Stormwater Calculations

Pre-Development

Post-Development (Proposed Project)

Pre and Post Development Alternatives
Naval Base + Daniel Island/Cooper River + Columbus Street
Naval Base + Daniel Island/Wando River

Job: Daniel Island
Description: Conceptual Stormwater Drainage System

Sheet 1 **of** 5 **Project No.** C103353.02
Computed By: RWP **Date:** 6/29/98
Checked By: **Date:**

1.0) Existing Conditions

The Daniel Island site consists of spoil areas enclosed by dikes, and a few parcels of wetlands. Total Area is approximately 1,289 acres

2.0) Proposed Conditions

- The Daniel Island Terminal well be developed in five phases over a time period of approximately 20 years.
- The 1,289 acre site was divided into three drainage basins based on the ultimate build out condition (after final phase, phase 5). Drainage patterns for berth and intermodal areas were assumed.
- The proposed drainage system will consist of closed storm sewer systems draining to open ditches which discharge into permitted wet detention ponds. The open ditches may be replaced with culverts/pipes after the final phase (Phase 5).

The five phases of development are described in the following table and shown in Figures 5.2.4.4-1 and 5.2.4.4-2

Phase	Description
1	Two wando berths and intermodal area; water quality treatment in a 30 acre temporary pond in a spoil area to the north; the pond discharges to the Cooper River (see Figure 5.2.4.4-1).
2	One additional wando berth and additional intermodal area; water quality treatment in the same 30 acre temporary pond in the spoil area to the north.
3	Two additional wando berths and additional intermodal area; water quality treatment in the same 30 acre temporary pond in the spoil area to the north.
4	Three additional cooper berths and additional intermodal area; water quality treatment in two 15 acre permanent ponds. One pond discharges in the Wando River and one pond discharges into the Cooper River.
5	Four additional cooper berths and additional intermodal area; water quality treatment in two 15 acre permanent ponds and one permanent 20 acre pond. One pond discharges in the Wando River and two ponds discharge into the Cooper River (see Figure 5.2.4.4-2)

3.0) Water Quality Requirements

The regulations of the Stormwater Management and Sediment Reduction Act require that permanent water quality detention ponds having a permanent pool shall be designed to store and release the first ½-inch of runoff from the site over a 24-hour period. The storage volume shall be for all projects, regardless of size which are located within ½-mile of a receiving water body in the Coastal Zone, this criteria shall be storage of the first ½-inch of runoff from the entire site or storage of the first 1-inch of runoff from the built-upon portion of the property, whichever is greater (see page 43 of the South Carolina Stormwater Management and Sediment Control Handbook for land disturbance activities, September, 1995).

Temporary Pond

- Utilized during the first three phases
- Designed for phase III (five wando berths and associated intermodal area)
- Designed for 550 acre drainage basin
- Assume a pond area of 30 acres

Permanent Ponds

- Pond 1 (15 acres) and Pond 2 (15 acres) will be constructed during Phase IV, and are designed to treat Basin 1 (473 acres) and Basin 2 (348 acres) respectively.
- Pond 3 (20 acres) will be constructed during the final phase (Phase V) and designed to treat Basin 3 (468 acres).

Pre-Development

Job: Daniel island
Description: Conceptual Stormwater Drainage System
Project No.: C10362800

Sheet 1 of 2
Computed By: RWP Date: 6-29-88
Checked By: Date:

CN = ((AC)i(CN)i + (AC)i+1(CN)i+1 + (AC)i+2(CN)i+2 +.....(AC)n-1(CN)n-1 + (AC)n(CN)n)) / Total Area

Basin #	Total Area	Impervious Area				Pervious Area										Composite
		Land Use				Soils			Land Use							
		Pavement		Roofs		Symbol / Name	Hydrologic		Spoil Area		Forest		Dirt Road		Cultivated	
	(AC)	(AC)	CN	(AC)	CN		Group	%	(AC)	CN	(AC)	CN	(AC)	CN	(AC)	CN	CN
Wando Cell	300.00	0.00		0.00		AU / Aquic Udifluvents	D	100	287.58	89	7.12	83	5.30	89	0.00	83	89
Middle Cell	195.00	0.00		0.00		AU / Aquic Udifluvents	D	100	191.10	89	1.15	83	2.75	89	0.00	83	89
West Cell	180.00	0.00		0.00		AU / Aquic Udifluvents	D	100	173.97	89	3.44	83	2.58	89	0.00	83	89
Central Cell	55.00	0.00		0.00		AU / Aquic Udifluvents	D	100	51.56	89	3.44	83	0.00	89	0.00	83	89
North Cell	559.00	0.00		0.00		AU / Aquic Udifluvents	D	100	0.00	89	52.00	83	0.00	89	507	83	83

NOTES: (1) Curve numbers and Land uses from Tables 2-2a and 2-2c TR55 manual
(2) Soil Names, Symbols and Hydrologic Soil Group were obtained from USDA Soil Conservation Service Soil Survey of Berkeley county , January 1980

Job: Daniel island
Description: Conceptual Stormwater Drainage System
Project No.: C10362800

Computed By: RWP Date: 6-29-88
Checked By: Date:

Basin #	Sheet Flow T1 = (0.007*(n*L)^0.8) / (P2^0.5)*(s^0.4) *60min/hr Surface Type	Mannings Coeff. n (1)	Flow Length <=300 ft. L (2) (ft)	2yr-24hr Rainfall P2 (3) (in)	Land Slope s (4) (ft/ft)	Time T1 (min)	Shallow Concentrated Flow Avg. Vel (V), Figure 3-1 T2 = (L/V) / 60 sec/min. Surface Type	Flow Length L (ft)	Water Course Slope s (4) (ft/ft)	Avg. Vel. V (5 & 6) (ft/s)	Time T2 (min)	Total Time Tc (min)
Wando Cell	Bare Soil	0.011	300	4.4	0.005	4.3	Unpaved	5200	0.005	1.1	76.0	80
Middle Cell	Bare Soil	0.011	300	4.4	0.005	4.3	Unpaved	3600	0.005	1.1	52.6	57
West Cell	Bare Soil	0.011	300	4.4	0.005	4.3	Unpaved	3000	0.005	1.1	43.8	48
Central Cell	Bare Soil	0.011	300	4.4	0.005	4.3	Unpaved	1000	0.005	1.1	14.6	19
North Cell	Cultivated Soils	0.17	300	4.4	0.005	38.7	Unpaved	4000	0.005	1.1	58.4	97

Notes:
(1) Maximum hydraulic length for sheet Flow is 300 ft. (TR 55 Manual)
(2) 2yr-24hhr rainfall amount (P2) was obtained from South Carolina Stormwter Management and Sediment Control Handboo
(3) Hydraulic lengths and slopes determined from aerials and contour maps from the SCSPA
(4) Average Velocity for Unpaved Surface = 16.1345(s)^0.5 (See Appendix F TR55 Manual)
(5) Mannings n Values from Table 3-1 TR55 Manual

```
Advanced Interconnected Channel & Pond Routing (ICPR Ver 2.11) [1]
Copyright 1995, Streamline Technologies, Inc.

Predevelopment Runoff at Daniel Island
AdICPR Input Data
2, 10, 25, 50 and 100 Year - 24 Hour Storms

********** Input Report: Basins ***********************************************
-------------------------------------------------------------------------------
Basin: CENTRAL    Node: CENTRAL    Status: On Site    Type: SCS Unit Hydr
Group: BASE
    Unit Hydrograph: UH256                    Peak Factor: 256
      Rainfall File:                  Storm Duration(hrs): 0
Rainfall Amount(in): 0
           Area(ac): 55           Concentration Time(min): 19
            Curve #: 89                     Lag Time(hrs): 0
            DCIA(%): 0

          Existing Conditions Spoil Cell

-------------------------------------------------------------------------------
Basin: MIDDLE     Node: MIDDLE     Status: On Site    Type: SCS Unit Hydr
Group: BASE
    Unit Hydrograph: UH256                    Peak Factor: 256
      Rainfall File:                  Storm Duration(hrs): 0
Rainfall Amount(in): 0
           Area(ac): 195          Concentration Time(min): 57
            Curve #: 89                     Lag Time(hrs): 0
            DCIA(%): 0

          Existing Conditions Spoil Cell

-------------------------------------------------------------------------------
Basin: NORTH      Node: NORTH      Status: On Site    Type: SCS Unit Hydr
Group: BASE
    Unit Hydrograph: UH256                    Peak Factor: 256
      Rainfall File:                  Storm Duration(hrs): 0
Rainfall Amount(in): 0
           Area(ac): 559          Concentration Time(min): 97
            Curve #: 83                     Lag Time(hrs): 0
            DCIA(%): 0

          Existing Conditions Spoil Cell

-------------------------------------------------------------------------------
Basin: WANDO      Node: WANDO      Status: On Site    Type: SCS Unit Hydr
Group: BASE
    Unit Hydrograph: UH256                    Peak Factor: 256
      Rainfall File:                  Storm Duration(hrs): 0
Rainfall Amount(in): 0
           Area(ac): 300          Concentration Time(min): 80
            Curve #: 89                     Lag Time(hrs): 0
            DCIA(%): 0

          Existing Conditions Spoil Cell
```

Post-Development (Porposed Project)

Job: Daniel Island
Description: Conceptual Stormwater
Drainage System

Computed By: RWP Date: 6/29/98
Checked By: Date:

Table 1 Summary of Land Uses In Basins 1, 2 and 3 for

Land Use	Area (acres)																			
	Phases																			
	One				Two				Three				Four				Five			
	Basins				Basins				Basins				Basins				Basins			
	1	2	3	Total	1	2	3	Total	1	2	3	Total	1	2	3	Total	1	2	3	Total
Wando (1) Berths	127.2	Not Developed	Not Developed	127.2	190.8	Not Developed	Not Developed	190.8	318	Not Developed	Not Developed	318	127.2	190.8	Not Developed	318	127.2	190.8	0	318
Cooper (2) Berths	0			0	0			0	0			0	190.8	0		190.8	190.8	0	226.2	417
Park (3)	0			0	0			0	0			0	55	0		55	55	0	0	55
Support Area (4)	52.8			52.8	74.2			74.2	123.5			123.5	64	64.5		128.5	64	64.5	103.5	232
Open Area (5)	370			370	285			285	108.5			108.5	21	77.7		98.7	21	77.7	118.3	217
Temporary Pond (5)	0			0	0			0	0			0	0	0		0	0	0	0	0
Permanent Pond (5)	0			0	0			0	0			0	15	15		30	15	15	20	50
Totals	550			550	550			550	550			550	473	348		821	473	348	468	1289

Notes:

(1) Wando berth areas include berths, wharf and hardstand
(2) Cooper berth areas include berths, wharf and hardstand
(3) 55 acres of park area in Basin 1 is considered open pervious area
(4) Support areas includes, support, intermodal and soundwall and is 100 % impervious
(5) Open area consists of undeveloped parcels
(5) One permanent pond per basin
(6) Temporary pond is utilized during phases 1 through 3 and filled during phase 4 and 5
(7) See Figures 5.2.4.4-1 and Figure 5.2.4.4-2 for land use locations, areas, basin delineation, proposed pond locations, and discharge points

Job: Daniel Island
Description: Conceptual Stormwater Drainage System

Sheet 4 of 5 Project No. C103703.02
Computed By: RWP Date: 6/29/98
Checked By: Date:

4.0) Treatment Volume

For wet detention systems, the design treatment volume is the greater of the 1/2 inch over the entire drainage are or 1 inch times the impervious area
Water quality treatment volumes will be stored above the normal water level

Required Water Quality Treatment Volumes								
	Temporary Pond		Pond 1 (Basin 1)		Pond 2 (Basin 2)		Pond 3 (Basin 3)	
Rainfall Depth (in)	Area Total Basin (ac)	Treatment Volume (ac-ft)	Area Total Basin (ac)	Treatment Volume (ac-ft)	Area Total Basin (ac)	Treatment Volume (ac-ft)	Area Total Basin (ac)	Treatment Volume (ac-ft)
0.5	550	22.92	473	19.71	348	14.50	468	19.50
1	441.5	36.79	452	37.67	270.3	22.53	349.7	29.14
Controls		**36.79**		**37.67**		**22.53**		**29.14**

5.0) Sedimentation Volume Requirements

Assume Sediment Volumes for the ponds are 1/2-inch times the total basin area
Sedimentation will be stored below the normal water level

Required Sediment Storage Volumes								
	Temporary Pond		Pond 1 (Basin 1)		Pond 2 (Basin 2)		Pond 3 (Basin 3)	
Rainfall Depth (in)	Area Total Basin (ac)	Sediment Volume (ac-ft)	Area Total Basin (ac)	Sediment Volume (ac-ft)	Area Total Basin (ac)	Treatment Volume (ac-ft)	Area Total Basin (ac)	Sediment Volume (ac-ft)
0.5	550	22.92	473	19.71	348	14.50	468	19.50

6.0) Determine normal water levles in ponds

The vertical datum is Charleston Low Water (CLW)
Normal water level is the Mean Higher High Water (MHHW) indicated at the NOAA Custom House Tidal Bench Mark Station 866 5530

Datums and Norma Water Levels at the Custom House Bench Mark Sta					
Datums			MHHW (Normal Water)		
MLLW (Ft, MLLW)	NGVD (Ft, MLLW)	CLW (Ft, MLLW)	(Ft, MLLW)	(Ft, NGVD)	(Ft, CLW)
0	2.43	-0.21	5.8	3.37	**6.01**

MLLW: Mean Lower Low Water
NGVD: National Geodetic Vertical Datum-1929
CLW: Charleston Low Water

However the City of Charleston requires the normal pool elevation in Daniel Island to be 4.5 ft NGVD, 1929

4.5 ft. NGVD, 1929 + 2.43 ft. = 6.93 ft. MLLW - -0.21 ft. = 7.14 ft. CLW

7.14 ft. CLW > 6.01 ft. CLW

Therefore Normal Water Level = **7.14 ft. CLW**

Job: Daniel Island
Description: Conceptual Stormwater Drainage System

Sheet 5 of 5 Project No. C103703.02
Computed By: RWP Date: 6/29/98
Checked By: Date:

7.0) Pond Dimensions

Assumptions For Temporary Pond, Pond 1, Pond 2 and Pond 3

* Top of bank elevation = 18 ft. CLW
* 4:1 side slopes from top to bottom
* Bottom Elevation = 5 ft. CLW
* Normal water level = 7.14 ft. CLW
* Sediment storage below normal water level
* Runoff storage above normal water level
* Rectangular ponds, length is two times longer than width
* Temporary pond - 30 acres at 18 ft. CLW
* Pond 1 - 15acres at 18 ft. CLW
* Pond 2 - 15 acres at 18 ft. CLW
* Pond 3 - 20 acres at 18 ft. CLW

The Temporary Pond, Pond 1, Pond 2 and Pond 3 have the following stage - area - storage relationships

Stage - Area - Storage For Proposed Ponds								
	Temporary Pond		Pond 1		Pond 2		Pond 3	
Stage (ft, CLW)	Area (ac)	Volume (ac-ft)	Area (ac)	Volume (ac-ft)	Area (ac)	Volume (ac-ft)	Area (ac)	Volume (ac-ft)
5	23.5	0.0	10.4	0.0	10.4	0.0	14.7	0
7.14	24.6	51.4	11.2	23.1	11.2	23.1	15.6	32.4
18	30	347.8	15	165.2	15	165.2	20	225.6
Sediment								
Available	ok	51.4	ok	23.1	ok	23.1	ok	32.4
Required		22.9		19.7		14.5		19.5
Treatment								
Available	ok	296.3	ok	142.1	ok	142.1	ok	193.2
Required	8.5	36.8	10.0	37.7	8.9	22.5	8.8	29.1

Job: Daniel Island
Description: Conceptual Stormwater Drainage System

Sheet 2 of 3 Project No. C1037
Computed By: RWP Date: 6/29
Checked By: Date:

Basin Summary

Summary of Basin Input											
POND1				POND2				POND2			
Basin Name	Area (ac)	Curve Number	Time of Conc. (min.)	Basin Name	Area (ac)	Curve Number	Time of Conc. (min.)	Basin Name	Area (ac)	Curve Number	Time of Conc. (min.)
WB-1	63.6	98	30.9	WB-3	63.6	98	35.5	CB-4	63.6	98	36.3
WB-2	63.6	98	34.7	WB-4	63.6	98	31.2	CB-5	63.6	98	31.9
CB-1	63.6	98	27.4	WB-5	63.6	98	27.4	CB-6	63.6	98	27.7
CB-2	63.6	98	31.2	INTW-3	21.5	98	25.5	CB-7	35.4	98	23.7
CB-3	63.6	98	35.5	INTW-4	21.5	98	21.2	INTC-4	25.875	98	26.3
INTW-1	12.8	98	20.9	INTW-5	21.5	98	17.4	INTC-5	25.875	98	21.9
INTW-2	12.8	98	24.7	POND2	92.7	85	10.0	INTC-6	25.875	98	17.7
INTC-1	12.8	98	17.4					INTC-7	25.875	98	13.7
INTC-2	12.8	98	21.2					POND3	138.3	84	10.0
INTC-3	12.8	98	25.5								
PARK	91	85	10.0								
Totals	473				348				468		

(1) Time of Concentrations See Page 3
(2) Curve Number Calculations

All Impervious Areas are 98
Pervious areas were assumed to 82

Curve Number Calculations CN =((A1*CN1)+(A2*CN2))/(A)						
Basin	Total Area A	Pervious		Impervious		Composit
		Area A1 (ac)	CN1	Area A2 (ac)	CN2	CN
Park	91	76	82	15	98	85
Pond 2	92.7	77.7	82	15	98	85
Pond3	138.3	118.3	82	20	98	84
The remaining basins were 100 % impervious, therefore CN = 98						

Notes: Impervious area are pond area and pervious area are open areas

a:\basinsum.wb2

Job: Daniel Island
Description: Conceptual Stormwater Drainage System

Sheet 3 of 3 Project No. C103703.02
Computed By: RWP Date: 6/29/98
Checked By: Date:

Storm Tide Elevations (Tailwater)

Location	Peak Elevations (ft, NGVD)		
	10 Yr.	50 Yr.	100 Yr.
Confluence of Wando and Cooper Rivers	6	9	11

Source: Berkeley County Flood Insurance Study, May 6, 1996, FEMA

Convert above elevations to Charleston Low Water, (CLW), using the tidal datums at the NOAA Tidal Bench Mark Station Custom House 866 5530

Datums (ft, MLLW)		
(NGVD)	(MLLW)	(CLW)
2.43	-0.21	0

Peak Tailwaters			
Storm Frequency	Elevations		
(Year)	(ft, NGVD)	(ft, MLLW)	(ft, CLW)
10	6	8.43	8.64
25	7	9.43	9.64
50	9	11.43	11.64
100	11	13.43	13.64

Notes: 25 Yr. storm elevations was estimated

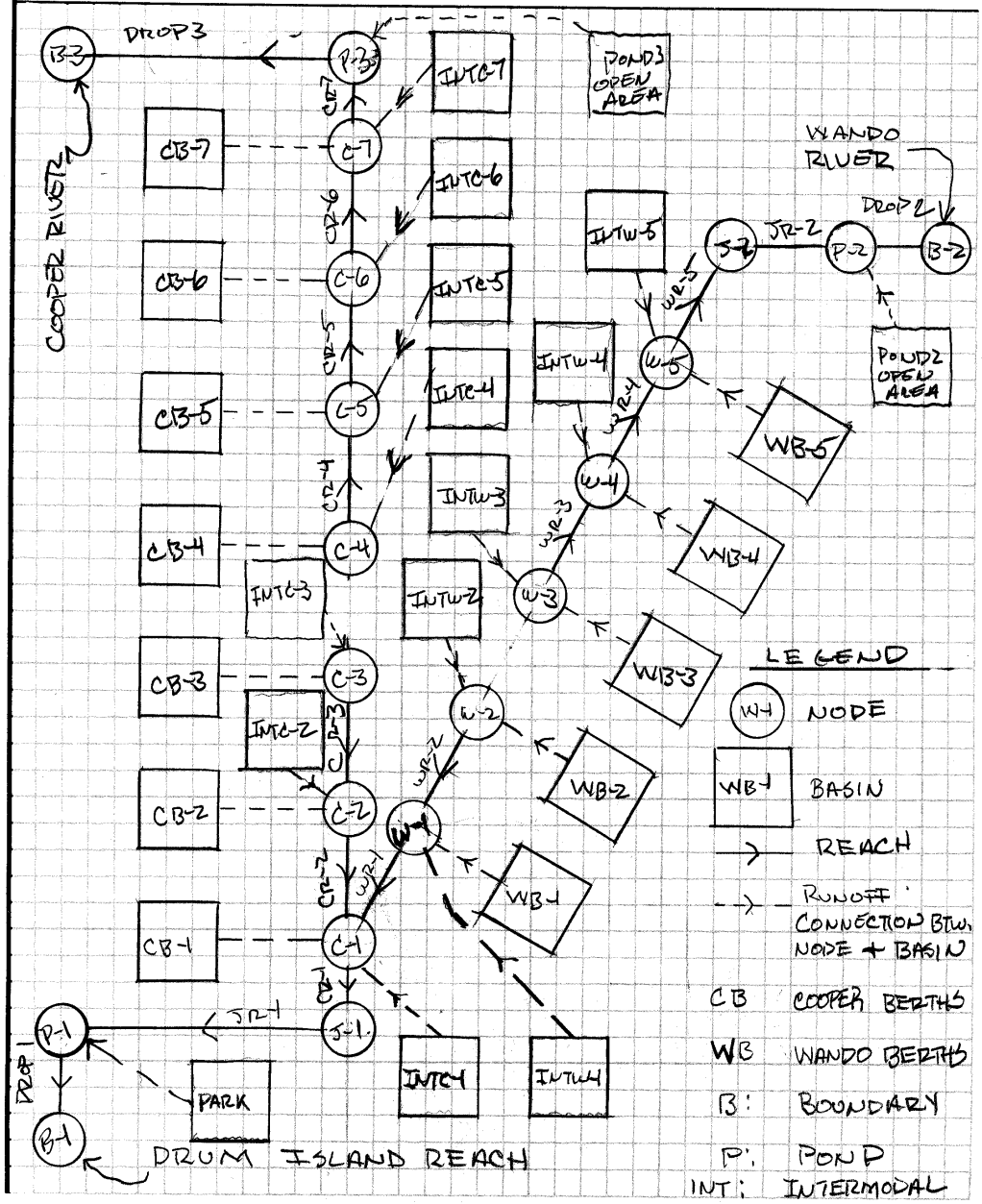
Boundary Node Time Stage				
Time	Stage (ft, CLW)			
(hr)	10 yr	25 yr	50 yr	100 yr
0	6.01	6.01	6.01	6.01
6	0.71	0.71	0.71	0.71
13	8.64	9.64	11.64	13.64
19	0.81	0.81	0.81	0.81
26	6.01	6.01	6.01	6.01

Tidal Cycle based on Tide Tables 1994 High and Low Water Predictions
From East Coast of North and South Amarica U.S. Department of Commerce
National Oceanic and Atmospheric Administration National Ocean Service

URS Greiner

JOB DANIEL ISLAND
DESCRIPTION NODE DIAGRAM PHASES 1,2,3 4+5

SHEET 1 OF 5 PROJ. NO.
COMPUTED BY RWP DATE 6/29/98
CHECKED BY DATE



Form No. G1002-07

Advanced Interconnected Channel & Pond Routing (ICPR Ver 2.11) [1]
Copyright 1995, Streamline Technologies, Inc.

Daniel Island Preliminary Design
AdICPR Input Data
Stormwater Master Plan

********** Input Report: Basins **********

Basin: CB-1 Node: C-1 Status: On Site Type: SCS Unit Hydr
Group: BASE
Unit Hydrograph: UH256 Peak Factor: 256
Rainfall File: SCSII-24 Storm Duration(hrs): 24
Rainfall Amount(in): 0
Area(ac): 63.6 Concentration Time(min): 20
Curve #: 98 Lag Time(hrs): 0
DCIA(%): 0

Cooper Berth

Basin: CB-2 Node: C-2 Status: On Site Type: SCS Unit Hydr
Group: BASE
Unit Hydrograph: UH256 Peak Factor: 256
Rainfall File: SCSII-24 Storm Duration(hrs): 24
Rainfall Amount(in): 0
Area(ac): 63.6 Concentration Time(min): 20
Curve #: 98 Lag Time(hrs): 0
DCIA(%): 0

Cooper Berth

Basin: CB-3 Node: C-3 Status: On Site Type: SCS Unit Hydr
Group: BASE
Unit Hydrograph: UH256 Peak Factor: 256
Rainfall File: SCSII-24 Storm Duration(hrs): 24
Rainfall Amount(in): 0
Area(ac): 63.6 Concentration Time(min): 20
Curve #: 98 Lag Time(hrs): 0
DCIA(%): 0

Cooper Berth

Basin: CB-4 Node: C-4 Status: On Site Type: SCS Unit Hydr
Group: BASE
Unit Hydrograph: UH256 Peak Factor: 256
Rainfall File: SCSII-24 Storm Duration(hrs): 24
Rainfall Amount(in): 0
Area(ac): 63.6 Concentration Time(min): 20
Curve #: 98 Lag Time(hrs): 0
DCIA(%): 0

Cooper Berth

Advanced Interconnected Channel & Pond Routing (ICPR Ver 2.11) [2]
Copyright 1995, Streamline Technologies, Inc.

Daniel Island Preliminary Design
AdICPR Input Data
Stormwater Master Plan

********** Input Report: Basins **********

Basin: CB-5 Node: C-5 Status: On Site Type: SCS Unit Hydr
Group: BASE
Unit Hydrograph: UH256 Peak Factor: 256
Rainfall File: SCSII-24 Storm Duration(hrs): 24
Rainfall Amount(in): 0
Area(ac): 63.6 Concentration Time(min): 20
Curve #: 98 Lag Time(hrs): 0
DCIA(%): 0

Cooper Berth

Basin: CB-6 Node: C-6 Status: On Site Type: SCS Unit Hydr
Group: BASE
Unit Hydrograph: UH256 Peak Factor: 256
Rainfall File: SCSII-24 Storm Duration(hrs): 24
Rainfall Amount(in): 0
Area(ac): 63.6 Concentration Time(min): 20
Curve #: 98 Lag Time(hrs): 0
DCIA(%): 0

Cooper Berth

Basin: CB-7 Node: C-7 Status: On Site Type: SCS Unit Hydr
Group: BASE
Unit Hydrograph: UH256 Peak Factor: 256
Rainfall File: SCSII-24 Storm Duration(hrs): 24
Rainfall Amount(in): 0
Area(ac): 35.4 Concentration Time(min): 20
Curve #: 98 Lag Time(hrs): 0
DCIA(%): 0

Cooper Berth

Basin: INTC-1 Node: C-1 Status: On Site Type: SCS Unit Hydr
Group: BASE
Unit Hydrograph: UH256 Peak Factor: 256
Rainfall File: SCSII-24 Storm Duration(hrs): 24
Rainfall Amount(in): 0
Area(ac): 12.8 Concentration Time(min): 10
Curve #: 98 Lag Time(hrs): 0
DCIA(%): 0

Intermodal Area

Advanced Interconnected Channel & Pond Routing (ICPR Ver 2.11) [3]
Copyright 1995, Streamline Technologies, Inc.

Daniel Island Preliminary Design
AdICPR Input Data
Stormwater Master Plan

********** Input Report: Basins **********

Basin: INTC-2 Node: C-2 Status: On Site Type: SCS Unit Hydr
Group: BASE
Unit Hydrograph: UH256 Peak Factor: 256
Rainfall File: SCSII-24 Storm Duration(hrs): 24
Rainfall Amount(in): 0
Area(ac): 12.8 Concentration Time(min): 10
Curve #: 98 Lag Time(hrs): 0
DCIA(%): 0

Intermodal Area

Basin: INTC-3 Node: C-3 Status: On Site Type: SCS Unit Hydr
Group: BASE
Unit Hydrograph: UH256 Peak Factor: 256
Rainfall File: SCSII-24 Storm Duration(hrs): 24
Rainfall Amount(in): 0
Area(ac): 12.8 Concentration Time(min): 10
Curve #: 98 Lag Time(hrs): 0
DCIA(%): 0

Intermodal Area

Basin: INTC-4 Node: C-4 Status: On Site Type: SCS Unit Hydr
Group: BASE
Unit Hydrograph: UH256 Peak Factor: 256
Rainfall File: SCSII-24 Storm Duration(hrs): 24
Rainfall Amount(in): 0
Area(ac): 25.875 Concentration Time(min): 10
Curve #: 98 Lag Time(hrs): 0
DCIA(%): 0

Intermodal Area

Basin: INTC-5 Node: C-5 Status: On Site Type: SCS Unit Hydr
Group: BASE
Unit Hydrograph: UH256 Peak Factor: 256
Rainfall File: SCSII-24 Storm Duration(hrs): 24
Rainfall Amount(in): 0
Area(ac): 25.875 Concentration Time(min): 10
Curve #: 98 Lag Time(hrs): 0
DCIA(%): 0

Intermodal Area

Advanced Interconnected Channel & Pond Routing (ICPR Ver 2.11) [4]
Copyright 1995, Streamline Technologies, Inc.

Daniel Island Preliminary Design
AdICPR Input Data
Stormwater Master Plan

********** Input Report: Basins **********

Basin: INTC-6 Node: C-6 Status: On Site Type: SCS Unit Hydr
Group: BASE
Unit Hydrograph: UH256 Peak Factor: 256
Rainfall File: SCSII-24 Storm Duration(hrs): 24
Rainfall Amount(in): 0
Area(ac): 25.875 Concentration Time(min): 10
Curve #: 98 Lag Time(hrs): 0
DCIA(%): 0

Intermodal Area

Basin: INTC-7 Node: C-7 Status: On Site Type: SCS Unit Hydr
Group: BASE
Unit Hydrograph: UH256 Peak Factor: 256
Rainfall File: SCSII-24 Storm Duration(hrs): 24
Rainfall Amount(in): 0
Area(ac): 25.875 Concentration Time(min): 10
Curve #: 98 Lag Time(hrs): 0
DCIA(%): 0

Intermodal Area

Basin: INTW-1 Node: W-1 Status: On Site Type: SCS Unit Hydr
Group: BASE
Unit Hydrograph: UH256 Peak Factor: 256
Rainfall File: SCSII-24 Storm Duration(hrs): 24
Rainfall Amount(in): 0
Area(ac): 12.8 Concentration Time(min): 10
Curve #: 98 Lag Time(hrs): 0
DCIA(%): 0

Intermodal Area

Basin: INTW-2 Node: W-2 Status: On Site Type: SCS Unit Hydr
Group: BASE
Unit Hydrograph: UH256 Peak Factor: 256
Rainfall File: SCSII-24 Storm Duration(hrs): 24
Rainfall Amount(in): 0
Area(ac): 12.8 Concentration Time(min): 10
Curve #: 98 Lag Time(hrs): 0
DCIA(%): 0

Intermodal Area

Advanced Interconnected Channel & Pond Routing (ICPR Ver 2.11) [5]
Copyright 1995, Streamline Technologies, Inc.

Daniel Island Preliminary Design
AdICPR Input Data
Stormwater Master Plan

********** Input Report: Basins **********

Basin: INTW-3 Node: W-3 Status: On Site Type: SCS Unit Hydr
Group: BASE
Unit Hydrograph: UH256 Peak Factor: 256
Rainfall File: SCSII-24 Storm Duration(hrs): 24
Rainfall Amount(in): 0
Area(ac): 21.5 Concentration Time(min): 10
Curve #: 98 Lag Time(hrs): 0
DCIA(%): 0

Intermodal Area

Basin: INTW-4 Node: W-4 Status: On Site Type: SCS Unit Hydr
Group: BASE
Unit Hydrograph: UH256 Peak Factor: 256
Rainfall File: SCSII-24 Storm Duration(hrs): 24
Rainfall Amount(in): 0
Area(ac): 21.5 Concentration Time(min): 10
Curve #: 98 Lag Time(hrs): 0
DCIA(%): 0

Intermodal Area

Basin: INTW-5 Node: W-5 Status: On Site Type: SCS Unit Hydr
Group: BASE
Unit Hydrograph: UH256 Peak Factor: 256
Rainfall File: SCSII-24 Storm Duration(hrs): 24
Rainfall Amount(in): 0
Area(ac): 21.5 Concentration Time(min): 10
Curve #: 98 Lag Time(hrs): 0
DCIA(%): 0

Intermodal Area

Basin: PARK Node: POND1 Status: On Site Type: SCS Unit Hydr
Group: BASE
Unit Hydrograph: UH256 Peak Factor: 256
Rainfall File: SCSII-24 Storm Duration(hrs): 24
Rainfall Amount(in): 0
Area(ac): 91 Concentration Time(min): 10
Curve #: 85 Lag Time(hrs): 0
DCIA(%): 0

Park

Advanced Interconnected Channel & Pond Routing (ICPR Ver 2.11) [6]
Copyright 1995, Streamline Technologies, Inc.

Daniel Island Preliminary Design
AdICPR Input Data
Stormwater Master Plan

********** Input Report: Basins **********

Basin: POND2 Node: POND2 Status: On Site Type: SCS Unit Hydr
Group: BASE
Unit Hydrograph: UH256 Peak Factor: 256
Rainfall File: SCSII-24 Storm Duration(hrs): 24
Rainfall Amount(in): 0
Area(ac): 92.7 Concentration Time(min): 10
Curve #: 85 Lag Time(hrs): 0
DCIA(%): 0

POND2

Basin: POND3 Node: POND3 Status: On Site Type: SCS Unit Hydr
Group: BASE
Unit Hydrograph: UH256 Peak Factor: 256
Rainfall File: SCSII-24 Storm Duration(hrs): 24
Rainfall Amount(in): 0
Area(ac): 138.3 Concentration Time(min): 10
Curve #: 84 Lag Time(hrs): 0
DCIA(%): 0

POND3

Basin: WB-1 Node: W-1 Status: On Site Type: SCS Unit Hydr
Group: BASE
Unit Hydrograph: UH256 Peak Factor: 256
Rainfall File: SCSII-24 Storm Duration(hrs): 24
Rainfall Amount(in): 0
Area(ac): 63.6 Concentration Time(min): 20
Curve #: 98 Lag Time(hrs): 0
DCIA(%): 0

Wando Berth

Basin: WB-2 Node: W-2 Status: On Site Type: SCS Unit Hydr
Group: BASE
Unit Hydrograph: UH256 Peak Factor: 256
Rainfall File: SCSII-24 Storm Duration(hrs): 24
Rainfall Amount(in): 0
Area(ac): 63.6 Concentration Time(min): 20
Curve #: 98 Lag Time(hrs): 0
DCIA(%): 0

Wando Berth

Advanced Interconnected Channel & Pond Routing (ICPR Ver 2.11) [7]
Copyright 1995, Streamline Technologies, Inc.

Daniel Island Preliminary Design
AdICPR Input Data
Stormwater Master Plan

********** Input Report: Basins **********

Basin: WB-3 Node: W-3 Status: On Site Type: SCS Unit Hydr
Group: BASE
Unit Hydrograph: UH256 Peak Factor: 256
Rainfall File: SCSII-24 Storm Duration(hrs): 24
Rainfall Amount(in): 0
Area(ac): 63.6 Concentration Time(min): 20
Curve #: 98 Lag Time(hrs): 0
DCIA(%): 0

Wando Berth

Basin: WB-4 Node: W-4 Status: On Site Type: SCS Unit Hydr
Group: BASE
Unit Hydrograph: UH256 Peak Factor: 256
Rainfall File: SCSII-24 Storm Duration(hrs): 24
Rainfall Amount(in): 0
Area(ac): 63.6 Concentration Time(min): 20
Curve #: 98 Lag Time(hrs): 0
DCIA(%): 0

Wando Berth

Basin: WB-5 Node: W-5 Status: On Site Type: SCS Unit Hydr
Group: BASE
Unit Hydrograph: UH256 Peak Factor: 256
Rainfall File: SCSII-24 Storm Duration(hrs): 24
Rainfall Amount(in): 0
Area(ac): 63.6 Concentration Time(min): 20
Curve #: 98 Lag Time(hrs): 0
DCIA(%): 0

Wando Berth

Advanced Interconnected Channel & Pond Routing (ICPR Ver 2.11) [1]
Copyright 1995, Streamline Technologies, Inc.

Daniel Island Preliminary Design
AdICPR Input Data
Stormwater Master Plan

********** Input Report: Nodes **********

Name: BNDRY1 Base Flow(cfs): 0 Init Stage(ft): 6.01
Group: BASE Length(ft): 0 Warn Stage(ft): 18
Comment: BNDRY1 Confluence of Cooper and Wando Rivers

Time(hrs)	Stage(ft)
0	6.01
6	0.71
13	8.64
19	0.81
26	6.01

Name: BNDRY2 Base Flow(cfs): 0 Init Stage(ft): 6.01
Group: BASE Length(ft): 0 Warn Stage(ft): 18
Comment: BNDRY2 Wando River

Time(hrs)	Stage(ft)
0	6.01
6	0.71
13	8.64
19	0.81
26	6.01

Name: BNDRY3 Base Flow(cfs): 0 Init Stage(ft): 6.01
Group: BASE Length(ft): 0 Warn Stage(ft): 18
Comment: BNDRY3 Cooper River

Time(hrs)	Stage(ft)
0	6.01
6	0.71
13	8.64
19	0.81
26	6.01

Name: C-1 Base Flow(cfs): 0 Init Stage(ft): 7.2
Group: BASE Length(ft): 0 Warn Stage(ft): 18
Comment: Channel Node

Stage(ft)	Area(ac)

Name: C-2 Base Flow(cfs): 0 Init Stage(ft): 7.2
Group: BASE Length(ft): 0 Warn Stage(ft): 18
Comment: Channel Node

Stage(ft)	Area(ac)

Advanced Interconnected Channel & Pond Routing (ICPR Ver 2.11) [2]
Copyright 1995, Streamline Technologies, Inc.

Daniel Island Preliminary Design
AdICPR Input Data
Stormwater Master Plan

********** Input Report: Nodes **********

Name: C-3 Base Flow(cfs): 0 Init Stage(ft): 7.2
Group: BASE Length(ft): 0 Warn Stage(ft): 18
Comment: Channel Node

Stage(ft) Area(ac)

Name: C-4 Base Flow(cfs): 0 Init Stage(ft): 7.2
Group: BASE Length(ft): 0 Warn Stage(ft): 18
Comment: Channel Node

Stage(ft) Area(ac)

Name: C-5 Base Flow(cfs): 0 Init Stage(ft): 7.2
Group: BASE Length(ft): 0 Warn Stage(ft): 18
Comment: Channel Node

Stage(ft) Area(ac)

Name: C-6 Base Flow(cfs): 0 Init Stage(ft): 7.2
Group: BASE Length(ft): 0 Warn Stage(ft): 18
Comment: Channel Node

Stage(ft) Area(ac)

Name: C-7 Base Flow(cfs): 0 Init Stage(ft): 7.2
Group: BASE Length(ft): 0 Warn Stage(ft): 18
Comment: Channel Node

Stage(ft) Area(ac)

Name: J-1 Base Flow(cfs): 0 Init Stage(ft): 7.2
Group: BASE Length(ft): 0 Warn Stage(ft): 18
Comment: Channel Node

Stage(ft) Area(ac)

Advanced Interconnected Channel & Pond Routing (ICPR Ver 2.11) [3]
Copyright 1995, Streamline Technologies, Inc.

Daniel Island Preliminary Design
AdICPR Input Data
Stormwater Master Plan

********** Input Report: Nodes **********

Name: POND1 Base Flow(cfs): 0 Init Stage(ft): 7.2
Group: BASE Length(ft): 0 Warn Stage(ft): 18
Comment: Pond 1

Stage(ft)	Area(ac)
5	10.4
18	15

Name: POND2 Base Flow(cfs): 0 Init Stage(ft): 7.2
Group: BASE Length(ft): 0 Warn Stage(ft): 18
Comment: Pond 2

Stage(ft)	Area(ac)
5	10.4
18	15

Name: POND3 Base Flow(cfs): 0 Init Stage(ft): 7.2
Group: BASE Length(ft): 0 Warn Stage(ft): 18
Comment: Pond 3

Stage(ft)	Area(ac)
5	14.7
18	20

Name: W-1 Base Flow(cfs): 0 Init Stage(ft): 7.2
Group: BASE Length(ft): 0 Warn Stage(ft): 18
Comment: Channel Node

Stage(ft) Area(ac)

Name: W-2 Base Flow(cfs): 0 Init Stage(ft): 7.2
Group: BASE Length(ft): 0 Warn Stage(ft): 18
Comment: Channel Node

Stage(ft) Area(ac)

Name: W-3 Base Flow(cfs): 0 Init Stage(ft): 7.2
Group: BASE Length(ft): 0 Warn Stage(ft): 18
Comment: Channel Node

Stage(ft) Area(ac)

Name: W-4 Base Flow(cfs): 0 Init Stage(ft): 7.2
Group: BASE Length(ft): 0 Warn Stage(ft): 18
Comment: Channel Node

Stage(ft) Area(ac)

Advanced Interconnected Channel & Pond Routing (ICPR Ver 2.11) [4]
Copyright 1995, Streamline Technologies, Inc.

Daniel Island Preliminary Design
AdICPR Input Data
Stormwater Master Plan

********** Input Report: Nodes **********

Name: W-5 Base Flow(cfs): 0 Init Stage(ft): 7.2
Group: BASE Length(ft): 0 Warn Stage(ft): 18
Comment: Channel Node

Stage(ft)	Area(ac)

Advanced Interconnected Channel & Pond Routing (ICPR Ver 2.11) [1]
Copyright 1995, Streamline Technologies, Inc.

Daniel Island Preliminary Design
AdICPR Input Data
Stormwater Master Plan

********** Input Report: Channels **********

Name: CR-1 From Node: C-1 Length(ft): 700
Group: BASE To Node: J-1 Count: 1

	UPSTREAM	DOWNSTREAM		
Geometry:	Trapezoidal	Trapezoidal	Equation:	Aver Conveyance
Invert(ft):	5.51	5.24	Flow:	Both
TOB(ft):	18	18	Eddy Contrac Coef:	0.5
Manning's N:	0.05	0.05	Eddy Expans Coef:	0.5
TClip(ft):	0	0	Entrance Loss Coef:	0.5
BClip(ft):	0	0	Exit Loss Coef:	0.5
Main Xsec:			Outlet Cntrl Spec:	Use dc or tw
AxEl1(ft):			Inlet Cntrl Spec:	Use dn
Aux Xsec1:			Stabilizer Option:	None
AxEl2(ft):				
Aux Xsec2:				
TWidth(ft):				
Depth(ft):				
BWidth(ft):	10	10		
LSdSlp(h/v):	2	2		
RSdSlp(h/v):	2	2		

Name: CR-2 From Node: C-2 Length(ft): 1000
Group: BASE To Node: C-1 Count: 1

	UPSTREAM	DOWNSTREAM		
Geometry:	Trapezoidal	Trapezoidal	Equation:	Aver Conveyance
Invert(ft):	5.91	5.51	Flow:	Both
TOB(ft):	18	18	Eddy Contrac Coef:	0.5
Manning's N:	0.05	0.05	Eddy Expans Coef:	0.5
TClip(ft):	0	0	Entrance Loss Coef:	0.5
BClip(ft):	0	0	Exit Loss Coef:	0.5
Main Xsec:			Outlet Cntrl Spec:	Use dc or tw
AxEl1(ft):			Inlet Cntrl Spec:	Use dn
Aux Xsec1:			Stabilizer Option:	None
AxEl2(ft):				
Aux Xsec2:				
TWidth(ft):				
Depth(ft):				
BWidth(ft):	10	10		
LSdSlp(h/v):	2	2		
RSdSlp(h/v):	2	2		

Advanced Interconnected Channel & Pond Routing (ICPR Ver 2.11) [2]
Copyright 1995, Streamline Technologies, Inc.

Daniel Island Preliminary Design
AdICPR Input Data
Stormwater Master Plan

********** Input Report: Channels **********

Name: CR-3 From Node: C-3 Length(ft): 1500
Group: BASE To Node: C-2 Count: 1

	UPSTREAM	DOWNSTREAM		
Geometry:	Trapezoidal	Trapezoidal	Equation:	Aver Conveyance
Invert(ft):	6.5	5.91	Flow:	Both
TOB(ft):	18	18	Eddy Contrac Coef:	0.5
Manning's N:	0.05	0.05	Eddy Expans Coef:	0.5
TClip(ft):	0	0	Entrance Loss Coef:	0.5
BClip(ft):	0	0	Exit Loss Coef:	0.5
Main Xsec:			Outlet Cntrl Spec:	Use dc or tw
AxEl1(ft):			Inlet Cntrl Spec:	Use dn
Aux Xsec1:			Stabilizer Option:	None
AxEl2(ft):				
Aux Xsec2:				
TWidth(ft):				
Depth(ft):				
BWidth(ft):	10	10		
LSdSlp(h/v):	2	2		
RSdSlp(h/v):	2	2		

Name: CR-4 From Node: C-4 Length(ft): 1500
Group: BASE To Node: C-5 Count: 1

	UPSTREAM	DOWNSTREAM		
Geometry:	Trapezoidal	Trapezoidal	Equation:	Aver Conveyance
Invert(ft):	6.5	5.97	Flow:	Both
TOB(ft):	18	18	Eddy Contrac Coef:	0.5
Manning's N:	0.05	0.05	Eddy Expans Coef:	0.5
TClip(ft):	0	0	Entrance Loss Coef:	0.5
BClip(ft):	0	0	Exit Loss Coef:	0.5
Main Xsec:			Outlet Cntrl Spec:	Use dc or tw
AxEl1(ft):			Inlet Cntrl Spec:	Use dn
Aux Xsec1:			Stabilizer Option:	None
AxEl2(ft):				
Aux Xsec2:				
TWidth(ft):				
Depth(ft):				
BWidth(ft):	10	10		
LSdSlp(h/v):	2	2		
RSdSlp(h/v):	2	2		

Advanced Interconnected Channel & Pond Routing (ICPR Ver 2.11) [3]
Copyright 1995, Streamline Technologies, Inc.

Daniel Island Preliminary Design
AdICPR Input Data
Stormwater Master Plan

********** Input Report: Channels **********

Name: CR-5 From Node: C-5 Length(ft): 1000
Group: BASE To Node: C-6 Count: 1

	UPSTREAM	DOWNSTREAM		
Geometry:	Trapezoidal	Trapezoidal	Equation:	Aver Conveyance
Invert(ft):	5.97	5.61	Flow:	Both
TOB(ft):	18	18	Eddy Contrac Coef:	0.5
Manning's N:	0.05	0.05	Eddy Expans Coef:	0.5
TClip(ft):	0	0	Entrance Loss Coef:	0.5
BClip(ft):	0	0	Exit Loss Coef:	0.5
Main Xsec:			Outlet Cntrl Spec:	Use dc or tw
AxEl1(ft):			Inlet Cntrl Spec:	Use dn
Aux Xsec1:			Stabilizer Option:	None
AxEl2(ft):				
Aux Xsec2:				
TWidth(ft):				
Depth(ft):				
BWidth(ft):	10	10		
LSdSlp(h/v):	2	2		
RSdSlp(h/v):	2	2		

Name: CR-6 From Node: C-6 Length(ft): 1000
Group: BASE To Node: C-7 Count: 1

	UPSTREAM	DOWNSTREAM		
Geometry:	Trapezoidal	Trapezoidal	Equation:	Aver Conveyance
Invert(ft):	5.61	5.26	Flow:	Both
TOB(ft):	18	18	Eddy Contrac Coef:	0.5
Manning's N:	0.05	0.05	Eddy Expans Coef:	0.5
TClip(ft):	0	0	Entrance Loss Coef:	0.5
BClip(ft):	0	0	Exit Loss Coef:	0.5
Main Xsec:			Outlet Cntrl Spec:	Use dc or tw
AxEl1(ft):			Inlet Cntrl Spec:	Use dn
Aux Xsec1:			Stabilizer Option:	None
AxEl2(ft):				
Aux Xsec2:				
TWidth(ft):				
Depth(ft):				
BWidth(ft):	10	10		
LSdSlp(h/v):	2	2		
RSdSlp(h/v):	2	2		

Advanced Interconnected Channel & Pond Routing (ICPR Ver 2.11) [4]
Copyright 1995, Streamline Technologies, Inc.

Daniel Island Preliminary Design
AdICPR Input Data
Stormwater Master Plan

********** Input Report: Channels **********

Name: CR-7 From Node: C-7 Length(ft): 700
Group: BASE To Node: POND3 Count: 1

	UPSTREAM	DOWNSTREAM		
Geometry:	Trapezoidal	Trapezoidal	Equation:	Aver Conveyance
Invert(ft):	5.26	5	Flow:	Both
TOB(ft):	18	18	Eddy Contrac Coef:	0.5
Manning's N:	0.05	0.05	Eddy Expans Coef:	0.5
TClip(ft):	0	0	Entrance Loss Coef:	0.5
BClip(ft):	0	0	Exit Loss Coef:	0.5
Main Xsec:			Outlet Cntrl Spec:	Use dc or tw
AxEl1(ft):			Inlet Cntrl Spec:	Use dn
Aux Xsec1:			Stabilizer Option:	None
AxEl2(ft):				
Aux Xsec2:				
TWidth(ft):				
Depth(ft):				
BWidth(ft):	10	10		
LSdSlp(h/v):	2	2		
RSdSlp(h/v):	2	2		

Name: JR-1 From Node: J-1 Length(ft): 600
Group: BASE To Node: POND1 Count: 1

	UPSTREAM	DOWNSTREAM		
Geometry:	Trapezoidal	Trapezoidal	Equation:	Aver Conveyance
Invert(ft):	5.24	5	Flow:	Both
TOB(ft):	18	18	Eddy Contrac Coef:	0.5
Manning's N:	0.05	0.05	Eddy Expans Coef:	0.5
TClip(ft):	0	0	Entrance Loss Coef:	0.5
BClip(ft):	0	0	Exit Loss Coef:	0.5
Main Xsec:			Outlet Cntrl Spec:	Use dc or tw
AxEl1(ft):			Inlet Cntrl Spec:	Use dn
Aux Xsec1:			Stabilizer Option:	None
AxEl2(ft):				
Aux Xsec2:				
TWidth(ft):				
Depth(ft):				
BWidth(ft):	10	10		
LSdSlp(h/v):	2	2		
RSdSlp(h/v):	2	2		

Advanced Interconnected Channel & Pond Routing (ICPR Ver 2.11) [4]
Copyright 1995, Streamline Technologies, Inc.

Daniel Island Preliminary Design
AdICPR Input Data
Stormwater Master Plan

********** Input Report: Channels **********

Name: CR-7 From Node: C-7 Length(ft): 700
Group: BASE To Node: POND3 Count: 1

	UPSTREAM	DOWNSTREAM		
Geometry:	Trapezoidal	Trapezoidal	Equation:	Aver Conveyance
Invert(ft):	5.26	5	Flow:	Both
TOB(ft):	18	18	Eddy Contrac Coef:	0.5
Manning's N:	0.05	0.05	Eddy Expans Coef:	0.5
TClip(ft):	0	0	Entrance Loss Coef:	0.5
BClip(ft):	0	0	Exit Loss Coef:	0.5
Main Xsec:			Outlet Cntrl Spec:	Use dc or tw
AxEl1(ft):			Inlet Cntrl Spec:	Use dn
Aux Xsec1:			Stabilizer Option:	None
AxEl2(ft):				
Aux Xsec2:				
TWidth(ft):				
Depth(ft):				
BWidth(ft):	10	10		
LSdSlp(h/v):	2	2		
RSdSlp(h/v):	2	2		

Name: JR-1 From Node: J-1 Length(ft): 600
Group: BASE To Node: POND1 Count: 1

	UPSTREAM	DOWNSTREAM		
Geometry:	Trapezoidal	Trapezoidal	Equation:	Aver Conveyance
Invert(ft):	5.24	5	Flow:	Both
TOB(ft):	18	18	Eddy Contrac Coef:	0.5
Manning's N:	0.05	0.05	Eddy Expans Coef:	0.5
TClip(ft):	0	0	Entrance Loss Coef:	0.5
BClip(ft):	0	0	Exit Loss Coef:	0.5
Main Xsec:			Outlet Cntrl Spec:	Use dc or tw
AxEl1(ft):			Inlet Cntrl Spec:	Use dn
Aux Xsec1:			Stabilizer Option:	None
AxEl2(ft):				
Aux Xsec2:				
TWidth(ft):				
Depth(ft):				
BWidth(ft):	10	10		
LSdSlp(h/v):	2	2		
RSdSlp(h/v):	2	2		

Advanced Interconnected Channel & Pond Routing (ICPR Ver 2.11) [5]
Copyright 1995, Streamline Technologies, Inc.

Daniel Island Preliminary Design
AdICPR Input Data
Stormwater Master Plan

********** Input Report: Channels **********

Name: JR-2 From Node: J-2 Length(ft): 600
Group: BASE To Node: POND2 Count: 1

	UPSTREAM	DOWNSTREAM		
Geometry:	Trapezoidal	Trapezoidal	Equation:	Aver Conveyance
Invert(ft):	5.24	5	Flow:	Both
TOB(ft):	18	18	Eddy Contrac Coef:	0.5
Manning's N:	0.05	0.05	Eddy Expans Coef:	0.5
TClip(ft):	0	0	Entrance Loss Coef:	0.5
BClip(ft):	0	0	Exit Loss Coef:	0.5
Main Xsec:			Outlet Cntrl Spec:	Use dc or tw
AxEl1(ft):			Inlet Cntrl Spec:	Use dn
Aux Xsec1:			Stabilizer Option:	None
AxEl2(ft):				
Aux Xsec2:				
TWidth(ft):				
Depth(ft):				
BWidth(ft):	10	10		
LSdSlp(h/v):	2	2		
RSdSlp(h/v):	2	2		

Name: WR-1 From Node: W-1 Length(ft): 600
Group: BASE To Node: C-1 Count: 1

	UPSTREAM	DOWNSTREAM		
Geometry:	Trapezoidal	Trapezoidal	Equation:	Aver Conveyance
Invert(ft):	5.8	5.51	Flow:	Both
TOB(ft):	18	18	Eddy Contrac Coef:	0.5
Manning's N:	0.05	0.05	Eddy Expans Coef:	0.5
TClip(ft):	0	0	Entrance Loss Coef:	0.5
BClip(ft):	0	0	Exit Loss Coef:	0.5
Main Xsec:			Outlet Cntrl Spec:	Use dc or tw
AxEl1(ft):			Inlet Cntrl Spec:	Use dn
Aux Xsec1:			Stabilizer Option:	None
AxEl2(ft):				
Aux Xsec2:				
TWidth(ft):				
Depth(ft):				
BWidth(ft):	10	10		
LSdSlp(h/v):	2	2		
RSdSlp(h/v):	2	2		

Advanced Interconnected Channel & Pond Routing (ICPR Ver 2.11) [6]
Copyright 1995, Streamline Technologies, Inc.

Daniel Island Preliminary Design
AdICPR Input Data
Stormwater Master Plan

********** Input Report: Channels **********

Name: WR-2 From Node: W-2 Length(ft): 1500
Group: BASE To Node: W-1 Count: 1

	UPSTREAM	DOWNSTREAM		
Geometry:	Trapezoidal	Trapezoidal	Equation:	Aver Conveyance
Invert(ft):	6.5	5.8	Flow:	Both
TOB(ft):	18	18	Eddy Contrac Coef:	0.5
Manning's N:	0.05	0.05	Eddy Expans Coef:	0.5
TClip(ft):	0	0	Entrance Loss Coef:	0.5
BClip(ft):	0	0	Exit Loss Coef:	0.5
Main Xsec:			Outlet Cntrl Spec:	Use dc or tw
AxEl1(ft):			Inlet Cntrl Spec:	Use dn
Aux Xsec1:			Stabilizer Option:	None
AxEl2(ft):				
Aux Xsec2:				
TWidth(ft):				
Depth(ft):				
BWidth(ft):	10	10		
LSdSlp(h/v):	2	2		
RSdSlp(h/v):	2	2		

Name: WR-3 From Node: W-3 Length(ft): 1500
Group: BASE To Node: W-4 Count: 1

	UPSTREAM	DOWNSTREAM		
Geometry:	Trapezoidal	Trapezoidal	Equation:	Aver Conveyance
Invert(ft):	6.5	5.91	Flow:	Both
TOB(ft):	18	18	Eddy Contrac Coef:	0.5
Manning's N:	0.05	0.05	Eddy Expans Coef:	0.5
TClip(ft):	0	0	Entrance Loss Coef:	0.5
BClip(ft):	0	0	Exit Loss Coef:	0.5
Main Xsec:			Outlet Cntrl Spec:	Use dc or tw
AxEl1(ft):			Inlet Cntrl Spec:	Use dn
Aux Xsec1:			Stabilizer Option:	None
AxEl2(ft):				
Aux Xsec2:				
TWidth(ft):				
Depth(ft):				
BWidth(ft):	10	10		
LSdSlp(h/v):	2	2		
RSdSlp(h/v):	2	2		

Advanced Interconnected Channel & Pond Routing (ICPR Ver 2.11) [7]
Copyright 1995, Streamline Technologies, Inc.

Daniel Island Preliminary Design
AdICPR Input Data
Stormwater Master Plan

********** Input Report: Channels **********

Name: WR-4 From Node: W-4 Length(ft): 1000
Group: BASE To Node: W-5 Count: 1

	UPSTREAM	DOWNSTREAM		
Geometry:	Trapezoidal	Trapezoidal	Equation:	Aver Conveyance
Invert(ft):	5.91	5.51	Flow:	Both
TOB(ft):	18	18	Eddy Contrac Coef:	0.5
Manning's N:	0.05	0.05	Eddy Expans Coef:	0.5
TClip(ft):	0	0	Entrance Loss Coef:	0.5
BClip(ft):	0	0	Exit Loss Coef:	0.5
Main Xsec:			Outlet Cntrl Spec:	Use dc or tw
AxEl1(ft):			Inlet Cntrl Spec:	Use dn
Aux Xsec1:			Stabilizer Option:	None
AxEl2(ft):				
Aux Xsec2:				
TWidth(ft):				
Depth(ft):				
BWidth(ft):	10	10		
LSdSlp(h/v):	2	2		
RSdSlp(h/v):	2	2		

Name: WR-5 From Node: W-5 Length(ft): 700
Group: BASE To Node: J-2 Count: 1

	UPSTREAM	DOWNSTREAM		
Geometry:	Trapezoidal	Trapezoidal	Equation:	Aver Conveyance
Invert(ft):	5.51	5.24	Flow:	Both
TOB(ft):	18	18	Eddy Contrac Coef:	0.5
Manning's N:	0.05	0.05	Eddy Expans Coef:	0.5
TClip(ft):	0	0	Entrance Loss Coef:	0.5
BClip(ft):	0	0	Exit Loss Coef:	0.5
Main Xsec:			Outlet Cntrl Spec:	Use dc or tw
AxEl1(ft):			Inlet Cntrl Spec:	Use dn
Aux Xsec1:			Stabilizer Option:	None
AxEl2(ft):				
Aux Xsec2:				
TWidth(ft):				
Depth(ft):				
BWidth(ft):	10	10		
LSdSlp(h/v):	2	2		
RSdSlp(h/v):	2	2		

Advanced Interconnected Channel & Pond Routing (ICPR Ver 2.11) [1]
Copyright 1995, Streamline Technologies, Inc.

Daniel Island Preliminary Design
AdICPR Input Data
Stormwater Master Plan

********** Input Report: Drop Structures **********

Name: DROP1 From Node: POND1 Length(ft): 200
Group: BASE To Node: BNDRY1 Count: 1

Outlet Cntrl Spec: Use dc or tw Inlet Cntrl Spec: Use dn
Upstream Geometry: Circular Downstream Geometry: Circular

	UPSTREAM	DOWNSTREAM
Span(in):	72	72
Rise(in):	72	72
Invert(ft):	6.5	6.3
Manning's N:	0.013	0.013
Top Clip(in):	0	0
Bottom Clip(in):	0	0

Entrance Loss Coef: 0.5 Flow: Both
Exit Loss Coef: 1 Equation: Aver Conveyance

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall 1 1
Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall 1 1

*** Weir 1 of 3 for Drop Structure DROP1 *** [TABLE]
Count: 1 Bottom Clip(in): 0
Type: Horiz Top Clip(in): 0
Flow: Both Weir Discharge Coef: 3.1
Geometry: Rectangular Orifice Discharge Coef: 0.6

Span(in): 240 Invert(ft): 15
Rise(in): 240 Control Elev(ft): 15

*** Weir 2 of 3 for Drop Structure DROP1 *** [TABLE]
Count: 1 Bottom Clip(in): 0
Type: Mavis Top Clip(in): 0
Flow: Both Weir Discharge Coef: 3.1
Geometry: Rectangular Orifice Discharge Coef: 0.6

Span(in): 360 Invert(ft): 10
Rise(in): 999999 Control Elev(ft): 10

Advanced Interconnected Channel & Pond Routing (ICPR Ver 2.11) [2]
Copyright 1995, Streamline Technologies, Inc.

Daniel Island Preliminary Design
AdICPR Input Data
Stormwater Master Plan

********** Input Report: Drop Structures **********

*** Weir 3 of 3 for Drop Structure DROP1 *** [TABLE]

Count: 1
Bottom Clip(in): 0
Type: Mavis
Top Clip(in): 0
Flow: Both
Weir Discharge Coef: 3.1
Geometry: Circular
Orifice Discharge Coef: 0.6

Span(in): 10
Invert(ft): 7.2
Rise(in): 10
Control Elev(ft): 7.2

Name: DROP2
From Node: POND2
Length(ft): 200
Group: BASE
To Node: BNDRY2
Count: 1

Outlet Cntrl Spec: Use dc or tw
Inlet Cntrl Spec: Use dn
Upstream Geometry: Circular
Downstream Geometry: Circular

	UPSTREAM	DOWNSTREAM
Span(in):	72	72
Rise(in):	72	72
Invert(ft):	6.5	6.3
Manning's N:	0.013	0.013
Top Clip(in):	0	0
Bottom Clip(in):	0	0

Entrance Loss Coef: 0.5
Flow: Both
Exit Loss Coef: 1
Equation: Aver Conveyance

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall 1 1
Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall 1 1

*** Weir 1 of 3 for Drop Structure DROP2 *** [TABLE]

Count: 1
Bottom Clip(in): 0
Type: Horiz
Top Clip(in): 0
Flow: Both
Weir Discharge Coef: 3.1
Geometry: Rectangular
Orifice Discharge Coef: 0.6

Span(in): 240
Invert(ft): 15
Rise(in): 240
Control Elev(ft): 15

Advanced Interconnected Channel & Pond Routing (ICPR Ver 2.11) [3]
Copyright 1995, Streamline Technologies, Inc.

Daniel Island Preliminary Design
AdICPR Input Data
Stormwater Master Plan

********** Input Report: Drop Structures **********

*** Weir 2 of 3 for Drop Structure DROP2 *** [TABLE]

Count: 1 Bottom Clip(in): 0
Type: Mavis Top Clip(in): 0
Flow: Both Weir Discharge Coef: 3.1
Geometry: Rectangular Orifice Discharge Coef: 0.6

Span(in): 360 Invert(ft): 8.9
Rise(in): 999999 Control Elev(ft): 8.9

*** Weir 3 of 3 for Drop Structure DROP2 *** [TABLE]

Count: 1 Bottom Clip(in): 0
Type: Mavis Top Clip(in): 0
Flow: Both Weir Discharge Coef: 3.1
Geometry: Circular Orifice Discharge Coef: 0.6

Span(in): 10 Invert(ft): 7.2
Rise(in): 10 Control Elev(ft): 7.2

Name: DROP3 From Node: POND3 Length(ft): 200
Group: BASE To Node: BNDRY3 Count: 1

Outlet Cntrl Spec: Use dc or tw Inlet Cntrl Spec: Use dn
Upstream Geometry: Circular Downstream Geometry: Circular

	UPSTREAM	DOWNSTREAM
Rise(in):	72	72
Invert(ft):	6.5	6.3
Manning's N:	0.013	0.013
Top Clip(in):	0	0
Bottom Clip(in):	0	0

Entrance Loss Coef: 0.5 Flow: Both
Exit Loss Coef: 1 Equation: Aver Conveyance

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall 1 1
Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall 1 1

Advanced Interconnected Channel & Pond Routing (ICPR Ver 2.11) [4]
Copyright 1995, Streamline Technologies, Inc.

Daniel Island Preliminary Design
AdICPR Input Data
Stormwater Master Plan

********** Input Report: Drop Structures **********

*** Weir 1 of 3 for Drop Structure DROP3 *** [TABLE]

Count: 1 Bottom Clip(in): 0
Type: Horiz Top Clip(in): 0
Flow: Both Weir Discharge Coef: 3.1
Geometry: Rectangular Orifice Discharge Coef: 0.6

Span(in): 240 Invert(ft): 15
Rise(in): 240 Control Elev(ft): 15

*** Weir 2 of 3 for Drop Structure DROP3 *** [TABLE]

Count: 1 Bottom Clip(in): 0
Type: Mavis Top Clip(in): 0
Flow: Both Weir Discharge Coef: 3.1
Geometry: Rectangular Orifice Discharge Coef: 0.6

Span(in): 360 Invert(ft): 8.8
Rise(in): 999999 Control Elev(ft): 8.8

*** Weir 3 of 3 for Drop Structure DROP3 *** [TABLE]

Count: 1 Bottom Clip(in): 0
Type: Mavis Top Clip(in): 0
Flow: Both Weir Discharge Coef: 3.1
Geometry: Circular Orifice Discharge Coef: 0.6

Span(in): 10 Invert(ft): 7.2
Rise(in): 10 Control Elev(ft): 7.2

```
   Advanced Interconnected Channel & Pond Routing (ICPR Ver 2.11) [3]
   Copyright 1995, Streamline Technologies, Inc.

   Daniel Island Preliminary Design
   AdICPR Input Data
   Stormwater Master Plan

   ********** Input Report: Simulations ******************************************
   ------------------------------------------------------------------------------
 C:\ICPR2\DAN2\2YR24HR\2YR24HR
 Execution: Both
   Header: Daniel Island Preliminary design
           2 Year 24 Hpur Storm
           Stormwater Master Plan
---------HYDRAULICS----------------------------HYDROLOGY--------------------
        Max Delta Z (ft): 1
          Delta Z Factor: 0.01           Override Defaults: Yes
     Time Step Optimizer: 0                 Storm Dur(hrs): 24
Drop Structure Optimizer: 0                Rain Amount(in): 4.4
     Sim Start Time(hrs): 0                  Rainfall File: SCSII-24
       Sim End Time(hrs): 24
      Min Calc Time(sec): 1
      Max Calc Time(sec): 30
        To Hour:   PInc(min):                 To Hour:   PInc(min):
        24         15                         24         15
---------GROUP SELECTIONS----------------------------------------------------
+ BASE     [10/05/98]
```

```
    Advanced Interconnected Channel & Pond Routing (ICPR Ver 2.11) [1]
    Copyright 1995, Streamline Technologies, Inc.

    Daniel Island Preliminary Design
    AdICPR Input Data
    Stormwater Master Plan

    ********** Input Report: Simulations ******************************************
    ---------------------------------------------------------------------------
 C:\ICPR2\DAN2\10YR24HR\10YR24HR
 Execution: Both
    Header: Daniel Island Preliminary design
            10 Year 24 Hour Storm
            Stormwater Master Plan
---------HYDRAULICS----------------------------HYDROLOGY--------------------
        Max Delta Z (ft): 1
          Delta Z Factor: 0.01           Override Defaults: Yes
     Time Step Optimizer: 0                 Storm Dur(hrs): 24
Drop Structure Optimizer: 0                Rain Amount(in): 6.7
     Sim Start Time(hrs): 0                  Rainfall File: SCSII-24
       Sim End Time(hrs): 24
      Min Calc Time(sec): 1
      Max Calc Time(sec): 30
        To Hour:   PInc(min):                  To Hour:   PInc(min):
        24         15                          24         15
---------GROUP SELECTIONS----------------------------------------------------
+ BASE     [10/05/98]
    ---------------------------------------------------------------------------
 C:\ICPR2\DAN2\25YR24HR\25YR24HR
 Execution: Both
    Header: Daniel Island Preliminary design
            25 Year 24 Hour Storm
            Stormwater Master Plan
---------HYDRAULICS----------------------------HYDROLOGY--------------------
        Max Delta Z (ft): 1
          Delta Z Factor: 0.01           Override Defaults: Yes
     Time Step Optimizer: 0                 Storm Dur(hrs): 24
Drop Structure Optimizer: 0                Rain Amount(in): 7.6
     Sim Start Time(hrs): 0                  Rainfall File: SCSII-24
       Sim End Time(hrs): 24
      Min Calc Time(sec): 1
      Max Calc Time(sec): 30
        To Hour:   PInc(min):                  To Hour:   PInc(min):
        24         15                          24         15
---------GROUP SELECTIONS----------------------------------------------------
+ BASE     [10/05/98]
```

```
    Advanced Interconnected Channel & Pond Routing (ICPR Ver 2.11) [2]
    Copyright 1995, Streamline Technologies, Inc.

    Daniel Island Preliminary Design
    AdICPR Input Data
    Stormwater Master Plan

    ********** Input Report: Simulations ******************************************
    ---------------------------------------------------------------------------
 C:\ICPR2\DAN2\50YR24HR\50YR24HR
 Execution: Both
    Header: Daniel Island Preliminary design
            50 Year 24 Hour Storm
            Stormwater Master Plan
---------HYDRAULICS---------------------------HYDROLOGY--------------------
        Max Delta Z (ft): 1
          Delta Z Factor: 0.01           Override Defaults: Yes
     Time Step Optimizer: 0                 Storm Dur(hrs): 24
Drop Structure Optimizer: 0                Rain Amount(in): 8.5
     Sim Start Time(hrs): 0                  Rainfall File: SCSII-24
       Sim End Time(hrs): 24
      Min Calc Time(sec): 1
      Max Calc Time(sec): 30
        To Hour:   PInc(min):                  To Hour:   PInc(min):
        24         15                          24         15
---------GROUP SELECTIONS---------------------------------------------------
+ BASE     [10/05/98]
    ---------------------------------------------------------------------------
 C:\ICPR2\DAN2\100YR24H\100YR24H
 Execution: Both
    Header: Daniel Island Preliminary design
            100 Year 24 Hour Storm
            Stormwater Master Plan
---------HYDRAULICS---------------------------HYDROLOGY--------------------
        Max Delta Z (ft): 1
          Delta Z Factor: 0.01           Override Defaults: Yes
     Time Step Optimizer: 0                 Storm Dur(hrs): 24
Drop Structure Optimizer: 0                Rain Amount(in): 9.8
     Sim Start Time(hrs): 0                  Rainfall File: SCSII-24
       Sim End Time(hrs): 24
      Min Calc Time(sec): 1
      Max Calc Time(sec): 30
        To Hour:   PInc(min):                  To Hour:   PInc(min):
        24         15                          24         15
---------GROUP SELECTIONS---------------------------------------------------
+ BASE     [10/05/98]
```

Job: Daniel Island
Description: Conceptual Stormwater Drainage System

Post

Sheet 1 of 1 Project No. C103703.02
Computed By: RWP Date: 6/29/98
Checked By: Date:

Summary of ~~Pre~~-Development Results By Basin

Sub-Basin	BASIN 1					BASIN 2					BASIN 3				
	Area	2yr		10yr		Area	2yr		10yr		Area	2yr		10yr	
	(ac)	Flow (cfs)	Volume (ac-ft)	Flow (cfs)	Volume (ac-ft)	(ac)	Flow (cfs)	Volume (ac-ft)	Flow (cfs)	Volume (ac-ft)	(ac)	Flow (cfs)	Volume (ac-ft)	Flow (cfs)	Volume (ac-ft)
WB-1	63.6	160.4	961063	245.47	1491176										
WB-2	63.6	160.4	961063	245.47	1491176										
WB-3						63.6	160.4	961063	245.47	1491176					
WB-4						63.6	160.4	961063	245.47	1491176					
WB-5						63.6	160.4	961063	245.47	1491176					
CB-1	63.6	160.4	961063	245.47	1491176										
CB-2	63.6	160.4	961063	245.47	1491176										
CB-3	63.6	160.4	961063	245.47	1491176										
CB-4											63.6	160.4	961063	245.47	1491176
CB-5											63.6	160.4	961063	245.47	1491176
CB-6											63.6	160.4	961063	245.47	1491176
CB-7											35.4	89.28	534931	136.63	829994
INTW-1	12.8	46.23	193422	70.7	300112										
INTW-2	12.8	46.23	193422	70.7	300112										
INTC-1	12.8	46.23	193422	70.7	300112										
INTC-2	12.8	46.23	193422	70.7	300112										
INTC-3	12.8	46.23	193422	70.7	300112										
INTW-3						21.5	77.65	324888	118.76	504094					
INTW-4						21.5	77.65	324888	118.76	504094					
INTW-5						21.5	77.65	324888	118.76	504094					
INTC-4											25.875	93.45	391000	142.92	606671
INTC-5											25.875	93.45	391000	142.92	606671
INTC-6											25.875	93.45	391000	142.92	606671
INTC-7											25.875	93.45	391000	142.92	606671
PARK	91	251.83	930622	433.66	1639956										
POND2						92.7	256.08	948008	441.76	1670591					
POND3											138.3	370.64	1368448	647.26	2436761
Totals	**473**	**1285.0**	**153.9**	**2014.51**	**243.3**	**348.0**	**970.2**	**110.3**	**1534.5**	**175.8**	**468.0**	**1314.9**	**145.8**	**2092.0**	**233.4**

a:\presum

Advanced Interconnected Channel & Pond Routing (ICPR Ver 2.11) [1]
Copyright 1995, Streamline Technologies, Inc.

Daniel Island Preliminary design
2, 10, 25, 50 and 100 Year - 24 Hour Storms
Stormwater Master Plan

********** Basin Results Comparisons **********

Simulation Name	Time Max (hrs)	Flow Max (cfs)	Runoff Volume (in)	Runoff Volume (cf)
*** Basin Name: WB-1				
2YR24HR	12.13	160.40	4.16	961063
25YR24HR	12.13	278.69	7.36	1698725
50YR24HR	12.13	311.89	8.26	1906306
100YR24H	12.13	359.82	9.56	2206189
10YR24HR	12.13	245.47	6.46	1491176
*** Basin Name: WB-2				
2YR24HR	12.13	160.40	4.16	961063
25YR24HR	12.13	278.69	7.36	1698725
50YR24HR	12.13	311.89	8.26	1906306
100YR24H	12.13	359.82	9.56	2206189
10YR24HR	12.13	245.47	6.46	1491176
*** Basin Name: WB-3				
2YR24HR	12.13	160.40	4.16	961063
25YR24HR	12.13	278.69	7.36	1698725
50YR24HR	12.13	311.89	8.26	1906306
100YR24H	12.13	359.82	9.56	2206189
10YR24HR	12.13	245.47	6.46	1491176
*** Basin Name: WB-4				
2YR24HR	12.13	160.40	4.16	961063
25YR24HR	12.13	278.69	7.36	1698725
50YR24HR	12.13	311.89	8.26	1906306
100YR24H	12.13	359.82	9.56	2206189
10YR24HR	12.13	245.47	6.46	1491176
*** Basin Name: WB-5				
2YR24HR	12.13	160.40	4.16	961063
25YR24HR	12.13	278.69	7.36	1698725
50YR24HR	12.13	311.89	8.26	1906306
100YR24H	12.13	359.82	9.56	2206189
10YR24HR	12.13	245.47	6.46	1491176
*** Basin Name: CB-1				
2YR24HR	12.13	160.40	4.16	961063
25YR24HR	12.13	278.69	7.36	1698725
50YR24HR	12.13	311.89	8.26	1906306
100YR24H	12.13	359.82	9.56	2206189
10YR24HR	12.13	245.47	6.46	1491176
*** Basin Name: CB-2				
2YR24HR	12.13	160.40	4.16	961063
25YR24HR	12.13	278.69	7.36	1698725
50YR24HR	12.13	311.89	8.26	1906306
100YR24H	12.13	359.82	9.56	2206189
10YR24HR	12.13	245.47	6.46	1491176

Copyright 1995, Streamline Technologies, Inc.

Daniel Island Preliminary design
2, 10, 25, 50 and 100 Year - 24 Hour Storms
Stormwater Master Plan

********** Basin Results Comparisons **********

Simulation Name	Time Max (hrs)	Flow Max (cfs)	Runoff Volume (in)	Runoff Volume (cf)
*** Basin Name: CB-3				
2YR24HR	12.13	160.40	4.16	961063
25YR24HR	12.13	278.69	7.36	1698725
50YR24HR	12.13	311.89	8.26	1906306
100YR24H	12.13	359.82	9.56	2206189
10YR24HR	12.13	245.47	6.46	1491176
*** Basin Name: CB-4				
2YR24HR	12.13	160.40	4.16	961063
25YR24HR	12.13	278.69	7.36	1698725
50YR24HR	12.13	311.89	8.26	1906306
100YR24H	12.13	359.82	9.56	2206189
10YR24HR	12.13	245.47	6.46	1491176
*** Basin Name: CB-5				
2YR24HR	12.13	160.40	4.16	961063
25YR24HR	12.13	278.69	7.36	1698725
50YR24HR	12.13	311.89	8.26	1906306
100YR24H	12.13	359.82	9.56	2206189
10YR24HR	12.13	245.47	6.46	1491176
*** Basin Name: CB-6				
2YR24HR	12.13	160.40	4.16	961063
25YR24HR	12.13	278.69	7.36	1698725
50YR24HR	12.13	311.89	8.26	1906306
100YR24H	12.13	359.82	9.56	2206189
10YR24HR	12.13	245.47	6.46	1491176
*** Basin Name: CB-7				
2YR24HR	12.13	89.28	4.16	534931
25YR24HR	12.13	155.12	7.36	945518
50YR24HR	12.13	173.60	8.26	1061058
100YR24H	12.13	200.28	9.56	1227974
10YR24HR	12.13	136.63	6.46	829994
*** Basin Name: INTW-1				
2YR24HR	12.04	46.23	4.16	193422
25YR24HR	12.04	80.26	7.36	341884
50YR24HR	12.04	89.81	8.26	383661
100YR24H	12.04	103.61	9.56	444015
10YR24HR	12.04	70.70	6.46	300112
*** Basin Name: INTW-2				
2YR24HR	12.04	46.23	4.16	193422
25YR24HR	12.04	80.26	7.36	341884
50YR24HR	12.04	89.81	8.26	383661

100YR24H	12.04	103.61	9.56	444015
10YR24HR	12.04	70.70	6.46	300112

Copyright 1995, Streamline Technologies, Inc.

Daniel Island Preliminary design
2, 10, 25, 50 and 100 Year - 24 Hour Storms
Stormwater Master Plan

********** Basin Results Comparisons **********

Simulation Name	Time Max (hrs)	Flow Max (cfs)	Runoff Volume (in)	Runoff Volume (cf)
*** Basin Name: INTC-1				
2YR24HR	12.04	46.23	4.16	193422
25YR24HR	12.04	80.26	7.36	341884
50YR24HR	12.04	89.81	8.26	383661
100YR24H	12.04	103.61	9.56	444015
10YR24HR	12.04	70.70	6.46	300112
*** Basin Name: INTC-2				
2YR24HR	12.04	46.23	4.16	193422
25YR24HR	12.04	80.26	7.36	341884
50YR24HR	12.04	89.81	8.26	383661
100YR24H	12.04	103.61	9.56	444015
10YR24HR	12.04	70.70	6.46	300112
*** Basin Name: INTC-3				
2YR24HR	12.04	46.23	4.16	193422
25YR24HR	12.04	80.26	7.36	341884
50YR24HR	12.04	89.81	8.26	383661
100YR24H	12.04	103.61	9.56	444015
10YR24HR	12.04	70.70	6.46	300112
*** Basin Name: INTW-3				
2YR24HR	12.04	77.65	4.16	324888
25YR24HR	12.04	134.81	7.36	574257
50YR24HR	12.04	150.86	8.26	644430
100YR24H	12.04	174.03	9.56	745805
10YR24HR	12.04	118.76	6.46	504094
*** Basin Name: INTW-4				
2YR24HR	12.04	77.65	4.16	324888
25YR24HR	12.04	134.81	7.36	574257
50YR24HR	12.04	150.86	8.26	644430
100YR24H	12.04	174.03	9.56	745805
10YR24HR	12.04	118.76	6.46	504094
*** Basin Name: INTW-5				
2YR24HR	12.04	77.65	4.16	324888
25YR24HR	12.04	134.81	7.36	574257
50YR24HR	12.04	150.86	8.26	644430
100YR24H	12.04	174.03	9.56	745805
10YR24HR	12.04	118.76	6.46	504094
*** Basin Name: INTC-4				
2YR24HR	12.04	93.45	4.16	391000
25YR24HR	12.04	162.25	7.36	691112
50YR24HR	12.04	181.56	8.26	775563

100YR24H	12.04	209.44	9.56	897569
10YR24HR	12.04	142.92	6.46	606671

Copyright 1995, Streamline Technologies, Inc.

Daniel Island Preliminary design
2, 10, 25, 50 and 100 Year - 24 Hour Storms
Stormwater Master Plan

********** Basin Results Comparisons **********

Simulation Name	Time Max (hrs)	Flow Max (cfs)	Runoff Volume (in)	Runoff Volume (cf)
*** Basin Name: INTC-5				
2YR24HR	12.04	93.45	4.16	391000
25YR24HR	12.04	162.25	7.36	691112
50YR24HR	12.04	181.56	8.26	775563
100YR24H	12.04	209.44	9.56	897569
10YR24HR	12.04	142.92	6.46	606671
*** Basin Name: INTC-6				
2YR24HR	12.04	93.45	4.16	391000
25YR24HR	12.04	162.25	7.36	691112
50YR24HR	12.04	181.56	8.26	775563
100YR24H	12.04	209.44	9.56	897569
10YR24HR	12.04	142.92	6.46	606671
*** Basin Name: INTC-7				
2YR24HR	12.04	93.45	4.16	391000
25YR24HR	12.04	162.25	7.36	691112
50YR24HR	12.04	181.56	8.26	775563
100YR24H	12.04	209.44	9.56	897569
10YR24HR	12.04	142.92	6.46	606671
*** Basin Name: PARK				
2YR24HR	12.04	251.38	2.82	930622
25YR24HR	12.04	504.93	5.83	1924497
50YR24HR	12.04	576.01	6.69	2211331
100YR24H	12.04	678.27	7.96	2628585
10YR24HR	12.04	433.66	4.96	1639956
*** Basin Name: POND2				
2YR24HR	12.04	256.08	2.82	948008
25YR24HR	12.04	514.37	5.83	1960444
50YR24HR	12.04	586.77	6.69	2252641
100YR24H	12.04	690.94	7.96	2677691
10YR24HR	12.04	441.76	4.96	1670591
*** Basin Name: POND3				
2YR24HR	12.04	370.64	2.73	1368448
25YR24HR	12.04	755.73	5.71	2866598
50YR24HR	12.04	863.96	6.57	3300356
100YR24H	12.04	1019.75	7.83	3931925
10YR24HR	12.04	647.26	4.85	2436761

Advanced Interconnected Channel & Pond Routing (ICPR Ver 2.11) [1]
Copyright 1995, Streamline Technologies, Inc.

Daniel Island Preliminary design
2, 10, 25, 50 and 100 Year - 24 Hour Storms
Stormwater Master Plan

********** Node Maximum Comparisons **********

(Time units - hours)

Sim Name	Max Time Conditions	Max Stage (ft)	Warning Stage (ft)	Max Delta Stage (ft)	Max Surface Area (sf)	Max Time Inflow	Max Inflow (cfs)	Max Time Outflow	Max Outflow (cfs)
*** Node Name: BNDRY1		Group: BASE							
2YR24HR	13.00	7.50	18.00	-0.0093	0.00	13.51	162.53	0.00	0.00
25YR24HR	13.00	9.64	18.00	0.0106	0.00	13.44	324.05	0.00	0.00
50YR24HR	13.00	11.64	18.00	0.0130	0.00	13.45	359.68	0.00	0.00
100YR24H	13.00	13.64	18.00	0.0154	0.00	13.71	413.42	0.00	0.00
10YR24HR	13.00	8.64	18.00	0.0094	0.00	13.47	282.42	0.00	0.00
*** Node Name: BNDRY2		Group: BASE							
2YR24HR	13.00	7.50	18.00	-0.0093	0.00	13.49	120.08	0.00	0.00
25YR24HR	13.00	9.64	18.00	0.0106	0.00	13.39	241.75	0.00	0.00
50YR24HR	13.00	11.64	18.00	0.0130	0.00	13.06	291.07	0.00	0.00
100YR24H	13.00	13.64	18.00	0.0154	0.00	13.74	347.32	0.00	0.00
10YR24HR	13.00	8.64	18.00	0.0094	0.00	13.39	207.20	0.00	0.00
*** Node Name: BNDRY3		Group: BASE							
2YR24HR	13.00	7.50	18.00	-0.0093	0.00	13.68	125.42	0.00	0.00
25YR24HR	13.00	9.64	18.00	0.0106	0.00	13.53	261.83	0.00	0.00
50YR24HR	13.00	11.64	18.00	0.0130	0.00	13.05	307.82	0.00	0.00
100YR24H	13.00	13.64	18.00	0.0154	0.00	13.74	369.79	0.00	0.00
10YR24HR	13.00	8.64	18.00	0.0094	0.00	13.58	220.57	0.00	0.00
*** Node Name: C-1		Group: BASE							
2YR24HR	12.42	14.19	18.00	0.0100	51139.97	12.28	661.25	12.36	636.47
25YR24HR	13.33	17.07	18.00	0.0100	64589.04	12.26	1194.75	12.30	1140.39
50YR24HR	13.41	17.94	18.00	-0.0100	68592.10	12.25	1342.94	12.29	1278.35
100YR24H	13.44	19.30	18.00	-0.0099	74842.25	12.25	1551.30	12.28	1470.10
10YR24HR	12.42	16.18	18.00	-0.0100	60304.66	12.26	1045.62	12.32	1001.01
*** Node Name: C-2		Group: BASE							
2YR24HR	12.41	14.38	18.00	0.0093	54664.85	12.25	296.03	12.37	254.90
25YR24HR	13.35	17.08	18.00	0.0098	68226.87	12.22	524.16	12.31	457.24
50YR24HR	13.37	17.95	18.00	0.0097	72575.79	12.21	588.28	12.30	512.67
100YR24H	13.43	19.30	18.00	0.0093	79342.60	12.19	680.30	12.28	589.73
10YR24HR	12.40	16.36	18.00	0.0097	64566.39	12.23	460.03	12.32	401.24
*** Node Name: C-3		Group: BASE							
2YR24HR	12.40	14.46	18.00	0.0095	31861.33	12.00	176.85	12.27	133.51
25YR24HR	12.40	17.11	18.00	0.0099	39835.33	12.00	307.61	12.26	240.88
50YR24HR	13.36	17.96	18.00	0.0098	42421.46	12.00	344.29	12.26	270.71
100YR24H	13.44	19.31	18.00	0.0094	46478.45	12.00	397.28	12.25	312.70
10YR24HR	12.40	16.43	18.00	0.0098	37791.79	12.00	270.87	12.26	210.85
*** Node Name: C-4		Group: BASE							
2YR24HR	12.32	14.55	18.00	0.0100	32049.81	12.00	222.41	12.26	172.38
25YR24HR	12.29	16.99	18.00	0.0100	39356.55	12.00	386.80	12.25	311.19
50YR24HR	12.29	17.56	18.00	0.0100	41064.79	12.00	432.86	12.25	350.07
100YR24H	12.30	18.37	18.00	0.0100	43512.00	12.00	499.51	12.22	405.02

Copyright 1995, Streamline Technologies, Inc.

Daniel Island Preliminary design
2, 10, 25, 50 and 100 Year - 24 Hour Storms
Stormwater Master Plan

********** Node Maximum Comparisons **********

(Time units - hours)

Sim Name	Max Time Conditions	Max Stage (ft)	Warning Stage (ft)	Max Delta Stage (ft)	Max Surface Area (sf)	Max Time Inflow	Max Inflow (cfs)	Max Time Outflow	Max Outflow (cfs)
10YR24HR	12.30	16.38	18.00	0.0100	37527.54	12.00	340.57	12.25	272.18
*** Node Name: C-5		Group: BASE							
2YR24HR	12.32	14.41	18.00	0.0100	54514.73	12.12	368.06	12.32	338.30
25YR24HR	12.30	16.84	18.00	0.0100	66649.15	12.11	655.84	12.28	611.76
50YR24HR	12.30	17.41	18.00	0.0099	69492.60	12.11	737.47	12.27	688.00
100YR24H	12.30	18.23	18.00	0.0099	73597.27	12.11	856.11	12.26	792.53
10YR24HR	12.30	16.23	18.00	0.0098	63607.60	12.12	574.45	12.29	535.16
*** Node Name: C-6		Group: BASE							
2YR24HR	12.32	14.06	18.00	0.0097	43608.74	12.25	520.38	12.32	506.87
25YR24HR	12.30	16.45	18.00	0.0097	53151.25	12.24	937.37	12.28	915.48
50YR24HR	12.30	17.02	18.00	0.0096	55414.64	12.23	1054.69	12.27	1029.20
100YR24H	13.41	17.92	18.00	0.0098	59332.22	12.21	1221.50	12.25	1184.20
10YR24HR	12.31	15.85	18.00	0.0094	50742.79	12.25	820.16	12.29	801.17
*** Node Name: C-7		Group: BASE							
2YR24HR	12.33	13.12	18.00	0.0089	34834.60	12.27	626.28	12.32	620.01
25YR24HR	13.46	15.60	18.00	0.0088	43704.78	12.25	1134.62	12.27	1114.42
50YR24HR	13.45	16.39	18.00	0.0085	46366.00	12.24	1276.62	12.26	1251.25
100YR24H	13.45	17.88	18.00	0.0094	51455.95	12.22	1475.70	12.24	1434.71
10YR24HR	12.33	14.83	18.00	0.0087	40818.43	12.25	991.98	12.28	976.70
*** Node Name: J-1		Group: BASE							
2YR24HR	13.48	13.47	18.00	-0.0092	27989.72	12.36	636.47	12.39	625.11
25YR24HR	13.42	17.02	18.00	0.0084	37211.49	12.30	1140.39	12.32	1105.67
50YR24HR	13.43	17.89	18.00	0.0083	39495.36	12.29	1278.35	12.31	1235.66
100YR24H	13.47	19.26	18.00	0.0083	43051.90	12.28	1470.10	12.29	1414.74
10YR24HR	13.42	16.09	18.00	0.0084	34797.28	12.32	1001.01	12.33	973.93
*** Node Name: J-2		Group: BASE							
2YR24HR	12.38	12.29	18.00	0.0072	24796.58	12.29	489.11	12.32	481.29
25YR24HR	13.34	15.20	18.00	0.0071	32491.46	12.26	873.49	12.27	850.69
50YR24HR	13.30	15.88	18.00	0.0069	34259.58	12.25	980.04	12.26	952.30
100YR24H	13.33	17.33	18.00	0.0089	38022.31	12.23	1123.25	12.24	1082.76
10YR24HR	13.35	14.40	18.00	0.0073	30422.68	12.26	766.39	12.28	748.56
*** Node Name: POND1		Group: BASE							
2YR24HR	13.60	13.42	18.00	0.0061	595844.14	12.33	740.83	13.51	162.53
25YR24HR	13.47	16.98	18.00	0.0073	654937.26	12.27	1364.98	13.44	324.05
50YR24HR	13.47	17.86	18.00	0.0073	669601.86	12.22	1539.26	13.45	359.68
100YR24H	13.49	19.24	18.00	0.0076	692460.91	12.20	1790.46	13.71	413.42
10YR24HR	13.48	16.04	18.00	0.0073	639445.61	12.29	1191.23	13.47	282.42
*** Node Name: POND2		Group: BASE							

2YR24HR	13.54	12.11	18.00	0.0052	574080.78	12.22	618.39	13.49	120.08
25YR24HR	13.40	15.16	18.00	0.0055	624761.09	12.16	1168.57	13.39	241.75

Advanced Interconnected Channel & Pond Routing (ICPR Ver 2.11) [3]
Copyright 1995, Streamline Technologies, Inc.

Daniel Island Preliminary design
2, 10, 25, 50 and 100 Year - 24 Hour Storms
Stormwater Master Plan

********** Node Maximum Comparisons **********

(Time units - hours)

Sim Name	Max Time Conditions	Max Stage (ft)	Warning Stage (ft)	Max Delta Stage (ft)	Max Surface Area (sf)	Max Time Inflow	Max Inflow (cfs)	Max Time Outflow	Max Outflow (cfs)
50YR24HR	13.37	15.84	18.00	0.0057	636037.49	12.15	1325.31	13.06	291.07
100YR24H	13.36	17.30	18.00	0.0089	660270.70	12.13	1547.30	13.74	347.32
10YR24HR	13.43	14.36	18.00	0.0054	611497.63	12.17	1012.62	13.39	207.20
*** Node Name: POND3		Group: BASE							
2YR24HR	13.75	12.25	18.00	0.0052	782724.12	12.19	827.15	13.68	125.42
25YR24HR	13.55	15.56	18.00	0.0058	846098.28	12.14	1595.18	13.53	261.83
50YR24HR	13.52	16.35	18.00	0.0061	861145.21	12.13	1815.36	13.05	307.82
100YR24H	13.49	17.85	18.00	0.0088	890003.37	12.11	2133.63	13.74	369.79
10YR24HR	13.59	14.69	18.00	0.0055	829417.88	12.15	1376.26	13.58	220.57
*** Node Name: W-1		Group: BASE							
2YR24HR	12.41	14.31	18.00	0.0093	45935.15	12.25	296.53	12.33	258.40
25YR24HR	13.33	17.08	18.00	-0.0099	57541.23	12.21	524.60	12.28	464.90
50YR24HR	13.37	17.95	18.00	-0.0096	61194.87	12.20	588.70	12.28	521.80
100YR24H	13.44	19.30	18.00	0.0093	66886.42	12.19	680.67	12.27	601.29
10YR24HR	12.41	16.29	18.00	0.0097	54262.25	12.23	460.48	12.29	407.52
*** Node Name: W-2		Group: BASE							
2YR24HR	12.40	14.39	18.00	0.0094	31744.31	12.00	176.85	12.27	134.05
25YR24HR	13.33	17.09	18.00	0.0098	39894.50	12.00	307.61	12.26	241.16
50YR24HR	13.32	17.96	18.00	0.0097	42500.39	12.00	344.29	12.26	270.85
100YR24H	13.44	19.32	18.00	0.0094	46566.06	12.00	397.28	12.25	312.60
10YR24HR	12.40	16.37	18.00	0.0098	37681.34	12.00	270.87	12.26	211.24
*** Node Name: W-3		Group: BASE							
2YR24HR	12.31	13.89	18.00	0.0094	30096.74	12.00	207.16	12.26	167.01
25YR24HR	12.29	16.18	18.00	0.0093	36952.28	12.00	360.30	12.24	297.95
50YR24HR	12.29	16.72	18.00	0.0093	38562.61	12.00	403.22	12.23	334.62
100YR24H	12.31	17.53	18.00	0.0095	41014.15	12.00	465.31	12.20	385.99
10YR24HR	12.30	15.61	18.00	0.0093	35229.45	12.00	317.25	12.25	261.29
*** Node Name: W-4		Group: BASE							
2YR24HR	12.32	13.71	18.00	0.0091	51264.67	12.13	352.61	12.30	326.60
25YR24HR	12.30	15.99	18.00	0.0091	62668.94	12.12	625.67	12.27	583.22
50YR24HR	12.30	16.53	18.00	0.0090	65357.62	12.11	702.84	12.26	654.41
100YR24H	13.26	17.39	18.00	0.0094	69786.50	12.11	814.39	12.24	750.15
10YR24HR	12.30	15.42	18.00	0.0089	59795.85	12.12	548.65	12.28	511.70
*** Node Name: W-5		Group: BASE							
2YR24HR	12.32	13.24	18.00	0.0086	34690.33	12.25	502.96	12.29	489.11
25YR24HR	12.32	15.50	18.00	0.0086	42387.87	12.22	896.85	12.26	873.49
50YR24HR	12.33	16.05	18.00	0.0084	44238.04	12.21	1007.55	12.25	980.04
100YR24H	13.29	17.37	18.00	0.0093	48818.70	12.19	1163.42	12.23	1123.25
10YR24HR	12.32	14.93	18.00	0.0083	40424.74	12.23	786.25	12.26	766.39

Pre and Post-Development Alternatives
Naval Base + Daniel Island/Cooper River + Columbus Street
Naval Base + Daniel Island/Wando River

Job: Daniel island
Description: Conceptual Stormwater Drainage System
Project No.: C10362800

Sheet 1 of 2
Computed By: RWP Date: 6-29-88
Checked By: Date:

Daniel Cooper River Side																	
		CN = ((AC)i(CN)i + (AC)i+1(CN)i+1 + (AC)i+2(CN)i+2 +.....(AC)n-1(CN)n-1 + (AC)n(CN)n)) / Total Area															
Basin #	Total Area	Impervious Area				Pervious Area											Composite
		Land Use				Soils			Land Use								
		Pavement		Roofs		Symbol / Name	Hydrologic		Spoil Area		Forest		Dirt Road		Cultivated		
	(AC)	(AC)	CN	(AC)	CN		Group	%	(AC)	CN	(AC)	CN	(AC)	CN	(AC)	CN	CN
West Cell	125.00	0.00		0.00		AU / Aquic Udifluvents	D	100	118.97	89	3.44	83	2.58	89	0.00	83	89
Central Cell	55.00	0.00		0.00		AU / Aquic Udifluvents	D	100	51.56	89	3.44	83	0.00	89	0.00	83	89
North Cell	559.00	0.00		0.00		AU / Aquic Udifluvents	D	100	0.00	89	52.00	83	0.00	89	507	83	83

NOTES: (1) Curve numbers and Land uses from Tables 2-2a and 2-2c TR55 manual
(2) Soil Names, Symbols and Hydrologic Soil Group were obtained from USDA Soil Conservation Service Soil Survey of Berkeley county , January 1980

Daniel Wando River Side																	
		CN = ((AC)i(CN)i + (AC)i+1(CN)i+1 + (AC)i+2(CN)i+2 +.....(AC)n-1(CN)n-1 + (AC)n(CN)n)) / Total Area															
Basin #	Total Area	Impervious Area				Pervious Area											Composite
		Land Use				Soils			Land Use								
		Pavement		Roofs		Symbol / Name	Hydrologic		Spoil Area		Forest		Dirt Road		Cultivated		
	(AC)	(AC)	CN	(AC)	CN		Group	%	(AC)	CN	(AC)	CN	(AC)	CN	(AC)	CN	CN
West Cell	40.00	0.00		0.00		AU / Aquic Udifluvents	D	100	33.97	89	3.44	83	2.58	89	0.00	83	88
Wando Cell	330.00	0.00		0.00		AU / Aquic Udifluvents	D	100	326.56	89	3.44	83	0.00	89	0.00	83	89
Midddle Cell	180.00	0.00		0.00		AU / Aquic Udifluvents	D	100	0.00	89	52.00	83	0.00	89	128	83	83

```
Advanced Interconnected Channel & Pond Routing (ICPR Ver 2.11) [1]
Copyright 1995, Streamline Technologies, Inc.

Daniel Island Pre and Post Conditions Alternatives
Wando River Side Alternative and Cooper River Side Altarnative
AdICPR Indput Data

********** Input Report: Basins ***********************************************
-------------------------------------------------------------------------------
Basin: CENTRAL    Node: CENTRAL    Status: On Site    Type: SCS Unit Hydr
Group: BASE
    Unit Hydrograph: UH256                    Peak Factor: 256
      Rainfall File:                 Storm Duration(hrs): 0
Rainfall Amount(in): 0
           Area(ac): 55          Concentration Time(min): 19
            Curve #: 89                    Lag Time(hrs): 0
            DCIA(%): 0

          For Coopper River Development Table 5.3.1.4-1

-------------------------------------------------------------------------------
Basin: COOPBERT   Node: COOPBERT   Status: On Site    Type: SCS Unit Hydr
Group: BASE
    Unit Hydrograph: UH256                    Peak Factor: 256
      Rainfall File:                 Storm Duration(hrs): 0
Rainfall Amount(in): 0
           Area(ac): 739         Concentration Time(min): 25
            Curve #: 95                    Lag Time(hrs): 0
            DCIA(%): 0

          Post Development Cooper River Side Table 5.3.1.4-1

-------------------------------------------------------------------------------
Basin: MIDDLE     Node: MIDDLE     Status: On Site    Type: SCS Unit Hydr
Group: BASE
    Unit Hydrograph: UH256                    Peak Factor: 256
      Rainfall File:                 Storm Duration(hrs): 0
Rainfall Amount(in): 0
           Area(ac): 195         Concentration Time(min): 57
            Curve #: 89                    Lag Time(hrs): 0
            DCIA(%): 0

          For Wando River Development Table 5.3.2.4-1

-------------------------------------------------------------------------------
Basin: NORTH      Node: NORTH      Status: On Site    Type: SCS Unit Hydr
Group: BASE
    Unit Hydrograph: UH256                    Peak Factor: 256
      Rainfall File:                 Storm Duration(hrs): 0
Rainfall Amount(in): 0
           Area(ac): 559         Concentration Time(min): 97
            Curve #: 83                    Lag Time(hrs): 0
            DCIA(%): 0

          For Cooper River Development Table 5.3.1.4-1
```

Advanced Interconnected Channel & Pond Routing (ICPR Ver 2.11) [2]
Copyright 1995, Streamline Technologies, Inc.

Daniel Island Pre and Post Conditions Alternatives
Wando River Side Alternative and Cooper River Side Altarnative
AdICPR Indput Data

********** Input Report: Basins **********

Basin: WANDO Node: WANDO Status: On Site Type: SCS Unit Hydr
Group: BASE
Unit Hydrograph: UH256 Peak Factor: 256
Rainfall File: Storm Duration(hrs): 0
Rainfall Amount(in): 0
Area(ac): 300 Concentration Time(min): 80
Curve #: 89 Lag Time(hrs): 0
DCIA(%): 0

For Wando River Side Development Table 5.3.2.4-1

Basin: WANDOBER Node: WANDOBER Status: On Site Type: SCS Unit Hydr
Group: BASE
Unit Hydrograph: UH256 Peak Factor: 256
Rainfall File: Storm Duration(hrs): 0
Rainfall Amount(in): 0
Area(ac): 550 Concentration Time(min): 25
Curve #: 95 Lag Time(hrs): 0
DCIA(%): 0

Post Development Wando River Side Table 5.3.2.4-1

Basin: WESTCOOP Node: WESTCOOP Status: On Site Type: SCS Unit Hydr
Group: BASE
Unit Hydrograph: UH256 Peak Factor: 256
Rainfall File: Storm Duration(hrs): 0
Rainfall Amount(in): 0
Area(ac): 125 Concentration Time(min): 48
Curve #: 89 Lag Time(hrs): 0
DCIA(%): 0

For Cooper River Development Table 5.3.1.4-1(West)

Basin: WESTWAND Node: WESTWAND Status: On Site Type: SCS Unit Hydr
Group: BASE
Unit Hydrograph: UH256 Peak Factor: 256
Rainfall File: Storm Duration(hrs): 0
Rainfall Amount(in): 0
Area(ac): 40 Concentration Time(min): 48
Curve #: 88 Lag Time(hrs): 0
DCIA(%): 0

For Wando River Development table 5.3.2.4-1 (West)

Advanced Interconnected Channel & Pond Routing (ICPR Ver 2.11) [1]
Copyright 1995, Streamline Technologies, Inc.

2 and 5 Year - 24 Hour Storms
Daniel Island Wando and Cooper River Berths
For Alternatives

********** Basin Results Comparisons **********

Simulation Name	Time Max (hrs)	Flow Max (cfs)	Runoff Volume (in)	Runoff Volume (cf)
*** Basin Name: WANDO PRE-DEVELOPMENT				
2YR24HR	12.80	235.76	3.20	3483983
10YR24HR	12.80	396.04	5.41	5895530
*** Basin Name: MIDDLE PRE-DEVELOPMENT				
2YR24HR	12.54	197.84	3.20	2263115
10YR24HR	12.54	331.30	5.41	3829787
*** Basin Name: CENTRAL PRE-DEVELOPMENT				
2YR24HR	12.12	119.83	3.20	638607
10YR24HR	12.12	198.82	5.41	1080653
*** Basin Name: WESTWAND PRE-DEVELOPMENT				
2YR24HR	12.37	44.58	3.10	450301
10YR24HR	12.37	75.66	5.30	769637
*** Basin Name: WESTCOOP PRE-DEVELOPMENT				
2YR24HR	12.37	143.64	3.20	1451660
10YR24HR	12.37	240.77	5.41	2456471
*** Basin Name: NORTH PRE-DEVELOPMENT				
2YR24HR	12.93	307.81	2.63	5344056
10YR24HR	12.93	561.16	4.74	9617896
*** Basin Name: WANDOBER POST DEVELOPMENT				
2YR24HR	12.17	1161.58	3.82	7635800
10YR24HR	12.17	1815.66	6.11	12189163
*** Basin Name: COOPBERT POST DEVELOPMENT				
2YR24HR	12.17	1560.74	3.82	10259727
10YR24HR	12.17	2439.58	6.11	16377805