

ICPR – Pre-development Input

==== Basins =====

Name: Area 1	Node: Area 1	Status: Onsite
Group: BASE	Type: SCS Unit Hydrograph CN	
Unit Hydrograph: Uh256	Peaking Factor: 256.0	
Rainfall File:	Storm Duration(hrs): 0.00	
Rainfall Amount(in): 0.000	Time of Conc(min): 30.00	
Area(ac): 42.100	Time Shift(hrs): 0.00	
Curve Number: 79.00	Max Allowable Q(cfs): 999999.000	
DCIA(%): 0.00		

Name: Area 2	Node: Area 2	Status: Onsite
Group: BASE	Type: SCS Unit Hydrograph CN	
Unit Hydrograph: Uh256	Peaking Factor: 256.0	
Rainfall File:	Storm Duration(hrs): 0.00	
Rainfall Amount(in): 0.000	Time of Conc(min): 20.00	
Area(ac): 41.300	Time Shift(hrs): 0.00	
Curve Number: 79.00	Max Allowable Q(cfs): 999999.000	
DCIA(%): 0.00		

Name: offsite	Node: offsite	Status: Offsite
Group: BASE	Type: SCS Unit Hydrograph CN	
Unit Hydrograph: Uh256	Peaking Factor: 256.0	
Rainfall File:	Storm Duration(hrs): 0.00	
Rainfall Amount(in): 0.000	Time of Conc(min): 30.00	
Area(ac): 35.000	Time Shift(hrs): 0.00	
Curve Number: 73.00	Max Allowable Q(cfs): 999999.000	
DCIA(%): 0.00		

==== Nodes =====

Name: Area 1	Base Flow(cfs): 0.000	Init Stage(ft): 14.690
Group: BASE		Warn Stage(ft): 19.000
Type: Stage/Area		

Stage(ft)	Area(ac)
14.690	17.2000
17.000	42.1000

Name: Area 2	Base Flow(cfs): 0.000	Init Stage(ft): 14.690
Group: BASE		Warn Stage(ft): 19.000
Type: Stage/Area		

Stage(ft)	Area(ac)
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14.690	13.0000
17.000	41.3000

Name: offsite Base Flow(cfs): 0.000 Init Stage(ft): 14.690
Group: BASE Warn Stage(ft): 16.000
Type: Stage/Area

Stage(ft)	Area(ac)
14.690	4.0000
17.000	35.0000

Name: outfall Base Flow(cfs): 0.000 Init Stage(ft): 14.690
Group: BASE Warn Stage(ft): 20.000
Type: Time/Stage

Time(hrs)	Stage(ft)
0.00	14.690
1000.00	14.690

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Channels

Name: CONNECTION From Node: offsite Length(ft): 50.00
Group: BASE To Node: Area 1 Count: 1

UPSTREAM DOWNSTREAM Friction Equation: Average Conveyance
Geometry: Trapezoidal Trapezoidal Solution Algorithm: Automatic
Invert(ft): 14.000 14.000 Flow: Both
TClipInitZ(ft): 9999.000 9999.000 Contraction Coef: 0.100
Manning's N: 0.040000 0.040000 Expansion Coef: 0.300
Top Clip(ft): 0.000 0.000 Entrance Loss Coef: 0.000
Bot Clip(ft): 0.000 0.000 Exit Loss Coef: 0.000
Main XSec: Outlet Ctrl Spec: Use dc or tw
AuxElev1(ft): Inlet Ctrl Spec: Use dc
Aux XSec1: Stabilizer Option: None
AuxElev2(ft):
Aux XSec2:
Top Width(ft):
Depth(ft):
Bot Width(ft): 200.000 200.000
LtSdSlp(h/v): 25.00 25.00
RtSdSlp(h/v): 25.00 25.00

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Weirs

Name: land weir From Node: Area 2
Group: BASE To Node: outfall
Flow: Both Count: 1
Type: Vertical: Fread Geometry: Rectangular

Span(in): 6000.00
Rise(in): 999.00

Invert(ft): 15.400
Control Elevation(ft): 15.400
Bottom Clip(in): 0.000
Top Clip(in): 0.000
Weir Discharge Coef: 3.200
Orifice Discharge Coef: 0.600

TABLE

Name: Land Weir 3 From Node: Area 1
Group: BASE To Node: Area 2
Flow: Both Count: 1
Type: Vertical: Fread Geometry: Rectangular

Span(in): 1200.00
Rise(in): 999.00
Invert(ft): 15.500
Control Elevation(ft): 15.500

TABLE

Bottom Clip(in): 0.000
Top Clip(in): 0.000
Weir Discharge Coef: 3.200
Orifice Discharge Coef: 0.600

Hydrology Simulations

Name: 100yr3day
Filename: O:\2016\16042.02 Tuttle - Cove Road Engineering\Calculations\ICPR\100yr3day.R32

Override Defaults: Yes
Storm Duration(hrs): 72.00
Rainfall File: Sfwmd72
Rainfall Amount(in): 15.00

Time(hrs)	Print Inc(min)
80.000	5.00

Name: 10yr1day
Filename: O:\2016\16042.02 Tuttle - Cove Road Engineering\Calculations\ICPR\10yr1day.R32

Override Defaults: Yes
Storm Duration(hrs): 24.00
Rainfall File: Flmod
Rainfall Amount(in): 7.00

Time(hrs)	Print Inc(min)
80.000	5.00

Name: 25yr3day
Filename: O:\2016\16042.02 Tuttle - Cove Road Engineering\Calculations\ICPR\25yr3day.R32

Override Defaults: Yes
Storm Duration(hrs): 72.00
Rainfall File: Sfwmd72
Rainfall Amount(in): 12.00

Time(hrs)	Print Inc(min)
80.000	5.00

Name: 3yr1day
Filename: O:\2016\16042.02 Tuttle - Cove Road Engineering\Calculations\ICPR\3yr1day.R32
Override Defaults: Yes
Storm Duration(hrs): 24.00
Rainfall File: F1mod
Rainfall Amount(in): 5.25

Time(hrs)	Print Inc(min)
80.000	5.00

Name: 500yr3day
Filename: O:\2016\16042.02 Tuttle - Cove Road Engineering\Calculations\ICPR\500yr3day.R32
Override Defaults: Yes
Storm Duration(hrs): 72.00
Rainfall File: Sfwmd72
Rainfall Amount(in): 18.00

Time(hrs)	Print Inc(min)
80.000	5.00

==== Routing Simulations =====

Name: 100yr3day Hydrology Sim: 100yr3day
Filename: O:\2016\16042.02 Tuttle - Cove Road Engineering\Calculations\ICPR\100yr3day.I32
Execute: Yes 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): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

Time(hrs)	Print Inc(min)
58.000	15.000
64.000	5.000
100.000	30.000

Group	Run
BASE	Yes

Name: 10yr1day Hydrology Sim: 10yr1day
Filename: O:\2016\16042.02 Tuttle - Cove Road Engineering\Calculations\ICPR\10yr1day.I32
Execute: Yes Restart: No Patch: No
Alternative: No

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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): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

Time(hrs)	Print Inc(min)
8.000	15.000
12.000	5.000
60.000	30.000
100.000	50.000

Group	Run
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BASE	Yes

Name: 25yr3day Hydrology Sim: 25yr3day
Filename: O:\2016\16042.02 Tuttle - Cove Road Engineering\Calculations\ICPR\25yr3day.I32

Execute: Yes 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): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

Time(hrs)	Print Inc(min)
58.000	15.000
64.000	5.000
100.000	30.000

Group	Run
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BASE	Yes

Name: 3yr1day Hydrology Sim: 3yr1day
Filename: O:\2016\16042.02 Tuttle - Cove Road Engineering\Calculations\ICPR\3yr1day.I32

Execute: Yes 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): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

Time(hrs)	Print Inc(min)
8.000	15.000
12.000	5.000
60.000	30.000

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100.000 50.000

Group Run

BASE Yes

Name: 500yr3day Hydrology Sim: 500yr3day
Filename: O:\2016\16042.02 Tuttle - Cove Road Engineering\Calculations\ICPR\500yr3day.I32

Execute: Yes 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): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

Time(hrs)	Print Inc(min)
58.000	15.000
64.000	5.000
100.000	30.000

Group Run

BASE Yes

ICPR – Post-development Input

==== Basins =====

Name: basin 1	Node: Basin 1	Status: Onsite
Group: BASE	Type: SCS Unit Hydrograph CN	
Unit Hydrograph: Uh256	Peaking Factor: 256.0	
Rainfall File:	Storm Duration(hrs): 0.00	
Rainfall Amount(in): 0.000	Time of Conc(min): 30.00	
Area(ac): 28.820	Time Shift(hrs): 0.00	
Curve Number: 78.00	Max Allowable Q(cfs): 999999.000	
DCIA(%): 37.00		

Name: Basin 2	Node: Basin 2	Status: Onsite
Group: BASE	Type: SCS Unit Hydrograph CN	
Unit Hydrograph: Uh256	Peaking Factor: 256.0	
Rainfall File:	Storm Duration(hrs): 0.00	
Rainfall Amount(in): 0.000	Time of Conc(min): 15.00	
Area(ac): 9.380	Time Shift(hrs): 0.00	
Curve Number: 78.00	Max Allowable Q(cfs): 999999.000	
DCIA(%): 37.00		

Name: offsite	Node: offsite	Status: Offsite
Group: BASE	Type: SCS Unit Hydrograph CN	
Unit Hydrograph: Uh256	Peaking Factor: 256.0	
Rainfall File:	Storm Duration(hrs): 0.00	
Rainfall Amount(in): 0.000	Time of Conc(min): 30.00	
Area(ac): 35.000	Time Shift(hrs): 0.00	
Curve Number: 73.00	Max Allowable Q(cfs): 999999.000	
DCIA(%): 0.00		

Name: Wetland 1	Node: Wetland 1	Status: Onsite
Group: BASE	Type: SCS Unit Hydrograph CN	
Unit Hydrograph: Uh256	Peaking Factor: 256.0	
Rainfall File:	Storm Duration(hrs): 0.00	
Rainfall Amount(in): 0.000	Time of Conc(min): 20.00	
Area(ac): 24.800	Time Shift(hrs): 0.00	
Curve Number: 79.00	Max Allowable Q(cfs): 999999.000	
DCIA(%): 0.00		

Name: Wetland 2	Node: Wetland 2	Status: Onsite
Group: BASE	Type: SCS Unit Hydrograph CN	
Unit Hydrograph: Uh256	Peaking Factor: 256.0	
Rainfall File:	Storm Duration(hrs): 0.00	
Rainfall Amount(in): 0.000	Time of Conc(min): 15.00	
Area(ac): 19.400	Time Shift(hrs): 0.00	
Curve Number: 79.00	Max Allowable Q(cfs): 999999.000	
DCIA(%): 0.00		

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Nodes

```
Name: Basin 1          Base Flow(cfs): 0.000          Init Stage(ft): 15.690
Group: BASE            Warn Stage(ft): 0.000
Type: Stage/Volume
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Type: Stage/Volume

Stage(ft)	Volume(af)
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15.690	0.0000
16.000	1.4100
17.000	7.4800
18.000	17.8700
19.000	34.5600
20.000	52.8600

```
Name: Basin 2          Base Flow(cfs): 0.000          Init Stage(ft): 15.690
Group: BASE           Warn Stage(ft): 19.000
```

Type: Stage/Volume

Stage (ft)	Volume (af)
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15.690	0.0000
16.000	0.2800
17.000	1.3900
18.000	3.4600
19.000	7.7900
20.000	12.7700

```
Name: offsite          Base Flow(cfs): 0.000          Init Stage(ft): 14.690
Group: BASE           Warn Stage(ft): 16.000
```

Type: Stage/Area

Stage (ft)	Area (ac)
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14.690	4.0000
17.000	35.0000

```
Name: outfall          Base Flow(cfs): 0.000          Init Stage(ft): 14.690
Group: BASE           Warn Stage(ft): 20.000
```

Type: Time/Stage

Time (hrs)	Stage (ft)
0	0
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15
16	16
17	17
18	18
19	19
20	20
21	21
22	22
23	23
24	24
25	25
26	26
27	27
28	28
29	29
30	30
31	31
32	32
33	33
34	34
35	35
36	36
37	37
38	38
39	39
40	40
41	41
42	42
43	43
44	44
45	45
46	46
47	47
48	48
49	49
50	50
51	51
52	52
53	53
54	54
55	55
56	56
57	57
58	58
59	59
60	60
61	61
62	62
63	63
64	64
65	65
66	66
67	67
68	68
69	69
70	70
71	71
72	72
73	73
74	74
75	75
76	76
77	77
78	78
79	79
80	80
81	81
82	82
83	83
84	84
85	85
86	86
87	87
88	88
89	89
90	90
91	91
92	92
93	93
94	94
95	95
96	96
97	97
98	98
99	99
100	100

0.00	14.690
1000.00	14.690

```
Name: Wetland 1      Base Flow(cfs): 0.000      Init Stage(ft): 14.690
Group: BASE          Warn Stage(ft): 19.000
```

Group: BASE
Type: Stage/Area

Stage(ft)	Area(ac)
14.690	17.2000
17.000	24.8000

Name: Wetland 2 Base Flow(cfs): 0.000 Init Stage(ft): 14.690
 Group: BASE Warn Stage(ft): 19.000
 Type: Stage/Area

Stage(ft)	Area(ac)
14.690	13.0000
17.000	19.4000

===== Pipes =====

Name: Pipe1	From Node: Wetland 1	Length(ft): 30.00
Group: BASE	To Node: Wetland 2	Count: 7
UPSTREAM	DOWNSTREAM	Friction Equation: Automatic
Geometry: Horz Ellipse	Horz Ellipse	Solution Algorithm: Most Restrictive
Span(in): 45.00	45.00	Flow: Both
Rise(in): 29.00	29.00	Entrance Loss Coef: 0.00
Invert(ft): 13.100	13.100	Exit Loss Coef: 1.00
Manning's N: 0.012000	0.012000	Bend Loss Coef: 0.00
Top Clip(in): 0.000	0.000	Outlet Ctrl Spec: Use dc or tw
Bot Clip(in): 0.000	0.000	Inlet Ctrl Spec: Use dc
		Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Horizontal Ellipse Concrete: Square edge with headwall

Downstream FHWA Inlet Edge Description:
Horizontal Ellipse Concrete: Square edge with headwall

===== Channels =====

Name: CONNECTION	From Node: offsite	Length(ft): 50.00
Group: BASE	To Node: Wetland 1	Count: 1
UPSTREAM	DOWNSTREAM	Friction Equation: Automatic
Geometry: Trapezoidal	Trapezoidal	Solution Algorithm: Automatic
Invert(ft): 14.000	14.000	Flow: Both
TC1pint2(ft): 9999.000	9999.000	Contraction Coef: 0.100
Manning's N: 0.040000	0.040000	Expansion Coef: 0.300
Top Clip(ft): 0.000	0.000	Entrance Loss Coef: 0.000
Bot Clip(ft): 0.000	0.000	Exit Loss Coef: 0.000
Main XSec:		Outlet Ctrl Spec: Use dc or tw
AuxElev1(ft):		Inlet Ctrl Spec: Use dc
Aux XSec1:		Stabilizer Option: None
AuxElev2(ft):		
Aux XSec2:		
Top Width(ft):		

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Depth(ft):
Bot Width(ft): 200.000 200.000
LtsdSlp(h/v): 25.00 25.00
RtsdSlp(h/v): 25.00 25.00

Name: Culvert From Node: Wetland 1 Length(ft): 37.00
Group: BASE To Node: Wetland 2 Count: 2

UPSTREAM DOWNSTREAM Friction Equation: Automatic
Geometry: Trapezoidal Trapezoidal Solution Algorithm: Automatic
Invert(ft): 15.400 15.400 Flow: Both
TClipInit2(ft): 9999.000 9999.000 Contraction Coef: 0.100
Manning's N: 0.040000 0.040000 Expansion Coef: 0.300
Top Clip(ft): 0.000 0.000 Entrance Loss Coef: 0.000
Bot Clip(ft): 0.000 0.000 Exit Loss Coef: 0.000
Main XSec: Outlet Ctrl Spec: Use dc or tw
AuxElev1(ft): Inlet Ctrl Spec: Use dc
Aux XSec1: Stabilizer Option: None
AuxElev2(ft):
Aux XSec2:
Top Width(ft):
Depth(ft):
Bot Width(ft): 4.000 4.000
LtsdSlp(h/v): 0.00 0.00
RtsdSlp(h/v): 0.00 0.00

===== Drop Structures =====

Name: CS#1 From Node: Basin 1 Length(ft): 80.00
Group: BASE To Node: Wetland 2 Count: 1

UPSTREAM DOWNSTREAM Friction Equation: Automatic
Geometry: Circular Circular Solution Algorithm: Most Restrictive
Span(in): 30.00 30.00 Flow: Both
Rise(in): 30.00 30.00 Entrance Loss Coef: 0.000
Invert(ft): 12.900 11.000 Exit Loss Coef: 1.000
Manning's N: 0.012000 0.012000 Outlet Ctrl Spec: Use dc or tw
Top Clip(in): 0.000 0.000 Inlet Ctrl Spec: Use dc
Bot Clip(in): 0.000 0.000 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 1 for Drop Structure CS#1 ***

Count: 1 Bottom Clip(in): 0.000
Type: Vertical: Mavis Top Clip(in): 0.000
Flow: Both Weir Disc Coef: 3.200
Geometry: Rectangular Orifice Disc Coef: 0.600
Span(in): 18.00 Invert(ft): 16.470
Rise(in): 999.00 Control Elev(ft): 16.470

TABLE

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Name: CS#2          From Node: Basin 2      Length(ft): 70.00
Group: BASE        To Node: Wetland 2      Count: 1

      UPSTREAM      DOWNSTREAM      Friction Equation: Automatic
Geometry: Circular  Circular          Solution Algorithm: Most Restrictive
Span(in): 24.00     24.00             Flow: Both
Rise(in): 24.00     24.00             Entrance Loss Coef: 0.000
Invert(ft): 12.440  11.000            Exit Loss Coef: 1.000
Manning's N: 0.012000  0.012000        Outlet Ctrl Spec: Use dc or tw
Top Clip(in): 0.000  0.000            Inlet Ctrl Spec: Use dc
Bot Clip(in): 0.000  0.000            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 1 for Drop Structure CS#2 ***

```

Count: 1
Type: Vertical: Mavis
Flow: Both
Geometry: Rectangular
Span(in): 18.00
Rise(in): 999.00

```

TABLE

```

Bottom Clip(in): 0.000
Top Clip(in): 0.000
Weir Disc Coef: 3.200
Orifice Disc Coef: 0.600
Invert(ft): 17.160
Control Elev(ft): 17.160

```

===== Weirs =====

```

Name: land weir      From Node: Wetland 2
Group: BASE          To Node: outfall
Flow: Both           Count: 1
Type: Vertical: Fread
Geometry: Rectangular
Span(in): 6000.00
Rise(in): 999.00
Invert(ft): 15.400
Control Elevation(ft): 15.400

```

TABLE

```

Bottom Clip(in): 0.000
Top Clip(in): 0.000
Weir Discharge Coef: 3.200
Orifice Discharge Coef: 0.600

```

===== Hydrology Simulations =====

```

Name: 100yr3day
Filename: O:\2016\16042.02 Tuttle - Cove Road Engineering\Calculations\ICPR\100yr3day.R32
Override Defaults: Yes
Storm Duration(hrs): 72.00
Rainfall File: Sfwmd72
Rainfall Amount(in): 15.00
Time(hrs)      Print Inc(min)

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80.000 5.00

Name: 10yr1day
Filename: O:\2016\16042.02 Tuttle - Cove Road Engineering\Calculations\ICPR\10yr1day.R32
Override Defaults: Yes
Storm Duration(hrs): 24.00
Rainfall File: Flmod
Rainfall Amount(in): 7.00

Time(hrs) Print Inc(min)

80.000 5.00

Name: 25yr3day
Filename: O:\2016\16042.02 Tuttle - Cove Road Engineering\Calculations\ICPR\25yr3day.R32
Override Defaults: Yes
Storm Duration(hrs): 72.00
Rainfall File: Sfwmd72
Rainfall Amount(in): 12.00

Time(hrs) Print Inc(min)

80.000 5.00

Name: 3yr1day
Filename: O:\2016\16042.02 Tuttle - Cove Road Engineering\Calculations\ICPR\3yr1day.R32
Override Defaults: Yes
Storm Duration(hrs): 24.00
Rainfall File: Flmod
Rainfall Amount(in): 5.25

Time(hrs) Print Inc(min)

80.000 5.00

Name: 500 year
Filename: O:\2016\16042.02 Tuttle - Cove Road Engineering\Calculations\ICPR\500 year.R32
Override Defaults: Yes
Storm Duration(hrs): 72.00
Rainfall File: Sfwmd72
Rainfall Amount(in): 18.00

Time(hrs) Print Inc(min)

80.000 5.00

==== Routing Simulations =====
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Name: 100yr3day Hydrology Sim: 100yr3day
Filename: O:\2016\16042.02 Tuttle - Cove Road Engineering\Calculations\ICPR\100yr3day.I32
Execute: Yes Restart: No Patch: No
Alternative: No
Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500

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Time Step Optimizer: 10.000
Start Time(hrs): 0.000
Min Calc Time(sec): 0.5000
Boundary Stages:
End Time(hrs): 100.00
Max Calc Time(sec): 60.0000
Boundary Flows:

Time(hrs)	Print Inc(min)
58.000	15.000
64.000	5.000
100.000	30.000

Group	Run
BASE	Yes

Name: 10yrlday Hydrology Sim: 10yrlday
Filename: O:\2016\16042.02 Tuttle - Cove Road Engineering\Calculations\ICPR\10yrlday.I32
Execute: Yes 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): 144.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

Time(hrs)	Print Inc(min)
8.000	15.000
12.000	5.000
60.000	30.000
144.000	50.000

Group	Run
BASE	Yes

Name: 25yr3day Hydrology Sim: 25yr3day
Filename: O:\2016\16042.02 Tuttle - Cove Road Engineering\Calculations\ICPR\25yr3day.I32
Execute: Yes 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): 288.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

Time(hrs)	Print Inc(min)
58.000	15.000
64.000	5.000
100.000	30.000
288.000	30.000

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Group	Run
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BASE	Yes

Name: 3yr1day Hydrology Sim: 3yr1day
Filename: O:\2016\16042.02 Tuttle - Cove Road Engineering\Calculations\ICPR\3yr1day.I32
Execute: Yes 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): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

Time(hrs)	Print Inc(min)
-----	-----
8.000	15.000
12.000	5.000
60.000	30.000
100.000	50.000

Group	Run
-----	-----
BASE	Yes

Name: 500yr3day Hydrology Sim: 500 year
Filename: O:\2016\16042.02 Tuttle - Cove Road Engineering\Calculations\ICPR\500yr3day.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): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

Time(hrs)	Print Inc(min)
-----	-----
58.000	15.000
64.000	5.000
100.000	30.000

Group	Run
-----	-----
BASE	Yes

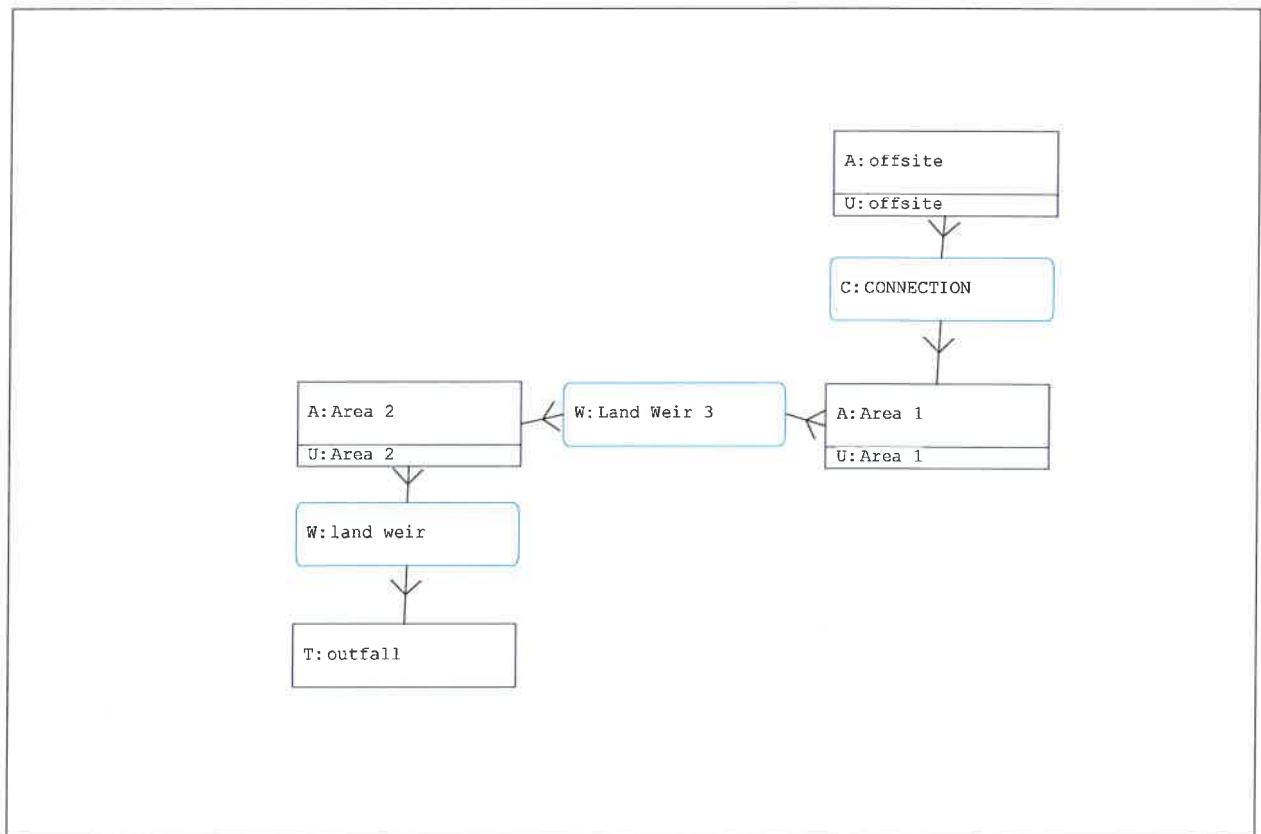
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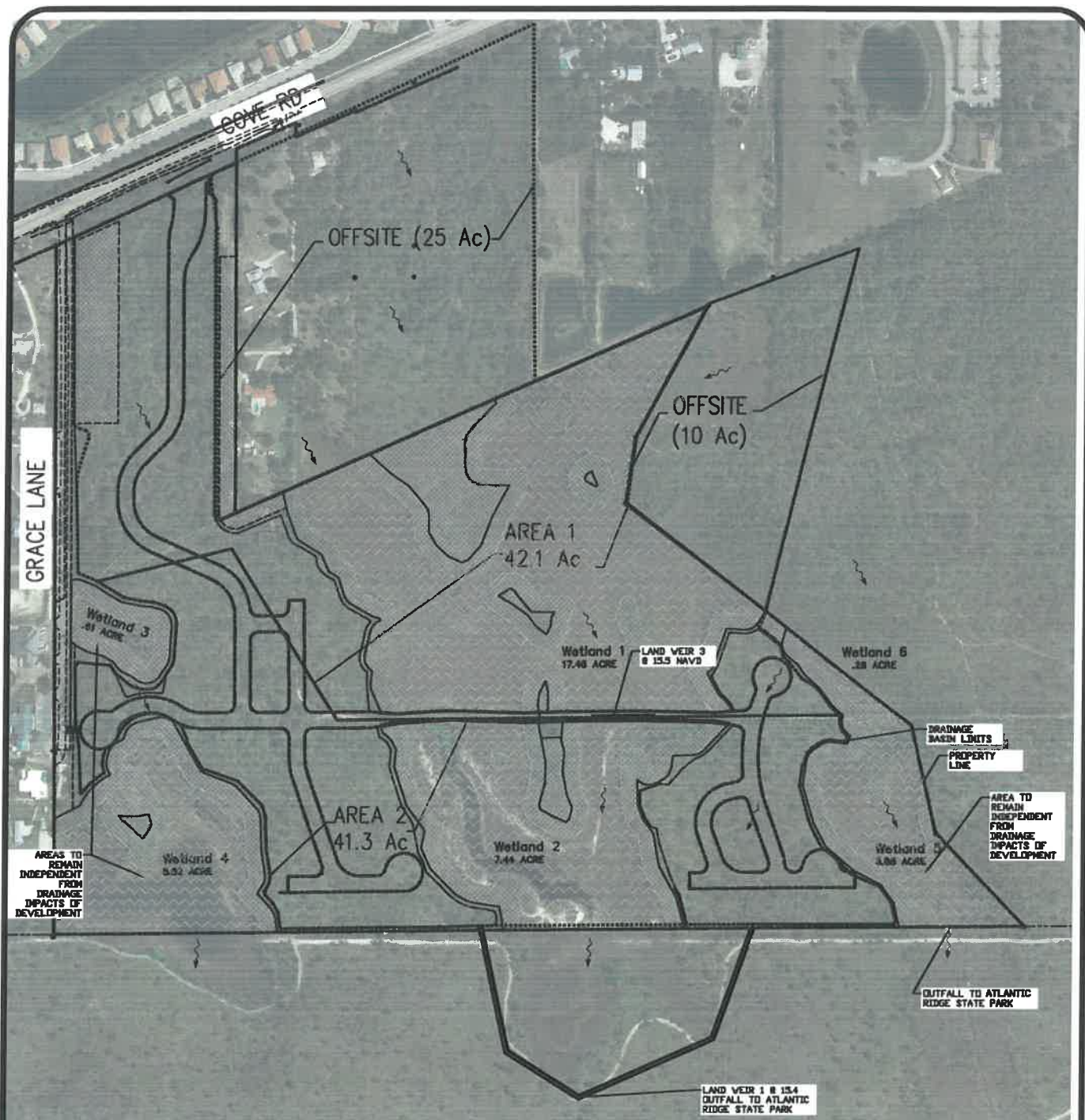
ICPR – Pre-development Diagram

Nodes
A Stage/Area
V Stage/Volume
T Time/Stage
M Manhole

Basins
O Overland Flow
U SCS Unit CN
S SBUH CN
Y SCS Unit GA
Z SBUH GA

Links
P Pipe
W Weir
C Channel
D Drop Structure
B Bridge
R Rating Curve
H Breach
E Percolation
F Filter
X Exfil Trench





SCALE: 1"=450'

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EXISTING NODE AREAS

DATE: 5/25/18

PROJECT ENGINEER: ACS

CHECKED BY:

CHECKED BY:



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SCALE:
SCALE: 1"=450'
DRAWN BY:
KMR

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JOB No.
16042.02

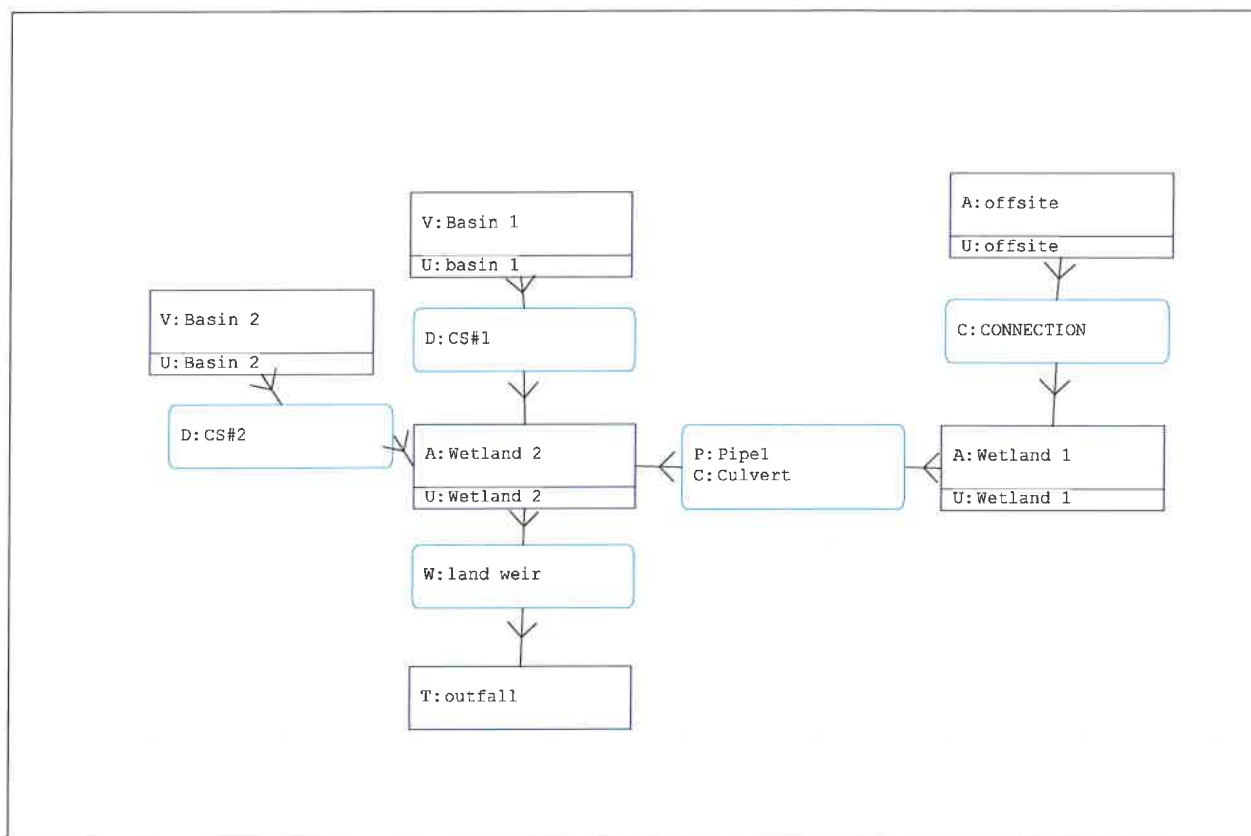
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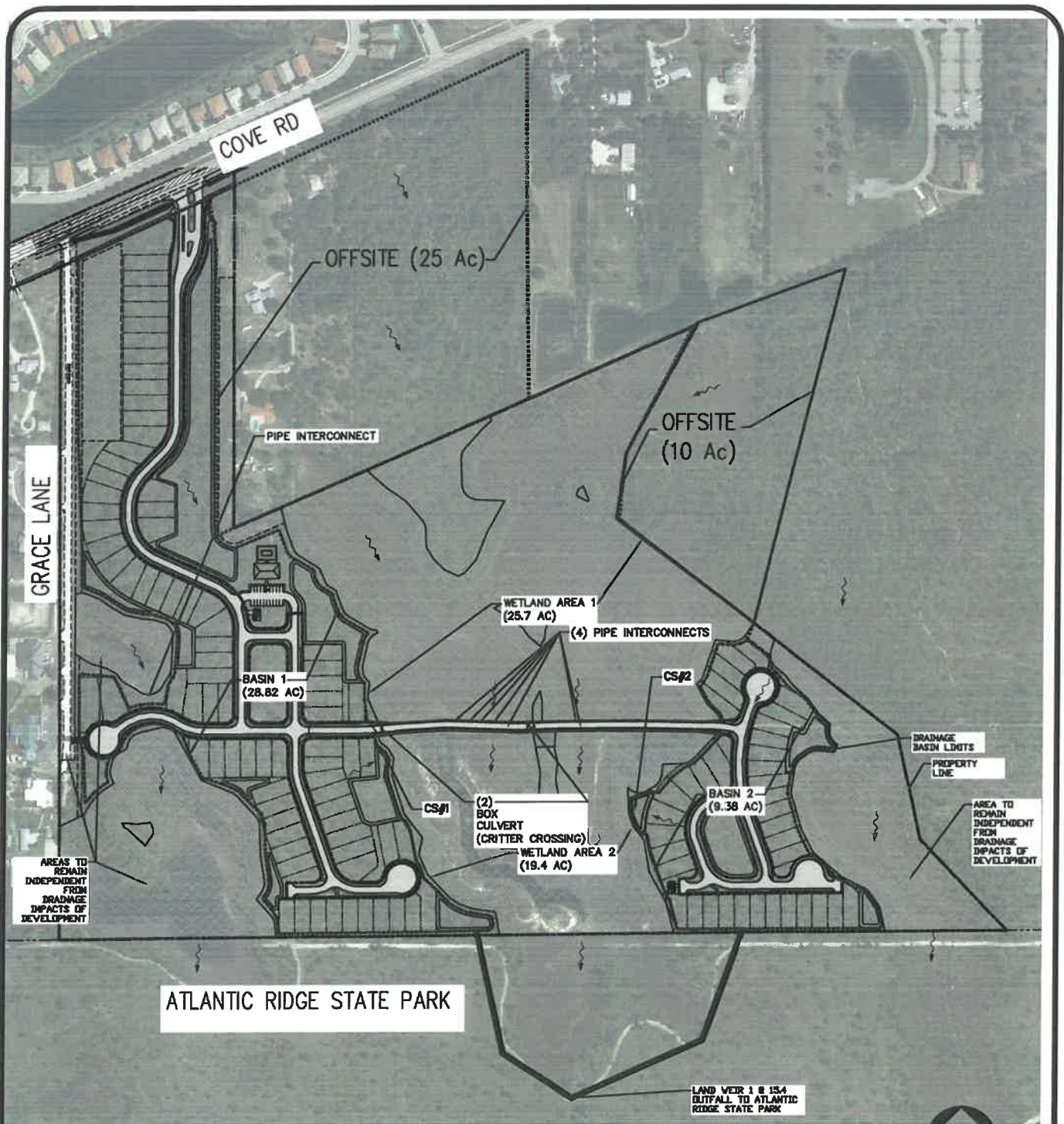
ICPR – Post-development Diagram

Nodes
 A Stage/Area
 V Stage/Volume
 T Time/Stage
 N Manhole

Basins
 O Overland Flow
 U SCS Unit CN
 S SBUH CN
 Y SCS Unit GA
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Links
 P Pipe
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 X Exfil Trench





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SCALE: 1"=450'



PROPOSED NODE AREAS

DATE: 5/25/18
PROJECT ENGINEER: ACS
CHECKED BY:
CHECKED BY:



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1964

ICPR – Pre-development nodal minimum and maximums

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
Area 1	BASE	100yr3day	61.58	15.96	19.00	0.0050	1352728	60.71	395.01	61.58	99.65
Area 2	BASE	100yr3day	60.47	15.64	19.00	0.0035	1073610	60.09	225.91	60.47	188.90
offsite	BASE	100yr3day	61.58	15.96	16.00	0.0050	922458	60.16	131.09	61.11	307.24
outfall	BASE	100yr3day	0.00	14.69	20.00	0.0000	0	60.47	188.90	0.00	0.00
Area 1	BASE	10yr1day	24.62	15.54	19.00	0.0037	1155823	12.25	99.74	24.62	2.67
Area 2	BASE	10yr1day	17.68	15.42	19.00	0.0050	957521	12.16	97.25	17.68	5.63
offsite	BASE	10yr1day	24.64	15.54	16.00	0.0040	676841	12.33	56.96	11.87	54.63
outfall	BASE	10yr1day	0.00	14.69	20.00	0.0000	0	17.68	5.63	0.00	0.00
Area 1	BASE	25yr3day	61.93	15.81	19.00	0.0049	1280615	60.78	293.91	61.93	54.23
Area 2	BASE	25yr3day	60.54	15.57	19.00	0.0050	1035600	60.08	154.49	60.54	111.60
offsite	BASE	25yr3day	62.03	15.81	16.00	0.0049	836405	60.16	100.60	61.84	246.29
outfall	BASE	25yr3day	0.00	14.69	20.00	0.0000	0	60.54	111.60	0.00	0.00
Area 1	BASE	3yr1day	27.02	15.30	19.00	0.0038	1044576	12.94	108.76	0.00	0.00
Area 2	BASE	3yr1day	26.01	15.31	19.00	0.0049	896468	12.16	63.87	0.00	0.00
offsite	BASE	3yr1day	27.01	15.31	16.00	0.0038	542321	12.33	35.38	26.56	102.28
outfall	BASE	3yr1day	0.00	14.69	20.00	0.0000	0	0.00	0.00	0.00	0.00

ICPR – Post-development nodal minimum and maximums

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
Basin 1	BASE	10yrlday	20.17	17.23	0.00	0.0029	411771	12.25	61.11	20.17	3.18
Basin 2	BASE	10yrlday	15.69	17.68	19.00	0.0050	116873	12.08	28.09	15.69	1.79
Basin 1	BASE	25yr3day	63.38	17.94	0.00	0.0031	576367	60.17	90.10	63.38	8.57
Basin 2	BASE	25yr3day	61.28	18.39	19.00	0.0050	164166	60.08	40.70	61.28	6.55
offsite	BASE	25yr3day	61.22	15.60	16.00	-0.0022	712522	60.17	100.70	61.22	220.26
outfall	BASE	25yr3day	0.00	14.69	20.00	0.0000	0	61.13	101.11	0.00	0.00
Wetland 1	BASE	25yr3day	61.23	15.59	19.00	0.0024	885709	61.22	246.06	61.23	70.31
Wetland 2	BASE	25yr3day	61.13	15.56	19.00	0.0022	671282	60.77	103.54	61.13	101.11
Basin 1	BASE	3yrlday	24.02	16.95	0.00	0.0028	351631	12.25	42.42	24.02	1.58
Basin 2	BASE	3yrlday	20.27	17.43	19.00	0.0050	99686	12.08	19.53	20.27	0.69
offsite	BASE	3yrlday	99.98	15.28	16.00	0.0022	525699	12.33	35.39	99.98	110.67
outfall	BASE	3yrlday	0.00	14.69	20.00	0.0000	0	0.00	0.00	0.00	0.00
Wetland 1	BASE	3yrlday	99.99	15.28	19.00	0.0015	840109	99.98	110.67	10.43	9.29
Wetland 2	BASE	3yrlday	99.98	15.28	19.00	0.0011	637476	12.17	37.64	0.00	0.00

Zero Discharge

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
Basin 1	BASE	100yr3day	63.17	18.26	0.00	0.0034	634358	60.17	114.61	63.17	11.48
Basin 2	BASE	100yr3day	61.23	18.66	19.00	0.0050	181190	60.08	51.69	61.23	8.81
offsite	BASE	100yr3day	99.97	16.71	16.00	0.0027	1361194	60.17	131.18	99.97	419.79
outfall	BASE	100yr3day	0.00	14.69	20.00	0.0000	0	0.00	0.00	0.00	0.00
Wetland 1	BASE	100yr3day	100.00	16.70	19.00	0.0025	1046214	99.97	419.79	8.46	1.10
Wetland 2	BASE	100yr3day	100.00	16.71	19.00	0.0024	809640	60.08	104.90	0.00	0.00

1969

**ICPR – 10 year 1 day storm time series
(for retention recovery analysis)**

Simulation	Node	Group	Time	Stage	Warning	Surface	Total	Total	Total	Total
			hrs	ft	Stage	Area	Inflow	Outflow	Vol In	Vol Out
					ft	ft2	cfs	cfs	af	af
10yrlday	Basin 1	BASE	0.00	15.69	0.00	164987	0.00	0.00	0.0	0.0
10yrlday	Basin 1	BASE	0.26	15.69	0.00	164987	0.00	0.00	0.0	0.0
10yrlday	Basin 1	BASE	0.50	15.69	0.00	164987	0.00	0.00	0.0	0.0
10yrlday	Basin 1	BASE	0.77	15.69	0.00	164987	0.00	0.00	0.0	0.0
10yrlday	Basin 1	BASE	1.02	15.69	0.00	164987	0.00	0.00	0.0	0.0
10yrlday	Basin 1	BASE	1.27	15.69	0.00	164993	0.02	0.00	0.0	0.0
10yrlday	Basin 1	BASE	1.52	15.69	0.00	165125	0.24	0.00	0.0	0.0
10yrlday	Basin 1	BASE	1.77	15.69	0.00	165554	0.48	0.00	0.0	0.0
10yrlday	Basin 1	BASE	2.02	15.70	0.00	166205	0.63	0.00	0.0	0.0
10yrlday	Basin 1	BASE	2.27	15.70	0.00	167005	0.75	0.00	0.0	0.0
10yrlday	Basin 1	BASE	2.52	15.70	0.00	167917	0.84	0.00	0.1	0.0
10yrlday	Basin 1	BASE	2.77	15.71	0.00	168912	0.90	0.00	0.1	0.0
10yrlday	Basin 1	BASE	3.02	15.71	0.00	169966	0.95	0.00	0.1	0.0
10yrlday	Basin 1	BASE	3.27	15.72	0.00	171070	1.00	0.00	0.1	0.0
10yrlday	Basin 1	BASE	3.52	15.72	0.00	172225	1.05	0.00	0.1	0.0
10yrlday	Basin 1	BASE	3.77	15.73	0.00	173419	1.09	0.00	0.2	0.0
10yrlday	Basin 1	BASE	4.02	15.74	0.00	174633	1.11	0.00	0.2	0.0
10yrlday	Basin 1	BASE	4.27	15.74	0.00	175864	1.14	0.00	0.2	0.0
10yrlday	Basin 1	BASE	4.52	15.75	0.00	177133	1.18	0.00	0.2	0.0
10yrlday	Basin 1	BASE	4.77	15.75	0.00	178434	1.22	0.00	0.2	0.0
10yrlday	Basin 1	BASE	5.02	15.76	0.00	179751	1.24	0.00	0.3	0.0
10yrlday	Basin 1	BASE	5.27	15.77	0.00	181082	1.26	0.00	0.3	0.0
10yrlday	Basin 1	BASE	5.52	15.77	0.00	182434	1.29	0.00	0.3	0.0
10yrlday	Basin 1	BASE	5.75	15.78	0.00	183716	1.31	0.00	0.4	0.0
10yrlday	Basin 1	BASE	6.00	15.78	0.00	185099	1.34	0.00	0.4	0.0
10yrlday	Basin 1	BASE	6.25	15.79	0.00	186517	1.41	0.00	0.4	0.0
10yrlday	Basin 1	BASE	6.50	15.80	0.00	188019	1.52	0.00	0.4	0.0
10yrlday	Basin 1	BASE	6.75	15.81	0.00	189614	1.61	0.00	0.5	0.0
10yrlday	Basin 1	BASE	7.00	15.81	0.00	191294	1.69	0.00	0.5	0.0
10yrlday	Basin 1	BASE	7.25	15.82	0.00	193043	1.81	0.00	0.5	0.0
10yrlday	Basin 1	BASE	7.50	15.83	0.00	194928	1.96	0.00	0.6	0.0
10yrlday	Basin 1	BASE	7.75	15.84	0.00	196894	2.08	0.00	0.6	0.0
10yrlday	Basin 1	BASE	8.01	15.85	0.00	199008	2.19	0.00	0.7	0.0
10yrlday	Basin 1	BASE	8.25	15.86	0.00	201138	2.34	0.00	0.7	0.0
10yrlday	Basin 1	BASE	8.34	15.86	0.00	201987	2.42	0.00	0.7	0.0
10yrlday	Basin 1	BASE	8.43	15.87	0.00	202766	2.49	0.00	0.7	0.0
10yrlday	Basin 1	BASE	8.51	15.87	0.00	203530	2.55	0.00	0.8	0.0
10yrlday	Basin 1	BASE	8.59	15.87	0.00	204343	2.62	0.00	0.8	0.0
10yrlday	Basin 1	BASE	8.67	15.88	0.00	205142	2.69	0.00	0.8	0.0
10yrlday	Basin 1	BASE	8.75	15.88	0.00	205995	2.78	0.00	0.8	0.0
10yrlday	Basin 1	BASE	8.83	15.89	0.00	206837	2.87	0.00	0.8	0.0
10yrlday	Basin 1	BASE	8.92	15.89	0.00	207738	2.95	0.00	0.9	0.0
10yrlday	Basin 1	BASE	9.01	15.89	0.00	208772	3.05	0.00	0.9	0.0
10yrlday	Basin 1	BASE	9.09	15.90	0.00	209738	3.12	0.00	0.9	0.0
10yrlday	Basin 1	BASE	9.17	15.90	0.00	210645	3.20	0.00	0.9	0.0
10yrlday	Basin 1	BASE	9.26	15.91	0.00	211630	3.28	0.00	0.9	0.0
10yrlday	Basin 1	BASE	9.34	15.91	0.00	212595	3.36	0.00	1.0	0.0
10yrlday	Basin 1	BASE	9.42	15.92	0.00	213619	3.44	0.00	1.0	0.0
10yrlday	Basin 1	BASE	9.50	15.92	0.00	214619	3.51	0.00	1.0	0.0
10yrlday	Basin 1	BASE	9.58	15.93	0.00	215679	3.60	0.00	1.0	0.0
10yrlday	Basin 1	BASE	9.68	15.93	0.00	216892	3.71	0.00	1.1	0.0
10yrlday	Basin 1	BASE	9.76	15.94	0.00	218002	3.83	0.00	1.1	0.0
10yrlday	Basin 1	BASE	9.84	15.94	0.00	219098	3.95	0.00	1.1	0.0
10yrlday	Basin 1	BASE	9.92	15.95	0.00	220269	4.07	0.00	1.1	0.0
10yrlday	Basin 1	BASE	10.00	15.95	0.00	221421	4.19	0.00	1.2	0.0
10yrlday	Basin 1	BASE	10.09	15.96	0.00	222650	4.32	0.00	1.2	0.0
10yrlday	Basin 1	BASE	10.17	15.97	0.00	223861	4.46	0.00	1.2	0.0
10yrlday	Basin 1	BASE	10.25	15.97	0.00	225164	4.66	0.00	1.3	0.0
10yrlday	Basin 1	BASE	10.34	15.98	0.00	226682	4.89	0.00	1.3	0.0
10yrlday	Basin 1	BASE	10.43	15.99	0.00	228091	5.09	0.00	1.3	0.0
10yrlday	Basin 1	BASE	10.51	15.99	0.00	229487	5.28	0.00	1.4	0.0
10yrlday	Basin 1	BASE	10.59	16.00	0.00	230987	5.48	0.00	1.4	0.0
10yrlday	Basin 1	BASE	10.67	16.01	0.00	231987	5.71	0.00	1.4	0.0

1971

Simulation	Node	Group	Time hrs	Stage ft	Warning Stage ft	Surface Area ft2	Total Inflow cfs	Total Outflow cfs	Total Vol In af	Total Vol Out af
10yrlday	Basin 1	BASE	10.75	16.01	0.00	232948	6.00	0.00	1.5	0.0
10yrlday	Basin 1	BASE	10.83	16.02	0.00	233914	6.30	0.00	1.5	0.0
10yrlday	Basin 1	BASE	10.92	16.03	0.00	234965	6.61	0.00	1.6	0.0
10yrlday	Basin 1	BASE	11.01	16.04	0.00	236237	6.93	0.00	1.6	0.0
10yrlday	Basin 1	BASE	11.09	16.05	0.00	237329	7.18	0.00	1.7	0.0
10yrlday	Basin 1	BASE	11.17	16.06	0.00	238454	7.42	0.00	1.7	0.0
10yrlday	Basin 1	BASE	11.25	16.07	0.00	239612	7.69	0.00	1.8	0.0
10yrlday	Basin 1	BASE	11.33	16.08	0.00	240814	8.07	0.00	1.8	0.0
10yrlday	Basin 1	BASE	11.43	16.09	0.00	242308	8.86	0.00	1.9	0.0
10yrlday	Basin 1	BASE	11.51	16.10	0.00	243726	10.00	0.00	1.9	0.0
10yrlday	Basin 1	BASE	11.59	16.11	0.00	245307	11.84	0.00	2.0	0.0
10yrlday	Basin 1	BASE	11.67	16.13	0.00	247383	15.03	0.00	2.1	0.0
10yrlday	Basin 1	BASE	11.75	16.15	0.00	250083	20.20	0.00	2.2	0.0
10yrlday	Basin 1	BASE	11.84	16.18	0.00	253751	27.19	0.00	2.4	0.0
10yrlday	Basin 1	BASE	11.92	16.21	0.00	258220	34.94	0.00	2.6	0.0
10yrlday	Basin 1	BASE	12.00	16.26	0.00	264117	44.54	0.00	2.9	0.0
10yrlday	Basin 1	BASE	12.50	16.61	0.00	309454	54.55	0.26	4.9	0.0
10yrlday	Basin 1	BASE	13.00	16.85	0.00	339985	34.09	1.14	6.8	0.0
10yrlday	Basin 1	BASE	13.51	16.99	0.00	357506	23.47	1.81	8.0	0.1
10yrlday	Basin 1	BASE	14.01	17.08	0.00	376993	16.36	2.29	8.8	0.2
10yrlday	Basin 1	BASE	14.50	17.13	0.00	388871	11.03	2.58	9.3	0.3
10yrlday	Basin 1	BASE	15.01	17.16	0.00	395827	7.66	2.76	9.7	0.4
10yrlday	Basin 1	BASE	15.50	17.18	0.00	400125	6.47	2.87	10.0	0.5
10yrlday	Basin 1	BASE	16.01	17.19	0.00	403431	5.67	2.96	10.3	0.6
10yrlday	Basin 1	BASE	16.50	17.20	0.00	405834	5.08	3.02	10.5	0.8
10yrlday	Basin 1	BASE	17.01	17.21	0.00	407693	4.61	3.07	10.7	0.9
10yrlday	Basin 1	BASE	17.50	17.22	0.00	409081	4.36	3.11	10.9	1.0
10yrlday	Basin 1	BASE	18.01	17.22	0.00	410154	3.93	3.14	11.1	1.1
10yrlday	Basin 1	BASE	18.50	17.23	0.00	410840	3.81	3.16	11.2	1.3
10yrlday	Basin 1	BASE	19.01	17.23	0.00	411362	3.48	3.17	11.4	1.4
10yrlday	Basin 1	BASE	19.50	17.23	0.00	411595	3.40	3.18	11.5	1.5
10yrlday	Basin 1	BASE	20.00	17.23	0.00	411759	3.25	3.18	11.6	1.7
10yrlday	Basin 1	BASE	20.50	17.23	0.00	411698	2.98	3.18	11.8	1.8
10yrlday	Basin 1	BASE	21.01	17.23	0.00	411401	2.81	3.17	11.9	1.9
10yrlday	Basin 1	BASE	21.50	17.23	0.00	411001	2.74	3.16	12.0	2.1
10yrlday	Basin 1	BASE	22.01	17.23	0.00	410553	2.70	3.15	12.1	2.2
10yrlday	Basin 1	BASE	22.51	17.22	0.00	410087	2.68	3.14	12.2	2.3
10yrlday	Basin 1	BASE	23.01	17.22	0.00	409557	2.52	3.12	12.3	2.4
10yrlday	Basin 1	BASE	23.51	17.22	0.00	408880	2.40	3.10	12.4	2.6
10yrlday	Basin 1	BASE	24.00	17.21	0.00	408092	2.19	3.08	12.5	2.7
10yrlday	Basin 1	BASE	24.51	17.21	0.00	406748	1.23	3.05	12.6	2.8
10yrlday	Basin 1	BASE	25.00	17.20	0.00	404581	0.59	2.99	12.6	2.9
10yrlday	Basin 1	BASE	25.50	17.19	0.00	401959	0.28	2.92	12.7	3.1
10yrlday	Basin 1	BASE	26.00	17.18	0.00	399148	0.11	2.85	12.7	3.2
10yrlday	Basin 1	BASE	26.50	17.16	0.00	396260	0.02	2.77	12.7	3.3
10yrlday	Basin 1	BASE	27.01	17.15	0.00	393378	0.00	2.70	12.7	3.4
10yrlday	Basin 1	BASE	27.50	17.14	0.00	390560	0.00	2.62	12.7	3.5
10yrlday	Basin 1	BASE	28.01	17.13	0.00	387782	0.00	2.55	12.7	3.6
10yrlday	Basin 1	BASE	28.51	17.11	0.00	385060	0.00	2.49	12.7	3.7
10yrlday	Basin 1	BASE	29.01	17.10	0.00	382392	0.00	2.42	12.7	3.8
10yrlday	Basin 1	BASE	29.51	17.09	0.00	379777	0.00	2.35	12.7	3.9
10yrlday	Basin 1	BASE	30.01	17.08	0.00	377215	0.00	2.29	12.7	4.0
10yrlday	Basin 1	BASE	30.51	17.07	0.00	374717	0.00	2.23	12.7	4.1
10yrlday	Basin 1	BASE	31.00	17.06	0.00	372307	0.00	2.17	12.7	4.2
10yrlday	Basin 1	BASE	31.50	17.05	0.00	369894	0.00	2.12	12.7	4.3
10yrlday	Basin 1	BASE	32.00	17.04	0.00	367530	0.00	2.06	12.7	4.4
10yrlday	Basin 1	BASE	32.50	17.03	0.00	365213	0.00	2.01	12.7	4.5
10yrlday	Basin 1	BASE	33.00	17.02	0.00	362954	0.00	1.95	12.7	4.6
10yrlday	Basin 1	BASE	33.50	17.01	0.00	360730	0.00	1.90	12.7	4.6
10yrlday	Basin 1	BASE	34.01	17.00	0.00	358550	0.00	1.85	12.7	4.7
10yrlday	Basin 1	BASE	34.51	16.99	0.00	357353	0.00	1.81	12.7	4.8
10yrlday	Basin 1	BASE	35.01	16.98	0.00	356206	0.00	1.76	12.7	4.9
10yrlday	Basin 1	BASE	35.51	16.97	0.00	355086	0.00	1.71	12.7	4.9

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Simulation	Node	Group	Time hrs	Stage ft	Warning Stage ft	Surface Area ft2	Total Inflow cfs	Total Outflow cfs	Total Vol In af	Total Vol Out af
10yrlday	Basin 1	BASE	36.01	16.96	0.00	353996	0.00	1.67	12.7	5.0
10yrlday	Basin 1	BASE	36.51	16.96	0.00	352925	0.00	1.63	12.7	5.1
10yrlday	Basin 1	BASE	37.00	16.95	0.00	351900	0.00	1.59	12.7	5.1
10yrlday	Basin 1	BASE	37.50	16.94	0.00	350876	0.00	1.55	12.7	5.2
10yrlday	Basin 1	BASE	38.00	16.93	0.00	349875	0.00	1.51	12.7	5.3
10yrlday	Basin 1	BASE	38.50	16.92	0.00	348896	0.00	1.47	12.7	5.3
10yrlday	Basin 1	BASE	39.00	16.92	0.00	347943	0.00	1.43	12.7	5.4
10yrlday	Basin 1	BASE	39.50	16.91	0.00	347007	0.00	1.40	12.7	5.5
10yrlday	Basin 1	BASE	40.01	16.90	0.00	346091	0.00	1.37	12.7	5.5
10yrlday	Basin 1	BASE	40.51	16.90	0.00	345195	0.00	1.33	12.7	5.6
10yrlday	Basin 1	BASE	41.01	16.89	0.00	344318	0.00	1.30	12.7	5.6
10yrlday	Basin 1	BASE	41.51	16.88	0.00	343461	0.00	1.27	12.7	5.7
10yrlday	Basin 1	BASE	42.01	16.88	0.00	342626	0.00	1.24	12.7	5.7
10yrlday	Basin 1	BASE	42.51	16.87	0.00	341805	0.00	1.21	12.7	5.8
10yrlday	Basin 1	BASE	43.00	16.86	0.00	341019	0.00	1.18	12.7	5.8
10yrlday	Basin 1	BASE	43.50	16.86	0.00	340232	0.00	1.15	12.7	5.9
10yrlday	Basin 1	BASE	44.00	16.85	0.00	339462	0.00	1.13	12.7	5.9
10yrlday	Basin 1	BASE	44.50	16.84	0.00	338712	0.00	1.10	12.7	6.0
10yrlday	Basin 1	BASE	45.00	16.84	0.00	337974	0.00	1.07	12.7	6.0
10yrlday	Basin 1	BASE	45.50	16.83	0.00	337252	0.00	1.05	12.7	6.1
10yrlday	Basin 1	BASE	46.01	16.83	0.00	336544	0.00	1.03	12.7	6.1
10yrlday	Basin 1	BASE	46.51	16.82	0.00	335852	0.00	1.00	12.7	6.1
10yrlday	Basin 1	BASE	47.01	16.82	0.00	335173	0.00	0.98	12.7	6.2
10yrlday	Basin 1	BASE	47.51	16.81	0.00	334512	0.00	0.96	12.7	6.2
10yrlday	Basin 1	BASE	48.01	16.81	0.00	333862	0.00	0.94	12.7	6.3
10yrlday	Basin 1	BASE	48.51	16.80	0.00	333224	0.00	0.92	12.7	6.3
10yrlday	Basin 1	BASE	49.00	16.80	0.00	332613	0.00	0.90	12.7	6.3
10yrlday	Basin 1	BASE	49.50	16.79	0.00	332001	0.00	0.88	12.7	6.4
10yrlday	Basin 1	BASE	50.00	16.79	0.00	331401	0.00	0.86	12.7	6.4
10yrlday	Basin 1	BASE	50.50	16.78	0.00	330816	0.00	0.84	12.7	6.4
10yrlday	Basin 1	BASE	51.00	16.78	0.00	330240	0.00	0.82	12.7	6.5
10yrlday	Basin 1	BASE	51.50	16.77	0.00	329676	0.00	0.80	12.7	6.5
10yrlday	Basin 1	BASE	52.01	16.77	0.00	329122	0.00	0.79	12.7	6.5
10yrlday	Basin 1	BASE	52.51	16.76	0.00	328580	0.00	0.77	12.7	6.6
10yrlday	Basin 1	BASE	53.01	16.76	0.00	328048	0.00	0.75	12.7	6.6
10yrlday	Basin 1	BASE	53.51	16.76	0.00	327529	0.00	0.74	12.7	6.6
10yrlday	Basin 1	BASE	54.01	16.75	0.00	327018	0.00	0.72	12.7	6.7
10yrlday	Basin 1	BASE	54.51	16.75	0.00	326517	0.00	0.71	12.7	6.7
10yrlday	Basin 1	BASE	55.00	16.74	0.00	326035	0.00	0.69	12.7	6.7
10yrlday	Basin 1	BASE	55.50	16.74	0.00	325553	0.00	0.68	12.7	6.8
10yrlday	Basin 1	BASE	56.00	16.74	0.00	325082	0.00	0.66	12.7	6.8
10yrlday	Basin 1	BASE	56.50	16.73	0.00	324618	0.00	0.65	12.7	6.8
10yrlday	Basin 1	BASE	57.00	16.73	0.00	324162	0.00	0.64	12.7	6.8
10yrlday	Basin 1	BASE	57.50	16.73	0.00	323715	0.00	0.62	12.7	6.9
10yrlday	Basin 1	BASE	58.01	16.72	0.00	323277	0.00	0.61	12.7	6.9
10yrlday	Basin 1	BASE	58.51	16.72	0.00	322847	0.00	0.60	12.7	6.9
10yrlday	Basin 1	BASE	59.01	16.72	0.00	322427	0.00	0.59	12.7	6.9
10yrlday	Basin 1	BASE	59.51	16.71	0.00	322012	0.00	0.58	12.7	7.0
10yrlday	Basin 1	BASE	60.01	16.71	0.00	321605	0.00	0.56	12.7	7.0
10yrlday	Basin 1	BASE	60.83	16.70	0.00	320951	0.00	0.55	12.7	7.0
10yrlday	Basin 1	BASE	61.67	16.70	0.00	320306	0.00	0.53	12.7	7.1
10yrlday	Basin 1	BASE	62.50	16.69	0.00	319690	0.00	0.51	12.7	7.1
10yrlday	Basin 1	BASE	63.34	16.69	0.00	319082	0.00	0.50	12.7	7.1
10yrlday	Basin 1	BASE	64.17	16.69	0.00	318503	0.00	0.48	12.7	7.2
10yrlday	Basin 1	BASE	65.01	16.68	0.00	317932	0.00	0.47	12.7	7.2
10yrlday	Basin 1	BASE	65.83	16.68	0.00	317384	0.00	0.45	12.7	7.2
10yrlday	Basin 1	BASE	66.67	16.67	0.00	316846	0.00	0.44	12.7	7.3
10yrlday	Basin 1	BASE	67.51	16.67	0.00	316322	0.00	0.42	12.7	7.3
10yrlday	Basin 1	BASE	68.34	16.66	0.00	315821	0.00	0.41	12.7	7.3
10yrlday	Basin 1	BASE	69.18	16.66	0.00	315328	0.00	0.40	12.7	7.3
10yrlday	Basin 1	BASE	70.01	16.66	0.00	314853	0.00	0.39	12.7	7.4
10yrlday	Basin 1	BASE	70.84	16.65	0.00	314387	0.00	0.38	12.7	7.4
10yrlday	Basin 1	BASE	71.67	16.65	0.00	313939	0.00	0.37	12.7	7.4

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Simulation	Node	Group	Time hrs	Stage ft	Warning Stage ft	Surface Area ft2	Total Inflow cfs	Total Outflow cfs	Total Vol In af	Total Vol Out af
10yrlday	Basin 1	BASE	72.51	16.65	0.00	313497	0.00	0.36	12.7	7.4
10yrlday	Basin 1	BASE	73.34	16.64	0.00	313074	0.00	0.35	12.7	7.5
10yrlday	Basin 1	BASE	74.18	16.64	0.00	312655	0.00	0.34	12.7	7.5
10yrlday	Basin 1	BASE	75.00	16.64	0.00	312254	0.00	0.33	12.7	7.5
10yrlday	Basin 1	BASE	75.84	16.63	0.00	311859	0.00	0.32	12.7	7.5
10yrlday	Basin 1	BASE	76.67	16.63	0.00	311478	0.00	0.31	12.7	7.6
10yrlday	Basin 1	BASE	77.51	16.63	0.00	311103	0.00	0.30	12.7	7.6
10yrlday	Basin 1	BASE	78.33	16.62	0.00	310743	0.00	0.29	12.7	7.6
10yrlday	Basin 1	BASE	79.17	16.62	0.00	310386	0.00	0.28	12.7	7.6
10yrlday	Basin 1	BASE	80.00	16.62	0.00	310044	0.00	0.28	12.7	7.6
10yrlday	Basin 1	BASE	80.84	16.62	0.00	309705	0.00	0.27	12.7	7.7
10yrlday	Basin 1	BASE	81.67	16.61	0.00	309380	0.00	0.26	12.7	7.7
10yrlday	Basin 1	BASE	82.50	16.61	0.00	309059	0.00	0.26	12.7	7.7
10yrlday	Basin 1	BASE	83.33	16.61	0.00	308749	0.00	0.25	12.7	7.7
10yrlday	Basin 1	BASE	84.17	16.61	0.00	308444	0.00	0.24	12.7	7.7
10yrlday	Basin 1	BASE	85.01	16.60	0.00	308147	0.00	0.24	12.7	7.7
10yrlday	Basin 1	BASE	85.84	16.60	0.00	307859	0.00	0.23	12.7	7.8
10yrlday	Basin 1	BASE	86.67	16.60	0.00	307576	0.00	0.22	12.7	7.8
10yrlday	Basin 1	BASE	87.50	16.60	0.00	307302	0.00	0.22	12.7	7.8
10yrlday	Basin 1	BASE	88.34	16.60	0.00	307032	0.00	0.21	12.7	7.8
10yrlday	Basin 1	BASE	89.17	16.59	0.00	306772	0.00	0.21	12.7	7.8
10yrlday	Basin 1	BASE	90.01	16.59	0.00	306514	0.00	0.20	12.7	7.8
10yrlday	Basin 1	BASE	90.83	16.59	0.00	306266	0.00	0.20	12.7	7.9
10yrlday	Basin 1	BASE	91.67	16.59	0.00	306021	0.00	0.19	12.7	7.9
10yrlday	Basin 1	BASE	92.50	16.59	0.00	305784	0.00	0.19	12.7	7.9
10yrlday	Basin 1	BASE	93.34	16.58	0.00	305550	0.00	0.18	12.7	7.9
10yrlday	Basin 1	BASE	94.17	16.58	0.00	305323	0.00	0.18	12.7	7.9
10yrlday	Basin 1	BASE	95.01	16.58	0.00	305099	0.00	0.18	12.7	7.9
10yrlday	Basin 1	BASE	95.84	16.58	0.00	304881	0.00	0.17	12.7	7.9
10yrlday	Basin 1	BASE	96.67	16.58	0.00	304669	0.00	0.17	12.7	7.9
10yrlday	Basin 1	BASE	97.51	16.58	0.00	304460	0.00	0.16	12.7	8.0
10yrlday	Basin 1	BASE	98.34	16.57	0.00	304259	0.00	0.17	12.7	8.0
10yrlday	Basin 1	BASE	99.18	16.57	0.00	304058	0.00	0.16	12.7	8.0
10yrlday	Basin 1	BASE	100.00	16.57	0.00	303865	0.00	0.15	12.7	8.0
10yrlday	Basin 1	BASE	100.84	16.57	0.00	303674	0.00	0.15	12.7	8.0
10yrlday	Basin 1	BASE	101.67	16.57	0.00	303489	0.00	0.15	12.7	8.0
10yrlday	Basin 1	BASE	102.51	16.57	0.00	303306	0.00	0.14	12.7	8.0
10yrlday	Basin 1	BASE	103.34	16.56	0.00	303128	0.00	0.14	12.7	8.0
10yrlday	Basin 1	BASE	104.17	16.56	0.00	302953	0.00	0.14	12.7	8.0
10yrlday	Basin 1	BASE	105.00	16.56	0.00	302783	0.00	0.13	12.7	8.0
10yrlday	Basin 1	BASE	105.84	16.56	0.00	302615	0.00	0.13	12.7	8.1
10yrlday	Basin 1	BASE	106.67	16.56	0.00	302452	0.00	0.13	12.7	8.1
10yrlday	Basin 1	BASE	107.51	16.56	0.00	302290	0.00	0.13	12.7	8.1
10yrlday	Basin 1	BASE	108.33	16.56	0.00	302135	0.00	0.12	12.7	8.1
10yrlday	Basin 1	BASE	109.17	16.56	0.00	301980	0.00	0.12	12.7	8.1
10yrlday	Basin 1	BASE	110.00	16.55	0.00	301830	0.00	0.12	12.7	8.1
10yrlday	Basin 1	BASE	110.84	16.55	0.00	301681	0.00	0.12	12.7	8.1
10yrlday	Basin 1	BASE	111.68	16.55	0.00	301535	0.00	0.11	12.7	8.1
10yrlday	Basin 1	BASE	112.50	16.55	0.00	301394	0.00	0.11	12.7	8.1
10yrlday	Basin 1	BASE	113.34	16.55	0.00	301254	0.00	0.11	12.7	8.1
10yrlday	Basin 1	BASE	114.17	16.55	0.00	301119	0.00	0.11	12.7	8.1
10yrlday	Basin 1	BASE	115.01	16.55	0.00	300984	0.00	0.10	12.7	8.1
10yrlday	Basin 1	BASE	115.83	16.55	0.00	300854	0.00	0.10	12.7	8.1
10yrlday	Basin 1	BASE	116.67	16.55	0.00	300724	0.00	0.10	12.7	8.2
10yrlday	Basin 1	BASE	117.50	16.54	0.00	300599	0.00	0.10	12.7	8.2
10yrlday	Basin 1	BASE	118.34	16.54	0.00	300474	0.00	0.10	12.7	8.2
10yrlday	Basin 1	BASE	119.17	16.54	0.00	300354	0.00	0.09	12.7	8.2
10yrlday	Basin 1	BASE	120.01	16.54	0.00	300234	0.00	0.09	12.7	8.2
10yrlday	Basin 1	BASE	120.83	16.54	0.00	300118	0.00	0.09	12.7	8.2
10yrlday	Basin 1	BASE	121.67	16.54	0.00	300002	0.00	0.09	12.7	8.2
10yrlday	Basin 1	BASE	122.51	16.54	0.00	299889	0.00	0.09	12.7	8.2
10yrlday	Basin 1	BASE	123.34	16.54	0.00	299779	0.00	0.09	12.7	8.2
10yrlday	Basin 1	BASE	124.18	16.54	0.00	299670	0.00	0.08	12.7	8.2

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Simulation	Node	Group	Time hrs	Stage ft	Warning Stage ft	Surface Area ft ²	Total Inflow cfs	Total Outflow cfs	Total Vol In af	Total Vol Out af
10yrlday	Basin 1	BASE	125.01	16.54	0.00	299564	0.00	0.08	12.7	8.2
10yrlday	Basin 1	BASE	125.84	16.54	0.00	299459	0.00	0.08	12.7	8.2
10yrlday	Basin 1	BASE	126.67	16.54	0.00	299357	0.00	0.08	12.7	8.2
10yrlday	Basin 1	BASE	127.51	16.53	0.00	299255	0.00	0.08	12.7	8.2
10yrlday	Basin 1	BASE	128.34	16.53	0.00	299157	0.00	0.08	12.7	8.2
10yrlday	Basin 1	BASE	129.17	16.53	0.00	299059	0.00	0.08	12.7	8.2
10yrlday	Basin 1	BASE	130.00	16.53	0.00	298964	0.00	0.07	12.7	8.3
10yrlday	Basin 1	BASE	130.84	16.53	0.00	298870	0.00	0.07	12.7	8.3
10yrlday	Basin 1	BASE	131.67	16.53	0.00	298778	0.00	0.07	12.7	8.3
10yrlday	Basin 1	BASE	132.51	16.53	0.00	298687	0.00	0.07	12.7	8.3
10yrlday	Basin 1	BASE	133.33	16.53	0.00	298598	0.00	0.07	12.7	8.3
10yrlday	Basin 1	BASE	134.17	16.53	0.00	298510	0.00	0.07	12.7	8.3
10yrlday	Basin 1	BASE	135.00	16.53	0.00	298425	0.00	0.07	12.7	8.3
10yrlday	Basin 1	BASE	135.84	16.53	0.00	298340	0.00	0.07	12.7	8.3
10yrlday	Basin 1	BASE	136.67	16.53	0.00	298257	0.00	0.06	12.7	8.3
10yrlday	Basin 1	BASE	137.50	16.53	0.00	298175	0.00	0.06	12.7	8.3
10yrlday	Basin 1	BASE	138.33	16.53	0.00	298094	0.00	0.06	12.7	8.3
10yrlday	Basin 1	BASE	139.17	16.52	0.00	298015	0.00	0.06	12.7	8.3
10yrlday	Basin 1	BASE	140.01	16.52	0.00	297937	0.00	0.06	12.7	8.3
10yrlday	Basin 1	BASE	140.84	16.52	0.00	297861	0.00	0.06	12.7	8.3
10yrlday	Basin 1	BASE	141.67	16.52	0.00	297788	0.00	0.06	12.7	8.3
10yrlday	Basin 1	BASE	142.50	16.52	0.00	297711	0.00	0.06	12.7	8.3
10yrlday	Basin 1	BASE	143.34	16.52	0.00	297638	0.00	0.06	12.7	8.3
10yrlday	Basin 1	BASE	144.00	16.52	0.00	297562	0.00	0.06	12.7	8.3
10yrlday	Basin 2	BASE	0.00	15.69	19.00	34841	0.00	0.00	0.0	0.0
10yrlday	Basin 2	BASE	0.26	15.69	19.00	34841	0.00	0.00	0.0	0.0
10yrlday	Basin 2	BASE	0.50	15.69	19.00	34841	0.00	0.00	0.0	0.0
10yrlday	Basin 2	BASE	0.77	15.69	19.00	34841	0.00	0.00	0.0	0.0
10yrlday	Basin 2	BASE	1.02	15.69	19.00	34841	0.00	0.00	0.0	0.0
10yrlday	Basin 2	BASE	1.27	15.69	19.00	34844	0.03	0.00	0.0	0.0
10yrlday	Basin 2	BASE	1.52	15.69	19.00	34924	0.18	0.00	0.0	0.0
10yrlday	Basin 2	BASE	1.77	15.70	19.00	35086	0.25	0.00	0.0	0.0
10yrlday	Basin 2	BASE	2.02	15.71	19.00	35285	0.29	0.00	0.0	0.0
10yrlday	Basin 2	BASE	2.27	15.71	19.00	35509	0.32	0.00	0.0	0.0
10yrlday	Basin 2	BASE	2.52	15.72	19.00	35748	0.33	0.00	0.0	0.0
10yrlday	Basin 2	BASE	2.77	15.73	19.00	35993	0.34	0.00	0.0	0.0
10yrlday	Basin 2	BASE	3.02	15.74	19.00	36238	0.34	0.00	0.0	0.0
10yrlday	Basin 2	BASE	3.27	15.75	19.00	36486	0.35	0.00	0.0	0.0
10yrlday	Basin 2	BASE	3.52	15.76	19.00	36741	0.36	0.00	0.1	0.0
10yrlday	Basin 2	BASE	3.77	15.76	19.00	37000	0.37	0.00	0.1	0.0
10yrlday	Basin 2	BASE	4.02	15.77	19.00	37259	0.37	0.00	0.1	0.0
10yrlday	Basin 2	BASE	4.27	15.78	19.00	37523	0.39	0.00	0.1	0.0
10yrlday	Basin 2	BASE	4.52	15.79	19.00	37800	0.40	0.00	0.1	0.0
10yrlday	Basin 2	BASE	4.77	15.80	19.00	38081	0.41	0.00	0.1	0.0
10yrlday	Basin 2	BASE	5.02	15.81	19.00	38363	0.41	0.00	0.1	0.0
10yrlday	Basin 2	BASE	5.27	15.82	19.00	38648	0.43	0.00	0.1	0.0
10yrlday	Basin 2	BASE	5.52	15.83	19.00	38939	0.43	0.00	0.1	0.0
10yrlday	Basin 2	BASE	5.75	15.84	19.00	39212	0.44	0.00	0.1	0.0
10yrlday	Basin 2	BASE	6.00	15.85	19.00	39508	0.45	0.00	0.1	0.0
10yrlday	Basin 2	BASE	6.25	15.86	19.00	39818	0.50	0.00	0.1	0.0
10yrlday	Basin 2	BASE	6.50	15.87	19.00	40157	0.54	0.00	0.2	0.0
10yrlday	Basin 2	BASE	6.75	15.89	19.00	40516	0.57	0.00	0.2	0.0
10yrlday	Basin 2	BASE	7.00	15.90	19.00	40892	0.59	0.00	0.2	0.0
10yrlday	Basin 2	BASE	7.25	15.91	19.00	41289	0.66	0.00	0.2	0.0
10yrlday	Basin 2	BASE	7.50	15.93	19.00	41723	0.71	0.00	0.2	0.0
10yrlday	Basin 2	BASE	7.75	15.94	19.00	42170	0.74	0.00	0.2	0.0
10yrlday	Basin 2	BASE	8.01	15.96	19.00	42644	0.77	0.00	0.2	0.0
10yrlday	Basin 2	BASE	8.25	15.98	19.00	43127	0.85	0.00	0.3	0.0
10yrlday	Basin 2	BASE	8.34	15.98	19.00	43322	0.88	0.00	0.3	0.0
10yrlday	Basin 2	BASE	8.43	15.99	19.00	43502	0.90	0.00	0.3	0.0
10yrlday	Basin 2	BASE	8.51	15.99	19.00	43677	0.92	0.00	0.3	0.0
10yrlday	Basin 2	BASE	8.59	16.00	19.00	43861	0.95	0.00	0.3	0.0

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Simulation	Node	Group	Time	Stage	Warning	Surface	Total	Total	Total	Total
			hrs	ft	Stage	Area	Inflow	Outflow	Vol In	Vol Out
					ft	ft2	cfs	cfs	af	af
10yrlday	Basin 2	BASE	8.67	16.01	19.00	44022	0.99	0.00	0.3	0.0
10yrlday	Basin 2	BASE	8.75	16.01	19.00	44196	1.03	0.00	0.3	0.0
10yrlday	Basin 2	BASE	8.83	16.02	19.00	44368	1.06	0.00	0.3	0.0
10yrlday	Basin 2	BASE	8.92	16.03	19.00	44551	1.08	0.00	0.3	0.0
10yrlday	Basin 2	BASE	9.01	16.04	19.00	44761	1.11	0.00	0.3	0.0
10yrlday	Basin 2	BASE	9.09	16.04	19.00	44952	1.14	0.00	0.3	0.0
10yrlday	Basin 2	BASE	9.17	16.05	19.00	45139	1.17	0.00	0.3	0.0
10yrlday	Basin 2	BASE	9.26	16.06	19.00	45339	1.20	0.00	0.3	0.0
10yrlday	Basin 2	BASE	9.34	16.07	19.00	45534	1.22	0.00	0.3	0.0
10yrlday	Basin 2	BASE	9.42	16.07	19.00	45740	1.24	0.00	0.4	0.0
10yrlday	Basin 2	BASE	9.50	16.08	19.00	45940	1.26	0.00	0.4	0.0
10yrlday	Basin 2	BASE	9.58	16.09	19.00	46152	1.30	0.00	0.4	0.0
10yrlday	Basin 2	BASE	9.68	16.10	19.00	46397	1.36	0.00	0.4	0.0
10yrlday	Basin 2	BASE	9.76	16.11	19.00	46625	1.42	0.00	0.4	0.0
10yrlday	Basin 2	BASE	9.84	16.12	19.00	46851	1.46	0.00	0.4	0.0
10yrlday	Basin 2	BASE	9.92	16.13	19.00	47091	1.50	0.00	0.4	0.0
10yrlday	Basin 2	BASE	10.00	16.14	19.00	47326	1.53	0.00	0.4	0.0
10yrlday	Basin 2	BASE	10.09	16.15	19.00	47576	1.59	0.00	0.4	0.0
10yrlday	Basin 2	BASE	10.17	16.16	19.00	47827	1.68	0.00	0.4	0.0
10yrlday	Basin 2	BASE	10.25	16.17	19.00	48102	1.78	0.00	0.5	0.0
10yrlday	Basin 2	BASE	10.34	16.18	19.00	48425	1.87	0.00	0.5	0.0
10yrlday	Basin 2	BASE	10.43	16.19	19.00	48723	1.93	0.00	0.5	0.0
10yrlday	Basin 2	BASE	10.51	16.20	19.00	49016	1.98	0.00	0.5	0.0
10yrlday	Basin 2	BASE	10.59	16.22	19.00	49330	2.07	0.00	0.5	0.0
10yrlday	Basin 2	BASE	10.67	16.23	19.00	49647	2.21	0.00	0.5	0.0
10yrlday	Basin 2	BASE	10.75	16.24	19.00	49997	2.36	0.00	0.5	0.0
10yrlday	Basin 2	BASE	10.83	16.26	19.00	50349	2.47	0.00	0.6	0.0
10yrlday	Basin 2	BASE	10.92	16.27	19.00	50729	2.57	0.00	0.6	0.0
10yrlday	Basin 2	BASE	11.01	16.29	19.00	51183	2.66	0.00	0.6	0.0
10yrlday	Basin 2	BASE	11.09	16.30	19.00	51567	2.73	0.00	0.6	0.0
10yrlday	Basin 2	BASE	11.17	16.32	19.00	51960	2.82	0.00	0.6	0.0
10yrlday	Basin 2	BASE	11.25	16.34	19.00	52362	2.92	0.00	0.7	0.0
10yrlday	Basin 2	BASE	11.33	16.35	19.00	52785	3.16	0.00	0.7	0.0
10yrlday	Basin 2	BASE	11.43	16.37	19.00	53349	3.84	0.00	0.7	0.0
10yrlday	Basin 2	BASE	11.51	16.40	19.00	53914	4.50	0.00	0.7	0.0
10yrlday	Basin 2	BASE	11.59	16.42	19.00	54588	5.87	0.00	0.8	0.0
10yrlday	Basin 2	BASE	11.67	16.46	19.00	55622	9.09	0.00	0.8	0.0
10yrlday	Basin 2	BASE	11.75	16.52	19.00	57077	12.42	0.00	0.9	0.0
10yrlday	Basin 2	BASE	11.84	16.60	19.00	58992	16.14	0.00	1.0	0.0
10yrlday	Basin 2	BASE	11.92	16.69	19.00	61264	20.99	0.00	1.1	0.0
10yrlday	Basin 2	BASE	12.00	16.80	19.00	64158	25.85	0.00	1.3	0.0
10yrlday	Basin 2	BASE	12.50	17.36	19.00	94317	17.28	0.42	2.2	0.0
10yrlday	Basin 2	BASE	13.00	17.56	19.00	108433	7.94	1.21	2.7	0.0
10yrlday	Basin 2	BASE	13.51	17.63	19.00	113173	4.00	1.53	2.9	0.1
10yrlday	Basin 2	BASE	14.01	17.65	19.00	115107	2.92	1.67	3.1	0.2
10yrlday	Basin 2	BASE	14.50	17.67	19.00	116128	2.45	1.74	3.2	0.2
10yrlday	Basin 2	BASE	15.01	17.68	19.00	116656	2.07	1.78	3.3	0.3
10yrlday	Basin 2	BASE	15.50	17.68	19.00	116851	1.89	1.79	3.4	0.4
10yrlday	Basin 2	BASE	16.01	17.68	19.00	116823	1.67	1.79	3.4	0.5
10yrlday	Basin 2	BASE	16.50	17.68	19.00	116612	1.52	1.77	3.5	0.5
10yrlday	Basin 2	BASE	17.01	17.67	19.00	116269	1.39	1.75	3.6	0.6
10yrlday	Basin 2	BASE	17.50	17.66	19.00	115881	1.36	1.72	3.6	0.7
10yrlday	Basin 2	BASE	18.01	17.66	19.00	115393	1.18	1.69	3.7	0.7
10yrlday	Basin 2	BASE	18.50	17.65	19.00	114882	1.21	1.65	3.7	0.8
10yrlday	Basin 2	BASE	19.01	17.64	19.00	114320	1.05	1.61	3.8	0.9
10yrlday	Basin 2	BASE	19.50	17.63	19.00	113755	1.09	1.57	3.8	0.9
10yrlday	Basin 2	BASE	20.00	17.63	19.00	113202	1.02	1.53	3.9	1.0
10yrlday	Basin 2	BASE	20.50	17.62	19.00	112586	0.91	1.49	3.9	1.1
10yrlday	Basin 2	BASE	21.01	17.61	19.00	111937	0.88	1.44	3.9	1.1
10yrlday	Basin 2	BASE	21.50	17.60	19.00	111317	0.87	1.40	4.0	1.2
10yrlday	Basin 2	BASE	22.01	17.59	19.00	110736	0.87	1.36	4.0	1.2
10yrlday	Basin 2	BASE	22.51	17.58	19.00	110195	0.87	1.32	4.0	1.3
10yrlday	Basin 2	BASE	23.01	17.58	19.00	109639	0.78	1.29	4.1	1.4

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Simulation	Node	Group	Time hrs	Stage ft	Warning Stage ft	Surface Area ft2	Total Inflow cfs	Total Outflow cfs	Total Vol In af	Total Vol Out af
10yrlday	Basin 2	BASE	23.51	17.57	19.00	109057	0.75	1.25	4.1	1.4
10yrlday	Basin 2	BASE	24.00	17.56	19.00	108455	0.66	1.21	4.1	1.5
10yrlday	Basin 2	BASE	24.51	17.55	19.00	107524	0.18	1.15	4.2	1.5
10yrlday	Basin 2	BASE	25.00	17.53	19.00	106342	0.03	1.07	4.2	1.6
10yrlday	Basin 2	BASE	25.50	17.51	19.00	105113	0.00	1.00	4.2	1.6
10yrlday	Basin 2	BASE	26.00	17.49	19.00	103946	0.00	0.93	4.2	1.6
10yrlday	Basin 2	BASE	26.50	17.48	19.00	102848	0.00	0.86	4.2	1.7
10yrlday	Basin 2	BASE	27.01	17.46	19.00	101816	0.00	0.81	4.2	1.7
10yrlday	Basin 2	BASE	27.50	17.45	19.00	100849	0.00	0.75	4.2	1.7
10yrlday	Basin 2	BASE	28.01	17.44	19.00	99933	0.00	0.70	4.2	1.8
10yrlday	Basin 2	BASE	28.51	17.43	19.00	99071	0.00	0.65	4.2	1.8
10yrlday	Basin 2	BASE	29.01	17.41	19.00	98258	0.00	0.61	4.2	1.8
10yrlday	Basin 2	BASE	29.51	17.40	19.00	97491	0.00	0.57	4.2	1.9
10yrlday	Basin 2	BASE	30.01	17.39	19.00	96768	0.00	0.54	4.2	1.9
10yrlday	Basin 2	BASE	30.51	17.38	19.00	96088	0.00	0.50	4.2	1.9
10yrlday	Basin 2	BASE	31.00	17.37	19.00	95456	0.00	0.47	4.2	1.9
10yrlday	Basin 2	BASE	31.50	17.36	19.00	94845	0.00	0.44	4.2	1.9
10yrlday	Basin 2	BASE	32.00	17.36	19.00	94268	0.00	0.42	4.2	2.0
10yrlday	Basin 2	BASE	32.50	17.35	19.00	93721	0.00	0.39	4.2	2.0
10yrlday	Basin 2	BASE	33.00	17.34	19.00	93206	0.00	0.37	4.2	2.0
10yrlday	Basin 2	BASE	33.50	17.33	19.00	92715	0.00	0.35	4.2	2.0
10yrlday	Basin 2	BASE	34.01	17.33	19.00	92250	0.00	0.33	4.2	2.0
10yrlday	Basin 2	BASE	34.51	17.32	19.00	91809	0.00	0.31	4.2	2.0
10yrlday	Basin 2	BASE	35.01	17.32	19.00	91390	0.00	0.29	4.2	2.0
10yrlday	Basin 2	BASE	35.51	17.31	19.00	90993	0.00	0.28	4.2	2.1
10yrlday	Basin 2	BASE	36.01	17.30	19.00	90617	0.00	0.26	4.2	2.1
10yrlday	Basin 2	BASE	36.51	17.30	19.00	90257	0.00	0.25	4.2	2.1
10yrlday	Basin 2	BASE	37.00	17.29	19.00	89923	0.00	0.24	4.2	2.1
10yrlday	Basin 2	BASE	37.50	17.29	19.00	89597	0.00	0.22	4.2	2.1
10yrlday	Basin 2	BASE	38.00	17.29	19.00	89287	0.00	0.21	4.2	2.1
10yrlday	Basin 2	BASE	38.50	17.28	19.00	88991	0.00	0.20	4.2	2.1
10yrlday	Basin 2	BASE	39.00	17.28	19.00	88711	0.00	0.19	4.2	2.1
10yrlday	Basin 2	BASE	39.50	17.27	19.00	88442	0.00	0.18	4.2	2.1
10yrlday	Basin 2	BASE	40.01	17.27	19.00	88185	0.00	0.17	4.2	2.1
10yrlday	Basin 2	BASE	40.51	17.27	19.00	87940	0.00	0.17	4.2	2.1
10yrlday	Basin 2	BASE	41.01	17.26	19.00	87705	0.00	0.16	4.2	2.1
10yrlday	Basin 2	BASE	41.51	17.26	19.00	87481	0.00	0.15	4.2	2.2
10yrlday	Basin 2	BASE	42.01	17.26	19.00	87268	0.00	0.14	4.2	2.2
10yrlday	Basin 2	BASE	42.51	17.25	19.00	87063	0.00	0.14	4.2	2.2
10yrlday	Basin 2	BASE	43.00	17.25	19.00	86871	0.00	0.13	4.2	2.2
10yrlday	Basin 2	BASE	43.50	17.25	19.00	86682	0.00	0.13	4.2	2.2
10yrlday	Basin 2	BASE	44.00	17.25	19.00	86502	0.00	0.12	4.2	2.2
10yrlday	Basin 2	BASE	44.50	17.24	19.00	86330	0.00	0.12	4.2	2.2
10yrlday	Basin 2	BASE	45.00	17.24	19.00	86164	0.00	0.11	4.2	2.2
10yrlday	Basin 2	BASE	45.50	17.24	19.00	86004	0.00	0.11	4.2	2.2
10yrlday	Basin 2	BASE	46.01	17.24	19.00	85851	0.00	0.10	4.2	2.2
10yrlday	Basin 2	BASE	46.51	17.23	19.00	85704	0.00	0.10	4.2	2.2
10yrlday	Basin 2	BASE	47.01	17.23	19.00	85563	0.00	0.09	4.2	2.2
10yrlday	Basin 2	BASE	47.51	17.23	19.00	85428	0.00	0.09	4.2	2.2
10yrlday	Basin 2	BASE	48.01	17.23	19.00	85297	0.00	0.09	4.2	2.2
10yrlday	Basin 2	BASE	48.51	17.23	19.00	85171	0.00	0.08	4.2	2.2
10yrlday	Basin 2	BASE	49.00	17.23	19.00	85053	0.00	0.08	4.2	2.2
10yrlday	Basin 2	BASE	49.50	17.22	19.00	84936	0.00	0.08	4.2	2.2
10yrlday	Basin 2	BASE	50.00	17.22	19.00	84824	0.00	0.07	4.2	2.2
10yrlday	Basin 2	BASE	50.50	17.22	19.00	84716	0.00	0.07	4.2	2.2
10yrlday	Basin 2	BASE	51.00	17.22	19.00	84611	0.00	0.07	4.2	2.2
10yrlday	Basin 2	BASE	51.50	17.22	19.00	84511	0.00	0.07	4.2	2.2
10yrlday	Basin 2	BASE	52.01	17.22	19.00	84413	0.00	0.06	4.2	2.2
10yrlday	Basin 2	BASE	52.51	17.21	19.00	84319	0.00	0.06	4.2	2.2
10yrlday	Basin 2	BASE	53.01	17.21	19.00	84229	0.00	0.06	4.2	2.2
10yrlday	Basin 2	BASE	53.51	17.21	19.00	84142	0.00	0.06	4.2	2.2
10yrlday	Basin 2	BASE	54.01	17.21	19.00	84057	0.00	0.06	4.2	2.3
10yrlday	Basin 2	BASE	54.51	17.21	19.00	83975	0.00	0.05	4.2	2.3

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Simulation	Node	Group	Time hrs	Stage ft	Warning Stage ft	Surface Area ft2	Total Inflow cfs	Total Outflow cfs	Total Vol In af	Total Vol Out af
10yrlday	Basin 2	BASE	55.00	17.21	19.00	83898	0.00	0.05	4.2	2.3
10yrlday	Basin 2	BASE	55.50	17.21	19.00	83821	0.00	0.05	4.2	2.3
10yrlday	Basin 2	BASE	56.00	17.21	19.00	83747	0.00	0.05	4.2	2.3
10yrlday	Basin 2	BASE	56.50	17.21	19.00	83676	0.00	0.05	4.2	2.3
10yrlday	Basin 2	BASE	57.00	17.20	19.00	83606	0.00	0.05	4.2	2.3
10yrlday	Basin 2	BASE	57.50	17.20	19.00	83539	0.00	0.04	4.2	2.3
10yrlday	Basin 2	BASE	58.01	17.20	19.00	83474	0.00	0.04	4.2	2.3
10yrlday	Basin 2	BASE	58.51	17.20	19.00	83411	0.00	0.04	4.2	2.3
10yrlday	Basin 2	BASE	59.01	17.20	19.00	83350	0.00	0.04	4.2	2.3
10yrlday	Basin 2	BASE	59.51	17.20	19.00	83290	0.00	0.04	4.2	2.3
10yrlday	Basin 2	BASE	60.01	17.20	19.00	83233	0.00	0.04	4.2	2.3
10yrlday	Basin 2	BASE	60.83	17.20	19.00	83141	0.00	0.04	4.2	2.3
10yrlday	Basin 2	BASE	61.67	17.20	19.00	83053	0.00	0.03	4.2	2.3
10yrlday	Basin 2	BASE	62.50	17.20	19.00	82970	0.00	0.03	4.2	2.3
10yrlday	Basin 2	BASE	63.34	17.19	19.00	82890	0.00	0.03	4.2	2.3
10yrlday	Basin 2	BASE	64.17	17.19	19.00	82815	0.00	0.03	4.2	2.3
10yrlday	Basin 2	BASE	65.01	17.19	19.00	82743	0.00	0.03	4.2	2.3
10yrlday	Basin 2	BASE	65.83	17.19	19.00	82674	0.00	0.03	4.2	2.3
10yrlday	Basin 2	BASE	66.67	17.19	19.00	82607	0.00	0.03	4.2	2.3
10yrlday	Basin 2	BASE	67.51	17.19	19.00	82544	0.00	0.02	4.2	2.3
10yrlday	Basin 2	BASE	68.34	17.19	19.00	82484	0.00	0.02	4.2	2.3
10yrlday	Basin 2	BASE	69.18	17.19	19.00	82426	0.00	0.02	4.2	2.3
10yrlday	Basin 2	BASE	70.01	17.19	19.00	82371	0.00	0.02	4.2	2.3
10yrlday	Basin 2	BASE	70.84	17.19	19.00	82317	0.00	0.02	4.2	2.3
10yrlday	Basin 2	BASE	71.67	17.19	19.00	82267	0.00	0.02	4.2	2.3
10yrlday	Basin 2	BASE	72.51	17.18	19.00	82218	0.00	0.02	4.2	2.3
10yrlday	Basin 2	BASE	73.34	17.18	19.00	82171	0.00	0.02	4.2	2.3
10yrlday	Basin 2	BASE	74.18	17.18	19.00	82126	0.00	0.02	4.2	2.3
10yrlday	Basin 2	BASE	75.00	17.18	19.00	82083	0.00	0.02	4.2	2.3
10yrlday	Basin 2	BASE	75.84	17.18	19.00	82041	0.00	0.02	4.2	2.3
10yrlday	Basin 2	BASE	76.67	17.18	19.00	82001	0.00	0.02	4.2	2.3
10yrlday	Basin 2	BASE	77.51	17.18	19.00	81962	0.00	0.01	4.2	2.3
10yrlday	Basin 2	BASE	78.33	17.18	19.00	81926	0.00	0.01	4.2	2.3
10yrlday	Basin 2	BASE	79.17	17.18	19.00	81889	0.00	0.01	4.2	2.3
10yrlday	Basin 2	BASE	80.00	17.18	19.00	81855	0.00	0.01	4.2	2.3
10yrlday	Basin 2	BASE	80.84	17.18	19.00	81822	0.00	0.01	4.2	2.3
10yrlday	Basin 2	BASE	81.67	17.18	19.00	81790	0.00	0.01	4.2	2.3
10yrlday	Basin 2	BASE	82.50	17.18	19.00	81759	0.00	0.01	4.2	2.3
10yrlday	Basin 2	BASE	83.33	17.18	19.00	81729	0.00	0.01	4.2	2.3
10yrlday	Basin 2	BASE	84.17	17.18	19.00	81700	0.00	0.01	4.2	2.3
10yrlday	Basin 2	BASE	85.01	17.18	19.00	81672	0.00	0.01	4.2	2.3
10yrlday	Basin 2	BASE	85.84	17.18	19.00	81646	0.00	0.01	4.2	2.3
10yrlday	Basin 2	BASE	86.67	17.18	19.00	81619	0.00	0.01	4.2	2.3
10yrlday	Basin 2	BASE	87.50	17.18	19.00	81594	0.00	0.01	4.2	2.3
10yrlday	Basin 2	BASE	88.34	17.18	19.00	81570	0.00	0.01	4.2	2.3
10yrlday	Basin 2	BASE	89.17	17.18	19.00	81547	0.00	0.01	4.2	2.3
10yrlday	Basin 2	BASE	90.01	17.17	19.00	81524	0.00	0.01	4.2	2.3
10yrlday	Basin 2	BASE	90.83	17.17	19.00	81502	0.00	0.01	4.2	2.3
10yrlday	Basin 2	BASE	91.67	17.17	19.00	81480	0.00	0.01	4.2	2.3
10yrlday	Basin 2	BASE	92.50	17.17	19.00	81460	0.00	0.01	4.2	2.3
10yrlday	Basin 2	BASE	93.34	17.17	19.00	81439	0.00	0.01	4.2	2.3
10yrlday	Basin 2	BASE	94.17	17.17	19.00	81420	0.00	0.01	4.2	2.3
10yrlday	Basin 2	BASE	95.01	17.17	19.00	81401	0.00	0.01	4.2	2.3
10yrlday	Basin 2	BASE	95.84	17.17	19.00	81382	0.00	0.01	4.2	2.3
10yrlday	Basin 2	BASE	96.67	17.17	19.00	81365	0.00	0.01	4.2	2.3
10yrlday	Basin 2	BASE	97.51	17.17	19.00	81347	0.00	0.01	4.2	2.3
10yrlday	Basin 2	BASE	98.34	17.17	19.00	81331	0.00	0.01	4.2	2.3
10yrlday	Basin 2	BASE	99.18	17.17	19.00	81314	0.00	0.01	4.2	2.3
10yrlday	Basin 2	BASE	100.00	17.17	19.00	81299	0.00	0.01	4.2	2.3
10yrlday	Basin 2	BASE	100.84	17.17	19.00	81283	0.00	0.01	4.2	2.3
10yrlday	Basin 2	BASE	101.67	17.17	19.00	81268	0.00	0.01	4.2	2.3
10yrlday	Basin 2	BASE	102.51	17.17	19.00	81254	0.00	0.01	4.2	2.3
10yrlday	Basin 2	BASE	103.34	17.17	19.00	81239	0.00	0.01	4.2	2.3

1978

Simulation	Node	Group	Time hrs	Stage ft	Warning Stage ft	Surface Area ft2	Total Inflow cfs	Total Outflow cfs	Total Vol In af	Total Vol Out af
10yrlday	Basin 2	BASE	104.17	17.17	19.00	81226	0.00	0.01	4.2	2.3
10yrlday	Basin 2	BASE	105.00	17.17	19.00	81212	0.00	0.01	4.2	2.3
10yrlday	Basin 2	BASE	105.84	17.17	19.00	81199	0.00	0.00	4.2	2.3
10yrlday	Basin 2	BASE	106.67	17.17	19.00	81187	0.00	0.00	4.2	2.3
10yrlday	Basin 2	BASE	107.51	17.17	19.00	81174	0.00	0.00	4.2	2.3
10yrlday	Basin 2	BASE	108.33	17.17	19.00	81162	0.00	0.00	4.2	2.3
10yrlday	Basin 2	BASE	109.17	17.17	19.00	81150	0.00	0.00	4.2	2.3
10yrlday	Basin 2	BASE	110.00	17.17	19.00	81139	0.00	0.00	4.2	2.3
10yrlday	Basin 2	BASE	110.84	17.17	19.00	81128	0.00	0.00	4.2	2.3
10yrlday	Basin 2	BASE	111.68	17.17	19.00	81117	0.00	0.00	4.2	2.3
10yrlday	Basin 2	BASE	112.50	17.17	19.00	81106	0.00	0.00	4.2	2.3
10yrlday	Basin 2	BASE	113.34	17.17	19.00	81096	0.00	0.00	4.2	2.3
10yrlday	Basin 2	BASE	114.17	17.17	19.00	81086	0.00	0.00	4.2	2.3
10yrlday	Basin 2	BASE	115.01	17.17	19.00	81076	0.00	0.00	4.2	2.3
10yrlday	Basin 2	BASE	115.83	17.17	19.00	81066	0.00	0.00	4.2	2.3
10yrlday	Basin 2	BASE	116.67	17.17	19.00	81057	0.00	0.00	4.2	2.3
10yrlday	Basin 2	BASE	117.50	17.17	19.00	81048	0.00	0.00	4.2	2.3
10yrlday	Basin 2	BASE	118.34	17.17	19.00	81039	0.00	0.00	4.2	2.3
10yrlday	Basin 2	BASE	119.17	17.17	19.00	81030	0.00	0.00	4.2	2.3
10yrlday	Basin 2	BASE	120.01	17.17	19.00	81022	0.00	0.00	4.2	2.3
10yrlday	Basin 2	BASE	120.83	17.17	19.00	81013	0.00	0.00	4.2	2.3
10yrlday	Basin 2	BASE	121.67	17.17	19.00	81005	0.00	0.00	4.2	2.3
10yrlday	Basin 2	BASE	122.51	17.17	19.00	80997	0.00	0.00	4.2	2.3
10yrlday	Basin 2	BASE	123.34	17.17	19.00	80989	0.00	0.00	4.2	2.3
10yrlday	Basin 2	BASE	124.18	17.17	19.00	80982	0.00	0.00	4.2	2.3
10yrlday	Basin 2	BASE	125.01	17.17	19.00	80974	0.00	0.00	4.2	2.3
10yrlday	Basin 2	BASE	125.84	17.17	19.00	80967	0.00	0.00	4.2	2.3
10yrlday	Basin 2	BASE	126.67	17.17	19.00	80960	0.00	0.00	4.2	2.3
10yrlday	Basin 2	BASE	127.51	17.17	19.00	80953	0.00	0.00	4.2	2.3
10yrlday	Basin 2	BASE	128.34	17.17	19.00	80946	0.00	0.00	4.2	2.3
10yrlday	Basin 2	BASE	129.17	17.17	19.00	80940	0.00	0.00	4.2	2.3
10yrlday	Basin 2	BASE	130.00	17.17	19.00	80933	0.00	0.00	4.2	2.3
10yrlday	Basin 2	BASE	130.84	17.17	19.00	80927	0.00	0.00	4.2	2.3
10yrlday	Basin 2	BASE	131.67	17.17	19.00	80920	0.00	0.00	4.2	2.3
10yrlday	Basin 2	BASE	132.51	17.17	19.00	80914	0.00	0.00	4.2	2.3
10yrlday	Basin 2	BASE	133.33	17.17	19.00	80908	0.00	0.00	4.2	2.3
10yrlday	Basin 2	BASE	134.17	17.17	19.00	80902	0.00	0.00	4.2	2.3
10yrlday	Basin 2	BASE	135.00	17.17	19.00	80897	0.00	0.00	4.2	2.3
10yrlday	Basin 2	BASE	135.84	17.17	19.00	80891	0.00	0.00	4.2	2.3
10yrlday	Basin 2	BASE	136.67	17.17	19.00	80886	0.00	0.00	4.2	2.3
10yrlday	Basin 2	BASE	137.50	17.17	19.00	80880	0.00	0.00	4.2	2.3
10yrlday	Basin 2	BASE	138.33	17.17	19.00	80875	0.00	0.00	4.2	2.3
10yrlday	Basin 2	BASE	139.17	17.17	19.00	80870	0.00	0.00	4.2	2.3
10yrlday	Basin 2	BASE	140.01	17.17	19.00	80865	0.00	0.00	4.2	2.3
10yrlday	Basin 2	BASE	140.84	17.17	19.00	80860	0.00	0.00	4.2	2.3
10yrlday	Basin 2	BASE	141.67	17.17	19.00	80855	0.00	0.00	4.2	2.3
10yrlday	Basin 2	BASE	142.50	17.17	19.00	80850	0.00	0.00	4.2	2.3
10yrlday	Basin 2	BASE	143.34	17.17	19.00	80845	0.00	0.00	4.2	2.3
10yrlday	Basin 2	BASE	144.00	17.17	19.00	80842	0.00	0.00	4.2	2.3

Exhibits
(Aerial, Wetland Map, Soil Map, Existing
Contour Map)

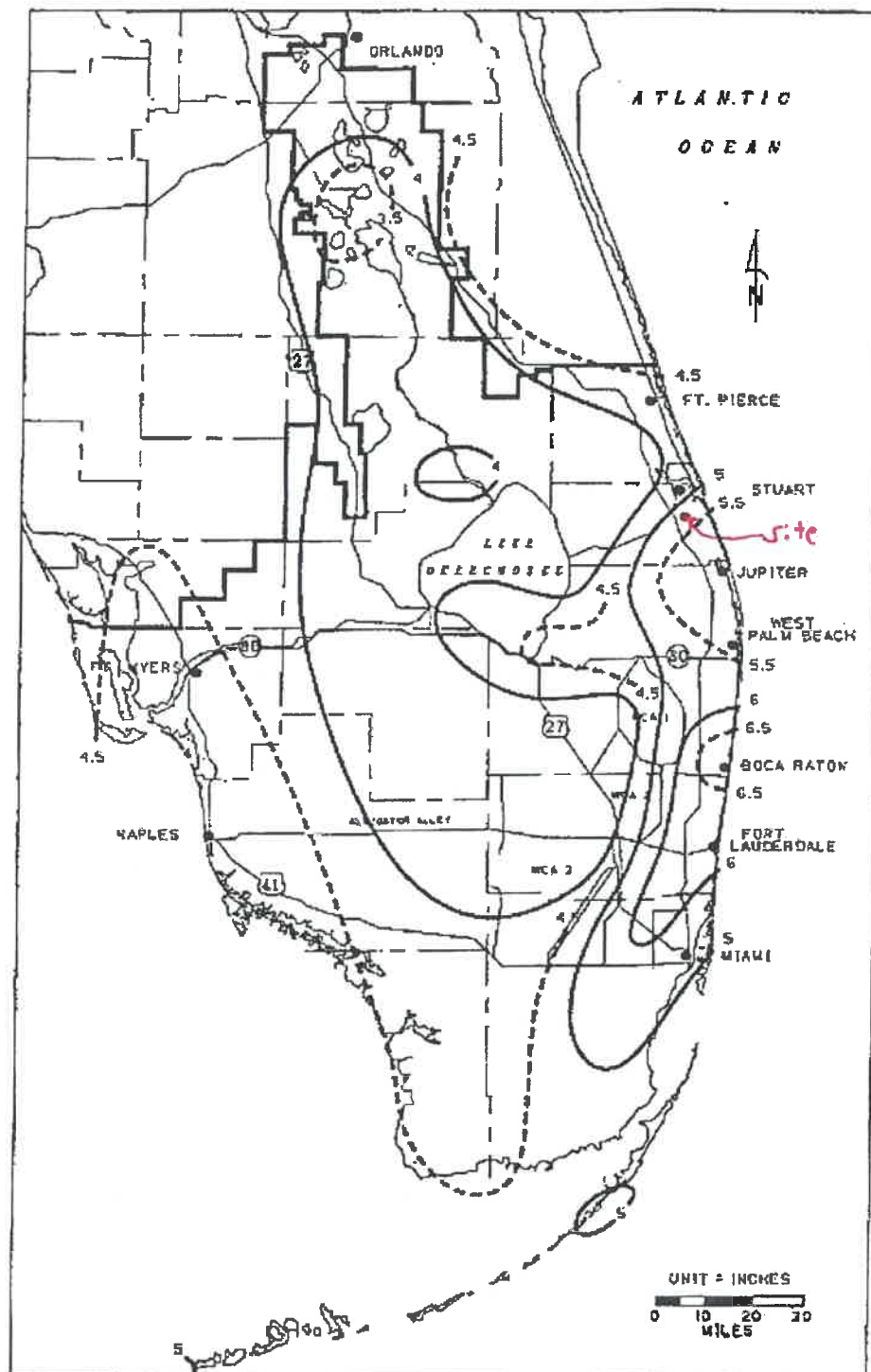


FIGURE C-2. 1-DAY RAINFALL: 3-YEAR RETURN PERIOD

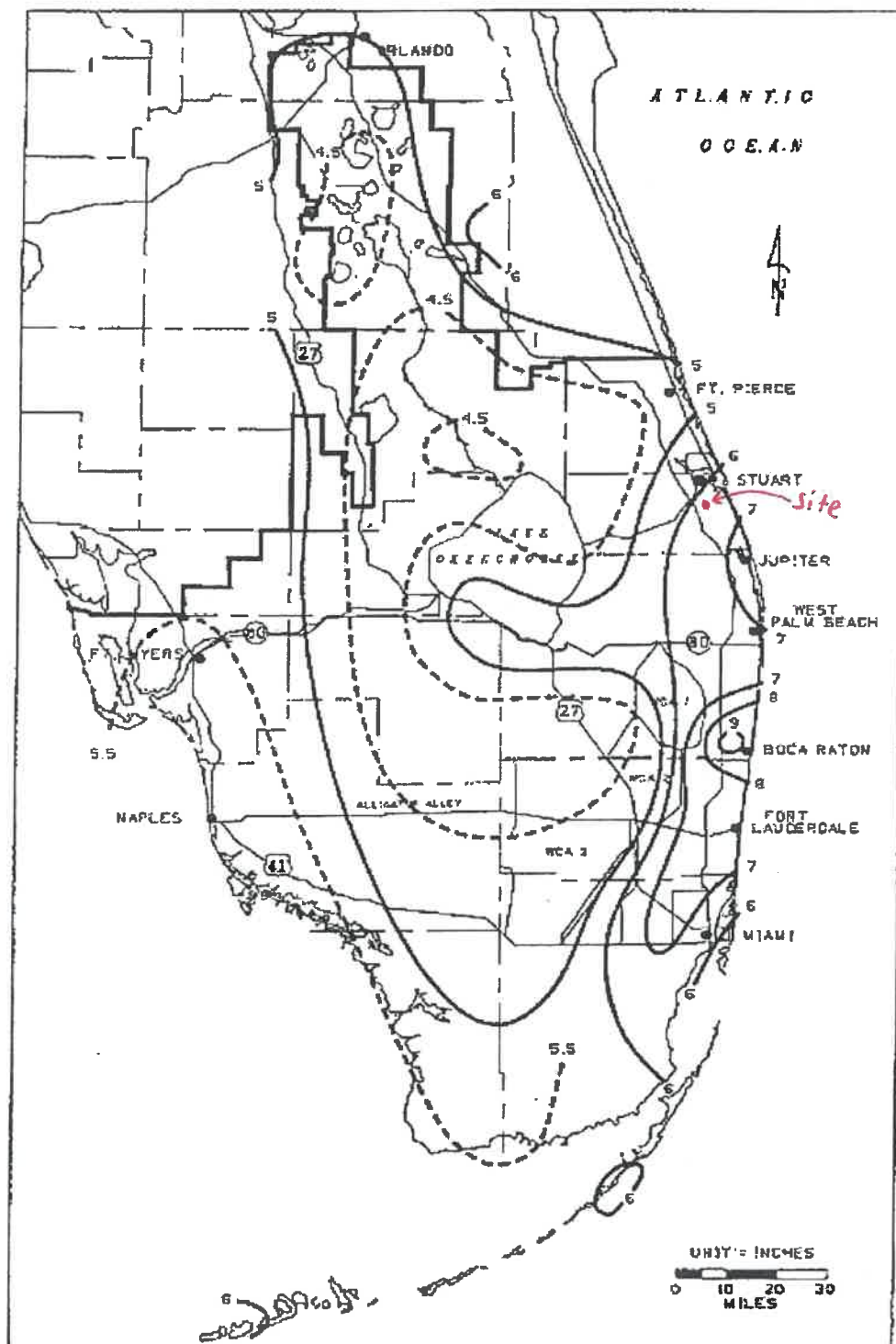


FIGURE C-3. 1-DAY RAINFALL: 5-YEAR RETURN PERIOD

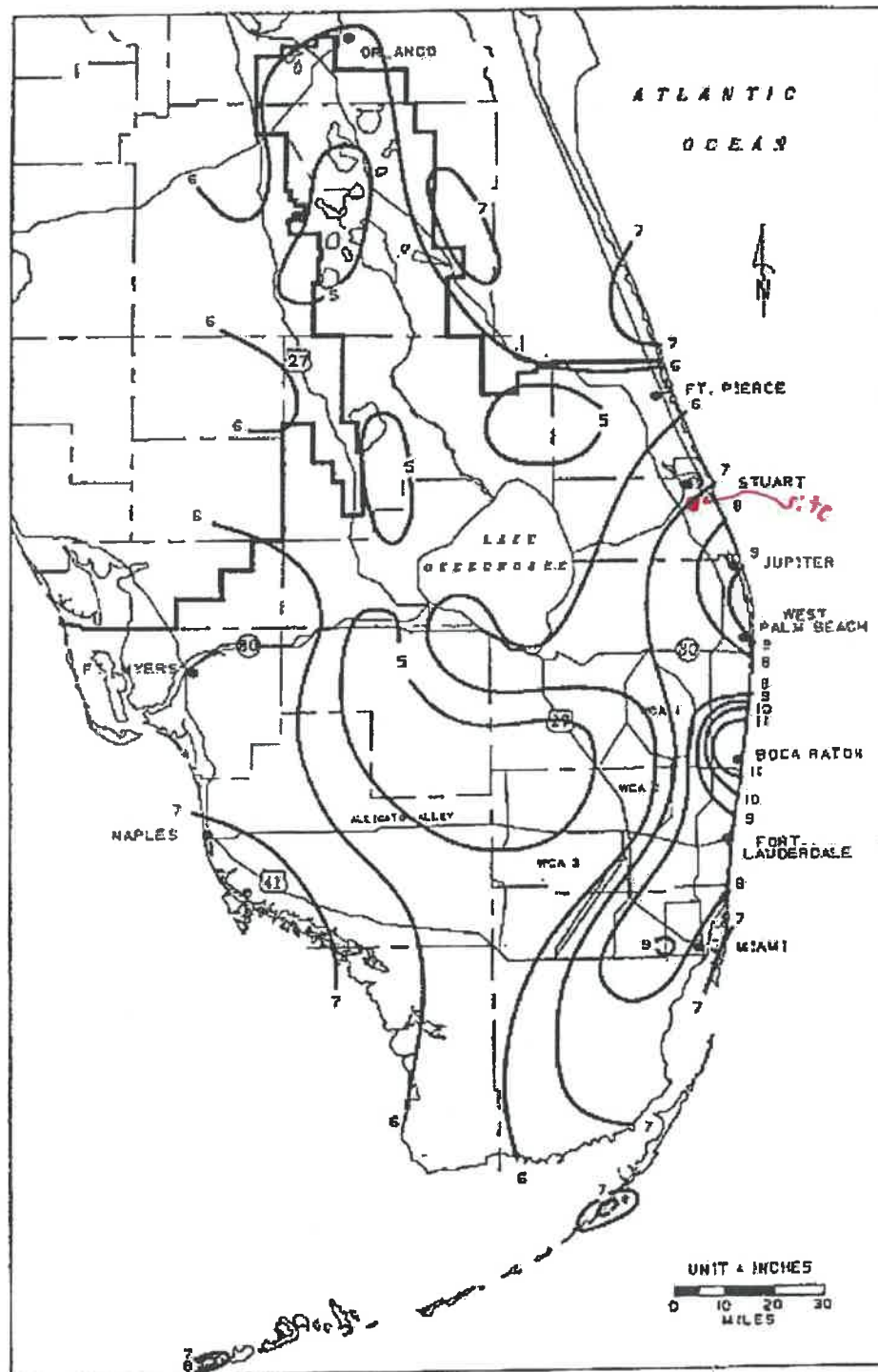


FIGURE C-4. 1-DAY RAINFALL: 10-YEAR RETURN PERIOD

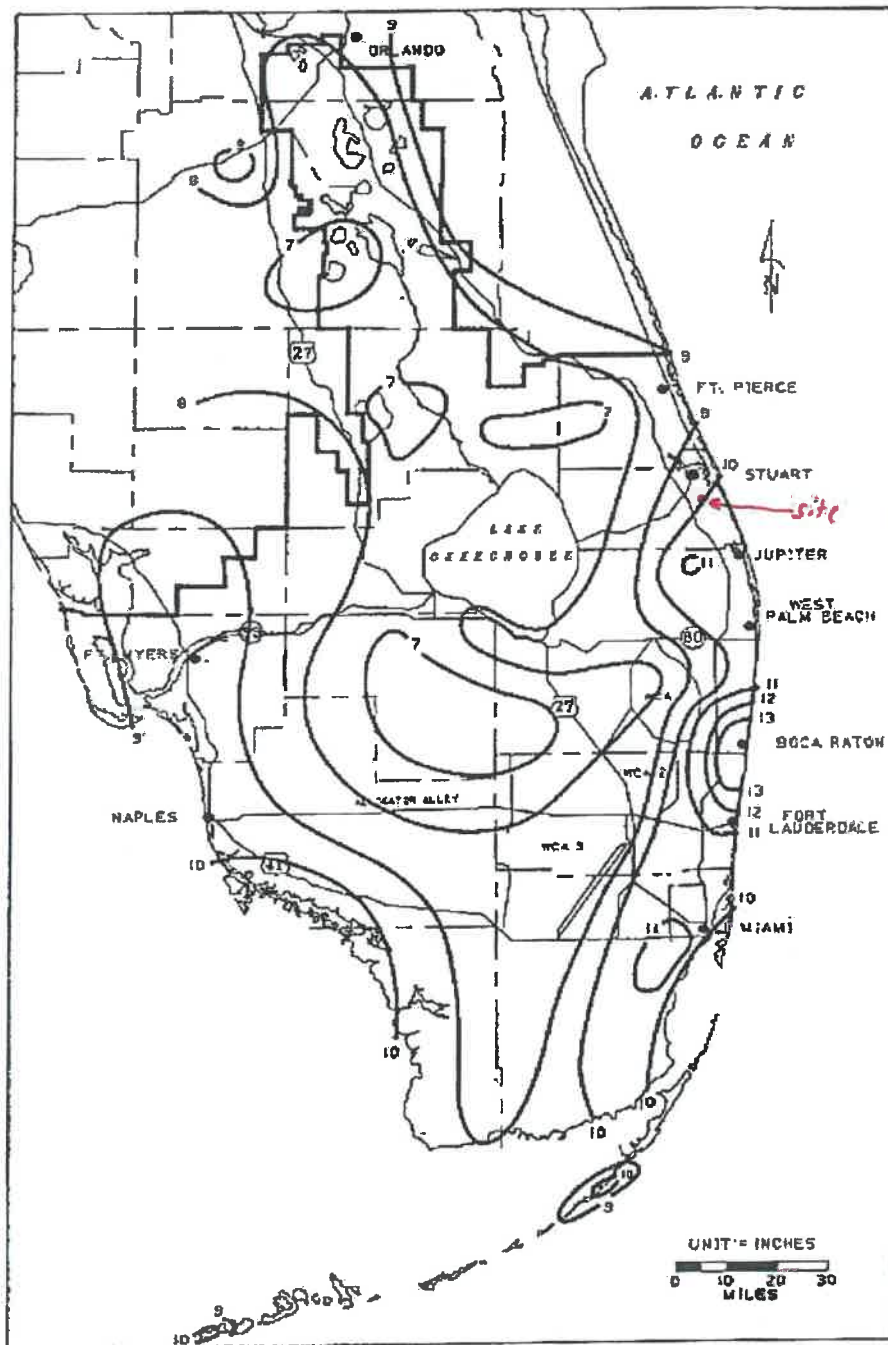


FIGURE C-7. 3-DAY RAINFALL: 10-YEAR RETURN PERIOD

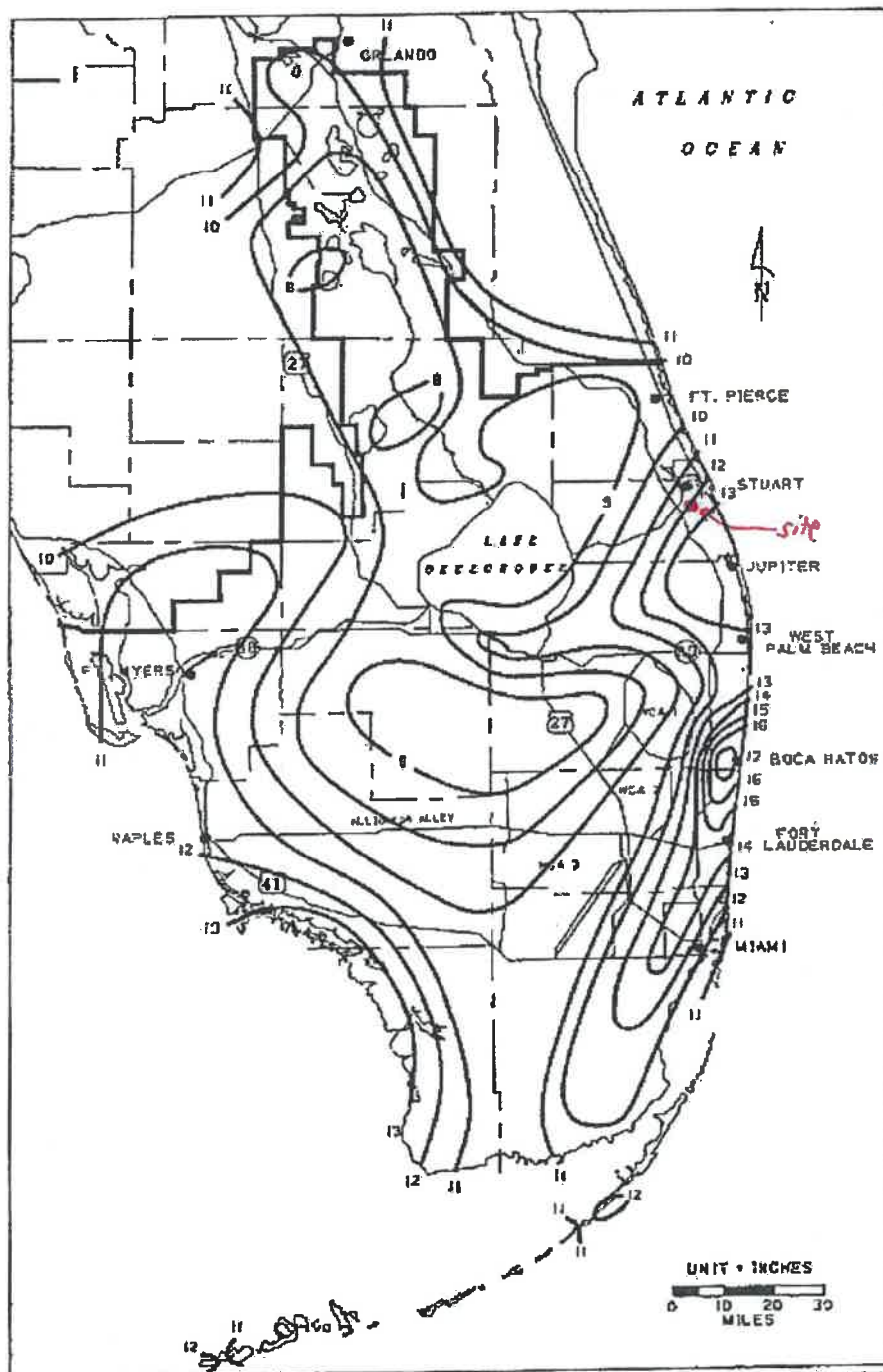


FIGURE C-8. 3-DAY RAINFALL; 25-YEAR RETURN PERIOD

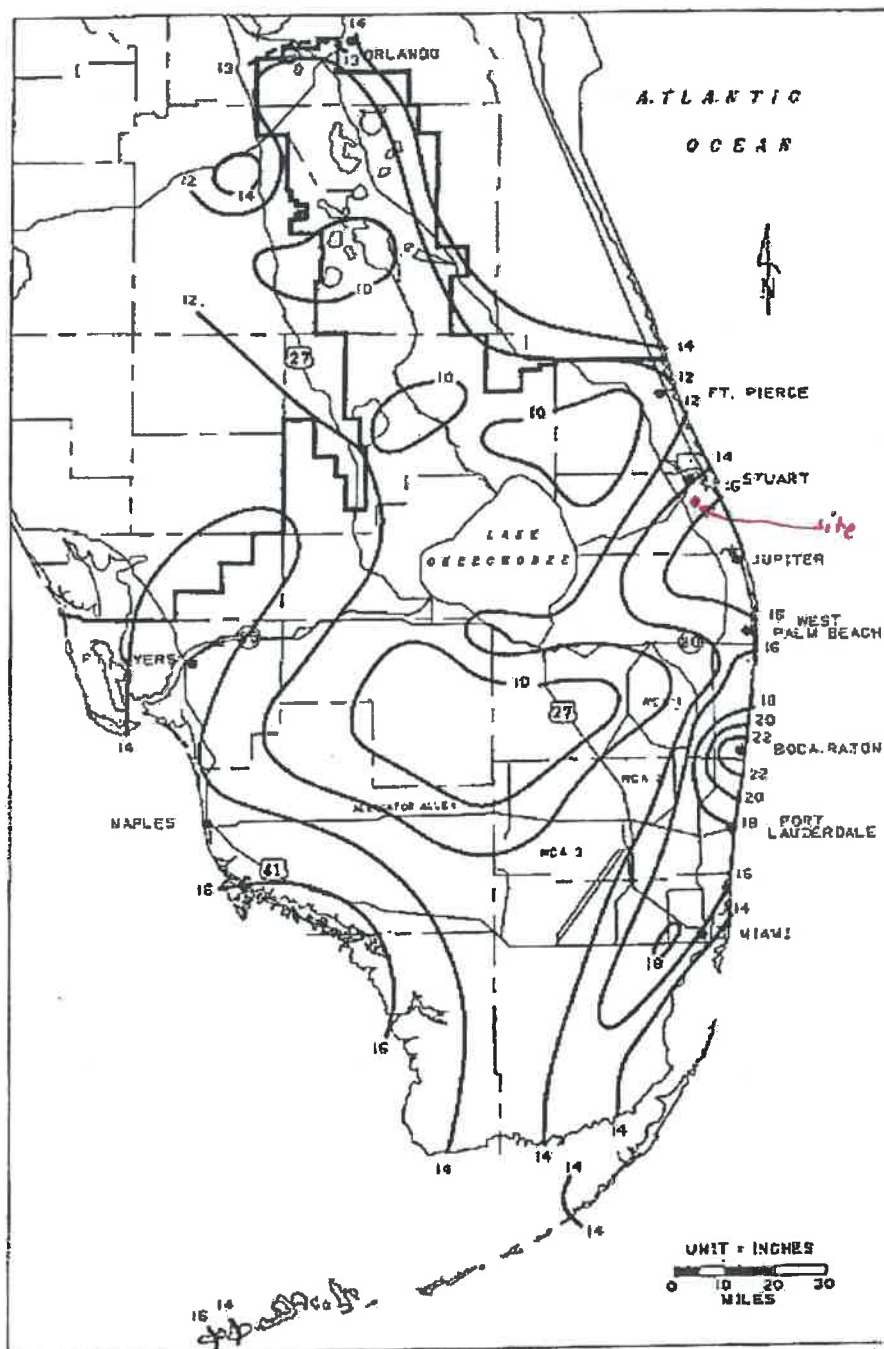


FIGURE C-9. 3-DAY RAINFALL: 100-YEAR RETURN PERIOD

PRE-DEVELOPMENT

Table 2-2c Runoff curve numbers for other agricultural lands ^{1/}

Cover description		Curve numbers for hydrologic soil group			
Cover type	Hydrologic condition	A	B	C	D
Pasture, grassland, or range—continuous forage for grazing. ^{2/}	Poor	68	79	86	89
	Fair	49	69	79	84
	Good	39	61	74	80
Meadow—continuous grass, protected from grazing and generally mowed for hay.	—	30	58	71	78
Brush—brush-weed-grass mixture with brush the major element. ^{3/}	Poor	48	67	77	83
	Fair	35	56	70	77
	Good	30 ^{4/}	48	65	73
Woods—grass combination (orchard or tree farm). ^{5/}	Poor	57	73	82	86
	Fair	43	65	76	82
	Good	32	58	72	79
Woods. ^{6/}	Poor	45	66	77	83
	Fair	36	60	74	79
	Good	30 ^{4/}	55	70	77
Farmsteads—buildings, lanes, driveways, and surrounding lots.	—	59	74	82	86

^{1/} Average runoff condition, and $I_a = 0.2S$.

^{2/} *Poor*: <50% ground cover or heavily grazed with no mulch.

Fair: 50 to 75% ground cover and not heavily grazed.

Good: > 75% ground cover and lightly or only occasionally grazed.

^{3/} *Poor*: <50% ground cover.

Fair: 50 to 75% ground cover.

Good: >75% ground cover.

^{4/} Actual curve number is less than 30; use CN = 30 for runoff computations.

^{5/} CN's shown were computed for areas with 50% woods and 50% grass (pasture) cover. Other combinations of conditions may be computed from the CN's for woods and pasture.

^{6/} *Poor*: Forest litter, small trees, and brush are destroyed by heavy grazing or regular burning.

Fair: Woods are grazed but not burned, and some forest litter covers the soil.

Good: Woods are protected from grazing, and litter and brush adequately cover the soil.

POST-DEVELOPMENT

Table 2-2a Runoff curve numbers for urban areas ^{1/}

Cover description		Curve numbers for hydrologic soil group			
Cover type and hydrologic condition	Average percent impervious area ^{2/}	A	B	C	D
<i>Fully developed urban areas (vegetation established)</i>					
Open space (lawns, parks, golf courses, cemeteries, etc.) ^{3/} :					
Poor condition (grass cover < 50%)		68	79	86	89
Fair condition (grass cover 50% to 75%)		49	69	79	84
Good condition (grass cover > 75%)		39	61	74	80
Impervious areas:					
Paved parking lots, roofs, driveways, etc. (excluding right-of-way)		98	98	98	98
Streets and roads:					
Paved; curbs and storm sewers (excluding right-of-way)		98	98	98	98
Paved; open ditches (including right-of-way)		83	89	92	93
Gravel (including right-of-way)		76	85	89	91
Dirt (including right-of-way)		72	82	87	89
Western desert urban areas:					
Natural desert landscaping (pervious areas only) ^{4/}		63	77	85	88
Artificial desert landscaping (impervious weed barrier, desert shrub with 1- to 2-inch sand or gravel mulch and basin borders)		96	96	96	96
Urban districts:					
Commercial and business	85	89	92	94	95
Industrial	72	81	88	91	93
Residential districts by average lot size:					
1/8 acre or less (town houses)	65	77	85	90	92
1/4 acre	38	61	75	83	87
1/3 acre	30	57	72	81	86
1/2 acre	25	54	70	80	85
1 acre	20	51	68	79	84
2 acres	12	46	65	77	82
<i>Developing urban areas</i>					
Newly graded areas (pervious areas only, no vegetation) ^{5/}		77	86	91	94
Idle lands (CN's are determined using cover types similar to those in table 2-2c).					

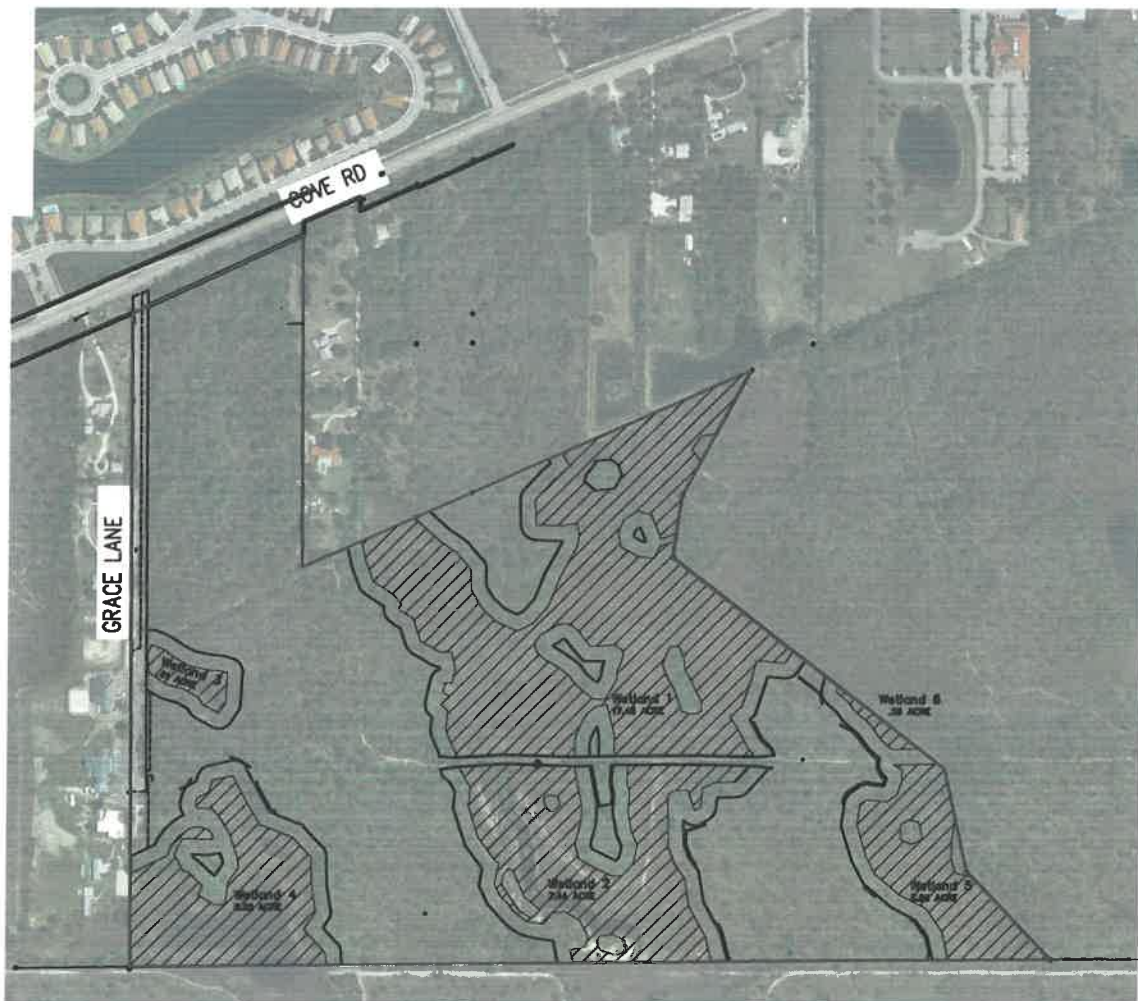
^{1/} Average runoff condition, and $I_p = 0.25$.

^{2/} The average percent impervious area shown was used to develop the composite CN's. Other assumptions are as follows: impervious areas are directly connected to the drainage system, impervious areas have a CN of 98, and pervious areas are considered equivalent to open space in good hydrologic condition. CN's for other combinations of conditions may be computed using figure 2-3 or 2-4.

^{3/} CN's shown are equivalent to those of pasture. Composite CN's may be computed for other combinations of open space cover type.

^{4/} Composite CN's for natural desert landscaping should be computed using figures 2-3 or 2-4 based on the impervious area percentage (CN = 98) and the pervious area CN. The pervious area CN's are assumed equivalent to desert shrub in poor hydrologic condition.

^{5/} Composite CN's to use for the design of temporary measures during grading and construction should be computed using figure 2-3 or 2-4 based on the degree of development (impervious area percentage) and the CN's for the newly graded pervious areas.



ATLANTIC RIDGE STATE PARK



SCALE: 1"=600'

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AERIAL IMAGE

DATE: 5/25/18

PROJECT ENGINEER: ACS

CHECKED BY:

CHECKED BY:



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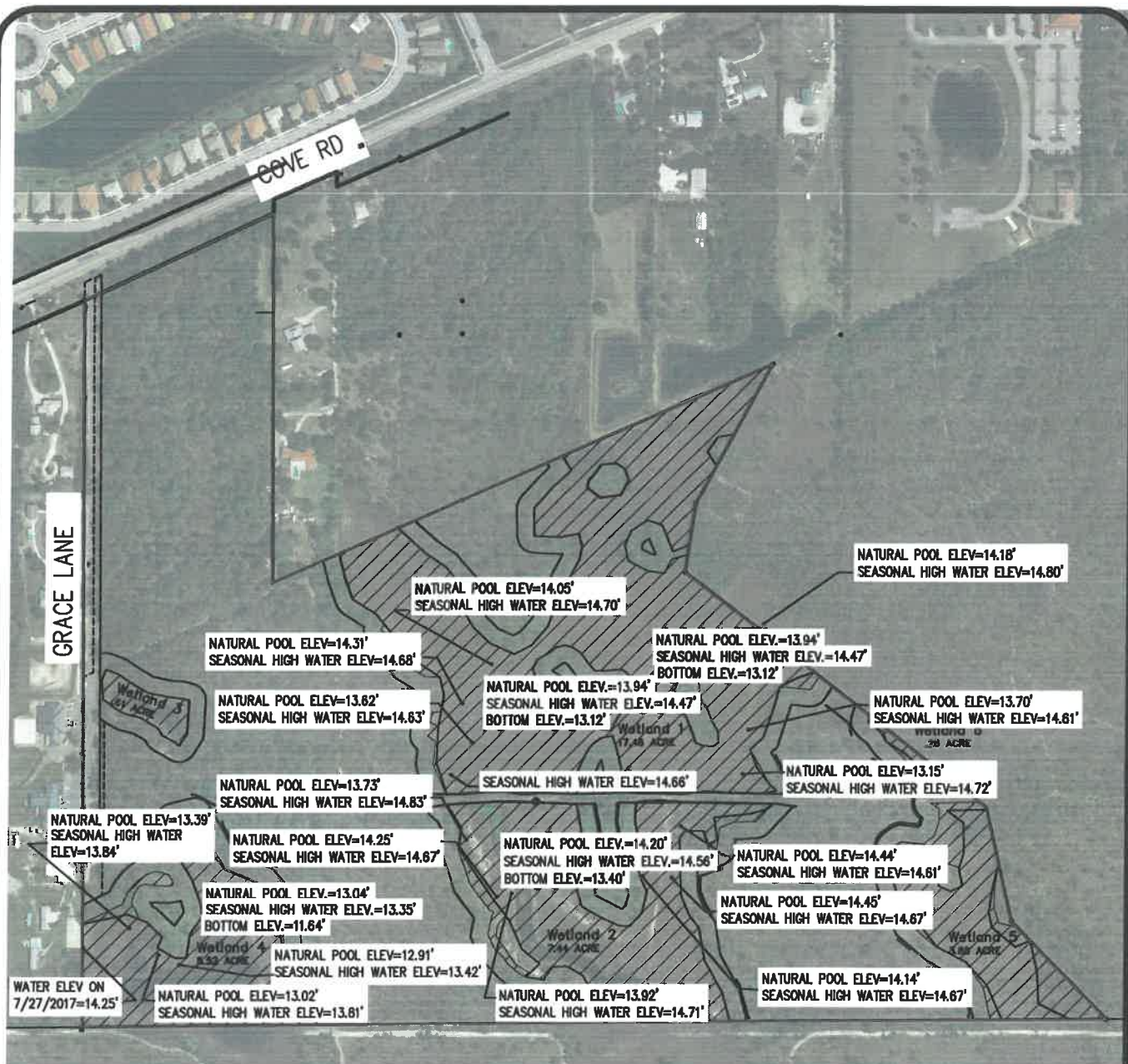
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KMR

SHEET:

1 / 1

JOB No.
16042.02

1989

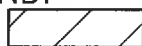


ATLANTIC RIDGE STATE PARK



SCALE: 1"=450'

LEGEND:



WETLAND

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WETLANDS

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NOTES:

1. ALL ELEVATIONS REFERENCE NAVD 1988.



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EXISTING CONTOUR MAP

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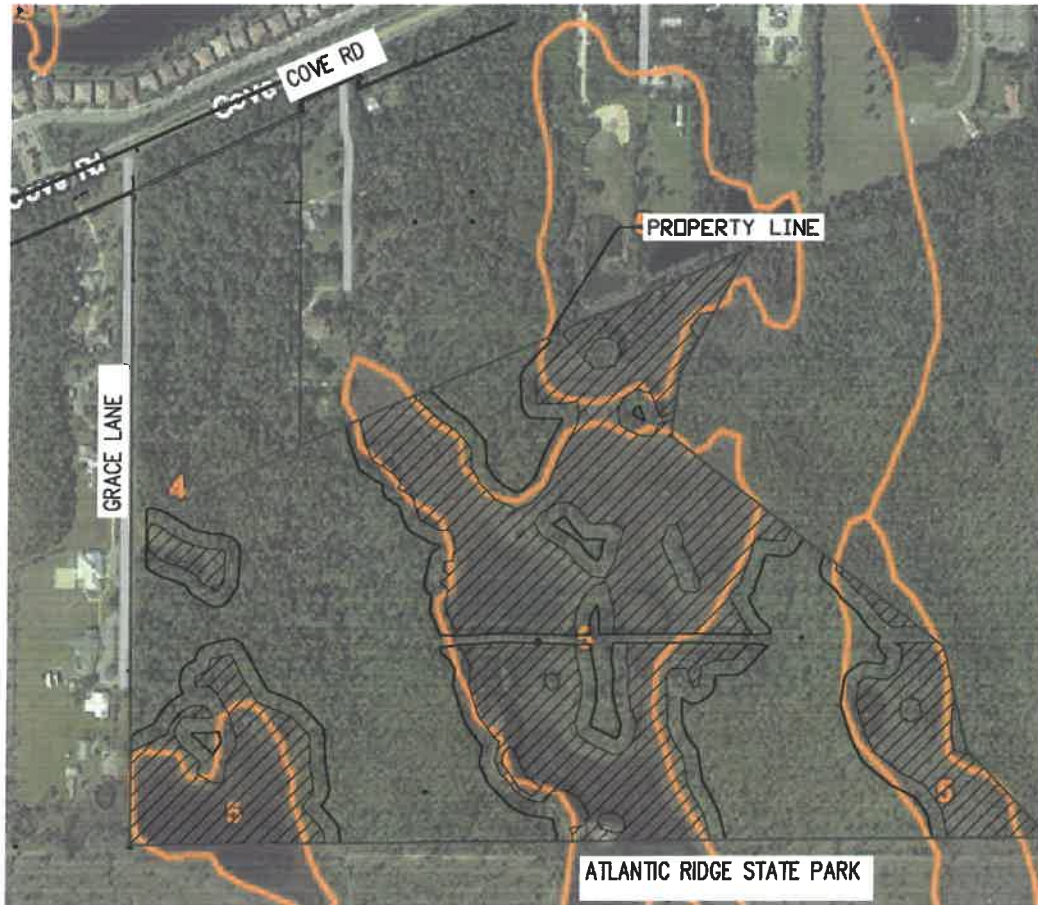
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JOB No.

16042.02 1991



LEGEND:

- 2 LAWNWOOD AND MYAKKA FINE SANDS
- 4 WAVELAND AND IMMOKALEE FINE SANDS
- 5 WAVELAND AND LAWNWOOD FINE SANDS, DEPRESSIONAL
- 99 WATER



SCALE: 1"=600'

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SOIL MAP

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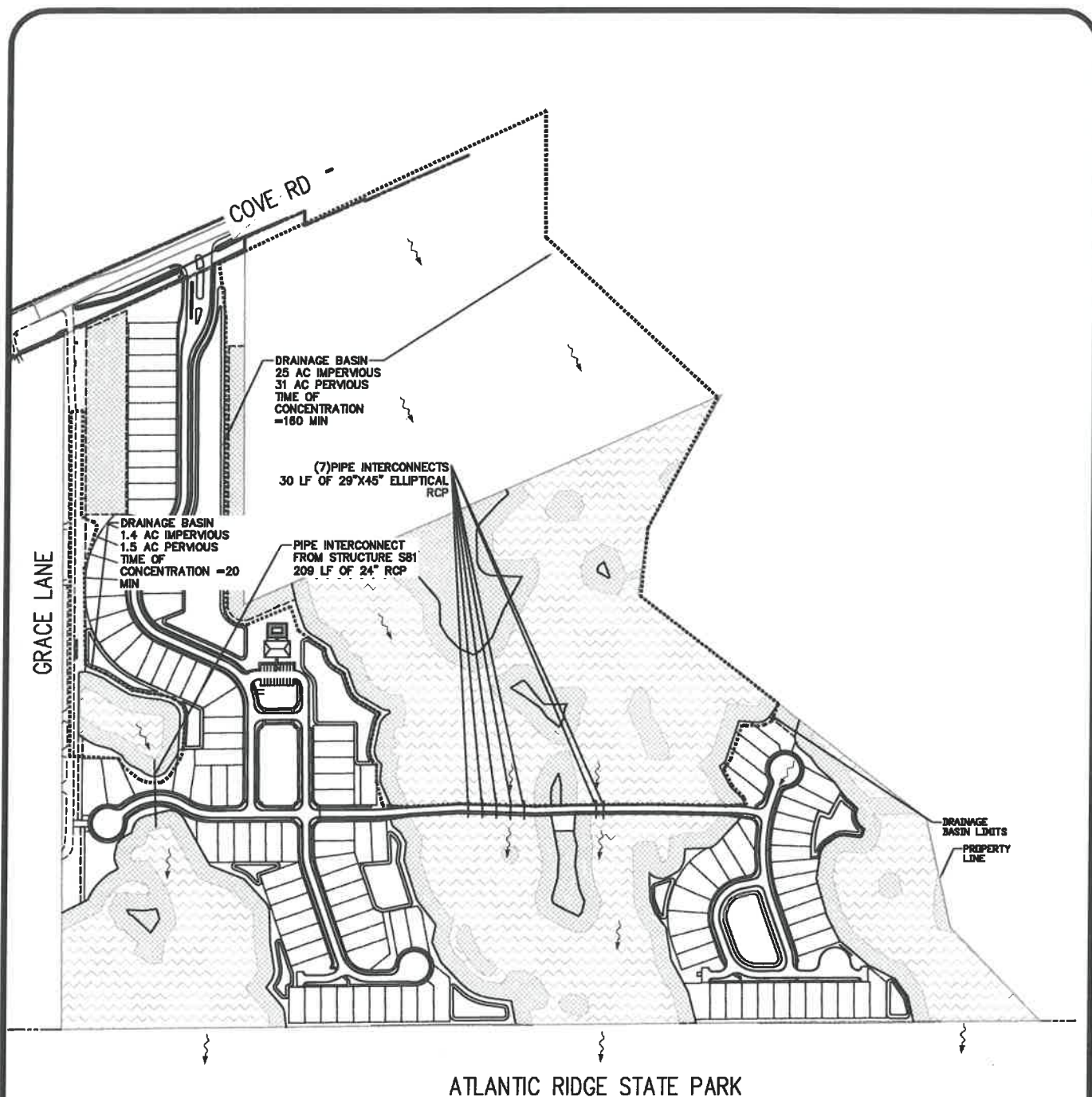
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16042.02

1992

Pipe Sizing –Wetland Interconnects



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WETLAND INTERCONNECT PIPE SIZING

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1994

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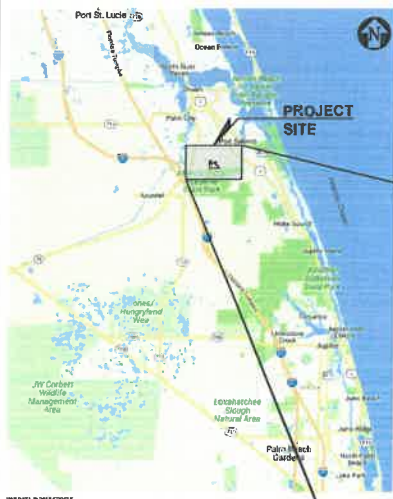
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1995

INSPECTION AND MAINTENANCE PLAN FOR STORMWATER MANAGEMENT STRUCTURES (BMPS)		
	INSPECTION SCHEDULE	CORRECTIVE ACTIONS
SWALES	Annually and after heavy rains	Remove obstructions, sediments or debris from swales and other open channels
		Repair any erosion of the ditch lining
		Mow vegetated ditches
		Repair any slumping side slopes
CULVERTS	Annually	Remove accumulated sediments and debris at the inlet, outlet, or within the conduit
		Remove any obstruction to flow
		Repair any erosion damage at the culvert's inlet and outlet
CATCHBASINS	Annually	Remove sediments and debris from the bottom of the basin and inlets grates
		Remove floating debris and oils (using oil absorptive pads) from any trap
ROADWAYS AND PARKING AREAS	Annually	Sweep pavement to remove sediment
WETPONDS AND DETENTION BASINS	Annually	Inspect the embankments for settlement, slope erosion, piping, and slumping
		Remove exotic vegetation
		Inspect the outlet structure for broken seals, obstructed orifices, and repair
		Remove and dispose of sediments and debris within the control structure/ detention areas

COVE ROYALE-PHASE I

PREPARED FOR
TLH-82 DOT, LLC
MARTIN COUNTY, FLORIDA
 FEBRUARY 2020



SECTION 34, TOWNSHIP 38S, RANGE 41E
VICINITY MAP
 NTS



INDEX-PAVING, GRADING AND DRAINAGE PLANS

SHEET NO	SHEET TITLE
1	COVER SHEET
2	KEY SHEET MAP
3	GENERAL NOTES
4	DRAINAGE STRUCTURE TABLE
5	PAVING, GRADING AND DRAINAGE - OFFSITE
6	TYPICAL SECTIONS - OFFSITE
7	CROSS SECTIONS - OFFSITE
8	SIGN, MARKING AND PAVEMENT PLAN - OFFSITE
9	CLEARING AND EROSION CONTROL PLAN
10	CLEARING AND EROSION CONTROL PLAN
11	PAVING, GRADING AND DRAINAGE PLAN
12	PAVING, GRADING AND DRAINAGE PLAN
13	PAVING, GRADING AND DRAINAGE PLAN
14	PAVING, GRADING AND DRAINAGE PLAN
15	PAVING, GRADING AND DRAINAGE PLAN
16	CROSS SECTIONS
17	SIGN, MARKING AND PAVEMENT
18	SIGN, MARKING AND PAVEMENT
19	DRAINAGE DETAILS
20	DRAINAGE DETAILS
21	DRAINAGE DETAILS
22	DRAINAGE DETAILS

TOTAL NO OF SHEETS - 22

INDEX- WATER AND SEWER PLANS

SHEET NO	SHEET TITLE
1	COVER SHEET
2	KEY SHEET & MASTER UTILITY MAP
3	WATER AND SEWER PLAN
4	WATER AND SEWER PLAN
5	WATER AND SEWER PLAN
6	WATER AND SEWER PLAN
7	WATER AND SEWER PLAN
8	WATER AND SEWER PROFILES
9	WATER AND SEWER PROFILES
10	WATER AND SEWER PROFILES
11	DIRECTIONAL BORE PROFILES
12	WATER AND SEWER DETAILS
13	WATER AND SEWER DETAILS
14	WATER AND SEWER DETAILS
15	WATER AND SEWER DETAILS
16	WATER AND SEWER DETAILS
17	WATER AND SEWER DETAILS
18	WATER AND SEWER DETAILS
19	WATER AND SEWER DETAILS

TOTAL NO OF SHEETS - 19



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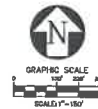
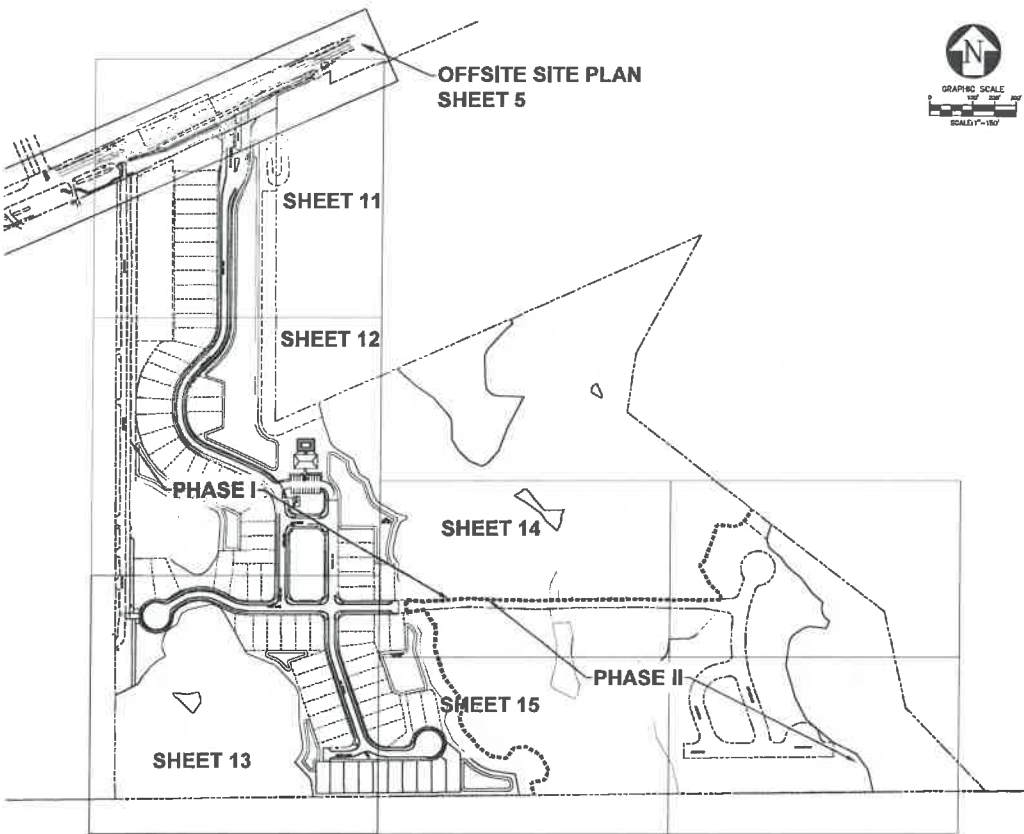
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OFFSITE SITE PLAN
SHEET 5

SHEET 11

SHEET 12

PHASE I

SHEET 14

PHASE II

SHEET 15

SHEET 13



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REVISION	DATE	BY	CHKD

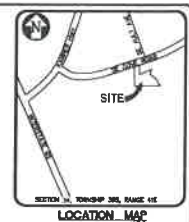
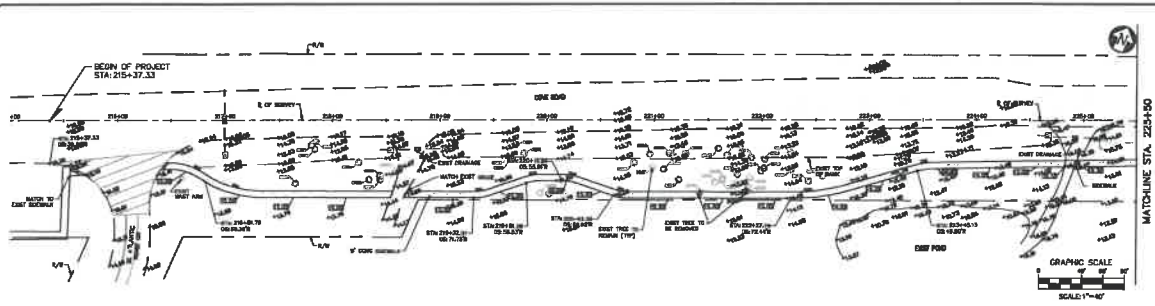
DESIGNED BY: [blank]
CHECKED BY: [blank]
DATE: [blank]
PROJECT: [blank]
SHEET: [blank] OF [blank]

COVE ROYALE-PHASE I
MARTIN COUNTY, FLORIDA
KEY SHEET MAP

engenuity
group inc.
1001 S. UNIVERSITY BLVD., SUITE 100
TALLAHASSEE, FL 32310
TEL: 904.833.1111
WWW.ENGUNITYGROUP.COM

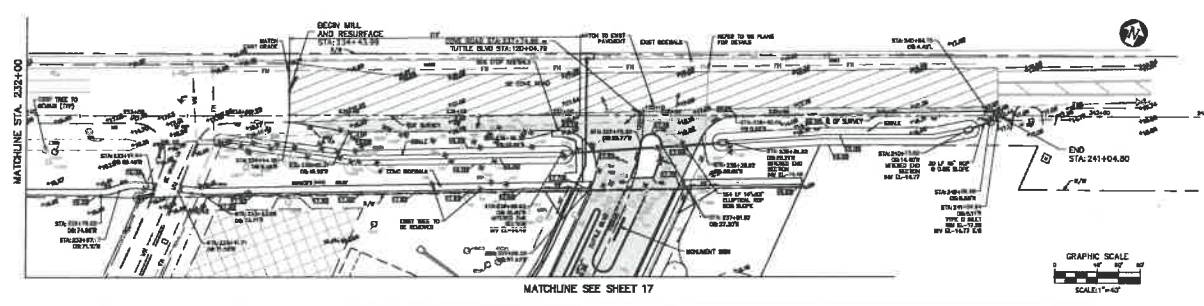
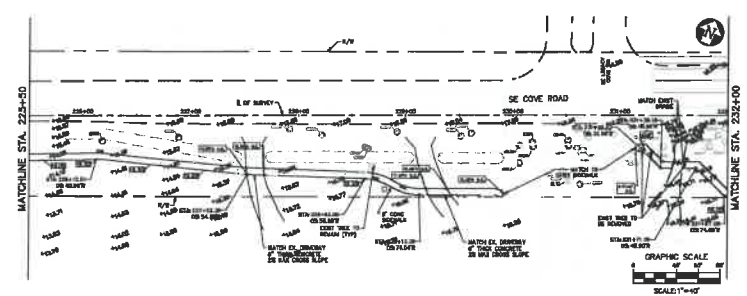
NO.	DATE	BY	CHKD
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2	01/11/2011	AS/	AS/
22	01/11/2011	AS/	AS/

16042.02

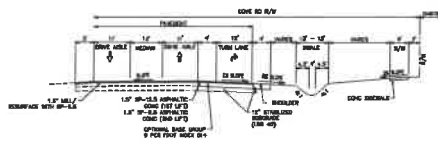


- ENGINEERING LEGEND**
1. ALL ELEVATIONS ARE REFERENCED TO THE 1985 NORTH AMERICAN VERTICAL DATUM (NAVD83).
 2. TOPOGRAPHIC SURVEY PERFORMED BY ENGINTY GROUP.
 3. WITHIN ONE ROAD RIGHT OF WAY, CONSTRUCTION SHALL CLEAR NON-NATIVE VEGETATION WITHIN 10' OF PROPOSED SIDEWALK.
 4. SALT FENCE SHALL BE PLACED ALONG SOUTH 8/4 LINE ADJACENT TO ALL CONSTRUCTION WORK.

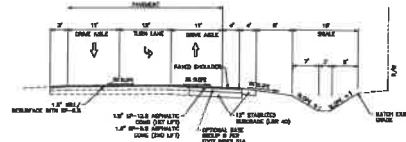
- ENGINEERING LEGEND**
- EXISTING ROAD
 - CONCRETE SIDEWALK
 - DRY RETENTION
 - GRAVEL
 - PROPOSED ROAD
 - MILL AND RESURFACE
 - PRESERVE / WETLAND BUFFER
 - WETLAND AREA
 - FINISHED GRADE ELEVATION
 - FLOW ARROW
 - ROADS CALL-OUT



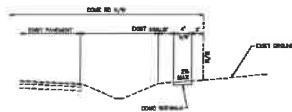
PROJECT: COVE ROYALE PHASE I CLIENT: TLH-22 DOT, LLC LOCATION: MARTIN COUNTY, FLORIDA PAVING, GRADING AND DRAINAGE - OFFSITE	
DATE: 10/15/2020 BY: [Signature] CHECKED: [Signature] APPROVED: [Signature]	DATE: 10/15/2020 BY: [Signature] CHECKED: [Signature] APPROVED: [Signature]



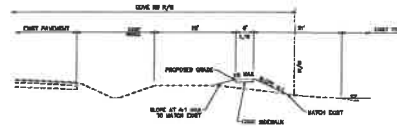
1
6 TYPICAL SECTION - RIGHT TURN LANE
NTS



2
6 TYPICAL SECTION - LEFT TURN LANE
NTS



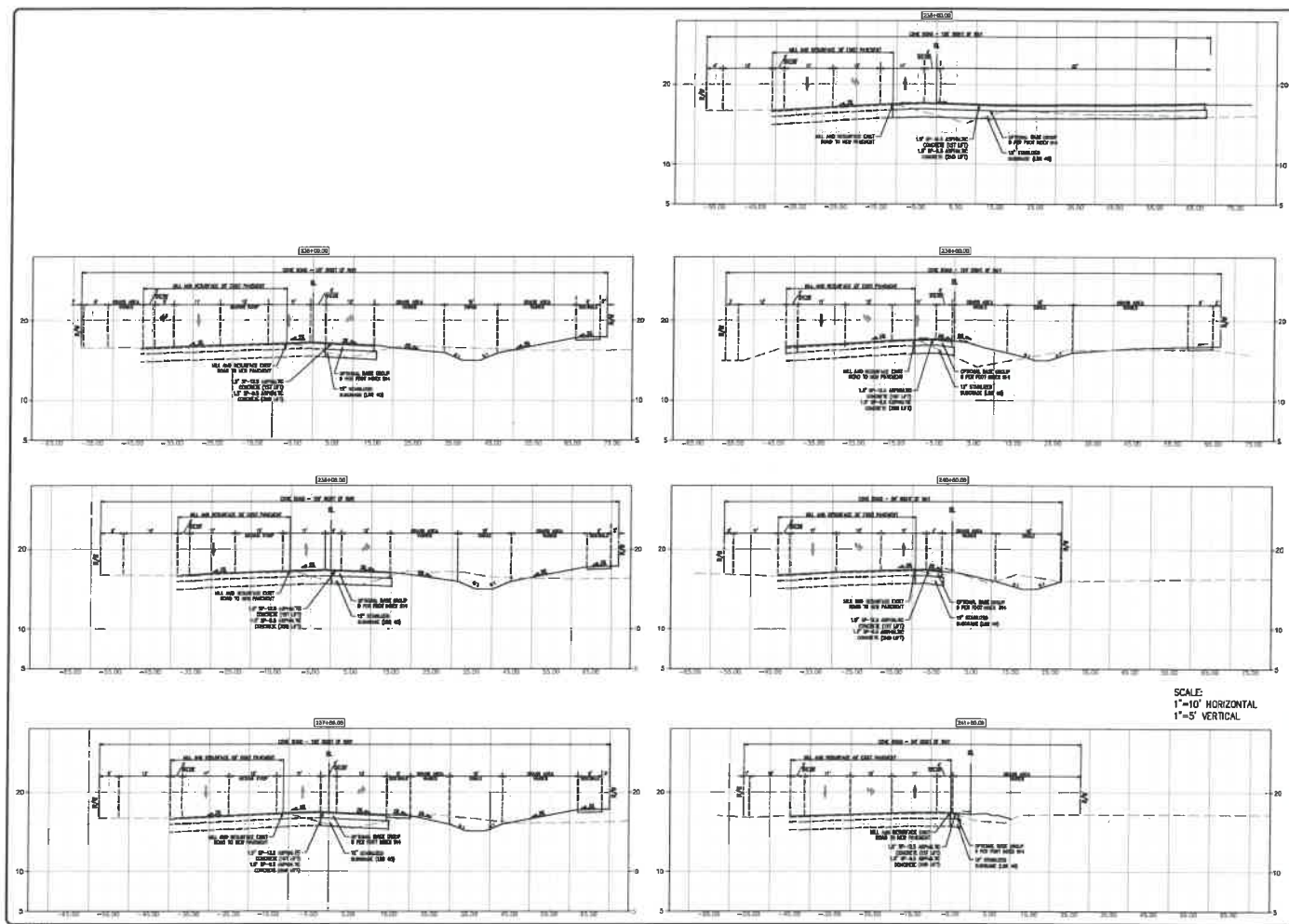
3
6 TYPICAL SECTION - STA: 220+00 - STA: 221+00
NTS



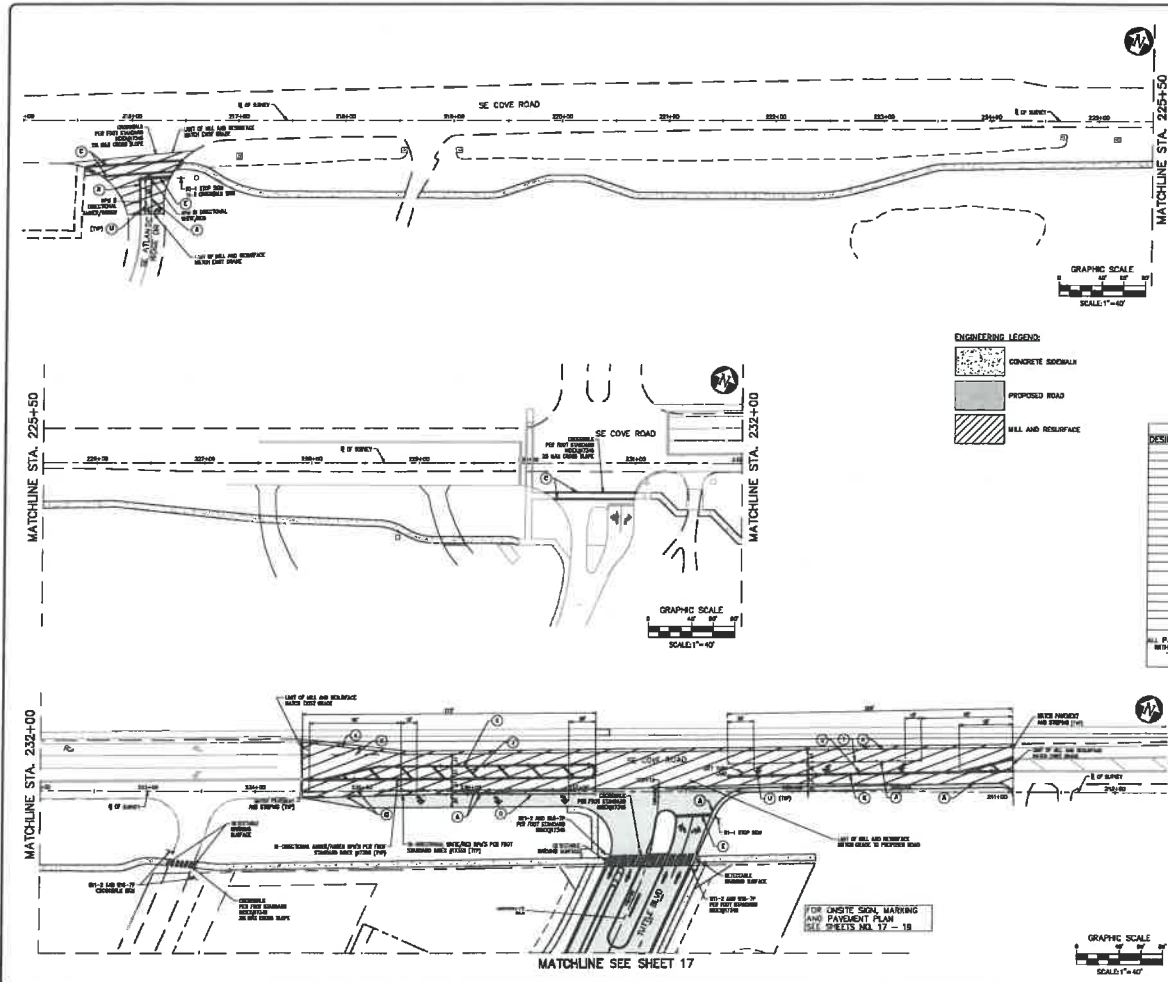
4
6 TYPICAL SECTION - STA: 223+00 - STA: 224+00
NTS



CODE ROYAL/CHASE I TLL-42 DOT 11, FLORIDA MARTIN COUNTY, FLORIDA TYPICAL SECTIONS - OFFSITE	
811 Know what's below. Call before you dig.	16042.02



PROJECT NO.		16042.02	
SHEET NO.		22	
DATE		7/22/02	
DRAWN BY		JAC	
CHECKED BY		JAC	
APPROVED BY		JAC	
COVE ROYALE PHASE I TLH42.DOT.LLC MARTIN COUNTY, FLORIDA CROSS SECTIONS - OFFSITE			
engenuity group, inc. 1000 N. W. 10th Ave., Suite 100 Fort Lauderdale, FL 33304 Phone: (954) 571-1000 Fax: (954) 571-1001 www.engenuitygroup.com			



ENGINEERING LEGEND

[Pattern]	CONCRETE SIDEWALK
[Pattern]	PROPOSED ROAD
[Pattern]	WELL AND SURFACE

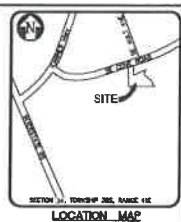
- GENERAL NOTE**
1. ALL ELEVATIONS ARE REFERENCED TO THE 1988 NORTH AMERICAN VERTICAL DATUM, (NAVD83).
 2. TOPOGRAPHIC SURVEY PERFORMED BY ENGINEERING GROUP.
 3. ALL STRIPING SHALL BE THERMOPLASTIC.
 4. ALL DRAINAGE AND STRIPING SHALL MEET WEST FOOT AND MARTIN COUNTY REQUIREMENTS.

STRIPE KEY

DESIGNATION	TYPE	COLOR
A	PAVEMENT	WHITE
B	PAVEMENT	WHITE
C	PAVEMENT	WHITE
D	PAVEMENT	WHITE
E	PAVEMENT	WHITE
F	PAVEMENT	WHITE
G	PAVEMENT	WHITE
H	PAVEMENT	WHITE
I	PAVEMENT	WHITE
J	PAVEMENT	WHITE
K	PAVEMENT	WHITE
L	PAVEMENT	WHITE
M	PAVEMENT	WHITE
N	PAVEMENT	WHITE
O	PAVEMENT	WHITE
P	PAVEMENT	WHITE
Q	PAVEMENT	WHITE
R	PAVEMENT	WHITE
S	PAVEMENT	WHITE
T	PAVEMENT	WHITE
U	PAVEMENT	WHITE
V	PAVEMENT	WHITE
W	PAVEMENT	WHITE
X	PAVEMENT	WHITE
Y	PAVEMENT	WHITE
Z	PAVEMENT	WHITE

GENERAL NOTE

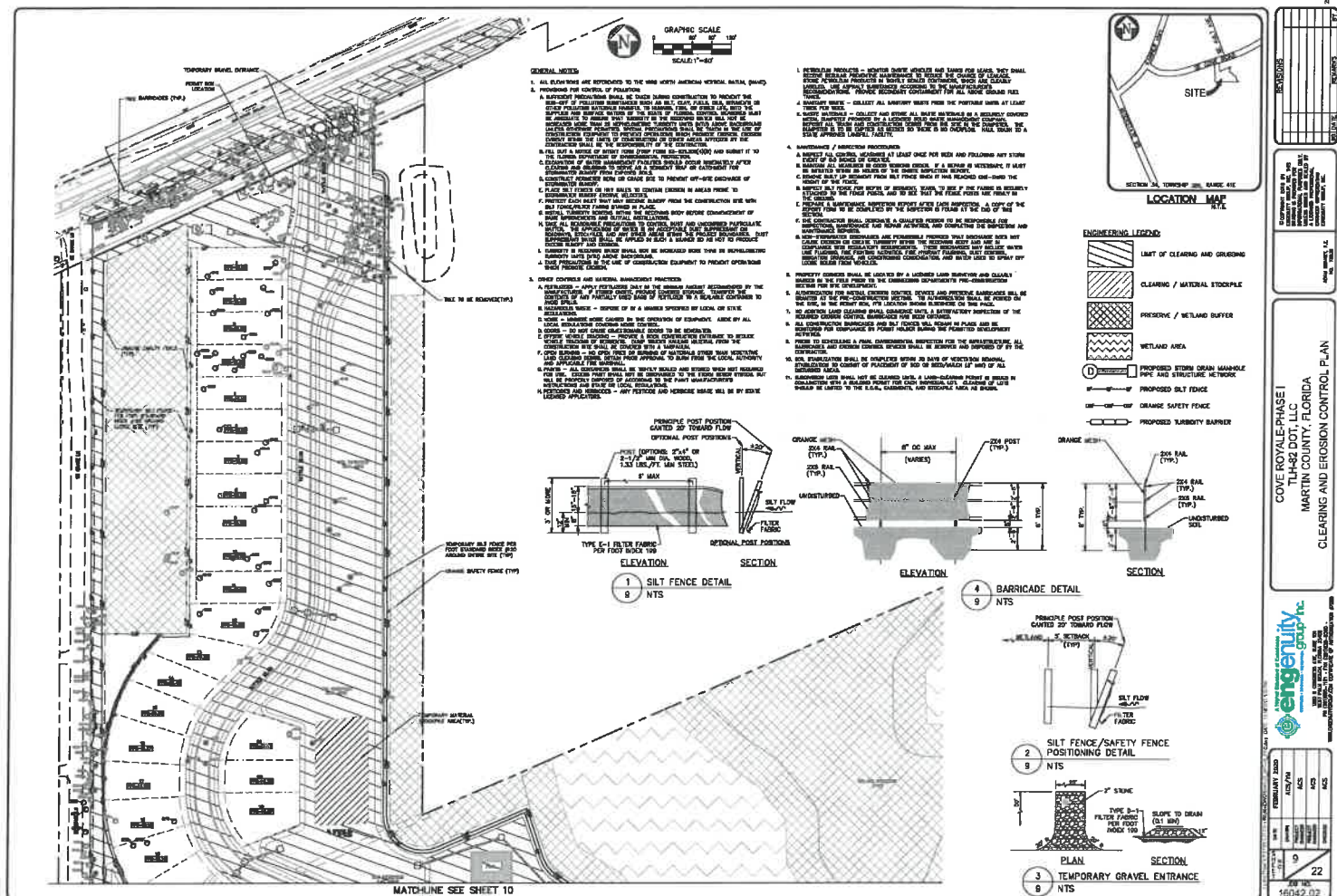
ALL PAVEMENT MARKINGS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AND THE ROADWAY AND TRAFFIC DESIGN STANDARDS (FDOT).



COVE ROYALE PHASE I
TL-HQ DOT, FLORIDA
MARTIN COUNTY, FLORIDA
SIGN, MARKING AND PAVEMENT PLAN - OFFSITE

811
 Know what's below.
 Call before you dig.

16042.02

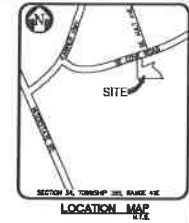
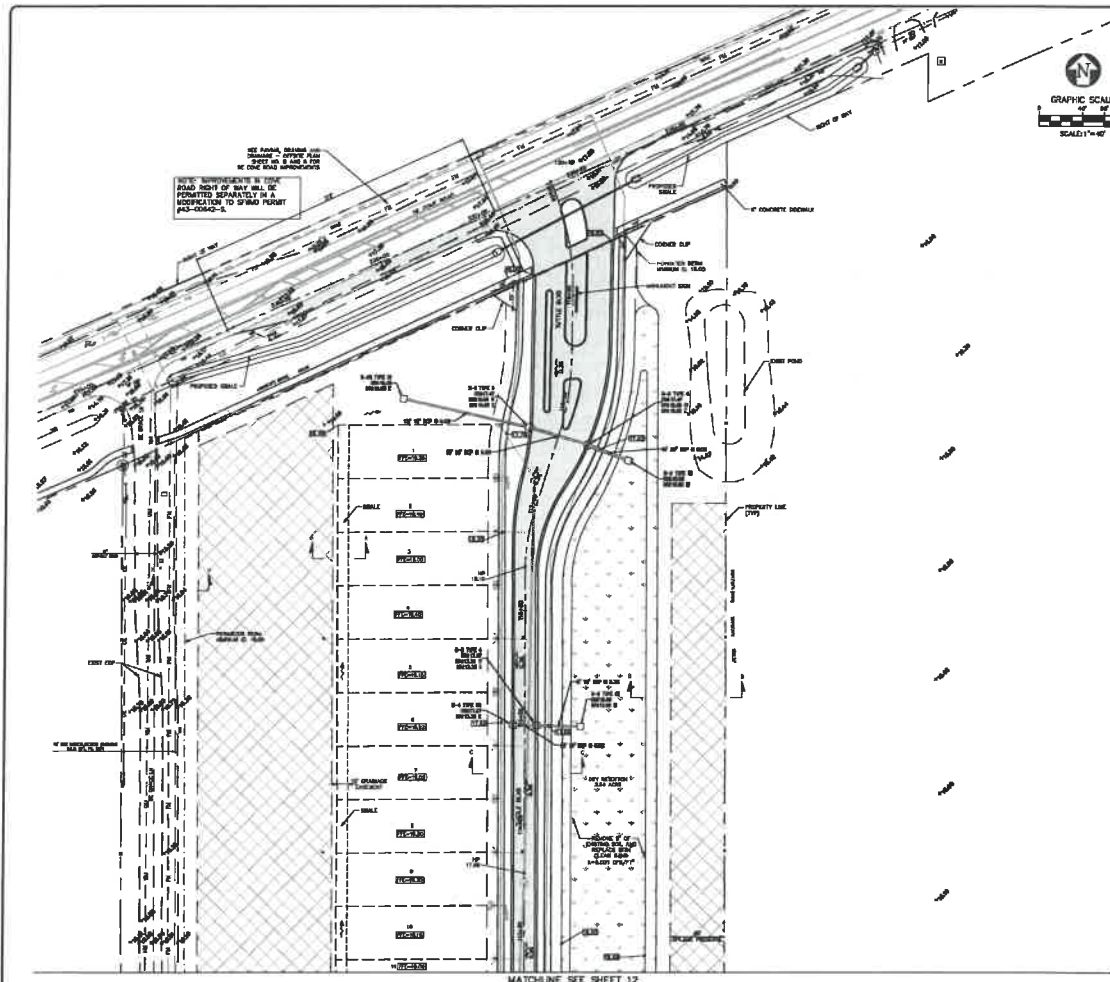


COVER ROYAL-PHASE I
TUL-82 DOT, LLC
MARTIN COUNTY, FLORIDA
CLEARING AND EROSION CONTROL PLAN

entirety group, inc.
1000 N. W. 10th Ave., Suite 100
Fort Lauderdale, FL 33304
(954) 561-1000

NO.	DESCRIPTION	QTY	UNIT
1	SILT FENCE	100	LINEAL FEET
2	BARRICADE	10	LINEAL FEET
3	SILT FENCE/SAFETY FENCE	100	LINEAL FEET
4	TEMPORARY GRAVEL ENTRANCE	10	LINEAL FEET



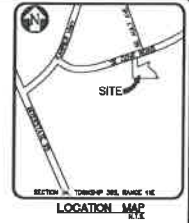
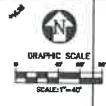
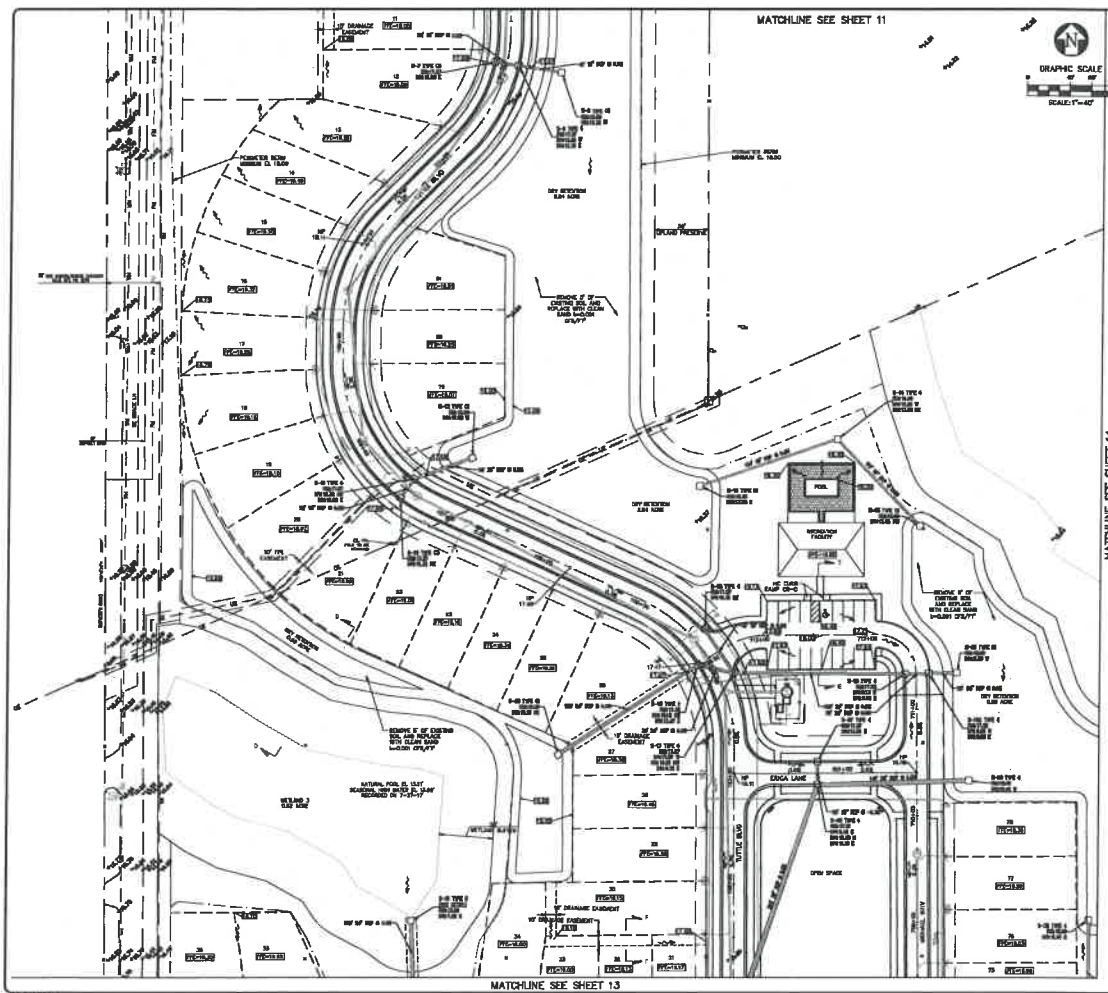


- ENGINEERING LEGEND:**
- EXISTING ROAD
 - CONCRETE SIDEWALK
 - DRY RETENTION
 - GRAVEL
 - PROPOSED ROAD
 - PRESERVE / WETLAND BUFFER
 - WETLAND AREA
 - FINISHED GRADE ELEVATION
 - FLOW ARROW

- GENERAL NOTES:**
1. ALL ELEVATIONS ARE REFERENCED TO THE 1988 NORTH AMERICAN VERTICAL DATUM (NAVD83).
 2. TOPOGRAPHIC SURVEY INFORMATION BY ENGINEERING GROUP.
 3. ALL DISTURBED AREAS MUST BE STABILIZED WITH SEED WITHIN 30 DAYS OF CONSTRUCTION COMPLETION.
 4. GEOTECHNICAL REPORT SHALL BE PROVIDED VERSELYING SURVEY AND REPLACEMENT OF ROAD PAVEMENT BEHIND THE PROPOSED RETENTION WALLS AS PART OF THE CIVIL INFRASTRUCTURE SUBMITTAL.



COVER ROYALE PHASE I TIAH DOT LLC MARTIN COUNTY, FLORIDA PAVING, GRADING AND DRAINAGE PLAN	
DATE: 11/11/2020 TIME: 10:00 AM BY: JAC CHECKED BY: JAC APPROVED BY: JAC	11 22 16042.02



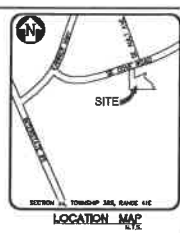
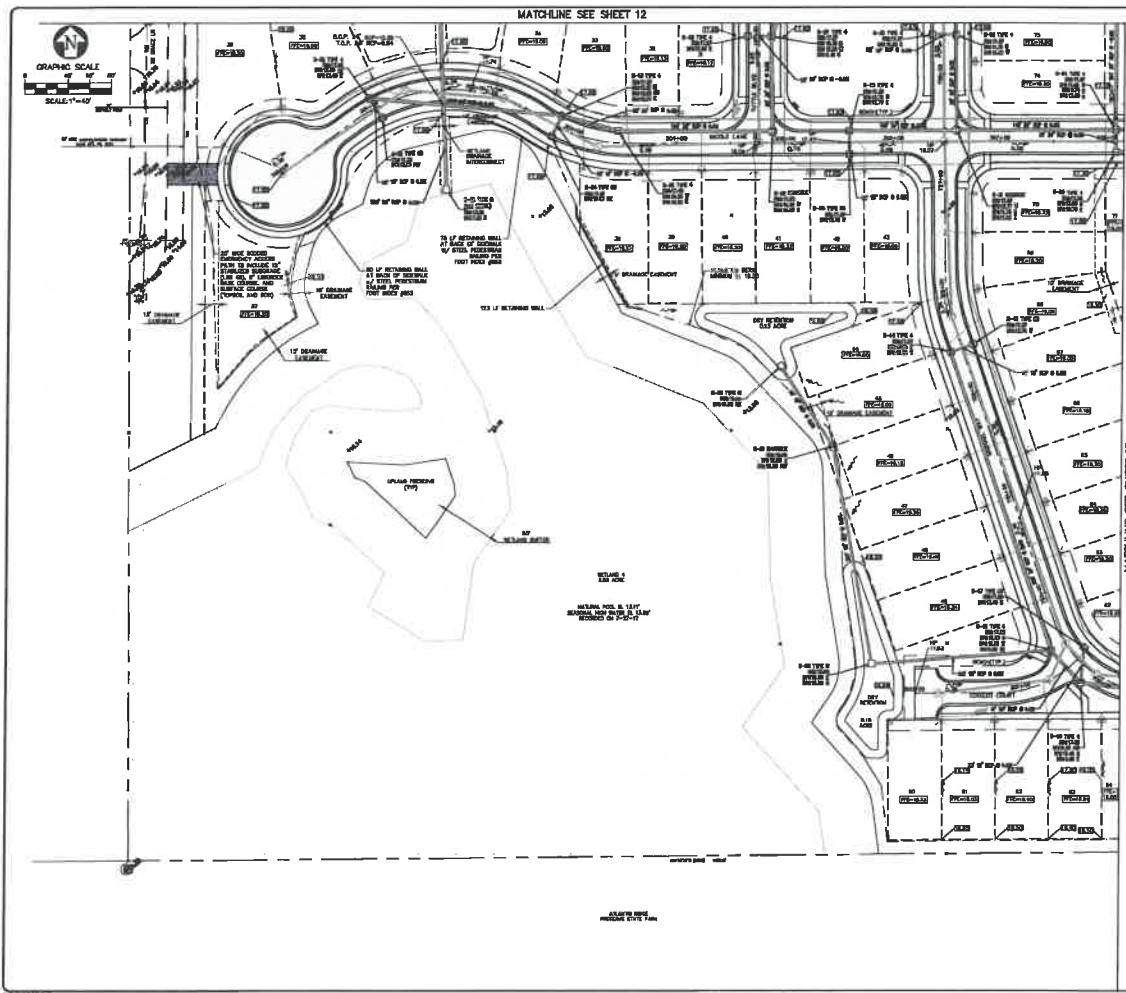
- CONSTRUCTION LEGEND:**
- EXISTING ROAD
 - CONCRETE SIDEWALK
 - DRY RETENTION
 - GRAVEL
 - PROPOSED ROAD
 - PRESERVE / WETLAND BUFFER
 - WETLAND AREA
 - FINISHED GRADE ELEVATION
 - FLOW ARROW

- GENERAL NOTES:**
1. ALL ELEVATIONS ARE REFERENCED TO THE 1988 NORTH AMERICAN VERTICAL DATUM (NAVD83).
 2. TOPOGRAPHIC SURVEY PERFORMED BY CIRCULARITY GROUP.
 3. ALL DISTURBED AREAS MUST BE STABILIZED WITH SEED WITHIN 30 DAYS OF CONSTRUCTION COMPLETION.
 4. GEOTECHNICAL REPORT SHALL BE PROVIDED VERIFYING BOREHOLE AND REINFORCEMENT OF HARD PAN LAYER BENEATH THE PROPOSED RETENTION AREAS AS PART OF THE CIVIL INFRASTRUCTURE SUBMITTAL.



PROJECT INFORMATION	
PROJECT NAME	COVE ROYALE PHASE I
CLIENT	TLH&S DOT, LLC
LOCATION	MARTIN COUNTY, FLORIDA
DRAWING INFORMATION	
DRAWN BY	AS
CHECKED BY	AS
DATE	12/22/22
16042.02	

eriginty group inc.
1000 N. W. 10th Ave., Suite 100
Fort Lauderdale, FL 33304
Phone: (954) 578-1000
Fax: (954) 578-1001
www.eriginty.com



- ENGINEERING LEGEND**
- EXISTING ROAD
 - CONCRETE SIDEWALK
 - DRY DETENTION
 - GRAVEL
 - PROPOSED ROAD
 - PERIODIC / WETLAND BUFFER
 - WETLAND AREA
 - FINISHED GRADE ELEVATION
 - FLOW ARROW

- GENERAL NOTES**
1. ALL ELEVATIONS ARE REFERENCED TO THE 1988 NORTH AMERICAN DATUM, DATUM.
 2. TOPOGRAPHIC SURVEY PERFORMED BY ENGINEERING GROUP.
 3. ALL INSURED AREAS MUST BE STABILIZED WITH SODS WITHIN 30 DAYS OF CONSTRUCTION COMPLETION.
 4. GEOTECHNICAL REPORT SHALL BE PROVIDED FOR REMOVAL AND REPLACEMENT OF 18\"/>

PROJECT INFORMATION

PROJECT NO. 13

DATE 11/13/2013

SCALE 1"=40'

COVE ROYALE-PHASE I

TLH48 DOT, LLC

MARTIN COUNTY, FLORIDA

PAVING, GRADING AND DRAINAGE PLAN

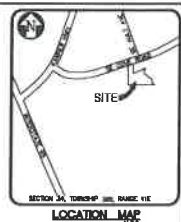
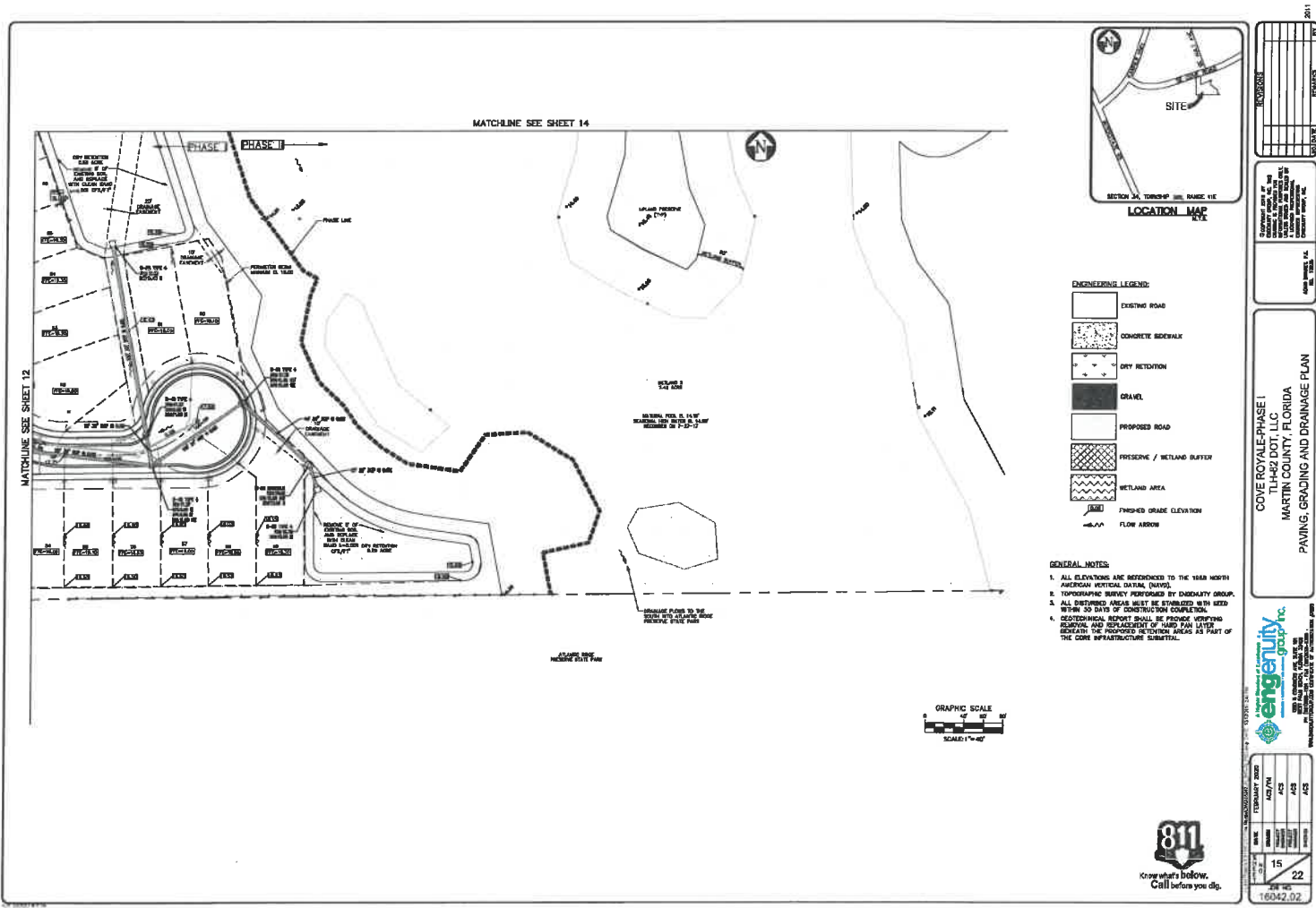
811

Know what's below.
Call before you dig.

engineer

13 22

16042.02



- OVERLAYING LEGEND:**
- [Symbol] EXISTING ROAD
 - [Symbol] CONCRETE SIDEWALK
 - [Symbol] DRY RETENTION
 - [Symbol] GRAVEL
 - [Symbol] PROPOSED ROAD
 - [Symbol] PRESERVE / WETLAND BUFFER
 - [Symbol] WETLAND AREA
 - [Symbol] FINISHED GRADE ELEVATION
 - [Symbol] FLOW ARROWS

- GENERAL NOTES:**
1. ALL ELEVATIONS ARE REFERENCED TO THE 1988 NORTH AMERICAN VERTICAL DATUM (NAVD83).
 2. TOPOGRAPHIC SURVEY PERFORMED BY ENGENUITY GROUP.
 3. ALL DISTURBED AREAS MUST BE STABILIZED WITH SEED WITHIN 30 DAYS OF CONSTRUCTION COMPLETION.
 4. GEOTECHNICAL REPORT SHALL BE PROVIDED VERIFYING RELIABLE AND REPLACEMENT OF SUBS PAV LAYER BENEATH THE PROPOSED RETENTION AREAS AS PART OF THE CORP INFRASTRUCTURE SUBMITTAL.

TERMINAL 2020

DATE	BY	REVISION
11/15/20	AKS	1
11/15/20	AKS	2
11/15/20	AKS	3

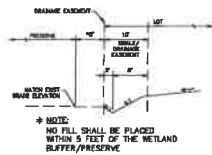
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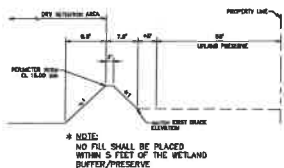
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Know what's below.
Call before you dig.

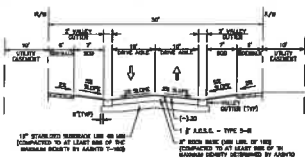
COVE ROYALE PHASE I
TLH42 DOT, LLC
MARTIN COUNTY, FLORIDA
PAVING, GRADING AND DRAINAGE PLAN



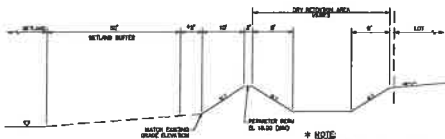
SECTION A-A



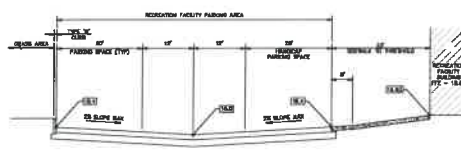
SECTION B-B



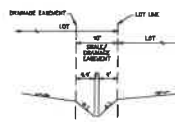
SECTION C-C



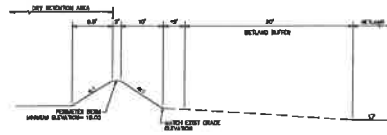
SECTION D-D



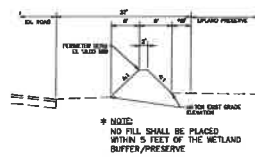
SECTION E-E



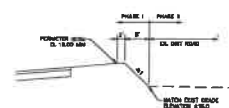
SECTION F-F



SECTION G-G



SECTION H-H

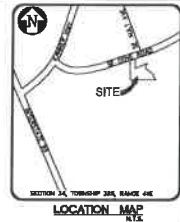
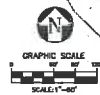


SECTION I-I



COVE ROYALE-PHASE I TLH42.DOT.LLC MARTIN COUNTY, FLORIDA	
CROSS SECTIONS	
engenuity group, inc.	
16042.02	
18 22	

MATCHLINE STA. 107+00 (SEE SHEET 17)



DATE	BY	CHKD	APPD
10/03/2018	TLH		
10/03/2018	TLH		
10/03/2018	TLH		
10/03/2018	TLH		
10/03/2018	TLH		
10/03/2018	TLH		
10/03/2018	TLH		
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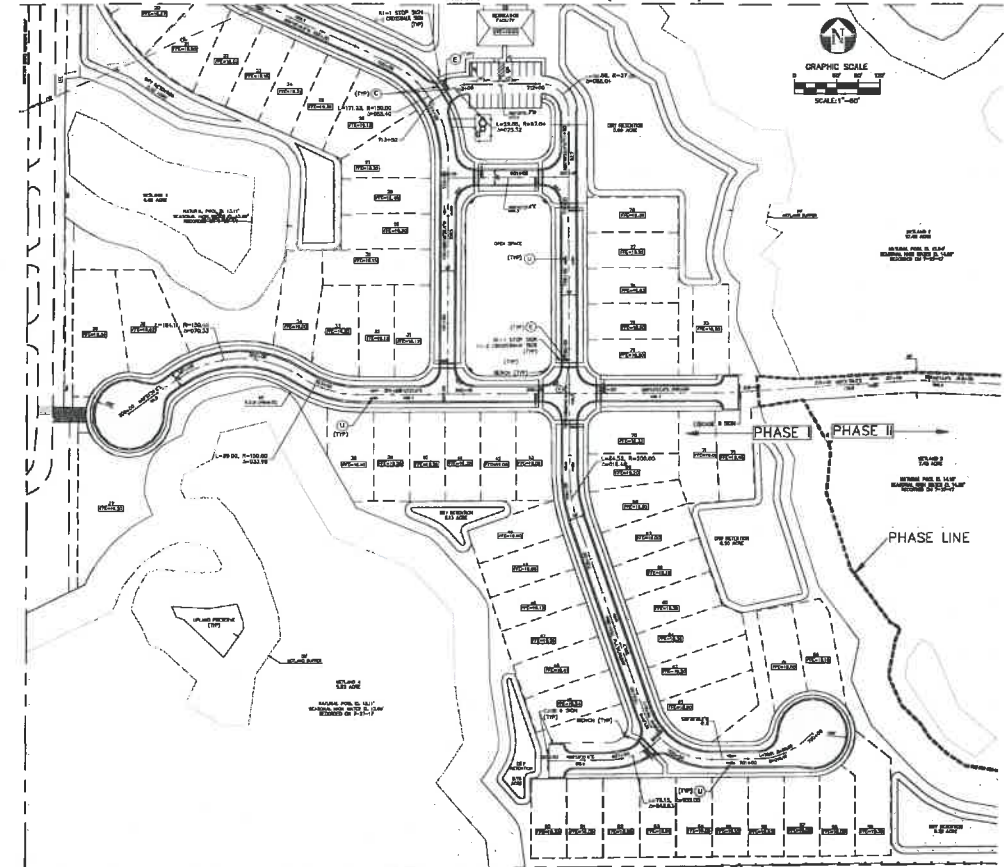
Document shall be the property of the client and shall not be reproduced or transmitted in any form or by any means electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system without the written permission of the engineer.

COVE ROYALE-PHASE I
TLH&D DOT, LLC
MARTIN COUNTY, FLORIDA
SIGN, MARKING AND PAVEMENT



DATE	BY	CHKD	APPD
10/03/2018	TLH		
10/03/2018	TLH		
10/03/2018	TLH		
10/03/2018	TLH		
10/03/2018	TLH		
10/03/2018	TLH		
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10/03/2018	TLH		

16042.02

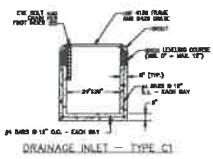


- ENGINEERING LEGEND:**
- CONCRETE SIDEWALK
 - DRY DETENTION
 - GRAVEL
 - PROPOSED ROAD
 - PRESERVE / WETLAND BUFFER
 - WETLAND AREA
 - FINISHED GRADE ELEVATION
 - FLOW ARROW
 - RADIUS CALL-OUT

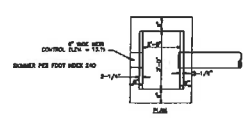
- GENERAL NOTES:**
1. ALL ELEVATIONS ARE REFERENCED TO THE 1988 NORTH AMERICAN VERTICAL DATUM (NAVD83).
 2. TOPOGRAPHIC SURVEY PERFORMED BY CH2M HILL GROUP.
 3. ALL PAVEMENT MARKING SHALL BE THERMOPLASTIC IN ACCORDANCE WITH FOOT NOTES 1000.
 4. ALL CROSSWALK/BIKELANE TO COMPLY WITH LATEST ADA GUIDELINES.

DESIGNATION	TYPE	COLOR
A	PAVEMENT	WHITE
B	PAVEMENT	WHITE
C	PAVEMENT	WHITE
D	PAVEMENT	WHITE
E	PAVEMENT	WHITE
F	PAVEMENT	WHITE
G	PAVEMENT	WHITE
H	PAVEMENT	WHITE
I	PAVEMENT	WHITE
J	PAVEMENT	WHITE
K	PAVEMENT	WHITE
L	PAVEMENT	WHITE
M	PAVEMENT	WHITE
N	PAVEMENT	WHITE
O	PAVEMENT	WHITE
P	PAVEMENT	WHITE
Q	PAVEMENT	WHITE
R	PAVEMENT	WHITE
S	PAVEMENT	WHITE
T	PAVEMENT	WHITE
U	PAVEMENT	WHITE

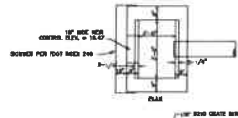




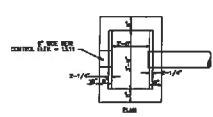
DRAINAGE INLET - TYPE C1



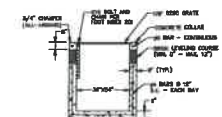
STRUCTURE #81



CONTROL STRUCTURE #1



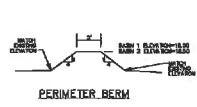
STRUCTURE #82



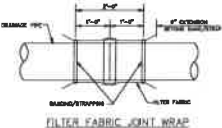
DRAINAGE INLET - TYPE E



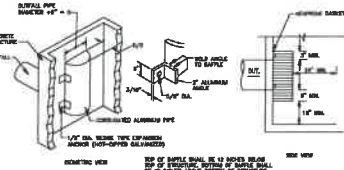
EMERGENCY ACCESS PATH DETAIL



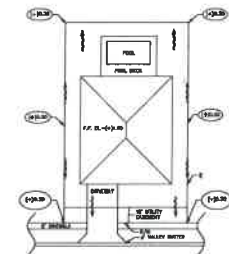
PERIMETER BERM



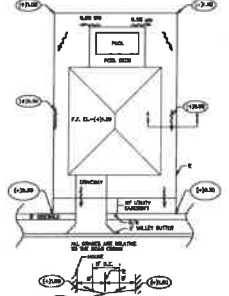
FILTER FABRIC JOINT WRAP



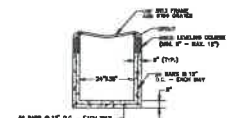
POLLUTION CONTROL BAFFLE



TOP LOT GRADING PLAN

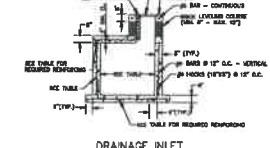


TOP LOT GRADING PLAN

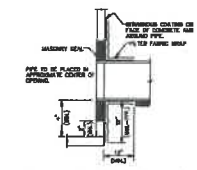


DRAINAGE INLET - TYPE C3

NO.	DESCRIPTION	QTY	UNIT	PRICE	TOTAL
1	12" DIA. - EACH WAY	1	EA	100.00	100.00
2	1/2" THICK CURB	1	EA	50.00	50.00
3	1/2" THICK BASE	1	EA	50.00	50.00
4	1/2" THICK CURB	1	EA	50.00	50.00
5	1/2" THICK BASE	1	EA	50.00	50.00



DRAINAGE INLET



FILTER FABRIC WRAP ON GROUTED PIPE TO STRUCTURE JOINT

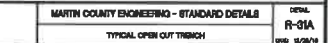
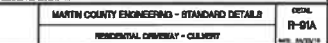
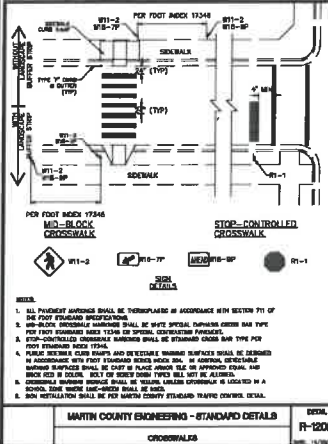
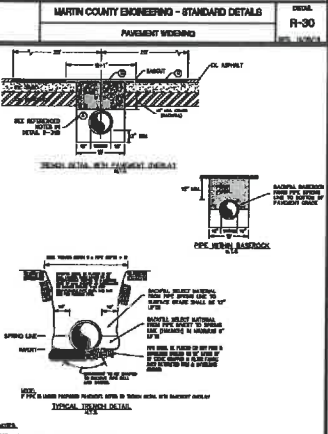
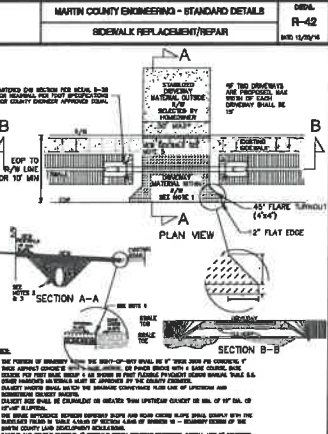
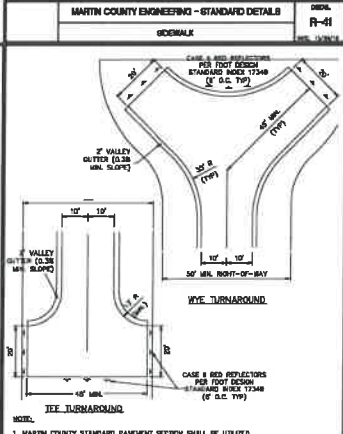
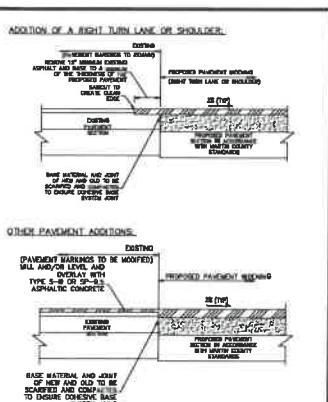
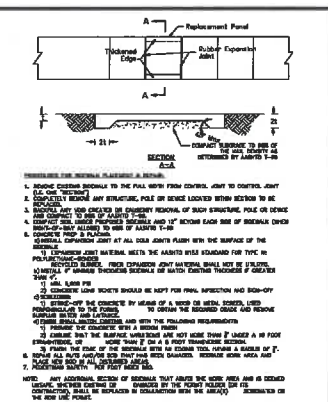
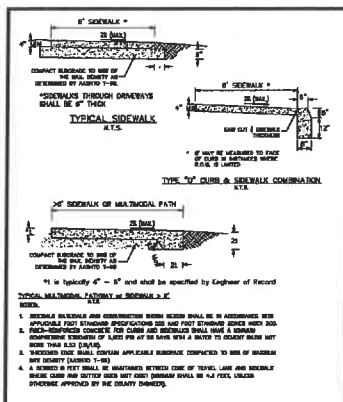
INVENTORY

NO.	DESCRIPTION	QTY	UNIT	PRICE	TOTAL
1	12" DIA. - EACH WAY	1	EA	100.00	100.00
2	1/2" THICK CURB	1	EA	50.00	50.00
3	1/2" THICK BASE	1	EA	50.00	50.00
4	1/2" THICK CURB	1	EA	50.00	50.00
5	1/2" THICK BASE	1	EA	50.00	50.00

COVE ROYALE-PHASE I
11482 BOT. LLC
MARTIN COUNTY, FLORIDA
DRAINAGE DETAILS

19

22



COVE ROYAL PHASE I
11482 LOT, L.C.
MARTIN COUNTY, FLORIDA

Drainage Details

Legend

Notes

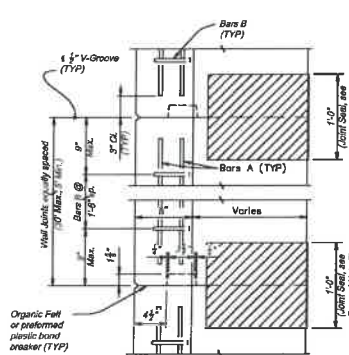
Scale

Revision

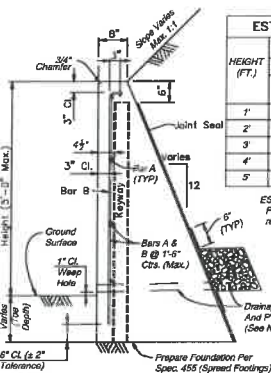
21

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16042.02



KEYWAY & WALL JOINT DETAIL
(TOP VIEW)



TYPICAL SECTION
C-I-P CONCRETE GRAVITY WALL

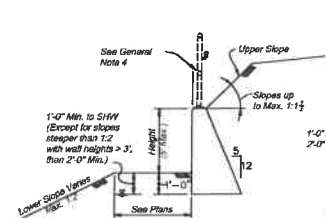
ESTIMATED QUANTITIES FOR C-I-P WALL					
HEIGHT (FT.)	PER LINEAR FOOT OF WALL			WEEP HOLES DRAIN REQD.	
	CLASS NS CONCRETE (CY)				
	SCHEME 1	SCHEME 2	SCHEME 3**		
1'	0.08	0.11 (0.20')	0.03	3 (4')	No
2'	0.14	0.20 (0.32')	0.09	4 (5')	No
3'	0.22	0.32 (0.47')	0.29	5 (6')	Yes
4'	0.32 (0.43')	0.47 (0.65')	0.43	6 (7')	Yes
5'	0.43 (0.55')	0.65 (0.85')	0.60	7 (8')	Yes

ESTIMATED QUANTITIES NOTES:
For Scheme 3 Junction Slab and Traffic Railing see the
referenced Design Standards for estimated quantities.
* Quantity for 2'-0" Toe Depth.
** Quantity for Scheme 3 assumes 1'-3" thick
coping above Gravity Wall.

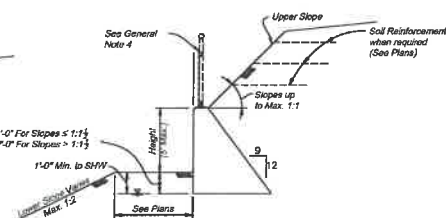
GENERAL NOTES

- C-I-P Gravity Walls constructed as extensions of reinforced concrete retaining walls, except walls of proprietary design, shall have the same face texture and finish as the reinforced concrete retaining wall.
- Concrete for Gravity Wall shall be Class NS per Section 347, Concrete for Scheme 3 Junction Slab and Traffic Railing shall be Class II per Section 346, unless otherwise specified in the plans.
- Reinforcing steel shall meet the requirements of Specification Section 601 (Grade 60 or 65). Smooth or Deformed Milled Wire Reinforcement (MWR) may be substituted on an equal area basis. Do not increase bar/pipe spacing for Grade 60 reinforcing steel or MWR.
- When required, for adjacent guideway, see Index 670 or 680 as appropriate. For adjacent Type B fence see Index 602.
- Joint Seal: Organic Felt and breaker in accordance with Specification Section 400 or Type D-5 geotextile fabric in accordance with Specification Section 185. Map of contact surfaces of concrete and Organic Felt or geotextile fabric with out-back asphalt. Slope Organic Felt or geotextile fabric 6" below top of wall.
- Provide a continuous 1"x1" clean gravel or crushed rock drain for wall heights 3 ft. and higher. Wrap drainage layer as shown, with Type D-3 geotextile fabric in accordance with Specification Section 185. Provide 6"x6" galvanized mesh with 1"x1" openings at the inside end of the PVC Drain Pipe. Provide 2" Ø PVC Drain Pipe (Sch. 40) at 10 ft. max. spacing (when Drainage Layer is required). Locate outermost edge of Drain Pipe a minimum of 2'-0" from wall joint.
- Cost of reinforcing steel, face texture, finish, joint seal, drain pipes, drainage layer, galvanized mesh and geotextile fabric to be included in the Contract Unit Price for Concrete Class NS, Gravity Wall. Cost of concrete for Junction Slab in Scheme 3, to be included in Contract Unit Price for Concrete Traffic Railing Barrier With Junction Slab. Adjunct railings or fences to be paid for separately.

BILL OF REINFORCING STEEL		
MARK	SIZE	LENGTH
A	4	As Req'd.
B	4	As Req'd.
BAR BENDING DIAGRAM		
NOTES: - All bar dimensions are out to out. - Lap splices for Bar A must be a minimum of 1'-10".		



SCHEME 1
(No Traffic Loading Effects &
Upper Slopes ≤ 1:1 1/2)



SCHEME 2
(With Traffic Loading or
Upper Slopes > 1:1 1/2)

GRAVITY WALL FOOT DESIGN STANDARD INDEX NO. 8011

REVISIONS

NO.	DATE	DESCRIPTION
1	01/01/00	ISSUED FOR BIDDING

COVE ROYALE-PHASE I
TULHSE DOT, LLC
MARTIN COUNTY, FLORIDA
DRAINAGE DETAILS

engineer
inc.

22 22
18042.02

WATER AND SEWER DRAWINGS FOR COVE ROYALE -PHASE I JUNE 2019

PREPARED FOR:
TLH-82 DOT, LLC

INDEX

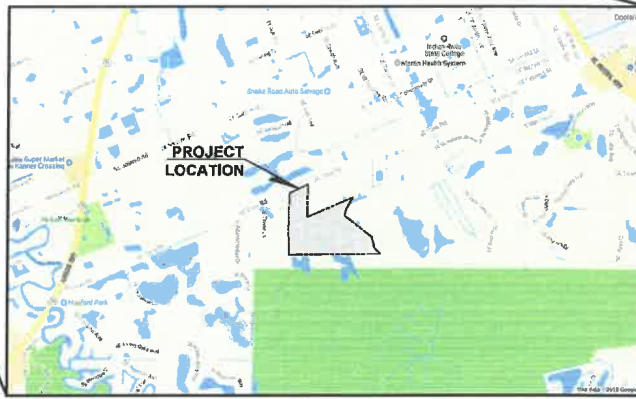
SHEET NO	SHEET TITLE
1	COVER SHEET
2	KEY SHEET & MASTER UTILITY MAP
3	WATER AND SEWER PLAN
4	WATER AND SEWER PLAN
5	WATER AND SEWER PLAN
6	WATER AND SEWER PLAN
7	WATER AND SEWER PLAN
8	WATER AND SEWER PROFILES
9	WATER AND SEWER PROFILES
10	WATER AND SEWER PROFILES
11	DIRECTIONAL BORE PROFILES
12	WATER AND SEWER DETAILS
13	WATER AND SEWER DETAILS
14	WATER AND SEWER DETAILS
15	WATER AND SEWER DETAILS
16	WATER AND SEWER DETAILS
17	WATER AND SEWER DETAILS
18	WATER AND SEWER DETAILS
19	WATER AND SEWER DETAILS

TOTAL NO OF SHEETS - 19



NIP DATA © 2018 GOOGLE

SECTION 34, TOWNSHIP 38S, RANGE 41E
VICINITY MAP
NTS



NIP DATA © 2018 GOOGLE



Have what's below.
Call before you dig.

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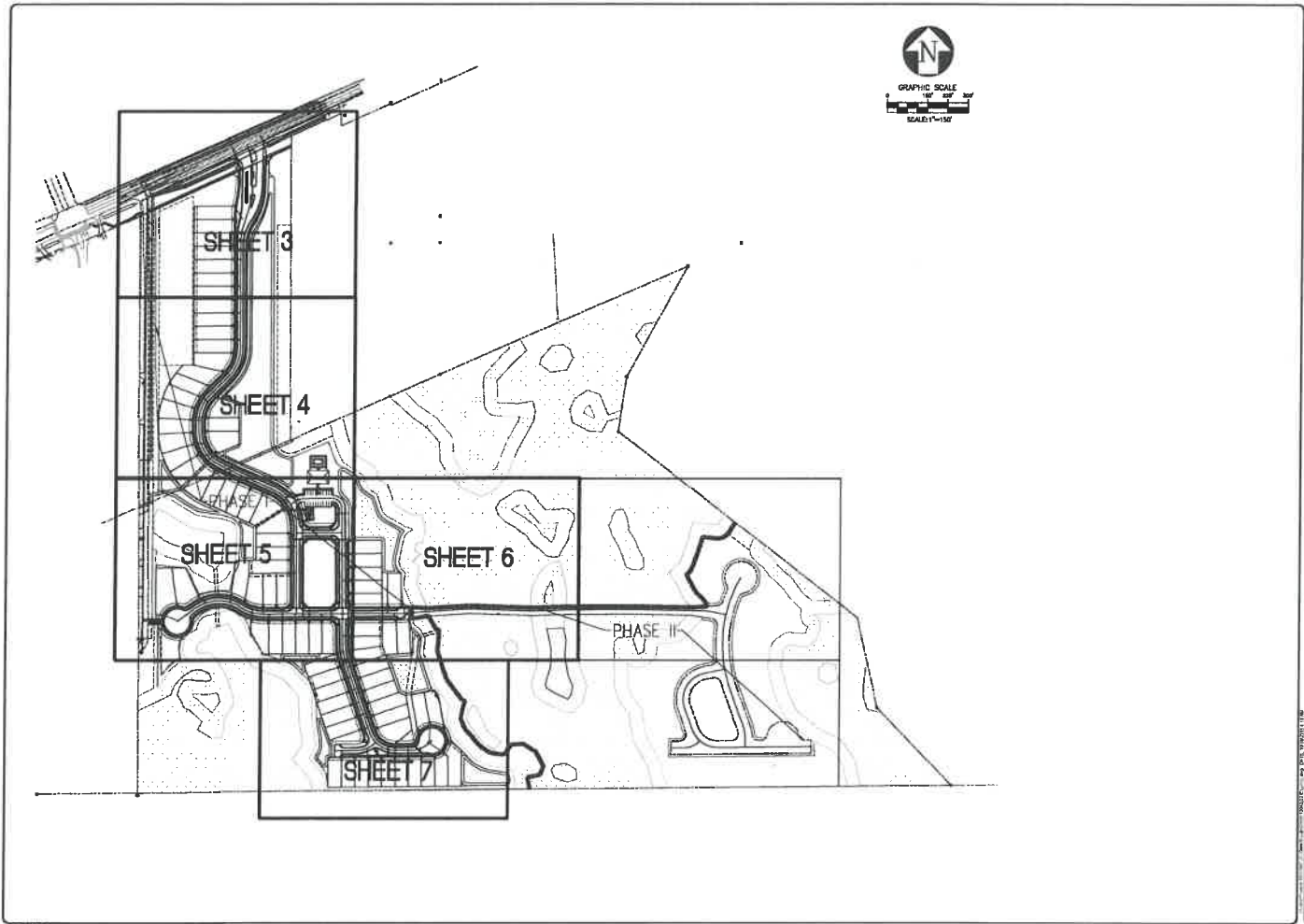
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Reviewed by: [blank]
Approved by: [blank]
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North Arrow: [blank]

COVE ROYALE-PHASE I
TLH-82 DOT, LLC
MARTIN COUNTY, FLORIDA
COVER SHEET

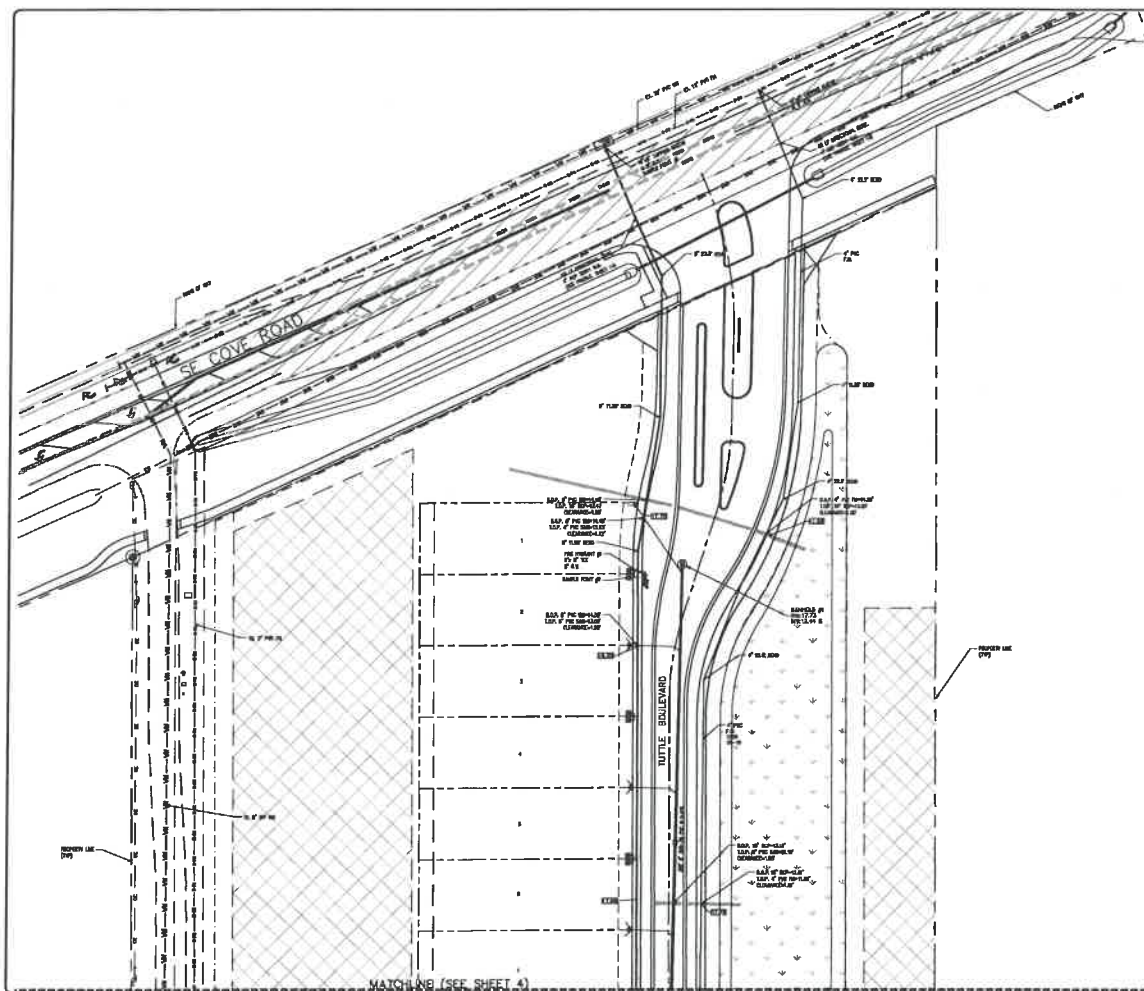


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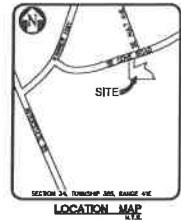


DATE: 07/20/2018 DRAWN BY: J. L. BROWN CHECKED BY: J. L. BROWN PROJECT NO: 16042.02	
PROJECT: COVE ROYALE-PHASE I CLIENT: TLH42 DOT, LLC LOCATION: MARTIN COUNTY, FLORIDA MAP SHEET & MASTER UTILITY MAP	
DESIGNED BY: J. L. BROWN CHECKED BY: J. L. BROWN PROJECT NO: 16042.02	
DATE: 07/20/2018 DRAWN BY: J. L. BROWN CHECKED BY: J. L. BROWN PROJECT NO: 16042.02	



MATCHLINE (SEE SHEET 5)

MATCHLINE (SEE SHEET 6)



LEGEND:

- SEWER MAIN
- STORM SEWER
- FIRE HYDRANT
- FIRE HYDRANT CONNECTION (FHC)
- WATER MAIN
- WATER MAIN CONNECTION (WMC)
- GAS MAIN
- GAS MAIN CONNECTION (GMC)
- ELECTRIC MAIN
- ELECTRIC MAIN CONNECTION (EMC)
- TELEPHONE MAIN
- TELEPHONE MAIN CONNECTION (TMC)
- CABLE TV MAIN
- CABLE TV MAIN CONNECTION (CTMC)
- FIRE HYDRANT
- FIRE HYDRANT CONNECTION (FHC)
- WATER MAIN
- WATER MAIN CONNECTION (WMC)
- GAS MAIN
- GAS MAIN CONNECTION (GMC)
- ELECTRIC MAIN
- ELECTRIC MAIN CONNECTION (EMC)
- TELEPHONE MAIN
- TELEPHONE MAIN CONNECTION (TMC)
- CABLE TV MAIN
- CABLE TV MAIN CONNECTION (CTMC)

GENERAL NOTES:
 1. ALL DIMENSIONS ARE REFERENCED TO THE 100-HIGH CORNER VERTICAL CURVE.
 2. DIMENSIONS ARE REFERENCED TO THE 100-HIGH CORNER VERTICAL CURVE.

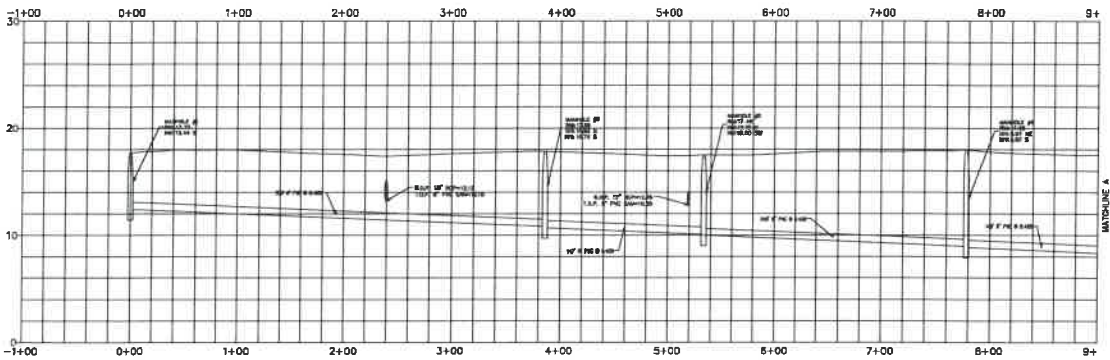


COVE ROYALE-PHASE I
 TLH-82 DOT, LLC
 MARTIN COUNTY, FLORIDA
 WATER AND SEWER PLAN

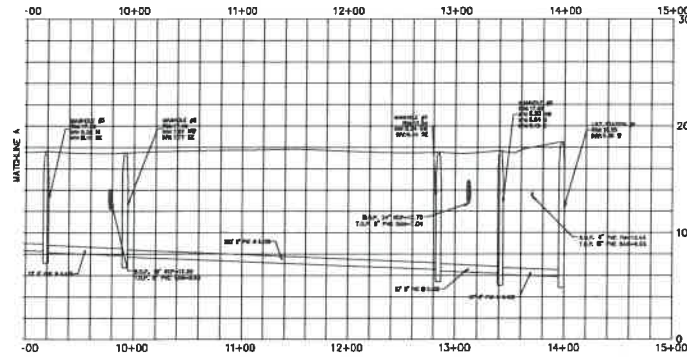
engenuity
 CONSULTING, INC.

DATE: 07/15/2018
 BY: JAC
 CHECKED: JAC
 APPROVED: JAC

16042.02



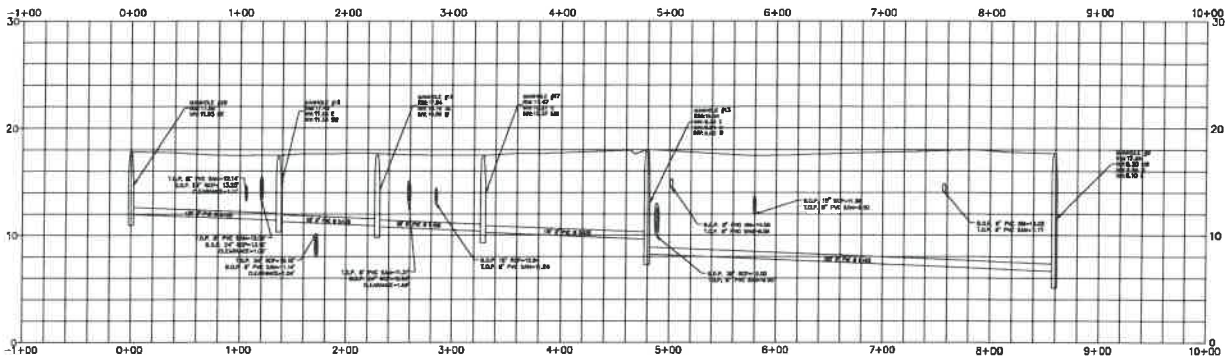
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SEE SHEETS WS-3 & WS-4
VERTICAL SCALE 1"=10'
HORIZONTAL SCALE 1"=40'



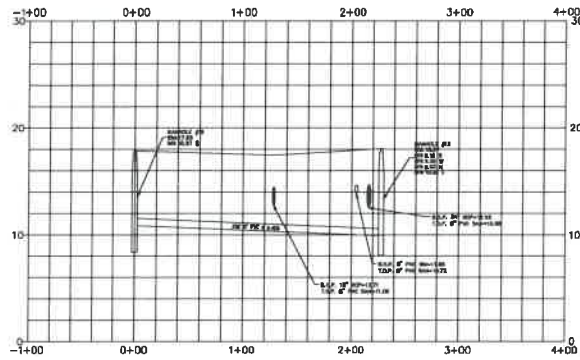
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Cove Royale-Phase I		16042.02	
TIL-442 DOT, LLC		19	
MARTIN COUNTY, FLORIDA		8	
WATER AND SEWER PROFILES		16042.02	

ENGINEER
 TIL-442 DOT, LLC
 1000 N. W. 10th St.
 Ft. Lauderdale, FL 33304
 (954) 561-1000
 TIL-442 DOT, LLC
 1000 N. W. 10th St.
 Ft. Lauderdale, FL 33304
 (954) 561-1000

16042.02
 19
 8



SEWER PROFILE 2
SEE SHEETS WS-4 & WS-5
VERTICAL SCALE: 1"=4'
HORIZONTAL SCALE: 1"=40'



SEWER PROFILE 3
SEE SHEETS WS-4 & WS-5
VERTICAL SCALE: 1"=4'
HORIZONTAL SCALE: 1"=40'

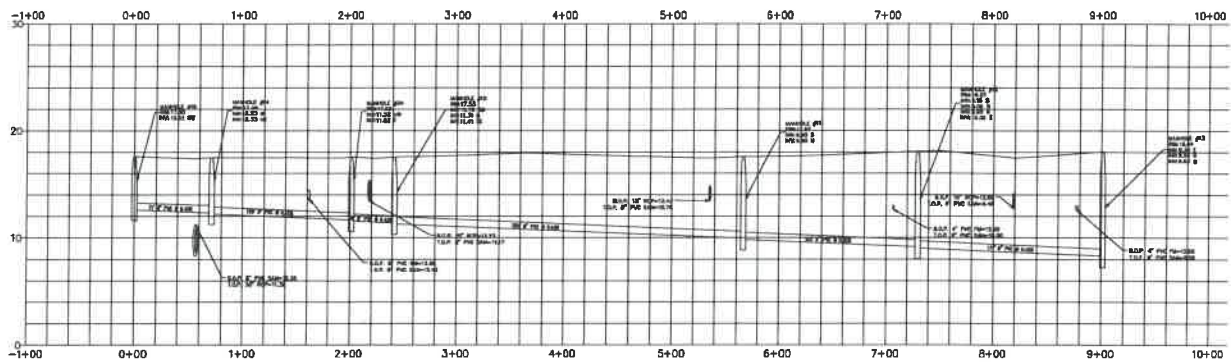
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2				
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Company Seal of
Professional Engineer
State of Florida
No. 12345
Date: 07/1/2019
Project: 16042.02

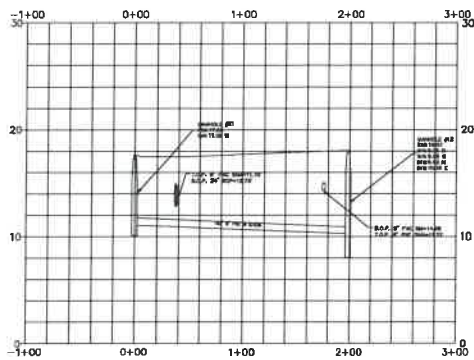
COVE ROYALE-PHASE I
TLH48 DOT, LLC
MARTIN COUNTY, FLORIDA
WATER AND SEWER PROFILES

ingenity
INC.
1001 S. W. 10th Ave., Suite 100
Fort Lauderdale, FL 33304
Phone: (954) 571-1111
Fax: (954) 571-1112
Email: info@ingenityinc.com
Website: www.ingenityinc.com

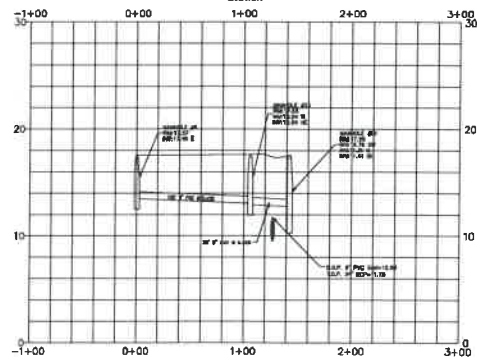
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BY	AL
CHKD.	AL
APP'D.	AL
PROJECT	16042.02
SHEET	9
TOTAL	19



SEWER PROFILE 4
SEE SHEETS WS-5 & WS-8
VERTICAL SCALE: 1"=4'
HORIZONTAL SCALE: 1"=40'



SEWER PROFILE 5
SEE SHEETS WS-5 & WS-6
VERTICAL SCALE: 1"=4'
HORIZONTAL SCALE: 1"=40'



SEWER PROFILE 6
SEE SHEETS WS-5
VERTICAL SCALE: 1"=4'
HORIZONTAL SCALE: 1"=40'

NO.	DATE	BY	CHKD.	APP'D.	REVISION
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2	08/11/10	WBS	WBS	WBS	ISSUED FOR PERMIT
3	08/11/10	WBS	WBS	WBS	ISSUED FOR PERMIT
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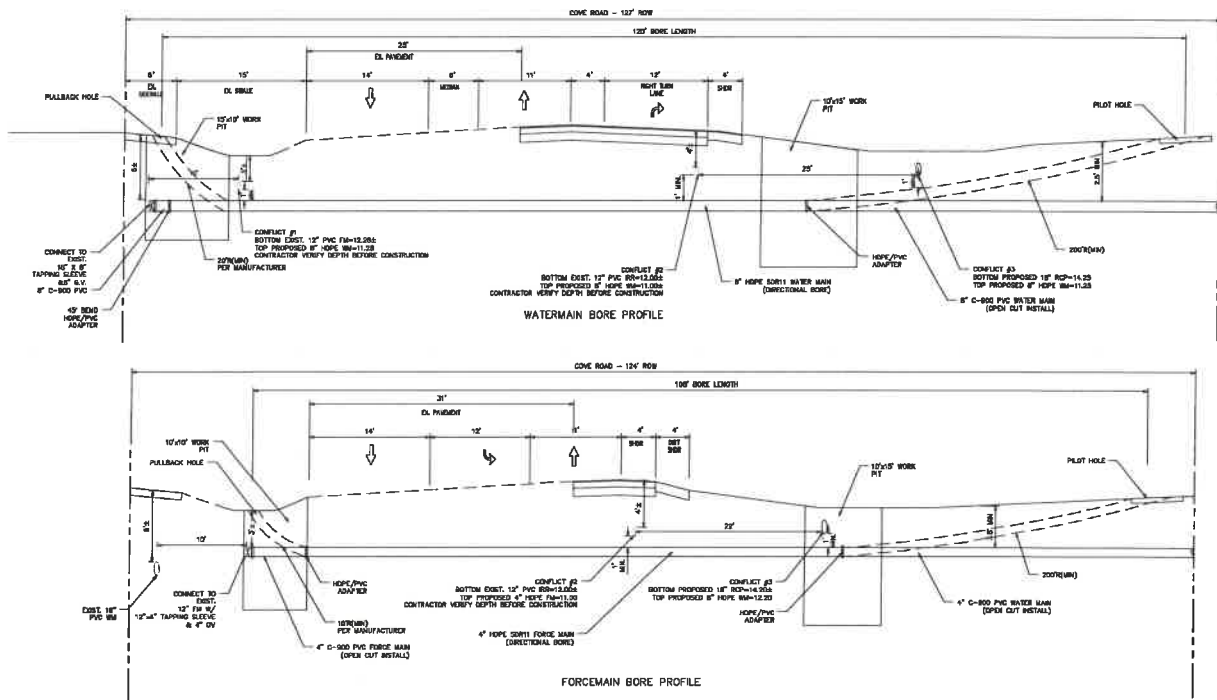
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SHEET NO. 10-00000000-01
DATE: 08/11/10
BY: WBS
CHKD.: WBS
APP'D.: WBS
REVISION: ISSUED FOR PERMIT

COVE ROYALE-PHASE I
TLH-82 DOT, LLC
MARTIN COUNTY, FLORIDA
WATER AND SEWER PROFILES

argenuty
INC.
1000 S. W. 10th Ave., Suite 100
Fort Lauderdale, FL 33304
TEL: 954.344.1000
FAX: 954.344.1001
WWW.ARGENTUTYINC.COM

NO.	DATE	BY	CHKD.	APP'D.	REVISION
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2	08/11/10	WBS	WBS	WBS	ISSUED FOR PERMIT
3	08/11/10	WBS	WBS	WBS	ISSUED FOR PERMIT
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9	08/11/10	WBS	WBS	WBS	ISSUED FOR PERMIT
10	08/11/10	WBS	WBS	WBS	ISSUED FOR PERMIT

16042.02



N.T.S

N.T.S

GENERAL DIRECTIONAL DRILL NOTES

- MINIMUM ACCEPTED DRILL BODIES IS 200 TIMES THE HOPE DIAMETER NOT EXCEEDING 80% OF RECOMMENDED MANUFACTURER'S MAXIMUM BENDING RADIUS.

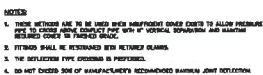
NO.	REVISION	DATE	BY	CHECKED
1	ISSUED FOR PERMIT	07/11/2019	TLH	TLH

Customer: City of
Project: Cove Royale Phase I
Location: Martin County, Florida
Drawn: TLH
Checked: TLH
Scale: As Shown
Date: 07/11/2019

COVE ROYALE-PHASE I
TLH42.DOT, LLC
MARTIN COUNTY, FLORIDA
DIRECTIONAL BORE PROFILES



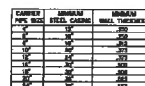
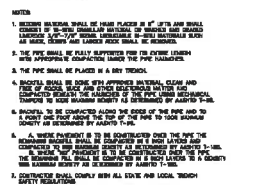
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BY	TLH
CHECKED	TLH
SCALE	AS SHOWN
PROJECT	COVE ROYALE-PHASE I
SHEET NO.	11
TOTAL SHEETS	19
DATE	07/11/2019



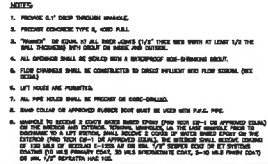
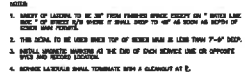
THE DATA IN THE ABOVE TABLE ARE BASED UPON THE FOLLOWING INSTALLATION CONDITIONS:

SOIL TYPE-SAND	FEET PRESSURE-100 PS	DEPTH OF SURF-VERTICAL OFFER
THICKNESS TYPE-S	SAFETY FACTOR-1.5	
MINIMUM PIPE LENGTH ALONG THE RUN-8'		

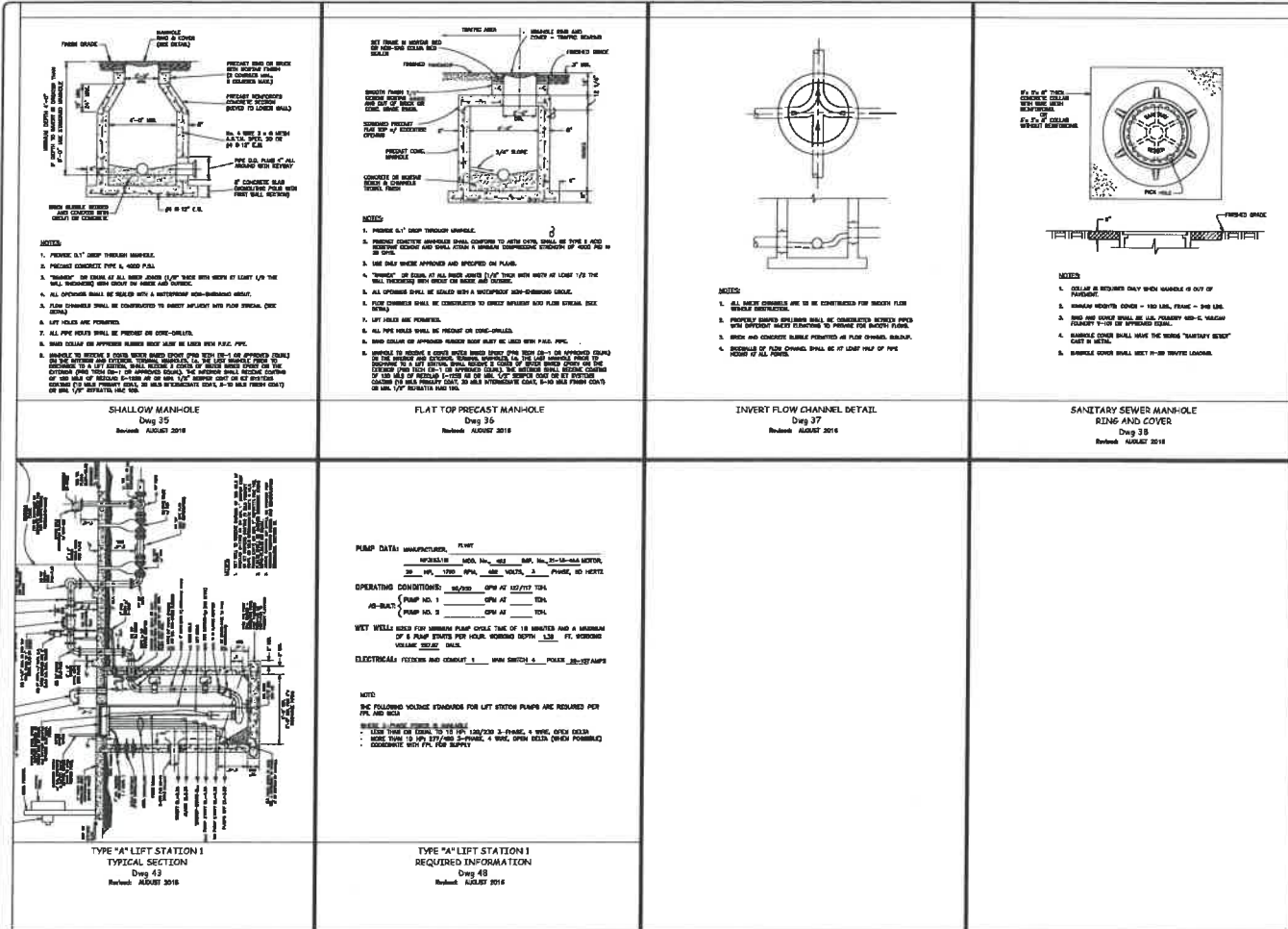
THE REINFORCED PIPE LENGTHS APPLY TO RUSTIC IRON AND FIBER PIPE. ALL JOINTS BETWEEN DEPTH AND LENGTH SHOULD BE SECURED.



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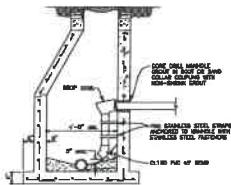


COVE ROYALE-PHASE I
TLH42 DOT, LLC
MARTIN COUNTY, FLORIDA
WATER AND SEWER DETAILS

16042.02

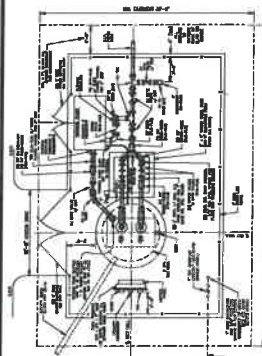
16042.02

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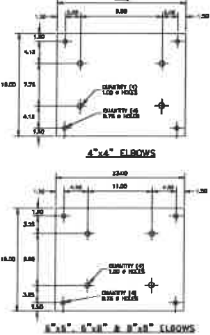


- NOTES**
1. ALL DETAILS AND DIMENSIONS FOR REMOVAL UNLESS OTHERWISE SPECIFIED ARE TO BE MAINTAINED FOR REMOVAL TO BE MAINTAINED.
 2. THE REMOVAL SHALL BE MAINTAINED FOR REMOVAL TO BE MAINTAINED.
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DROP MANHOLE AND SERVICE DROP
Dwg 39
Revised: AUGUST 2018

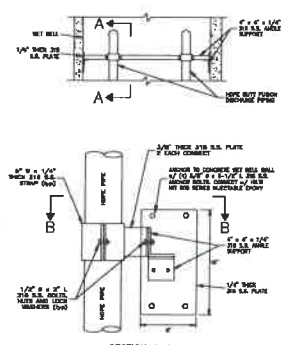


**TYPE "A" LIFT STATION
TYPICAL SITE PLAN LAYOUT**
Dwg 42
Revised: AUGUST 2018

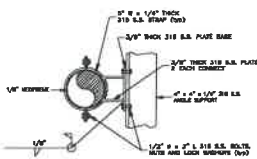


- NOTES**
1. EACH BASE CLOSURE SHALL BE MAINTAINED TO THE BOTTOM OF THE WELL WITH FOUR (4) 3/4" STEEL WEDGE ANCHORS AND ANCHORED STEEL PLATE. THE PLATE SHALL BE MAINTAINED WITH FOUR (4) 3/4" STEEL WEDGE ANCHORS AND ANCHORED STEEL PLATE. THE PLATE SHALL BE MAINTAINED WITH FOUR (4) 3/4" STEEL WEDGE ANCHORS AND ANCHORED STEEL PLATE.
 2. THE ANCHORED STEEL PLATE AND ANCHORS SHALL BE MAINTAINED BY THE PUMP MANUFACTURER.

**TYPE "A" LIFT STATION
BASE PLATES**
Dwg 44
Revised: AUGUST 2018



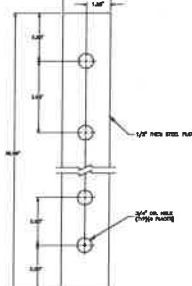
**TYPE "A" LIFT STATION
HIDE ANGLE PIPE SUPPORT**
Dwg 45
Revised: AUGUST 2018



SECTION B-B'

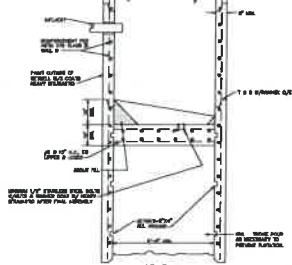
- NOTES**
1. CONSTRUCTION SHALL BE MAINTAINED WITH FOUR (4) 3/4" STEEL WEDGE ANCHORS AND ANCHORED STEEL PLATE.
 2. THE ANCHORED STEEL PLATE AND ANCHORS SHALL BE MAINTAINED BY THE PUMP MANUFACTURER.

**TYPE "A" LIFT STATION
HIDE ANGLE PIPE SUPPORT**
Dwg 45A
Revised: AUGUST 2018



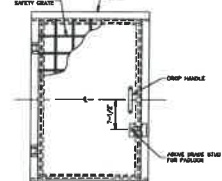
NOTES

**TYPE "A" LIFT STATION
WET WELL SECTION RETAINER STRAP**
Dwg 46
Revised: AUGUST 2018



- NOTES**
1. CONSTRUCTION SHALL BE MAINTAINED WITH FOUR (4) 3/4" STEEL WEDGE ANCHORS AND ANCHORED STEEL PLATE.
 2. THE ANCHORED STEEL PLATE AND ANCHORS SHALL BE MAINTAINED BY THE PUMP MANUFACTURER.

**TYPE "A" LIFT STATION
TRENCH POUR DETAIL**
Dwg 47
Revised: AUGUST 2018



- NOTES**
1. CONSTRUCTION SHALL BE MAINTAINED WITH FOUR (4) 3/4" STEEL WEDGE ANCHORS AND ANCHORED STEEL PLATE.
 2. THE ANCHORED STEEL PLATE AND ANCHORS SHALL BE MAINTAINED BY THE PUMP MANUFACTURER.

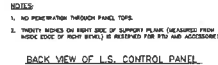
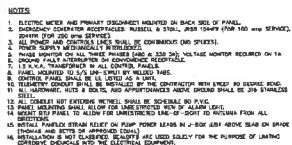
**TYPE "A" LIFT STATION
STANDARD ALUMINUM COVER**
Dwg 49
Revised: AUGUST 2018

COVE ROYALE-PHASE I
TLH-82 DOT, LLC
MARTIN COUNTY, FLORIDA
WATER AND SEWER DETAILS

engenuity
INC.

NO.	DATE	BY	CHKD	APPD	DESC
1	18				
2	19				

16042.02



- S. J. DOCKE AND ERIC C. BARTO

3.2.1 The manufacturer shall furnish the following on delivery of the pumping system:

3.3.1.1 One Spare Porta 4k Connecting to

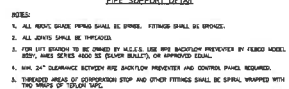
[illegible]

3.2.1.2 An Operations and Maintenance manual for the pump and engine

3.1. BIRRAITV

3.3.1 The manufacturer shall furnish the following in the order:

- 3.3.1.1 a copy of the engine manufacturer's parts and labor warranty
- 3.3.1.2 a one-year Parts and Labor warranty issued by the manufacturer on the Trash Pump Engine. This warranty must cover all pump parts, including the mechanical seal.



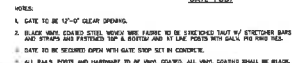
- NOTES:
1. ALL WELD JOINTS SHALL BE BRONZE. FITTINGS SHALL BE BRONZE.
 2. ALL JOINTS SHALL BE THREADED.
 3. FOR LIFT STATION TO BE OWNED BY M.C.E.S. USE PIPE BACKFLOW PREVENTER BY FLECK MODEL SERIES, AMES SERIES 4000 SS (FLECK BRALL), OR APPROVED EQUAL.
 4. MIN. 24" CLEARANCE BETWEEN PIPE BACKFLOW PREVENTER AND CONTROL PANEL REQUIRED.
 5. THREADED AREAS OF CORROSION STOP AND OTHER FITTINGS SHALL BE SPIRAL WRAPPED WITH TWO LAPS OF TYPOLAP.

TYPE "A" LIFT STATION
TYPICAL CONTROL PANEL
Dwg 50
Revised 6/20/52 2018

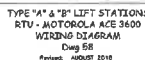
TYPE "A" LIFT STATION
TYPICAL CONTROL PANEL, BACKVIEW
Dwg 51
Revised AUGUST 2018

TYPE "A" LIFT STATION
FIXED MOUNTED EMERGENCY BACKUP PUMP
Dwg 55D
Revised: AUGUST 2018

TYPE "A" & "B" LIFT STATIONS
WATER SERVICE DETAIL
Dwg 56
Revised: AUGUST 2016



TYPE "A" & "B" LIFT STATIONS
FENCE DETAIL
Dwg 57
Revised: AUGUST 2016



TYPE "A" & "B" LIFT STATIONS
RTU - MOTOROLA ACE 3600
WIRING DIAGRAM (Cont.) & ENCLOSURE
Dwg 59
Revised: AUGUST 2016

[illegible]

INSTALL PER MANUFACTURER'S SPECIFICATIONS TO BEAT THAT 97' COCONUT MOUNTAIN GRANITE ENVIRONMENTAL. 800.667.6767 OR ENVIRONMENTAL.COM

[illegible]

Preparation of modified histocopy

- [illegible]

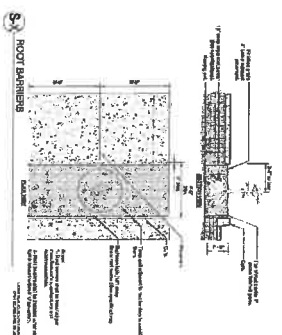
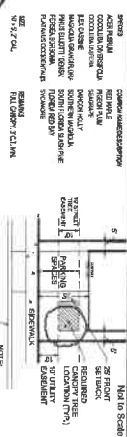
1. No plans submitted can be made without Merito Community approval.
2. All required landscaping and/or construction must be completed and approved.

- [illegible]

101

- | | | | |
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|  |  |  |  |
| Wellands | Uplands & Wetland Buffers | Dry Retention | Dry Retention Sloped Areas |

5



ET, ALCOUSTINE 500 SMALL ONLY BE USED IN THE NIGHT ARE BETWEEN THE CURB AND SIDEWALK WITHIN THE

- [illegible]

Phase I

Scale: 1" = 150'

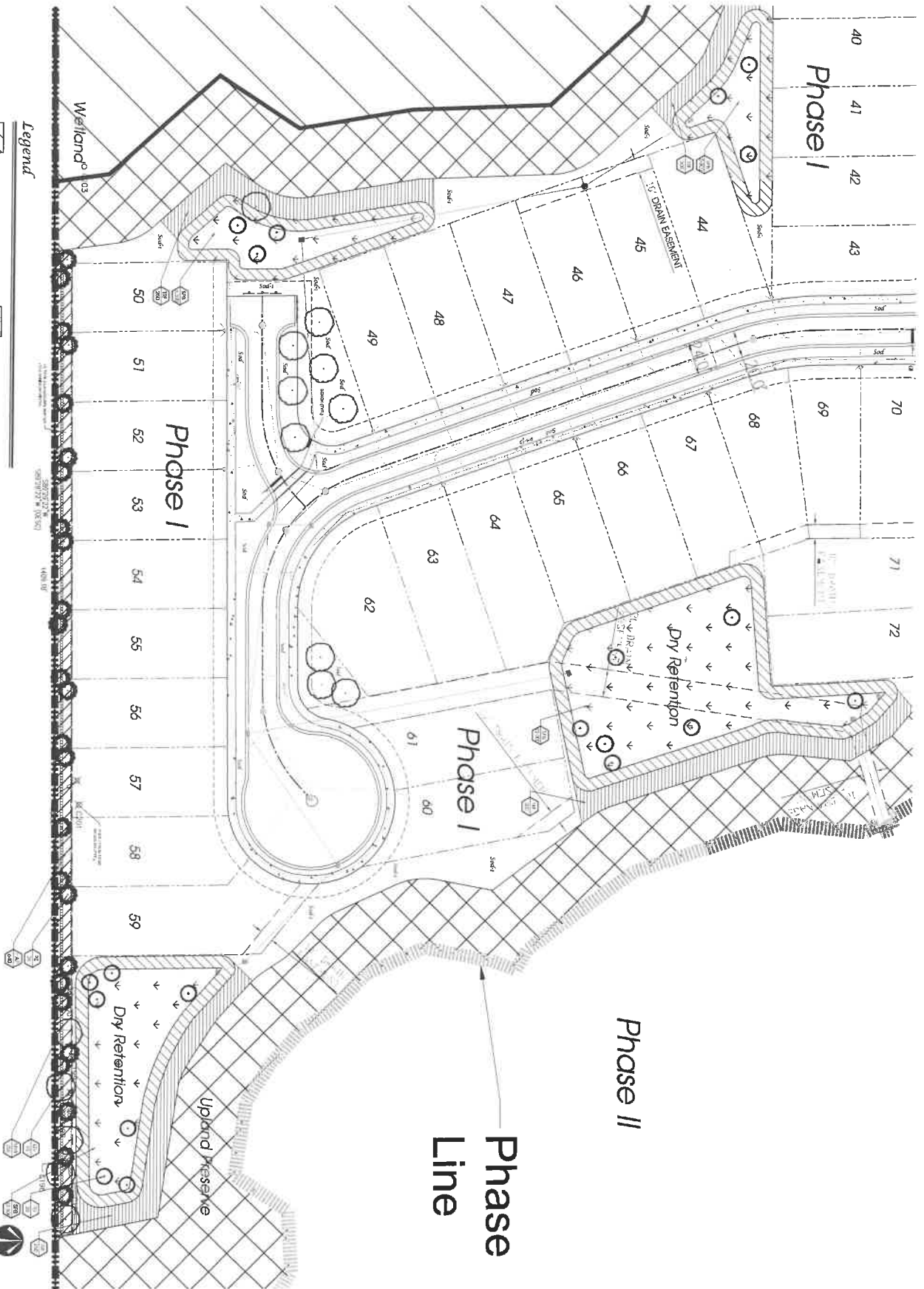
**Conceptual
Design
Group, Inc.**
Landscape Architect - Site Planning
3600 West County Highway, Suite 100
Tampa, FL 33610
771.118.4210
www.conceptualgroup.com

Cove Royale
Martin County, Florida

Job No.	14-020
Client	JMS
Submitted Plans	10-16-2016
5/25/2018 10:30:2018 2-4-2019	
6-7-2019 9-17-2019 11-4-2019	
3-3-2020	
Anticipated Dates	5-25-2018
Submitted Plans	10-16-2018
5/25/2018 10:30:2018 2-4-2019	
6-7-2019 9-17-2019 11-4-2019	
3-3-2020	
Anticipated Dates	5-25-2018
Submitted Plans	10-16-2018
5/25/2018 10:30:2018 2-4-2019	
6-7-2019 9-17-2019 11-4-2019	
3-3-2020	

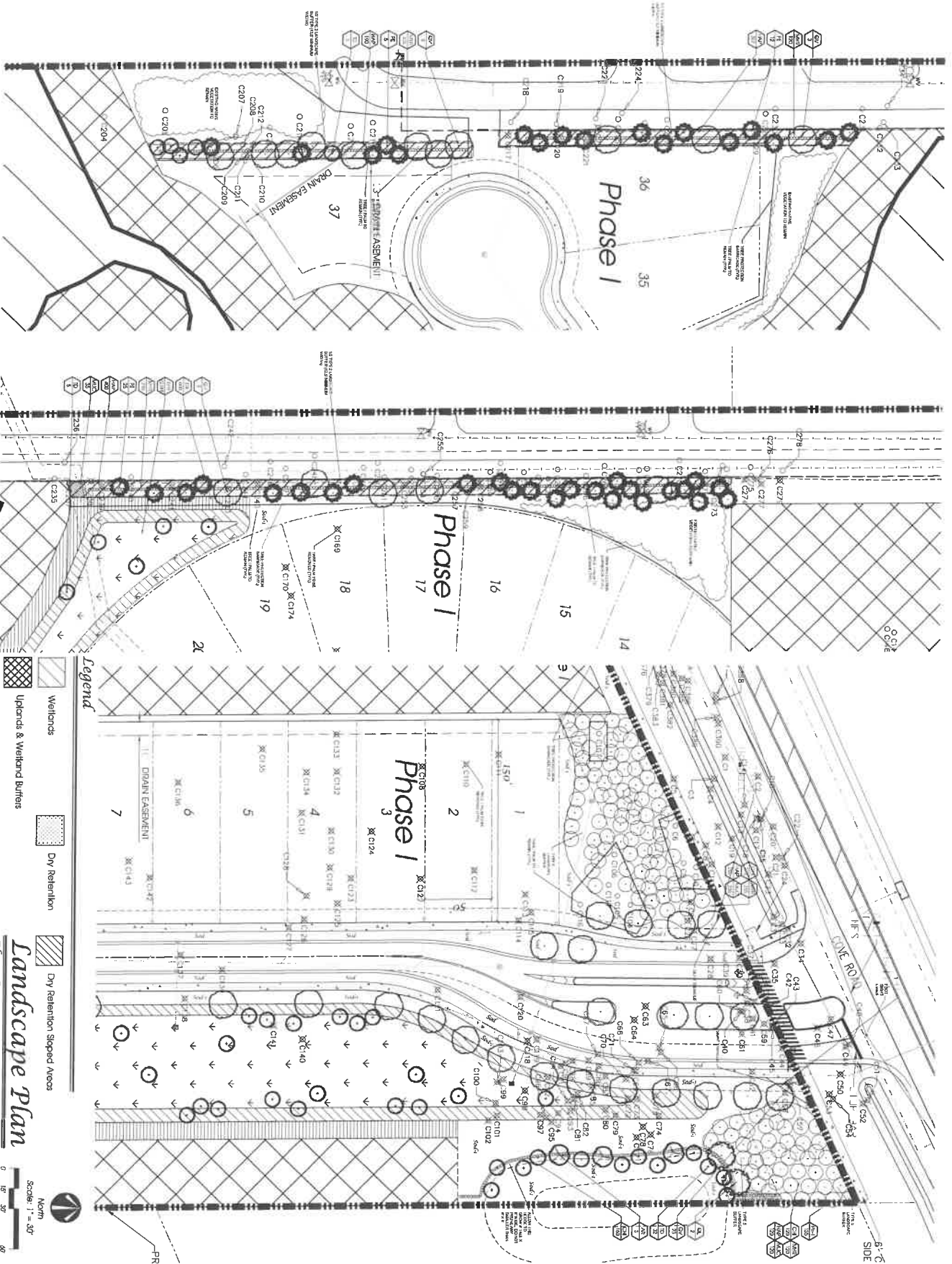
These drawings are the property of the
designer and shall remain the property of the
designer. No part of these drawings shall be
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including photocopying, recording, or by
any information storage and retrieval system,
without the written permission of the
designer.

Sheet
L-2.7
of



Conceptual
Design
Group, Inc.
Landscape Architecture - AIA Registered
1000 East Coast Highway, Suite 100
Fort Lauderdale, FL 33304
(772) 344-3330
info@conceptualdesigngroup.com

Cove Royale
Martin County, Florida



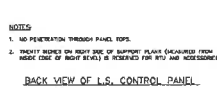
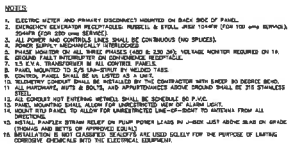
Lot Numbers 3-3-2020

Scale: 1" = 30'



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Client	City of Martin
Submitted Date	10-14-2015
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5-25-2019	10-30-2019
5-25-2020	10-30-2020
5-25-2021	10-30-2021
5-25-2022	10-30-2022
5-25-2023	10-30-2023
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Sheet L-3 of 7



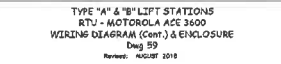
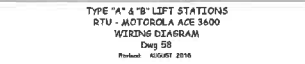
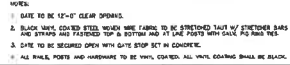
- 3.2.1 The infrastructure shall contain the following as part of the pumping system:

- | | | |
|-----|-------------|-------------------------------|
| 1 | SPURS50 | SPH-1500 Value Pumper |
| 2 | SPH43536000 | SPH-435/300 Value Tower Sinks |
| 3 | 33023000 | SPH-435/300 Value Tower Sinks |
| 4 | 3302372018 | Center Manure |
| 5 | 33023849023 | SPH-435/300 Value Tower Sinks |
| 6 | 40193000 | Water Truck |
| 7 | 38100441128 | Water Truck |
| 8 | 38100441128 | Water Truck |
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| 99 | 38100441128 | Water Truck |
| 100 | 38100441128 | Water Truck |

- 3.2.1.1 A copy of the engine manufacturer's parts and labor warranty
3.2.1.2 A one-year Parts and Labor Warranty issued by the manufacturer on the Deep Pump System. This warranty must cover all pump parts, including the mechanical seal.



1. ALL ABOVE GRADE PIPING SHALL BE BRASS. FITTINGS SHALL BE BRONZE.
2. ALL JOINTS SHALL BE THREADED.
3. FOR LIFT STATION TO BE OWNED BY N.C.E.S. USE RPT BACKFLOW PREVENTER BY FERCO MODEL 8207, JAMES SERIES 4900 SS (SILVER BRULLED), OR APPROVED EQUAL.
4. MIN. 24" CLEARANCE BETWEEN RPT BACKFLOW PREVENTER AND CONTROL PANEL REQUIRED.
5. THREADED AREAS OF COORDINATION STOP AND OTHER FITTINGS SHALL BE SPIRAL WRAPPED WITH TWO STRIPS OF VULCAN MAT.



Dry Retention Areas

[illegible]

Notes

4. Environmental factors include water, air, and soil, and are the permitted and regulated biotic factors that do not be used for the storage of materials or products or by purging of wastes and effluents.

1. *Isolated/acidophilic* and *acidophilic* are not at all the same. *Isolated* means a biotype, one that is not found in nature. *Acidophilic* means an organism that is adapted to live in an acid environment. These two properties are not related. *Isolated* is a relative term. A biotype isolated from a particular environment may be isolated simply because it is the only one that has been isolated from that environment, or it may be isolated for the simple reason that it is the only one that has been isolated from that environment.
2. *Acidophilic* means an organism that is adapted to live in an acid environment. *Isolated* means a biotype that is not found in nature. *Acidophilic* and *isolated* are not the same. *Acidophilic* is a relative term. A biotype isolated from a particular environment may be isolated simply because it is the only one that has been isolated from that environment, or it may be isolated for the simple reason that it is the only one that has been isolated from that environment.
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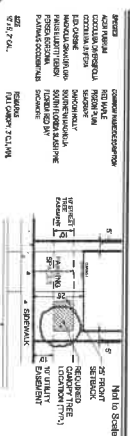
General Notes

[illegible]

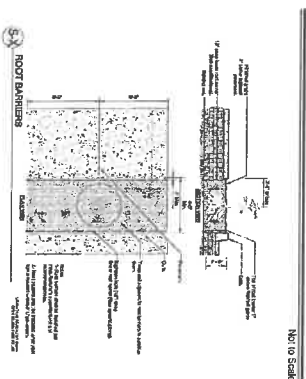
Legend

-

Typical Lot Street Tree



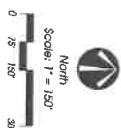
Street Tree Root Barrier Detail



Right of way sod

[illegible]

Landscape Plan

[illegible]

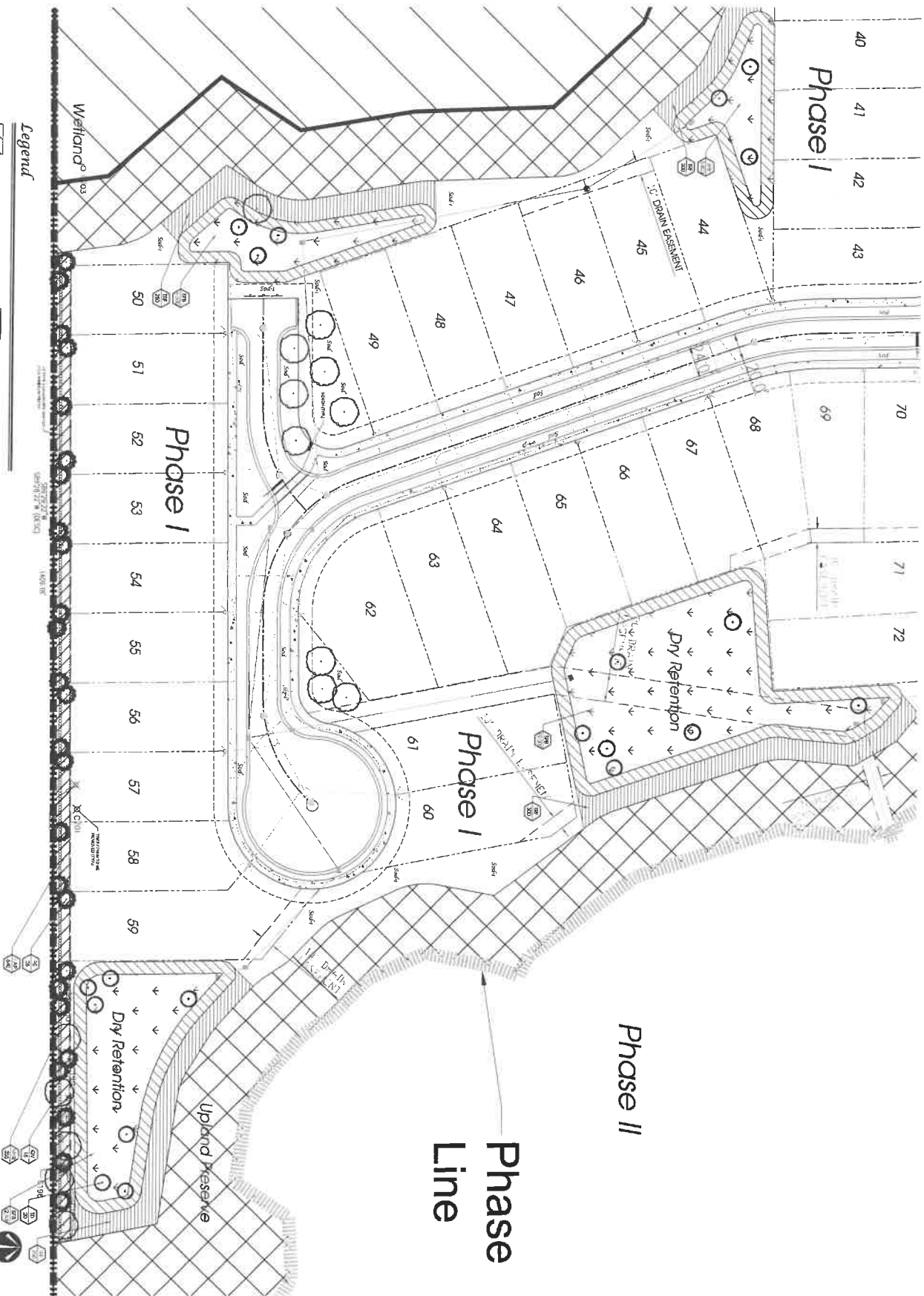
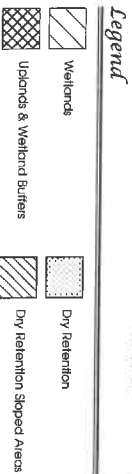
Conceptual
Design
Group, Inc.
Landscape Architect - 50% Planning
300 East Highway 100, Suite 100
Tampa, FL 33602
(813) 241-1100
www.conceptualgroup.com

Cove Royale
Martin County, Florida

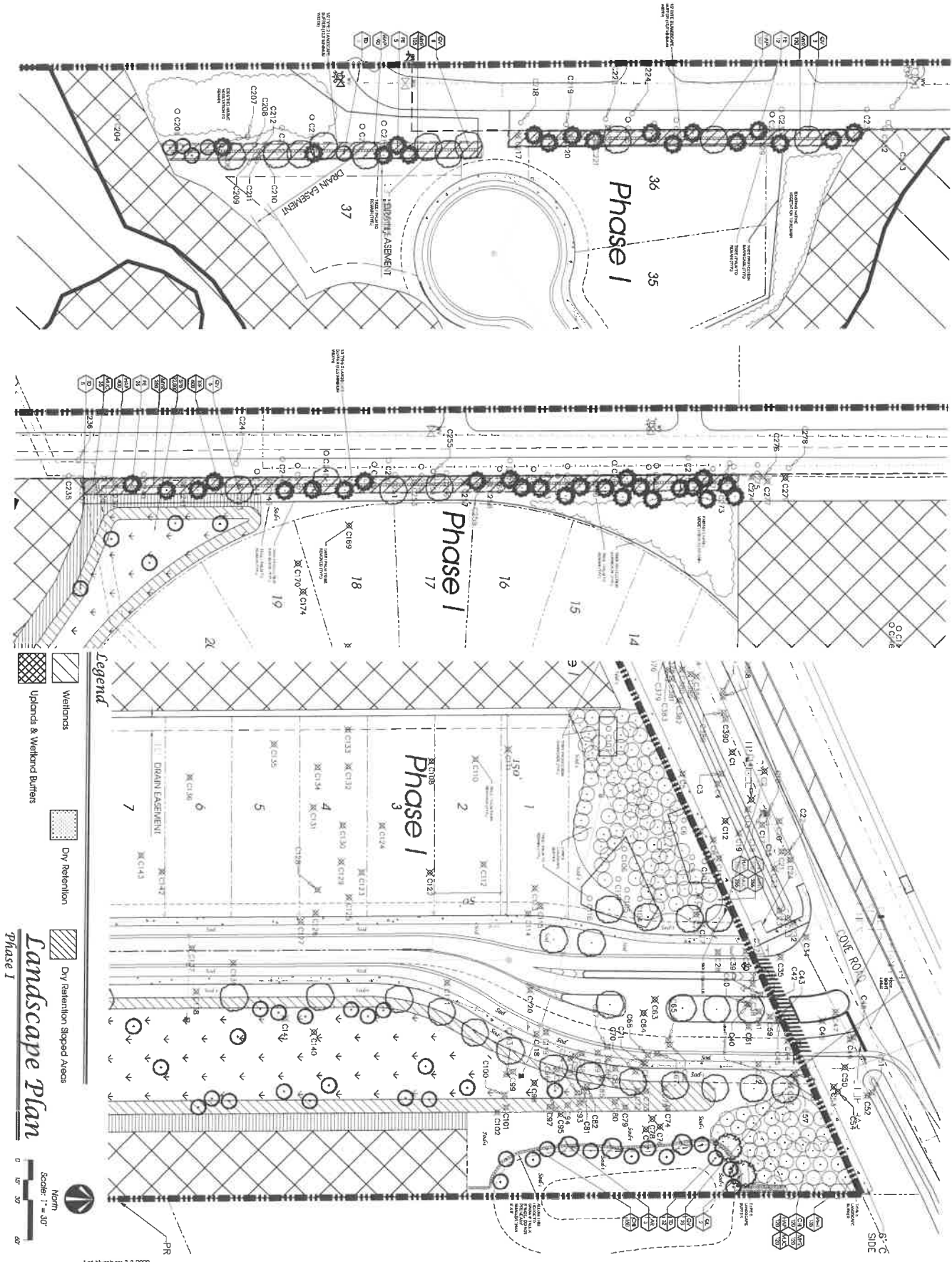
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Job No. 14-0001
Drawing By JMS
Checked By JMS
Design Date 10-16-2016
Issue Date 10-25-2016
Scale 1" = 30'
Project Name Cove Royale
Client Martin County
Project Location 11-14-2019
Project Phase II
Project Status 5-1-2019

Sheet L-2.7 of 7



Landscape Plan
Phase I



Job No. 16-0025

Drawn By [Signature]

Check By [Signature]

Date 10-16-2016

Project Name Cove Royale

Project Address 10-16-2016

Project City Martin County, Florida

Project State FL

Project Zip 32109

Project Phone 352-200-1111

Project Fax 352-200-1111

Project Email [Email]

Project Website [Website]

Project Notes

Job No. 16-0025

Drawn By [Signature]

Check By [Signature]

Date 10-16-2016

Project Name Cove Royale

Project Address 10-16-2016

Project City Martin County, Florida

Project State FL

Project Zip 32109

Project Phone 352-200-1111

Project Fax 352-200-1111

Project Email [Email]

Project Website [Website]

Project Notes

Job No. 16-0025

Drawn By [Signature]

Check By [Signature]

Date 10-16-2016

Project Name Cove Royale

Project Address 10-16-2016

Project City Martin County, Florida

Project State FL

Project Zip 32109

Project Phone 352-200-1111

Project Fax 352-200-1111

Project Email [Email]

Project Website [Website]

Project Notes

Job No. 16-0025

Drawn By [Signature]

Check By [Signature]

Date 10-16-2016

Project Name Cove Royale

Project Address 10-16-2016

Project City Martin County, Florida

Project State FL

Project Zip 32109

Project Phone 352-200-1111

Project Fax 352-200-1111

Project Email [Email]

Project Website [Website]

Project Notes

Job No. 16-0025

Drawn By [Signature]

Check By [Signature]

Date 10-16-2016

Project Name Cove Royale

Project Address 10-16-2016

Project City Martin County, Florida

Project State FL

Project Zip 32109

Project Phone 352-200-1111

Project Fax 352-200-1111

Project Email [Email]

Project Website [Website]

Project Notes

Job No. 16-0025

Drawn By [Signature]

Check By [Signature]

Date 10-16-2016

Project Name Cove Royale

Project Address 10-16-2016

Project City Martin County, Florida

Project State FL

Project Zip 32109

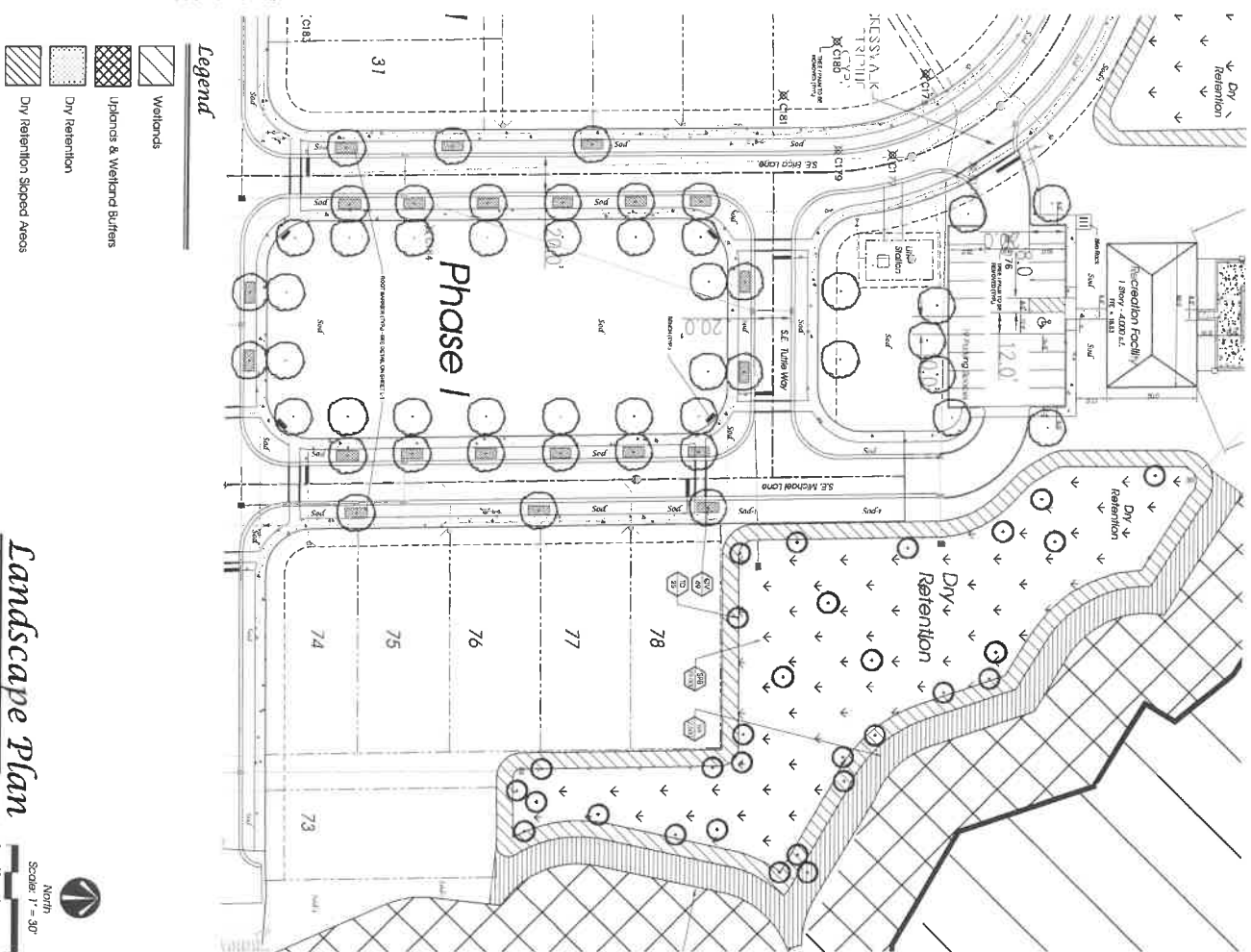
Project Phone 352-200-1111

Project Fax 352-200-1111

Project Email [Email]

Project Website [Website]

Project Notes



Legend

Wetlands

Upland & Wetland Buffers

Dry Retention

Dry Retention Sloped Areas

Landscape Plan

North
Scale: 1" = 30'

Cove Royale
Martin County, Florida

**Conceptual
Design
Group, Inc.**

Landesjugendarchitektur - vier Partner
2900 East Jackson, Birmingham, Suite 1300
Shaw, Morlock & Pugh
(772) 344-2300
EC: 960001508

Lot Numbers 33-2020

Join No.	16-0033
Join By	JMS
Submitted Date	10-16-2018
5-7-2018	10-30-2018
5-7-2019	1-17-2019
	3-3-2020
Location Dates	5-7-2020
Self Comments	10-21-2018
Self Comments	2-4-2019
Added	8-7-2019
Remove Price 1	9-17-2019

These statistics are for the property at the location. They are not for the property at the location and should not be used to compare the property to other properties. The statistics are for the property at the location and should not be used to compare the property to other properties.

Sheet of

[illegible]

Water Efficient Landscaping

[illegible]

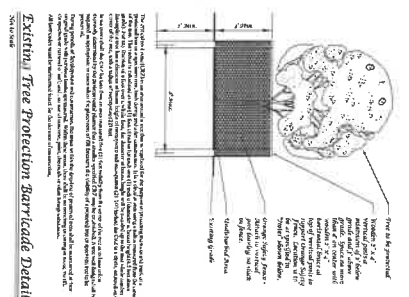
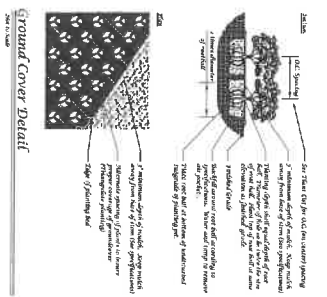
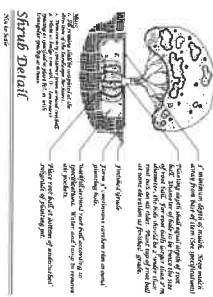
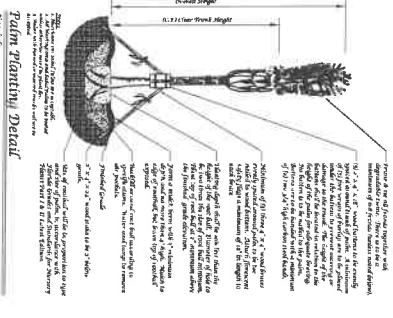
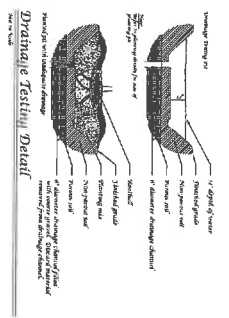
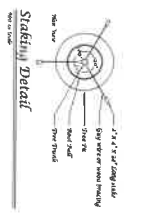
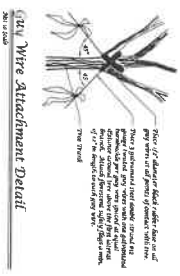
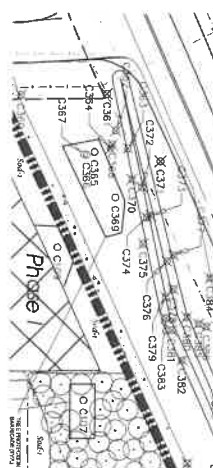
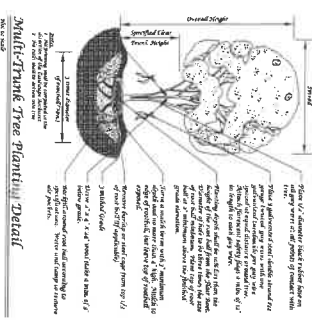
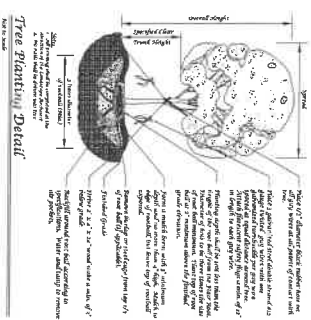
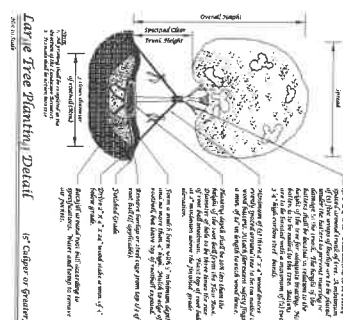
Landscape Data

[illegible]

Plant List

[illegible]

Landscape Details



Landscape Plan

<i>Draw No.</i>	16-0900
<i>Drawn By</i>	AMS
<i>Scheduled Dates</i>	10-6-2016
	2-4-2019
<i>B-4-DRB</i>	9-17-2019 1-4-2019
	3-3-2020
<i>Revision Dates</i>	
<i>Self Comments</i>	5-22-2018
<i>Self Comments</i>	10-6-2018
<i>Self Comments</i>	2-4-2019
<i>Revisions Project</i>	9-17-2019

I hereby certify that the above information is true and correct to the best of my knowledge and belief, and that I am not aware of any other information that would materially affect the accuracy of the above information.

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