WATSON VILLAGE

ST. JOHNS COUNTY, FLORIDA

FOR

DARK HARBOUR DEVELOPERS

LOCATION MAP

INDEX OF DRAWINGS

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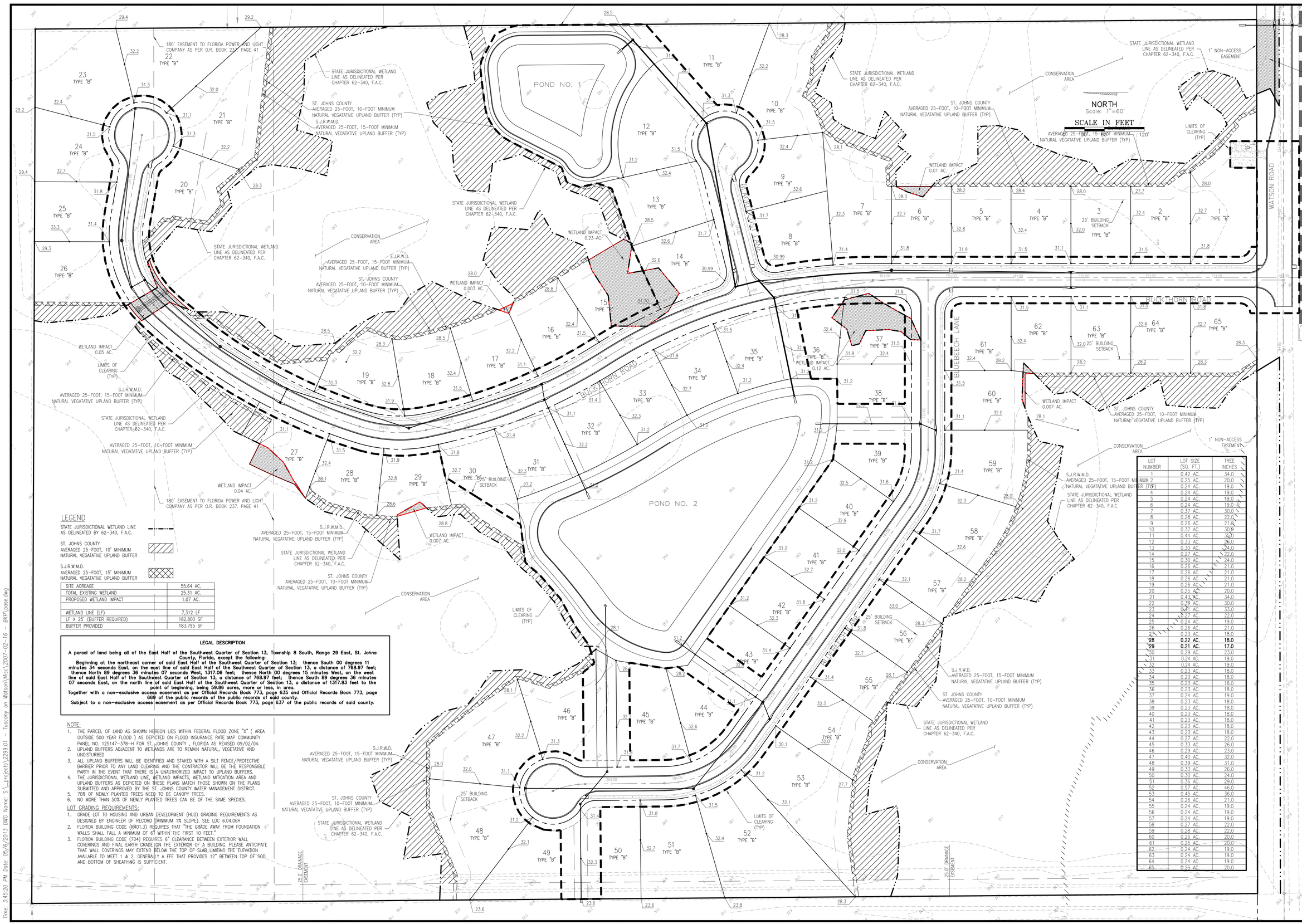
DATE: JUNE, 2006
11/28/2006 - SJRWMD SUBMITTAL

SJM PROJECT NO. 2299

PROJECT FORMERLY KNOWN AS:
TUSCANY ON WATSON ROAD



LEGEND

STATE JURISDICTIONAL WETLAND LINE AS DELINEATED BY 62-340, F.A.C.

ST. JOHNS COUNTY AVERAGED 25-FOOT, 10' MINIMUM NATURAL VEGATATIVE UPLAND BUFFER

S.J.R.W.M.D. AVERAGED 25-FOOT, 15' MINIMUM NATURAL VEGATATIVE UPLAND BUFFER

SITE ACREAGE	55.64 AC.
TOTAL EXISTING WETLAND	25.31 AC.
PROPOSED WETLAND IMPACT	1.07 AC.
WETLAND LINE (LF)	7,312 LF
LF X 25' (BUFFER REQUIRED)	182,800 SF
BUFFER PROVIDED	183,795 SF

LEGAL DESCRIPTION

A parcel of land being all of the East Half of the Southwest Quarter of Section 13, Township 8 South, Range 29 East, St. Johns County, Florida, except the following:

Beginning at the northeast corner of said East Half of the Southwest Quarter of Section 13; thence South 00 degrees 11 minutes 34 seconds East, on the east line of said East Half of the Southwest Quarter of Section 13, a distance of 768.97 feet; thence North 89 degrees 36 minutes 07 seconds West, 1317.06 feet; thence North 00 degrees 15 minutes West, on the west line of said East Half of the Southwest Quarter of Section 13, a distance of 768.97 feet; thence South 89 degrees 36 minutes 07 seconds East, on the north line of said East Half of the Southwest Quarter of Section 13, a distance of 1317.83 feet to the point of beginning, being 59.86 acres, more or less, in area.

Together with a non-exclusive access easement as per Official Records Book 773, page 635 and Official Records Book 773, page 669 of the public records of the public records of said county.

Subject to a non-exclusive access easement as per Official Records Book 773, page 637 of the public records of said county.

NOTE:

1. THE PARCEL OF LAND AS SHOWN HEREON LIES WITHIN FEDERAL FLOOD ZONE "X" (AREA OUTSIDE 500 YEAR FLOOD) AS DEPICTED ON FLOOD INSURANCE RATE MAP COMMUNITY PANEL NO. 125147-378-H FOR ST. JOHNS COUNTY , FLORIDA AS REVISED 09/02/04.
2. UPLAND BUFFERS ADJACENT TO WETLANDS ARE TO REMAIN NATURAL, VEGETATIVE AND UNDISTURBED
3. ALL UPLAND BUFFERS WILL BE IDENTIFIED AND STAKED WITH A SILT FENCE/PROTECTIVE BARRIER PRIOR TO ANY LAND CLEARING AND THE CONTRACTOR WILL BE THE RESPONSIBLE PARTY IN THE EVENT THAT THERE IS A UNAUTHORIZED IMPACT TO UPLAND BUFFERS.
4. THE JURISDICTIONAL WETLAND LINE, WETLAND IMPACTS, WETLAND MITIGATION AREA AND UPLAND BUFFERS AS DEPICTED ON THESE PLANS MATCH THOSE SHOWN ON THE PLANS SUBMITTED AND APPROVED BY THE ST. JOHNS COUNTY WATER MANAGEMENT DISTRICT.
5. 70% OF NEWLY PLANTED TREES NEED TO BE CANOPY TREES.
6. NO MORE THAN 50% OF NEWLY PLANTED TREES CAN BE OF THE SAME SPECIES.

LOT GRADING REQUIREMENTS:

1. GRADE LOT TO HOUSING AND URBAN DEVELOPMENT (HUD) GRADING REQUIREMENTS AS DESIGNED BY ENGINEER OF RECORD (MINIMUM 1% SLOPE). SEE LDC 6.04.06H
2. FLORIDA BUILDING CODE (R401.3) REQUIRES THAT "THE GRADE AWAY FROM FOUNDATION WALLS SHALL FALL A MINIMUM OF 6" WITHIN THE FIRST 10 FEET."
3. FLORIDA BUILDING CODE (704) REQUIRES 6" CLEARANCE BETWEEN EXTERIOR WALL COVERINGS AND FINAL EARTH GRADE ON THE EXTERIOR OF A BUILDING. PLEASE ANTICIPATE THAT WALL COVERINGS MAY EXTEND BELOW THE TOP OF SLAB LIMITING THE ELEVATION AVAILABLE TO MEET 1 & 2. GENERALLY A FFE THAT PROVIDES 12" BETWEEN TOP OF SOD AND BOTTOM OF SHEATHING IS SUFFICIENT.

LOT NUMBER	LOT SIZE (SQ. FT.)	TREE INCHES
1	0.42 AC.	34.0
2	0.25 AC.	20.0
3	0.24 AC.	19.0
4	0.24 AC.	19.0
5	0.24 AC.	19.0
6	0.24 AC.	19.0
7	0.37 AC.	30.0
8	0.28 AC.	22.0
9	0.26 AC.	21.0
10	0.37 AC.	30.0
11	0.44 AC.	35.0
12	0.33 AC.	26.0
13	0.30 AC.	24.0
14	0.27 AC.	22.0
15	0.30 AC.	24.0
16	0.26 AC.	21.0
17	0.26 AC.	21.0
18	0.26 AC.	21.0
19	0.26 AC.	21.0
20	0.25 AC.	20.0
21	0.43 AC.	34.0
22	0.38 AC.	30.0
23	0.41 AC.	33.0
24	0.27 AC.	22.0
25	0.24 AC.	19.0
26	0.26 AC.	21.0
27	0.23 AC.	18.0
28	0.22 AC.	18.0
29	0.21 AC.	17.0
30	0.29 AC.	23.0
31	0.24 AC.	19.0
32	0.24 AC.	19.0
33	0.23 AC.	18.0
34	0.23 AC.	18.0
35	0.23 AC.	18.0
36	0.23 AC.	18.0
37	0.24 AC.	19.0
38	0.23 AC.	18.0
39	0.23 AC.	18.0
40	0.23 AC.	18.0
41	0.23 AC.	18.0
42	0.23 AC.	18.0
43	0.23 AC.	18.0
44	0.27 AC.	22.0
45	0.33 AC.	26.0
46	0.29 AC.	23.0
47	0.40 AC.	32.0
48	0.39 AC.	31.0
49	0.33 AC.	26.0
50	0.30 AC.	24.0
51	0.36 AC.	29.0
52	0.57 AC.	46.0
53	0.45 AC.	36.0
54	0.26 AC.	21.0
55	0.24 AC.	19.0
56	0.24 AC.	19.0
57	0.24 AC.	19.0
58	0.27 AC.	22.0
59	0.28 AC.	22.0
60	0.25 AC.	20.0
61	0.25 AC.	20.0
62	0.24 AC.	19.0
63	0.24 AC.	19.0
64	0.24 AC.	19.0
65	0.25 AC.	20.0

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WATSON VILLAGE
FOR
DARK HARBOUR DEVELOPERS
NEIGHBORHOOD SITE PLAN

REVISIONS

PLOT DATE:	05/6/2013
DRAWN BY:	RNS
DESIGNED BY:	SPJ
CHECKED BY:	SPJ
SCALE:	1" = 60'
JOB NO.:	2299

SHEET NO.
1
OF 31

NOT RELEASED FOR CONSTRUCTION

Time: 3:45:20 PM Date: 05/6/2013 DWG Name: S:_projects\2299.01 - Tuscany on Watson\Misc\2007-02-16 - BKP\base.dwg

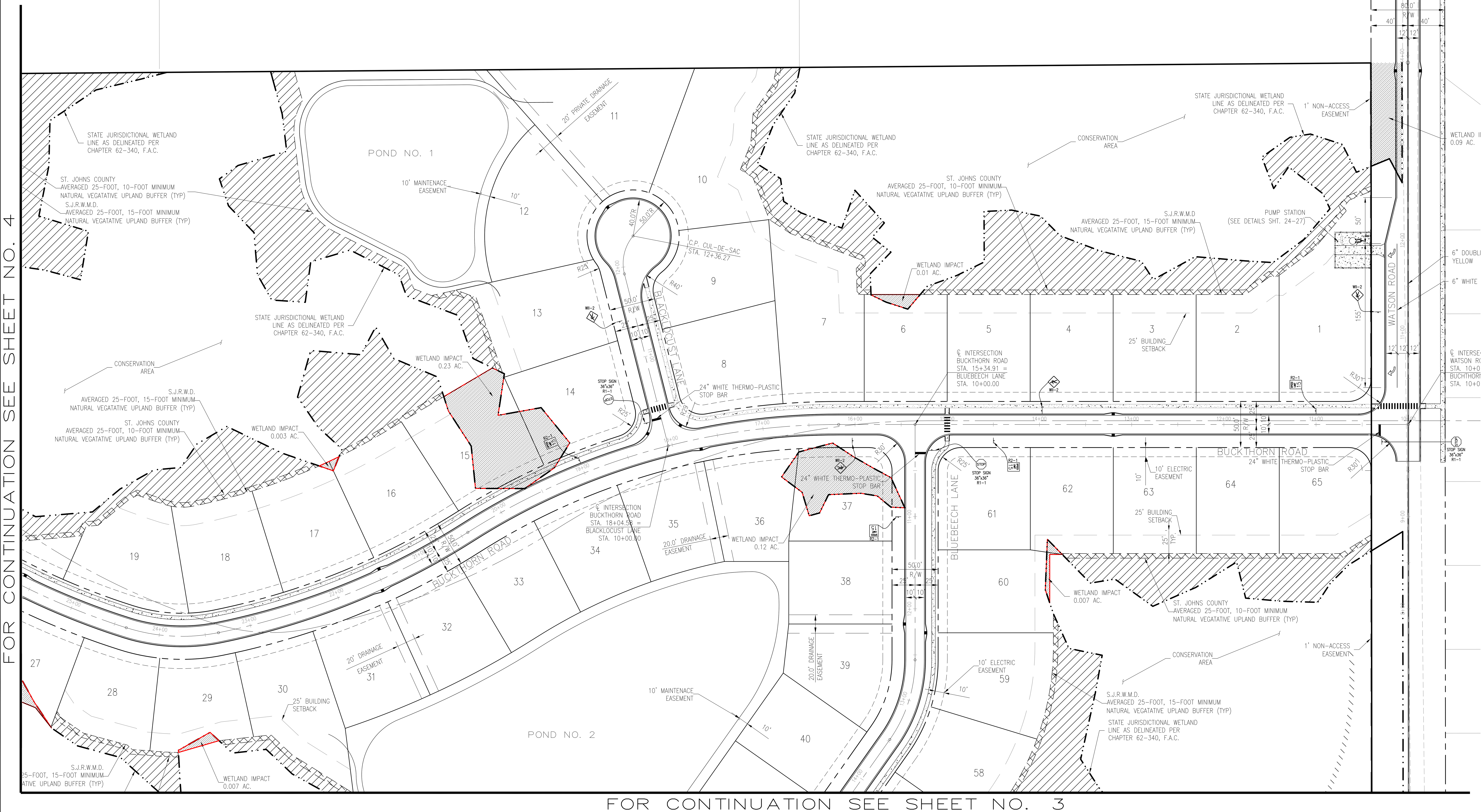
NOTE:
THE PARCEL OF LAND AS SHOWN HEREON LIES WITHIN FEDERAL FLOOD ZONE "X" (AREA OUTSIDE 500 YEAR FLOOD) AS DEPICTED ON FLOOD INSURANCE RATE MAP COMMUNITY PANEL NO. 125147-378-H FOR ST. JOHNS COUNTY , FLORIDA AS REVISED 09/02/04.

NORTH
Scale: 1"=50'

SCALE IN FEET
0' 25 50 100

GENERAL NOTES

1. BOUNDARY AND TOPOGRAPHIC INFORMATION SHOWN ARE FROM A SURVEY PREPARED BY ANCIENT CITY SURVEYING, DATED 12-22-04
2. ALL PAVEMENT DIMENSIONS ARE TO EDGE OF PAVEMENT.
3. ALL PARKING STRIPES SHALL BE 4" WIDE WHITE THERMOPLASTIC. ALL PAVEMENT MARKINGS SHALL BE THERMOPLASTIC, UNLESS OTHERWISE NOTED, AND IN ACCORDANCE WITH F.D.O.T. PAINT SPECIFICATIONS.
4. ALL SIGNS TO BE LOCATED PER FDOT INDEX NO.17302. CROSSWALKS AND PAVEMENT MARKINGS TO BE PER FDOT INDEX NO. 17346 AND 301.
5. ALL DIMENSIONAL TIES TO PROPERTY LINE ARE BASED ON "ACTUAL" FIELD CORNER LOCATIONS.
6. SOUTH PUBLIC SIDEWALK CURB RAMP ALONG SR 207 SHALL BE PER FDOT INDEX NO. 304, DETAIL CR 15, SHEET NO. 3 OF 8.
7. NORTH PUBLIC SIDEWALK CURB RAMP ALONG SR 207 SHALL BE PER FDOT INDEX NO. 304, DETAIL CR 18, SHEET NO. 3 OF 8.
8. ALL NEW CURB WITHIN THE RIGHT OF WAY OF SR 207 SHALL MATCH EXISTING CURB.



FOR CONTINUATION SEE SHEET NO. 4

FOR CONTINUATION SEE SHEET NO. 3

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WATSON VILLAGE
FOR
DARK HARBOUR DEVELOPERS

SITE GEOMETRY PLAN

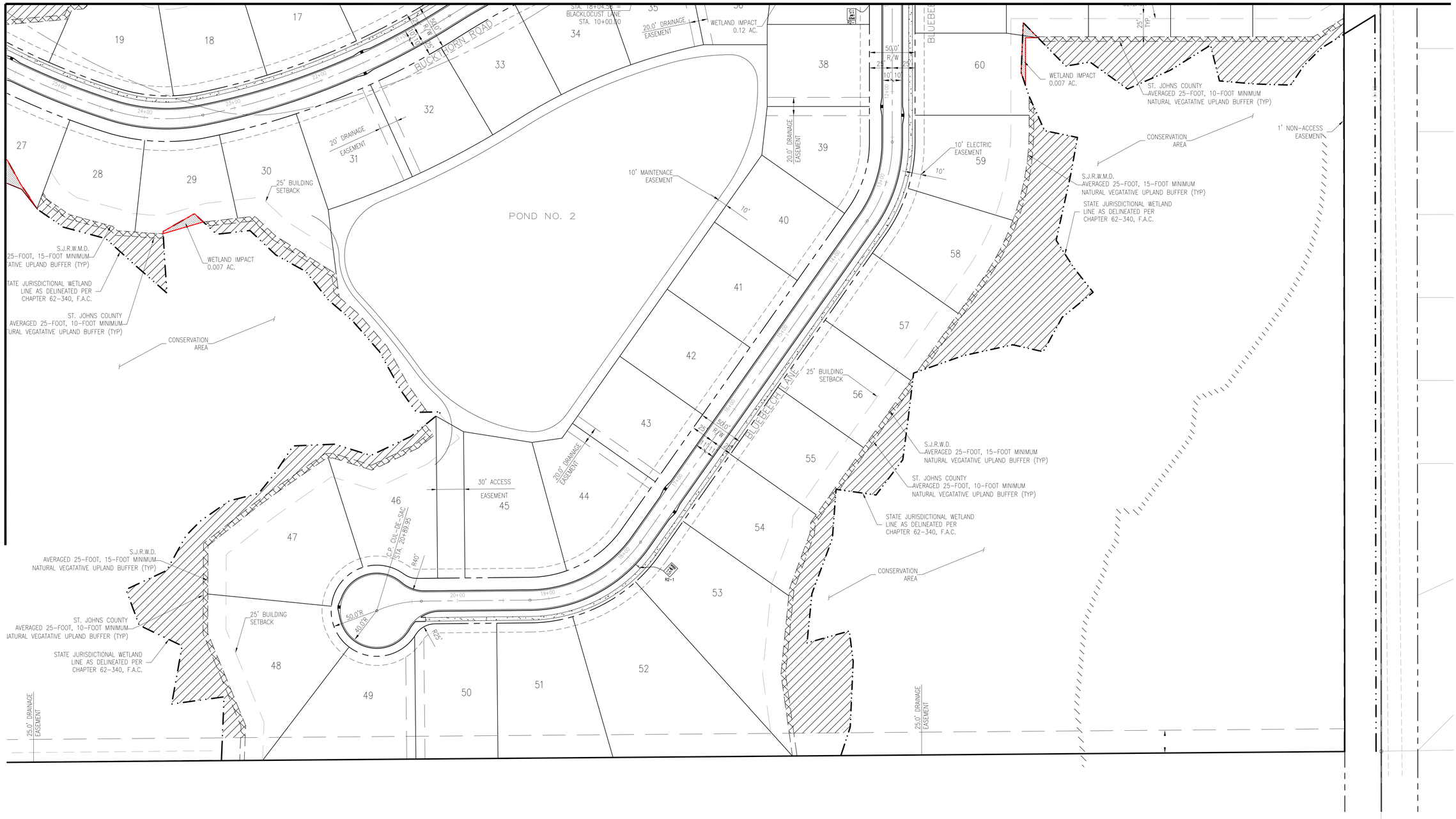
REVISIONS

PLOT DATE:	05/6/2013
DRAWN BY:	RNS
DESIGNED BY:	SPJ
CHECKED BY:	SPJ
SCALE:	1" = 50'
JOB NO.:	2299

SHEET NO.
2
OF 31

FOR CONTINUATION SEE SHEET NO. 2

FOR CONTINUATION SEE SHEET NO. 4



NORTH
Scale: 1"=50'

SCALE IN FEET
0' 25 50 100

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SITE GEOMETRY PLAN

REVISIONS

PLOT DATE:	05/6/2013
DRAWN BY:	RNS
DESIGNED BY:	SPJ
CHECKED BY:	SPJ
SCALE:	1" = 50'
JOB NO.:	2299

SHEET NO.
3
OF 31

NOT RELEASED FOR CONSTRUCTION

Time: 3:48:20 PM Date: 05/6/2013 DWG Name: S:_projects\2299.01 - Tuscany on Watson\Misc\2007-02-16 - BKP\base.dwg

FOR CONTINUATION SEE SHEET NO. 2

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WATSON VILLAGE
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DARK HARBOUR DEVELOPERS

SITE GEOMETRY PLAN

REVISIONS

PLOT DATE:	05/6/2013
DRAWN BY:	RNS
DESIGNED BY:	SPJ
CHECKED BY:	SPJ
SCALE:	1" = 50'
JOB NO.:	2299

SHEET NO.
4
OF 31

NOT RELEASED FOR CONSTRUCTION

NORTH
Scale: 1"=100'

SCALE IN FEET
0' 50' 100' 200'

LIMITS OF CLEARING (TYP.)

WETLAND UPLAND

UPLAND WETLAND

WETLAND IMPACT 0.007 AC.

DA 1 Tc PATH

DA 1
AREA = 31.46 AC.
Tc PATH LENGTH = 544 LF.
Tc PATH UPSTREAM EL. = 29.5
Tc PATH DOWNSTREAM EL. = 27.9

LEGEND

- WETLAND LINE
- DRAINAGE BASIN LIMITS
- TIME OF CONCENTRATION (Tc) PATH

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WATSON VILLAGE
FOR
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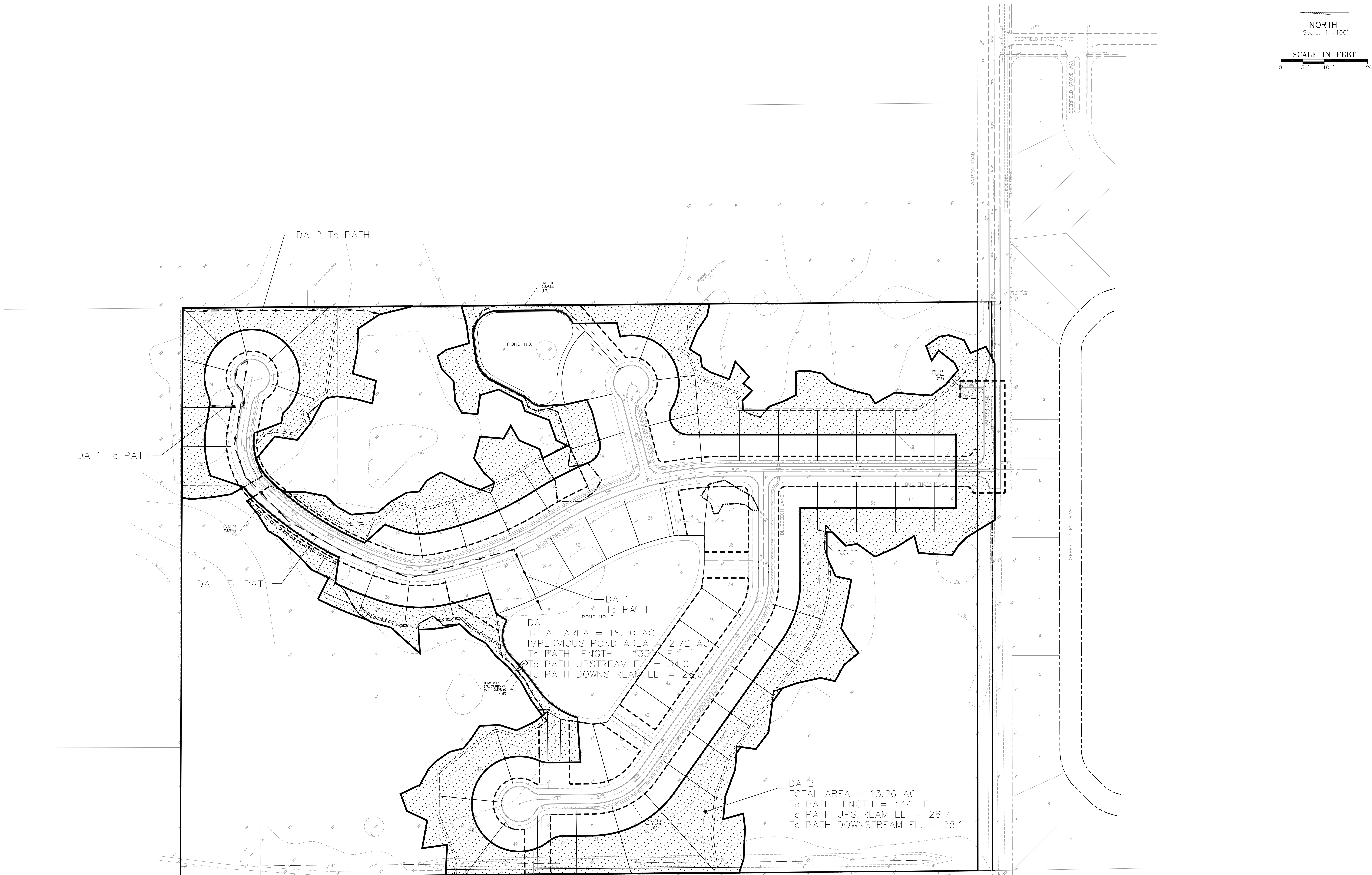
PRE DEVELOPMENT DRAINAGE PLAN

REVISIONS

PLOT DATE:	05/6/2013
DRAWN BY:	RNS
DESIGNED BY:	SPJ
CHECKED BY:	SPJ
SCALE:	1" = 100'
JOB NO.:	2299

SHEET NO.
5
OF 31

NOT RELEASED FOR CONSTRUCTION



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WATSON VILLAGE
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DARK HARBOUR DEVELOPERS

POST DEVELOPMENT DRAINAGE PLAN

REVISIONS

PLOT DATE:	05/6/2013
DRAWN BY:	RNS
DESIGNED BY:	SPJ
CHECKED BY:	SPJ
SCALE:	1" = 100'
JOB NO.:	2299

SHEET NO.
6
OF 31

Time: 3:51:57 PM Date: 05/6/2013 DWG Name: S:_projects\2299.01 - Tuscany on Watson\Misc\2007-02-16 - BKP\base.dwg

DRAINAGE STRUCTURE SCHEDULE

STRUCTURE NUMBER	STRUCTURE TYPE	DRAINAGE AREA (Ac.)	GRATE/TOP ELEVATION SLOT ELEVATION	INVERT ELEVATION AND DIRECTION
S-1	36" CURB INLET	0.71	30.50	26.60
S-2	J-1 MANHOLE	N.A.	30.68	26.25
S-3	36" CURB INLET	0.26	30.20	26.00NW, 25.50SW
S-4	36" CURB INLET	0.47	30.20	26.10
S-5	J-1 MANHOLE	N.A.	31.30	25.30
S-6	36" CURB INLET	0.38	30.20	25.15NE&NW, 24.65SW
S-7	36" CURB INLET	0.53	30.20	25.20
S-8	J-1 MANHOLE	N.A.	31.20	24.45
S-9	36" CURB INLET	0.73	30.20	24.25
S-10	36" CURB INLET	0.79	30.20	24.20E, 23.70W
S-11	30" M.E.S.	N.A.	N.A.	23.60
S-12	24" M.E.S.	N.A.	N.A.	26.45
S-13	J-1 MANHOLE	N.A.	30.00	26.40
S-14	36" CURB INLET	0.76	30.54	26.15
S-15	36" CURB INLET	0.49	30.15	25.80
S-16	36" CURB INLET	0.79	30.20	26.70
S-17	36" CURB INLET	0.87	30.20	26.65W, 26.15N
S-18	J-1 MANHOLE	N.A.	31.55	25.80
S-19	36" CURB INLET	0.72	30.15	25.55S, 25.05SW, 25.7N
S-20	36" CURB INLET	0.71	30.20	25.00
S-21	30" M.E.S.	N.A.	N.A.	24.70
S-22	36" CURB INLET	0.89	30.20	25.90
S-23	36" CURB INLET	0.79	30.20	25.80S, 25.55N
S-24	18" M.E.S.	N.A.	N.A.	24.75
S-25	DBL CURB INLET	0.94	30.47	25.75
S-26	J-1 MANHOLE	N.A.	31.25	25.25
S-27	DBL CURB INLET	1.06	30.20	25.00
S-28	36" CURB INLET	0.90	30.20	24.95NW, 24.85SW, 24.45NE
S-29	24" M.E.S.	N.A.	N.A.	24.00
S-30	OUTFALL STRUCTURE / IN BANK WEIR - SEE DETAIL			--
S-31	DBL 19"x30" M.E.S.	N.A.	N.A.	28.15
S-32	DBL 19"x30" M.E.S.	N.A.	N.A.	28.00
S-33	18" M.E.S.	N.A.	N.A.	27.00
S-34	36" CURB INLET	-	31.34	26.89
S-35	36" CURB INLET	-	31.34	26.83
S-36	TYPE "H" INLET	-	30.50/ 28.90N	26.80N, 25.02E&W
S-37	48"x76" M.E.S.	N.A.	N.A.	24.89
S-38	MOD. "C" INLET		ORFICE STRUCTURE - SEE DETAIL	--
S-39	J-1 MANHOLE	N.A.	31.73	23.90
S-40	J-1 MANHOLE	N.A.	31.31	23.80
S-41	15" M.E.S.	N.A.	N.A.	23.60

① S-31 DOUBLE MITERED END SECTION PER FDOT INDEX 272, 2:1 SIDE SLOPE

DRAINAGE PIPE SCHEDULE

PIPE NUMBER	SIZE/ TYPE	PIPE LENGTH
P-1	18" RCP	196 LF
P-2	18" RCP	72 LF
P-3	18" RCP	23 LF
P-4	24" RCP	151 LF
P-5	24" RCP	119 LF
P-6	15" RCP	23 LF
P-7	30" RCP	193 LF
P-8	30" RCP	211 LF
P-9	30" RCP	24 LF
P-10	36" RCP	161 LF
P-12	24" RCP	31 LF
P-13	24" RCP	168 LF
P-14	24" RCP	250 LF
P-15	24" RCP	36 LF
P-16	18" RCP	23 LF
P-17	24" RCP	270 LF
P-18	24" RCP	200 LF
P-19	30" RCP	34 LF
P-20	30" RCP	162 LF
P-22	15" RCP	25 LF
P-23	18" RCP	158 LF
P-25	18" RCP	252 LF
P-26	18" RCP	167 LF
P-27	15" RCP	27 LF
P-28	24" RCP	151 LF
P-31	DBL 19"x30" ERCP	54 LF
P-33	48"x76" ERCP	243 LF
P-34	18" RCP	43 LF
P-35	18" RCP	27 LF
P-36	18" RCP	13 LF
P-37	48"x76" ERCP	475 LF
P-38	15" HDPE	250 LF
P-39	12"x18" ERCP	63 LF
P-40	15" HDPE	148 LF

NORTH
Scale: 1"=50'

SCALE IN FEET
0' 25 50 100

IMPERMEABLE BARRIER WALL PER SJRWMD REQUIREMENTS
30 MIL THICKNESS (MIN.)
TOP OF WALL EL. 28.00
BOT. OF WALL EL. 14.00

POND NO. 1
TOP OF BANK EL. 30.0 MIN.
NWL 26.75
BOTTOM EL. 19.0

POND NO. 2
TOP OF BANK EL. 30.0 MIN.
NWL EL. 26.75
BOTTOM EL. 19.0

STATE JURISDICTIONAL WETLAND LINE AS DELINEATED PER CHAPTER 62-340, F.A.C.

ST. JOHNS COUNTY AVERAGED 25-FOOT, 10-FOOT MINIMUM NATURAL VEGATATIVE UPLAND BUFFER (TYP)

S.J.R.W.M.D. AVERAGED 25-FOOT, 15-FOOT MINIMUM NATURAL VEGATATIVE UPLAND BUFFER (TYP)

CONSERVATION AREA

1' NON-ACCESS EASEMENT

WETLAND IMPACT 0.01 AC.

WETLAND IMPACT 0.23 AC.

WETLAND IMPACT 0.003 AC.

WETLAND IMPACT 0.12 AC.

WETLAND IMPACT 0.007 AC.

WETLAND II 0.09 AC.

SILT FENCE (1' ABOVE WETLAND LINE)

20' DRAINAGE EASEMENT

11' MAINTENANCE EASEMENT

25' BUILDING SETBACK

REMOVE EXISTING MES ELEV. 25.15

REMOVE EXIST. 18" ADS

MATCH EXIST. PVMT. 31.56±

EXIST. 18" ADS INV. EL. 27.61

LP 31.80

HP 31.36

HP 31.42

HP 31.35

HP 31.57

HP 31.52

LP 30.60

30.71

31.24

DARK DUST LANE

BUCKTHORN ROAD

BLUEBEECH LANE

WATSON ROAD

FOR CONTINUATION SEE SHEET NO. 9

FOR CONTINUATION SEE SHEET NO. 8

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PAVING AND DRAINAGE PLAN

STEPHEN P. JOCA
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REVISIONS

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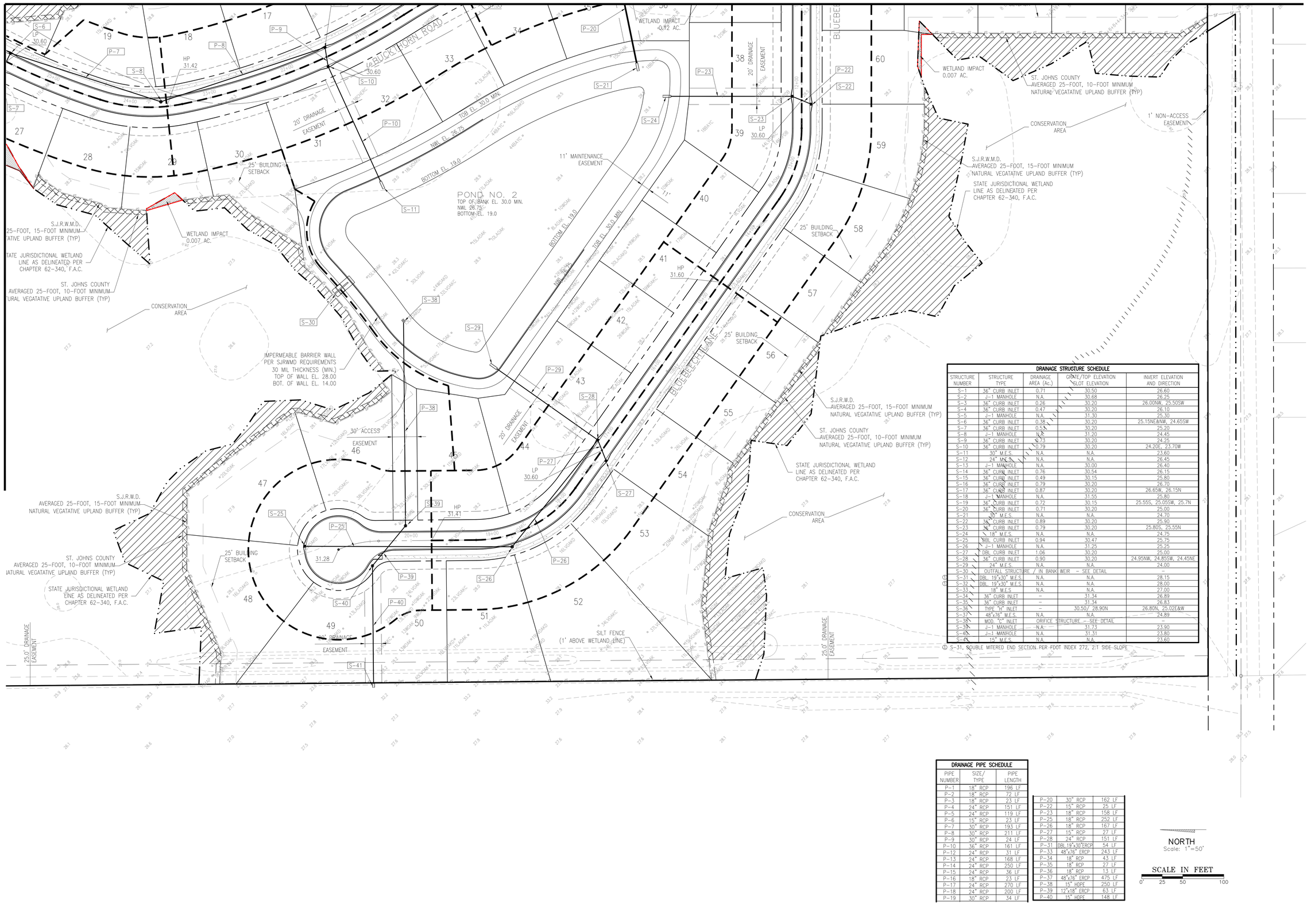
DRAWN BY:	RNS
DESIGNED BY:	SPJ
CHECKED BY:	SPJ
SCALE:	1" = 50'
JOB NO.:	2299

SHEET NO.
7
OF 31

NOT RELEASED FOR CONSTRUCTION

FOR CONTINUATION SEE SHEET NO. 7

FOR CONTINUATION SEE SHEET NO. 9



DRAINAGE STRUCTURE SCHEDULE				
STRUCTURE NUMBER	STRUCTURE TYPE	DRAINAGE AREA (Ac.)	GRATE/TOP ELEVATION SLOT ELEVATION	INVERT ELEVATION AND DIRECTION
S-1	36" CURB INLET	0.71	30.50	26.60
S-2	J-1 MANHOLE	N.A.	30.68	26.25
S-3	36" CURB INLET	0.26	30.20	26.00NW, 25.50SW
S-4	36" CURB INLET	0.47	30.20	26.10
S-5	J-1 MANHOLE	N.A.	31.30	25.30
S-6	36" CURB INLET	0.38	30.20	25.15NE&NW, 24.65SW
S-7	36" CURB INLET	0.53	30.20	25.20
S-8	J-1 MANHOLE	N.A.	31.20	24.45
S-9	36" CURB INLET	0.73	30.20	24.25
S-10	36" CURB INLET	0.79	30.20	24.20E, 23.70W
S-11	30" M.E.S.	N.A.	N.A.	23.60
S-12	24" M.E.S.	N.A.	N.A.	26.45
S-13	J-1 MANHOLE	N.A.	30.00	26.40
S-14	36" CURB INLET	0.76	30.54	26.15
S-15	36" CURB INLET	0.49	30.15	25.80
S-16	36" CURB INLET	0.79	30.20	26.70
S-17	36" CURB INLET	0.87	30.20	26.65W, 26.15N
S-18	J-1 MANHOLE	N.A.	31.55	25.80
S-19	36" CURB INLET	0.72	30.15	25.55S, 25.05SW, 25.7N
S-20	36" CURB INLET	0.71	30.20	25.00
S-21	30" M.E.S.	N.A.	N.A.	24.70
S-22	36" CURB INLET	0.89	30.20	25.90
S-23	36" CURB INLET	0.79	30.20	25.80S, 25.55N
S-24	18" M.E.S.	N.A.	N.A.	24.75
S-25	DBL CURB INLET	0.94	30.47	25.75
S-26	J-1 MANHOLE	N.A.	31.25	25.25
S-27	DBL CURB INLET	1.06	30.20	25.00
S-28	36" CURB INLET	0.90	30.20	24.95NW, 24.85SW, 24.45NE
S-29	24" M.E.S.	N.A.	N.A.	24.00
S-30	OUTFALL STRUCTURE	/ IN BANK WEIR	– SEE DETAIL	–
① S-31	DBL. 19"x30" M.E.S.	N.A.	N.A.	28.15
① S-32	DBL. 19"x30" M.E.S.	N.A.	N.A.	28.00
S-33	18" M.E.S.	N.A.	N.A.	27.00
S-34	36" CURB INLET	–	31.34	26.89
S-35	36" CURB INLET	–	31.34	26.83
S-36	TYPE "H" INLET	–	30.50/ 28.90N	26.80N, 25.02E&W
S-37	48"x76" M.E.S.	N.A.	N.A.	24.89
S-38	MOD. "C" INLET	ORIFICE STRUCTURE	– SEE DETAIL	–
S-39	J-1 MANHOLE	N.A.	31.73	23.90
S-40	J-1 MANHOLE	N.A.	31.31	23.80
S-41	15" M.E.S.	N.A.	N.A.	23.60

① S-31, DOUBLE MITERED END SECTION PER FDOT INDEX 272, 2:1 SIDE SLOPE

DRAINAGE PIPE SCHEDULE		
PIPE NUMBER	SIZE/ TYPE	PIPE LENGTH
P-1	18" RCP	196 LF
P-2	18" RCP	72 LF
P-3	18" RCP	23 LF
P-4	24" RCP	151 LF
P-5	24" RCP	119 LF
P-6	15" RCP	23 LF
P-7	30" RCP	193 LF
P-8	30" RCP	211 LF
P-9	30" RCP	24 LF
P-10	36" RCP	161 LF
P-12	24" RCP	31 LF
P-13	24" RCP	168 LF
P-14	24" RCP	250 LF
P-15	24" RCP	36 LF
P-16	18" RCP	23 LF
P-17	24" RCP	270 LF
P-18	24" RCP	200 LF
P-19	30" RCP	34 LF
P-20	30" RCP	162 LF
P-22	15" RCP	25 LF
P-23	18" RCP	158 LF
P-25	18" RCP	252 LF
P-26	18" RCP	167 LF
P-27	15" RCP	27 LF
P-28	24" RCP	151 LF
P-31	DBL 19"x30"ERCP	54 LF
P-33	48"x76" ERCP	243 LF
P-34	18" RCP	43 LF
P-35	18" RCP	27 LF
P-36	18" RCP	13 LF
P-37	48"x76" ERCP	475 LF
P-38	15" HDPE	250 LF
P-39	12"x18" ERCP	63 LF
P-40	15" HDPE	148 LF

NORTH
Scale: 1"=50'

SCALE IN FEET
0 25 50 100

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STEPHEN P. JOCA
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WATSON VILLAGE
FOR
DARK HARBOUR DEVELOPERS

PAVING AND DRAINAGE PLAN

REVISIONS

PLOT DATE: 05/6/2013
DRAWN BY: RNS
DESIGNED BY: SPJ
CHECKED BY: SPJ
SCALE: 1" = 50'
JOB NO.: 2299

SHEET NO.
8
OF 31

NOT RELEASED FOR CONSTRUCTION

DRAINAGE STRUCTURE SCHEDULE

STRUCTURE NUMBER	STRUCTURE TYPE	DRAINAGE AREA (Ac.)	GRATE/TOP ELEVATION SLOT ELEVATION	INVERT ELEVATION AND DIRECTION
S-1	36" CURB INLET	0.71	30.50	26.60
S-2	J-1 MANHOLE	N.A.	30.68	26.25
S-3	36" CURB INLET	0.26	30.20	26.00NW, 25.50SW
S-4	36" CURB INLET	0.47	30.20	26.10
S-5	J-1 MANHOLE	N.A.	31.30	25.30
S-6	36" CURB INLET	0.38	30.20	25.15NE&NW, 24.65SW
S-7	36" CURB INLET	0.53	30.20	25.20
S-8	J-1 MANHOLE	N.A.	31.20	24.45
S-9	36" CURB INLET	0.73	30.20	24.25
S-10	36" CURB INLET	0.79	30.20	24.20E, 23.70W
S-11	30" M.E.S.	N.A.	N.A.	23.60
S-12	24" M.E.S.	N.A.	N.A.	26.45
S-13	J-1 MANHOLE	N.A.	30.00	26.40
S-14	36" CURB INLET	0.76	30.54	26.15
S-15	36" CURB INLET	0.49	30.15	25.80
S-16	36" CURB INLET	0.79	30.20	26.70
S-17	36" CURB INLET	0.87	30.20	26.65W, 26.15N
S-18	J-1 MANHOLE	N.A.	31.55	25.80
S-19	36" CURB INLET	0.72	30.15	25.55S, 25.05W, 25.7N
S-20	36" CURB INLET	0.71	30.20	25.00
S-21	30" M.E.S.	N.A.	N.A.	24.70
S-22	36" CURB INLET	0.89	30.20	25.90
S-23	36" CURB INLET	0.79	30.20	25.80S, 25.55N
S-24	18" M.E.S.	N.A.	N.A.	24.75
S-25	DBL CURB INLET	0.94	30.47	25.75
S-26	J-1 MANHOLE	N.A.	31.25	25.25
S-27	DBL CURB INLET	1.06	30.20	25.00
S-28	36" CURB INLET	0.90	30.20	24.95NW, 24.85SW, 24.45NE
S-29	24" M.E.S.	N.A.	N.A.	24.00
S-30	OUTFALL STRUCTURE / IN BANK WEIR - SEE DETAIL			-
① S-31	DBL. 19"x30" M.E.S.	N.A.	N.A.	28.15
① S-32	DBL. 19"x30" M.E.S.	N.A.	N.A.	28.00
S-33	18" M.E.S.	N.A.	N.A.	27.00
S-34	36" CURB INLET	-	31.34	26.89
S-35	36" CURB INLET	-	31.34	26.83
S-36	TYPE "H" INLET	-	30.50/ 28.90N	26.80N, 25.02E&W
S-37	48"x76" M.E.S.	N.A.	N.A.	24.89
S-38	MOD. "C" INLET	ORIFICE STRUCTURE - SEE DETAIL		-
S-39	J-1 MANHOLE	N.A.	31.73	23.90
S-40	J-1 MANHOLE	N.A.	31.31	23.80
S-41	15" M.E.S.	N.A.	N.A.	23.60

① S-31, DOUBLE MITERED END SECTION PER FDOT INDEX 272, 2:1 SIDE SLOPE

DRAINAGE PIPE SCHEDULE

PIPE NUMBER	SIZE/ TYPE	PIPE LENGTH
P-1	18" RCP	196 LF
P-2	18" RCP	72 LF
P-3	18" RCP	23 LF
P-4	24" RCP	151 LF
P-5	24" RCP	119 LF
P-6	15" RCP	23 LF
P-7	30" RCP	193 LF
P-8	30" RCP	211 LF
P-9	30" RCP	24 LF
P-10	36" RCP	161 LF
P-12	24" RCP	31 LF
P-13	24" RCP	168 LF
P-14	24" RCP	250 LF
P-15	24" RCP	36 LF
P-16	18" RCP	23 LF
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P-34	18" RCP	43 LF
P-35	18" RCP	27 LF
P-36	18" RCP	13 LF
P-37	48"x76" ERCP	475 LF
P-38	15" HDPE	250 LF
P-39	12"x18" ERCP	63 LF
P-40	15" HDPE	148 LF

FOR CONTINUATION SEE SHEET NO. 7

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STEPHEN P. JOCA
P.E. NO. 38678

WATSON VILLAGE
FOR
DARK HARBOUR DEVELOPERS

PAVING AND DRAINAGE PLAN

REVISIONS

PLOT DATE: 05/6/2013
DRAWN BY: RNS
DESIGNED BY: SPJ
CHECKED BY: SPJ
SCALE: 1" = 50'
JOB NO.: 2299

SHEET NO.
9
OF 31

NOT RELEASED FOR CONSTRUCTION

LOT GRADING SCHEDULE					
LOT NUMBER	GRADING TYPE	F.F. ELEV.	LOT NUMBER	GRADING TYPE	F.F. ELEV.
1	B	34.17	34	B	34.17
2	B	34.17	35	B	33.87
3	B	33.88	36	B	33.87
4	B	33.88	37	B	33.87
5	B	34.27	38	B	33.87
6	B	34.27	39	B	33.97
7	B	34.17	40	B	34.37
8	B	34.07	41	B	34.37
9	B	34.07	42	B	34.17
10	B	33.87	43	B	33.77
11	B	33.71	44	B	34.07
12	B	33.87	45	B	34.08
13	B	34.07	46	B	34.08
14	B	34.07	47	B	33.67
15	B	34.07	48	B	33.57
16	B	33.87	49	B	33.77
17	B	33.87	50	B	34.17
18	B	34.27	51	B	34.17
19	B	34.27	52	B	33.87
20	B	33.67	53	B	33.57
21	B	33.67	54	B	33.77
22	B	33.67	55	B	34.17
23	B	33.87	56	B	34.47
24	B	34.17	57	B	34.47
25	B	34.17	58	B	34.07
26	B	34.17	59	B	33.77
27	B	33.87	60	B	33.87
28	B	34.27	61	B	33.87
29	B	34.27	62	B	33.86
30	B	34.27	63	B	33.88
31	B	33.77	64	B	34.18
32	B	33.77	65	B	34.17
33	B	34.17			

NORTH
Scale: 1"=50'

SCALE IN FEET
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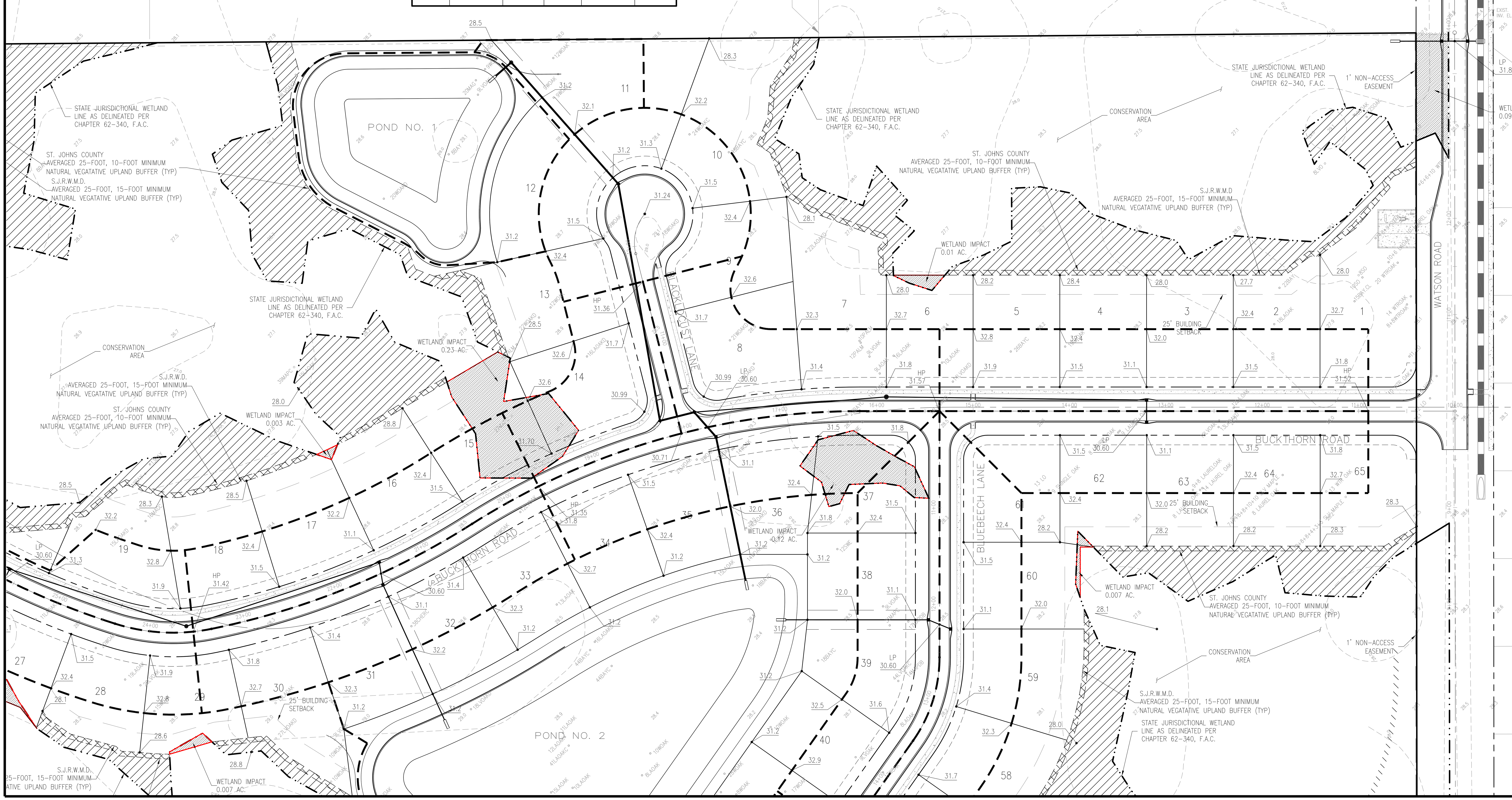

FOR CONTINUATION SEE SHEET NO. 12

FOR CONTINUATION SEE SHEET NO. 11

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STEPHEN P. JOCA
P.E. NO. 38678

WATSON VILLAGE
FOR
DARK HARBOUR DEVELOPERS

LOT AND BLOCK GRADING PLAN

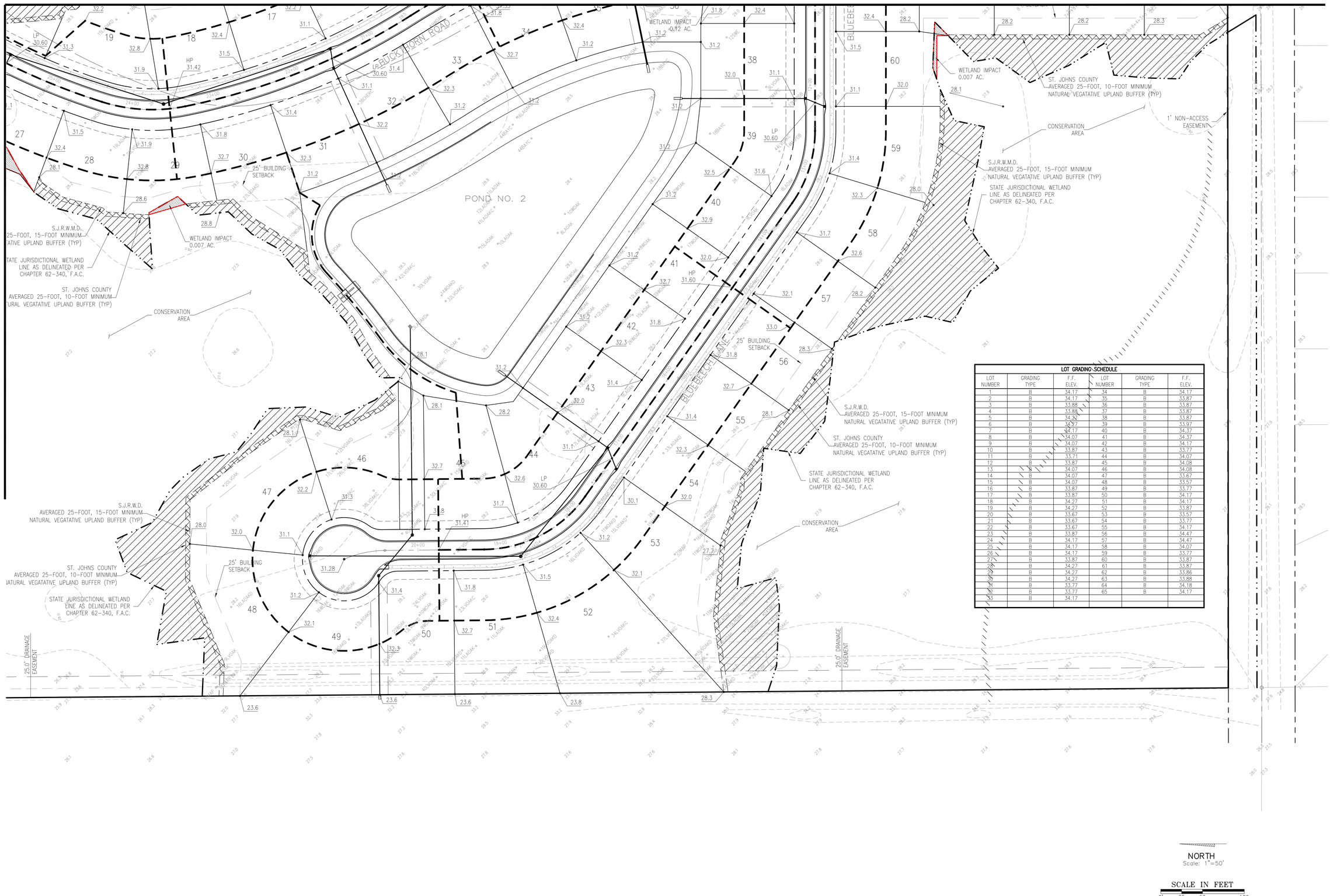
REVISIONS

PLOT DATE:	05/6/2013
DRAWN BY:	RNS
DESIGNED BY:	SPJ
CHECKED BY:	SPJ
SCALE:	1" = 50'
JOB NO.:	2299

Time: 3:54:47 PM Date: 05/6/2013 DWG Name: S:_projects\2299.01 - Tuscany on Watson\Misc\2007-02-16 - BKP\base.dwg

FOR CONTINUATION SEE SHEET NO. 10

FOR CONTINUATION SEE SHEET NO. 12



LOT GRADING SCHEDULE					
LOT NUMBER	GRADING TYPE	F.F. ELEV.	LOT NUMBER	GRADING TYPE	F.F. ELEV.
1	B	34.17	34	B	34.17
2	B	34.17	35	B	33.87
3	B	33.88	36	B	33.87
4	B	33.88	37	B	33.87
5	B	34.27	38	B	33.87
6	B	34.27	39	B	33.97
7	B	34.17	40	B	34.37
8	B	34.07	41	B	34.37
9	B	34.07	42	B	34.17
10	B	33.87	43	B	33.77
11	B	33.71	44	B	34.07
12	B	33.87	45	B	34.08
13	B	34.07	46	B	34.08
14	B	34.07	47	B	33.67
15	B	34.07	48	B	33.57
16	B	33.87	49	B	33.77
17	B	33.87	50	B	34.17
18	B	34.27	51	B	34.17
19	B	34.27	52	B	33.87
20	B	33.67	53	B	33.57
21	B	33.67	54	B	33.77
22	B	33.67	55	B	34.17
23	B	33.87	56	B	34.47
24	B	34.17	57	B	34.47
25	B	34.17	58	B	34.07
26	B	34.17	59	B	33.77
27	B	33.87	60	B	33.87
28	B	34.27	61	B	33.87
29	B	34.27	62	B	33.86
30	B	34.27	63	B	33.88
31	B	33.77	64	B	34.18
32	B	33.77	65	B	34.17
33	B	34.17			

NORTH
Scale: 1"=50'

SCALE IN FEET
0' 25 50 100

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WATSON VILLAGE
FOR
DARK HARBOUR DEVELOPERS

LOT AND BLOCK GRADING PLAN

REVISIONS

PLOT DATE:	05/6/2013
DRAWN BY:	RNS
DESIGNED BY:	SPJ
CHECKED BY:	SPJ
SCALE:	1" = 50'
JOB NO.:	2299

SHEET NO.
11
OF 31

NOT RELEASED FOR CONSTRUCTION

Time: 3:55:10 PM Date: 05/6/2013 DWG Name: S:_projects\2299.01 - Tuscany on Watson\Misc\2007-02-16 - BKP\base.dwg

LOT GRADING SCHEDULE

LOT NUMBER	GRADING TYPE	F.F. ELEV.	LOT NUMBER	GRADING TYPE	F.F. ELEV.
1	B	34.17	34	B	34.17
2	B	34.17	35	B	33.87
3	B	33.88	36	B	33.87
4	B	33.88	37	B	33.87
5	B	34.27	38	B	33.87
6	B	34.27	39	B	33.97
7	B	34.17	40	B	34.37
8	B	34.07	41	B	34.37
9	B	34.07	42	B	34.17
10	B	33.87	43	B	33.77
11	B	33.71	44	B	34.07
12	B	33.87	45	B	34.08
13	B	34.07	46	B	34.08
14	B	34.07	47	B	33.67
15	B	34.07	48	B	33.57
16	B	33.87	49	B	33.77
17	B	33.87	50	B	34.17
18	B	34.27	51	B	34.17
19	B	34.27	52	B	33.87
20	B	33.67	53	B	33.57
21	B	33.67	54	B	33.77
22	B	33.67	55	B	34.17
23	B	33.87	56	B	34.47
24	B	34.17	57	B	34.47
25	B	34.17	58	B	34.07
26	B	34.17	59	B	33.77
27	B	33.87	60	B	33.87
28	B	34.27	61	B	33.87
29	B	34.27	62	B	33.86
30	B	34.27	63	B	33.88
31	B	33.77	64	B	34.18
32	B	33.77	65	B	34.17
33	B	34.17			

FOR CONTINUATION SEE SHEET NO. 10

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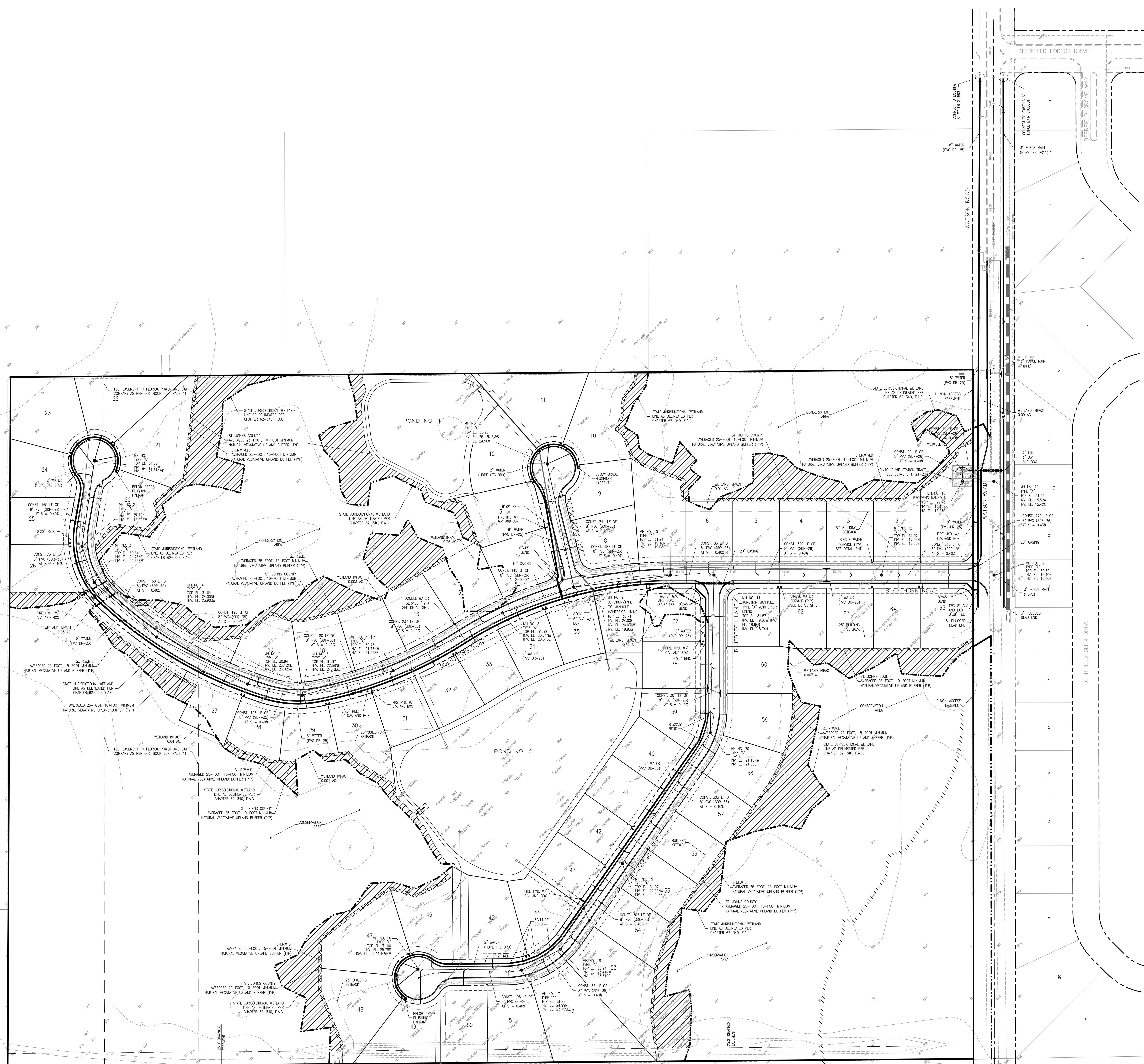
LOT AND BLOCK GRADING PLAN

REVISIONS

PLOT DATE: 05/6/2013
DRAWN BY: RNS
DESIGNED BY: SPJ
CHECKED BY: SPJ
SCALE: 1" = 50'
JOB NO.: 2299

SHEET NO.
12
OF 31

NOT RELEASED FOR CONSTRUCTION



NORTH
Scale: 1"=100'

SCALE IN FEET
0' 50' 100' 200'

ST. JOHNS COUNTY UTILITY DEPARTMENT (SJCUD) GENERAL NOTES:

1. WATER AND SEWER SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER OF RECORD FOR REVIEW AND APPROVAL. THE ENGINEER WILL THEN SUBMIT A MIN. OF 2 OR A MAX. OF 3 COPIES (STAMPED APPROVED BY THE ENGINEER) TO SJCUD FOR REVIEW PRIOR TO SCHEDULING THE REQUIRED PRE-CONSTRUCTION CONFERENCE. A PRE-CONSTRUCTION CONFERENCE WITH SJCUD IS REQUIRED REGARDLESS OF OTHER AGENCIES REQUIREMENTS. FOR FIRST TIME SHOP DRAWINGS SUBMITTAL, SJCUD SHALL COMPLETE REVIEW WITHIN FIFTEEN (15) WORKING DAYS. FOR SECOND TIME OR BEYOND SHOP DRAWINGS SUBMITTAL, SJCUD SHALL COMPLETE REVIEW WITHIN TEN (10) WORKING DAYS.
2. A PRE-CONSTRUCTION CONFERENCE IS REQUIRED WITH THE DEVELOPER, THE ENGINEER OF RECORD, THE UTILITY CONTRACTOR, AND THE SJCUD PRIOR TO THE START OF ANY WATER AND SEWER INSTALLATIONS.
3. A COPY OF THE CONTRACTORS GENERAL LICENSE AND/OR UNDER GROUND UTILITY LICENSE SHALL BE PROVIDED AT THE TIME OF THE PRE-CONSTRUCTION CONFERENCE.
4. ALL WATER AND SANITARY SEWER CONSTRUCTION SHALL BE PERFORMED BY AN UNDERGROUND UTILITY CONTRACTOR LICENSED UNDER THE PROVISIONS OF CHAPTER 489, FLORIDA STATUTES.
5. THE CONTRACTOR IS RESPONSIBLE FOR INSPECTING THE SITE PRIOR TO CONSTRUCTION.
6. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONFIRM, IN THE FIELD, THE LOCATIONS AND ELEVATIONS SHOWN PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
7. THE CONTRACTOR(S) SHALL LOCATE, VERIFY, AND IDENTIFY ALL EXISTING UTILITIES AND UNDERGROUND UTILITIES SHOWN OR NOT SHOWN ON THE PLANS PRIOR TO ANY EXCAVATING ACTIVITIES AND TAKE ALL MEASURES NECESSARY TO PROTECT UTILITIES DURING CONSTRUCTION. SHOULD ANY UTILITY LINE OR COMPONENT BECOME DAMAGED OR REQUIRE RELOCATION THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE RESPONSIBLE UTILITY COMPANY, THE ENGINEER OF RECORD, THE COUNTY, AND SJCUD.
8. THE CONTRACTOR SHALL FIELD VERIFY THE CONNECTION POINTS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. ALL DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER OF RECORD IMMEDIATELY AND SJCUD.
9. EXISTING UTILITIES SHOWN ON THESE PLANS HAVE BEEN LOCATED PER AVAILABLE MEANS WITHOUT EXCAVATION.
10. VERTICAL LOCATIONS OF ALL UTILITIES (EXCLUDING EXISTING STORM SEWERS) SHOWN ON PLAN AND PROFILE SHEETS HAVE BEEN REFERENCED TO A BENCH MARK SHOWN IN THE UTILITY PLANS. CONTRACTOR SHALL EXERCISE CAUTION DURING EXCAVATION NEAR EXISTING UTILITIES SHOWN ON THE PLANS AND NOTIFY THE ENGINEER IF LOCATION DIFFERS FROM THAT SHOWN ON THE PLANS BEFORE CONTINUING WITH CONSTRUCTION.
11. SHOULD CONDITIONS VARY FROM THOSE SHOWN ON THESE PLANS THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER AND SJCUD PRIOR TO CONTINUING CONSTRUCTION.
12. THE CONTRACTOR SHALL PROTECT SURVEY MARKERS, MONUMENTS, ETC. DURING CONSTRUCTION. THE CONTRACTOR SHALL RESTORE/REPLACE AT NO ADDITIONAL EXPENSE TO THE OWNER ANY DAMAGE DONE BY CONSTRUCTION ACTIVITIES.
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO EXISTING UTILITIES CAUSED BY HIS OPERATIONS. ANY DAMAGE SHALL BE REPLACED/REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER
14. THE CONTRACTOR SHALL COORDINATE ALL CONSTRUCTION AND BUILDING PLACEMENT WITH ALL OTHER UTILITIES CONSTRUCTION.
15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL/DISPOSAL OF ANY UNSUITABLE MATERIAL FROM HIS OPERATION, FURNISHING AND COMPACTING SUITABLE REPLACEMENT BACKFILL MATERIAL IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS.
16. COMPACTION DENSITIES FOR ALL UTILITY TRENCHING BACKFILLING ARE TO BE TAKEN IN ONE-FOOT (1') LIFTS.
17. THE CONTRACTOR(S) SHALL NOTIFY ALL APPLICABLE UTILITIES COMPANIES, THE ENGINEER OF RECORD, AND THE PROPERTY OWNER 72 HOURS PRIOR TO INITIATING ANY EXCAVATION ACTIVITIES, OR AS SPECIFIED BY THE UTILITIES COMPANIES AND THE PERMITS OBTAINED FOR THE WORK.
18. THE ENGINEER OF RECORD AND SJCUD SHALL BE GIVEN SEVENTY TWO HOURS (72-HR) NOTICE OF ALL MEETINGS AND OR TESTING MEASURES RELATED TO SAID PROJECT.
19. ALL WORK AND MATERIALS SHALL BE IN COMPLETE ACCORDANCE WITH ALL RELATIVE ST. JOHNS COUNTY STANDARDS AND REQUIREMENTS.
20. ALL UNDERGROUND UTILITIES TO BE INSTALLED SHALL BE IN ACCORDANCE WITH THE ST. JOHNS COUNTY UTILITIES SPECIFICATIONS, DETAILS, AND THE APPROVED SITE PLANS.
21. ALL EQUIPMENT AND MATERIALS SHALL COMPLY WITH THE ST. JOHNS COUNTY UTILITIES STANDARDS AND SPECIFICATIONS.
22. ALL WORK WILL BE PERFORMED IN ACCORDANCE WITH ST. JOHNS COUNTY UTILITIES WATER AND SEWER STANDARDS, DETAILS, AND SPECIFICATIONS AS WELL AS ALL APPLICABLE STATE AND LOCAL REGULATIONS.
23. WHERE IT IS NOT POSSIBLE FOR WATER AND SEWER (INCLUDING STORM) LINES TO CROSS WITH A MINIMUM OF 12 INCHES OF VERTICAL CLEARANCE, A FULL-UNCUT LENGTH OF WATER QUALITY PIPE WHICH IS USUALLY 20 FEET LONG WILL BE CENTERED ON THE POINT OF CROSSING. THE CONTRACTOR WILL FIELD VERIFY THE VERTICAL SEPARATION. IT IS PREFERABLE TO HAVE THE WATER MAIN ABOVE THE SEWER LINES AND AT LEAST 12 INCHES VERTICAL SEPARATION.
24. ANY LANDSCAPING TREES SHALL BE PLACED AT A MINIMUM OF 7.5 FEET AWAY FROM THE CENTER LINE OF PIPELINE TO THE CENTER LINE OF THE TREES.
25. UNSUITABLE MATERIALS UNDER WATER AND SEWER MAINS SHALL BE REMOVED AND REPLACED WITH SELECTED BACKFILL PROPERLY COMPACTED TO 95% OF MAXIMUM DENSITY.
26. ALL ROCK AND UNSUITABLY SIZED STONES (AS DESCRIBED IN APPLICABLE AWWA AND ST. JOHNS COUNTY UTILITIES STANDARDS AND/OR PIPE MANUFACTURER'S RECOMMENDED INSTALLATION PROCEDURES) FOUND IN TRENCHES FOR NEW AND RELOCATED WATER MAIN PIPE SHALL BE REMOVED TO A DEPTH OF AT LEAST SIX (6) INCHES BELOW THE BOTTOM OF THE PIPE. CONTINUOUS AND UNIFORM BEDDING SHALL BE PROVIDED FOR NEW AND RELOCATED WATER & SEWER MAIN PIPES. THE BACKFILL MATERIAL SHALL BE TAMPED IN LAYERS AROUND THE NEW AND RELOCATED WATER & SEWER MAIN PIPES AND TO A SUFFICIENT HEIGHT ABOVE SUCH PIPE TO ADEQUATELY SUPPORT AND PROTECT THE PIPE.
27. WATER MAINS AND FORCE MAINS SHALL USE MJ RESTRAINER WHERE TERMINATED AND AT ALL BENDS. WHERE FORCE MAINS OR WATER MAINS ARE LAID WITHOUT FITTINGS, THE MAXIMUM DEFLECTION SHALL BE AS RECOMMENDED BY THE MANUFACTURER OF THE PIPE USED.
28. FITTINGS SHALL BE USED AT LOCATIONS INDICATED ON THE PLANS, UNLESS OTHERWISE APPROVED BY THE ENGINEER.
29. ALL UNDERGROUND VALVES SHALL BE INSTALLED WITH AN ADJUSTABLE CAST IRON VALVE BOX WITH TOP SET TO FINAL GRADE IN ACCORDANCE WITH ST. JOHNS COUNTY DETAILS AND SPECIFICATIONS. ALL VALVES SHALL HAVE PEG LOCATORS (145.7 KILOHERTZ).
30. CONTRACTOR IS RESPONSIBLE FOR PROPER NOTIFICATION OF INSPECTING AUTHORITIES BEFORE AND DURING CONSTRUCTION.
31. THERE SHALL BE A MINIMUM FIVE (5) DAYS NOTICE GIVEN FOR SCHEDULING THE FINAL INSPECTION.
32. ALL UTILITIES ARE PUBLIC.

NOTICE OF PROCEDURE

1. ALL COMMERCIAL BUILDING PERMITS AND METERS TO BE PROCESSED THROUGH SJCUD CUSTOMER SERVICE AND IT SHALL BE ACCOMPANIED BY A SET OF APPROVED CIVIL DESIGN PLANS.
2. ALL WATER AND SEWER TAP CONNECTIONS, FLUSHINGS, PRESSURE TEST TO BE PERFORMED BY UTILITY CONTRACTOR OR LICENSED MASTER PLUMBER MUST BE SCHEDULED AT LEAST 5 DAYS IN ADVANCE WITH SJCUD, IN ADDITION, IT IS THE ENGINEER OF RECORD'S RESPONSIBILITY TO SECURE APPLICABLE D.E.P. PERMITS IN ACCORDANCE WITH SJCUD PERMITTING PROCEDURES. A SJCUD INSPECTOR SHALL BE PRESENT AT TIME CONNECTION IS MADE.
3. NOTIFY SJCUD 5 DAYS IN ADVANCE OF MAKING THE CONNECTION TO THE EXISTING WATER OR SEWER MAIN STUB. A SJCUD INSPECTOR SHALL BE PRESENT AT TIME CONNECTION IS MADE.
4. METERS TO BE INSTALLED BY SJCUD FORCES UPON APPLICATION AND PAYMENT BY LICENSED MASTER PLUMBER.
5. WATER AND SEWER UNIT CONNECTION FEES SHALL BE REQUIRED AT TIME OF BUILDING PERMIT APPLICATION.
6. ALL ON-SITE PRIVATE WATER AND SEWER CONSTRUCTION REQUIRES A PLUMBING PERMIT WITH SCHEDULED INSPECTION PRIOR TO INSTALLATION.
7. ALL REQUIREMENTS BY SJCUD (i.e. FINAL INSPECTION, PUNCH LIST ITEM, "AS BUILTS", FDEP CERTIFICATION OF COMPLETION, ETC) MUST BE SATISFIED PRIOR OF ISSUANCE OF CERTIFICATES OF OCCUPANCY.

POTABLE WATER SYSTEM NOTES:

1. ALL WATER MAINS SHALL HAVE A MINIMUM OF 30" AND A MAXIMUM OF 42" COVER FROM FINISHED GRADE. WATER MAINS ARE DESIGNED TO FINISHED GRADE AND SHALL BE PROTECTED FROM DAMAGE UNTIL WORK IS COMPLETED.
2. ALL WATER MAINS 4" THROUGH 12" DIAMETER AND LARGER SHALL BE C-900, DR-25, COLOR "BLUE" WITH PUSH-ON GASKETED JOINTS OR HDPE DIPS DR 11 COLOR "BLUE".
3. ALL WATER MAINS 16" THROUGH 24" DIAMETER AND LARGER SHALL BE C-900, DR-26, COLOR "BLUE" WITH PUSH-ON GASKETED JOINTS OR HDPE DIPS DR 11 COLOR "BLUE".
4. ALL WATER MAINS 24" THROUGH 36" DIAMETER SHALL BE DUCTILE IRON PIPE.
5. ALL WATER LINES 2" DIAMETER OR LESS SHALL BE HDPE CTS DR 9 COLOR "BLUE" IN ACCORDANCE WITH ST. JOHNS COUNTY UTILITIES SPECIFICATIONS.
6. ALL CURB STOPS ARE TO BE FORD BALL-TYPE WITH LOCKING CAPACITY. 1" MINIMUM.
7. ALL UNDERGROUND WATERMAINS IN THE PROJECT WILL BE LAID TO PROVIDE A HORIZONTAL SEPARATION OF AT LEAST 3 FEET BETWEEN THE OUTSIDE OF THE WATERMAIN AND OUTSIDE OF ANY VACUUM SANITARY SEWER, STORM SEWER, STORMWATER FORCEMAIN, OR PIPELINE CONVEYING RECLAIMED WATER UNDER PART III OF CHAPTER 62-610 F.A.C. WATERMAIN SHALL BE LAID AT A MINIMUM DISTANCE OF 6 FEET BETWEEN THE OUTSIDE OF THE WATERMAIN AND THE OUTSIDE OF A GRAVITY SANITARY SEWER (3 FEET IF THE WATERMAIN BOTTOM IS LAID AT LEAST 12" ABOVE THE TOP OF THE SEWER) WATERMAIN SHALL BE LAID AT LEAST 6 FEET HORIZONTALLY (OUTSIDE TO OUTSIDE) FROM PRESSURE SANITARY SEWER, SANITARY FORCEMAINS, OR RECLAIMED WATER LINES NOT REGULATED UNDER PART III OF CHAPTER 62-610 F.A.C.
8. A FULL UNCUT LENGTH OF WATER MAIN PIPE (USUALLY 20 FEET) SHALL BE CENTERED AT THE POINT OF CROSSING OF ALL WATER AND SEWER (INCLUDING STORM) LINES AT THE POINT OF CROSSINGS REGARDLESS OF THE VERTICAL SEPARATIONS.
9. IN THE CASE WHERE SOLVENT CONTAMINATION IS FOUND IN TRENCH, WORK WILL BE STOPPED AND THE PROPER AUTHORITIES NOTIFIED. WITH THE APPROVAL OF THE ST. JOHNS COUNTY HEALTH DEPARTMENT, DUCTILE IRON PIPE, FITTINGS AND APPROVED SOLVENT RESISTANT GASKET MATERIAL SHALL BE USED IN THE CONTAMINATED AREA. THE DUCTILE IRON PIPE WILL EXTEND AT LEAST 100 FEET BEYOND ANY DISCOVERED SOLVENT.
10. NO CONNECTION TO EXISTING POTABLE WATER SYSTEM SHALL BE ALLOWED UNTIL ALL PROPOSED WATER LINES HAVE BEEN PRESSURE TESTED, DISINFECTED, CLEARED FOR SERVICE AND ACCEPTED FOR MAINTENANCE BY ST. JOHNS COUNTY UTILITIES AND FDEP.
11. JUMPER CONNECTIONS SHALL BE USED TO FILL OR FLUSH WATER MAINS AND SHALL BE IN ACCORDANCE WITH DETAIL 488-5.1 OF THE ST. JOHNS COUNTY'S STANDARD SPECIFICATIONS, VOLUME III, WATER AND SANITARY SEWER CONSTRUCTION (REFERENCED AS WSCM 488-5.1).
12. ALL NEW AND RELOCATED WATER MAIN PIPE, FITTINGS, VALVES, AND FIRE HYDRANTS SHALL BE IN CONFORMANCE WITH APPLICABLE AMERICAN WATER WORKS ASSOCIATION (AWWA) AND ST. JOHNS COUNTY UTILITIES STANDARDS.
13. ALL NEW AND RELOCATED WATER MAIN PIPE AND FITTINGS WILL COMPLY WITH THE LATEST FDEP AND AWWA STANDARDS FOR LEAD CONTENT.
14. ALL PACKING AND JOINTING MATERIALS USED IN THE JOINTS OF NEW AND RELOCATED WATER MAIN PIPE SHALL BE IN CONFORMANCE WITH APPLICABLE AWWA AND ST. JOHNS COUNTY UTILITIES STANDARDS.
15. ALL NEW AND RELOCATED WATER MAINS AND APPURTENANCES SHALL BE INSTALLED IN ACCORDANCE WITH AWWA AND SJCUD STANDARDS.
16. ALL TEES, BENDS, PLUGS, AND HYDRANTS IN NEW AND RELOCATED WATER MAINS SHALL BE D.I.P. PER ST. JOHNS COUNTY UTILITIES DETAILS TO PREVENT MOVEMENT, MECHANICAL RESTRAINTS SHALL BE USED.
17. ALL NEW AND RELOCATED WATER MAINS SHALL BE PRESSURE TESTED AND LEAKAGE TESTED IN ACCORDANCE WITH AWWA STANDARD C605, LATEST EDITION.
18. ALL NEW AND RELOCATED WATER MAINS SHALL BE DISINFECTED IN ACCORDANCE WITH AWWA STANDARD C651 AND RULE 62-555.345, F.A.C.
19. ALL NEW AND RELOCATED WATER SERVICES SHALL BE IN CONFORMANCE WITH THE STATE PLUMBING CODE AND SJCUD STANDARDS.
20. ALL PIPE AND PIPE FITTINGS FOR NEW AND RELOCATED WATER SERVICES SHALL COMPLY WITH THE LATEST FDEP AND AWWA STANDARDS FOR LEAD CONTENT. ALL SOLDERS AND FLUX FOR NEW AND RELOCATED WATER SERVICES SHALL COMPLY WITH THE LATEST FDEP AND AWWA STANDARDS FOR LEAD CONTENT.
21. IN REGARD TO THE REQUEST FOR A LETTER OF RELEASE TO PLACE THE CONSTRUCTION INTO SERVICE, THE BACTERIOLOGICAL SAMPLE POINTS SHALL BE INDICATED IN RED OR PINK ON THE RECORD OR AS BUILT DRAWINGS. THE SAMPLE NUMBERS WILL CORRESPOND TO THOSE ON THE BACTERIOLOGICAL SAMPLE LAB SHEETS.

SANITARY SEWER SYSTEM NOTES:

1. INTERIOR LINERS ARE REQUIRED ON JUNCTION MANHOLES WITH THREE OR MORE INVERTS. LINERS WILL BE AGRUGRIP, SPECTRASHIELD SEWPERCOAT, OR EQUAL AS APPROVED BY SJCUD.
2. SANITARY SEWER LINE TO DEPTHS OF 10' SHALL BE SDR-35 PVC PIPE CONFORMING TO ASTM D-3034 COLORED GREEN. SANITARY SEWER LINE OF DEPTHS 10' TO 15' SHALL BE SDR-26 PVC. ALL SANITARY SEWER LINES SHALL BE COLOR CODED AND CLEARLY MARKED.
3. SANITARY SEWER FORCE MAIN 4" AND LARGER SHALL BE C900 DR25 PVC PIPE CONFORMING TO ASTM D-1784, D-2241, D-3139, AND F-477. SANITARY FORCE MAIN SHALL BE COLOR CODED GREEN AND CLEARLY MARKED.
4. ALL FORCE MAINS SHALL HAVE A MINIMUM OF 30" OR A MAXIMUM OF 42" COVER FROM FINISHED GRADE. FORCE MAINS ARE DESIGNED TO FINISHED GRADE AND SHALL BE PROTECTED FROM DAMAGE UNTIL WORK IS COMPLETED.
5. ALL SANITARY MANHOLES WILL BE LEAK TESTED PER SJCUD SPECIFICATIONS.
6. THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER OF RECORD AND SJCUD ALL VIDEO LOGS, WRITTEN REPORTS, AND DEFLECTION TEST RESULTS FOR REVIEW AND APPROVAL.
7. THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER OF RECORD AND ST. JOHNS COUNTY UTILITIES ALL EXFILTRATION/INFILTRATION TEST RESULTS FOR REVIEW AND APPROVAL.
8. THE SANITARY SEWER SYSTEM SHALL BE CONSTRUCTED IN ACCORDANCE WITH THESE CONSTRUCTION DRAWINGS AND SPECIFICATIONS. ANY DEVIATION FROM THESE CONSTRUCTION DRAWINGS AND SPECIFICATIONS SHALL BE THE SOLE RESPONSIBILITY OF THE ENTITY AUTHORIZING THE DEVIATIONS TO BRING THE SANITARY SEWER SYSTEM INTO COMPLIANCE WITH THESE CONSTRUCTION DOCUMENTS.
9. THE SANITARY SEWER SYSTEM SHALL MAINTAIN THE MINIMUM HORIZONTAL AND VERTICAL CLEARANCES FROM THE POTABLE WATER SYSTEM. THE MINIMUM HORIZONTAL AND VERTICAL CLEARANCES ARE DESCRIBED IN DETAIL UNDER THE STANDARD WATER/SEWER SEPARATION STATEMENT.
10. THE CONTRACTOR SHALL CONTACT SJCUD PRE-TREATMENT DEPARTMENT AT (904) 471-8486 EXT. 225 FOR INSPECTION AFTER INSTALLATION OF GREASE TRAPS, INTERCEPTORS, AND/OR OIL-WATER SEPARATORS.

AS-BUILTS:

1. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PRODUCE, SUBMIT AND OBTAIN APPROVAL OF REPRODUCIBLE "AS-BUILT" DRAWINGS FROM JURISDICTIONAL AGENCIES AS MAY BE REQUIRED.
2. "AS-BUILT" INFORMATION SHALL BE MAINTAINED BY THE CONTRACTOR. CONTRACTOR SHALL EMPLOY THE SERVICES OF A SURVEYOR REGISTERED IN THE STATE OF FLORIDA TO DETERMINE ALL "AS-BUILT" INFORMATION. UPON COMPLETION OF THE WORK THE CONTRACTOR SHALL PROVIDE UP TO SIX COPIES AND THE CAD FILE OF AS-BUILT DRAWINGS TO THE ENGINEER.
3. A MINIMUM OF FIVE DAYS PRIOR TO THE FINAL INSPECTION TWO (2) SETS OF PRELIMINARY BLUELINE "AS-BUILTS" AND COPY ON DISK IN AUTOCAD FORMAT SHOWING THE REQUIRED INFORMATION, SHALL BE SUBMITTED TO THE ENGINEER OF RECORD.
4. THE RECORD OR "AS BUILT" DRAWINGS TO BE PREPARED BY THE CONTRACTOR AND SUBMITTED AT THE TIME OF THE REQUEST FOR A LETTER OF RELEASE TO PLACE THE CONSTRUCTION INTO SERVICE WILL CLEARLY DEPICT THE VERTICAL CLEARANCES BETWEEN WATER AND SEWER (INCLUDING STORM) LINES AT ALL CROSSING AND PARALLEL RUNS WHERE THE HORIZONTAL SEPARATION IS LESS THAN 10 FEET. IN ADDITION, THE CENTERING OF UNCUT LENGTHS OF PIPE (USUALLY 20 FEET) AT POINTS OF CROSSINGS WILL BE DOCUMENTED ON THE DRAWINGS AND ALL MITIGATING CONSTRUCTION MEASURES CLEARLY DEPICTED IN CASES WHERE A MINIMUM OF 18 INCHES OF VERTICAL CLEARANCE BETWEEN THE WATER AND SEWER (INCLUDING STORM) LINES IS NOT POSSIBLE.
5. AFTER SJCUD HAS APPROVED PRELIMINARY "AS BUILT", THREE (3) SETS OF BLUELINE AS-BUILTS (SIGNED AND SEALED), ONE SET OF MYLARS AS BUILT (SIGNED), AND COPY ON DISK IN AUTOCAD FORMAT SHOWING THE REQUIRED INFORMATION, SHALL BE SUBMITTED TO SJCUD THROUGH ST. JOHNS COUNTY DEVELOPMENT SERVICES.

STANDARD WATER/SEWER SEPARATION STATEMENT:

1. SANITARY SEWERS (INCLUDING LATERALS), FORCE MAINS, AND STORM SEWERS SHOULD CROSS UNDER WATER MAINS WHENEVER POSSIBLE. SANITARY SEWERS, FORCE MAINS AND STORM SEWERS CROSSING WATER MAINS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 18 INCHES BETWEEN THE INVERT OF THE UPPER PIPE AND THE CROWN OF THE LOWER PIPE WHENEVER POSSIBLE.

   WHERE SANITARY SEWERS, FORCE MAINS AND STORM SEWERS MUST CROSS A WATER MAIN WITH LESS THAN 18 INCHES VERTICAL DISTANCE, BOTH THE FORCE MAIN AND THE WATER MAIN SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE (DIP) AT THE CROSSING. (DIP IS NOT REQUIRED FOR STORM SEWERS OR GRAVITY SEWER) SUFFICIENT LENGTHS OF DIP MUST BE USED TO PROVIDE A MINIMUM SEPARATION OF 10 FEET BETWEEN ANY TWO JOINTS. ALL JOINTS ON THE WATER MAIN WITHIN 20 FEET OF THE CROSSING MUST BE MECHANICALLY RESTRAINED. A MINIMUM VERTICAL CLEARANCE OF 12 INCHES MUST BE MAINTAINED AT ALL CROSSINGS.

   ALL CROSSINGS SHALL BE ARRANGED SO THAT THE SEWER PIPE JOINTS AND THE WATER MAIN PIPE JOINTS ARE EQUIDISTANT FROM THE POINT OF CROSSING (PIPES CENTERED ON THE CROSSING).

   WHERE A NEW PIPE CONFLICTS WITH AN EXISTING PIPE WITH LESS THAN 18 INCHES OF VERTICAL CLEARANCE, THE NEW PIPE SHALL BE CONSTRUCTED OF DIP (EXCEPT STORM SEWERS) AND THE NEW PIPE SHALL BE ARRANGED TO MEET THE CROSSING REQUIREMENTS ABOVE.

2. ALL UNDERGROUND WATERMAINS IN THE PROJECT WILL BE LAID TO PROVIDE A HORIZONTAL SEPARATION OF AT LEAST 3 FEET BETWEEN THE OUTSIDE OF THE WATERMAIN AND OUTSIDE OF ANY VACUUM SANITARY SEWER, STORM SEWER, FORCEMAIN, OR PIPELINE CONVEYING RECLAIMED WATER UNDER PART III OF CHAPTER 62-610 F.A.C. WATERMAIN SHALL BE LAID AT A MINIMUM DISTANCE OF 6 FEET BETWEEN THE OUTSIDE OF THE WATERMAIN AND THE OUTSIDE OF A GRAVITY SANITARY SEWER (3 FEET IF THE WATERMAIN BOTTOM IS LAID AT LEAST 12" ABOVE THE TOP OF THE SEWER) WATERMAIN SHALL BE LAID AT LEAST 6 FEET HORIZONTALLY (OUTSIDE TO OUTSIDE) FROM SANITARY FORCEMAINS OR RECLAIMED WATER LINES NOT REGULATED UNDER PART III OF CHAPTER 62-610 F.A.C.

   WHERE IT IS NOT POSSIBLE TO MAINTAIN A VERTICAL DISTANCE OF 18 INCHES IN PARALLEL INSTALLATIONS, THE WATER MAIN SHALL BE CONSTRUCTED OF DIP AND THE FORCE MAIN SHALL BE CONSTRUCTED OF DIP (EXCEPT STORM SEWERS) WITH A MINIMUM VERTICAL DISTANCE OF 12 INCHES. THE WATER MAIN SHOULD ALWAYS BE ABOVE THE SEWER. JOINTS ON THE WATER MAIN SHALL BE LOCATED AS FAR APART AS POSSIBLE FROM JOINTS ON THE SEWER OR FORCE MAIN (STAGGERED JOINTS).

3. ALL DIP SHALL MEET ST. JOHNS COUNTY UTILITIES STANDARDS AND SPECIFICATIONS.

HYDROSTATIC TESTING NOTES:

1. AFTER ALL PRESSURE PIPES (WATER MAINS, SERVICES, AND FORCE MAINS) ARE INSTALLED, THE JOINTS COMPLETED, AND THE TRENCH BACKFILLED, THE NEWLY LAID PIPE AND APPURTENANCES SHALL BE SUBJECTED TO A HYDROSTATIC TEST OF 150 PSI FOR A PERIOD OF AT LEAST TWO HOURS. THE ENGINEER AND ST. JOHNS COUNTY UTILITIES MUST BE NOTIFIED AT LEAST 72 HOURS BEFORE A TEST IS TO BE PERFORMED. TEST SHALL BE AS SET FORTH IN AWWA STANDARD C605. ANY LEAKS DETECTED SHALL BE CORRECTED AND THE SECTION OF PIPELINE RETESTED. THE TWO HOUR TEST PERIOD SHALL BEGIN WHEN ALL JOINTS HAVE BEEN DETERMINED TO BE WATER TIGHT. LEAKAGE SHALL BE LIMITED TO THAT ALLOWANCE SET FORTH IN SECTION 4 OF AWWA STANDARD C600 LATEST EDITION. HYDROSTATIC AND LEAKAGE TEST AND BLOW-DOWN (ZEROING OF GAGE) MUST OCCUR BEFORE SAMPLING FOR BACTERIOLOGICAL TEST. THE MAXIMUM ALLOWABLE PRESSURE LOSS IS 5 PSI REGARDLESS OF THE LENGTH OF PIPE.

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STEPHEN P. JOCA
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WATSON VILLAGE
FOR
DARK HARBOUR DEVELOPERS

MASTER UTILITY PLAN

REVISIONS

PLOT DATE:	05/6/2013
DRAWN BY:	RNS
DESIGNED BY:	SPJ
CHECKED BY:	SPJ
SCALE:	1" = 100'
JOB NO.:	2299

NORTH
Scale: 1"=50'

SCALE IN FEET
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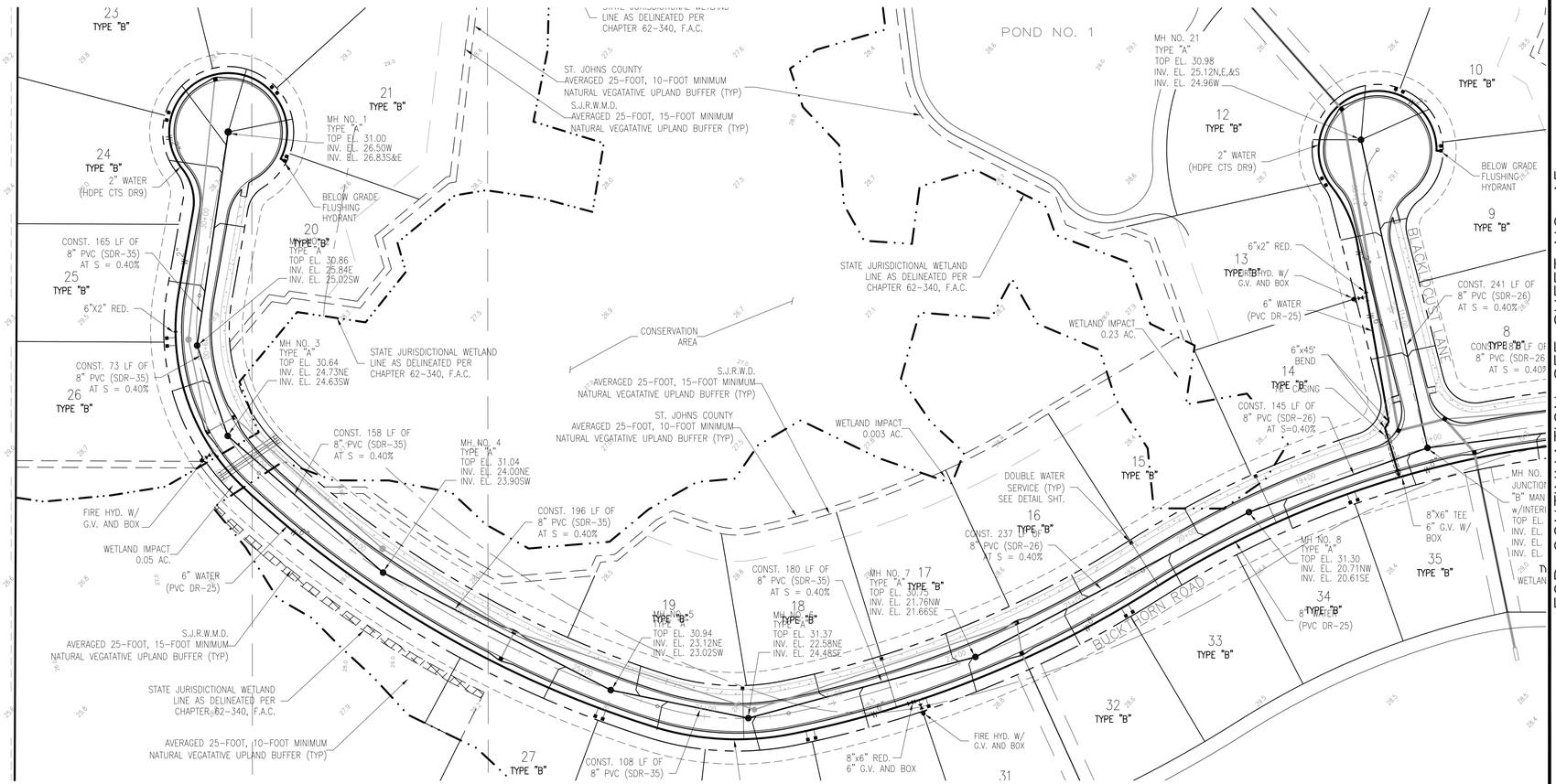

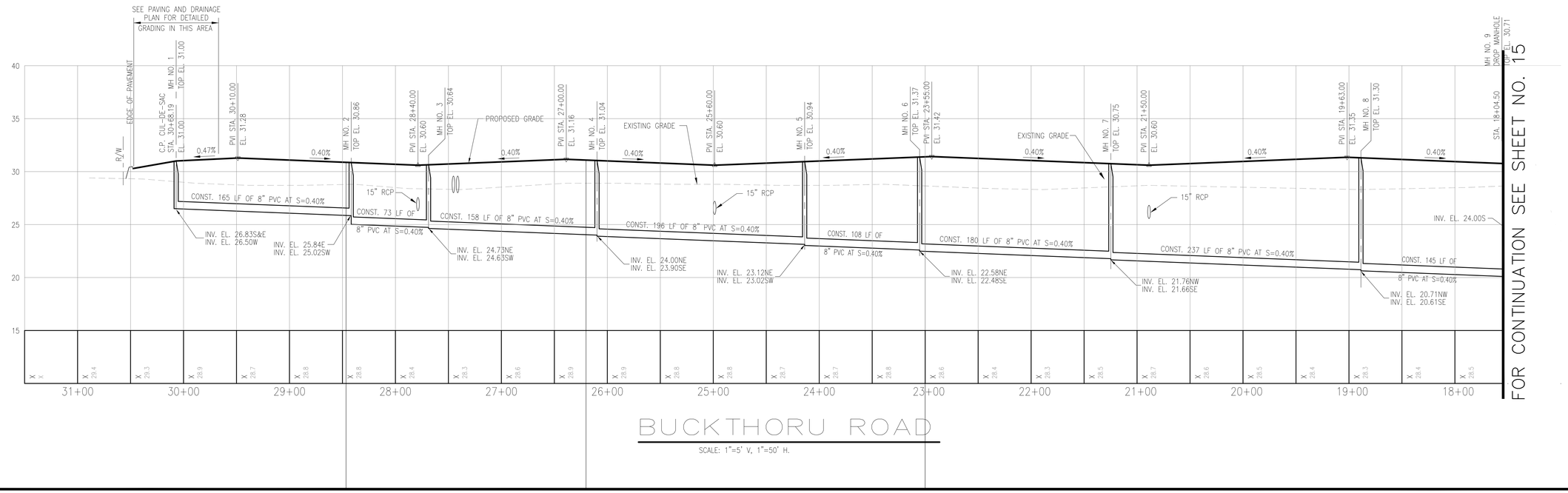

BUCKTHORU ROAD

SCALE: 1"=5' V, 1"=50' H.

FOR CONTINUATION SEE SHEET NO. 15

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WATSON VILLAGE
FOR
DARK HARBOUR DEVELOPERS

UTILITY PLAN AND SEWER / ROADWAY PROFILE

REVISIONS

PLOT DATE:	05/6/2013
DRAWN BY:	RNS
DESIGNED BY:	SPJ
CHECKED BY:	SPJ
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JOB NO.:	2299

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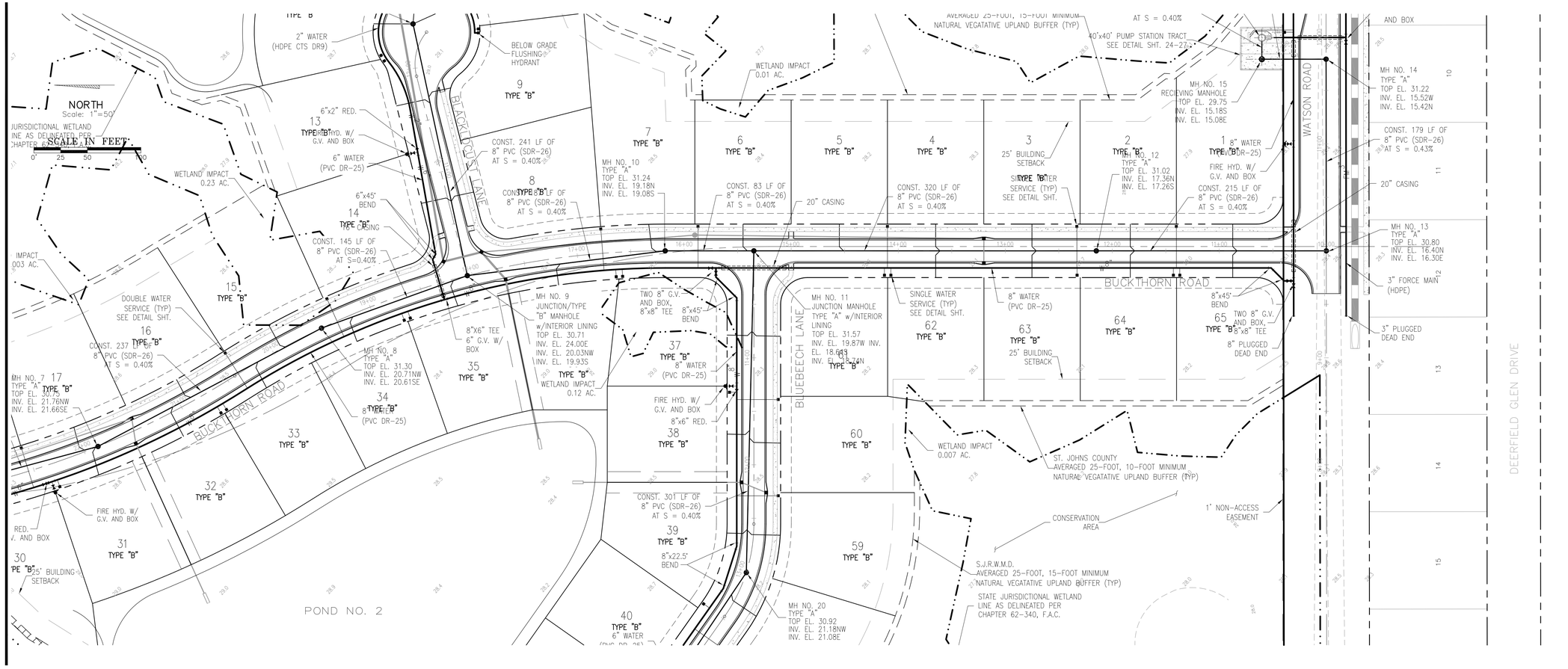
14
OF 31



BUCKTHORU ROAD

SCALE: 1"=5' V, 1"=50' H.

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JOB NO.:	2299

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SHEET NO. 15 OF 31

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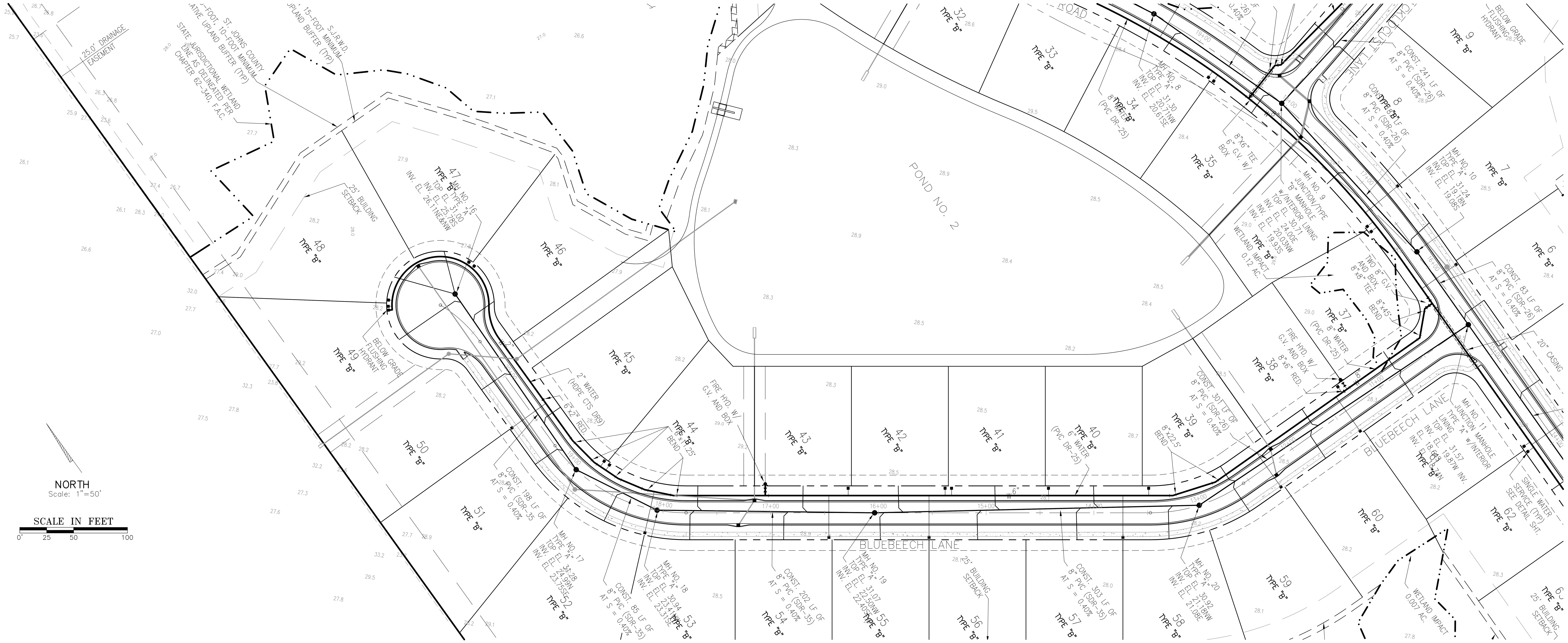

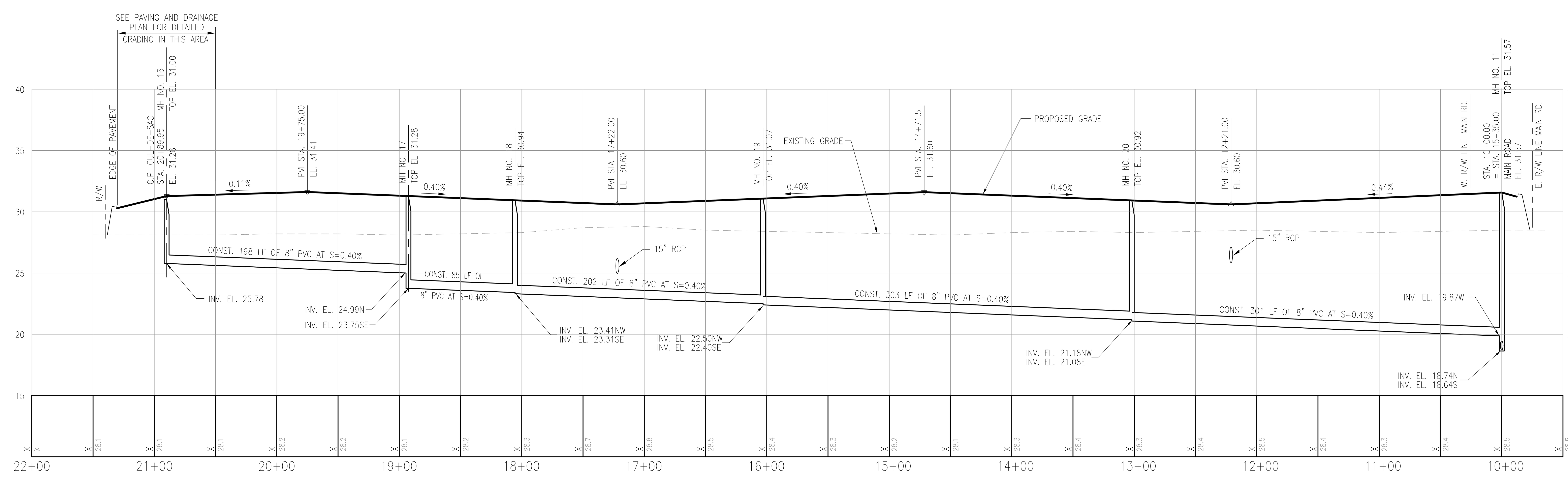

BLUEBEECH LANE

SCALE: 1"=5' V, 1"=50' H.

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SHEET NO.
16
OF 31

BLACKLOCUST LANE

SCALE: 1"=5' V, 1"=50' H.

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JOB NO.:	2299

NOT RELEASED FOR CONSTRUCTION

SHEET NO.
17
OF 31

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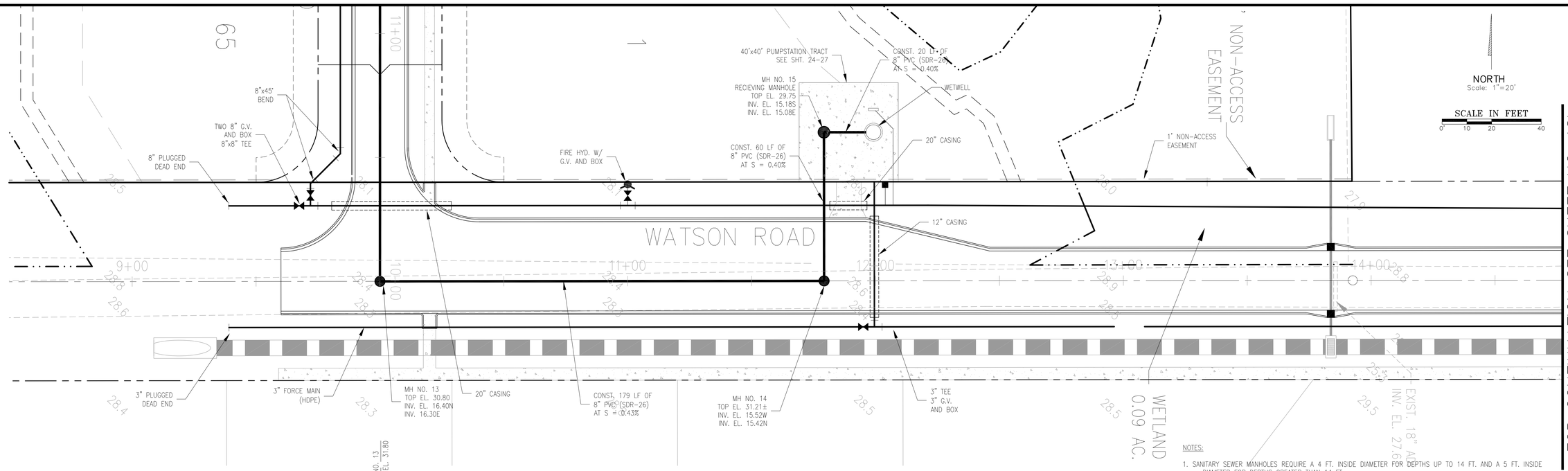
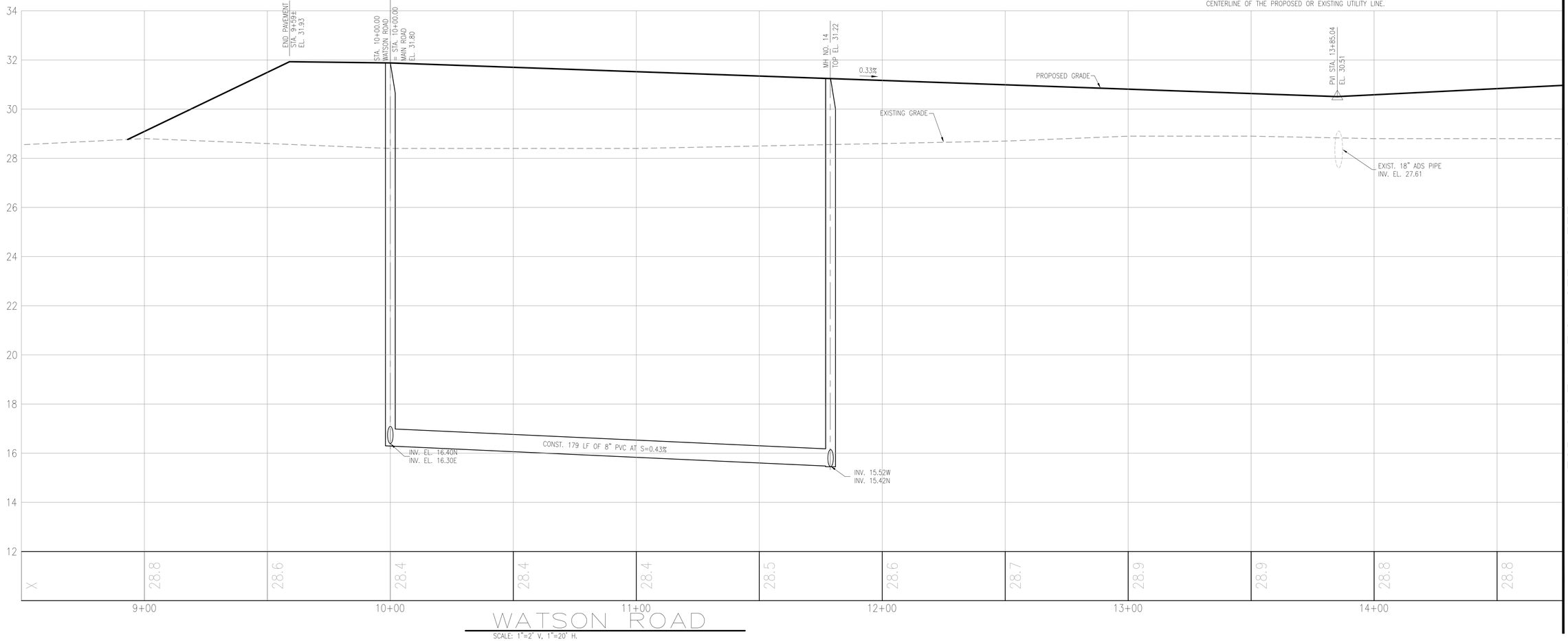


FOR CONTINUATION SEE SHEET NO. 18b

NOTES:

1. SANITARY SEWER MANHOLES REQUIRE A 4 FT. INSIDE DIAMETER FOR DEPTHS UP TO 14 FT. AND A 5 FT. INSIDE DIAMETER FOR DEPTHS GREATER THAN 14 FT.
2. IT IS THE REQUIREMENT OF THE SJCUD THAT WHEN TREES ARE TO BE PLANTED OR TO REMAIN LOCATE NEAR PROPOSED OR EXISTING UTILITY LINES, THAT THE TREES MUST NOT BE WITHIN 7.5 FT. (BOTH WAYS) FROM THE CENTERLINE OF THE PROPOSED OR EXISTING UTILITY LINE.



WATSON ROAD

SCALE: 1"=2' V, 1"=20' H.

FOR CONTINUATION SEE SHEET NO. 18b

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UTILITY PLAN AND SEWER / ROADWAY PROFILE

REVISIONS

PLOT DATE:	05/6/2013
DRAWN BY:	RNS
DESIGNED BY:	SPJ
CHECKED BY:	SPJ
SCALE:	AS NOTED
JOB NO.:	2299

SHEET NO.
18a
OF 31

NOT RELEASED FOR CONSTRUCTION

NOTES:

1. SANITARY SEWER MANHOLES REQUIRE A 4 FT. INSIDE DIAMETER FOR DEPTHS UP TO 14 FT. AND A 5 FT. INSIDE DIAMETER FOR DEPTHS GREATER THAN 14 FT.
2. IT IS THE REQUIREMENT OF THE SJCUD THAT WHEN TREES ARE TO BE PLANTED OR TO REMAIN LOCATE NEAR PROPOSED OR EXISTING UTILITY LINES, THAT THE TREES MUST NOT BE WITHIN 7.5 FT. (BOTH WAYS) FROM THE CENTERLINE OF THE PROPOSED OR EXISTING UTILITY LINE.

NORTH
Scale: 1"=20'

SCALE IN FEET
0 10 20 40

FOR CONTINUATION SEE SHEET NO. 18a

LOCATE 8" WATER BETWEEN EXISTING 14'x14' DRAINAGE STRUCTURE AND EXISTING C.L. FENCE

EXISTING 14'x14' DRAINAGE STRUCTURE

EXISTING DRIVEWAY

WATSON ROAD

8" WATER (PVC DR-25)

EXISTING DRIVEWAY

CONNECT TO EXISTING 8" WATER STUBOUT

28.7 28.7 28.7 28.8 28.8 28.2 29.6

15+00 16+00 17+00 18+00 19+00 20+00

EXIST. PAVEMENT

31.58

8" W

6" FM

48"x76" ERCP

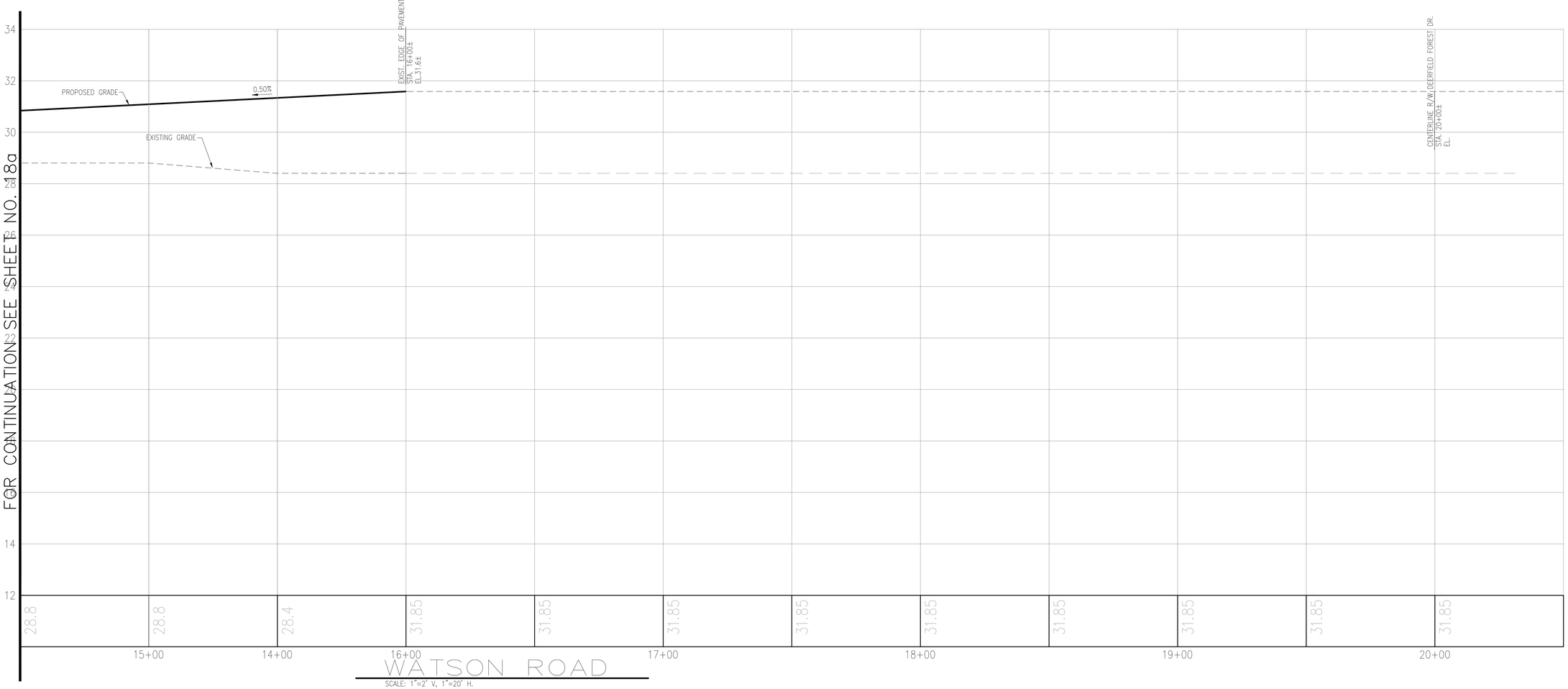
EXIST. 5' SIDEWALK

3" FORCE MAIN (HDPE)

CONNECT TO EXISTING 6" FORCE MAIN STUBOUT

8" W

DEERF



WATSON ROAD
SCALE: 1"=2' V, 1"=20' H.

FOR CONTINUATION SEE SHEET NO. 18a

STONE, JOCA & MAHONEY
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WATSON VILLAGE
FOR
DARK HARBOUR DEVELOPERS

UTILITY PLAN AND SEWER / ROADWAY PROFILE

REVISIONS

PLOT DATE:	05/6/2013
DRAWN BY:	RNS
DESIGNED BY:	SPJ
CHECKED BY:	SPJ
SCALE:	AS NOTED
JOB NO.:	2299

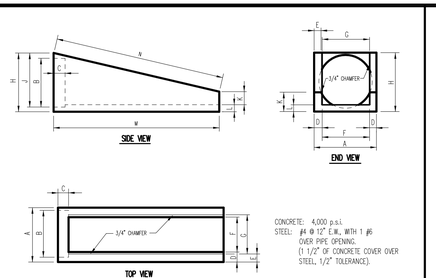
SHEET NO.
18b
OF 31

NOT RELEASED FOR CONSTRUCTION

Time: 4:28:03 PM Date: 05/6/2013 DWG Name: S:_projects\2299.01 - Tuscany on Watson\Misc\2299plan_prof_2007 03 28.dwg

GENERAL NOTES

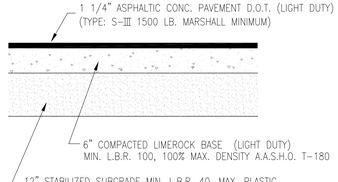
1. ALL ELEVATIONS SHOWN ARE IN FEET AND ARE BASED ON N.G.V.D. DATUM. EXISTING TOPOGRAPHY OBTAINED FROM SURVEY FURNISHED BY EILAND & ASSOCIATES INC. , DATED 4-7-06.
2. BENCHMARK: SPIKE NAIL IN 8" PINE - ELEVATION = 29.46'
3. THE CONTRACTOR SHALL OBTAIN / ACQUIRE ALL PERMITS NECESSARY TO COMPLETE THE CONSTRUCTION. ALL WORK SHALL BE DONE IN ACCORDANCE WITH PERMIT CONDITIONS.
4. THE OFFICE OF THE COUNTY ENGINEER SHALL BE GIVEN AT LEAST ONE (1) WEEK NOTICE PRIOR TO BEGINNING ANY CONSTRUCTION. ALL WORK SHALL BE DONE UNDER THE SUPERVISION AND INSPECTION OF THE OFFICE OF THE COUNTY ENGINEER AND IN ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATIONS.
5. ALL CONSTRUCTION AND MATERIALS SHALL CONFORM WITH THE CURRENT ST. JOHNS COUNTY STANDARDS.
6. THE CONTRACTOR SHALL SUBMIT A "NOTICE OF INTENT" A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION TO THE F.D.E.P. SHOULD N.P.D.E.S. REQUIREMENTS BE EXPECTED OR WARRANTED DURING CONSTRUCTION.
7. EXISTING UNDERGROUND UTILITIES HAVE BEEN SHOWN FROM THE BEST AVAILABLE INFORMATION. CONTRACTOR SHALL NOTIFY THE ST. JOHNS COUNTY UTILITY DEPARTMENT AND OTHER UTILITY REPRESENTATIVES AT LEAST THREE (3) DAYS PRIOR TO COMMENCING EXCAVATION NEAR THE UTILITY. CONTRACTOR IS RESPONSIBLE FOR LOCATION OF ALL SUCH UTILITIES IN THE PATH OF CONSTRUCTION. THE EXISTENCE OR NON-EXISTENCE OF ANY UTILITY DOES NOT CONSTITUTE RESPONSIBILITY BY THE ENGINEER.
8. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE AND AVOID ALL UTILITIES, OTHER STRUCTURES AND OBSTRUCTIONS, BOTH ABOVE AND BELOW THE GROUND SURFACE. ALL DAMAGE RESULTING FROM THE CONTRACTOR'S FAILURE TO COMPLY WITH THIS REQUIREMENT SHALL BE REPAIRED AT THE CONTRACTORS EXPENSE.
9. CONTRACTOR SHALL VERIFY EXISTING PAVEMENT ELEVATIONS, EXISTING STORM PIPE INVERTS AND SIZES PRIOR TO CONSTRUCTION.
10. THE CONTRACTOR SHALL COORDINATE THE PAVING AND DRAINAGE CONSTRUCTION WITH ALL OTHER CONSTRUCTION.
11. ALL WORK SHALL BE COORDINATED WITH THE LANDSCAPE PLANS.
12. SITE CLEARING, SILT FENCE AND TREE BARRIER LOCATIONS TO BE COORDINATED WITH TREE REMOVAL AND PROTECTION PLAN - SEE LANDSCAPE PLANS.
13. ALL UNDERGROUND UTILITIES MUST BE INSTALLED PRIOR TO PREPARATION OF SUBGRADE FOR PAVEMENT.
14. ALL PIPE JOINTS SHALL BE DOUBLE WRAPPED WITH FILTER FABRIC.
15. EXISTING PAVEMENT AND CURB TO BE REMOVED SHALL BE SAWCUT.
16. CONTRACTOR SHALL REMOVE ANY OTHER MISCELLANEOUS ITEMS NOT SPECIFICALLY SHOWN BUT WHICH IMPEDE THE FUNCTION OF THE PROPOSED SITE PLAN. CONTRACTOR SHALL COORDINATE WITH ENGINEER PRIOR TO SUCH REMOVAL.
17. PROPOSED GRADES SHOWN ARE FINISHED GRADES UNLESS OTHERWISE NOTED.
18. ALL CONCRETE FOR CURB & SIDEWALKS SHALL BE MINIMUM STRENGTH OF 3000 PSI WITH A MAXIMUM SLUMP OF 5 INCHES.
19. PAVEMENT SUBGRADE SHALL HAVE ALL UNSUITABLE MATERIAL REMOVED TO A DEPTH OF 2.0 FEET BELOW SUBGRADE AND 2.5 FEET BEYOND BACK OF CURB. BACKFILL WITH SUITABLE MATERIAL.
20. ALL PIPE LENGTHS SHOWN ON PLANS ARE FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE.
21. ALL DRAINAGE STRUCTURES SHALL BE CONSTRUCTED TO CONFORM WITH TYPICAL SECTION, DETAILS, CURBING AND PROPERTY LINES.
22. INVERT ELEVATIONS SHOWN ON DRAWINGS REFER TO THE CENTERLINE OF STRUCTURES, UNLESS OTHERWISE INDICATED.
23. RUBBLE FROM DEMOLITION SHALL BE REMOVED FROM THE SITE AND DISPOSED OF AT A STATE APPROVED SITE AT THE CONTRACTOR'S EXPENSE.
24. EXCESS MATERIAL SHALL BE DISPOSED OF OFF-SITE AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL AND REPLACEMENT OF ALL UNSUITABLE MATERIAL WITH STRUCTURAL FILL.
25. ALL EXCAVATION SHALL BE DONE IN A MANNER TO MINIMIZE THE WATER TURBIDITY AND POLLUTION. DISCHARGE SHALL BE CONTROLLED AND ROUTED THROUGH HAY FILTERS OR SILTATION DIAPERS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PREVENTION, CONTROL AND ABATEMENT OF EROSION AND WATER POLLUTION IN ACCORDANCE WITH CHAPTER 17-3, FLORIDA ADMINISTRATIVE CODE.
26. ANY EROSION PROBLEMS ENCOUNTERED DURING OR AFTER CONSTRUCTION WHICH IS DUE TO LACK OF COMPACTION OR LACK OF ESTABLISHING A PERMANENT GRASS COVER BY THE CONTRACTOR, SHALL BE CORRECTED AND THE MATERIAL REPLACED IN A TIMELY MANNER AT THE CONTRACTORS EXPENSE.
27. ALL DISTURBED AREAS WHICH ARE NOT SODDED SHALL RECEIVE GRASS SEED, FERTILIZER, MULCH AND IRRIGATION UNTIL A PERMANENT GRASS COVER IS ESTABLISHED. SOD TO BE CERTIFIED WEED FREE.
28. THE CONTRACTOR SHALL EMPLOY A LAND SURVEYOR, REGISTERED IN THE STATE OF FLORIDA, TO REFERENCE AND RESTORE PROPERTY CORNERS AND LANDMARKS, WHICH MAY BE DISTURBED BY CONSTRUCTION.
29. CONTRACTORS SHALL FURNISH REPRODUCIBLE AND AUTOCAD "AS-BUILTS" OF ENTIRE DRAINAGE SYSTEM, UTILITIES/SITE IMPROVEMENTS.
30. THERE ARE TO BE NO OPENED TRENCHES AT DAY'S END.
31. ALL SHOP DRAWINGS SHALL BE SUBMITTED TO ENGINEER FOR APPROVAL PRIOR TO START OF CONSTRUCTION.
32. SUBMITTAL OF AS-BUILT SITE SURVEY, INCLUDING BENCHMARKS, IS REQUIRED IN COMPLIANCE WITH SECTION 6.04.0 OF THE ST. JOHNS COUNTY LAND DEVELOPMENT CODE AND SECTION 15, "AS-BUILTS", OF THE DEVELOPMENT REVIEW MANUAL PRIOR TO SCHEDULING A FINAL INSPECTION BY THE BUILDING DEPARTMENT OR THE FIRE MATSHALL.
33. ST. JOHNS COUNTY DEVELOPMENT REVIEW INSPECTOR SHALL BE CONTACTED 24 HOURS PRIOR TO ALL NECESSARY SITE WORK INSPECTIONS AND 5 DAYS PRIOR TO THE FINAL INSPECTION.
34. "THE JURISDICTIONAL WETLAND LINE, WETLAND IMPACTS, MITIGATION AREA AND UPLAND BUFFERS AS DEPICTED ON THESE PLANS MATCH THE PLANS SUBMITTED TO AND APPROVED BY THE ST. JOHNS RIVER WATER MANAGEMENT DISTRICT."
35. UPLAND BUFFERS ADJACENT TO WETLANDS ARE TO REMAIN NATURAL, VEGETATIVE, AND UNDISTURBED,
36. ALL UPLAND BUFFERS WILL BE IDENTIFIED AND STAKED WITH A SILT FENCE/PROTECTIVE BARRIER PRIOR TO ANY LAND CLEARING, AND
37. DARK HARBOUR DEVELOPERS WILL BE THE RESPONSIBLE PARTY IN THE EVENT THAT THERE IS AN UNAUTHORIZED IMPACT TO WETLAND BUFFERS.



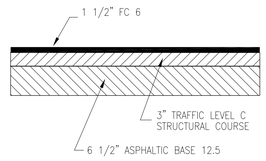
M.E.S. TABLE OF DIM

RCP/CMP	A	B	C	D	E	F	G
15"/18"	2'-3"	2'-0"	6"	4.5"	4"	1'-6"	1'-7"
24"	2'-10"	2'-7"	6"	5.5"	4.5"	1'-11"	2'-1"
30"	3'-4"	3'-2"	6"	5.5"	4.5"	2'-5"	2'-6"
36"	4'-1"	3'-10"	6"	7"	5.5"	2'-9"	3'-0"
RCP/CMP	H	J	K	L	M	N	
15"/18"	2'-6"	2'-0"	6"	4"	6'-8"	6'-10.5"	
24"	3'-4"	3'-0"	6"	4"	10'-0"	10'-3.63"	
30"	3'-8"	3'-4"	6"	4"	11'-4"	11'-8.13"	
36"	4'-6"	4'-0"	6"	6"	14'-0"	14'-4.5"	

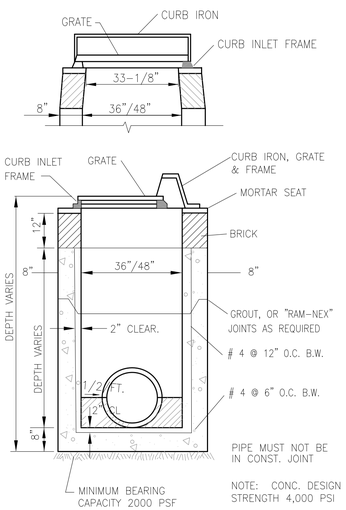
PRECAST MITERED END SECTION



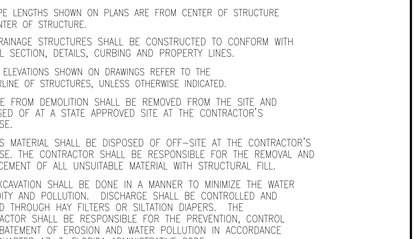
TYPICAL PAVEMENT SECTION (ONSITE)



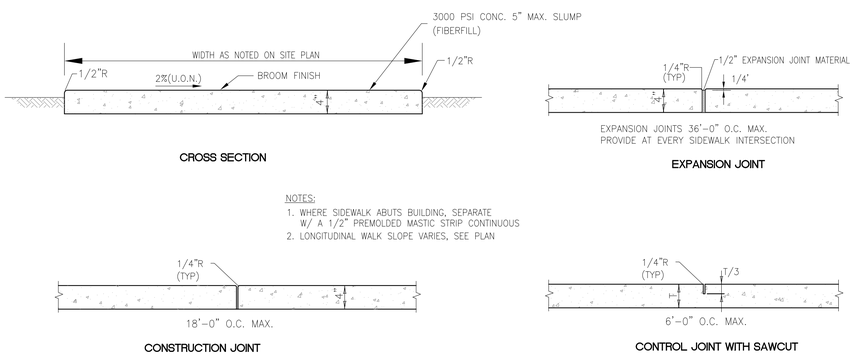
TYPICAL PAVEMENT SECTION (R/W SR 207)



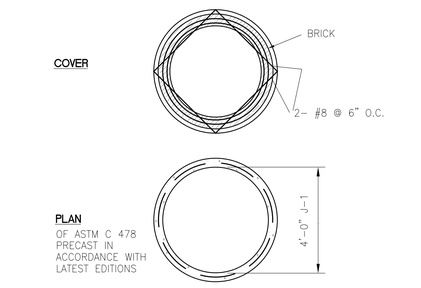
STORM SEWER CURB INLET



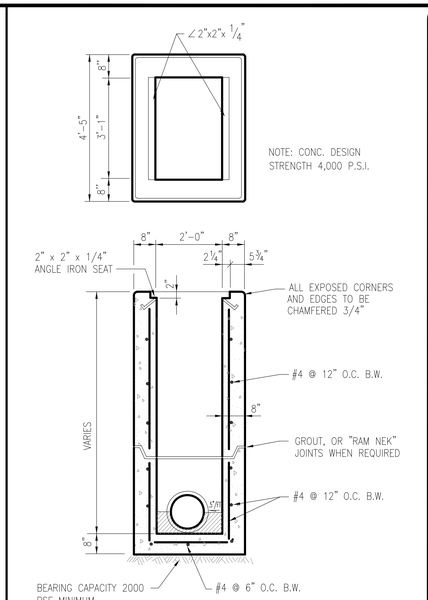
FENCE DETAIL



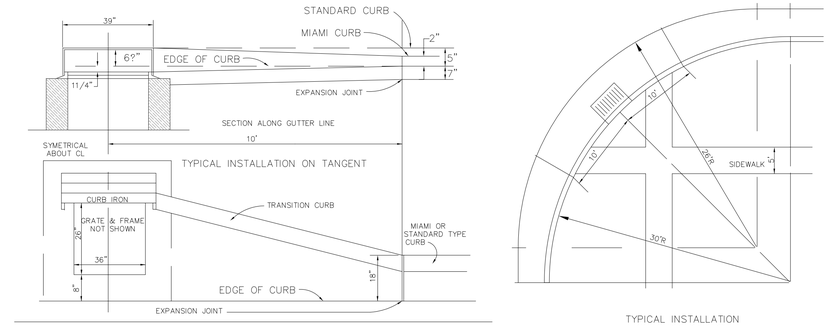
SIDEWALK DETAILS



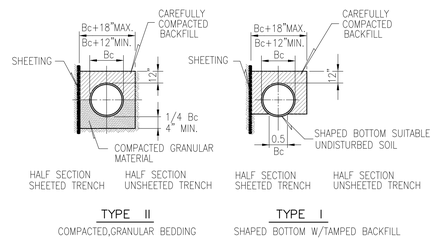
STORM SEWER MANHOLE



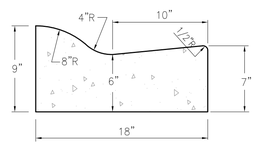
TYPE "C" INLET



STANDARD CURB INLET INSTALLATION



BEDDING DETAILS



MIAMI CURB AND GUTTER

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WATSON VILLAGE
FOR
DARK HARBOUR DEVELOPERS
PAVING AND DRAINAGE DETAILS

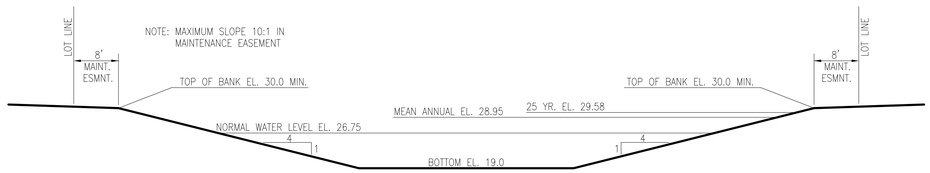
REVISIONS

PLOT DATE:	05/6/2013
DRAWN BY:	RNS
DESIGNED BY:	SPJ
CHECKED BY:	SPJ
SCALE:	N.T.S.
JOB NO.:	2299

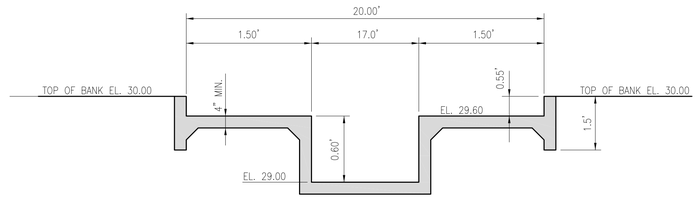
SHEET NO.
19
OF 31

NOT RELEASED FOR CONSTRUCTION

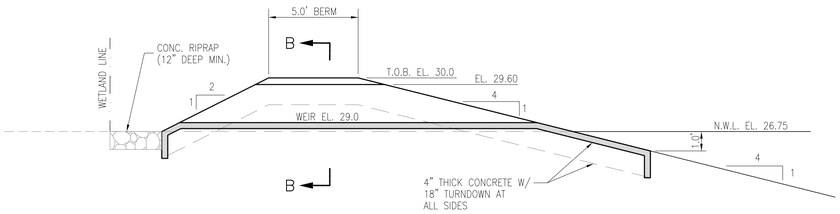
Time: 4:31:06 PM Date: 05/6/2013 DWG Names: S:_projects\2299.01 - Tuscany on Watson\2299pd-det.dwg



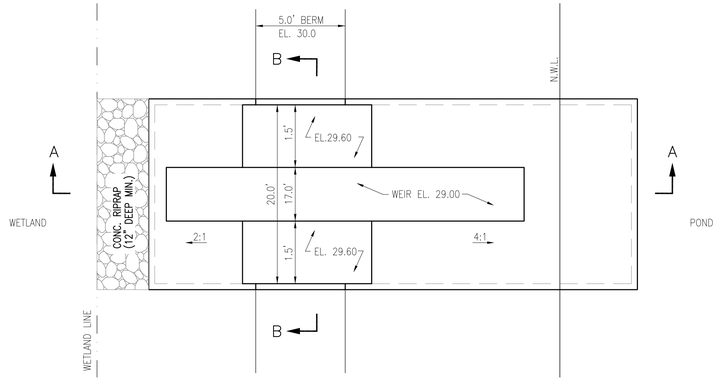
TYPICAL POND SECTION (PONDS 1 & 2) N.T.S.



SECTION B–B
N.T.S.

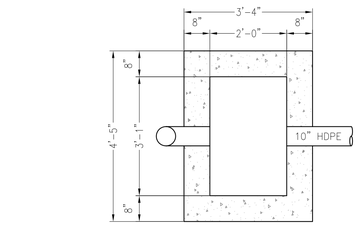


SECTION A–A
N.T.S.

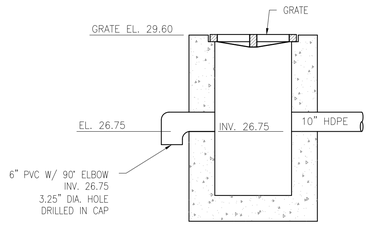


PLAN
N.T.S.

BERM WEIR STRUCTURE



PLAN



SECTION

NOTES:
PRECAST IN ACCORDANCE WITH LATEST EDITIONS OF ASTM C76 & C478
CONCRETE DESIGN STRENGTH: 4000 P.S.I.

(MOD TYPE "C" INLET)
POND CONTROL STRUCTURE

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WATSON VILLAGE
FOR
DARK HARBOUR DEVELOPERS

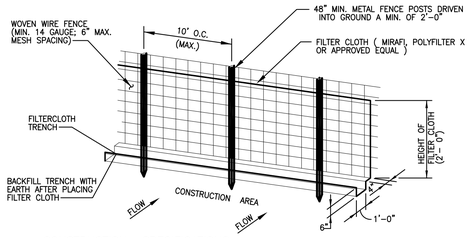
PAVING AND DRAINAGE DETAILS

REVISIONS

PLOT DATE:	05/6/2013
DRAWN BY:	RNS
DESIGNED BY:	SPJ
CHECKED BY:	SPJ
SCALE:	N.T.S.
JOB NO.:	2299

SHEET NO.
20
OF 31

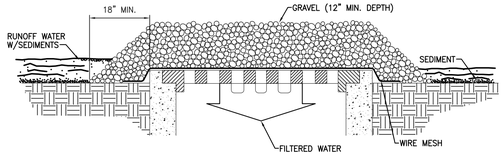
NOT RELEASED FOR CONSTRUCTION



CONSTRUCTION SPECIFICATIONS

1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS BY USE OF WIRE TIES
2. FILTER CLOTH TO BE FASTEN SECURELY TO WOVEN WIRE FENCE BY USE OF WIRE TIES SPACED EVERY 24"x 24".
3. SILT FENCES TO BE INSTALLED IN LOCATIONS AS SHOWN ON THIS EROSION AND SEDIMENT CONTROL PLAN PRIOR TO BEGINNING OF CONSTRUCTION TO CONTROL SEDIMENT.
4. SILT FENCES TO BE MAINTAINED AND CLEANED AS NECESSARY TO MAINTAIN IN FUNCTIONAL CONDITION.
5. SILT FENCES TO BE REMOVED AND THE AREA TO BE RESTORED TO ITS NATURAL CONDITION WHEN PERMANENT EROSION AND SEDIMENT CONTROL PROCEDURES ARE EFFECTIVE.

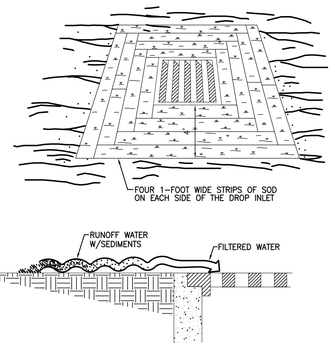
FILTER FENCE



SPECIFIC APPLICATION

THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE HEAVY CONCENTRATED FLOWS ARE EXPECTED, BUT NOT WHERE PONDING AROUND STRUCTURE MIGHT CAUSE EXCESSIVE INCONVENIENCE OR DAMAGE TO ADJACENT STRUCTURED ARE UNPROTECTED AREAS.

GRAVEL AND WIRE MESH DROP INLET SEDIMENT FILTER



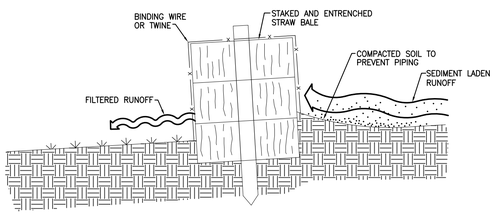
SPECIFIC APPLICATION

THIS METHOD OF INLET PROTECTION IS APPLICABLE ONLY AT THE TIME OF PERMANENT SEEDING, TO PROTECT THE INLET FROM SEDIMENT AND MULCH MATERIALS UNTIL PERMANENT VEGETATION HAS BECOME ESTABLISHED.

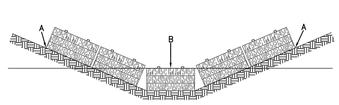
SOD DROP INLET SEDIMENT FILTER

EROSION AND SEDIMENT CONTROL NOTES

1. CONTRACTOR SHALL INSURE THAT ALL DRAINAGE STRUCTURES, PIPES, ETC., ARE CLEANED OUT AND WORKING PROPERLY AT TIME OF CITY ACCEPTANCE.
2. SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH RAINFALL. THEY MUST BE REMOVED WHEN THE LEVEL OF DEPOSITION REACHES APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER.
3. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE STRAW BALE BARRIER IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND SEEDED.
4. SILT FENCES AND FILTER BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.
5. SHOULD THE FABRIC ON A SILT FENCE OR FILTER BARRIER DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER STILL BE NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY.
6. THE CONTRACTOR IS RESPONSIBLE FOR FOLLOWING THE BEST EROSION AND SEDIMENT CONTROL PRACTICES AS OUTLINED IN THE PLANS, SPECIFICATIONS, STORM WATER POLLUTION PREVENTION PLAN AND SUWANNEE RIVER WATER MANAGEMENT DISTRICT PERMIT.
7. ALL DISTURBED AREAS SHALL BE GRASSED, FERTILIZED, MULCHED AND MAINTAINED UNTIL A PERMANENT VEGETATIVE COVER IS ESTABLISHED.
8. SOD SHALL BE PLACED IN AREAS WHICH MAY REQUIRE IMMEDIATE EROSION PROTECTION TO ENSURE WATER QUALITY STANDARDS AND MAINTAINED.
9. ANY DISCHARGE FROM DEWATERING ACTIVITY SHALL BE FILTERED AND CONVEYED TO THE OUTFALL IN A MANNER WHICH PREVENTS EROSION AND TRANSPORTATION OF SUSPENDED SOLIDS TO THE RECEIVING OUTFALL.
10. ALL DISTURBED AREAS TO BE STABILIZED THROUGH COMPACTION, SILT SCREENS, HAY BALES AND GRASSING. ALL FILL SLOPES 3:1 OR STEEPER TO RECEIVE STAKED SOLID SOD.
11. ALL DEWATERING, EROSION, AND SEDIMENT CONTROL TO REMAIN IN PLACE AFTER COMPLETION OF CONSTRUCTION AND ONLY WHEN AREAS HAVE BEEN STABILIZED.
12. THIS PLAN INDICATES THE MINIMUM EROSION AND SEDIMENT CONTROL MEASURES REQUIRED FOR THIS PROJECT. THE CONTRACTOR IS RESPONSIBLE FOR MEETING ALL APPLICABLE RULES, REGULATIONS AND WATER QUALITY GUIDELINES AND MAY NEED TO INSTALL ADDITIONAL CONTROLS.
13. ALL EXCAVATIONS AND EARTHWORK SHALL BE DONE IN A MANNER TO MINIMIZE WATER TURBIDITY AND POLLUTION. DISCHARGE SHALL BE CONTROLLED AND REROUTED THROUGH HAY FILTERS, SILTATION DIAPERS AND SUMPS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PREVENTION, CORRECTION, CONTROL AND ABATEMENT OF EROSION AND WATER POLLUTION IN ACCORDANCE WITH CHAPTER 17-3, FLORIDA ADMINISTRATIVE CODE.
14. THE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL OF ANY SEDIMENT THAT LEAVES THE SITE AND CHANGES ANY DOWNSTREAM CONDITIONS BY RAISING CHANNEL BOTTOMS AND/OR CLOGGING OUTFALL CULVERTS.
15. THE CONTRACTOR SHALL PAY FOR ANY WATER QUALITY CONTROL VIOLATIONS FROM ANY AGENCY THAT RESULT IN FINES BEING ASSESSED TO THE OWNER BECAUSE OF THE CONTRACTOR'S FAILURE TO PREVENT TURBID RUNOFF FROM LEAVING THE SITE AND RAISING TURBIDITY LEVELS MORE THAN 29 NTUS ABOVE EXISTING BACKGROUND LEVEL.
16. PURSUANT TO COMPREHENSIVE PLAN POLICY 9:1 OF THE CONSERVATION ELEMENT, THE USE OF ONE OR MORE EROSION CONTROL MEASURES, AS REQUESTED BY THE CITY OF STARKE, SHALL BE USED DURING CONSTRUCTION. THESE WILL BE, BUT NOT LIMITED TO, ITEMS SUCH AS TEMPORARY GRASS COVER, SEDIMENT BASINS OR PONDS, MULCHING, TEMPORARY FENCES, DIVERSION CHANNELS AND HAY BALES.
17. PURSUANT TO COMPREHENSIVE PLAN POLICY 9:1 OF THE CONSERVATION ELEMENT, SCHEDULING OF CONSTRUCTION SHALL BE GIVEN SPECIAL CONSIDERATION TO MAXIMIZE EXPOSURE OF BARE SOIL. THE CONTRACTOR WILL FORMULATE A CONSTRUCTION SCHEDULE TO BE GIVEN TO THE CITY REPRESENTATIVE.
18. THE CONTRACTOR SHALL CHECK EACH DAY TO INSURE THAT ALL EROSION CONTROL DEVICES ARE IN PLACE AND WORKING PROPERLY.
19. ALL EROSION CONTROL MEASURES SHALL BE IN COMPLIANCE WITH THE RULES, REGULATIONS AND SUWANNEE RIVER WATER MANAGEMENT DISTRICT, THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION AND THE UNITED STATES ARMY CORP OF ENGINEERS.
20. THE CONTRACTOR SHALL TAKE WHATEVER MEANS NECESSARY TO PREVENT THE EROSION OF SOIL AND DEPOSITION OF SEDIMENT ON ADJACENT AND DOWNSTREAM PROPERTIES.
21. ALL EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO CONSTRUCTION.



CROSS-SECTION OF A PROPERLY INSTALLED STRAW BALE

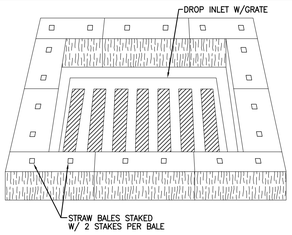


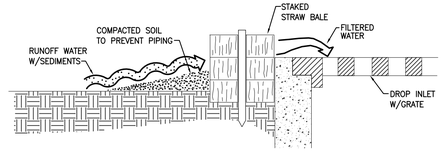
POINTS 'A' SHOULD BE HIGHER THAN POINT 'B'

PROPER PLACEMENT OF STRAW BALE BARRIER IN DRAINAGE WAY

NOTES:
1. EXCAVATE THE TRENCH
2. PLACE AND STAKE STRAW BALES
3. WEDGE LOOSE STRAW BETWEEN BALES
4. BACKFILL AND COMPACT THE EXCAVATED SOIL.

STRAW BALE BARRIER

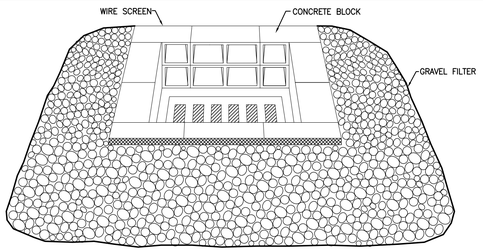


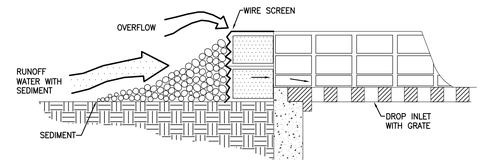


SPECIFIC APPLICATION

THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE THE INLET DRAINS A RELATIVELY FLAT AREA (SLOPES NO GREATER THAN 5%) WHERE SHEET OR OVERLAND FLOWS (NOT EXCEEDING 0.5 CFS) ARE TYPICAL. THE METHOD SHALL NOT APPLY TO INLETS RECEIVING CONCENTRATED FLOWS, SUCH AS IN STREET OR HIGHWAY MEDIANS.

STRAW BALE DROP INLET SEDIMENT FILTER

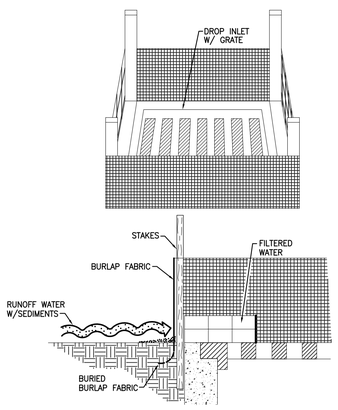




SPECIFIC APPLICATION

THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE HEAVY FLOWS ARE EXPECTED AND WHERE OVERFLOW CAPACITY IS NECESSARY TO PREVENT EXCESSIVE PONDING AROUND THE STRUCTURE.

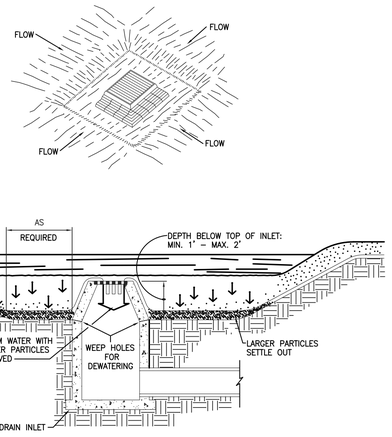
BLOCK AND GRAVEL DROP INLET SEDIMENT FILTER



SPECIFIC APPLICATION

THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE THE INLET DRAINS A RELATIVELY FLAT AREA (SLOPES NO GREATER THAN 5%) WHERE SHEET OR OVERLAND FLOWS (NOT EXCEEDING 0.5 CFS) ARE TYPICAL. THE METHOD SHALL NOT APPLY TO INLETS RECEIVING CONCENTRATED FLOWS, SUCH AS IN STREET OR HIGHWAY MEDIANS.

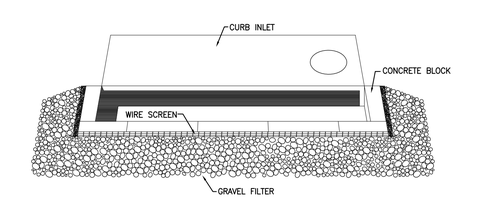
BURLAP DROP INLET SEDIMENT FILTER

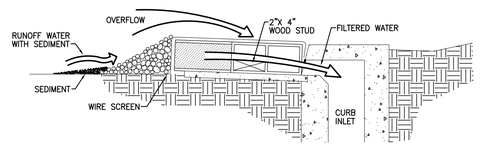


SPECIFIC APPLICATION

THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE HEAVY FLOWS ARE EXPECTED AND WHERE AN OVERFLOW CAPABILITY AND EASE OF MAINTENANCE ARE DESIRABLE.

EXCAVATED DROP INLET SEDIMENT TRAP

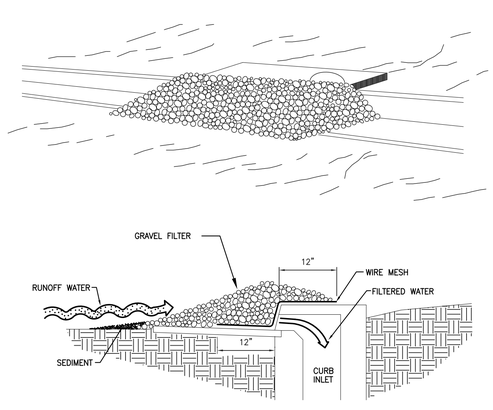




SPECIFIC APPLICATION

THIS METHOD OF INLET PROTECTION IS APPLICABLE AT CURB INLETS WHERE AN OVERFLOW CAPABILITY IS NECESSARY TO PREVENT EXESSIVE PONDING IN FRONT OF THE STRUCTURE.

BLOCK AND GRAVEL CURB INLET SEDIMENT FILTER



SPECIFIC APPLICATION

THIS METHOD OF INLET PROTECTION IS APPLICABLE AT CURB INLETS WHERE PONDING IN FRONT OF THE STRUCTURE IS NOT LIKELY TO CAUSE INCONVENIENCE OR DAMAGE TO ADJACENT STRUCTURES AND UNPROTECTED AREAS.

GRAVEL CURB INLET SEDIMENT FILTER

STONE, JOCA & MAHONEY
Consulting Engineers, Inc.
7400 BAYMEADOWS WAY, SUITE 220 JACKSONVILLE, FLORIDA 32256
PHONE (904) 448-5300 FAX (904) 448-0401
www.sjmengr.com
E. B. NO. 5288
STEPHEN P. JOCA P.E. NO. 38678

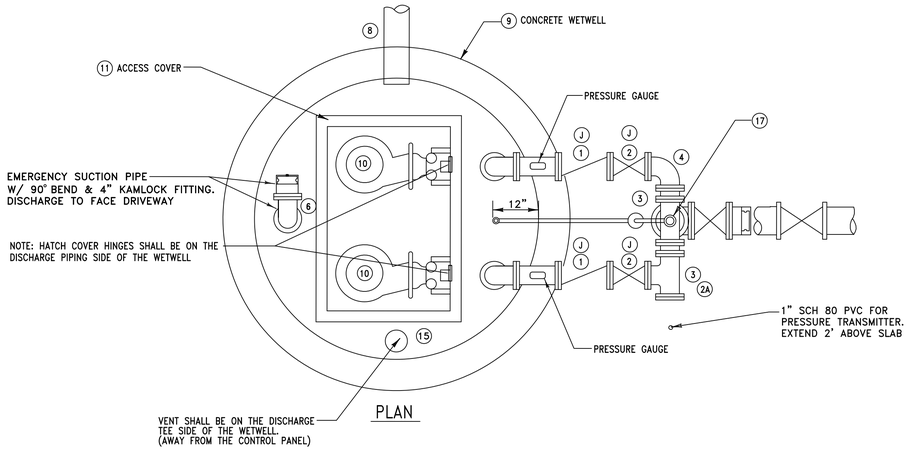
WATSON VILLAGE
FOR
DARK HARBOUR DEVELOPERS
EROSION CONTROL PLAN

REVISIONS

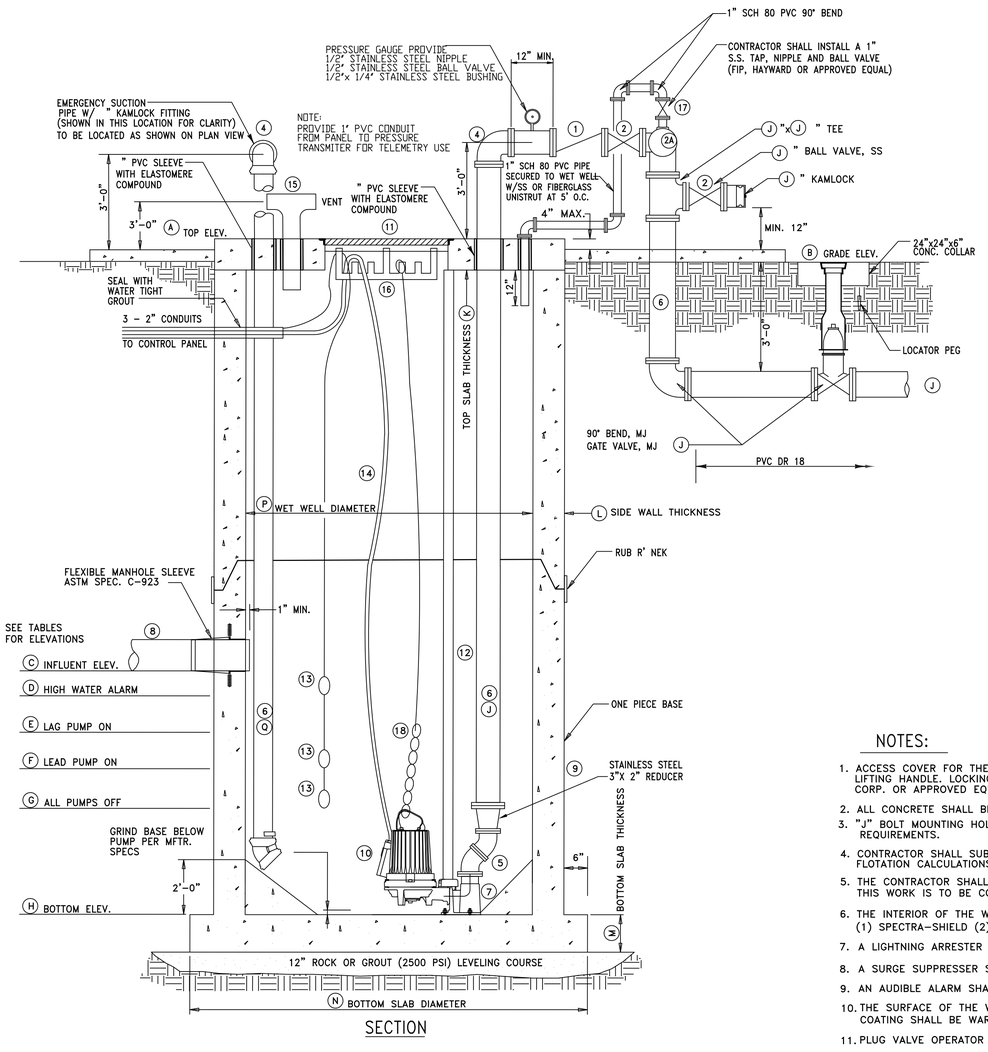
PLOT DATE:	05/6/2013
DRAWN BY:	RNS
DESIGNED BY:	SPJ
CHECKED BY:	SPJ
SCALE:	N.T.S
JOB NO.:	2299

NOT RELEASED FOR CONSTRUCTION

SHEET NO. 21 OF 31



PLAN



SECTION

LIFT STATION

STATION ELEVATIONS

(A)	TOP ELEVATION	31.62
(B)	GRADE ELEVATION	31.62(AVG)
(C)	INFLUENT INVERT	16.19
(D)	HIGH WATER ALARM	14.78
(E)	LAG PUMP ON (NO. 2)	14.28
(F)	LEAD PUMP ON (NO.1)	13.78
(G)	ALL PUMPS OFF	13.12
(H)	BOTTOM OF WET WELL	11.12

STATION INFORMATION

(I)	PUMP DISCHARGE PIPING SIZE	3"
(J)	FORCE MAIN PIPING SIZE	3"
(K)	TOP SLAB THICKNESS (MIN)	8"
(L)	SIDE WALL THICKNESS (MIN)	8"
(M)	BOTTOM SLAB THICKNESS	12"
(N)	BOTTOM SLAB DIAMETER (MIN)	8'-4"
(P)	WET WELL DIAMETER	6' DIA MIN.
(Q)	EMERGENCY SUCTION PIPING SIZE	4"

PUMP INFORMATION

NUMBER OF PUMPS 2

PUMP MANUFACTURER FLYGT

GRINDER SUBMERSIBLE

MODEL MP-3102 HT IMPELLER 267

DISCHARGE 3" MOTOR RPM 3455

6 HP 230 VOLTS 3 PHASE 60 HZ

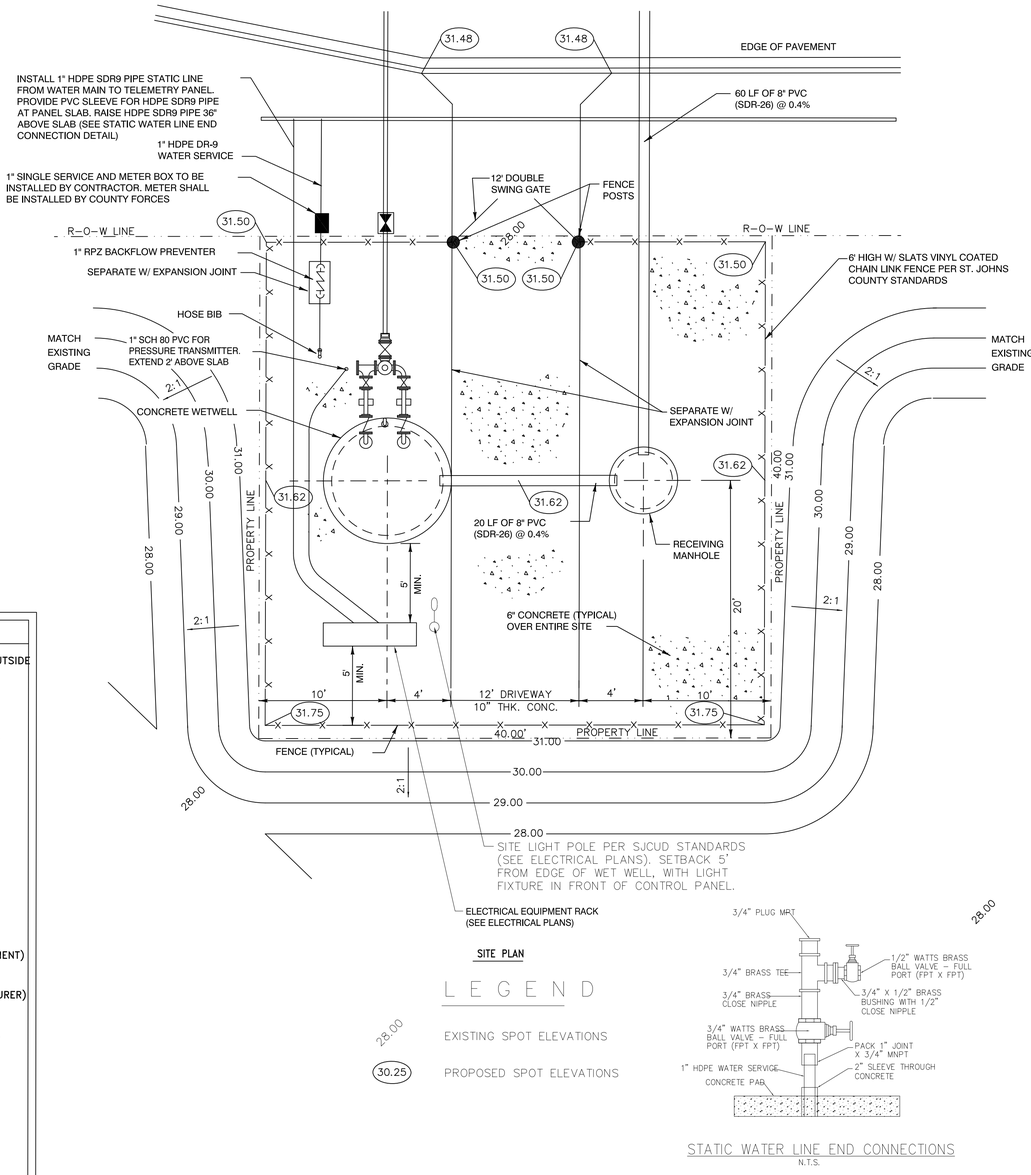
DESIGN POINT 56 GPM AT 98 FT.TDH

OPERATING COND. 91 GPM AT 63 FT.TDH

PUMP ACCESS HATCH SIZE ____ x ____

MECHANICAL EQUIPMENT SCHEDULE

1. CHECK VALVE, MUELLER OR M&H SWING-TYPE, LEVER FACING OUTSIDE LEVER AND SPRING OPERATED, IRON BODY, BRONZE MOUNTED
2. PLUG VALVE, DEZURIK, CAST IRON BODY, LEVER ACTUATED
2A. CONTRACTOR TO INSTALL PRESSURE SENSOR, ONYX, PART #160-0400-22-09-03, PSW-STAINLESS STEEL, VITRON SEAL, SILICON FILL W/ 1/2" NPT CONNECTION INCLUDING A PRESSURE TRANSMITER, ABB PART #264HSPSSBA1 CALIBRATOR 0-150 PSI (OR S.J.C.U.D. APPROVED EQUAL)
3. STAINLESS STEEL TEE
4. STAINLESS STEEL SHORT RADIUS 90° BEND
5. STAINLESS STEEL 45° BEND
6. 316 STAINLESS STEEL PIPE
7. DUCTILE IRON PUMP BASE
8. INFLUENT PIPE (SEE PLANS)
9. CONCRETE WETWELL
10. FLYGT PUMP (AS APPROVED BY ST. JOHNS COUNTY UTILITY DEPARTMENT) GRINDER SUBMERSIBLE)
11. ALUMINUM WETWELL ACCESS COVER (OPENING PER PUMP MANUFACTURER)
12. STAINLESS STEEL GUIDE RAILS
13. LEVEL TRANSDUCER, HIGH AND LOW ALARM FLOATS PROVIDED BY PUMP MANUFACTURER
14. PUMP MOTOR CABLE
15. 4" TEE SCHEDULE 80 PVC AIR VENT WITH PROTECTIVE SCREENS
16. STAINLESS STEEL CABLE HOLDER
17. 1" STAINLESS BLOW OFF LINE TO WETWELL-SECURE LINE TO WETWELL SLAB W/ UNISTRUT.
18. 1/4" STAINLESS STEEL WITH 18" CHAIN LINKS (FLYGT GRIP EYE CONNECTOR).



SITE PLAN

LEGEND

28.00 EXISTING SPOT ELEVATIONS

(30.25) PROPOSED SPOT ELEVATIONS

STATIC WATER LINE END CONNECTIONS

N.T.S.

NOTES:

1. ACCESS COVER FOR THE WETWELL SHALL BE 1/4" ALUM. TREAD PLATE WITH STAINLESS STEEL HARDWARE. COVER SHALL BE PROVIDED WITH LIFTING HANDLE. LOCKING HASP AND SAFETY LATCH TO HOLD COVERS OPEN. COVERS AND FRAME SHALL BE MANUFACTURED BY U.S. FOUNDRY CORP. OR APPROVED EQUAL. OPENING IN WETWELL SLAB AS PER MANUFACTURES SPECIFICATIONS.
2. ALL CONCRETE SHALL BE 6" THICK AND REINFORCED WITH 6 X 6 10/10 WWM EXCEPT THE DRIVEWAY WHICH SHALL BE 10" THICK.
3. "J" BOLT MOUNTING HOLE AND CONDUIT HOLES SHALL BE CORE DRILLED IN THE FIELD AS PER SHOP DRAWINGS OR ACTUAL FIELD REQUIREMENTS.
4. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF PRECAST WETWELL. SHOP DRAWINGS SHALL INCLUDE ALL NECESSARY STRUCTURAL AND FLOTATION CALCULATIONS.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING ELECTRICAL POWER TO THE PUMPING STATION. THREE PHASE POWER IS REQUIRED. THIS WORK IS TO BE COORDINATED WITH FLORIDA POWER AND LIGHT.
6. THE INTERIOR OF THE WET WELL AND RECEIVING MANHOLE SHALL BE COATED WITH ONE OF THE FOLLOWING APPROVED MANUFACTURERS: (1) SPECTRA-SHIELD (2) AGRU-LINER (3) SEWPER-COAT
7. A LIGHTNING ARRESTER SHALL BE SUPPLIED AND INSTALLED BY THE "SYSTEM" SUPPLIER.
8. A SURGE SUPPRESSER SHALL BE SUPPLIED AND INSTALLED BY THE "SYSTEM" SUPPLIER.
9. AN AUDIBLE ALARM SHALL BE SUPPLIED AND INSTALLED BY THE "SYSTEM" SUPPLIER.
10. THE SURFACE OF THE WET WELL SHALL FIRST BE PREPARED BY GROUTING THE WET WELL AS REQUIRED TO OBTAIN A SMOOTH SURFACE. THE COATING SHALL BE WARRANTED FOR A MINIMUM OF 10 YEARS FOR MATERIAL AND WORKMANSHIP.
11. PLUG VALVE OPERATOR SHALL BE MOUNTED PARALLELL TO GROUND AND FACE OUTWARD.
12. PLUG VALVE SEAT SHALL BE INSTALLED ADJACENT TO CHECK VALVE REGARDLESS OF FLOW ARROW ON VALVE.
13. RPZ BACKFLOW PREVENTER PIPING ABOVE GRADE SHALL BE THREADED BRASS WITH BRASS OR STAINLESS STEEL FITTINGS AND VALVES.
14. SITE GRADING SHALL PROVIDE FOR DRAINAGE OF WATER TO THE DRIVEWAY SIDE OF SITE.
15. SIZES SHOWN IN "STATION INFORMATION" ABOVE ARE MINIMUMS AND MAY NEED TO BE LARGER BASED UPON SPECIFIC SITE DESIGN.
16. ALL ABOVE GRADE PIPING AND FITTINGS SHALL BE PAINTED FOREST GREEN (OIL BASED).
17. FOR PUMPS 47 HP AND LARGER, USE 6" CAMLOCK FITTINGS. FOR PUMPS LESS THAN 47 HP, USE 4" CAMLOCK FITTINGS.
18. ONE STAINLESS STEEL SUPPORT SHALL BE INSTALLED UNDER EACH PLUG VALVE.
19. ALL PIPE SHALL BE FLANGED.

NO.	BY	DATE	SYMBOL	REVISIONS
6.				
5.				
4.				
3.				
2.				
1.				

DESIGNER:	G. REED
DRAWN BY:	
DATE:	NOVEMBER 2006
CHECKED BY:	
DATE:	NOVEMBER 2006

DESIGN ENGINEER

STEPHEN P. JOCA, P.E.

FLORIDA REGISTRATION NO.

38678

ST. JOHNS COUNTY
UTILITY DEPARTMENT
2175 MIZELL ROAD
ST AUGUSTINE, FLORIDA 32080
Phone (904) 471-2161 • Fax. (904) 461-7619

3" PUMP STATION STANDARD DETAIL

SCALE: N.T.S.

NO. SHEETS

SHEET NO.

DRAWING NO.