11.580
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	R4_049+51.91	R4_044+53.40
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation:	Automatic
Solution Algorithm:	Automatic
Flow:	Both
Contraction Coef:	0.600
Expansion Coef:	0.800
Entrance Loss Coef:	0.000
Exit Loss Coef:	0.000
Outlet Ctrl Spec:	Use dc or tw
Inlet Ctrl Spec:	Use dn
Stabilizer Option:	None

Name: C_32N10_32N09 From Node: 32N10 Length(ft): 502.00
Group: SW 32 AVE To Node: 32N09 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	11.590	11.540
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	R4_054+54.24	R4_049+51.91
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation:	Automatic
Solution Algorithm:	Automatic
Flow:	Both
Contraction Coef:	0.100
Expansion Coef:	0.300
Entrance Loss Coef:	0.000
Exit Loss Coef:	0.000
Outlet Ctrl Spec:	Use dc or tw
Inlet Ctrl Spec:	Use dn
Stabilizer Option:	None

Name: C_32N11_32N10 From Node: 32N11 Length(ft): 344.00
Group: SW 32 AVE To Node: 32N10 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	11.930	11.590
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	R4_057+98.33	R4_054+54.24
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.100
Expansion Coef: 0.300
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Name: C_32N13_32N12 From Node: 32N13 Length(ft): 2450.00
Group: SW 32 AVE To Node: 32N12 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	11.880	11.590
lpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	R4_082+92.21	R4_058+42.42
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.600
Expansion Coef: 0.800
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Name: C_32N15_32N14 From Node: 32N15 Length(ft): 93.00
Group: SW 32 AVE To Node: 32N14 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	11.600	12.440
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	R4_084+24.66	R4_083+30.92
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.600
Expansion Coef: 0.800
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Top Width(ft):
Depth(ft):
Bot Width(ft):
LtSdSlp(h/v):
RtSdSlp(h/v):

Name: C_32N16_32N15 From Node: 32N16 Length(ft): 230.00
Group: SW 32 AVE To Node: 32N15 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	11.400	11.600
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	R4_084+47.92	R4_084+24.66
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.600
Expansion Coef: 0.800
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Name: C_32N17_32N16 From Node: 32N17 Length(ft): 97.00
Group: SW 32 AVE To Node: 32N16 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	10.910	11.400
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	R4_085+44.67	R4_084+47.92
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.600
Expansion Coef: 0.800
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Name: C_32N18_32N17 From Node: 32N18 Length(ft): 573.00
Group: SW 32 AVE To Node: 32N17 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	6.760	10.910
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.600
Expansion Coef: 0.800

Top Clip(ft):	0.000	0.000	Entrance Loss Coef:	0.000
Bot Clip(ft):	0.000	0.000	Exit Loss Coef:	0.000
Main XSec:	R4_091+17.97	R4_085+44.67	Outlet Ctrl Spec:	Use dc or tw
AuxElev1(ft):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Aux XSec1:			Stabilizer Option:	None
AuxElev2(ft):	0.000	0.000		
Aux XSec2:				
Top Width(ft):				
Depth(ft):				
Bot Width(ft):				
LtSdSlp(h/v):				
RtSdSlp(h/v):				

Name:	C_32N19_32N18	From Node:	32N19	Length(ft):	480.00
Group:	SW 32 AVE	To Node:	32N18	Count:	1

	UPSTREAM	DOWNSTREAM		
Geometry:	Irregular	Irregular	Friction Equation:	Automatic
Invert(ft):	13.450	6.760	Solution Algorithm:	Automatic
TClpInitZ(ft):	9999.000	9999.000	Flow:	Both
Manning's N:			Contraction Coef:	0.600
Top Clip(ft):	0.000	0.000	Expansion Coef:	0.800
Bot Clip(ft):	0.000	0.000	Entrance Loss Coef:	0.000
Main XSec:	R4_095+97.80	R4_091+17.97	Exit Loss Coef:	0.000
AuxElev1(ft):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
Aux XSec1:			Inlet Ctrl Spec:	Use dn
AuxElev2(ft):	0.000	0.000	Stabilizer Option:	None
Aux XSec2:				
Top Width(ft):				
Depth(ft):				
Bot Width(ft):				
LtSdSlp(h/v):				
RtSdSlp(h/v):				

Name:	C_32N21_32N20	From Node:	32N21	Length(ft):	468.00
Group:	SW 32 AVE	To Node:	32N20	Count:	1

	UPSTREAM	DOWNSTREAM		
Geometry:	Irregular	Irregular	Friction Equation:	Automatic
Invert(ft):	13.060	12.850	Solution Algorithm:	Automatic
TClpInitZ(ft):	9999.000	9999.000	Flow:	Both
Manning's N:			Contraction Coef:	0.600
Top Clip(ft):	0.000	0.000	Expansion Coef:	0.800
Bot Clip(ft):	0.000	0.000	Entrance Loss Coef:	0.000
Main XSec:	R4_100+91.96	R4_096+23.79	Exit Loss Coef:	0.000
AuxElev1(ft):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
Aux XSec1:			Inlet Ctrl Spec:	Use dn
AuxElev2(ft):	0.000	0.000	Stabilizer Option:	None
Aux XSec2:				
Top Width(ft):				
Depth(ft):				
Bot Width(ft):				
LtSdSlp(h/v):				
RtSdSlp(h/v):				

Name:	C_32N22_32N21	From Node:	32N22	Length(ft):	541.00

Group: SW 32 AVE To Node: 32N21 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	13.320	13.060
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	R4_106+32.93	R4_100+91.96
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.100
Expansion Coef: 0.300
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Name: C_32N23_32N22 From Node: 32N23 Length(ft): 536.00
Group: SW 32 AVE To Node: 32N22 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	14.050	13.320
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	R4_111+68.98	R4_106+32.93
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.600
Expansion Coef: 0.800
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Name: C_32N24_32N23 From Node: 32N24 Length(ft): 542.00
Group: SW 32 AVE To Node: 32N23 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	14.670	14.050
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	R4_117+10.73	R4_111+68.98
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.100
Expansion Coef: 0.300
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

LtSdSlp(h/v):
RtSdSlp(h/v):

Name: C_32N25_32N24 From Node: 32N25 Length(ft): 548.00
Group: SW 32 AVE To Node: 32N24 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	15.780	14.670
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	R4_122+59.02	R4_117+10.73
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.600
Expansion Coef: 0.800
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Name: C_32N27_32N26 From Node: 32N27 Length(ft): 562.00
Group: SW 32 AVE To Node: 32N26 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	17.250	20.250
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	R4_129+46.94	R4_123+85.24
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.600
Expansion Coef: 0.800
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Name: C_32N28_32N27 From Node: 32N28 Length(ft): 548.00
Group: SW 32 AVE To Node: 32N27 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	17.280	17.250
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	R4_134+94.74	R4_129+46.94

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.600
Expansion Coef: 0.800
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw

AuxElev1(ft):	0.000	0.000	Inlet Ctrl Spec: Use dn
Aux XSec1:			Stabilizer Option: None
AuxElev2(ft):	0.000	0.000	
Aux XSec2:			
Top Width(ft):			
Depth(ft):			
Bot Width(ft):			
LtSdSlp(h/v):			
RtSdSlp(h/v):			

Name: C_32N29_32N28 From Node: 32N29 Length(ft): 478.00
Group: SW 32 AVE To Node: 32N28 Count: 1

	UPSTREAM	DOWNSTREAM	
Geometry:	Irregular	Irregular	Friction Equation: Automatic
Invert(ft):	17.960	17.280	Solution Algorithm: Automatic
TClpInitZ(ft):	9999.000	9999.000	Flow: Both
Manning's N:			Contraction Coef: 0.100
Top Clip(ft):	0.000	0.000	Expansion Coef: 0.300
Bot Clip(ft):	0.000	0.000	Entrance Loss Coef: 0.000
Main XSec:	R4_139+73.36	R4_134+94.74	Exit Loss Coef: 0.000
AuxElev1(ft):	0.000	0.000	Outlet Ctrl Spec: Use dc or tw
Aux XSec1:			Inlet Ctrl Spec: Use dn
AuxElev2(ft):	0.000	0.000	Stabilizer Option: None
Aux XSec2:			
Top Width(ft):			
Depth(ft):			
Bot Width(ft):			
LtSdSlp(h/v):			
RtSdSlp(h/v):			

Name: C_32N30_32N29 From Node: 32N30 Length(ft): 305.00
Group: SW 32 AVE To Node: 32N29 Count: 1

	UPSTREAM	DOWNSTREAM	
Geometry:	Irregular	Irregular	Friction Equation: Automatic
Invert(ft):	16.090	17.960	Solution Algorithm: Automatic
TClpInitZ(ft):	9999.000	9999.000	Flow: Both
Manning's N:			Contraction Coef: 0.600
Top Clip(ft):	0.000	0.000	Expansion Coef: 0.800
Bot Clip(ft):	0.000	0.000	Entrance Loss Coef: 0.000
Main XSec:	R4_142+78.00	R4_139+73.36	Exit Loss Coef: 0.000
AuxElev1(ft):	0.000	0.000	Outlet Ctrl Spec: Use dc or tw
Aux XSec1:			Inlet Ctrl Spec: Use dn
AuxElev2(ft):	0.000	0.000	Stabilizer Option: None
Aux XSec2:			
Top Width(ft):			
Depth(ft):			
Bot Width(ft):			
LtSdSlp(h/v):			
RtSdSlp(h/v):			

Name: C_32N31_32N30 From Node: 32N31 Length(ft): 301.00
Group: SW 32 AVE To Node: 32N30 Count: 1

	UPSTREAM	DOWNSTREAM	
			Friction Equation: Automatic

Geometry:	Irregular	Irregular
Invert(ft):	16.590	16.090
ClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	R4_145+79.32	R4_142+78.00
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Solution Algorithm:	Automatic
Flow:	Both
Contraction Coef:	0.600
Expansion Coef:	0.800
Entrance Loss Coef:	0.000
Exit Loss Coef:	0.000
Outlet Ctrl Spec:	Use dc or tw
Inlet Ctrl Spec:	Use dn
Stabilizer Option:	None

Name: C_32N32_32N31 From Node: 32N32 Length(ft): 405.00
Group: SW 32 AVE To Node: 32N31 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	17.630	16.590
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	R4_149+83.52	R4_145+79.32
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation:	Automatic
Solution Algorithm:	Automatic
Flow:	Both
Contraction Coef:	0.600
Expansion Coef:	0.800
Entrance Loss Coef:	0.000
Exit Loss Coef:	0.000
Outlet Ctrl Spec:	Use dc or tw
Inlet Ctrl Spec:	Use dn
Stabilizer Option:	None

Name: C_CN012_N012 From Node: CN012 Length(ft): 280.00
Group: SW 7 AVE To Node: N012 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	16.200	16.200
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	NDR4	NDR3
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation:	Average Conveyance
Solution Algorithm:	Automatic
Flow:	None
Contraction Coef:	0.100
Expansion Coef:	0.300
Entrance Loss Coef:	0.000
Exit Loss Coef:	0.000
Outlet Ctrl Spec:	Use dc or tw
Inlet Ctrl Spec:	Use dn
Stabilizer Option:	None

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Name: C_CN014_N013 From Node: CN014 Length(ft): 280.00
Group: SW 7 AVE To Node: N013 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	16.900	16.600
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	NDR6	NDR5
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: None
Contraction Coef: 0.100
Expansion Coef: 0.300
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

LINK TURNED OFF AND IS REPLACED W/NEW STORMWATER COLLECTION SYSTEM FOR SW 28 ST, SW 32 ST, AND SW 3
TER

Name: C_CN015_N014 From Node: CN015 Length(ft): 90.00
Group: SW 7 AVE To Node: N014 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	16.640	16.800
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	NDR8	NDR7
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: None
Contraction Coef: 0.100
Expansion Coef: 0.300
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

LINK TURNED OFF AND IS REPLACED W/NEW STORMWATER COLLECTION SYSTEM FOR SW 28 ST, SW 32 ST, AND SW 3
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Name: C_CN01_N01 From Node: CN001 Length(ft): 380.00
Group: SW 7 AVE To Node: N001 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	17.170	16.900
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	NWR2	NWR1

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: None
Contraction Coef: 0.100
Expansion Coef: 0.300
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw

AuxElev1(ft):	0.000	0.000	Inlet Ctrl Spec: Use dn
Aux XSec1:			Stabilizer Option: None
AuxElev2(ft):	0.000	0.000	
Aux XSec2:			
Top Width(ft):			
Depth(ft):			
Bot Width(ft):			
LtSdSlp(h/v):			
RtSdSlp(h/v):			

LINK TURNED OFF AND IS REPLACED W/NEW STORMWATER COLLECTION SYSTEM FOR SW 28 ST, SW 32 ST, AND SW 3 TER
LEGEND: NWR1 => NORTH WOLFF ROAD 1(TYP)

Name: C_CN02_N02 From Node: CN002 Length(ft): 139.00
Group: SW 7 AVE To Node: N002 Count: 1

	UPSTREAM	DOWNSTREAM		
Geometry:	Irregular	Irregular	Friction Equation:	Average Conveyance
Invert(ft):	17.000	16.900	Solution Algorithm:	Automatic
TClpInitZ(ft):	9999.000	9999.000	Flow:	None
Manning's N:			Contraction Coef:	0.100
Top Clip(ft):	0.000	0.000	Expansion Coef:	0.300
Bot Clip(ft):	0.000	0.000	Entrance Loss Coef:	0.000
Main XSec:	NWR4	NWR3	Exit Loss Coef:	0.000
AuxElev1(ft):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
Aux XSec1:			Inlet Ctrl Spec:	Use dn
AuxElev2(ft):	0.000	0.000	Stabilizer Option:	None
Aux XSec2:				
Top Width(ft):				
Depth(ft):				
Bot Width(ft):				
LtSdSlp(h/v):				
RtSdSlp(h/v):				

LINK TURNED OFF AND IS REPLACED W/NEW STORMWATER COLLECTION SYSTEM FOR SW 28 ST, SW 32 ST, AND SW 3 TER

Name: C_CN03_N03 From Node: CN003 Length(ft): 250.00
Group: SW 7 AVE To Node: N003 Count: 1

	UPSTREAM	DOWNSTREAM		
Geometry:	Irregular	Irregular	Friction Equation:	Automatic
Invert(ft):	17.590	17.390	Solution Algorithm:	Automatic
TClpInitZ(ft):	9999.000	9999.000	Flow:	Both
Manning's N:			Contraction Coef:	0.100
Top Clip(ft):	0.000	0.000	Expansion Coef:	0.300
Bot Clip(ft):	0.000	0.000	Entrance Loss Coef:	0.000
Main XSec:	NWR6	NWR5	Exit Loss Coef:	0.000
AuxElev1(ft):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
Aux XSec1:			Inlet Ctrl Spec:	Use dn
AuxElev2(ft):	0.000	0.000	Stabilizer Option:	None
Aux XSec2:				
Top Width(ft):				
Depth(ft):				
Bot Width(ft):				
LtSdSlp(h/v):				
RtSdSlp(h/v):				

Name: C_CN04_N04 From Node: CN004 Length(ft): 450.00

Group: SW 7 AVE To Node: N004 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	17.920	17.200
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	NWR8	NWR7
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.100
Expansion Coef: 0.300
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Name: C_CN06_N06 From Node: CN006 Length(ft): 80.00
Group: SW 7 AVE To Node: N006 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	17.330	17.400
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	SWR2	SWR1
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.100
Expansion Coef: 0.300
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Name: C_CN07_N07 From Node: CN007 Length(ft): 440.00
Group: SW 7 AVE To Node: N007 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	18.340	17.220
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	SWR4	SWR3
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.600
Expansion Coef: 0.800
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

LtSdSlp(h/v):
RtSdSlp(h/v):

Name: C_CN08_CN07 From Node: CN008 Length(ft): 265.00
Group: SW 7 AVE To Node: CN007 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	17.560	17.560
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	SWR5	SWR4
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: None
Contraction Coef: 0.100
Expansion Coef: 0.300
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Name: C_CN09_N08 From Node: CN009 Length(ft): 160.00
Group: SW 7 AVE To Node: N008 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	18.510	17.680
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	SWR7	SWR6
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.600
Expansion Coef: 0.800
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Name: C_CN10_N09 From Node: CN010 Length(ft): 84.00
Group: SW 7 AVE To Node: N009 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	19.460	20.660
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	SWR9	SWR8

Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.100
Expansion Coef: 0.300
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw

AuxElev1(ft):	0.000	0.000	Inlet Ctrl Spec: Use dn
Aux XSec1:			Stabilizer Option: None
AuxElev2(ft):	0.000	0.000	
Aux XSec2:			
Top Width(ft):			
Depth(ft):			
Bot Width(ft):			
LtSdSlp(h/v):			
RtSdSlp(h/v):			

Name: C_CN11_N11 From Node: CN011 Length(ft): 350.00
Group: SW 7 AVE To Node: N011 Count: 1

	UPSTREAM	DOWNSTREAM	
Geometry:	Irregular	Irregular	Friction Equation: Average Conveyance
Invert(ft):	16.000	15.600	Solution Algorithm: Automatic
TClpInitZ(ft):	9999.000	9999.000	Flow: None
Manning's N:			Contraction Coef: 0.100
Top Clip(ft):	0.000	0.000	Expansion Coef: 0.300
Bot Clip(ft):	0.000	0.000	Entrance Loss Coef: 0.000
Main XSec:	NDR2	NDR1	Exit Loss Coef: 0.000
AuxElev1(ft):	0.000	0.000	Outlet Ctrl Spec: Use dc or tw
Aux XSec1:			Inlet Ctrl Spec: Use dn
AuxElev2(ft):	0.000	0.000	Stabilizer Option: None
Aux XSec2:			
Top Width(ft):			
Depth(ft):			
Bot Width(ft):			
LtSdSlp(h/v):			
RtSdSlp(h/v):			

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Name: C_CN16_N017 From Node: CN016 Length(ft): 1000.00
Group: SW 7 AVE To Node: N017 Count: 1

	UPSTREAM	DOWNSTREAM	
Geometry:	Irregular	Irregular	Friction Equation: Automatic
Invert(ft):	17.110	17.400	Solution Algorithm: Automatic
TClpInitZ(ft):	9999.000	9999.000	Flow: None
Manning's N:			Contraction Coef: 0.100
Top Clip(ft):	0.000	0.000	Expansion Coef: 0.300
Bot Clip(ft):	0.000	0.000	Entrance Loss Coef: 0.000
Main XSec:	SDR2	SDR1	Exit Loss Coef: 0.000
AuxElev1(ft):	0.000	0.000	Outlet Ctrl Spec: Use dc or tw
Aux XSec1:			Inlet Ctrl Spec: Use dn
AuxElev2(ft):	0.000	0.000	Stabilizer Option: None
Aux XSec2:			
Top Width(ft):			
Depth(ft):			
Bot Width(ft):			
LtSdSlp(h/v):			
RtSdSlp(h/v):			

LINK TURNED OFF AND IS REPLACED W/NEW STORMWATER COLLECTION SYSTEM FOR SW 28 ST, SW 32 ST, AND SW 3
TER

Name: C_GB01_GB02 From Node: GBC01 Length(ft): 1610.00
Group: SW 16/12 AVE To Node: GBC02 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	6.300	2.700
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	GB CANAL X-01	GB CANAL X-02
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.600
Expansion Coef: 0.800
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

EXISTING FLOWWAY SECTION THAT JOINS 16AVE FLOWWAY WITH 26AVE FLOWWAY

Name: C_GBC02_26N08 From Node: GBC02 Length(ft): 1610.00
Group: SW 26 AVE To Node: 26N08 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	2.700	2.700
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	GB CANAL X-02	GB CANAL X-02
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.100
Expansion Coef: 0.300
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Name: PRO_C16_N07_N06 From Node: 16N07 Length(ft): 1070.00
Group: SW 16/12 AVE To Node: 16N06 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Trapezoidal	Trapezoidal
Invert(ft):	14.800	14.800
TClpInitZ(ft):	9999.000	9999.000
Manning's N:	0.033000	0.033000
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:		
AuxElev1(ft):		
Aux XSec1:		
AuxElev2(ft):		
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):	10.000	10.000
LtSdSlp(h/v):	2.00	2.00

Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.100
Expansion Coef: 0.300
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

RtSdSlp(h/v): 2.00 2.00

Name: PRO_C16_N08_N07 From Node: 16N08 Length(ft): 30.00
Group: SW 16/12 AVE To Node: 16N07 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Trapezoidal	Trapezoidal
Invert(ft):	14.800	14.800
TClpInitZ(ft):	9999.000	9999.000
Manning's N:	0.033000	0.033000
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:		
AuxElev1(ft):		
Aux XSec1:		
AuxElev2(ft):		
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):	10.000	10.000
LtSdSlp(h/v):	2.00	2.00
RtSdSlp(h/v):	2.00	2.00

Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.100
Expansion Coef: 0.300
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Name: PRO_C7N03_16N01 From Node: 7N03 Length(ft): 2500.00
Group: SW 7 AVE To Node: PRO_16N01B Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Trapezoidal	Trapezoidal
Invert(ft):	9.000	9.000
TClpInitZ(ft):	9999.000	9999.000
Manning's N:	0.033000	0.033000
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:		
AuxElev1(ft):		
Aux XSec1:		
AuxElev2(ft):		
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):	30.000	30.000
LtSdSlp(h/v):	2.00	2.00
RtSdSlp(h/v):	2.00	2.00

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.100
Expansion Coef: 0.300
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

PROPOSED CANAL CONNECTING 7 AVENUE FLOWWAY TO 16 AVENUE FLOWWAY

==========

==== Drop Structures ==========

==========

Name: EAGLEPT_26N15 From Node: EAGLE POINT SUB Length(ft): 22.00
Group: SW 26 AVE To Node: 26N15 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	24.00	24.00
Rise(in):	24.00	24.00
Invert(ft):	14.000	14.000
Manning's N:	0.024000	0.024000

Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.750
Exit Loss Coef: 1.000
Outlet Ctrl Spec: Use dc or tw

```
 Top Clip(in): 0.000          0.000                    Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000          0.000                      Solution Incs: 10

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular CMP: Mitered to slope

PIPE INVERTS ASSUMED.

*** Weir 1 of 3 for Drop Structure EAGLEPT_26N15 ***
                                                                          TABLE
                   Count: 1                      Bottom Clip(in): 0.000
                    Type: Vertical: Mavis          Top Clip(in): 0.000
                    Flow: Both                   Weir Disc Coef: 3.200
                Geometry: Circular           Orifice Disc Coef: 0.600

                Span(in): 4.00                       Invert(ft): 15.600
                Rise(in): 4.00                 Control Elev(ft): 15.600

*** Weir 2 of 3 for Drop Structure EAGLEPT_26N15 ***
                                                                          TABLE
                   Count: 1                      Bottom Clip(in): 0.000
                    Type: Vertical: Mavis          Top Clip(in): 0.000
                    Flow: Both                   Weir Disc Coef: 3.200
                Geometry: Rectangular        Orifice Disc Coef: 0.600

                Span(in): 54.00                      Invert(ft): 18.200
                Rise(in): 8.40                 Control Elev(ft): 18.200

*** Weir 3 of 3 for Drop Structure EAGLEPT_26N15 ***
                                                                          TABLE
                   Count: 1                      Bottom Clip(in): 0.000
                    Type: Horizontal               Top Clip(in): 0.000
                    Flow: Both                   Weir Disc Coef: 3.200
                Geometry: Rectangular        Orifice Disc Coef: 0.600

                Span(in): 21.00                      Invert(ft): 18.900
                Rise(in): 21.00                Control Elev(ft): 18.900

--------------------------------------------------------------------------------
        Name: HOLIDAY INN          From Node: N112          Length(ft): 650.00
       Group: SW 7 AVE               To Node: N016             Count: 1

              UPSTREAM       DOWNSTREAM          Friction Equation: Average Conveyance
    Geometry: Circular       Circular       Solution Algorithm: Automatic
    Span(in): 6.00           6.00                        Flow: Both
    Rise(in): 6.00           6.00           Entrance Loss Coef: 0.500
  Invert(ft): 17.300         17.300             Exit Loss Coef: 0.000
Manning's N: 0.012000        0.012000         Outlet Ctrl Spec: Use dc or tw
Top Clip(in): 0.000          0.000              Inlet Ctrl Spec: Use dn
Bot Clip(in): 0.000          0.000                Solution Incs: 10

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular CMP: Mitered to slope


*** Weir 1 of 1 for Drop Structure HOLIDAY INN ***
                                                                          TABLE
```

```
        Count: 1                    Bottom Clip(in): 0.000
         Type: Vertical: Mavis        Top Clip(in): 0.000
         Flow: Both                 Weir Disc Coef: 3.200
     Geometry: Circular            Orifice Disc Coef: 0.600

     Span(in): 3.00                       Invert(ft): 17.300
     Rise(in): 3.00                 Control Elev(ft): 17.300
```

```
        Name: N103_7N15_CB      From Node: N103        Length(ft): 20.00
       Group: SW 7 AVE            To Node: 7N15            Count: 1

              UPSTREAM      DOWNSTREAM
    Geometry: Circular      Circular          Friction Equation: Average Conveyance
    Span(in): 18.00         18.00           Solution Algorithm: Automatic
    Rise(in): 18.00         18.00                         Flow: Both
  Invert(ft): 14.600        14.700          Entrance Loss Coef: 0.500
Manning's N: 0.024000       0.024000            Exit Loss Coef: 0.000
Top Clip(in): 0.000         0.000             Outlet Ctrl Spec: Use dc or tw
Bot Clip(in): 0.000         0.000              Inlet Ctrl Spec: Use dn
                                                Solution Incs: 10

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting


*** Weir 1 of 1 for Drop Structure N103_7N15_CB ***
                                                                    TABLE
        Count: 1                    Bottom Clip(in): 0.000
         Type: Horizontal             Top Clip(in): 0.000
         Flow: Both                 Weir Disc Coef: 3.200
     Geometry: Rectangular         Orifice Disc Coef: 0.600

     Span(in): 21.21                      Invert(ft): 21.000
     Rise(in): 21.21                Control Elev(ft): 21.000
```

```
        Name: N104_7N14_CB      From Node: N104        Length(ft): 58.00
       Group: SW 7 AVE            To Node: 7N14            Count: 1

              UPSTREAM      DOWNSTREAM
    Geometry: Circular      Circular          Friction Equation: Average Conveyance
    Span(in): 24.00         24.00           Solution Algorithm: Automatic
    Rise(in): 24.00         24.00                         Flow: Both
  Invert(ft): 15.400        15.300          Entrance Loss Coef: 0.750
Manning's N: 0.024000       0.024000            Exit Loss Coef: 1.000
Top Clip(in): 0.000         0.000             Outlet Ctrl Spec: Use dc or tw
Bot Clip(in): 0.000         0.000              Inlet Ctrl Spec: Use dn
                                                Solution Incs: 10

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting


*** Weir 1 of 1 for Drop Structure N104_7N14_CB ***
                                                                    TABLE
        Count: 1                    Bottom Clip(in): 0.000
```

```
            Type: Horizontal              Top Clip(in): 0.000
            Flow: Both                  Weir Disc Coef: 3.200
        Geometry: Rectangular       Orifice Disc Coef: 0.600

        Span(in): 21.21                     Invert(ft): 19.700
        Rise(in): 21.21             Control Elev(ft): 19.700
```

```
        Name: N121_26N11        From Node: N121          Length(ft): 31.00
       Group: SW 26 AVE           To Node: 26N11             Count: 1

             UPSTREAM      DOWNSTREAM          Friction Equation: Average Conveyance
    Geometry: Circular     Circular          Solution Algorithm: Automatic
    Span(in): 30.00        30.00                        Flow: Both
    Rise(in): 30.00        30.00           Entrance Loss Coef: 0.750
  Invert(ft): 13.400       13.300             Exit Loss Coef: 0.000
Manning's N: 0.024000      0.024000         Outlet Ctrl Spec: Use dc or tw
Top Clip(in): 0.000        0.000             Inlet Ctrl Spec: Use dn
Bot Clip(in): 0.000        0.000              Solution Incs: 10

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting


*** Weir 1 of 1 for Drop Structure N121_26N11 ***
                                                                    TABLE
           Count: 1                    Bottom Clip(in): 0.000
            Type: Vertical: Mavis        Top Clip(in): 0.000
            Flow: Both                  Weir Disc Coef: 3.200
        Geometry: Rectangular       Orifice Disc Coef: 0.600

        Span(in): 30.00                     Invert(ft): 16.500
        Rise(in): 999.00            Control Elev(ft): 16.500
```

```
        Name: OE_&_PV           From Node: OUSLEY/P VLLG  Length(ft): 200.00
       Group: SW 16/12 AVE        To Node: 16N02             Count: 1

             UPSTREAM      DOWNSTREAM          Friction Equation: Average Conveyance
    Geometry: Circular     Circular          Solution Algorithm: Automatic
    Span(in): 36.00        36.00                        Flow: Both
    Rise(in): 36.00        36.00           Entrance Loss Coef: 0.750
  Invert(ft): 12.500       11.400             Exit Loss Coef: 0.000
Manning's N: 0.024000      0.024000         Outlet Ctrl Spec: Use dc or tw
Top Clip(in): 0.000        0.000             Inlet Ctrl Spec: Use dn
Bot Clip(in): 0.000        0.000              Solution Incs: 10

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

CULVERT LEGNTH OVERESTIMATED TO INCLUDE CULVERT CROSSING AT 16 AVE & ADDITIONAL DITCH LENGTH

*** Weir 1 of 2 for Drop Structure OE_&_PV ***
                                                                    TABLE
           Count: 1                    Bottom Clip(in): 0.000
            Type: Vertical: Mavis        Top Clip(in): 0.000
```

Flow: Both
Geometry: Rectangular
Weir Disc Coef: 3.200
Orifice Disc Coef: 0.600

Span(in): 36.00
Rise(in): 999.00
Invert(ft): 15.300
Control Elev(ft): 15.300

*** Weir 2 of 2 for Drop Structure OE_&_PV ***

TABLE

Count: 1
Type: Vertical: Mavis
Flow: Both
Geometry: Rectangular
Bottom Clip(in): 0.000
Top Clip(in): 0.000
Weir Disc Coef: 3.200
Orifice Disc Coef: 0.600

Span(in): 1.00
Rise(in): 9.60
Invert(ft): 14.500
Control Elev(ft): 14.500

Name: OKEE_MOTORS
Group: SW 7 AVE
From Node: N110
To Node: N019
Length(ft): 8.00
Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	15.00	15.00
Rise(in):	15.00	15.00
Invert(ft):	17.500	17.400
Manning's N:	0.013000	0.013000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.500
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Solution Incs: 10

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

*** Weir 1 of 3 for Drop Structure OKEE_MOTORS ***

TABLE

Count: 1
Type: Vertical: Mavis
Flow: Both
Geometry: Circular
Bottom Clip(in): 0.000
Top Clip(in): 0.000
Weir Disc Coef: 3.200
Orifice Disc Coef: 0.600

Span(in): 3.00
Rise(in): 3.00
Invert(ft): 17.500
Control Elev(ft): 17.500

*** Weir 2 of 3 for Drop Structure OKEE_MOTORS ***

TABLE

Count: 1
Type: Vertical: Mavis
Flow: Both
Geometry: Rectangular
Bottom Clip(in): 0.000
Top Clip(in): 0.000
Weir Disc Coef: 3.200
Orifice Disc Coef: 0.600

Span(in): 12.00
Rise(in): 25.80
Invert(ft): 19.000
Control Elev(ft): 19.000

*** Weir 3 of 3 for Drop Structure OKEE_MOTORS ***

TABLE

Count: 1
Type: Horizontal
Flow: Both
Geometry: Rectangular
Bottom Clip(in): 0.000
Top Clip(in): 0.000
Weir Disc Coef: 3.200
Orifice Disc Coef: 0.600

Span(in): 25.00 Invert(ft): 20.150
Rise(in): 25.00 Control Elev(ft): 20.150

Name: OVBC_CS1 From Node: N107 Length(ft): 22.00
Group: SW 7 AVE To Node: N014 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	15.00	15.00
Rise(in):	15.00	15.00
Invert(ft):	15.920	15.580
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.500
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Solution Incs: 10

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular CMP: Mitered to slope

LINK REDIRECTED TO DISCHARGE TO PROPOSED SYSTEM

*** Weir 1 of 1 for Drop Structure OVBC_CS1 ***

TABLE

Count: 1 Bottom Clip(in): 0.000
Type: Vertical: Mavis Top Clip(in): 0.000
Flow: Both Weir Disc Coef: 3.200
Geometry: Circular Orifice Disc Coef: 0.600

Span(in): 3.00 Invert(ft): 18.000
Rise(in): 3.00 Control Elev(ft): 18.000

Name: PRO_LMART_CS_E From Node: N103 Length(ft): 40.00
Group: SW 16/12 AVE To Node: 16N07 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	48.00	48.00
Rise(in):	48.00	48.00
Invert(ft):	15.000	15.000
Manning's N:	0.012000	0.012000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.500
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Solution Incs: 10

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

PROPOSED CONTROL STRUCTURE WAS SIZED TO SERVE BASIN 12 (274 AC) , ~70% BASIN 14 (142 AC), & 80% BASIN 13 (243 AC). ASSUME FLAP GATE.

Preliminary sizing based on a Qallowable = 15.6 * (274+142+243)/640 = 16 CFS; 1/2"/day = 13.8 cfs for bleeder sizing.

*** Weir 1 of 2 for Drop Structure PRO_LMART_CS_E ***

TABLE

Count: 1 Bottom Clip(in): 0.000
Type: Horizontal Top Clip(in): 0.000

Flow: Both
Geometry: Rectangular
Weir Disc Coef: 3.200
Orifice Disc Coef: 0.600

Span(in): 43.00
Rise(in): 29.00
Invert(ft): 21.000
Control Elev(ft): 21.000

*** Weir 2 of 2 for Drop Structure PRO_LMART_CS_E ***

TABLE

Count: 1
Type: Vertical: Mavis
Flow: Both
Geometry: Rectangular
Bottom Clip(in): 0.000
Top Clip(in): 0.000
Weir Disc Coef: 3.200
Orifice Disc Coef: 0.600

Span(in): 30.00
Rise(in): 24.00
Invert(ft): 19.500
Control Elev(ft): 19.500

Name: PRO_LMART_CS_W
Group: SW 16/12 AVE
From Node: N119
To Node: 16N07
Length(ft): 40.00
Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	48.00	48.00
Rise(in):	48.00	48.00
Invert(ft):	15.000	15.000
Manning's N:	0.012000	0.012000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Solution Incs: 10

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

PROPOSED CONTROL STRUCTURE WAS SIZED TO SERVE MOST OF BASIN 23 (210 AC) , ~50% BASIN 24 (48.5 AC), ASSUME FLAP GATE.

Preliminary sizing based on a Qallowable = 15.6 * (210+48.5)/640 = 6.3 CFS; 1/2"/day = 5.4 cfs for bleeder sizing.

*** Weir 1 of 2 for Drop Structure PRO_LMART_CS_W ***

TABLE

Count: 1
Type: Horizontal
Flow: Both
Geometry: Rectangular
Bottom Clip(in): 0.000
Top Clip(in): 0.000
Weir Disc Coef: 3.200
Orifice Disc Coef: 0.600

Span(in): 43.00
Rise(in): 29.00
Invert(ft): 22.000
Control Elev(ft): 22.000

*** Weir 2 of 2 for Drop Structure PRO_LMART_CS_W ***

TABLE

Count: 1
Type: Vertical: Mavis
Flow: Both
Geometry: Rectangular
Bottom Clip(in): 0.000
Top Clip(in): 0.000
Weir Disc Coef: 3.200
Orifice Disc Coef: 0.600

Span(in): 15.00
Rise(in): 24.00
Invert(ft): 19.500
Control Elev(ft): 19.500

Name: SMNLCV-7N07
From Node: SEMINOLE COVE
Length(ft): 210.00

Group: SW 7 AVE To Node: 7N07 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	36.00	36.00
Rise(in):	36.00	36.00
Invert(ft):	15.000	15.000
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.500
Exit Loss Coef: 1.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Solution Incs: 10

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

*** Weir 1 of 2 for Drop Structure SMNLCV-7N07 ***

TABLE

Count: 1
Type: Vertical: Mavis
Flow: Both
Geometry: Trapezoidal
Bottom Clip(ft): 0.000
Top Clip(ft): 0.000
Weir Disc Coef: 3.200
Orifice Disc Coef: 0.600

Bottom Width(ft): 0.00
Left Sd Slp(h/v): 1.00
Right Sd Slp(h/v): 1.00
Invert(ft): 15.000
Control Elev(ft): 15.000
Struct Opening Dim(ft): 1.20

*** Weir 2 of 2 for Drop Structure SMNLCV-7N07 ***

TABLE

Count: 1
Type: Vertical: Mavis
Flow: Both
Geometry: Rectangular
Bottom Clip(in): 0.000
Top Clip(in): 0.000
Weir Disc Coef: 3.200
Orifice Disc Coef: 0.600

Span(in): 28.80
Rise(in): 99999.00
Invert(ft): 16.200
Control Elev(ft): 16.200

Name: SW14ST_CB01 From Node: N102 Length(ft): 60.00
Group: SW 7 AVE To Node: 7N41 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	18.00	18.00
Rise(in):	18.00	18.00
Invert(ft):	21.800	21.400
Manning's N:	0.013000	0.013000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.500
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Solution Incs: 10

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

CATCH BASIN STRUCTURE ASSUMED TO HAVE TYPE C INLET W/450 SQ-IN OPENING

Weir 1 of 1 for Drop Structure SW14ST_CB01 ***

TABLE

Count: 1
Bottom Clip(in): 0.000

Type: Horizontal
Flow: Both
Geometry: Rectangular
Top Clip(in): 0.000
Weir Disc Coef: 3.200
Orifice Disc Coef: 0.600

Span(in): 21.21
Rise(in): 21.21
Invert(ft): 24.100
Control Elev(ft): 24.100

Name: SW19ST_CB01
Group: SW 7 AVE
From Node: N104
To Node: 7N22
Length(ft): 50.00
Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	24.00	24.00
Rise(in):	24.00	24.00
Invert(ft):	16.900	16.900
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.750
Exit Loss Coef: 1.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Solution Incs: 10

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

*** Weir 1 of 1 for Drop Structure SW19ST_CB01 ***

TABLE

Count: 1
Type: Horizontal
Flow: Both
Geometry: Rectangular
Bottom Clip(in): 0.000
Top Clip(in): 0.000
Weir Disc Coef: 3.200
Orifice Disc Coef: 0.600

Span(in): 21.21
Rise(in): 21.21
Invert(ft): 21.200
Control Elev(ft): 21.200

Name: SW2ST_CB01
Group: SW 7 AVE
From Node: N102
To Node: 7N76
Length(ft): 48.00
Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	18.00	18.00
Rise(in):	18.00	18.00
Invert(ft):	28.200	27.700
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.500
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Solution Incs: 10

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

CATCH BASIN STRUCTURE ASSUMED TO HAVE TYPE C INLET W/450 SQ-IN OPENING

*** Weir 1 of 1 for Drop Structure SW2ST_CB01 ***

TABLE

Count: 1
Type: Horizontal
Bottom Clip(in): 0.000
Top Clip(in): 0.000

Flow:	Both	Weir Disc Coef:	3.200
Geometry:	Rectangular	Orifice Disc Coef:	0.600
Span(in):	21.21	Invert(ft):	30.400
Rise(in):	21.21	Control Elev(ft):	30.400

Name:	SW2ST_CB02	From Node:	N101	Length(ft):	28.00
Group:	SW 7 AVE	To Node:	7N76	Count:	1

	UPSTREAM	DOWNSTREAM		
Geometry:	Circular	Circular	Friction Equation:	Average Conveyance
Span(in):	18.00	18.00	Solution Algorithm:	Automatic
Rise(in):	18.00	18.00	Flow:	Both
Invert(ft):	27.900	27.800	Entrance Loss Coef:	0.500
Manning's N:	0.024000	0.024000	Exit Loss Coef:	0.000
Top Clip(in):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
Bot Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
			Solution Incs:	10

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

CATCH BASIN STRUCTURE ASSUMED TO HAVE TYPE C INLET W/450 SQ-IN OPENING

*** Weir 1 of 1 for Drop Structure SW2ST_CB02 ***

TABLE

Count:	1	Bottom Clip(in):	0.000
Type:	Horizontal	Top Clip(in):	0.000
Flow:	Both	Weir Disc Coef:	3.200
Geometry:	Rectangular	Orifice Disc Coef:	0.600
Span(in):	21.21	Invert(ft):	30.800
Rise(in):	21.21	Control Elev(ft):	30.800

Name:	SW3ST_CB01	From Node:	N101	Length(ft):	24.00
Group:	SW 7 AVE	To Node:	7N72	Count:	1

	UPSTREAM	DOWNSTREAM		
Geometry:	Circular	Circular	Friction Equation:	Average Conveyance
Span(in):	15.00	15.00	Solution Algorithm:	Automatic
Rise(in):	15.00	15.00	Flow:	Both
Invert(ft):	27.400	26.800	Entrance Loss Coef:	0.500
Manning's N:	0.012000	0.012000	Exit Loss Coef:	0.000
Top Clip(in):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
Bot Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
			Solution Incs:	10

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

CATCH BASIN STRUCTURE ASSUMED TO HAVE TYPE C INLET W/450 SQ-IN OPENING

*** Weir 1 of 1 for Drop Structure SW3ST_CB01 ***

TABLE

Count:	1	Bottom Clip(in):	0.000
Type:	Horizontal	Top Clip(in):	0.000
Flow:	Both	Weir Disc Coef:	3.200

Geometry: Rectangular Orifice Disc Coef: 0.600

Span(in): 21.21 Invert(ft): 30.700
Rise(in): 21.21 Control Elev(ft): 30.700

Name: SW4ST_CB01 From Node: N102 Length(ft): 60.00
Group: SW 7 AVE To Node: 7N69 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	18.00	18.00
Rise(in):	18.00	18.00
Invert(ft):	25.100	24.700
Manning's N:	0.013000	0.013000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.500
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Solution Incs: 10

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

CATCH BASIN STRUCTURE ASSUMED TO HAVE TYPE C INLET W/450 SQ-IN OPENING

*** Weir 1 of 1 for Drop Structure SW4ST_CB01 ***

TABLE

Count: 1 Bottom Clip(in): 0.000
Type: Horizontal Top Clip(in): 0.000
Flow: Both Weir Disc Coef: 3.200
Geometry: Rectangular Orifice Disc Coef: 0.600

Span(in): 21.21 Invert(ft): 27.400
Rise(in): 21.21 Control Elev(ft): 27.400

Name: SW6ST_CB01 From Node: N102 Length(ft): 50.00
Group: SW 7 AVE To Node: 7N66 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	18.00	18.00
Rise(in):	18.00	18.00
Invert(ft):	25.900	25.500
Manning's N:	0.012000	0.012000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.500
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Solution Incs: 10

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

CATCH BASIN STRUCTURE ASSUMED TO HAVE TYPE C INLET W/450 SQ-IN OPENING

*** Weir 1 of 1 for Drop Structure SW6ST_CB01 ***

TABLE

Count: 1 Bottom Clip(in): 0.000
Type: Horizontal Top Clip(in): 0.000
Flow: Both Weir Disc Coef: 3.200
Geometry: Rectangular Orifice Disc Coef: 0.600

Span(in): 21.21 Invert(ft): 26.200
Rise(in): 21.21 Control Elev(ft): 26.200

Name: SW6ST_CB02E From Node: N102 Length(ft): 56.00
Group: SW 7 AVE To Node: 7MH01 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	18.00	18.00
Rise(in):	18.00	18.00
Invert(ft):	24.900	24.500
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.500
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Solution Incs: 10

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

CATCH BASIN STRUCTURE ASSUMED TO HAVE TYPE C INLET W/450 SQ-IN OPENING

*** Weir 1 of 1 for Drop Structure SW6ST_CB02E ***

TABLE

Count: 1 Bottom Clip(in): 0.000
Type: Horizontal Top Clip(in): 0.000
Flow: Both Weir Disc Coef: 3.200
Geometry: Rectangular Orifice Disc Coef: 0.600

Span(in): 21.21 Invert(ft): 27.100
Rise(in): 21.21 Control Elev(ft): 27.100

Name: SW6ST_CB02W From Node: N101 Length(ft): 100.00
Group: SW 7 AVE To Node: 7N65 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	18.00	18.00
Rise(in):	18.00	18.00
Invert(ft):	26.400	24.100
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.500
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Solution Incs: 10

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

CATCH BASIN STRUCTURE ASSUMED TO HAVE TYPE C INLET W/450 SQ-IN OPENING

*** Weir 1 of 1 for Drop Structure SW6ST_CB02W ***

TABLE

Count: 1 Bottom Clip(in): 0.000
Type: Horizontal Top Clip(in): 0.000
Flow: Both Weir Disc Coef: 3.200
Geometry: Rectangular Orifice Disc Coef: 0.600

Span(in): 21.70 Invert(ft): 29.100
Rise(in): 21.70 Control Elev(ft): 29.100

Name: SW9ST_CB01 From Node: N102 Length(ft): 50.00
Group: SW 7 AVE To Node: 7N56 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	18.00	18.00
Rise(in):	18.00	18.00
Invert(ft):	25.000	24.400
Manning's N:	0.013000	0.013000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.500
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Solution Incs: 10

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

CATCH BASIN STRUCTURE ASSUMED TO HAVE TYPE C INLET W/450 SQ-IN OPENING

*** Weir 1 of 1 for Drop Structure SW9ST_CB01 ***

TABLE

Count: 1 Bottom Clip(in): 0.000
Type: Horizontal Top Clip(in): 0.000
Flow: Both Weir Disc Coef: 3.200
Geometry: Rectangular Orifice Disc Coef: 0.600

Span(in): 21.21 Invert(ft): 27.100
Rise(in): 21.21 Control Elev(ft): 27.100

Name: SW9ST_CB02 From Node: N102 Length(ft): 50.00
Group: SW 7 AVE To Node: 7N55 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	18.00	18.00
Rise(in):	18.00	18.00
Invert(ft):	24.600	24.100
Manning's N:	0.013000	0.013000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.500
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Solution Incs: 10

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

CATCH BASIN STRUCTURE ASSUMED TO HAVE TYPE C INLET W/450 SQ-IN OPENING

*** Weir 1 of 1 for Drop Structure SW9ST_CB02 ***

TABLE

Count: 1 Bottom Clip(in): 0.000
Type: Horizontal Top Clip(in): 0.000
Flow: Both Weir Disc Coef: 3.200
Geometry: Rectangular Orifice Disc Coef: 0.600

Span(in): 21.21 Invert(ft): 27.100

Rise(in): 21.21 Control Elev(ft): 27.100

==== Weirs ====

Name: OW-CHURCH From Node: N107
Group: SW 7 AVE To Node: N005
Flow: Both Count: 1
Type: Vertical: Fread Geometry: Rectangular

Span(in): 240.00
Rise(in): 9999.00
Invert(ft): 20.500
Control Elevation(ft): 20.500
TABLE
Bottom Clip(in): 0.000
Top Clip(in): 0.000
Weir Discharge Coef: 2.800
Orifice Discharge Coef: 0.600

LINK REDIRECTED TO NEW SYSTEM

Name: OW_HBANK From Node: N111
Group: SW 7 AVE To Node: N005
Flow: Both Count: 1
Type: Vertical: Fread Geometry: Rectangular

Span(in): 240.00
Rise(in): 9999.00
Invert(ft): 20.500
Control Elevation(ft): 20.500
TABLE
Bottom Clip(in): 0.000
Top Clip(in): 0.000
Weir Discharge Coef: 2.800
Orifice Discharge Coef: 0.600

Name: OW_MIMS From Node: N109
Group: SW 7 AVE To Node: N016
Flow: Both Count: 1
Type: Vertical: Fread Geometry: Rectangular

Span(in): 120.00
Rise(in): 9999.00
Invert(ft): 18.250
Control Elevation(ft): 18.250
TABLE
Bottom Clip(in): 0.000
Top Clip(in): 0.000
Weir Discharge Coef: 2.800
Orifice Discharge Coef: 0.600

Name: OW_N101_7N35 From Node: N101
Group: SW 7 AVE To Node: 7N35
Flow: Both Count: 1
Type: Vertical: Fread Geometry: Rectangular

```
                Span(in): 240.00
                Rise(in): 99999.00
              Invert(ft): 25.000
   Control Elevation(ft): 25.000
                                        TABLE
         Bottom Clip(in): 0.000
            Top Clip(in): 0.000
      Weir Discharge Coef: 2.800
   Orifice Discharge Coef: 0.600
```

```
          Name: OW_N101_7N45        From Node: N101
         Group: SW 7 AVE              To Node: 7N45
          Flow: Both                    Count: 1
          Type: Vertical: Fread      Geometry: Rectangular

                Span(in): 240.00
                Rise(in): 9999.00
              Invert(ft): 25.000
   Control Elevation(ft): 25.000
                                        TABLE
         Bottom Clip(in): 0.000
            Top Clip(in): 0.000
      Weir Discharge Coef: 2.800
   Orifice Discharge Coef: 0.600
```

```
          Name: OW_N102_N104        From Node: N102
         Group: SW 32 AVE             To Node: N104
          Flow: Both                    Count: 1
          Type: Vertical: Paved      Geometry: Rectangular

                Span(in): 120.00
                Rise(in): 999.00
              Invert(ft): 25.000
   Control Elevation(ft): 25.000
                                        TABLE
         Bottom Clip(in): 0.000
            Top Clip(in): 0.000
      Weir Discharge Coef: 2.800
   Orifice Discharge Coef: 0.600
```

```
          Name: OW_N105_16N04       From Node: N105
         Group: SW 16/12 AVE          To Node: 16N04
          Flow: Both                    Count: 1
          Type: Vertical: Fread      Geometry: Rectangular

                Span(in): 120.00
                Rise(in): 9999.00
              Invert(ft): 21.000
   Control Elevation(ft): 21.000
                                        TABLE
         Bottom Clip(in): 0.000
            Top Clip(in): 0.000
      Weir Discharge Coef: 2.800
   Orifice Discharge Coef: 0.600
```

```
---------------------------------------------------------------------------------------------------
      Name: OW_N105_7N11        From Node: N105
     Group: SW 7 AVE             To Node: 7N11
      Flow: Both                   Count: 1
      Type: Vertical: Fread     Geometry: Rectangular

              Span(in): 120.00
              Rise(in): 999.00
            Invert(ft): 18.100
  Control Elevation(ft): 18.100
                                    TABLE
         Bottom Clip(in): 0.000
            Top Clip(in): 0.000
    Weir Discharge Coef: 2.800
 Orifice Discharge Coef: 0.600


---------------------------------------------------------------------------------------------------
      Name: OW_N106_7N16        From Node: N106
     Group: SW 7 AVE             To Node: 7N16
      Flow: Both                   Count: 1
      Type: Vertical: Fread     Geometry: Rectangular

              Span(in): 240.00
              Rise(in): 9999.00
            Invert(ft): 16.000
  Control Elevation(ft): 16.000
                                    TABLE
         Bottom Clip(in): 0.000
            Top Clip(in): 0.000
    Weir Discharge Coef: 2.800
 Orifice Discharge Coef: 0.600


---------------------------------------------------------------------------------------------------
      Name: OW_N109_N016        From Node: N019
     Group: SW 7 AVE             To Node: N016
      Flow: Both                   Count: 1
      Type: Vertical: Fread     Geometry: Rectangular

              Span(in): 120.00
              Rise(in): 99999.00
            Invert(ft): 17.600
  Control Elevation(ft): 17.600
                                    TABLE
         Bottom Clip(in): 0.000
            Top Clip(in): 0.000
    Weir Discharge Coef: 2.800
 Orifice Discharge Coef: 0.600


---------------------------------------------------------------------------------------------------
      Name: OW_N113_7N08        From Node: N113
     Group: SW 7 AVE             To Node: 7N08
      Flow: Both                   Count: 1
      Type: Vertical: Fread     Geometry: Rectangular

              Span(in): 120.00
              Rise(in): 999.00
            Invert(ft): 18.500
```

Control Elevation(ft): 18.500
TABLE
Bottom Clip(in): 0.000
Top Clip(in): 0.000
Weir Discharge Coef: 2.800
Orifice Discharge Coef: 0.600

Name: OW_N114_7N02 From Node: N114
Group: SW 7 AVE To Node: 7N02
Flow: Both Count: 1
Type: Vertical: Fread Geometry: Rectangular

Span(in): 240.00
Rise(in): 9999.00
Invert(ft): 16.800
Control Elevation(ft): 16.800
TABLE
Bottom Clip(in): 0.000
Top Clip(in): 0.000
Weir Discharge Coef: 2.800
Orifice Discharge Coef: 0.600

Name: OW_N114_7N06 From Node: N114
Group: SW 7 AVE To Node: 7N06
Flow: Both Count: 1
Type: Vertical: Fread Geometry: Rectangular

Span(in): 240.00
Rise(in): 9999.00
Invert(ft): 17.500
Control Elevation(ft): 17.500
TABLE
Bottom Clip(in): 0.000
Top Clip(in): 0.000
Weir Discharge Coef: 2.800
Orifice Discharge Coef: 0.600

Name: OW_N114_N18 From Node: N114
Group: SW 7 AVE To Node: N014
Flow: Both Count: 1
Type: Vertical: Fread Geometry: Rectangular

Span(in): 240.00
Rise(in): 9999.00
Invert(ft): 18.000
Control Elevation(ft): 18.000
TABLE
Bottom Clip(in): 0.000
Top Clip(in): 0.000
Weir Discharge Coef: 2.800
Orifice Discharge Coef: 0.600

LINK REDIRECTED TO DISCHARGE INTO NEW SYSTEM

Name: OW_N115_N113 From Node: N115

```
      Group: SW 16/12 AVE          To Node: N113
       Flow: Both                    Count: 1
       Type: Vertical: Fread      Geometry: Rectangular

                  Span(in): 120.00
                  Rise(in): 9999.00
                Invert(ft): 17.000
     Control Elevation(ft): 17.000
                                       TABLE
            Bottom Clip(in): 0.000
               Top Clip(in): 0.000
        Weir Discharge Coef: 2.800
    Orifice Discharge Coef: 0.600
```

```
       Name: OW_N115_N7N02       From Node: N115
      Group: SW 7 AVE              To Node: 7N02
       Flow: Both                    Count: 1
       Type: Vertical: Fread      Geometry: Rectangular

                  Span(in): 120.00
                  Rise(in): 9999.00
                Invert(ft): 18.500
     Control Elevation(ft): 18.500
                                       TABLE
            Bottom Clip(in): 0.000
               Top Clip(in): 0.000
        Weir Discharge Coef: 2.800
    Orifice Discharge Coef: 0.600
```

```
       Name: OW_N116_16N26       From Node: N118
      Group: SW 16/12 AVE          To Node: 16N26
       Flow: Both                    Count: 1
       Type: Vertical: Fread      Geometry: Rectangular

                  Span(in): 120.00
                  Rise(in): 999.00
                Invert(ft): 23.000
     Control Elevation(ft): 23.000
                                       TABLE
            Bottom Clip(in): 0.000
               Top Clip(in): 0.000
        Weir Discharge Coef: 2.800
    Orifice Discharge Coef: 0.600
```

```
       Name: OW_N118_N119        From Node: N118
      Group: SW 26 AVE             To Node: N119
       Flow: Both                    Count: 1
       Type: Vertical: Fread      Geometry: Rectangular

                  Span(in): 120.00
                  Rise(in): 999.00
                Invert(ft): 24.000
     Control Elevation(ft): 24.000
                                       TABLE
            Bottom Clip(in): 0.000
               Top Clip(in): 0.000
```

Weir Discharge Coef: 2.800
Orifice Discharge Coef: 0.600

Name: OW_N119_16N06 From Node: N119
Group: SW 16/12 AVE To Node: 16N06
Flow: Both Count: 1
Type: Vertical: Fread Geometry: Rectangular

Span(in): 120.00
Rise(in): 9999.00
Invert(ft): 22.000
Control Elevation(ft): 22.000
TABLE
Bottom Clip(in): 0.000
Top Clip(in): 0.000
Weir Discharge Coef: 2.800
Orifice Discharge Coef: 0.600

Name: OW_N120_26N16 From Node: N120
Group: SW 26 AVE To Node: 26N18
Flow: Both Count: 1
Type: Vertical: Fread Geometry: Rectangular

Span(in): 120.00
Rise(in): 999.00
Invert(ft): 18.700
Control Elevation(ft): 18.700
TABLE
Bottom Clip(in): 0.000
Top Clip(in): 0.000
Weir Discharge Coef: 2.800
Orifice Discharge Coef: 0.600

Name: OW_N120_N121 From Node: N120
Group: SW 16/12 AVE To Node: N121
Flow: Both Count: 1
Type: Vertical: Fread Geometry: Rectangular

Span(in): 120.00
Rise(in): 9999.00
Invert(ft): 21.000
Control Elevation(ft): 21.000
TABLE
Bottom Clip(in): 0.000
Top Clip(in): 0.000
Weir Discharge Coef: 2.800
Orifice Discharge Coef: 0.600

Name: OW_N121_16N02 From Node: N121
Group: SW 16/12 AVE To Node: 16N02
Flow: Both Count: 1
Type: Vertical: Fread Geometry: Rectangular

Span(in): 120.00
Rise(in): 999.00
Invert(ft): 20.000
Control Elevation(ft): 20.000
TABLE
Bottom Clip(in): 0.000
Top Clip(in): 0.000
Weir Discharge Coef: 2.800
Orifice Discharge Coef: 0.600

Name: OW_N121_16N04 From Node: N120
Group: SW 16/12 AVE To Node: 16N04
Flow: Both Count: 1
Type: Vertical: Fread Geometry: Rectangular

Span(in): 120.00
Rise(in): 999.00
Invert(ft): 20.000
Control Elevation(ft): 20.000
TABLE
Bottom Clip(in): 0.000
Top Clip(in): 0.000
Weir Discharge Coef: 2.800
Orifice Discharge Coef: 0.600

Name: OW_N122_26N10 From Node: N122
Group: SW 26 AVE To Node: 26N10
Flow: Both Count: 1
Type: Vertical: Fread Geometry: Rectangular

Span(in): 120.00
Rise(in): 999.00
Invert(ft): 19.500
Control Elevation(ft): 19.500
TABLE
Bottom Clip(in): 0.000
Top Clip(in): 0.000
Weir Discharge Coef: 2.800
Orifice Discharge Coef: 0.600

Name: OW_N122_32N04 From Node: N122
Group: SW 32 AVE To Node: 32N04
Flow: Both Count: 1
Type: Vertical: Fread Geometry: Rectangular

Span(in): 120.00
Rise(in): 999.00
Invert(ft): 17.000
Control Elevation(ft): 17.000
TABLE
Bottom Clip(in): 0.000
Top Clip(in): 0.000
Weir Discharge Coef: 2.800
Orifice Discharge Coef: 0.600

```
        Name: OW_N123_32N21        From Node: N123
       Group: SW 32 AVE              To Node: 32N21
        Flow: Both                     Count: 1
        Type: Vertical: Fread      Geometry: Rectangular

                  Span(in): 120.00
                  Rise(in): 999.00
                Invert(ft): 19.000
      Control Elevation(ft): 19.000
                                       TABLE
           Bottom Clip(in): 0.000
              Top Clip(in): 0.000
     Weir Discharge Coef: 2.800
  Orifice Discharge Coef: 0.600
```

```
        Name: OW_N124_32N32        From Node: N124
       Group: SW 32 AVE              To Node: 32N32
        Flow: Both                     Count: 1
        Type: Vertical: Fread      Geometry: Rectangular

                  Span(in): 120.00
                  Rise(in): 999.00
                Invert(ft): 23.000
      Control Elevation(ft): 23.000
                                       TABLE
           Bottom Clip(in): 0.000
              Top Clip(in): 0.000
     Weir Discharge Coef: 2.800
  Orifice Discharge Coef: 0.600
```

```
        Name: OW_N125_32N32        From Node: N125
       Group: SW 32 AVE              To Node: 32N32
        Flow: Both                     Count: 1
        Type: Vertical: Fread      Geometry: Rectangular

                  Span(in): 120.00
                  Rise(in): 999.00
                Invert(ft): 25.000
      Control Elevation(ft): 25.000
                                       TABLE
           Bottom Clip(in): 0.000
              Top Clip(in): 0.000
     Weir Discharge Coef: 2.800
  Orifice Discharge Coef: 0.600
```

```
        Name: OW_NLBP1             From Node: N108
       Group: SW 7 AVE               To Node: N014
        Flow: Both                     Count: 1
        Type: Vertical: Fread      Geometry: Rectangular

                  Span(in): 240.00
                  Rise(in): 9999.00
                Invert(ft): 20.500
      Control Elevation(ft): 20.500
```

TABLE
Bottom Clip(in): 0.000
Top Clip(in): 0.000
Weir Discharge Coef: 2.800
Orifice Discharge Coef: 0.600

Name: OW_NLBP2 From Node: N108
Group: SW 7 AVE To Node: N005
Flow: Both Count: 1
Type: Vertical: Fread Geometry: Rectangular

Span(in): 240.00
Rise(in): 9999.00
Invert(ft): 20.000
Control Elevation(ft): 20.000
TABLE
Bottom Clip(in): 0.000
Top Clip(in): 0.000
Weir Discharge Coef: 2.800
Orifice Discharge Coef: 0.600

LINK REDIRECTED TO DISCHARGE TO PROPOSED DRAINAGE SYSTEM

Name: OW_SW3AVE From Node: N104
Group: SW 7 AVE To Node: N005
Flow: Both Count: 1
Type: Vertical: Fread Geometry: Rectangular

Span(in): 120.00
Rise(in): 9999.00
Invert(ft): 21.000
Control Elevation(ft): 21.000
TABLE
Bottom Clip(in): 0.000
Top Clip(in): 0.000
Weir Discharge Coef: 2.800
Orifice Discharge Coef: 0.600

Name: PRO_7AV_DIV_CSA From Node: 7N03
Group: SW 7 AVE To Node: PRO_7N03B
Flow: Positive Count: 1
Type: Vertical: Mavis Geometry: Rectangular

Span(in): 445.00
Rise(in): 9999.00
Invert(ft): 12.000
Control Elevation(ft): 13.500
TABLE
Bottom Clip(in): 0.000
Top Clip(in): 0.000
Weir Discharge Coef: 3.200
Orifice Discharge Coef: 0.600

DIVERSION WEIR TO DIRECT RUNOFF FROM SW 7 TO SW 26 RESERVOIR

Name: PRO_7AV_DIV_CSB From Node: 7N03
Group: SW 7 AVE To Node: PRO_7N03B

```
        Flow: None                    Count: 2
        Type: Vertical: Mavis      Geometry: Rectangular

                   Span(in): 24.00
                   Rise(in): 18.00
                 Invert(ft): 13.500
       Control Elevation(ft): 13.500
                                       TABLE
             Bottom Clip(in): 0.000
                Top Clip(in): 0.000
          Weir Discharge Coef: 3.200
        Orifice Discharge Coef: 0.600

BLEEDERS IN DIVERSION WEIR TO ALLOW POSTIVE FLOW ONLY (ASSUME MANUALLY OPERATED GATES)

--------------------------------------------------------------------------------------------------
        Name: PRO_7N15_7N15B      From Node: 7N15
       Group: SW 7 AVE              To Node: PRO_7N15B
        Flow: Both                    Count: 1
        Type: Vertical: Mavis      Geometry: Rectangular

                   Span(in): 240.00
                   Rise(in): 72.00
                 Invert(ft): 16.500
       Control Elevation(ft): 16.500
                                       TABLE
             Bottom Clip(in): 0.000
                Top Clip(in): 0.000
          Weir Discharge Coef: 3.200
        Orifice Discharge Coef: 0.600

INSTALL WEIR TO DIVERT WATER WEST TO PROPOSED LAKE SYSTEM

--------------------------------------------------------------------------------------------------
        Name: PRO_CONTROLGATE     From Node: RESERVOIR
       Group: SW 26 AVE             To Node: 26@~LEMKIN CK
        Flow: Positive                Count: 2
        Type: Vertical: Mavis      Geometry: Rectangular

                   Span(in): 120.00
                   Rise(in): 48.00
                 Invert(ft): 13.500
       Control Elevation(ft): 13.500
                                       TABLE
             Bottom Clip(in): 0.000
                Top Clip(in): 0.000
          Weir Discharge Coef: 3.200
        Orifice Discharge Coef: 0.600

CONCEPTUAL CONTROL GATES FOR THE CONCEPTUAL RESERVOIR

--------------------------------------------------------------------------------------------------
        Name: PRO_EMRGNCY_OW      From Node: RESERVOIR
       Group: SW 26 AVE             To Node: 26N08
        Flow: Positive                Count: 1
        Type: Vertical: Fread      Geometry: Trapezoidal

              Bottom Width(ft): 25.00
        Left Side Slope(h/v): 2.00
       Right Side Slope(h/v): 2.00
                 Invert(ft): 20.000
       Control Elevation(ft): 20.000
      Struct Opening Dim(ft): 9999.00
                                       TABLE
             Bottom Clip(ft): 0.000
```

```
            Top Clip(ft): 0.000
      Weir Discharge Coef: 2.800
  Orifice Discharge Coef: 0.600

FOR THE PURPOSES OF MODELING; THE RESERVOIR IS CONCEPTUAL IN NATURE AND IS TREATED AS A MINOR
AGRICULTURAL IMPOUNDMENT CONTAINING A EMERGENCY RETURN STRUCTURE.


==========================================================================================
==== Rating Curves ======================================================================
==========================================================================================

       Name: PRO_32PSN126N20     From Node: N126                  Count: 1
      Group: SW 32 AVE             To Node: 32N20                 Flow: Both

            TABLE            ELEV ON(ft)     ELEV OFF(ft)
      #1: OAKPARK_PS         14.000          13.000
      #2: OAKPARK_PS         15.000          13.500
      #3:                    0.000           0.000
      #4:                    0.000           0.000

ASSUMPTION HERE IS TO INSTALL STORMWATER COLLECTION SYSTEM W/SMALL PUMPING STATION

------------------------------------------------------------------------------------------
       Name: PRO_MASTER_PS1      From Node: 26N08                 Count: 1
      Group: SW 26 AVE             To Node: RESERVOIR             Flow: Positive

            TABLE            ELEV ON(ft)     ELEV OFF(ft)
      #1: 50 CFS PUMP        13.750          12.500
      #2: 50 CFS PUMP        14.000          12.500
      #3: 50 CFS PUMP        14.250          12.500
      #4: 50 CFS PUMP        14.500          12.500

A TOTAL FLOW OF 250 CFS WILL BE USED AS PER THE SFWMD SOW CONTRACT CN040926 - WO03.
PROPOSED CONCEPTUAL MASTER PUMP STATION W/5-50 CFS PUMPS;
THE FITH PUMP IS MODELED IN ADDITIONAL LINK AS ICPR CAN ONLY HANDLE 4 OPERATING TABLES.

------------------------------------------------------------------------------------------
       Name: PRO_MASTER_PS2      From Node: 26N08                 Count: 1
      Group: SW 26 AVE             To Node: RESERVOIR             Flow: Positive

            TABLE            ELEV ON(ft)     ELEV OFF(ft)
      #1: 50 CFS PUMP        14.750          12.500
      #2:                    0.000           0.000
      #3:                    0.000           0.000
      #4:                    0.000           0.000

A TOTAL FLOW OF 250 CFS WILL BE USED AS PER THE SFWMD SOW CONTRACT CN040926 - WO03.
PROPOSED CONCEPTUAL MASTER PUMP STATION W/5-50 CFS PUMPS;
THE FITH PUMP IS MODELED IN ADDITIONAL LINK AS ICPR CAN ONLY HANDLE 4 OPERATING TABLES.

==========================================================================================
==== Hydrology Simulations ==============================================================
==========================================================================================

        Name: 4S_005Y1DPRO
    Filename: L:\LAND\00-0903\146 Stormwater Plan\ICPR3\HYDROLOGY\4S_005Y_1DAY PRO.R32

     Override Defaults: Yes
  Storm Duration(hrs): 24.00
       Rainfall File: Flmod
 Rainfall Amount(in): 4.50

Time(hrs)       Print Inc(min)
```

200.000	15.00

Name: 4S_005Y_1DAY
Filename: L:\LAND\00-0903\146 Stormwater Plan\ICPR3\HYDROLOGY\4S_005Y_1DAY.R32

Override Defaults: Yes
Storm Duration(hrs): 24.00
Rainfall File: Flmod
Rainfall Amount(in): 4.50

Time(hrs)	Print Inc(min)
200.000	15.00

Name: 4S_010Y3DPRO
Filename: L:\LAND\00-0903\146 Stormwater Plan\ICPR3\HYDROLOGY\4S_010Y_3DAY PRO.R32

Override Defaults: No

Time(hrs)	Print Inc(min)
200.000	15.00

Name: 4S_010Y_1DAY
Filename: L:\LAND\00-0903\146 Stormwater Plan\ICPR3\HYDROLOGY\4S_010Y_1DAY.R32

Override Defaults: Yes
Storm Duration(hrs): 24.00
Rainfall File: Flmod
Rainfall Amount(in): 5.00

Time(hrs)	Print Inc(min)
200.000	15.00

Name: 4S_010Y_3DAY
Filename: L:\LAND\00-0903\146 Stormwater Plan\ICPR3\HYDROLOGY\4S_010Y_3DAY.R32

Override Defaults: No

Time(hrs)	Print Inc(min)
200.000	15.00

Name: 4S_025Y3DPRO
Filename: L:\LAND\00-0903\146 Stormwater Plan\ICPR3\HYDROLOGY\4S_025Y_3DAY PRO.R32

Override Defaults: Yes
Storm Duration(hrs): 72.00
Rainfall File: Sfwmd72
Rainfall Amount(in): 9.00

Time(hrs)	Print Inc(min)
200.000	15.00

Name: 4S_025Y_1DAY
Filename: L:\LAND\00-0903\146 Stormwater Plan\ICPR3\HYDROLOGY\4S_025Y_1DAY.R32

```
      Override Defaults: Yes
   Storm Duration(hrs): 24.00
         Rainfall File: Flmod
  Rainfall Amount(in): 6.00

Time(hrs)        Print Inc(min)
---------------- ----------------
200.000          15.00

-------------------------------------------------------------------------------------------------------
         Name: 4S_025Y_3DAY
     Filename: L:\LAND\00-0903\146 Stormwater Plan\ICPR3\HYDROLOGY\4S_025Y_3DAY.R32

      Override Defaults: Yes
   Storm Duration(hrs): 72.00
         Rainfall File: Sfwmd72
  Rainfall Amount(in): 9.00

Time(hrs)        Print Inc(min)
---------------- ----------------
200.000          15.00

-------------------------------------------------------------------------------------------------------
         Name: 4S_050Y_1DAY
     Filename: L:\LAND\00-0903\146 Stormwater Plan\ICPR3\HYDROLOGY\4S_050Y_1DAY.R32

      Override Defaults: Yes
   Storm Duration(hrs): 24.00
         Rainfall File: Flmod
  Rainfall Amount(in): 7.00

ıe(hrs)          Print Inc(min)
---------------- ----------------
200.000          15.00

-------------------------------------------------------------------------------------------------------
         Name: 4S_100Y_1DAY
     Filename: L:\LAND\00-0903\146 Stormwater Plan\ICPR3\HYDROLOGY\4S_100Y_1DAY.R32

      Override Defaults: Yes
   Storm Duration(hrs): 24.00
         Rainfall File: Flmod
  Rainfall Amount(in): 8.00

Time(hrs)        Print Inc(min)
---------------- ----------------
200.000          15.00

-------------------------------------------------------------------------------------------------------
         Name: G_05Y_1DAY
     Filename: L:\LAND\00-0903\146 Stormwater Plan\ICPR3\HYDROLOGY\G_05Y_1DAY.R32

      Override Defaults: Yes
   Storm Duration(hrs): 24.00
         Rainfall File: Flmod
  Rainfall Amount(in): 4.50

Time(hrs)        Print Inc(min)
---------------- ----------------
200.000          15.00

-------------------------------------------------------------------------------------------------------
         Name: G_10Y_1DAY
     Filename: L:\LAND\00-0903\146 Stormwater Plan\ICPR3\HYDROLOGY\G_10Y_1DAY.R32
```

Override Defaults: Yes
Storm Duration(hrs): 24.00
Rainfall File: Flmod
Rainfall Amount(in): 5.00

Time(hrs)	Print Inc(min)
200.000	15.00

Name: G_10Y_3DAY
Filename: L:\LAND\00-0903\146 Stormwater Plan\ICPR3\HYDROLOGY\G_10Y_3DAY.R32

Override Defaults: No

Time(hrs)	Print Inc(min)
200.000	15.00

Name: G_25Y_3DAY
Filename: L:\LAND\00-0903\146 Stormwater Plan\ICPR3\HYDROLOGY\G_25Y_3DAY.R32

Override Defaults: Yes
Storm Duration(hrs): 72.00
Rainfall File: Sfwmd72
Rainfall Amount(in): 9.00

Time(hrs)	Print Inc(min)
200.000	15.00

Name: PRO_SWA_005_1
Filename: L:\LAND\00-0903\146 Stormwater Plan\ICPR3\HYDROLOGY\PROPOSED SW-AREA_005_1.R32

Override Defaults: Yes
Storm Duration(hrs): 24.00
Rainfall File: Sfwmd72
Rainfall Amount(in): 4.50

Time(hrs)	Print Inc(min)
200.000	15.00

Name: PRO_SWA_010_3
Filename: L:\LAND\00-0903\146 Stormwater Plan\ICPR3\HYDROLOGY\PROPOSED SW-AREA_010_3.R32

Override Defaults: No

Time(hrs)	Print Inc(min)
200.000	15.00

Name: PRO_SWA_025_3
Filename: L:\LAND\00-0903\146 Stormwater Plan\ICPR3\HYDROLOGY\PROPOSED SW-AREA_025_3.R32

Override Defaults: Yes
Storm Duration(hrs): 72.00
Rainfall File: Sfwmd72
Rainfall Amount(in): 9.00

Time(hrs)	Print Inc(min)
0.000	15.00

Name: SW-AREA_005_1
Filename: L:\LAND\00-0903\146 Stormwater Plan\ICPR3\HYDROLOGY\SW-AREA_005_1.R32

Override Defaults: Yes
Storm Duration(hrs): 24.00
Rainfall File: Flmod
Rainfall Amount(in): 4.50

Time(hrs)	Print Inc(min)
150.000	15.00

Name: SW-AREA_010_1
Filename: L:\LAND\00-0903\146 Stormwater Plan\ICPR3\HYDROLOGY\SW-AREA_010_1.R32

Override Defaults: Yes
Storm Duration(hrs): 24.00
Rainfall File: Flmod
Rainfall Amount(in): 5.00

Time(hrs)	Print Inc(min)
150.000	15.00

Name: SW-AREA_010_3
Filename: L:\LAND\00-0903\146 Stormwater Plan\ICPR3\HYDROLOGY\SW-AREA_010_3.R32

Override Defaults: No

Time(hrs)	Print Inc(min)
200.000	15.00

Name: SW-AREA_025_1
Filename: L:\LAND\00-0903\146 Stormwater Plan\ICPR3\HYDROLOGY\SW-AREA_025_1.R32

Override Defaults: Yes
Storm Duration(hrs): 24.00
Rainfall File: Flmod
Rainfall Amount(in): 6.00

Time(hrs)	Print Inc(min)
150.000	15.00

Name: SW-AREA_025_3
Filename: L:\LAND\00-0903\146 Stormwater Plan\ICPR3\HYDROLOGY\SW-AREA_025_3.R32

Override Defaults: Yes
Storm Duration(hrs): 72.00
Rainfall File: Sfwmd72
Rainfall Amount(in): 9.00

e(hrs)	Print Inc(min)
200.000	15.00

Name: SW-AREA_050_1
Filename: L:\LAND\00-0903\146 Stormwater Plan\ICPR3\HYDROLOGY\SW-AREA_050_1.R32

Override Defaults: Yes
Storm Duration(hrs): 24.00
Rainfall File: Flmod
Rainfall Amount(in): 7.00

Time(hrs)	Print Inc(min)
150.000	15.00

Name: SW-AREA_100_1
Filename: L:\LAND\00-0903\146 Stormwater Plan\ICPR3\HYDROLOGY\SW-AREA_100_1.R32

Override Defaults: Yes
Storm Duration(hrs): 24.00
Rainfall File: Flmod
Rainfall Amount(in): 8.00

Time(hrs)	Print Inc(min)
150.000	15.00

==========

==== Routing Simulations ====

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Name: PROSWA005_1 Hydrology Sim: SW-AREA_005_1
Filename: L:\LAND\00-0903\146 Stormwater Plan\ICPR3\HYDRAULICS\PROPOSED SWAREA005_1.I32

Execute: No Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00100
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 220.00
Min Calc Time(sec): 0.0800 Max Calc Time(sec): 999.0000
Boundary Stages: SW AREA 05YR-1 Boundary Flows: SW AREA 05_1

SOUTHWEST AREA DRAINAGE SIMULATION
BOUNDARY FLOWS INCLUDE FLOWS FROM PERMITTED PRIVATE LAND DEVELOPMENT PROJECTS & FDOT PROJECTS. SOME BROAD BASED ENGINEERING ASSUMPTIONS WERE MADE FOR BOUNDARY FLOWS AND STAGES PERTAINING TO FDOT PROJECTS AND RECEIVING BODY

Time(hrs)	Print Inc(min)
54.000	15.000
84.000	5.000
220.000	15.000

Group	Run
SW 16/12 AVE	Yes
SW 26 AVE	Yes
SW 32 AVE	Yes
SW 7 AVE	Yes

Name: PROSWA010_3 Hydrology Sim: PRO_SWA_010_3

Filename: L:\LAND\00-0903\146 Stormwater Plan\ICPR3\HYDRAULICS\PROPOSED SWAREA010_3.I32

Execute: No Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00100
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 220.00
Min Calc Time(sec): 0.0800 Max Calc Time(sec): 999.0000
Boundary Stages: SW AREA 10YR-3 Boundary Flows: SW AREA 10_3

SOUTHWEST AREA DRAINAGE SIMULATION
BOUNDARY FLOWS INCLUDE FLOWS FROM PERMITTED PRIVATE LAND DEVELOPMENT PROJECTS & FDOT PROJECTS. SOME BROAD BASED ENGINEERING ASSUMPTIONS WERE MADE FOR BOUNDARY FLOWS AND STAGES PERTAINING TO FDOT PROJECTS AND RECEIVING BODY

Time(hrs)	Print Inc(min)
54.000	15.000
84.000	5.000
220.000	15.000

Group	Run
SW 16/12 AVE	Yes
SW 26 AVE	Yes
SW 32 AVE	Yes
SW 7 AVE	Yes

Name: PROSWA025_3 Hydrology Sim: PRO_SWA_025_3
Filename: L:\LAND\00-0903\146 Stormwater Plan\ICPR3\HYDRAULICS\PROPOSED SWAREA025_3.I32

Execute: No Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00100
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 220.00
Min Calc Time(sec): 0.0800 Max Calc Time(sec): 999.0000
Boundary Stages: SW AREA 25YR-3 Boundary Flows: SW AREA 25_3

SOUTHWEST AREA DRAINAGE SIMULATION
BOUNDARY FLOWS INCLUDE FLOWS FROM PERMITTED PRIVATE LAND DEVELOPMENT PROJECTS & FDOT PROJECTS. SOME BROAD BASED ENGINEERING ASSUMPTIONS WERE MADE FOR BOUNDARY FLOWS AND STAGES PERTAINING TO FDOT PROJECTS AND RECEIVING BODY

Time(hrs)	Print Inc(min)
54.000	15.000
84.000	5.000
220.000	15.000

Group	Run
SW 16/12 AVE	Yes
SW 26 AVE	Yes
SW 32 AVE	Yes
SW 7 AVE	Yes

Name: SWAREA005_1 Hydrology Sim: SW-AREA_005_1
Filename: L:\LAND\00-0903\146 Stormwater Plan\ICPR3\HYDRAULICS\SWAREA005_1.I32

```
     Execute: No          Restart: No          Patch: No
 Alternative: No

       Max Delta Z(ft): 1.00                  Delta Z Factor: 0.00100
   Time Step Optimizer: 10.000
       Start Time(hrs): 0.000                  End Time(hrs): 150.00
    Min Calc Time(sec): 0.0800              Max Calc Time(sec): 999.0000
       Boundary Stages: SW AREA 05YR-1         Boundary Flows: SW AREA 05_1

SOUTHWEST AREA DRAINAGE SIMULATION
BOUNDARY FLOWS INCLUDE FLOWS FROM PERMITTED PRIVATE LAND DEVELOPMENT PROJECTS & FDOT PROJECTS . SOME
BROAD BASED ENGINEERING ASSUMPTIONS WERE MADE FOR  BOUNDARY FLOWS & STAGES PERTAINING TO FDOT PROJECTS
AND RECEIVING BODY.

Time(hrs)       Print Inc(min)
--------------- ---------------
11.000          15.000
12.000          5.000
18.000          5.000
150.000         15.000

Group           Run
--------------- -----
SW 16/12 AVE    Yes
SW 26 AVE       Yes
SW 32 AVE       Yes
SW 7 AVE        Yes


--------------------------------------------------------------------------------------------------------
        Name: SWAREA010_3         Hydrology Sim: SW-AREA_010_3
    Filename: L:\LAND\00-0903\146 Stormwater Plan\ICPR3\HYDRAULICS\SWAREA010_3.I32

     Execute: No          Restart: No          Patch: No
 Alternative: No

       Max Delta Z(ft): 1.00                  Delta Z Factor: 0.00100
   Time Step Optimizer: 10.000
       Start Time(hrs): 0.000                  End Time(hrs): 220.00
    Min Calc Time(sec): 0.0800              Max Calc Time(sec): 999.0000
       Boundary Stages: SW AREA 10YR-3         Boundary Flows: SW AREA 10_3

SOUTHWEST AREA DRAINAGE SIMULATION
BOUNDARY FLOWS INCLUDE FLOWS FROM PERMITTED PRIVATE LAND DEVELOPMENT PROJECTS & FDOT PROJECTS

Time(hrs)       Print Inc(min)
--------------- ---------------
54.000          15.000
84.000          5.000
220.000         15.000

Group           Run
--------------- -----
SW 16/12 AVE    Yes
SW 26 AVE       Yes
SW 32 AVE       Yes
SW 7 AVE        Yes


--------------------------------------------------------------------------------------------------------
        Name: SWAREA025_3         Hydrology Sim: SW-AREA_025_3
    Filename: L:\LAND\00-0903\146 Stormwater Plan\ICPR3\HYDRAULICS\SWAREA025_3.I32

     Execute: No          Restart: No          Patch: No
```

Alternative: No

Max Delta Z(ft):	1.00	Delta Z Factor:	0.00100
Time Step Optimizer:	10.000		
Start Time(hrs):	0.000	End Time(hrs):	220.00
Min Calc Time(sec):	0.0800	Max Calc Time(sec):	999.0000
Boundary Stages:	SW AREA 25YR-3	Boundary Flows:	SW AREA 25_3

SOUTHWEST AREA DRAINAGE SIMULATION
BOUNDARY FLOWS INCLUDE FLOWS FROM PERMITTED PRIVATE LAND DEVELOPMENT PROJECTS & FDOT PROJECTS. SOME BROAD BASED ENGINEERING ASSUMPTIONS WERE MADE FOR BOUNDARY FLOWS AND STAGES PERTAINING TO FDOT PROJECTS AND RECEIVING BODY

Time(hrs)	Print Inc(min)
54.000	15.000
84.000	5.000
220.000	15.000

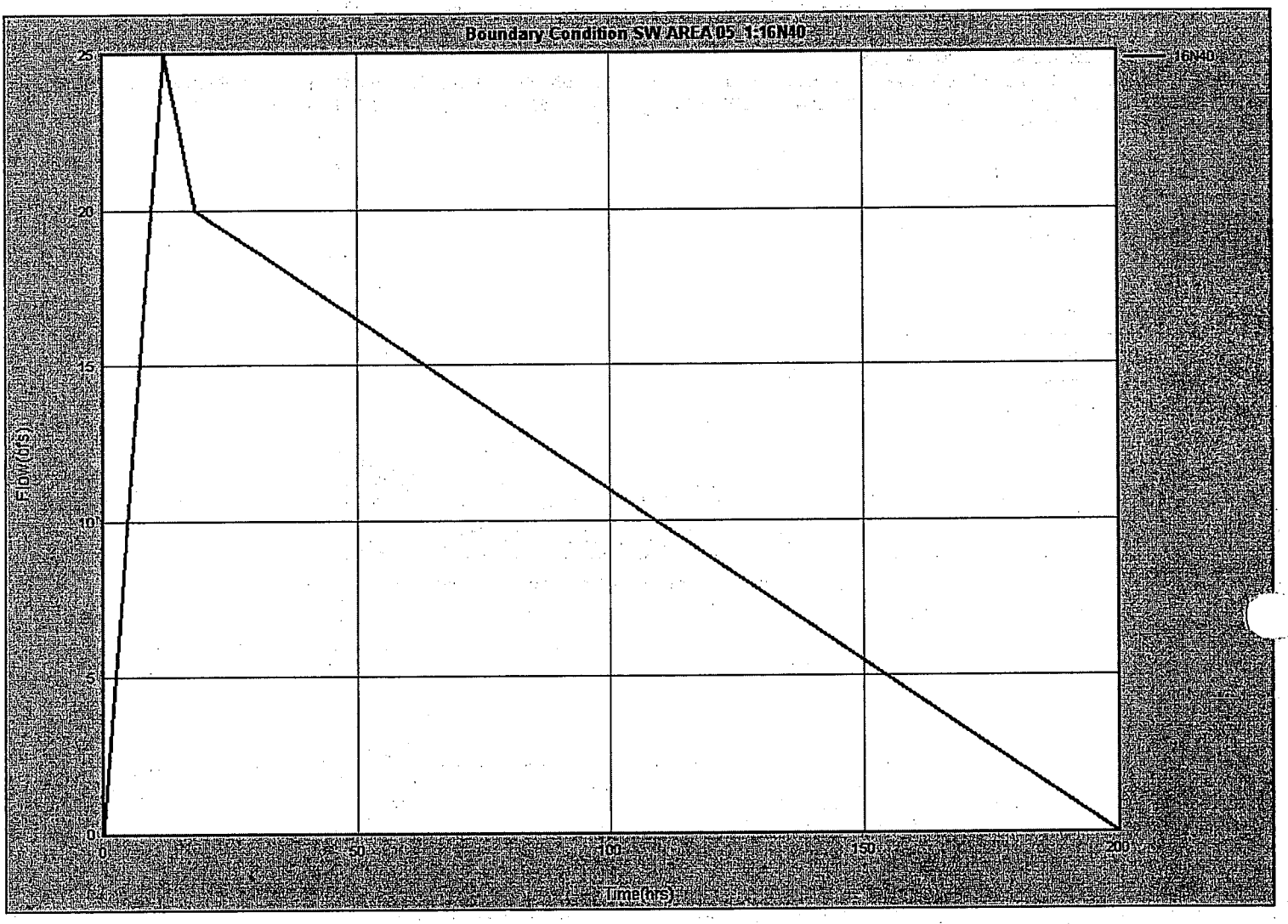
Group	Run
SW 16/12 AVE	Yes
SW 26 AVE	Yes
SW 32 AVE	Yes
SW 7 AVE	Yes

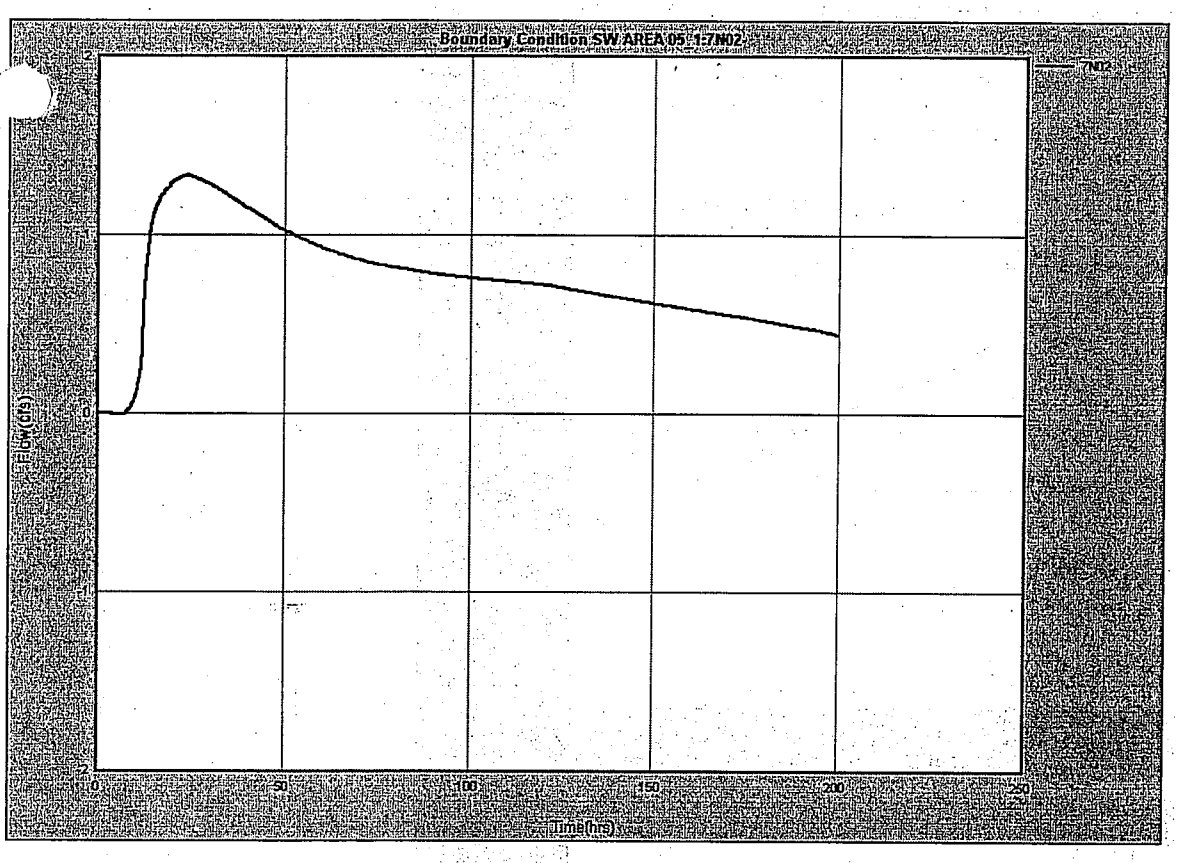
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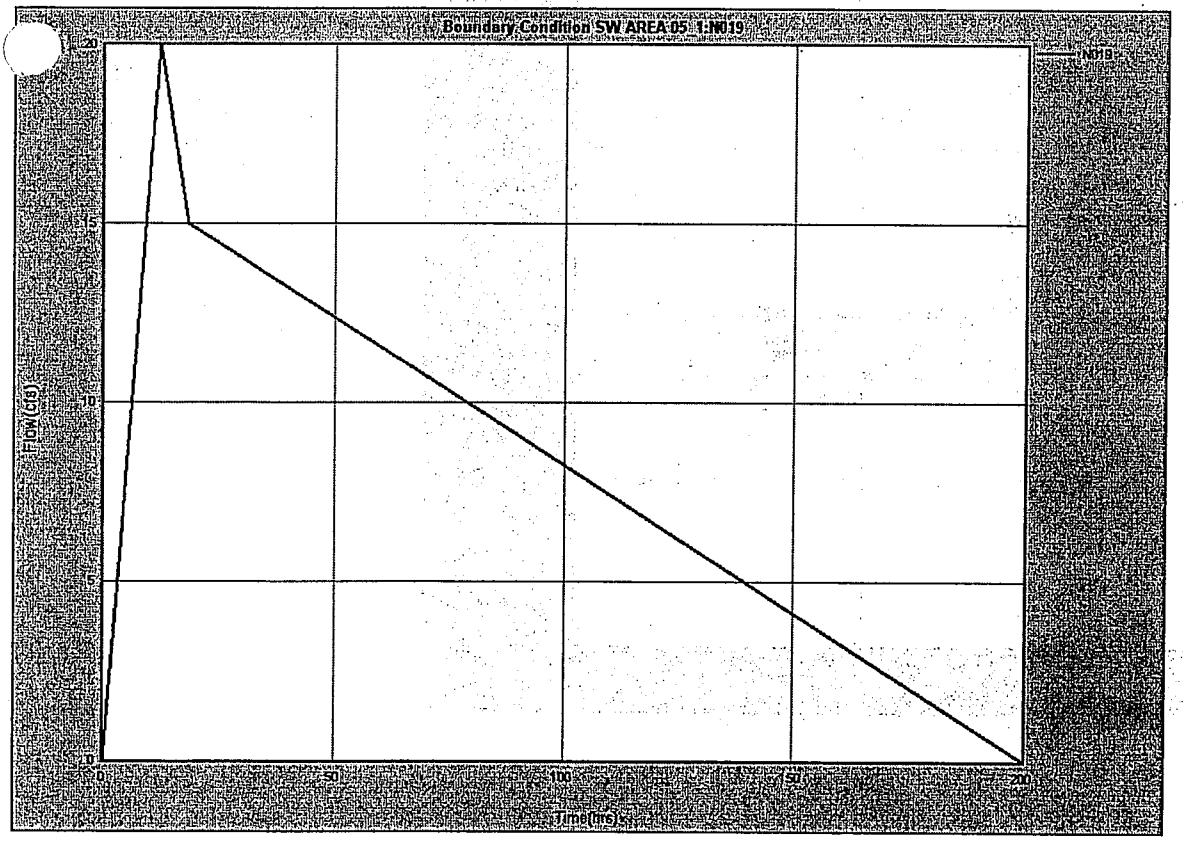
==== Boundary Conditions ====

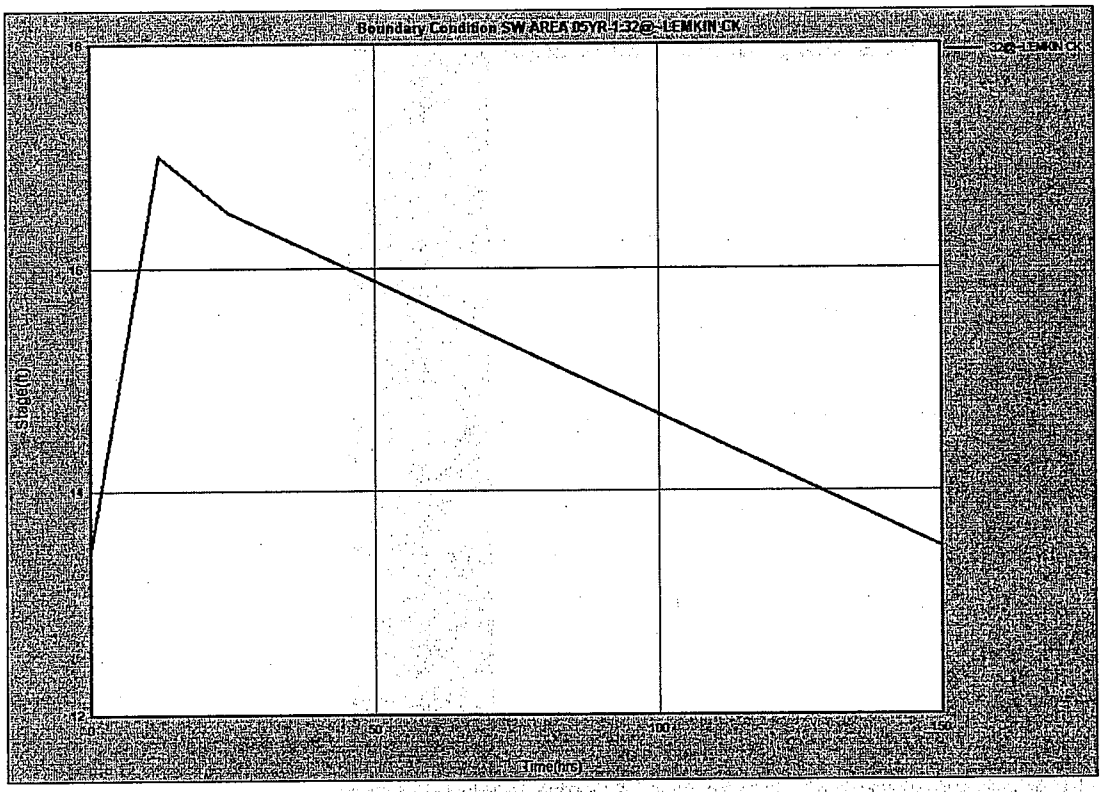
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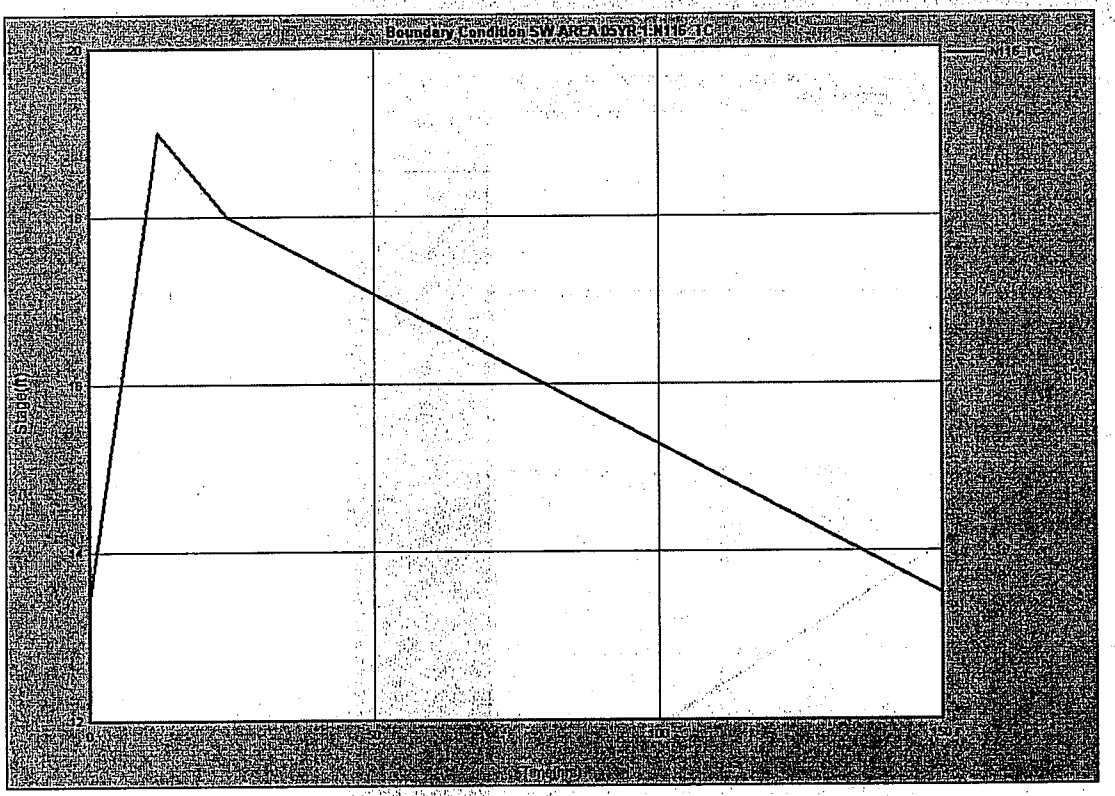
TO BE SHOWN IN GRAPHICAL FORMAT DUE LARGE VOLUME DATA

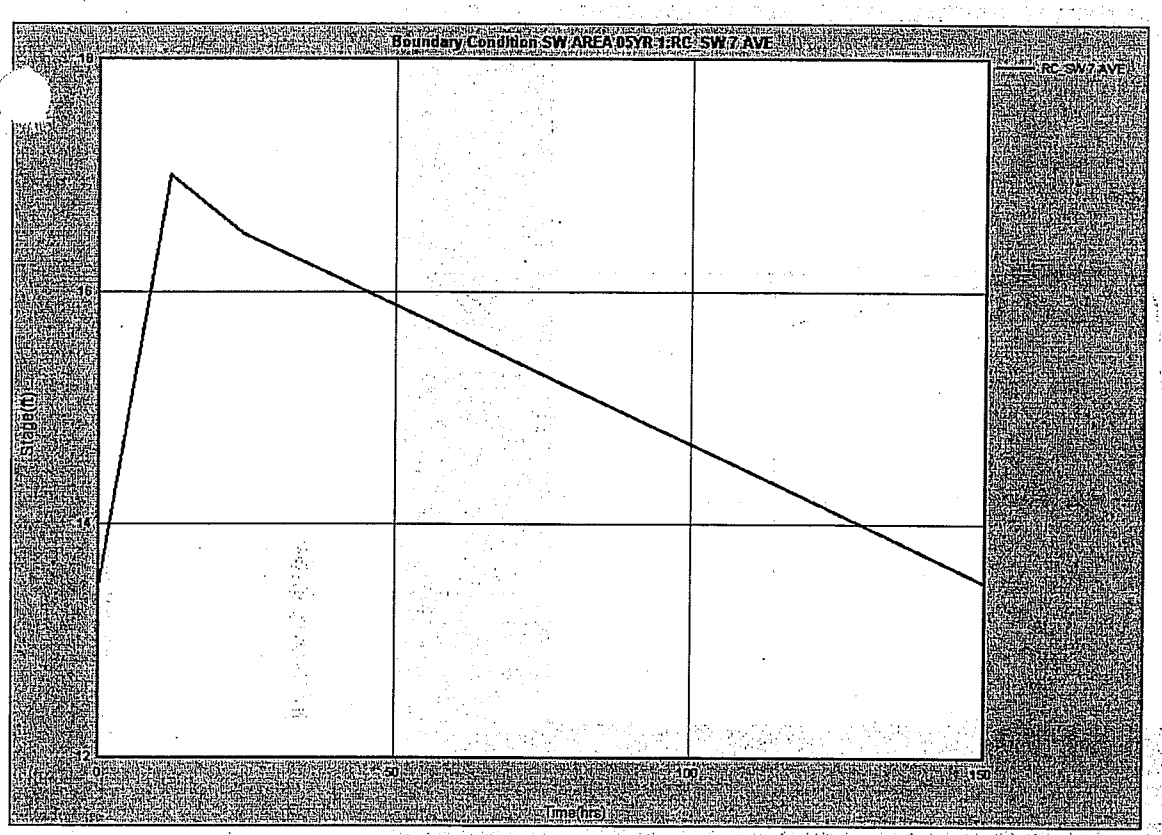


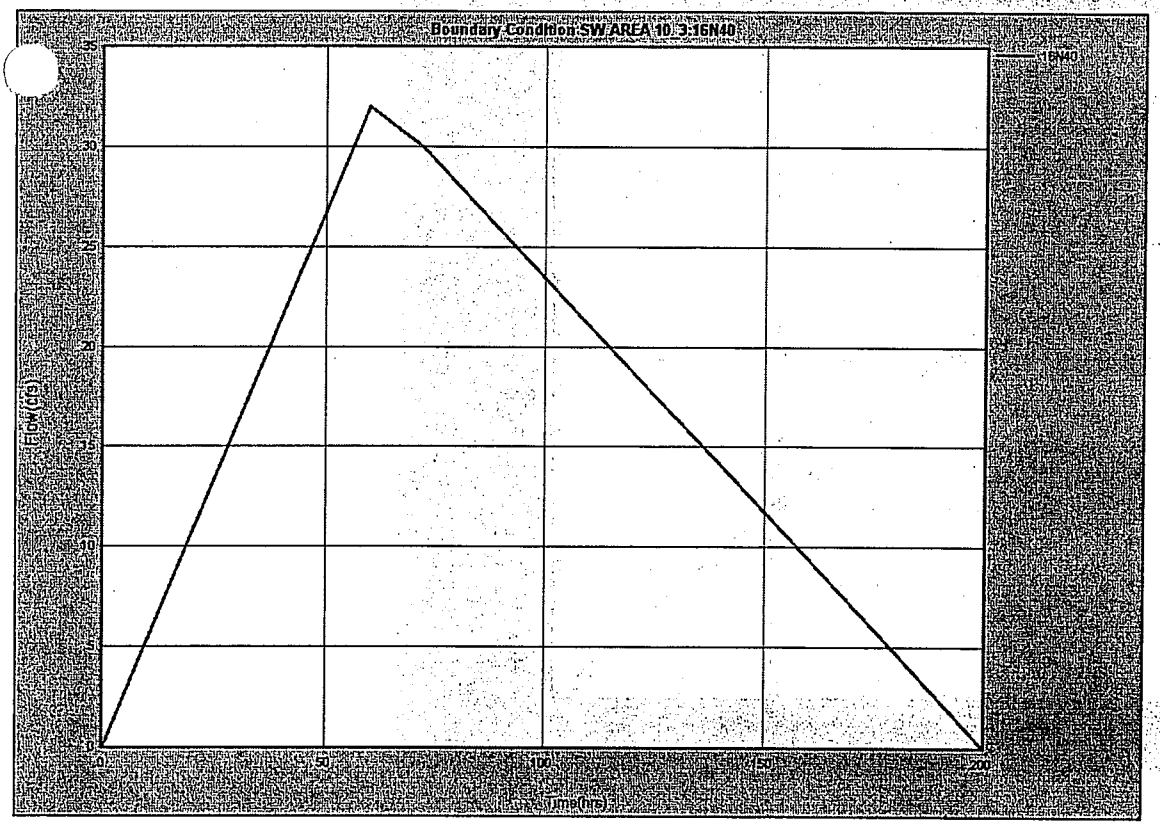

Boundary Condition SW AREA 05 1:7:N02
N02
FLOW (CFS)
Time (hrs)

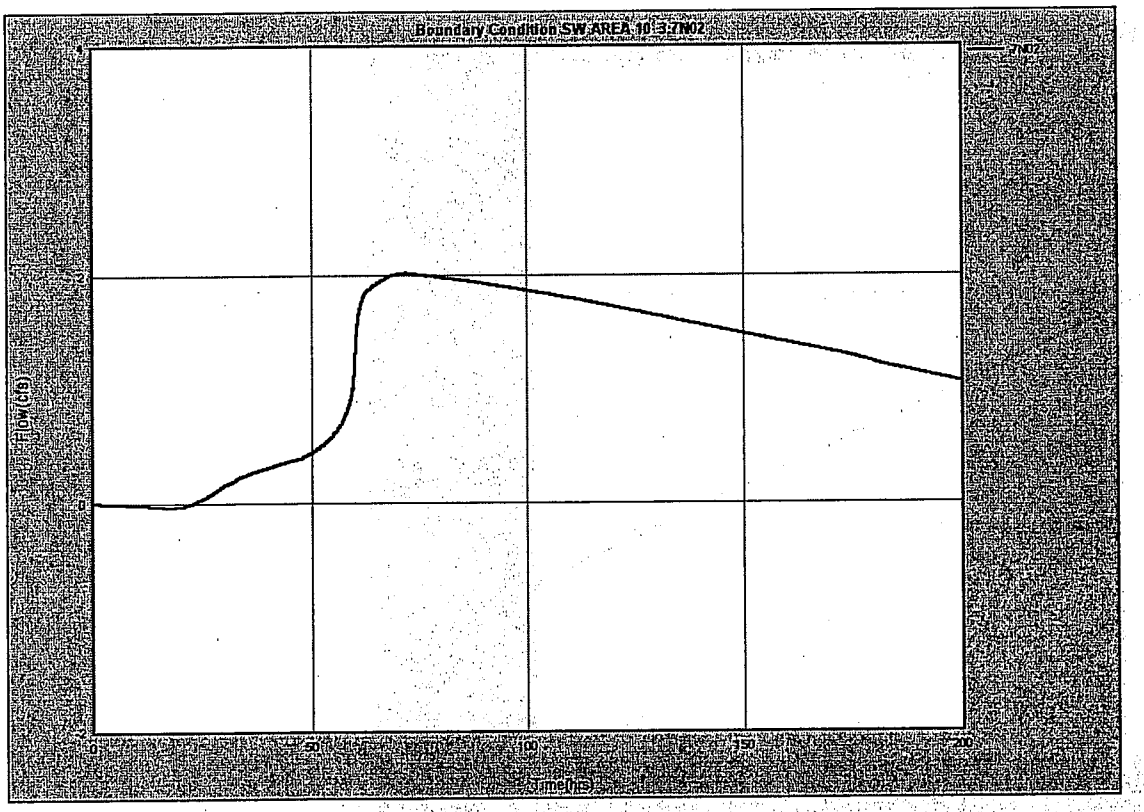

Boundary Condition SW AREA 05 1:N019
N019
FLOW (CFS)
Time (hrs)

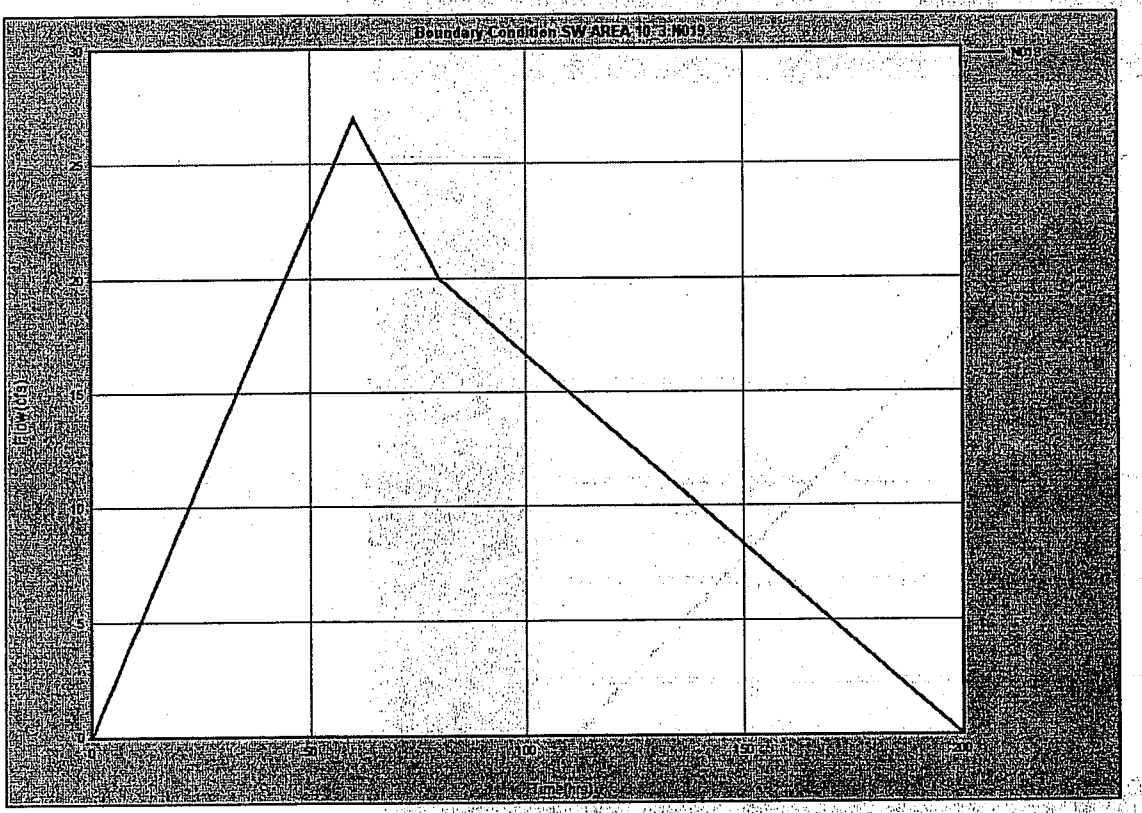

Boundary Condition SW AREA 05YR 1-32@ LEMKIN CK
LEMKIN CK
Stage (ft)
Time (hrs)

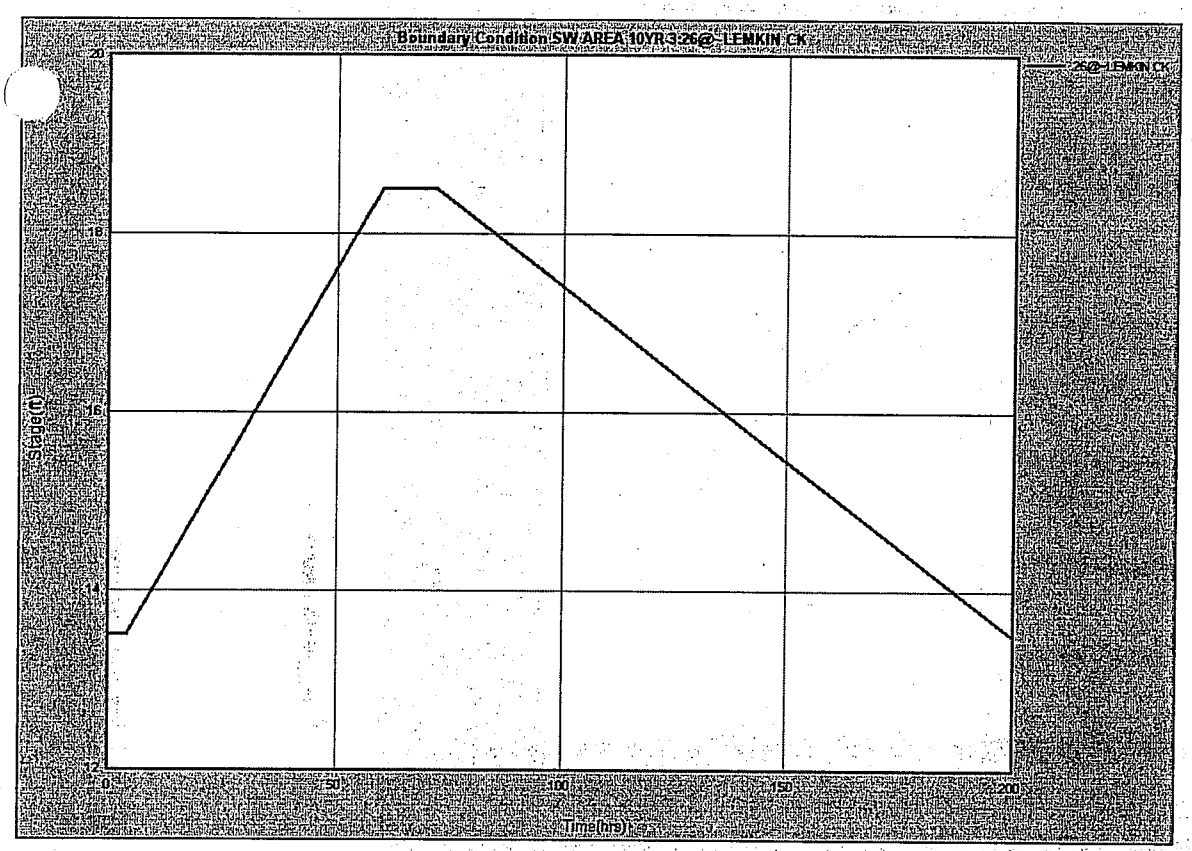

Boundary Condition SW AREA 05YR 1-N116 TC
N116 TC
Stage (ft)
Time (hrs)

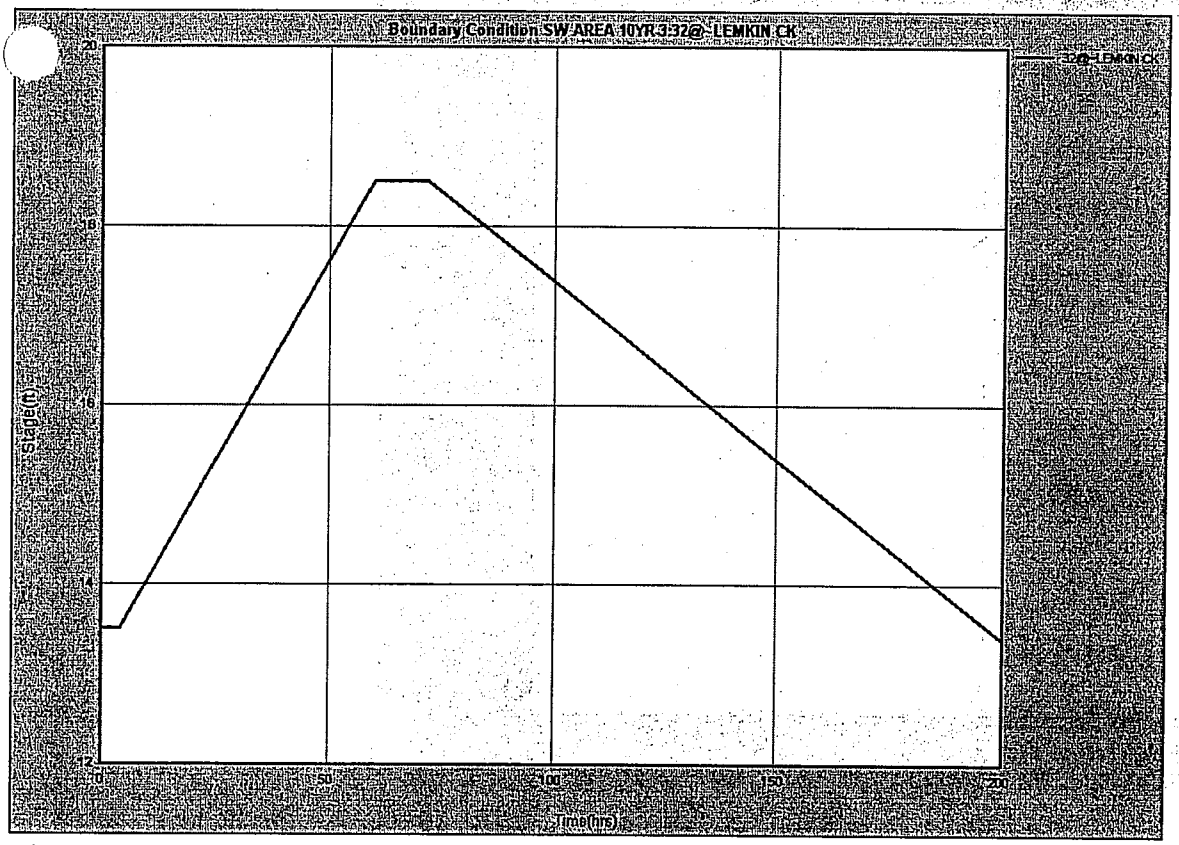

Boundary Condition SW AREA 05YR 1:RC_SW7 AVE
RC_SW7 AVE
Stage (ft)
Time (hrs)

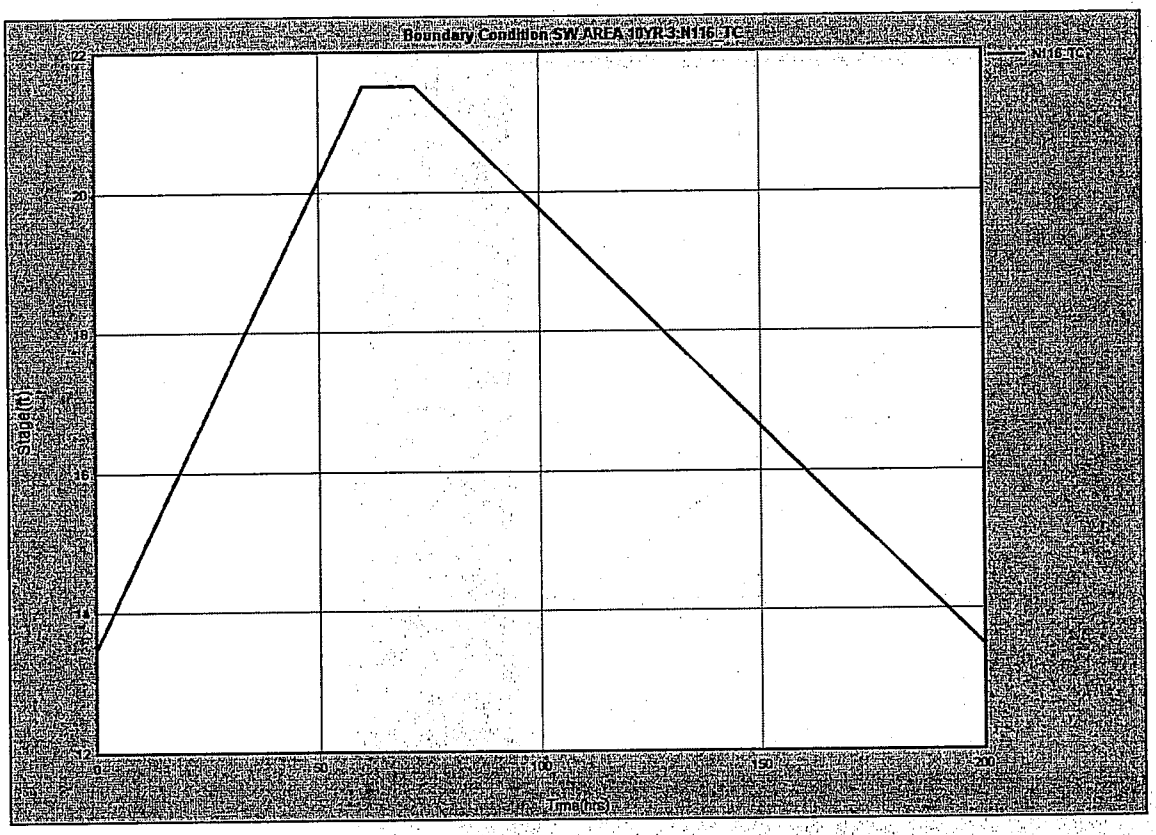

Boundary Condition SW AREA 10_3:16N40
16N40
Flow (cfs)
Time (hrs)

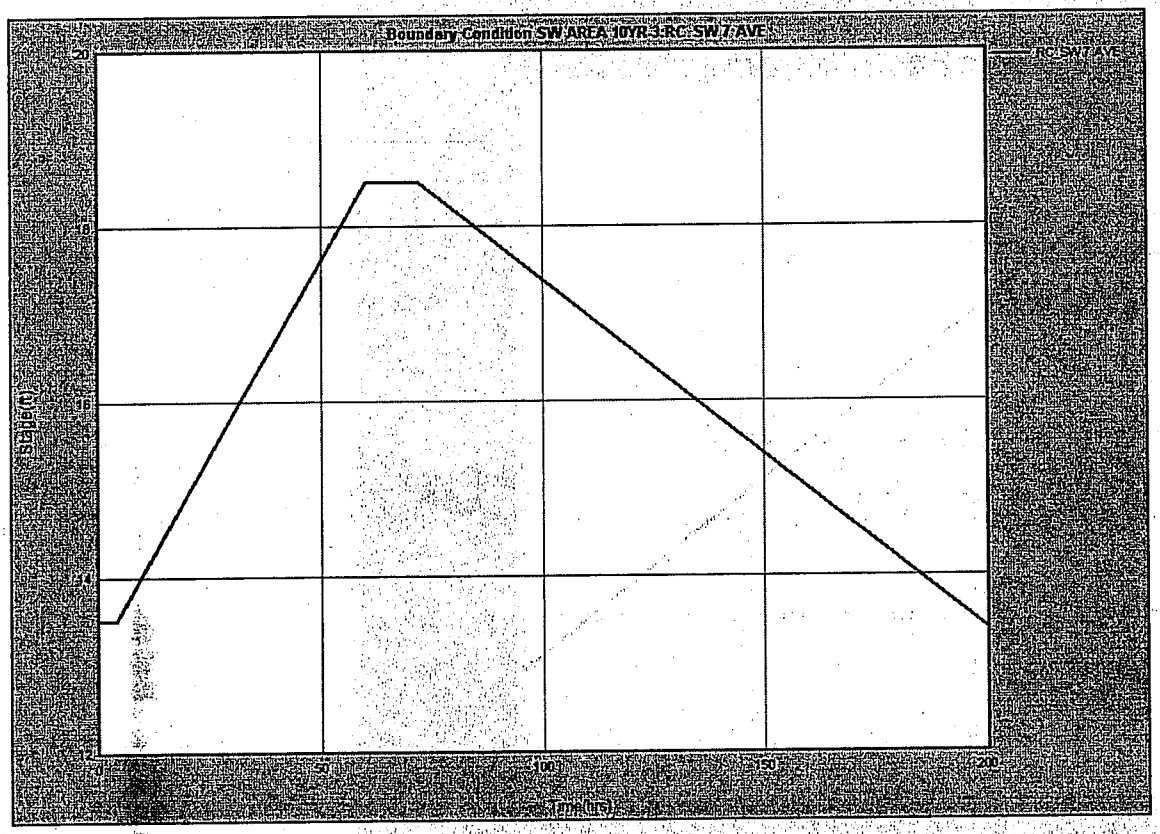

Boundary Condition SW AREA 10-3:7N02
7N02
FLOW (CFS)
Time (hrs)

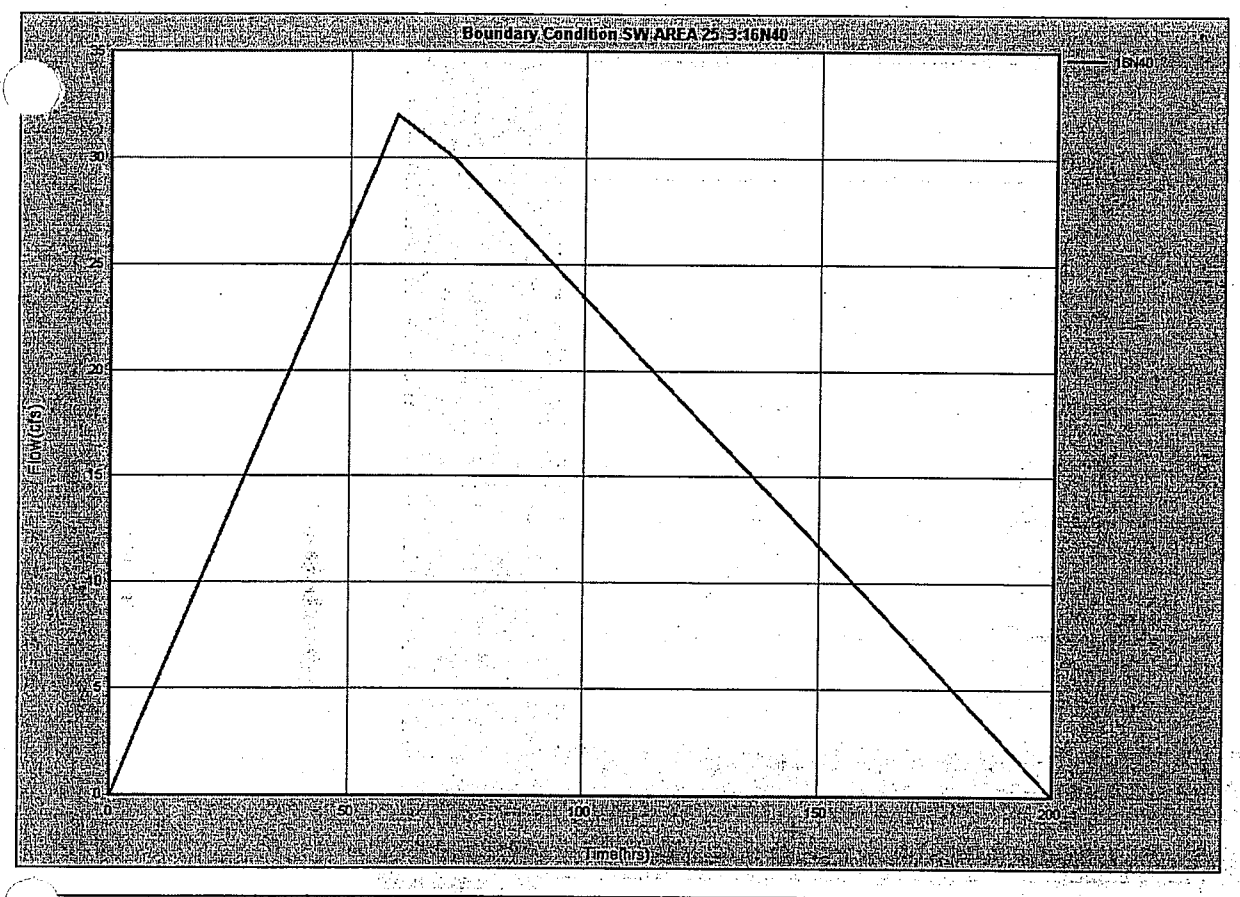

Boundary Condition SW AREA 10-3:N019
N019
FLOW (CFS)
Time (hrs)

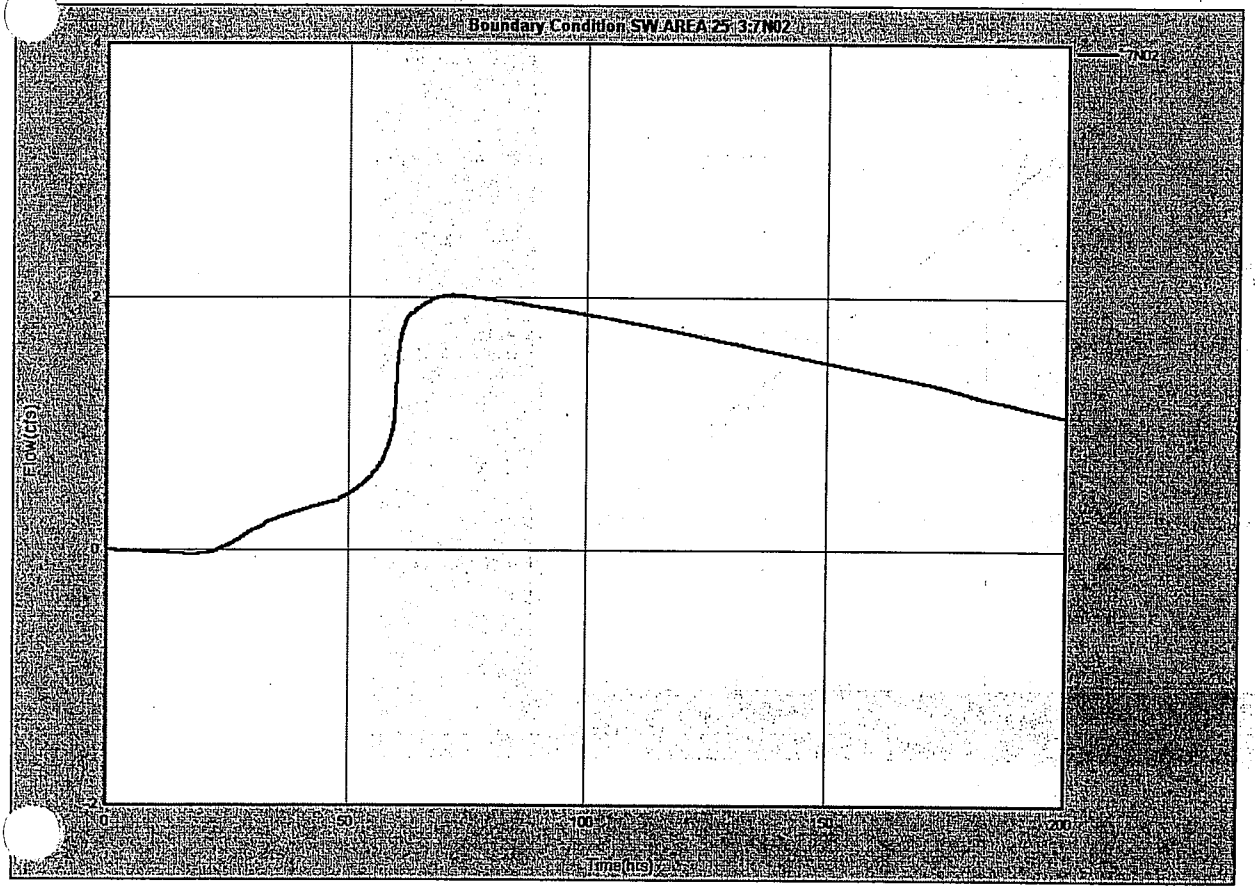

Boundary Condition SW AREA 10YR 3:26@-LEMKIN CK
Stage(ft)
Time(hrs)

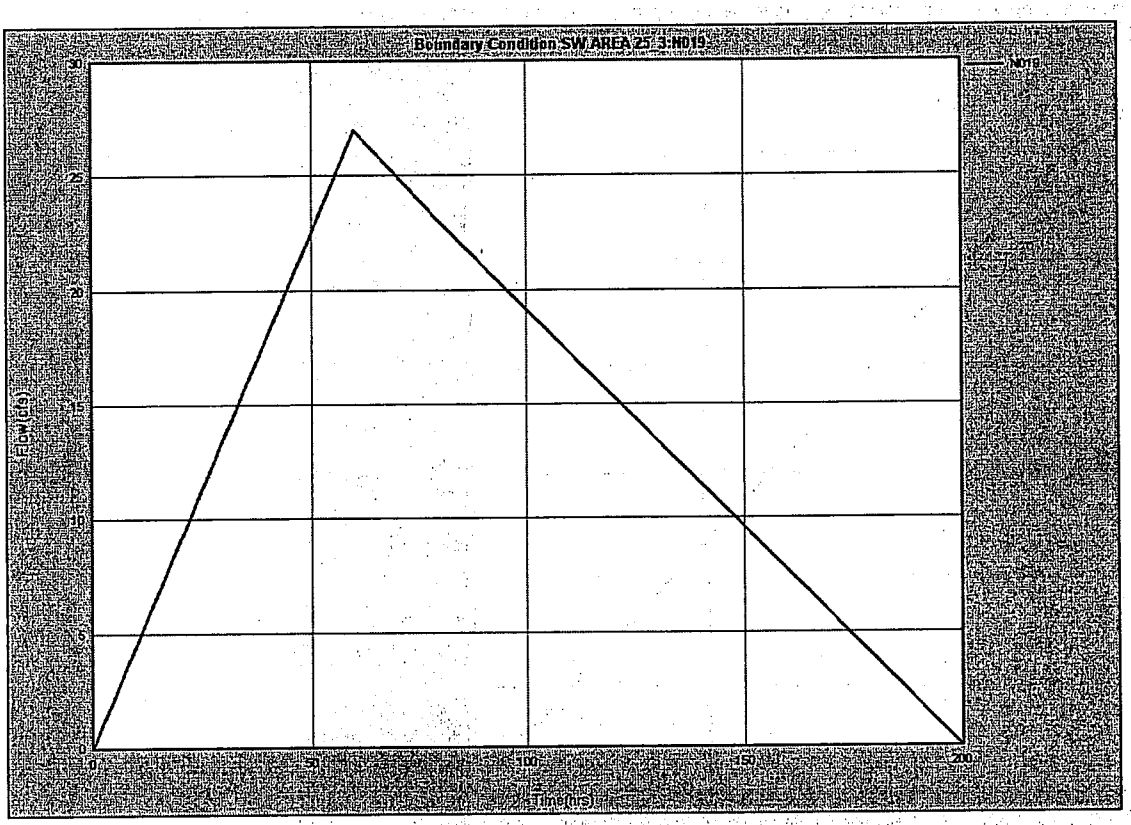

Boundary Condition SW AREA 10YR 3:32@-LEMKIN CK
Stage(ft)
Time(hrs)

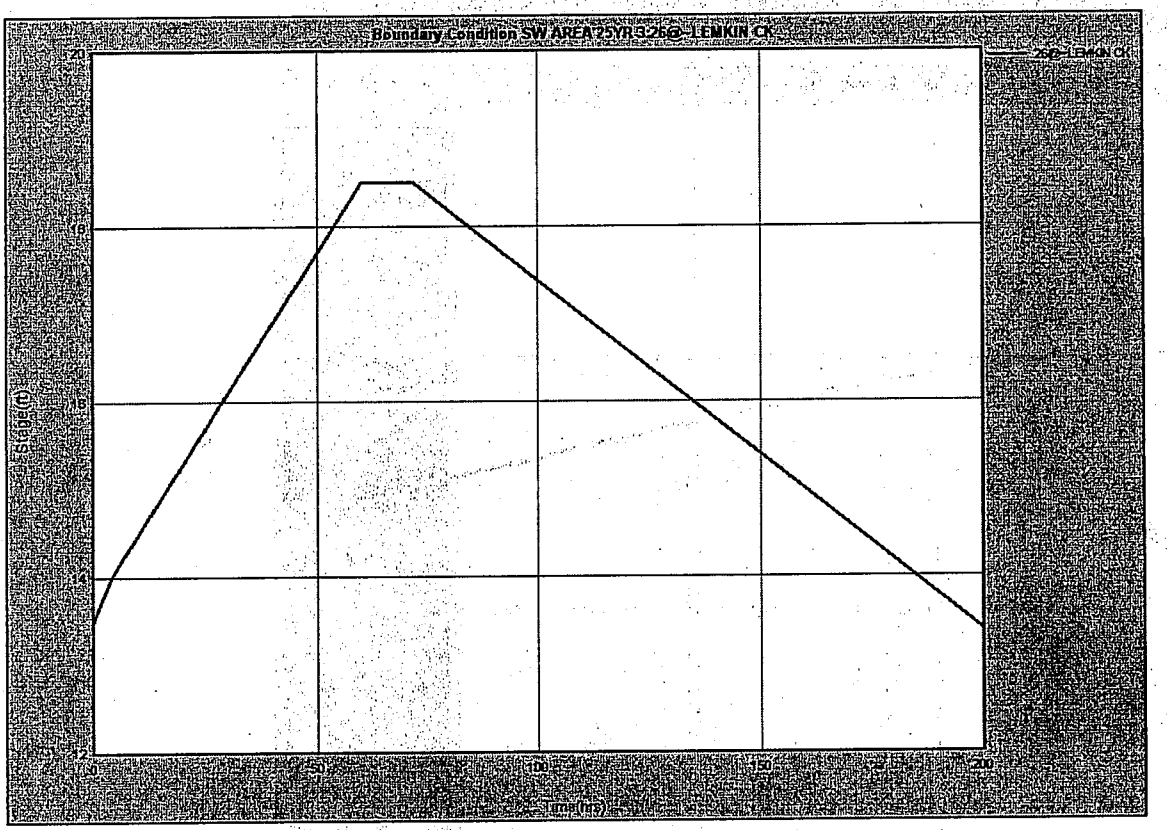

Boundary Condition SW AREA 10YR 3-N116_TC
N116_TC
Stage (ft)
Time (hrs)

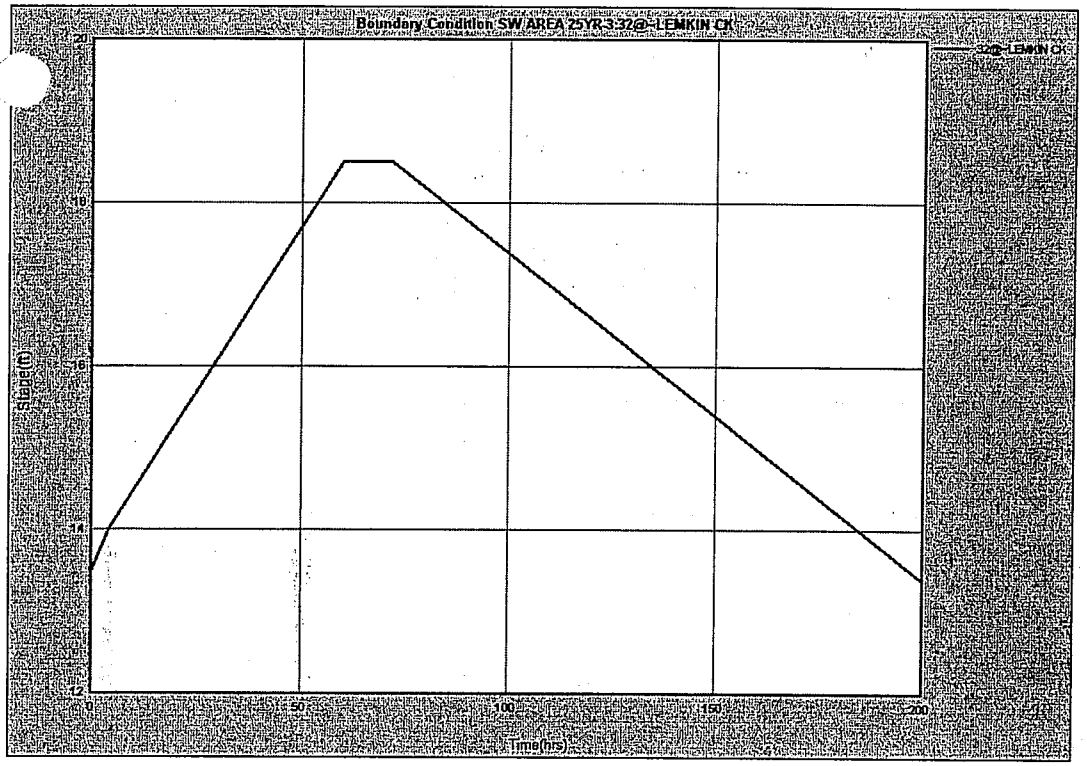

Boundary Condition SW AREA 10YR 3-RC_SW 7 AVE
RC_SW 7 AVE
Stage (ft)
Time (hrs)

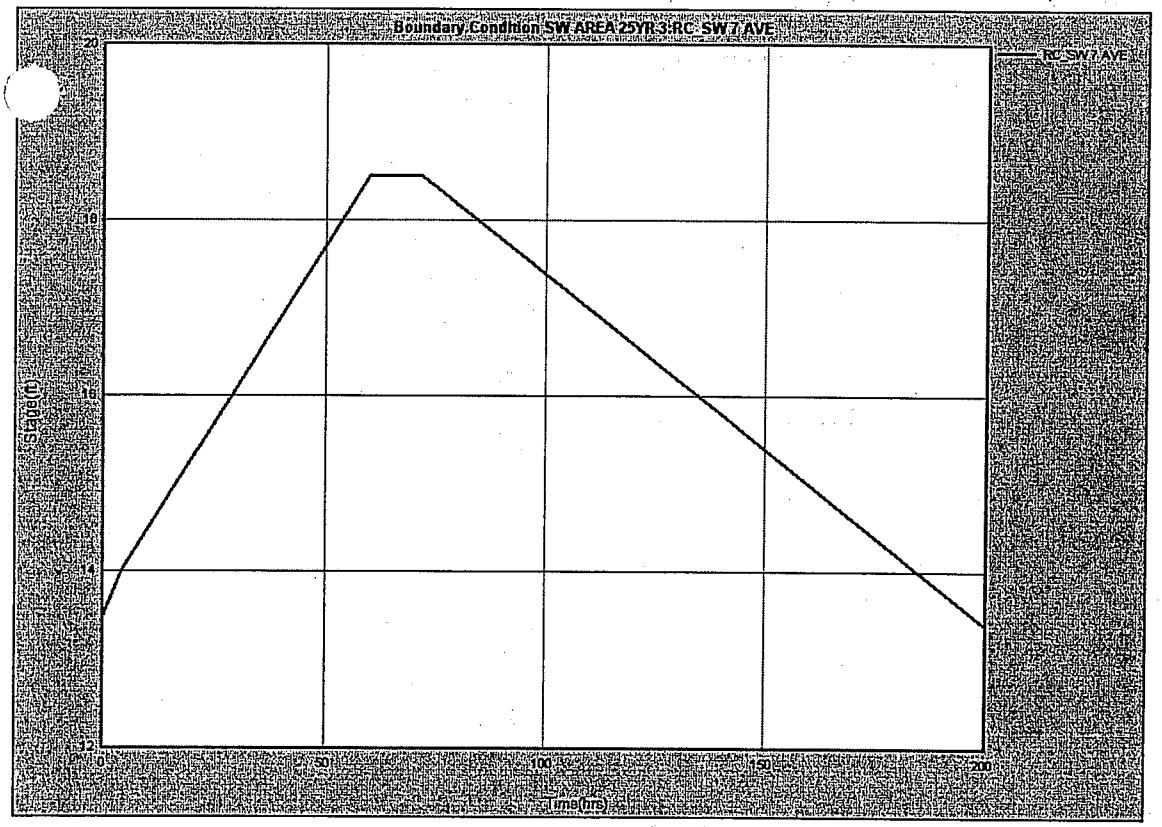

Boundary Condition SW AREA 25 3:16N40
16N40
Flow(cfs)
Time(hrs)
0
5
10
15
20
25
30
0
50
100
150
200


Boundary Condition SW AREA 25 3:7N02
7N02
Flow(cfs)
Time(hrs)
-2
0
2
0
50
100
150
200

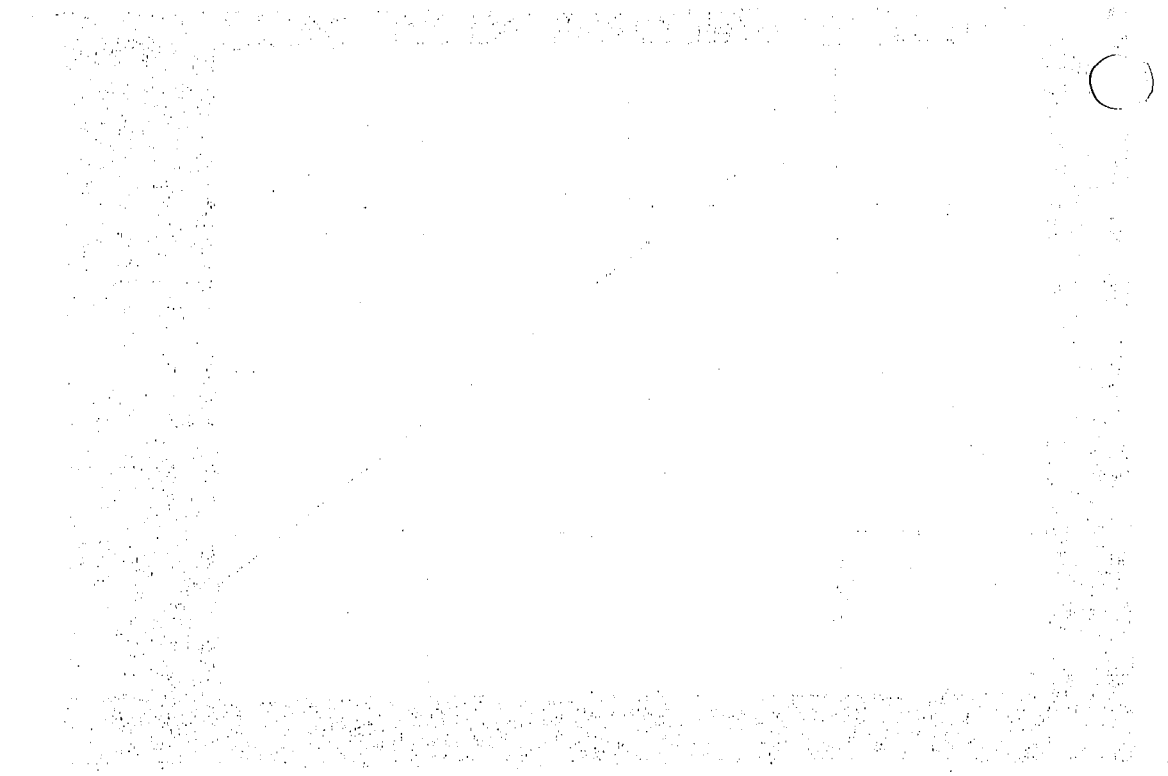

Boundary Condition SW AREA 25 3:N019
N019
Flow(cfs)
Time(hrs)

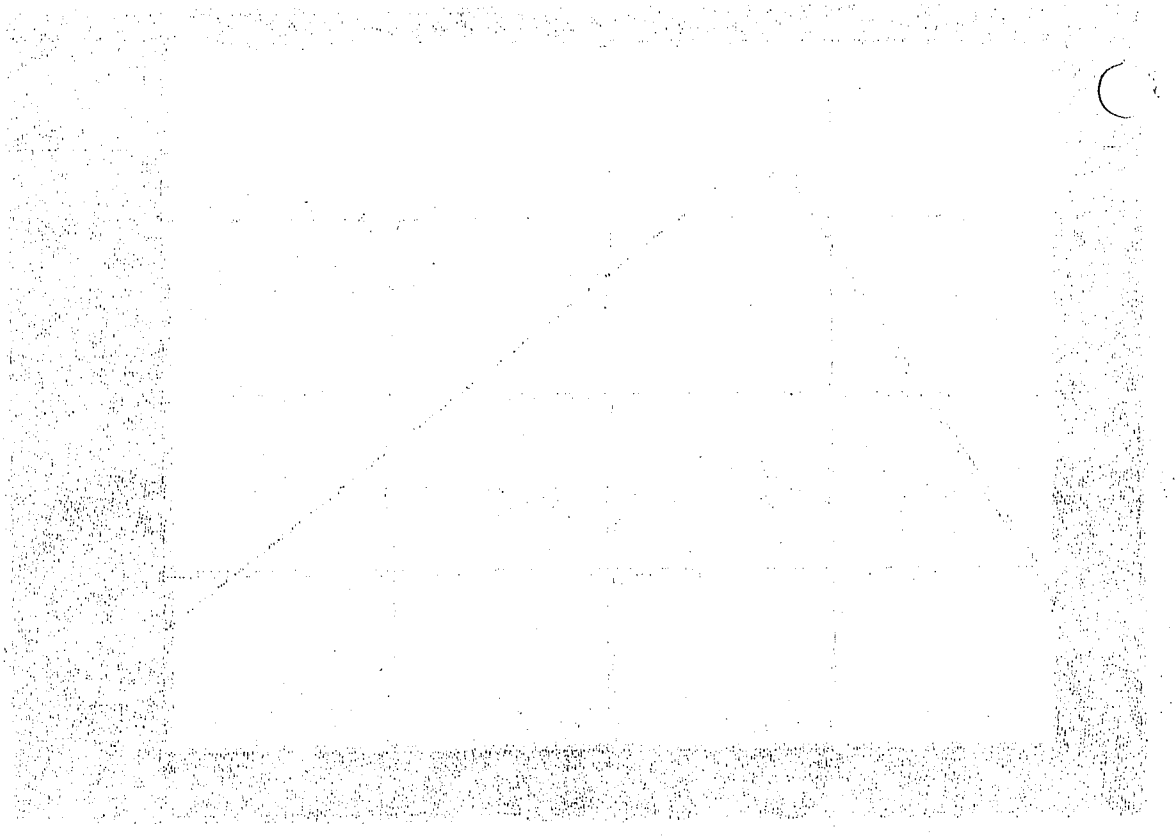

Boundary Condition SW AREA 25YR 3:26@_LEMKIN CK
Stage(ft)
Time(hrs)





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OKEECHOBEE COUNTY
COMPREHENSIVE URBANIZED AREA
STORMWATER MASTER PLAN

FOUR SEASONS
MODEL INPUT DATA

FOUR SEASONS ICPR 3.0 MODEL INPUT DATA

== Basins ==

Name: BASIN A
Group: 4 SEASONS
Node: NA
Type: SCS Unit Hydrograph
Status: Onsite

Unit Hydrograph: Uh256
Rainfall File: Sfwmd72
Rainfall Amount(in): 7.000
Area(ac): 217.000
Curve Number: 79.00
DCIA(%): 0.00
Peaking Factor: 256.0
Storm Duration(hrs): 72.00
Time of Conc(min): 60.00
Time Shift(hrs): 0.00
Max Allowable Q(cfs): 999999.000

Hydrologic data was taken from the December 1991 study produced by BWA.

Name: BASIN B
Group: 4 SEASONS
Node: NB
Type: SCS Unit Hydrograph
Status: Onsite

Unit Hydrograph: Uh256
Rainfall File: Sfwmd72
Rainfall Amount(in): 7.000
Area(ac): 120.000
Curve Number: 81.00
DCIA(%): 0.00
Peaking Factor: 256.0
Storm Duration(hrs): 72.00
Time of Conc(min): 40.00
Time Shift(hrs): 0.00
Max Allowable Q(cfs): 999999.000

Name: BASIN C
Group: 4 SEASONS
Node: NC
Type: SCS Unit Hydrograph
Status: Onsite

Unit Hydrograph: Uh256
Rainfall File: Sfwmd72
Rainfall Amount(in): 7.000
Area(ac): 60.000
Curve Number: 80.00
DCIA(%): 0.00
Peaking Factor: 256.0
Storm Duration(hrs): 72.00
Time of Conc(min): 40.00
Time Shift(hrs): 0.00
Max Allowable Q(cfs): 999999.000

Name: BASIN CC
Group: 4 SEASONS
Node: NCC
Type: SCS Unit Hydrograph
Status: Onsite

Unit Hydrograph: Uh256
Rainfall File: Sfwmd72
Rainfall Amount(in): 7.000
Area(ac): 12.000
Curve Number: 82.00
DCIA(%): 0.00
Peaking Factor: 256.0
Storm Duration(hrs): 72.00
Time of Conc(min): 60.00
Time Shift(hrs): 0.00
Max Allowable Q(cfs): 999999.000

Name: BASIN D
Group: 4 SEASONS
Node: ND
Type: SCS Unit Hydrograph
Status: Onsite

Unit Hydrograph: Uh256
Rainfall File: Sfwmd72
Rainfall Amount(in): 7.000
Area(ac): 76.000
Peaking Factor: 256.0
Storm Duration(hrs): 72.00
Time of Conc(min): 60.00
Time Shift(hrs): 0.00

Curve Number: 81.00
DCIA(%): 0.00
Max Allowable Q(cfs): 999999.000

Name: BASIN E
Group: 4 SEASONS
Node: NE
Type: SCS Unit Hydrograph
Status: Onsite

Unit Hydrograph: Uh256
Rainfall File: Sfwmd72
Rainfall Amount(in): 7.000
Area(ac): 144.000
Curve Number: 80.00
DCIA(%): 0.00
Peaking Factor: 256.0
Storm Duration(hrs): 72.00
Time of Conc(min): 100.00
Time Shift(hrs): 0.00
Max Allowable Q(cfs): 999999.000

Name: BASIN F
Group: 4 SEASONS
Node: NF
Type: SCS Unit Hydrograph
Status: Onsite

Unit Hydrograph: Uh256
Rainfall File: Sfwmd72
Rainfall Amount(in): 7.000
Area(ac): 147.000
Curve Number: 79.00
DCIA(%): 0.00
Peaking Factor: 256.0
Storm Duration(hrs): 72.00
Time of Conc(min): 100.00
Time Shift(hrs): 0.00
Max Allowable Q(cfs): 999999.000

Name: BASIN G
Group: 4 SEASONS
Node: NG
Type: SCS Unit Hydrograph
Status: Onsite

Unit Hydrograph: Uh256
Rainfall File: Sfwmd72
Rainfall Amount(in): 7.000
Area(ac): 66.000
Curve Number: 79.00
DCIA(%): 0.00
Peaking Factor: 256.0
Storm Duration(hrs): 72.00
Time of Conc(min): 75.00
Time Shift(hrs): 0.00
Max Allowable Q(cfs): 999999.000

Name: BASIN H
Group: 4 SEASONS
Node: NH
Type: SCS Unit Hydrograph
Status: Onsite

Unit Hydrograph: Uh256
Rainfall File: Sfwmd72
Rainfall Amount(in): 7.000
Area(ac): 120.000
Curve Number: 85.00
DCIA(%): 0.00
Peaking Factor: 256.0
Storm Duration(hrs): 72.00
Time of Conc(min): 120.00
Time Shift(hrs): 0.00
Max Allowable Q(cfs): 999999.000

RASIED CN FROM 80 TO 85

Name: BASIN I
Group: 4 SEASONS
Node: NI
Type: SCS Unit Hydrograph
Status: Onsite

Unit Hydrograph: Uh256
Rainfall File: Sfwmd72
Peaking Factor: 256.0
Storm Duration(hrs): 72.00

Rainfall Amount(in): 7.000
Area(ac): 104.000
Curve Number: 85.00
DCIA(%): 0.00
Time of Conc(min): 100.00
Time Shift(hrs): 0.00
Max Allowable Q(cfs): 999999.000

RASIED CN FROM 80 TO 85

Name: BASIN J
Group: 4 SEASONS
Node: NJ
Type: SCS Unit Hydrograph
Status: Onsite

Unit Hydrograph: Uh256
Rainfall File: Sfwmd72
Rainfall Amount(in): 7.000
Area(ac): 38.000
Curve Number: 82.00
DCIA(%): 0.00
Peaking Factor: 256.0
Storm Duration(hrs): 72.00
Time of Conc(min): 75.00
Time Shift(hrs): 0.00
Max Allowable Q(cfs): 999999.000

RASIED CN FROM 77 TO 82

Name: BASIN JJ
Group: 4 SEASONS
Node: NJJ
Type: SCS Unit Hydrograph
Status: Onsite

Unit Hydrograph: Uh256
Rainfall File: Sfwmd72
Rainfall Amount(in): 7.000
Area(ac): 3.900
Curve Number: 85.00
DCIA(%): 0.00
Peaking Factor: 256.0
Storm Duration(hrs): 72.00
Time of Conc(min): 10.00
Time Shift(hrs): 0.00
Max Allowable Q(cfs): 999999.000

RASIED CN FROM 80 TO 85

Name: BASIN K
Group: 4 SEASONS
Node: NK
Type: SCS Unit Hydrograph
Status: Onsite

Unit Hydrograph: Uh256
Rainfall File: Sfwmd72
Rainfall Amount(in): 7.000
Area(ac): 66.000
Curve Number: 85.00
DCIA(%): 0.00
Peaking Factor: 256.0
Storm Duration(hrs): 72.00
Time of Conc(min): 120.00
Time Shift(hrs): 0.00
Max Allowable Q(cfs): 999999.000

RASIED CN FROM 80 TO 85

Name: BASIN OA
Group: 4 SEASONS
Node: NOA
Type: SCS Unit Hydrograph
Status: Onsite

Unit Hydrograph: Uh256
Rainfall File: Sfwmd72
Rainfall Amount(in): 7.000
Area(ac): 190.000
Curve Number: 80.00
DCIA(%): 0.00
Peaking Factor: 256.0
Storm Duration(hrs): 72.00
Time of Conc(min): 150.00
Time Shift(hrs): 0.00
Max Allowable Q(cfs): 999999.000

Name: BASIN OB
Group: 4 SEASONS
Node: NOB
Type: SCS Unit Hydrograph
Status: Onsite

Unit Hydrograph: Uh256
Rainfall File: Sfwmd72
Rainfall Amount(in): 7.000
Area(ac): 254.000
Curve Number: 79.00
DCIA(%): 0.00

Peaking Factor: 256.0
Storm Duration(hrs): 72.00
Time of Conc(min): 200.00
Time Shift(hrs): 0.00
Max Allowable Q(cfs): 999999.000

Name: BASIN OC
Group: 4 SEASONS

Node: NOC
Type: SCS Unit Hydrograph

Status: Onsite

Unit Hydrograph: Uh256
Rainfall File: Sfwmd72
Rainfall Amount(in): 7.000
Area(ac): 578.000
Curve Number: 79.00
DCIA(%): 0.00

Peaking Factor: 256.0
Storm Duration(hrs): 72.00
Time of Conc(min): 430.00
Time Shift(hrs): 0.00
Max Allowable Q(cfs): 999999.000

Name: BASIN OD
Group: 4 SEASONS

Node: NOD
Type: SCS Unit Hydrograph

Status: Onsite

Unit Hydrograph: Uh256
Rainfall File: Sfwmd72
Rainfall Amount(in): 7.000
Area(ac): 99.000
Curve Number: 80.00
DCIA(%): 0.00

Peaking Factor: 256.0
Storm Duration(hrs): 72.00
Time of Conc(min): 120.00
Time Shift(hrs): 0.00
Max Allowable Q(cfs): 999999.000

Name: BASIN OE
Group: 4 SEASONS

Node: NOE
Type: SCS Unit Hydrograph

Status: Onsite

Unit Hydrograph: Uh256
Rainfall File: Sfwmd72
Rainfall Amount(in): 7.000
Area(ac): 109.000
Curve Number: 79.00
DCIA(%): 0.00

Peaking Factor: 256.0
Storm Duration(hrs): 72.00
Time of Conc(min): 150.00
Time Shift(hrs): 0.00
Max Allowable Q(cfs): 999999.000

Name: BASIN OF
Group: 4 SEASONS

Node: NOF
Type: SCS Unit Hydrograph

Status: Onsite

Unit Hydrograph: Uh256
Rainfall File: Sfwmd72
Rainfall Amount(in): 7.000
Area(ac): 49.000
Curve Number: 80.00
DCIA(%): 0.00

Peaking Factor: 256.0
Storm Duration(hrs): 72.00
Time of Conc(min): 60.00
Time Shift(hrs): 0.00
Max Allowable Q(cfs): 999999.000

==========

==== Nodes ==========

Name: NA
Group: 4 SEASONS
Type: Stage/Area

Base Flow(cfs): 0.000

Init Stage(ft): 29.300
Warn Stage(ft): 31.800

Stage(ft)	Area(ac)
29.000	0.0500
30.000	0.3900
31.000	2.7500
32.000	17.5000
33.000	17.5000

Name: NA2
Group: 4 SEASONS
Type: Stage/Area

Base Flow(cfs): 0.000

Init Stage(ft): 29.100
Warn Stage(ft): 31.600

Stage(ft)	Area(ac)
29.000	0.0100
31.000	0.0500
36.000	0.0500

Name: NB
Group: 4 SEASONS
Type: Stage/Area

Base Flow(cfs): 0.000

Init Stage(ft): 28.500
Warn Stage(ft): 31.000

Stage(ft)	Area(ac)
28.000	0.0500
29.000	0.2000
30.000	7.3000
31.000	7.3000

Name: NC
Group: 4 SEASONS
Type: Stage/Area

Base Flow(cfs): 0.000

Init Stage(ft): 26.400
Warn Stage(ft): 28.900

Stage(ft)	Area(ac)
26.000	0.0500
28.000	3.0900
29.000	7.7500
30.000	15.0000
31.000	15.0000

Name: NC2
Group: 4 SEASONS
Type: Stage/Area

Base Flow(cfs): 0.000

Init Stage(ft): 26.600
Warn Stage(ft): 29.100

Stage(ft)	Area(ac)
26.000	0.0100
29.900	0.0500
34.900	0.0500

Name: NCC Base Flow(cfs): 0.000 Init Stage(ft): 25.420
Group: 4 SEASONS Warn Stage(ft): 27.920
Type: Stage/Area

Stage(ft)	Area(ac)
25.000	0.0100
32.000	0.0500
37.000	0.0500

Name: NCH1 Base Flow(cfs): 0.000 Init Stage(ft): 21.270
Group: 4 SEASONS Warn Stage(ft): 23.770
Type: Stage/Area

Stage(ft)	Area(ac)
21.000	0.0100
26.000	0.0500
31.000	0.0500

Name: NCH10 Base Flow(cfs): 0.000 Init Stage(ft): 30.700
Group: 4 SEASONS Warn Stage(ft): 33.200
Type: Stage/Area

Stage(ft)	Area(ac)
30.500	0.0100
33.400	0.0500
38.400	0.0500

Name: NCH2 Base Flow(cfs): 0.000 Init Stage(ft): 22.800
Group: 4 SEASONS Warn Stage(ft): 25.300
Type: Stage/Area

Stage(ft)	Area(ac)
22.000	0.0100
29.800	0.0500
34.800	0.0500

Name: NCH3 Base Flow(cfs): 0.000 Init Stage(ft): 24.000
Group: 4 SEASONS Warn Stage(ft): 25.600

Type: Stage/Area

)POSED LOCATION OF 50 ACRE LAKE WHERE IT WILL OVERLAP BASINS H,I,J, & JJ;
NOTE VERY LITTLE SURFACE STORAGE WAS ASSUMED IN THE ORIGINAL STUDY SO NO ADJUSTMENT WAS NECESSARY FOR NODES ASSIGNED W/THE ABOVE BASINS; HOWEVER, CN WERE MODIFIED FOR THESE BASINS TO REFLECT AN INCREASE IMPERVIOUSNESS DUE TO PROPOSED LAKE.

Stage(ft)	Area(ac)
16.000	10.0000
24.000	50.0000
35.000	50.0000

Name: NCH4 Base Flow(cfs): 0.000 Init Stage(ft): 23.210
Group: 4 SEASONS Warn Stage(ft): 25.710
Type: Stage/Area

Stage(ft)	Area(ac)
23.000	0.0100
30.000	0.0500
35.000	0.0500

Name: NCH5 Base Flow(cfs): 0.000 Init Stage(ft): 21.700
Group: 4 SEASONS Warn Stage(ft): 24.200
Type: Stage/Area

Stage(ft)	Area(ac)
21.000	0.0100
31.000	0.0500
36.000	0.0500

Name: NCH6 Base Flow(cfs): 0.000 Init Stage(ft): 25.400
Group: 4 SEASONS Warn Stage(ft): 27.900
Type: Stage/Area

Stage(ft)	Area(ac)
25.000	0.0100
32.400	0.0500
37.400	0.0500

Name: NCH7 Base Flow(cfs): 0.000 Init Stage(ft): 26.200
Group: 4 SEASONS Warn Stage(ft): 28.700
Type: Stage/Area

Stage(ft)	Area(ac)
26.000	0.0100
34.600	0.0500

39.600	0.0500

Name: NCH8 Base Flow(cfs): 0.000 Init Stage(ft): 28.900
Group: 4 SEASONS Warn Stage(ft): 31.400
Type: Stage/Area

Stage(ft)	Area(ac)
28.900	0.0100
34.600	0.0500
39.600	0.0500

Name: NCH9 Base Flow(cfs): 0.000 Init Stage(ft): 29.000
Group: 4 SEASONS Warn Stage(ft): 31.500
Type: Stage/Area

Stage(ft)	Area(ac)
29.000	0.0100
34.600	0.0500
39.600	0.0500

Name: ND Base Flow(cfs): 0.000 Init Stage(ft): 28.600
Group: 4 SEASONS Warn Stage(ft): 31.100
Type: Stage/Area

Stage(ft)	Area(ac)
28.500	0.0100
31.000	0.0500
36.000	0.0500

Name: ND2 Base Flow(cfs): 0.000 Init Stage(ft): 28.600
Group: 4 SEASONS Warn Stage(ft): 31.100
Type: Stage/Area

Stage(ft)	Area(ac)
28.500	0.0100
31.000	0.0500
36.000	0.0500

Name: NE Base Flow(cfs): 0.000 Init Stage(ft): 29.000
Group: 4 SEASONS Warn Stage(ft): 31.500
Type: Stage/Area

Stage(ft)	Area(ac)

29.000	0.0100
30.000	0.0500
35.000	0.0500

Name: NE2 Base Flow(cfs): 0.000 Init Stage(ft): 27.990
Group: 4 SEASONS Warn Stage(ft): 30.490
Type: Stage/Area

Stage(ft)	Area(ac)
27.800	0.0100
30.000	0.0500
35.000	0.0500

Name: NF Base Flow(cfs): 0.000 Init Stage(ft): 29.000
Group: 4 SEASONS Warn Stage(ft): 31.500
Type: Stage/Area

Stage(ft)	Area(ac)
29.000	0.0100
30.000	0.0500
35.000	0.0500

Name: NG Base Flow(cfs): 0.000 Init Stage(ft): 28.500
Group: 4 SEASONS Warn Stage(ft): 31.000
Type: Stage/Area

Stage(ft)	Area(ac)
28.500	0.0100
31.000	0.0500
36.000	0.0500

Name: NH Base Flow(cfs): 0.000 Init Stage(ft): 29.700
Group: 4 SEASONS Warn Stage(ft): 32.200
Type: Stage/Area

Stage(ft)	Area(ac)
29.700	0.0100
31.000	0.0500
36.000	0.0500

Name: NI Base Flow(cfs): 0.000 Init Stage(ft): 26.510
Group: 4 SEASONS Warn Stage(ft): 29.010
Type: Stage/Area

Stage(ft)	Area(ac)
26.500	0.0100
30.000	0.0500
35.000	0.0500

Name: NJ | Base Flow(cfs): 0.000 | Init Stage(ft): 26.300
Group: 4 SEASONS | Warn Stage(ft): 28.800
Type: Stage/Area

Stage(ft)	Area(ac)
26.300	0.0100
29.000	0.0500
34.000	0.0500

Name: NJ2 | Base Flow(cfs): 0.000 | Init Stage(ft): 24.500
Group: 4 SEASONS | Warn Stage(ft): 27.000
Type: Stage/Area

Stage(ft)	Area(ac)
24.500	0.0100
29.800	0.0500
34.800	0.0500

Name: NJJ | Base Flow(cfs): 0.000 | Init Stage(ft): 23.060
Group: 4 SEASONS | Warn Stage(ft): 25.560
Type: Stage/Area

Stage(ft)	Area(ac)
23.000	0.0100
29.400	0.0500
34.400	0.0500

Name: NK | Base Flow(cfs): 0.000 | Init Stage(ft): 29.000
Group: 4 SEASONS | Warn Stage(ft): 31.500
Type: Stage/Area

Stage(ft)	Area(ac)
29.000	0.0100
31.000	0.0500
36.000	0.0500

Name: NK2 | Base Flow(cfs): 0.000 | Init Stage(ft): 26.880
Group: 4 SEASONS | Warn Stage(ft): 29.380
Type: Stage/Area

Stage(ft)	Area(ac)
26.500	0.0100
29.600	0.0500
34.600	0.0500

Name: NOA Base Flow(cfs): 0.000 Init Stage(ft): 41.400
Group: 4 SEASONS Warn Stage(ft): 43.900
Type: Stage/Area

Stage(ft)	Area(ac)
41.400	0.0100
43.000	0.0500
48.000	0.0500

Name: NOA2 Base Flow(cfs): 0.000 Init Stage(ft): 41.500
Group: 4 SEASONS Warn Stage(ft): 44.000
Type: Stage/Area

Stage(ft)	Area(ac)
41.400	0.0100
43.000	0.0500
48.000	0.0500

Name: NOB Base Flow(cfs): 0.000 Init Stage(ft): 39.700
Group: 4 SEASONS Warn Stage(ft): 42.200
Type: Stage/Area

Stage(ft)	Area(ac)
39.700	0.0100
42.000	0.0500
47.000	0.0500

Name: NOB2 Base Flow(cfs): 0.000 Init Stage(ft): 39.700
Group: 4 SEASONS Warn Stage(ft): 42.200
Type: Stage/Area

Stage(ft)	Area(ac)
39.700	0.0100
42.000	0.0500
47.000	0.0500

Name: NOC Base Flow(cfs): 0.000 Init Stage(ft): 30.700
Group: 4 SEASONS Warn Stage(ft): 33.200

Type: Stage/Area

Stage(ft)	Area(ac)
30.500	0.0100
33.400	0.0500
38.400	0.0500

Name: NOD
Group: 4 SEASONS
Type: Stage/Area

Base Flow(cfs): 0.000

Init Stage(ft): 29.200
Warn Stage(ft): 31.700

Stage(ft)	Area(ac)
29.000	0.0100
31.000	0.0500
36.000	0.0500

Name: NOD2
Group: 4 SEASONS
Type: Stage/Area

Base Flow(cfs): 0.000

Init Stage(ft): 26.740
Warn Stage(ft): 29.240

Stage(ft)	Area(ac)
26.500	0.0100
29.800	0.0500
34.800	0.0500

Name: NOE
Group: 4 SEASONS
Type: Stage/Area

Base Flow(cfs): 0.000

Init Stage(ft): 22.400
Warn Stage(ft): 24.900

Stage(ft)	Area(ac)
22.400	0.0100
27.600	0.0500
32.600	0.0500

Name: NOF
Group: 4 SEASONS
Type: Stage/Area

Base Flow(cfs): 0.000

Init Stage(ft): 23.000
Warn Stage(ft): 25.500

Stage(ft)	Area(ac)
23.000	0.0100
25.000	0.0500
30.000	0.0500

Name: NSLOUGH_SEC28 Base Flow(cfs): 0.000 Init Stage(ft): 28.000
Group: 4 SEASONS Warn Stage(ft): 32.000
Type: Time/Stage

NUBBIN SLOUGH POINT ~ NE CORNER OF SECTION 28

Time(hrs)	Stage(ft)
0.00	28.000
1000.00	28.000

Name: PRO_8ST&80AV_S Base Flow(cfs): 0.000 Init Stage(ft): 29.000
Group: 4 SEASONS Warn Stage(ft): 33.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: PRO__8ST&80AV_N Base Flow(cfs): 0.000 Init Stage(ft): 29.000
Group: 4 SEASONS Warn Stage(ft): 33.000
Type: Stage/Area

INTERSECTION OF OF SE 8 ST & 80 AVE

Stage(ft)	Area(ac)

Name: PRO_CENTERST_CS Base Flow(cfs): 0.000 Init Stage(ft): 28.000
Group: 4 SEASONS Warn Stage(ft): 34.000
Type: Stage/Area

LOCATION OF DIVERSION STRUCTURE

Stage(ft)	Area(ac)

Name: PRO_JUNC OF E&W Base Flow(cfs): 0.000 Init Stage(ft): 29.000
Group: 4 SEASONS Warn Stage(ft): 33.000
Type: Stage/Area

JUNCTION WHERE WEST AND EAST DITCH OF SE 80 AVE MEET

Stage(ft)	Area(ac)

Name: TW_MOSQUITO_CK Base Flow(cfs): 0.000 Init Stage(ft): 18.000
Group: 4 SEASONS Warn Stage(ft): 20.500
Type: Time/Stage

Time(hrs)	Stage(ft)
0.00	18.000
250.00	18.000

==== Cross Sections ====

Name: R1-A_11+41.59 Group: 4 SEASONS
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
24.800	33.400	0.033000
39.300	30.750	0.033000
51.000	32.160	0.033000

Name: R1-A_16+43.83 Group: 4 SEASONS
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
22.400	34.050	0.033000
37.900	30.150	0.033000
41.300	32.170	0.033000

Name: R1-A_21+42.47 Group: 4 SEASONS
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
28.300	33.440	0.033000
39.500	31.330	0.033000
42.700	31.040	0.033000

Name: R1-A_26+12.27 Group: 4 SEASONS
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
31.300	33.040	0.033000
41.300	30.660	0.033000
45.500	31.980	0.033000

Name: R1-A_31+35.95 Group: 4 SEASONS
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
26.600	34.070	0.033000
45.500	30.680	0.033000
52.000	30.930	0.033000

Name: RA2 Group: 4 SEASONS
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
0.000	30.800	0.070000
200.000	30.750	0.070000
207.000	28.850	0.070000
209.000	28.850	0.070000
217.000	30.800	0.070000
417.000	30.800	0.070000

Name: RC2 Group: 4 SEASONS
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
0.000	29.300	0.070000
200.000	29.300	0.070000
210.000	26.000	0.070000
215.000	26.000	0.070000
228.000	29.300	0.070000
428.000	29.300	0.070000

Name: RCH10 Group: 4 SEASONS
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
0.000	32.600	0.070000
200.000	32.600	0.070000
208.000	29.900	0.070000
216.000	29.900	0.070000
224.000	32.600	0.070000
424.000	32.600	0.070000

Name: RCH2 Group: 4 SEASONS
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
0.000	29.600	0.070000
200.000	29.600	0.070000
229.000	22.600	0.070000
250.000	22.590	0.070000
450.000	29.600	0.070000

Name: RCH3 Group: 4 SEASONS
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
0.000	29.800	0.070000
200.000	29.770	0.070000
220.000	23.000	0.070000
230.000	23.000	0.070000
256.000	29.780	0.070000
456.000	29.800	0.070000

Name: RCH5 Group: 4 SEASONS
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
0.000	31.800	0.070000
200.000	31.800	0.070000
218.000	22.550	0.070000
222.000	22.550	0.070000
247.000	31.850	0.070000
447.000	31.850	0.070000

Name: RCH6 Group: 4 SEASONS
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
0.000	31.650	0.070000
200.000	31.650	0.070000
214.000	24.650	0.070000
224.000	24.640	0.070000
238.000	31.650	0.070000
438.000	31.650	0.070000

Name: RCH7 Group: 4 SEASONS
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
0.000	34.200	0.070000
200.000	34.200	0.070000
216.000	25.800	0.070000
227.000	25.800	0.070000
244.000	34.200	0.070000
444.000	34.200	0.070000

Name: RCH8 Group: 4 SEASONS
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N

0.000	33.250	0.070000
200.000	33.250	0.070000
217.000	27.600	0.070000
224.000	27.500	0.070000
241.000	33.250	0.070000
441.000	32.250	0.070000

Name: RD2 Group: 4 SEASONS
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
0.000	30.700	0.060000
200.000	30.700	0.060000
209.000	28.300	0.060000
212.000	28.300	0.060000
221.000	30.700	0.060000
421.000	30.700	0.060000

Name: RE Group: 4 SEASONS
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
0.000	29.500	0.070000
200.000	29.500	0.070000
205.000	28.500	0.070000
212.000	28.500	0.070000
217.000	29.500	0.070000
417.000	29.500	0.070000

Name: RF Group: 4 SEASONS
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
0.000	29.800	0.070000
200.000	29.700	0.070000
204.000	28.750	0.070000
209.000	28.750	0.070000
213.000	29.750	0.070000
413.000	29.750	0.070000

Name: RG Group: 4 SEASONS
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
0.000	30.800	0.070000
200.000	30.750	0.070000

210.000	28.250	0.070000
215.000	28.250	0.070000
225.000	30.800	0.070000
425.000	30.800	0.070000

Name: RH Group: 4 SEASONS
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
0.000	29.300	0.060000
200.000	29.300	0.060000
204.000	28.000	0.060000
206.000	28.000	0.060000
210.000	29.300	0.060000
409.000	29.300	0.060000

Name: RJ Group: 4 SEASONS
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
0.000	28.100	0.070000
200.000	28.100	0.070000
208.000	25.440	0.070000
213.000	25.440	0.070000
221.000	28.100	0.070000
421.000	28.100	0.070000

Name: RK Group: 4 SEASONS
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
0.000	29.800	0.060000
200.000	29.800	0.060000
206.000	27.800	0.060000
208.000	27.800	0.060000
214.000	29.800	0.060000
414.000	29.800	0.060000

Name: ROA2 Group: 4 SEASONS
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
0.000	42.100	0.070000
200.000	42.100	0.070000
204.000	40.600	0.070000
214.000	40.600	0.070000
219.000	42.100	0.070000

419.000	42.100	0.070000

Name: ROB2 Group: 4 SEASONS
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
0.000	37.500	0.070000
200.000	37.500	0.070000
207.000	35.200	0.070000
212.000	35.200	0.070000
219.000	37.500	0.070000
418.000	37.500	0.070000

Name: ROD Group: 4 SEASONS
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
0.000	29.800	0.060000
200.000	29.770	0.060000
205.000	27.980	0.060000
207.000	27.970	0.060000
212.000	29.770	0.060000
412.000	29.800	0.060000

Name: ROE Group: 4 SEASONS
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
0.000	26.400	0.070000
200.000	26.400	0.070000
215.600	21.200	0.070000
223.600	21.200	0.070000
236.200	26.400	0.070000
436.200	26.400	0.070000

Name: ROF Group: 4 SEASONS
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
0.000	24.500	0.060000
200.000	24.500	0.060000
206.000	22.500	0.060000
214.000	22.500	0.060000
220.000	24.500	0.060000
420.000	24.500	0.060000

==========

==== Pipes ==========

Name: P_RA
Group: 4 SEASONS
From Node: NA
To Node: NA2
Length(ft): 48.50
Count: 1
Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.50
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	24.00	24.00
Rise(in):	24.00	24.00
Invert(ft):	29.300	28.100
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Downstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Name: P_RAB
Group: 4 SEASONS
From Node: NA
To Node: NB
Length(ft): 48.00
Count: 1
Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: None
Entrance Loss Coef: 0.50
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	24.00	24.00
Rise(in):	24.00	24.00
Invert(ft):	29.220	28.200
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

LINK TURNED OFF AND REPLACED W/LINK PRO_R_RAB

Name: P_RB
Group: 4 SEASONS
From Node: NB
To Node: NC
Length(ft): 40.00
Count: 1
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: None
Entrance Loss Coef: 0.50
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	24.00	24.00
Rise(in):	24.00	24.00
Invert(ft):	31.200	30.980
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

LINK TURNED OFF AND REPLACED W/LINK PRO_P_RB

Name:	P_RC	From Node:	NC	Length(ft):	40.00
Group:	4 SEASONS	To Node:	NC2	Count:	1
				Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Automatic
Geometry:	Circular	Circular		Flow:	None
Span(in):	36.00	36.00		Entrance Loss Coef:	0.50
Rise(in):	36.00	36.00		Exit Loss Coef:	0.00
Invert(ft):	26.360	26.650		Bend Loss Coef:	0.00
Manning's N:	0.024000	0.024000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

LINK TURNED OFF & REPLACED W/LINK PRO_P_RC

Name:	P_RCC	From Node:	NCC	Length(ft):	32.00
Group:	4 SEASONS	To Node:	NCH5	Count:	1
				Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Automatic
Geometry:	Circular	Circular		Flow:	None
Span(in):	60.00	60.00		Entrance Loss Coef:	0.50
Rise(in):	60.00	60.00		Exit Loss Coef:	0.00
Invert(ft):	25.400	25.400		Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

PIPE IS REPLACED W/LINK PRO_P_RCC; LINK IS TURNED OFF

Name:	P_RCH4A	From Node:	NCH4	Length(ft):	30.00
Group:	4 SEASONS	To Node:	NCH3	Count:	2
				Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Automatic
Geometry:	Circular	Circular		Flow:	None
Span(in):	48.00	48.00		Entrance Loss Coef:	0.50
Rise(in):	48.00	48.00		Exit Loss Coef:	0.00
Invert(ft):	23.520	23.520		Bend Loss Coef:	0.00

Manning's N:	0.024000	0.024000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Name:	P_RCH9	From Node: NCH9	Length(ft):	34.00
Group:	4 SEASONS	To Node: PRO_CENTERST_CS	Count:	2
			Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Automatic
Geometry:	Rectangular	Rectangular	Flow:	Both
Span(in):	72.00	72.00	Entrance Loss Coef:	0.50
Rise(in):	48.00	48.00	Exit Loss Coef:	0.00
Invert(ft):	28.100	28.230	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Rectangular Box: 0° wingwall flares

Downstream FHWA Inlet Edge Description:
Rectangular Box: 0° wingwall flares

Name:	P_RD	From Node: ND	Length(ft):	40.00
Group:	4 SEASONS	To Node: ND2	Count:	1
			Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Automatic
Geometry:	Circular	Circular	Flow:	Both
Span(in):	24.00	24.00	Entrance Loss Coef:	0.50
Rise(in):	24.00	24.00	Exit Loss Coef:	0.00
Invert(ft):	28.600	28.600	Bend Loss Coef:	0.00
Manning's N:	0.024000	0.024000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Name:	P_RE2	From Node: NE2	Length(ft):	40.00
Group:	4 SEASONS	To Node: NCH7	Count:	1

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	24.00	24.00
Rise(in):	24.00	24.00
Invert(ft):	27.990	28.060
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.50
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Name: P_RHC1A&B
Group: 4 SEASONS
From Node: NCH1
To Node: TW_MOSQUITO_CK
Length(ft): 41.50
Count: 2

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	48.00	48.00
Rise(in):	48.00	48.00
Invert(ft):	21.470	21.470
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: None
Entrance Loss Coef: 0.50
Exit Loss Coef: 1.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

LINK TURNED OFF; REPLACED WITH TWIN BOX CULVERTS

Name: P_RI
Group: 4 SEASONS
From Node: NI
To Node: NCH3
Length(ft): 30.00
Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	30.00	30.00
Rise(in):	30.00	30.00
Invert(ft):	25.570	25.510
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.50
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Name: P_RJ2 | From Node: NJ2 | Length(ft): 40.00
Group: 4 SEASONS | To Node: NCH3 | Count: 1
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.50
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	36.00	36.00
Rise(in):	36.00	36.00
Invert(ft):	24.600	24.600
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name: P_RJJ | From Node: NJJ | Length(ft): 32.00
Group: 4 SEASONS | To Node: NCH2 | Count: 2
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.50
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Rectangular	Rectangular
Span(in):	72.00	72.00
Rise(in):	72.00	72.00
Invert(ft):	23.060	23.060
Manning's N:	0.012000	0.012000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Rectangular Box: 0° wingwall flares

Downstream FHWA Inlet Edge Description:
Rectangular Box: 0° wingwall flares

Name: P_RK2 | From Node: NK2 | Length(ft): 30.00
Group: 4 SEASONS | To Node: NJJ | Count: 1
Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.50
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	36.00	36.00
Rise(in):	36.00	36.00
Invert(ft):	26.880	26.820
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

stream FHWA Inlet Edge Description:
cular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Name:	P_ROA	From Node:	NOA	Length(ft): 60.00
Group:	4 SEASONS	To Node:	NOA2	Count: 1
				Friction Equation: Average Conveyance
	UPSTREAM	DOWNSTREAM		Solution Algorithm: Automatic
Geometry:	Rectangular	Rectangular		Flow: Both
Span(in):	48.00	48.00		Entrance Loss Coef: 0.00
Rise(in):	24.00	24.00		Exit Loss Coef: 0.00
Invert(ft):	41.400	41.400		Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Rectangular Box: 0° wingwall flares

Downstream FHWA Inlet Edge Description:
Rectangular Box: 0° wingwall flares

Name:	P_ROB	From Node:	NOB	Length(ft): 48.00
Group:	4 SEASONS	To Node:	NOB2	Count: 1
				Friction Equation: Average Conveyance
	UPSTREAM	DOWNSTREAM		Solution Algorithm: Automatic
Geometry:	Horz Ellipse	Horz Ellipse		Flow: Both
Span(in):	48.00	48.00		Entrance Loss Coef: 0.50
Rise(in):	42.00	42.00		Exit Loss Coef: 0.00
Invert(ft):	39.720	39.720		Bend Loss Coef: 0.00
Manning's N:	0.024000	0.024000		Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Horizontal Ellipse Concrete: Groove end projecting

Downstream FHWA Inlet Edge Description:
Horizontal Ellipse Concrete: Groove end projecting

Name:	P_ROC	From Node:	NOC	Length(ft): 45.00
Group:	4 SEASONS	To Node:	NCH10	Count: 1
				Friction Equation: Average Conveyance
	UPSTREAM	DOWNSTREAM		Solution Algorithm: Automatic
Geometry:	Circular	Circular		Flow: Both
Span(in):	36.00	36.00		Entrance Loss Coef: 0.50
Rise(in):	36.00	36.00		Exit Loss Coef: 0.00

Invert(ft):	30.700	30.700	Bend Loss Coef:	0.00
Manning's N:	0.024000	0.024000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Name:	P_ROD2	From Node: NOD2	Length(ft):	40.00
Group:	4 SEASONS	To Node: NCH2	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Automatic
Geometry:	Circular	Circular	Flow:	Both
Span(in):	30.00	30.00	Entrance Loss Coef:	0.50
Rise(in):	30.00	30.00	Exit Loss Coef:	0.00
Invert(ft):	26.740	26.660	Bend Loss Coef:	0.00
Manning's N:	0.024000	0.024000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Name:	PRO_CULVT@SE8ST	From Node: PRO__8ST&80AV_N	Length(ft):	66.00
Group:	4 SEASONS	To Node: PRO_8ST&80AV_S	Count:	1
			Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Automatic
Geometry:	Circular	Circular	Flow:	Both
Span(in):	48.00	48.00	Entrance Loss Coef:	0.50
Rise(in):	48.00	48.00	Exit Loss Coef:	0.00
Invert(ft):	29.000	29.000	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

CULVERT UNDER SE 8 ST

Name:	PRO_DBL 6 X 6	From Node: NCH1	Length(ft):	40.00

Group: 4 SEASONS To Node: TW_MOSQUITO_CK Count: 2

	UPSTREAM	DOWNSTREAM
Geometry:	Rectangular	Rectangular
Span(in):	72.00	72.00
Rise(in):	72.00	72.00
Invert(ft):	20.000	20.000
Manning's N:	0.012000	0.012000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.50
Exit Loss Coef: 1.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Rectangular Box: 0° wingwall flares

Downstream FHWA Inlet Edge Description:
Rectangular Box: 0° wingwall flares

Name: PRO_P_RAB From Node: NA Length(ft): 48.00
Group: 4 SEASONS To Node: NB Count: 2

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	36.00	36.00
Rise(in):	36.00	36.00
Invert(ft):	29.220	28.200
Manning's N:	0.012000	0.012000
Top Clip(in):	0.000	0.000
t Clip(in):	0.000	0.000

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.50
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Name: PRO_P_RB From Node: NB Length(ft): 40.00
Group: 4 SEASONS To Node: NC Count: 2

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	36.00	36.00
Rise(in):	36.00	36.00
Invert(ft):	28.000	28.000
Manning's N:	0.012000	0.012000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.50
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

ıstream FHWA Inlet Edge Description:

Circular CMP: Projecting

LINK TURNED OFF AND REPLACED W/LINK PRO_P_RB

Name:	PRO_P_RC	From Node:	NC	Length(ft): 40.00
Group:	4 SEASONS	To Node:	NC2	Count: 2
				Friction Equation: Average Conveyance
	UPSTREAM	DOWNSTREAM		Solution Algorithm: Automatic
Geometry:	Circular	Circular		Flow: Both
Span(in):	36.00	36.00		Entrance Loss Coef: 0.50
Rise(in):	36.00	36.00		Exit Loss Coef: 0.00
Invert(ft):	26.600	26.600		Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Name:	PRO_P_RCC	From Node:	NCC	Length(ft): 45.00
Group:	4 SEASONS	To Node:	NCH3	Count: 2
				Friction Equation: Average Conveyance
	UPSTREAM	DOWNSTREAM		Solution Algorithm: Automatic
Geometry:	Rectangular	Rectangular		Flow: Both
Span(in):	72.00	72.00		Entrance Loss Coef: 0.50
Rise(in):	72.00	72.00		Exit Loss Coef: 0.00
Invert(ft):	24.000	24.000		Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option: None

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

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

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==== Channels ==========

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Name:	C_RA2	From Node:	NA2	Length(ft): 2000.00
Group:	4 SEASONS	To Node:	ND	Count: 1
				Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm: Automatic
Geometry:	Irregular	Irregular		Flow: Both
Invert(ft):	29.100	28.600		Contraction Coef: 0.100
TClpInitZ(ft):	9999.000	9999.000		Expansion Coef: 0.300
Manning's N:				Entrance Loss Coef: 0.000
Top Clip(ft):	0.000	0.000		

Bot Clip(ft):	0.000	0.000	Exit Loss Coef: 0.000
Main XSec:	RA2	RA2	Outlet Ctrl Spec: Use dc or tw
AuxElev1(ft):	0.000	0.000	Inlet Ctrl Spec: Use dn
Aux XSec1:			Stabilizer Option: None
AuxElev2(ft):	0.000	0.000	
Aux XSec2:			
Top Width(ft):			
Depth(ft):			
Bot Width(ft):			
LtSdSlp(h/v):			
RtSdSlp(h/v):			

Name:	C_RC2	From Node: NC2	Length(ft): 370.00
Group:	4 SEASONS	To Node: NCC	Count: 1

	UPSTREAM	DOWNSTREAM	
Geometry:	Irregular	Irregular	Friction Equation: Average Conveyance
Invert(ft):	26.600	25.400	Solution Algorithm: Automatic
TClpInitZ(ft):	9999.000	9999.000	Flow: Both
Manning's N:			Contraction Coef: 0.100
Top Clip(ft):	0.000	0.000	Expansion Coef: 0.300
Bot Clip(ft):	0.000	0.000	Entrance Loss Coef: 0.000
Main XSec:	RC2	RC2	Exit Loss Coef: 0.000
AuxElev1(ft):	0.000	0.000	Outlet Ctrl Spec: Use dc or tw
Aux XSec1:			Inlet Ctrl Spec: Use dn
AuxElev2(ft):	0.000	0.000	Stabilizer Option: None
Aux XSec2:			
Top Width(ft):			
Depth(ft):			
t Width(ft):			
LtSdSlp(h/v):			
RtSdSlp(h/v):			

Name:	C_RCH10	From Node: NCH10	Length(ft): 850.00
Group:	4 SEASONS	To Node: NCH9	Count: 1

	UPSTREAM	DOWNSTREAM	
Geometry:	Irregular	Irregular	Friction Equation: Automatic
Invert(ft):	30.700	29.000	Solution Algorithm: Automatic
TClpInitZ(ft):	9999.000	9999.000	Flow: Both
Manning's N:			Contraction Coef: 0.100
Top Clip(ft):	0.000	0.000	Expansion Coef: 0.300
Bot Clip(ft):	0.000	0.000	Entrance Loss Coef: 0.000
Main XSec:	RCH10	RCH10	Exit Loss Coef: 0.000
AuxElev1(ft):	0.000	0.000	Outlet Ctrl Spec: Use dc or tw
Aux XSec1:			Inlet Ctrl Spec: Use dn
AuxElev2(ft):	0.000	0.000	Stabilizer Option: None
Aux XSec2:			
Top Width(ft):			
Depth(ft):			
Bot Width(ft):			
LtSdSlp(h/v):			
RtSdSlp(h/v):			

Name: C_RCH2 From Node: NCH2 Length(ft): 1200.00
Group: 4 SEASONS To Node: NOE Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	22.800	22.400
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	RCH2	RCH2
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: None
Contraction Coef: 0.100
Expansion Coef: 0.300
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

TURNED OFF & REPLACED W/LINK PRO_RCH2

Name: C_RCH3 From Node: NCH3 Length(ft): 1300.00
Group: 4 SEASONS To Node: NJJ Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	23.100	23.060
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	RCH3	RCH3
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: None
Contraction Coef: 0.100
Expansion Coef: 0.300
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

LINK IS TURNED OFF AND REPLACED W/PROPOSED LAKE & 4S MAIN WEIR

Name: C_RCH5 From Node: NCH5 Length(ft): 1500.00
Group: 4 SEASONS To Node: NCH4 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	21.700	23.400
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	RCH5	RCH5
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		

Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: None
Contraction Coef: 0.100
Expansion Coef: 0.300
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

```
 Top Width(ft):
     Depth(ft):
   ,t Width(ft):
   LtSdSlp(h/v):
   RtSdSlp(h/v):

TURNED OFF AND REPLACED W/LAKE NODE

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         Name: C_RCH6              From Node: NCH6          Length(ft): 1700.00
        Group: 4 SEASONS             To Node: NCC               Count: 1

               UPSTREAM       DOWNSTREAM          Friction Equation: Automatic
     Geometry: Irregular      Irregular         Solution Algorithm: Automatic
    Invert(ft): 25.400        23.900                       Flow: None
 TClpInitZ(ft): 9999.000      9999.000          Contraction Coef: 0.100
   Manning's N:                                   Expansion Coef: 0.300
  Top Clip(ft): 0.000         0.000           Entrance Loss Coef: 0.000
  Bot Clip(ft): 0.000         0.000              Exit Loss Coef: 0.000
     Main XSec: RCH6          RCH6             Outlet Ctrl Spec: Use dc or tw
  AuxElev1(ft): 0.000         0.000              Inlet Ctrl Spec: Use dn
     Aux XSec1:                                Stabilizer Option: None
  AuxElev2(ft): 0.000         0.000
     Aux XSec2:
 Top Width(ft):
     Depth(ft):
 Bot Width(ft):
  LtSdSlp(h/v):
  RtSdSlp(h/v):

LINK TURNED OFF & REPALCED W/LINK PRO_C_RCH6

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         Name: C_RCH7              From Node: NCH7          Length(ft): 1200.00
        Group: 4 SEASONS             To Node: NCH6               Count: 1

               UPSTREAM       DOWNSTREAM          Friction Equation: Automatic
     Geometry: Irregular      Irregular         Solution Algorithm: Automatic
    Invert(ft): 26.200        25.400                       Flow: Both
 TClpInitZ(ft): 9999.000      9999.000          Contraction Coef: 0.100
   Manning's N:                                   Expansion Coef: 0.300
  Top Clip(ft): 0.000         0.000           Entrance Loss Coef: 0.000
  Bot Clip(ft): 0.000         0.000              Exit Loss Coef: 0.000
     Main XSec: RCH7          RCH7             Outlet Ctrl Spec: Use dc or tw
  AuxElev1(ft): 0.000         0.000              Inlet Ctrl Spec: Use dn
     Aux XSec1:                                Stabilizer Option: None
  AuxElev2(ft): 0.000         0.000
     Aux XSec2:
 Top Width(ft):
     Depth(ft):
 Bot Width(ft):
  LtSdSlp(h/v):
  RtSdSlp(h/v):

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         Name: C_RCH8              From Node: NCH8          Length(ft): 2250.00
        Group: 4 SEASONS             To Node: NCH7               Count: 1

               UPSTREAM       DOWNSTREAM          Friction Equation: Automatic
     Geometry: Irregular      Irregular         Solution Algorithm: Automatic
    Invert(ft): 28.900        26.200                       Flow: Both
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TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	RCH8	RCH8
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Contraction Coef:	0.100
Expansion Coef:	0.300
Entrance Loss Coef:	0.000
Exit Loss Coef:	0.000
Outlet Ctrl Spec:	Use dc or tw
Inlet Ctrl Spec:	Use dn
Stabilizer Option:	None

Name:	C_RD2	From Node: ND2	Length(ft): 225.00
Group:	4 SEASONS	To Node: NCH6	Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	28.600	28.000
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	RD2	RD2
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation:	Automatic
Solution Algorithm:	Automatic
Flow:	Both
Contraction Coef:	0.100
Expansion Coef:	0.300
Entrance Loss Coef:	0.000
Exit Loss Coef:	0.000
Outlet Ctrl Spec:	Use dc or tw
Inlet Ctrl Spec:	Use dn
Stabilizer Option:	None

Name:	C_RE	From Node: NE	Length(ft): 1000.00
Group:	4 SEASONS	To Node: NE2	Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	29.000	28.000
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	RE	RE
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation:	Automatic
Solution Algorithm:	Automatic
Flow:	Both
Contraction Coef:	0.100
Expansion Coef:	0.300
Entrance Loss Coef:	0.000
Exit Loss Coef:	0.000
Outlet Ctrl Spec:	Use dc or tw
Inlet Ctrl Spec:	Use dn
Stabilizer Option:	None

Name: C_RF | From Node: NF | Length(ft): 700.00
Group: 4 SEASONS | To Node: NG | Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	29.000	28.500
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	RF	RF
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.100
Expansion Coef: 0.300
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Name: C_RG | From Node: NG | Length(ft): 1800.00
Group: 4 SEASONS | To Node: NCH6 | Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	28.500	28.000
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	RG	RG
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.100
Expansion Coef: 0.300
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Name: C_RH | From Node: NH | Length(ft): 1500.00
Group: 4 SEASONS | To Node: NCH5 | Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	29.700	26.300
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	RH	RH
uxElev1(ft):	0.000	0.000

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: None
Contraction Coef: 0.100
Expansion Coef: 0.300
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn

Aux XSec1:			Stabilizer Option: None
AuxElev2(ft):	0.000	0.000	
Aux XSec2:			
Top Width(ft):			
Depth(ft):			
Bot Width(ft):			
LtSdSlp(h/v):			
RtSdSlp(h/v):			

TURNED OFF & REPALCED W/LINK PRO_C_RH

Name:	C_RJ	From Node:	NJ	Length(ft):	900.00
Group:	4 SEASONS	To Node:	NJ2	Count:	1
	UPSTREAM	DOWNSTREAM		Friction Equation:	Automatic
Geometry:	Irregular	Irregular		Solution Algorithm:	Automatic
Invert(ft):	26.300	24.600		Flow:	Both
TClpInitZ(ft):	9999.000	9999.000		Contraction Coef:	0.100
Manning's N:				Expansion Coef:	0.300
Top Clip(ft):	0.000	0.000		Entrance Loss Coef:	0.000
Bot Clip(ft):	0.000	0.000		Exit Loss Coef:	0.000
Main XSec:	RJ	RJ		Outlet Ctrl Spec:	Use dc or tw
AuxElev1(ft):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Aux XSec1:				Stabilizer Option:	None
AuxElev2(ft):	0.000	0.000			
Aux XSec2:					
Top Width(ft):					
Depth(ft):					
Bot Width(ft):					
LtSdSlp(h/v):					
RtSdSlp(h/v):					

Name:	C_RK	From Node:	NK	Length(ft):	2000.00
Group:	4 SEASONS	To Node:	NK2	Count:	1
	UPSTREAM	DOWNSTREAM		Friction Equation:	Automatic
Geometry:	Irregular	Irregular		Solution Algorithm:	Automatic
Invert(ft):	29.000	26.500		Flow:	Both
TClpInitZ(ft):	9999.000	9999.000		Contraction Coef:	0.100
Manning's N:				Expansion Coef:	0.300
Top Clip(ft):	0.000	0.000		Entrance Loss Coef:	0.000
Bot Clip(ft):	0.000	0.000		Exit Loss Coef:	0.000
Main XSec:	RK	RK		Outlet Ctrl Spec:	Use dc or tw
AuxElev1(ft):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Aux XSec1:				Stabilizer Option:	None
AuxElev2(ft):	0.000	0.000			
Aux XSec2:					
Top Width(ft):					
Depth(ft):					
Bot Width(ft):					
LtSdSlp(h/v):					
RtSdSlp(h/v):					

Name:	C_ROA2	From Node:	NOA2	Length(ft):	2800.00
Group:	4 SEASONS	To Node:	NOB	Count:	1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	41.500	39.700
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	ROA2	ROA2
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation:	Automatic
Solution Algorithm:	Automatic
Flow:	Both
Contraction Coef:	0.100
Expansion Coef:	0.300
Entrance Loss Coef:	0.000
Exit Loss Coef:	0.000
Outlet Ctrl Spec:	Use dc or tw
Inlet Ctrl Spec:	Use dn
Stabilizer Option:	None

Name:	C_ROB2	From Node:	NOB2	Length(ft):	1200.00
Group:	4 SEASONS	To Node:	NOC	Count:	1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	39.700	30.700
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	ROB2	ROB2
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation:	Automatic
Solution Algorithm:	Automatic
Flow:	Both
Contraction Coef:	0.100
Expansion Coef:	0.300
Entrance Loss Coef:	0.000
Exit Loss Coef:	0.000
Outlet Ctrl Spec:	Use dc or tw
Inlet Ctrl Spec:	Use dn
Stabilizer Option:	None

Name:	C_ROD	From Node:	NOD	Length(ft):	2000.00
Group:	4 SEASONS	To Node:	NOD2	Count:	1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	29.200	26.740
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	ROD	ROD
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
t Width(ft):		

Friction Equation:	Automatic
Solution Algorithm:	Automatic
Flow:	Both
Contraction Coef:	0.100
Expansion Coef:	0.300
Entrance Loss Coef:	0.000
Exit Loss Coef:	0.000
Outlet Ctrl Spec:	Use dc or tw
Inlet Ctrl Spec:	Use dn
Stabilizer Option:	None

LtSdSlp(h/v):
RtSdSlp(h/v):

Name: C_ROE | From Node: NOE | Length(ft): 1400.00
Group: 4 SEASONS | To Node: NCH1 | Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	22.400	20.000
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	ROE	ROE
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: None
Contraction Coef: 0.100
Expansion Coef: 0.300
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

TURNED OFF & REPLACED W/LINK PRO_C_ROE

Name: C_ROF | From Node: NOF | Length(ft): 1000.00
Group: 4 SEASONS | To Node: NCH1 | Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	23.000	22.000
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	ROF	ROF
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.100
Expansion Coef: 0.300
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Name: PRO_80_SWALE_E1 | From Node: NCH9 | Length(ft): 2640.00
Group: 4 SEASONS | To Node: PRO_JUNC OF E&W | Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Trapezoidal	Trapezoidal
Invert(ft):	30.000	29.000
TClpInitZ(ft):	9999.000	9999.000
Manning's N:	0.033000	0.033000
Top Clip(ft):	0.000	0.000

Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.100
Expansion Coef: 0.300
Entrance Loss Coef: 0.000

Bot Clip(ft):	0.000	0.000	Exit Loss Coef:	0.000
Main XSec:			Outlet Ctrl Spec:	Use dc or tw
AuxElev1(ft):			Inlet Ctrl Spec:	Use dn
Aux XSec1:			Stabilizer Option:	None
AuxElev2(ft):				
Aux XSec2:				
Top Width(ft):				
Depth(ft):				
Bot Width(ft):	0.000	0.000		
LtSdSlp(h/v):	2.00	2.00		
RtSdSlp(h/v):	2.00	2.00		

Name:	PRO_80_SWALE_W1	From Node:	PRO_CENTERST_CS	Length(ft):	2600.00
Group:	4 SEASONS	To Node:	PRO__8ST&80AV_N	Count:	1

	UPSTREAM	DOWNSTREAM		
Geometry:	Trapezoidal	Trapezoidal	Friction Equation:	Average Conveyance
Invert(ft):	30.000	29.000	Solution Algorithm:	Automatic
TClpInitZ(ft):	9999.000	9999.000	Flow:	Both
Manning's N:	0.033000	0.033000	Contraction Coef:	0.100
Top Clip(ft):	0.000	0.000	Expansion Coef:	0.300
Bot Clip(ft):	0.000	0.000	Entrance Loss Coef:	0.000
Main XSec:			Exit Loss Coef:	0.000
AuxElev1(ft):			Outlet Ctrl Spec:	Use dc or tw
Aux XSec1:			Inlet Ctrl Spec:	Use dn
AuxElev2(ft):			Stabilizer Option:	None
Aux XSec2:				
Top Width(ft):				
Depth(ft):				
t Width(ft):	0.000	0.000		
LtSdSlp(h/v):	2.00	2.00		
RtSdSlp(h/v):	2.00	2.00		

NEW SE 80 AVE WEST SIDE DITCH

Name:	PRO_80_SWALE_W2	From Node:	PRO_8ST&80AV_S	Length(ft):	50.00
Group:	4 SEASONS	To Node:	PRO_JUNC OF E&W	Count:	1

	UPSTREAM	DOWNSTREAM		
Geometry:	Trapezoidal	Trapezoidal	Friction Equation:	Average Conveyance
Invert(ft):	29.000	29.000	Solution Algorithm:	Automatic
TClpInitZ(ft):	9999.000	9999.000	Flow:	Both
Manning's N:	0.033000	0.033000	Contraction Coef:	0.100
Top Clip(ft):	0.000	0.000	Expansion Coef:	0.300
Bot Clip(ft):	0.000	0.000	Entrance Loss Coef:	0.000
Main XSec:			Exit Loss Coef:	0.000
AuxElev1(ft):			Outlet Ctrl Spec:	Use dc or tw
Aux XSec1:			Inlet Ctrl Spec:	Use dn
AuxElev2(ft):			Stabilizer Option:	None
Aux XSec2:				
Top Width(ft):				
Depth(ft):				
Bot Width(ft):	0.000	0.000		
LtSdSlp(h/v):	2.00	2.00		
RtSdSlp(h/v):	2.00	2.00		

Name: PRO_C_RCH2 From Node: NCH2 Length(ft): 1200.00
Group: 4 SEASONS To Node: NOE Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Trapezoidal	Trapezoidal
Invert(ft):	23.000	23.000
TClpInitZ(ft):	9999.000	9999.000
Manning's N:	0.033000	0.033000
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:		
AuxElev1(ft):		
Aux XSec1:		
AuxElev2(ft):		
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):	15.000	15.000
LtSdSlp(h/v):	2.00	2.00
RtSdSlp(h/v):	2.00	2.00

Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.100
Expansion Coef: 0.300
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Name: PRO_C_RCH6 From Node: NCH6 Length(ft): 1700.00
Group: 4 SEASONS To Node: NCC Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Trapezoidal	Trapezoidal
Invert(ft):	24.500	24.000
TClpInitZ(ft):	9999.000	9999.000
Manning's N:	0.033000	0.033000
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:		
AuxElev1(ft):		
Aux XSec1:		
AuxElev2(ft):		
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):	14.000	14.000
LtSdSlp(h/v):	2.00	2.00
RtSdSlp(h/v):	2.00	2.00

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.100
Expansion Coef: 0.300
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Name: PRO_C_RH From Node: NH Length(ft): 1500.00
Group: 4 SEASONS To Node: NCH3 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	29.700	26.300
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	RH	RH
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.100
Expansion Coef: 0.300
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Top Width(ft):
Depth(ft):
t Width(ft):
LtSdSlp(h/v):
RtSdSlp(h/v):

Name: PRO_C_ROE | From Node: NOE | Length(ft): 1400.00
Group: 4 SEASONS | To Node: NCH1 | Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Trapezoidal	Trapezoidal
Invert(ft):	22.000	20.000
TClpInitZ(ft):	9999.000	9999.000
Manning's N:	0.033000	0.033000
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:		
AuxElev1(ft):		
Aux XSec1:		
AuxElev2(ft):		
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):	15.000	15.000
LtSdSlp(h/v):	3.00	3.00
RtSdSlp(h/v):	3.00	3.00

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.100
Expansion Coef: 0.300
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Name: PRO_NS_CHANNEL | From Node: PRO_JUNC OF E&W | Length(ft): 7840.00
Group: 4 SEASONS | To Node: NSLOUGH_SEC28 | Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Trapezoidal	Trapezoidal
Invert(ft):	29.000	28.000
TClpInitZ(ft):	9999.000	9999.000
Manning's N:	0.033000	0.033000
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:		
AuxElev1(ft):		
Aux XSec1:		
AuxElev2(ft):		
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):	20.000	20.000
LtSdSlp(h/v):	2.00	2.00
RtSdSlp(h/v):	2.00	2.00

Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.100
Expansion Coef: 0.300
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

==========

==== Weirs ==========

==========

Name: PRO_4SMAIN_BLDR | From Node: NCH3
Group: 4 SEASONS | To Node: NJJ
Flow: Both | Count: 1

```
        Type: Vertical: Mavis      Geometry: Rectangular

                   Span(in): 30.00
                   Rise(in): 24.00
                 Invert(ft): 24.000
       Control Elevation(ft): 24.000
                                          TABLE
             Bottom Clip(in): 0.000
                Top Clip(in): 0.000
          Weir Discharge Coef: 3.200
        Orifice Discharge Coef: 0.600
```

```
         Name: PRO_4SMAIN_WEIR     From Node: NCH3
        Group: 4 SEASONS             To Node: NJJ
         Flow: Both                    Count: 1
         Type: Vertical: Mavis     Geometry: Rectangular

                   Span(in): 144.00
                   Rise(in): 9999.00
                 Invert(ft): 26.000
       Control Elevation(ft): 26.000
                                          TABLE
             Bottom Clip(in): 0.000
                Top Clip(in): 0.000
          Weir Discharge Coef: 3.200
        Orifice Discharge Coef: 0.600
```

4 SEASONS PRIMARY WEIR; SIZED TO PASS ALLOWABLE OF 39.6 CSM PLUS OFF-SITE FLOWS COMING FROM PROPOSED DIVERSION STRUCTURE

```
         Name: PRO_DIVERSIONCS     From Node: PRO_CENTERST_CS
        Group: 4 SEASONS             To Node: NCH8
         Flow: Both                    Count: 1
         Type: Vertical: Mavis     Geometry: Trapezoidal

            Bottom Width(ft): 22.50
       Left Side Slope(h/v): 1.83
      Right Side Slope(h/v): 2.64
                 Invert(ft): 31.500
       Control Elevation(ft): 31.500
     Struct Opening Dim(ft): 9999.00
                                          TABLE
             Bottom Clip(ft): 0.000
                Top Clip(ft): 0.000
          Weir Discharge Coef: 3.200
        Orifice Discharge Coef: 0.600
```

INSTALL SHEET PILE WEIR; ASSUMED TRAP SECTION WAS USED TO ACCOUNT FOR FLOW ALONG EXISTING CANAL BANK DURING LARGER EVENTS.

```
         Name: PRO_SE8ST_0W        From Node: PRO__8ST&80AV_N
        Group: 4 SEASONS             To Node: PRO_8ST&80AV_S
         Flow: Both                    Count: 1
         Type: Vertical: Paved     Geometry: Rectangular

                   Span(in): 240.00
                   Rise(in): 9999.00
                 Invert(ft): 34.000
```

```
       Control Elevation(ft): 34.000
                                                TABLE
             Bottom Clip(in): 0.000
                Top Clip(in): 0.000
          Weir Discharge Coef: 2.800
       Orifice Discharge Coef: 0.600

LINK ADDED TO ASSUME SE 8 ST ROAD OVERFLOW

-------------------------------------------------------------------------------------------------
         Name: RA_OW                From Node: NA
        Group: 4 SEASONS              To Node: NA2
         Flow: Both                     Count: 1
         Type: Vertical: Paved      Geometry: Rectangular

                    Span(in): 2400.00
                    Rise(in): 9999.00
                  Invert(ft): 33.400
       Control Elevation(ft): 33.400
                                                TABLE
             Bottom Clip(in): 0.000
                Top Clip(in): 0.000
          Weir Discharge Coef: 2.800
       Orifice Discharge Coef: 0.600


-------------------------------------------------------------------------------------------------
         Name: RAB_OW               From Node: NA
        Group: 4 SEASONS              To Node: NB
         Flow: Both                     Count: 1
         Type: Vertical: Paved      Geometry: Rectangular

                    Span(in): 2400.00
                    Rise(in): 9999.00
                  Invert(ft): 32.700
       Control Elevation(ft): 32.700
                                                TABLE
             Bottom Clip(in): 0.000
                Top Clip(in): 0.000
          Weir Discharge Coef: 2.800
       Orifice Discharge Coef: 0.600


-------------------------------------------------------------------------------------------------
         Name: RB_OW                From Node: NB
        Group: 4 SEASONS              To Node: NC
         Flow: Both                     Count: 1
         Type: Vertical: Paved      Geometry: Rectangular

                    Span(in): 2400.00
                    Rise(in): 9999.00
                  Invert(ft): 33.600
       Control Elevation(ft): 33.600
                                                TABLE
             Bottom Clip(in): 0.000
                Top Clip(in): 0.000
          Weir Discharge Coef: 2.800
       Orifice Discharge Coef: 0.600
```

Name: RC_OW
Group: 4 SEASONS
Flow: Both
Type: Vertical: Paved
From Node: NC
To Node: NC2
Count: 1
Geometry: Rectangular

Span(in): 2400.00
Rise(in): 9999.00
Invert(ft): 31.700
Control Elevation(ft): 31.700
TABLE
Bottom Clip(in): 0.000
Top Clip(in): 0.000
Weir Discharge Coef: 2.800
Orifice Discharge Coef: 0.600

Name: RCC_OW
Group: 4 SEASONS
Flow: Both
Type: Vertical: Paved
From Node: NCC
To Node: NCH5
Count: 1
Geometry: Rectangular

Span(in): 2400.00
Rise(in): 9999.00
Invert(ft): 32.000
Control Elevation(ft): 32.000
TABLE
Bottom Clip(in): 0.000
Top Clip(in): 0.000
Weir Discharge Coef: 2.800
Orifice Discharge Coef: 0.600

Name: RCH4A_OW
Group: 4 SEASONS
Flow: None
Type: Vertical: Paved
From Node: NCH4
To Node: NCH3
Count: 1
Geometry: Rectangular

Span(in): 4800.00
Rise(in): 9999.00
Invert(ft): 32.200
Control Elevation(ft): 32.200
TABLE
Bottom Clip(in): 0.000
Top Clip(in): 0.000
Weir Discharge Coef: 2.800
Orifice Discharge Coef: 0.600

Name: RCH4B_OW
Group: 4 SEASONS
Flow: None
Type: Vertical: Paved
From Node: NCH4
To Node: NCH3
Count: 1
Geometry: Rectangular

Span(in): 2400.00
Rise(in): 9999.00
Invert(ft): 32.000

```
Control Elevation(ft): 32.000
                                        TABLE
      Bottom Clip(in): 0.000
         Top Clip(in): 0.000
   Weir Discharge Coef: 2.800
Orifice Discharge Coef: 0.600
```

```
        Name: RCH9_OW              From Node: NCH9
       Group: 4 SEASONS              To Node: PRO_CENTERST_CS
        Flow: Both                     Count: 1
        Type: Vertical: Paved      Geometry: Rectangular

            Span(in): 2400.00
            Rise(in): 9999.00
          Invert(ft): 34.600
Control Elevation(ft): 34.600
                                        TABLE
      Bottom Clip(in): 0.000
         Top Clip(in): 0.000
   Weir Discharge Coef: 2.800
Orifice Discharge Coef: 0.600
```

NE 80 AVE & CENTER STREET OVER TWIN 6X4 BC

```
        Name: RD_OW                From Node: ND
       Group: 4 SEASONS              To Node: ND2
        Flow: Both                     Count: 1
        Type: Vertical: Paved      Geometry: Rectangular

            Span(in): 2400.00
            Rise(in): 9999.00
          Invert(ft): 33.000
Control Elevation(ft): 33.000
                                        TABLE
      Bottom Clip(in): 0.000
         Top Clip(in): 0.000
   Weir Discharge Coef: 2.800
Orifice Discharge Coef: 0.600
```

```
        Name: RE2_OW               From Node: NE2
       Group: 4 SEASONS              To Node: NCH7
        Flow: Both                     Count: 1
        Type: Vertical: Paved      Geometry: Rectangular

            Span(in): 2400.00
            Rise(in): 9999.00
          Invert(ft): 33.700
Control Elevation(ft): 33.700
                                        TABLE
      Bottom Clip(in): 0.000
         Top Clip(in): 0.000
   Weir Discharge Coef: 2.800
Orifice Discharge Coef: 0.600
```

Name: RI_OW
Group: 4 SEASONS
Flow: Both
Type: Vertical: Paved
From Node: NI
To Node: NCH3
Count: 1
Geometry: Rectangular

Span(in): 2400.00
Rise(in): 9999.00
Invert(ft): 32.000
Control Elevation(ft): 32.000
TABLE
Bottom Clip(in): 0.000
Top Clip(in): 0.000
Weir Discharge Coef: 2.800
Orifice Discharge Coef: 0.600

Name: RJ2_OW
Group: 4 SEASONS
Flow: Both
Type: Vertical: Paved
From Node: NJ2
To Node: NCH3
Count: 1
Geometry: Rectangular

Span(in): 2400.00
Rise(in): 9999.00
Invert(ft): 32.000
Control Elevation(ft): 32.000
TABLE
Bottom Clip(in): 0.000
Top Clip(in): 0.000
Weir Discharge Coef: 2.800
Orifice Discharge Coef: 0.600

Name: RJJ_OW
Group: 4 SEASONS
Flow: Both
Type: Vertical: Paved
From Node: NJJ
To Node: NCH2
Count: 1
Geometry: Rectangular

Span(in): 2400.00
Rise(in): 9999.00
Invert(ft): 31.000
Control Elevation(ft): 31.000
TABLE
Bottom Clip(in): 0.000
Top Clip(in): 0.000
Weir Discharge Coef: 2.800
Orifice Discharge Coef: 0.600

Name: RK2_OW
Group: 4 SEASONS
Flow: Both
Type: Vertical: Paved
From Node: NK2
To Node: NJJ
Count: 1
Geometry: Rectangular

Span(in): 2400.00
Rise(in): 9999.00
Invert(ft): 31.000

```
Control Elevation(ft): 31.000
                                        TABLE
      Bottom Clip(in): 0.000
         Top Clip(in): 0.000
   Weir Discharge Coef: 2.800
Orifice Discharge Coef: 0.600
```

```
        Name: ROA_OW              From Node: NOA
       Group: 4 SEASONS             To Node: NOA2
        Flow: Both                    Count: 1
        Type: Vertical: Paved      Geometry: Rectangular

            Span(in): 2400.00
            Rise(in): 9999.00
          Invert(ft): 44.750
Control Elevation(ft): 44.750
                                        TABLE
      Bottom Clip(in): 0.000
         Top Clip(in): 0.000
   Weir Discharge Coef: 2.800
Orifice Discharge Coef: 0.600
```

```
        Name: ROB_OW              From Node: NOB
       Group: 4 SEASONS             To Node: NOB2
        Flow: Both                    Count: 1
        Type: Vertical: Paved      Geometry: Rectangular

            Span(in): 2400.00
            Rise(in): 9999.00
          Invert(ft): 43.000
Control Elevation(ft): 43.000
                                        TABLE
      Bottom Clip(in): 0.000
         Top Clip(in): 0.000
   Weir Discharge Coef: 2.800
Orifice Discharge Coef: 0.600
```

```
        Name: ROC_OW              From Node: NOC
       Group: 4 SEASONS             To Node: NCH10
        Flow: Both                    Count: 1
        Type: Vertical: Paved      Geometry: Rectangular

            Span(in): 2400.00
            Rise(in): 9999.00
          Invert(ft): 34.600
Control Elevation(ft): 34.600
                                        TABLE
      Bottom Clip(in): 0.000
         Top Clip(in): 0.000
   Weir Discharge Coef: 2.800
Orifice Discharge Coef: 0.600
```

Name: ROD2_OW
Group: 4 SEASONS
Flow: Both
Type: Vertical: Paved
From Node: NOD2
To Node: NCH2
Count: 1
Geometry: Rectangular

Span(in): 2400.00
Rise(in): 9999.00
Invert(ft): 31.000
Control Elevation(ft): 31.000
TABLE
Bottom Clip(in): 0.000
Top Clip(in): 0.000
Weir Discharge Coef: 2.800
Orifice Discharge Coef: 0.600

```
================================================================================
  == Hydrology Simulations ======================================================
   ==============================================================================

         Name: 4S_005Y_1DAY
     Filename: L:\LAND\00-0903\146 Stormwater Plan\ICPR3\HYDROLOGY\4S_005Y_1DAY.R32

      Override Defaults: Yes
    Storm Duration(hrs): 24.00
          Rainfall File: Flmod
   Rainfall Amount(in): 4.50

Time(hrs)       Print Inc(min)
--------------- ---------------
200.000         15.00

--------------------------------------------------------------------------------
         Name: 4S_010Y_3DAY
     Filename: L:\LAND\00-0903\146 Stormwater Plan\ICPR3\HYDROLOGY\4S_010Y_3DAY.R32

      Override Defaults: No

Time(hrs)       Print Inc(min)
--------------- ---------------
200.000         15.00

--------------------------------------------------------------------------------
         Name: 4S_025Y_3DAY
     Filename: L:\LAND\00-0903\146 Stormwater Plan\ICPR3\HYDROLOGY\4S_025Y_3DAY.R32

      Override Defaults: Yes
    Storm Duration(hrs): 72.00
          Rainfall File: Sfwmd72
   Rainfall Amount(in): 9.00

Time(hrs)       Print Inc(min)
--------------- ---------------
200.000         15.00

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

```
==========================================================================================
==== Routing Simulations ================================================================
==========================================================================================

        Name: 4S_05Y1DPROF        Hydrology Sim: 4S_005Y1DPRO
    Filename: L:\LAND\00-0903\146 Stormwater Plan\ICPR3\HYDRAULICS\4S_05Y_1DAY PRO FINAL.I32

     Execute: No          Restart: No           Patch: No
 Alternative: No

       Max Delta Z(ft): 1.00                   Delta Z Factor: 0.00500
   Time Step Optimizer: 10.000
       Start Time(hrs): 0.000                   End Time(hrs): 100.00
    Min Calc Time(sec): 0.1000              Max Calc Time(sec): 60.0000
       Boundary Stages:                         Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
10.000          15.000
18.000          5.000
100.000         15.000

Group           Run
--------------- -----
4 SEASONS       Yes

------------------------------------------------------------------------------------------
        Name: 4S_05Y_1DAY         Hydrology Sim: 4S_005Y_1DAY
    Filename: L:\LAND\00-0903\146 Stormwater Plan\ICPR3\HYDRAULICS\4S_05Y_1DAY.I32

     Execute: No          Restart: No           Patch: No
 Alternative: No

       Max Delta Z(ft): 1.00                   Delta Z Factor: 0.00500
   Time Step Optimizer: 10.000
       Start Time(hrs): 0.000                   End Time(hrs): 100.00
    Min Calc Time(sec): 0.1000              Max Calc Time(sec): 60.0000
       Boundary Stages:                         Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
10.000          15.000
18.000          5.000
100.000         15.000

Group           Run
--------------- -----
4 SEASONS       Yes

------------------------------------------------------------------------------------------
------------------------------------------------------------------------------------------
        Name: 4S_10Y3DPROF        Hydrology Sim: 4S_010Y3DPRO
    Filename: L:\LAND\00-0903\146 Stormwater Plan\ICPR3\HYDRAULICS\4S_10Y_3DAY PRO FINAL.I32

     Execute: No          Restart: No           Patch: No
 Alternative: No
```

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 200.00
Min Calc Time(sec): 0.1000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

Time(hrs)	Print Inc(min)
54.000	15.000
84.000	5.000
200.000	15.000

Group	Run
4 SEASONS	Yes

Name: 4S_10Y_3DAY Hydrology Sim: 4S_010Y_3DAY
Filename: L:\LAND\00-0903\146 Stormwater Plan\ICPR3\HYDRAULICS\4S_10Y_3DAY.I32

Execute: No Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 200.00
Min Calc Time(sec): 0.1000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

Time(hrs)	Print Inc(min)
54.000	15.000
84.000	5.000
200.000	15.000

Group	Run
4 SEASONS	Yes

Name: 4S_25Y3DPROF Hydrology Sim: 4S_025Y3DPRO
Filename: L:\LAND\00-0903\146 Stormwater Plan\ICPR3\HYDRAULICS\4S_25Y_3DAY PRO FINAL.I32

Execute: No Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 150.00
Min Calc Time(sec): 0.1000 Max Calc Time(sec): 999.0000
Boundary Stages: Boundary Flows:

Time(hrs)	Print Inc(min)
000	15.000

84.000	5.000
150.000	15.000

Group	Run
4 SEASONS	Yes

Name: 4S_25Y_3DAY Hydrology Sim: 4S_025Y_3DAY
Filename: L:\LAND\00-0903\146 Stormwater Plan\ICPR3\HYDRAULICS\4S_25Y_3DAY.I32

Execute: No Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 150.00
Min Calc Time(sec): 0.1000 Max Calc Time(sec): 999.0000
Boundary Stages: Boundary Flows:

Time(hrs)	Print Inc(min)
54.000	15.000
84.000	5.000
150.000	15.000

Group	Run
4 SEASONS	Yes

L:\LAND\00-0903\146 Stormwater Plan\ICPR3\COMPREHENSIVE MODEL DATA FOR 4 SEASONS.doc

OKEECHOBEE COUNTY
COMPREHENSIVE URBANIZED AREA
STORMWATER MASTER PLAN

GENERAL REGION
MODEL INPUT DATA

GENERAL REGION ICPR 3.0 MODEL INPUT DATA

Basins

Name: BASIN 01
Group: GENERAL
Node: BASSWOOD
Type: SCS Unit Hydrograph
Status: Onsite

Unit Hydrograph: Uh256
Rainfall File: Sfwmd72
Rainfall Amount(in): 7.000
Area(ac): 1050.000
Curve Number: 80.70
DCIA(%): 0.00
Peaking Factor: 256.0
Storm Duration(hrs): 72.00
Time of Conc(min): 226.00
Time Shift(hrs): 0.00
Max Allowable Q(cfs): 999999.000

Name: BASIN 02
Group: GENERAL
Node: AIRP_INUDSTRIAL
Type: SCS Unit Hydrograph
Status: Onsite

Unit Hydrograph: Uh256
Rainfall File: Sfwmd72
Rainfall Amount(in): 7.000
Area(ac): 139.790
Curve Number: 72.10
DCIA(%): 0.00
Peaking Factor: 256.0
Storm Duration(hrs): 72.00
Time of Conc(min): 229.00
Time Shift(hrs): 0.00
Max Allowable Q(cfs): 999999.000

Name: BASIN 03
Group: GENERAL
Node: AIRPORT
Type: SCS Unit Hydrograph
Status: Onsite

Unit Hydrograph: Uh256
Rainfall File: Sfwmd72
Rainfall Amount(in): 7.000
Area(ac): 655.260
Curve Number: 72.90
DCIA(%): 0.00
Peaking Factor: 256.0
Storm Duration(hrs): 72.00
Time of Conc(min): 151.00
Time Shift(hrs): 0.00
Max Allowable Q(cfs): 999999.000

Name: BASIN 04
Group: GENERAL
Node: GN04
Type: SCS Unit Hydrograph
Status: Onsite

Unit Hydrograph: Uh256
Rainfall File: Sfwmd72
Rainfall Amount(in): 7.000
Area(ac): 840.000
Curve Number: 73.00
DCIA(%): 0.00
Peaking Factor: 256.0
Storm Duration(hrs): 72.00
Time of Conc(min): 253.00
Time Shift(hrs): 0.00
Max Allowable Q(cfs): 999999.000

AREA NW OF ROYAL CONCRETE CONCEPTS

Name: BASIN 05
Group: GENERAL
Node: GN05
Type: SCS Unit Hydrograph
Status: Onsite

Unit Hydrograph: Uh256
Rainfall File: Sfwmd72
Rainfall Amount(in): 7.000
Peaking Factor: 256.0
Storm Duration(hrs): 72.00
Time of Conc(min): 66.00

Area(ac): 95.700
Curve Number: 82.30
DCIA(%): 0.00
Time Shift(hrs): 0.00
Max Allowable Q(cfs): 999999.000

AREA WEST OF US 98 & NORTH OF ROYAL CONCRETE CONCEPTS

Name: BASIN 06
Group: GENERAL
Node: GN06
Type: SCS Unit Hydrograph
Status: Onsite

Unit Hydrograph: Uh256
Rainfall File: Sfwmd72
Rainfall Amount(in): 7.000
Area(ac): 683.500
Curve Number: 68.20
DCIA(%): 0.00
Peaking Factor: 256.0
Storm Duration(hrs): 72.00
Time of Conc(min): 194.00
Time Shift(hrs): 0.00
Max Allowable Q(cfs): 999999.000

AREA NORTH SR 70, SOUTH SCRR, & WEST OF COUNTY DITCH

Name: BASIN 07
Group: GENERAL
Node: GN07
Type: SCS Unit Hydrograph
Status: Onsite

Unit Hydrograph: GAMMA
Rainfall File: Sfwmd72
Rainfall Amount(in): 7.000
Area(ac): 424.000
Curve Number: 84.40
DCIA(%): 0.00
Peaking Factor: 200.0
Storm Duration(hrs): 72.00
Time of Conc(min): 151.00
Time Shift(hrs): 0.00
Max Allowable Q(cfs): 999999.000

AREA SOUTH SR 70, NORTH & WEST OF L-62 CANAL

Name: BASIN 08
Group: GENERAL
Node: GN08
Type: SCS Unit Hydrograph
Status: Onsite

Unit Hydrograph: Uh256
Rainfall File: Sfwmd72
Rainfall Amount(in): 7.000
Area(ac): 242.000
Curve Number: 78.20
DCIA(%): 0.00
Peaking Factor: 256.0
Storm Duration(hrs): 72.00
Time of Conc(min): 94.00
Time Shift(hrs): 0.00
Max Allowable Q(cfs): 999999.000

AREA SOUTH OF SCRR, WEST OF US 98, EAST OF COUNTY DITCH, & NORTH SR 70

Name: BASIN 09
Group: GENERAL
Node: GN09
Type: SCS Unit Hydrograph
Status: Onsite

Unit Hydrograph: Uh256
Rainfall File: Sfwmd72
Rainfall Amount(in): 7.000
Area(ac): 301.800
Curve Number: 67.90
DCIA(%): 0.00
Peaking Factor: 256.0
Storm Duration(hrs): 72.00
Time of Conc(min): 91.00
Time Shift(hrs): 0.00
Max Allowable Q(cfs): 999999.000

AREA WEST OF SR 15, SOUTH OF BASSWOOD, EAST OF AIRPORT, & NORTH AIRPORT DITCH. ACREAGE BEING HANDLED BY FDOT SYSTEM WAS REMOVED FROM THIS AREA.

Name: BASIN 10
Group: GENERAL
Node: GN10
Type: SCS Unit Hydrograph
Status: Onsite

GENERAL REGION ICPR 3.0 MODEL INPUT DATA

Unit Hydrograph: Uh256
Rainfall File: Sfwmd72
Rainfall Amount(in): 7.000
Area(ac): 394.000
Curve Number: 67.90
DCIA(%): 0.00

Peaking Factor: 256.0
Storm Duration(hrs): 72.00
Time of Conc(min): 66.00
Time Shift(hrs): 0.00
Max Allowable Q(cfs): 999999.000

AREA SOUTH AIRPOT DITCH, WEST OF SR 15, EAST OF US 98, & NORTH OF SCRR

==== Nodes ====

Name: 4A_01 Base Flow(cfs): 0.000 Init Stage(ft): 18.400
Group: GENERAL Warn Stage(ft): 25.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 4A_02 Base Flow(cfs): 0.000 Init Stage(ft): 18.300
Group: GENERAL Warn Stage(ft): 24.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 4A_03 Base Flow(cfs): 0.000 Init Stage(ft): 19.400
Group: GENERAL Warn Stage(ft): 27.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 4A_04 Base Flow(cfs): 0.000 Init Stage(ft): 18.100
Group: GENERAL Warn Stage(ft): 25.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 4A_05 Base Flow(cfs): 0.000 Init Stage(ft): 18.100
Group: GENERAL Warn Stage(ft): 19.500
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 4A_06_BC_SR70 Base Flow(cfs): 0.000 Init Stage(ft): 20.700
Group: GENERAL Warn Stage(ft): 28.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 4A_07 Base Flow(cfs): 0.000 Init Stage(ft): 19.700
Group: GENERAL Warn Stage(ft): 23.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 4A_08 Base Flow(cfs): 0.000 Init Stage(ft): 20.200
Group: GENERAL Warn Stage(ft): 28.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 4A_09 Base Flow(cfs): 0.000 Init Stage(ft): 18.900
Group: GENERAL Warn Stage(ft): 24.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: 4A_10 Base Flow(cfs): 0.000 Init Stage(ft): 19.140
Group: GENERAL Warn Stage(ft): 23.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: AIRP_INUDSTRIAL Base Flow(cfs): 0.000 Init Stage(ft): 26.000
Group: GENERAL Warn Stage(ft): 33.000
Type: Stage/Area

OKEECHOBEE COUNTY AIRPORT INDUSTRIAL PARK

Stage(ft)	Area(ac)
23.000	0.0100
26.000	0.0500
26.500	0.1000
27.000	10.1200
27.500	10.1200

28.000	10.1200
28.500	19.6200
29.000	29.1100
29.250	33.8600
29.500	38.6100
29.750	43.3500
30.000	48.1000
30.500	57.6000
31.000	67.0900
31.500	76.5900
32.000	86.0800
32.500	95.5800
33.000	105.0800

Name: AIRPORT Base Flow(cfs): 0.000 Init Stage(ft): 26.000
Group: GENERAL Warn Stage(ft): 33.000
Type: Stage/Area

OKEECHOBEE COUNTY AIRPORT

Stage(ft)	Area(ac)
24.000	0.1000
26.500	0.5000
27.000	57.6000
27.500	57.6000
28.000	57.6000
28.500	100.9800
29.000	144.3700
29.250	166.0600
29.500	187.7500
29.750	209.4500
30.000	231.1400
30.500	274.5200
31.000	317.9100
31.500	361.2900
32.000	404.6800
32.500	448.0600
33.000	491.4500

Name: APD_01 Base Flow(cfs): 0.000 Init Stage(ft): 16.500
Group: GENERAL Warn Stage(ft): 28.000
Type: Stage/Area

SR 15 FLOWS FROM PERMIT 47-00489 WILL BE INTRODUCE HERE (BASIN 100 & BASIN 200) VIA BOUNDARY FLOWS.

Stage(ft)	Area(ac)

Name: APD_02 Base Flow(cfs): 0.000 Init Stage(ft): 18.500
Group: GENERAL Warn Stage(ft): 24.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: APD_03 Base Flow(cfs): 0.000 Init Stage(ft): 18.000

Group: GENERAL
Type: Stage/Area

Warn Stage(ft): 28.000

Stage(ft)	Area(ac)

Name: APD_04
Group: GENERAL
Type: Stage/Area

Base Flow(cfs): 0.000

Init Stage(ft): 19.400
Warn Stage(ft): 25.000

Stage(ft)	Area(ac)

Name: APD_05
Group: GENERAL
Type: Stage/Area

Base Flow(cfs): 0.000

Init Stage(ft): 20.400
Warn Stage(ft): 26.000

Stage(ft)	Area(ac)

Name: APD_06
Group: GENERAL
Type: Stage/Area

Base Flow(cfs): 0.000

Init Stage(ft): 20.100
Warn Stage(ft): 25.500

Stage(ft)	Area(ac)

Name: APD_07
Group: GENERAL
Type: Stage/Area

Base Flow(cfs): 0.000

Init Stage(ft): 20.500
Warn Stage(ft): 26.000

Stage(ft)	Area(ac)

Name: APD_08
Group: GENERAL
Type: Stage/Area

Base Flow(cfs): 0.000

Init Stage(ft): 20.100
Warn Stage(ft): 26.000

Stage(ft)	Area(ac)

Name: APD_09
Group: GENERAL
Type: Stage/Area

Base Flow(cfs): 0.000

Init Stage(ft): 20.500
Warn Stage(ft): 27.000

NODE DOWNSTREAM OF NW 9 AVENUE BOXCULVERT OF AIRPORT DITCH SYSTEM

Stage(ft)	Area(ac)

Name: APD_10 Base Flow(cfs): 0.000 Init Stage(ft): 20.500
Group: GENERAL Warn Stage(ft): 28.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: APD_11 Base Flow(cfs): 0.000 Init Stage(ft): 20.700
Group: GENERAL Warn Stage(ft): 28.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: APD_12 Base Flow(cfs): 0.000 Init Stage(ft): 21.800
Group: GENERAL Warn Stage(ft): 27.500
Type: Stage/Area

Stage(ft)	Area(ac)

Name: APD_13 Base Flow(cfs): 0.000 Init Stage(ft): 22.400
Group: GENERAL Warn Stage(ft): 30.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: APD_14 Base Flow(cfs): 0.000 Init Stage(ft): 22.800
Group: GENERAL Warn Stage(ft): 29.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: APD_15 Base Flow(cfs): 0.000 Init Stage(ft): 26.100
Group: GENERAL Warn Stage(ft): 32.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: APD_16 Base Flow(cfs): 0.000 Init Stage(ft): 25.600
Group: GENERAL Warn Stage(ft): 32.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: BASSWOOD Base Flow(cfs): 0.000 Init Stage(ft): 28.000
Group: GENERAL Warn Stage(ft): 33.000
Type: Stage/Area

BASSWOOD AREA

Stage(ft)	Area(ac)
26.500	0.0100
28.000	108.0000
28.500	108.0000
29.000	108.0000
29.500	135.0000
30.000	162.0000
30.500	189.0000
31.000	216.0000
31.250	229.5000
31.500	243.0000
31.750	256.5000
32.000	270.0000
32.500	297.0000
33.000	324.0000
33.500	418.5000
34.000	513.0000
34.500	607.5000
35.000	702.0000

Name: GC1 Base Flow(cfs): 0.000 Init Stage(ft): 13.500
Group: GENERAL Warn Stage(ft): 16.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: GC2 Base Flow(cfs): 0.000 Init Stage(ft): 13.500
Group: GENERAL Warn Stage(ft): 18.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: GC3 Base Flow(cfs): 0.000 Init Stage(ft): 13.500
Group: GENERAL Warn Stage(ft): 21.000

Type: Stage/Area

Stage(ft)	Area(ac)

Name: GC4 Base Flow(cfs): 0.000 Init Stage(ft): 15.000
Group: GENERAL Warn Stage(ft): 23.000
Type: Stage/Area

RATING CURVE FOR 2-EXISTING 18" CMP WILL BE INTRODUCE AT THIS NODE W/0'5 HEAD PEAK DISCHARGE.

Stage(ft)	Area(ac)

Name: GC5 Base Flow(cfs): 0.000 Init Stage(ft): 16.070
Group: GENERAL Warn Stage(ft): 22.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: GC6A Base Flow(cfs): 0.000 Init Stage(ft): 13.500
Group: GENERAL Warn Stage(ft): 23.000
Type: Stage/Area

OCATION OF EXISTING 60" CMP WHICH WASHED OUT IN PREVIOUS STORM EVENTS.

Stage(ft)	Area(ac)

Name: GC6B Base Flow(cfs): 0.000 Init Stage(ft): 13.500
Group: GENERAL Warn Stage(ft): 22.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: GN04 Base Flow(cfs): 0.000 Init Stage(ft): 24.000
Group: GENERAL Warn Stage(ft): 28.000
Type: Stage/Area

Stage(ft)	Area(ac)
24.000	8.1600
24.500	8.1600
25.000	8.1600
25.500	59.4500
26.000	110.8600
26.500	162.1500
27.000	213.4500

27.250	239.0900
27.500	264.7400
27.750	290.3800
28.000	316.0300
28.500	367.3200
29.000	418.6100
29.500	469.9000
30.000	521.1900
30.500	572.4900
31.000	623.7800

Name: GN05 Base Flow(cfs): 0.000 Init Stage(ft): 24.000
Group: GENERAL Warn Stage(ft): 28.000
Type: Stage/Area

Stage(ft)	Area(ac)
24.000	0.9600
24.500	0.9600
25.000	0.9600
25.500	6.8900
26.000	12.8300
26.500	18.7600
27.000	24.7000
27.250	27.6700
27.500	30.6400
27.750	33.6000
28.000	36.5700
28.500	42.5100
29.000	48.4400
29.500	54.3800
30.000	60.3100
30.500	66.2500
31.000	72.1900

Name: GN06 Base Flow(cfs): 0.000 Init Stage(ft): 23.000
Group: GENERAL Warn Stage(ft): 28.000
Type: Stage/Area

Stage(ft)	Area(ac)
23.000	5.0400
23.500	5.0400
24.000	5.0400
24.500	25.3300
25.000	45.6100
25.500	65.9000
26.000	86.1800
26.250	96.3300
26.500	106.4700
26.750	116.6100
27.000	126.7600
27.500	147.0400
28.000	167.3300
28.500	187.6100
29.000	207.9000
29.500	211.0500

30.000 214.2000

Name: GN07 Base Flow(cfs): 0.000 Init Stage(ft): 24.000
Group: GENERAL Warn Stage(ft): 29.000
Type: Stage/Area

Stage(ft)	Area(ac)
24.000	4.2400
24.500	39.1500
25.000	74.0600
25.500	108.9700
26.000	143.8800
26.500	178.7900
27.000	213.7000
27.250	231.1900
27.500	248.6800
27.750	266.1700
28.000	283.6600
28.500	318.6400
29.000	353.6200
29.500	388.6000
30.000	423.5800
30.500	423.5800

Name: GN08 Base Flow(cfs): 0.000 Init Stage(ft): 26.000
Group: GENERAL Warn Stage(ft): 28.000
Type: Stage/Area

ASSUMED OVERLAND WEIR

Stage(ft)	Area(ac)
23.000	2.4200
24.000	2.4200
24.500	16.3400
25.000	30.2500
25.500	47.8000
26.000	65.3400
26.250	74.1100
26.500	82.8900
26.750	91.6600
27.000	100.4300
27.500	117.9800
28.000	135.5200
28.500	153.0700
29.000	170.6100
29.500	188.1600
30.000	205.7000

Name: GN09 Base Flow(cfs): 0.000 Init Stage(ft): 24.000
Group: GENERAL Warn Stage(ft): 28.000
Type: Stage/Area

Stage(ft)	Area(ac)

24.000	2.7600
25.000	2.7600
25.500	25.9700
26.000	49.1800
26.500	72.3900
27.000	95.6000
27.250	107.2000
27.500	118.8100
27.750	130.4100
28.000	142.0200
28.500	165.2300
29.000	188.4400
29.500	211.6500
30.000	234.8600
30.500	234.8600

Name: GN10 Base Flow(cfs): 0.000 Init Stage(ft): 24.000
Group: GENERAL Warn Stage(ft): 28.000
Type: Stage/Area

Stage(ft)	Area(ac)
24.000	3.8000
25.000	3.8000
25.500	37.6200
26.000	71.4400
26.500	105.2600
27.000	139.0800
27.250	155.9900
27.500	172.9000
27.750	189.8100
28.000	206.7200
28.500	240.5400
29.000	274.3600
29.500	308.1800
30.000	342.0000
30.500	342.0000

Name: PRO_POND Base Flow(cfs): 0.000 Init Stage(ft): 13.500
Group: GENERAL Warn Stage(ft): 21.000
Type: Stage/Area

PROPOSED DETENTION POND

POND ASSUMED TO BE DRAWNED DOWN TO ELEVATION 13.5 PRIOR TO STORMS

Stage(ft)	Area(ac)
7.000	7.0000
13.000	9.0000
15.000	10.0000
21.000	10.0000

Name: RCC1 Base Flow(cfs): 0.000 Init Stage(ft): 23.000
Group: GENERAL Warn Stage(ft): 27.000
Type: Stage/Area

TIME DISCHARGE CURVE FROM ROYAL CONCRETE CONCEPTS OUTFALL STRUCTURE INTRODUCED AT THIS NODE (REF. TH)

Stage(ft)	Area(ac)

Name: RCC2 Base Flow(cfs): 0.000 Init Stage(ft): 24.000
Group: GENERAL Warn Stage(ft): 29.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: RCC3 Base Flow(cfs): 0.000 Init Stage(ft): 23.000
Group: GENERAL Warn Stage(ft): 28.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: RCC4 Base Flow(cfs): 0.000 Init Stage(ft): 23.000
Group: GENERAL Warn Stage(ft): 28.000
Type: Stage/Area

TIME DISCHARGE CURVE FROM ROYAL CONCRETE CONCEPTS OUTFALL STRUCTURE INTRODUCED AT THIS NODE (REF. TH)

Stage(ft)	Area(ac)

Name: RCC5 Base Flow(cfs): 0.000 Init Stage(ft): 22.000
Group: GENERAL Warn Stage(ft): 24.000
Type: Stage/Area

TIME DISCHARGE CURVE FROM ROYAL CONCRETE CONCEPTS OUTFALL STRUCTURE INTRODUCED AT THIS NODE (REF. LBFH)

Stage(ft)	Area(ac)

Name: RCC6 Base Flow(cfs): 0.000 Init Stage(ft): 23.000
Group: GENERAL Warn Stage(ft): 27.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: RCC7A Base Flow(cfs): 0.000 Init Stage(ft): 21.000
Group: GENERAL Warn Stage(ft): 28.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: RCC7B Base Flow(cfs): 0.000 Init Stage(ft): 21.000
Group: GENERAL Warn Stage(ft): 28.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: SBRR Base Flow(cfs): 0.000 Init Stage(ft): 21.000
Group: GENERAL Warn Stage(ft): 29.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: TC_E_AIRPORT Base Flow(cfs): 0.000 Init Stage(ft): 13.500
Group: GENERAL Warn Stage(ft): 21.000
Type: Time/Stage

Time(hrs)	Stage(ft)
0.00	13.500
200.00	13.500

Name: TW_ L62N Base Flow(cfs): 0.000 Init Stage(ft): 19.000
Group: GENERAL Warn Stage(ft): 25.000
Type: Time/Stage

Time(hrs)	Stage(ft)
0.00	19.000
200.00	19.000

==== Cross Sections ====

Name: R4A_152+19.24 Group: GENERAL
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
83.200	29.060	0.033000
111.900	18.300	0.033000
153.800	18.300	0.033000

194.100	30.500	0.033000

Name: R4A_156+50 Group: GENERAL
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
23.800	30.410	0.033000
41.800	18.410	0.033000
56.900	18.400	0.033000
87.000	27.480	0.033000

Name: R4A_158+40.53 Group: GENERAL
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
23.500	30.420	0.033000
42.800	18.410	0.033000
81.000	18.310	0.033000
107.000	24.850	0.033000

Name: R4A_168+55.25 Group: GENERAL
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
20.700	27.550	0.033000
53.200	19.380	0.033000
60.000	20.260	0.033000
70.500	27.690	0.033000

Name: R4A_170+26.95 Group: GENERAL
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
24.300	27.050	0.033000
55.200	18.920	0.033000
61.600	19.290	0.033000
74.200	27.060	0.033000

Name: R4A_176+50 Group: GENERAL
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
55.900	22.950	0.033000

74.200	18.230	0.033000
92.600	18.100	0.033000
114.600	24.230	0.033000

Name: R4A_180+63.38 Group: GENERAL
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
64.900	23.530	0.033000
73.100	19.150	0.033000
91.600	20.130	0.033000
108.200	24.440	0.033000

Name: R4A_181+80.74 Group: GENERAL
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
78.800	21.270	0.033000
90.200	18.480	0.033000
109.700	18.500	0.033000
132.600	28.660	0.033000

Name: R4A_182+66.98 Group: GENERAL
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
140.900	19.930	0.033000
148.400	18.150	0.033000
169.600	18.040	0.033000
189.700	25.890	0.033000

Name: R4A_186+47.13 Group: GENERAL
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
183.700	25.260	0.033000
193.900	20.410	0.033000
210.800	19.830	0.033000
217.800	23.670	0.033000

Name: R4A_188+19.52 Group: GENERAL
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N

64.200	20.000	0.033000
75.000	18.920	0.033000
82.800	19.000	0.033000
94.200	19.770	0.033000
101.500	25.520	0.033000

Name: R4A_196+25.34 Group: GENERAL
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
13.800	29.470	0.033000
24.500	20.180	0.033000
39.400	21.850	0.033000
66.100	29.670	0.033000

Name: R4A_200+90.20 Group: GENERAL
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
9.500	27.980	0.033000
23.400	20.270	0.033000
34.400	19.860	0.033000
53.600	27.820	0.033000

Name: R4A_205+64.58 Group: GENERAL
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
0.800	29.420	0.033000
15.000	22.940	0.033000
25.900	19.320	0.033000
45.500	28.700	0.033000

Name: R4A_208+94.26 Group: GENERAL
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
2.600	26.300	0.033000
16.900	19.250	0.033000
27.400	18.700	0.033000
40.200	26.580	0.033000

Name: R4A_210+17.80 Group: GENERAL
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
2.800	25.180	0.033000
16.500	18.880	0.033000
26.900	19.450	0.033000
48.300	29.160	0.033000

Name: R4A_217+09.38 Group: GENERAL
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
7.500	24.320	0.033000
18.100	19.300	0.033000
28.900	19.140	0.033000
41.200	23.340	0.033000

Name: R6_10+33.67 Group: GENERAL
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
13.400	33.570	0.033000
24.400	26.000	0.033000
29.400	25.610	0.033000
35.900	25.580	0.033000
45.400	32.810	0.033000

Name: R6_12+80.31 Group: GENERAL
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
11.300	34.390	0.033000
24.900	25.700	0.033000
33.500	24.810	0.033000
42.200	25.290	0.033000
51.500	30.100	0.033000

Name: R6_13+92.40 Group: GENERAL
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
6.500	33.650	0.033000
20.400	25.460	0.033000
29.000	24.860	0.033000
36.900	25.230	0.033000
47.900	30.390	0.033000

Name: R6_18+82.07 Group: GENERAL
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
3.700	33.120	0.033000
17.600	24.930	0.033000
26.700	23.970	0.033000
36.000	24.600	0.033000
48.500	32.450	0.033000

Name: R6_23+76.27 Group: GENERAL
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
11.700	30.260	0.033000
19.900	24.860	0.033000
28.500	24.160	0.033000
37.500	24.440	0.033000
48.100	28.990	0.033000

Name: R6_28+97.95 Group: GENERAL
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
7.900	31.970	0.033000
18.300	24.650	0.033000
29.100	23.700	0.033000
37.600	24.260	0.033000
47.900	29.680	0.033000

Name: R6_33+93.53 Group: GENERAL
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
4.600	33.140	0.033000
18.400	24.320	0.033000
29.200	23.710	0.033000
39.600	24.390	0.033000
49.100	27.120	0.033000

Name: R6_38+85.61 Group: GENERAL
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
8.500	34.580	0.033000
21.100	26.510	0.033000
28.100	26.070	0.033000
36.800	26.340	0.033000
48.000	32.520	0.033000

Name: R6_43+82.60 Group: GENERAL
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
7.800	31.860	0.033000
21.100	23.800	0.033000
30.100	23.230	0.033000
39.100	24.060	0.033000
49.500	29.290	0.033000

Name: R6_48+62.03 Group: GENERAL
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
9.000	30.900	0.033000
21.000	23.470	0.033000
30.100	22.760	0.033000
40.100	23.680	0.033000
48.200	28.200	0.033000

Name: R6_53+59.40 Group: GENERAL
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
0.100	33.830	0.033000
16.800	23.380	0.033000
29.300	22.760	0.033000
38.900	23.330	0.033000
47.500	29.080	0.033000

Name: R6_58+66.88 Group: GENERAL
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
6.600	32.850	0.033000
17.800	23.400	0.033000
27.200	22.380	0.033000
36.500	22.900	0.033000
45.500	30.130	0.033000

Name: R6_63+72.12 Group: GENERAL
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
7.100	31.980	0.033000
22.500	22.270	0.033000
28.500	21.820	0.033000
35.400	22.310	0.033000
48.100	28.900	0.033000

Name: R6_68+84.52 Group: GENERAL
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
6.700	30.160	0.033000
21.300	21.800	0.033000
30.100	20.700	0.033000
38.000	21.890	0.033000
45.600	27.190	0.033000

Name: R7_10+35.97 Group: GENERAL
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
2.400	28.700	0.033000
15.000	21.050	0.033000
22.100	20.490	0.033000
27.100	20.820	0.033000
34.800	28.010	0.033000

Name: R7_12+60.44 Group: GENERAL
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
5.800	29.390	0.033000
22.000	20.530	0.033000
27.300	20.110	0.033000
30.400	20.680	0.033000
43.200	27.130	0.033000

Name: R7_14+03.86 Group: GENERAL
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
2.600	28.490	0.033000
12.600	21.800	0.033000
19.600	20.400	0.033000
27.100	21.990	0.033000
33.000	26.920	0.033000

Name: R7_15+20.67 Group: GENERAL
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
13.500	26.310	0.033000
22.300	20.090	0.033000
34.900	20.580	0.033000
43.500	27.100	0.033000

Name: R7_15+76.36 Group: GENERAL
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
15.000	26.190	0.033000
24.100	20.390	0.033000
42.600	20.870	0.033000
52.300	26.660	0.033000

Name: R7_16+91.22 Group: GENERAL
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
9.000	28.150	0.033000
25.000	19.900	0.033000
36.600	19.360	0.033000
58.100	26.210	0.033000

Name: R7_19+24.53 Group: GENERAL
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
8.000	29.200	0.033000
29.900	18.000	0.033000
44.800	18.910	0.033000
60.700	29.130	0.033000

Name: R7_24+62.51 Group: GENERAL
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
11.100	27.860	0.033000
25.600	18.290	0.033000
43.300	18.290	0.033000
56.700	25.410	0.033000

Name: R7_30+05.92 Group: GENERAL
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
7.700	27.480	0.033000
23.900	18.250	0.033000
50.900	17.900	0.033000
65.900	25.720	0.033000

Name: R7_34+18.60 Group: GENERAL
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
17.500	26.290	0.033000
34.500	16.960	0.033000
45.900	16.390	0.033000
64.500	29.440	0.033000

Name: R7_39+02.26 Group: GENERAL
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
9.300	26.410	0.033000
28.500	16.420	0.033000
45.100	17.000	0.033000
64.100	28.170	0.033000

Name: R8_10+27.35 Group: GENERAL
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
16.800	24.340	0.033000
32.400	15.960	0.033000
41.800	16.140	0.033000
56.000	24.490	0.033000

Name: R8_13+00.62 Group: GENERAL
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
24.400	22.110	0.033000
34.200	14.170	0.033000
49.500	14.290	0.033000
62.100	22.410	0.033000

Name: R8_17+16.60 Group: GENERAL
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
10.700	20.860	0.033000
23.500	12.980	0.033000
34.100	11.960	0.033000
53.200	20.340	0.033000

Name: R8_19+82.41 Group: GENERAL
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
9.500	18.440	0.033000
16.900	10.360	0.033000
25.500	11.420	0.033000
31.400	15.790	0.033000

Name: R8_20+22.13 Group: GENERAL
Encroachment: No

Station(ft)	Elevation(ft)	Manning's N
11.100	19.140	0.033000
18.400	10.980	0.033000
25.500	11.120	0.033000
46.100	16.170	0.033000

Name: RCC-10+00 Group: GENERAL
Encroachment: No

RCC = ROYAL CONCRETE CONCEPTS PROJECT LIMITS

Station(ft)	Elevation(ft)	Manning's N
0.000	28.000	0.033000
3.000	27.000	0.033000
4.000	26.000	0.033000
5.000	25.000	0.033000

10.000	24.000	0.033000
20.000	23.000	0.033000
25.000	23.000	0.033000
34.000	24.000	0.033000
37.000	25.000	0.033000
38.000	26.000	0.033000
40.000	27.000	0.033000
42.000	28.000	0.033000

Name: RCC-14+89 Group: GENERAL
Encroachment: No

RCC = ROYAL CONCRETE CONCEPTS PROJECT LIMITS

Station(ft)	Elevation(ft)	Manning's N
0.000	30.000	0.033000
4.000	29.000	0.033000
9.000	28.000	0.033000
12.000	27.000	0.033000
15.000	26.000	0.033000
20.000	25.000	0.033000
25.000	24.000	0.033000
32.000	24.000	0.033000
42.000	25.000	0.033000
45.000	26.000	0.033000
50.000	27.000	0.033000
54.000	28.000	0.033000
59.000	29.000	0.033000

Name: RCC-15+96 Group: GENERAL
Encroachment: No

RCC = ROYAL CONCRETE CONCEPTS PROJECT LIMITS

Station(ft)	Elevation(ft)	Manning's N
0.000	29.000	0.033000
2.000	28.000	0.033000
4.000	27.000	0.033000
6.000	26.000	0.033000
9.000	25.000	0.033000
13.000	24.000	0.033000
19.000	23.000	0.033000
24.000	23.000	0.033000
30.000	24.000	0.033000
34.000	25.000	0.033000
36.000	26.000	0.033000
38.000	27.000	0.033000
40.000	28.000	0.033000
46.000	31.000	0.033000

Name: RCC-19+96 Group: GENERAL
Encroachment: No

RCC = ROYAL CONCRETE CONCEPTS PROJECT LIMITS

Station(ft)	Elevation(ft)	Manning's N
0.000	28.000	0.033000

7.000	24.000	0.033000
15.000	23.000	0.033000
20.000	23.000	0.033000
29.000	24.000	0.033000
32.000	25.000	0.033000
42.000	31.000	0.033000

Name: RCC-22+76 Group: GENERAL
Encroachment: No

RCC = ROYAL CONCRETE CONCEPTS PROJECT LIMITS

Station(ft)	Elevation(ft)	Manning's N
0.000	24.000	0.033000
5.000	23.000	0.033000
13.000	22.000	0.033000
22.000	22.000	0.033000
32.000	23.000	0.033000
37.000	24.000	0.033000
44.000	28.000	0.033000

Name: RCC-26+59 Group: GENERAL
Encroachment: No

RCC = ROYAL CONCRETE CONCEPTS PROJECT LIMITS

Station(ft)	Elevation(ft)	Manning's N
0.000	28.000	0.033000
3.000	27.000	0.033000
5.000	26.000	0.033000
9.000	25.000	0.033000
14.000	24.000	0.033000
23.000	23.000	0.033000
32.000	23.000	0.033000
43.000	24.000	0.033000
46.000	25.000	0.033000
55.000	28.000	0.033000

Name: RCC-27+09 Group: GENERAL
Encroachment: No

RCC = ROYAL CONCRETE CONCEPTS PROJECT LIMITS

Station(ft)	Elevation(ft)	Manning's N
0.000	28.000	0.033000
4.000	24.000	0.033000
12.000	23.000	0.033000
19.000	22.000	0.033000
25.000	21.000	0.033000
27.000	21.000	0.033000
33.000	22.000	0.033000
38.000	23.000	0.033000
42.000	24.000	0.033000

Name: RCC-31+19 Group: GENERAL
Encroachment: No

2 = ROYAL CONCRETE CONCEPTS PROJECT LIMITS

Station(ft)	Elevation(ft)	Manning's N
0.000	31.000	0.033000
7.000	30.800	0.033000
17.000	29.900	0.033000
20.000	29.400	0.033000
27.000	29.100	0.033000
37.000	26.500	0.033000
43.000	26.700	0.033000
47.000	23.500	0.033000
48.000	21.000	0.033000
51.000	24.500	0.033000
52.000	22.200	0.033000
55.000	25.100	0.033000
67.000	23.800	0.033000
74.000	22.700	0.033000
75.000	22.900	0.033000
78.000	29.400	0.033000
95.000	30.400	0.033000

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==== Pipes ====

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Name: 2-24 CMP_E_US9 From Node: BASSWOOD Length(ft): 50.00
Group: GENERAL To Node: GN04 Count: 2
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: None
Entrance Loss Coef: 0.50
Exit Loss Coef: 1.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	24.00	24.00
Rise(in):	24.00	24.00
Invert(ft):	29.000	29.000
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

D/W CMP US OF US 98 3- 54"

INVERTS & LENGTHS WERE ASSUMED;

US 98 3-54" NOT MODELED AS THEY ARE LESS RESTRICTIVE THAN EXISTING 24" CMP'S

LINK TURNED OFF AND REPLACED W.LAGER CULVERTS

Name: AIRP_INDPK2_60 From Node: AIRPORT Length(ft): 1000.00
Group: GENERAL To Node: AIRP_INUDSTRIAL Count: 1
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.50
Exit Loss Coef: 0.00

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	60.00	60.00
Rise(in):	60.00	60.00

Invert(ft):	23.000	23.000	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

INVERTS & LENGTH ASSUMED; 60" CULVERT FROM EASTERLY RUNWAY

Name: AIRP_INDPK_30 From Node: AIRPORT Length(ft): 300.00
Group: GENERAL To Node: AIRP_INUDSTRIAL Count: 1
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.50
Exit Loss Coef: 1.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	30.00	30.00
Rise(in):	30.00	30.00
Invert(ft):	26.000	26.000
Manning's N:	0.012000	0.012000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

PER CAS PROJECT NO 95-0198

Name: AIRPT_APD12_30 From Node: AIRPORT Length(ft): 50.00
Group: GENERAL To Node: APD_12 Count: 1
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.50
Exit Loss Coef: 1.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	36.00	36.00
Rise(in):	36.00	36.00
Invert(ft):	24.690	24.690
Manning's N:	0.013000	0.013000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

LENGTH & US INVERT ASSUMED

Name: AIRPT_APD12_60 From Node: AIRPORT Length(ft): 50.00

Group: GENERAL To Node: APD_11 Count: 1
Friction Equation: Average Conveyance

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	60.00	60.00
Rise(in):	60.00	60.00
Invert(ft):	25.860	25.860
Manning's N:	0.024000	0.024000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.50
Exit Loss Coef: 1.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

LENGTH & US INVERT ASSUMED

Name: BCSR70_4A05A From Node: 4A_06_BC_SR70 Length(ft): 58.00
Group: GENERAL To Node: 4A_05 Count: 1
Friction Equation: Average Conveyance

	UPSTREAM	DOWNSTREAM
Geometry:	Rectangular	Rectangular
Span(in):	126.00	126.00
Rise(in):	60.00	60.00
Invert(ft):	20.700	20.800
Manning's N:	0.012000	0.012000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.50
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Rectangular Box: 0° wingwall flares

Downstream FHWA Inlet Edge Description:
Rectangular Box: 0° wingwall flares

BOX CULVERT 1 @ SR 70 WEST OF SW 28 AVE

Name: BCSR70_4A05B From Node: 4A_06_BC_SR70 Length(ft): 58.00
Group: GENERAL To Node: 4A_05 Count: 1
Friction Equation: Average Conveyance

	UPSTREAM	DOWNSTREAM
Geometry:	Rectangular	Rectangular
Span(in):	138.00	138.00
Rise(in):	60.00	60.00
Invert(ft):	20.700	20.800
Manning's N:	0.012000	0.012000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.50
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Rectangular Box: 0° wingwall flares

Downstream FHWA Inlet Edge Description:

Rectangular Box: 0° wingwall flares

BOX CULVERT 2 @ SR 70 WEST OF SW 28 AVE

Name:	BWOOD_AIRPORT	From Node:	BASSWOOD	Length(ft):	100.00
Group:	GENERAL	To Node:	AIRPORT	Count:	1
				Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Automatic
Geometry:	Circular	Circular		Flow:	Both
Span(in):	54.00	54.00		Entrance Loss Coef:	0.50
Rise(in):	54.00	54.00		Exit Loss Coef:	1.00
Invert(ft):	28.000	28.000		Bend Loss Coef:	0.00
Manning's N:	0.024000	0.024000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

54" @ SW 16 AVE; INVERTS & LENGTH ASSUMED

Name:	EXIST_CMP_HCF	From Node:	GC6A	Length(ft):	40.00
Group:	GENERAL	To Node:	GC6B	Count:	1
				Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Automatic
Geometry:	Circular	Circular		Flow:	None
Span(in):	60.00	60.00		Entrance Loss Coef:	0.75
Rise(in):	60.00	60.00		Exit Loss Coef:	0.00
Invert(ft):	13.700	13.700		Bend Loss Coef:	0.00
Manning's N:	0.024000	0.024000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

TURNED OFF & REPLACED W/SHEET PILE WEIR

Name:	GN06_4A_09	From Node:	GN06	Length(ft):	50.00
Group:	GENERAL	To Node:	4A_09	Count:	1
				Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Automatic
Geometry:	Circular	Circular		Flow:	Both
Span(in):	24.00	24.00		Entrance Loss Coef:	0.50
Rise(in):	24.00	24.00		Exit Loss Coef:	1.00
Invert(ft):	24.290	24.290		Bend Loss Coef:	0.00
Manning's N:	0.024000	0.024000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

US INVERT & LENGTH ASSUME

Name:	GN07_L62N	From Node:	GN07	Length(ft):	80.00
Group:	GENERAL	To Node:	TW_ L62N	Count:	1
				Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Automatic
Geometry:	Circular	Circular		Flow:	Both
Span(in):	24.00	24.00		Entrance Loss Coef:	0.50
Rise(in):	24.00	24.00		Exit Loss Coef:	1.00
Invert(ft):	24.000	24.000		Bend Loss Coef:	0.00
Manning's N:	0.024000	0.024000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

FROM FIELD OBSERVATION; DIMENSIONS & ELEVATIONS ASSUMED

Name:	GN09_APD03A	From Node:	GN09	Length(ft):	50.00
Group:	GENERAL	To Node:	APD_03	Count:	1
				Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Automatic
Geometry:	Circular	Circular		Flow:	Both
Span(in):	18.00	18.00		Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00		Exit Loss Coef:	1.00
Invert(ft):	24.900	24.900		Bend Loss Coef:	0.00
Manning's N:	0.024000	0.024000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

CULVERT E OF 7 AVE (LENGTH & US INVERT ASSUMED) NORTH OF AIRPORT DITCH

Name:	GN09_APD03B	From Node:	GN09	Length(ft):	50.00
Group:	GENERAL	To Node:	APD_03	Count:	1
				Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Automatic
Geometry:	Circular	Circular		Flow:	Both
Span(in):	18.00	18.00		Entrance Loss Coef:	0.50

Rise(in):	18.00	18.00	Exit Loss Coef:	1.00
Invert(ft):	23.190	23.190	Bend Loss Coef:	0.00
Manning's N:	0.024000	0.024000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

CULVERT W OF 7 AVE (LENGTH & US INVERT ASSUMED) NORTH OF AIRPORT DITCH

Name:	GN09_APD10	From Node: GN09	Length(ft):	50.00
Group:	GENERAL	To Node: APD_10	Count:	1
			Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Automatic
Geometry:	Circular	Circular	Flow:	Both
Span(in):	18.00	18.00	Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00	Exit Loss Coef:	1.00
Invert(ft):	26.810	26.810	Bend Loss Coef:	0.00
Manning's N:	0.024000	0.024000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

LENGTH & US INVERT ASSUMED

Name:	GN09_APD8	From Node: GN09	Length(ft):	50.00
Group:	GENERAL	To Node: APD_08	Count:	1
			Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Automatic
Geometry:	Circular	Circular	Flow:	Both
Span(in):	15.00	15.00	Entrance Loss Coef:	0.50
Rise(in):	15.00	15.00	Exit Loss Coef:	1.00
Invert(ft):	21.670	21.670	Bend Loss Coef:	0.00
Manning's N:	0.024000	0.024000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

LENGTH & US INVERT ASSUMED

Name:	GN09_APD9	From Node:	GN09	Length(ft):	50.00
Group:	GENERAL	To Node:	APD_09	Count:	1
				Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Automatic
Geometry:	Circular	Circular		Flow:	Both
Span(in):	18.00	18.00		Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00		Exit Loss Coef:	1.00
Invert(ft):	25.070	25.070		Bend Loss Coef:	0.00
Manning's N:	0.024000	0.024000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

LENGTH & US INVERT ASSUMED

Name:	GN10_APD03A	From Node:	GN10	Length(ft):	50.00
Group:	GENERAL	To Node:	APD_03	Count:	1
				Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Automatic
Geometry:	Circular	Circular		Flow:	Both
Span(in):	36.00	36.00		Entrance Loss Coef:	0.50
Rise(in):	36.00	36.00		Exit Loss Coef:	1.00
Invert(ft):	23.480	23.480		Bend Loss Coef:	0.00
Manning's N:	0.024000	0.024000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

CULVERT E OF 7 AVE (LENGTH & US INVERT ASSUMED) SOUTH OF AIRPORT DITCH

Name:	GN10_APD03B	From Node:	GN10	Length(ft):	50.00
Group:	GENERAL	To Node:	APD_07	Count:	1
				Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Automatic
Geometry:	Circular	Circular		Flow:	Both
Span(in):	24.00	24.00		Entrance Loss Coef:	0.50
Rise(in):	24.00	24.00		Exit Loss Coef:	1.00
Invert(ft):	24.050	24.050		Bend Loss Coef:	0.00
Manning's N:	0.013000	0.013000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

LENGTH & US INVERT ASSUMED

Name:	GN10_APD12	From Node:	GN10	Length(ft): 50.00
Group:	GENERAL	To Node:	APD_10	Count: 1
				Friction Equation: Average Conveyance
	UPSTREAM	DOWNSTREAM		Solution Algorithm: Automatic
Geometry:	Circular	Circular		Flow: Both
Span(in):	18.00	18.00		Entrance Loss Coef: 0.50
Rise(in):	18.00	18.00		Exit Loss Coef: 1.00
Invert(ft):	29.000	29.000		Bend Loss Coef: 0.00
Manning's N:	0.024000	0.024000		Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

LENGTH & US INVERT ASSUMED

Name:	GN10_APD9	From Node:	GN10	Length(ft): 50.00
Group:	GENERAL	To Node:	APD_09	Count: 1
				Friction Equation: Average Conveyance
	UPSTREAM	DOWNSTREAM		Solution Algorithm: Automatic
Geometry:	Circular	Circular		Flow: Both
Span(in):	18.00	18.00		Entrance Loss Coef: 0.50
Rise(in):	18.00	18.00		Exit Loss Coef: 1.00
Invert(ft):	27.130	27.130		Bend Loss Coef: 0.00
Manning's N:	0.024000	0.024000		Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

LENGTH & US INVERT ASSUMED

Name:	NW9AVEBXCULVRT	From Node:	APD_10	Length(ft): 55.00
Group:	GENERAL	To Node:	APD_09	Count: 1
				Friction Equation: Average Conveyance
	UPSTREAM	DOWNSTREAM		Solution Algorithm: Automatic
Geometry:	Rectangular	Rectangular		Flow: Both
Span(in):	120.00	120.00		Entrance Loss Coef: 0.50
Rise(in):	72.00	72.00		Exit Loss Coef: 1.00
Invert(ft):	22.480	22.270		Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Rectangular Box: 0° wingwall flares

Downstream FHWA Inlet Edge Description:
Rectangular Box: 0° wingwall flares

NW 9 AVE BOX CULVERT

Name:	PRO_TWIN_36_BW	From Node:	BASSWOOD	Length(ft):	50.00
Group:	GENERAL	To Node:	GN04	Count:	2
				Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Automatic
Geometry:	Circular	Circular		Flow:	Both
Span(in):	36.00	36.00		Entrance Loss Coef:	0.50
Rise(in):	36.00	36.00		Exit Loss Coef:	0.00
Invert(ft):	27.000	27.000		Bend Loss Coef:	0.00
Manning's N:	0.013000	0.013000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

VERT REPLACEMENT

Name:	RCC6-RCC7A	From Node:	RCC6	Length(ft):	50.00
Group:	GENERAL	To Node:	RCC7A	Count:	3
				Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Automatic
Geometry:	Circular	Circular		Flow:	Both
Span(in):	42.00	42.00		Entrance Loss Coef:	0.75
Rise(in):	42.00	42.00		Exit Loss Coef:	0.00
Invert(ft):	22.500	22.300		Bend Loss Coef:	0.00
Manning's N:	0.013000	0.013000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	RCC7B_SBRR	From Node:	RCC7B	Length(ft):	52.00
Group:	GENERAL	To Node:	SBRR	Count:	3
				Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Automatic
Geometry:	Circular	Circular		Flow:	Both

Span(in):	42.00	42.00
Rise(in):	42.00	42.00
Invert(ft):	21.500	21.500
Manning's N:	0.013000	0.013000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Entrance Loss Coef: 0.50
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

PROPOSED RCP UNDER RR BY RCC (LBFH)

Name: SR15_BC1 From Node: GC5 Length(ft): 130.00
Group: GENERAL To Node: PRO_POND Count: 1
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.50
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Rectangular	Rectangular
Span(in):	120.00	120.00
Rise(in):	72.00	72.00
Invert(ft):	16.070	16.070
Manning's N:	0.012000	0.012000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Rectangular Box: 0° wingwall flares

Downstream FHWA Inlet Edge Description:
Rectangular Box: 0° wingwall flares

LENGTH ESTIMATED

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==== Channels ====

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Name: C_4A_01_L62N From Node: 4A_01 Length(ft): 431.00
Group: GENERAL To Node: TW_ L62N Count: 1
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.600
Expansion Coef: 0.800
Entrance Loss Coef: 0.000
Exit Loss Coef: 1.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	18.400	18.300
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	R4A_156+50	R4A_152+19.24
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		

RtSdSlp(h/v):

Name: C_4A_02_4A_01 From Node: 4A_02 Length(ft): 191.00
Group: GENERAL To Node: 4A_01 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	18.300	18.300
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	R4A_158+40.53	R4A_156+50
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.600
Expansion Coef: 0.800
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Name: C_4A_03_4A_02 From Node: 4A_03 Length(ft): 1014.00
Group: GENERAL To Node: 4A_02 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	19.400	18.300
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	R4A_168+55.25	R4A_158+40.53
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.600
Expansion Coef: 0.800
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Name: C_4A_04_4A_03 From Node: 4A_04 Length(ft): 795.00
Group: GENERAL To Node: 4A_03 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	18.100	19.400
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.600
Expansion Coef: 0.800
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000

Main XSec:	R4A_176+50	R4A_168+55.25	Outlet Ctrl Spec:	Use dc or tw
AuxElev1(ft):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Aux XSec1:			Stabilizer Option:	None
AuxElev2(ft):	0.000	0.000		
Aux XSec2:				
Top Width(ft):				
Depth(ft):				
Bot Width(ft):				
LtSdSlp(h/v):				
RtSdSlp(h/v):				

Name:	C_4A_05_4A_04	From Node:	4A_05	Length(ft):	617.00
Group:	GENERAL	To Node:	4A_04	Count:	1

	UPSTREAM	DOWNSTREAM		
Geometry:	Irregular	Irregular	Friction Equation:	Automatic
Invert(ft):	18.100	18.100	Solution Algorithm:	Automatic
TClpInitZ(ft):	9999.000	9999.000	Flow:	Both
Manning's N:			Contraction Coef:	0.100
Top Clip(ft):	0.000	0.000	Expansion Coef:	0.300
Bot Clip(ft):	0.000	0.000	Entrance Loss Coef:	0.000
Main XSec:	R4A_182+66.98	R4A_176+50	Exit Loss Coef:	0.000
AuxElev1(ft):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
Aux XSec1:			Inlet Ctrl Spec:	Use dn
AuxElev2(ft):	0.000	0.000	Stabilizer Option:	None
Aux XSec2:				
Top Width(ft):				
Depth(ft):				
Bot Width(ft):				
LtSdSlp(h/v):				
RtSdSlp(h/v):				

DOWNSTREAM OF SR 70 BOX CULVERT

Name:	C_4A_07_4A_06	From Node:	4A_07	Length(ft):	187.00
Group:	GENERAL	To Node:	4A_06_BC_SR70	Count:	1

	UPSTREAM	DOWNSTREAM		
Geometry:	Irregular	Irregular	Friction Equation:	Average Conveyance
Invert(ft):	19.830	19.830	Solution Algorithm:	Automatic
TClpInitZ(ft):	9999.000	9999.000	Flow:	Both
Manning's N:			Contraction Coef:	0.100
Top Clip(ft):	0.000	0.000	Expansion Coef:	0.000
Bot Clip(ft):	0.000	0.000	Entrance Loss Coef:	0.000
Main XSec:	R4A_186+47.13	R4A_186+47.13	Exit Loss Coef:	0.000
AuxElev1(ft):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
Aux XSec1:			Inlet Ctrl Spec:	Use dn
AuxElev2(ft):	0.000	0.000	Stabilizer Option:	None
Aux XSec2:				
Top Width(ft):				
Depth(ft):				
Bot Width(ft):				
LtSdSlp(h/v):				
RtSdSlp(h/v):				

STARTED THIS RUN @ STATION 187+00

Name:	C_4A_08_4A_07	From Node:	4A_08	Length(ft):	978.00

Group: GENERAL To Node: 4A_07 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	20.200	19.830
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	R4A_196+25.34	R4A_186+47.13
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.600
Expansion Coef: 0.800
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

THIS RUN ENDS AT STATION 187+00

Name: C_4A_09_4A_08 From Node: 4A_09 Length(ft): 1393.00
Group: GENERAL To Node: 4A_08 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	18.880	20.200
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
ot Clip(ft):	0.000	0.000
Main XSec:	R4A_210+17.80	R4A_196+25.34
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.600
Expansion Coef: 0.800
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Name: C_4A_10_4A_09 From Node: 4A_10 Length(ft): 691.00
Group: GENERAL To Node: 4A_09 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	19.140	18.880
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	R4A_217+09.38	R4A_210+17.80
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
p Width(ft):		

Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.100
Expansion Coef: 0.300
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Depth(ft):
Bot Width(ft):
LtSdSlp(h/v):
RtSdSlp(h/v):

Name: C_APD02_APD01 From Node: APD_02 Length(ft): 543.00
Group: GENERAL To Node: APD_01 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	18.290	17.900
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	R7_24+62.51	R7_30+05.92
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.600
Expansion Coef: 0.800
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Name: C_APD03_APD02 From Node: APD_03 Length(ft): 538.00
Group: GENERAL To Node: APD_02 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	18.000	18.290
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	R7_19+24.53	R7_24+62.51
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.100
Expansion Coef: 0.300
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Name: C_APD04_APD03 From Node: APD_04 Length(ft): 234.00
Group: GENERAL To Node: APD_03 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	19.360	18.000
TClpInitZ(ft):	9999.000	9999.000

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.600

Manning's N:			Expansion Coef:	0.800
Top Clip(ft):	0.000	0.000	Entrance Loss Coef:	0.000
Bot Clip(ft):	0.000	0.000	Exit Loss Coef:	0.000
Main XSec:	R7_16+91.22	R7_19+24.53	Outlet Ctrl Spec:	Use dc or tw
AuxElev1(ft):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Aux XSec1:			Stabilizer Option:	None
AuxElev2(ft):	0.000	0.000		
Aux XSec2:				
Top Width(ft):				
Depth(ft):				
Bot Width(ft):				
LtSdSlp(h/v):				
RtSdSlp(h/v):				

Name:	C_APD05_APD04	From Node:	APD_05	Length(ft):	115.00
Group:	GENERAL	To Node:	APD_04	Count:	1

	UPSTREAM	DOWNSTREAM		
Geometry:	Irregular	Irregular	Friction Equation:	Automatic
Invert(ft):	20.390	19.360	Solution Algorithm:	Automatic
TClpInitZ(ft):	9999.000	9999.000	Flow:	Both
Manning's N:			Contraction Coef:	0.600
Top Clip(ft):	0.000	0.000	Expansion Coef:	0.800
Bot Clip(ft):	0.000	0.000	Entrance Loss Coef:	0.000
Main XSec:	R7_15+76.36	R7_16+91.22	Exit Loss Coef:	0.000
AuxElev1(ft):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
Aux XSec1:			Inlet Ctrl Spec:	Use dn
AuxElev2(ft):	0.000	0.000	Stabilizer Option:	None
Aux XSec2:				
Top Width(ft):				
Depth(ft):				
Bot Width(ft):				
LtSdSlp(h/v):				
RtSdSlp(h/v):				

Name:	C_APD06_APD05	From Node:	APD_06	Length(ft):	56.00
Group:	GENERAL	To Node:	APD_05	Count:	1

	UPSTREAM	DOWNSTREAM		
Geometry:	Irregular	Irregular	Friction Equation:	Average Conveyance
Invert(ft):	20.090	20.390	Solution Algorithm:	Automatic
TClpInitZ(ft):	9999.000	9999.000	Flow:	Both
Manning's N:			Contraction Coef:	0.600
Top Clip(ft):	0.000	0.000	Expansion Coef:	0.800
Bot Clip(ft):	0.000	0.000	Entrance Loss Coef:	0.000
Main XSec:	R7_15+20.67	R7_15+76.36	Exit Loss Coef:	0.000
AuxElev1(ft):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
Aux XSec1:			Inlet Ctrl Spec:	Use dn
AuxElev2(ft):	0.000	0.000	Stabilizer Option:	None
Aux XSec2:				
Top Width(ft):				
Depth(ft):				
Bot Width(ft):				
LtSdSlp(h/v):				
RtSdSlp(h/v):				

Name: C_APD11_APD10 | From Node: APD_11 | Length(ft): 69.00
Group: GENERAL | To Node: APD_10 | Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	20.700	20.700
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	R6_68+84.52	R6_68+84.52
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.100
Expansion Coef: 0.300
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Name: C_APD12_APD11 | From Node: APD_12 | Length(ft): 483.00
Group: GENERAL | To Node: APD_11 | Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	21.800	20.700
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	R6_63+72.12	R6_68+84.52
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.100
Expansion Coef: 0.300
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Name: C_APD13_APD12 | From Node: APD_13 | Length(ft): 505.00
Group: GENERAL | To Node: APD_12 | Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	22.400	21.800
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	R6_58+66.88	R6_63+72.12
AuxElev1(ft):	0.000	0.000
Aux XSec1:		

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.100
Expansion Coef: 0.300
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Name: C_APD14_APD13 | From Node: APD_14 | Length(ft): 508.00
Group: GENERAL | To Node: APD_13 | Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	22.760	22.400
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	R6_53+59.40	R6_58+66.88
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.100
Expansion Coef: 0.300
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Name: C_APD15_APD14 | From Node: APD_15 | Length(ft): 1473.00
Group: GENERAL | To Node: APD_14 | Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	26.100	22.800
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	R6_38+85.61	R6_53+59.40
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.600
Expansion Coef: 0.800
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Name: C_APD16_APD15 | From Node: APD_16 | Length(ft): 2852.00
Group: GENERAL | To Node: APD_15 | Count: 1

	UPSTREAM	DOWNSTREAM

Friction Equation: Average Conveyance

Geometry:	Irregular	Irregular
Invert(ft):	25.600	26.100
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	R6_10+33.67	R6_38+85.61
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Solution Algorithm:	Automatic
Flow:	Both
Contraction Coef:	0.100
Expansion Coef:	0.300
Entrance Loss Coef:	0.000
Exit Loss Coef:	0.000
Outlet Ctrl Spec:	Use dc or tw
Inlet Ctrl Spec:	Use dn
Stabilizer Option:	None

Name:	C_APD1_GC5	From Node:	APD_01	Length(ft):	484.00
Group:	GENERAL	To Node:	GC5	Count:	1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	16.390	16.420
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	R7_34+18.60	R7_39+02.26
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation:	Automatic
Solution Algorithm:	Automatic
Flow:	Both
Contraction Coef:	0.600
Expansion Coef:	0.800
Entrance Loss Coef:	0.000
Exit Loss Coef:	0.000
Outlet Ctrl Spec:	Use dc or tw
Inlet Ctrl Spec:	Use dn
Stabilizer Option:	None

Name:	C_APD7_APD6	From Node:	APD_07	Length(ft):	117.00
Group:	GENERAL	To Node:	APD_06	Count:	1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	20.400	20.100
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	R7_14+03.86	R7_15+20.67
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		

Friction Equation:	Automatic
Solution Algorithm:	Automatic
Flow:	Both
Contraction Coef:	0.600
Expansion Coef:	0.800
Entrance Loss Coef:	0.000
Exit Loss Coef:	0.000
Outlet Ctrl Spec:	Use dc or tw
Inlet Ctrl Spec:	Use dn
Stabilizer Option:	None

RtSdSlp(h/v):

Name: C_APD8_APD7 From Node: APD_08 Length(ft): 144.00
Group: GENERAL To Node: APD_07 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	20.100	20.400
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	R7_12+60.44	R7_14+03.86
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.100
Expansion Coef: 0.300
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Name: C_APD9_APD8 From Node: APD_09 Length(ft): 224.00
Group: GENERAL To Node: APD_08 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	20.500	20.100
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	R7_10+35.97	R7_12+60.44
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.600
Expansion Coef: 0.800
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Name: C_R8_C1 From Node: GC1 Length(ft): 39.70
Group: GENERAL To Node: TC_E_AIRPORT Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	10.360	10.980
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: None
Contraction Coef: 0.600
Expansion Coef: 0.800
Entrance Loss Coef: 0.000
Exit Loss Coef: 1.000

Main XSec:	R8_19+82.41	R8_20+22.13	Outlet Ctrl Spec:	Use dc or tw
AuxElev1(ft):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Aux XSec1:			Stabilizer Option:	None
AuxElev2(ft):	0.000	0.000		
Aux XSec2:				
Top Width(ft):				
Depth(ft):				
Bot Width(ft):				
LtSdSlp(h/v):				
RtSdSlp(h/v):				

TURNED OFF AND REPLACED W/NEW SECTION

Name:	C_R8_C2	From Node: GC2	Length(ft):	265.00
Group:	GENERAL	To Node: GC1	Count:	1
	UPSTREAM	DOWNSTREAM	Friction Equation:	Automatic
Geometry:	Irregular	Irregular	Solution Algorithm:	Automatic
Invert(ft):	11.960	10.360	Flow:	None
TClpInitZ(ft):	9999.000	9999.000	Contraction Coef:	0.600
Manning's N:			Expansion Coef:	0.800
Top Clip(ft):	0.000	0.000	Entrance Loss Coef:	0.000
Bot Clip(ft):	0.000	0.000	Exit Loss Coef:	0.000
Main XSec:	R8_17+16.60	R8_19+82.41	Outlet Ctrl Spec:	Use dc or tw
AuxElev1(ft):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Aux XSec1:			Stabilizer Option:	None
AuxElev2(ft):	0.000	0.000		
Aux XSec2:				
Top Width(ft):				
Depth(ft):				
Bot Width(ft):				
LtSdSlp(h/v):				
RtSdSlp(h/v):				

TURNED OFF AND REPLACED W/NEW SECTION

Name:	C_R8_C3	From Node: GC6B	Length(ft):	227.00
Group:	GENERAL	To Node: GC2	Count:	1
	UPSTREAM	DOWNSTREAM	Friction Equation:	Automatic
Geometry:	Irregular	Irregular	Solution Algorithm:	Automatic
Invert(ft):	14.170	11.960	Flow:	None
TClpInitZ(ft):	9999.000	9999.000	Contraction Coef:	0.600
Manning's N:			Expansion Coef:	0.800
Top Clip(ft):	0.000	0.000	Entrance Loss Coef:	0.000
Bot Clip(ft):	0.000	0.000	Exit Loss Coef:	0.000
Main XSec:	R8_13+00.62	R8_17+16.60	Outlet Ctrl Spec:	Use dc or tw
AuxElev1(ft):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Aux XSec1:			Stabilizer Option:	None
AuxElev2(ft):	0.000	0.000		
Aux XSec2:				
Top Width(ft):				
Depth(ft):				
Bot Width(ft):				
LtSdSlp(h/v):				
RtSdSlp(h/v):				

TURNED OFF AND REPLACED W/NEW SECTION

Name:	C_R8_C4	From Node: GC3	Length(ft):	150.00

Group: GENERAL To Node: GC6A Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	13.800	13.600
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	R8_13+00.62	R8_13+00.62
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: None
Contraction Coef: 0.100
Expansion Coef: 0.300
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Name: C_R8_C5 From Node: GC4 Length(ft): 273.27
Group: GENERAL To Node: GC3 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	15.960	14.170
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	R8_10+27.35	R8_13+00.62
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: None
Contraction Coef: 0.600
Expansion Coef: 0.800
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Name: C_RCC1_RCC2 From Node: RCC1 Length(ft): 489.00
Group: GENERAL To Node: RCC2 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	23.000	24.000
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	RCC-10+00	RCC-14+89
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		

Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.100
Expansion Coef: 0.300
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Depth(ft):
Bot Width(ft):
LtSdSlp(h/v):
RtSdSlp(h/v):

Name: C_RCC2_RCC3 | From Node: RCC2 | Length(ft): 107.00
Group: GENERAL | To Node: RCC3 | Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	24.000	23.000
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	RCC-14+89	RCC-15+96
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.100
Expansion Coef: 0.300
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Name: C_RCC3_RCC4 | From Node: RCC3 | Length(ft): 400.00
Group: GENERAL | To Node: RCC4 | Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	23.000	23.000
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	RCC-15+96	RCC-19+96
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.100
Expansion Coef: 0.300
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Name: C_RCC4_RCC5 | From Node: RCC4 | Length(ft): 280.00
Group: GENERAL | To Node: RCC5 | Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	23.000	22.000
TClpInitZ(ft):	9999.000	9999.000

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.100

Manning's N:			Expansion Coef:	0.300
Top Clip(ft):	0.000	0.000	Entrance Loss Coef:	0.000
Bot Clip(ft):	0.000	0.000	Exit Loss Coef:	0.000
Main XSec:	RCC-19+96	RCC-22+76	Outlet Ctrl Spec:	Use dc or tw
AuxElev1(ft):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Aux XSec1:			Stabilizer Option:	None
AuxElev2(ft):	0.000	0.000		
Aux XSec2:				
Top Width(ft):				
Depth(ft):				
Bot Width(ft):				
LtSdSlp(h/v):				
RtSdSlp(h/v):				

Name:	C_RCC5_RCC6	From Node:	RCC5	Length(ft):	383.00
Group:	GENERAL	To Node:	RCC6	Count:	1

	UPSTREAM	DOWNSTREAM		
Geometry:	Irregular	Irregular	Friction Equation:	Average Conveyance
Invert(ft):	22.000	23.000	Solution Algorithm:	Automatic
TClpInitZ(ft):	9999.000	9999.000	Flow:	Both
Manning's N:			Contraction Coef:	0.600
Top Clip(ft):	0.000	0.000	Expansion Coef:	0.800
Bot Clip(ft):	0.000	0.000	Entrance Loss Coef:	0.000
Main XSec:	RCC-22+76	RCC-26+59	Exit Loss Coef:	0.000
AuxElev1(ft):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
Aux XSec1:			Inlet Ctrl Spec:	Use dn
AuxElev2(ft):	0.000	0.000	Stabilizer Option:	None
Aux XSec2:				
Top Width(ft):				
Depth(ft):				
Bot Width(ft):				
LtSdSlp(h/v):				
RtSdSlp(h/v):				

Name:	C_RCC7A_RCC7B	From Node:	RCC7A	Length(ft):	410.00
Group:	GENERAL	To Node:	RCC7B	Count:	1

	UPSTREAM	DOWNSTREAM		
Geometry:	Irregular	Irregular	Friction Equation:	Average Conveyance
Invert(ft):	21.000	21.000	Solution Algorithm:	Automatic
TClpInitZ(ft):	9999.000	9999.000	Flow:	Both
Manning's N:			Contraction Coef:	0.600
Top Clip(ft):	0.000	0.000	Expansion Coef:	0.800
Bot Clip(ft):	0.000	0.000	Entrance Loss Coef:	0.000
Main XSec:	RCC-27+09	RCC-31+19	Exit Loss Coef:	0.000
AuxElev1(ft):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
Aux XSec1:			Inlet Ctrl Spec:	Use dn
AuxElev2(ft):	0.000	0.000	Stabilizer Option:	None
Aux XSec2:				
Top Width(ft):				
Depth(ft):				
Bot Width(ft):				
LtSdSlp(h/v):				
RtSdSlp(h/v):				

Name: C_SBRR_4A_10 From Node: SBRR Length(ft): 396.00
Group: GENERAL To Node: 4A_10 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Irregular	Irregular
Invert(ft):	21.000	19.140
TClpInitZ(ft):	9999.000	9999.000
Manning's N:		
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:	RCC-31+19	R4A_217+09.38
AuxElev1(ft):	0.000	0.000
Aux XSec1:		
AuxElev2(ft):	0.000	0.000
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.600
Expansion Coef: 0.800
Entrance Loss Coef: 0.000
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Name: PRO_CH BY HCF From Node: GC6B Length(ft): 532.00
Group: GENERAL To Node: TC_E_AIRPORT Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Trapezoidal	Trapezoidal
Invert(ft):	14.000	10.000
TClpInitZ(ft):	9999.000	9999.000
Manning's N:	0.033000	0.033000
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:		
AuxElev1(ft):		
Aux XSec1:		
AuxElev2(ft):		
Aux XSec2:		
Top Width(ft):		
Depth(ft):		
Bot Width(ft):	20.000	20.000
LtSdSlp(h/v):	2.00	2.00
RtSdSlp(h/v):	2.00	2.00

Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: None
Contraction Coef: 0.100
Expansion Coef: 0.300
Entrance Loss Coef: 0.000
Exit Loss Coef: 1.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

PROPOSED TRAPEZIODAL SECTION

LINK WAS TURNED OFF WHEN DETENTION POND OPTION WAS ANALYZED

==========

==== Drop Structures ====

==========

Name: AIP_CONTROL_ST From Node: AIRP_INUDSTRIAL Length(ft): 180.00
Group: GENERAL To Node: APD_15 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	18.00	18.00
Rise(in):	18.00	18.00
Invert(ft):	27.580	27.580

Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.500
Exit Loss Coef: 1.000

```
  Manning's N: 0.024000       0.024000          Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000              Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000          0.000                Solution Incs: 10

Upstream FHWA Inlet Edge Description:
Circular CMP: Mitered to slope

Downstream FHWA Inlet Edge Description:
Circular CMP: Mitered to slope

AS-BUILT DS END USED FOR US INVERT;

NOTE:PIPE INVERT HIGHER THAN PERMITTED INVERTS

*** Weir 1 of 2 for Drop Structure AIP_CONTROL_ST ***
                                                                        TABLE
                 Count: 1                      Bottom Clip(in): 0.000
                  Type: Vertical: Mavis          Top Clip(in): 0.000
                  Flow: Both                   Weir Disc Coef: 3.200
              Geometry: Circular             Orifice Disc Coef: 0.600

              Span(in): 9.00                       Invert(ft): 26.500
              Rise(in): 9.00                  Control Elev(ft): 26.500

*** Weir 2 of 2 for Drop Structure AIP_CONTROL_ST ***
                                                                        TABLE
                 Count: 1                      Bottom Clip(in): 0.000
                  Type: Vertical: Mavis          Top Clip(in): 0.000
                  Flow: Both                   Weir Disc Coef: 3.200
              Geometry: Rectangular          Orifice Disc Coef: 0.600

              Span(in): 9.00                       Invert(ft): 28.000
              Rise(in): 6.00                  Control Elev(ft): 28.000

--------------------------------------------------------------------------------------------------
        Name: ARPT_RISERS          From Node: AIRPORT           Length(ft): 15.00
       Group: GENERAL                To Node: APD_16                Count: 2

              UPSTREAM       DOWNSTREAM              Friction Equation: Average Conveyance
    Geometry: Circular       Circular             Solution Algorithm: Automatic
    Span(in): 36.00          36.00                             Flow: Both
    Rise(in): 36.00          36.00               Entrance Loss Coef: 0.500
   Invert(ft): 25.000        25.000                 Exit Loss Coef: 0.000
  Manning's N: 0.024000      0.024000             Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000         0.000                 Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000         0.000                   Solution Incs: 10

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting


*** Weir 1 of 1 for Drop Structure ARPT_RISERS ***
                                                                        TABLE
                 Count: 2                      Bottom Clip(in): 0.000
                  Type: Vertical: Mavis          Top Clip(in): 0.000
                  Flow: Both                   Weir Disc Coef: 3.200
              Geometry: Rectangular          Orifice Disc Coef: 0.600
```

```
            Span(in): 36.00                    Invert(ft): 26.000
            Rise(in): 60.00              Control Elev(ft): 26.000

================================================================================
==== Weirs =====================================================================
================================================================================

        Name: BW_AIRP_OW          From Node: BASSWOOD
       Group: GENERAL               To Node: AIRPORT
        Flow: Both                    Count: 1
        Type: Vertical: Paved      Geometry: Rectangular

                  Span(in): 120.00
                  Rise(in): 9999.00
                Invert(ft): 34.000
      Control Elevation(ft): 34.000
                                       TABLE
            Bottom Clip(in): 0.000
               Top Clip(in): 0.000
          Weir Discharge Coef: 3.200
     Orifice Discharge Coef: 0.600

ASSUME OVERLAND FLOW WEIR

--------------------------------------------------------------------------------
        Name: GN04-RCC1           From Node: GN04
       Group: GENERAL               To Node: RCC1
        Flow: Both                    Count: 1
        Type: Vertical: Fread      Geometry: Rectangular

                  Span(in): 1200.00
                  Rise(in): 9999.00
                Invert(ft): 25.000
      Control Elevation(ft): 25.000
                                       TABLE
            Bottom Clip(in): 0.000
               Top Clip(in): 0.000
          Weir Discharge Coef: 2.800
     Orifice Discharge Coef: 0.600

ASSUMED OVERLAND FLOW  WEIR

--------------------------------------------------------------------------------
        Name: GN05-RCC1           From Node: GN05
       Group: GENERAL               To Node: RCC1
        Flow: Both                    Count: 1
        Type: Vertical: Fread      Geometry: Rectangular

                  Span(in): 1200.00
                  Rise(in): 9999.00
                Invert(ft): 27.000
      Control Elevation(ft): 27.000
                                       TABLE
            Bottom Clip(in): 0.000
               Top Clip(in): 0.000
          Weir Discharge Coef: 2.800
     Orifice Discharge Coef: 0.600

ASSUMED OVERLAND FLOW  WEIR

--------------------------------------------------------------------------------
        Name: GN07_OW-4A1         From Node: GN07
```

```
        Group: GENERAL              To Node: 4A_01
         Flow: Both                   Count: 1
         Type: Vertical: Fread     Geometry: Rectangular

                    Span(in): 1200.00
                    Rise(in): 9999.00
                  Invert(ft): 24.500
       Control Elevation(ft): 24.500
                                          TABLE
            Bottom Clip(in): 0.000
               Top Clip(in): 0.000
         Weir Discharge Coef: 2.800
      Orifice Discharge Coef: 0.600

FULFORD C ALEC & HANDLEY RUBY
Site Address 0 , Okeechobee
Mailing Address 22242 HWY 60 EAST
LAKE WALES, FL 33853
Brief Legal SUNSET PARK ALL BLOCKS 1 TO 80 INC EXCEPT
LD-62 R/W AND LOTS 11-13 &


--------------------------------------------------------------------------------
         Name: GN08_4A8_OW         From Node: GN08
        Group: GENERAL               To Node: 4A_08
         Flow: Both                   Count: 1
         Type: Vertical: Fread     Geometry: Rectangular

                    Span(in): 1200.00
                    Rise(in): 9999.00
                  Invert(ft): 28.000
       Control Elevation(ft): 28.000
                                          TABLE
            Bottom Clip(in): 0.000
               Top Clip(in): 0.000
         Weir Discharge Coef: 2.800
      Orifice Discharge Coef: 0.600

ASSUMED OVERLAND FLOW  WEIR

--------------------------------------------------------------------------------
         Name: GN06_GN07_OW        From Node: GN06
        Group: GENERAL               To Node: GN07
         Flow: Both                   Count: 1
         Type: Vertical: Paved     Geometry: Rectangular

                    Span(in): 1200.00
                    Rise(in): 9999.00
                  Invert(ft): 26.000
       Control Elevation(ft): 26.000
                                          TABLE
            Bottom Clip(in): 0.000
               Top Clip(in): 0.000
         Weir Discharge Coef: 2.800
      Orifice Discharge Coef: 0.600

ASSUMED SR 70 OVERTOPPING; OVERFLOW ELEV ASSUMED

--------------------------------------------------------------------------------
         Name: HCF_DITCH_OW60"     From Node: GC6A
        Group: GENERAL               To Node: GC6B
         Flow: None                   Count: 1
         Type: Vertical: Gravel    Geometry: Rectangular
```

```
                Span(in): 360.00
                Rise(in): 9999.00
              Invert(ft): 20.000
  Control Elevation(ft): 20.000
                                        TABLE
       Bottom Clip(in): 0.000
          Top Clip(in): 0.000
    Weir Discharge Coef: 2.800
  Orifice Discharge Coef: 0.600

EXISTING DIRT ROAD OVER EXISTING 60" BEFORE THE WASH OUT...DIMENSIONS AND ELEVATIONS ASSUMED

TURNED AND REPLACED W/SHEET PILE WEIR

-------------------------------------------------------------------------------------------
      Name: PRO_BLEEDER BY      From Node: GC6A
     Group: GENERAL               To Node: GC6B
      Flow: None                    Count: 1
      Type: Vertical: Mavis     Geometry: Rectangular

                Span(in): 24.00
                Rise(in): 18.00
              Invert(ft): 14.000
  Control Elevation(ft): 14.000
                                        TABLE
       Bottom Clip(in): 0.000
          Top Clip(in): 0.000
    Weir Discharge Coef: 3.200
  Orifice Discharge Coef: 0.600

-------------------------------------------------------------------------------------------
      Name: PRO_CS BY HCF       From Node: PRO_POND
     Group: GENERAL               To Node: TC_E_AIRPORT
      Flow: Positive                Count: 2
      Type: Vertical: Mavis     Geometry: Rectangular

                Span(in): 120.00
                Rise(in): 48.00
              Invert(ft): 13.000
  Control Elevation(ft): 13.000
                                        TABLE
       Bottom Clip(in): 0.000
          Top Clip(in): 0.000
    Weir Discharge Coef: 3.200
  Orifice Discharge Coef: 0.600

-------------------------------------------------------------------------------------------
      Name: PRO_WEIR BY HCF     From Node: GC6A
     Group: GENERAL               To Node: GC6B
      Flow: None                    Count: 1
      Type: Vertical: Mavis     Geometry: Trapezoidal

         Bottom Width(ft): 20.00
   Left Side Slope(h/v): 2.00
  Right Side Slope(h/v): 2.00
              Invert(ft): 15.500
  Control Elevation(ft): 15.500
 Struct Opening Dim(ft): 9999.00
```

TABLE

Bottom Clip(ft): 0.000
Top Clip(ft): 0.000
Weir Discharge Coef: 3.200
Orifice Discharge Coef: 0.600

```
==========================================================================================
==== Hydrology Simulations ===============================================================
==========================================================================================
------------------------------------------------------------------------------------------
         Name: G_05Y_1DAY
     Filename: L:\LAND\00-0903\146 Stormwater Plan\ICPR3\HYDROLOGY\G_05Y_1DAY.R32

      Override Defaults: Yes
    Storm Duration(hrs): 24.00
          Rainfall File: Flmod
    Rainfall Amount(in): 4.50

Time(hrs)        Print Inc(min)
---------------- ---------------
200.000          15.00

------------------------------------------------------------------------------------------
         Name: G_10Y_3DAY
     Filename: L:\LAND\00-0903\146 Stormwater Plan\ICPR3\HYDROLOGY\G_10Y_3DAY.R32

      Override Defaults: No

Time(hrs)        Print Inc(min)
---------------- ---------------
200.000          15.00

------------------------------------------------------------------------------------------
         Name: G_25Y_3DAY
     Filename: L:\LAND\00-0903\146 Stormwater Plan\ICPR3\HYDROLOGY\G_25Y_3DAY.R32

      Override Defaults: Yes
    Storm Duration(hrs): 72.00
          Rainfall File: Sfwmd72
    Rainfall Amount(in): 9.00

Time(hrs)        Print Inc(min)
---------------- ---------------
200.000          15.00

------------------------------------------------------------------------


==========================================================================================
==== Routing Simulations =================================================================
==========================================================================================


   ---------------------------------------------------------------------------------------
-
         Name: G_05YR_1D           Hydrology Sim: G_05Y_1DAY
     Filename: L:\LAND\00-0903\146 Stormwater Plan\ICPR3\HYDROLOGY\G_05YR_1D.I32

      Execute: No          Restart: No          Patch: No
  Alternative: No

       Max Delta Z(ft): 1.00                   Delta Z Factor: 0.00100
   Time Step Optimizer: 10.000
      Start Time(hrs): 0.000                    End Time(hrs): 150.00
    Min Calc Time(sec): 0.1000               Max Calc Time(sec): 60.0000
      Boundary Stages: L62 & TC 10YR_1          Boundary Flows: RC_10_1
```

BOUNDARY FLOWS INCLUDE FLOWS FROM PERMITTED PRIVATE LAND DEVELOPMENT PROJECTS & FDOT PROJECTS

4E BOUNDARY FLOWS & STAGES FOR THE 10-3 STORM WERE USED FOR THE 25-3 STORM DUE TO LIMITED DATA.

Time(hrs)	Print Inc(min)
150.000	15.000

Group	Run
GENERAL	Yes

Name: G_10YR_3D Hydrology Sim: G_10Y_3DAY
Filename: L:\LAND\00-0903\146 Stormwater Plan\ICPR3\HYDROLOGY\G_10YR_3D.I32

Execute: No Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00100
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 200.00
Min Calc Time(sec): 0.1000 Max Calc Time(sec): 60.0000
Boundary Stages: L62 & TC 10YR_3 Boundary Flows: RC_10_3

BOUNDARY FLOWS INCLUDE FLOWS FROM PERMITTED PRIVATE LAND DEVELOPMENT PROJECTS & FDOT PROJECTS

Time(hrs)	Print Inc(min)
200.000	15.000

)up	Run
GENERAL	Yes

Name: G_25YR_3D Hydrology Sim: G_25Y_3DAY
Filename: L:\LAND\00-0903\146 Stormwater Plan\ICPR3\HYDROLOGY\G_25YR_3D.I32

Execute: No Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00100
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 200.00
Min Calc Time(sec): 0.1000 Max Calc Time(sec): 60.0000
Boundary Stages: L62 & TC 10YR_3 Boundary Flows: RC_10_3

BOUNDARY FLOWS INCLUDE FLOWS FROM PERMITTED PRIVATE LAND DEVELOPMENT PROJECTS & FDOT PROJECTS

SAME BOUNDARY FLOWS & STAGES FOR THE 10-3 STORM WERE USED FOR THE 25-3 STORM DUE TO LIMITED DATA.

Time(hrs)	Print Inc(min)
200.000	15.000

Group	Run
GENERAL	Yes

Name: PRO_G05Y_1D Hydrology Sim: G_05Y_1DAY
Filename: L:\LAND\00-0903\146 Stormwater Plan\ICPR3\HYDROLOGY\PROPOSED G_05YR_1D.I32

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00100
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 150.00
Min Calc Time(sec): 0.1000 Max Calc Time(sec): 999.0000
Boundary Stages: L62 & TC 10YR_1 Boundary Flows: RC_10_1

BOUNDARY FLOWS INCLUDE FLOWS FROM PERMITTED PRIVATE LAND DEVELOPMENT PROJECTS & FDOT PROJECTS

SAME BOUNDARY FLOWS & STAGES FOR THE 10-3 STORM WERE USED FOR THE 25-3 STORM DUE TO LIMITED DATA.

Time(hrs)	Print Inc(min)
150.000	15.000

Group	Run
GENERAL	Yes

Name: PRO_G10Y_3D Hydrology Sim: G_10Y_3DAY
Filename: L:\LAND\00-0903\146 Stormwater Plan\ICPR3\HYDROLOGY\PROPOSED G_10YR_3D.I32

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00100
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 200.00
Min Calc Time(sec): 0.1000 Max Calc Time(sec): 999.0000
Boundary Stages: L62 & TC 10YR_3 Boundary Flows: RC_10_3

BOUNDARY FLOWS INCLUDE FLOWS FROM PERMITTED PRIVATE LAND DEVELOPMENT PROJECTS & FDOT PROJECTS

Time(hrs)	Print Inc(min)
200.000	15.000

Group	Run
GENERAL	Yes

Name: PRO_G25Y_3D Hydrology Sim: G_25Y_3DAY
Filename: L:\LAND\00-0903\146 Stormwater Plan\ICPR3\HYDROLOGY\PROPOSED G_25YR_3D.I32

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00100
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 200.00
Min Calc Time(sec): 0.1000 Max Calc Time(sec): 999.0000
Boundary Stages: L62 & TC 10YR_3 Boundary Flows: RC_10_3

BOUNDARY FLOWS INCLUDE FLOWS FROM PERMITTED PRIVATE LAND DEVELOPMENT PROJECTS & FDOT PROJECTS

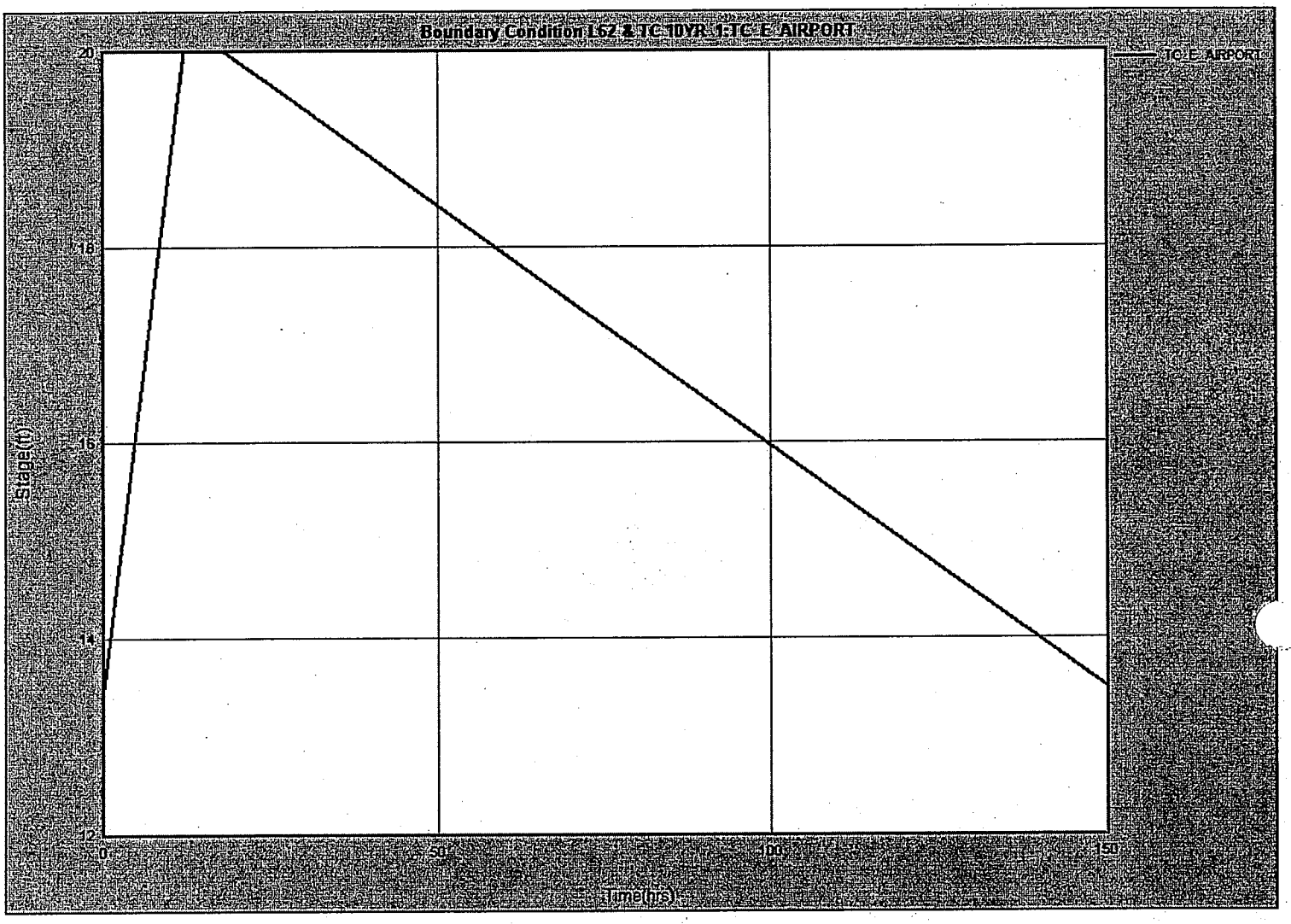
ME BOUNDARY FLOWS & STAGES FOR THE 10-3 STORM WERE USED FOR THE 25-3 STORM DUE TO LIMITED DATA.

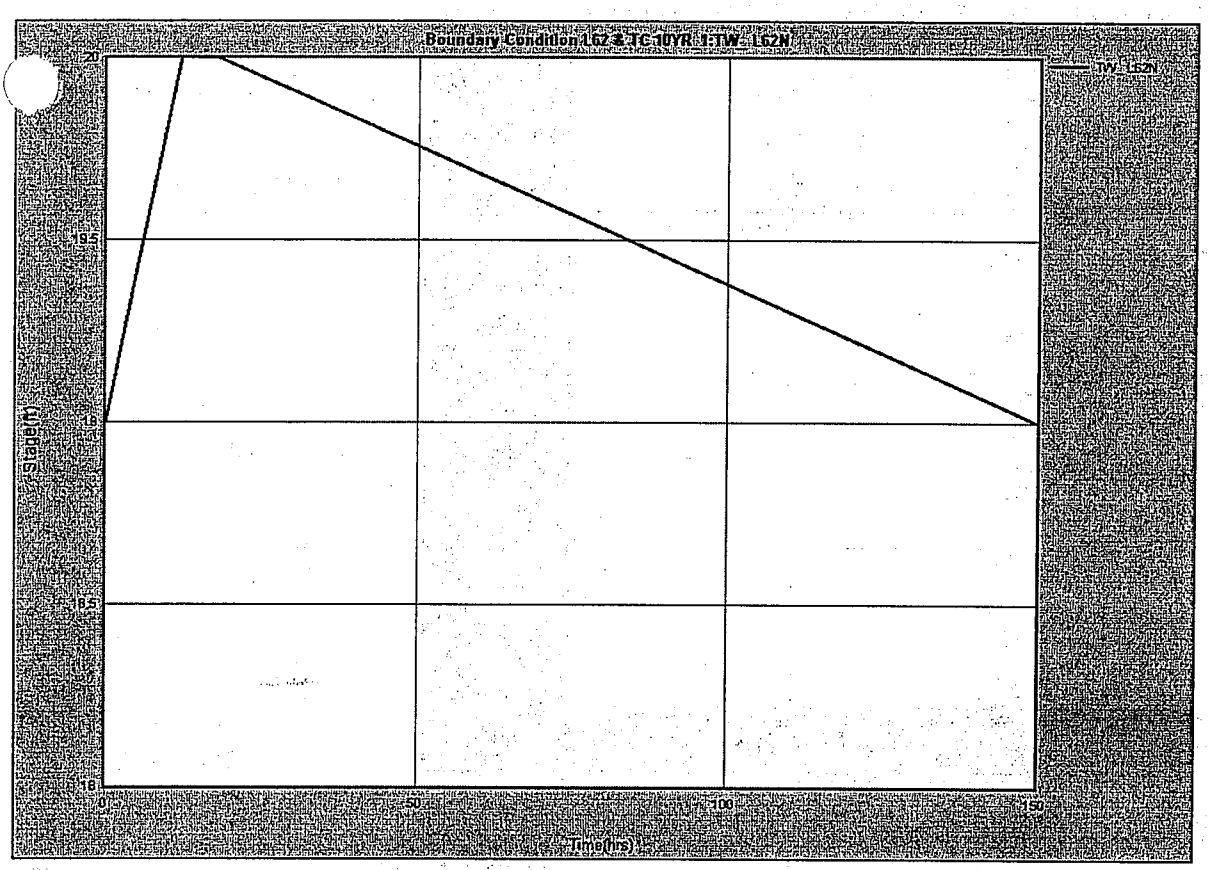
Time(hrs)	Print Inc(min)
200.000	15.000

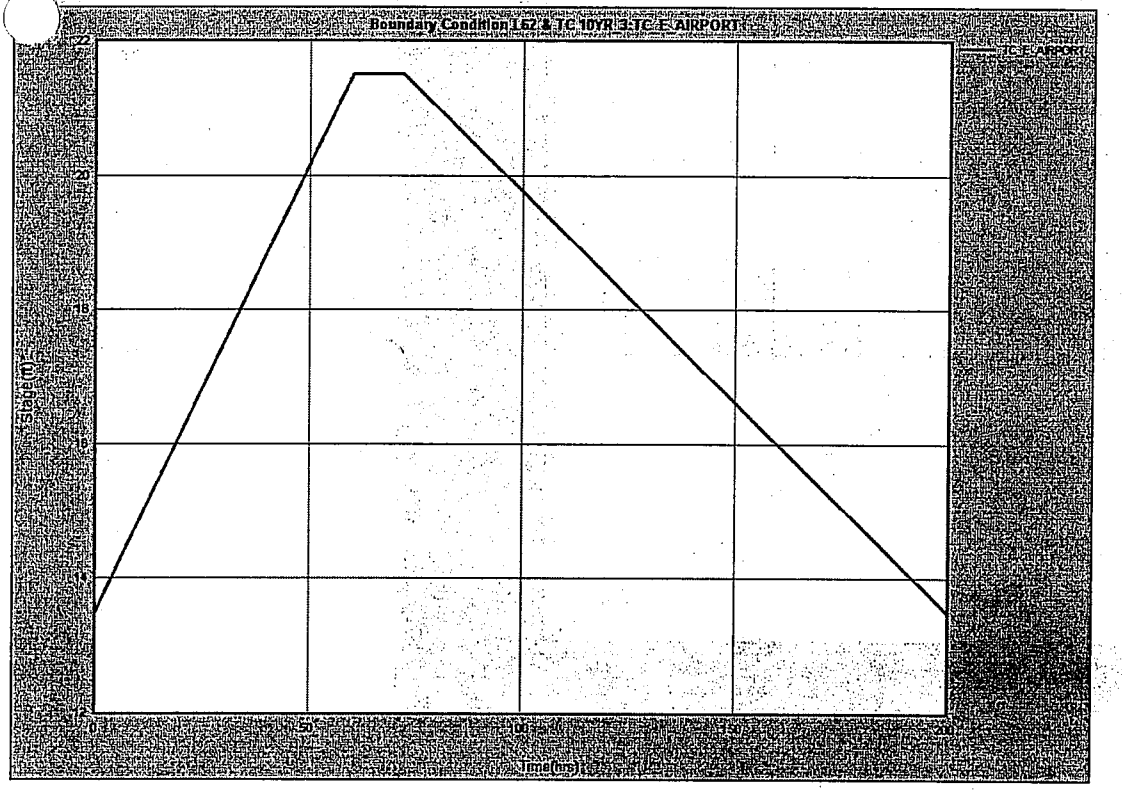
Group	Run
GENERAL	Yes

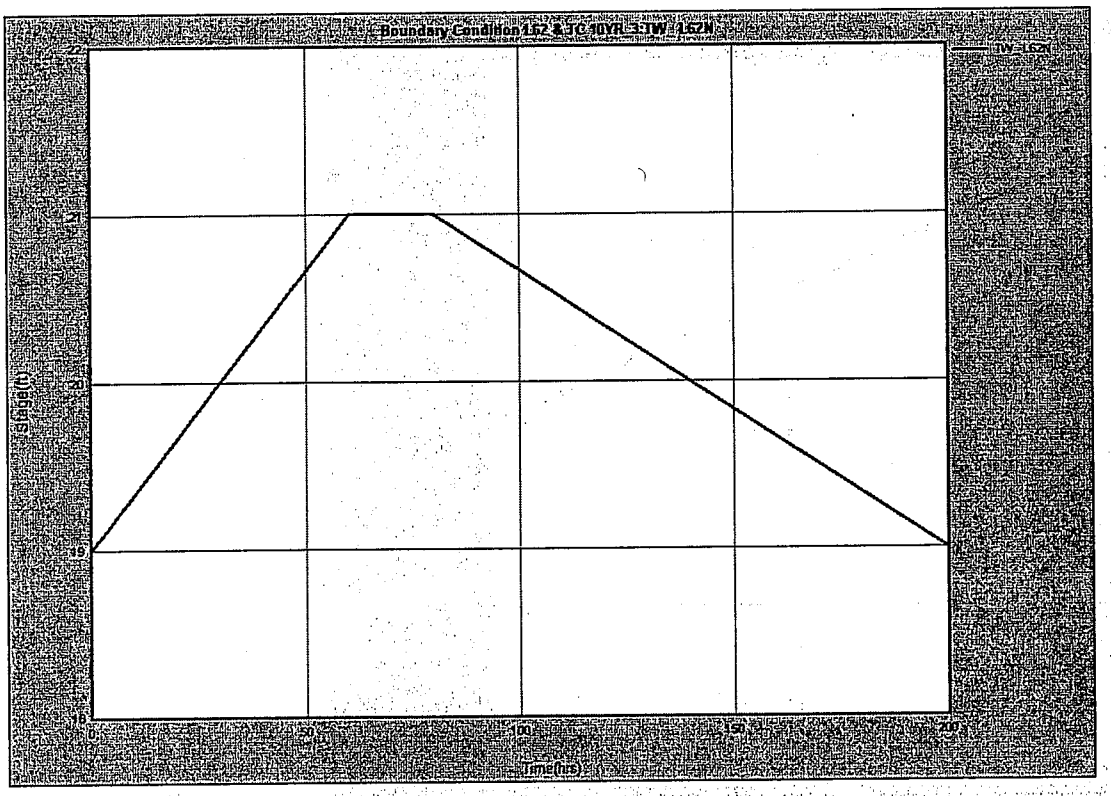
==== Boundary Conditions ====

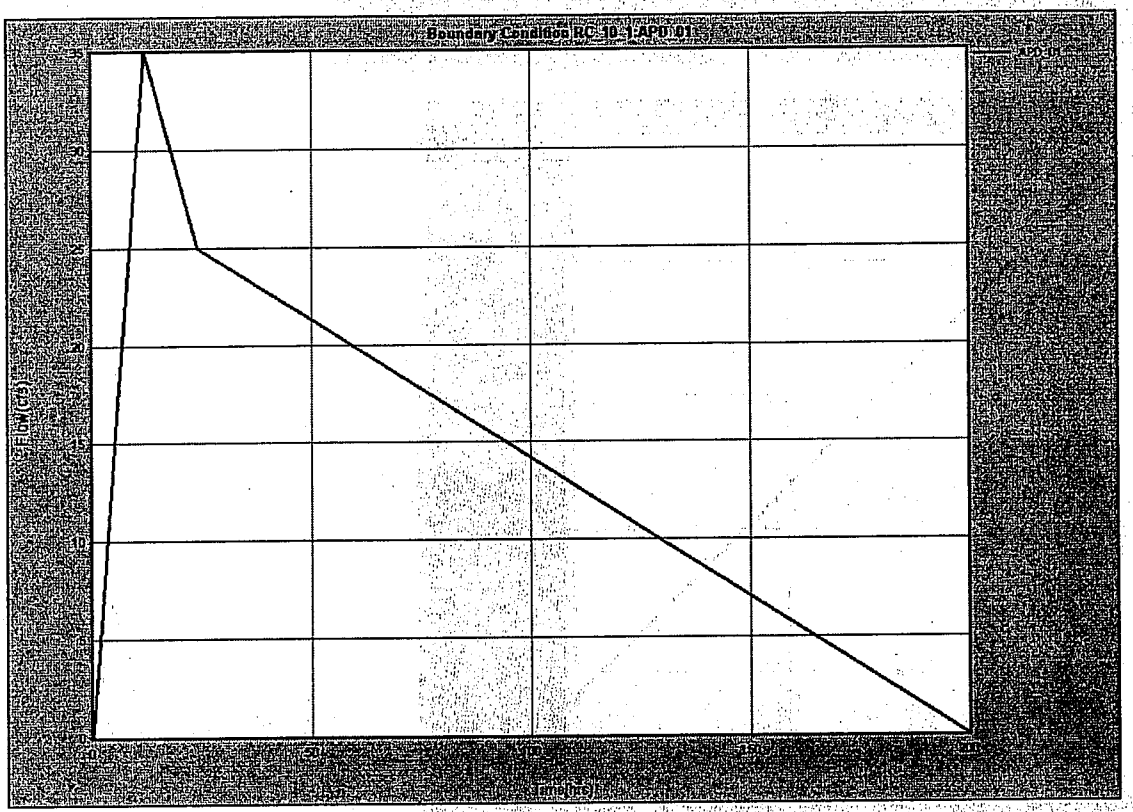
DUE TO LARGE VOLUME OF DATA, BOUNDARY FLOWS AND STAGES ARE PRESENTED IN GRAPHICAL FORMAT.

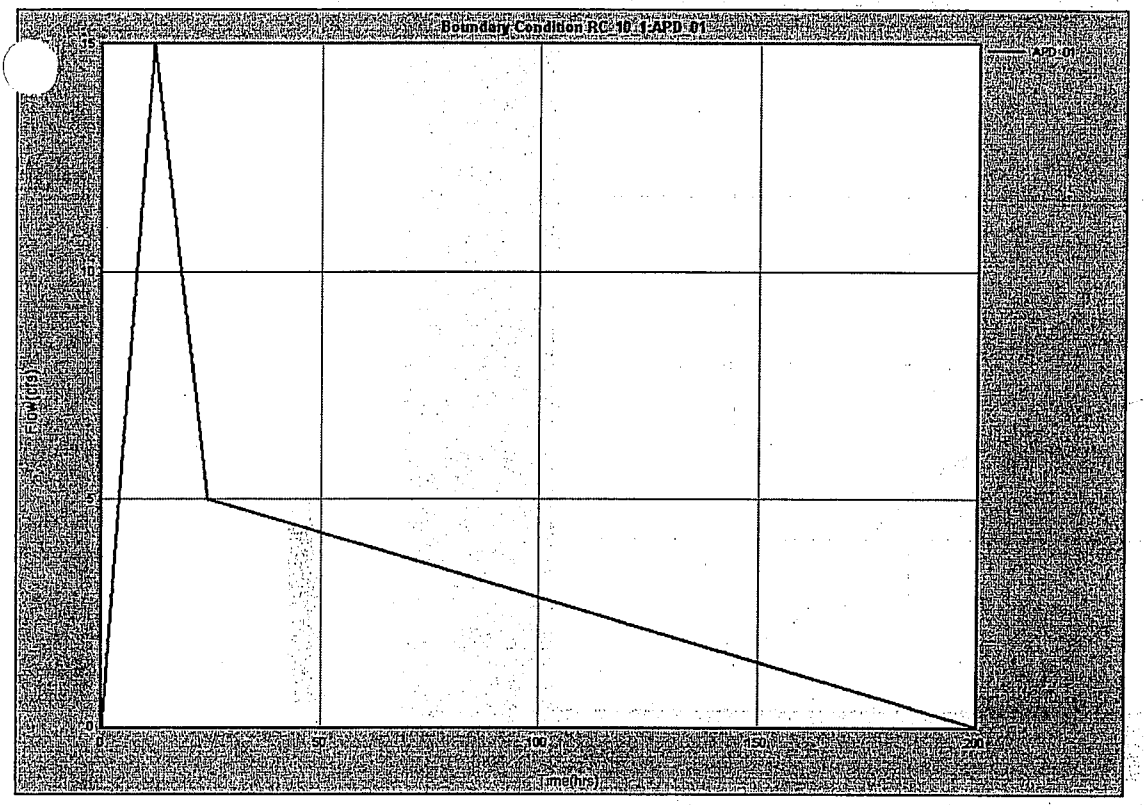


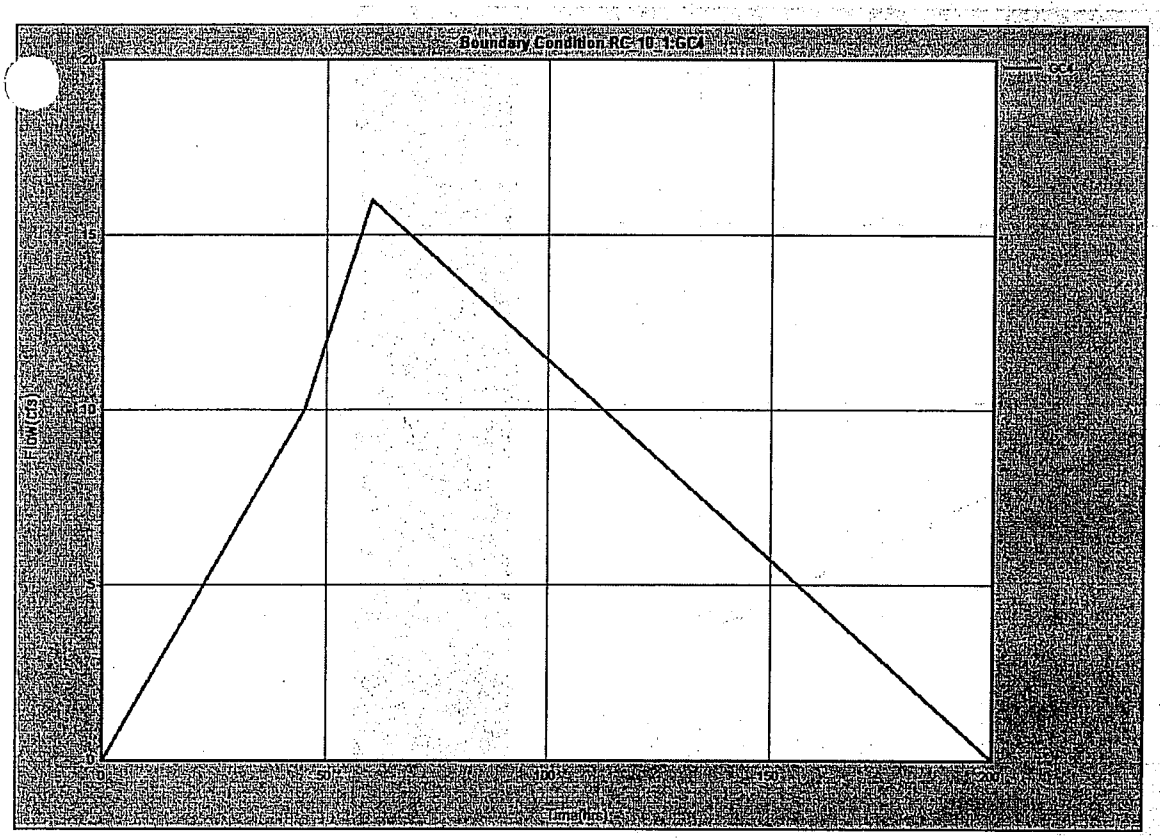

Boundary Condition 162 : TC 10YR 1:TW_162N
TW_162N
Stage (ft)
20
19.5
19
18.5
18
0
50
100
150
Time(hrs)

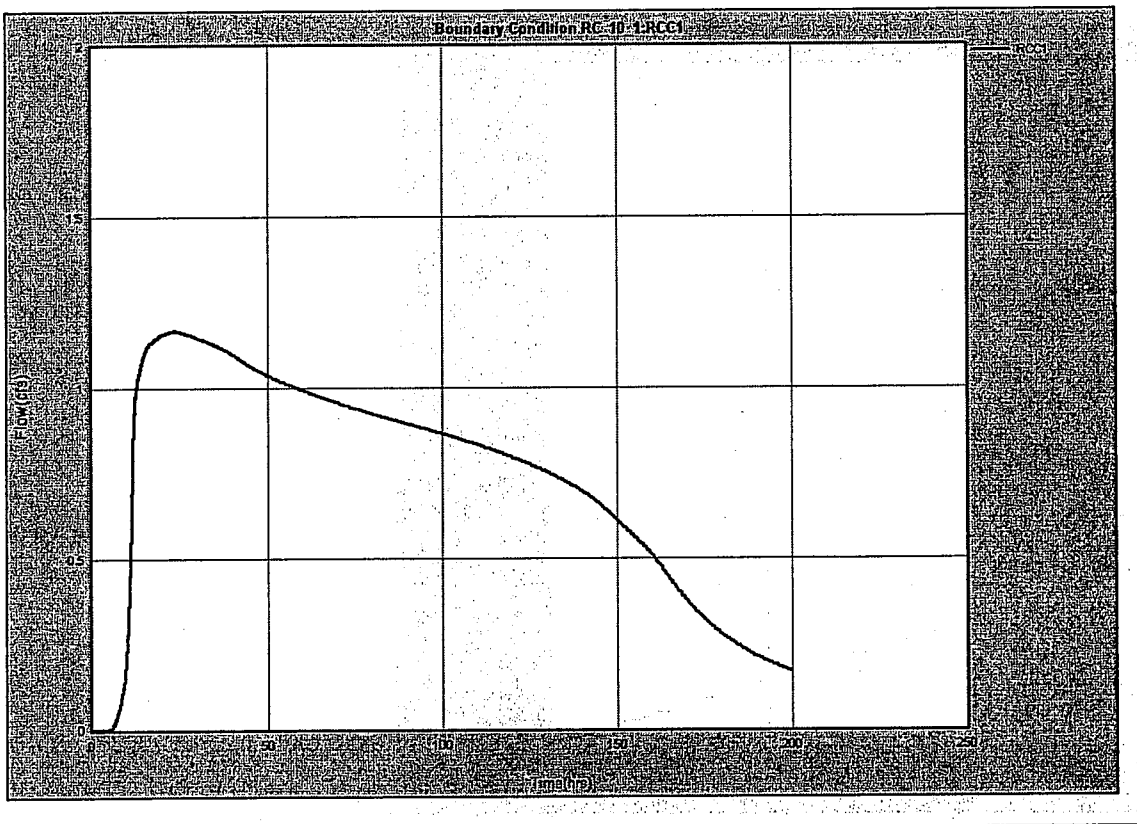

Boundary Condition 162 : TC 10YR 3:TC_F_AIRPORT
TC_F_AIRPORT
Stage (ft)
22
20
18
16
14
0
50
100
150
Time(hrs)

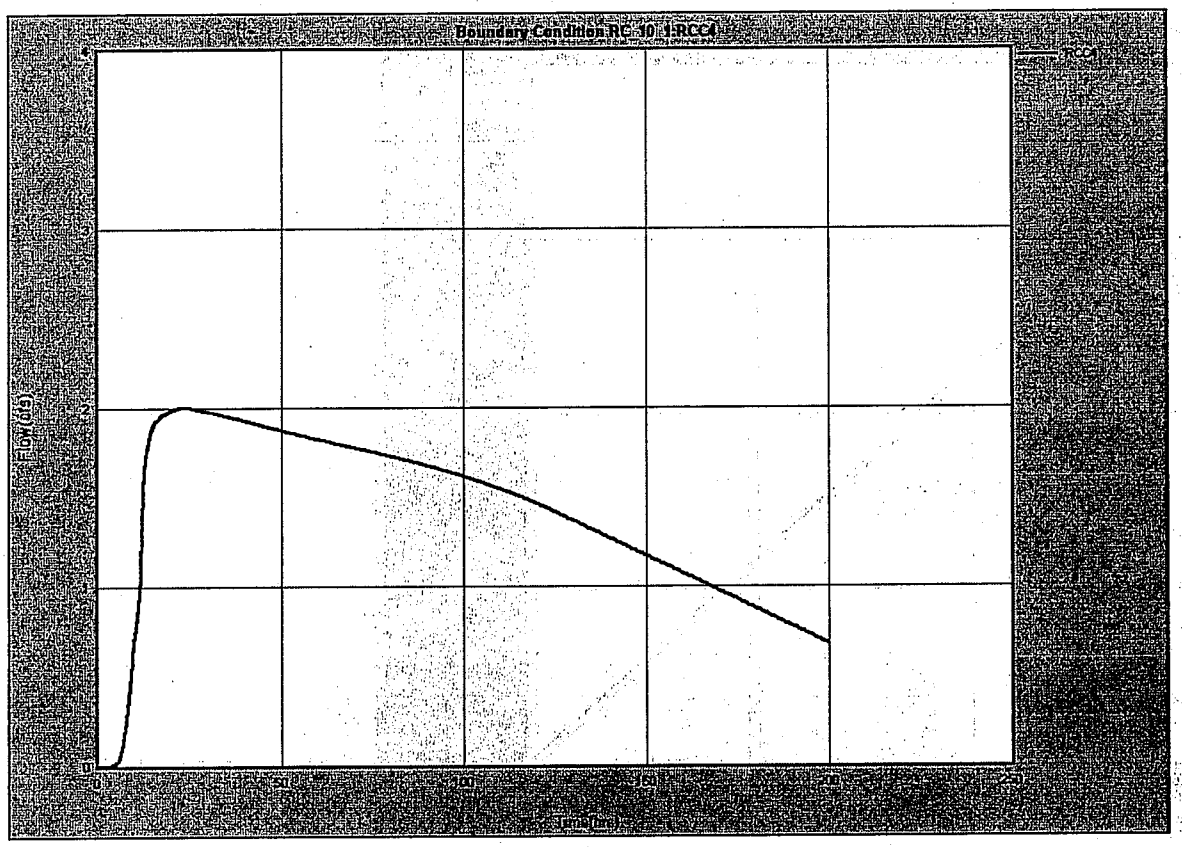

Boundary Condition 1-hr & 10-YR - 3-TW - 1-STN
TW-1-STN
Stage (ft)
Time (hrs)

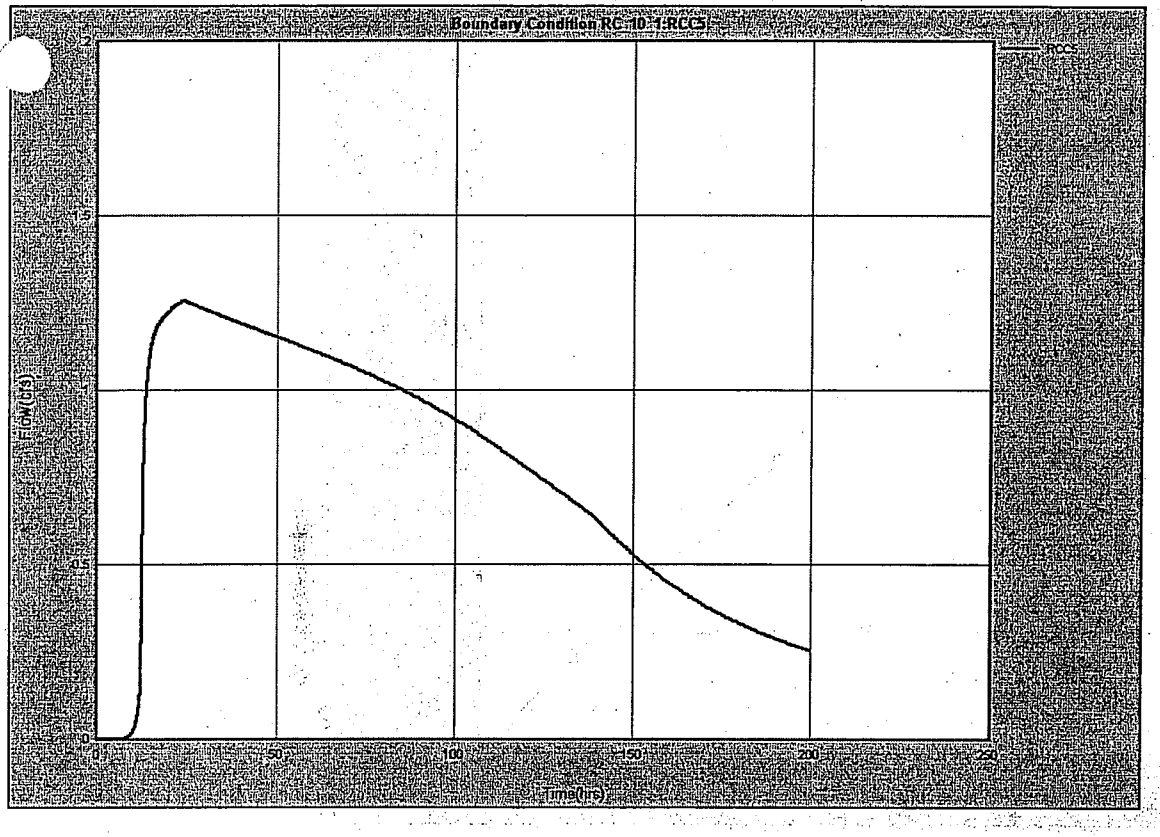

Boundary Condition RC_10 - 1-APD-01
APD-01
Flow (cfs)
Time (hrs)

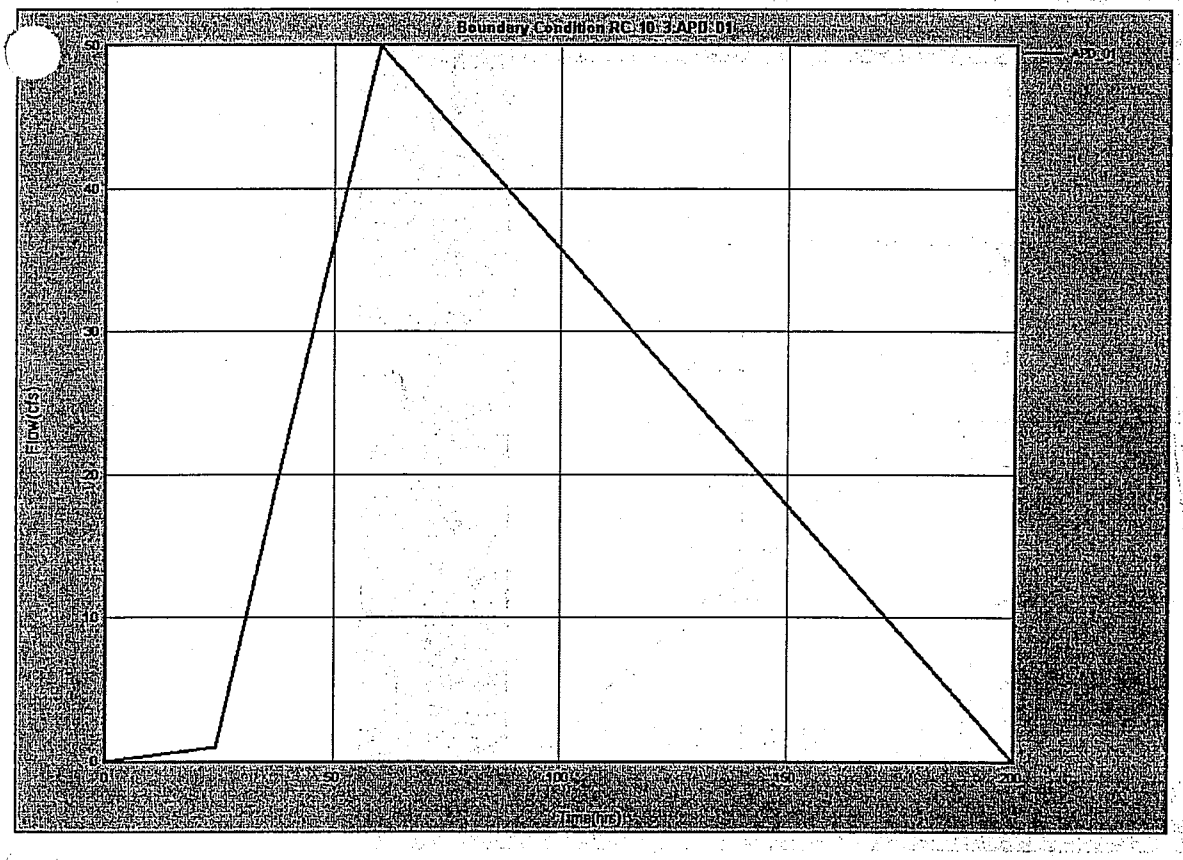

Boundary Condition RC_10_1:APD_01
APD_01
FLOW (cfs)
15
10
5
0
0
50
100
150
200
Time(hrs)

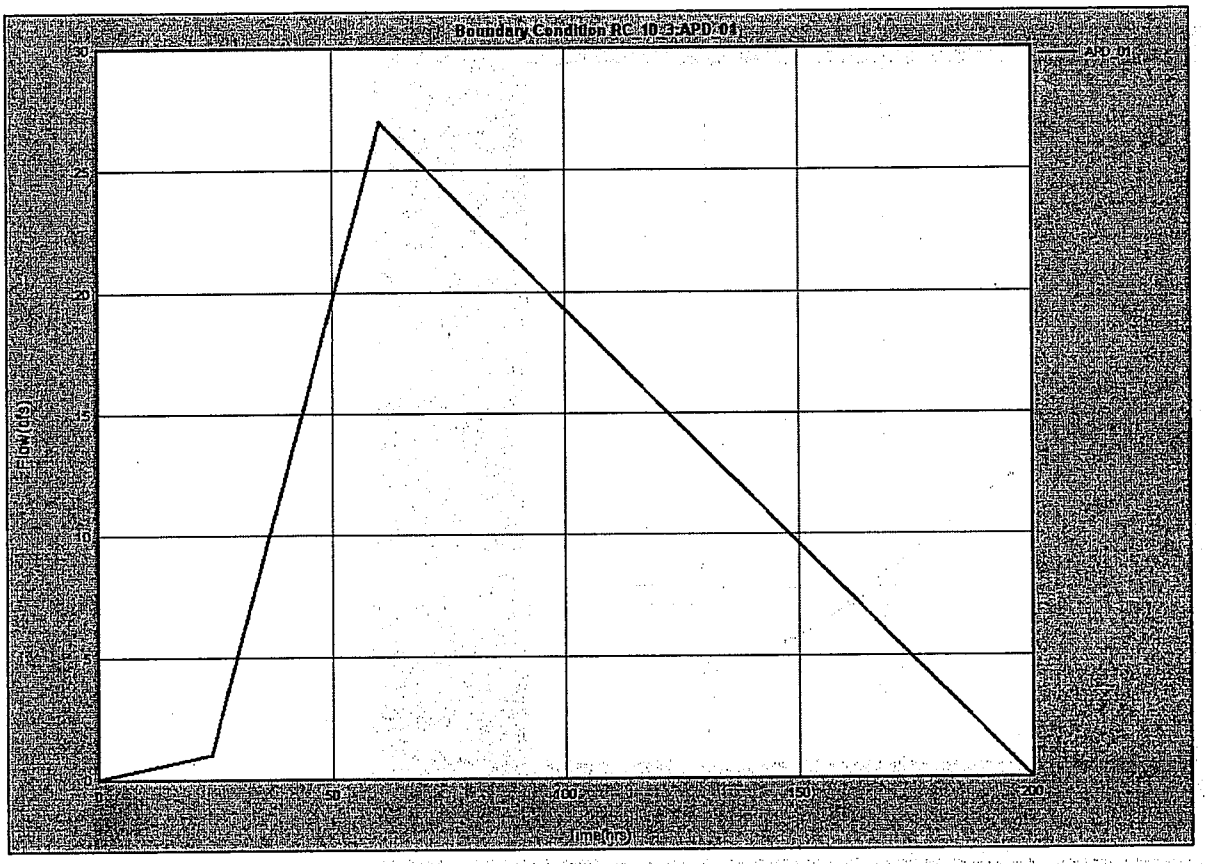

Boundary Condition RC_10_1:GC4
GC4
FLOW (cfs)
20
15
10
5
0
0
50
100
150
200
Time(hrs)

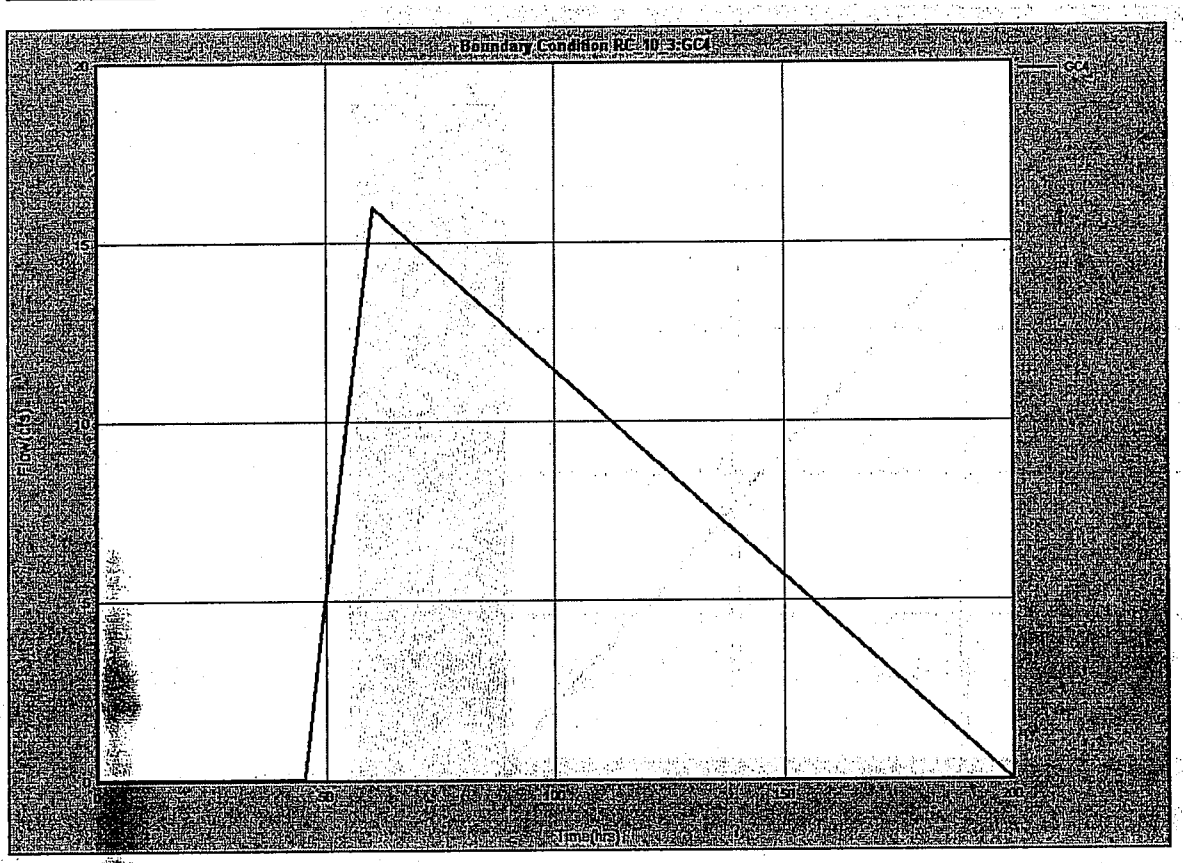

Boundary Condition RC_10_1:RCC1
RCC1
Flow (cfs)
Time (hrs)

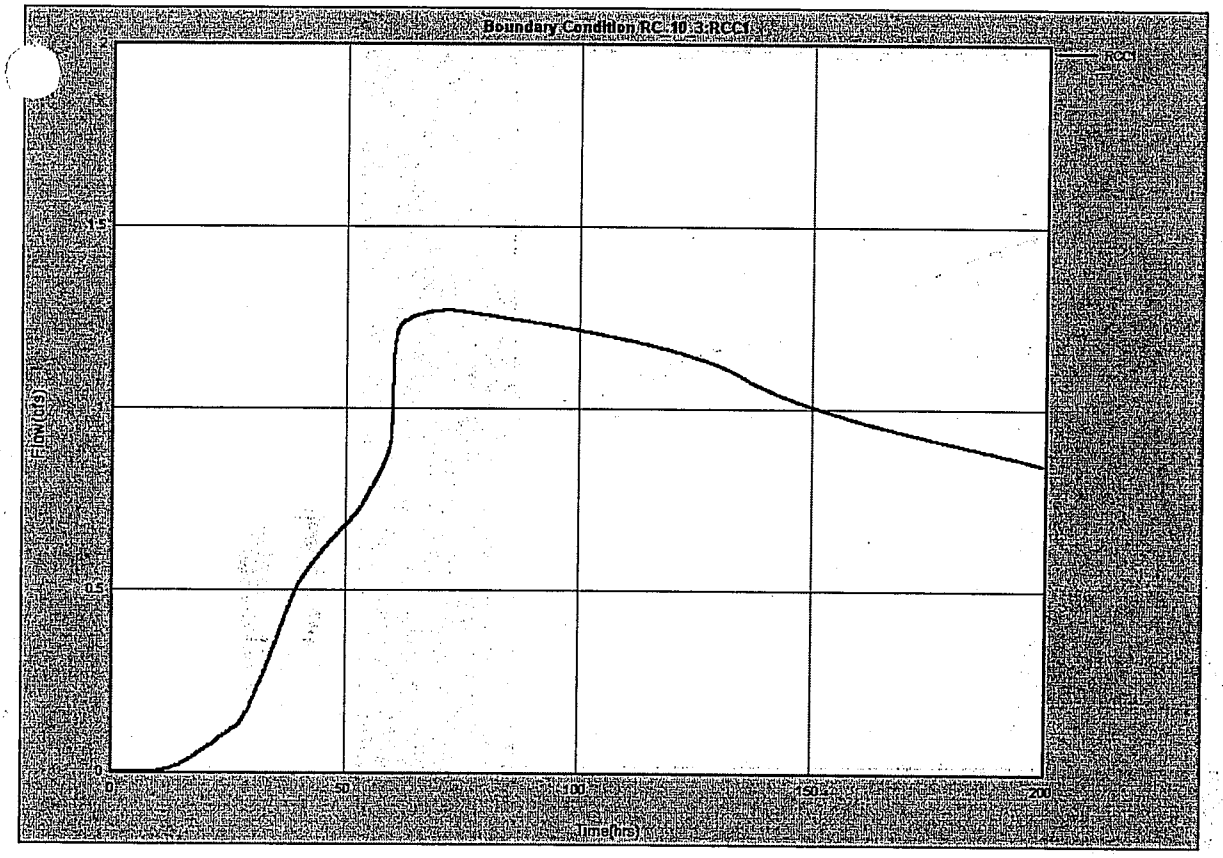

Boundary Condition RC_10_1:RCC1
RCC1
Flow (cfs)

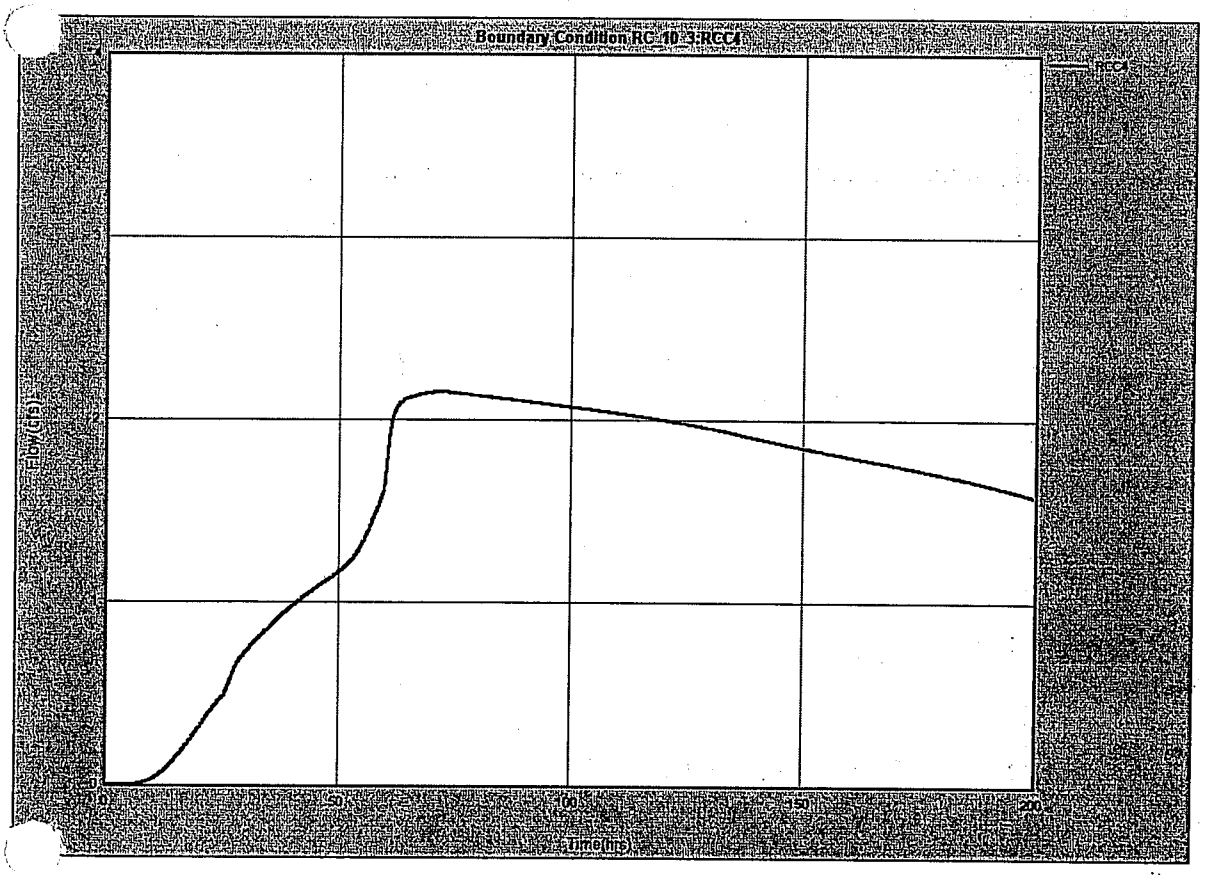

Boundary Condition RC_10_1:RCC5
RCC5
FLOW(CFS)
Time(hrs)

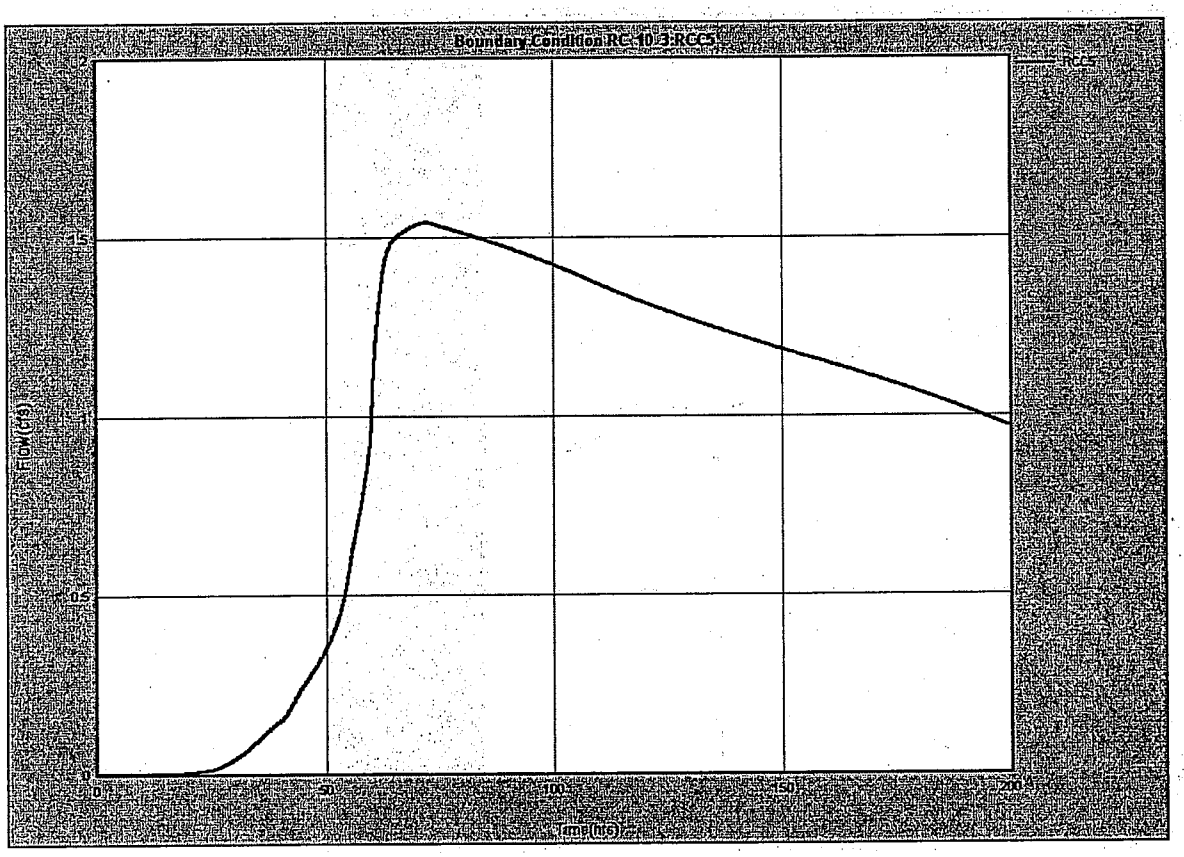

Boundary Condition RC_10_3:APD_01
APD_01
FLOW(CFS)
Time(hrs)


Boundary Condition RC_10_3:APD_01
APD_01
Flow (cfs)
Time (hrs)


Boundary Condition RC_10_3:GC4
GC4
Flow (cfs)
Time (hrs)


Boundary Condition RC_10_3:RCC1
RCC1
Flow(cfs)
Time(hrs)
0
50
100
150
200
0.5
1
1.5
2


Boundary Condition RC_10_3:RCC1
RCC1
Flow(cfs)
Time(hrs)
0
50
100
150
200
1
2



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OKEECHOBEE COUNTY
COMPREHENSIVE URBANIZED AREA
STORMWATER MASTER PLAN

SECTION 7

CONCEPTUAL ESTIMATED
CONSTRUCTION COSTS

OKEECHOBEE COUNTY STORMWATER MASTER PLAN
CONCEPTUAL ESTIMATED CONSTRUCTION COSTS
CAS PROJECT No.: 00-0903
EXHIBIT O1

ITEM No.	DESCRIPTION		QUANTITY	UNIT		UNIT COST		TOTAL
1	Mobilization	7%	1	LS	$	431,571.00	$	431,571.00
2	Maintenance of Traffic	2%	1	LS	$	123,306.00	$	123,306.00
3	Clearing & Grubbing	5%	1	LS	$	308,265.00	$	308,265.00
4	Survey Stakeout and As-Builts	2%	1	LS	$	123,306.00	$	123,306.00
5	Density Testing	1%	1	LS	$	61,653.00	$	61,653.00
	Earthwork							
6	Excavate Swale Area		7500	CY	$	10.00	$	75,000.00
7	Excavate Canal Area		120000	CY	$	12.00	$	1,440,000.00
8	Seed & Mulch		342100	SY	$	2.00	$	684,200.00
9	Excavate Flow way Area		33550	CY	$	10.00	$	335,500.00
10	Excavate Stormwater Pond		302500	CY	$	10.00	$	3,025,000.00
11	Excavate Channel			CY	$	12.00	$	-
12	Excavate Detention Pond			CY	$	12.00	$	-
13	Perimeter Berm for Stormwater Facility			CY	$	10.00	$	-
14	Fill & Compact Existing Swale Area			CY	$	7.00	$	-
15	Clear & Grub Existing Flow Way			AC	$	3,000.00	$	-
16	Construct Wetland Area w/ 5 YR Maintenance Program			AC	$	120,000.00	$	-
	Demolition							
17	Remove Existing Drainage Culvert			LF	$	12.00	$	-
18	Remove Existing Drainage Pipe			LF	$	12.00	$	-
19	Remove Existing Drainage Structure			EA	$	500.00	$	-
	Road Improvements							
20	1 1/4" Type S-III Asphalt Pavement Overlay			SY	$	15.00	$	-
21	Asphalt Pavement Restoration		170	SY	$	30.00	$	5,100.00
22	Asphalt Driveway Restoration			SY	$	30.00	$	-
23	Grade Swale Area			SY	$	7.00	$	-
24	Seed & Mulch Swale			SY	$	4.00	$	-
25	Sod Restoration			SY	$	7.50	$	-
26	Striping Restoration			EA	$	6,000.00	$	-
	Drainage Structures							
27	Diversion Control Structure (Sheet Pile w/ Cap)		1	EA	$	160,000.00	$	160,000.00
28	Control Structure		1	EA	$	10,000.00	$	10,000.00
29	5' Control Structure			EA	$	8,000.00	$	-
30	6' Control Structure			EA	$	12,000.00	$	-
31	Stormwater Pumping Station (250 cfs) w/ B/U Generator			LS	$	3,800,000.00	$	-
32	Stormwater Pumping Station (1200 gpm) w/ B/U Generator			LS	$	1,500,000.00	$	-
33	Weir Structure			EA	$	120,000.00	$	-
34	Sheet Pile Weir Structure w/ Cap			EA	$	160,000.00	$	-
35	Water Quality Structure			EA	$	50,000.00	$	-
36	Type 'E' Inlet			EA	$	7,500.00	$	-
37	Type 'F' Inlet			EA	$	10,000.00	$	-
38	C-4 Inlet			EA	$	4,000.00	$	-

OKEECHOBEE COUNTY STORMWATER MASTER PLAN
CONCEPTUAL ESTIMATED CONSTRUCTION COSTS
CAS PROJECT No.: 00-0903
EXHIBIT O1

ITEM No.	DESCRIPTION	QUANTITY	UNIT		UNIT COST		TOTAL
39	C-5 Inlet		EA	$	5,500.00	$	-
40	C-6 Inlet		EA	$	8,000.00	$	-
41	M-5 Inlet		EA	$	4,500.00	$	-
42	M-5 Manhole		EA	$	5,000.00	$	-
43	24" Yard Drain		EA	$	1,500.00	$	-
	Drainage Pipe						
44	12' x 6' Conc. Box Culvert		LF	$	2,000.00	$	-
45	6' x 6' Conc. Box Culvert	200	LF	$	1,000.00	$	200,000.00
46	48" RCP	80	LF	$	150.00	$	12,000.00
47	42" RCP		LF	$	125.00	$	-
48	36" RCP	480	LF	$	100.00	$	48,000.00
49	36" HDPE		LF	$	85.00	$	-
50	36" DIP Force Main		LF	$	100.00	$	-
51	30" HDPE		LF	$	75.00	$	-
52	24" RCP		LF	$	70.00	$	-
53	24" HDPE		LF	$	65.00	$	-
54	24" DIP Force Main		LF	$	70.00	$	-
55	18" RCP		LF	$	60.00	$	-
56	18" HDPE		LF	$	55.00	$	-
57	15" HDPE		LF	$	45.00	$	-
58	48" Conc. Headwall		EA	$	10,000.00	$	-
59	42" Conc. Headwall		EA	$	8,000.00	$	-
60	36" Conc. Headwall		EA	$	6,500.00	$	-
61	24" Conc. Headwall		EA	$	5,000.00	$	-
62	18" Conc. Headwall		EA	$	3,500.00	$	-
63	36" Mitered End Section		EA	$	1,800.00	$	-
64	24" Mitered End Section		EA	$	1,200.00	$	-
65	18" HDPE Driveway Culvert w/ Flared Ends (2)		EA	$	2,000.00	$	-
66	N-12 Adapter Fittings		EA	$	550.00	$	-
	Misc.						
67	Turbidity Screen	200	LF	$	40.00	$	8,000.00
68	Guardrail	50	LF	$	250.00	$	12,500.00
69	6' High Chain Link Fence w/ Gates	6000	LF	$	25.00	$	150,000.00
70	Land Purchase (in Acres)	50	AC	$	50,000.00	$	2,500,000.00
71	Core and Connect to Exist. Drainage Structures		EA	$	1,800.00	$	-
				SUB TOTAL		$	**9,713,401.00**
			Excluding land purchasing, Engineering Design, Permitting,				
			20%	**Const. Services (Varies)**			**$1,233,060.00**
			10%	**CONTINGENCY**		$	**971,340.10**
TOTAL ESTIMATED CONSTRUCTION COST						$	**11,917,801.10**

OKEECHOBEE COUNTY STORMWATER MASTER PLAN
CONCEPTUAL ESTIMATED CONSTRUCTION COSTS
CAS PROJECT No.: 00-0903
EXHIBIT P1A

ITEM No.	DESCRIPTION		QUANTITY	UNIT		UNIT COST		TOTAL
1	Mobilization	7%	1	LS	$	175,910.00	$	175,910.00
2	Maintenance of Traffic	2%	1	LS	$	50,260.00	$	50,260.00
3	Clearing & Grubbing	5%	1	LS	$	125,650.00	$	125,650.00
4	Survey Stakeout and As-Builts	2%	1	LS	$	50,260.00	$	50,260.00
5	Density Testing	1%	1	LS	$	25,130.00	$	25,130.00
	Earthwork							
6	Excavate Swale Area			CY	$	10.00	$	-
7	Excavate Canal Area		23400	CY	$	12.00	$	280,800.00
8	Seed & Mulch		177700	SY	$	2.00	$	355,400.00
9	Excavate Flow way Area			CY	$	10.00	$	-
10	Excavate Stormwater Pond			CY	$	10.00	$	-
11	Excavate Channel			CY	$	12.00	$	-
12	Excavate Detention Pond			CY	$	12.00	$	-
13	Perimeter Berm for Stormwater Facility		149280	CY	$	10.00	$	1,492,800.00
14	Fill & Compact Existing Swale Area			CY	$	7.00	$	-
15	Clear & Grub Existing Flow Way			AC	$	3,000.00	$	-
16	Construct Wetland Area w/ 5 YR Maintenance Program			AC	$	120,000.00	$	-
	Demolition							
17	Remove Existing Drainage Culvert			LF	$	12.00	$	-
18	Remove Existing Drainage Pipe			LF	$	12.00	$	-
19	Remove Existing Drainage Structure			EA	$	500.00	$	-
	Road Improvements							
20	1 1/4" Type S-III Asphalt Pavement Overlay			SY	$	15.00	$	-
21	Asphalt Pavement Restoration			SY	$	30.00	$	-
22	Asphalt Driveway Restoration			SY	$	30.00	$	-
23	Grade Swale Area			SY	$	7.00	$	-
24	Seed & Mulch Swale			SY	$	4.00	$	-
25	Sod Restoration			SY	$	7.50	$	-
26	Striping Restoration			EA	$	6,000.00	$	-
	Drainage Structures							
27	Diversion Control Structure (Sheet Pile w/ Cap)			EA	$	160,000.00	$	-
28	Control Structure			EA	$	10,000.00	$	-
29	5' Control Structure			EA	$	8,000.00	$	-
30	6' Control Structure			EA	$	12,000.00	$	-
31	**Stormwater Pumping Station (250 cfs) (BY SFWMD)**		1	LS	$	-	$	-
32	Stormwater Pumping Station (1200 gpm) w/ B/U Generator			LS	$	1,500,000.00	$	-
33	Weir Structure		1	EA	$	120,000.00	$	120,000.00
34	Sheet Pile Weir Structure w/ Cap			EA	$	160,000.00	$	-
35	Water Quality Structure			EA	$	50,000.00	$	-
36	Type 'E' Inlet			EA	$	7,500.00	$	-
37	Type 'F' Inlet			EA	$	10,000.00	$	-
38	C-4 Inlet			EA	$	4,000.00	$	-

OKEECHOBEE COUNTY STORMWATER MASTER PLAN
CONCEPTUAL ESTIMATED CONSTRUCTION COSTS
CAS PROJECT No.: 00-0903
EXHIBIT P1A

ITEM No.	DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
39	C-5 Inlet		EA	$ 5,500.00	$ -
40	C-6 Inlet		EA	$ 8,000.00	$ -
41	M-5 Inlet		EA	$ 4,500.00	$ -
42	M-5 Manhole		EA	$ 5,000.00	$ -
43	24" Yard Drain		EA	$ 1,500.00	$ -
	Drainage Pipe				
44	12' x 6' Conc. Box Culvert	120	LF	$ 2,000.00	$ 240,000.00
45	6' x 6' Conc. Box Culvert		LF	$ 1,000.00	$ -
46	48" RCP		LF	$ 150.00	$ -
47	42" RCP		LF	$ 125.00	$ -
48	36" RCP		LF	$ 100.00	$ -
49	36" HDPE		LF	$ 85.00	$ -
50	36" DIP Force Main		LF	$ 100.00	$ -
51	30" HDPE		LF	$ 75.00	$ -
52	24" RCP		LF	$ 70.00	$ -
53	24" HDPE		LF	$ 65.00	$ -
54	24" DIP Force Main		LF	$ 70.00	$ -
55	18" RCP		LF	$ 60.00	$ -
56	18" HDPE		LF	$ 55.00	$ -
57	15" HDPE		LF	$ 45.00	$ -
58	48" Conc. Headwall		EA	$ 10,000.00	$ -
59	42" Conc. Headwall		EA	$ 8,000.00	$ -
60	36" Conc. Headwall		EA	$ 6,500.00	$ -
61	24" Conc. Headwall		EA	$ 5,000.00	$ -
62	18" Conc. Headwall		EA	$ 3,500.00	$ -
63	36" Mitered End Section		EA	$ 1,800.00	$ -
64	24" Mitered End Section		EA	$ 1,200.00	$ -
65	18" HDPE Driveway Culvert w/ Flared Ends (2)		EA	$ 2,000.00	$ -
66	N-12 Adapter Fittings		EA	$ 550.00	$ -
	Misc.				
67	Turbidity Screen	600	LF	$ 40.00	$ 24,000.00
68	Guardrail		LF	$ 250.00	$ -
69	6' High Chain Link Fence w/ Gates		LF	$ 25.00	$ -
70	Land Purchase (in Acres)	150	AC	$ 50,000.00	$ 7,500,000.00
71	Core and Connect to Exist. Drainage Structures		EA	$ 1,800.00	$ -
				SUB TOTAL	**$ 10,440,210.00**

Some work in this area is underway.

Excluding land purchasing,
Engineering Design, Permitting,
15% Const. Services (Varies). **$376,950.00**

10% CONTINGENCY $ 1,044,021.00

TOTAL ESTIMATED CONSTRUCTION COST **$ 11,861,181.00**

OKEECHOBEE COUNTY STORMWATER MASTER PLAN
CONCEPTUAL ESTIMATED CONSTRUCTION COSTS
CAS PROJECT No.: 00-0903
EXHIBIT P1B

ITEM No.	DESCRIPTION		QUANTITY	UNIT		UNIT COST		TOTAL
1	Mobilization	7%	1	LS	$	323,456.00	$	323,456.00
2	Maintenance of Traffic	2%	1	LS	$	92,416.00	$	92,416.00
3	Clearing & Grubbing	5%	1	LS	$	231,040.00	$	231,040.00
4	Survey Stakeout and As-Builts	2%	1	LS	$	92,416.00	$	92,416.00
5	Density Testing	1%	1	LS	$	46,208.00	$	46,208.00
	Earthwork							
6	Excavate Swale Area			CY	$	10.00	$	-
7	Excavate Canal Area			CY	$	12.00	$	-
8	Seed & Mulch			SY	$	2.00	$	-
9	Excavate Flow way Area			CY	$	10.00	$	-
10	Excavate Stormwater Pond			CY	$	10.00	$	-
11	Excavate Channel			CY	$	12.00	$	-
12	Excavate Detention Pond			CY	$	12.00	$	-
13	Perimeter Berm for Stormwater Facility		149280	CY	$	10.00	$	1,492,800.00
14	Fill & Compact Existing Swale Area			CY	$	7.00	$	-
15	Clear & Grub Existing Flow Way			AC	$	3,000.00	$	-
16	Construct Wetland Area w/ 5 YR Maintenance Program			AC	$	120,000.00	$	-
	Demolition							
17	Remove Existing Drainage Culvert			LF	$	12.00	$	-
18	Remove Existing Drainage Pipe			LF	$	12.00	$	-
19	Remove Existing Drainage Structure			EA	$	500.00	$	-
	Road Improvements							
20	1 1/4" Type S-III Asphalt Pavement Overlay			SY	$	15.00	$	-
21	Asphalt Pavement Restoration			SY	$	30.00	$	-
22	Asphalt Driveway Restoration			SY	$	30.00	$	-
23	Grade Swale Area			SY	$	7.00	$	-
24	Seed & Mulch Swale			SY	$	4.00	$	-
25	Sod Restoration			SY	$	7.50	$	-
26	Striping Restoration			EA	$	6,000.00	$	-
	Drainage Structures							
27	Diversion Control Structure (Sheet Pile w/ Cap)			EA	$	160,000.00	$	-
28	Control Structure			EA	$	10,000.00	$	-
29	5' Control Structure			EA	$	8,000.00	$	-
30	6' Control Structure			EA	$	12,000.00	$	-
31	**Stormwater Pumping Station (250 cfs) (BY SFWMD)**		1	LS	$	-	$	-
32	Stormwater Pumping Station (75 cfs) w/ B/U Generator		1	LS	$	2,300,000.00	$	2,300,000.00
33	Weir Structure			EA	$	120,000.00	$	-
34	Sheet Pile Weir Structure w/ Cap			EA	$	160,000.00	$	-
35	Water Quality Structure			EA	$	50,000.00	$	-
36	Type 'E' Inlet			EA	$	7,500.00	$	-
37	Type 'F' Inlet			EA	$	10,000.00	$	-
38	C-4 Inlet			EA	$	4,000.00	$	-

OKEECHOBEE COUNTY STORMWATER MASTER PLAN
CONCEPTUAL ESTIMATED CONSTRUCTION COSTS
CAS PROJECT No.: 00-0903
EXHIBIT P1B

ITEM No.	DESCRIPTION	QUANTITY	UNIT		UNIT COST		TOTAL
39	C-5 Inlet		EA	$	5,500.00	$	-
40	C-6 Inlet		EA	$	8,000.00	$	-
41	M-5 Inlet		EA	$	4,500.00	$	-
42	M-5 Manhole		EA	$	5,000.00	$	-
43	24" Yard Drain		EA	$	1,500.00	$	-
	Drainage Pipe						
44	12' x 6' Conc. Box Culvert		LF	$	2,000.00	$	-
45	6' x 6' Conc. Box Culvert		LF	$	1,000.00	$	-
46	48" RCP		LF	$	150.00	$	-
47	42" RCP		LF	$	125.00	$	-
48	36" RCP		LF	$	100.00	$	-
49	36" HDPE		LF	$	85.00	$	-
50	96" DIP Force Main	40	LF	$	1,200.00	$	48,000.00
51	30" HDPE		LF	$	75.00	$	-
52	24" RCP		LF	$	70.00	$	-
53	24" HDPE		LF	$	65.00	$	-
54	60" DIP Force Main	2520	LF	$	300.00	$	756,000.00
55	18" RCP		LF	$	60.00	$	-
56	18" HDPE		LF	$	55.00	$	-
57	15" HDPE		LF	$	45.00	$	-
58	48" Conc. Headwall		EA	$	10,000.00	$	-
59	42" Conc. Headwall		EA	$	8,000.00	$	-
60	36" Conc. Headwall		EA	$	6,500.00	$	-
61	24" Conc. Headwall		EA	$	5,000.00	$	-
62	18" Conc. Headwall		EA	$	3,500.00	$	-
63	36" Mitered End Section		EA	$	1,800.00	$	-
64	24" Mitered End Section		EA	$	1,200.00	$	-
65	18" HDPE Driveway Culvert w/ Flared Ends (2)		EA	$	2,000.00	$	-
66	N-12 Adapter Fittings		EA	$	550.00	$	-
	Misc.						
67	Turbidity Screen	600	LF	$	40.00	$	24,000.00
68	Guardrail		LF	$	250.00	$	-
69	6' High Chain Link Fence w/ Gates		LF	$	25.00	$	-
70	Land Purchase (in Acres)	150	AC	$	50,000.00	$	7,500,000.00
71	Core and Connect to Exist. Drainage Structures		EA	$	1,800.00	$	-
				SUB TOTAL		$	**12,906,336.00**

Some work in this area is underway.

Excluding land purchasing, Engineering Design, Permitting,

15%	**Const. Services (Varies).**		**$693,120.00**
10%	**CONTINGENCY**	$	**1,290,633.60**
TOTAL ESTIMATED CONSTRUCTION COST		$	**14,890,089.60**

OKEECHOBEE COUNTY STORMWATER MASTER PLAN
CONCEPTUAL ESTIMATED CONSTRUCTION COSTS
CAS PROJECT No.: 00-0903
EXHIBIT P2

ITEM No.	DESCRIPTION		QUANTITY	UNIT		UNIT COST		TOTAL
1	Mobilization	7%	1	LS	$	538,009.50	$	538,009.50
2	Maintenance of Traffic	2%	1	LS	$	153,717.00	$	153,717.00
3	Clearing & Grubbing	5%	1	LS	$	384,292.50	$	384,292.50
4	Survey Stakeout and As-Builts	2%	1	LS	$	153,717.00	$	153,717.00
5	Density Testing	1%	1	LS	$	76,858.50	$	76,858.50
	Earthwork							
6	Excavate Swale Area			CY	$	10.00	$	-
7	Excavate Canal Area			CY	$	12.00	$	-
8	Seed & Mulch		56600	SY	$	2.00	$	113,200.00
9	Excavate Flow way Area			CY	$	10.00	$	-
10	Excavate Stormwater Pond		605000	CY	$	10.00	$	6,050,000.00
11	Excavate Channel			CY	$	12.00	$	-
12	Excavate Detention Pond			CY	$	12.00	$	-
13	Perimeter Berm for Stormwater Facility			CY	$	10.00	$	-
14	Fill & Compact Existing Swale Area			CY	$	7.00	$	-
15	Clear & Grub Existing Flow Way			AC	$	3,000.00	$	-
16	Construct Wetland Area w/ 5 YR Maintenance Program			AC	$	120,000.00	$	-
	Demolition							
17	Remove Existing Drainage Culvert			LF	$	12.00	$	-
18	Remove Existing Drainage Pipe			LF	$	12.00	$	-
19	Remove Existing Drainage Structure			EA	$	500.00	$	-
	Road Improvements							
20	1 1/4" Type S-III Asphalt Pavement Overlay		14000	SY	$	15.00	$	210,000.00
21	Asphalt Pavement Restoration		170	SY	$	30.00	$	5,100.00
22	Asphalt Driveway Restoration		310	SY	$	30.00	$	9,300.00
23	Grade Swale Area		30000	SY	$	7.00	$	210,000.00
24	Seed & Mulch Swale		30000	SY	$	4.00	$	120,000.00
25	Sod Restoration			SY	$	7.50	$	-
26	Striping Restoration		1	EA	$	6,000.00	$	6,000.00
	Drainage Structures							
27	Diversion Control Structure (Sheet Pile w/ Cap)			EA	$	160,000.00	$	-
28	Control Structure			EA	$	10,000.00	$	-
29	5' Control Structure		7	EA	$	8,000.00	$	56,000.00
30	6' Control Structure			EA	$	12,000.00	$	-
31	Stormwater Pumping Station (250 cfs) w/ B/U Generator			LS	$	3,800,000.00	$	-
32	Stormwater Pumping Station (1200 gpm) w/ B/U Generator			LS	$	1,500,000.00	$	-
33	Weir Structure			EA	$	120,000.00	$	-
34	Sheet Pile Weir Structure w/ Cap			EA	$	160,000.00	$	-
35	Water Quality Structure			EA	$	50,000.00	$	-
36	Type 'E' Inlet			EA	$	7,500.00	$	-
37	Type 'F' Inlet			EA	$	10,000.00	$	-
38	C-4 Inlet		20	EA	$	4,000.00	$	80,000.00

OKEECHOBEE COUNTY STORMWATER MASTER PLAN
CONCEPTUAL ESTIMATED CONSTRUCTION COSTS
CAS PROJECT No.: 00-0903
EXHIBIT P2

ITEM No.	DESCRIPTION	QUANTITY	UNIT		UNIT COST		TOTAL
39	C-5 Inlet		EA	$	5,500.00	$	-
40	C-6 Inlet		EA	$	8,000.00	$	-
41	M-5 Inlet		EA	$	4,500.00	$	-
42	M-5 Manhole	2	EA	$	5,000.00	$	10,000.00
43	24" Yard Drain		EA	$	1,500.00	$	-
	Drainage Pipe						
44	12' x 6' Conc. Box Culvert		LF	$	2,000.00	$	-
45	6' x 6' Conc. Box Culvert		LF	$	1,000.00	$	-
46	48" RCP		LF	$	150.00	$	-
47	42" RCP		LF	$	125.00	$	-
48	36" RCP		LF	$	100.00	$	-
49	36" HDPE		LF	$	85.00	$	-
50	36" DIP Force Main		LF	$	100.00	$	-
51	30" HDPE		LF	$	75.00	$	-
52	24" RCP		LF	$	70.00	$	-
53	24" HDPE	1620	LF	$	65.00	$	105,300.00
54	24" DIP Force Main		LF	$	70.00	$	-
55	18" RCP		LF	$	60.00	$	-
56	18" HDPE	4530	LF	$	55.00	$	249,150.00
57	15" HDPE	320	LF	$	45.00	$	14,400.00
58	48" Conc. Headwall	2	EA	$	10,000.00	$	20,000.00
59	42" Conc. Headwall		EA	$	8,000.00	$	-
60	36" Conc. Headwall		EA	$	6,500.00	$	-
61	24" Conc. Headwall		EA	$	5,000.00	$	-
62	18" Conc. Headwall		EA	$	3,500.00	$	-
63	30" Mitered End Section		EA	$	1,800.00	$	-
64	24" Mitered End Section	7	EA	$	1,200.00	$	8,400.00
65	24" HDPE Driveway Culvert w/ Flared Ends (2)	23	EA	$	2,000.00	$	46,000.00
66	N-12 Adapter Fittings		EA	$	550.00	$	-
	Misc.						
67	Turbidity Screen	200	LF	$	40.00	$	8,000.00
68	Guardrail		LF	$	250.00	$	-
69	6' High Chain Link Fence w/ Gates	14600	LF	$	25.00	$	365,000.00
70	Land Purchase (in Acres)	50	AC	$	50,000.00	$	2,500,000.00
71	Core and Connect to Exist. Drainage Structures		EA	$	1,800.00	$	-
				SUB TOTAL		**$**	**11,492,444.50**
				Excluding land purchasing, Engineering Design, Permitting,			
			25%	**Const. Services (Varies)**			**$1,921,462.50**
			10%	**CONTINGENCY**		**$**	**1,149,244.45**
TOTAL ESTIMATED CONSTRUCTION COST						**$**	**14,563,151.45**

OKEECHOBEE COUNTY STORMWATER MASTER PLAN
CONCEPTUAL ESTIMATED CONSTRUCTION COSTS
CAS PROJECT No.: 00-0903
EXHIBIT P3

ITEM No.	DESCRIPTION		QUANTITY	UNIT		UNIT COST		TOTAL
1	Mobilization	7%	1	LS	$	84,889.00	$	84,889.00
2	Maintenance of Traffic	2%	1	LS	$	24,254.00	$	24,254.00
3	Clearing & Grubbing	5%	1	LS	$	60,635.00	$	60,635.00
4	Survey Stakeout and As-Builts	2%	1	LS	$	24,254.00	$	24,254.00
5	Density Testing	1%	1	LS	$	12,127.00	$	12,127.00
	Earthwork							
6	Excavate Swale Area			CY	$	10.00	$	-
7	Excavate Canal Area			CY	$	12.00	$	-
8	Seed & Mulch			SY	$	2.00	$	-
9	Excavate Flow way Area			CY	$	10.00	$	-
10	Excavate Stormwater Pond			CY	$	10.00	$	-
11	Excavate Channel			CY	$	12.00	$	-
12	Excavate Detention Pond			CY	$	12.00	$	-
13	Perimeter Berm for Stormwater Facility			CY	$	10.00	$	-
14	Fill & Compact Existing Swale Area			CY	$	7.00	$	-
15	Clear & Grub Existing Flow Way			AC	$	3,000.00	$	-
16	Construct Wetland Area w/ 5 YR Maintenance Program			AC	$	120,000.00	$	-
	Demolition							
17	Remove Existing Drainage Culvert			LF	$	12.00	$	-
18	Remove Existing Drainage Pipe			LF	$	12.00	$	-
19	Remove Existing Drainage Structure			EA	$	500.00	$	-
	Road Improvements							
20	1 1/4" Type S-III Asphalt Pavement Overlay		11550	SY	$	15.00	$	173,250.00
21	Asphalt Pavement Restoration		460	SY	$	30.00	$	13,800.00
22	Asphalt Driveway Restoration		190	SY	$	30.00	$	5,700.00
23	Grade Swale Area		18900	SY	$	7.00	$	132,300.00
24	Seed & Mulch Swale		18900	SY	$	4.00	$	75,600.00
25	Sod Restoration			SY	$	7.50	$	-
26	Striping Restoration		1	EA	$	6,000.00	$	6,000.00
	Drainage Structures							
27	Diversion Control Structure (Sheet Pile w/ Cap)			EA	$	160,000.00	$	-
28	Control Structure			EA	$	10,000.00	$	-
29	5' Control Structure		2	EA	$	8,000.00	$	16,000.00
30	6' Control Structure			EA	$	12,000.00	$	-
31	Stormwater Pumping Station (250 cfs) w/ B/U Generator			LS	$	3,800,000.00	$	-
32	Stormwater Pumping Station (1200 gpm) w/ B/U Generator			LS	$	1,500,000.00	$	-
33	Weir Structure			EA	$	120,000.00	$	-
34	Sheet Pile Weir Structure w/ Cap			EA	$	160,000.00	$	-
35	Water Quality Structure		2	EA	$	50,000.00	$	100,000.00
36	Type 'E' Inlet			EA	$	7,500.00	$	-
37	Type 'F' Inlet			EA	$	10,000.00	$	-
38	C-4 Inlet		33	EA	$	4,000.00	$	132,000.00

OKEECHOBEE COUNTY STORMWATER MASTER PLAN
CONCEPTUAL ESTIMATED CONSTRUCTION COSTS
CAS PROJECT No.: 00-0903
EXHIBIT P3

ITEM No.	DESCRIPTION	QUANTITY	UNIT		UNIT COST		TOTAL
39	C-5 Inlet	15	EA	$	5,500.00	$	82,500.00
40	C-6 Inlet		EA	$	8,000.00	$	-
41	M-5 Inlet	1	EA	$	4,500.00	$	4,500.00
42	M-5 Manhole		EA	$	5,000.00	$	-
43	24" Yard Drain	6	EA	$	1,500.00	$	9,000.00
	Drainage Pipe						
44	12' x 6' Conc. Box Culvert		LF	$	2,000.00	$	-
45	6' x 6' Conc. Box Culvert		LF	$	1,000.00	$	-
46	48" RCP		LF	$	150.00	$	-
47	42" RCP	900	LF	$	125.00	$	112,500.00
48	36" RCP		LF	$	100.00	$	-
49	36" HDPE	1100	LF	$	85.00	$	93,500.00
50	36" DIP Force Main		LF	$	100.00	$	-
51	30" HDPE	770	LF	$	75.00	$	57,750.00
52	24" RCP		LF	$	70.00	$	-
53	24" HDPE	300	LF	$	65.00	$	19,500.00
54	24" DIP Force Main		LF	$	70.00	$	-
55	18" RCP		LF	$	60.00	$	-
56	18" HDPE	1000	LF	$	55.00	$	55,000.00
57	15" HDPE	1700	LF	$	45.00	$	76,500.00
58	48" Conc. Headwall		EA	$	10,000.00	$	-
59	42" Conc. Headwall	2	EA	$	8,000.00	$	16,000.00
60	36" Conc. Headwall		EA	$	6,500.00	$	-
61	24" Conc. Headwall		EA	$	5,000.00	$	-
62	18" Conc. Headwall		EA	$	3,500.00	$	-
63	36" Mitered End Section		EA	$	1,800.00	$	-
64	24" Mitered End Section		EA	$	1,200.00	$	-
65	18" HDPE Driveway Culvert w/ Flared Ends (2)	14	EA	$	2,000.00	$	28,000.00
66	N-12 Adapter Fittings	6	EA	$	550.00	$	3,300.00
	Misc.						
67	Turbidity Screen		LF	$	40.00	$	-
68	Guardrail		LF	$	250.00	$	-
69	6' High Chain Link Fence w/ Gates		LF	$	25.00	$	-
70	Land Purchase (in Acres)		AC	$	50,000.00	$	-
71	Core and Connect to Exist. Drainage Structures		EA	$	1,800.00	$	-
				SUB TOTAL		**$**	**1,418,859.00**

25%	**Excluding land purchasing, Engineering Design, Permitting, Const. Services (Varies)**		**$303,175.00**
10%	**CONTINGENCY**	**$**	**141,885.90**
TOTAL ESTIMATED CONSTRUCTION COST		**$**	**1,863,919.90**

OKEECHOBEE COUNTY STORMWATER MASTER PLAN
CONCEPTUAL ESTIMATED CONSTRUCTION COSTS
CAS PROJECT No.: 00-0903
EXHIBIT P4

ITEM No.	DESCRIPTION		QUANTITY	UNIT		UNIT COST		TOTAL
1	Mobilization	7%	1	LS	$	67,238.50	$	67,238.50
2	Maintenance of Traffic	2%	1	LS	$	19,211.00	$	19,211.00
3	Clearing & Grubbing	5%	1	LS	$	48,027.50	$	48,027.50
4	Survey Stakeout and As-Builts	2%	1	LS	$	19,211.00	$	19,211.00
5	Density Testing	1%	1	LS	$	9,605.50	$	9,605.50
	Earthwork							
6	Excavate Swale Area			CY	$	10.00	$	-
7	Excavate Canal Area			CY	$	12.00	$	-
8	Seed & Mulch			SY	$	2.00	$	-
9	Excavate Flow way Area			CY	$	10.00	$	-
10	Excavate Stormwater Pond			CY	$	10.00	$	-
11	Excavate Channel			CY	$	12.00	$	-
12	Excavate Detention Pond			CY	$	12.00	$	-
13	Perimeter Berm for Stormwater Facility			CY	$	10.00	$	-
14	Fill & Compact Existing Swale Area			CY	$	7.00	$	-
15	Clear & Grub Existing Flow Way			AC	$	3,000.00	$	-
16	Construct Wetland Area w/ 5 YR Maintenance Program			AC	$	120,000.00	$	-
	Demolition							
17	Remove Existing Drainage Culvert			LF	$	12.00	$	-
18	Remove Existing Drainage Pipe			LF	$	12.00	$	-
19	Remove Existing Drainage Structure			EA	$	500.00	$	-
	Road Improvements							
20	1 1/4" Type S-III Asphalt Pavement Overlay		13000	SY	$	15.00	$	195,000.00
21	Asphalt Pavement Restoration		550	SY	$	30.00	$	16,500.00
22	Asphalt Driveway Restoration		550	SY	$	30.00	$	16,500.00
23	Grade Swale Area		19000	SY	$	7.00	$	133,000.00
24	Seed & Mulch Swale		19000	SY	$	4.00	$	76,000.00
25	Sod Restoration			SY	$	7.50	$	-
26	Striping Restoration		1	EA	$	6,000.00	$	6,000.00
	Drainage Structures							
27	Diversion Control Structure (Sheet Pile w/ Cap)			EA	$	160,000.00	$	-
28	Control Structure			EA	$	10,000.00	$	-
29	5' Control Structure			EA	$	8,000.00	$	-
30	6' Control Structure			EA	$	12,000.00	$	-
31	Stormwater Pumping Station (250 cfs) w/ B/U Generator			LS	$	3,800,000.00	$	-
32	Stormwater Pumping Station (1200 gpm) w/ B/U Generator			LS	$	1,500,000.00	$	-
33	Weir Structure			EA	$	120,000.00	$	-
34	Sheet Pile Weir Structure w/ Cap			EA	$	160,000.00	$	-
35	Water Quality Structure			EA	$	50,000.00	$	-
36	Type 'E' Inlet			EA	$	7,500.00	$	-
37	Type 'F' Inlet			EA	$	10,000.00	$	-
38	C-4 Inlet		16	EA	$	4,000.00	$	64,000.00

OKEECHOBEE COUNTY STORMWATER MASTER PLAN
CONCEPTUAL ESTIMATED CONSTRUCTION COSTS
CAS PROJECT No.: 00-0903
EXHIBIT P4

ITEM No.	DESCRIPTION	QUANTITY	UNIT		UNIT COST		TOTAL
39	C-5 Inlet	16	EA	$	5,500.00	$	88,000.00
40	C-6 Inlet		EA	$	8,000.00	$	-
41	M-5 Inlet		EA	$	4,500.00	$	-
42	M-5 Manhole		EA	$	5,000.00	$	-
43	24" Yard Drain		EA	$	1,500.00	$	-
	Drainage Pipe						
44	12' x 6' Conc. Box Culvert		LF	$	2,000.00	$	-
45	6' x 6' Conc. Box Culvert		LF	$	1,000.00	$	-
46	48" RCP		LF	$	150.00	$	-
47	42" RCP		LF	$	125.00	$	-
48	36" RCP		LF	$	100.00	$	-
49	36" HDPE	305	LF	$	85.00	$	25,925.00
50	36" DIP Force Main		LF	$	100.00	$	-
51	30" HDPE		LF	$	75.00	$	-
52	24" RCP		LF	$	70.00	$	-
53	24" HDPE	885	LF	$	65.00	$	57,525.00
54	24" DIP Force Main		LF	$	70.00	$	-
55	18" RCP		LF	$	60.00	$	-
56	18" HDPE	3380	LF	$	55.00	$	185,900.00
57	15" HDPE	360	LF	$	45.00	$	16,200.00
58	48" Conc. Headwall		EA	$	10,000.00	$	-
59	42" Conc. Headwall		EA	$	8,000.00	$	-
60	36" Conc. Headwall		EA	$	6,500.00	$	-
61	24" Conc. Headwall		EA	$	5,000.00	$	-
62	18" Conc. Headwall		EA	$	3,500.00	$	-
63	36" Mitered End Section		EA	$	1,800.00	$	-
64	24" Mitered End Section		EA	$	1,200.00	$	-
65	18" HDPE Driveway Culvert w/ Flared Ends (2)	40	EA	$	2,000.00	$	80,000.00
66	N-12 Adapter Fittings		EA	$	550.00	$	-
	Misc.						
67	Turbidity Screen		LF	$	40.00	$	-
68	Guardrail		LF	$	250.00	$	-
69	6' High Chain Link Fence w/ Gates		LF	$	25.00	$	-
70	Land Purchase (in Acres)		AC	$	50,000.00	$	-
71	Core and Connect to Exist. Drainage Structures		EA	$	1,800.00	$	-
				SUB TOTAL		$	**1,123,843.50**

	Excluding land purchasing, Engineering Design, Permitting,		
25%	**Const. Services (Varies)**		**$240,137.50**
10%	**CONTINGENCY**	**$**	**112,384.35**
TOTAL ESTIMATED CONSTRUCTION COST		**$**	**1,476,365.35**

OKEECHOBEE COUNTY STORMWATER MASTER PLAN
CONCEPTUAL ESTIMATED CONSTRUCTION COSTS
CAS PROJECT No.: 00-0903
EXHIBIT P5 - OPTION 1

ITEM No.	DESCRIPTION		QUANTITY	UNIT		UNIT COST		TOTAL
1	Mobilization	7%	1	LS	$	172,310.60	$	172,310.60
2	Maintenance of Traffic	2%	1	LS	$	49,231.60	$	49,231.60
3	Clearing & Grubbing	5%	1	LS	$	123,079.00	$	123,079.00
4	Survey Stakeout and As-Builts	2%	1	LS	$	49,231.60	$	49,231.60
5	Density Testing	1%	1	LS	$	24,615.80	$	24,615.80
	Earthwork							
6	Excavate Swale Area			CY	$	10.00	$	-
7	Excavate Canal Area			CY	$	12.00	$	-
8	Seed & Mulch			SY	$	2.00	$	-
9	Excavate Flow way Area			CY	$	10.00	$	-
10	Excavate Stormwater Pond			CY	$	10.00	$	-
11	Excavate Channel			CY	$	12.00	$	-
12	Excavate Detention Pond			CY	$	12.00	$	-
13	Perimeter Berm for Stormwater Facility			CY	$	10.00	$	-
14	Fill & Compact Existing Swale Area			CY	$	7.00	$	-
15	Clear & Grub Existing Flow Way			AC	$	3,000.00	$	-
16	Construct Wetland Area w/ 5 YR Maintenance Program			AC	$	120,000.00	$	-
	Demolition							
17	Remove Existing Drainage Culvert			LF	$	12.00	$	-
18	Remove Existing Drainage Pipe			LF	$	12.00	$	-
19	Remove Existing Drainage Structure			EA	$	500.00	$	-
	Road Improvements							
20	1 1/4" Type S-III Asphalt Pavement Overlay		9500	SY	$	15.00	$	142,500.00
21	Asphalt Pavement Restoration		180	SY	$	30.00	$	5,400.00
22	Asphalt Driveway Restoration		460	SY	$	30.00	$	13,800.00
23	Grade Swale Area		14180	SY	$	7.00	$	99,260.00
24	Seed & Mulch Swale		14180	SY	$	4.00	$	56,720.00
25	Sod Restoration			SY	$	7.50	$	-
26	Striping Restoration		1	EA	$	6,000.00	$	6,000.00
	Drainage Structures							
27	Diversion Control Structure (Sheet Pile w/ Cap)			EA	$	160,000.00	$	-
28	Control Structure			EA	$	10,000.00	$	-
29	5' Control Structure			EA	$	8,000.00	$	-
30	6' Control Structure			EA	$	12,000.00	$	-
31	Stormwater Pumping Station (250 cfs) w/ B/U Generator			LS	$	3,800,000.00	$	-
32	Stormwater Pumping Station (1200 gpm) w/ B/U Generator		1	LS	$	1,500,000.00	$	1,500,000.00
33	Weir Structure			EA	$	120,000.00	$	-
34	Sheet Pile Weir Structure w/ Cap			EA	$	160,000.00	$	-
35	Water Quality Structure		1	EA	$	50,000.00	$	50,000.00
36	Type 'E' Inlet			EA	$	7,500.00	$	-
37	Type 'F' Inlet			EA	$	10,000.00	$	-
38	C-4 Inlet		17	EA	$	4,000.00	$	68,000.00

OKEECHOBEE COUNTY STORMWATER MASTER PLAN
CONCEPTUAL ESTIMATED CONSTRUCTION COSTS
CAS PROJECT No.: 00-0903
EXHIBIT P5 - OPTION 1

ITEM No.	DESCRIPTION	QUANTITY	UNIT		UNIT COST		TOTAL
39	C-5 Inlet	10	EA	$	5,500.00	$	55,000.00
40	C-6 Inlet	2	EA	$	8,000.00	$	16,000.00
41	M-5 Inlet	2	EA	$	4,500.00	$	9,000.00
42	M-5 Manhole		EA	$	5,000.00	$	-
43	24" Yard Drain		EA	$	1,500.00	$	-
	Drainage Pipe						
44	12' x 6' Conc. Box Culvert		LF	$	2,000.00	$	-
45	6' x 6' Conc. Box Culvert		LF	$	1,000.00	$	-
46	48" RCP		LF	$	150.00	$	-
47	42" RCP	880	LF	$	125.00	$	110,000.00
48	36" RCP		LF	$	100.00	$	-
49	36" HDPE	610	LF	$	85.00	$	51,850.00
50	36" DIP Force Main		LF	$	100.00	$	-
51	30" HDPE		LF	$	75.00	$	-
52	24" RCP		LF	$	70.00	$	-
53	24" HDPE		LF	$	65.00	$	-
54	24" DIP Force Main	75	LF	$	70.00	$	5,250.00
55	18" RCP		LF	$	60.00	$	-
56	18" HDPE	3290	LF	$	55.00	$	180,950.00
57	15" HDPE	330	LF	$	45.00	$	14,850.00
58	48" Conc. Headwall		EA	$	10,000.00	$	-
59	42" Conc. Headwall		EA	$	8,000.00	$	-
60	36" Conc. Headwall		EA	$	6,500.00	$	-
61	24" Conc. Headwall	1	EA	$	5,000.00	$	5,000.00
62	18" Conc. Headwall		EA	$	3,500.00	$	-
63	36" Mitered End Section		EA	$	1,800.00	$	-
64	24" Mitered End Section		EA	$	1,200.00	$	-
65	18" HDPE Driveway Culvert w/ Flared Ends (2)	34	EA	$	2,000.00	$	68,000.00
66	N-12 Adapter Fittings		EA	$	550.00	$	-
	Misc.						
67	Turbidity Screen	100	LF	$	40.00	$	4,000.00
68	Guardrail		LF	$	250.00	$	-
69	6' High Chain Link Fence w/ Gates		LF	$	25.00	$	-
70	Land Purchase (in Acres)		AC	$	50,000.00	$	-
71	Core and Connect to Exist. Drainage Structures		EA	$	1,800.00	$	-

	SUB TOTAL	**$**	**2,880,048.60**
25%	**Excluding land purchasing, Engineering Design, Permitting, Const. Services (Varies)**		**$615,395.00**
10%	**CONTINGENCY**	**$**	**288,004.86**
TOTAL ESTIMATED CONSTRUCTION COST		**$**	**3,783,448.46**

OKEECHOBEE COUNTY STORMWATER MASTER PLAN
CONCEPTUAL ESTIMATED CONSTRUCTION COSTS
CAS PROJECT No.: 00-0903
EXHIBIT P6 - OPTION 2

ITEM No.	DESCRIPTION		QUANTITY	UNIT		UNIT COST		TOTAL
1	Mobilization	7%	1	LS	$	60,888.10	$	60,888.10
2	Maintenance of Traffic	2%	1	LS	$	17,396.60	$	17,396.60
3	Clearing & Grubbing	5%	1	LS	$	43,491.50	$	43,491.50
4	Survey Stakeout and As-Builts	2%	1	LS	$	17,396.60	$	17,396.60
5	Density Testing	1%	1	LS	$	8,698.30	$	8,698.30
	Earthwork							
6	Excavate Swale Area			CY	$	10.00	$	-
7	Excavate Canal Area			CY	$	12.00	$	-
8	Seed & Mulch			SY	$	2.00	$	-
9	Excavate Flow way Area			CY	$	10.00	$	-
10	Excavate Stormwater Pond			CY	$	10.00	$	-
11	Excavate Channel			CY	$	12.00	$	-
12	Excavate Detention Pond			CY	$	12.00	$	-
13	Perimeter Berm for Stormwater Facility			CY	$	10.00	$	-
14	Fill & Compact Existing Swale Area			CY	$	7.00	$	-
15	Clear & Grub Existing Flow Way			AC	$	3,000.00	$	-
16	Construct Wetland Area w/ 5 YR Maintenance Program			AC	$	120,000.00	$	-
	Demolition							
17	Remove Existing Drainage Culvert			LF	$	12.00	$	-
18	Remove Existing Drainage Pipe			LF	$	12.00	$	-
19	Remove Existing Drainage Structure			EA	$	500.00	$	-
	Road Improvements							
20	1 1/4" Type S-III Asphalt Pavement Overlay		9500	SY	$	15.00	$	142,500.00
21	Asphalt Pavement Restoration		180	SY	$	30.00	$	5,400.00
22	Asphalt Driveway Restoration		460	SY	$	30.00	$	13,800.00
23	Grade Swale Area		14180	SY	$	7.00	$	99,260.00
24	Seed & Mulch Swale		14180	SY	$	4.00	$	56,720.00
25	Sod Restoration			SY	$	7.50	$	-
26	Striping Restoration		1	EA	$	6,000.00	$	6,000.00
	Drainage Structures							
27	Diversion Control Structure (Sheet Pile w/ Cap)			EA	$	160,000.00	$	-
28	Control Structure			EA	$	10,000.00	$	-
29	5' Control Structure		1	EA	$	8,000.00	$	8,000.00
30	6' Control Structure			EA	$	12,000.00	$	-
31	Stormwater Pumping Station (250 cfs) w/ B/U Generator			LS	$	3,800,000.00	$	-
32	Stormwater Pumping Station (1200 gpm) w/ B/U Generator			LS	$	1,500,000.00	$	-
33	Weir Structure			EA	$	120,000.00	$	-
34	Sheet Pile Weir Structure w/ Cap			EA	$	160,000.00	$	-
35	Water Quality Structure			EA	$	50,000.00	$	-
36	Type 'E' Inlet			EA	$	7,500.00	$	-
37	Type 'F' Inlet			EA	$	10,000.00	$	-
38	C-4 Inlet		17	EA	$	4,000.00	$	68,000.00

OKEECHOBEE COUNTY STORMWATER MASTER PLAN
CONCEPTUAL ESTIMATED CONSTRUCTION COSTS
CAS PROJECT No.: 00-0903
EXHIBIT P6 - OPTION 2

ITEM No.	DESCRIPTION	QUANTITY	UNIT		UNIT COST		TOTAL
39	C-5 Inlet	10	EA	$	5,500.00	$	55,000.00
40	C-6 Inlet	2	EA	$	8,000.00	$	16,000.00
41	M-5 Inlet	1	EA	$	4,500.00	$	4,500.00
42	M-5 Manhole		EA	$	5,000.00	$	-
43	24" Yard Drain		EA	$	1,500.00	$	-
	Drainage Pipe						
44	12' x 6' Conc. Box Culvert		LF	$	2,000.00	$	-
45	6' x 6' Conc. Box Culvert		LF	$	1,000.00	$	-
46	48" RCP	250	LF	$	150.00	$	37,500.00
47	42" RCP	180	LF	$	125.00	$	22,500.00
48	36" RCP		LF	$	100.00	$	-
49	36" HDPE	610	LF	$	85.00	$	51,850.00
50	36" DIP Force Main		LF	$	100.00	$	-
51	30" HDPE		LF	$	75.00	$	-
52	24" RCP		LF	$	70.00	$	-
53	24" HDPE		LF	$	65.00	$	-
54	24" DIP Force Main		LF	$	70.00	$	-
55	18" RCP		LF	$	60.00	$	-
56	18" HDPE	3290	LF	$	55.00	$	180,950.00
57	15" HDPE	330	LF	$	45.00	$	14,850.00
58	48" Conc. Headwall	1	EA	$	10,000.00	$	10,000.00
59	42" Conc. Headwall		EA	$	8,000.00	$	-
60	36" Conc. Headwall		EA	$	6,500.00	$	-
61	24" Conc. Headwall	1	EA	$	5,000.00	$	5,000.00
62	18" Conc. Headwall		EA	$	3,500.00	$	-
63	36" Mitered End Section		EA	$	1,800.00	$	-
64	24" Mitered End Section		EA	$	1,200.00	$	-
65	18" HDPE Driveway Culvert w/ Flared Ends (2)	34	EA	$	2,000.00	$	68,000.00
66	N-12 Adapter Fittings		EA	$	550.00	$	-
	Misc.						
67	Turbidity Screen	100	LF	$	40.00	$	4,000.00
68	Guardrail		LF	$	250.00	$	-
69	6' High Chain Link Fence w/ Gates		LF	$	25.00	$	-
70	Land Purchase (in Acres)	39	AC	$	50,000.00	$	1,950,000.00
71	Core and Connect to Exist. Drainage Structures		EA	$	1,800.00	$	-
				SUB TOTAL		**$**	**2,967,701.10**

	Excluding land purchasing, Engineering Design, Permitting,		
25%	**Const. Services (Varies)**		**$217,457.50**
10%	**CONTINGENCY**	**$**	**296,770.11**
TOTAL ESTIMATED CONSTRUCTION COST		**$**	**3,481,928.71**

OKEECHOBEE COUNTY STORMWATER MASTER PLAN
CONCEPTUAL ESTIMATED CONSTRUCTION COSTS
CAS PROJECT No.: 00-0903
EXHIBIT P7

ITEM No.	DESCRIPTION		QUANTITY	UNIT		UNIT COST		TOTAL
1	Mobilization	7%	1	LS	$	53,998.00	$	53,998.00
2	Maintenance of Traffic	2%	1	LS	$	15,428.00	$	15,428.00
3	Clearing & Grubbing	5%	1	LS	$	38,570.00	$	38,570.00
4	Survey Stakeout and As-Builts	2%	1	LS	$	15,428.00	$	15,428.00
5	Density Testing	1%	1	LS	$	7,714.00	$	7,714.00
	Earthwork							
6	Excavate Swale Area			CY	$	10.00	$	-
7	Excavate Canal Area			CY	$	12.00	$	-
8	Seed & Mulch			SY	$	2.00	$	-
9	Excavate Flow way Area			CY	$	10.00	$	-
10	Excavate Stormwater Pond			CY	$	10.00	$	-
11	Excavate Channel			CY	$	12.00	$	-
12	Excavate Detention Pond			CY	$	12.00	$	-
13	Perimeter Berm for Stormwater Facility			CY	$	10.00	$	-
14	Fill & Compact Existing Swale Area			CY	$	7.00	$	-
15	Clear & Grub Existing Flow Way			AC	$	3,000.00	$	-
16	Construct Wetland Area w/ 5 YR Maintenance Program			AC	$	120,000.00	$	-
	Demolition							
17	Remove Existing Drainage Culvert			LF	$	12.00	$	-
18	Remove Existing Drainage Pipe			LF	$	12.00	$	-
19	Remove Existing Drainage Structure			EA	$	500.00	$	-
	Road Improvements							
20	1 1/4" Type S-III Asphalt Pavement Overlay		13000	SY	$	15.00	$	195,000.00
21	Asphalt Pavement Restoration		200	SY	$	30.00	$	6,000.00
22	Asphalt Driveway Restoration		240	SY	$	30.00	$	7,200.00
23	Grade Swale Area		13600	SY	$	7.00	$	95,200.00
24	Seed & Mulch Swale		13600	SY	$	4.00	$	54,400.00
25	Sod Restoration			SY	$	7.50	$	-
26	Striping Restoration		1	EA	$	6,000.00	$	6,000.00
	Drainage Structures							
27	Diversion Control Structure (Sheet Pile w/ Cap)			EA	$	160,000.00	$	-
28	Control Structure			EA	$	10,000.00	$	-
29	5' Control Structure			EA	$	8,000.00	$	-
30	6' Control Structure		1	EA	$	12,000.00	$	12,000.00
31	Stormwater Pumping Station (250 cfs) w/ B/U Generator			LS	$	3,800,000.00	$	-
32	Stormwater Pumping Station (1200 gpm) w/ B/U Generator			LS	$	1,500,000.00	$	-
33	Weir Structure			EA	$	120,000.00	$	-
34	Sheet Pile Weir Structure w/ Cap			EA	$	160,000.00	$	-
35	Water Quality Structure			EA	$	50,000.00	$	-
36	Type 'E' Inlet			EA	$	7,500.00	$	-
37	Type 'F' Inlet			EA	$	10,000.00	$	-
38	C-4 Inlet		12	EA	$	4,000.00	$	48,000.00

OKEECHOBEE COUNTY STORMWATER MASTER PLAN
CONCEPTUAL ESTIMATED CONSTRUCTION COSTS
CAS PROJECT No.: 00-0903
EXHIBIT P7

ITEM No.	DESCRIPTION	QUANTITY	UNIT		UNIT COST		TOTAL
39	C-5 Inlet	5	EA	$	5,500.00	$	27,500.00
40	C-6 Inlet	1	EA	$	8,000.00	$	8,000.00
41	M-5 Inlet	5	EA	$	4,500.00	$	22,500.00
42	M-5 Manhole	2	EA	$	5,000.00	$	10,000.00
43	24" Yard Drain		EA	$	1,500.00	$	-
	Drainage Pipe						
44	12' x 6' Conc. Box Culvert		LF	$	2,000.00	$	-
45	6' x 6' Conc. Box Culvert		LF	$	1,000.00	$	-
46	48" RCP		LF	$	150.00	$	-
47	42" RCP	240	LF	$	125.00	$	30,000.00
48	36" RCP		LF	$	100.00	$	-
49	36" HDPE	450	LF	$	85.00	$	38,250.00
50	36" DIP Force Main		LF	$	100.00	$	-
51	30" HDPE	1000	LF	$	75.00	$	75,000.00
52	24" RCP		LF	$	70.00	$	-
53	24" HDPE	830	LF	$	65.00	$	53,950.00
54	24" DIP Force Main		LF	$	70.00	$	-
55	18" RCP		LF	$	60.00	$	-
56	18" HDPE	380	LF	$	55.00	$	20,900.00
57	15" HDPE	300	LF	$	45.00	$	13,500.00
58	48" Conc. Headwall		EA	$	10,000.00	$	-
59	42" Conc. Headwall	1	EA	$	8,000.00	$	8,000.00
60	36" Conc. Headwall		EA	$	6,500.00	$	-
61	24" Conc. Headwall		EA	$	5,000.00	$	-
62	18" Conc. Headwall		EA	$	3,500.00	$	-
63	36" Mitered End Section		EA	$	1,800.00	$	-
64	24" Mitered End Section		EA	$	1,200.00	$	-
65	18" HDPE Driveway Culvert w/ Flared Ends (2)	18	EA	$	2,000.00	$	36,000.00
66	N-12 Adapter Fittings		EA	$	550.00	$	-
	Misc.						
67	Turbidity Screen	100	LF	$	40.00	$	4,000.00
68	Guardrail		LF	$	250.00	$	-
69	6' High Chain Link Fence w/ Gates		LF	$	25.00	$	-
70	Land Purchase (in Acres)		AC	$	50,000.00	$	-
71	Core and Connect to Exist. Drainage Structures		EA	$	1,800.00	$	-
				SUB TOTAL		$	**902,538.00**

	Excluding land purchasing, Engineering Design, Permitting,		
25%	**Const. Services (Varies)**		**$192,850.00**
10%	**CONTINGENCY**	**$**	**90,253.80**
TOTAL ESTIMATED CONSTRUCTION COST		**$**	**1,185,641.80**

OKEECHOBEE COUNTY STORMWATER MASTER PLAN
CONCEPTUAL ESTIMATED CONSTRUCTION COSTS
CAS PROJECT No.: 00-0903
EXHIBIT Q1

ITEM No.	DESCRIPTION		QUANTITY	UNIT		UNIT COST		TOTAL
1	Mobilization	7%	1	LS	$	70,396.20	$	70,396.20
2	Maintenance of Traffic	2%	1	LS	$	20,113.20	$	20,113.20
3	Clearing & Grubbing	5%	1	LS	$	50,283.00	$	50,283.00
4	Survey Stakeout and As-Builts	2%	1	LS	$	20,113.20	$	20,113.20
5	Density Testing	1%	1	LS	$	10,056.60	$	10,056.60
	Earthwork							
6	Excavate Swale Area			CY	$	10.00	$	-
7	Excavate Canal Area			CY	$	12.00	$	-
8	Seed & Mulch		32500	SY	$	2.00	$	65,000.00
9	Excavate Flow way Area			CY	$	10.00	$	-
10	Excavate Stormwater Pond		33500	CY	$	10.00	$	335,000.00
11	Excavate Channel			CY	$	12.00	$	-
12	Excavate Detention Pond			CY	$	15.00	$	-
13	Perimeter Berm for Stormwater Facility			CY	$	12.00	$	-
14	Fill & Compact Existing Swale Area		480	CY	$	7.00	$	3,360.00
15	Clear & Grub Existing Flow Way		1.3	AC	$	3,000.00	$	3,900.00
16	Construct Wetland Area w/ 5 YR Maintenance Program			AC	$	120,000.00	$	-
	Demolition							
17	Remove Existing Drainage Culvert			LF	$	12.00	$	-
18	Remove Existing Drainage Pipe			LF	$	12.00	$	-
19	Remove Existing Drainage Structure			EA	$	500.00	$	-
	Road Improvements							
20	1 1/4" Type S-III Asphalt Pavement Overlay		2500	SY	$	15.00	$	37,500.00
21	Asphalt Pavement Restoration		140	SY	$	30.00	$	4,200.00
22	Asphalt Driveway Restoration		200	SY	$	30.00	$	6,000.00
23	Grade Swale Area		6500	SY	$	7.00	$	45,500.00
24	Seed & Mulch Swale		6500	SY	$	4.00	$	26,000.00
25	Sod Restoration			SY	$	7.50	$	-
26	Striping Restoration		1	EA	$	6,000.00	$	6,000.00
	Drainage Structures							
27	Diversion Control Structure (Sheet Pile w/ Cap)			EA	$	160,000.00	$	-
28	Control Structure			EA	$	10,000.00	$	-
29	5' Control Structure			EA	$	8,000.00	$	-
30	6' Control Structure		1	EA	$	12,000.00	$	12,000.00
31	Stormwater Pumping Station (250 cfs) w/ B/U Generator			LS	$	3,800,000.00	$	-
32	Stormwater Pumping Station (1200 gpm) w/ B/U Generator			LS	$	1,500,000.00	$	-
33	Weir Structure			EA	$	120,000.00	$	-
34	Sheet Pile Weir Structure w/ Cap			EA	$	160,000.00	$	-
35	Water Quality Structure			EA	$	50,000.00	$	-
36	Type 'E' Inlet		12	EA	$	7,500.00	$	90,000.00
37	Type 'F' Inlet		1	EA	$	10,000.00	$	10,000.00
38	C-4 Inlet			EA	$	4,000.00	$	-

OKEECHOBEE COUNTY STORMWATER MASTER PLAN
CONCEPTUAL ESTIMATED CONSTRUCTION COSTS
CAS PROJECT No.: 00-0903
EXHIBIT Q1

ITEM No.	DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
39	C-5 Inlet		EA	$ 5,500.00	$ -
40	C-6 Inlet		EA	$ 8,000.00	$ -
41	M-5 Inlet		EA	$ 4,500.00	$ -
42	M-5 Manhole		EA	$ 5,000.00	$ -
43	24" Yard Drain		EA	$ 1,500.00	$ -
	Drainage Pipe				
44	12' x 6' Conc. Box Culvert		LF	$ 2,000.00	$ -
45	6' x 6' Conc. Box Culvert		LF	$ 1,000.00	$ -
46	48" RCP		LF	$ 150.00	$ -
47	42" RCP	525	LF	$ 125.00	$ 65,625.00
48	36" RCP		LF	$ 100.00	$ -
49	36" HDPE	290	LF	$ 85.00	$ 24,650.00
50	36" DIP Force Main		LF	$ 100.00	$ -
51	30" HDPE	1300	LF	$ 75.00	$ 97,500.00
52	24" RCP		LF	$ 70.00	$ -
53	24" HDPE	475	LF	$ 65.00	$ 30,875.00
54	24" DIP Force Main		LF	$ 70.00	$ -
55	18" RCP		LF	$ 60.00	$ -
56	18" HDPE	350	LF	$ 55.00	$ 19,250.00
57	15" HDPE		LF	$ 45.00	$ -
58	48" Conc. Headwall		EA	$ 10,000.00	$ -
59	42" Conc. Headwall		EA	$ 8,000.00	$ -
60	36" Conc. Headwall	1	EA	$ 6,500.00	$ 6,500.00
61	24" Conc. Headwall		EA	$ 5,000.00	$ -
62	18" Conc. Headwall		EA	$ 3,500.00	$ -
63	36" Mitered End Section	2	EA	$ 1,800.00	$ 3,600.00
64	24" Mitered End Section	1	EA	$ 1,200.00	$ 1,200.00
65	18" HDPE Driveway Culvert w/ Flared Ends (2)	15	EA	$ 2,000.00	$ 30,000.00
66	N-12 Adapter Fittings		EA	$ 550.00	$ -
	Misc.				
67	Turbidity Screen	100	LF	$ 40.00	$ 4,000.00
68	Guardrail		LF	$ 250.00	$ -
69	6' High Chain Link Fence w/ Gates	2400	LF	$ 25.00	$ 60,000.00
70	Land Purchase (in Acres)	7.6	AC	$ 50,000.00	$ 380,000.00
71	Core and Connect to Exist. Drainage Structures	10	EA	$ 1,800.00	$ 18,000.00
			SUB TOTAL		**$ 1,556,622.20**
	Excluding land purchasing, Engineering Design, Permitting,				
25%	**Const. Services (Varies)**				**$251,415.00**
10%	**CONTINGENCY**				**$ 155,662.22**
TOTAL ESTIMATED CONSTRUCTION COST					**$ 1,963,699.42**

OKEECHOBEE COUNTY STORMWATER MASTER PLAN
CONCEPTUAL ESTIMATED CONSTRUCTION COSTS
CAS PROJECT No.: 00-0903
EXHIBIT Q2

ITEM No.	DESCRIPTION		QUANTITY	UNIT		UNIT COST		TOTAL
1	Mobilization	7%	1	LS	$	10,170.65	$	10,170.65
2	Maintenance of Traffic	2%	1	LS	$	2,905.90	$	2,905.90
3	Clearing & Grubbing	5%	1	LS	$	7,264.75	$	7,264.75
4	Survey Stakeout and As-Builts	2%	1	LS	$	2,905.90	$	2,905.90
5	Density Testing	1%	1	LS	$	1,452.95	$	1,452.95
	Earthwork							
6	Excavate Swale Area			CY	$	10.00	$	-
7	Excavate Canal Area			CY	$	12.00	$	-
8	Seed & Mulch		1500	SY	$	2.00	$	3,000.00
9	Excavate Flow way Area			CY	$	10.00	$	-
10	Excavate Stormwater Pond			CY	$	10.00	$	-
11	Excavate Channel			CY	$	12.00	$	-
12	Excavate Detention Pond			CY	$	12.00	$	-
13	Perimeter Berm for Stormwater Facility			CY	$	10.00	$	-
14	Fill & Compact Existing Swale Area		360	CY	$	7.00	$	2,520.00
15	Clear & Grub Existing Flow Way			AC	$	3,000.00	$	-
16	Construct Wetland Area w/ 5 YR Maintenance Program			AC	$	120,000.00	$	-
	Demolition							
17	Remove Existing Drainage Culvert			LF	$	12.00	$	-
18	Remove Existing Drainage Pipe			LF	$	12.00	$	-
19	Remove Existing Drainage Structure			EA	$	500.00	$	-
	Road Improvements							
20	1 1/4" Type S-III Asphalt Pavement Overlay			SY	$	15.00	$	-
21	Asphalt Pavement Restoration			SY	$	30.00	$	-
22	Asphalt Driveway Restoration		95	SY	$	30.00	$	2,850.00
23	Grade Swale Area			SY	$	7.00	$	-
24	Seed & Mulch Swale			SY	$	4.00	$	-
25	Sod Restoration			SY	$	7.50	$	-
26	Striping Restoration			EA	$	6,000.00	$	-
	Drainage Structures							
27	Diversion Control Structure (Sheet Pile w/ Cap)			EA	$	160,000.00	$	-
28	Control Structure			EA	$	10,000.00	$	-
29	5' Control Structure			EA	$	8,000.00	$	-
30	6' Control Structure			EA	$	12,000.00	$	-
31	Stormwater Pumping Station (250 cfs) w/ B/U Generator			LS	$	3,800,000.00	$	-
32	Stormwater Pumping Station (1200 gpm) w/ B/U Generator			LS	$	1,500,000.00	$	-
33	Weir Structure			EA	$	120,000.00	$	-
34	Sheet Pile Weir Structure w/ Cap			EA	$	160,000.00	$	-
35	Water Quality Structure			EA	$	50,000.00	$	-
36	Type 'E' Inlet			EA	$	7,500.00	$	-
37	Type 'F' Inlet			EA	$	10,000.00	$	-
38	C-4 Inlet			EA	$	4,000.00	$	-

OKEECHOBEE COUNTY STORMWATER MASTER PLAN
CONCEPTUAL ESTIMATED CONSTRUCTION COSTS
CAS PROJECT No.: 00-0903
EXHIBIT Q2

ITEM No.	DESCRIPTION	QUANTITY	UNIT		UNIT COST		TOTAL
39	C-5 Inlet		EA	$	5,500.00	$	-
40	C-6 Inlet		EA	$	8,000.00	$	-
41	M-5 Inlet		EA	$	4,500.00	$	-
42	M-5 Manhole		EA	$	5,000.00	$	-
43	24" Yard Drain		EA	$	1,500.00	$	-
	Drainage Pipe						
44	12' x 6' Conc. Box Culvert		LF	$	2,000.00	$	-
45	6' x 6' Conc. Box Culvert		LF	$	1,000.00	$	-
46	48" RCP		LF	$	150.00	$	-
47	42" RCP		LF	$	125.00	$	-
48	36" RCP		LF	$	100.00	$	-
49	36" HDPE		LF	$	85.00	$	-
50	36" DIP Force Main		LF	$	100.00	$	-
51	30" HDPE	150	LF	$	75.00	$	11,250.00
52	24" RCP		LF	$	70.00	$	-
53	24" HDPE	1275	LF	$	65.00	$	82,875.00
54	24" DIP Force Main		LF	$	70.00	$	-
55	18" RCP		LF	$	60.00	$	-
56	18" HDPE		LF	$	55.00	$	-
57	15" HDPE		LF	$	45.00	$	-
58	48" Conc. Headwall		EA	$	10,000.00	$	-
59	42" Conc. Headwall		EA	$	8,000.00	$	-
60	36" Conc. Headwall		EA	$	6,500.00	$	-
61	24" Conc. Headwall		EA	$	5,000.00	$	-
62	18" Conc. Headwall		EA	$	3,500.00	$	-
63	36" Mitered End Section		EA	$	1,800.00	$	-
64	24" Mitered End Section		EA	$	1,200.00	$	-
65	18" HDPE Driveway Culvert w/ Flared Ends (2)	7	EA	$	2,000.00	$	14,000.00
66	N-12 Adapter Fittings		EA	$	550.00	$	-
	Misc.						
67	Turbidity Screen		LF	$	40.00	$	-
68	Guardrail		LF	$	250.00	$	-
69	6' High Chain Link Fence w/ Gates		LF	$	25.00	$	-
70	Land Purchase (in Acres)		AC	$	50,000.00	$	-
71	Core and Connect to Exist. Drainage Structures	16	EA	$	1,800.00	$	28,800.00
				SUB TOTAL		**$**	**169,995.15**

	Excluding land purchasing, Engineering Design, Permitting,		
25%	**Const. Services (Varies)**		**$36,323.75**
10%	**CONTINGENCY**	**$**	**16,999.52**
TOTAL ESTIMATED CONSTRUCTION COST		**$**	**223,318.42**

OKEECHOBEE COUNTY STORMWATER MASTER PLAN
CONCEPTUAL ESTIMATED CONSTRUCTION COSTS
CAS PROJECT No.: 00-0903
EXHIBIT R1

ITEM No.	DESCRIPTION		QUANTITY	UNIT		UNIT COST		TOTAL
1	Mobilization	7%	1	LS	$	118,930.00	$	118,930.00
2	Maintenance of Traffic	2%	1	LS	$	33,980.00	$	33,980.00
3	Clearing & Grubbing	5%	1	LS	$	84,950.00	$	84,950.00
4	Survey Stakeout and As-Builts	2%	1	LS	$	33,980.00	$	33,980.00
5	Density Testing	1%	1	LS	$	16,990.00	$	16,990.00
	Earthwork							
6	Excavate Swale Area			CY	$	10.00	$	-
7	Excavate Canal Area			CY	$	12.00	$	-
8	Seed & Mulch		68100	SY	$	2.00	$	136,200.00
9	Excavate Flow way Area			CY	$	10.00	$	-
10	Excavate Stormwater Pond			CY	$	10.00	$	-
11	Excavate Channel		200	CY	$	12.00	$	2,400.00
12	Excavate Detention Pond		74700	CY	$	12.00	$	896,400.00
13	Perimeter Berm for Stormwater Facility			CY	$	10.00	$	-
14	Fill & Compact Existing Swale Area			CY	$	7.00	$	-
15	Clear & Grub Existing Flow Way			AC	$	3,000.00	$	-
16	Construct Wetland Area w/ 5 YR Maintenance Program		1.5	AC	$	120,000.00	$	180,000.00
	Demolition							
17	Remove Existing Drainage Culvert			LF	$	12.00	$	-
18	Remove Existing Drainage Pipe			LF	$	12.00	$	-
19	Remove Existing Drainage Structure			EA	$	500.00	$	-
	Road Improvements							
20	1 1/4" Type S-III Asphalt Pavement Overlay			SY	$	15.00	$	-
21	Asphalt Pavement Restoration			SY	$	30.00	$	-
22	Asphalt Driveway Restoration			SY	$	30.00	$	-
23	Grade Swale Area			SY	$	7.00	$	-
24	Seed & Mulch Swale			SY	$	4.00	$	-
25	Sod Restoration			SY	$	7.50	$	-
26	Striping Restoration			EA	$	6,000.00	$	-
	Drainage Structures							
27	Diversion Control Structure (Sheet Pile w/ Cap)		1	EA	$	160,000.00	$	160,000.00
28	Control Structure			EA	$	10,000.00	$	-
29	5' Control Structure			EA	$	8,000.00	$	-
30	6' Control Structure			EA	$	12,000.00	$	-
31	Stormwater Pumping Station (250 cfs) w/ B/U Generator			LS	$	3,800,000.00	$	-
32	Stormwater Pumping Station (1200 gpm) w/ B/U Generator			LS	$	1,500,000.00	$	-
33	Weir Structure			EA	$	120,000.00	$	-
34	Sheet Pile Weir Structure w/ Cap		1	EA	$	160,000.00	$	160,000.00
35	Water Quality Structure			EA	$	50,000.00	$	-
36	Type 'E' Inlet			EA	$	7,500.00	$	-
37	Type 'F' Inlet			EA	$	10,000.00	$	-
38	C-4 Inlet			EA	$	4,000.00	$	-

OKEECHOBEE COUNTY STORMWATER MASTER PLAN
CONCEPTUAL ESTIMATED CONSTRUCTION COSTS
CAS PROJECT No.: 00-0903
EXHIBIT R1

ITEM No.	DESCRIPTION	QUANTITY	UNIT		UNIT COST		TOTAL
39	C-5 Inlet		EA	$	5,500.00	$	-
40	C-6 Inlet		EA	$	8,000.00	$	-
41	M-5 Inlet		EA	$	4,500.00	$	-
42	M-5 Manhole		EA	$	5,000.00	$	-
43	24" Yard Drain		EA	$	1,500.00	$	-
	Drainage Pipe						
44	12' x 6' Conc. Box Culvert		LF	$	2,000.00	$	-
45	6' x 6' Conc. Box Culvert		LF	$	1,000.00	$	-
46	48" RCP		LF	$	150.00	$	-
47	42" RCP		LF	$	125.00	$	-
48	36" RCP	200	LF	$	100.00	$	20,000.00
49	36" HDPE		LF	$	85.00	$	-
50	36" DIP Force Main		LF	$	100.00	$	-
51	30" HDPE		LF	$	75.00	$	-
52	24" RCP		LF	$	70.00	$	-
53	24" HDPE		LF	$	65.00	$	-
54	24" DIP Force Main		LF	$	70.00	$	-
55	18" RCP		LF	$	60.00	$	-
56	18" HDPE		LF	$	55.00	$	-
57	15" HDPE		LF	$	45.00	$	-
58	48" Conc. Headwall		EA	$	10,000.00	$	-
59	42" Conc. Headwall		EA	$	8,000.00	$	-
60	36" Conc. Headwall		EA	$	6,500.00	$	-
61	24" Conc. Headwall		EA	$	5,000.00	$	-
62	18" Conc. Headwall		EA	$	3,500.00	$	-
63	36" Mitered End Section		EA	$	1,800.00	$	-
64	24" Mitered End Section		EA	$	1,200.00	$	-
65	18" HDPE Driveway Culvert w/ Flared Ends (2)		EA	$	2,000.00	$	-
66	N-12 Adapter Fittings		EA	$	550.00	$	-
	Misc.						
67	Turbidity Screen	100	LF	$	40.00	$	4,000.00
68	Guardrail		LF	$	250.00	$	-
69	6' High Chain Link Fence w/ Gates	5600	LF	$	25.00	$	140,000.00
70	Land Purchase (in Acres)	14	AC	$	50,000.00	$	700,000.00
71	Core and Connect to Exist. Drainage Structures		EA	$	1,800.00	$	-
				SUB TOTAL		**$**	**2,687,830.00**

	Excluding land purchasing, Engineering Design, Permitting,		
20%	**Const. Services (Varies)**		**$339,800.00**
10%	**CONTINGENCY**	**$**	**268,783.00**
TOTAL ESTIMATED CONSTRUCTION COST		**$**	**3,296,413.00**

OKEECHOBEE COUNTY
COMPREHENSIVE URBANIZED AREA
STORMWATER MASTER PLAN

SECTION 8

EXHIBITS

OKEECHOBEE COUNTY
COMPREHENSIVE URBANIZED AREA
STORMWATER MASTER PLAN
EXHIBITS

SECTION 8

LOCATION MAP	A
KEY MAP	B-B2
SFWMD DRAINAGE BASIN AND STRUCTURE LOCATION MAP	C
OKEECHOBEE COUNTY FUTURE LAND USE MAP	D
ARMY CORPS OF ENGINEERS LAND USE MAPS	
EXISTING LAND USE MAP	E1
FUTURE 2010 LAND USE MAP WITH PROJECTS	E2
FLOOD ZONE MAP	F
U.S.G.S. TOPOGRAPHIC MAP	G
COMPREHENSIVE SOILS MAP	H
WATERWAYS AND CITY/COUNTY FLOWAYS MAP	I
SFWMD PERMITTED SITES MAP	J
QUESTIONNAIRE LOCATION MAP	K
EXISTING STORMWATER COLLECTION SYSTEM KEY MAP	L
DRAINAGE BASIN MAP	M
IDENTIFY PROBLEM AREA LOCATION MAP	N

PROPOSED CONCEPTUAL STORMWATER IMPROVEMENTS FOR FOUR SEASONS	O1-O2
SW AREA PROPOSED CONCEPTUAL STORMWATER IMPROVEMENTS	P1A-P7
PROPOSED CONCEPTUAL STORMWATER IMPROVEMENTS FOR DOUGLAS PARK	Q1-Q2
PROPOSED CONCEPTUAL STORMWATER IMPROVEMENTS (GENERAL AREA)	R1
7TH AVENUE DITCH CHANNEL IMPROVEMENTS	S1-S9
7TH AVENUE DITCH CHANNEL IMPROVEMENTS	T1-T3
TYPICAL CONSTRUCTION DETAILS AND BEST MANAGEMENT PRACTICES DETAILS	U1-U7

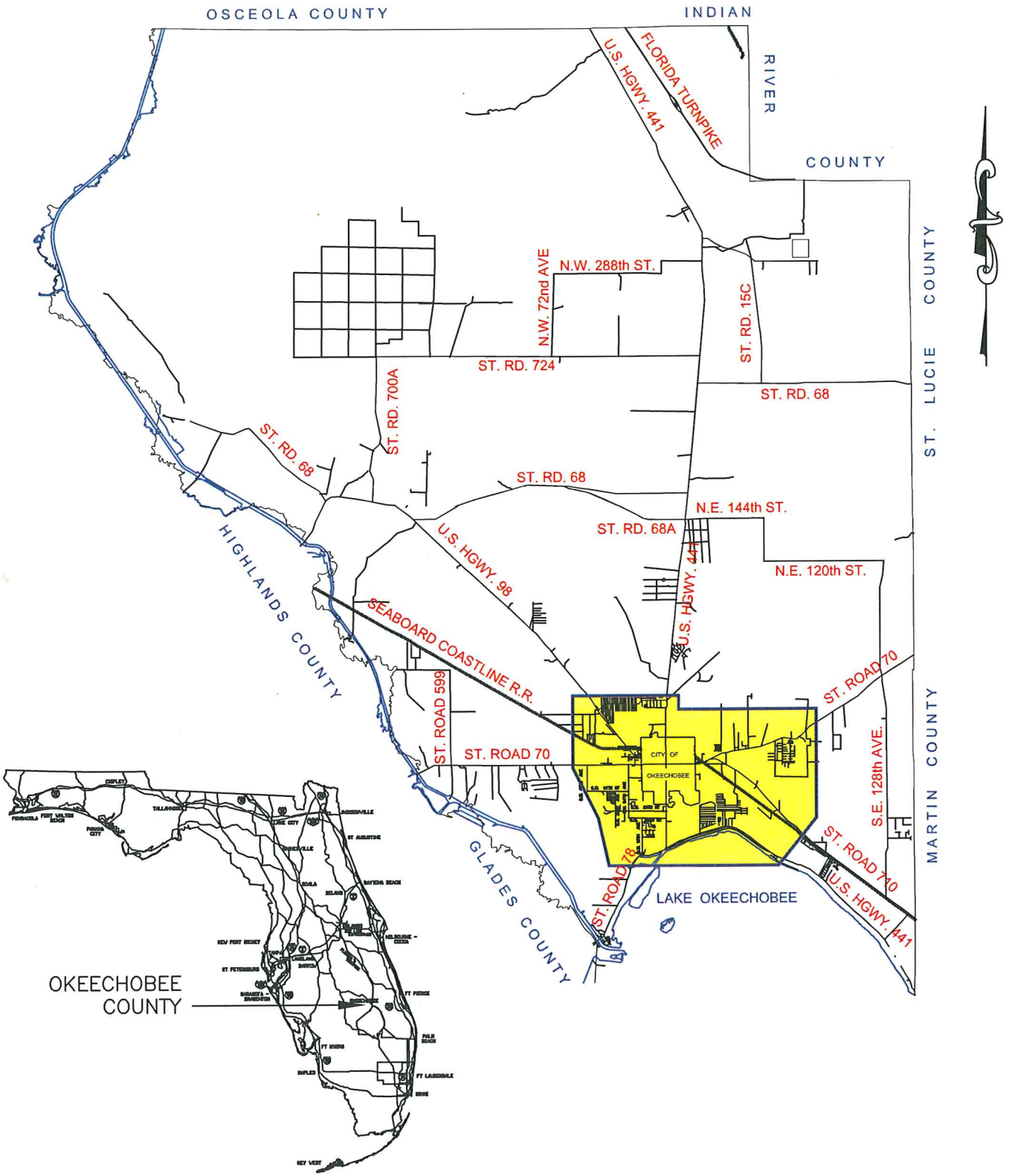
OKEECHOBEE COUNTY
COMPREHENSIVE URBANIZED AREA
STORMWATER MASTER PLAN

EXHIBIT A

LOCATION MAP

EXHIBIT A

LOCATION MAP



CRAIG A. SMITH & ASSOCIATES
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(561)791-9280
CERTIFICATE. NO. LB0003110

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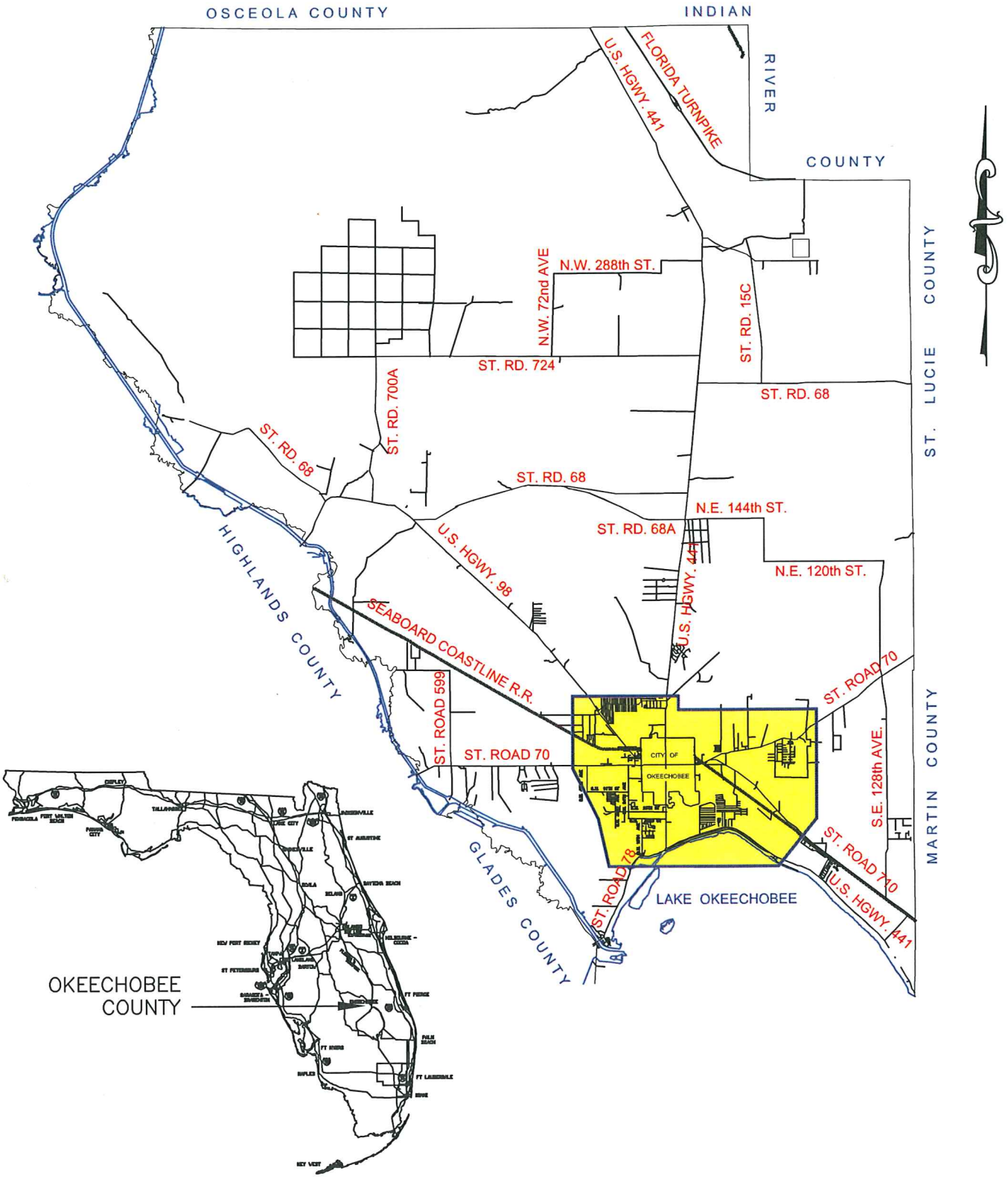
OKEECHOBEE COUNTY
COMPREHENSIVE URBANIZED AREA
STORMWATER MASTER PLAN

EXHIBIT B - B2

KEY MAP

EXHIBIT A

LOCATION MAP

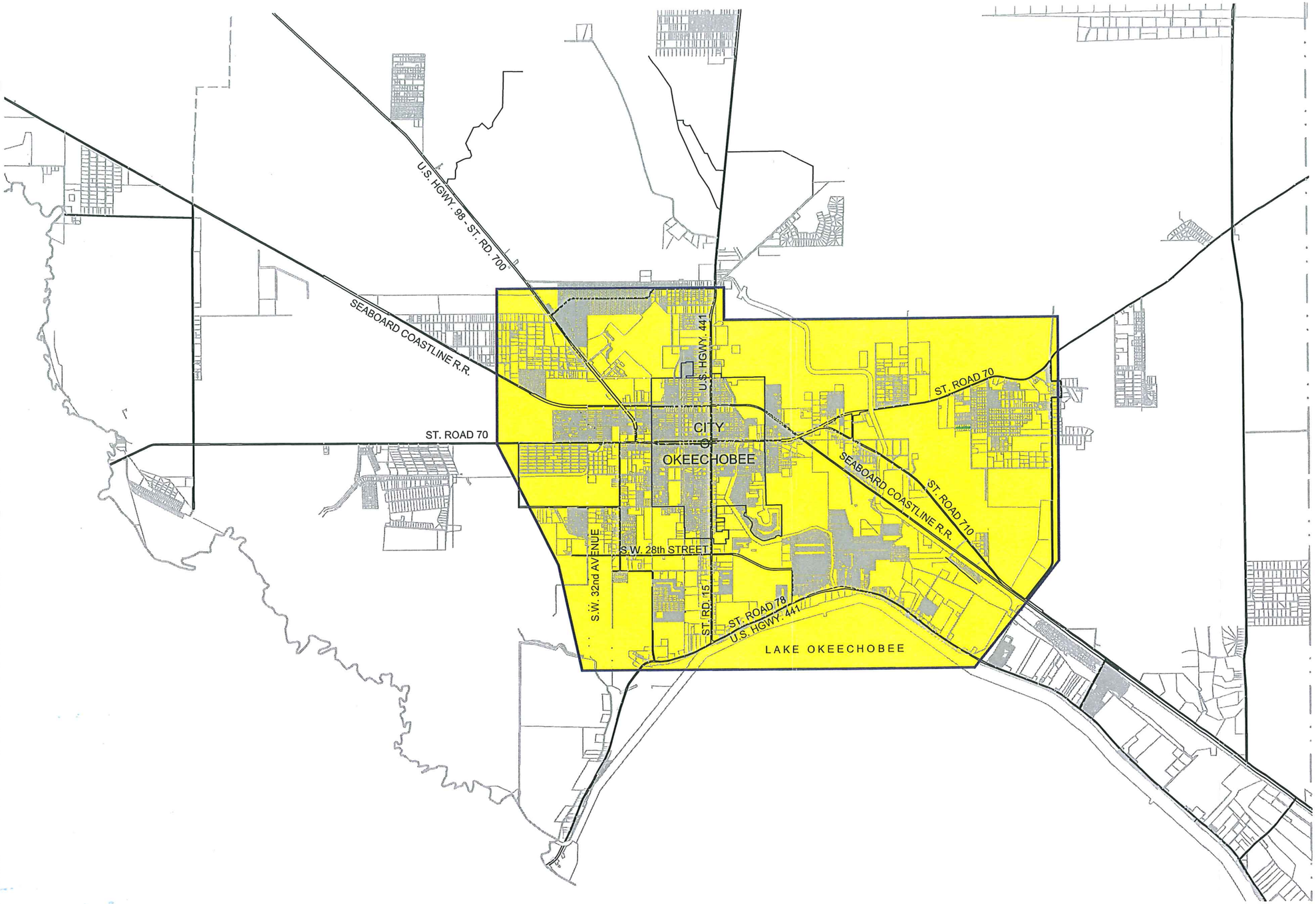


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EXHIBIT B

KEY MAP

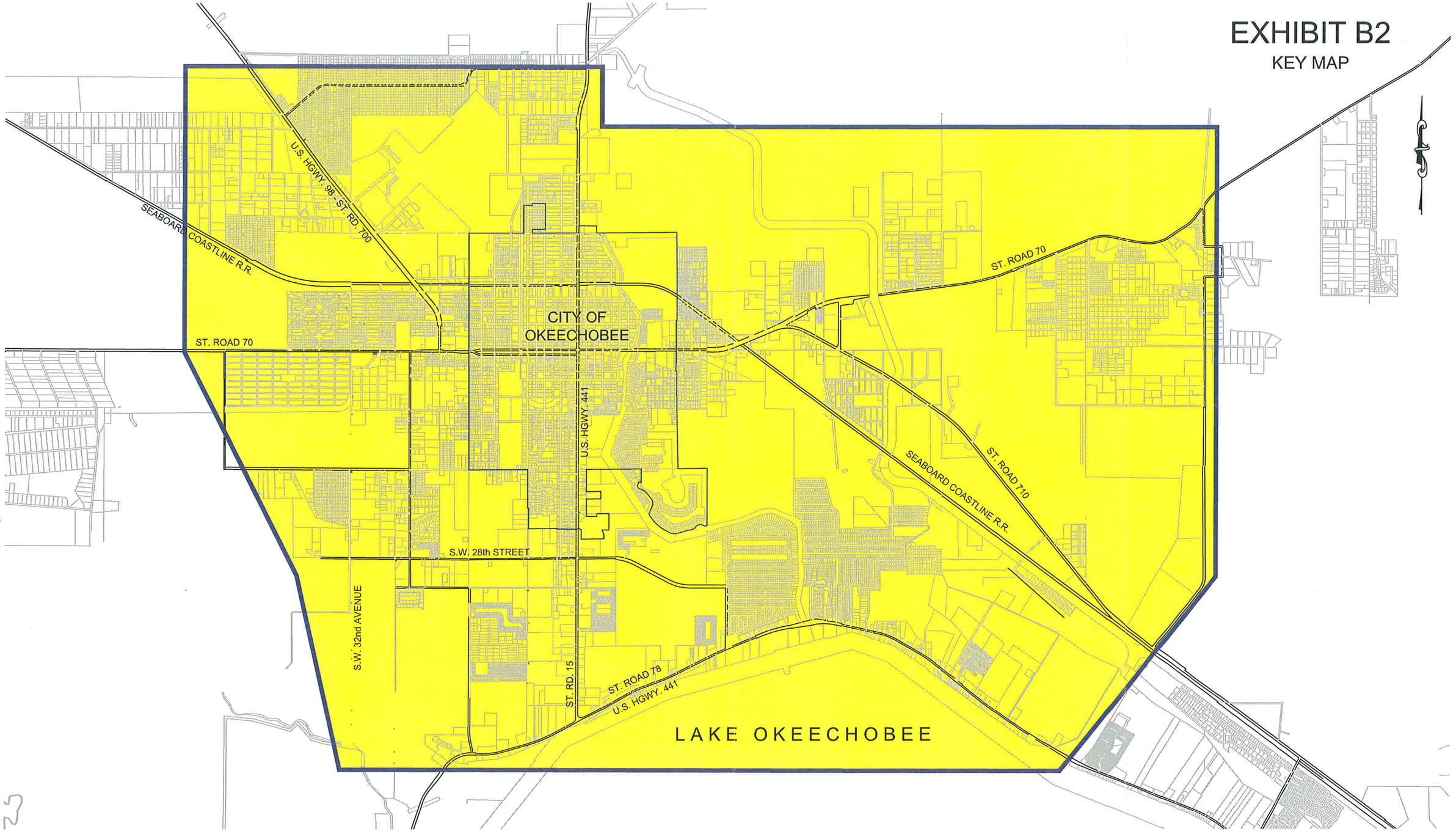


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EXHIBIT B2

KEY MAP



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EXHIBIT C

S.F.W.M.D. DRAINAGE BASIN AND STRUCTURE LOCATION MAP

S-154

S-191

S-65E

S-154C

L-59E

S-133

L-48

S-135

U.S. HGWY. 98 - ST. RD. 700

SEABOARD COASTLINE R.R.

ST. ROAD 70

CITY OF OKEECHOBEE

U.S. HIGHWAY 441

S.W. 32nd AVENUE

S.W. 23th STREET

ST. RD. 15

ST. ROAD 78

U.S. HGWY. 441

LAKE OKEECHOBEE

S192

S193

S133

S191

G80

G35

G108

LEGEND

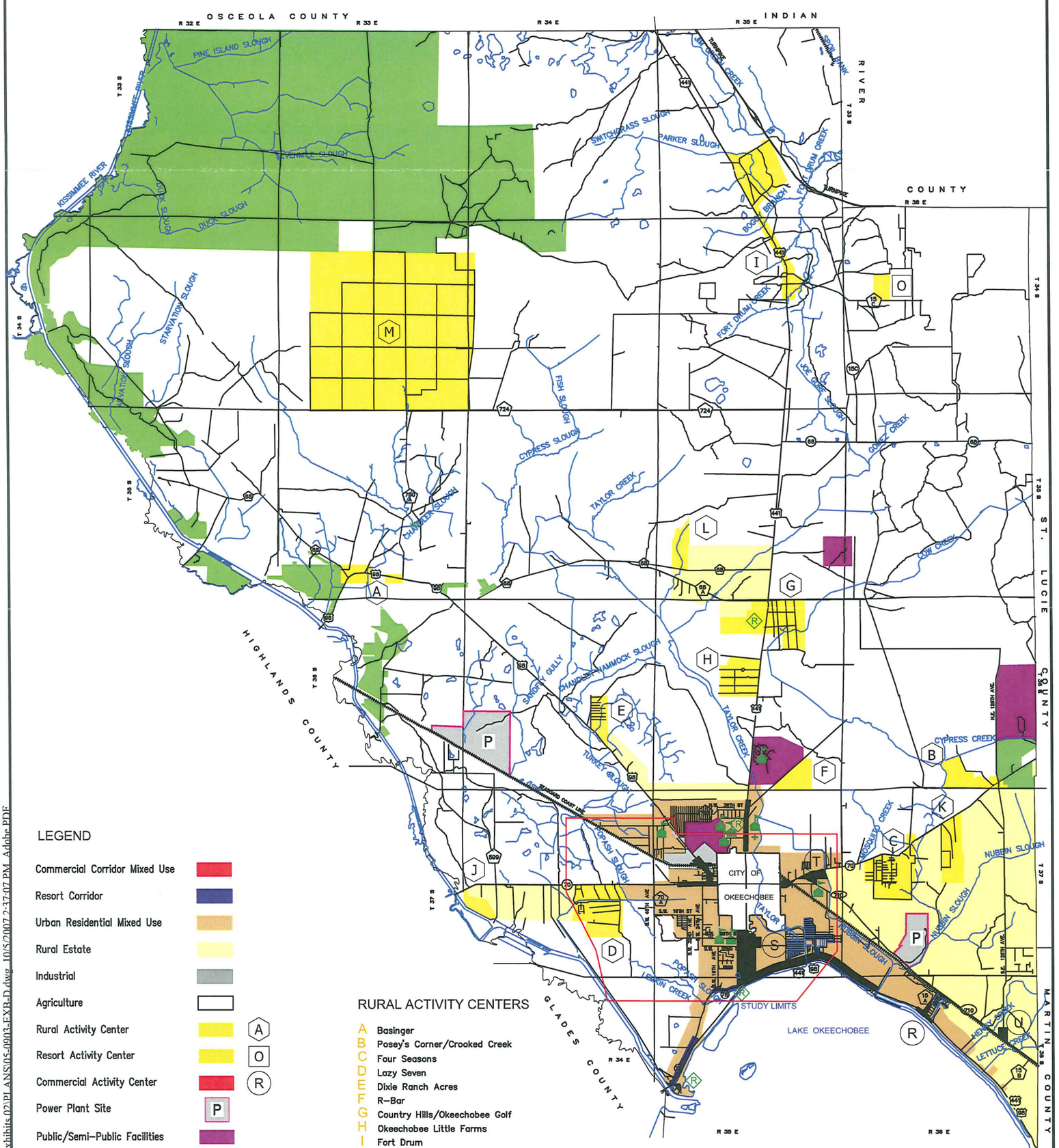
- S-191
- S-135
- S-154
- S-65E
- S-154C
- L-59E
- S-133
- L-48
- SFWMD STRUCTURE

CRAIG A. SMITH & ASSOCIATES
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CERTIFICATE NO. LB0003110

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EXHIBIT D
FUTURE LAND USE MAP

OKEECHOBEE COUNTY
CONCEPTUAL FUTURE LAND USE 2020



LEGEND

- Commercial Corridor Mixed Use
- Resort Corridor
- Urban Residential Mixed Use
- Rural Estate
- Industrial
- Agriculture
- Rural Activity Center (A)
- Resort Activity Center (O)
- Commercial Activity Center (R)
- Power Plant Site (P)
- Public/Semi-Public Facilities
- Education Facilities
- Recreation (R)
- Hospital (+)
- Conservation 1

0 1 2 3 4
SCALE IN MILES

Adopted April 2, 1992
Amended May 10, 2005
Drawing File: land use 01.DWG

Prepared by: Okeechobee County Planning Department
CRAIG A. SMITH & ASSOCIATES Last Rev. 05/05

RURAL ACTIVITY CENTERS

- A Basinger
- B Posey's Corner/Crooked Creek
- C Four Seasons
- D Lazy Seven
- E Dixie Ranch Acres
- F R-Bar
- G Country Hills/Okeechobee Golf
- H Okeechobee Little Farms
- I Fort Drum
- J River Oaks
- K Spot In the Sun/Starnes Loop
- L Edwards/Otter Creek
- M Viking

RESORT ACTIVITY CENTER

- O Rucks R.V. Resort

COMMERCIAL ACTIVITY CENTERS

- R CR 15A
- S WOLFF ROAD
- T SR 70/710
- U SR 710/Berman Road

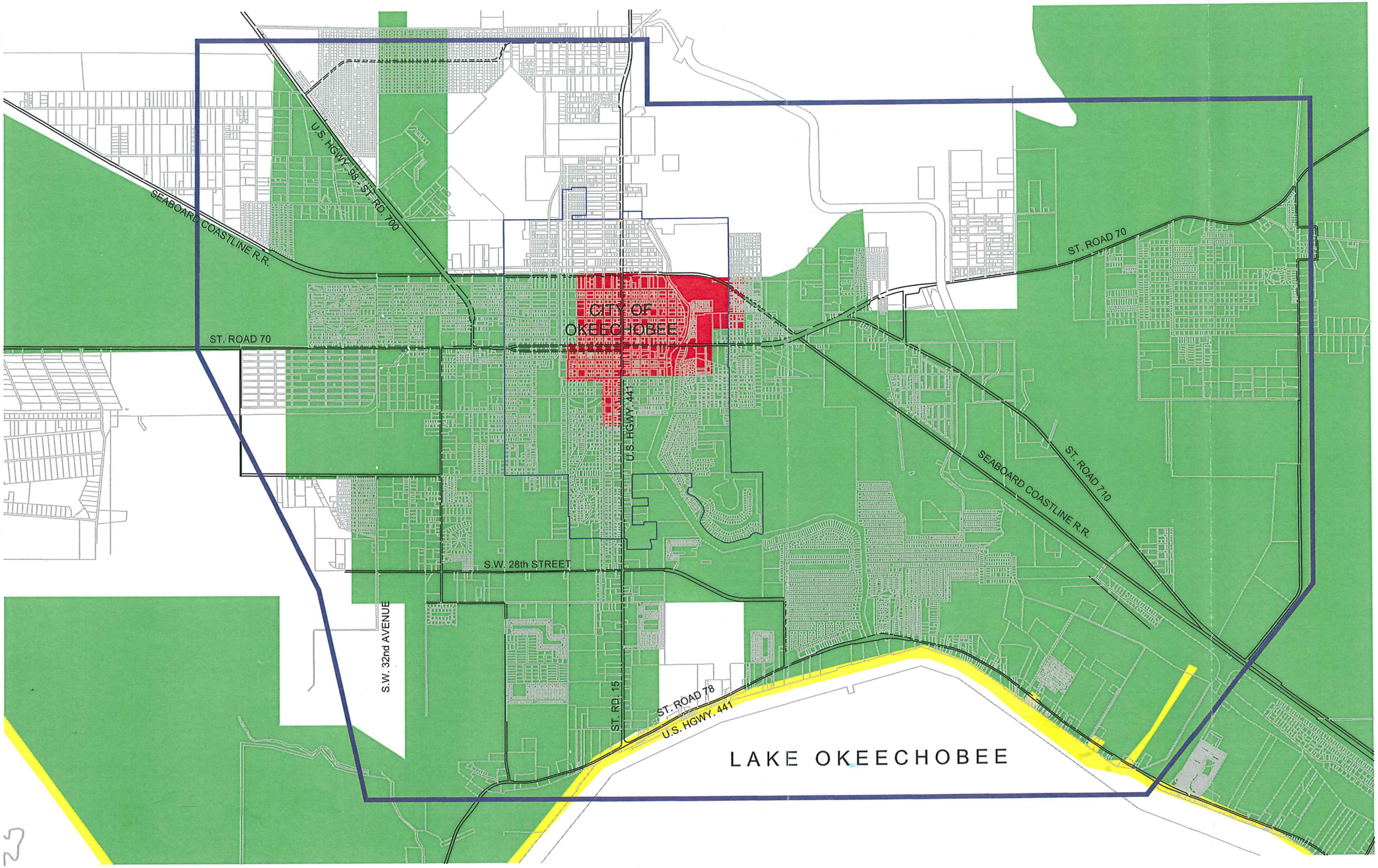
This Conceptual Future Land Use map is a graphic representation of the Okeechobee County Comprehensive Plan Future Land Use Element, and is not intended to be interpreted without the Goal, objectives and policies contained within the element.

Map 2.1

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EXHIBIT E1

U.S. A.C.O.E.
EXISTING 1963
LAND USE MAP



LEGEND

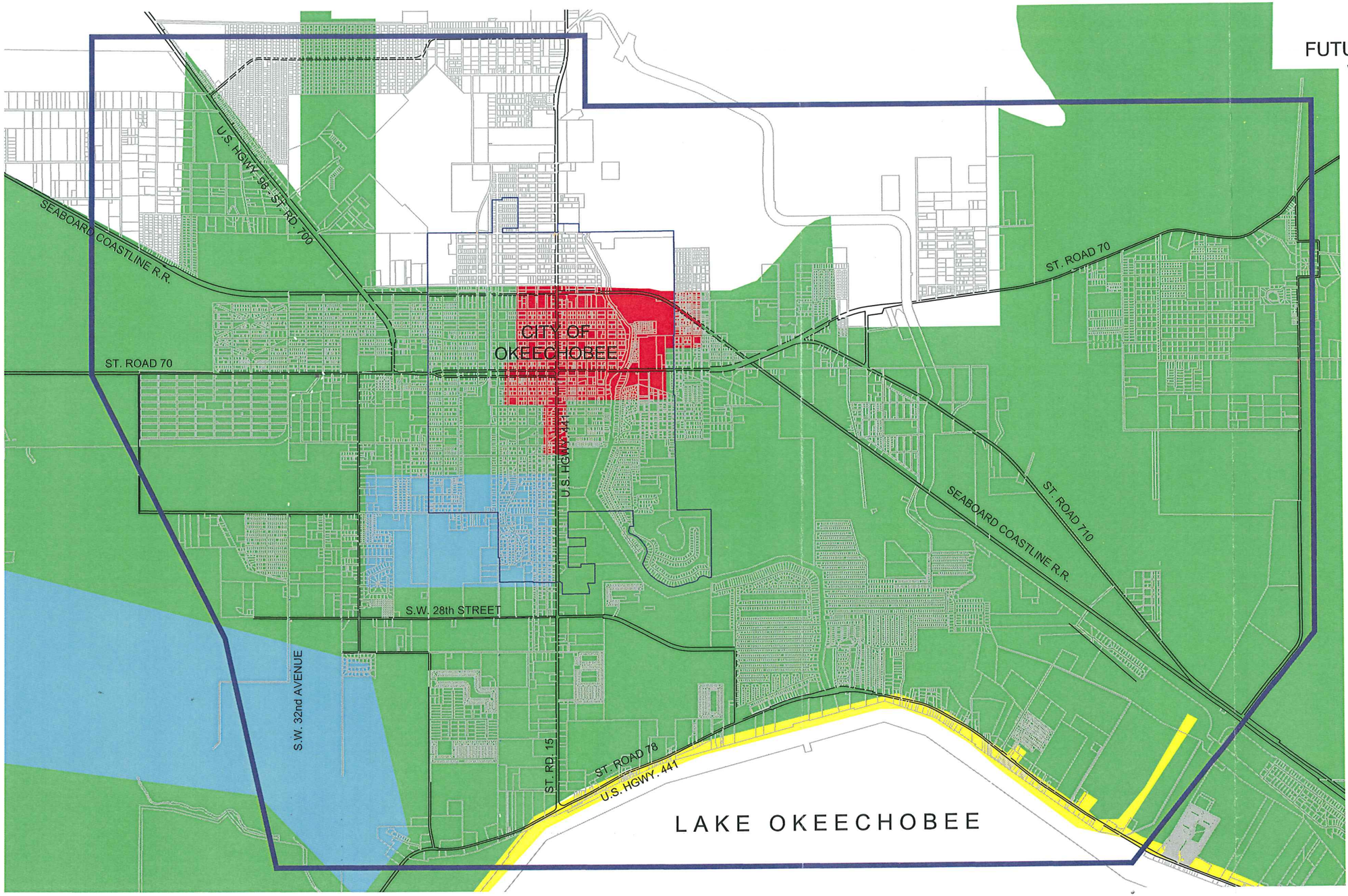
- NATIVE RANGE & UNDEVELOPED
- URBAN
- IMPROVED PASTURE
- TRUCK CROPS

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EXHIBIT E2

U.S. A.C.O.E.
FUTURE 2010 LAND USE MAP
WITH PROJECTIONS



LEGEND

- NATIVE RANGE & UNDEVELOPED
- URBAN
- IMPROVED PASTURE
- TRUCK CROPS
- SUGARCANE

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EXHIBIT F

FLOOD ZONE MAP

U.S. HGWY. 98, ST. RD. 700

SEABOARD COASTLINE R.R.

ST. ROAD 70

CITY OF OKEECHOBEE

U.S. HGWY. 441

S.W. 28th STREET

S.W. 32nd AVENUE

ST. RD. 15

ST. ROAD 78

U.S. HGWY. 441

LAKE OKEECHOBEE

ST. ROAD 710

SEABOARD COASTLINE R.R.

ST. ROAD 70

LEGEND

ZONE A:

AREA OF 100–YEAR FLOOD
FLOOD ELEVATIONS AND FLOOD HAZARD FACTORS NOT DETERMINED.

ZONE B:

AREA BETWEEN LIMITS OF THE 100–YEAR FLOOD AND 500–YEAR FLOOD; OR CERTAIN AREAS SUBJECT TO 100 YEARS FLOODING WITH AVERAGE DEPTHS LESS THAN ONE (1) FOOT OR WHERE THE CONTRIBUTING DRAINAGE AREA IS LESS THAN ONE (1) SQUARE MILE OR AREAS PROTECTED BY LEVEES FROM THE BASE FLOOD.

ZONE C:

AREA OF MINIMAL FLOODING.

* CITY OF OKEECHOBEE NOT INCLUDED.

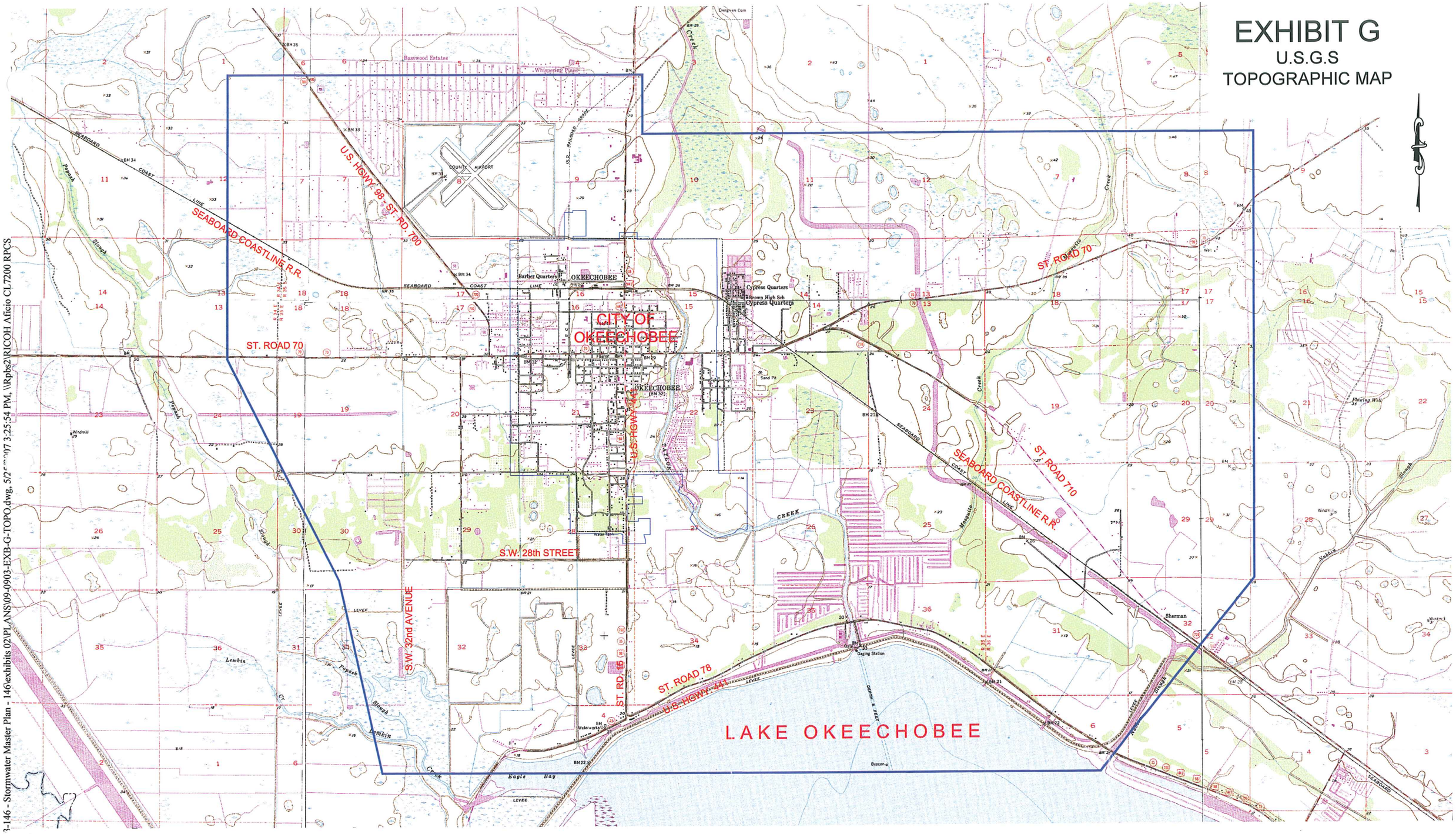
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(561)791-9280
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EXHIBIT G

U.S.G.S

TOPOGRAPHIC MAP



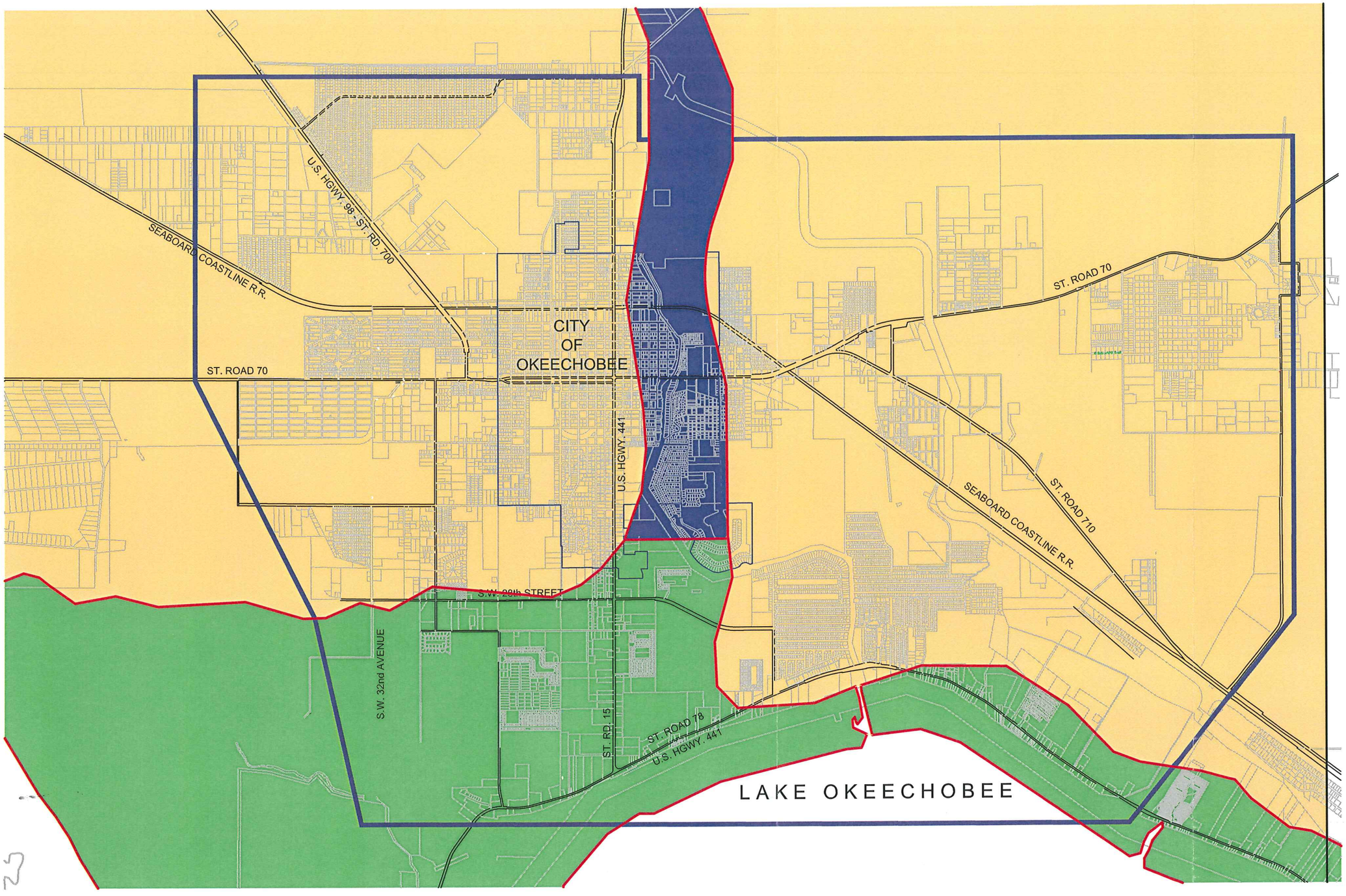
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EXHIBIT H
COMPREHENSIVE SOIL MAP



LEGEND

- MYAKKA–IMMOKALEE–BASINGER
- FLORIDANA–MANATEE–PLACID
- MANATEE–FLORIDANA–TEQUESTA

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EXHIBIT I

WATERWAYS AND CITY/COUNTY FLOWAYS MAP

U.S. HGWY. 98 - ST. RD. 700
SEABOARD COASTLINE R.R.
ST. ROAD 70
L-62
CITY OF OKEECHOBEE
D.O.T. DITCH
WOLFF DITCH
CITY LIMITS DITCH
WHIDDEN DITCH
U.S. HGWY. 441
S.W. 7th AVE
S.W. 28th STREET
S.W. 32nd AVENUE
S.W. 26th AVE
S.W. 16th AVE
ST. RD. 15
ST. ROAD 78
LEMKIN CREEK
SAM DAVIS DITCH
TAYLOR CREEK
COW CREEK
CYPRESS CREEK
MOSQUITO CREEK
ST. ROAD 710
NUBBIN SLOUGH
LAKE OKEECHOBEE

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EXHIBIT J
SFWMD PERMITTED SITE MAP

U.S. HGWY. 98 - ST. RD. 700

SEABOARD COASTLINE R.R.

ST. ROAD 70

CITY LIMITS

U.S. HGWY. 441

S.W. 28th STREET

S.W. 32nd AVENUE

ST. RD. 15

ST. ROAD 78

U.S. HGWY. 441

SEABOARD COASTLINE R.R.

ST. ROAD 710

LAKE OKEECHOBEE

LEGEND:

PERMIT LIMITS

PERMIT AREA OVERLAP

NOTE:
MAGENTA COLOR USED WHEN ADJACENT TO ANOTHER PERMIT AREA

LEGEND:

1. BROWN & CROSBY RANCH, SFWMD PERMIT NO. 47-00042-S
2. CONNERS GABLE SUBDIVISION, SFWMD PERMIT NO. 47-00590-P
3. HAZELLIEF, QUILLE, SFWMD PERMIT NO. 47-00020-S
4. VANTAGE DEVELOPMENT CORP. SFWMD PERMIT NO. 47-00065-S
5. TREE CONNECTION, SFWMD PERMIT NO. 47-00450-P
6. HI-LO ACRES, SFWMD PERMIT NO. 47-00231-S
7. BRINDABAN FOREST, SFWMD PERMIT NO. 47-0092-S
8. TAYLOR CREEK ISLES, SFWMD PERMIT NO. 47-0052-S
9. SNUG HARBOR WASTE WTP, SFWMD PERMIT NO. 47-00155-S
10. COKER CATTLE CORP., SFWMD PERMIT NO. 47-00476-P
11. PALM CREEK, SFWMD PERMIT NO. 47-00455-P
12. PALM CREEK, SFWMD PERMIT NO. 47-00532-P
13. STARLITE RV PARK FACILITY EXPANSION, SFWMD PERMIT NO. 47-00505-P
14. HERITAGE PLACE, SFWMD PERMIT NO. 47-00138-S
15. OAKVIEW BAPTIST CHURCH, SFWMD PERMIT NO. 47-00528-P
16. WALPORE INC., SFWMD PERMIT NO. 47-00156-S
17. PALM CREEK, SFWMD PERMIT NO. 47-00532-P
18. MURPHY OIL, SFWMD PERMIT NO. 47-0044-P
19. ELEMENTARY SCHOOL, SFWMD PERMIT NO. 47-00500-P
20. NEWCOMER FACILITY, SFWMD PERMIT NO. 021011-5 APP. 10
21. OKEECHOBEE CO. JAIL, SFWMD PERMIT NO. 47-00146-S
22. ABUOQAB CONVENIENCE STORE, SFWMD PERMIT NO. 020621-16 APP. 10
23. ST. RD. 70, SFWMD PERMIT NO. 47-00504-P
24. NICHOLS SANITATION, SFWMD PERMIT NO. 47-00442-P
25. APAC MACASPHALT, SFWMD PERMIT NO. 47-00447-P
26. LEGACY COURT SUBDIVISION, SFWMD PERMIT NO. 47-00258-S
27. OKEECHOBEE AIRPORT, SFWMD PERMIT NO. 47-00447-P
28. OKEECHOBEE CO. AIRPORT APRON EXPANTION, SFWMD PERMIT NO. 47-00447-P
29. CONFALONE HANGER, SFWMD PERMIT NO. 47-00074-S
30. OKEECHOBEE CO. T-HANGER ADDITION SFWMD PERMIT NO. 47-00074-S
31. OKEECHOBEE CO. SCHOOL BOARD TRANSPORTATION, SFWMD PERMIT NO. 47-00293-S
32. OKEECHOBEE ELEMENTARY SCHOOL-B, SFWMD PERMIT NO. 47-00242-S
33. WOLFF BROS. DAIRY INC., SFWMD PERMIT NO. 47-00035-S
34. DAVIS, SAMUEL J. FAMILY TRUST, SFWMD PEMIT NO. 47-00014-S
35. NORTHLAKE VILLAGE SHOPPING CENTER, SFWMD PERMIT NO. 47-00136-S
36. INDIAN RIVER COMM. COLLEGE DIXON HENDRY CAMPUS, SFWMD PERMIT NO. 47-00514-P
37. OKEECHOBEE MEDICAL CENTER, SFWMD PERMIT NO. 47-00562-P
38. ROULERSON HOSPITAL, SFWMD PERMIT NO. 47-0050-S
39. OKEECOBEE HEALTH CARE FACILITY CENTER, SFWMD PERMIT NO. 83-00203-S
40. N.E. 12th ST. PAVING, SFWMD PERMIT NO. 47-00314-S
41. FDOT ST. RD. 70 SLOPE REHABILITATION, SFWMD PERMIT NO. 47-00401-S
42. AGRI-CIVIC CENTER, SFWMD PERMIT NO. 47-00582-P
43. CEDER COVE II, SFWMD PERMIT NO. 47-00141-S
44. CONVEYANCE IMPROVEMENTS AT FOUR SEASONS, SFWMD PERMIT NO. 47-00310-S
45. STATE ROAD 710 IMPROVEMENTS, SFWMD PERMIT NO. 47-00510-P
46. KING'S BAY, SFWMD PERMIT NO. 47-00126-S
47. STATE ROAD 70, SFWMD PERMIT NO. 47-00446-P
48. CONSOLIDATED HRS FACILITY, SFWMD PERMIT NO. 47-00303-S
49. UNITED FEED CO. OP. INC., SFWMD PERMIT NO. 47-00352-S
50. DOUGLAS PARK AREA DRAINAGE IMPROVEMENTS, SFWMD PERMIT NO. 47-00652-P
51. NEW TESTAMENT CHURCH, SFWMD APP. NO. 060502-1
52. SUNSHINE CARWASH, SFWMD APP. NO. 021015-2
53. DONNA DURAND BLDG., SFWMD APP. NO. 050324-11
54. GILBERT CULBRETH INVESTMENTS INC., SFWMD PERMIT NO. 47-00138-S-02
55. SENEIDER LAW OFFICE, SFWMD APP. NO. 021031-7
56. SACRED HEART CATHOLIC CHURCH, SFWMD PERMIT NO. 47-00738-P
57. ABNEY & CULBRETH SUBDIVISION, SFWMD PERMIT NO. 47-00435-S
58. MIDDLE SCHOOL 'A-A', SFWMD PERMIT NO. 47-00426-S
59. HARBOR FEDERAL BANK, SFWMD APP. NO. 060502-2
60. HOLIDAY INN EXPRESS, SFWMD PERMIT NO. 47-00840-P
61. HAYNES E WILLIAMS 9.77AC, SFWMD PERMIT NO. 47-00625-P
62. WALMART SHOPPING CENTER, SFWMD PERMIT NO. 47-00136-S
63. OKEECHOBEE HESS STATION, SFWMD APP. NO. 020619-1
64. LUNKER'S SPORTS GRILLE, SFWMD APP. NO. 050224-14
65. THE GRAND PRESERVE, SFWMD PERMIT NO. 47-00740-P
66. QUALITY A/C STORAGE OFFICE SITE, SFWMD APP. NO. 050303-1
67. FERRELL PIT, SFWMD PERMIT NO. 47-00490-P
68. GOODBREAD RV PARK, SFWMD PERMIT NO. 47-00554-P
69. S.J. DAVIS TRUST SHELL MINE, SFWMD PERMIT NO. 47-00472-P
70. EAGLE POINT SUBDIVISION, SFWMD PERMIT NO. 47-00558-P
71. WOLFF BROS. SHELL MINE, SFWMD PERMIT NO. 47-00461-P
72. OMEGA SHELL MINE, SFWMD PERMIT NO. 47-00494-P
73. BAD TO THE BONE, SFWMD PERMIT NO. 47-00459-P
74. OKEECHOBEE PROFESSIONAL PLAZA, SFWMD APP. NO. 060228-6
75. PRITCHARD AND ASSOCIATES OFFICE FACILITY, SFWMD APP. NO. 040105-6
76. AUTOZONE, SFWMD PERMIT NO. 47-00474-P
77. BEST WESTER INN OF OKEECHOBEE, SFWMD PERMIT NO. 47-00867-P
78. BARTEL'S OPTOMETRY, SFWMD APP. NO. 030724-20
79. DECARLO FAMILY TRUST, SFWMD APP. NO. 050404-14
80. SOUTHERN TRACE, SFWMD APP. NO. 051213-5
81. TOWNES OF OKEECHOBEE, SFWMD PERMIT NO. 47-00726-P
82. FDOT US 441 NO. 828062, SFWMD PERMIT NO. 47-00489-P
83. ARMSTRONG SUBDIVISION, SFWMD PERMIT NO. 47-00192-S
84. SEMINOLE COVE, SFWMD PERMIT NO. 47-00077-S
85. OUSLEY ESTATES, SFWMD PERMIT NO. 47-00053-S
86. PALM VILLAGE, SFWMD PERMIT NO. 47-00088-S

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EXHIBIT K

QUESTIONNAIRE LOCATION MAP

U.S. HGWY. 98 ST. RD. 700

SEABOARD COASTLINE R.R.

ST. ROAD 70

CITY OF OKEECHOBEE

U.S. HGWY. 441

ST. ROAD 710

S.W. 28th STREET

S.W. 32nd AVENUE

ST. RD. 15

ST. ROAD 78

U.S. HGWY. 441

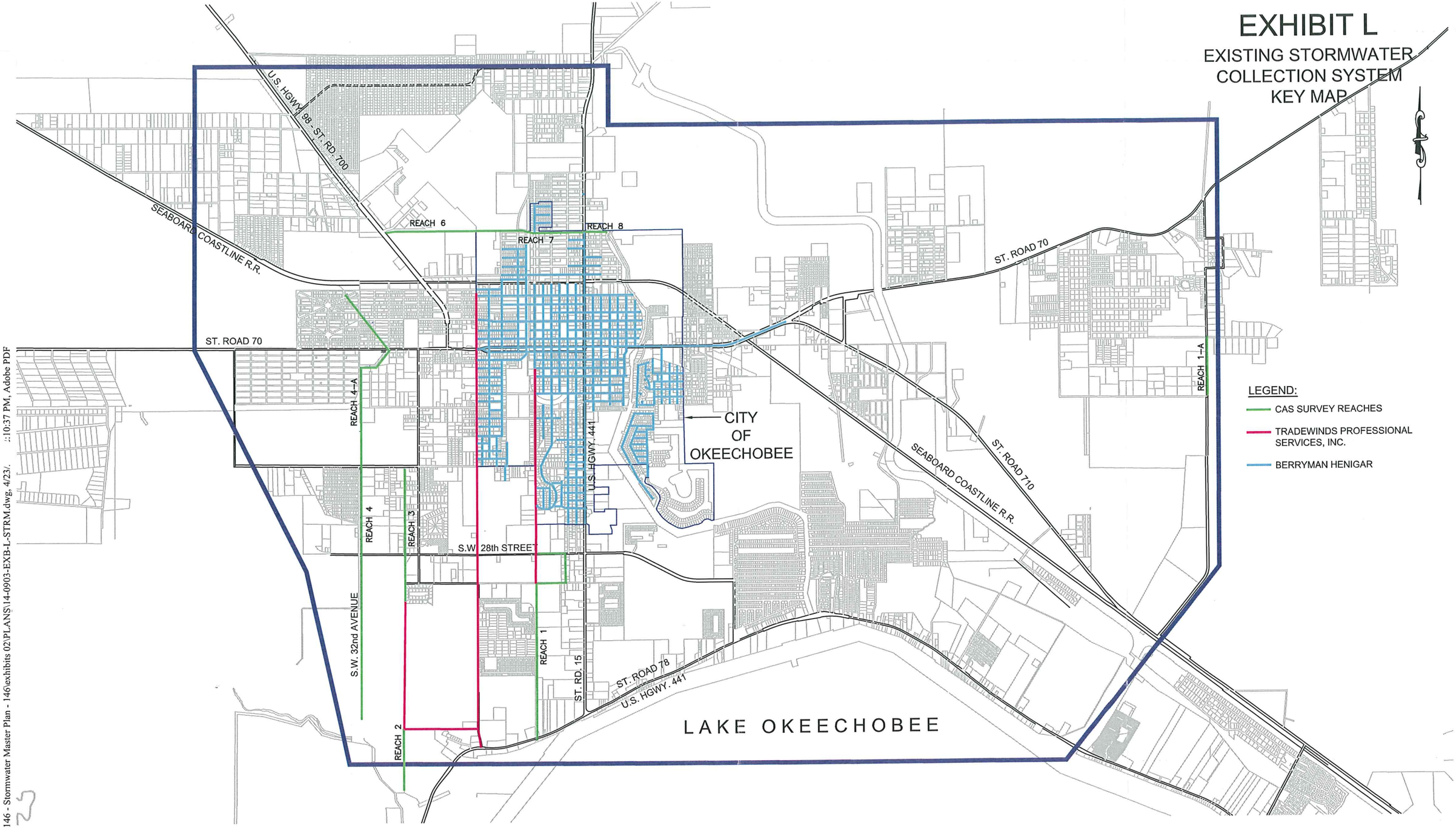
LAKE OKEECHOBEE

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EXHIBIT L

EXISTING STORMWATER COLLECTION SYSTEM KEY MAP



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CERTIFICATE NO. LB0003110

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EXHIBIT M

DRAINAGE BASIN MAP

(BASSWOOD) BASIN 1
(OKEECHOBEE AIRPORT) BASIN 3
BASIN 4
BASIN 5
OAIP BASIN 2
BASIN 9
BASIN 10
BASIN 6
BASIN 8
BASIN 21
BASIN 20
CITY OF OKEECHOBEE
BASIN 7
BASIN 28
BASIN 11
BASIN 29
BASIN 22
BASIN 12
BASIN 30
BASIN 27
BASIN 23
BASIN 13
BASIN 14
BASIN 31
BASIN 24
BASIN 15
BASIN 16A-16G
BASIN 25B
BASIN 17B
BASIN 18
BASIN 25A
BASIN 17C
BASIN 26
BASIN 17A
BASIN 19
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JJ
U.S. HGWY. 98 ST. RD. 700
SEABOARD COASTLINE R.R.
ST. ROAD 70
U.S. HGWY. 441
S.W. 32nd AVENUE
S.W. 28th STREET
ST. RD. 15
ST. ROAD 78
N.E. 50th AVE.
ST. ROAD 710
N.E. 80th AVE.
LAKE OKEECHOBEE

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EXHIBIT N

IDENTIFY PROBLEM AREA LOCATION MAP

BASSWOOD

U.S. HGWY. 98 - ST. RD. 700

SEABOARD COASTLINE R.R.

GENERAL AREA

ST. ROAD 70

CITY OF OKEECHOBEE

U.S. HGWY. 441

ST. ROAD 70

FOUR SEASONS

SEABOARD COASTLINE R.R.

ST. ROAD 710

SW CORRIDOR

S.W. 28th STREET

S.W. 32nd AVENUE

ST. RD. 15

ST. ROAD 78

U.S. HGWY. 441

LAKE OKEECHOBEE

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EXHIBIT J
SFWMD PERMITTED SITE MAP

U.S. HGWY. 98 - ST. RD. 700

SEABOARD COASTLINE R.R.

ST. ROAD 70

CITY LIMITS

U.S. HGWY. 441

S.W. 28th STREET

S.W. 32nd AVENUE

ST. RD. 15

ST. ROAD 78

U.S. HGWY. 441

SEABOARD COASTLINE R.R.

ST. ROAD 710

LAKE OKEECHOBEE

LEGEND:

PERMIT LIMITS

PERMIT AREA OVERLAP

NOTE:
MAGENTA COLOR USED WHEN ADJACENT TO ANOTHER PERMIT AREA

LEGEND:

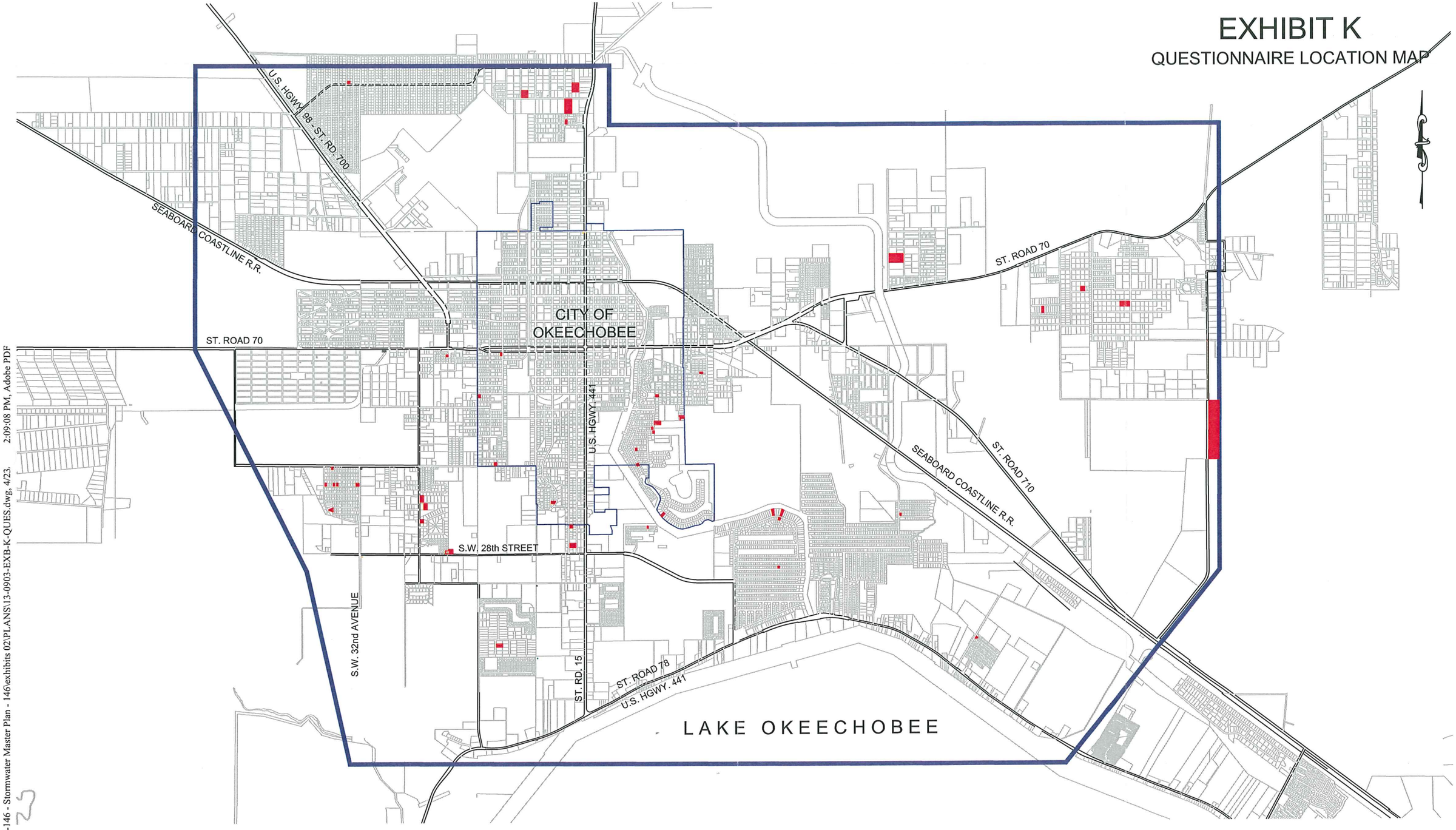
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2. CONNERS GABLE SUBDIVISION, SFWMD PERMIT NO. 47-00590-P
3. HAZELLIEF, QUILLE, SFWMD PERMIT NO. 47-00020-S
4. VANTAGE DEVELOPMENT CORP. SFWMD PERMIT NO. 47-00065-S
5. TREE CONNECTION, SFWMD PERMIT NO. 47-00450-P
6. HI-LO ACRES, SFWMD PERMIT NO. 47-00231-S
7. BRINDABAN FOREST, SFWMD PERMIT NO. 47-0092-S
8. TAYLOR CREEK ISLES, SFWMD PERMIT NO. 47-0052-S
9. SNUG HARBOR WASTE WTP, SFWMD PERMIT NO. 47-00155-S
10. COKER CATTLE CORP., SFWMD PERMIT NO. 47-00476-P
11. PALM CREEK, SFWMD PERMIT NO. 47-00455-P
12. PALM CREEK, SFWMD PERMIT NO. 47-00532-P
13. STARLITE RV PARK FACILITY EXPANSION, SFWMD PERMIT NO. 47-00505-P
14. HERITAGE PLACE, SFWMD PERMIT NO. 47-00138-S
15. OAKVIEW BAPTIST CHURCH, SFWMD PERMIT NO. 47-00528-P
16. WALPORE INC., SFWMD PERMIT NO. 47-00156-S
17. PALM CREEK, SFWMD PERMIT NO. 47-00532-P
18. MURPHY OIL, SFWMD PERMIT NO. 47-0044-P
19. ELEMENTARY SCHOOL, SFWMD PERMIT NO. 47-00500-P
20. NEWCOMER FACILITY, SFWMD PERMIT NO. 021011-5 APP. 10
21. OKEECHOBEE CO. JAIL, SFWMD PERMIT NO. 47-00146-S
22. ABUOQAB CONVENIENCE STORE, SFWMD PERMIT NO. 020621-16 APP. 10
23. ST. RD. 70, SFWMD PERMIT NO. 47-00504-P
24. NICHOLS SANITATION, SFWMD PERMIT NO. 47-00442-P
25. APAC MACASPHALT, SFWMD PERMIT NO. 47-00447-P
26. LEGACY COURT SUBDIVISION, SFWMD PERMIT NO. 47-00258-S
27. OKEECHOBEE AIRPORT, SFWMD PERMIT NO. 47-00447-P
28. OKEECHOBEE CO. AIRPORT APRON EXPANTION, SFWMD PERMIT NO. 47-00447-P
29. CONFALONE HANGER, SFWMD PERMIT NO. 47-00074-S
30. OKEECHOBEE CO. T-HANGER ADDITION SFWMD PERMIT NO. 47-00074-S
31. OKEECHOBEE CO. SCHOOL BOARD TRANSPORTATION, SFWMD PERMIT NO. 47-00293-S
32. OKEECHOBEE ELEMENTARY SCHOOL-B, SFWMD PERMIT NO. 47-00242-S
33. WOLFF BROS. DAIRY INC., SFWMD PERMIT NO. 47-00035-S
34. DAVIS, SAMUEL J. FAMILY TRUST, SFWMD PEMIT NO. 47-00014-S
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36. INDIAN RIVER COMM. COLLEGE DIXON HENDRY CAMPUS, SFWMD PERMIT NO. 47-00514-P
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39. OKEECOBEE HEALTH CARE FACILITY CENTER, SFWMD PERMIT NO. 83-00203-S
40. N.E. 12th ST. PAVING, SFWMD PERMIT NO. 47-00314-S
41. FDOT ST. RD. 70 SLOPE REHABILITATION, SFWMD PERMIT NO. 47-00401-S
42. AGRI-CMIC CENTER, SFWMD PERMIT NO. 47-00582-P
43. CEDER COVE II, SFWMD PERMIT NO. 47-00141-S
44. CONVEYANCE IMPROVEMENTS AT FOUR SEASONS, SFWMD PERMIT NO. 47-00310-S
45. STATE ROAD 710 IMPROVEMENTS, SFWMD PERMIT NO. 47-00510-P
46. KING'S BAY, SFWMD PERMIT NO. 47-00126-S
47. STATE ROAD 70, SFWMD PERMIT NO. 47-00446-P
48. CONSOLIDATED HRS FACILITY, SFWMD PERMIT NO. 47-00303-S
49. UNITED FEED CO. OP. INC., SFWMD PERMIT NO. 47-00352-S
50. DOUGLAS PARK AREA DRAINAGE IMPROVEMENTS, SFWMD PERMIT NO. 47-00652-P
51. NEW TESTAMENT CHURCH, SFWMD APP. NO. 050502-1
52. SUNSHINE CARWASH, SFWMD APP. NO. 021015-2
53. DONNA DURAND BLDG., SFWMD APP. NO. 050324-11
54. GILBERT CULBRETH INVESTMENTS INC., SFWMD PERMIT NO. 47-00138-S-02
55. SENEIDER LAW OFFICE, SFWMD APP. NO. 021031-7
56. SACRED HEART CATHOLIC CHURCH, SFWMD PERIMT NO. 47-00738-P
57. ABNEY & CULBRETH SUBDIVISION, SFWMD PERMIT NO. 47-00435-S
58. MIDDLE SCHOOL 'A-A', SFWMD PERMIT NO. 47-00426-S
59. HARBOR FEDERAL BANK, SFWMD APP. NO. 050502-2
60. HOLIDAY INN EXPRESS, SFWMD PERMIT NO. 47-00840-P
61. HAYNES E WILLIAMS 9.77AC, SFWMD PERMIT NO. 47-00625-P
62. WALMART SHOPPING CENTER, SFWMD PERMIT NO. 47-00136-S
63. OKEECHOBEE HESS STATION, SFWMD APP. NO. 020619-1
64. LUNKER'S SPORTS GRILLE, SFWMD APP. NO. 050224-14
65. THE GRAND PRESERVE, SFWMD PERMIT NO. 47-00740-P
66. QUALITY A/C STORAGE OFFICE SITE, SFWMD APP. NO. 050303-1
67. FERRELL PIT, SFWMD PERMIT NO. 47-00490-P
68. GOODBREAD RV PARK, SFWMD PERMIT NO. 47-00554-P
69. S.J. DAVIS TRUST SHELL MINE, SFWMD PERMIT NO. 47-00472-P
70. EAGLE POINT SUBDIVISION, SFWMD PERMIT NO. 47-00558-P
71. WOLFF BROS. SHELL MINE, SFWMD PERMIT NO. 47-00461-P
72. OMEGA SHELL MINE, SFWMD PERMIT NO. 47-00494-P
73. BAD TO THE BONE, SFWMD PERMIT NO. 47-00459-P
74. OKEECHOBEE PROFESSIONAL PLAZA, SFWMD APP. NO. 060228-6
75. PRITCHARD AND ASSOCIATES OFFICE FACILITY, SFWMD APP. NO. 040105-6
76. AUTOZONE, SFWMD PERMIT NO. 47-00474-P
77. BEST WESTER INN OF OKEECHOBEE, SFWMD PERMIT NO. 47-00687-P
78. BARTEL'S OPTOMETRY, SFWMD APP. NO. 030724-20
79. DECARLO FAMILY TRUST, SFWMD APP. NO. 050404-14
80. SOUTHERN TRACE, SFWMD APP. NO. 051213-5
81. TOWNES OF OKEECHOBEE, SFWMD PERMIT NO. 47-00726-P
82. FDOT US 441 NO. 628062, SFWMD PERMIT NO. 47-00489-P
83. ARMSTRONG SUBDIVISION, SFWMD PERMIT NO. 47-00192-S
84. SEMINOLE COVE, SFWMD PERMIT NO. 47-00077-S
85. OUSLEY ESTATES, SFWMD PERMIT NO. 47-00053-S
86. PALM VILLAGE, SFWMD PERMIT NO. 47-00088-S

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EXHIBIT K

QUESTIONNAIRE LOCATION MAP

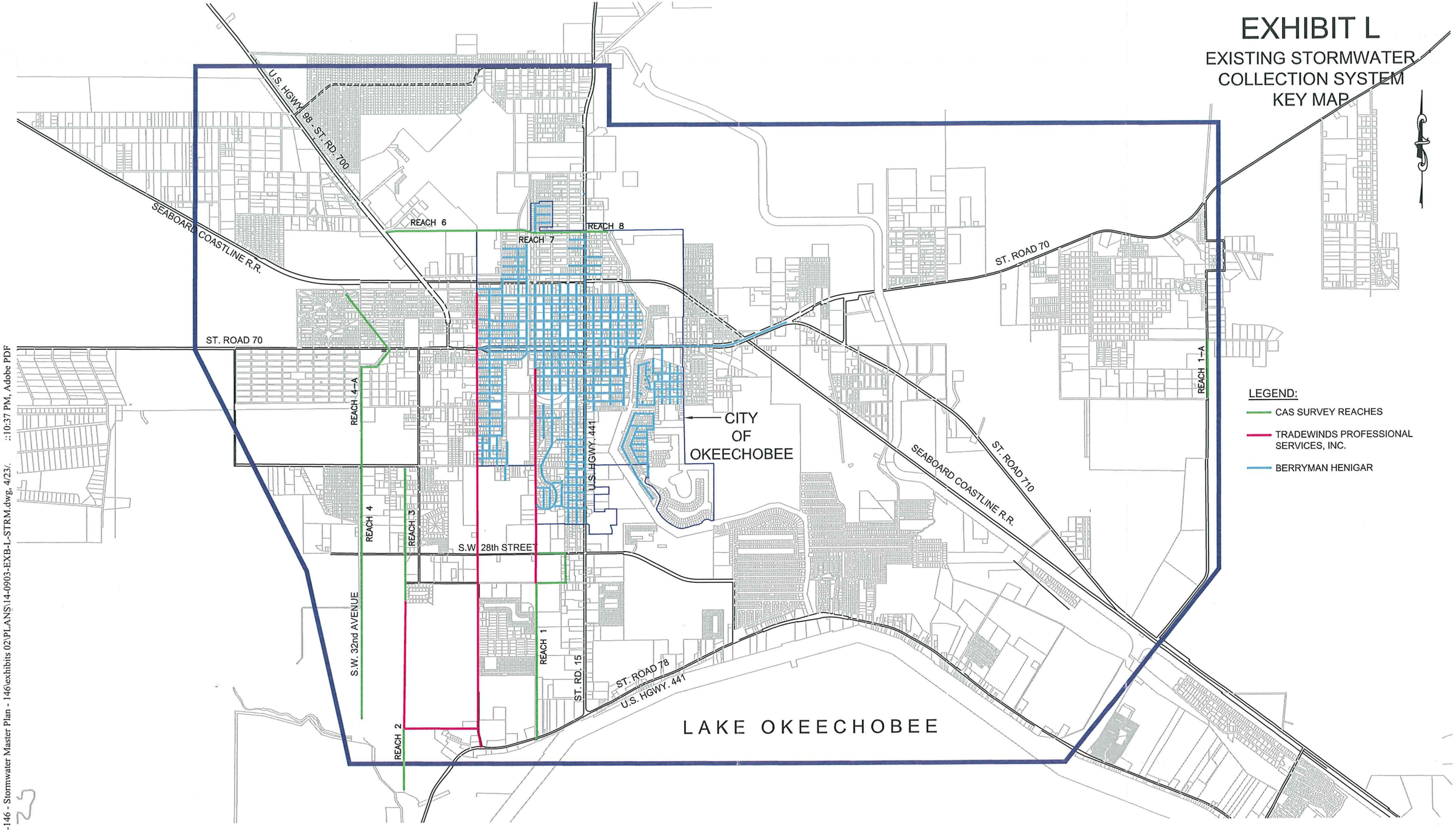


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EXHIBIT L

EXISTING STORMWATER COLLECTION SYSTEM KEY MAP



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EXHIBIT M

DRAINAGE BASIN MAP

(BASSWOOD) BASIN 1
(OKEECHOBEE AIRPORT) BASIN 3
BASIN 4
BASIN 5
OAIP BASIN 2
BASIN 9
BASIN 10
BASIN 6
BASIN 8
BASIN 21
BASIN 20
CITY OF OKEECHOBEE
BASIN 7
BASIN 28
BASIN 11
BASIN 29
BASIN 22
BASIN 12
BASIN 30
BASIN 27
BASIN 23
BASIN 13
BASIN 14
BASIN 31
BASIN 24
BASIN 15
BASIN 16A-16G
BASIN 25B
BASIN 17B
BASIN 25A
BASIN 17C
BASIN 18
BASIN 26
BASIN 17A
BASIN 19
OA
OB
OC
K
A
B
C
D
E
H
OD
OE
OF
I
J
G
F
JJ
CC
CENTER ST.
N.E. 50th AVE.
N.E. 80th AVE.
U.S. HGWY. 98 - ST. RD. 700
SEABOARD COASTLINE R.R.
ST. ROAD 70
U.S. HGWY. 441
ST. ROAD 710
S.W. 28th STREET
S.W. 32nd AVENUE
ST. RD. 15
ST. ROAD 78
LAKE OKEECHOBEE

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EXHIBIT N

IDENTIFY PROBLEM AREA LOCATION MAP

BASSWOOD

U.S. HGWY. 98 - ST. RD. 700

GENERAL AREA

SEABOARD COASTLINE R.R.

ST. ROAD 70

CITY OF OKEECHOBEE

FOUR SEASONS

U.S. HGWY. 441

SEABOARD COASTLINE R.R.

ST. ROAD 710

SW CORRIDOR

S.W. 28th STREET

S.W. 32nd AVENUE

ST. RD. 15

ST. ROAD 78

U.S. HGWY. 441

LAKE OKEECHOBEE

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INDEX SHEET OF IMPROVEMENTS

U.S. HGWY. 98 - ST. RD. 700

SEABOARD COASTLINE R.R.

ST. ROAD 70

CITY OF OKEECHOBEE

U.S. HGWY. 441

R

Q2

Q1

O1

ST. ROAD 710

S1
S2
S3
S4
S5
S6
S7
S8
S9

P1a,
P1b
P2
P3
P4
P5,
P6
P7

T1
T2
T3

S.W. 28th STREET

S.W. 32nd AVENUE

ST. RD. 15

ST. ROAD 78

LAKE OKEECHOBEE

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EXHIBIT O1

PROPOSED CONCEPTUAL STORMWATER IMPROVEMENTS FOR FOUR SEASONS

ST. ROAD 70

S.E. 60th AVE.

N.E. 80th AVE

EXISTING DRAINAGE FLOW WAY

N.E. 7th ST.

REMOVE EXIST. DRAINAGE PIPE AND REPLACE (2) PROPOSED 50 L.F.–36" R.C.P.

PROPOSED DIVERSION CONTROL STRUCTURE (SEE DETAIL)

EXISTING BOX CULVERT

EXISTING DRAINAGE FLOW WAY

N.T.S.

(2) PROPOSED 36" R.C.P.

(2) PROPOSED 6'x6' CONC. BOX CULVERTS

N.E. 4th ST.

N.E. 2nd ST.

CENTER ST.

PROPOSED CONTROL STRUCTURE (SEE SECTION D-D)

PROPOSED FLOW WAY WIDENING, 1400'– 15' BOTTOM WIDTH; w/3:1 SS

EXISTING FLOW WAY

PROPOSED 6240 L.F. CHAIN LINK

PROPOSED FLOW WAY WIDENING, 1700'– 14' B.W; w/2:1 SS

PROPOSED TURBIDITY SCREEN

EXISTING DRAINAGE PIPES AND DITCH TO BE REMOVED

(2) PROPOSED 6'x6' CONC. BOX CULVERTS

30.0'

S.E. 8th ST.

N.E. 80th AVE ROADWAY SWALE FLOWWAYS

PROPOSED 48" R.C.P. CULVERT

PROPOSED 50 ACRE STORMWATER POND

EXISTING DRAINAGE FLOW WAY

PROPOSED FLOW WAY WIDENING, 1200'– 15' BOTTOM WIDTH; w/2:1 SS

PROPOSED CANAL

PROPOSED CANAL SECTION TO NUBBIN SLOUGH STORMWATER TREATMENT AREA

ST. ROAD 710

S.F.W.M.D. (NUBBIN SLOUGH STORMWATER TREATMENT AREA)

NOTE:
TOPOGRAPHY TO BE FURTHER ANALYZED TO DETERMINE ACTUAL LENGTH OF CANAL TO NUBBIN SLOUGH.

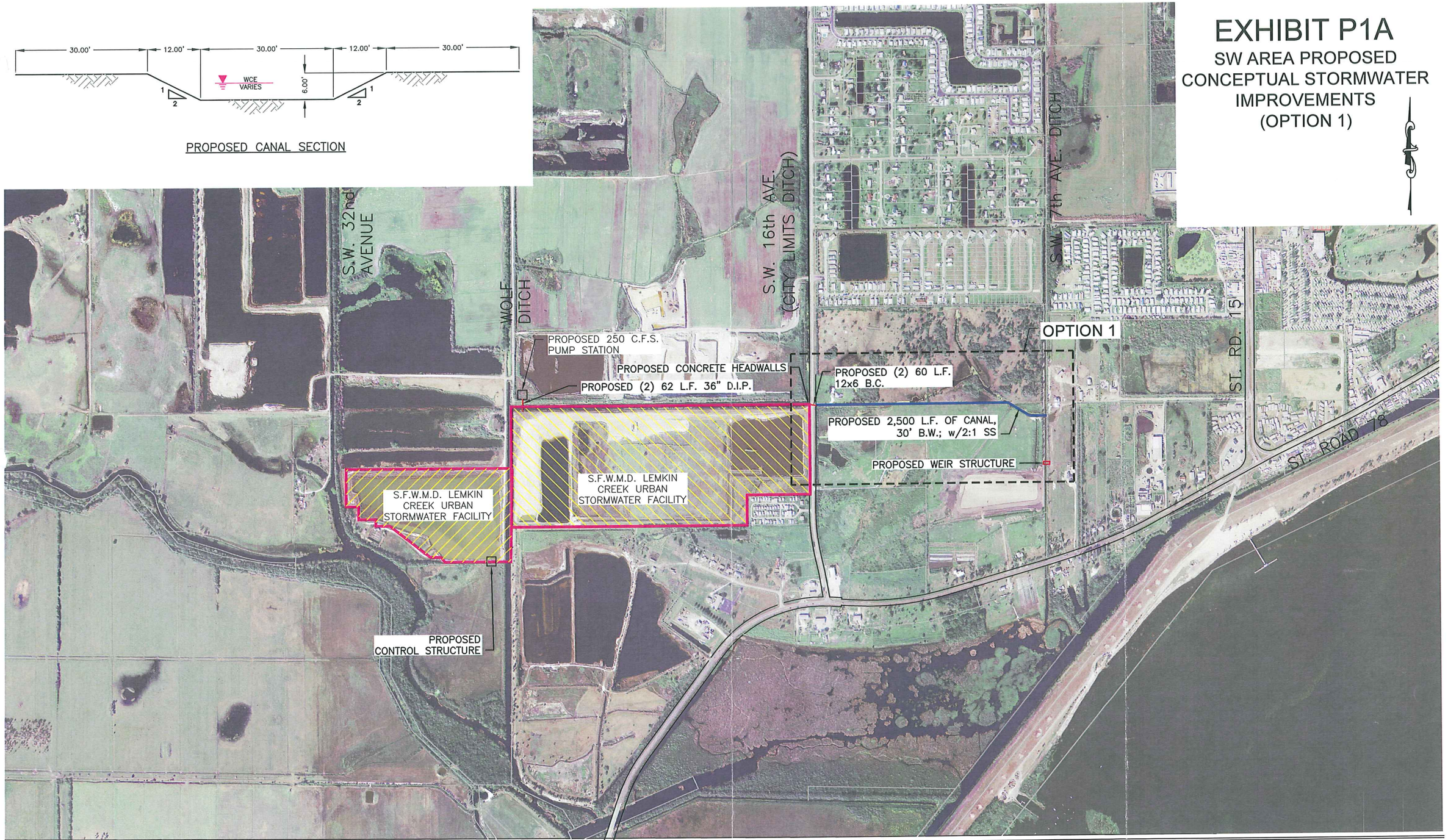
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EXHIBIT P1A

SW AREA PROPOSED CONCEPTUAL STORMWATER IMPROVEMENTS (OPTION 1)

PROPOSED CANAL SECTION



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EXHIBIT P1B

SW AREA PROPOSED CONCEPTUAL STORMWATER IMPROVEMENTS (OPTION 2)

S.W. 32nd AVENUE

WOLF DITCH

S.W. 16th AVE. (CITY LIMITS DITCH)

S.W. 7th AVE. DITCH

ST. RD. 15

ST. ROAD 78

PROPOSED 250 C.F.S. PUMP STATION

PROPOSED CONCRETE HEADWALL w/ GATE

PROPOSED (2) 62 L.F. 36" D.I.P.

PROPOSED 40 L.F.–96" D.I.P. STORMWATER F.M.

PROPOSED 75 C.F.S. PUMP STATION

PROPOSED 2,520 L.F.–60" D.I.P. STORMWATER F.M.

OPTION 2

S.F.W.M.D. LEMKIN CREEK URBAN STORMWATER FACILITY

S.F.W.M.D. LEMKIN CREEK URBAN STORMWATER FACILITY

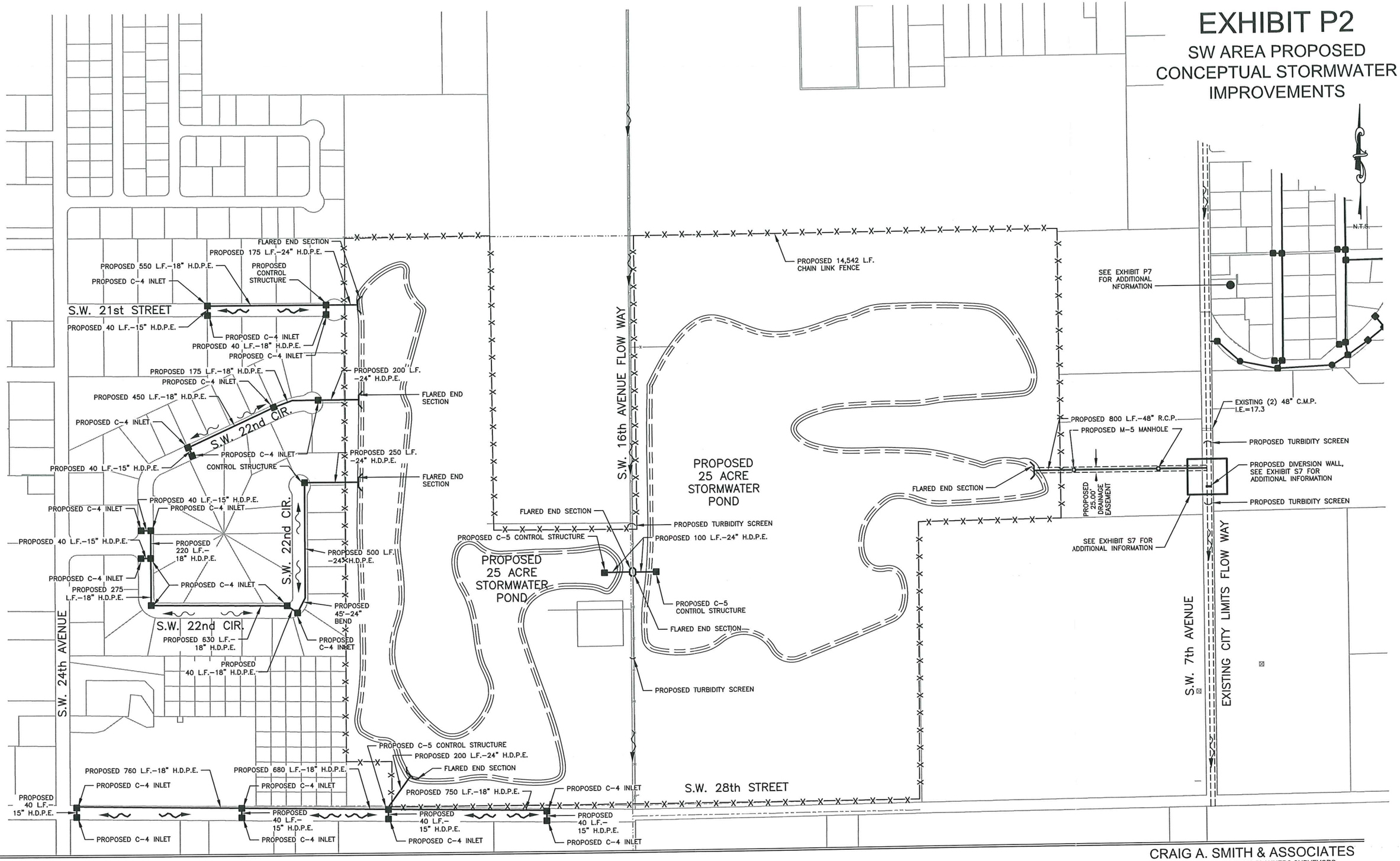
PROPOSED CONTROL STRUCTURE

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EXHIBIT P2

SW AREA PROPOSED CONCEPTUAL STORMWATER IMPROVEMENTS



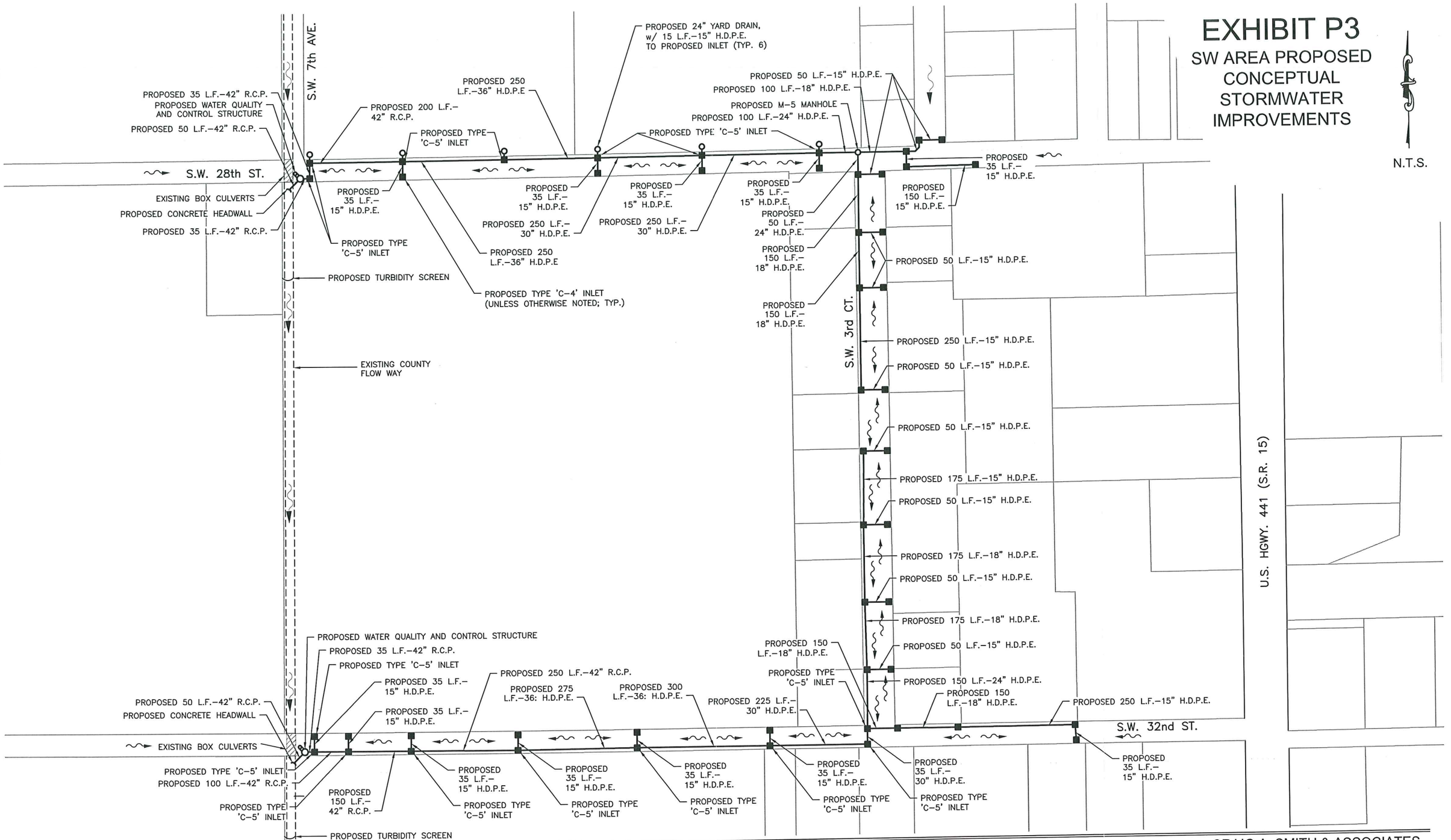
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EXHIBIT P3

SW AREA PROPOSED CONCEPTUAL STORMWATER IMPROVEMENTS

N.T.S.



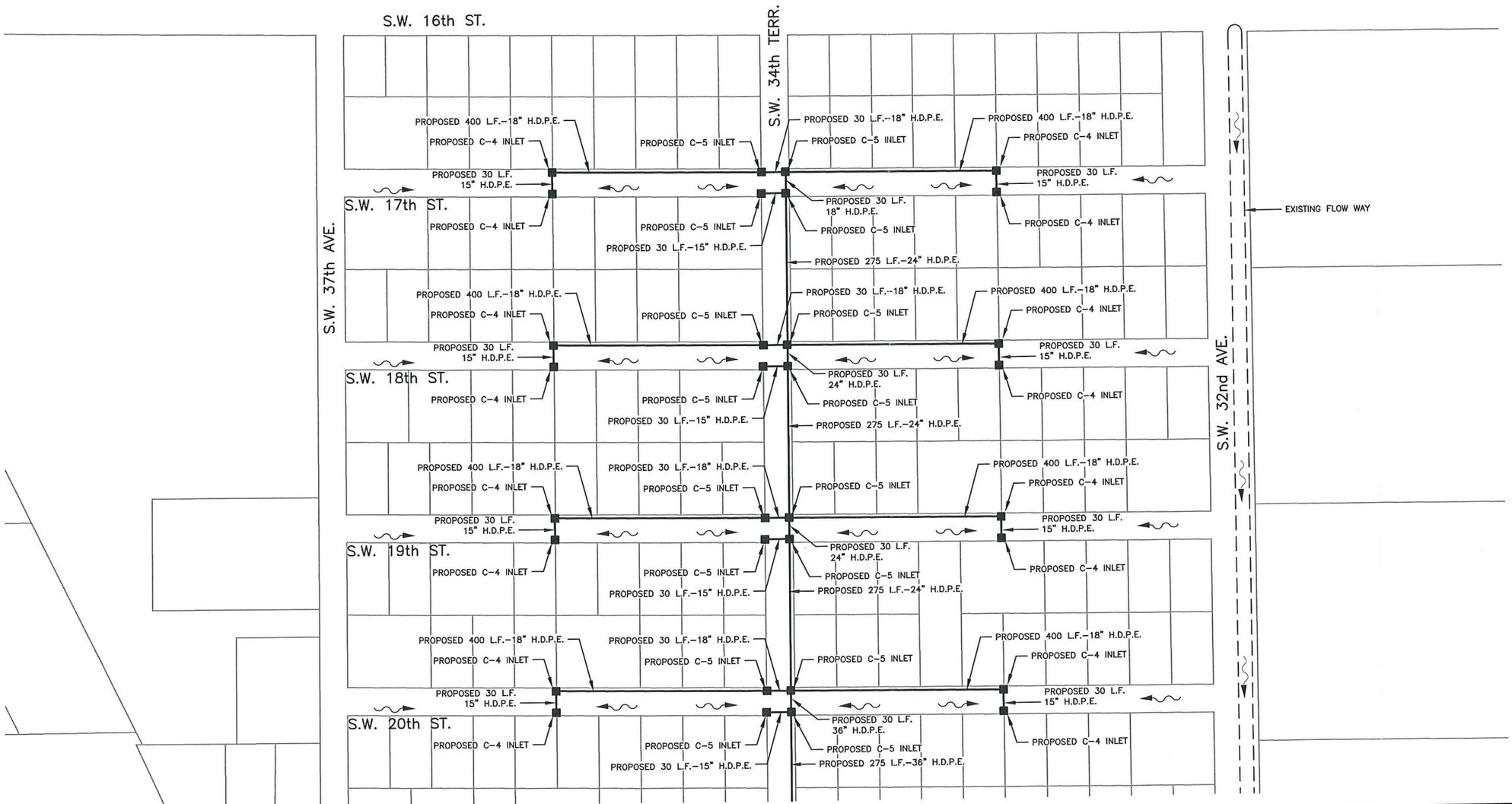
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EXHIBIT P4

SW AREA PROPOSED
CONCEPTUAL STORMWATER
IMPROVEMENTS
FOR OAK PARK
(OPTION 1 / 2)

N.T.S.



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EXHIBIT P5

SW AREA PROPOSED CONCEPTUAL STORMWATER IMPROVEMENTS FOR OAK PARK (OPTION 1)

N.T.S.

S.W. 34th TERR.

S.W. 21st ST.

S.W. 22nd ST.

S.W. 23rd ST.

S.W. 32nd AVE.

S.W. 37th AVE.

EXISTING FLOW WAY

PROPOSED 400 L.F.–18" H.D.P.E.

PROPOSED C–4 INLET

PROPOSED 30 L.F. 15" H.D.P.E.

PROPOSED 30 L.F.–18" H.D.P.E.

PROPOSED C–5 INLET

PROPOSED 30 L.F. 36" H.D.P.E.

PROPOSED 275 L.F.–36" H.D.P.E.

PROPOSED 30 L.F.–15" H.D.P.E.

PROPOSED 30 L.F. 42" R.C.P.

PROPOSED 150 L.F.–42" R.C.P.

PROPOSED M–5 MANHOLE

PROPOSED 350 L.F.–42" R.C.P.

PROPOSED PUMP STATION (1,200 GPM) w/ WATER QUALITY STRUCTURES

PROPOSED TURBIDITY SCREEN

PROPOSED 75 L.F.–24" D.I.P.

PROPOSED CONCRETE HEADWALL

P5 (OPTION 1)

EXISTING LAKE

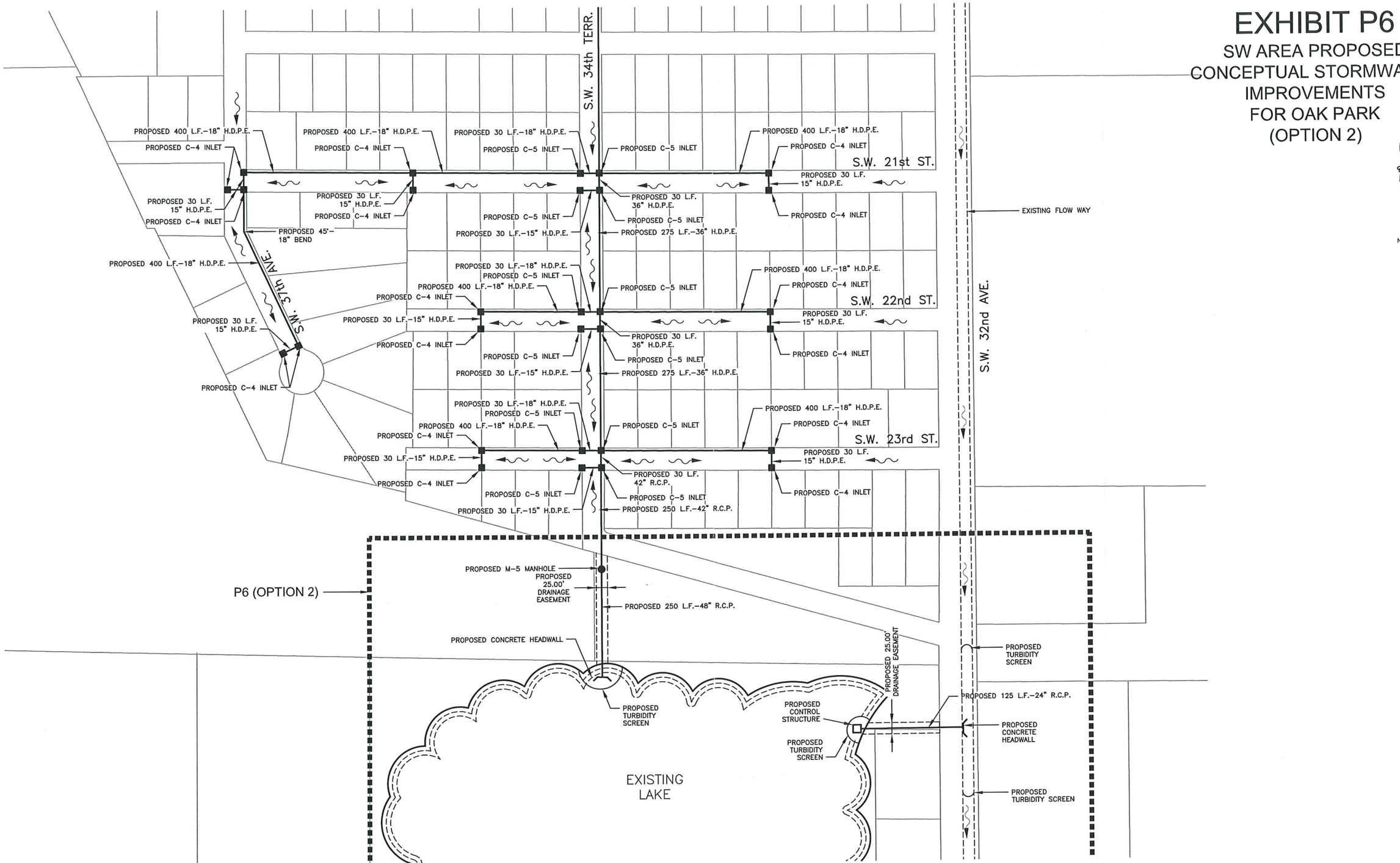
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EXHIBIT P6

SW AREA PROPOSED CONCEPTUAL STORMWATER IMPROVEMENTS FOR OAK PARK (OPTION 2)

N.T.S.



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EXHIBIT P7

SW AREA
PROPOSED CONCEPTUAL
STORMWATER
IMPROVEMENTS

N.T.S.

S.W. 17th ST.
S.W. 18th ST.
S.W. 19th ST.
S.W. 20th ST.
S.W. 21st ST.
S.W. 7th AVE.
S.W. 6th AVE.
S.W. 5th DR.
S.W. 5th AVE.
S.W. 4th AVE.
S.W. 3rd AVE.
S.W. 2nd AVE.
S. PARROT AVE.

PROP. C-4 INLET
PROP. 30 L.F. 15" H.D.P.E.
PROP. C-5 INLET
PROP. 30 L.F.-15" H.D.P.E.
PROP. 400 L.F.-24" H.D.P.E.
PROP. 400 L.F.-30" H.D.P.E.
PROP. 30 L.F.-24" H.D.P.E.
PROP. M-5 INLET
PROP. 260 L.F.-18" H.D.P.E.
PROP. 400 L.F. 30" H.D.P.E.
PROPOSED TURBIDITY SCREEN
PROP. 6'x6' CONTROL STRUCTURE
PROP. 100 L.F.- 42" R.C.P.
EXISTING CITY LIMIT FLOW WAY
TERMINATE 54" CULVERT AT EXISTING DITCH WITH ENDWALL PER FDOT INDEX NO. 250
PROP. 140 L.F.- 42" R.C.P.
PROP. M-6 INLET
PROP. 180 L.F.- 36" R.C.P.
PROP. 270 L.F.- 36" H.D.P.E.
PROP. 40 L.F.- 30" H.D.P.E.
PROP. 90 L.F.- 30" H.D.P.E.
PROP. 120 L.F.-18" H.D.P.E.
PROP. 60 L.F.- 30" H.D.P.E.

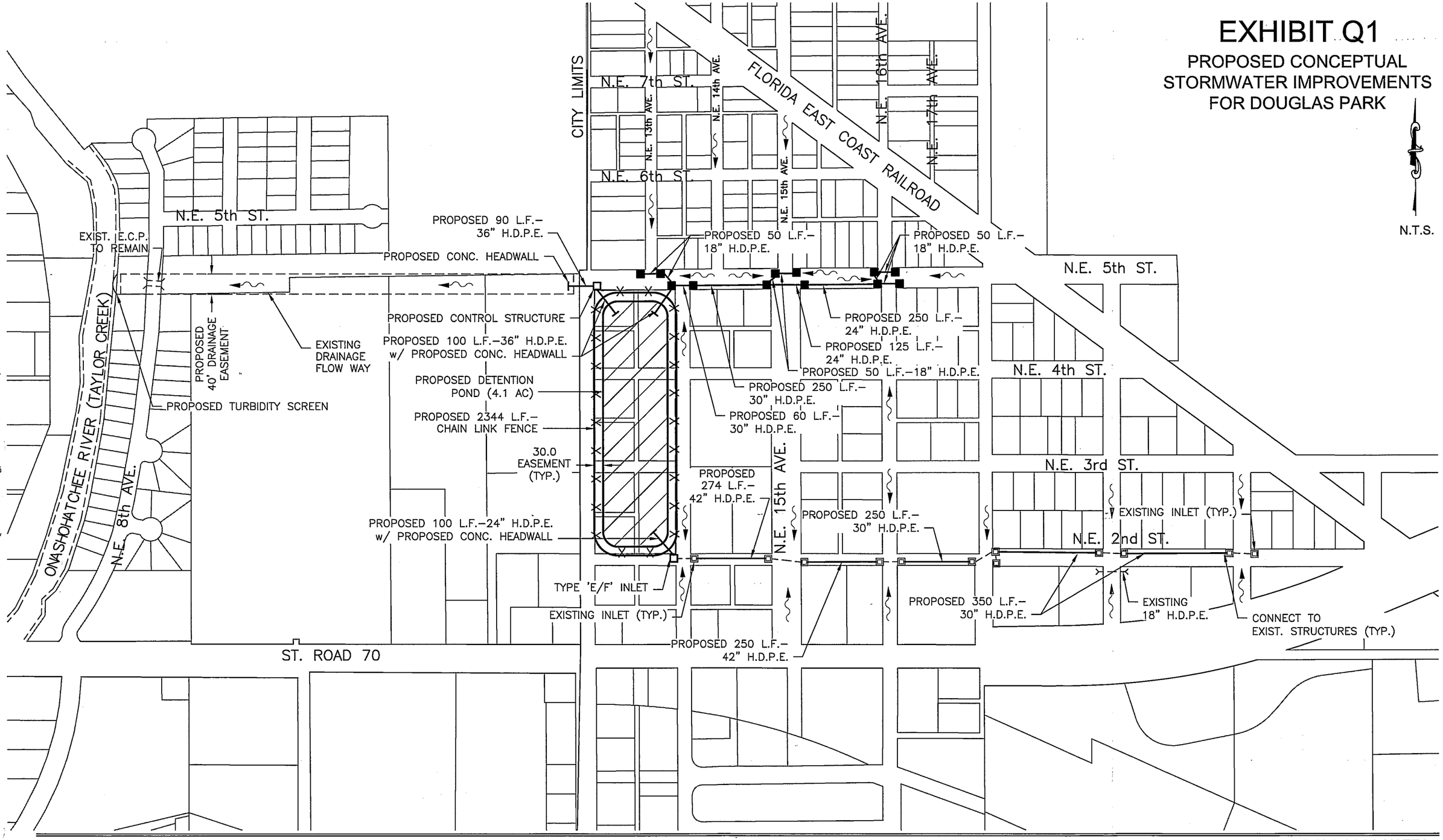
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EXHIBIT Q1

PROPOSED CONCEPTUAL STORMWATER IMPROVEMENTS FOR DOUGLAS PARK

N.T.S.



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EXHIBIT Q2

PROPOSED CONCEPTUAL STORMWATER IMPROVEMENTS FOR DOUGLAS PARK

N.T.S.

TAYLOR CREEK

PROPOSED TURBITITY SCREEN

EXISTING 30" C.M.P.

EXISTING HEADWALL

EXISTING DRAINAGE FLOW WAY

FLORIDA EAST COAST RAILROAD

EXISTING 24" DRAINAGE BASIN

PROPOSED 150 L.F.– 24" H.D.P.E.

PROPOSED 250 L.F.– 24" H.D.P.E.

EXISTING INLET (TYP.)

CORE AND CONNECT TO EXIST. INLET (TYP.)

EXISTING INLET (TYP.)

EXITING TYPE 'E' INLET

EXIST. DRAINAGE (TYP.)

PROPOSED 275 L.F.– 24" H.D.P.E.

PROPOSED 150 L.F.– 24" H.D.P.E.

PROPOSED 150 L.F.– 30" H.D.P.E.

CITY LIMITS

N.E. 13th ST.

N.E. 12th ST.

N.E. 11th ST.

N.E. 10th ST.

N.E. 9th ST.

N.E. 8th ST.

13th AVE.

14th AVE.

15th AVE.

16th AVE.

N.E.

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EXHIBIT R1

PROPOSED CONCEPTUAL STORMWATER IMPROVEMENTS (GENERAL AREA)

N.T.S.

OKEECHOBEE COUNTY AIRPORT

EXISTING COUNTY FLOW WAY

PROPOSED CONTROL STRUCTURE

PROPOSED WETLAND (0.5 AC)

PROPOSED 2795 L.F.–CHAIN LINK FENCE

25' DRAINAGE EASEMENT

PROPOSED 70 L.F.–12'x8' BOX CULVERT

PROPOSED TURBIDITY SCREEN

PROPOSED CONCRETE HEADWALL

PROPOSED DETENTION POND (4.5 AC)

PROPOSED 2718 L.F.–CHAIN LINK FENCE

PROPOSED WETLAND (0.32 AC)

PROPOSED 200 L.F.– 36" R.C.P. w/ (2) CONC. HEADWALL

PROPOSED DETENTION POND (5.6 AC)

TAYLOR CREEK

N.W. 13th ST.

N.W. 11th ST.

N.W. 9th ST.

N.W. 7th AVE.

N.W. 3rd AVE.

U.S. HWY. 441 (S.R. 15)

N.E. 4th AVE.

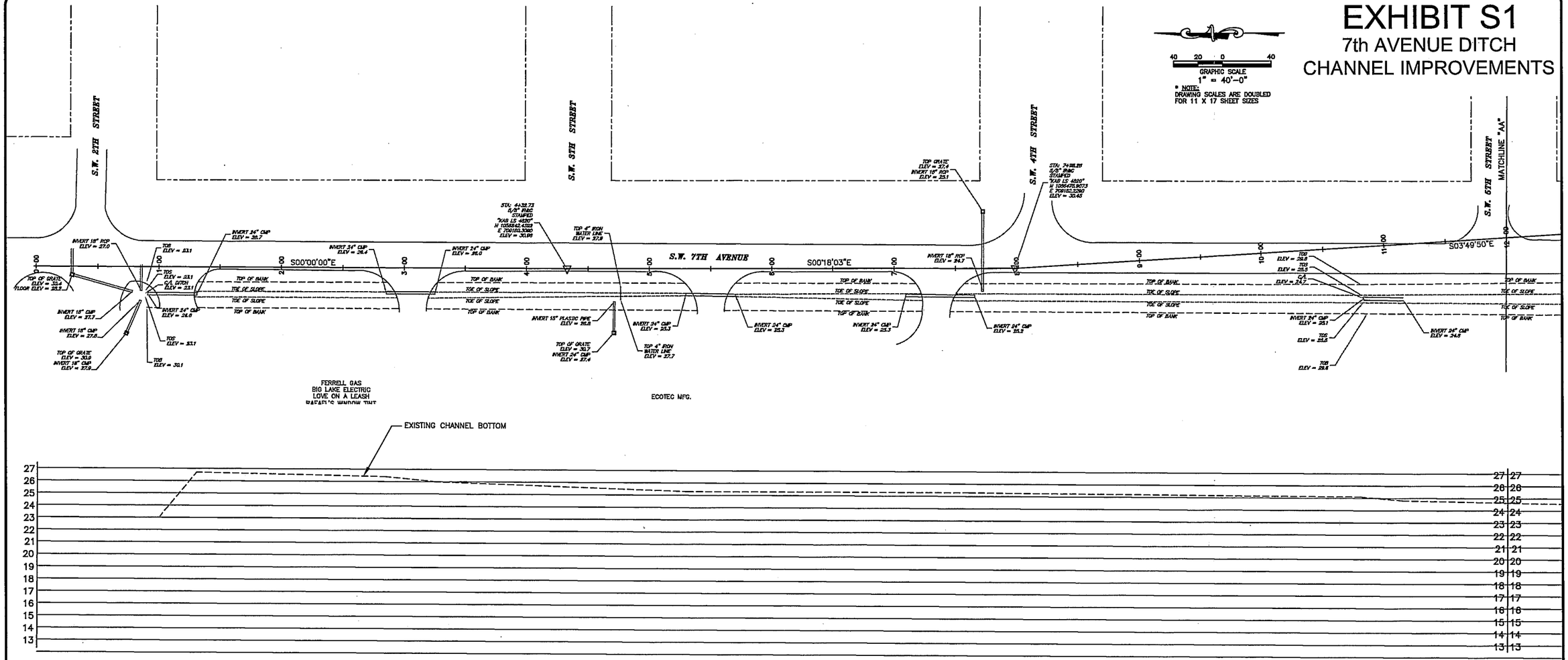
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WELLINGTON, FLORIDA 33414
(561)791-9280
CERTIFICATE. NO. LB0003110

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EXHIBIT S1
7th AVENUE DITCH CHANNEL IMPROVEMENTS

GRAPHIC SCALE
1" = 40'-0"
40 20 0 40

* NOTE:
DRAWING SCALES ARE DOUBLED FOR 11 X 17 SHEET SIZES



PROJECT SPECIFIC LEGEND:

- = WATER VALVE
- WM = WATER METER
- S = SANITARY SEWER MANHOLE
- = TELEPHONE RISER
- = SIGN
- = "WPP" (WOOD POWER POLE)
- = ANCHOR (GUY)
- = FIRE HYDRANT
- = SEWER VALVE
- = STOP SIGN
- = CABLE TV-RISER
- CMP = CORRUGATED METAL PIPE
- PVC = PLASTIC PIPE
- RCP = REINFORCED CONCRETE PIPE
- CPP = CORRUGATED PLASTIC PIPE

PROJECT SPECIFIC NOTES:

1) SPECIAL PURPOSE SURVEY – ROUTE SURVEY TO ESTABLISH ARBITRARY HORIZONTAL CONTROL LINE, LOCATE AND IDENTIFY PHYSICAL FEATURES OF DRAINAGE STRUCTURES WITHIN THE LIMITS OF SUBJECT AREAS IDENTIFIED AS SEGMENTS 1, 2, 3, 4, 5, 6A, 6B, 7, AND 8, PER CLIENT REQUEST.
2) VERTICAL CONTROL WILL BE BASED ON THE NATIONAL GEODETIC VERTICAL DATUM, 1929 ADJUSTMENT (NGVD'29).
3) HORIZONTAL CONTROL IS BASED ON FLORIDA STATE PLANE COORDINATES, NAD 83/99 ADJUSTMENT.
4) VISIBLE AND UNDERGROUND UTILITIES ARE NOT LOCATED
5) JURISDICTIONAL AREAS ARE NOT LOCATED OR SHOWN.
6) DATE OF LAST FIELD SURVEY: 05/31/05
7) THE SURVEY DEPICTED HERE IS NOT COVERED BY PROFESSIONAL LIABILITY INSURANCE. ADDITIONS OR DELETIONS TO SURVEY MAPS OR REPORTS BY OTHER THAN THE SIGNING PARTY OR PARTIES IS PROHIBITED WITHOUT WRITTEN CONSENT OF THE SIGNING PARTY OR PARTIES.

TRADEWINDS PROFESSIONAL SERVICES, INC.
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Tel: (863) 763-2557

NO.	DATE	REVISION	BY

Date: 03/30/07
Designed: AJC
Drawn: RRM
Checked: OAR

APPROVED BY: ORLANDO A. RUBIO, P.E.
DATE
FLORIDA PROFESSIONAL ENGINEER NO. 48265

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PREPARED FOR:
OKEECHOBEE COUNTY, FL

STORMWATER MASTER PLAN
CHANNEL IMPOVEMENTS
S.W. 7th AVENUE DITCH

FILE NAME: 30-0903-EXB-S1-IMPROV.dwg
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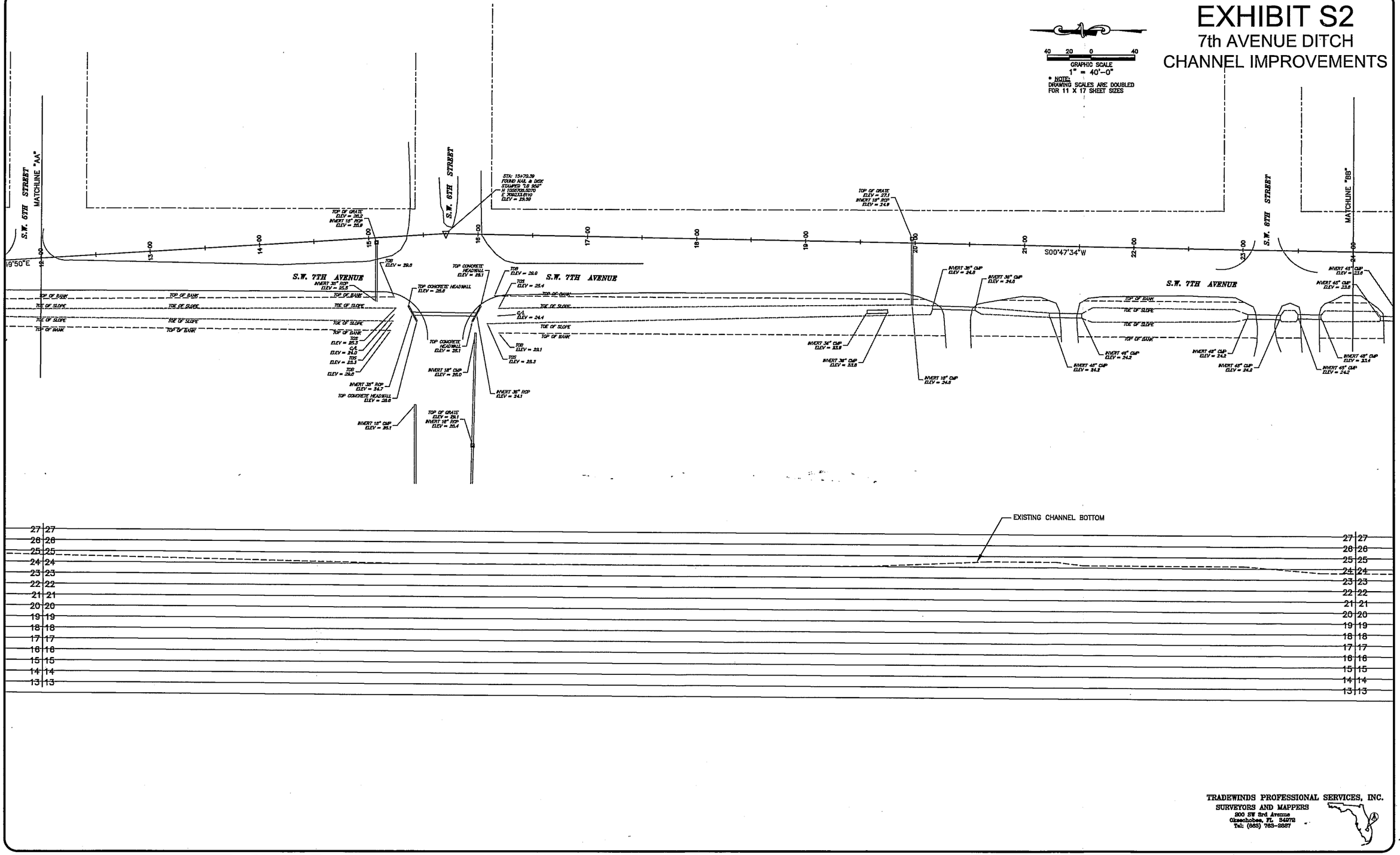
EXHIBIT S2

7th AVENUE DITCH CHANNEL IMPROVEMENTS

40 20 0 40

GRAPHIC SCALE
1" = 40'-0"

• NOTE:
DRAWING SCALES ARE DOUBLED FOR 11 X 17 SHEET SIZES



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Date: 03/30/07
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APPROVED BY: ORLANDO A. RUBIO, P.E.

DATE

FLORIDA PROFESSIONAL ENGINEER NO. 48265

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CERTIFICATE NO. LB0003110

PREPARED FOR:

OKEECHOBEE COUNTY, FL

STORMWATER MASTER PLAN

CHANNEL IMPOVEMENTS
S.W. 7th AVENUE DITCH

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EXHIBIT S3
7th AVENUE DITCH CHANNEL IMPROVEMENTS

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GRAPHIC SCALE
1" = 40'-0"

• NOTE:
DRAWING SCALES ARE DOUBLED FOR 11 X 17 SHEET SIZES

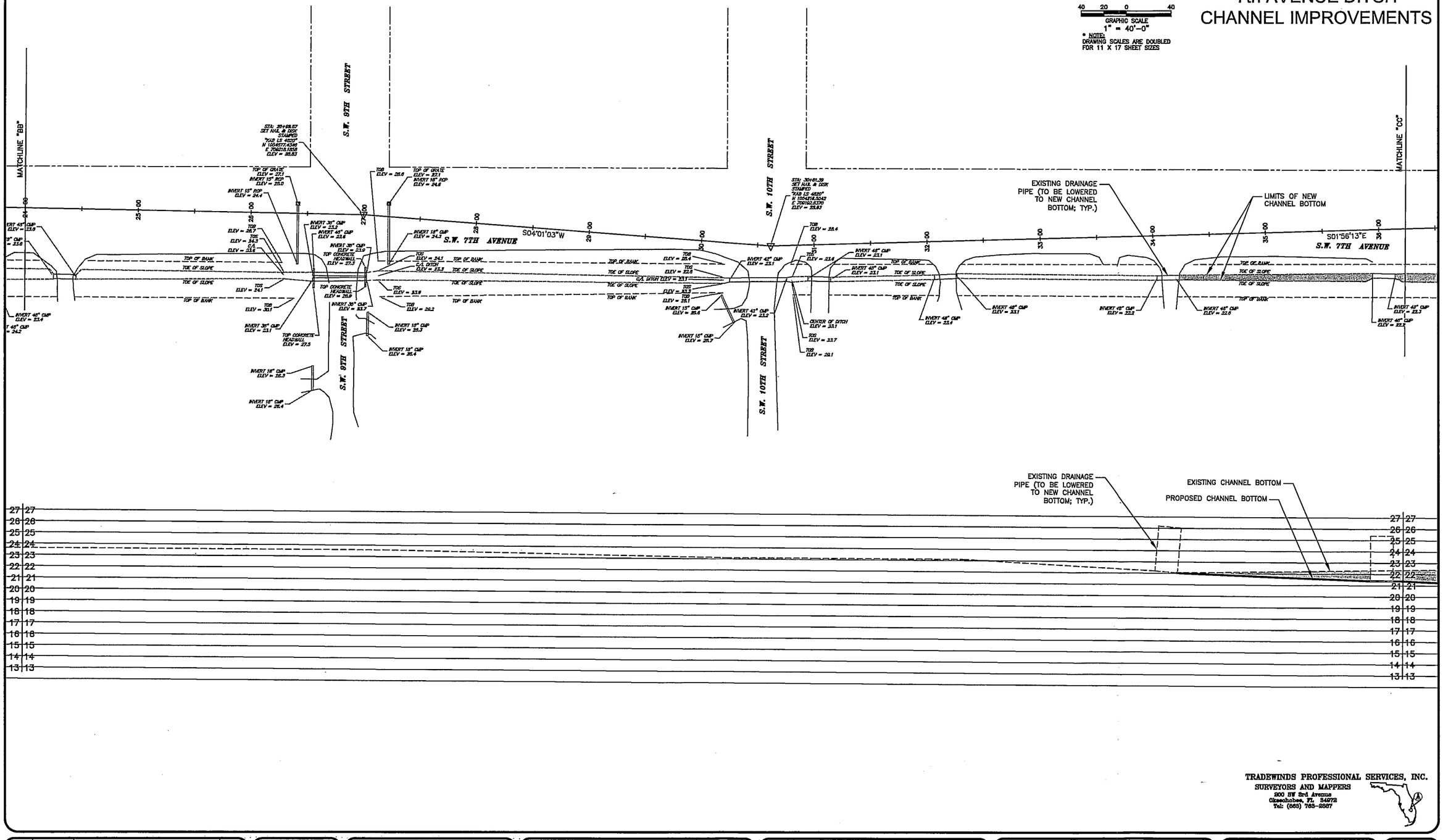

MATCHLINE "BB"
MATCHLINE "CC"
S.W. 9TH STREET
S.W. 10TH STREET
S.W. 7TH AVENUE
S04°01'03"W
S01°56'13"E
STA: 29+69.57 SET NAIL & DISK STAMPED "KJB LS 4820" N 1054577.4346 E 706218.1558 ELEV = 26.83
STA: 30+97.79 SET NAIL & DISK STAMPED "KJB LS 4820" N 1054218.5042 E 706102.2378 ELEV = 25.87
EXISTING DRAINAGE PIPE (TO BE LOWERED TO NEW CHANNEL BOTTOM; TYP.)
LIMITS OF NEW CHANNEL BOTTOM
TOP OF BANK
TOE OF SLOPE
TOP OF GRATE ELEV = 27.1
INVERT 15" RCP ELEV = 25.0
INVERT 15" RCP ELEV = 24.4
TOP OF GRATE ELEV = 27.1
INVERT 18" RCP ELEV = 24.6
INVERT 36" CMP ELEV = 23.2
INVERT 48" CMP ELEV = 23.6
INVERT 36" CMP ELEV = 23.0
TOP CONCRETE HEADWALL ELEV = 27.3
INVERT 18" CMP ELEV = 24.3
TOP CONCRETE HEADWALL ELEV = 26.9
INVERT 36" CMP ELEV = 23.7
TOP CONCRETE HEADWALL ELEV = 27.5
INVERT 18" CMP ELEV = 25.3
INVERT 18" CMP ELEV = 25.4
INVERT 18" CMP ELEV = 25.3
INVERT 18" CMP ELEV = 25.4
G.A. DITCH ELEV = 23.3
G.A. DITCH ELEV = 23.1
INVERT 42" CMP ELEV = 23.1
INVERT 15" CMP ELEV = 25.6
INVERT 42" CMP ELEV = 23.2
INVERT 18" CMP ELEV = 25.7
INVERT 48" CMP ELEV = 23.1
INVERT 48" CMP ELEV = 23.4
INVERT 48" CMP ELEV = 23.1
INVERT 48" CMP ELEV = 22.2
INVERT 48" CMP ELEV = 22.0
INVERT 48" CMP ELEV = 23.3
CENTER OF DITCH ELEV = 23.1
TOE ELEV = 23.7
TOE ELEV = 23.1
TOE ELEV = 23.4
TOE ELEV = 24.7
TOE ELEV = 24.3
G.A. ELEV = 23.6
TOE ELEV = 30.1
TOE ELEV = 34.1
TOE ELEV = 33.9
TOE ELEV = 29.2
TOE ELEV = 25.4
TOE ELEV = 23.6
TOE ELEV = 23.6
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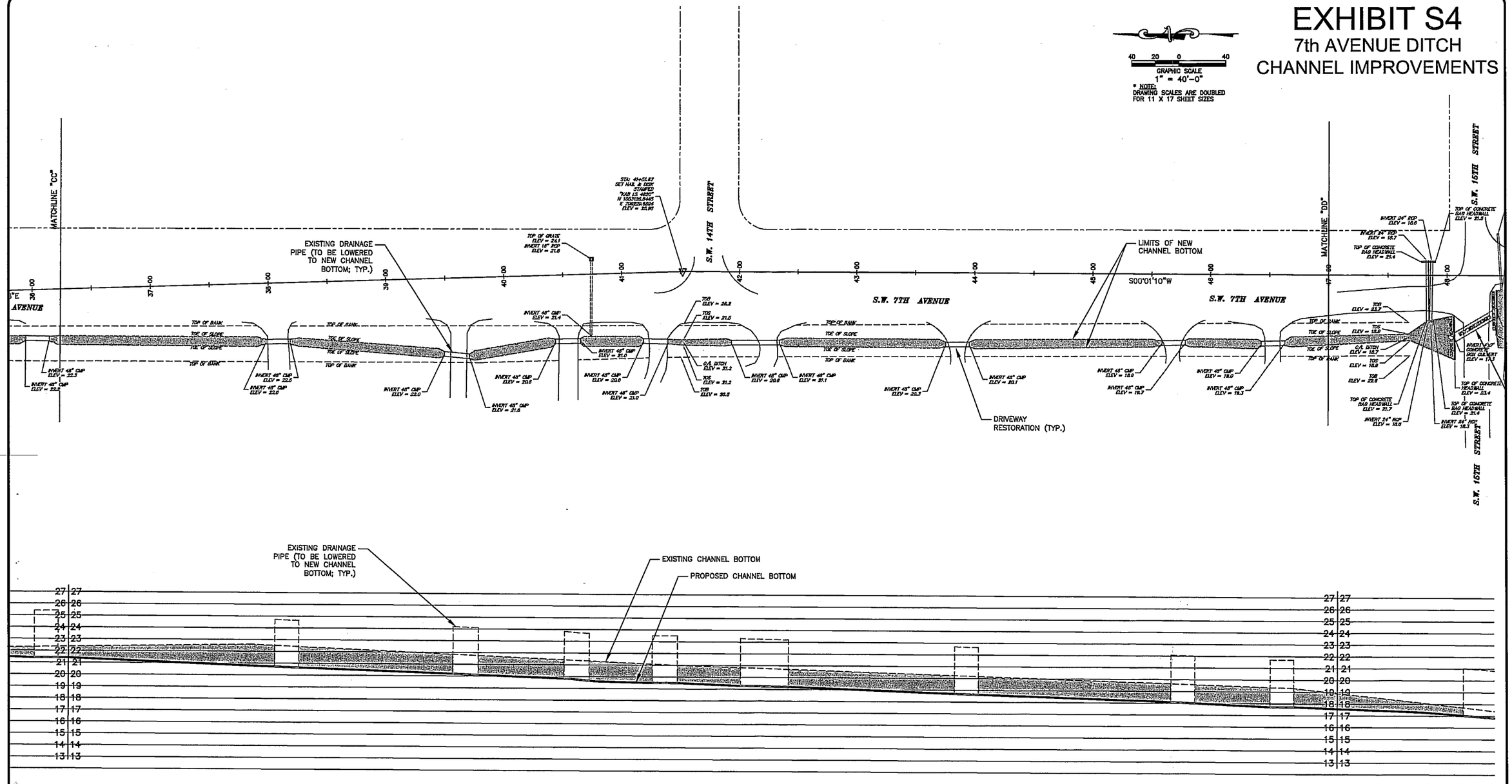
EXHIBIT S4

7th AVENUE DITCH CHANNEL IMPROVEMENTS

40 20 0 40

GRAPHIC SCALE
1" = 40'-0"

* NOTE:
DRAWING SCALES ARE DOUBLED FOR 11 X 17 SHEET SIZES



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Date: 03/30/07
Designed: AJC
Drawn: RRM
Checked: OAR

APPROVED BY: ORLANDO A. RUBIO, P.E.
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PREPARED FOR:
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STORMWATER MASTER PLAN
CHANNEL IMPOVEMENTS
S.W. 7th AVENUE DITCH

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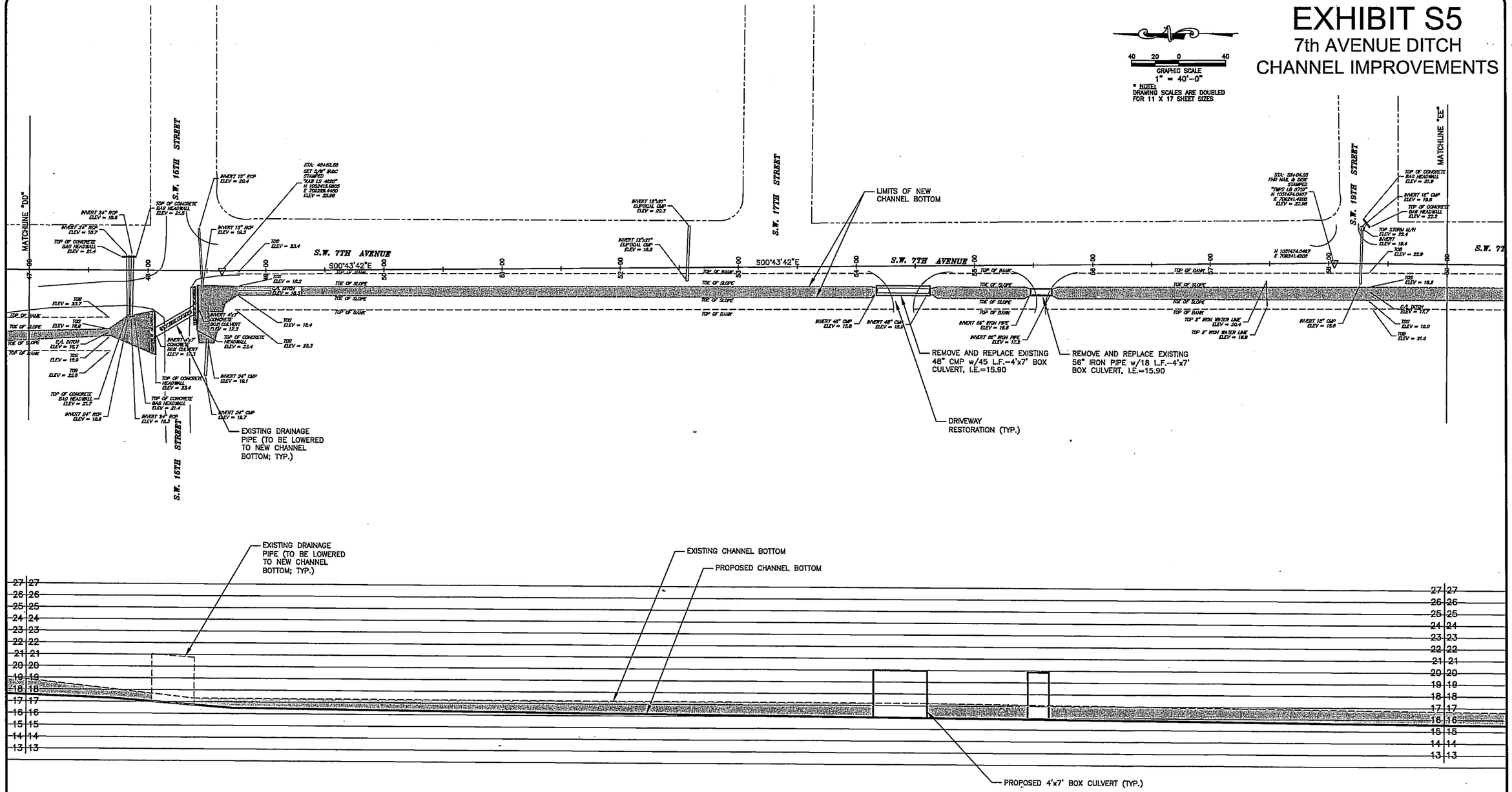
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EXHIBIT S5

7th AVENUE DITCH CHANNEL IMPROVEMENTS

GRAPHIC SCALE
1" = 40'-0"
40 20 0 40

* NOTE:
DRAWING SCALES ARE DOUBLED FOR 11 X 17 SHEET SIZES



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CHANNEL IMPOVEMENTS
S.W. 7th AVENUE DITCH

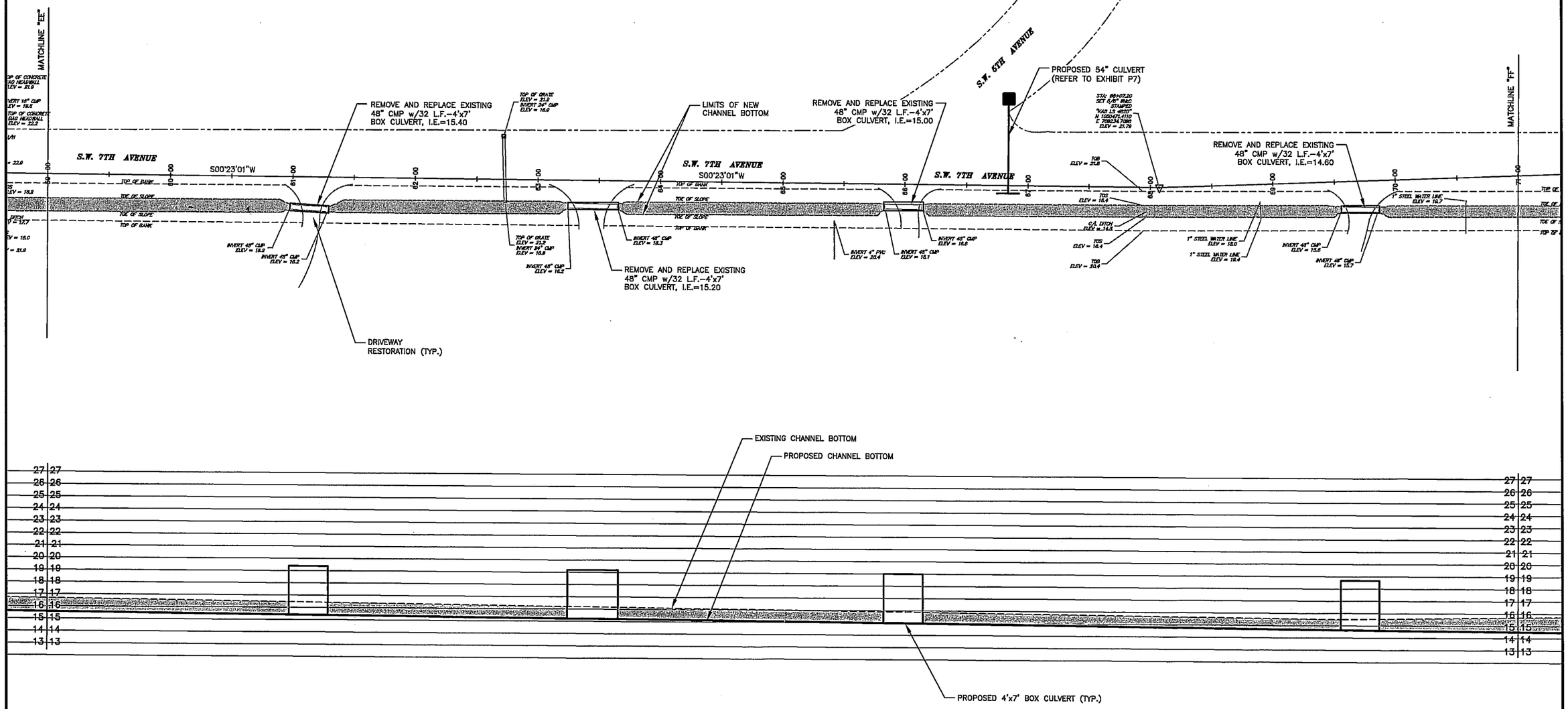
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EXHIBIT S6
7th AVENUE DITCH
CHANNEL IMPROVEMENTS

GRAPHIC SCALE
40 20 0 40
1" = 40'-0"

* NOTE:
DRAWING SCALES ARE DOUBLED FOR 11 X 17 SHEET SIZES



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CHANNEL IMPOVEMENTS
S.W. 7th AVENUE DITCH

FILE NAME: 35-0903 EXB-S6-IMPROV.dwg
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PROJECT: 00-0903-146
SHEET: EXB-S6
OF 9 Total Sheets

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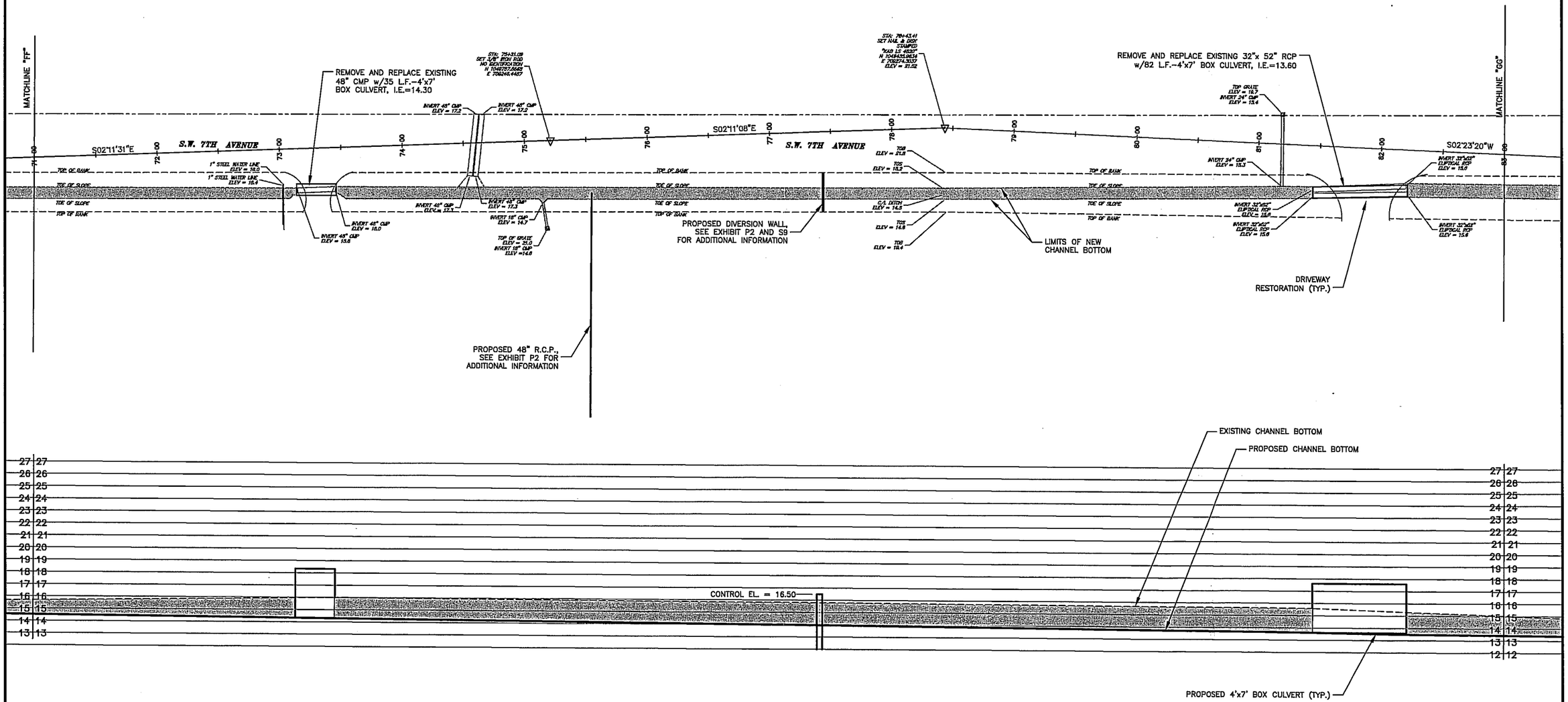
EXHIBIT S7

7th AVENUE DITCH CHANNEL IMPROVEMENTS

40 20 0 40

GRAPHIC SCALE
1" = 40'-0"

* NOTE:
DRAWING SCALES ARE DOUBLED FOR 11 X 17 SHEET SIZES



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Date: 03/30/07
Designed: AJC
Drawn: RRM
Checked: OAR

APPROVED BY: ORLANDO A. RUBIO, P.E.
DATE
FLORIDA PROFESSIONAL ENGINEER NO. 48265

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CERTIFICATE NO. LB0003110

PREPARED FOR:
OKEECHOBEE COUNTY, FL

STORMWATER MASTER PLAN
CHANNEL IMPOVEMENTS
S.W. 7th AVENUE DITCH

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OF 9 Total Sheets

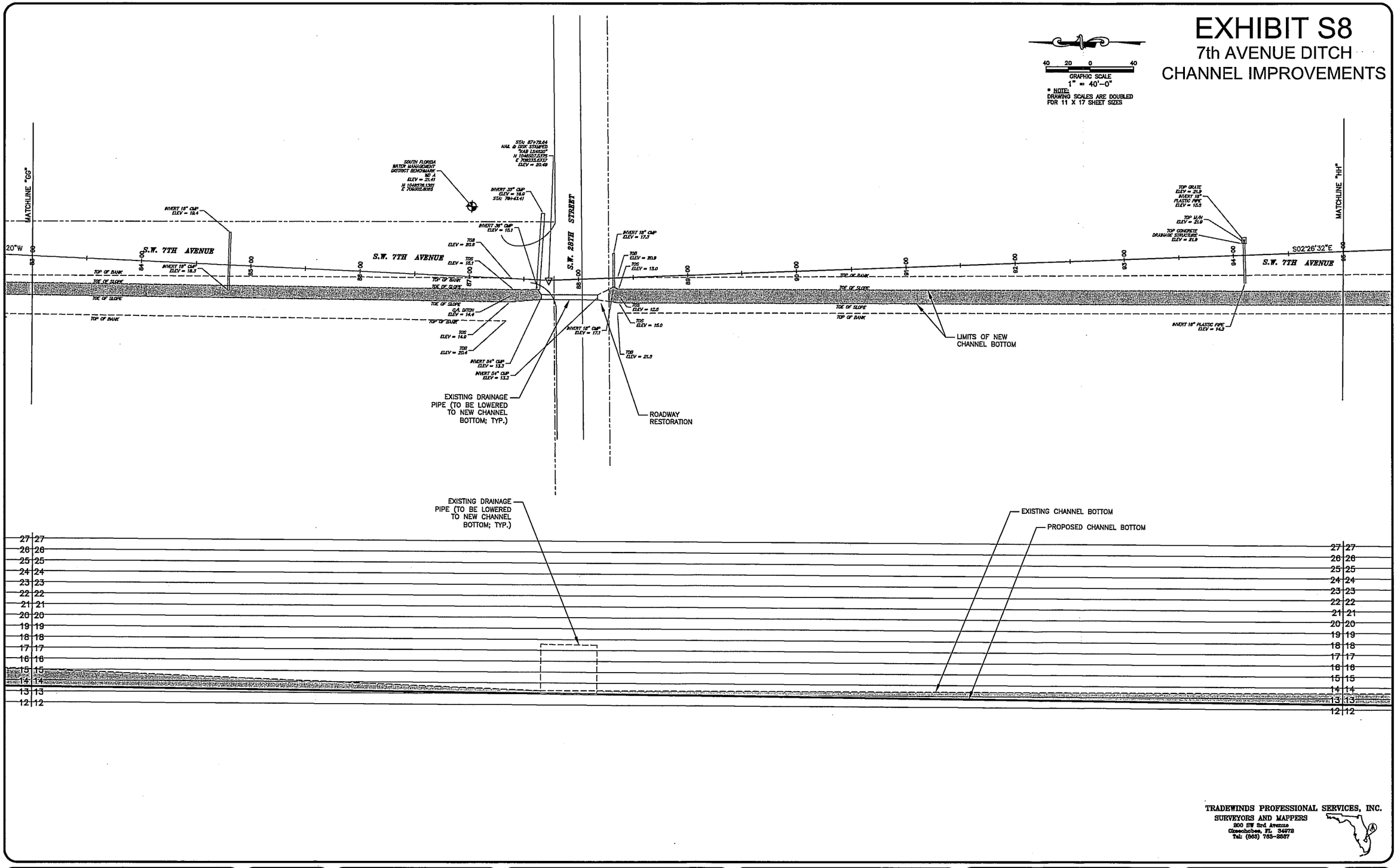
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EXHIBIT S8

7th AVENUE DITCH CHANNEL IMPROVEMENTS

GRAPHIC SCALE
40 20 0 40
1" = 40'-0"

• NOTE:
DRAWING SCALES ARE DOUBLED FOR 11 X 17 SHEET SIZES



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Tel: (863) 763-2587

NO.	DATE	REVISION	BY

Date: 03/30/07
Designed: AJC
Drawn: RRM
Checked: OAR

APPROVED BY: ORLANDO A. RUBIO, P.E.
DATE
FLORIDA PROFESSIONAL ENGINEER NO. 48265

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WELLINGTON, FLORIDA 33414
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CERTIFICATE NO. LB0003110

PREPARED FOR:
OKEECHOBEE COUNTY, FL

STORMWATER MASTER PLAN
CHANNEL IMPOVEMENTS
S.W. 7th AVENUE DITCH

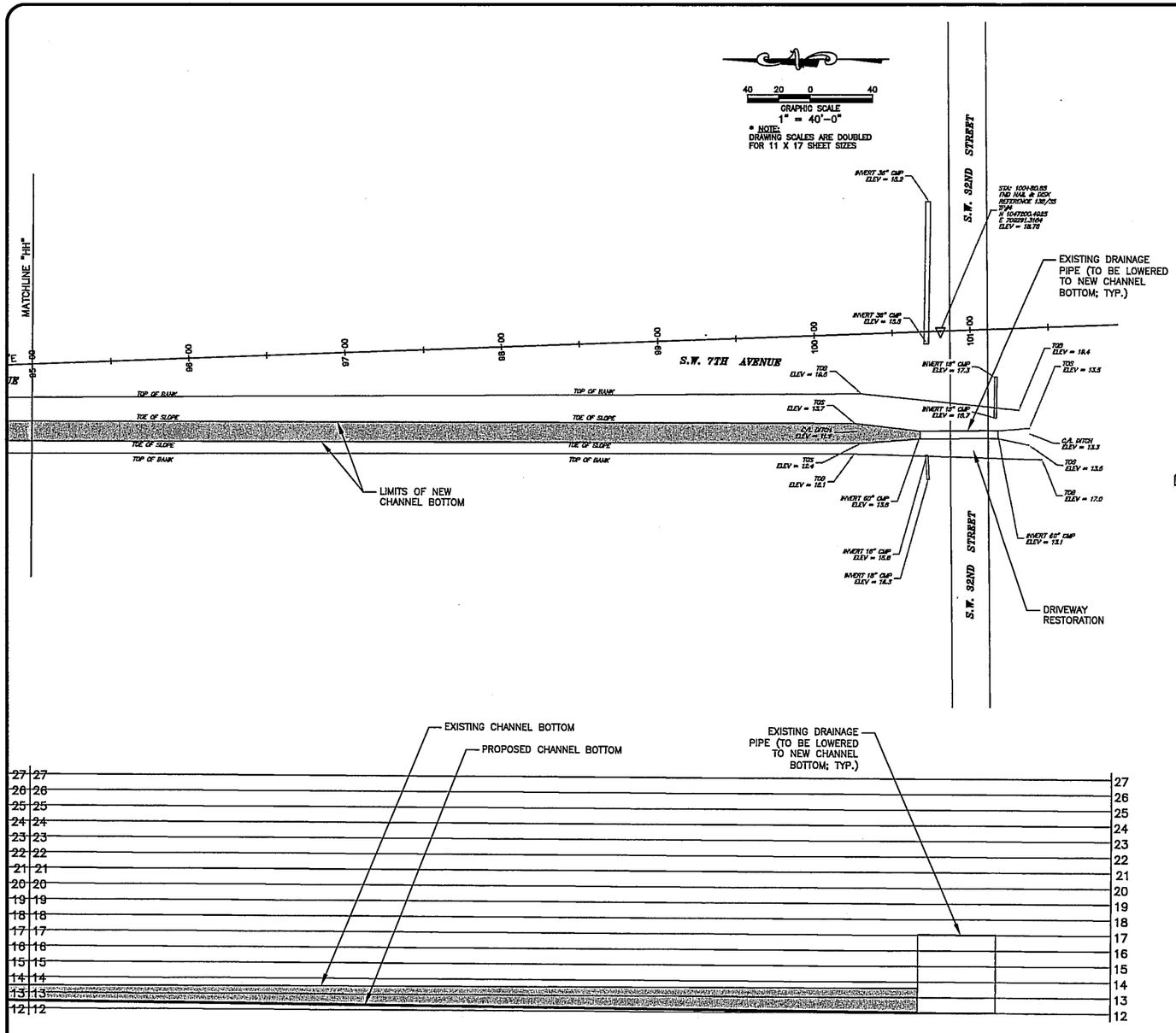
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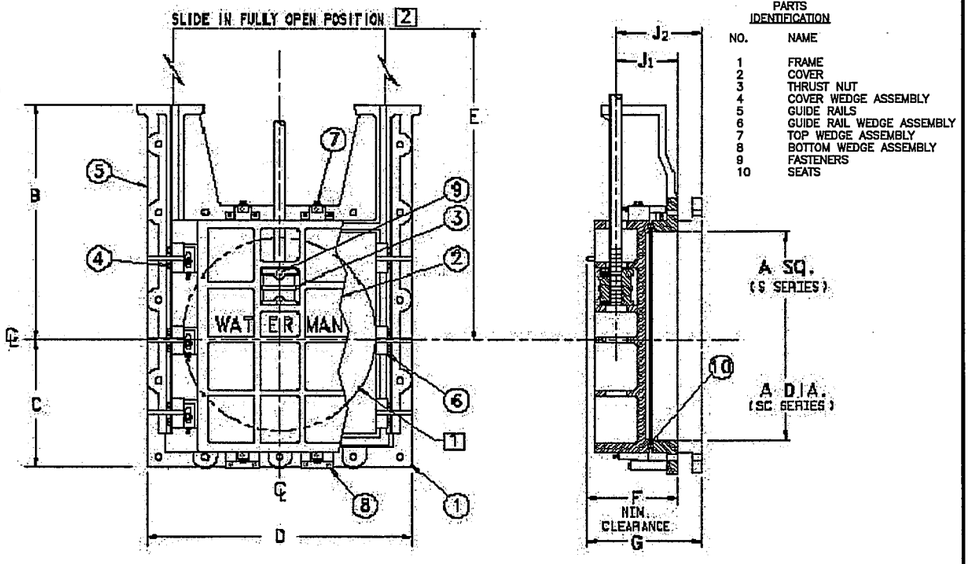
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OF 9 Total Sheets

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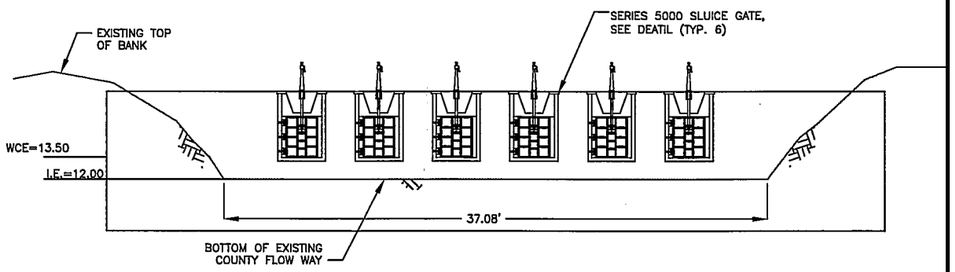
EXHIBIT S9
7th AVENUE DITCH
CHANNEL IMPROVEMENTS





GATE SIZE A	B	C	D	E	F	J1*	G	J2*
30	37.5	19.75	39	52	12.5	7	17	11.5

SLUICE GATE DETAIL
SCALE: N.T.S.



DIVERSION WALL DETAIL
SCALE: N.T.S.

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NO.	DATE	REVISION	BY

Date: 03/30/07
Designed: AJC
Drawn: RRM
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DATE
FLORIDA PROFESSIONAL ENGINEER NO. 48265

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PREPARED FOR:
OKEECHOBEE COUNTY, FL

STORMWATER MASTER PLAN
CHANNEL IMPOVEMENTS
S.W. 7th AVENUE DITCH

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PROJECT: 00-0903-146
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EXHIBIT T1

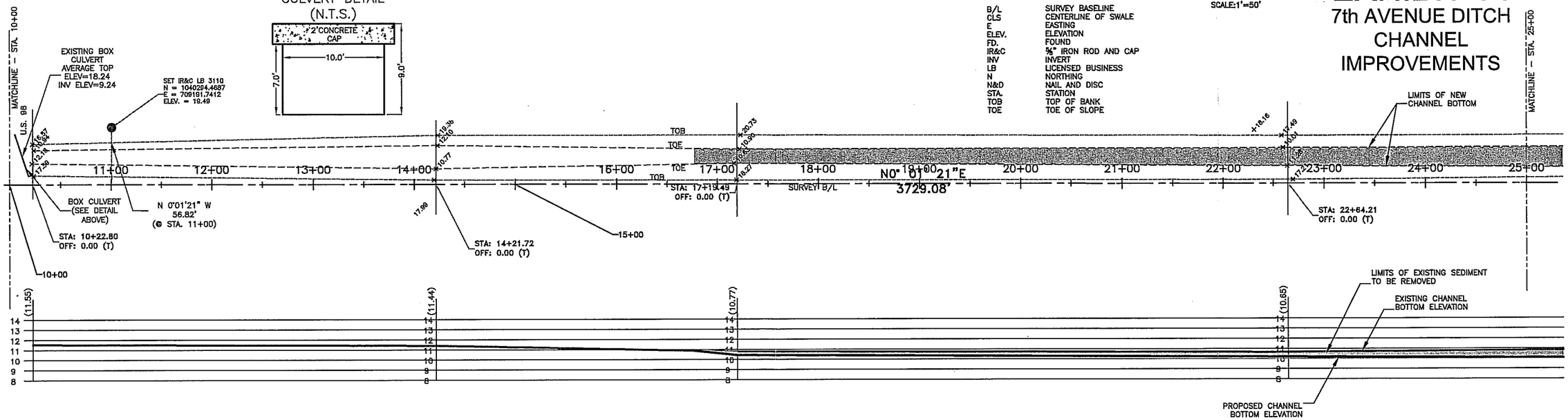
7th AVENUE DITCH CHANNEL IMPROVEMENTS

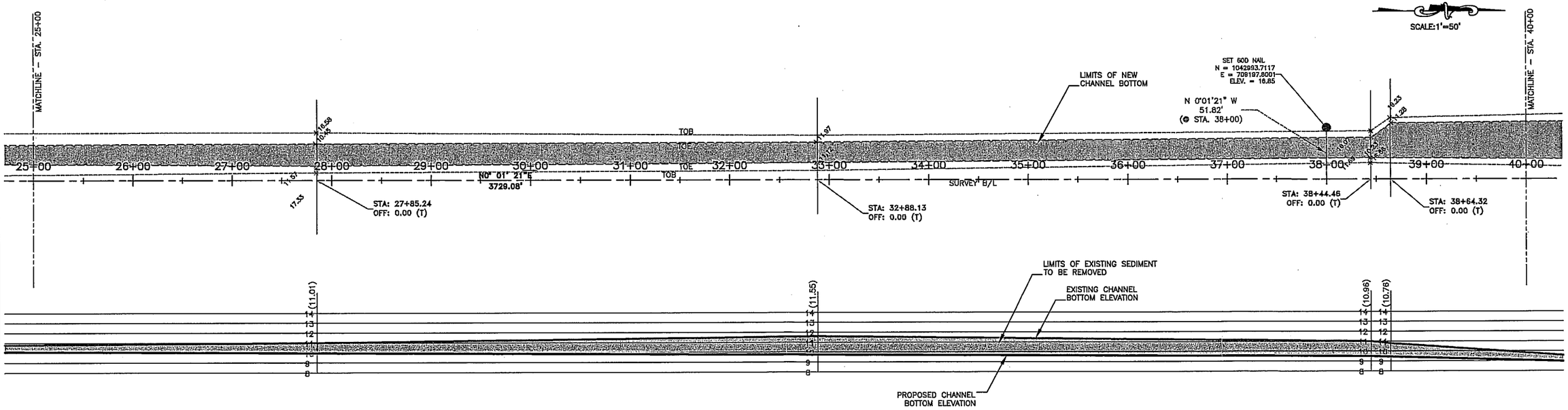
EXISTING BOX CULVERT DETAIL (N.T.S.)

LEGEND

B/L	SURVEY BASELINE
CLS	CENTERLINE OF SWALE
E	EASTING
ELEV.	ELEVATION
FD.	FOUND
IR&C	⅝" IRON ROD AND CAP
INV	INVERT
LB	LICENSED BUSINESS
N	NORTHING
N&D	NAIL AND DISC
STA.	STATION
TOB	TOP OF BANK
TOE	TOE OF SLOPE

SCALE:1"=50'





NO.	DATE	FB / PG	DWN	REVISION	CKD
3	01/24/07	N/A	SWM	ADD CENTERLINE OF DITCH PROFILE	RDK
2	10/27/06	N/A	SWM	REVISE PER ENGINEERING COMMENTS	RDK
1	09/20/06	155/31	SWM	MAP OF SPECIFIC PURPOSE SURVEY	RDK

PREPARED FOR
OKEECHOBEE COUNTY

CRAIG A. SMITH & ASSOCIATES
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CERT. NO. LB0003110

CHANNEL IMPROVEMENTS

7th AVE. DITCH
STA.10+00 TO 40+00

FILE: 39-0903-EXB-T1-IMPROV.dwg
LAST SAVED: 04/18/07 – 11:47am

SCALE: AS SHOWN

PROJECT: 00-0903-446

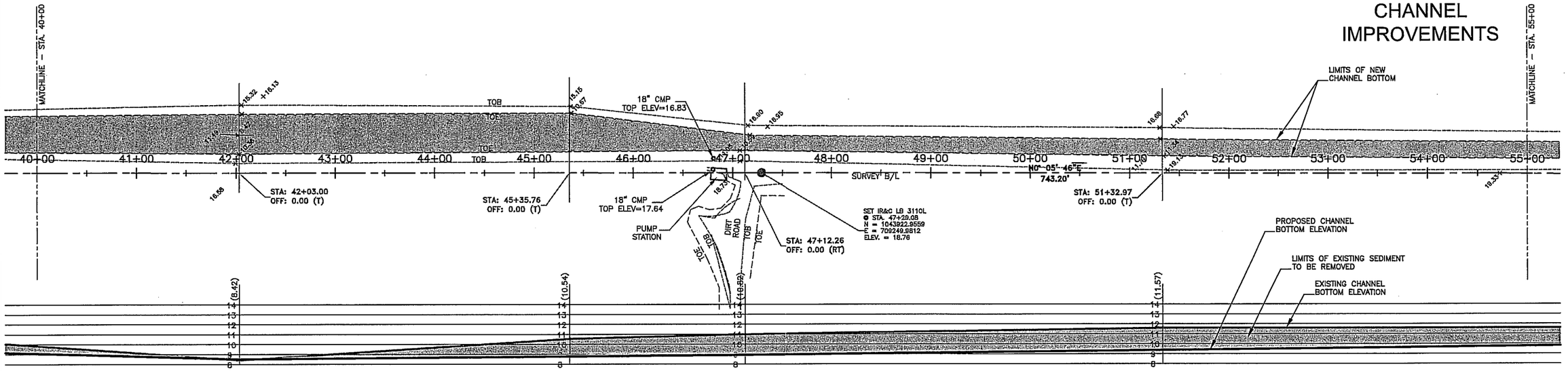
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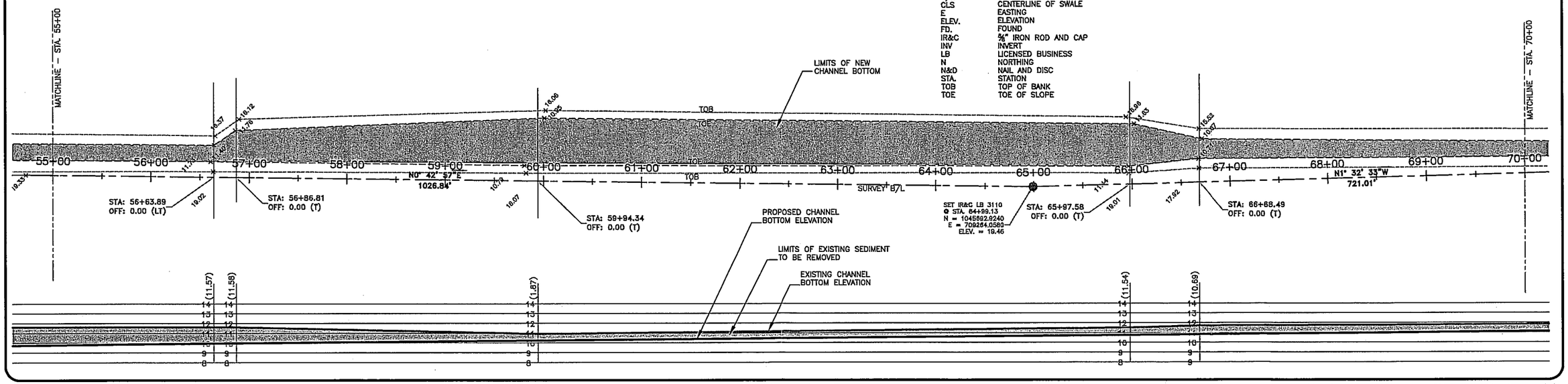
EXHIBIT T2

7th AVENUE DITCH CHANNEL IMPROVEMENTS

SCALE:1"=50'



SCALE:1"=50'



LEGEND

B/L	SURVEY BASELINE
CLS	CENTERLINE OF SWALE
E	EASTING
ELEV.	ELEVATION
FD.	FOUND
IR&C	⅝" IRON ROD AND CAP
INV	INVERT
LB	LICENSED BUSINESS
N	NORTHING
N&D	NAIL AND DISC
STA.	STATION
TOB	TOP OF BANK
TOE	TOE OF SLOPE

NO.	DATE	FB / PG	DWN	REVISION	CKD
3	01/24/07	N/A	SWM	ADD CENTERLINE OF DITCH PROFILE	RDK
2	10/27/06	N/A	SWM	REVISE PER ENGINEERING COMMENTS	RDK
1	09/20/05	155/31	SWM	MAP OF SPECIFIC PURPOSE SURVEY	RDK

PREPARED FOR

OKEECHOBEE COUNTY

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WELLINGTON, FLORIDA 33414
(561)791-0220
CERT. NO. LB0003110

CHANNEL IMPROVEMENTS

7th AVE. DITCH
STA.10+00 TO 40+00

FILE: 40-0903-EXB-T2-IMPROV.dwg
LAST SAVED: 04/18/07 – 11:49am

SCALE: AS SHOWN

PROJECT: 00-0903-446

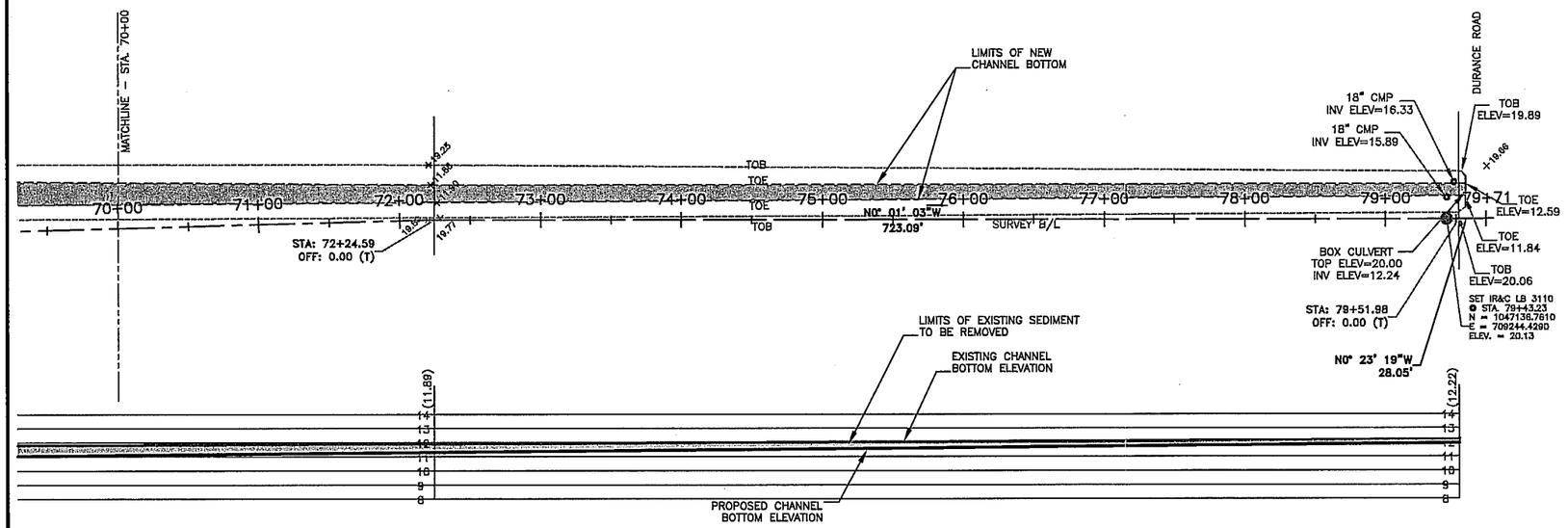
SHEET: EXB–T2
OF 2 OF 3

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EXHIBIT T3

7th AVENUE DITCH CHANNEL IMPROVEMENTS

SCALE:1"=50'



NO.	DATE	FB / PG	DWN	REVISION	CKD
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2	10/27/06	N/A	SWM	REVISE PER ENGINEERING COMMENTS	RDK
1	09/20/06	155/31	SWM	MAP OF SPECIFIC PURPOSE SURVEY	RDK

PREPARED FOR

OKEECHOBEE COUNTY

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CERT. NO. LB0003110

CHANNEL IMPROVEMENTS

7th AVE. DITCH
STA.10+00 TO 40+00

FILE: 41-0903-EXB-T3-IMPROV.dwg
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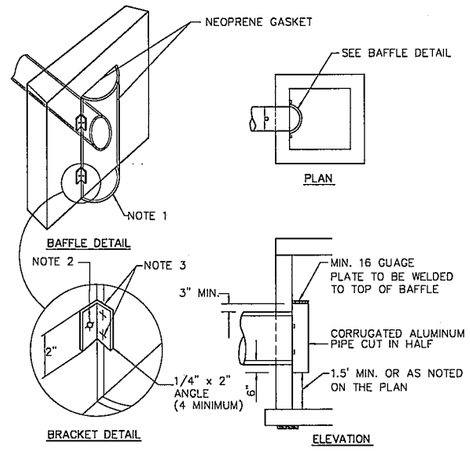
PROJECT: 00-0903-446

SHEET: EXB-T3 OF 3

L:\land\00-0903\00 -146 - Stormwater Master Plan - 146\exhibits 02\PLANS\7th AVE DITCH\41-0903-EXB-T3- OV.dwg, 4/23/2007 3:04:21 PM, Adobe PDF

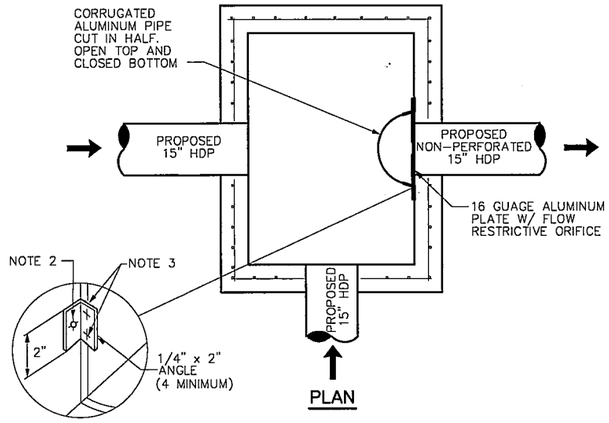
EXHIBIT U1

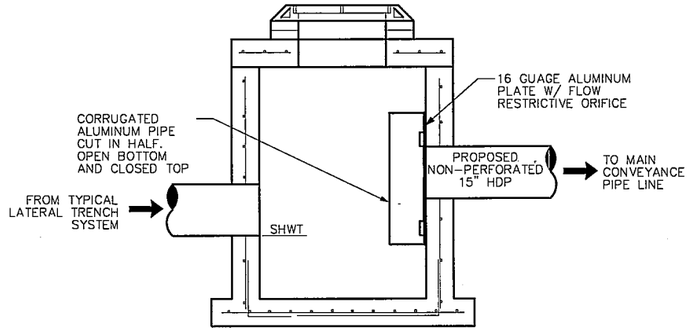
TYPICAL CONSTRUCTION DETAILS



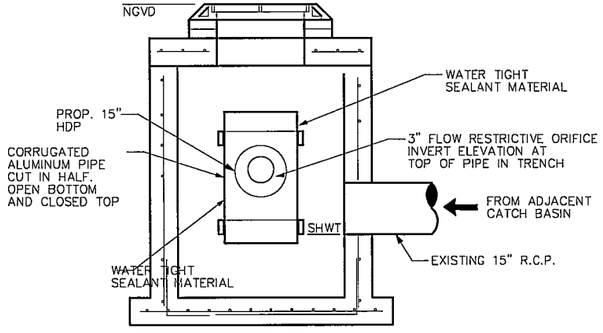
1. SECTION OF C.A.P. CUT IN HALF. BAFFLE DIAMETER TO BE ONE SIZE LARGER THAN DISCHARGE PIPE
2. *" GALVANIZED LAG BOLT IN LEAD SHIELD.
3. WELD OR 2-1/4" THRU BOLTS.

POLLUTION BAFFLE DETAIL





SECTION



SECTION

NOTES:

1. SECTION OF C.A.P. CUT IN HALF. BAFFLE DIAMETER TO BE ONE SIZE LARGER THAN DISCHARGE PIPE
2. *" GALVANIZED LAG BOLT IN LEAD SHIELD.
3. WELD OR 2-1/4" THRU BOLTS.

TYPICAL WATER QUALITY/CONTROL STRUCTURE

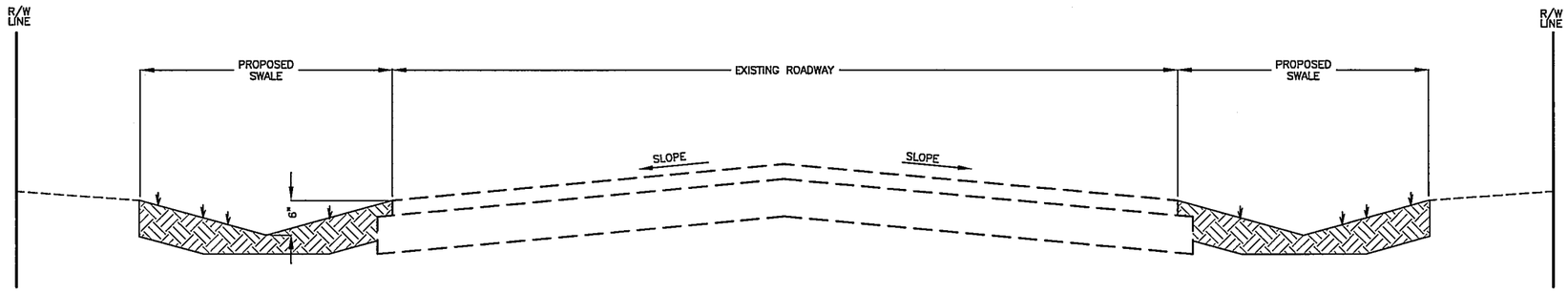
NOTE: THE TYPE AND/OR NEED FOR A WATER QUALITY STRUCTURE WILL BE DETERMINED AT THE TIME OF CONSTRUCTION DESIGN FOR EACH BASIN IMPROVEMENT.

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EXHIBIT U2

TYPICAL
CONSTRUCTION
DETAILS



TYPICAL CROSS SECTION

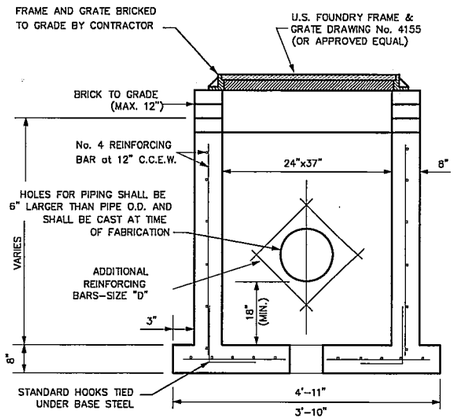
(WHERE APPLICABLE)

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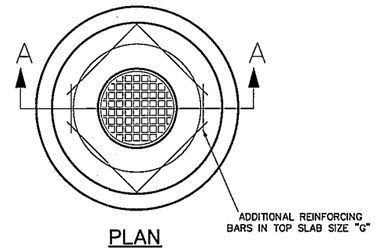
EXHIBIT U3

TYPICAL CONSTRUCTION DETAILS

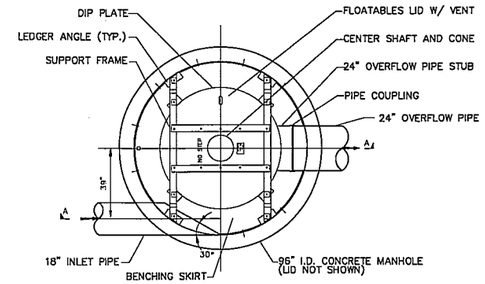


SECTION

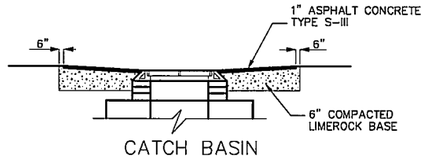
PRECAST TYPE "C–A" CATCH BASIN



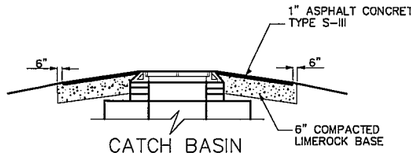
PLAN



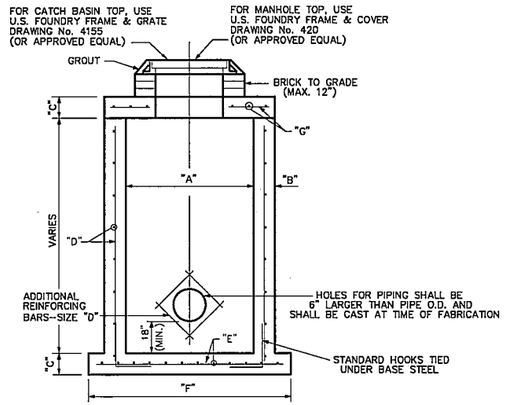
PLAN VIEW



SECTION



SECTION

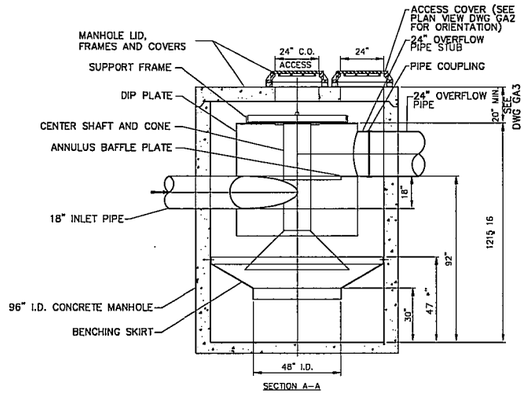


SECTION

PRECAST DRAINAGE MANHOLE/CATCH BASIN

TYPE	"A"	"B"	"C"	"D"	"E"	"F"	"G"
C–4 / M–4	4'–0"	8"	8"	#4 @ 12" C.C.E.W.	#4 @ 12" C.C.E.W.	6'–4" DIA	#4 @ 6" C.C.E.W.
C–5 / M–5	5'–0"	8"	8"	#5 @ 12" C.C.E.W.	#5 @ 12" C.C.E.W.	7'–4" DIA	#5 @ 8" C.C.E.W.
C–6 / M–6	6'–0"	8"	10"	#5 @ 12" C.C.E.W.	#5 @ 6" C.C.E.W.	8'–4" DIA	#5 @ 6" C.C.E.W.
C–7 / M–7	7'–0"	8"	10"	#5 @ 12" C.C.E.W.	#5 @ 6" C.C.E.W.	9'–4" DIA	#5 @ 6" C.C.E.W.
C–8 / M–8	8'–0"	10"	10"	2–W.W.M.w/#4 @12" C.C. VERT.	#5 @ 6" C.C.E.W.	10'–8" DIA	#5 @ 6" C.C.E.W.

PRECAST DRAINAGE STRUCTURE



SECTION A–A

*HEADLOSS IS DEFINED AS THE DIFFERENCE BETWEEN STATIC WATER LEVEL AT THE INLET OF THE UPSTREAM STRUCTURE TO THE FREE WATER SURFACE IN THE OVERFLOW PIPE ASSUMING FREE DISCHARGE.

PRELIMINARY DIMENSIONS

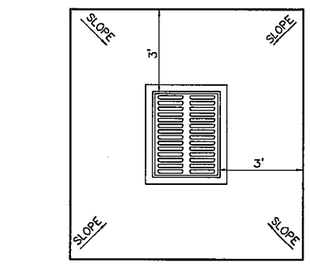
DEPTH OF FLOW IN OVERFLOW PIPE AT cfs		INCHES
DEPTH OF FLOW IN OVERFLOW PIPE AT cfs		INCHES
ESTIMATED HEADLOSS * AT cfs		INCHES
ESTIMATED HEADLOSS * AT cfs		INCHES

DOWNSTREAM DEFENDER WEIGHT

EMPTY WEIGHT		Lbs.
OPERATIONAL WEIGHT		Lbs.

WATER QUALITY STRUCTURE

NOTE: THE TYPE AND/OR NEED FOR A WATER QUALITY STRUCTURE WILL BE DETERMINED AT THE TIME OF CONSTRUCTION DESIGN FOR EACH BASIN IMPROVEMENT.



PLAN

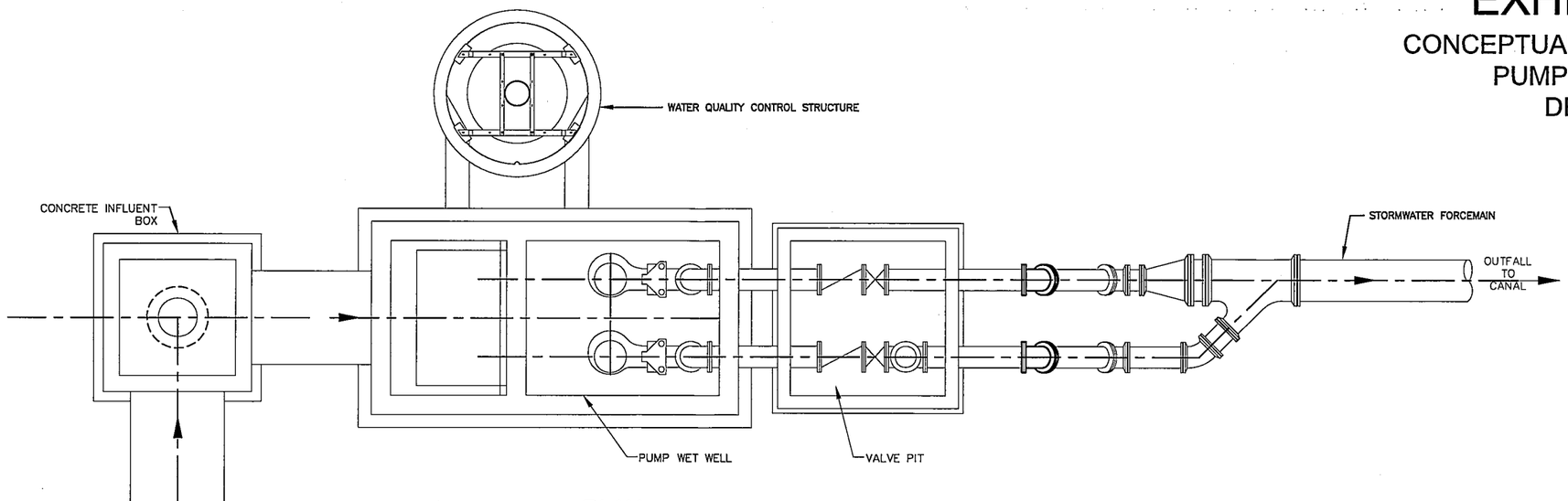
APRON DETAIL FOR CATCH BASINS IN GRASSED AREAS

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CERTIFICATE NO. LB0003110

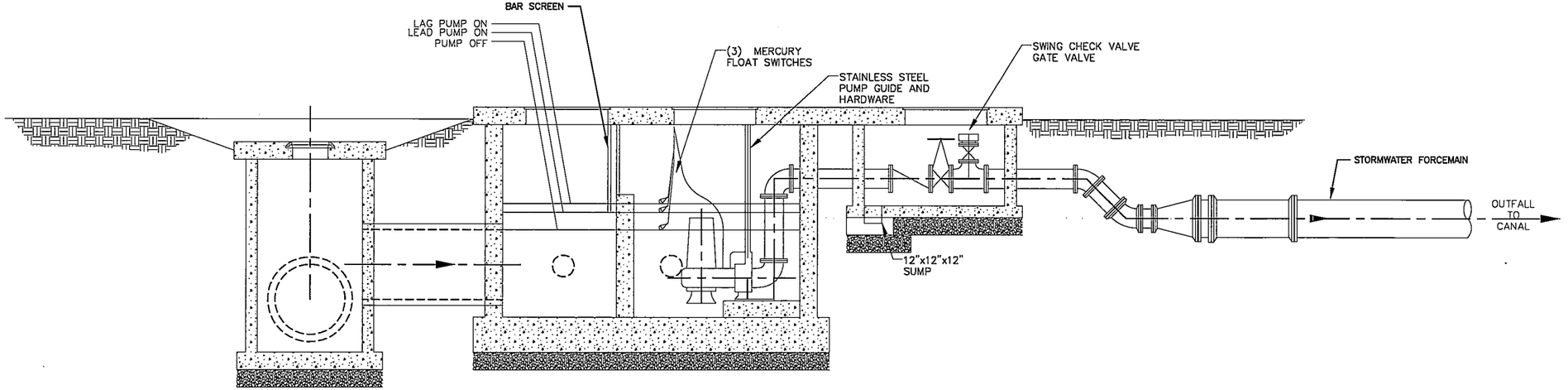
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EXHIBIT U4

CONCEPTUAL STORMWATER PUMP STATION DETAIL



PLAN



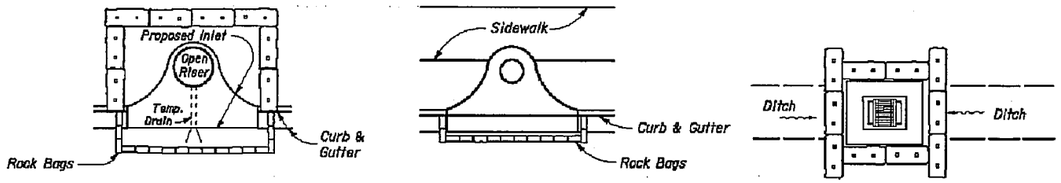
SECTION

STORMWATER PUMP STATION DETAIL

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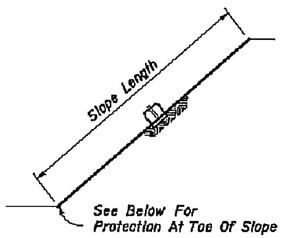
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EXHIBIT U5
BEST MANAGEMENT
PRACTICES DETAILS



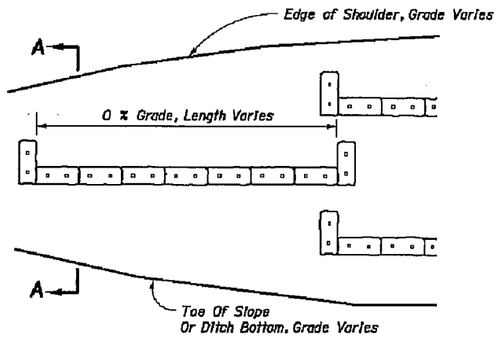
PARTIAL INLET COMPLETED INLET DITCH BOTTOM INLET

PROTECTION AROUND INLETS OR SIMILAR STRUCTURES



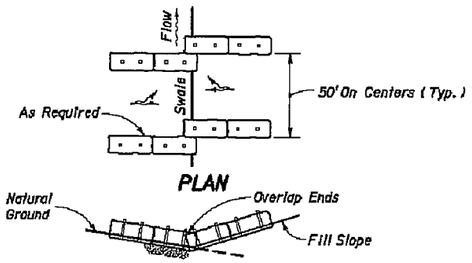
SECTION AA

Note:
Where the slope length exceeds 25 feet, construct one row of bale barriers at 0% longitudinal grade midway up the slope. Contruct two rows of bale barriers where the slope length exceeds 50 feet.



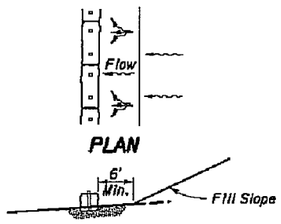
ELEVATION

ALONG FILL SLOPE



PLAN

ELEVATION
TO BE USED WHERE THE NATURAL GROUND SLOPES TOWARD THE TOE OF SLOPE

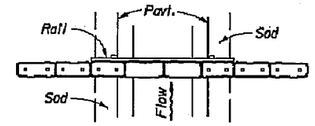


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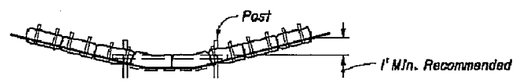
ELEVATION
TO BE USED WHERE THE NATURAL GROUND SLOPES AWAY FROM THE TOE OF SLOPE

AT TOE OF SLOPE

BARRIERS FOR FILL SLOPES

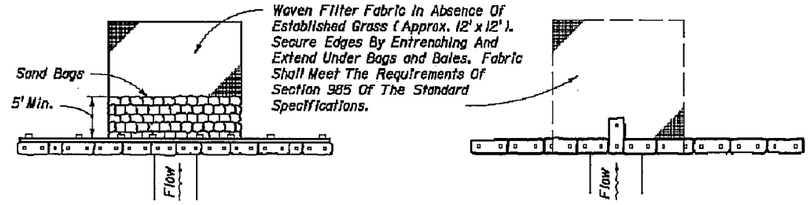


PLAN

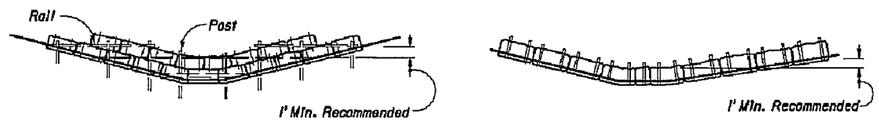


ELEVATION

BARRIER FOR PAVED DITCH



PLAN PLAN



Anchor Top Bales To Lower Bales With 2 Stakes Per Bale.

ELEVATION ELEVATION

TYPE II TYPE I

BARRIERS FOR UNPAVED DITCHES

NOTES FOR BALED HAY OR STRAW BARRIERS

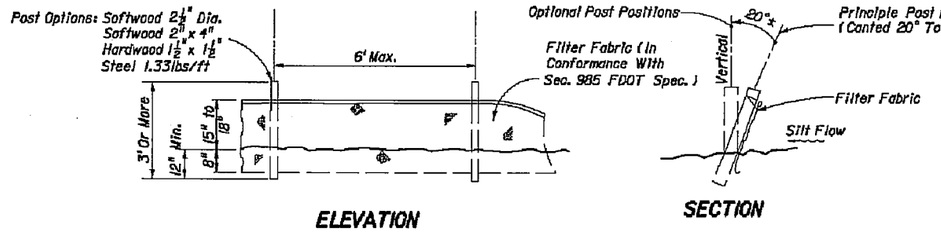
1. Type I and II Barriers should be spaced in accordance with Chart 1, Sheet 1.
2. Hay bales shall be trenched 3" to 4" and anchored with 2 - 1" x 2" (or 1" dia.) x 4' wood stakes. Stakes of other material or shape providing equivalent strength may be used if approved by the Engineer. Stakes other than wood shall be removed upon completion of the project.
3. Rails and posts shall be 2" x 4" wood. Other materials providing equivalent strength may be used if approved by the Engineer.
4. Adjacent bales shall be butted firmly together. Unavoidable gaps shall be plugged with hay or straw to prevent silt from passing.
5. Where used in conjunction with silt fence, hay bales shall be placed on the upstream side of the fence.
6. Bales to be paid for under the contract unit price for Baled Hay or Straw, EA. The unit price shall include the cost of filter fabric for Type I and II Barriers. Sand bags shall be paid for under the unit price for Sandbagging, CY. Rock bags to be paid for under the contract unit price for Rock Bags, EA.

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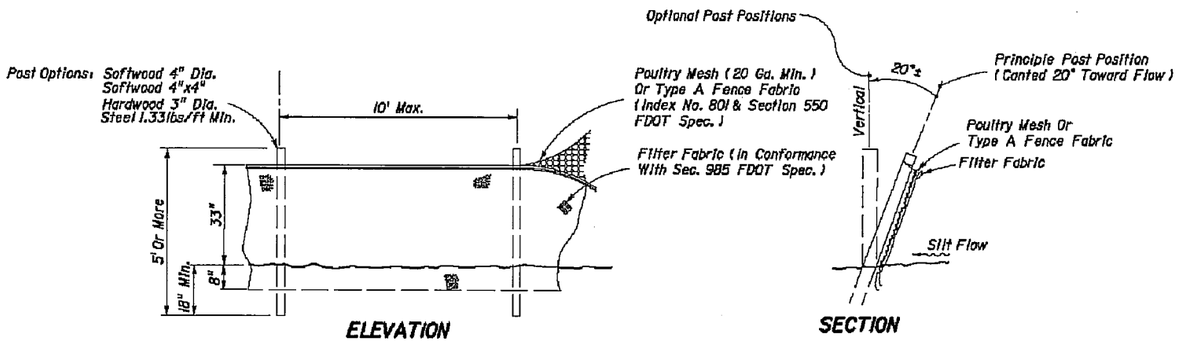
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EXHIBIT U6

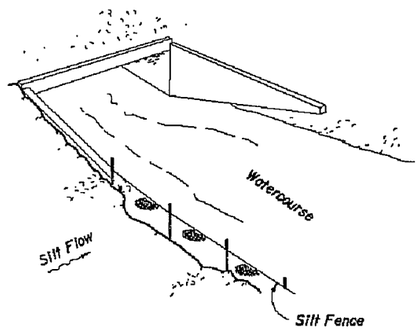
BEST MANAGEMENT
PRACTICES DETAILS

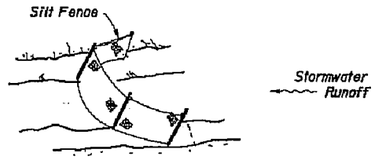


TYPE III SILT FENCE

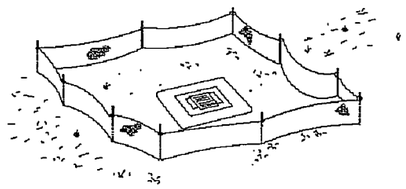


TYPE IV SILT FENCE



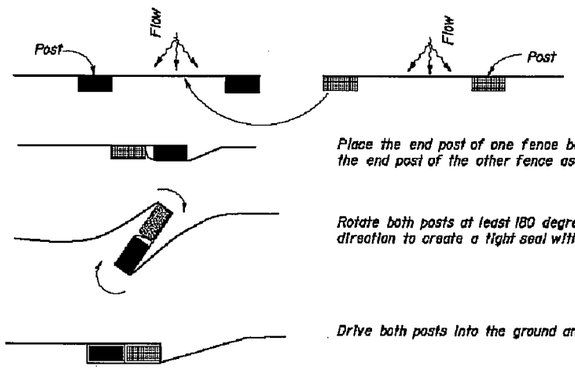


Silt Fence Protection
In Ditches with Intermittent Flow



Silt Fence Protection
Around Ditch Bottom Inlets.

SILT FENCE APPLICATIONS



PLAN VIEW

JOINING TWO SILT FENCES

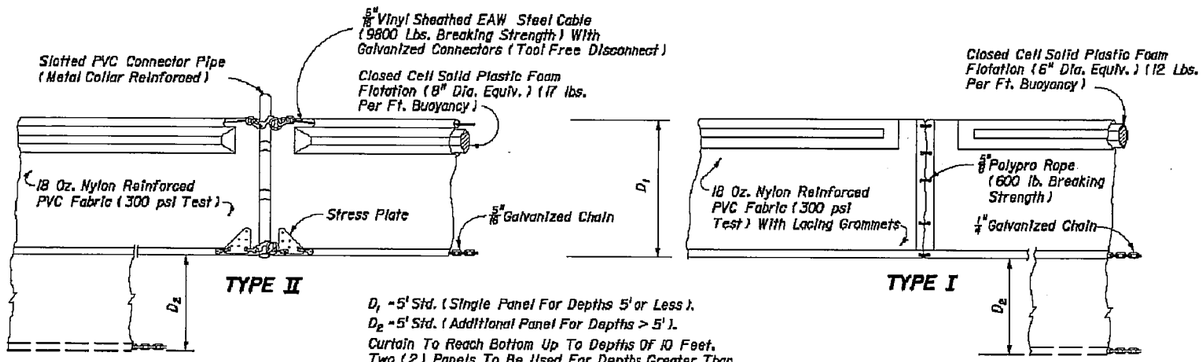
NOTES FOR SILT FENCES

1. Type III Silt Fence to be used at most locations. Where used in ditches, the spacing for Type III Silt fence shall be in accordance with Chart 1, Sheet 1.
2. Type IV Silt Fence to be used where large sediment loads are anticipated. Suggested use is where fill slope is 1:2 or steeper and length of slope exceeds 25 feet. Avoid use where the detained water may back into travel lanes or off the right of way.
3. Do not construct silt fences across permanent flowing watercourses. Silt fences are to be at upland locations and turbidity barriers used at permanent bodies of water.
4. Where used as slope protection, Silt Fence is to be constructed on 0% longitudinal grade to avoid channelizing runoff along the length of the fence.
5. Silt Fence to be paid for under the contract unit price for Staked Silt Fence, (LF).

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CERTIFICATE NO. LB0003110

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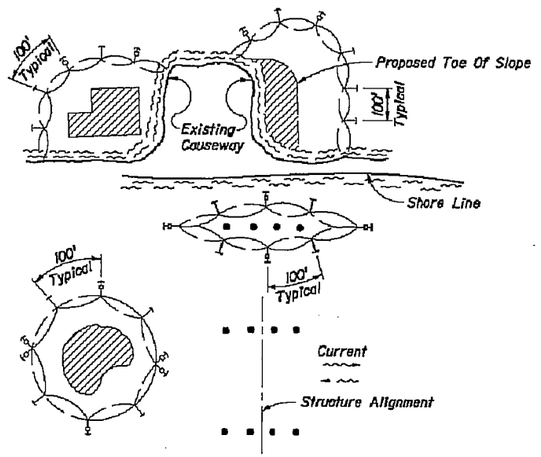
EXHIBIT U7
BEST MANAGEMENT PRACTICES DETAILS



D_1 = 5' Std. (Single Panel For Depths 5' or Less).
D_2 = 5' Std. (Additional Panel For Depths > 5').
Curtain To Reach Bottom Up To Depths Of 10 Feet. Two (2) Panels To Be Used For Depths Greater Than 10 Feet Unless Special Depth Curtains Specifically Call For In The Plans Or As Determined By The Engineer.

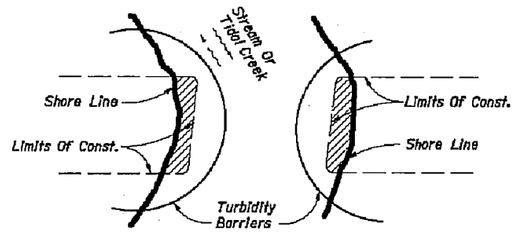
NOTICE: COMPONENTS OF TYPES I AND II MAY BE SIMILAR OR IDENTICAL TO PROPRIETARY DESIGNS. ANY INFRINGEMENT ON THE PROPRIETARY RIGHTS OF THE DESIGNER SHALL BE THE SOLE RESPONSIBILITY OF THE USER. SUBSTITUTIONS FOR TYPES I AND II SHALL BE AS APPROVED BY THE ENGINEER.

FLOATING TURBIDITY BARRIERS

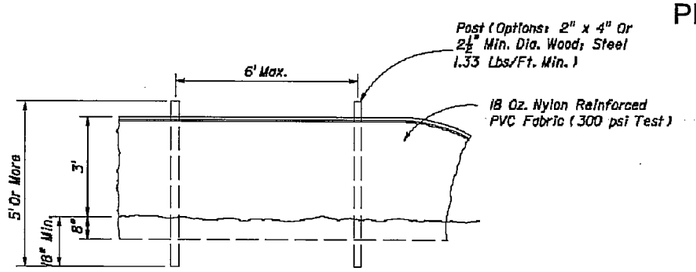


NOTES:
1. Turbidity barriers are to be used in all permanent bodies of water regardless of water depth.
2. Number and spacing of anchors dependent on current velocities.
3. Deployment of barrier around pile locations may vary to accommodate construction operations.
4. Navigation may require segmenting barrier during construction operations.
5. For additional information see Section 104 of the Standard Specifications.

LEGEND
- Pile Locations
- Dredge Or Fill Area
- Mooring Buoy w/Anchor
- Anchor
- Barrier Movement Due To Current Action



Note:
Turbidity barriers for flowing streams and tidal creeks may be either floating, or staked types or any combinations of types that will suit site conditions and meet erosion control and water quality requirements. The barrier type(s) will be at the Contractors option unless otherwise specified in the plans, however payment will be under the pay item(s) established in the plans for Floating Turbidity Barrier and/or Staked Turbidity Barrier. Posts in staked turbidity barriers to be installed in vertical position unless otherwise directed by the Engineer.



STAKED TURBIDITY BARRIER

TURBIDITY BARRIER APPLICATIONS

GENERAL NOTES

1. Floating turbidity barriers are to be paid for under the contract unit price for Floating Turbidity Barrier, LF.
2. Staked turbidity barriers are to be paid for under the contract unit price for Staked Turbidity Barrier, LF.

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OKEECHOBEE COUNTY

COMPREHENSIVE URBANIZED AREA STORMWATER MASTER PLAN

VOLUME II

MAY 2007

CAS PROJECT No. 00-0903-146

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REPORT

OF

WATER QUALITY MODEL SIMULATION IN COOPERATION WITH CAS'S OKEECHOBEE COUNTY STORMWATER MASTER PLAN PROJECT

OKEECHOBEE COUNTY, FLORIDA

ASMUSSEN ENGINEERING, LLC
P.O. Box 1998
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May 22, 2007

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1.0 EXECUTIVE SUMMARY

The GLEAMS model was used to simulate storm water discharge for Four Seasons and Okeechobee Southwest Corridor problem areas in Okeechobee County, Florida. The 50-yr (1931-80) daily precipitation record from Avon Park, Florida was selected for model applications since greater runoff events occurred during that period compared with that for 1956-2005. The 75-yr (1931-2005) record was used for frequency analyses to estimate 1-, 2-, and 3-day storm water discharge for 5-, 10-, 25-, 50-, and 100-yr recurrence intervals.

Model simulations were made for residential and agricultural land uses in Four Seasons and Okeechobee Southwest Corridor problem areas. Average annual storm water, return flow, and total stream flow were estimated to determine water volumes to be considered in proposed storm water treatment areas (STA's) and/or drainage canals.

Total nitrogen and total phosphorus loads were determined for each sub-basin source in the problem areas. Unit masses of each element were calculated at sub-basin outlets, and estimates were made for losses in channel conveyance systems and STA's. These estimates provide potential plant-nutrient loadings to Nubbin Slough, Mosquito Creek, and Lemkin Creek.

Average-annual unit-area storm flow in Four Seasons ranged from 6.46 in/ac for improved pasture to 9.65 in/ac for residential area. Average annual unit-area stream flow (storm flow + return flow) ranged from 9.69 in/ac to 12.53 in/ac for the same land uses. The 1-day 5-yr storm flow was 2.67 in/ac for improved pasture and the 100-yr storm flow was 5.99 in/ac. The 1-day storm flow for residential areas ranged from 3.08 to 6.37 in/ac for the 5-yr and 100-yr recurrence, respectively.

Average-annual unit-area total-nitrogen (TN) losses in storm flow at Four Seasons ranged from 2.82 to 4.78 lbs/ac while the unit area losses in stream flow ranged from

3.19 to 5.23 lbs/ac. Average annual unit area total phosphorus (TP) losses in storm flow ranged from 0.08 to 2.56 lbs/ac, and the losses in total stream flow was the same.

In the Okeechobee Southwest Corridor, average-annual unit-area storm flow ranged from 5.89 in/ac for a basin with improved pasture sod farms to 12.87 in/ac for a residential and municipal basin with relatively large impervious areas. The total stream flow ranged from 8.48 to 15.12 in/ac for the same basins. The 1-day storm flow for the agricultural basin was 2.51 in/ac for a 5-yr event and 5.52 in/ac for a 100-yr event. The corresponding values for the residential/municipal basin was 3.43 in/ac and 6.88 in/ac for the 5-yr and 100-year events, respectively.

In the Okeechobee Southwest Corridor, average annual unit area losses of TN in storm flow ranged from 2.05 to 4.29 lbs/ac, while that for total stream flow ranged from 2.29-8.05 lbs/ac. TP losses ranged from 0.08 to 2.56 lbs/ac for both storm flow and total stream flow.

Reductions of TN and TP in conveyance channels from literature were found to be approximately 60% and 15%, respectively. Reductions of TN and TP in wet detention (STA's) were found to be 25% and 60% respectively. Total loads of TN and TP would be 10,229 lbs and 4,195 lbs, respectively, with channel losses of 6,137 lbs of TN and and 629 lbs of TP for flow from Four Seasons basins into existing and proposed STA's. The estimated losses for wet detention in the STA's would be 1,023 lbs for TN and 2,140 lbs for TP. Thus, the estimated loads discharging from the STA's would be 3,069 lbs of TN and 1,425 lbs of TP. Similar conveyance reductions for off-site basins OD-OF would be 689 lbs and 70 lbs for TN and TP, respectively, resulting in estimated loads entering Mosquito Creek would be 460 lbs TN and 403 lbs TP.

In the Okeechobee Southwest Corridor, where all the drainage canal flow is proposed to discharge into STA's or water management areas, the channel and wet detention reductions resulted in TN loads from 18,407 lbs to 5,522 lbs. Similar reductions for TP reduced the total source loads from 3,827 lbs to 1,301 lbs.

2.0 INTRODUCTION

HDR Engineering, Inc (2004) identified water quantity and water quality problems in and around City of Okeechobee, Florida. Their report dealt primarily with administrative matters and did not quantify the extent of storm water problems nor offer solutions to identified problems.

One of the items of discussion in the HDR report was selection of a model for storm water simulation. The report gave an overview of the WAM model (Bottcher, et al., 2002) and gave no information on results of any model simulations substantive to the County to alleviate problems of flooding and water quality.

Craig A. Smith & Associates entered into an agreement with Okeechobee County (CAS Project No. 00-0903-146 to assemble data sets, assess storm water problems, and to make recommendations to alleviate those problems consistent with SFWMD criteria for improving water quantity and water quality to Lake Okeechobee.

This report is prepared for CAS's consideration of storm water model simulations on which to make recommendations to Okeechobee County for remediation of existing flooding and water quality problems in the subject areas.

3.0 APPROACH

It is physically and financially impossible to measure (monitor) runoff, stream flow, and quality of all water discharged from farms, ranches, and urban areas. Further, it is impossible to measure effects of changes in land use and treatment before changes take place. Therefore, the only feasible way to estimate the effects *a priori* is through use of computer models of physical processes based upon somewhat limited research data. Those processes consist of pollutant carriers (runoff and sediment) and pollutant loadings (plant nutrient and/or pesticide entrainment and delivery). It is essential to

assess both elements in order to extrapolate research results to locations and conditions beyond their site of collection. The carrier must be adequately assessed before loadings can be evaluated.

3.1 Model Selection

The USDA-ARS developed the CREAMS model (Knisel, 1980) to assess nonpoint source pollution from agriculture and consider alternative management strategies to reduce pollutant loads. CREAMS was primarily a surface response-model, i.e. runoff, sediment yield, and pesticide and plant nutrient runoff. Little attention was given to leaching or for high water-table conditions. Heatwole, et al. (1987) extended model applicability for Florida conditions with CREAMS-WT, which builds onto CREAMS and has become a preferred model for SFWMD (South Florida Water Management District). CREAMS-WT is a principal component of the WAM model (Bottcher, 2002).

An integral component of CREAMS and CREAMS-WT is a modification of the SCS curve-number method for estimating daily or storm runoff from storm rainfall (U.S. Soil Conservation Service, 1972). Debo and Associates (2001) assembled the Georgia storm water management manual with input from numerous consultants. The SCS curve number procedure was included in the technical handbook. This further demonstrates the wide acceptance of the procedure for estimating storm runoff.

In 1987, Leonard, et al (1987) revised CREAMS to extend its representation and applicability for runoff, sediment yield, and pesticide loadings at the edge-of-field and bottom-of-root-zone, called GLEAMS. Knisel et al (1993) developed a comprehensive plant nutrient component for GLEAMS for nitrogen and phosphorus cycling and movement into, within, below, and off the soil surface. Soil representations input to GLEAMS enables simulation of perched water tables above restrictive layers below the root zone. Perched water tables that build up near or at the ground surface during the rainy season cause significant direct surface runoff. Runoff carries pollutant loads such

as nitrogen, phosphorus, and pesticides to drainage ditches and channels. Prolonged drainage of excess soil water (perched water table) along the confining layer results in longer-term sustained flow in the ditches and channels.

GLEAMS was developed to represent a wide range of agricultural management scenarios such as animal waste application by spreading (or by deposition from animal grazing), sod farming, multiple cropping, etc. Although GLEAMS was developed for field-size source areas, it can be applied on several hundred acres. However, it should be recognized that it does not allow attenuation or adsorption in channel delivery systems. GLEAMS can simulate daily processes for 50-yr climatic records to evaluate best management practices (BMP's) for field-size areas which enables long-term probability analyses. Improved soil representations and process formulations in the GLEAMS model made it more representative of management systems over the CREAMS model.

Management practices are applied on individual fields or pastures or management units. Some fertilizer application is made on a given pasture, and that pasture is grazed at some specific intensity of livestock. Adjacent lands may be operated by different managers and thus has different response to rainfall. Yet these aggregate areas, or basins, may discharge water and pollutant loads to the same drainage network and be further transferred to some receiving body, i.e. stream, or pond or lake. The attenuation of water and chemicals in transit through a delivery system further impacts the receiving body. However, it must be realized that management is imposed on individual fields, pastures, and residential areas.

3.2 Water Quality

Water quality emanating from agricultural, municipal, and residential areas has become a major problem in recent years. Pollutants entering Lake Okeechobee is a primary concern for SFWMD. Little attention has been given to nitrogen loadings to Lake

Okeechobee in the past, primarily because of the very transient nature of the nitrogen species and the fact that relatively large nitrogen loadings to the lake occur annually from rainfall. However, more concern is being generated because of intensive activities and rapid growth, particularly residential areas.

Best management practices (BMP's) are routinely considered for reductions of runoff and phosphorus input to Lake Okeechobee. These BMP's include swales, channels, wetlands, and detention/retention ponds which reduce pollutant loads beyond field edges. The SFWMD (2005) incorporated these effects into their phosphorus budget estimating procedure for permitting land-use changes in the contributing area to the lake. Bottcher and Harper (2003) provided information on phosphorus removal efficiency for several agricultural BMP's which ranged from 2-70% and 25-70% for urban BMP's.

Most investigations on nitrogen reduction by BMP's have occurred in urban areas rather than from diffuse nonpoint agricultural systems. There have been some comparisons of nitrogen reductions for channels and wetlands, and for wet and dry retention/detention storage areas.

Strassler et al. (1999) reported reductions of 11% for total nitrogen (TN), 39% for organic nitrogen (ON), 11% for nitrate-nitrogen (NO_3-N), and 3% for ammonia nitrogen (NH_3-N) in open-channel flow from a 140-ac agricultural area in Maryland. Total phosphorus (TP) concentrations were reduced by 15%. These values varied from storm-to-storm due, among other things, to "first flush" concentrations, especially for phosphorus (Livingston, 1999). The first-flush effect into wet and dry detention storage is dependent upon residence time in the storage ranging from 24-72 hours.

Harper (1999) reported TKN (total Kjeldahl nitrogen) and TN reductions of 80-100% in residential storm water for dry detention storage, and 91% reduction in commercial storm water flow for wet detention storage. TP reduction was 61% for both residential and commercial storm water.

Wotzka and Oberts (1988) reported 85% TN removal by detention basins compared with 24% removal by wetlands. They further reported 78% and 36% removal of TP for detention basins and wetlands, respectively. Schueler (1995) found 40% removal of TN and 60% removal of TP for wet storm-water ponds and NO REMOVAL for TN or TP for dry storm-water ponds.

TN and ON are the major nitrogen constituents in storm runoff from agricultural or residential areas. Reduction values found in the literature appear to be in the range of 40-80% TN in grass-lined channels and dry detention/retention storage. Possibly 10-35% nitrogen removal might be expected in wet storage.

In view of the above considerations, GLEAMS was considered appropriate for the purposes of examining storm water quantity and quality from source areas. Nitrogen and phosphorus reductions must be considered for BMP's in downstream delivery to major streams and ultimately as loadings to Lake Okeechobee.

4.0 PROBLEM AREAS

There are two principal areas of concern for storm water in Okeechobee County under the present contract. Flooding from storm runoff occurs on both areas: (1) Four Seasons area located northeast of the City of Okeechobee and (2) Southwest Corridor located southwest of the City of Okeechobee. Both areas are in the Bassinger-Myakka-Immokalee soil association in Okeechobee County, Florida (U.S. Department of Agriculture-Natural Resources Conservation Service, 2003). A map of the Okeechobee County stormwater project area is shown in Appendix A, Figure 1 (Rubio, 2007), which shows the Four Seasons and Okeechobee Southwest Corridor problem areas. Sub-basins within the problem areas are not clear in the figure, but more detail will be shown in larger scale maps later in this report.

4.1 Four Seasons

Four Seasons is an un-platted non-engineered subdivision. Flooding in the area results from a combination of conditions and consequences. The flat topography, lack of well-defined surface drainage with clogged channels, and high water table conditions during the rainy season result in considerable local flooding. During the 1950's, development of residences on relatively large lots began when the mobile home industry started booming. Construction of access roads continued over the years as the area grew, and drainage system conveyance became inadequate. In some instances street and driveway construction completely disregarded natural drainage and prolonged water ponding occurred with slow evaporation during the dry season as the only mechanism for dissipation. As further un-restricted development took place, larger areas of residences, outbuildings, barns, hard-surface or paved driveways and street paving resulted in more impervious area contributing 98% of rainfall to runoff, thus further increasing the flooding potential during the rainy season.

The low-density residential area in Four Seasons contains significant areas of pasture land where homeowners have horses and cows grazing the entire lot surrounding the residence. Some property owners have dug ponds for livestock water supply and created dams with outflow pipes of limited discharge capacity.

A well-designed surface water management system is the only feasible way to alleviate flooding and to convey storm water to existing SFWMD canal systems. Peer Consultants (2005) proposed some alternative drainage in Four Seasons. However, their proposal did not address the ultimate disposition of storm water, and did not propose alleviation of flooding.

There are significant challenges that must be addressed in order to accomplish the necessary storm-water management. Surface drainage systems must be constructed to convey water in a non-harmful manner to off-site storm water treatment areas and detention basins. After construction, maintenance of the system will be an additional

problem as there is not a Home Owners Association (HOA) with designated compliance authority. Okeechobee County and/or SFWMD probably would have to provide maintenance in order to be compliant with local and state regulations. All aspects of these endeavors must involve complete and open communications among all parties. If any entity—County, State, property owners—are not in complete accord, the project would be doomed to failure and the flooding problems would continue and worsen indefinitely with continued building in the area. These challenges and considerations are beyond the scope of this project which deals only with runoff volumes and rates, and plant nutrient loads.

4.2 Okeechobee Southwest Corridor

The southwest corridor of the county (Appendix A, Figure 1) is a growing area and is currently plagued with flooding. Although the flooding is primarily a problem of insufficient storage, drainage canal size, and maintenance, subdivisions within this corridor flood frequently because of inadequate tertiary drainage systems.

There are some agricultural areas discharging into the lower end of the drainage canal. The dominant land use is improved cattle and horse pastures. A few sod farms exist in the lower part of the Corridor. There are several active and inactive shell mines in the lower area near Lemkin Creek. The inactive mines are currently water impoundments which serve in water quality remediation.

5.0 DATA AVAILABLE AND MODEL APPLICABILITY

The U.S. Department of Agriculture-Agricultural Research Service (USDA-ARS), in cooperation with the U.S. Geological Survey (USGS), the U.S. Department of Agriculture-Natural Resources Conservation Service (USDA-NRCS), formerly U.S. Department of Agriculture-Soil Conservation Service, and South Florida Water

Management District (SFWMD), collected data for the upper Taylor Creek watershed in Okeechobee County from 1956 to 1975. The data collection included rainfall, stream flow, and water table measurements. Data summaries and analyses were published in 1985 (Knisel, et al, 1985). Measured annual rainfall and stream flow for the upper 15.7 sq. mi. drainage area (W-3 designation) averaged 47.99 inches and 11.88 inches, respectively, for the 20-yr. record period. During the record period, land use included considerable areas of improved pasture but consisted mainly of unimproved pasture.

In order to extrapolate to long-term rainfall data for probability analyses, two NOAA cooperative-observer locations were selected for examination. A short-term record at nearby Ft. Drum, Florida, and longer-term records at the more distant Avon Park, Florida. Daily precipitation data were available for Ft. Drum for the period 1957 to 1992 (Nicks, 1998). Precipitation data at Avon Park are available for the 75-yr period 1931-2005 (Nicks, 1998; Zhang, 2006).

A GLEAMS simulation was made for the 1957-75 rainfall record at Ft. Drum and a second simulation was made for the 1956-75 record at Avon Park. The simulations were made for unimproved pasture land use for comparative purposes. Model simulation results are compared with observed data for Upper Taylor Creek watershed W-3 in Table 1.

Runoff and percolation were not separately measured at the W-3 gaging station, and model simulation results of the two components are added to be approximately equivalent to total stream flow. It is recognized that some of the simulated percolation moves to shallow groundwater and would not appear as stream flow in channels. Also, it should be pointed out that observed rainfall is weighted from two recording rain gages, and areal rainfall is normally less than point rainfall. The comparisons indicate that GLEAMS can be used to (1) represent large areas for water-balance calculations, and (2) be representative with long-term climatic records within a climatic region.

The 1931-2005 precipitation record at Avon Park, Florida (state climatological station 08-0369, Appendix A, Figure 2) was examined for appropriateness of record for long-term model simulation. There were several years available prior to 1931 (Nicks, 1998), but there were many months and days with missing record hence the 75-yr period was selected as the most usable.

Table 1. Observed and simulated runoff, percolation, and stream flow, Upper Taylor Creek watershed W-3, 1956-75.

Location	Precipitation (inches)	Runoff (inches)	Percolation (inches)	Stream flow (inches)
Observed W-3 (1956-75)	47.99			11.88
Simulated with Ft. Drum rainfall (1957-75)	50.52	7.36	2.85	10.21
Simulated with Avon Park rainfall (1956-75)	54.32	9.10	2.86	11.96

A plot of cumulative annual observed rainfall (series 1) and cumulative mean annual rainfall (series 2) is shown in Appendix A, Figure 3 and cumulative normalized departures are shown in Figure 4.. The average was 52.23 inches for the 75-yr period. Observed annual values were approximately normal during the first 18 years, but a gradual departure continued until about year 30 (1961) when a strong departure continued for about 50 years (~1980). Since about 1980, there has been another period of 26 years with near normal annual rainfall. Similar results were found at Belle Glade, Florida (08-0611), but average annual rainfall was greater than that at Avon Park.

The entire 75-yr record of daily rainfall was used with the GLEAMS model to simulate long-term daily runoff, percolation, and nitrogen and phosphorus losses from improved

pasture for further frequency analyses. Since GLEAMS can only use a maximum of 50 years in one simulation run, two over-lapping periods were used: 1931-1980 and 1956-2005. Runoff, percolation, and N and P losses were the same for over-lap years 1956-1980. Average annual precipitation for the 1931-80 period was approximately 2 inches greater than for the 1956-2005 period.

Based upon these comparisons, the 1931-1980 record period was selected for all 50-yr simulations used in this report. Furthermore, it appears that the climatic region is in a drier than normal period since about 1960.

Design criteria are oftentimes based upon some selected storm duration and frequency, or recurrence interval. Long-term records are important in determining storm frequency. In flatland hydrology, multiples of days may be significant for design information, such as 1-day, 2-day, and 3-day durations. The 75-yr rainfall record at Avon Park, Florida was analyzed for annual maximum 1-day, 2-day, and 3-day rainfall amounts.

These 75-yr annual maximum for each duration were fitted with a computerized Gumbel extreme-value procedure (Potter, 1949) to estimate the 5-, 10-, 25-, 50-, and 100-yr events for each duration. Results of the frequency analyses are given in Table 2.

Table 2. Results of frequency analyses for 1-, 2-, and 3-day annual maximum rainfall, Avon Park, Florida, 1931-2005.

Duration	Recurrence Interval, years				
	5 years	10 years	25 years	50 years	100 years
	Depth, inches				
1-day	4.89	5.67	6.93	7.80	8.66
2-day	5.82	6.69	8.07	9.03	9.98
3-day	6.57	7.51	9.00	10.04	11.06

The data in Table 2 reveal that little additional rainfall occurs on the 2nd and 3rd days following the annual maximum 1-day storm. This indicates that hurricane-associated

rainfall is generally over on the day after maximum rainfall, i.e. most hurricanes pass in 1-day's time. Even extreme events for 50- and 100-year occurrences are not vastly greater than the 5-year rainfall. The 75-year simulation should be representative of longer-term precipitation.

6.0 MODEL SIMULATIONS

GLEAMS model simulations were made to obtain unit area runoff and percolation, and nitrogen and phosphorus losses. The unit area data were used to accumulate storm and annual discharge volumes and loads of N and P leaving respective areas.

6.1 FOUR SEASONS

The Four Seasons problem area consists of two parts: (1) off-site, primarily agricultural area, and (2) on-site, primarily residential area. Some of the residential sub-basins include significant amounts of improved and/or un-improved pasture. The residential area consists of low- to medium-density residences on moderate size lots. Most households have animals, generally horses or cows, that graze pasture areas surrounding the residences.

Off-site sub-basins OA, OB, and OC are primarily improved pasture areas with drainage outside the residential area. Drainage from OB currently enters the channel system into on-site sub-basin A, but re-routing through sub-basin OC is proposed. These sub-basins are grouped in the analyses for convenience of the report users.

Sub-basins OD, OE, and OF drain into delivery channels outside the residential areas and outside the delivery to a proposed Storm Treatment Area (STA). Basins OE and OF are cattle pastures, mainly improved, although OE contains a significant amount of un-improved pasture. Sub-basin OD is primarily a medium-density residential area with

significant amounts of improved and un-improved pastures. These three sub-basins are also grouped in this report for users' convenience.

Maps of the Four Seasons are shown in Appendix C. Map 1 shows sub-division delineations with topography superimposed with 5-ft contours showing a general southwesterly drainage pattern. Table 3 shows all sub-basins in Four Seasons with their respective revised areas determined by Williams (2007). The most significant revision was the area of sub-basin OA.

Table 3. Four Seasons sub-basins and drainage areas.

Basin Name	Area, Acres
A	215
B	120
C	62
CC	12
D	79
E	141
F	146
G	67
H	120
I	103
J	39
JJ	3.6
K	66
OA	235
OB	270
OC	686
OD	99
OE	109
OF	49
Total	2,621.6

Soils data from the Okeechobee County soil survey (USDA-NRCS, 2003) is superimposed on the sub-basin delineation in map 2 of Appendix C. As stated earlier, NRCS groups the soils into the Bassinger-Myakka-Immokalee soil association.

Map 3 shows land use for Four Seasons. This map distinguishes the different residential area breakdowns. Land cover from 2006 aerial photos (Williams, 2007) is shown on map 4 in Appendix C. The cover map was used to estimate relative percentages of residential area, improved pasture, and un-improved pasture within sub-basins. These percentages were used to estimate SCS curve numbers (USDA-SCS, 1972) for use in GLEAMS model applications. The curve numbers are not given in Table 3 since the procedure incorporated in the model is an adaptation to estimate maximum soil water storage. This is significantly different from the original procedure used for design storm purposes (USDA-SCS, 1972; Debo, et al., 2003).

6.1.1 Model Simulations for Offsite Areas

As stated earlier, GLEAMS assumes uniform rainfall, uniform soil, uniform water retention and saturated conductivity, uniform N & P content, and uniform fertilizer and manure applications over the "field". From these assumptions, a uniform depth of runoff, percolation, and N & P losses are simulated. Thus, unit depth of runoff (inches), unit depth of percolation (inches), and unit losses of N & P (lbs/ac) were simulated. In this manner, size of area is important only when total volume of runoff and percolation and total mass of N and P are calculated for a drainage area.

The major pathways of plant nutrient losses are demonstrated in Table 4. Nitrogen species (ammonia and nitrate) move in the solution phase in runoff and in percolation, whereas phosphorus moves mainly in the adsorbed phase with the clay fraction in sediment and as solution P in runoff. Percolation over the 50-yr simulation period was approximately half the average runoff depth.

During the 1931-80 simulation period, annual precipitation ranged from 34.86 inches in 1955 to 79.63 inches in 1959. However, rainfall distribution within the year is sometimes more dominating for runoff production. For example, in 1955, simulated runoff was 2.20 inches compared with the least annual value of 1.67 inches when annual rainfall was 37.12 inches. Likewise, maximum simulated annual runoff was 19.60 inches in 1948 when annual precipitation was 70.39 inches compared with 18.20 inches of runoff simulated in 1959 when the maximum annual rainfall occurred. There were 4 years from 1948 through 1959 when annual rainfall was greater than 70 inches, and simulated runoff ranged from 9.06 inches to 19.60 inches.

These facets indicate why it is necessary to use long-term rainfall for model applications. Simply put, the driest and wettest years would not be the best selections. This is further complicated for plant nutrients or pesticide simulations. The determining factor is when runoff-producing rains occur relative to application dates of fertilizer and pesticides.

Since percolation below the root zone mainly returns to stream flow, its movement to regional groundwater is essentially negligible. Therefore, the sum of runoff and percolation is equivalent to total stream flow. Volumes of runoff and percolation are added in Table 4, and the respective components of nitrogen and phosphorus are summed in the table as well.

The equivalent stream flow masses of nitrogen and phosphorus losses were used to estimate stream flow concentrations of N and P. These values represent source mass and concentrations of N and P without attenuation. They are greater than the values reported by HDR (2004) using the WAM model for improved pasture. The difference between these results and those of WAM probably result from initial values, climate, grazing intensity, estimated manure production, and manure characteristics. This is not intended to indicate that either modeling procedure is right or wrong, but merely indicates differences among model applications.

Table 4. The 50-yr average-annual unit precipitation, simulated runoff, percolation, stream flow, and nitrogen and phosphorus losses for Four Seasons off-site improved pasture area, OA.

COMPONENT	UNIT DEPTH, MASS CONCENTRATIONS-UNITS
Precipitation	53.08 inches
Runoff (Storm flow)	6.46 inches
Percolation (Return Flow)	3.23 inches
Stream flow (Storm flow + Return flow)	9.69 inches
Nitrogen in runoff + sediment Mass Concentration	 2.88 lbs/ac 1.97 mg/L
Nitrogen leached Mass Concentration	 1.88 lbs/ac 2.57 mg/L
Nitrogen runoff + sediment + leached Mass Concentration	 4.76 lbs/ac 2.17 mg/L
Phosphorus in runoff + sediment Mass Concentration	 2.36 lbs/ac 1.61 mg/L
Phosphorus leached Mass Concentration	 <0.01 lbs/ac 0.01 mg/L
Phosphorus runoff + sediment + leached Mass Concentration	 2.36 lbs/ac 1.08 mg/L

6.1.1.1. Off-Site Sub-basins OA, OB, and OC

Under the proposed plan, drainage of sub-basin OA will be improved with a larger culvert under SR 70. Flow from OA will combine with discharge from sub-basin OB to pass through a culvert under N.E. 12th Lane. Flow would further combine with that of sub-basin OC to a proposed bypass weir at N.E. 80th Ave. and Center St. A drainage canal/channel would be constructed south along side N.E. 80th Ave. to S.E. 8th St. Further conveyance of storm flow would continue to the Nubbin Slough STA.

Total drainage of the three sub-basins OA, OB, and OC is 1,191 acres. Storm runoff volumes, stream flow volumes, and plant nutrient loads are given for these sub-basins. The land use for all three sub-basins is improved pasture.

Unit area data from Table 4 were used to calculate the sub-basin volumes of storm flow and total stream flow with their respective nutrient loads for the three offsite sub-basins. Totals for the three off-site basins are given in Table 5.

Total simulated stream flow volumes and loads are accumulated for sub-basins OA, OB, and OC at the lowest point, i.e. at the bypass weir at N.E. 80th Ave and Center St. Beyond that point in the proposed drainage canal to the STA, reduction of loads of total phosphorus (TP) would be 15% as recommended by the SFWMD (2005) for swales and channel BMP's. In accordance with literature values for reduction of total nitrogen (TN) (Sec. 3.2 above), a conservative estimate of 60% loss in the drainage canal was used. When the stream flow reaches the STA, the total N load would be estimated as 2,271 lbs and the total P load would be estimated as 2,570 lbs. These estimated loads reaching the STA could be less because of flow in the drainage canal from the bypass weir.

Estimated losses of N and P in wet detention storage, such as the STA, are estimated as 25% and 60%, respectively. Thus, annual stream flow loads leaving the STA would be estimated as approximately 1,703 lbs for TN and 1,030 lbs for TP entering the Nubbin Slough-Mosquito Creek interceptor canal.

6.1.1.2. Off-site Sub-basins OD, OE, and OF

Storm water drainage from Four Seasons off-site sub-basins OD, OE, and OF discharge into a Mosquito Creek tributary channel. The combined flow enters the tributary channel below a proposed wet detention pond. Therefore, these sub-basins

were grouped for user convenience even though there is not a proposed retention basin or STA at the present time.

Table 5. Simulated annual storm flow, return flow, and total stream flow volumes, and plant nutrient loads for off-site sub-basins OA, OB, and OC.

	Sub-basin			Basin Total
	OA	OB	OC	
Area, acres	235	270	686	1,191
Storm flow				
In/ac	6.46	6.46	6.46	6.46
Ac-ft	126.51	145.35	369.30	641.16
Return flow				
In/ac	3.23	3.23	3.23	3.23
Ac-ft	63.25	72.68	184.65	320.58
Stream flow				
In/ac	9.69	9.69	9.69	9.69
Ac-ft	189.76	218.02	553.94	961.73
Nitrogen				
Storm flow lbs/ac	2.88	2.86	2.90	2.88
lbs	676.80	772.20	1,989.40	3,438.40
Return flow lbs/ac	1.88	1.88	1.88	1.88
lbs	441.80	507.60	1,289.68	2,239.08
Stream flow lbs/ac	4.76	4.74	4.78	4.76
Lbs	1,118.60	1,279.80	3,279.08	5,677.48
Phosphorus				
Storm flow lbs/ac	2.36	2.54	2.56	2.53
lbs	554.60	685.80	1,776.74	3,016.84
Return flow lbs/ac	<0.01	<0.01	<0.01	<0.01
lbs	1.20	1.35	3.43	5.96
Stream flow lbs/ac	2.36	2.54	2.56	2.53
lbs	555.80	687.15	1,780.17	3,023.12

The 50-yr GLEAMS model simulation results for the basins are summarized in Table 6. Data in Table 6 include flow volumes and N and P loads and concentrations. Combined volumes, loads, and concentrations are given in the table as well.

Table 6. Simulated annual storm flow, return flow and total stream flow volumes, and plant nutrient loads for Four Seasons off-site sub-basins OD, OE, and OF.

	Sub-basin			
	OD Residential + Pasture	OE Improved Pasture	OF Improved Pasture	Basin Total
Area, acres	99	109	49	257
Storm flow				
in/ac	8.26	7.23	6.46	7.44
ac-ft	68.14	65.67	26.38	160.19
Return flow				
in/ac	3.04	3.15	3.23	3.12
ac-ft	25.08	28.61	13.19	66.88
Stream flow				
in/ac	11.30	10.38	9.69	10.60
ac-ft	93.22	94.29	39.57	227.08
Nitrogen				
Storm flow lbs/ac	3.17	3.24	2.82	3.14
lbs	315.81	353.16	138.19	807.16
Return flow lbs/ac	1.19	1.27	1.73	1.33
lbs	118.21	138.64	84.73	341.58
Stream flow lbs/ac	4.36	4.51	4.55	4.47
lbs	471.24	491.80	222.92	1,148.74
Phosphorus				
Storm flow lbs/ac	1.33	2.07	2.35	1.84
lbs	131.67	225.63	115.15	472.45
Return flow lbs/ac	<0.01	<0.01	<0.01	<0.01
lbs	0.40	0.44	0.20	1.04
Stream flow lbs/ac	1.33	2.07	2.35	1.84
lbs	132.07	226.07	115.35	473.49

The model-simulated average-annual total nitrogen and total phosphorus for the three sub-basins is 1,149 lbs and 474 lbs, respectively. Using the same percentage conveyance losses as for sub-basins OA-OC and A thru K (60% reduction for TN and 15% reduction for TP), the estimated loads into Mosquito Creek would be 460 lbs TN and 403 lbs TP. These values are conservative estimates for use with a potential retention/detention basin or STA. Since outflow from the proposed wet detention basin in sub-basin J flows through the channel system in sub-basin OE, that outflow load of TN and TP would add to the reduced load from sub-basins OD, OE, and OF.

6.1.2 On-site Sub-basins A thru K

All on-site sub-basins in Four Seasons except sub-basins "J" and "JJ" have varying amounts of residential areas and both improved and un-improved pasture as seen in the 2006-based cover map (Williams, 2007). Sub-basins "J" and "JJ" are basically un-improved pasture.

Much of the residential area consists of closely-spaced houses including mobile (manufactured) homes. Development of the subdivision began in the 1950's on relatively large lots. Homeowners wanted large lots where they could have animals, mainly horses. The homes were closely spaced near the county roadways. In essence, the building area represented a medium density residential with carports, storage buildings, horse shelters (one horse per lot), and other outbuildings. Driveways into individual residences were generally hard surface (shell or gravel) although some were paved.

The residences are all on individual septic systems. Due to high water table conditions in the rainy season, septic tanks and drain fields were mounded to provide adequate septage drainage. Ponds were generally dug with borrow material used for the septic-system mounds.

A representative area was selected for GLEAMS simulations. One horse was assumed for each residential lot as for the improved pasture simulation. In addition to monthly application of horse manure, septage from each household was also applied on a monthly basis using nitrogen and phosphorus contents from the USDA-NRCS animal waste handbook (Barth, et al., 1992). Since an adaptation of the SCS curve number method (US Soil Conservation Service, 1972) is used in GLEAMS, a procedure was used for estimating a weighted curve number as given in the Georgia Stormwater Handbook (Debo and Associates, 2001.) A weighted curve number for the residential area was estimated by factoring in the impervious area and improved pasture. It should be remembered that the Myakka-Bassinger-Immokalee soil association without drainage performs as a hydrologic soil group "D" (least permeable due to high water table), whereas in a drained condition, it responds to rainfall as hydrologic soil group A (USDA, 2003), i.e. most permeable.

The average household size for Okeechobee County, 2.68 residents per household (SFWMD, 2005) was used with the average annual discharge of 16,425 gallons per capita (Otis et al., 1993). As with animal waste, septage was applied in the model monthly to simplify the parameter file. Effluent disposal (injection in GLEAMS application) varies from residence to residence, and generalizations were made to represent the different sub-basins. Hopefully these generalizations are appropriate and give reasonable model simulation results.

Results of the 50-yr model simulations for sub-basins A thru K are summarized in Tables 7a and 7b. Average-annual storm flow, return flow, and stream flow volumes are given in the table as well as average annual nitrogen and phosphorus loadings and concentrations. The data are presented for each sub-basin individually for user convenience.

Sub-basin groupings for on-site and off-site sub-basins will be given in a later section. Also, summary results of simulation are given for all Four Seasons sub-basins in appendix B, Table B-1.

Table 7a. Simulated storm flow, return flow, and stream flow volumes, and plant nutrient loads for Four Seasons sub-basins A thru F.

	Sub-basin						
	A	B	C	CC	D	E	F
Area, ac.	215	120	62	12	79	141	146
Storm flow							
in/ac	7.23	8.26	7.71	9.65	8.90	7.71	7.71
ac-ft	129.54	83.28	39.84	9.65	58.59	90.59	93.80
Return flow							
in/ac	3.45	3.04	3.10	2.88	2.96	3.10	3.10
ac-ft	56.44	30.65	16.02	2.88	19.49	36.42	37.72
Stream flow							
in/ac	10.38	11.30	10.81	12.53	11.86	10.81	10.81
ac-ft	185.48	113.94	55.85	12.53	78.08	127.02	131.52
Nitrogen							
Storm flow lbs/ac	2.88	2.87	2.86	3.51	3.32	3.09	4.78
lbs	618.32	344.91	177.15	42.12	262.28	435.69	697.25
Return flow lbs/ac	0.74	1.47	0.33	0.15	0.36	0.94	0.45
lbs	150.33	176.49	20.38	1.80	28.16	132.69	65.20
Stream flow lbs/ac	3.62	4.34	3.19	3.66	3.68	4.03	5.23
lbs	776.65	521.40	199.53	43.92	290.44	568.38	762.45
Phosphorus							
Storm flow lbs/ac	1.03	1.73	0.35	0.14	0.76	1.52	1.05
lbs	221.45	207.60	21.70	1.68	60.04	214.32	153.30
Return flow lbs/ac	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
lbs	0.86	0.48	0.25	0.05	0.32	0.56	0.58
Stream flow lbs/ac	1.03	1.73	0.35	0.14	0.76	1.52	1.05
lbs	222.31	208.08	21.95	1.73	60.36	214.88	153.88

Table 7b. Simulated storm flow, return flow, and stream flow volumes, and plant nutrient loads for Four Seasons sub-basins G thru K and basin total.

	Sub-basin						A – K
	G	H	I	J	JJ	K	Total
Area, ac.	67	120	103	39	3.6	66	1,173.6
Storm flow							
in/ac	7.71	8.90	7.71	7.71	7.71	8.90	7.97
ac-ft	43.05	89.00	66.18	25.06	2.31	48.95	779.84
Return flow							
in/ac	3.10	2.96	3.10	3.10	3.10	2.97	3.07
ac-ft	17.31	29.60	26.61	10.08	0.93	16.34	300.49
Stream flow							
in/ac	10.81	12.86	10.81	10.81	10.81	11.87	11.01
ac-ft	57.56	118.60	92.79	35.13	3.24	65.29	1,077.03
Nitrogen							
Storm flow lbs/ac	3.07	3.19	3.04	3.05	3.06	3.19	3.24
lbs	205.69	368.40	313.12	118.95	11.01	210.54	3,805.43
Return flow lbs/ac	0.68	0.14	0.76	0.26	0.26	0.14	0.64
lbs	45.69	16.54	78.10	10.15	0.93	9.12	745.58
Stream flow lbs/ac	3.75	3.33	3.80	3.31	3.32	3.33	3.88
lbs	251.38	384.94	391.22	129.10	11.94	219.66	4,551.01
Phosphorus							
Storm flow lbs/ac	1.51	0.08	1.34	0.77	0.77	0.08	0.99
lbs	101.17	9.60	138.02	30.03	2.77	5.28	1,166.96
Return flow lbs/ac	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
lbs	0.27	0.48	0.41	0.16	0.01	0.26	4.69
Stream flow lbs/ac	1.51	0.08	1.34	0.77	0.77	0.08	0.99
lbs	101.44	10.08	138.43	30.19	2.78	5.54	1,171.65

In accordance with the procedure used in section 6.1.1.1 for sub-basins OA, OB, and OC, corresponding reductions in TN and TP were estimated for sub-basins A through K. Reductions of TN and TP in the channel conveyance system from the uppermost sub-basin A to the proposed wet detention pond in sub-basin J would be 60% and 15%, respectively. Thus, the reduction of TN would be 3,407 lbs with 2,271 lbs entering the wet detention basin annually. The reduction of TP would be 176 lbs with 996 lbs entering the wet detention basin annually. Further reduction in the wet detention basin, 25% for TN and 60% for TP, would reduce wet detention basin outflow to 1,704 lbs TN and 400 lbs TP. Thus the total reduction of TN for the conveyance system and wet detention basin would be approximately 3,974 lbs and a total reduction of 772 lbs for TP.

6.1.3. Four Seasons Basin Summary

Average annual discharge and nutrient loadings for the three sub-basin groups are summarized in Table 8. This table provides a reference for sub-basin groupings in the Four Seasons area (also, see Appendix B, Table B-1).

6.1.4. Storm Flow for 1-, 2-, and 3-day Durations

Two overlapping 50-yr simulations were made with GLEAMS for each sub-basin in the Four Seasons area. The 75-yr Avon Park rainfall record was partitioned into the 1931-80 and 1956-2005. Simulation results for the two periods were combined for the total record period. Annual maximum 1-, 2-, and 3-day rainfall depths were determined for the 75-yr record period, 1931-2005. A computerized Gumbel extreme-value procedure (Potter, 1949) was used to fit annual maxima data. The fitted data were used to calculate the 5-, 10-, 25-, 50-, and 100-yr storm depths for each duration. Fitted data are shown in Appendix A Figure 5.

Annual maximum 1-, 2-, and 3-day runoff depths (storm flow) were determined for each sub-basin in Four Seasons to provide a relatively long-term record for frequency analysis. The data are presented in Table 9 for each sub-basin.

Off-site sub-basin OA was selected to demonstrate results of the frequency analysis. The data are shown graphically in Appendix A Figure 6. The same relative relationships occur between 1-day and 2-day and between 2-day and 3-day storm flow as occurred for rainfall (Table 2 and Appendix A Figure 5).

The GLEAMS model assumes that all daily storm runoff occurs on the day of rainfall. This is not true for large areas, for example sub-basin OC. This simplification is not a problem regarding runoff depths, but hydrograph generation is not simulated with GLEAMS. Storm drainage from rainfall in day 1 would not all drain out of the basin during the day of maximum rainfall.

Table 8. Average annual storm flow, return flow, and stream flow and nitrogen and phosphorus loads for Four Seasons basin groups.

	Sub-basin Groups			Basin Total
	OA, OB, & OC	OD, OE, & OF	A thru K	
Area, acres	1,191	257	1,173.6	2,621.6
Storm flow				
in/ac	6.46	7.44	7.97	7.24
ac-ft	641.16	160.19	779.84	1,581.19
Return flow				
in/ac	3.23	3.12	3.07	3.15
ac-ft	320.56	66.88	300.49	687.93
Stream flow				
in/ac	9.69	10.60	11.01	10.37
ac-ft	961.73	227.08	1,077.03	2,265.84
Nitrogen				
Storm flow				
lbs/ac	2.88	3.14	3.24	3.07
lbs	3,438.40	807.16	3,805.43	8,050.99
Return flow				
lbs/ac	1.88	1.33	0.64	1.27
lbs	2,239.08	341.58	745.58	3,326.24
Stream flow				
lbs/ac	4.76	4.47	3.88	4.34
lbs	5,677.48	1,148.74	4,551.01	8,377.23
Phosphorus				
Storm flow				
lbs/ac	2.53	1.84	0.99	1.78
lbs	3,016.84	472.45	1,166.96	4,656.25
Return flow				
lbs/ac	<0.01	<0.01	<0.01	<0.01
lbs	5.96	1.04	4.69	11.69
Stream flow				
lbs/ac	2.53	1.84	0.99	1.78
lbs	3,023.12	473.49	1,171.65	4,667.94

Table 9. Storm flow depth for Four Seasons sub-basins for 5-, 10-, 25-, 50-, and 100-yr recurrence intervals (table continued on next page).

Sub-basin	Duration days	Recurrence Interval, years				
		5	10	25	50	100
		Storm Flow Depth, inches				
A	1	2.80	3.47	4.53	5.26	5.99
	2	3.07	3.80	4.96	5.76	6.56
	3	3.31	4.09	5.34	6.20	7.05
B	1	2.89	3.56	4.63	5.37	6.10
	2	3.15	3.88	5.05	5.86	6.65
	3	3.39	4.17	5.42	6.28	7.13
C	1	2.80	3.47	4.53	5.26	5.99
	2	3.07	3.80	4.96	5.76	6.56
	3	3.31	4.09	5.34	6.20	7.05
CC	1	3.08	3.76	4.86	5.62	6.37
	2	3.36	4.10	5.29	6.12	6.93
	3	3.59	4.38	5.63	6.50	7.36
D	1	2.98	3.66	4.74	5.49	6.23
	2	3.25	3.98	5.16	5.98	6.78
	3	3.49	4.27	5.52	6.38	7.24
E	1	2.80	3.47	4.53	5.26	5.99
	2	3.07	3.80	4.96	5.76	6.56
	3	3.31	4.09	5.34	6.20	7.05
F	1	2.80	3.47	4.53	5.26	5.99
	2	3.07	3.80	4.96	5.76	6.56
	3	3.31	4.09	5.34	6.20	7.05
G	1	2.80	3.47	4.53	5.26	5.99
	2	3.07	3.80	4.96	5.76	6.56
	3	3.31	4.09	5.34	6.20	7.05
H	1	2.98	3.66	4.74	5.49	6.23
	2	3.25	3.98	5.16	5.98	6.78
	3	3.49	4.27	5.52	6.38	7.24
I	1	2.80	3.47	4.53	5.26	5.99
	2	3.07	3.80	4.96	5.76	6.56
	3	3.31	4.09	5.34	6.20	7.05
J	1	2.80	3.47	4.53	5.26	5.99
	2	3.07	3.80	4.96	5.76	6.56
	3	3.31	4.09	5.34	6.20	7.05

JJ	1	2.80	3.47	4.53	5.26	5.99
	2	3.07	3.80	4.96	5.76	6.56
	3	3.31	4.09	5.34	6.20	7.05
K	1	2.98	3.66	4.74	5.49	6.23
	2	3.25	3.98	5.16	5.98	6.78
	3	3.49	4.27	5.52	6.38	724
OA	1	2.61	3.27	4.32	5.05	5.77
	2	2.91	3.64	4.81	5.61	6.41
	3	3.17	3.96	5.24	6.12	6.99
OB	1	2.61	3.27	4.32	5.05	5.77
	2	2.91	3.64	4.81	5.61	6.41
	3	3.17	3.96	5.24	6.12	6.99
OC	1	2.61	3.27	4.32	5.05	5.77
	2	2.91	3.64	4.81	5.61	6.41
	3	3.17	3.96	5.24	6.12	6.99
OD	1	2.89	3.56	4.63	5.37	6.10
	2	3.15	3.88	5.05	5.86	6.65
	3	3.39	4.17	5.42	6.28	7.13
OE	1	2.73	3.39	4.44	5.17	5.88
	2	3.00	3.73	4.89	5.69	6.48
	3	3.24	4.03	5.28	6.14	6.99
OF	1	2.61	3.27	4.32	5.05	5.77
	2	2.91	3.64	4.81	5.61	6.41
	3	3.17	3.96	5.24	6.12	6.99
RANGE	1	2.61 – 3.08	3.27 – 3.76	4.32 – 4.86	5.05 – 5.62	5.77 – 6.37
	2	2.91 – 3.36	3.64 – 4.10	4.81 – 5.29	5.61 – 6.12	6.41 – 6.93
	3	3.17 – 3.59	3.96 – 4.38	5.24 – 5.63	6.12 – 6.50	6.99 – 7.36

6.1.5. Storm Flow 1-day Peak Discharge Rates

The GLEAMS model does not generate storm hydrographs, sedigraphs, or chemigraphs. However, it is essential to route eroded soil particles and organic matter through a field (basin) in order to accurately estimate sediment and sediment-associated pollutant yield. Since the time step in GLEAMS is one day, and precipitation input is daily amounts, it is not possible to generate continuous discharge rates and

concentrations during a storm, or day. A procedure was developed in the CREAMS model (Knisel, 1980) for estimating daily peak discharge rates as functions of field (drainage area) characteristics. The relationship, also used in GLEAMS, is

$$q = 200\, A^{0.7}\, S^{0.159}\, Q^{C}\, (LW)^{-0.187} \qquad (1)$$

where q is discharge in cfs (ft^3/sec), A is drainage area in mi^2, S is slope in ft/mi, and Q is runoff (storm flow) depth in inches. The exponent C is

$$C = 0.917\, A^{0.0166}. \qquad (2)$$

LW is the length:width ratio estimated as

$$LW = (l)^2 / A \qquad (3)$$

where l is the length of the distance in miles of the most remote point of the drainage along the flow path to the outlet.

This estimating procedure in equation (1) assumes a triangular hydrograph with a 1-day time base. It is recognized that all storm flow does not completely drain from a sub-basin in a 1-day period, especially sub-basin OC with a 686-acre drainage area. This does not invalidate the peak-flow estimating procedure. However, it would not be appropriate to estimate peak discharge for the 2-day and 3-day storm flow with the above procedure.

The above relationship was used to estimate peak discharge in each sub-basin in Four Seasons for the 1-day storm flow for the 5-, 10-, 25-, 50-, and 100-yr recurrence interval (1-day storm depths given in Table 9).

The 1-day peak discharge rates were calculated by the peak-estimating procedure for Four Seasons basin groupings A-K, OA-OC, and OD-OF. The estimated peaks are

given in Table 11 for the 5-, 10-, 25-, 50-, and 100-yr recurrence intervals. These basin groupings represent the areas contributing to proposed STA's.

Table 10. Peak discharge rate for 1-day storm flow for 5-, 10-, 25-, 50-, and 100-year recurrence interval in the Four Seasons sub-basins.

Sub-basin	Area Acres	5-yr	10-yr	25-yr	50-yr	100-yr
		Cubic Feet per Second (CFS)				
A	215	312	479	482	551	620
B	121	208	251	317	361	405
C	62	128	155	196	224	251
CC	12	34	41	51	57	64
D	79	159	190	239	272	305
E	141	207	250	318	363	408
F	146	231	280	356	406	456
G	67	122	148	187	213	239
H	120	173	208	261	298	333
I	103	182	220	279	318	357
J	39	92	111	140	159	178
JJ	3.6	12	14	18	21	23
K	66	104	124	156	178	199
OA	235	301	369	475	547	617
OB	270	332	406	523	602	679
OC	686	562	691	892	1,029	1,164
OD	99	147	177	223	255	286
OE	109	191	220	280	320	359
OF	49	88	108	138	158	177

Table 11. Four Season basin 1-day peak discharge rates.

Basin	Area Acres	5-yr	10-yr	25-yr	50-yr	100-yr
		Cubic Feet per Second (CFS)				
A – K	1,173.6	1,062	1,291	1,567	1,891	2,130
OA – OC	1,191	924	1,138	1,473	1,703	1,927
OD – OF	257	307	364	464	531	597

As in the case of the individual sub-basins, it is recognized that all the 1-day volumes would not drain from these basins. However, the estimated peak discharge rates given in Table 11 are valid estimates of peak rates.

6.1.6. Alternate Agricultural Management System (BMP)

GLEAMS was developed to represent a wide range of management systems. One such system is the date or dates of fertilizer application and another could be the rate of application. The common practice, as described above, is to apply 10-10-10 fertilizer on improved pastures. Some ranchers prefer fertilizers without phosphorus, particularly in view of the problems of phosphorus inflow to Lake Okeechobee (H. Williams, 2006). Florida soils in general contain enough phosphorus that it could easily be eliminated on pastures but probably not on row crops. Animal grazing of pastures results in re-cycling P in forage through the digestive system of animals and deposition of animal waste back onto the pasture.

Fertilizers, such as ammonium nitrate (33-0-0), nitrate of soda (15-0-16), and potassium nitrate (15-0-34) are commercially available. Since Florida soils generally are low in potassium, nitrate of soda and potassium nitrate would satisfy that deficiency.

An alternative model application was made with an annual application of 200 lbs/ac of 15-0-16 fertilizer on improved pasture within the Four Seasons sub-basin OA. The fertilizer application was the only change from the earlier simulation presented in Table 4 (Sec. 6.1.1). Although GLEAMS considers forage production stress based upon nitrogen and phosphorus deficiencies, forage yields were not reduced due to the absence of phosphorus fertilizer application.

Results of the alternate model simulation are summarized in Table 12. The fertilizer change did not affect the water balance calculations—that is, runoff, percolation, and evapotranspiration remained the same for the 1931-80 simulation period reported in Table 4. Since nitrogen application was the same in each simulation, nitrogen losses remained the same. Only phosphorus mass and concentration are shown in Table 12 to demonstrate the effect of phosphorus fertilizer application. The elimination of P_2O_4 in the annual fertilizer application reduced the mass and concentration losses in runoff + sediment by about 20%. This is significant when the total area of improved pasture that drains into Lake Okeechobee. It should be kept in mind that the data in Table 11 represents source runoff and nutrient production without attenuation.

The reduction in source-area phosphorus loss by using fertilizer without P_2O_4 indicated in Table 12 would be significant for reducing net P loss from off-site sub-basins OA, OB, and OC. The 1.06 lb/ac reduction would be a total reduction of 1,263 lbs for the 1,191-acre improved-pasture area proposed to be drained into the STA.

Considering the acreage of improved pasture in the Lake Okeechobee drainage basin, this BMP would represent a significant reduction in total phosphorus delivered to the lake.

Table 12. Average annual GLEAMS-simulated phosphorus mass and concentrations in runoff + sediment for 1931-80 with and without phosphorus fertilizer applications.

Phosphorus Mass Discharge (lbs/ac)	Phosphorus Concentration Discharge (mg/L)
With Phosphorus Fertilizer	
2.36	1.61
Without Phosphorus Fertilizer	
1.33	0.91

6.2. Okeechobee Southwest Corridor

Land use in the Okeechobee Southwest Corridor primarily consists of medium-density single-family residences along the drainage canals with agricultural use at the lower end of the canals. All residences have septic systems. The agricultural area probably will be urbanized to some degree within the next 10 years at the rate of current growth in and around the City of Okeechobee. Schools and residential areas are already taking agricultural land in this Corridor from S.W. 7th Ave west beyond S.W. 32nd Ave.

6.2.1. Okeechobee Southwest Corridor Residential Area

The HDR storm water master plan (2004) identified a flooding problem in the residential areas along S.W.7th Ave. in the vicinity of S.W. 23rd St. This was the only flooding problem identified in the plan and there was not a recommended solution.

Storm water from a medium-density single-family residential area discharges into the drainage canal along S.W. 7th Ave. Building lots are relatively small with approximately 2 residences per acre, and all residences have septic tanks for sewage disposal. The

7th Ave. canal originate well above the area where flooding occurs in the vicinity of S.W. 23rd St. Even though the residential area draining into the 7th Ave. canal is within the city limits, all residences have septic systems.

Residential and commercial/municipal areas of considerable size drain into the S.W. 16th Ave. canal, known as the "City Limits Ditch". Drainage into the canal originates well above SR 70 on the northwest section of the City of Okeechobee.

Flooding also occurs in the Oak Park area, along S.W. 32nd Ave between S.W. 16th St. and S.W. 23rd St. Storm water from paved streets without curbing, impervious areas, and lawns drain into swales which further drain into the canal.

Some residents indicated (March 15, 2007) they had been promised a city sewage collection and disposal system within 3 years. At present, the lack of adequate drainage in the Southwest Corridor residential area causes septic drain problems during the rainy season.

This study concentrates on storm water flow, return flow, and total stream flow with their respective nitrogen and phosphorus loads from designated basins in the Southwest Corridor. The basins were delineated by C.A. Smith & Associates in their storm water master plan (Rubio, 2007).

6.2.2. Okeechobee Southwest Corridor Model Simulations

GLEAMS simulations were made for the sub-basins in the Okeechobee Southwest Corridor area using the same Avon Park, FL rainfall record as used for Four Seasons. The sub-basins were delineated by Rubio (2007) and are shown on Map 7 (Appendix C). Basins 1 – 10 drain outside the Southwest corridor and are not included in this study. The sub-basin designations and their respective areas are shown in Table 13. Some basins include self-contained ponds with their respective drainage areas that do

not empty into the drainage canals. These "non-contributing" areas are not included in the model representations. Likewise, some basin areas shown in subsequent tables may differ slightly from those in Table 13 in order to accurately calculate basin flow volumes and nutrient loads to the drainage canals. Also, since significant flooding is known to occur in the Oak Park residential area and it is proposed for remediation, separate model simulations were made for that area as well as for the entire basin 31 which contains Oak Park.

Existing drainage canals are shown on Map 5 along S.W. 7th Ave (Okeechobee city limit), S.W. 16th Ave., S.W. 26th Ave., and S.W. 32nd Ave. The City-limit canal drains directly into the perimeter canal outside the levee around Lake Okeechobee. S.W. 16th Ave. canal is diverted into the S.W. 26th Ave. canal which further empties into the Kissimmee River. Drainage water in the S.W. 32nd Ave. canal currently discharges into the Kissimmee River. However, storm water management plans may be changed to divert the S.W. 32nd Ave. canal drainage into existing ponds created by shell mining in lower basins of the Southwest Corridor, i.e. basins 26, 27, and 30. Such diversions would be beneficial in reducing nitrogen and phosphorus loads discharging into the perimeter canal and ultimately into Lake Okeechobee.

Some drainage from basins 11, 13, 15, 17A, 17B, 17C, and 19 discharges into the S.W. 7th Ave. canal. For convenience in calculations, 100% of storm water and total stream flow from these basins is assumed to drain into the S.W. 16th Ave. canal. Similar assumptions are made to simplify calculations for the S.W. 26th Ave. and S.W. 32nd Ave. canals. The general topographic slope is in the southwesterly direction (Appendix C., Map 7).

Soils in the Southwest Corridor are generally in the same soil association as those in Four Seasons. A detailed soils map is shown on Map 8 (Appendix C) and are tabulated in Table 3, Appendix D. Land use by basin in the Southwest Corridor are given in Appendix D, Table 4.

Table 13. Okeechobee Southwest Corridor basins and drainage areas (from Rubio, 2007).

Basin	Area
11	326
12	274
13	243
14	203
15	78
16	66
17A	65
17B	53
17C	142
18	332
19	85
20	324
21	105
22	320
23	301
24	97
25A	367
25B	28
26	233
27	246
28	303
29	331
30	353
Oak Park	83
31	72

All houses in the residential areas of the Southwest Corridor have individual septic systems. The septage is considered "injected" below the soil surface, and as such is not entrained into the storm water. It can and does move with percolate in the model applications, and may affect return flow.

Land use in each basin was determined from Maps 9 and 10, Appendix C. These data were used to estimate the necessary parameters input into the GLEAMS model for long-term simulations. Since the locally known "Oak Park" residential area in Basin 30 is a principal area of concern for flooding, that area is delineated in Table 13 but it is also a part of the larger Basin 30.

Basins are grouped to obtain storm water, return flow, and total stream flow volumes and total nitrogen and phosphorus loads for each drainage canal. Results of model simulations are grouped for the basins in tables to estimate totals for each drainage canal.

Soils in the southern-most part of the Okeechobee Southwest Corridor differ from those in the northern basins. The Immokalee soil dominates the northern basins to SW Wolff Street (SW 28th St.) and the Wobasso series dominates south of SW Wolff St. Obviously this not a clear line of demarcation, but Lake Okeechobee sand deposits extended approximately to SW Wolfe St. in geologic time. The flat topography and different soils are prominent indicators of present day land use, i.e. old city limits (south), shell mines, and present-day sod farms.

Model simulations were made for the basins draining into the SW 7th Ave. drainage canal. Results of the 50-yr simulation are summarized in Table 14. Annual-average unit-area and volume data are shown in the table for storm flow, return flow, and total stream flow. Average-annual unit-area and basin loads are shown for nitrogen and phosphorus as well.

Table 14. The 1931-80 average annual storm flow, return flow, and steam flow and average annual nitrogen and phosphorus loads for the Okeechobee SW Corridor, SW 7th Ave. canal.

	Basin							Total
	12	14	16	17A	18	19	20	
Area, ac.	274	203	66	65	332	85	324	1,349
Storm flow, in.	11.60	9.65	11.58	6.31	9.16	6.77	12.87	10.44
Vol. ac-ft	264.87	163.25	63.70	34.18	253.43	47.95	347.49	1,173.63
Return flow, in.	2.62	2.87	1.10	2.52	2.36	2.42	2.39	2.45
Vol. ac-ft	59.82	48.55	6.05	13.65	65.29	17.14	64.53	275.03
Stream flow, in.	14.22	12.52	12.68	8.83	11.52	9.19	15.26	12.99
Vol. ac-ft	324.69	211.80	69.75	47.83	318.72	65.09	412.02	1,448.66
NITROGEN								
Storm flow, lbs/ac	3.84	3.19	3.81	2.11	3.03	2.45	4.29	3.51
lbs	1,052.60	648.44	251.57	137.32	1,007.32	208.55	1,389.21	4,731.01
Return flow, lbs/ac	0.33	0.51	0.04	0.18	2.08	1.46	2.76	1.42
lbs	89.83	102.95	2.86	11.39	689.43	123.74	894.41	1,914.61
Stream flow, lbs/ac	4.17	3.70	3.85	2.29	5.11	3.91	8.05	4.93
lbs	1,142.43	751.39	254.43	148.71	1,696.43	332.29	2,283.62	6,655.62
PHOSPHORUS								
Storm flow, lbs/ac	0.73	0.87	0.07	0.26	0.31	1.45	2.56	1.08
lbs	198.80	176.61	4.93	16.88	102.27	123.28	829.32	1,452.19
Return flow, lbs/ac	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Lbs	0.38	0.32	0.04	0.09	0.53	0.10	0.39	1.85
Stream flow, lbs/ac	0.73	0.87	0.07	0.26	0.31	1.45	2.56	1.08
lbs	199.18	176.73	4.93	16.97	102.80	123.38	831.88	1,454.04

A different representation was necessary for the Okeechobee Southwest Corridor compared with the residential area in Four Seasons. Some areas within the city limits are on the city sewage collection systems while most all residences have septic tanks. These are treated separately and distinctly different in the several basins affected. Relative residential density is considered in the different basins as well. For example, there are several "retirement villages" that have more impervious area, less lawns, and smaller lots. Thus, the septage is greater per unit area than where lots are larger, such as in the Oak Park area.

Model simulation results for the SW 16th Ave., SW 26th Ave., and SW 32nd Ave. canals are shown in Tables 15-17. Storm water and stream flow from these three drainage canals will discharge into proposed STA's or wet detention ponds.

In the following tables, areas of some basins do not agree with those in Table 13. There is significant amounts of ponds in the basins that do not drain such as in the previously excavated shell mines. Those ponds do not contribute flow to the respective drainage canals. The slightly-reduced areas are necessary to accurately calculate discharge to the canals.

Since localized flooding occurs mainly in the Oak Park area of the Southwest Corridor, that residential area was simulated separately. Oak Park is approximately 83 acres in size and is considered medium density residential, all on septic tanks. Although it is within the much larger basin 30, subsurface storm-water drainage is proposed to help alleviate flooding. The proposal includes pump installation to discharge the storm water into the SW 32nd Ave. canal. Results of the model simulation and analysis are given in Table 18. These data represent the source area, and should be helpful in conveyance and pump design. Drain pipes with risers will place the source closer to the pump and the higher nitrogen and phosphorus loads would be more applicable for design than the basin 30 data in Table 17. The Oak Park contribution to basin 30 discharge to the canal assumes flow over the soil to the basin outlet.

Table 15. The 1931-80 simulated average annual storm flow, return flow, and steam flow and average annual nitrogen and phosphorus loads for the Okeechobee SW Corridor, SW 16th Ave canal.

	Basin							Total SW 16th
	11	13	15	17B	17C	21	22	
Area, ac	326	220	78	43	115	105	320	1,217
Storm flow, in.	9.65	8.26	6.30	10.42	12.95	12.87	10.54	9.92
ac-ft	262.16	151.43	40.95	37.34	120.87	112.61	281.07	1,006.43
Return flow, in.	2.87	3.04	2.51	1.41	0.78	2.35	2.57	2.48
ac-ft	77.97	55.73	16.32	5.05	7.48	20.56	68.53	251.64
Stream flow, in.	12.52	11.30	8.81	11.83	13.73	15.12	13.11	12.40
ac-ft	340.13	207.16	57.27	42.39	128.35	133.17	349.60	1,258.07
Nitrogen								
Storm flow lbs/ac	3.19	2.78	2.37	3.45	4.28	4.26	3.61	3.35
lbs	1,040.17	610.70	154.57	148.31	492.28	447.54	1,155.37	4,078.88
Return flow lbs/ac	0.19	0.24	1.98	0.30	1.38	0.29	0.76	0.59
lbs	61.82	53.78	154.36	12.83	158.80	30.79	243.60	715.98
Stream flow lbs/ac	3.38	3.02	4.35	3.75	5.66	4.55	4.37	3.94
lbs	1,101.99	664.48	338.93	164.14	651.08	478.33	1,398.97	4,794.86
Phosphorus								
Storm flow lbs/ac	0.14	0.78	1.73	0.31	0.18	0.71	0.82	0.59
lbs	45.76	111.25	134.68	13.16	20.41	74.92	261.26	721.44
Return flow lbs/ac	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
lbs	0.46	0.35	0.11	0.03	0.07	0.13	0.45	1.60
Stream flow lbs/ac	0.14	0.78	1.73	0.31	0.18	0.71	0.82	0.59
lbs	46.22	171.60	134.79	13.19	20.48	75.05	261.71	723.04

Table 16. The 1931-80 simulated average annual storm flow, return flow, and stream flow and average annual nitrogen and phosphorus loads for the Okeechobee SW Corridor, SW 26th Ave canal.

	Basin					Total
	23	24	25A	25B	28	SW 26th
Area, ac	303	97	339	21.8	297	1,057.8
Storm flow						
in.	8.90	6.30	5.89	7.30	7.23	7.04
ac-ft	224.73	50.93	166.39	13.26	178.94	634.25
Return flow						
in.	2.96	2.51	2.59	2.29	3.15	2.84
ac-ft	74.74	20.29	70.63	4.16	77.96	250.32
Stream flow						
In.	11.86	8.81	8.48	9.59	10.38	9.88
ac-ft	299.47	71.22	237.02	17.42	256.90	884.57
Nitrogen						
Storm flow						
lbs/ac	3.04	2.38	2.05	2.41	2.47	2.49
lbs	922.53	231.18	695.07	52.55	732.85	2,634.18
Return flow						
lbs/ac	0.40	2.36	1.99	0.17	0.27	1.05
lbs	120.93	228.76	673.82	3.63	79.29	1,106.43
Stream flow						
lbs/ac	3.34	4.74	4.04	2.58	2.74	3.54
lbs	1,043.46	459.94	1,368.89	56.18	812.14	3,740.61
Phosphorus						
Storm flow						
lbs/ac	0.90	1.85	1.70	0.11	0.40	1.09
lbs	271.51	179.54	577.69	2.31	117.69	1,148.74
Return flow						
lbs/ac	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
lbs	0.48	0.14	0.41	0.03	0.53	1.59
Stream flow						
lbs/ac	0.90	1.85	1.70	0.11	0.40	1.09
lbs	271.99	179.68	578.10	2.34	118.22	1,150.33

Table 17. The 1931-80 simulated average annual storm flow, return flow, and steam flow and average annual nitrogen and phosphorus loads for the Okeechobee SW Corridor, SW 32nd Ave canal.

						Total
	26	27	29	30	31	SW 32nd
Area, ac	219	212	331	318	72	1152
Storm flow						
in.	6.30	8.26	7.25	8.26	5.89	7.45
ac-ft	114.98	145.93	199.8	218.89	35.34	715.12
Return flow						
in.	2.51	3.04	3.17	3.04	2.59	2.95
ac-ft	45.81	53.71	87.44	80.56	15.54	283.05
Stream flow						
In.	8.81	11.30	10.42	11.30	8.58	10.40
ac-ft	160.79	199.64	287.42	299.45	50.92	998.17
Nitrogen						
Storm flow						
lbs/ac	2.15	2.83	2.40	2.77	2.09	2.51
lbs	470.58	598.94	794.22	880.97	150.18	2,894.89
Return flow						
lbs/ac	0.61	0.18	0.11	0.18	1.21	0.28
lbs	134.22	37.48	37.24	58.77	87.47	321.18
Stream flow						
lbs/ac	2.76	3.01	2.51	2.95	3.30	2.79
lbs	604.80	636.42	831.46	939.74	237.65	3,216.07
Phosphorus						
Storm flow						
lbs/ac	0.86	0.35	0.01	0.46	1.20	0.43
lbs	187.40	74.88	1.83	147.36	86.72	498.19
Return flow						
lbs/ac	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Lbs	0.31	0.34	0.33	0.51	0.09	1.58
Stream flow						
lbs/ac	0.86	0.35	0.01	0.46	1.20	0.43
lbs	187.71	75.22	2.16	147.87	86.81	499.77

Table 18. The 1931-80 simulated average annual storm flow, return flow, and steam flow and average annual nitrogen and phosphorus loads for the Okeechobee SW Corridor, 83-acre Oak Park residential area.

COMPONET	UNIT DEPTHS & MASS and VOLUMES & LOADS
Storm flow, inches	10.54
ac-ft	79.90
Return flow, inches	2.77
ac-ft	19.16
Stream flow, inches	13.31
ac-ft	92.06
NITROGEN	
Storm flow, lbs/ac	3.52
lbs	292.99
Return flow, lbs/ac	2.11
lbs	175.29
Stream flow, lbs/ac	5.63
lbs	468.28
PHOSPHORUS	
Storm flow, lbs/ac	2.11
lbs	175.13
Return flow, lbs/ac	<0.01
lbs	0.33
Stream flow, lbs/ac	2.11
lbs	175.46

6.2.3. Okeechobee Southwest Corridor Summaries

Data for the four drainage canals in the Southwest Corridor are summarized in Table 19. The SW 7th Ave. canal is proposed to drain into an STA or directly into the Lake Okeechobee rim canal. The SW 16th , SW 26th , and SW 32nd canals are totaled in Table 19. Discharges from these canals may or may not ultimately drain into a single STA, but the totals are presented in Table 19 for user convenience.

A map of average-annual storm water nitrogen by basin is shown in Appendix C, map 11 for the Southwest Corridor area. A similar map of average-annual storm water phosphorus by basin is shown in Appendix C, map 12. These maps provide a ready-reference of relative loads by basin in the Okeechobee Southwest Corridor

Assumptions for nitrogen and phosphorus reductions from the literature used for the Four Seasons area conveyance channels were also used for drainage canals in the Okeechobee Southwest Corridor. Reductions in the conveyance system are shown in Table 20. Also, the same reductions for N and P losses in wet detention ponds (STA's) used in the Four Seasons area were used in the Southwest Corridor. The reduced N and P loads for canal losses in Table 20 were used as loadings to wet detention areas to estimate the reduced N and P discharges from the detention areas. These loads out of the detention areas represent approximate loads to conveyance channels as ultimate discharge to Lake Okeechobee. Reductions in the retention areas are shown in Table 21.

Table 19. Average annual storm flow, return flow, and stream flow and average annual nitrogen and phosphorus loads for the Okeechobee Southwest Corridor.

	Drainage Canal				SW 16th, SW 26th, SW 32nd Totals
	SW 7th Ave	SW 16th Ave	SW 26th Ave	SW 32nd Ave	
Area, acres	1,349	1,217	1,058	1,152	3,427
Storm flow, in	10.44	9.92	7.04	7.45	8.24
ac-ft	1,173.63	1,006.43	634.25	715.12	2,355.80
Return flow, in	2.45	2.48	2.84	2.95	2.75
ac-ft	275.03	251.64	250.32	283.05	785.01
Stream flow, in	12.99	12.40	9.88	10.40	11.00
ac-ft	1,448.66	1,258.07	884.57	998.17	3,140.81
NITROGEN					
Storm flow, lbs/ac	3.51	3.35	2.49	2.51	2.80
lbs	4,731.01	4,078.88	2,634.18	2,894.89	9,607.95
Return flow, lbs/ac	1.42	0.59	1.05	0.28	0.63
lbs	1,914.61	715.98	1,106.43	321.18	2,143.59
Stream flow, lbs/ac	4.93	3.94	3.54	2.79	3.43
lbs	6,655.62	4,794.96	3,740.61	3,216.07	11,751.54
PHOSPHORUS					
Storm flow, lbs/ac	1.08	0.59	1.09	0.43	0.69
lbs	1,452.19	721.44	1,148.74	498.19	2,368.37
Return flow, lbs/ac	<0.01	<0.01	<0.01	<0.01	<0.01
lbs	1.85	1.60	1.59	1.58	4.77
Stream flow, lbs/ac	1.08	0.59	1.09	0.43	0.69
lbs	1,454.04	723.04	1,150.33	499.77	2,373.14

Table 20. Total nitrogen and total phosphorus reductions in the Okeechobee Southwest Corridor drainage canals.

Canal	TN Input lbs	Nitrogen Reduction %	TN Discharge lbs	TP Input lbs	Phosphorus Reduction %	TP Discharge lbs
SW 7th Ave	6,655.62	60	2,662.25	1,454.04	15	1,235.93
SW 16th Ave	4,794.86	60	1,917.94	723.04	15	614.58
SW 26th Ave	3,740.61	60	1,496.24	1,150.33	15	977.78
SW 32nd Ave	3,216.07	60	1,286.43	499.77	15	424.80
Total	18,407.16	60	7,362.86	3,827.18	15	3,253.10

Table 21. Total nitrogen and total phosphorus reductions in the Okeechobee Southwest Corridor STA's/wet detention management areas.

Canal	TN Input lbs	Nitrogen Reduction %	TN Discharge lbs	TP Input lbs	Phosphorus Reduction %	TP Discharge lbs
SW 7th Ave	2,662.25	25	1,996.69	1,235.93	60	494.37
SW 16th Ave	1,917.94	25	1,438.46	614.58	60	245.83
SW 26th Ave	1,496.24	25	1,122.18	977.78	60	391.11
SW 32nd Ave	1,286.43	25	964.82	424.80	60	169.92
Total	7,362.86	25	5,522.15	3,253.10	60	1,301.23

6.2.4. Okeechobee Southwest Corridor Storm Runoff for 1-, 2-, and 3-Day Durations

Annual maximum storm runoff was determined for 1-, 2-, and 3-day durations for the Okeechobee Southwest basins and drainage canals. The Gumbel extreme-value procedure (Potter, 1949) was used to estimate the 5-, 15-, 20-, 50-, and 100-yr expected storm flow depths for each duration. Results of the frequency analyses are shown in Table 22 for basins in the SW 7th Ave canal drainage. Similar analyses were made for SW 16th Ave, SW 26th Ave, and SW 32nd Ave canals, also. Frequency data are shown in Tables 23 – 25, respectively, for these canals.

As seen in Tables 22 - 25, there is less difference between 2-day and 3-day storm flow than between the 1-day and 2-day events. This indicates that rainfall events last little more than two days even where hurricanes occur in some years.

6.2.5. Okeechobee Southwest Corridor Storm Flow Peak Discharge Rates

Peak rates of discharge were estimated for each basin in the Okeechobee Southwest Corridor using the procedure outlined in Sec. 6.1.5. The peak rates were determined using the peak 1-day depths by recurrence interval in Tables 22 – 25. The 1-day peak discharge rates in cubic feet per second (cfs) for the 5-, 10-, 25-, 50-, and 100-yr recurrence intervals are shown in Table 26.

The peak discharge rates for 1-day storm depths were calculated for each of the SW 7th Ave, SW 16th Ave, SW 26th Ave, and SW 32nd Ave canals, also. These canal peak discharge data are given in Table 27.

Table 22. Storm flow depths for Okeechobee Southwest SW 7th Ave. basins and canal for 1-, 2-, and 3-day durations for 5-, 10-, 25-, 50-, and 100-yr recurrence intervals.

Basin/ Duration	Recurrence Interval				
	5-yr	10-yr	25-yr	50-yr	100-yr
	Inches				
12					
1-day	3.30	4.01	5.14	5.92	6.69
2-day	3.61	4.38	5.61	6.46	7.29
3-day	3.85	4.66	5.94	6.82	7.70
14					
1-day	3.07	3.76	4.86	5.62	6.37
2-day	3.36	4.10	5.29	6.12	6.93
3-day	3.59	4.38	5.63	6.50	7.36
16					
1-day	3.30	4.01	5.14	5.92	6.69
2-day	3.61	4.38	5.61	6.46	7.29
3-day	3.85	4.66	5.94	6.82	7.70
17A					
1-day	2.59	3.22	4.24	4.94	5.64
2-day	2.80	3.49	4.59	5.35	6.10
3-day	3.00	3.73	4.90	5.71	6.52
18					
1-day	3.02	3.70	4.78	5.52	6.26
2-day	3.30	4.03	5.19	6.00	6.80
3-day	3.48	4.24	5.45	6.28	7.11
19					
1-day	2.67	3.31	4.34	5.06	5.76
2-day	2.89	3.59	4.70	5.47	6.23
3-day	3.08	3.82	5.00	5.81	6.61
20					
1-day	3.43	4.15	5.30	6.09	6.87
2-day	3.77	4.55	5.80	6.66	7.51
3-day	4.02	4.83	6.13	7.03	7.92
SW 7th Ave Canal					
1-day	3.16	3.85	4.96	5.72	6.46
2-day	3.45	4.20	5.40	6.26	7.04
3-day	3.67	4.46	5.70	6.57	7.43

Table 23. Storm flow depths for Okeechobee Southwest Corridor, SW 16th Ave. basins and canal for 1-, 2-, and 3-day durations for 5-, 10-, 25-, 50-, and 100-yr recurrence intervals.

Basin/ Duration	Recurrence Interval				
	5-yr	10-yr	25-yr	50-yr	100-yr
	Inches				
11					
1-day	3.08	3.76	4.86	5.62	6.37
2-day	3.36	4.10	5.29	6.12	6.93
3-day	3.59	4.38	5.63	6.50	7.36
13					
1-day	2.89	3.56	4.63	5.37	6.10
2-day	3.15	3.88	5.05	5.86	6.65
3-day	3.39	4.17	5.42	6.28	7.13
15					
1-day	2.59	3.22	4.24	4.94	5.63
2-day	2.80	3.49	4.59	5.35	6.10
3-day	3.00	3.79	4.90	5.71	6.51
17B					
1-day	3.17	3.86	4.97	5.74	6.49
2-day	3.47	4.22	5.42	6.25	7.07
3-day	3.68	4.46	5.71	6.57	7.42
17C					
1-day	3.43	4.15	5.30	6.09	6.88
2-day	3.79	4.57	5.82	6.68	7.53
3-day	4.04	4.85	6.16	7.06	7.94
21					
1-day	3.43	4.15	5.29	6.09	6.87
2-day	3.77	4.55	5.80	6.66	7.51
3-day	4.02	4.83	6.13	7.03	7.92
22					
1-day	3.18	3.87	4.99	5.75	6.51
2-day	3.48	4.23	5.44	6.27	7.10
3-day	3.71	4.50	5.76	6.64	7.50
SW 16th Ave Canal					
1-day	3.08	3.76	4.86	5.61	6.35
2-day	3.14	4.11	5.30	6.12	6.93
3-day	3.60	4.38	5.60	6.50	7.34

Table 24. Storm flow depths for Okeechobee Southwest SW 26th Ave. basins and canal for 1-, 2-, and 3-day durations for 5-, 10-, 25-, 50-, and 100-yr recurrence intervals.

Basin/ Duration	Recurrence Interval				
	5-yr	10-yr	25-yr	50-yr	100-yr
	Inches				
23					
1-day	2.89	3.66	4.74	5.49	6.23
2-day	3.25	3.98	5.16	5.97	6.78
3-day	3.29	4.27	5.52	6.38	7.24
24					
1-day	2.59	3.22	4.24	4.94	5.63
2-day	2.80	3.49	4.59	5.35	6.10
3-day	3.00	3.73	4.90	5.71	6.51
25A					
1-day	2.51	3.14	4.14	4.83	5.52
2-day	2.72	3.40	4.49	5.24	5.99
3-day	2.91	3.64	4.81	5.62	6.41
25B					
1-day	2.75	3.41	4.45	5.17	5.88
2-day	2.99	3.69	4.82	5.60	6.37
3-day	3.17	3.91	5.10	5.92	6.72
28					
1-day	2.73	3.39	4.44	5.17	5.88
2-day	3.00	3.73	4.89	5.69	6.48
3-day	3.24	4.03	5.28	6.14	6.99
SW 26th Ave Canal					
1-day	2.69	3.37	4.41	5.13	5.84
2-day	2.96	3.67	4.81	5.59	6.37
3-day	3.13	3.94	5.16	6.00	6.83

Table 25. Storm flow depths for Okeechobee Southwest Corridor SW 32nd Ave basins and canal for 1-, 2-, and 3-day durations for 5-, 10-, 25-, 50-, and 100-yr recurrence intervals.

Basin/ Duration	Recurrence Interval				
	5-yr	10-yr	25-yr	50-yr	100-yr
	Inches				
26					
1-day	2.59	3.22	4.24	4.94	5.63
2-day	2.80	3.49	4.59	5.35	6.10
3-day	2.99	3.73	4.90	5.71	6.51
27					
1-day	2.89	3.56	4.63	5.37	6.10
2-day	3.15	3.88	5.05	5.86	6.65
3-day	3.39	4.17	5.42	6.28	7.14
29					
1-day	2.73	3.39	4.44	5.17	5.89
2-day	3.01	3.73	4.39	5.70	6.49
3-day	3.25	4.03	5.28	6.15	7.00
30					
1-day	2.89	3.56	4.63	5.37	6.10
2-day	3.15	3.88	5.05	5.86	6.65
3-day	3.39	4.17	5.42	6.28	7.14
31					
1-day	2.51	3.14	4.14	4.83	5.52
2-day	2.72	3.40	4.49	5.24	5.99
3-day	2.91	3.64	4.81	5.62	6.41
SW 32nd Ave Canal					
1-day	2.76	3.42	4.47	5.20	5.91
2-day	3.02	3.74	4.88	5.68	6.46
3-day	3.24	4.01	5.24	6.09	6.93

Table 26. Peak discharge rates for 1-day storm flow for 5-, 10-, 25-, 50-, and 100-yr recurrence intervals in the Okeechobee Southwest Corridor.

Basin	Area Acres	5-yr	10-yr	25-yr	50-yr	100-yr
		Cubic Feet per second (CFS)				
11	326	350	420	529	604	677
12	274	453	538	672	762	850
13	243	252	304	386	441	495
14	203	249	299	376	429	480
15	78	105	127	162	186	209
16	65	120	142	177	201	113
17A	65	94	114	145	166	187
17B	53	84	99	124	140	156
17C	142	190	225	280	317	353
18	332	325	390	492	561	629
19	85	111	134	171	195	219
20	324	453	538	672	762	850
21	105	161	191	237	268	299
22	320	355	424	533	606	679
23	301	345	427	539	616	691
24	97	124	150	191	219	247
25A	367	250	306	393	452	510
25B	28	43	52	65	75	83
26	233	222	270	346	397	447
27	246	239	289	366	418	468
28	303	325	395	504	579	650
29	331	334	406	519	596	670
30	353	338	409	519	593	666
Oak Park	83	179	213	267	303	338
31	72	97	118	151	173	194

Table 27. Peak discharge rates for 1-day storm flow for 5-, 10-, 25-, 50-, and 100-yr recurrence intervals in the Okeechobee Southwest Corridor drainage canals.

Drainage Canal	Area, acres	5-yr	10-yr	25-yr	50-yr	100-yr
		Cubic Feet per Second (CFS)				
SW 7th Ave	1,349	932	1,120	1,417	1,617	1,811
SW 16th Ave	1,217	790	950	1,205	1,377	1,544
SW 26th Ave	1,058	683	841	1,079	1,241	1,399
SW 32nd Ave	1,152	714	871	1,116	1,285	1,446

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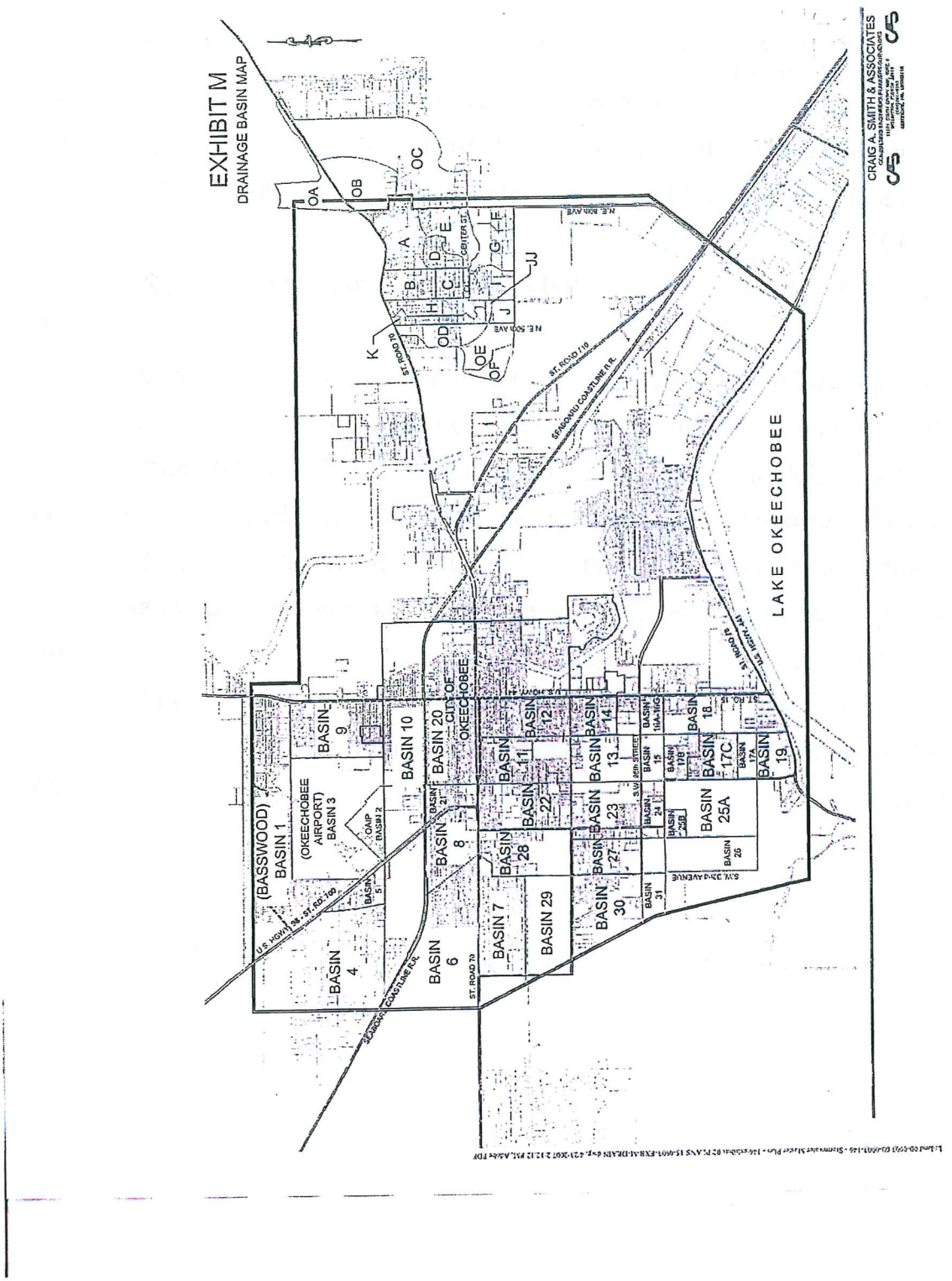


Figure 1. Map of Okeechobee County storm water management area (from C.A. Smith, & Associates).

Figure 2. Annual Rainfall, Avon Park, FL.

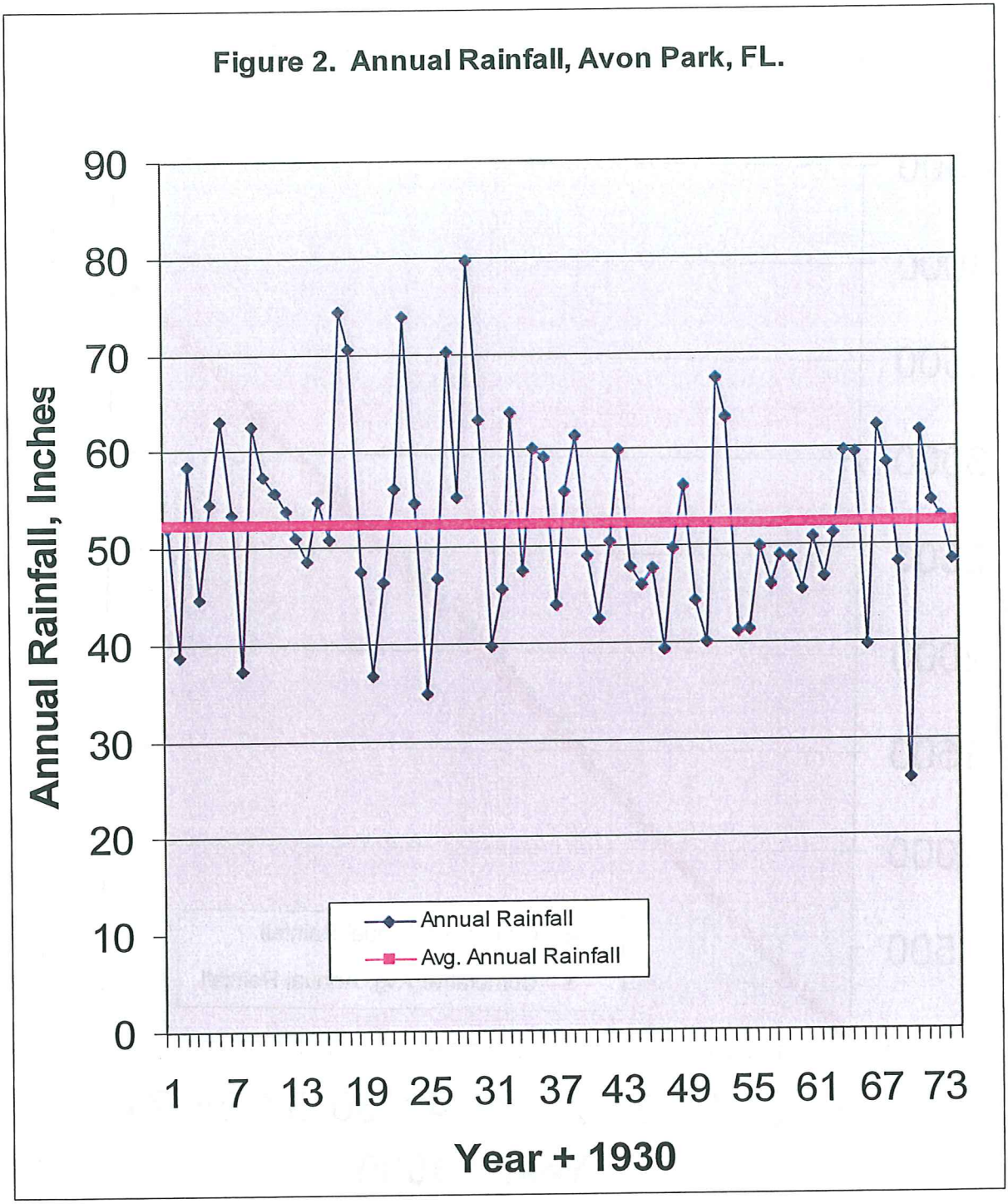


Figure 3. Cumulative Rainfall, Avon Park, FL

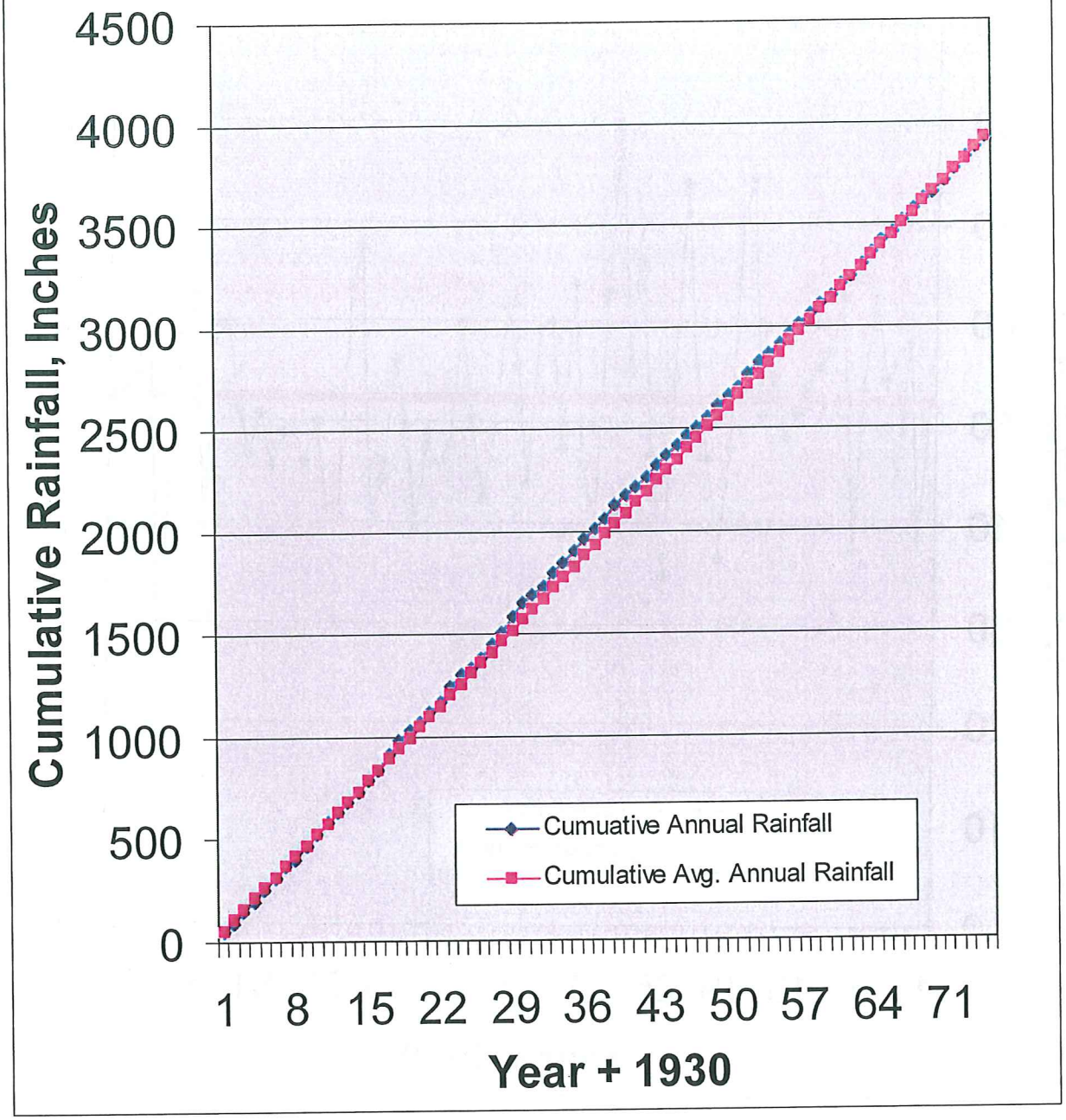


Figure 4. AVON PARK, FL, 1931 - 2005, Cumulative Normalized Rainfall Diff=P-Avg

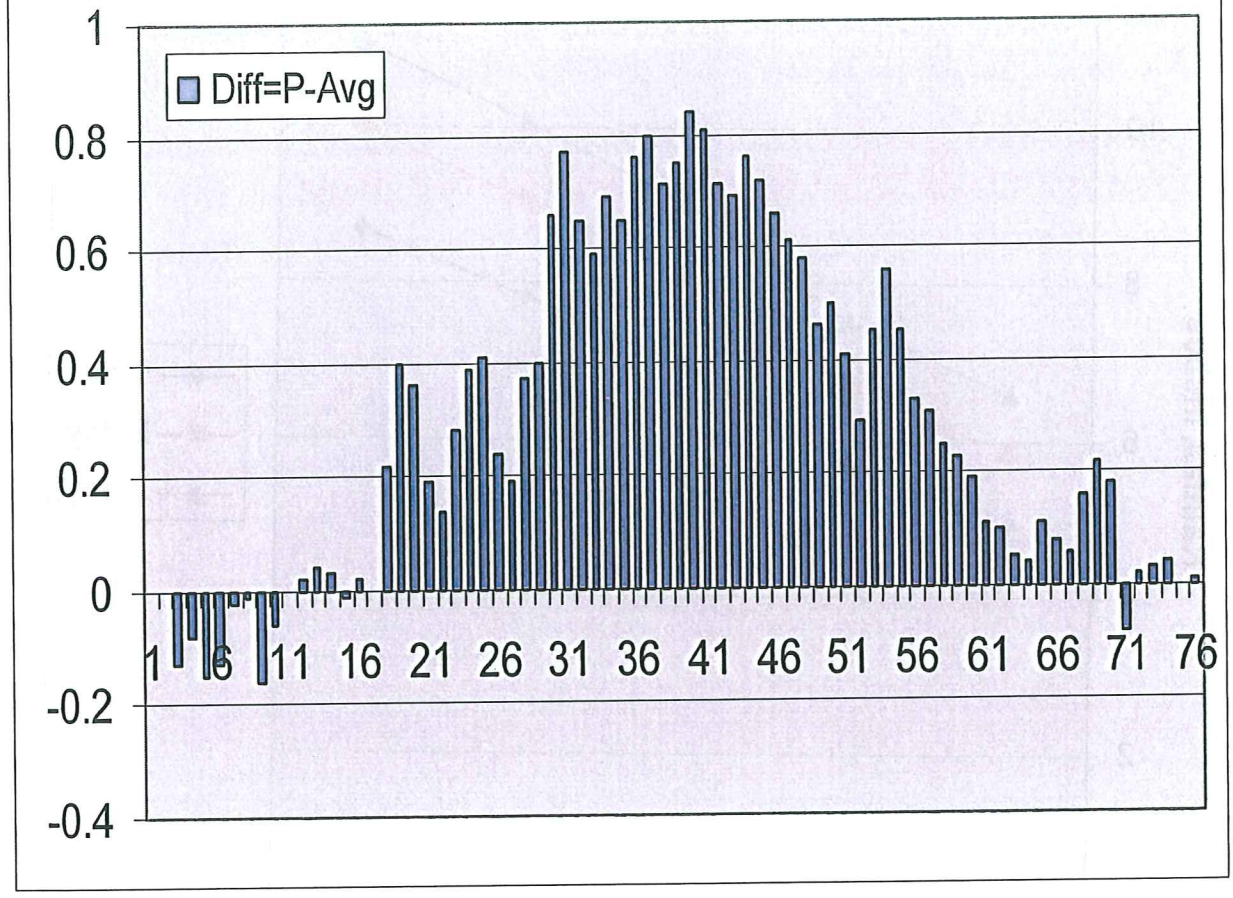


Figure 5. 1-, 2-, and 3-day Rainfall Avon Park, Florida, 1931-2005

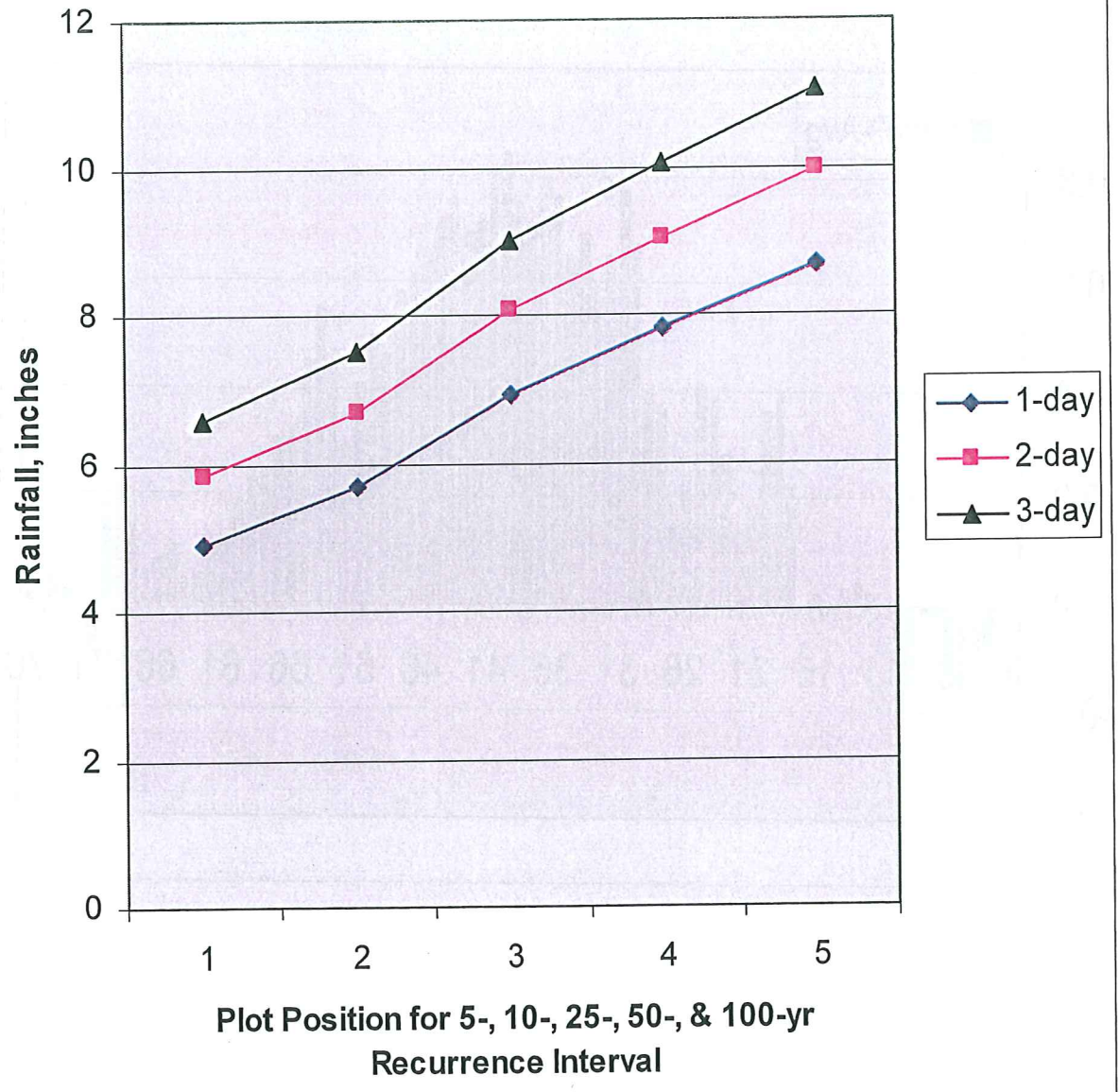


Figure 6. 1-, 2-, & 3-day Runoff, Four Seasons Sub-basin OA

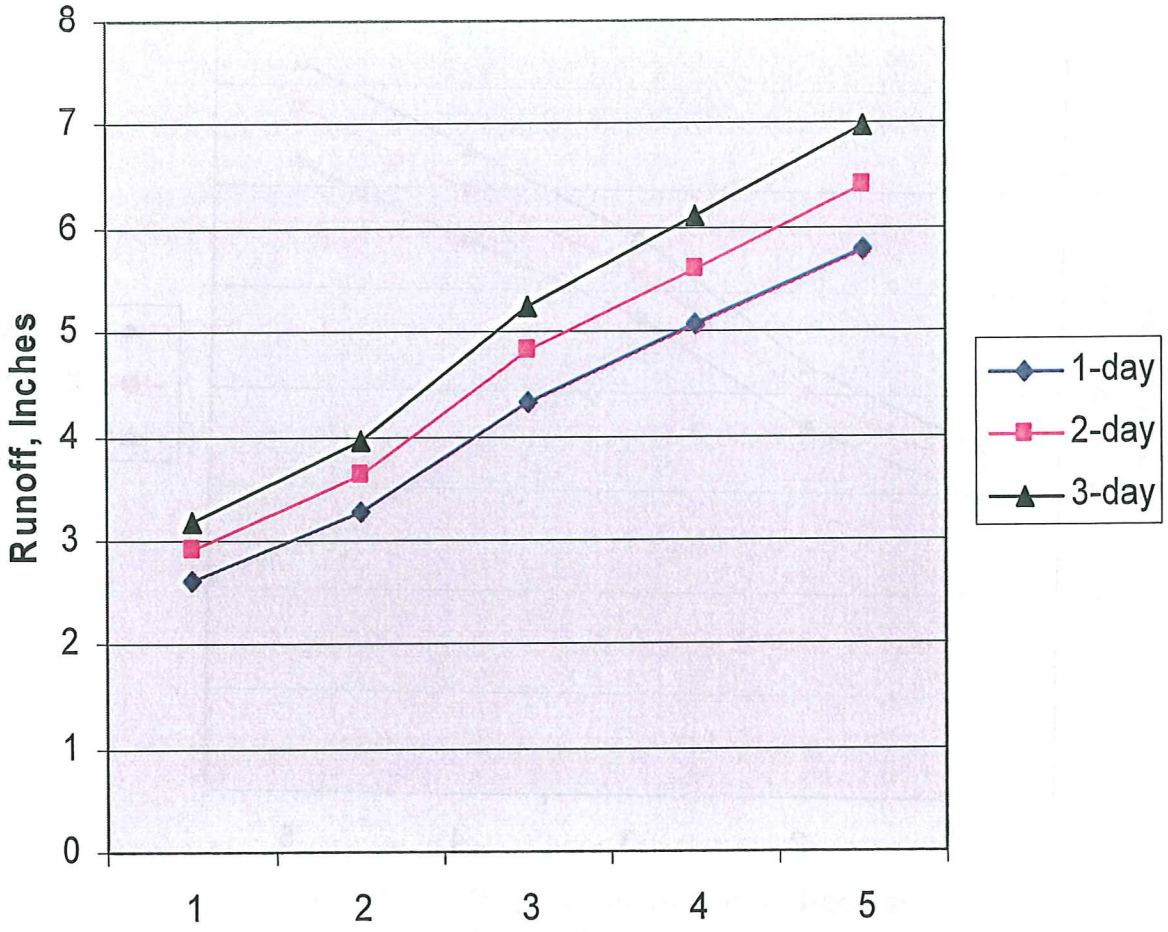


Figure 7. 1-, 2-, & 3-day Runoff, Four Seasons Sub-basin H

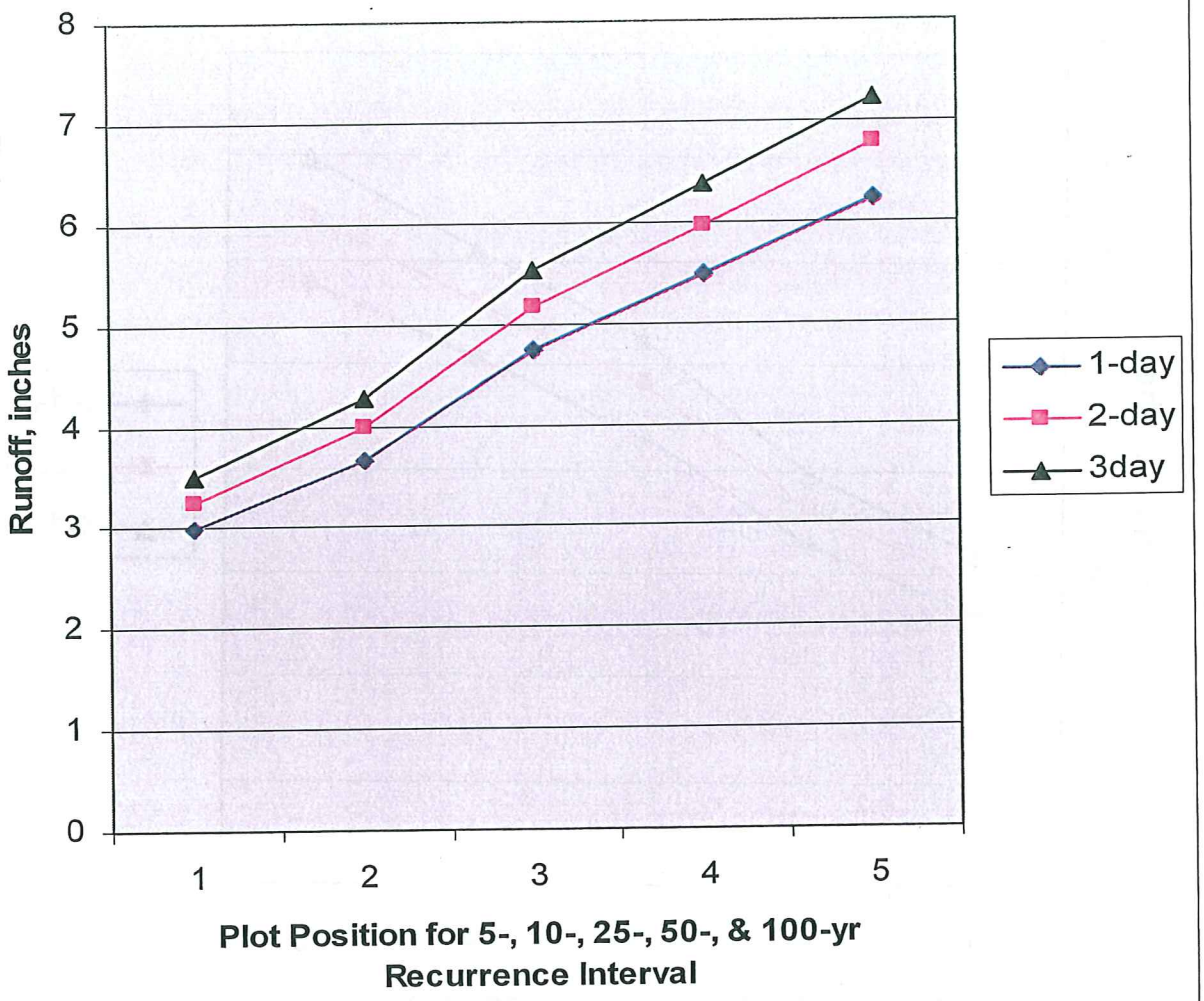


Figure 8. 1-, 2-, & 3-day Runoff Oak Park Residential Area, Okeechobee Southwest Corridor

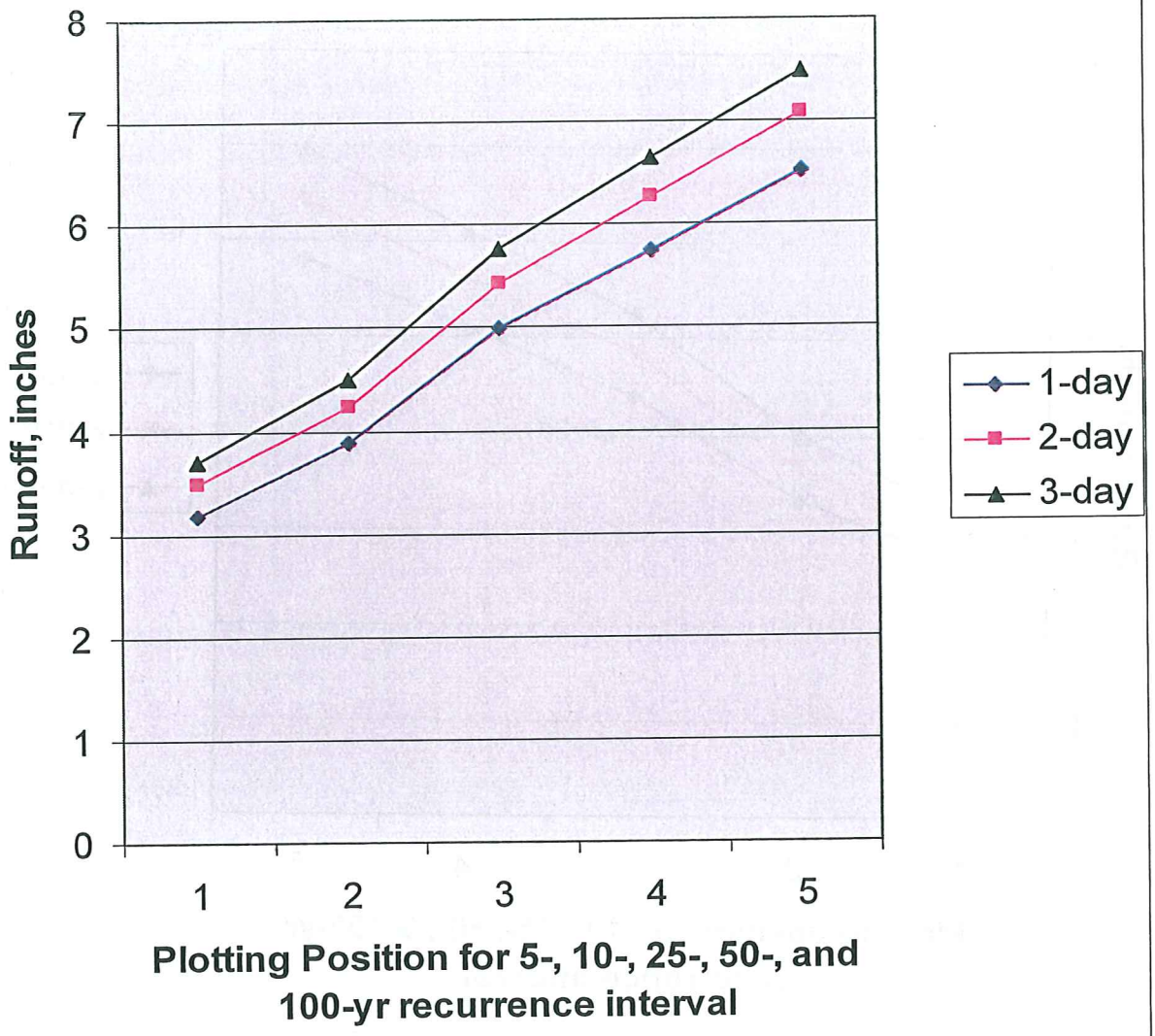
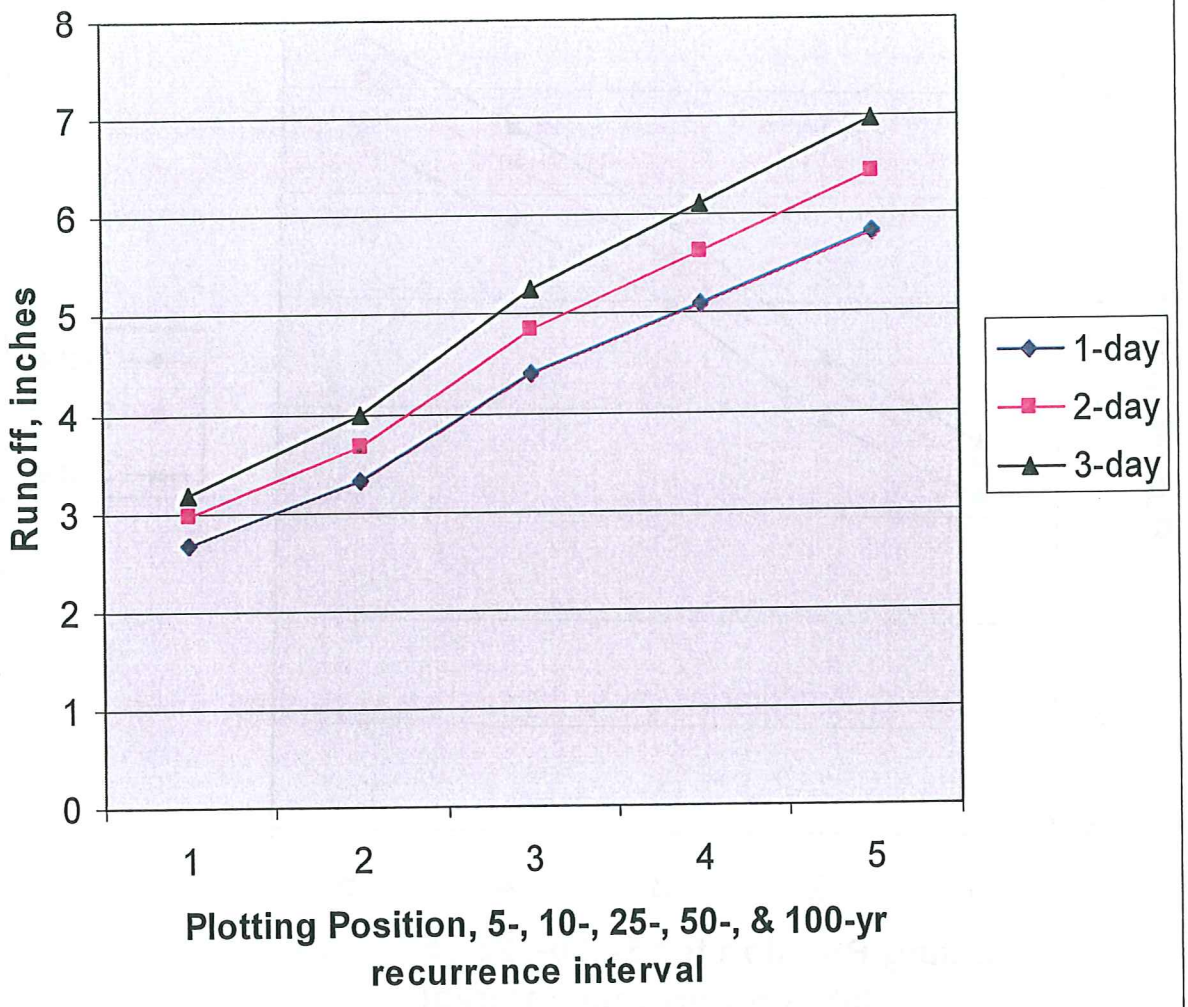


Figure 9. 1-, 2-, & 3-day Runoff Okeechobee Southwest Corridor Pasture Area



APPENDIX B--TABLES

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Table B-2. Okeechobee Southwest Summary.....73

Table B-1. Average annual storm flow, return flow, and stream flow, nitrogen and phosphorus losses, and peak 1-day discharge, Four Seasons sub-basin summary.

	SUB-BASIN																		
	A	B	C	CC	D	E	F	G	H	I	J	JJ	K	OA	OB	OC	OD	OE	OF
Acres	215	121	62	12	79	141	146	67	120	103	39	3.6	66	235	270	686	99	109	49
Storm flow, ac-ft	128.54	83.28	39.84	9.65	58.59	90.59	93.80	43.05	89.00	66.18	25.06	2.31	48.95	126.51	145.35	369.30	68.14	65.67	26.38
Return flow, ac-ft	56.44	30.65	16.02	2.88	79.49	36.42	37.72	17.31	29.60	26.61	10.08	0.93	16.31	63.25	72.68	184.65	25.08	28.67	13.19
Stream flow ac-ft	185.0	113.9	55.9	12.5	78.1	127.0	131.5	57.4	118.6	92.79	35.13	3.24	65.29	189.76	218.08	553.94	93.22	94.28	39.57
Nitrogen																			
Storm flow lbs/ac	2.88	2.87	2.86	3.51	3.32	3.09	4.78	3.07	3.19	3.04	3.05	3.06	3.19	2.88	2.86	2.90	3.17	3.24	2.82
lbs	618.3	344.9	177.2	42.1	262.3	435.7	697.3	205.7	368.4	313.1	119.0	11.0	210.5	676.8	772.2	1,989.4	315.8	353.2	138.2
Return flow lbs/ac	0.74	1.47	0.33	0.15	0.36	0.94	0.45	0.68	0.14	0.76	0.26	0.26	0.14	1.88	1.88	1.88	1.18	1.27	1.73
lbs	150.3	176.5	20.4	1.8	28.2	132.7	65.2	45.7	16.5	78.1	10.2	0.9	9.1	441.8	507.6	1,289.7	118.2	138.6	272.4
Stream flow lbs/ac	3.62	4.34	3.19	3.66	3.68	4.03	5.23	3.75	3.33	3.80	3.31	3.32	3.33	4.76	4.74	4.78	4.36	4.51	4.55
lbs	776.7	521.4	199.5	43.9	290.4	568.4	762.5	251.4	384.9	391.2	129.1	11.9	219.7	1,118.6	1,279.8	3,279.1	471.2	491.8	222.9
Phos-Phorus																			
Storm flow lbs/ac	1.03	1.73	0.35	0.14	0.76	1.52	1.05	1.51	0.08	1.34	0.77	0.77	0.08	2.36	2.54	2.56	1.33	2.07	2.35
lbs	1,178.2	785.3	259.2	62.2	442.1	766.5	689.4	101.2	9.6	138.0	30.0	2.8	5.3	554.6	685.8	1,776.7	131.7	225.6	115.2
Return flow lbs/ac	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
lbs	0.86	0.48	0.25	0.05	0.32	0.56	0.58	0.27	0.48	0.41	0.16	0.01	0.26	1.20	1.35	3.43	0.40	0.44	0.20
Stream flow lbs/ac	1.03	1.73	0.35	0.14	0.76	1.52	1.05	1.51	0.08	1.34	0.77	0.77	0.08	2.36	2.54	2.56	1.33	2.07	2.35
lbs	222.3	208.1	22.0	1.7	60.4	214.9	153.9	101.4	10.1	138.4	30.2	2.8	318.9	555.8	687.2	1,780.2	132.1	226.1	115.4
Peak Rate 1-day, cfs																			
5-yr	212	225	128	34	159	207	231	122	173	182	92	12	104	301	332	562	157	191	88
10-yr	379	271	155	41	190	251	280	148	208	220	111	15	124	370	406	691	177	220	108
25-yr	482	342	196	51	239	318	356	187	261	279	140	18	156	475	523	892	223	280	138
50-yr	551	391	224	57	272	363	406	213	298	318	159	21	178	547	602	1,030	255	320	158
100-yr	620	438	251	64	305	408	456	239	333	357	179	23	199	617	679	1,164	286	359	178

Table B-2. Average-annual simulated storm flow, return flow, and stream flow depths and volumes, plant nutrient loads, and 1-day peak discharge rates, Okeechobee Southwest Corridor.

	Oak Park	SW 7th Ave Canal	SW 16th Ave Canal	SW 26th Ave Canal	SW 32nd Ave Canal	Total Canals
Area, acres	83	1,349	1,217	1,058	1,152	4,776
Storm flow in/ac	10.54	10.44	9.92	7.04	7.45	8.87
ac-ft	79.90	1,173.63	1,006.43	634.25	715.12	3,529.43
Return flow in/ac	2.77	2.45	2.48	2.84	2.96	2.66
ac-ft	19.16	275.03	251.64	250.32	283.05	1,060.04
Stream flow in/ac	13.31	12.99	12.40	9.88	10.40	11.53
ac-ft	92.06	1,448.66	1,258.07	884.57	988.17	4,589.47
NITROGEN						
Storm flow lbs/ac	3.52	3.51	3.35	2.49	2.51	2.80
lbs	292.99	4,731.01	4,078.88	2,634.18	2,894.89	9,607.95
Return flow lbs/ac	2.11	1.42	0.59	1.05	0.28	0.63
lbs	175.29	1,914.61	715.98	1,106.43	321.18	2,143.59
Stream flow lbs/ac	5.63	4.93	3.94	3.54	2.79	3.43
lbs	468.28	6,655.62	4,794.96	3,740.61	3,216.07	11,751.54
PHOSPHORUS						
Storm flow lbs/ac	2.11	1.08	0.59	1.09	0.43	0.69
lbs	175.13	1,452.19	712.44	1,148.74	498.19	2,368.37
Return flow lbs/ac	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
lbs	0.33	1.86	1.60	1.59	1.58	6.62
Stream flow lbs/ac	2.11	1.08	0.59	1.09	0.43	0.69
lbs	175.46	1,454.04	723.04	1,150.33	499.77	2,373.14
1-day Peak Rate cfs						
5-yr	179	932	790	683	714	--
10-yr	213	1,120	950	841	871	--
25-yr	267	1,417	1,205	1,079	1,116	--
50-yr	303	1,617	1,377	1,241	1,285	--
100-yr	338	1,811	1,544	1,399	1,446	--

APPENDIX C—MAPS

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Map 1. Topography of Four Seasons Area, Okeechobee Co., FL

TOPOGRAPHY OF FOUR SEASONS AREA
MAP 1 OKEECHOBEE CO, FLORIDA

UPDATED APRIL 2007

Legend

- ROADS
- SUB-BASINS
- 15 - 25 FEET
- 26 - 30 FEET
- 31 - 35 FEET
- 36 - 40 FEET
- 41 - 45 FEET
- 46 - 50 FEET

SECTIONS
7 8
18 17

State Hwy 70

State Hwy 710

OA
OB
OC
OD
OE
OF
A
B
C
D
E
F
G
H
I
J
K
CC
JJ

NE 80TH AVE

SE 8TH ST

USGS FIVE FOOT CONTOURS SHOWN AT MSL

ASMUSSEN ENGINEERING, LLC

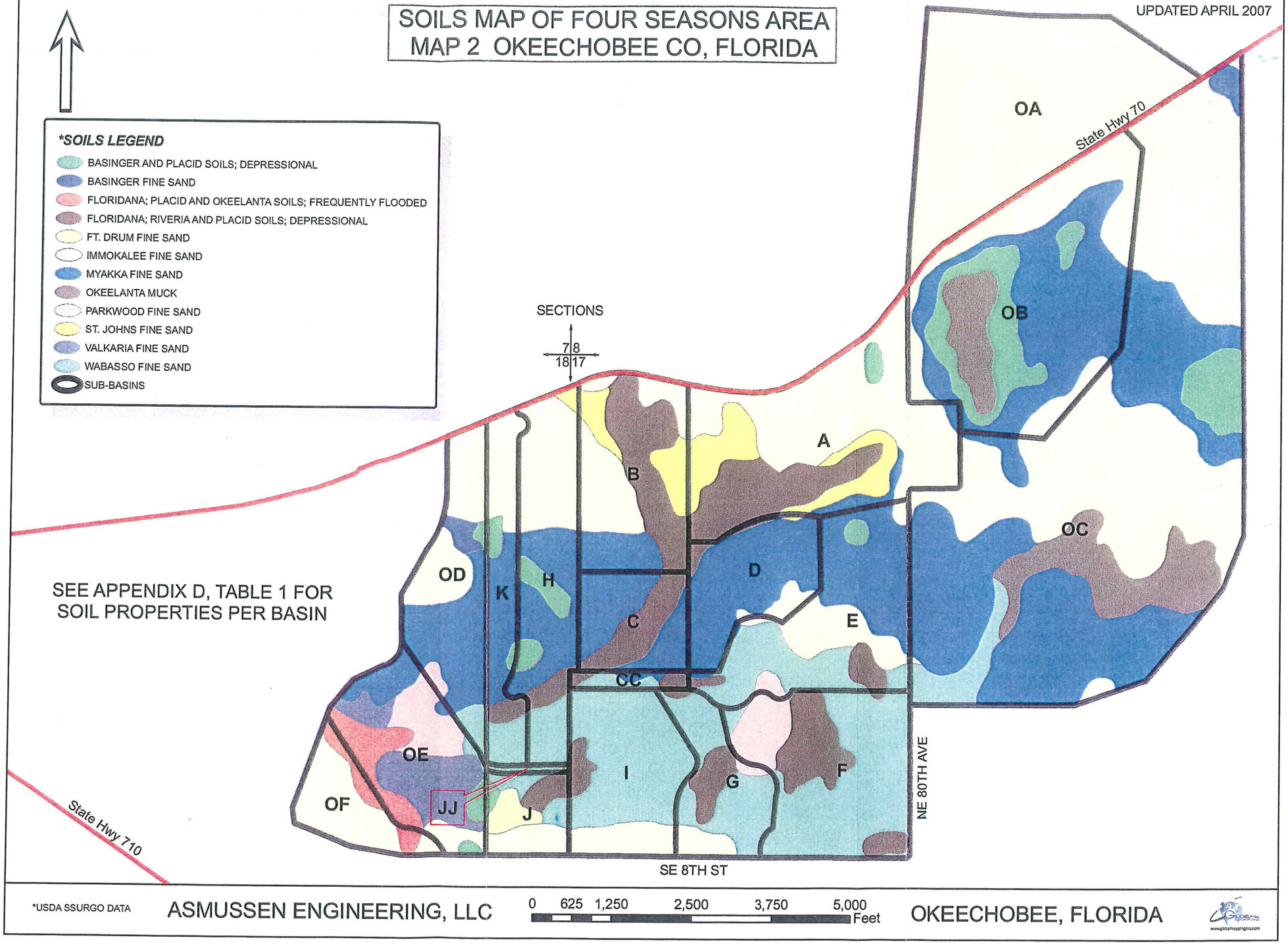
0 625 1,250 2,500 3,750 5,000 Feet

OKEECHOBEE, FLORIDA

75

SOILS MAP OF FOUR SEASONS AREA
MAP 2 OKEECHOBEE CO, FLORIDA

UPDATED APRIL 2007



*USDA SSURGO DATA

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0 625 1,250 2,500 3,750 5,000 Feet

OKEECHOBEE, FLORIDA

LAND USE MAP OF FOUR SEASONS AREA
MAP 3 OKEECHOBEE CO, FLORIDA

UPDATED APRIL 2007

SEE APPENDIX D, TABLE 2 FOR
LAND-USE PROPERTIES PER BASIN

***LAND USE LEGEND**

- ROADS
- SUB-BASINS

LAND USE

- COUNTY
- IMP PASTURE
- MH/RV PRK
- MISC AG MH
- MOBILE HOME
- MULTI-FAMILY
- NON AG ACREAGE
- OFFICE BUILDING
- PK/LT RVMH
- RIGHTS OF WAY
- RSF W/ RV
- SINGLE FAMILY
- UTILITIES
- VACANT
- VACANT COM
- WAREHOSE/D

SECTIONS
7 8
18 17

OA
OB
OC
OD
OE
OF
A
B
C
D
E
F
G
H
I
J
K
CC
JJ

State Hwy 70
State Hwy 710
NE 80TH AVE
SE 8TH ST

*DERIVED FROM FLORIDA DEPT. OF REVENUE USE CODES

ASMUSSEN ENGINEERING, LLC

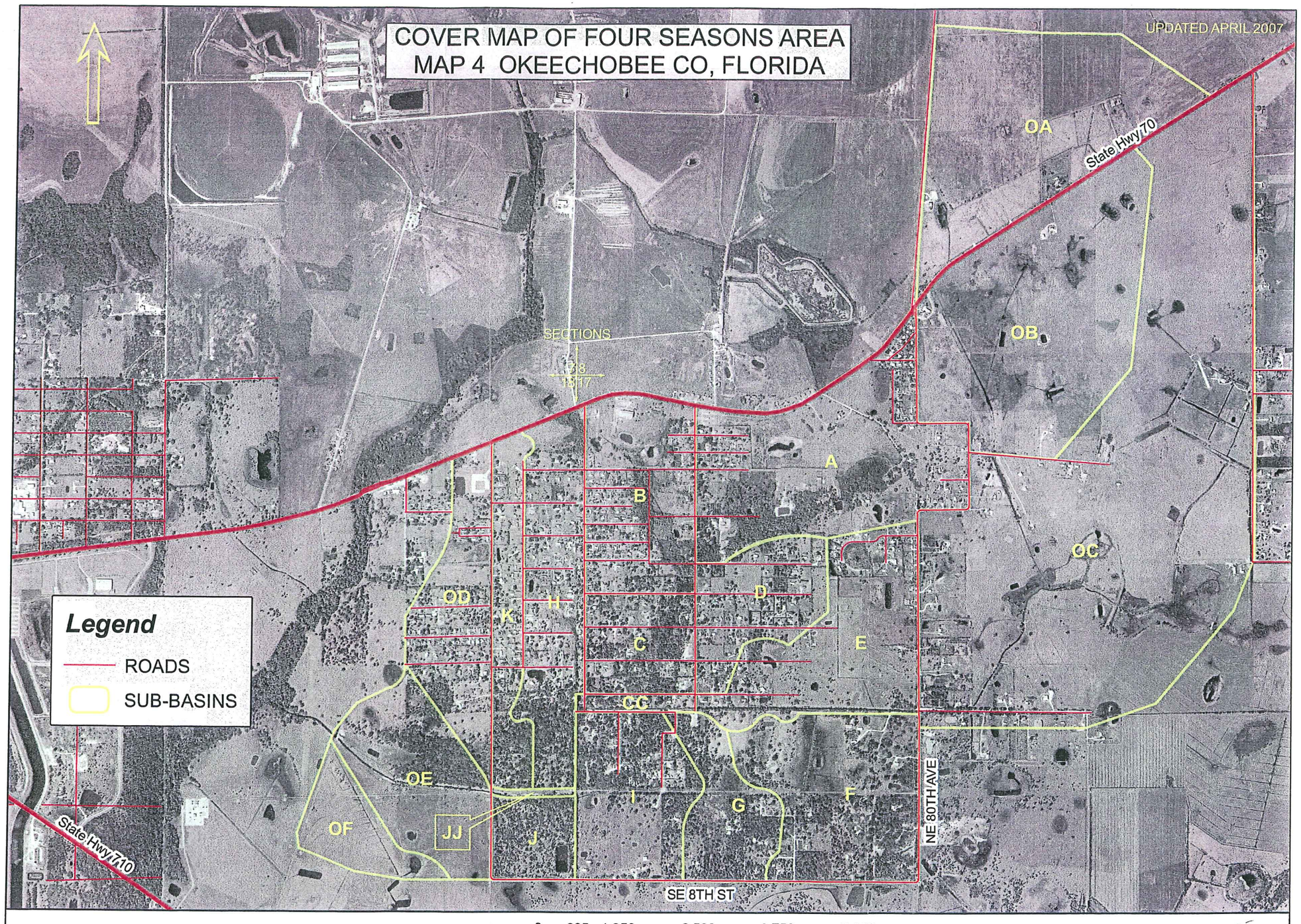
0 625 1,250 2,500 3,750 5,000 Feet

OKEECHOBEE, FLORIDA

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COVER MAP OF FOUR SEASONS AREA
MAP 4 OKEECHOBEE CO, FLORIDA

UPDATED APRIL 2007



2006 1 FOOT PIXEL ORTHO-RECTIFIED AERIAL IMAGERY

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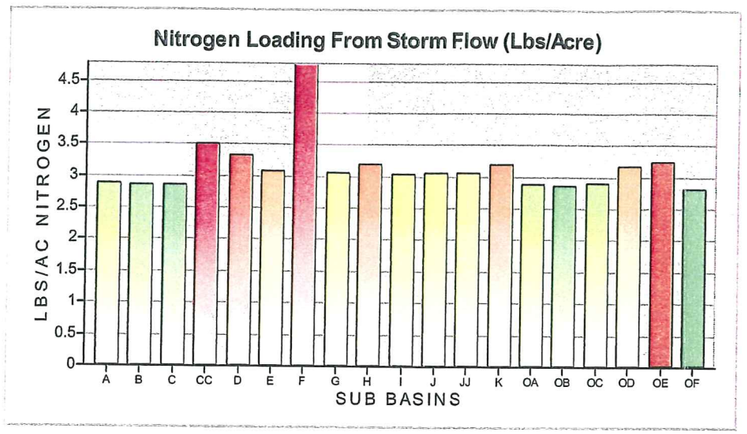
0 625 1,250 2,500 3,750 5,000 Feet

OKEECHOBEE, FLORIDA

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NITROGEN LOADING LBS/ACRE FROM STORM FLOW
MAP 5 FOUR SEASONS AREA OKEECHOBEE CO, FLORIDA

UPDATED APRIL 2007



SECTIONS
7 8
18 17

2.88 Lbs / Acre OA

State Hwy 70

2.86 Lbs / Acre OB

2.88 Lbs / Acre A

2.87 Lbs / Acre B

2.90 Lbs / Acre OC

3.19 Lbs / Acre

OD

K

H

D 3.32 Lbs / Acre

C 2.86 Lbs / Acre

3.09 Lbs / Acre E

3.17 Lbs / Acre

3.19 Lbs / Acre

CC 3.51 Lbs / Acre

3.24 Lbs / Acre OE

2.82 Lbs / Acre OF

JJ

3.04 Lbs / Acre I

3.06 Lbs / Acre

3.05 Lbs / Acre J

G 3.07 Lbs / Acre

4.78 Lbs / Acre F

NE 80TH AVE

State Hwy 710

SE 8TH ST

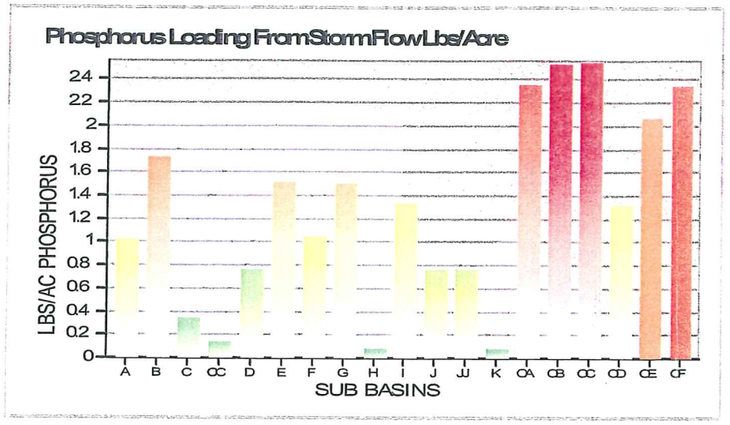
ASMUSSEN ENGINEERING, LLC

0 625 1,250 2,500 3,750 5,000 Feet

OKEECHOBEE, FLORIDA

PHOSPHORUS LOADING LBS/ACRE FROM STORM FLOW
MAP 6 FOUR SEASONS AREA OKEECHOBEE CO, FLORIDA

UPDATED APRIL 2007



SECTIONS
7 8
18 17

2.36 Lbs / Acre OA

State Hwy 70

2.54 Lbs / Acre OB

2.56 Lbs / Acre OC

1.03 Lbs / Acre A

1.73 Lbs / Acre B

0.08 Lbs / Acre K

H

D 0.76 Lbs / Acre

E 1.52 Lbs / Acre

C 0.35 Lbs / Acre

CC 0.14 Lbs / Acre

0.08 Lbs / Acre

OD 1.33 Lbs / Acre

2.07 Lbs / Acre OE

2.35 Lbs / Acre OF

JJ

0.77 Lbs / Acre

J

0.77 Lbs / Acre I

1.34 Lbs / Acre

G 1.51 Lbs / Acre

1.05 Lbs / Acre F

NE 80TH AVE

State Hwy 710

SE 8TH ST

ASMUSSEN ENGINEERING, LLC

0 625 1,250 2,500 3,750 5,000 Feet

OKEECHOBEE, FLORIDA

TOPOGRAPHY MAP OF SW OKEECHOBEE AREA
MAP 7 OKEECHOBEE CO, FLORIDA

UPDATED MAY 2007

*LEGEND

- SUB BASINS
- 15 FEET
- 16 - 20 FEET
- 21 - 25 FEET
- 26 - 30 FEET
- 31 - 35 FEET

*USGS FIVE FOOT CONTOURS SHOWN AT MSL

ASMUSSEN ENGINEERING, LLC

0 0.25 0.5 1 1.5 Miles

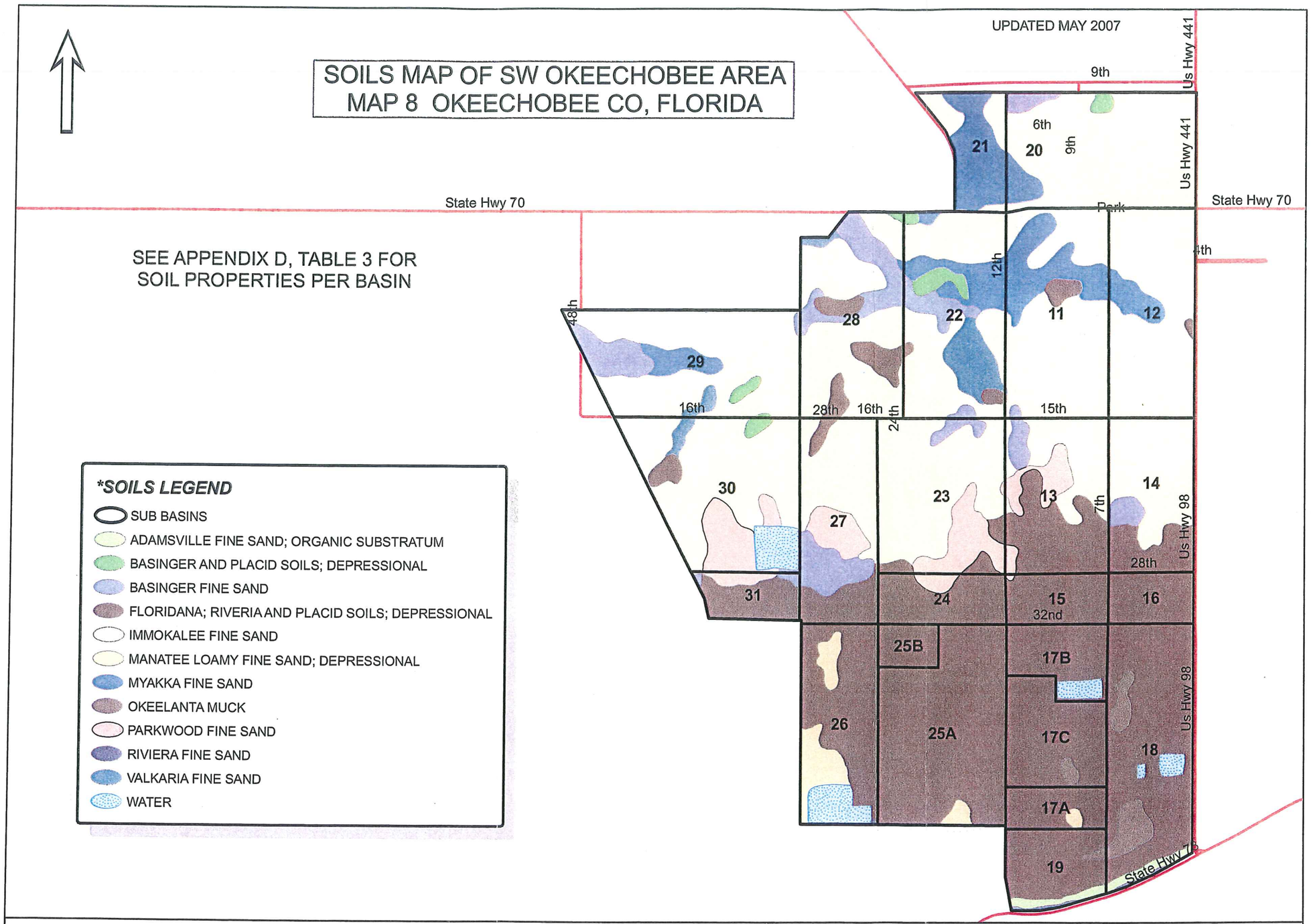
OKEECHOBEE, FLORIDA

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SOILS MAP OF SW OKEECHOBEE AREA
MAP 8 OKEECHOBEE CO, FLORIDA

UPDATED MAY 2007

SEE APPENDIX D, TABLE 3 FOR
SOIL PROPERTIES PER BASIN



*SOILS LEGEND

- SUB BASINS
- ADAMSVILLE FINE SAND; ORGANIC SUBSTRATUM
- BASINGER AND PLACID SOILS; DEPRESSIONAL
- BASINGER FINE SAND
- FLORIDANA; RIVERIA AND PLACID SOILS; DEPRESSIONAL
- IMMOKALEE FINE SAND
- MANATEE LOAMY FINE SAND; DEPRESSIONAL
- MYAKKA FINE SAND
- OKEELANTA MUCK
- PARKWOOD FINE SAND
- RIVIERA FINE SAND
- VALKARIA FINE SAND
- WATER

*USDA SSURGO DATA

ASMUSSEN ENGINEERING, LLC

0 0.25 0.5 1 1.5 Miles

OKEECHOBEE, FLORIDA

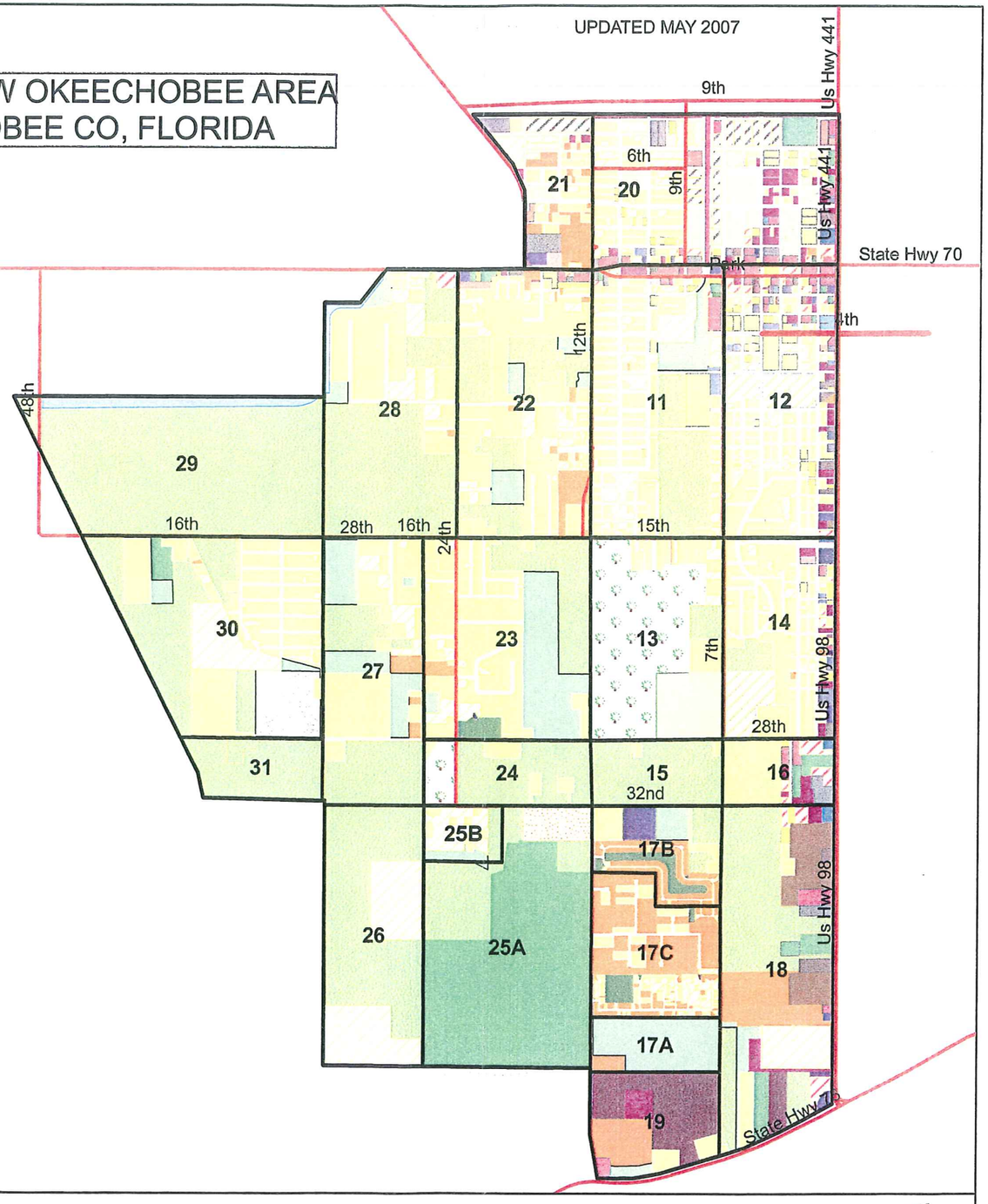
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LAND USE MAP OF SW OKEECHOBEE AREA
MAP 9 OKEECHOBEE CO, FLORIDA

UPDATED MAY 2007

SEE APPENDIX D, TABLE 4 FOR
LAND-USE PROPERTIES PER BASIN



*LAND USE LEGEND

SUB BASINS	MISC AG	RESTAURANT
BEAUTY PAR	MISC AG SF	RIGHTS-OF-
CENTRALLY	MOBILE HOM	SERVICE ST
CHURCHES	MULTI-FAM	SINGLE FAM
CLUBS/LODG	MUNICIPAL	STATE
COMMUNITY	MXD RES/OF	STORE/FLEA
CONDOMINIA	NAT PASTUR	STORES/1 S
CONV STORE	NIGHTCLUB/	SUPERMARKE
COUNTY	NON AG ACR	THEATER/AU
CROP III	NON-PROFIT	UTILITIES
FINANCIAL	O U A	VAC INSTIT
GROVE W/ S	OFFCE BLD	VACANT
GROVES,ORC	OFFICE BLD	VACANT COM
HOTELS/MOT	OPEN STORA	VACANT IND
IMP PASTUR	PK/LT RVMH	VEH SALE/R
INSURANCE	PROFESS OF	WAREHOSE/D
MH PARK	PRVT SCHL/	WATER MG D
MH/RV PRK	PUBLIC SCH	
MINING	REPAIR SER	

*DERIVED FROM
FLORIDA DEPT. OF
REVENUE USE CODES

ASMUSSEN ENGINEERING, LLC

0 0.25 0.5 1 1.5 Miles

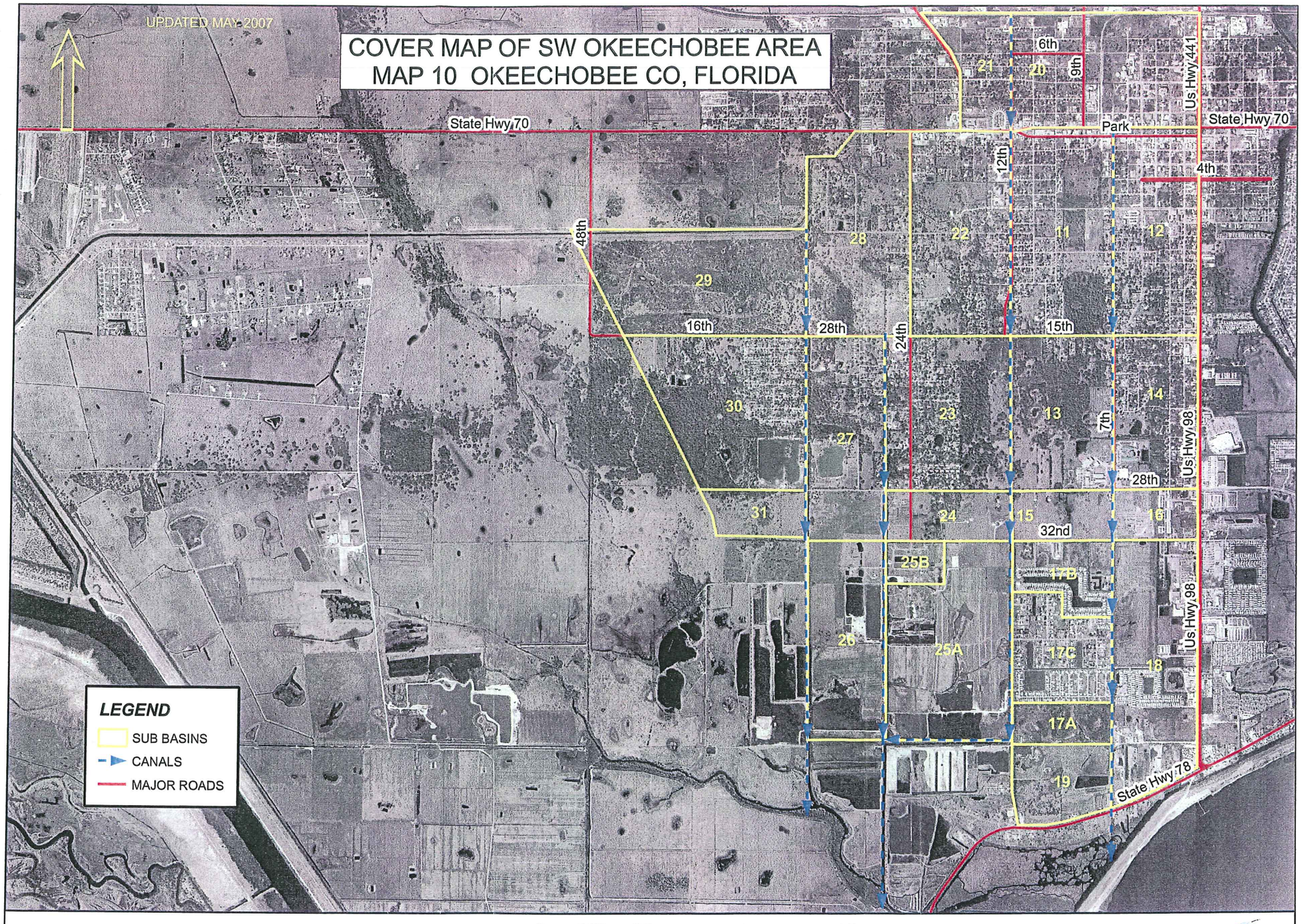
OKEECHOBEE, FLORIDA

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UPDATED MAY 2007

COVER MAP OF SW OKEECHOBEE AREA
MAP 10 OKEECHOBEE CO, FLORIDA



2006 1 FOOT PIXEL ORTHO-RECTIFIED IMAGERY

ASMUSSEN ENGINEERING, LLC

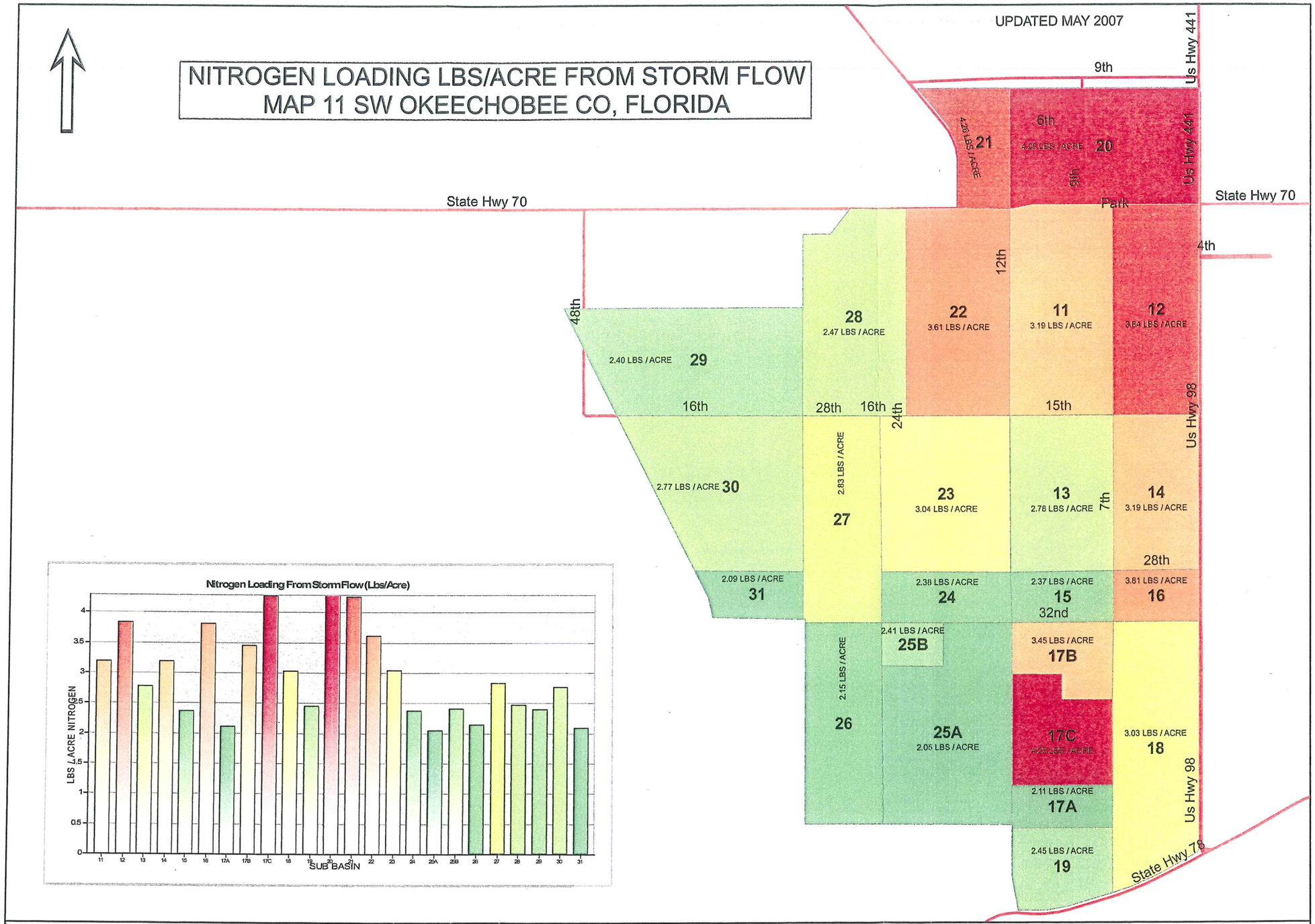
0 0.25 0.5 1 1.5 Miles

OKEECHOBEE, FLORIDA

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NITROGEN LOADING LBS/ACRE FROM STORM FLOW
MAP 11 SW OKEECHOBEE CO, FLORIDA

UPDATED MAY 2007



ASMUSSEN ENGINEERING, LLC

0 0.25 0.5 1 1.5 Miles

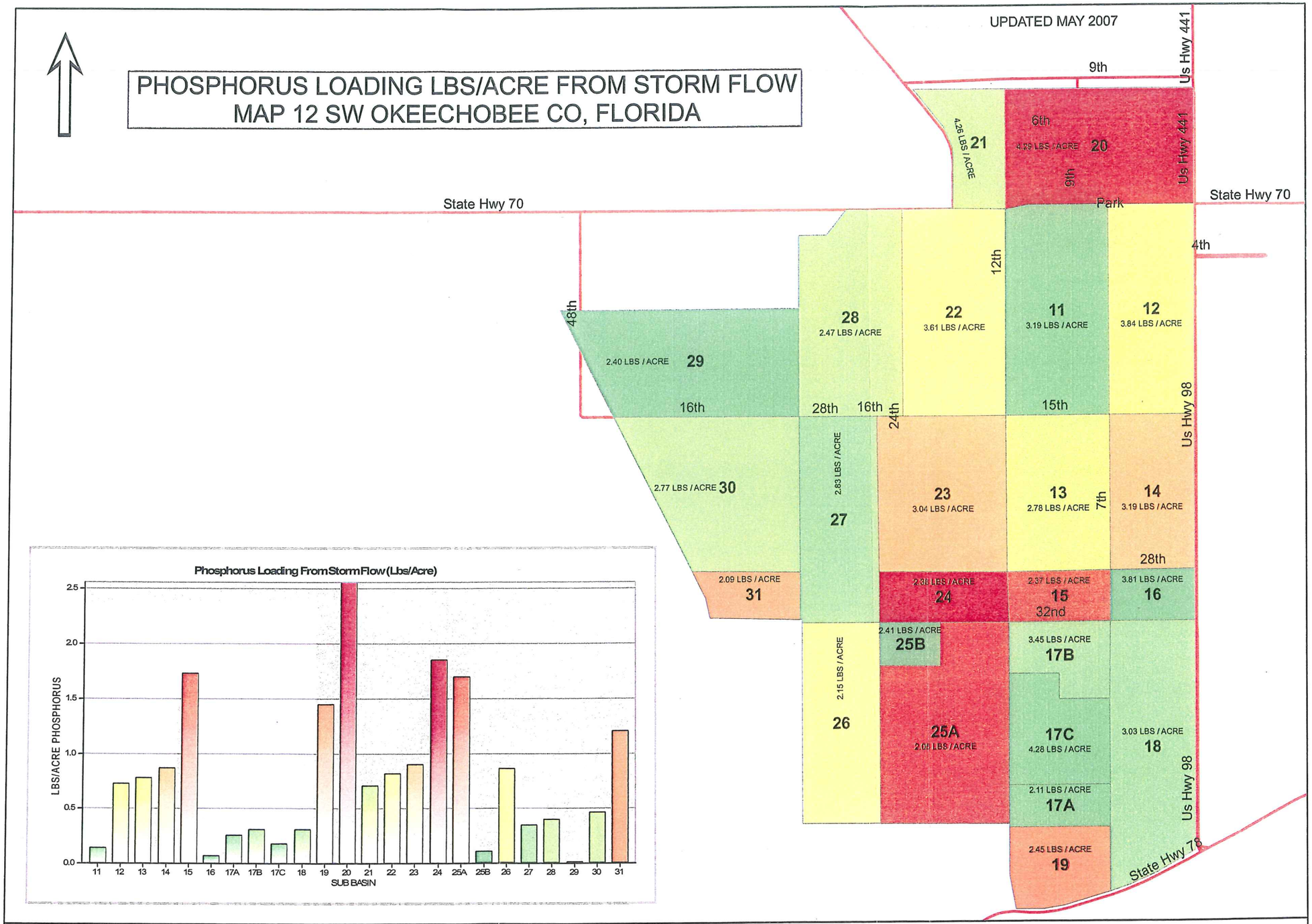
OKEECHOBEE, FLORIDA

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PHOSPHORUS LOADING LBS/ACRE FROM STORM FLOW
MAP 12 SW OKEECHOBEE CO, FLORIDA

UPDATED MAY 2007



ASMUSSEN ENGINEERING, LLC

0 0.25 0.5 1 1.5 Miles

OKEECHOBEE, FLORIDA

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TABLE 1 SOIL SERIES BY SUB BASIN
FOUR SEASONS AREA, OKEECHOBEE, CO., FL

SUB-BASIN	SOIL SERIES	ACRES	PCT
A	**TOTAL ACRES: 215.00**		
	BASINGER AND PLACID SOILS; DEPRESSIONAL	3.61	**1.68%**
	FLORIDANA; RIVERIA AND PLACID SOILS; DEPRESSIONAL	47.21	**21.96%**
	IMMOKALEE FINE SAND	118.30	**55.02%**
	MYAKKA FINE SAND	9.10	**4.23%**
	ST. JOHNS FINE SAND	36.84	**17.14%**
B	**TOTAL ACRES: 120.00**		
	FLORIDANA; RIVERIA AND PLACID SOILS; DEPRESSIONAL	45.22	**37.68%**
	IMMOKALEE FINE SAND	39.26	**32.72%**
	MYAKKA FINE SAND	17.78	**14.82%**
	ST. JOHNS FINE SAND	18.28	**15.23%**
C	**TOTAL ACRES: 62.00**		
	FLORIDANA; RIVERIA AND PLACID SOILS; DEPRESSIONAL	22.16	**35.74%**
	MYAKKA FINE SAND	39.42	**63.58%**
CC	**TOTAL ACRES: 12.00**		
	FLORIDANA; RIVERIA AND PLACID SOILS; DEPRESSIONAL	4.14	**34.53%**
	MYAKKA FINE SAND	2.71	**22.62%**
	WABASSO FINE SAND	5.18	**43.18%**
D	**TOTAL ACRES: 79.00**		
	FLORIDANA; RIVERIA AND PLACID SOILS; DEPRESSIONAL	4.06	**5.14%**
	IMMOKALEE FINE SAND	6.49	**8.21%**
	MYAKKA FINE SAND	66.98	**84.79%**
	ST. JOHNS FINE SAND	0.66	**0.83%**
	WABASSO FINE SAND	0.39	**0.50%**
E	**TOTAL ACRES: 141.00**		
	BASINGER AND PLACID SOILS; DEPRESSIONAL	2.94	**2.08%**
	FLORIDANA; RIVERIA AND PLACID SOILS; DEPRESSIONAL	9.24	**0.07**
	IMMOKALEE FINE SAND	30.15	**21.38%**
	MYAKKA FINE SAND	53.68	**38.07%**
	PARKWOOD FINE SAND	3.31	**2.35%**
	WABASSO FINE SAND	41.80	**29.65%**
F	**TOTAL ACRES: 146.00**		
	FLORIDANA; RIVERIA AND PLACID SOILS; DEPRESSIONAL	34.47	**23.61%**
	PARKWOOD FINE SAND	18.92	**12.96%**
	WABASSO FINE SAND	92.91	**63.64%**

SUB-BASIN	SOIL SERIES	ACRES	PCT
I	**TOTAL ACRES: 103.00**		
	FLORIDANA; RIVERIA AND PLACID SOILS; DEPRESSIONAL	6.62	**6.42%**
	IMMOKALEE FINE SAND	18.81	**18.26%**
	WABASSO FINE SAND	77.80	**75.53%**
J	**TOTAL ACRES: 39.00**		
	BASINGER AND PLACID SOILS; DEPRESSIONAL	2.06	**5.29%**
	FLORIDANA; RIVERIA AND PLACID SOILS; DEPRESSIONAL	7.00	**17.95%**
	FT. DRUM FINE SAND	8.46	**21.70%**
	IMMOKALEE FINE SAND	12.90	**33.09%**
	WABASSO FINE SAND	8.48	**21.76%**
JJ	**TOTAL ACRES: 3.60**		
	FLORIDANA; RIVERIA AND PLACID SOILS; DEPRESSIONAL	0.29	**8.15%**
	WABASSO FINE SAND	3.33	**92.46%**
K	**TOTAL ACRES: 66.00**		
	BASINGER AND PLACID SOILS; DEPRESSIONAL	4.78	**7.24%**
	FLORIDANA; RIVERIA AND PLACID SOILS; DEPRESSIONAL	4.46	**6.76%**
	IMMOKALEE FINE SAND	20.87	**31.63%**
	MYAKKA FINE SAND	25.03	**37.92%**
	WABASSO FINE SAND	10.62	**16.09%**
OA	**TOTAL ACRES: 235.00**		
	IMMOKALEE FINE SAND	234.75	**99.89%**
OB	**TOTAL ACRES: 270.00**		
	BASINGER AND PLACID SOILS; DEPRESSIONAL	46.58	**17.25%**
	IMMOKALEE FINE SAND	73.18	**27.10%**
	MYAKKA FINE SAND	120.14	**44.50%**
	OKEELANTA MUCK	30.16	**11.17%**
OC	**TOTAL ACRES: 686.00**		
	BASINGER AND PLACID SOILS; DEPRESSIONAL	24.15	**3.52%**
	IMMOKALEE FINE SAND	316.99	**46.21%**
	MYAKKA FINE SAND	256.76	**37.43%**
	OKEELANTA MUCK	65.77	**9.59%**
	WABASSO FINE SAND	22.05	**3.21%**
OD	**TOTAL ACRES: 99.00**		
	BASINGER AND PLACID SOILS; DEPRESSIONAL	1.44	**1.45%**
	BASINGER FINE SAND	5.18	**5.23%**

TABLE 2 LAND USE BY SUB BASIN
FOUR SEASONS AREA, OKEECHOBEE CO., FL

SUB BASIN	LAND USE	ACRES	PCT
A	**TOTAL ACRES: 215**		
	IMP PASTUR	25.20	**11.72%**
	MOBILE HOM	61.67	**28.68%**
	NON AG ACR	61.44	**28.58%**
	RIGHTS-OF-WAY	14.11	**6.56%**
	SINGLE FAM	42.91	**19.96%**
	VACANT	3.60	**1.67%**
	VACANT COM	1.04	**0.48%**
	WAREHOSE/D	2.04	**0.95%**
B	**TOTAL ACRES: 120**		
	MOBILE HOM	37.87	**31.55%**
	NON AG ACR	29.85	**24.87%**
	RIGHTS-OF-WAY	21.55	**17.96%**
	SINGLE FAM	16.86	**14.05%**
	VACANT	12.03	**10.03%**
	VACANT COM	0.99	**0.83%**
C	**TOTAL ACRES: 62**		
	MOBILE HOM	28.63	**46.18%**
	RIGHTS-OF-WAY	11.69	**18.85%**
	SINGLE FAM	10.94	**17.64%**
	VACANT	10.31	**16.63%**
CC	**TOTAL ACRES: 12**		
	MOBILE HOM	4.96	**41.36%**
	RIGHTS-OF-WAY	3.35	**27.92%**
	SINGLE FAM	1.92	**15.99%**
	VACANT	1.84	**15.36%**
D	**TOTAL ACRES: 79**		
	IMP PASTUR	5.74	**7.26%**
	MH/RV PRK	2.50	**3.17%**
	MOBILE HOM	40.20	**50.89%**
	RIGHTS-OF-WAY	12.73	**16.12%**
	SINGLE FAM	14.33	**18.14%**
	VACANT	3.16	**4.00%**
E	**TOTAL ACRES: 141**		
	IMP PASTUR	70.62	**50.08%**
	MOBILE HOM	18.48	**13.11%**
	NON AG ACR	23.94	**16.98%**
	RIGHTS-OF-WAY	7.56	**5.36%**
	SINGLE FAM	5.20	**3.69%**
	VACANT	8.48	**6.02%**
F	**TOTAL ACRES: 146**		
	IMP PASTUR	84.85	**58.12%**
	MOBILE HOM	14.47	**9.91%**
	NON AG ACR	12.71	**8.71%**
	RIGHTS-OF-WAY	0.17	**0.11%**
	RSF W/ RV	5.38	**3.69%**
	SINGLE FAM	23.64	**16.19%**
	VACANT	7.97	**5.46%**
G	**TOTAL ACRES: 67**		
	IMP PASTUR	13.44	**20.05%**
	MOBILE HOM	9.10	**13.59%**
	NON AG ACR	10.92	**16.30%**
	RIGHTS-OF-WAY	0.62	**0.92%**
	SINGLE FAM	28.97	**43.23%**
	VACANT	2.33	**3.48%**
H	**TOTAL ACRES: 120**		
	IMP PASTUR	14.05	**11.71%**
	MOBILE HOM	52.88	**44.07%**
	NON AG ACR	10.10	**8.42%**
	RIGHTS-OF-WAY	15.67	**13.06%**
	RSF W/ RV	5.53	**4.60%**
	SINGLE FAM	14.39	**11.99%**
	UTILITIES	0.39	**0.33%**
	VACANT	5.78	**4.82%**
I	**TOTAL ACRES: 103**		
	IMP PASTUR	38.61	**37.48%**
	MOBILE HOM	26.76	**25.98%**
	NON AG ACR	4.80	**4.66%**
	PK/LT RVMH	8.77	**8.52%**
	RIGHTS-OF-WAY	6.34	**6.16%**
	SINGLE FAM	12.58	**12.21%**
	VACANT	4.06	**3.95%**
J	**TOTAL ACRES: 39**		
	IMP PASTUR	36.57	**93.78%**
	MOBILE HOM	0.65	**1.66%**
	RIGHTS-OF-WAY	0.78	**2.00%**
JJ	**TOTAL ACRES: 3.6**		
	IMP PASTUR	2.14	**59.45%**
	MOBILE HOM	1.41	**39.09%**
	RIGHTS-OF-WAY	0.07	**2.00%**
K	**TOTAL ACRES: 66**		
	IMP PASTUR	9.72	**14.72%**
	MOBILE HOM	28.61	**43.34%**
	NON AG ACR	4.97	**7.53%**
	RSF W/ RV	2.81	**4.26%**
	RIGHTS-OF-WAY	7.85	**11.89%**
	SINGLE FAM	9.12	**13.82%**
	VACANT	2.34	**3.55%**
OA	**TOTAL ACRES: 235**		
	IMP PASTUR	95.92	**40.82%**
	RIGHTS-OF-WAY	3.47	**1.47%**
	SINGLE FAM	9.52	**4.05%**
	VACANT	125.80	**53.53%**
OB	**TOTAL ACRES: 270**		
	IMP PASTUR	194.38	**71.99%**
	MOBILE HOM	10.41	**3.86%**
	NON AG ACR	53.42	**19.79%**
	OFFICE BLD	4.90	**1.81%**
	RIGHTS-OF-WAY	6.95	**2.57%**
OC	**TOTAL ACRES: 686**		
	IMP PASTUR	544.37	**79.35%**
	MISC AG MH	1.52	**0.22%**
	MOBILE HOM	77.15	**11.25%**
	MULTI-FAM	0.20	**0.03%**
	NON AG ACR	22.72	**3.31%**
	RIGHTS-OF-WAY	12.04	**1.75%**
	SINGLE FAM	19.10	**2.78%**
OD	**TOTAL ACRES: 99**		
	COUNTY	0.16	**0.16%**
	IMP PASTUR	22.58	**22.81%**
	MOBILE HOM	39.37	**39.77%**
	RIGHTS-OF-WAY	11.14	**11.25%**
	SINGLE FAM	7.22	**7.30%**
	VACANT	18.44	**18.63%**
OE	**TOTAL ACRES: 109**		
	IMP PASTUR	103.33	**94.80%**
	MOBILE HOM	1.10	**1.01%**
	RIGHTS-OF-WAY	1.11	**1.01%**
	VACANT	3.71	**3.40%**
OF	**TOTAL ACRES: 49**		
	IMP PASTUR	48.71	**99.41%**

TABLE 3 SOIL SERIES BY BASIN
OKEECHOBEE SOUTHWEST CORRIDOR, OKEECHOBEE CO., FL

SUB BASIN	SOILSERIES	ACRES	PCT
11	TOTAL ACRES: 326		
	BASINGER FINE SAND	2.1	0.66%
	FLORIDANA; RIVERIA AND PLACID SOILS; DEPRESSIONAL	11.0	3.37%
	IMMOKALEE FINE SAND	237.9	72.98%
	MYAKKA FINE SAND	75.4	23.13%
	VALKARIA FINE SAND	0.3	0.09%
12	TOTAL ACRES: 274		
	FLORIDANA; RIVERIA AND PLACID SOILS; DEPRESSIONAL	2.3	0.86%
	IMMOKALEE FINE SAND	245.1	89.44%
	MYAKKA FINE SAND	25.0	9.12%
13	TOTAL ACRES: 243		
	BASINGER FINE SAND	13.8	5.69%
	FLORIDANA; RIVERIA AND PLACID SOILS; DEPRESSIONAL	105.3	43.32%
	IMMOKALEE FINE SAND	89.2	36.69%
	PARKWOOD FINE SAND	35.2	14.47%
14	TOTAL ACRES: 203		
	BASINGER FINE SAND	13.4	6.61%
	FLORIDANA; RIVERIA AND PLACID SOILS; DEPRESSIONAL	53.0	26.10%
	IMMOKALEE FINE SAND	132.2	65.12%
15	TOTAL ACRES: 78		
	FLORIDANA; RIVERIA AND PLACID SOILS; DEPRESSIONAL	77.5	99.42%
	PARKWOOD FINE SAND	0.7	0.93%
16	TOTAL ACRES: 66		
	FLORIDANA; RIVERIA AND PLACID SOILS; DEPRESSIONAL	65.9	99.80%
17A	TOTAL ACRES: 65		
	FLORIDANA; RIVERIA AND PLACID SOILS; DEPRESSIONAL	59.7	91.77%
	MANATEE LOAMY FINE SAND; DEPRESSIONAL	4.1	6.35%
17B	TOTAL ACRES: 53		
	FLORIDANA; RIVERIA AND PLACID SOILS; DEPRESSIONAL	40.5	76.42%
	WATER	12.5	23.55%
17C	TOTAL ACRES: 142		
	FLORIDANA; RIVERIA AND PLACID SOILS; DEPRESSIONAL	137.2	96.62%
	OKEELANTA MUCK	4.8	3.38%
18	TOTAL ACRES: 332		
	ADAMSVILLE FINE SAND; ORGANIC SUBSTRATUM	12.3	3.71%
	BASINGER FINE SAND	2.3	0.71%
	FLORIDANA; RIVERIA AND PLACID SOILS; DEPRESSIONAL	265.9	80.08%
	OKEELANTA MUCK	37.1	11.18%
	WATER	9.9	2.99%
19	TOTAL ACRES: 85		
	ADAMSVILLE FINE SAND; ORGANIC SUBSTRATUM	11.5	13.52%
	BASINGER FINE SAND	3.2	3.75%
	FLORIDANA; RIVERIA AND PLACID SOILS; DEPRESSIONAL	97.3	114.50%
	MANATEE LOAMY FINE SAND; DEPRESSIONAL	0.1	0.09%
	OKEELANTA MUCK	2.8	3.24%
20	TOTAL ACRES: 324		
	BASINGER AND PLACID SOILS; DEPRESSIONAL	6.0	1.84%
	BASINGER FINE SAND	11.4	3.53%
	IMMOKALEE FINE SAND	296.2	91.42%
	MYAKKA FINE SAND	18.6	5.74%
21	TOTAL ACRES: 105		
	BASINGER FINE SAND	0.0	0.02%
	IMMOKALEE FINE SAND	32.5	30.95%
	MYAKKA FINE SAND	76.1	72.52%

SUB BASIN	SOILSERIES	ACRES	PCT
22	TOTAL ACRES: 320		
	BASINGER AND PLACID SOILS; DEPRESSIONAL	17.3	5.42%
	BASINGER FINE SAND	27.8	8.67%
	FLORIDANA; RIVERIA AND PLACID SOILS; DEPRESSIONAL	6.7	2.09%
	IMMOKALEE FINE SAND	174.8	54.62%
	MYAKKA FINE SAND	50.2	15.68%
	VALKARIA FINE SAND	43.6	13.62%
23	TOTAL ACRES: 301		
	BASINGER FINE SAND	10.7	3.55%
	FLORIDANA; RIVERIA AND PLACID SOILS; DEPRESSIONAL	18.6	6.17%
	IMMOKALEE FINE SAND	216.4	71.89%
	PARKWOOD FINE SAND	54.1	17.97%
24	TOTAL ACRES: 97		
	FLORIDANA; RIVERIA AND PLACID SOILS; DEPRESSIONAL	87.8	90.49%
	PARKWOOD FINE SAND	10.0	10.26%
25A	TOTAL ACRES: 367		
	FLORIDANA; RIVERIA AND PLACID SOILS; DEPRESSIONAL	343.0	93.47%
	MANATEE LOAMY FINE SAND; DEPRESSIONAL	7.8	2.14%
25B	TOTAL ACRES: 28		
	FLORIDANA; RIVERIA AND PLACID SOILS; DEPRESSIONAL	28.0	100.00%
26	TOTAL ACRES: 233		
	FLORIDANA; RIVERIA AND PLACID SOILS; DEPRESSIONAL	153.1	65.69%
	MANATEE LOAMY FINE SAND; DEPRESSIONAL	50.3	21.58%
	RIVIERA FINE SAND	0.4	0.17%
	WATER	31.5	13.51%
27	TOTAL ACRES: 246		
	BASINGER FINE SAND	42.3	17.18%
	FLORIDANA; RIVERIA AND PLACID SOILS; DEPRESSIONAL	53.4	21.71%
	IMMOKALEE FINE SAND	116.7	47.43%
	PARKWOOD FINE SAND	32.5	13.21%
	WATER	0.1	0.03%
28	TOTAL ACRES: 303		
	BASINGER AND PLACID SOILS; DEPRESSIONAL	1.6	0.52%
	BASINGER FINE SAND	56.5	18.64%
	FLORIDANA; RIVERIA AND PLACID SOILS; DEPRESSIONAL	43.1	14.22%
	IMMOKALEE FINE SAND	201.3	66.42%
	MYAKKA FINE SAND	0.9	0.28%
	VALKARIA FINE SAND	5.0	1.65%
29	TOTAL ACRES: 331		
	BASINGER AND PLACID SOILS; DEPRESSIONAL	7.1	2.14%
	BASINGER FINE SAND	40.4	12.20%
	IMMOKALEE FINE SAND	264.4	79.88%
	MYAKKA FINE SAND	24.8	7.49%
	VALKARIA FINE SAND	7.5	2.28%
30	TOTAL ACRES: 353		
	BASINGER AND PLACID SOILS; DEPRESSIONAL	5.8	1.63%
	BASINGER FINE SAND	1.2	0.35%
	FLORIDANA; RIVERIA AND PLACID SOILS; DEPRESSIONAL	11.2	3.18%
	IMMOKALEE FINE SAND	234.9	66.53%
	PARKWOOD FINE SAND	54.2	15.37%
	VALKARIA FINE SAND	7.7	2.19%
	WATER	28.9	8.19%
31	TOTAL ACRES: 72		
	BASINGER FINE SAND	3.9	5.45%
	FLORIDANA; RIVERIA AND PLACID SOILS; DEPRESSIONAL	53.7	74.56%
	IMMOKALEE FINE SAND	0.4	0.57%
	PARKWOOD FINE SAND	11.3	15.63%

TABLE 4 LAND USE BY BASIN
OKEECHOBEE SOUTHWEST CORRIDOR, OKEECHOBEE CO., FL

SUB BASIN	LAND USE	ACRES	PCT
11	TOTAL ACRES:	326	
	CHURCHES	13.7	4.19%
	CONV STORE	0.7	0.22%
	COUNTY	1.0	0.30%
	MOBILE HOM	0.3	0.10%
	MULTI-FAM	1.1	0.34%
	MUNICIPAL	0.1	0.02%
	MXD RES/OF	1.3	0.40%
	NAT PASTUR	62.0	19.02%
	NON AG ACR	19.1	5.85%
	O U A	0.0	0.00%
	OFFICE BLD	2.2	0.66%
	PRVT SCHL/	2.4	0.72%
	RIGHTS-OF-	0.3	0.09%
	SERVICE ST	0.3	0.09%
	SINGLE FAM	96.1	29.47%
	STATE	0.6	0.18%
	STORES/1 S	6.9	2.10%
	VACANT	39.3	12.05%
	VACANT COM	1.3	0.40%
	VEH SALE/R	0.9	0.27%
	WAREHOSE/D	1.3	0.41%
12	TOTAL ACRES:	274	
	BEAUTY PAR	0.5	0.18%
	CHURCHES	15.6	5.70%
	COMMUNITY	0.8	0.31%
	CONV STORE	1.8	0.66%
	COUNTY	0.8	0.31%
	INSURANCE	0.3	0.12%
	MULTI-FAM	6.1	2.21%
	MUNICIPAL	0.1	0.02%
	MXD RES/OF	3.8	1.40%
	O U A	0.7	0.24%
	OFFCE BLD	0.9	0.33%
	OFFICE BLD	6.9	2.52%
	OPEN STORA	0.4	0.16%
	PK/LT RVMH	0.7	0.25%
	PROFESS OF	1.0	0.37%
	PRVT SCHL/	2.3	0.83%
	PUBLIC SCH	24.6	8.99%
	REPAIR SER	1.8	0.67%
	RESTAURANT	3.8	1.37%
	SINGLE FAM	78.8	28.76%
	STORES/1 S	8.8	3.20%
	SUPERMARKE	2.0	0.73%
	VACANT	14.2	5.18%
	VACANT COM	5.5	2.02%
	VEH SALE/R	1.2	0.42%
	WAREHOSE/D	1.1	0.41%
13	TOTAL ACRES:	243	
	COUNTY	39.2	16.13%
	GROVES,ORC	149.6	61.57%
	IMP PASTUR	10.0	4.12%
	MXD RES/OF	0.1	0.06%
	PK/LT RVMH	0.8	0.35%
	SINGLE FAM	34.2	14.08%
	VACANT	6.4	2.65%

SUB BASIN	LAND USE	ACRES	PCT
14	TOTAL ACRES:	203	
	CHURCHES	10.5	5.19%
	CONV STORE	1.2	0.58%
	COUNTY	1.5	0.73%
	FINANCIAL	0.8	0.37%
	IMP PASTUR	11.9	5.86%
	MH PARK	0.3	0.53%
	MOBILE HOM	0.4	0.21%
	MULTI-FAM	0.1	0.07%
	MUNICIPAL	0.6	0.30%
	MXD RES/OF	2.2	1.09%
	NIGHTCLUB/	0.3	0.16%
	NON-PROFIT	1.0	0.51%
	OFFICE BLD	3.4	1.67%
	PROFESS OF	0.8	0.38%
	PRVT SCHL/	0.6	0.28%
	PUBLIC SCH	23.9	11.77%
	REPAIR SER	2.9	1.41%
	RESTAURANT	0.9	0.44%
	SINGLE FAM	88.3	43.51%
	STORE/FLEA	0.2	0.08%
	STORES/1 S	1.0	0.49%
	THEATER/AU	2.1	1.02%
	VACANT	6.8	3.35%
	VACANT COM	2.9	1.45%
	VEH SALE/R	0.4	0.17%
15	TOTAL ACRES:	78	
	IMP PASTUR	72.8	93.29%
	SINGLE FAM	2.2	2.83%
16	TOTAL ACRES:	66	
	CHURCHES	33.3	50.52%
	FINANCIAL	1.0	1.52%
	HOTELS/MOT	4.4	6.59%
	MXD RES/OF	0.4	0.66%
	OFFICE BLD	1.4	2.17%
	PROFESS OF	3.5	5.28%
	STORES/1 S	3.1	4.74%
	VACANT COM	7.2	10.97%
	VEH SALE/R	4.0	6.10%
	WAREHOSE/D	2.3	3.42%
17A	TOTAL ACRES:	65	
	MOBILE HOM	8.9	13.68%
	NON AG ACR	57.7	88.74%
	SINGLE FAM	0.5	0.71%
	VACANT	1.3	1.94%
17B	TOTAL ACRES:	53	
	CONDOMINIA	13.3	25.07%
	IMP PASTUR	14.0	26.41%
	MOBILE HOM	20.2	38.07%
	NON AG ACR	9.9	18.77%
	SINGLE FAM	14.6	27.58%
	VAC INSTIT	10.0	18.94%
	VACANT	0.5	1.00%
17C	TOTAL ACRES:	142	
	CONDOMINIA	11.7	8.27%
	MOBILE HOM	78.5	55.27%
	O U A	0.1	0.09%
	SINGLE FAM	25.0	17.64%
	VACANT	10.9	7.69%

SUB BASIN	LAND USE	ACRES	PCT
18	TOTAL ACRES:	332	
	COMMUNITY	40.0	12.05%
	CONV STORE	2.9	0.86%
	FINANCIAL	1.8	0.54%
	HOTELS/MOT	6.4	1.94%
	IMP PASTUR	129.8	39.09%
	MISC AG SF	9.7	2.91%
	MULTI-FAM	2.5	0.75%
	NIGHTCLUB/	1.1	0.33%
	NON AG ACR	9.1	2.75%
	O U A	9.6	2.89%
	OFFICE BLD	5.7	1.71%
	PK/LT RVMH	38.6	11.64%
	PROFESS OF	2.0	0.60%
	RESTAURANT	5.2	1.57%
	SINGLE FAM	13.3	3.99%
	STORES/1 S	6.0	1.80%
	VACANT	26.4	7.95%
	VACANT COM	7.7	2.31%
	VEH SALE/R	3.0	0.91%
	WAREHOSE/D	2.3	0.68%
19	TOTAL ACRES:	85	
	MOBILE HOM	24.0	28.23%
	NON AG ACR	4.7	5.48%
	O U A	65.5	77.11%
	OFFICE BLD	7.3	8.58%
	SINGLE FAM	9.6	11.35%
	STORES/1 S	2.4	2.82%
20	TOTAL ACRES:	324	
	BEAUTY PAR	0.3	0.11%
	CENTRALLY	12.9	3.97%
	CHURCHES	6.5	2.01%
	CLUBS/LODG	0.4	0.13%
	CONV STORE	0.3	0.11%
	COUNTY	31.7	9.79%
	FINANCIAL	2.2	0.67%
	HOTELS/MOT	1.6	0.51%
	MULTI-FAM	6.0	1.86%
	MUNICIPAL	3.1	0.97%
	MXD RES/OF	1.5	0.47%
	OFFCE BLD	11.2	3.46%
	OPEN STORA	2.1	0.65%
	PK/LT RVMH	0.7	0.20%
	PROFESS OF	2.2	0.66%
	PRVT SCHL/	0.8	0.26%
	REPAIR SER	0.8	0.25%
	RESTAURANT	2.7	0.83%
	SERVICE ST	0.3	0.10%
	SINGLE FAM	53.6	16.55%
	STORES/1 S	9.3	2.87%
	UTILITIES	2.1	0.64%
	VACANT	27.1	8.35%
	VACANT COM	4.9	1.52%
	VACANT IND	19.7	6.08%
	VEH SALE/R	6.7	2.06%
	WAREHOSE/D	8.6	2.67%

SUB BASIN	LAND USE	ACRES	PCT
21	TOTAL ACRES:	105	
	CONV STORE	2.2	2.08%
	COUNTY	3.7	3.55%
	MH/RV PRK	0.4	0.37%
	MOBILE HOM	12.5	11.94%
	OFFICE BLD	1.3	1.21%
	OPEN STORA	1.0	0.98%
	PK/LT RVMH	8.6	8.15%
	SINGLE FAM	20.6	19.66%
	STATE	2.0	1.95%
	STORES/1 S	0.1	0.11%
	VACANT	11.8	11.27%
	VACANT IND	7.9	7.52%
	VEH SALE/R	8.7	8.32%
22	TOTAL ACRES:	320	
	CHURCHES	1.5	0.46%
	CONV STORE	1.0	0.31%
	COUNTY	0.3	0.11%
	IMP PASTUR	69.7	21.78%
	MOBILE HOM	16.9	5.27%
	MULTI-FAM	1.9	0.60%
	MXD RES/OF	0.7	0.23%
	NON AG ACR	21.4	6.67%
	OFFICE BLD	0.5	0.15%
	OPEN STORA	2.0	0.63%
	PK/LT RVMH	1.8	0.55%
	RESTAURANT	0.7	0.22%
	SINGLE FAM	145.4	45.45%
	STORES/1 S	2.0	0.63%
	VACANT	18.2	5.69%
	VACANT COM	0.3	0.09%
	VEH SALE/R	0.3	0.11%
	WAREHOSE/D	1.7	0.54%
23	TOTAL ACRES:	301	
	CHURCHES	6.3	2.09%
	CLUBS/LODG	0.3	0.10%
	CONDOMINIA	7.6	2.54%
	IMP PASTUR	57.2	19.02%
	MOBILE HOM	4.8	1.59%
	NON AG ACR	66.8	22.18%
	O U A	0.0	0.01%
	SINGLE FAM	122.0	40.52%
	VACANT	12.8	4.27%

SUB BASIN	LAND USE	ACRES	PCT
24	TOTAL ACRES:	97	
	CONDOMINIA	0.0	0.03%
	GROVE W/ S	16.1	16.56%
	IMP PASTUR	63.3	65.28%
	SINGLE FAM	12.3	12.67%
25A	TOTAL ACRES:	367	
	CROP III	20.0	5.44%
	IMP PASTUR	71.5	19.48%
	MISC AG	260.2	70.89%
25B	TOTAL ACRES:	28	
	NON AG ACR	6.5	23.11%
	SINGLE FAM	5.2	18.44%
	VACANT	19.0	67.92%
26	TOTAL ACRES:	233	
	IMP PASTUR	149.8	64.28%
	MISC AG	0.8	0.33%
	NON AG ACR	1.0	0.43%
	VACANT	81.1	34.79%
27	TOTAL ACRES:	246	
	IMP PASTUR	81.5	33.13%
	MOBILE HOM	8.1	3.31%
	NON AG ACR	46.6	18.94%
	SINGLE FAM	83.0	33.72%
	VACANT	13.5	5.47%
28	TOTAL ACRES:	303	
	IMP PASTUR	166.2	54.84%
	MOBILE HOM	0.6	0.19%
	NON AG ACR	9.8	3.24%
	SINGLE FAM	80.8	26.65%
	VACANT	21.4	7.07%
	VACANT COM	3.2	1.05%
	WATER MG D	5.8	1.92%
29	TOTAL ACRES:	331	
	IMP PASTUR	313.9	94.82%
	WATER MG D	26.2	7.91%
30	TOTAL ACRES:	353	
	IMP PASTUR	169.2	47.94%
	MINING	36.9	10.47%
	MISC AG SF	7.0	2.00%
	MOBILE HOM	0.5	0.13%
	NON AG ACR	7.5	2.13%
	SINGLE FAM	120.0	34.00%
	VACANT	37.3	10.56%
31	TOTAL ACRES:	72	
	IMP PASTUR	5.0	7.01%