

# CONSTRUCTION PLANS FOR Liberty Square Park Phase Five

## A Residential Subdivision

Being a portion of:  
Land Lots 229 and 230, 6th dist.  
City of Hampton  
Henry County, Georgia

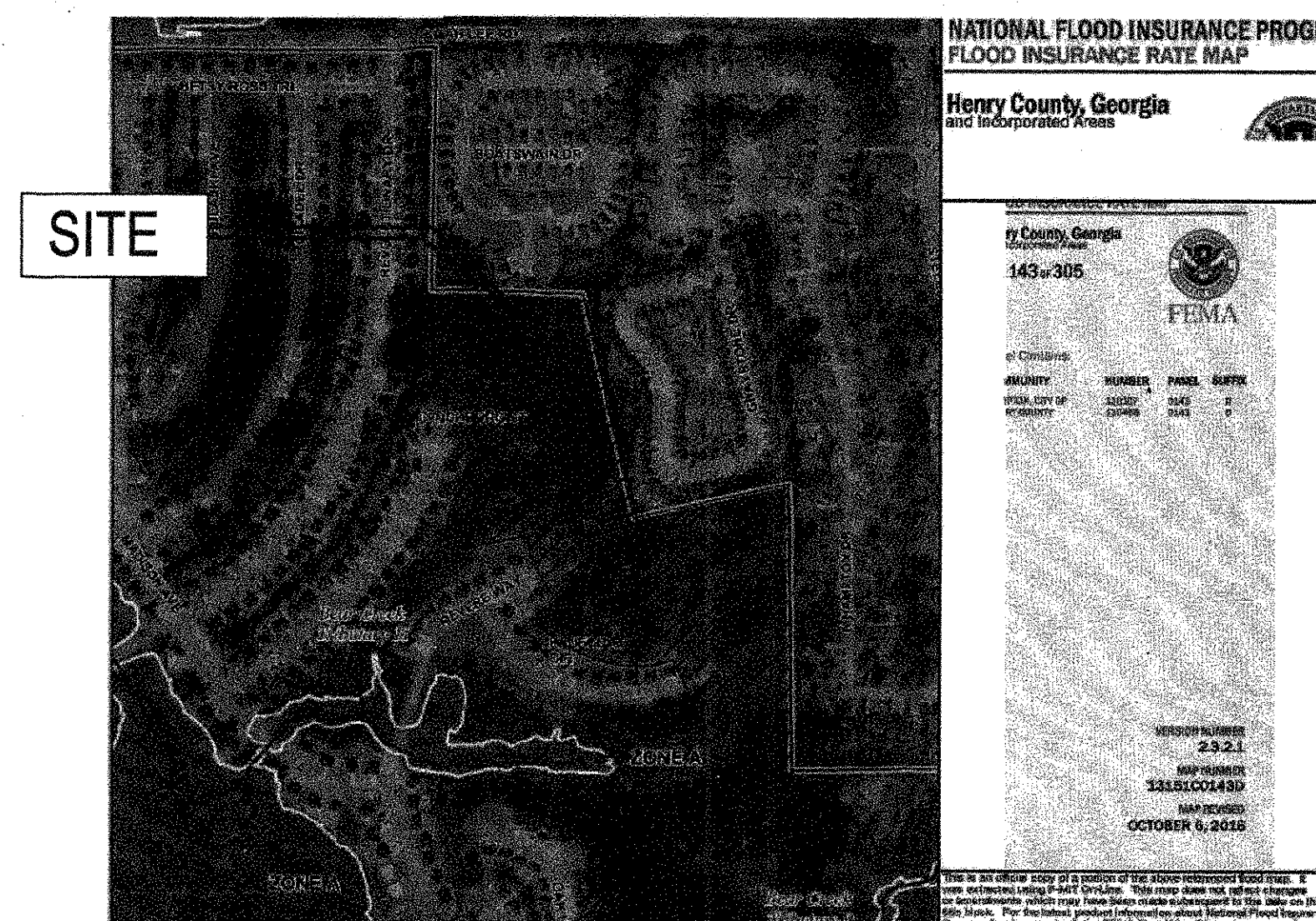
PARCEL ID. 008-01034000

OWNER/DEVELOPER  
PRIMARY PERMITTEE:

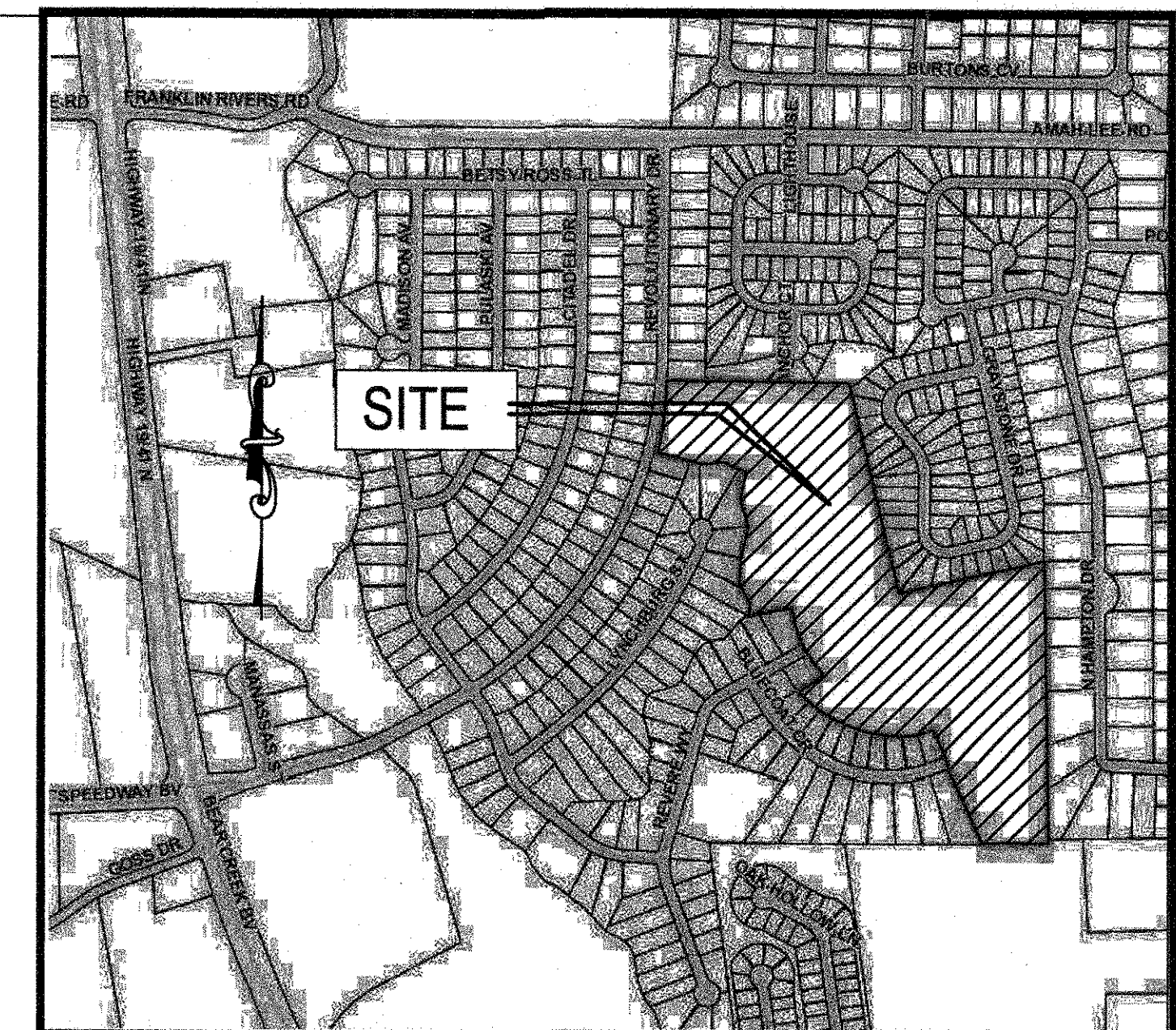
LSPV, LLC  
P.O. BOX 1796  
Monroe, Ga. 30655

24 HOUR CONTACT:

R. Neil Koelbl  
P.O. Box 2422  
McDonough, Ga. 30253  
404-925-9103  
neil@libertycommunities.com



AS SHOWN ON FLOOD INSURANCE RATE MAP OF HENRY COUNTY, GEORGIA COMMUNITY PANEL NUMBER:  
13151C0143D, EFFECTIVE DATE : OCTOBER 6, 2016 HE SITE IS NOT LOCATED IN FLOOD HAZARD ZONE



Location Map

### Sheet Index

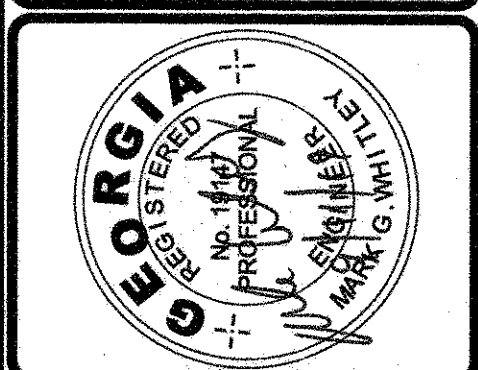
- COVER SHEET
- 1.1 CONSENT ORDER
- 1.2 ORDINANCE 179
2. PRELIMINARY PLAT (BY OTHERS)
- 2.1 EXISTING CONDITIONS
3. OVERALL SITE PLAN
4. SITE PLAN (SHEET 1)
5. SITE PLAN (SHEET 2)
6. GRADING AND DRAINAGE PLAN (SHEET 1)
7. GRADING AND DRAINAGE PLAN (SHEET 2)
8. ES&PC PHASE I
9. ES&PC PHASE II
10. ES&PC PHASE III
11. STORM PROFILES (SHEET 1)
12. STORM PROFILES (SHEET 2)
13. STORMWATER POND DETAILS
14. WATER PLAN (SHEET 1)
15. WATER PLAN (SHEET 2)
16. SANITARY SEWER PLAN (SHEET 1)
17. SANITARY SEWER PLAN (SHEET 2)
18. SANITARY SEWER PROFILES
19. BLUECOAT CIRCLE PLAN AND PROFILE (SHEET-1)
20. BLUECOAT CIRCLE PLAN AND PROFILE (SHEET 2)
21. BLUECOAT CIRCLE PLAN AND PROFILE (SHEET 3)
22. STREET "B" PLAN AND PROFILE
23. NPDES NOTES (SHEET 1)
24. NPDES NOTES (SHEET 2)
25. NPDES NOTES (SHEET 3)
- 26.-28 EROSION CONTROL DETAILS
29. HENRY COUNTY SEWER DETAILS
30. HENRY COUNTY WATER DETAILS
31. GDOT STRUCTURE DETAILS
32. GDOT DETAILS
33. TREE PROTECTION PLAN (SHEET 1)
34. TREE PROTECTION PLAN (SHEET 2)

### NPDES FEES

AGENCY	DISTURBED ACRES	FEE/ACRE	TOTAL
GA EPA	13.50	\$40.00	\$540.00
CITY OF HAMPTON	13.50	\$40.00	\$540.00

APPROVED  
DATE: 12/28/19  
BY: [Signature]

GSWCC  
MARK G. WHITLEY, PE  
000001036  
LEVEL 1A CERTIFIED PERSONNEL  
LEVEL 1B CERTIFIED INSPECTOR  
LEVEL 1I CERTIFIED DESIGN PROF.



WHITLEY  
ENGINEERING INC.  
DESIGN NPDES PROJECT MANAGEMENT  
TEL: (770)946-0256  
38 E. MAIN STREET N.  
HAMPTON, GA 30228

REV.	DATE:	DESCRIPTION:
1	04/20/19	REVISED PER CITY/COUNTY COMMENTS
2	05/08/19	REVISED PER CITY COMMENTS
3	05/16/19	REVISED PER HOWSA COMMENTS
4	06/26/19	REVISED PER CITY COMMENTS
5	07/15/19	REVISED PER CITY COMMENTS
6	07/25/19	REVISED PER CITY COMMENTS
7	08/29/19	REVISED PER CITY COMMENTS

Liberty Square Park Phase 5	DATE: 02/04/2019
COVER SHEET	SCALE: N.T.S.
LAND LOT 229 AND 230 OF THE 6TH DISTRICT	
CITY OF HAMPTON, HENRY COUNTY, GA	

THESE DRAWINGS ARE THE PROPERTY OF WHITLEY ENGINEERING, INC. AND MAY NOT BE USED, REPRODUCED AND/OR INCORPORATED INTO ANOTHER WORK FOR ANY REASON WITHOUT THE WRITTEN CONSENT OF THE DESIGN PROFESSIONAL.

SHEET  
1 OF 34

City Approved



\*PHASES I-V  
TOTAL AREA - 203 AC  
TOTAL UNITS - 392  
DENSITY - 1.93

BY: Valde M...

GSWCC  
MARK G. WHITLEY, PE  
0000001036  
LEVEL IA CERTIFIED PERSONNEL  
LEVEL IB CERTIFIED INSPECTOR  
LEVEL II CERTIFIED DESIGN PROF.



STATE OF GEORGIA  
CITY OF HAMPTON

ORDINANCE 179 - Liberty Square

AN ORDINANCE TO ANNEX CERTAIN PROPERTY INTO THE CITY OF HAMPTON, GEORGIA; AND FOR OTHER PURPOSES.

WHEREAS, the owner of the Property described herein have petitioned the City for annexation of the Property into the City;

WHEREAS, the Mayor and Council of the City of Hampton have considered the petition for annexation of the Property;

WHEREAS, the Mayor and Council of the City of Hampton deem it in the best interests of the residents of the City that the Property be annexed into the City; and

WHEREAS, such act would benefit the health, safety and welfare of the City;

NOW THEREFORE the Council of the City of Hampton hereby ordains that:

**Section 1.** The property (the "Property") described in Exhibit A attached hereto and incorporated herein by reference is hereby annexed into the City of Hampton, Georgia pursuant to the authority of O.C.G.A. Sections 36-36-1 *et seq.* and 36-36-20 *et seq.*

**Section 2.** The Property is hereby zoned R-2 and C-3 as shown on Exhibit A, such zoning to be noted on the Official Zoning Map of the City of Hampton, Georgia as soon as reasonably possible following adoption of this Ordinance by the Zoning Administrator along with an editorial note on the Official Zoning Map of the City of Hampton, Georgia specifying the parcel(s) affected by this Ordinance and the date of adoption of this Ordinance. Until the zoning is indicated on the Official Zoning Map of the City of Hampton, Georgia, this Ordinance shall govern over the Official Zoning Map of the City of Hampton, Georgia to the extent of any

discrepancy between this Ordinance and the Official Zoning Map of the City of Hampton, Georgia.

**Section 3.** This Ordinance shall become effective ten (10) days after the date of its adoption, except insofar as Chapter 36 of the Official Code of Georgia provides otherwise and except that the provisions of this Ordinance shall not be enforceable until receipt from the United States Department of Justice of notice that no objection shall be interposed under the Voting Rights Act.

**Section 4.** The preamble of this Ordinance shall be considered to be and is hereby incorporated by reference as if fully set out herein.

**Section 5.** (a) It is hereby declared to be the intention of the Mayor and Council that all sections, paragraphs, sentences, clauses and phrases of this Ordinance are or were, upon their enactment, believed by the Mayor and Council to be fully valid, enforceable and constitutional.

(b) It is hereby declared to be the intention of the Mayor and Council that, to the greatest extent allowed by law, each and every section, paragraph, sentence, clause or phrase of this Ordinance is severable from every other section, paragraph, sentence, clause or phrase of this Ordinance. It is hereby further declared to be the intention of the Mayor and Council that, to the greatest extent allowed by law, no section, paragraph, sentence, clause or phrase of this Ordinance is mutually dependent upon any other section, paragraph, sentence, clause or phrase of this Ordinance.

(c) In the event that any phrase, clause, sentence, paragraph or section of this Ordinance shall, for any reason whatsoever, be declared invalid, unconstitutional or otherwise unenforceable by the valid judgment or decree of any court of competent jurisdiction, it is the express intent of the Mayor and Council that such invalidity, unconstitutionality or unenforceability shall, to the greatest extent allowed by law, not render invalid, unconstitutional

or otherwise unenforceable any of the remaining phrases, clauses, sentences, paragraphs or sections of the Ordinance and that, to the greatest extent allowed by law, all remaining phrases, clauses, sentences, paragraphs and sections of the Ordinance shall remain valid, constitutional, enforceable, and of full force and effect.

**Section 6.** All ordinances and parts of ordinances in conflict herewith are hereby expressly repealed.

**Section 7.** Penalties in effect for violations of the Zoning Ordinance of the City of Hampton, Georgia at the time of the effective date of this Ordinance shall be and are hereby made applicable to this Ordinance and shall remain in full force and effect.

SO ORDAINED this 4<sup>th</sup> day of December, 2003.

CITY OF HAMPTON, GEORGIA

HUGH LEWIS, Mayor

ATTEST:

ELAINE HAYNES, City Clerk

APPROVED AS TO FORM:

STEVEN M. FINCHER, City Attorney

APPROVED  
DATE: 11/25/19  
BY: [Signature]

Liberty Square Park Phase 5  
ORDINANCE 179

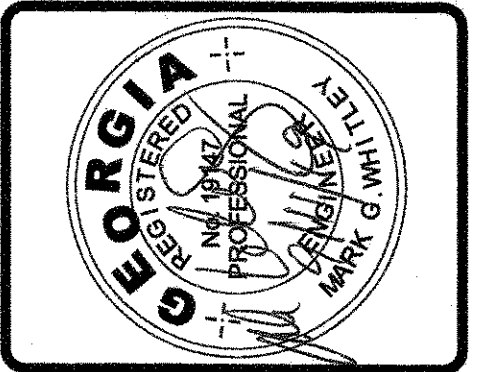
LAND LOT 229 AND 230 of the 6th DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA

DATE: 02/04/2019  
SCALE: N.T.S.  
THESE DRAWINGS ARE THE PROPERTY OF WHITLEY ENGINEERING, INC. AND MAY NOT BE USED, REPRODUCED AND OR INCORPORATED INTO ANOTHER WORK FOR ANY REASON WITHOUT THE WRITTEN CONSENT OF THE DESIGN PROFESSIONAL.

REV	DATE	DESCRIPTION
1	04/30/19	REVISED PER CITY/COUNTY COMMENTS
2	05/08/19	REVISED PER CITY COMMENTS
3	05/16/19	REVISED PER HOWSA COMMENTS
4	06/25/19	REVISED PER CITY COMMENTS
5	07/15/19	REVISED PER CITY COMMENTS
6	07/25/19	REVISED PER CITY COMMENTS
7	09/09/2019	REVISED PER CITY COMMENTS

☒ Not Released For Construction  
☐ Released For Construction

WHITLEY  
ENGINEERING INC.  
DESIGN NPDES PROJECT MANAGEMENT  
TEL: (770)946-0256  
38 E. MAIN STREET N.  
HAMPTON, GA 30228



GSWCC  
MARK G. WHITLEY, PE  
000007036  
LEVEL IA CERTIFIED PERSONNEL  
LEVEL IB CERTIFIED INSPECTOR  
LEVEL II CERTIFIED DESIGN PROF.



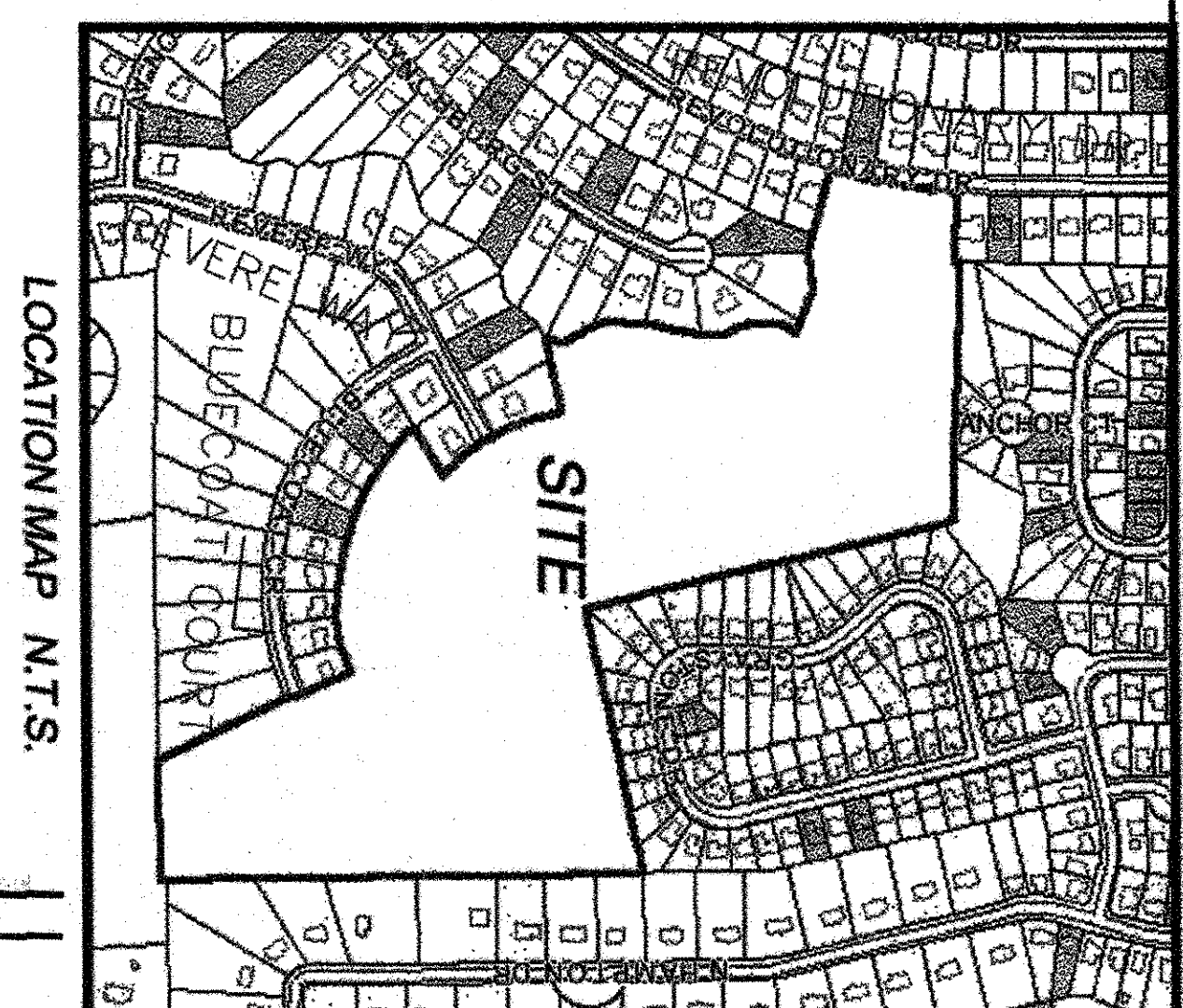
THIS PRELIMINARY PLAT IS NOT FOR RECORDING,  
AND SHOULD BE APPROVED BY THE CITY OF HAMPTON.

UTILITY NOTES

- NOTES:
1. INFORMATION REGARDING THE PRESENCE, SIZE, AND LOCATION OF UNDERGROUND UTILITIES IS SHOWN HEREON. THE INFORMATION IS BASED ON THE LOCATION OF ABOVE GROUND UTILITIES AND THE LOCATION OF UNDERGROUND UTILITIES IS BASED ON THE LOCATION OF ABOVE GROUND UTILITIES. NO CERTIFICATION IS MADE AS TO THE ACCURACY.

GENERAL NOTES

1. The field data upon which this map is based is based on a close precision of one foot in 13,333 feet and an angular error of 0.4" per angle point, and was not adjusted.
2. The map area has been calculated to be 1,162,248 square feet.
3. The map area has been calculated to be 1,162,248 square feet.
4. The map area has been calculated to be 1,162,248 square feet.



LOCATION MAP N.T.S.

PRELIMINARY PLAT FOR:  
LIBERTY SQUARE PARK S/D.  
PHASE V  
HENRY COUNTY, GEORGIA  
CITY OF HAMPTON

NOTE : DETENTION / WATER QUALITY  
1. THE TOTAL NUMBER OF LOTS MAY BE LESS DUE TO THE DESIGN OF STORM WATER CONTROL / W.Q. FACILITIES. IT ALSO MAY CHANGE SOME OF THE LOT CONFIGURATIONS.

APPROVED  
DATE: 10/24/18  
BY: [Signature]



Map Unit Symbol	Map Unit Name	Area in Acre	Percent of Acre
1	Asphalt road, 12' to 18'	0.3	0.1%
2	Asphalt road, 18' to 24'	1.2	0.4%
3	Asphalt road, 24' to 30'	4.4	1.5%
4	Asphalt road, 30' to 36'	10.1	4.0%
5	Asphalt road, 36' to 42'	24.4	10.0%
6	Asphalt road, 42' to 48'	73.8	28.9%

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

FLOOD NOTES  
BASED ON THE INFORMATION SHOWN ON THE FLOOD HAZARD BOUNDARY MAPS FURNISHED BY THE DEPT. OF THE ENVIRONMENTAL PROTECTION AGENCY, IT IS THE PROPERTY SHOWN HEREON IS OUTSIDE OF THE 100 YRS FLOOD HAZARD AREA.  
COM. PANEL 1315101430 DATED 10-05-2018

CAUTION  
THE UTILITIES SHOWN ARE SHOWN FOR THE CONVENIENCE OF THE USER. THE USER SHALL BE RESPONSIBLE FOR THE LOCATION AND DEPTH OF THE UTILITIES. THE USER SHALL BE RESPONSIBLE FOR THE LOCATION AND DEPTH OF THE UTILITIES. THE USER SHALL BE RESPONSIBLE FOR THE LOCATION AND DEPTH OF THE UTILITIES.

PRELIMINARY PLAT  
APPROVED  
DATE: 10/24/18  
BY: [Signature]  
HAMPTON, GA  
PER ORDINANCE  
SEC 51

1. WETLANDS SHOWN ON THIS PLAT ARE UNDER THE JURISDICTION OF THE U.S. ARMY CORPS OF ENGINEERS. LOT OWNERS MAY BE SUBJECT TO RESTRICTIONS ON THE USE OF THESE WETLAND AREAS WITHOUT PROPER AUTHORIZATION.
2. WETLANDS AND CREEKS DELINEATED BY APPLIED ENVIRONMENTAL SCIENCES INC. 770-328-8108, JUNE 19, 2018

SITE NARRATIVE

1. EXISTING ZONING: R-2
2. ADJACENT PROPERTIES ARE ZONED R-2.
3. ALL ELEVATIONS SHOWN ARE ON MEAN SEA LEVEL DATUM.
4. TOPOGRAPHIC BY AERIAL MAPPING PROVIDED BY DEVELOPER.
5. TOTAL PHASE III SITE AREA - (14.33 ACRES).
6. TOTAL PHASE III OPEN SPACE LOT 384 - 3.18 Acres.
7. LOT AREA: 9,600 s.f. TO 11,999 s.f. LOT AREA: 12,000 s.f. AND LARGER
8. FRONT SETBACK: 30'
9. REAR SETBACK: 40'
10. SIDE SETBACK: 10'
11. LOTS 16, 17, 18, 25, 39, 53, REQUIRE FRONT AND REAR SET BACK OF 25 FT.
12. GROSS DENSITY: 94 LOTS/33.82 AC. = 2.86 LOTS/ACRE
13. MIN. HOUSE SIZES: 1/3 1,800 S.F., 1/3 1,800 S.F., 1/3 1,800 S.F.
14. BOUNDARY INFORMATION FIELD RUN BY SOUTHSIDE SURVEYING AND PLANNING L.L.C. DATE: 06-22-18
15. TAX ID # 008-01034000
16. WATER & SEWER SERVICE PROVIDED BY H.C.W.A.
17. 12 ADA HANDICAPPED RAMPS LOCATED AT ALL INTERSECTIONS.
18. 14 SIDEWALKS OF (4) FT WIDTH SHALL BE PROVIDED ON BOTH SIDES OF INTERIOR STREETS.
19. 12 UNDERGROUND UTILITIES WITH STREET LIGHTS THROUGHOUT.
20. 16 CENTRALIZED MAIL BOX LOCATION WILL BE PROVIDED.
21. TOTAL ROAD LINEAR FOOTAGE - 4,075'
22. BLUECOAT COURT LINEAR FOOTAGE - 2,780'
23. REVERSE COURT LINEAR FOOTAGE - 1,316'
24. THE HOA WILL OWN AND MAINTAIN ALL OPEN SPACE AREAS.
25. THERE ARE WETLANDS AND STATE WATER ON THIS SITE - SEE PLAT.
26. LANDSCAPING AND PLANTINGS WILL COMPLY WITH ALL CITY OF HAMPTON REQUIREMENTS.
27. IMPERVIOUS AREAS/HOUSES AVG 1,600 S.F. \* 93 = 81,840 S.F.
28. DRY 22 \* 40 = 880 S.F.
29. STREETS / SIDEWALKS = 136,560 S.F.
30. TOTAL 373,840 S.F. (8.58 ACRES)

PARCEL #1  
TAX ID # 008-01034000  
AREA #1 (33.75 ACRES)  
SCANNED AREA (+/- 0.07 ACRES)  
TOTAL AREA = +/- 33.82 ACRES  
N/F  
BPP068 LLC  
D.B. 13295, PG. 272

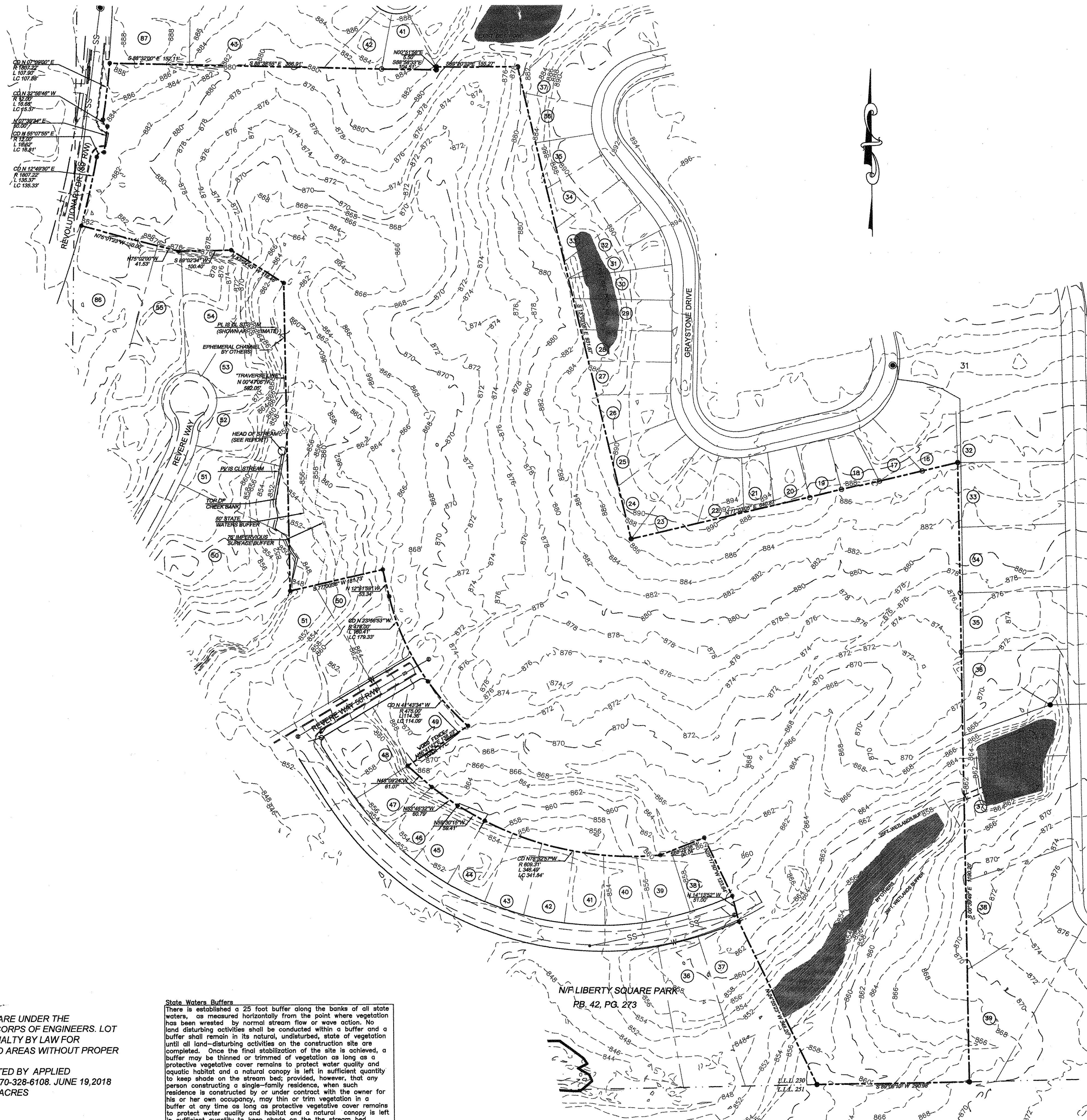
State Waters Buffers  
There is established a 25 foot buffer along the banks of all state waters, or measured horizontally from the point where vegetation has been washed by normal stream flow or wave action, to land disturbing activities and structures. The purpose of this buffer is to protect the water quality and the stream bed. Once the final stabilization of the site is achieved, a buffer may be thinned or trimmed of vegetation as long as a protective vegetative cover remains to protect water quality and aquatic habitat and a reduced canopy is left in sufficient quantity to keep shade on the stream bed. When such residence is constructed by or under contract with the owner for his or her own occupancy, may then or then vegetation in a buffer at any time as long as protective vegetative cover remains to protect water quality and the stream bed. The owner shall be responsible for maintaining the buffer. Georgia House Bill 1426

INDEX:  
SHEET#1 LAYOUT, TOPOGRAPHIC  
SHEET#2 LOT AREAS



REV.	DESCRIPTION	DATE
1	CITY COMMENTS	9/22/2018
2	SURVEYING & PLANNING	10/24/2018
3	PRELIMINARY PLAT FOR	10/24/2018
4	GENERAL HOLDINGS L.L.C.	10/24/2018
5	Land Lot 229 & 230 6TH Land District	10/24/2018
6	Hampton, Georgia	10/24/2018
7	Drawn By: MAM SR	10/24/2018
8	Date: 08/07/18	10/24/2018





**WETLANDS**

1. WETLANDS SHOWN ON THIS PLAT ARE UNDER THE JURISDICTION OF THE U.S. ARMY CORPS OF ENGINEERS. LOT OWNERS MAY BE SUBJECT TO PENALTY BY LAW FOR DISTURBANCE TO THESE WETLAND AREAS WITHOUT PROPER AUTHORIZATION

2. WETLANDS AND CREEKS DELINEATED BY APPLIED ENVIRONMENTAL SCIENCES INC, 770-328-6108. JUNE 19, 2018  
TOTAL AREA OF WETLANDS = 0.55 ACRES

**State Waters Buffers**

There is established a 25 foot buffer along the banks of all state waters, as measured horizontally from the point where vegetation has been wasted by normal stream flow or wave action. No land disturbing activities shall be conducted within a buffer and a buffer shall remain in its natural, undisturbed, state of vegetation until all land-disturbing activities on the construction site are completed. Once the final stabilization of the site is achieved, a buffer may be thinned or trimmed of vegetation as long as a protective vegetative cover remains to protect water quality and aquatic habitat and a natural canopy is left in sufficient quantity to keep shade on the stream bed; provided, however, that any person constructing a single-family residence, when such residence is constructed by or under contract with the owner for his or her own occupancy, may thin or trim vegetation in a buffer at any time as long as protective vegetative cover remains to protect water quality and habitat and a natural canopy is left in sufficient quantity to keep shade on the stream bed.

Georgia House Bill 1426

**811**  
Utilities Protection Center, Inc.  
Know what's below.  
Call before you dig.

LEGEND	
SS	EXISTING SANITARY SEWER MAIN
SS	PROPOSED SANITARY SEWER MAIN
W	EXISTING WATER MAIN
W	PROPOSED WATER MAIN
P	EXISTING POWER LINE
P	EXISTING STORM PIPE
P	PROPOSED STORM PIPE
1" RCP	EXISTING FIRE HYDRANT
1" RCP	PROPOSED FIRE HYDRANT
1" RCP	EXISTING FIRE HYDRANT VALVE
1" RCP	PROPOSED FIRE HYDRANT VALVE
1" RCP	EXISTING SEWER MANHOLE
1" RCP	PROPOSED SEWER MANHOLE
1" RCP	EXISTING POWER POLE
1" RCP	PROPOSED POWER POLE
1" RCP	EXISTING CONTOURS
1" RCP	PROPOSED CONTOURS
1" RCP	DROP INLET - DI
1" RCP	JUNCTION BOX - JB
1" RCP	DOUBLE-WING CATCH BASIN - DWCB
1" RCP	SINGLE-WING CATCH BASIN - SWCB
1" RCP	HEADWALL

**DEVELOPER/PRIMARY PERMITTEE**  
LSVP, LLC  
P.O. Box 1796  
MONROE, GA. 30655  
**24 HOUR CONTACT:**  
R. NEIL KOELBL  
P.O. Box 2422  
McDONOUGH, GA. 30253  
404-925-9103  
neil@libertycommunities.com

**APPROVED**  
DATE: 10/22/19  
BY: [Signature]  
**GRAPHIC SCALE**  
100 0 50 100 200 300 400  
( IN FEET )  
1 inch = 100 ft.

GSWCC  
MARK G. WHITLEY, PE  
0000001036  
LEVEL I A CERTIFIED PERSONNEL  
LEVEL I B CERTIFIED INSPECTOR  
LEVEL II CERTIFIED DESIGN PROF.

**GEORGIA**  
REGISTERED PROFESSIONAL  
[Signature]  
MARK G. WHITLEY, PE

**WHITLEY ENGINEERING INC.**  
DESIGN NPDES PROJECT MANAGEMENT  
TEL: (770)946-0256  
38 E. MAIN STREET N.  
HAMPTON, GA 30228

REV.	DATE:	DESCRIPTION:
1	04/30/19	REVISED PER CITY COMMENTS
2	05/09/19	REVISED PER CITY COMMENTS
3	05/16/19	REVISED PER CITY COMMENTS
4	06/25/19	REVISED PER CITY COMMENTS
5	07/15/19	REVISED PER CITY COMMENTS
6	07/22/19	REVISED PER CITY COMMENTS
7	08/09/2019	REVISED PER CITY COMMENTS

☒ Not Released For Construction  
☐ Released For Construction

**Liberty Square Park Phase 5**  
**EXISTING CONDITIONS**  
LAND LOT 229 AND 230 OF THE 6TH DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA  
DATE: 02/02/2019  
SCALE: AS SHOWN

THESE DRAWINGS ARE THE PROPERTY OF WHITLEY ENGINEERING, INC. AND MAY NOT BE USED, REPRODUCED AND OR INCORPORATED INTO ANOTHER WORK FOR ANY REASON WITHOUT THE WRITTEN CONSENT OF THE DESIGN PROFESSIONAL.

**SHEET**  
**2.1 OF 34**

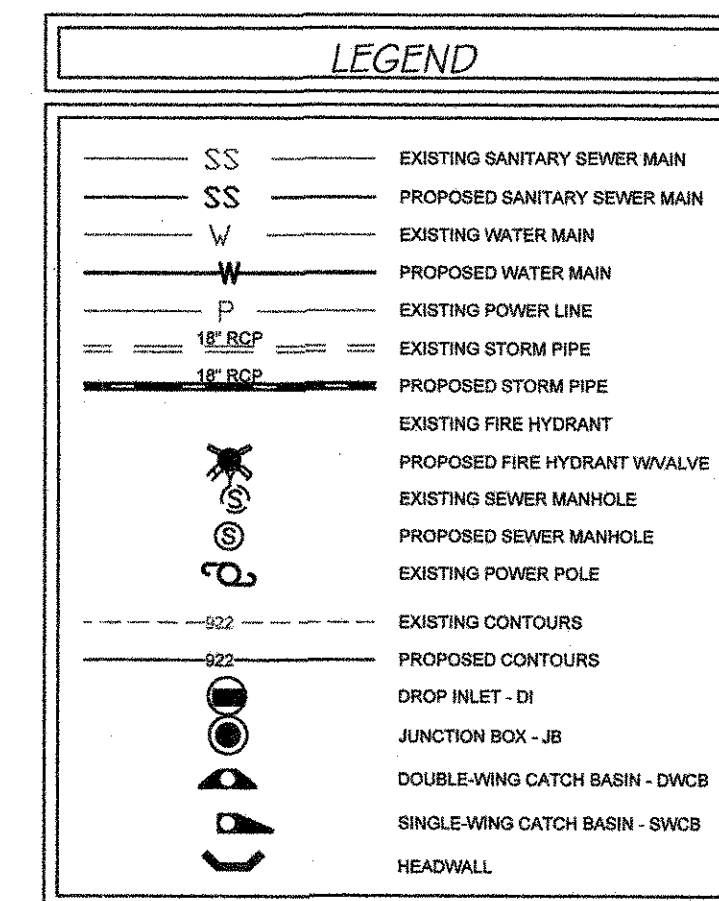




Know what's below.  
Call before you dig.

THE PROPOSED SITE IS NOT LOCATED  
IN THE TOWALIGA DISTRICT.

**DRAINAGE EASEMENT NOTE:**  
DRAINAGE EASEMENT IS AN EASEMENT  
FOR THE CONVEYANCE OF WATER,  
CONSTRUCTION AND MAINTENANCE OF  
STORM DRAIN STRUCTURES.



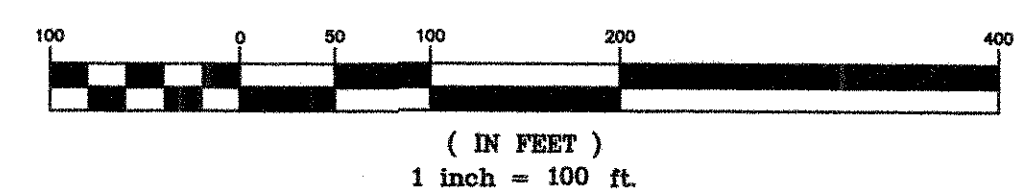
**DEVELOPER/PRIMARY PERMITTEE**  
LSVP, LLC  
P.O. Box 1796  
MONROE, GA. 30655  
**24 HOUR CONTACT:**  
R. NEIL KOELBL  
P.O. Box 2422  
McDONOUGH, GA. 30253  
404-925-9103  
neil@libertycommunities.com

**APPROVED**

DATE: 11-4-19

BY: [Signature]

**GRAPHIC SCALE**



( IN FEET )  
1 inch = 100 ft.

**WETLANDS**

1. WETLANDS SHOWN ON THIS PLAT ARE UNDER THE JURISDICTION OF THE U.S. ARMY CORPS OF ENGINEERS. LOT OWNERS MAY BE SUBJECT TO PENALTY BY LAW FOR DISTURBANCE TO THESE WETLAND AREAS WITHOUT PROPER AUTHORIZATION
2. WETLANDS AND CREEKS DELINEATED BY APPLIED ENVIRONMENTAL SCIENCES INC, 770-328-6108. JUNE 19, 2018  
TOTAL AREA OF WETLANDS = 0.55 ACRES

**SITE PARAMETERS**

1. EXISTING ZONING: R-2
2. TAX PARCEL # 008-01034000 N/F BPP069 D.B.13295, PG. 272 PER HENRY COUNTY RECORDS
3. ADJACENT PROPERTIES ARE ZONED R-2.
4. ALL ELEVATIONS SHOWN ARE ON MEAN SEA LEVEL DATUM. TOPOGRAPHIC BY AERIAL MAPPING PROVIDED BY HENRY COUNTY GIS (CONTOUR INTERVAL 2FT.)
5. TOTAL PHASE 5 SITE AREA - (+/-) 33.82 ACRES.
6. TOTAL PHASE 5 OPEN SPACE = 3.84 Acres.
7. ALL LOTS TO BE A MINIMUM WIDTH OF 75' AT THE FRONT BUILDING SETBACK.
8. SITE ZONED: R-2
9. LOT AREA: 9,500 s.f. TO 11,999 s.f.  
FRONT SETBACK = 30'  
REAR SETBACK = 30'  
SIDE SETBACK = 10'
10. LOT AREA: 12,000 s.f. AND LARGER  
FRONT SETBACK = 40'  
REAR SETBACK = 40'  
SIDE SETBACK = 10'
11. GROSS DENSITY: 90 LOTS/ 33.82 AC. = 2.66 LOTS/ACRE
12. MIN. HOUSE SIZES: 1/3 1,500 S.F., 1/3 1,600 S.F., 1/3 1,800 S.F.
13. BOUNDARY INFORMATION FIELD RUN BY SOUTHSIDE SURVEYING AND PLANNING L.L.C. DATED-06-22-18  
TAX ID # 008-01034000
14. WATER & SEWER SERVICE PROVIDED BY H.C.W.A.
15. ADA HANDICAPPED RAMPS LOCATED AT ALL INTERSECTIONS.
16. SIDEWALKS OF (4) FT WIDTH SHALL BE PROVIDED ON BOTH SIDES OF INTERIOR STREETS.
17. UNDERGROUND UTILITIES WITH STREET LIGHTS THROUGHOUT.
18. CENTRALIZED MAIL BOX LOCATION WILL BE PROVIDED.
19. TOTAL ROAD LINEAR FOOTAGE - 4,045'  
BLUECOAT COURT LINEAR FOOTAGE - 2,730'  
STREET "B" LINEAR FOOTAGE = 1,315'
20. THE HOA WILL OWN AND MAINTAIN ALL OPEN SPACE AREAS.
21. THERE ARE JURISDICTIONAL WETLANDS AND STATE WATERS ON THIS SITE.
22. LANDSCAPING AND PLANTINGS WILL COMPLY WITH ALL CITY OF HAMPTON REQUIREMENTS.
23. IMPERVIOUS AREA: HOUSES AVG. 1,650 S.F. X 90 = 148,500 S.F.  
DRIVEWAYS 16' X 42' = 672 S.F. X 90 = 60,480 S.F.  
26' WIDE STREETS & AND 4' SIDEWALKS= 138,040 S.F.  
TOTAL IMPERVIOUS SURFACE = (7.97 ACRES)

**FINAL PLAT NOTE:**

THE FINAL PLAT SHALL CONTAIN  
THE FOLLOWING:

1. A MAIL KIOSK PLAN
2. A DRIVEWAY PLAN FOR LOTS 56 & 57

**STREET NAME NOTE:**

OWNER WILL OBTAIN APPROVAL FOR ALL STREET  
NAMES TO BE PROVIDED ON THE FINAL PLAT.

**State Waters Buffers**

There is established a 25 foot buffer along the banks of all state waters, as measured horizontally from the point where vegetation has been wrested by normal stream flow or wave action. No land disturbing activities shall be conducted within a buffer and a buffer shall remain in its natural, undisturbed, state of vegetation until all land-disturbing activities on the construction site are completed. Once the final stabilization of the site is achieved, a buffer may be thinned or trimmed of vegetation as long as a protective vegetative cover remains to protect water quality and aquatic habitat and a natural canopy is left in sufficient quantity to keep shade on the stream bed; provided, however, that any person constructing a single-family residence, when such residence is constructed by or under contract with the owner for his or her own occupancy, may thin or trim vegetation in a buffer at any time as long as protective vegetative cover remains to protect water quality and habitat and a natural canopy is left in sufficient quantity to keep shade on the stream bed.  
Georgia House Bill 1426

Liberty Square Park Phase 5  
OVERALL SITEPLAN

LAND LOT 228 AND 230 of the 6th DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA

DATE: 02/04/2019  
SCALE: AS SHOWN

REV. DATE: DESCRIPTION:

REV. DATE:	DESCRIPTION:
2 05/08/19	REVISED PER CITY COMMENTS
3 05/16/19	REVISED PER CIVILS COMMENTS
4 06/25/19	REVISED PER CITY COMMENTS
5 07/15/19	REVISED PER CITY COMMENTS
6 07/25/19	REVISED PER CITY COMMENTS
7 08/09/2019	REVISED PER CITY COMMENTS
8 10/29/2019	REVISED PER CITY COMMENTS

Not Released For Construction

WHITLEY  
ENGINEERING INC.

DESIGN NPDES PROJECT MANAGEMENT

TEL: (770)946-0256

38 E. MAIN STREET N.

HAMPTON, GA 30228



GSWCC  
MARK G. WHITLEY, PE  
000001036  
LEVEL I A CERTIFIED PERSONNEL  
LEVEL I B CERTIFIED INSPECTOR  
LEVEL I CERTIFIED DESIGN PROF.



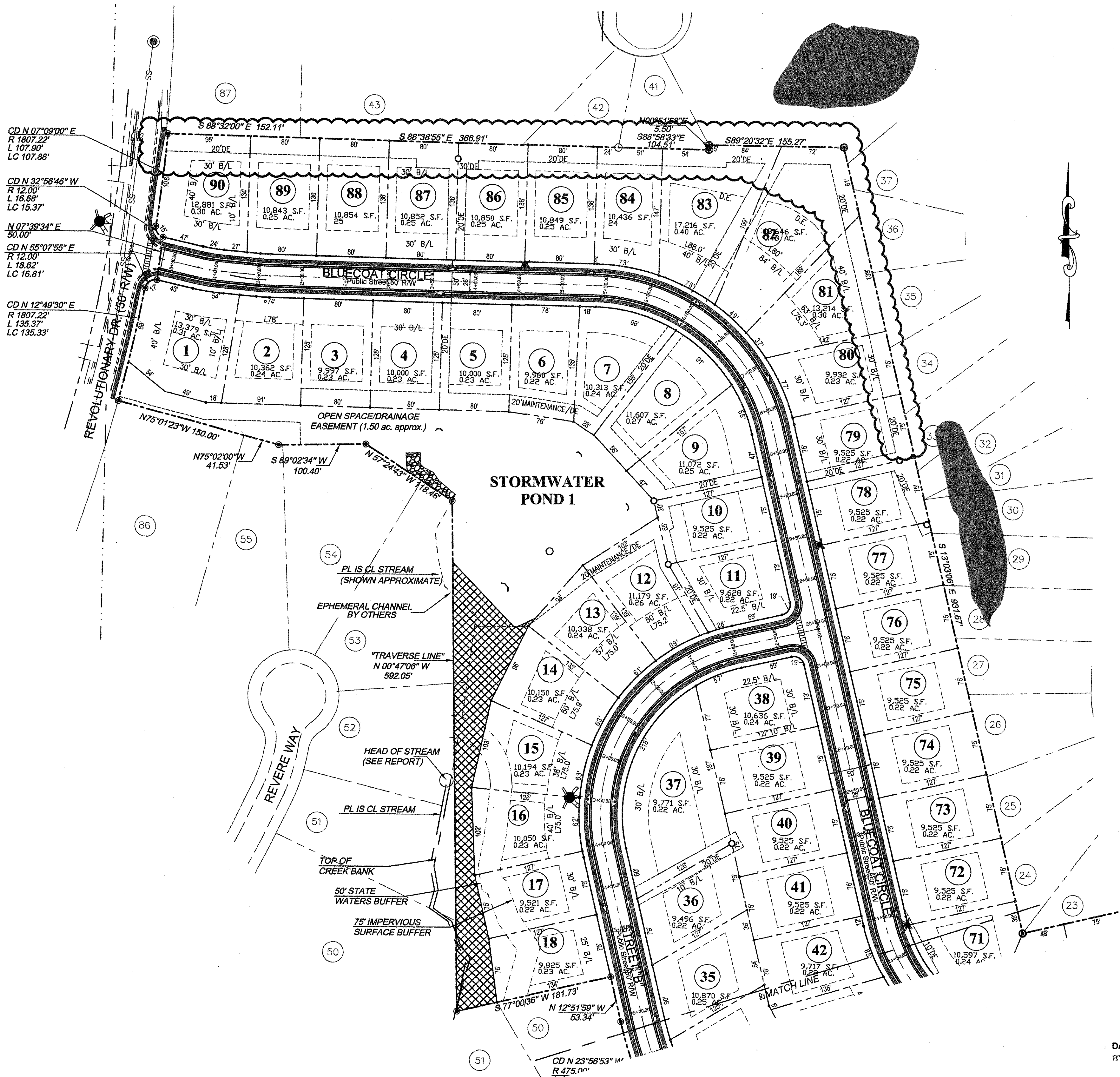


Know what's below.  
Call before you dig.

GSWCC  
MARK G. WHITLEY, PE  
000001036  
LEVEL I A CERTIFIED PROFESSIONAL  
LEVEL II CERTIFIED DESIGN PROFESSIONAL



WHITLEY  
ENGINEERING INC.  
DESIGN NPDES PROJECT MANAGEMENT  
TEL: (770) 946-0256  
38 E. MAIN STREET N.  
HAMPTON, GA 30228



**DRAINAGE EASEMENT NOTE:**  
DRAINAGE EASEMENT IS AN EASEMENT  
FOR THE CONVEYANCE OF WATER,  
CONSTRUCTION AND MAINTENANCE OF  
STORM DRAIN STRUCTURES.

LEGEND	
SS	EXISTING SANITARY SEWER MAIN
SS	PROPOSED SANITARY SEWER MAIN
W	EXISTING WATER MAIN
W	PROPOSED WATER MAIN
P	EXISTING POWER LINE
18" RCP	EXISTING STORM PIPE
18" RCP	PROPOSED STORM PIPE
⊗	EXISTING FIRE HYDRANT
⊗	PROPOSED FIRE HYDRANT VALVE
⊗	EXISTING SEWER MANHOLE
⊗	PROPOSED SEWER MANHOLE
⊗	EXISTING POWER POLE
---	EXISTING CONTOURS
---	PROPOSED CONTOURS
DI	DROP INLET - DI
JB	JUNCTION BOX - JB
DWCB	DOUBLE-WING CATCH BASIN - DWCB
SWCB	SINGLE-WING CATCH BASIN - SWCB
HW	HEADWALL

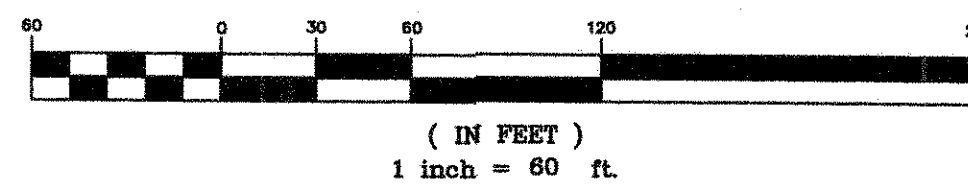
The contractor shall provide plastic sheeting or temporary roofs to cover any and all building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste, and other materials in order to minimize exposure to precipitation and to stormwater.

#### CAUTION

THE UTILITIES SHOWN ARE SHOWN FOR THE CONTRACTOR'S CONVENIENCE ONLY. THERE MAY BE OTHER UTILITIES NOT SHOWN ON THESE PLANS. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE LOCATIONS SHOWN AND IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATIONS OF ALL UTILITIES WITHIN THE LIMITS OF THE WORK. ALL DAMAGE MADE TO EXISTING UTILITIES BY THE CONTRACTOR SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

APPROVED  
DATE: 11-1-19  
BY: [Signature]

GRAPHIC SCALE



Liberty Square Park Phase 5  
SITEPLAN (SHEET 1)

LAND LOT 229 AND 230 OF THE 6TH DISTRICT

CITY OF HAMPTON, HENRY COUNTY, GA

DATE

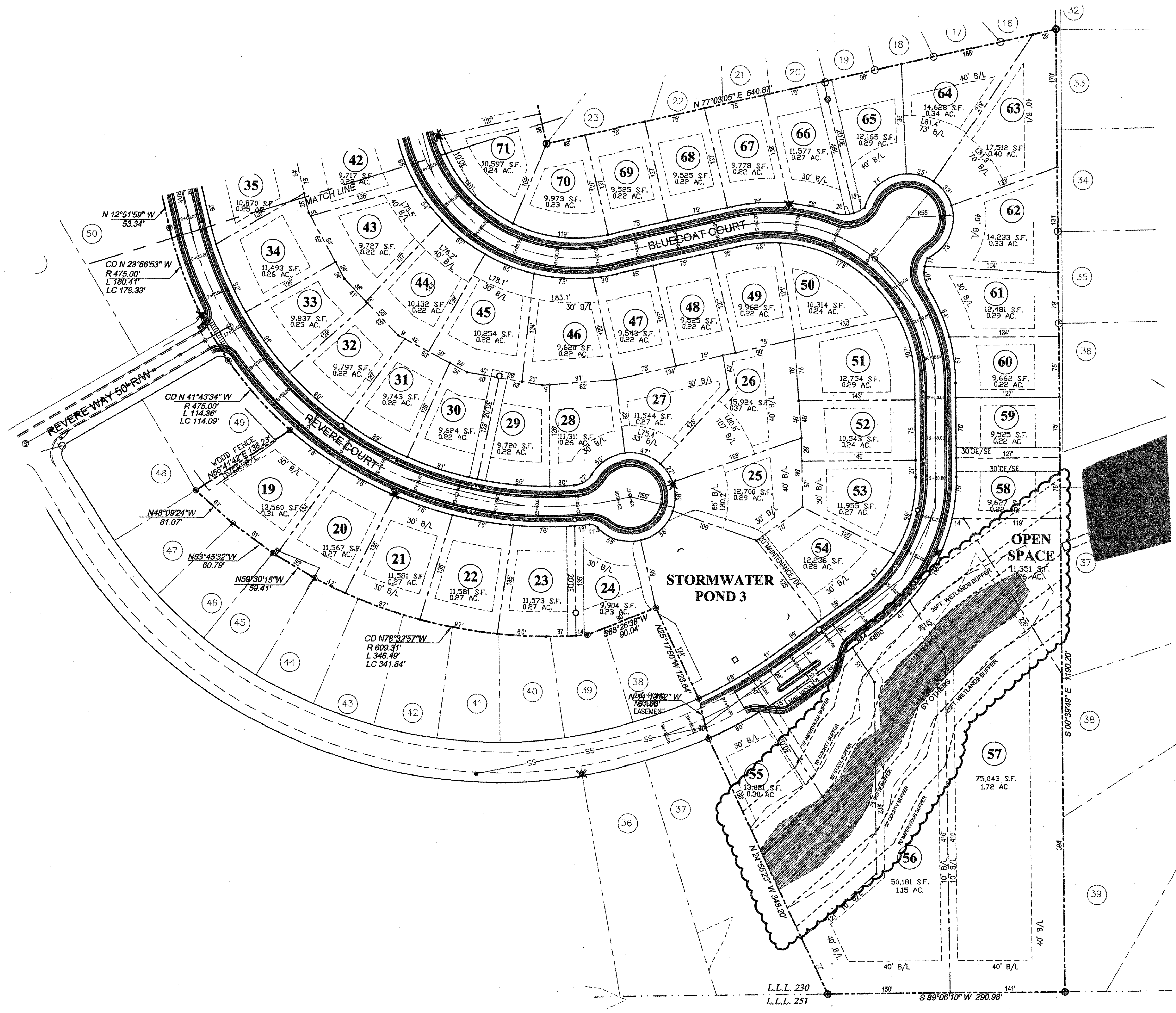
SCALE: AS SHOWN

THESE DRAWINGS ARE THE PROPERTY OF WHITLEY ENGINEERING, INC. AND MAY NOT BE USED, REPRODUCED AND OR INCORPORATED INTO ANOTHER WORK FOR ANY REASON WITHOUT THE WRITTEN CONSENT OF THE DESIGN PROFESSIONAL.





Know what's below.  
Call before you dig.

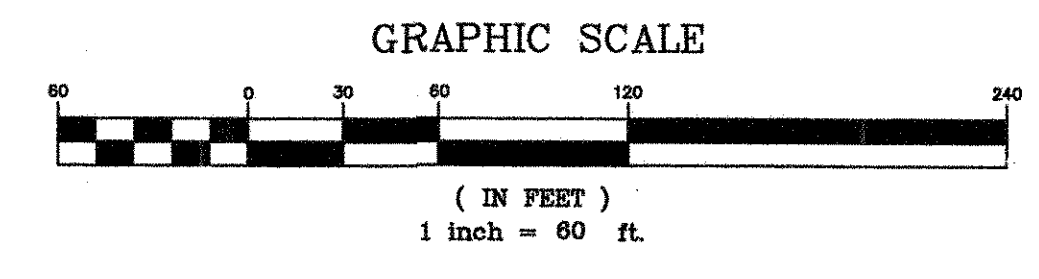


**DRAINAGE EASEMENT NOTE:**  
DRAINAGE EASEMENT IS AN EASEMENT FOR THE CONVEYANCE OF WATER, CONSTRUCTION AND MAINTENANCE OF STORM DRAIN STRUCTURES.

LEGEND	
SS	EXISTING SANITARY SEWER MAIN
SS	PROPOSED SANITARY SEWER MAIN
W	EXISTING WATER MAIN
W	PROPOSED WATER MAIN
P	EXISTING POWER LINE
P	PROPOSED POWER LINE
18" RCP	EXISTING STORM PIPE
18" RCP	PROPOSED STORM PIPE
⊙	EXISTING FIRE HYDRANT
⊙	PROPOSED FIRE HYDRANT VALVE
⊙	EXISTING SEWER MANHOLE
⊙	PROPOSED SEWER MANHOLE
⊙	EXISTING POWER POLE
⊙	EXISTING CONTOURS
⊙	PROPOSED CONTOURS
⊙	DROP INLET - DI
⊙	JUNCTION BOX - JB
⊙	DOUBLE-WING CATCH BASIN - DWCB
⊙	SINGLE-WING CATCH BASIN - SWCB
⊙	HEADWALL

The contractor shall provide plastic sheeting or temporary roofs to cover any and all building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste, and other materials in order to minimize exposure to precipitation and to stormwater.

**APPROVED**  
DATE: 11-7-18  
BY: [Signature]



GSWCC  
MARK G. WHITLEY, PE  
000001036  
LEVEL I A CERTIFIED INSPECTOR  
LEVEL II CERTIFIED DESIGN PROF.

**WHITLEY ENGINEERING INC.**  
DESIGN NPDES PROJECT MANAGEMENT  
TEL: (770)946-0256  
38 E. MAIN STREET N.  
HAMPTON, GA 30228

REV.	DATE	DESCRIPTION
1	05/08/19	REVISED PER CITY COMMENTS
2	05/16/19	REVISED PER HANSA COMMENTS
3	06/26/19	REVISED PER CITY COMMENTS
4	07/18/19	REVISED PER CITY COMMENTS
5	07/18/19	REVISED PER CITY COMMENTS
6	08/02/19	REVISED PER CITY COMMENTS
7	10/22/19	REVISED PER CITY COMMENTS

☒ Not Released For Construction  
☐ Released For Construction

**Liberty Square Park Phase 5**  
SITEPLAN (SHEET 2)  
LAND LOT 229 AND 230 OF THE 6TH DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA  
SCALE: AS SHOWN  
DATE: 02/04/2019

**SHEET**  
5 OF 34



Utilities Protection Center, Inc.

Know what's below.  
Call before you dig.

GSWCC  
 MARK G. WHITLEY, PE  
 0000070036  
 LEVEL I A CERTIFIED INSPECTOR  
 LEVEL II CERTIFIED DESIGN PROF.

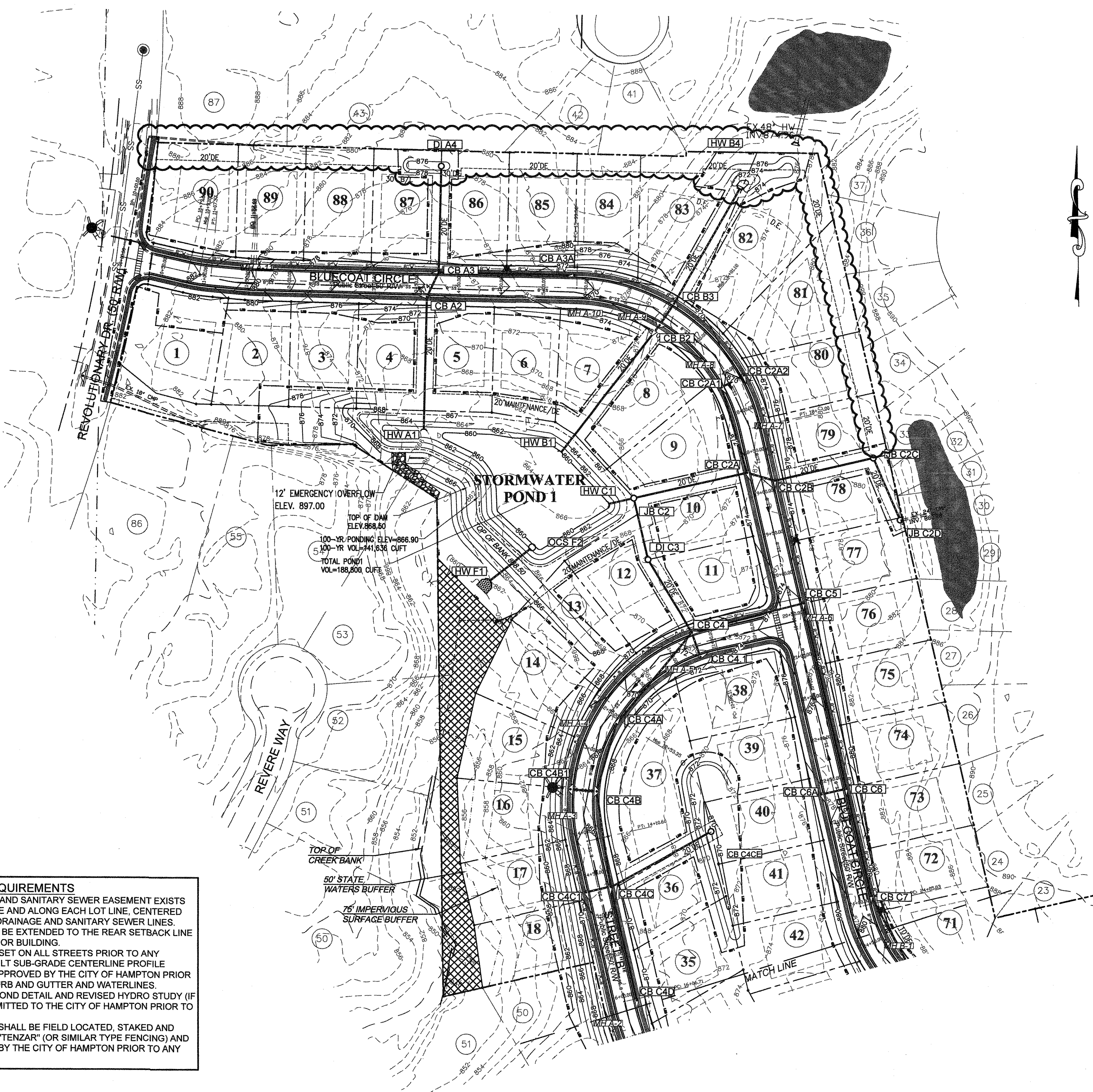
REGISTERED  
 PROFESSIONAL  
 ENGINEER  
 STATE OF GEORGIA  
 MARK G. WHITLEY  
 No. 18419  
 Expiration 12/31/2019

WHITLEY  
 ENGINEERING INC.  
 DESIGN NPDES PROJECT MANAGEMENT  
 TEL: (770)946-0256  
 38 E. MAIN STREET N.  
 HAMPTON, GA 30228

REV.	DATE:	DESCRIPTION:
2	05/08/19	REVISED PER CITY COMMENTS
3	05/16/19	REVISED PER HCA/SA COMMENTS
4	08/28/19	REVISED PER CITY COMMENTS
5	07/15/19	REVISED PER CITY COMMENTS
6	07/23/19	REVISED PER CITY COMMENTS
7	09/26/2018	REVISED PER CITY COMMENTS
8	10/22/2018	REVISED PER CITY COMMENTS
		<input checked="" type="checkbox"/> Not Released For Construction
		Released For Construction

Liberty Square Park Phase 5  
 GRADING PLAN (SHEET 1)  
 LAND LOT 229 AND 230 OF THE 6TH DISTRICT  
 CITY OF HAMPTON, HENRY COUNTY, GA  
 DATE: 02/04/2019  
 SCALE: AS SHOWN

THESE DRAWINGS ARE THE PROPERTY OF WHITLEY ENGINEERING, INC. AND MAY NOT BE USED, REPRODUCED AND OR INCORPORATED INTO ANOTHER WORK FOR ANY REASON WITHOUT THE WRITTEN CONSENT OF THE DESIGN PROFESSIONAL.



LEGEND

SS

EXISTING SANITARY SEWER MAIN

SS

PROPOSED SANITARY SEWER MAIN

W

EXISTING WATER MAIN

W

PROPOSED WATER MAIN

P

EXISTING POWER LINE

P

PROPOSED POWER LINE

18" RCP

EXISTING STORM PIPE

18" RCP

PROPOSED STORM PIPE

⊗

EXISTING FIRE HYDRANT

⊗

PROPOSED FIRE HYDRANT

⊗

EXISTING SEWER MANHOLE

⊗

PROPOSED SEWER MANHOLE

⊗

EXISTING POWER POLE

---

EXISTING CONTOURS

---

PROPOSED CONTOURS

⊙

DROP INLET - DI

⊙

JUNCTION BOX - JB

⊙

DOUBLE-WING CATCH BASIN - DWCB

⊙

SINGLE-WING CATCH BASIN - SWCB

---

HEADWALL

St OUTLET PROTECTION CHART

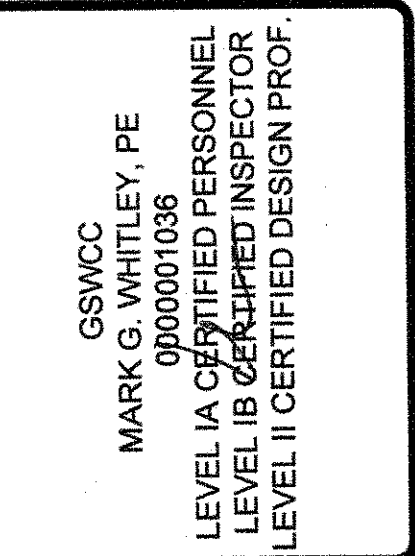
HEADWALL NO.	PIPE SIZE	WIDTH OF APRON OF PIPE	LENGTH OF APRON	WIDTH OF APRON OF END OF APRON	THICKNESS OF APRON	RIP-RAP SIZE
A-1	24"	6'	12'	14'	0.60'	0.4'
B-1	36"	9'	20'	23'	0.90'	0.6'
C-1	30"	7.5'	16'	18.5'	0.75'	0.5'
D-1	24"	6'	12'	14'	0.60'	0.4'
E-1	24"	6'	12'	14'	0.60'	0.4'
F-1	60"	15.0'	32'	37'	1.50'	1.0'
G-1	48"	12.0'	26'	30'	1.2'	0.8'

CITY OF HAMPTON REQUIREMENTS  
 1. A 20-FOOT STORM SEWER AND SANITARY SEWER EASEMENT EXISTS ALONG EACH PROPERTY LINE AND ALONG EACH LOT LINE, CENTERED ON LOT LINES FOR FUTURE DRAINAGE AND SANITARY SEWER LINES.  
 2. ALL STORM DRAINS SHALL BE EXTENDED TO THE REAR SETBACK LINE OF ANY FUTURE RESIDENCE OR BUILDING.  
 3. GRADE STAKES SHALL BE SET ON ALL STREETS PRIOR TO ANY STREET GRADING. AN AS-BUILT SUB-GRADE CENTERLINE PROFILE SHALL BE SUBMITTED AND APPROVED BY THE CITY OF HAMPTON PRIOR TO THE INSTALLATION OF CURB AND GUTTER AND WATERLINES.  
 4. AN AS-BUILT DETENTION POND DETAIL AND REVISED HYDRO STUDY (IF NECESSARY) SHALL BE SUBMITTED TO THE CITY OF HAMPTON PRIOR TO THE FINAL APPROVAL.  
 5. ALL DISTURBED BUFFERS SHALL BE FIELD LOCATED, STAKED AND FLAGGED OR MARKED WITH "TENZAR" (OR SIMILAR TYPE FENCING) AND INSPECTED AND APPROVED BY THE CITY OF HAMPTON PRIOR TO ANY GRADING.

The contractor shall provide plastic sheeting or temporary roofs to cover any and all building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste, and other materials in order to minimize exposure to precipitation and to stormwater.

APPROVED  
 DATE: 11/19/19  
 BY: *A. Whitley*





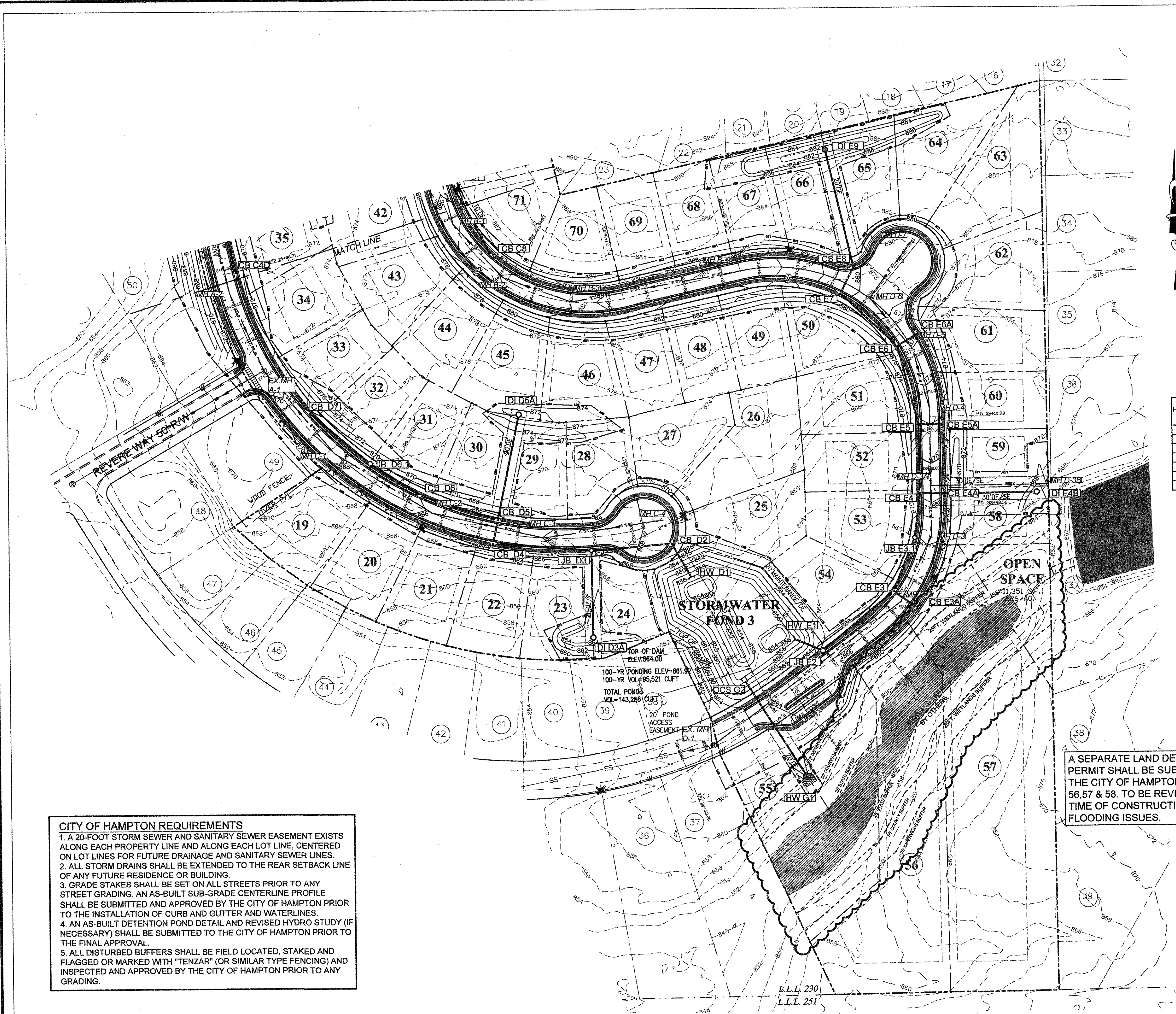
**WHITLEY  
ENGINEERING INC.**  
DESIGN NPDES PROJECT MANAGEMENT  
TEL: (770)946-0256  
38 E. MAIN STREET N.  
HAMPTON, GA 30228

REV.	DATE:	DESCRIPTION:
2	05/08/19	REVISED PER CITY COMMENTS
3	05/16/19	REVISED PER HOUSE COMMENTS
4	06/25/19	REVISED PER CITY COMMENTS
5	07/15/19	REVISED PER CITY COMMENTS
6	07/25/19	REVISED PER CITY COMMENTS
7	09/03/2019	REVISED PER CITY COMMENTS
8	10/23/2019	REVISED PER CITY COMMENTS

LIBERTY SQUARE PARK PHASE 5	
GRADING PLAN (SHEET 2)	
LAND LOT 229 AND 230 of the 6th DISTRICT	
CITY OF HAMPTON, HENRY COUNTY, GA	SCALE: AS SHOWN
DATE: 02/04/2019	

THESE DRAWINGS ARE THE PROPERTY OF WHITLEY ENGINEERING, INC. AND MAY NOT BE USED, REPRODUCED AND/OR INCORPORATED INTO ANOTHER WORK FOR ANY REASON WITHOUT THE WRITTEN CONSENT OF THE DESIGN PROFESSIONAL











SHEET  
7 OF 34



### St OUTLET PROTECTION CHART

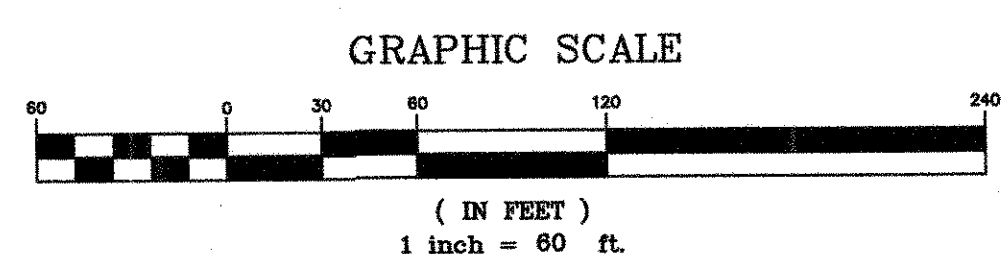
HEADWALL NO.	PIPE SIZE	WIDTH OF APRON @ PIPE	LENGTH OF APRON	WIDTH OF APRON @ END OF APRON	THICKNESS OF APRON	RIP-RAP SIZE
A-1	24"	6'	12'	14'	0.60'	0.4"
B-1	36"	9'	20'	23'	0.90'	0.6"
C-1	30"	7.5'	16'	18.5'	0.75'	0.5"
D-1	24"	6'	12'	14'	0.60'	0.4"
E-1	24"	6'	12'	14'	0.60'	0.4"
F-1	60"	15.0'	32'	37'	1.50'	1.0"
G-1	48"	12.0'	26'	30'	1.2'	0.8"

## LEGEND

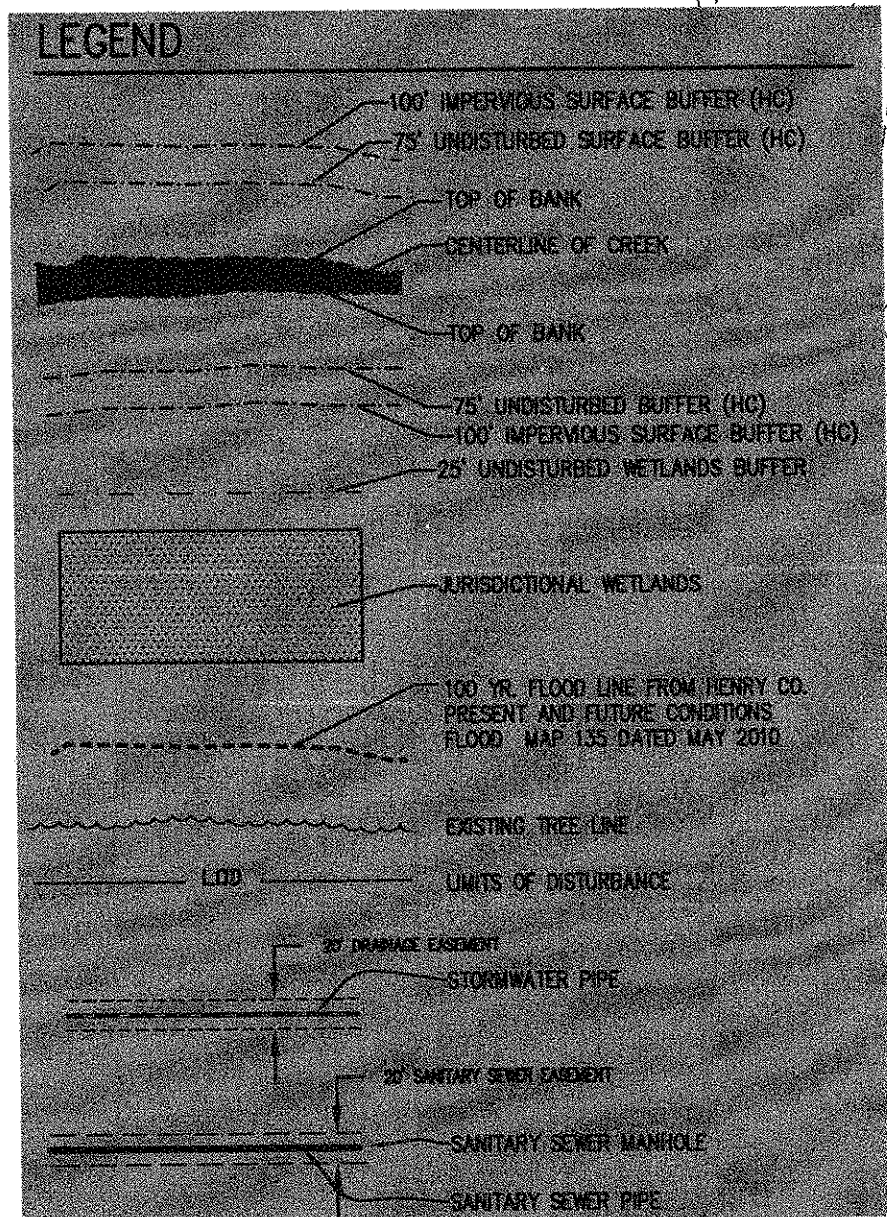
SS	EXISTING SANITARY SEWER MAIN
SS	PROPOSED SANITARY SEWER MAIN
W	EXISTING WATER MAIN
W	PROPOSED WATER MAIN
P	EXISTING POWER LINE
1" ECP	EXISTING STORM PIPE
1" ECP	PROPOSED STORM PIPE
	EXISTING FIRE HYDRANT
	PROPOSED FIRE HYDRANT W/VALVE
	EXISTING SEWER MANHOLE
	PROPOSED SEWER MANHOLE
	EXISTING POWER POLE
---	EXISTING CONTOURS
---	PROPOSED CONTOURS
	DROP INLET - DI
	JUNCTION BOX - JB
	DOUBLE-WING CATCH BASIN - DWCB
	SINGLE-WING CATCH BASIN - SWCB
	HEADWALL

APPROVED  
DATE: 11-9-19  
BY: *[Signature]* *[Signature]*  
*[Signature]*

The contractor shall provide plastic sheeting or temporary roofs to cover any and all building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste, and other materials in order to minimize exposure to precipitation and to stormwater.







SOILS SERIES

SOILS TYPE	SOILS NAME (Desc)
AkA	Alivsta sandy loam 0 to 3% slopes
AmB	Appling sandy loam 2 to 6% slopes
AmC	Appling sandy loam 6 to 10% slopes
CbB	Cecil sandy loam 2 to 6% slopes
CcC	Cecil sandy loam 6 to 10% slopes
CtC2	Cecil sandy loam 6 to 10% slopes(eroded)

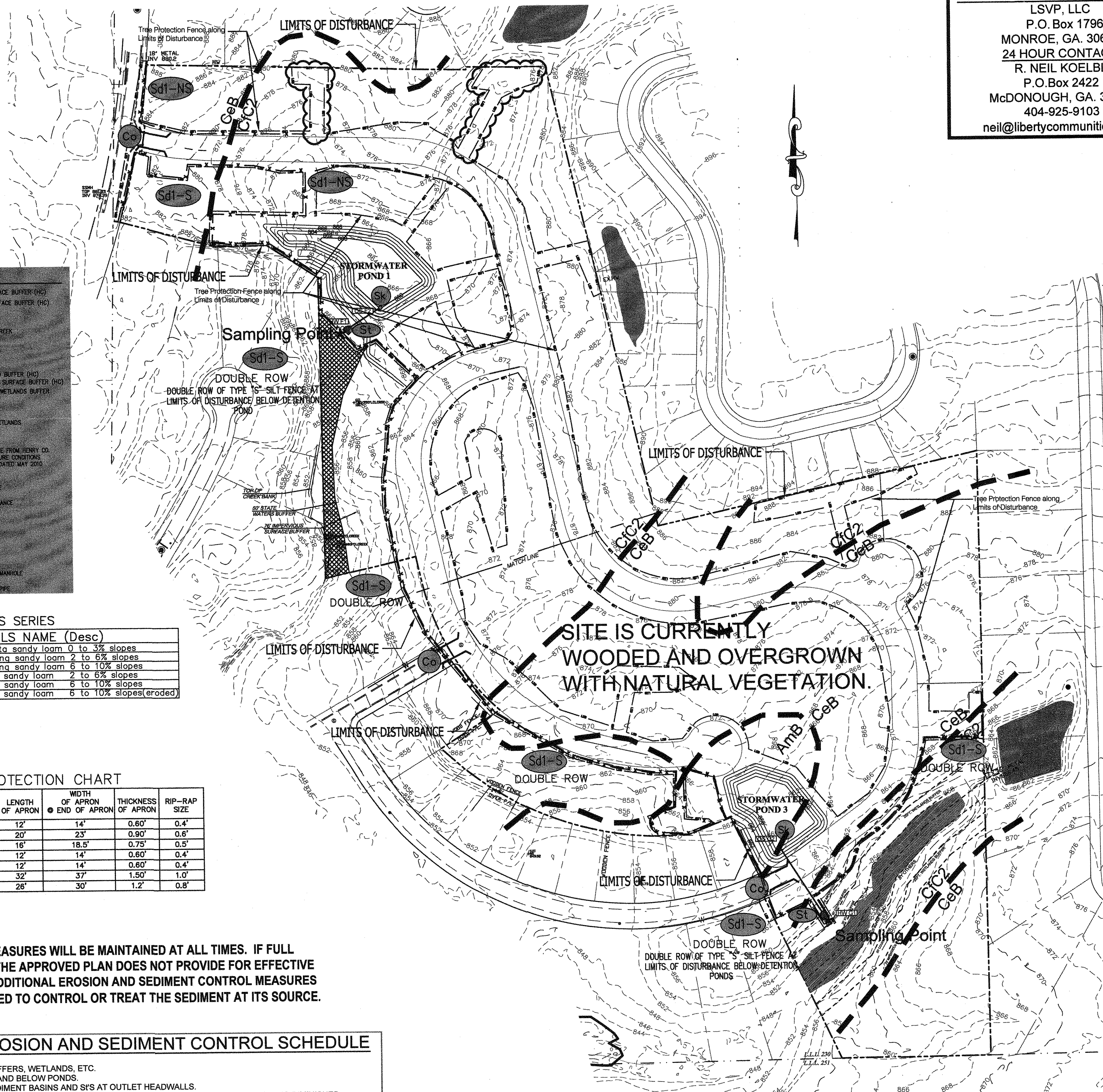
St OUTLET PROTECTION CHART

HEADWALL NO.	PIPE SIZE	WIDTH OF APRON @ PIPE	LENGTH OF APRON	WIDTH OF APRON @ END OF APRON	THICKNESS OF APRON	RIP-RAP SIZE
A-1	24"	6'	12'	14'	0.60'	0.4'
B-1	36"	9'	20'	23'	0.90'	0.6'
C-1	30"	7.5'	16'	18.5'	0.75'	0.5'
D-1	24"	6'	12'	14'	0.60'	0.4'
E-1	24"	6'	12'	14'	0.60'	0.4'
F-1	60"	15.0'	32'	37'	1.50'	1.0'
G-1	48"	12.0'	26'	30'	1.2'	0.8'

EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT AT ITS SOURCE.

#### INITIAL PHASE EROSION AND SEDIMENT CONTROL SCHEDULE

1. INSTALL CONSTRUCTION EXITS.
2. STAKE OUT CLEARING LIMITS, BUFFERS, WETLANDS, ETC.
3. INSTALL PERIMETER SILT FENCE AND BELOW PONDS.
4. INSTALL STORMWATER POND/SEDIMENT BASINS AND ST'S AT OUTLET HEADWALLS.
5. REMOVE SEDIMENT FROM STORMWATER POND AND MODIFY SEDIMENT BASIN AS STORAGE CAPACITY IS DIMINISHED.
6. INSTALL AND MAINTAIN WATER MONITORING DEVICES AT LOCATIONS SHOWN ON THIS PLAN

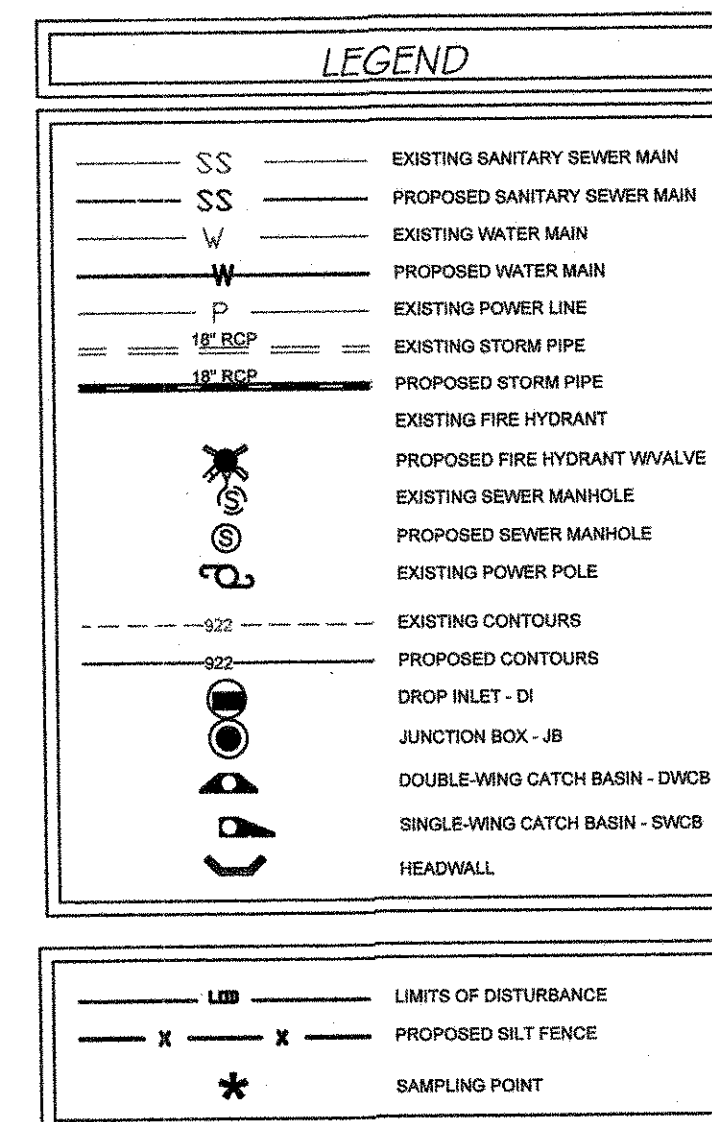


DEVELOPER/PRIMARY PERMITTEE  
LSVP, LLC  
P.O. Box 1796  
MONROE, GA. 30655  
24 HOUR CONTACT:  
R. NEIL KOELBL  
P.O. Box 2422  
McDONOUGH, GA. 30253  
404-925-9103  
neil@libertycommunities.com



- GENERAL SITE/GRADING NOTES:
1. ALL SLOPES (CUT OR FILL) 8' HIGH AND OVER SHALL BE COVERED W/ JUTE MATTING (Ss) MULCH, TEMPORARY VEGETATION, OR PERMANENT (PERENNIAL) VEGETATION.
  2. A 10 FOOT STORM SEWER EASEMENT SHALL BE LOCATED ALONG ALL REAR PROPERTY LINE UNLESS OTHERWISE IMPLIED.
  3. ALL STORM DRAINS SHALL BE EXTENDED TO THE REAR SETBACK LINE OF ANY FUTURE RESIDENCE OR BUILDING.
  4. GRADE STAKES TO BE SET ON ALL STREETS PRIOR TO COMMENCING ANY STREET GRADING.
  5. AS-BUILT STREET PROFILES SHALL BE SUBMITTED TO THE CITY OF HAMPTON FOR APPROVAL PRIOR TO INSTALLING ANY CURB AND GUTTER OR WATER LINES.
  6. PROVIDE DRAINAGE EASEMENTS AS NEEDED WHERE STORM WATER FLOWS FROM ONE LOT ONTO ANOTHER.
  7. SLOPE LOTS SO THAT STORM WATER FLOWS TO THE FRONT OR REAR OF INDIVIDUAL HOUSE SITE.

The contractor shall provide plastic sheeting or temporary roofs to cover any and all building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste, and other materials in order to minimize exposure to precipitation and to stormwater.

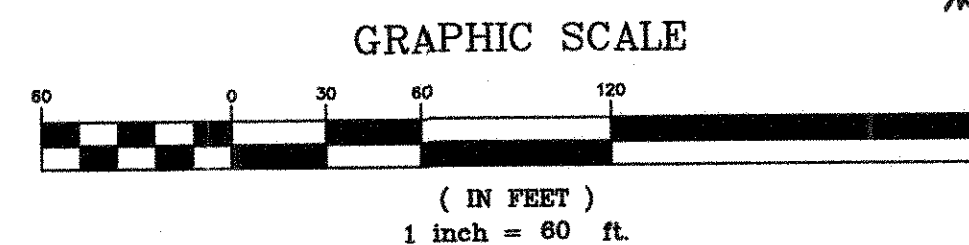


NOTE APPLYING TO LIMITS OF DISTURBANCE AND SW PONDS:  
LOCATION OF PONDS AND LIMITS OF DISTURBANCE SHALL BE CALCULATED BY THE CONSTRUCTION SURVEYOR AND STAKED OUT PRECISELY AS SHOWN ON THESE PLANS.

#### OPERATION AND MAINTENANCE REQUIREMENTS FOR STORMWATER PONDS:

1. SEDIMENT TO BE REMOVED WHEN 30% OF STORAGE VOLUME OF THE FACILITY IS FILLED (DESIGN STORAGE VOLUME MUST ACCOUNT FOR VOLUME LOST TO SEDIMENT STORAGE).
2. SEDIMENT TRAPS SHALL BE CLEANED OUT WHEN FILLED.
3. NO WOODY VEGETATION SHALL BE ALLOWED ON THE EMBANKMENT. OTHER VEGETATION OVER 18 INCHES HIGH SHALL BE CUT UNLESS IT IS PART OF PLANNED LANDSCAPING.
4. DEBRIS SHALL BE REMOVED FROM BLOCKING INLET AND OUTLET STRUCTURES AND FROM AREAS OF POTENTIAL CLOGGING.
5. THE CONTROL STRUCTURE SHALL BE KEPT STRUCTURALLY SOUND, FREE FROM EROSION, AND FUNCTIONING AS DESIGNED.
6. PERIODIC REMOVAL OF DEAD VEGETATION SHALL BE ACCOMPLISHED.
7. AN ANNUAL INSPECTION IS REQUIRED, REPORTS KEPT BY OWNER.
8. THE SITE SHOULD BE INSPECTED AND DEBRIS REMOVED AFTER EVERY MAJOR STORM.

APPROVED  
DATE: 11-1-18  
BY: A. Collier, W. Moore, R. B. B. B.



GSWCC  
MARK G. WHITLEY, PE  
0000010038  
LEVEL I A CDR (E) PERSONNEL  
LEVEL I B CERTIFIED INSPECTOR  
LEVEL I I CERTIFIED DESIGN PROF.

LIBERTY PROTECTION CENTER, INC.

WHITLEY ENGINEERING, INC.  
DESIGN NPDES PROJECT MANAGEMENT  
TEL: (770) 946-0256  
38 E. MAIN STREET N.  
HAMPTON, GA 30228

REV.	DATE	DESCRIPTION
2	05/08/19	REVISED PER CITY COMMENTS
3	05/16/19	REVISED PER HCWSA COMMENTS
4	06/25/19	REVISED PER CITY COMMENTS
5	07/15/19	REVISED PER CITY COMMENTS
6	07/25/19	REVISED PER CITY COMMENTS
7	08/02/2019	REVISED PER CITY COMMENTS
8	10/22/2019	REVISED PER CITY COMMENTS

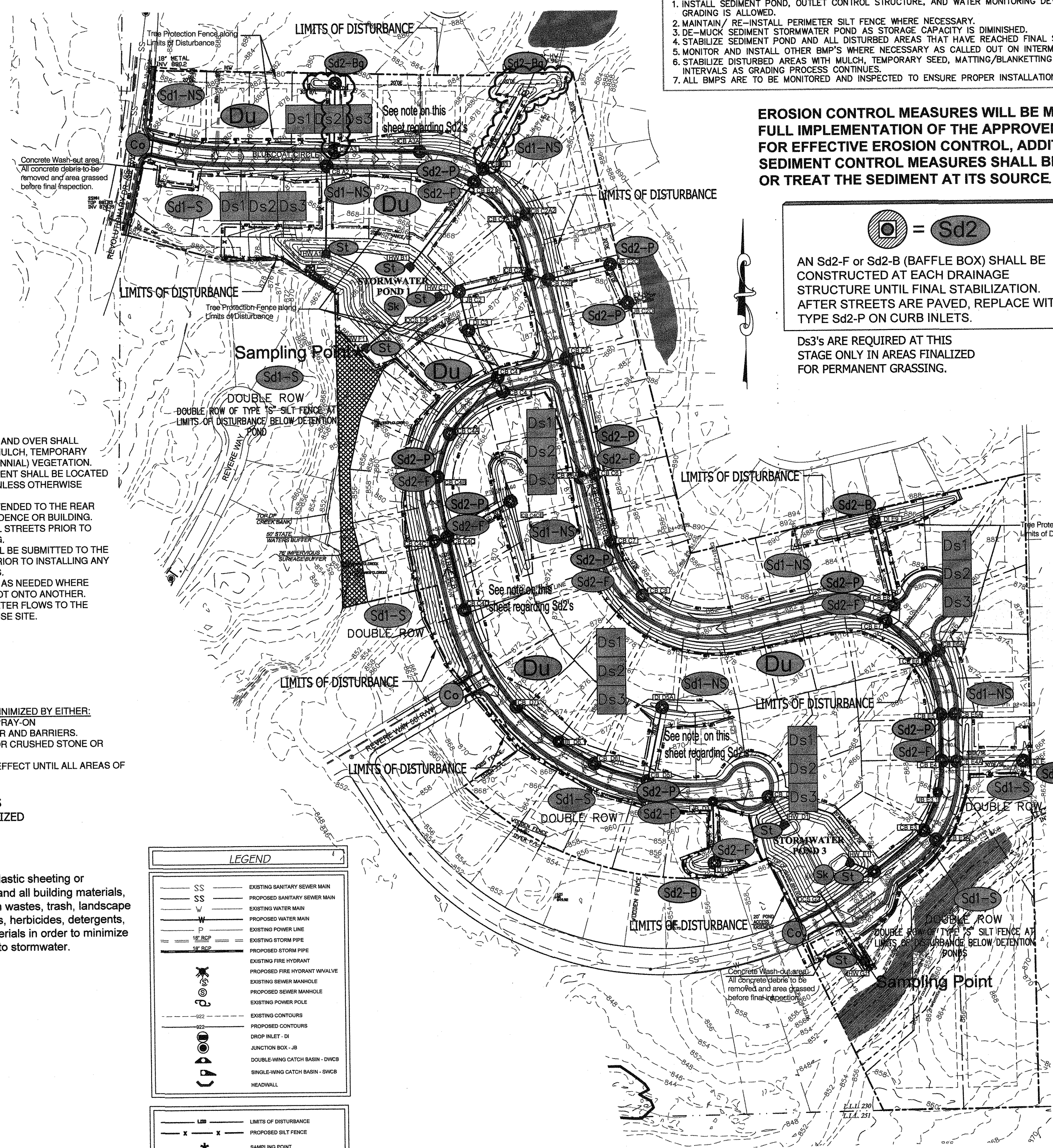
Not Released For Construction  
Released For Construction

Liberty Square Park Phase 5  
E&SC PLAN - INITIAL PHASE  
LAND LOT 229 AND 230 of the 6th DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA  
SCALE: AS SHOWN  
DATE: 02/04/2019

THESE DRAWINGS ARE THE PROPERTY OF WHITLEY ENGINEERING, INC. AND MAY NOT BE USED, REPRODUCED AND OR INCORPORATED INTO ANOTHER WORK FOR ANY REASON WITHOUT THE WRITTEN CONSENT OF THE DESIGN PROFESSIONAL.

SHEET  
8 OF 34





**INTERMEDIATE PHASE EROSION AND SEDIMENT CONTROL SCHEDULE**

1. INSTALL SEDIMENT POND, OUTLET CONTROL STRUCTURE, AND WATER MONITORING DEVICES BEFORE ANY OTHER CLEARING OR GRADING IS ALLOWED.
2. MAINTAIN/ RE-INSTALL PERIMETER SILT FENCE WHERE NECESSARY.
3. DE-MUCK SEDIMENT STORMWATER POND AS STORAGE CAPACITY IS DIMINISHED.
4. STABILIZE SEDIMENT POND AND ALL DISTURBED AREAS THAT HAVE REACHED FINAL STABILIZATION.
5. MONITOR AND INSTALL OTHER BMP'S WHERE NECESSARY AS CALLED OUT ON INTERMEDIATE PHASE.
6. STABILIZE DISTURBED AREAS WITH MULCH, TEMPORARY SEED, MATTING/BLANKETTING & PAM AS REQUIRED @ 14 DAY INTERVALS AS GRADING PROCESS CONTINUES.
7. ALL BMP'S ARE TO BE MONITORED AND INSPECTED TO ENSURE PROPER INSTALLATION AND MAINTENANCE ARE ACHIEVED.

**EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT AT ITS SOURCE.**

**Sd2**

AN Sd2-F or Sd2-B (BAFFLE BOX) SHALL BE CONSTRUCTED AT EACH DRAINAGE STRUCTURE UNTIL FINAL STABILIZATION. AFTER STREETS ARE PAVED, REPLACE WITH TYPE Sd2-P ON CURB INLETS.

Ds3's ARE REQUIRED AT THIS STAGE ONLY IN AREAS FINALIZED FOR PERMANENT GRASSING.

**Sd2 Sediment Trap Chart**

STRUCTURE	0.25	0.50	0.75	1.00
CB-A2	0.22			
CB-A3	1.15			
CB-A4	4.75			
CB-A5	6.66			
CB-B2	0.21			
CB-B3	0.80			
CB-B4	1.54			
CB-C2	0.00			
CB-C3	0.10			
CB-C4	0.76			
CB-C5	9.03			
CB-C6	0.31			
CB-C7	0.07			
CB-C8	0.16			
CB-C9	1.12			
CB-D2	0.10			
CB-D3	0.76			
CB-D4	9.03			
CB-D5	0.31			
CB-D6	0.07			
CB-D7	0.16			
CB-D8	1.12			
CB-E2	0.10			
CB-E3	0.76			
CB-E4	9.03			
CB-E5	0.31			
CB-E6	0.07			
CB-E7	0.16			
CB-E8	1.12			
CB-F2	0.10			
CB-F3	0.76			
CB-F4	9.03			
CB-F5	0.31			
CB-F6	0.07			
CB-F7	0.16			
CB-F8	1.12			
CB-G2	0.10			
CB-G3	0.76			
CB-G4	9.03			
CB-G5	0.31			
CB-G6	0.07			
CB-G7	0.16			
CB-G8	1.12			
CB-H2	0.10			
CB-H3	0.76			
CB-H4	9.03			
CB-H5	0.31			
CB-H6	0.07			
CB-H7	0.16			
CB-H8	1.12			

USE SD-2Bg  
See Esc Details

JUNCTION BOX NOTE:  
G.C. TO PROVIDE AND MAINTAIN Sd2 - F ON ALL JUNCTION BOXES UNTIL TOPS ARE INSTALLED.

**GENERAL SITE/GRADING NOTES:**

1. ALL SLOPES (CUT OR FILL) 8' HIGH AND OVER SHALL BE COVERED W/ JUTE MATTING (Ss) MULCH, TEMPORARY VEGETATION, OR PERMANENT (PERENNIAL) VEGETATION.
2. A 10 FOOT STORM SEWER EASEMENT SHALL BE LOCATED ALONG ALL REAR PROPERTY LINE UNLESS OTHERWISE IMPLIED.
3. ALL STORM DRAINS SHALL BE EXTENDED TO THE REAR SETBACK LINE OF ANY FUTURE RESIDENCE OR BUILDING.
4. GRADE STAKES TO BE SET ON ALL STREETS PRIOR TO COMMENCING ANY STREET GRADING.
5. AS-BUILT STREET PROFILES SHALL BE SUBMITTED TO THE CITY OF LOVEJOY FOR APPROVAL PRIOR TO INSTALLING ANY CURB AND GUTTER OR WATER LINES.
6. PROVIDE DRAINAGE EASEMENTS AS NEEDED WHERE STORM WATER FLOWS FROM ONE LOT ONTO ANOTHER.
7. SLOPE LOTS SO THAT STORM WATER FLOWS TO THE FRONT OR REAR OF INDIVIDUAL HOUSE SITE.

**GENERATION OF DUST WILL BE MINIMIZED BY EITHER:**

1. TEMPORARY BY MULCH AND SPRAY-ON ADHESIVES, IRRIGATION BY WATER AND BARRIERS.
2. PERMANENT BY VEGETATION OR CRUSHED STONE OR COARSE GRAVEL.

DUST CONTROL WILL REMAIN IN EFFECT UNTIL ALL AREAS OF SITE ARE STABILIZED.

Ds3's ARE REQUIRED AT THIS STAGE ONLY IN AREAS FINALIZED FOR PERMANENT GRASSING.

The contractor shall provide plastic sheeting or temporary roofs to cover any and all building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste, and other materials in order to minimize exposure to precipitation and to stormwater.

**LEGEND**

SS	EXISTING SANITARY SEWER MAIN
SS	PROPOSED SANITARY SEWER MAIN
W	EXISTING WATER MAIN
W	PROPOSED WATER MAIN
P	EXISTING POWER LINE
P	PROPOSED POWER LINE
18" RCP	EXISTING STORM PIPE
18" RCP	PROPOSED STORM PIPE
18" RCP	EXISTING FIRE HYDRANT
18" RCP	PROPOSED FIRE HYDRANT
18" RCP	EXISTING SEWER MANHOLE
18" RCP	PROPOSED SEWER MANHOLE
18" RCP	EXISTING POWER POLE
18" RCP	PROPOSED POWER POLE
18" RCP	EXISTING CONTOURS
18" RCP	PROPOSED CONTOURS
18" RCP	DROP INLET - DI
18" RCP	JUNCTION BOX - JB
18" RCP	DOUBLE-WING CATCH BASIN - DWCB
18" RCP	SINGLE-WING CATCH BASIN - SWCB
18" RCP	HEADWALL

---	LIMITS OF DISTURBANCE
-x-x-	PROPOSED SILT FENCE
*	SAMPLING POINT

**Utilities Protection Center, Inc.**

Know what's below.  
Call before you dig.

**DEVELOPER/PRIMARY PERMITTEE**

LSVP, LLC  
P.O. Box 1796  
MONROE, GA. 30655  
24 HOUR CONTACT:  
R. NEIL KOELBL  
P.O. Box 2422  
McDONOUGH, GA. 30253  
404-925-9103  
neil@libertycommunities.com

**Sd2 Sediment Trap Sizing Calculations**

**EXCAVATED INLET SEDIMENT TRAP CALCULATIONS FOR 0.25 AC.**

1. DRAINAGE AREA = 0.25 AC.
2. REQUIRED SEDIMENT STORAGE = 67 CY/AC \* DRAINAGE AREA  
REQUIRED SEDIMENT STORAGE = 67 CY/AC \* 0.25 AC  
REQUIRED SEDIMENT STORAGE = 17 CY = 150 CF
3. ASSUME EXCAVATION DEPTH (MIN. OF 1.5 FT.) = 3.0 FT.
4. ASSUME SLOPE OF SIDES (SHALL NOT BE STEEPER THAN 2:1) = 2:1 FT.
5. DETERMINE REQUIRED SURFACE AREA  
SAmin = REQUIRED SEDIMENT STORAGE/EXCAVATION DEPTH  
SAmin = 150 CF / 3 FT  
SAmin = 50 SF
6. ASSUME SHAPE OF EXCAVATION AND DETERMINE DIMENSIONS.  
(A RECTANGULAR SHAPE WITH 2:1 LENGTH TO WIDTH RATIO IS RECOMMENDED)  
SHAPE: RECTANGULAR  
DIMENSIONS: LENGTH = 10 FT. WIDTH = 5 FT.

**EXCAVATED INLET SEDIMENT TRAP CALCULATIONS FOR 0.5 AC.**

1. DRAINAGE AREA = 0.5 AC.
2. REQUIRED SEDIMENT STORAGE = 67 CY/AC \* DRAINAGE AREA  
REQUIRED SEDIMENT STORAGE = 67 CY/AC \* 0.5 AC  
REQUIRED SEDIMENT STORAGE = 33 CY = 300 CF
3. ASSUME EXCAVATION DEPTH (MIN. OF 1.5 FT.) = 3.0 FT.
4. ASSUME SLOPE OF SIDES (SHALL NOT BE STEEPER THAN 2:1) = 2:1 FT.
5. DETERMINE REQUIRED SURFACE AREA  
SAmin = REQUIRED SEDIMENT STORAGE/EXCAVATION DEPTH  
SAmin = 300 CF / 3 FT  
SAmin = 100 SF
6. ASSUME SHAPE OF EXCAVATION AND DETERMINE DIMENSIONS.  
(A RECTANGULAR SHAPE WITH 2:1 LENGTH TO WIDTH RATIO IS RECOMMENDED)  
SHAPE: RECTANGULAR  
DIMENSIONS: LENGTH = 14 FT. WIDTH = 7 FT.

**EXCAVATED INLET SEDIMENT TRAP CALCULATIONS FOR 0.75 AC.**

1. DRAINAGE AREA = 0.75 AC.
2. REQUIRED SEDIMENT STORAGE = 67 CY/AC \* DRAINAGE AREA  
REQUIRED SEDIMENT STORAGE = 67 CY/AC \* 0.75 AC  
REQUIRED SEDIMENT STORAGE = 50 CY = 450 CF
3. ASSUME EXCAVATION DEPTH (MIN. OF 1.5 FT.) = 3.0 FT.
4. ASSUME SLOPE OF SIDES (SHALL NOT BE STEEPER THAN 2:1) = 2:1 FT.
5. DETERMINE REQUIRED SURFACE AREA  
SAmin = REQUIRED SEDIMENT STORAGE/EXCAVATION DEPTH  
SAmin = 450 CF / 3 FT  
SAmin = 150 SF
6. ASSUME SHAPE OF EXCAVATION AND DETERMINE DIMENSIONS.  
(A RECTANGULAR SHAPE WITH 2:1 LENGTH TO WIDTH RATIO IS RECOMMENDED)  
SHAPE: RECTANGULAR  
DIMENSIONS: LENGTH = 18 FT. WIDTH = 9 FT.

**EXCAVATED INLET SEDIMENT TRAP CALCULATIONS FOR 1.0 AC.**

1. DRAINAGE AREA = 1.0 AC.
2. REQUIRED SEDIMENT STORAGE = 67 CY/AC \* DRAINAGE AREA  
REQUIRED SEDIMENT STORAGE = 67 CY/AC \* 1.0 AC  
REQUIRED SEDIMENT STORAGE = 67 CY = 600 CF
3. ASSUME EXCAVATION DEPTH (MIN. OF 1.5 FT.) = 3.0 FT.
4. ASSUME SLOPE OF SIDES (SHALL NOT BE STEEPER THAN 2:1) = 2:1 FT.
5. DETERMINE REQUIRED SURFACE AREA  
SAmin = REQUIRED SEDIMENT STORAGE/EXCAVATION DEPTH  
SAmin = 600 CF / 3 FT  
SAmin = 200 SF
6. ASSUME SHAPE OF EXCAVATION AND DETERMINE DIMENSIONS.  
(A RECTANGULAR SHAPE WITH 2:1 LENGTH TO WIDTH RATIO IS RECOMMENDED)  
SHAPE: RECTANGULAR  
DIMENSIONS: LENGTH = 20 FT. WIDTH = 10 FT.

**APPROVED**

DATE: 11-4-19  
BY: [Signature]

**GRAPHIC SCALE**

100 0 50 100 200 300

( IN FEET )  
1 inch = 100 ft.

**WHITLEY ENGINEERING INC.**

DESIGN NPDES PROJECT MANAGEMENT

LIBERTY SQUARE PARK PHASE 5  
E&S PLAN - INTERMEDIATE PHASE  
LAND LOT 229 AND 230 OF THE 6TH DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA

SCALE: AS SHOWN  
DATE: 02/04/2019

NOT RELEASED FOR CONSTRUCTION  
Released For Construction

SHEET  
9 OF 34

LIBERTY SQUARE PARK PHASE 5  
E&S PLAN - INTERMEDIATE PHASE  
LAND LOT 229 AND 230 OF THE 6TH DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA

SCALE: AS SHOWN  
DATE: 02/04/2019

NOT RELEASED FOR CONSTRUCTION  
Released For Construction

LIBERTY SQUARE PARK PHASE 5  
E&S PLAN - INTERMEDIATE PHASE  
LAND LOT 229 AND 230 OF THE 6TH DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA

SCALE: AS SHOWN  
DATE: 02/04/2019

NOT RELEASED FOR CONSTRUCTION  
Released For Construction

LIBERTY SQUARE PARK PHASE 5  
E&S PLAN - INTERMEDIATE PHASE  
LAND LOT 229 AND 230 OF THE 6TH DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA

SCALE: AS SHOWN  
DATE: 02/04/2019

NOT RELEASED FOR CONSTRUCTION  
Released For Construction

LIBERTY SQUARE PARK PHASE 5  
E&S PLAN - INTERMEDIATE PHASE  
LAND LOT 229 AND 230 OF THE 6TH DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA

SCALE: AS SHOWN  
DATE: 02/04/2019

NOT RELEASED FOR CONSTRUCTION  
Released For Construction

LIBERTY SQUARE PARK PHASE 5  
E&S PLAN - INTERMEDIATE PHASE  
LAND LOT 229 AND 230 OF THE 6TH DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA

SCALE: AS SHOWN  
DATE: 02/04/2019

NOT RELEASED FOR CONSTRUCTION  
Released For Construction

LIBERTY SQUARE PARK PHASE 5  
E&S PLAN - INTERMEDIATE PHASE  
LAND LOT 229 AND 230 OF THE 6TH DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA

SCALE: AS SHOWN  
DATE: 02/04/2019

NOT RELEASED FOR CONSTRUCTION  
Released For Construction

LIBERTY SQUARE PARK PHASE 5  
E&S PLAN - INTERMEDIATE PHASE  
LAND LOT 229 AND 230 OF THE 6TH DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA

SCALE: AS SHOWN  
DATE: 02/04/2019

NOT RELEASED FOR CONSTRUCTION  
Released For Construction

LIBERTY SQUARE PARK PHASE 5  
E&S PLAN - INTERMEDIATE PHASE  
LAND LOT 229 AND 230 OF THE 6TH DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA

SCALE: AS SHOWN  
DATE: 02/04/2019

NOT RELEASED FOR CONSTRUCTION  
Released For Construction

LIBERTY SQUARE PARK PHASE 5  
E&S PLAN - INTERMEDIATE PHASE  
LAND LOT 229 AND 230 OF THE 6TH DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA

SCALE: AS SHOWN  
DATE: 02/04/2019

NOT RELEASED FOR CONSTRUCTION  
Released For Construction

LIBERTY SQUARE PARK PHASE 5  
E&S PLAN - INTERMEDIATE PHASE  
LAND LOT 229 AND 230 OF THE 6TH DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA

SCALE: AS SHOWN  
DATE: 02/04/2019

NOT RELEASED FOR CONSTRUCTION  
Released For Construction

LIBERTY SQUARE PARK PHASE 5  
E&S PLAN - INTERMEDIATE PHASE  
LAND LOT 229 AND 230 OF THE 6TH DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA

SCALE: AS SHOWN  
DATE: 02/04/2019

NOT RELEASED FOR CONSTRUCTION  
Released For Construction

LIBERTY SQUARE PARK PHASE 5  
E&S PLAN - INTERMEDIATE PHASE  
LAND LOT 229 AND 230 OF THE 6TH DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA

SCALE: AS SHOWN  
DATE: 02/04/2019

NOT RELEASED FOR CONSTRUCTION  
Released For Construction

LIBERTY SQUARE PARK PHASE 5  
E&S PLAN - INTERMEDIATE PHASE  
LAND LOT 229 AND 230 OF THE 6TH DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA

SCALE: AS SHOWN  
DATE: 02/04/2019

NOT RELEASED FOR CONSTRUCTION  
Released For Construction

LIBERTY SQUARE PARK PHASE 5  
E&S PLAN - INTERMEDIATE PHASE  
LAND LOT 229 AND 230 OF THE 6TH DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA

SCALE: AS SHOWN  
DATE: 02/04/2019

NOT RELEASED FOR CONSTRUCTION  
Released For Construction

LIBERTY SQUARE PARK PHASE 5  
E&S PLAN - INTERMEDIATE PHASE  
LAND LOT 229 AND 230 OF THE 6TH DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA

SCALE: AS SHOWN  
DATE: 02/04/2019

NOT RELEASED FOR CONSTRUCTION  
Released For Construction

LIBERTY SQUARE PARK PHASE 5  
E&S PLAN - INTERMEDIATE PHASE  
LAND LOT 229 AND 230 OF THE 6TH DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA

SCALE: AS SHOWN  
DATE: 02/04/2019

NOT RELEASED FOR CONSTRUCTION  
Released For Construction

LIBERTY SQUARE PARK PHASE 5  
E&S PLAN - INTERMEDIATE PHASE  
LAND LOT 229 AND 230 OF THE 6TH DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA

SCALE: AS SHOWN  
DATE: 02/04/2019

NOT RELEASED FOR CONSTRUCTION  
Released For Construction

LIBERTY SQUARE PARK PHASE 5  
E&S PLAN - INTERMEDIATE PHASE  
LAND LOT 229 AND 230 OF THE 6TH DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA

SCALE: AS SHOWN  
DATE: 02/04/2019

NOT RELEASED FOR CONSTRUCTION  
Released For Construction

LIBERTY SQUARE PARK PHASE 5  
E&S PLAN - INTERMEDIATE PHASE  
LAND LOT 229 AND 230 OF THE 6TH DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA

SCALE: AS SHOWN  
DATE: 02/04/2019

NOT RELEASED FOR CONSTRUCTION  
Released For Construction

LIBERTY SQUARE PARK PHASE 5  
E&S PLAN - INTERMEDIATE PHASE  
LAND LOT 229 AND 230 OF THE 6TH DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA

SCALE: AS SHOWN  
DATE: 02/04/2019

NOT RELEASED FOR CONSTRUCTION  
Released For Construction

LIBERTY SQUARE PARK PHASE 5  
E&S PLAN - INTERMEDIATE PHASE  
LAND LOT 229 AND 230 OF THE 6TH DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA

SCALE: AS SHOWN  
DATE: 02/04/2019

NOT RELEASED FOR CONSTRUCTION  
Released For Construction

LIBERTY SQUARE PARK PHASE 5  
E&S PLAN - INTERMEDIATE PHASE  
LAND LOT 229 AND 230 OF THE 6TH DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA

SCALE: AS SHOWN  
DATE: 02/04/2019

NOT RELEASED FOR CONSTRUCTION  
Released For Construction

LIBERTY SQUARE PARK PHASE 5  
E&S PLAN - INTERMEDIATE PHASE  
LAND LOT 229 AND 230 OF THE 6TH DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA

SCALE: AS SHOWN  
DATE: 02/04/2019

NOT RELEASED FOR CONSTRUCTION  
Released For Construction

LIBERTY SQUARE PARK PHASE 5  
E&S PLAN - INTERMEDIATE PHASE  
LAND LOT 229 AND 230 OF THE 6TH DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA

SCALE: AS SHOWN  
DATE: 02/04/2019

NOT RELEASED FOR CONSTRUCTION  
Released For Construction

LIBERTY SQUARE PARK PHASE 5  
E&S PLAN - INTERMEDIATE PHASE  
LAND LOT 229 AND 230 OF THE 6TH DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA

SCALE: AS SHOWN  
DATE: 02/04/2019

NOT RELEASED FOR CONSTRUCTION  
Released For Construction

LIBERTY SQUARE PARK PHASE 5  
E&S PLAN - INTERMEDIATE PHASE  
LAND LOT 229 AND 230 OF THE 6TH DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA

SCALE: AS SHOWN  
DATE: 02/04/2019

NOT RELEASED FOR CONSTRUCTION  
Released For Construction

LIBERTY SQUARE PARK PHASE 5  
E&S PLAN - INTERMEDIATE PHASE  
LAND LOT 229 AND 230 OF THE 6TH DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA

SCALE: AS SHOWN  
DATE: 02/04/2019

NOT RELEASED FOR CONSTRUCTION  
Released For Construction

LIBERTY SQUARE PARK PHASE 5  
E&S PLAN - INTERMEDIATE PHASE  
LAND LOT 229 AND 230 OF THE 6TH DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA

SCALE: AS SHOWN  
DATE: 02/04/2019

NOT RELEASED FOR CONSTRUCTION  
Released For Construction

LIBERTY SQUARE PARK PHASE 5  
E&S PLAN - INTERMEDIATE PHASE  
LAND LOT 229 AND 230 OF THE 6TH DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA

SCALE: AS SHOWN  
DATE: 02/04/2019

NOT RELEASED FOR CONSTRUCTION  
Released For Construction

LIBERTY SQUARE PARK PHASE 5  
E&S PLAN - INTERMEDIATE PHASE  
LAND LOT 229 AND 230 OF THE 6TH DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA

SCALE: AS SHOWN  
DATE: 02/04/2019

NOT RELEASED FOR CONSTRUCTION  
Released For Construction

LIBERTY SQUARE PARK PHASE 5  
E&S PLAN - INTERMEDIATE PHASE  
LAND LOT 229 AND 230 OF THE 6TH DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA

SCALE: AS SHOWN  
DATE: 02/04/2019

NOT RELEASED FOR CONSTRUCTION  
Released For Construction

LIBERTY SQUARE PARK PHASE 5  
E&S PLAN - INTERMEDIATE PHASE  
LAND LOT 229 AND 230 OF THE 6TH DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA

SCALE: AS SHOWN  
DATE: 02/04/2019

NOT RELEASED FOR CONSTRUCTION  
Released For Construction

LIBERTY SQUARE PARK PHASE 5  
E&S PLAN - INTERMEDIATE PHASE  
LAND LOT 229 AND 230 OF THE 6TH DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA

SCALE: AS SHOWN  
DATE: 02/04/2019

NOT RELEASED FOR CONSTRUCTION  
Released For Construction

LIBERTY SQUARE PARK PHASE 5  
E&S PLAN - INTERMEDIATE PHASE  
LAND LOT 229 AND 230 OF THE 6TH DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA

SCALE: AS SHOWN  
DATE: 02/04/2019

NOT RELEASED FOR CONSTRUCTION  
Released For Construction

LIBERTY SQUARE PARK PHASE 5  
E&S PLAN - INTERMEDIATE PHASE  
LAND LOT 229 AND 230 OF THE 6TH DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA

SCALE: AS SHOWN  
DATE: 02/04/2019

NOT RELEASED FOR CONSTRUCTION  
Released For Construction

LIBERTY SQUARE PARK PHASE 5  
E&S PLAN - INTERMEDIATE PHASE  
LAND LOT 229 AND 230 OF THE 6TH DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA

SCALE: AS SHOWN  
DATE: 02/04/2019

NOT RELEASED FOR CONSTRUCTION  
Released For Construction

LIBERTY SQUARE PARK PHASE 5  
E&S PLAN - INTERMEDIATE PHASE  
LAND LOT 229 AND 230 OF THE 6TH DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA

SCALE: AS SHOWN  
DATE: 02/04/2019

NOT RELEASED FOR CONSTRUCTION  
Released For Construction

LIBERTY SQUARE PARK PHASE 5  
E&S PLAN - INTERMEDIATE PHASE  
LAND LOT 229 AND 230 OF THE 6TH DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA

SCALE: AS SHOWN  
DATE: 02/04/2019

NOT RELEASED FOR CONSTRUCTION  
Released For Construction

LIBERTY SQUARE PARK PHASE 5  
E&S PLAN - INTERMEDIATE PHASE  
LAND LOT 229 AND 230 OF THE 6TH DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA

SCALE: AS SHOWN  
DATE: 02/04/2019

NOT RELEASED FOR CONSTRUCTION  
Released For Construction

LIBERTY SQUARE PARK PHASE 5  
E&S PLAN - INTERMEDIATE PHASE  
LAND LOT 229 AND 230 OF THE 6TH DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA

SCALE: AS SHOWN  
DATE: 02/04/2019

NOT RELEASED FOR CONSTRUCTION  
Released For Construction

LIBERTY SQUARE PARK PHASE 5  
E&S PLAN - INTERMEDIATE PHASE  
LAND LOT 229 AND 230 OF THE 6TH DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA

SCALE: AS SHOWN  
DATE: 02/04/2019

NOT RELEASED FOR CONSTRUCTION  
Released For Construction

LIBERTY SQUARE PARK PHASE 5  
E&S PLAN - INTERMEDIATE PHASE  
LAND LOT 229 AND 230 OF THE 6TH DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA

SCALE: AS SHOWN  
DATE: 02/04/2019

NOT RELEASED FOR CONSTRUCTION  
Released For Construction

LIBERTY SQUARE PARK PHASE 5  
E&S PLAN - INTERMEDIATE PHASE  
LAND LOT 229 AND 230 OF THE 6TH DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA

SCALE: AS SHOWN  
DATE: 02/04/2019

NOT RELEASED FOR CONSTRUCTION  
Released For Construction

LIBERTY SQUARE PARK PHASE 5  
E&S PLAN - INTERMEDIATE PHASE  
LAND LOT 229 AND 230 OF THE 6TH DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA

SCALE: AS SHOWN  
DATE: 02/04/2019

NOT RELEASED FOR CONSTRUCTION  
Released For Construction

LIBERTY SQUARE PARK PHASE 5  
E&S PLAN - INTERMEDIATE PHASE  
LAND LOT 229 AND 230 OF THE 6TH DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA

SCALE: AS SHOWN  
DATE: 02/04/2019

NOT RELEASED FOR CONSTRUCTION  
Released For Construction

LIBERTY SQUARE PARK PHASE 5  
E&S PLAN - INTERMEDIATE PHASE  
LAND LOT 229 AND 230 OF THE 6TH DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA

SCALE: AS SHOWN  
DATE: 02/04/2019

NOT RELEASED FOR CONSTRUCTION  
Released For Construction

LIBERTY SQUARE PARK PHASE 5  
E&S PLAN - INTERMEDIATE PHASE  
LAND LOT 229 AND 230 OF THE 6TH DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA

SCALE: AS SHOWN  
DATE: 02/04/2019

NOT RELEASED FOR CONSTRUCTION  
Released For Construction

LIBERTY SQUARE PARK PHASE 5  
E&S PLAN - INTERMEDIATE PHASE  
LAND LOT 229 AND 230 OF THE 6TH DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA

SCALE: AS SHOWN  
DATE: 02/04/2019

NOT RELEASED FOR CONSTRUCTION  
Released For Construction

LIBERTY SQUARE PARK PHASE 5  
E&S PLAN - INTERMEDIATE PHASE  
LAND LOT 229 AND 230 OF THE 6TH DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA

SCALE: AS SHOWN  
DATE: 02/04/2019

NOT RELEASED FOR CONSTRUCTION  
Released For Construction

LIBERTY SQUARE PARK PHASE 5  
E&S PLAN - INTERMEDIATE PHASE  
LAND LOT 229 AND 230 OF THE 6TH DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA

SCALE: AS SHOWN  
DATE: 02/04/2019

NOT RELEASED FOR CONSTRUCTION  
Released For Construction

LIBERTY SQUARE PARK PHASE 5  
E&S PLAN - INTERMEDIATE PHASE  
LAND LOT 229 AND 230 OF THE 6TH DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA

SCALE: AS SHOWN  
DATE: 02/04/2019

NOT RELEASED FOR CONSTRUCTION  
Released For Construction

LIBERTY SQUARE PARK PHASE 5  
E&S PLAN - INTERMEDIATE PHASE  
LAND LOT 229 AND 230 OF THE 6TH DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA

SCALE: AS SHOWN  
DATE: 02/04/2019

NOT RELEASED FOR CONSTRUCTION  
Released For Construction

LIBERTY SQUARE PARK PHASE 5  
E&S PLAN - INTERMEDIATE PHASE  
LAND LOT 229 AND 230 OF THE 6TH DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA

SCALE: AS SHOWN  
DATE: 02/04/2019

NOT RELEASED FOR CONSTRUCTION  
Released For Construction

LIBERTY SQUARE PARK PHASE 5  
E&S PLAN - INTERMEDIATE PHASE  
LAND LOT 229 AND 230 OF THE 6TH DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA

SCALE: AS SHOWN  
DATE: 02/04/2019

NOT RELEASED FOR CONSTRUCTION  
Released For Construction

LIBERTY SQUARE PARK PHASE 5  
E&S PLAN - INTERMEDIATE PHASE  
LAND LOT 229 AND 230 OF THE 6TH DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA

SCALE: AS SHOWN  
DATE: 02/04/2019

NOT RELEASED FOR CONSTRUCTION  
Released For Construction

LIBERTY SQUARE PARK PHASE 5  
E&S PLAN - INTERMEDIATE PHASE  
LAND LOT 229 AND 230 OF THE 6TH DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA

SCALE: AS SHOWN  
DATE: 02/04/2019

NOT RELEASED FOR CONSTRUCTION  
Released For Construction

LIBERTY SQUARE PARK PHASE 5  
E&S PLAN - INTERMEDIATE PHASE  
LAND LOT 229 AND 230 OF THE 6TH DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA

SCALE: AS SHOWN  
DATE: 02/04/2019

NOT RELEASED FOR CONSTRUCTION  
Released For Construction

LIBERTY SQUARE PARK PHASE 5  
E&S PLAN - INTERMEDIATE PHASE  
LAND LOT 229 AND 230 OF THE 6TH DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA

SCALE: AS SHOWN  
DATE: 02/04/2019

NOT RELEASED FOR CONSTRUCTION  
Released For Construction

LIBERTY SQUARE PARK PHASE 5  
E&S PLAN - INTERMEDIATE PHASE  
LAND LOT 229 AND 230 OF THE 6TH DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA

SCALE: AS SHOWN  
DATE: 02/04/2019

NOT RELEASED FOR CONSTRUCTION  
Released For Construction

LIBERTY SQUARE PARK PHASE 5  
E&S PLAN - INTERMEDIATE PHASE  
LAND LOT 229 AND 230 OF THE 6TH DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA

SCALE: AS SHOWN  
DATE: 02/04/2019

NOT RELEASED FOR CONSTRUCTION  
Released For Construction

LIBERTY SQUARE PARK PHASE 5  
E&S PLAN - INTERMEDIATE PHASE  
LAND LOT 229 AND 230 OF THE 6TH DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA

SCALE: AS SHOWN  
DATE: 02/04/2019

NOT RELEASED FOR CONSTRUCTION  
Released For Construction

LIBERTY SQUARE PARK PHASE 5  
E&S PLAN - INTERMEDIATE PHASE  
LAND LOT 229 AND 230 OF THE 6TH DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA

SCALE: AS SHOWN  
DATE: 02/04/2019

NOT RELEASED FOR CONSTRUCTION  
Released For Construction

LIBERTY SQUARE PARK PHASE 5  
E&S PLAN - INTERMEDIATE PHASE  
LAND LOT 229 AND 230 OF THE 6TH DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA

SCALE: AS SHOWN  
DATE: 02/04/2019

NOT RELEASED FOR CONSTRUCTION  
Released For Construction

LIBERTY SQUARE PARK PHASE 5  
E&S PLAN - INTERMEDIATE PHASE  
LAND LOT 229 AND 230 OF THE 6TH DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA

SCALE: AS SHOWN  
DATE: 02/04/2019

NOT RELEASED FOR CONSTRUCTION  
Released For Construction

LIBERTY SQUARE PARK PHASE 5  
E&S PLAN - INTERMEDIATE PHASE  
LAND LOT 229 AND 230 OF THE 6TH DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA

SCALE: AS SHOWN  
DATE: 02/04/2019

NOT RELEASED FOR CONSTRUCTION  
Released For Construction

LIBERTY SQUARE PARK PHASE 5  
E&S PLAN - INTERMEDIATE PHASE  
LAND LOT 229 AND 230 OF THE 6TH DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA

SCALE: AS SHOWN  
DATE: 02/04/2019

NOT RELEASED FOR CONSTRUCTION  
Released For Construction

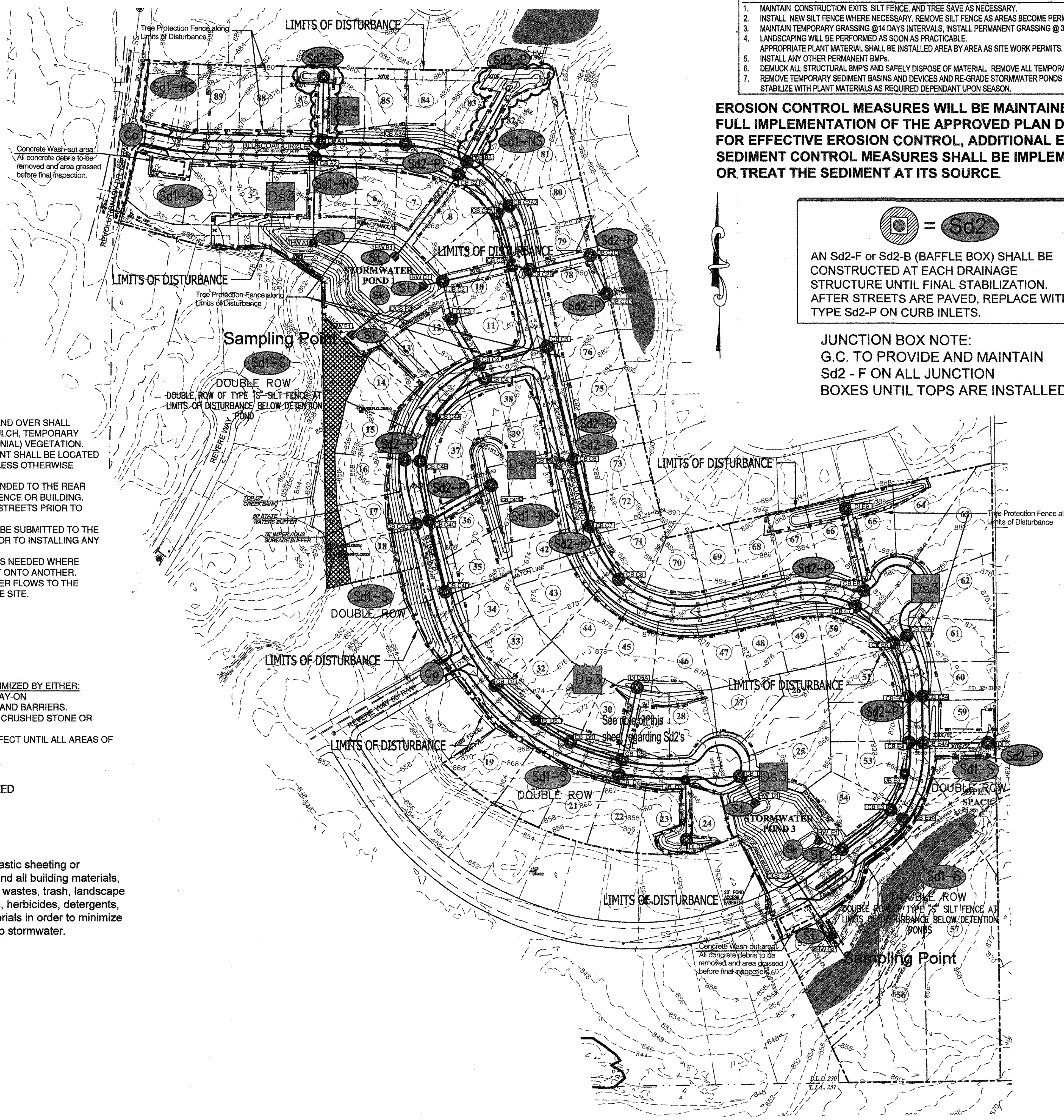
LIBERTY SQUARE PARK PHASE 5  
E&S PLAN - INTERMEDIATE PHASE  
LAND LOT 229 AND 230 OF THE 6TH DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA

SCALE: AS SHOWN  
DATE: 02/04/2019

NOT RELEASED FOR CONSTRUCTION  
Released For Construction

LIBERTY SQUARE PARK PHASE 5





**GENERAL SITE/GRADING NOTES:**

1. ALL SLOPES (CUT OR FILL) 8" HIGH AND OVER SHALL BE COVERED W/ JUTE MATTING (S8) MULCH, TEMPORARY VEGETATION, OR PERMANENT (PERENNIAL) VEGETATION.
2. A 10 FOOT STORM SEWER EASEMENT SHALL BE LOCATED ALONG ALL REAR PROPERTY LINE UNLESS OTHERWISE IMPLIED.
3. ALL STORM DRAINS SHALL BE EXTENDED TO THE REAR SETBACK LINE OF ANY FUTURE RESIDENCE OR BUILDING.
4. GRADE STAKES TO BE SET ON ALL STREETS PRIOR TO COMMENCING ANY STREET GRADING.
5. AS-BUILT STREET PROFILES SHALL BE SUBMITTED TO THE CITY OF LOVEJOY FOR APPROVAL PRIOR TO INSTALLING ANY CURB AND GUTTER OR WATER LINES.
6. PROVIDE DRAINAGE EASEMENTS AS NEEDED WHERE STORM WATER FLOWS FROM ONE LOT ONTO ANOTHER.
7. SLOPE LOTS SO THAT STORM WATER FLOWS TO THE FRONT OR REAR OF INDIVIDUAL HOUSE SITE.

**GENERATION OF DUST WILL BE MINIMIZED BY EITHER:**

1. TEMPORARY BY MULCH AND SPRAY-ON ADHESIVES, IRRIGATION BY WATER AND BARRIERS.
2. PERMANENT BY VEGETATION OR CRUSHED STONE OR COARSE GRAVEL.

DUST CONTROL WILL REMAIN IN EFFECT UNTIL ALL AREAS OF SITE ARE STABILIZED.


Ds3's ARE REQUIRED AT THIS STAGE ONLY IN AREAS FINALIZED FOR PERMANENT GRASSING.

The contractor shall provide plastic sheeting or temporary roofs to cover any and all building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste, and other materials in order to minimize exposure to precipitation and to stormwater.

**FINAL PHASE EROSION AND SEDIMENT CONTROL SCHEDULE**

1. MAINTAIN CONSTRUCTION EXITS, SILT FENCE, AND TREE SAVE AS NECESSARY.
2. INSTALL NEW SILT FENCE WHERE NECESSARY. REMOVE SILT FENCE AS AREAS BECOME PERMANENTLY STABILIZED.
3. MAINTAIN TEMPORARY GRASSING @ 14 DAYS INTERVALS. INSTALL PERMANENT GRASSING @ 30 DAY INTERVALS.
4. LANDSCAPING WILL BE PERFORMED AS SOON AS PRACTICABLE. APPROPRIATE PLANT MATERIAL SHALL BE INSTALLED AREA BY AREA AS SITE WORK PERMITS.
5. INSTALL ANY OTHER PERMANENT BMPs.
6. DEMUCK ALL STRUCTURAL BMPs AND SAFELY DISPOSE OF MATERIAL. REMOVE ALL TEMPORARY BMPs AS SHOWN ON PLANS.
7. REMOVE TEMPORARY SEDIMENT BASINS AND DEVICES AND RE-GRADE STORMWATER PONDS PER GSWCC STANDARDS. STABILIZE WITH PLANT MATERIALS AS REQUIRED DEPENDANT UPON SEASON.

**EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT AT ITS SOURCE.**

 = Sd2

AN Sd2-F or Sd2-B (BAFFLE BOX) SHALL BE CONSTRUCTED AT EACH DRAINAGE STRUCTURE UNTIL FINAL STABILIZATION. AFTER STREETS ARE PAVED, REPLACE WITH TYPE Sd2-P ON CURB INLETS.

**JUNCTION BOX NOTE:**  
G.C. TO PROVIDE AND MAINTAIN Sd2 - F ON ALL JUNCTION BOXES UNTIL TOPS ARE INSTALLED.

AS-BUILTS FOR THE STORMWATER POND SHALL BE PROVIDED TO AND APPROVED BY THE CITY OF HAMPTON BEFORE FINAL STABILIZATION.

LEGEND	
SS	EXISTING SANITARY SEWER MAIN
SS	PROPOSED SANITARY SEWER MAIN
W	EXISTING WATER MAIN
W	PROPOSED WATER MAIN
P	EXISTING POWER LINE
P	PROPOSED STORM PIPE
18" ROP	EXISTING FIRE HYDRANT
18" ROP	PROPOSED FIRE HYDRANT W/ VALVE
18" ROP	EXISTING SEWER MANHOLE
18" ROP	PROPOSED SEWER MANHOLE
18" ROP	EXISTING POWER POLE
18" ROP	PROPOSED STORM PIPE
18" ROP	EXISTING CONTOURS
18" ROP	PROPOSED CONTOURS
18" ROP	DROP INLET - DI
18" ROP	JUNCTION BOX - JB
18" ROP	DOUBLE-WING CATCH BASIN - DWCB
18" ROP	SINGLE-WING CATCH BASIN - SWCB
18" ROP	HEADWALL
18" ROP	LIMITS OF DISTURBANCE
18" ROP	PROPOSED SILT FENCE
18" ROP	SAMPLING POINT

**APPROVED**  
DATE: 11/11/19  
BY: *[Signature]*

**GRAPHIC SCALE**  
1 inch = 60 ft.

**Utilities Protection Center, Inc.**  
Know what's below.  
Call before you dig.

**DEVELOPER/PRIMARY PERMITTEE**  
LSVP, LLC  
P.O. Box 1796  
MONROE, GA. 30655  
24 HOUR CONTACT:  
R. NEIL KOELBL  
P.O. Box 2422  
McDONOUGH, GA. 30253  
404-925-9103  
neil@libertycommunities.com

**Liberty Square Park Phase 5**  
E&SC PLAN - FINAL PHASE  
LAND LOT 229 AND 230 OF THE 8th DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA

**DATE:** 02/04/2019  
**SCALE:** AS SHOWN

**DESCRIPTION:**  
REVISED PER CITY COMMENTS  
REVISED PER HCVSA COMMENTS  
REVISED PER CITY COMMENTS  
REVISED PER CITY COMMENTS  
REVISED PER CITY COMMENTS  
REVISED PER CITY COMMENTS  
REVISED PER CITY COMMENTS  
REVISED PER CITY COMMENTS

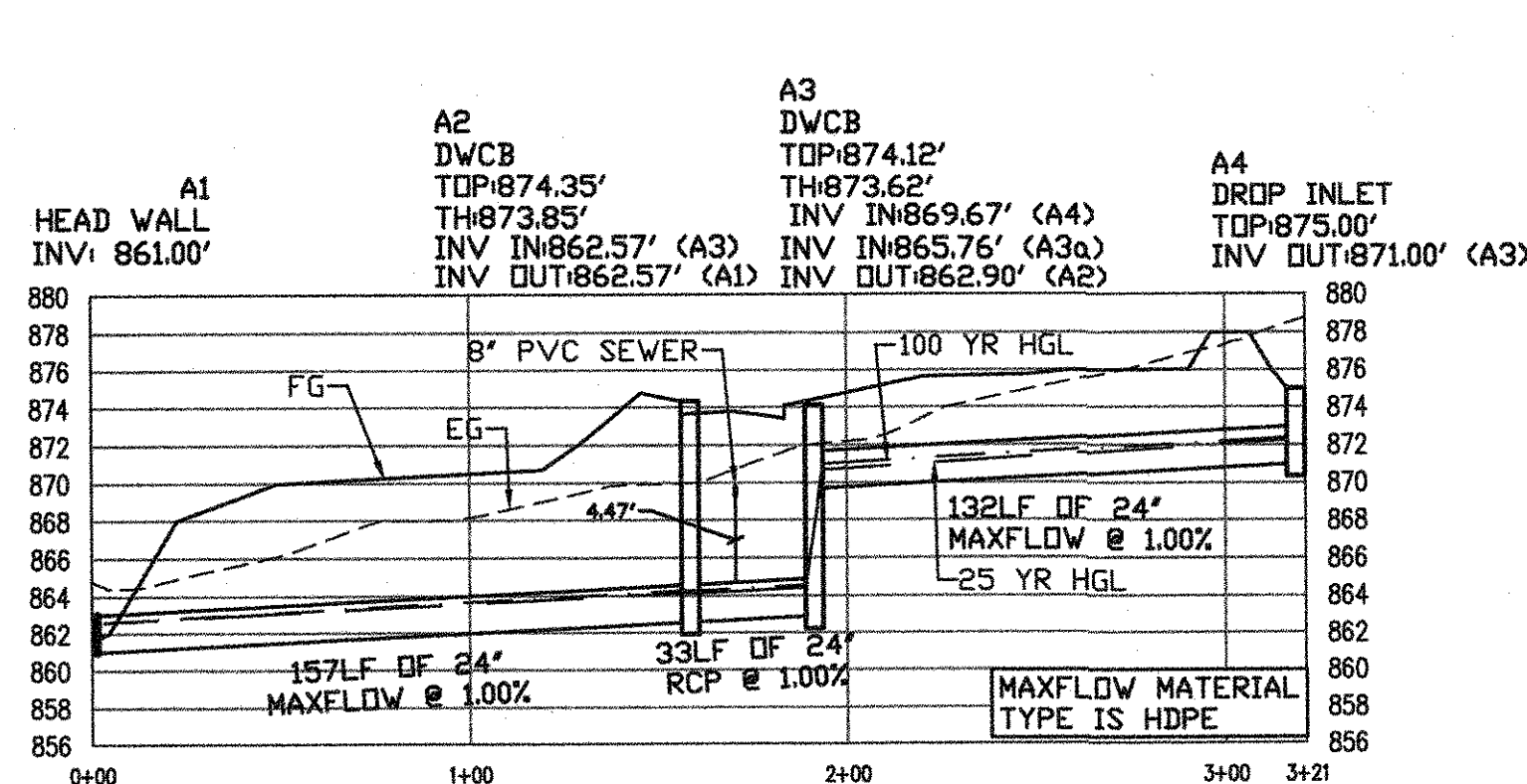
**Not Released For Construction**  
Released For Construction

**WHITLEY ENGINEERING INC.**  
DESIGN NPDES PROJECT MANAGEMENT  
TEL: (770) 946-0256  
38 E. MAIN STREET N.  
HAMPTON, GA 30228

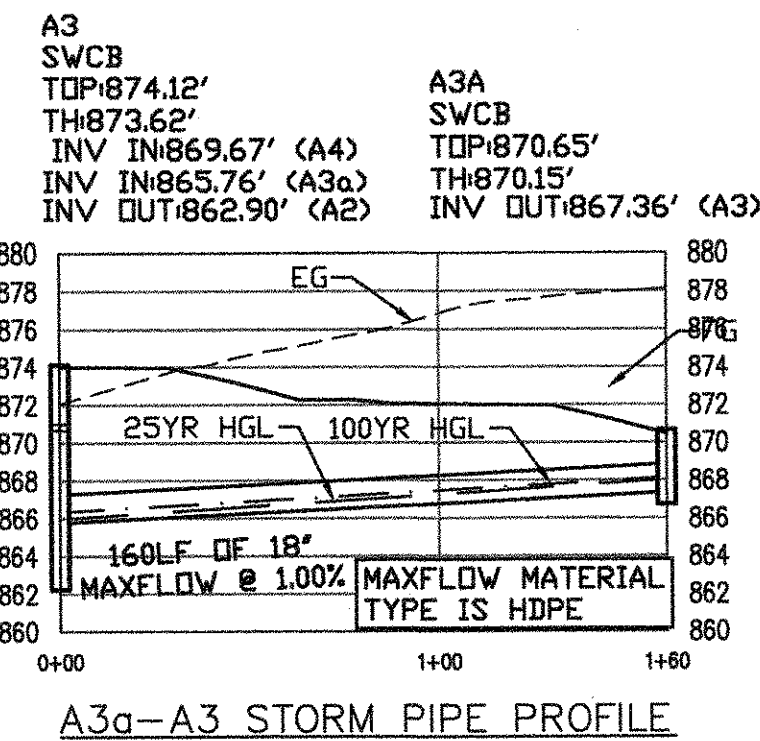
**GSWCC**  
MARK G. WHITLEY, PE  
000001036  
LEVEL I A CERTIFIED PERSONNEL  
LEVEL II CERTIFIED INSPECTOR  
LEVEL II CERTIFIED DESIGN PROF.

**SHHEET**  
10 OF 34

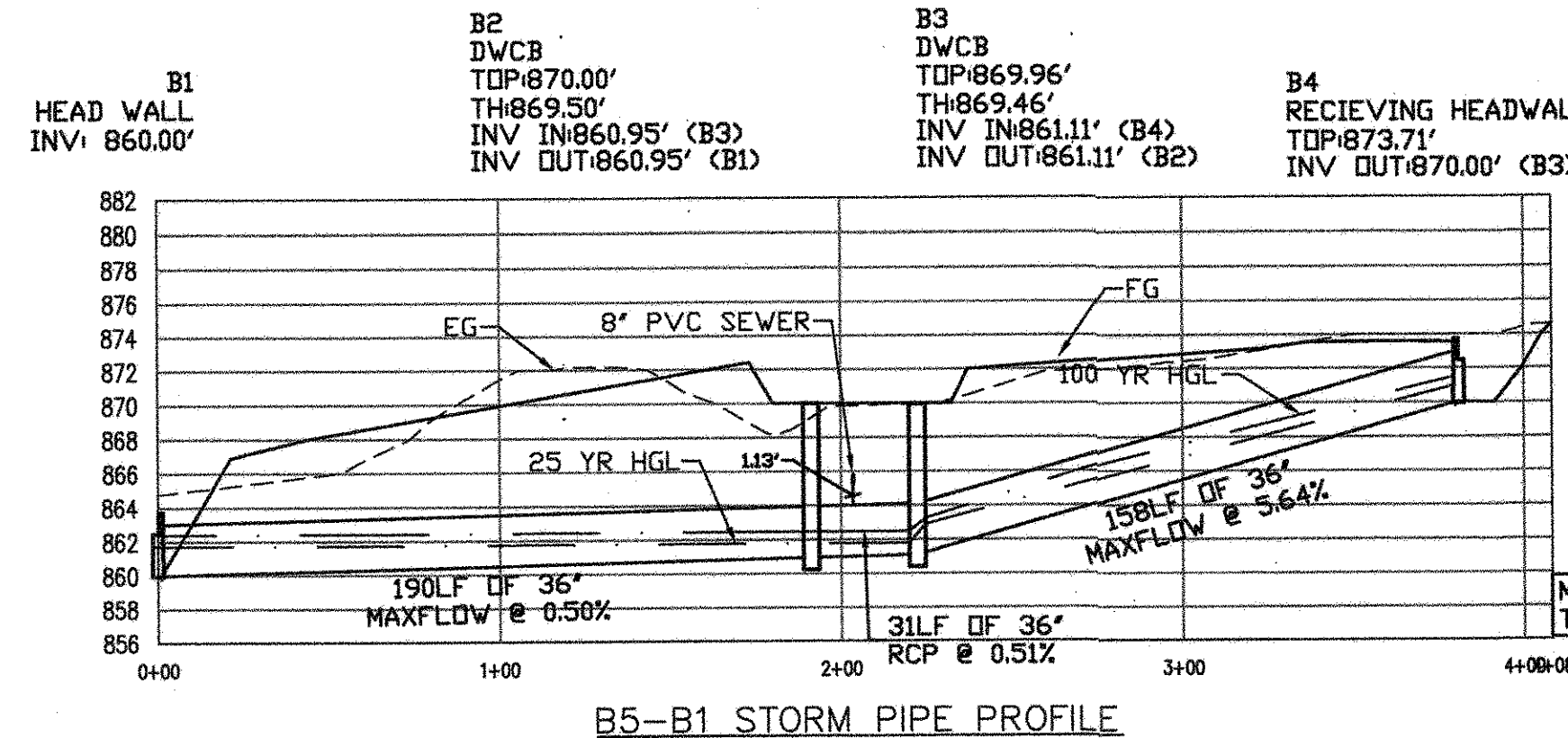




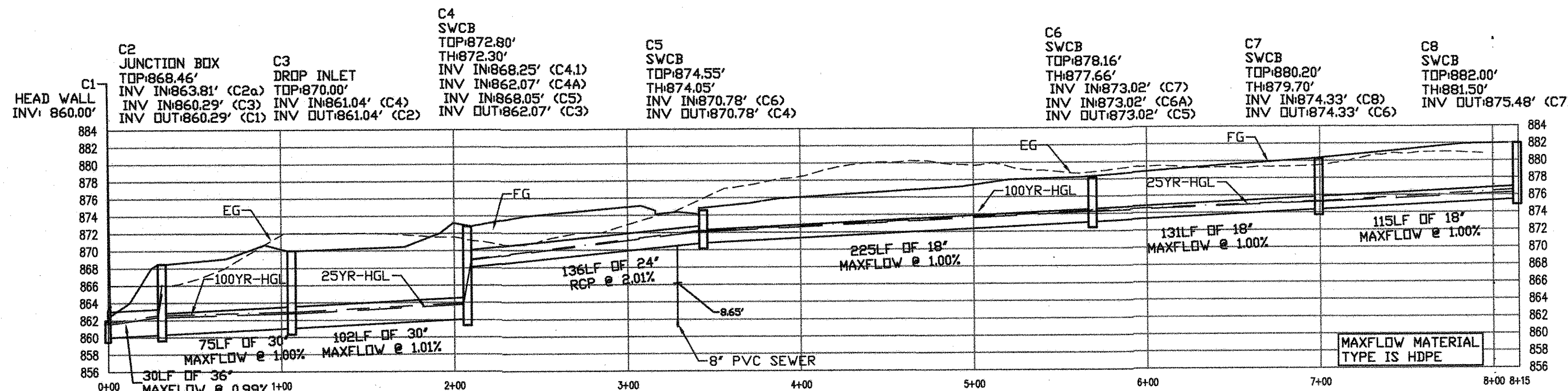
A4-A1 STORM PIPE PROFILE



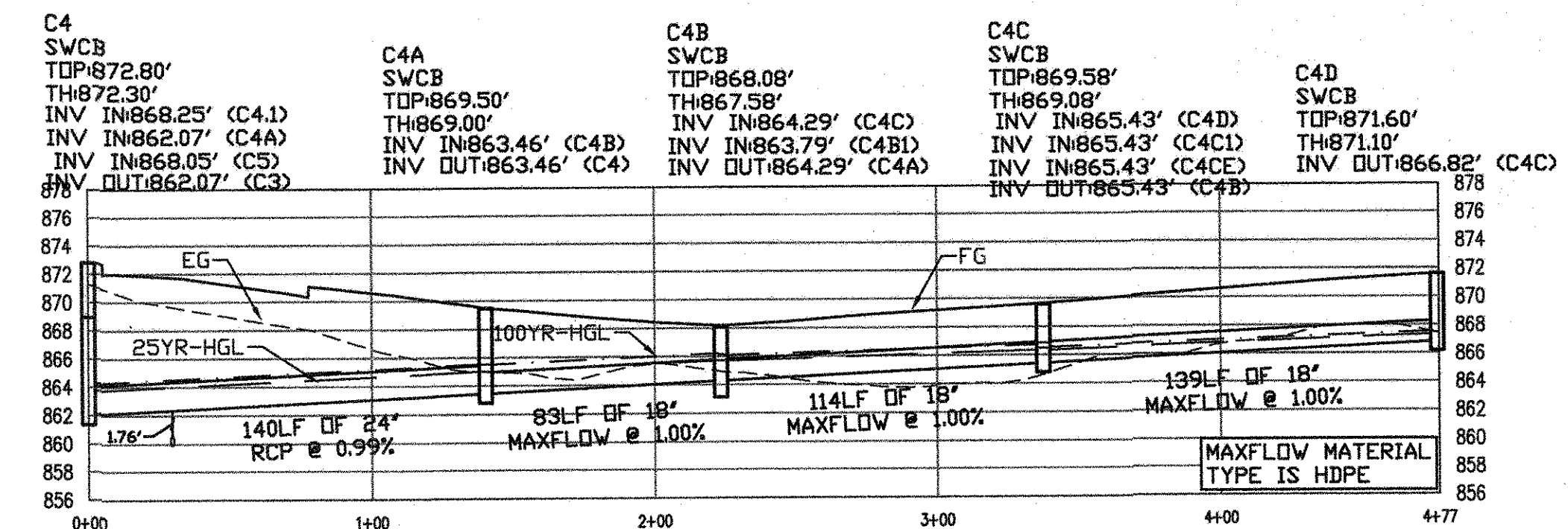
A3a-A3 STORM PIPE PROFILE



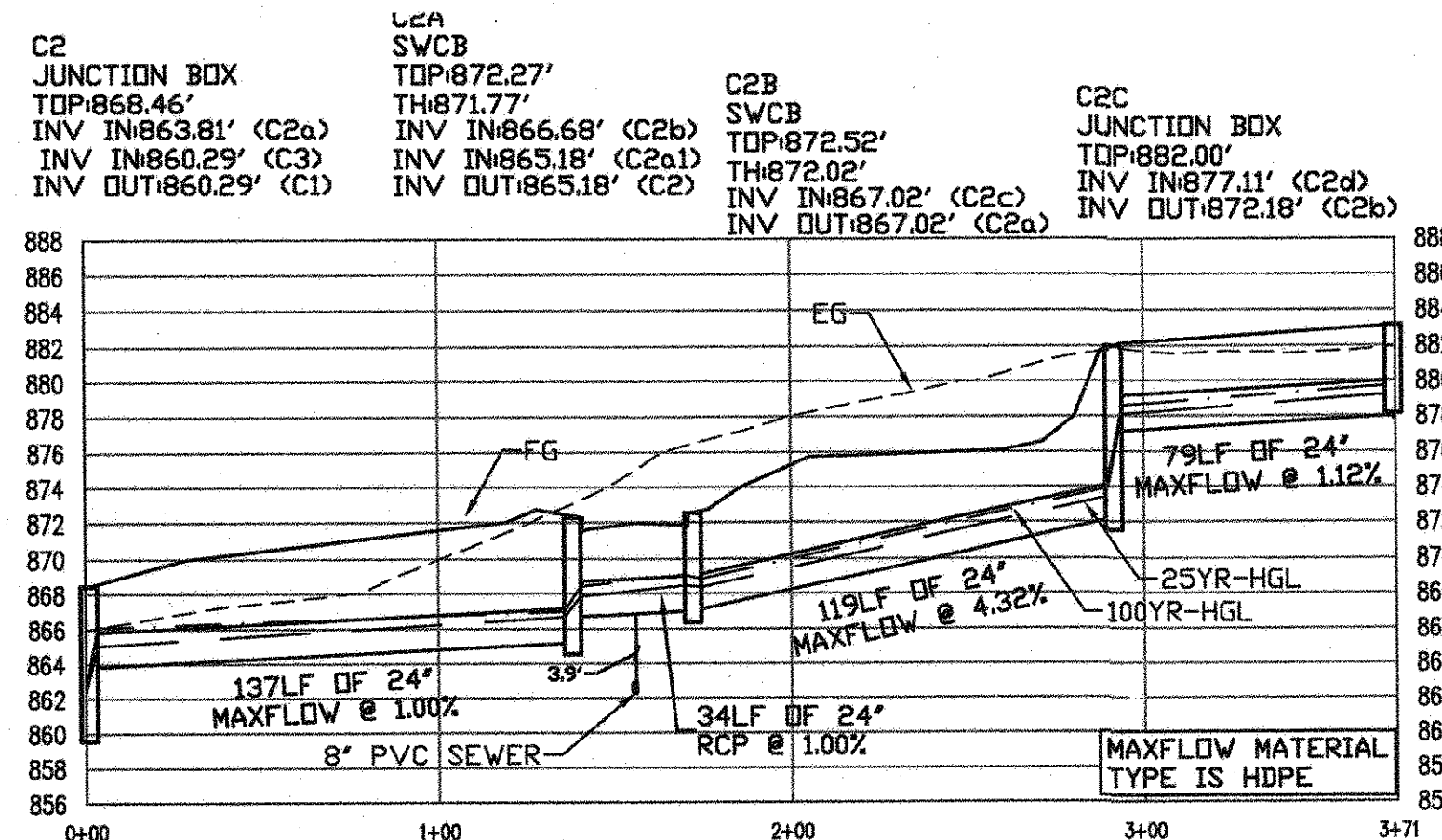
B5-B1 STORM PIPE PROFILE



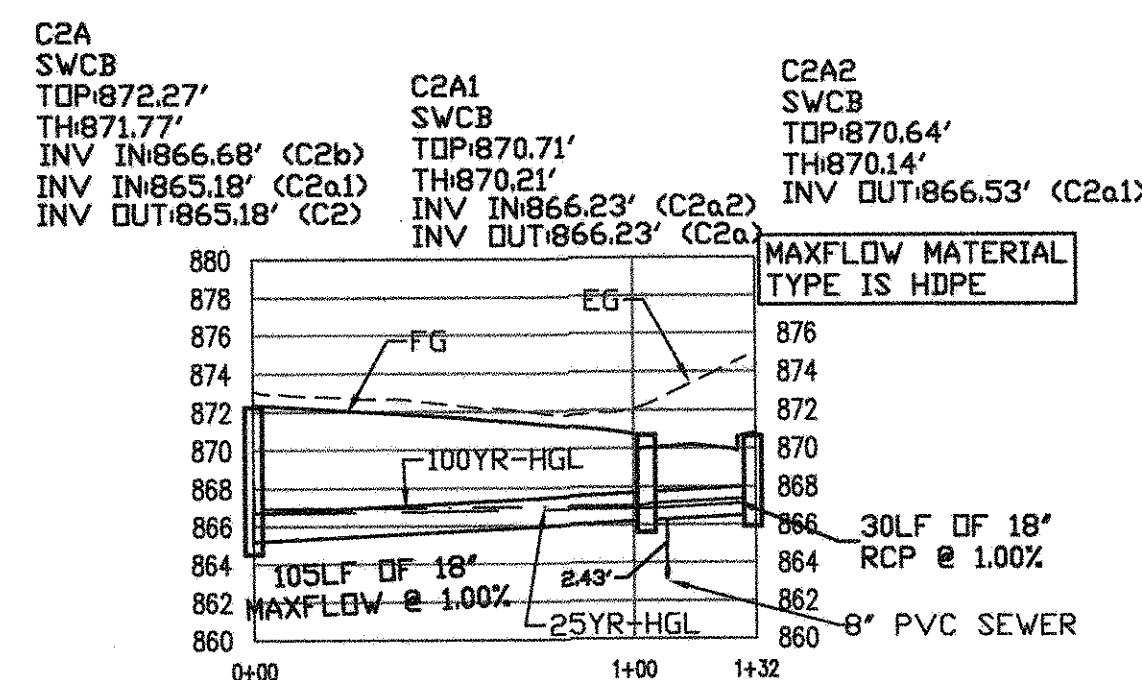
C9-C1 STORM PIPE PROFILE



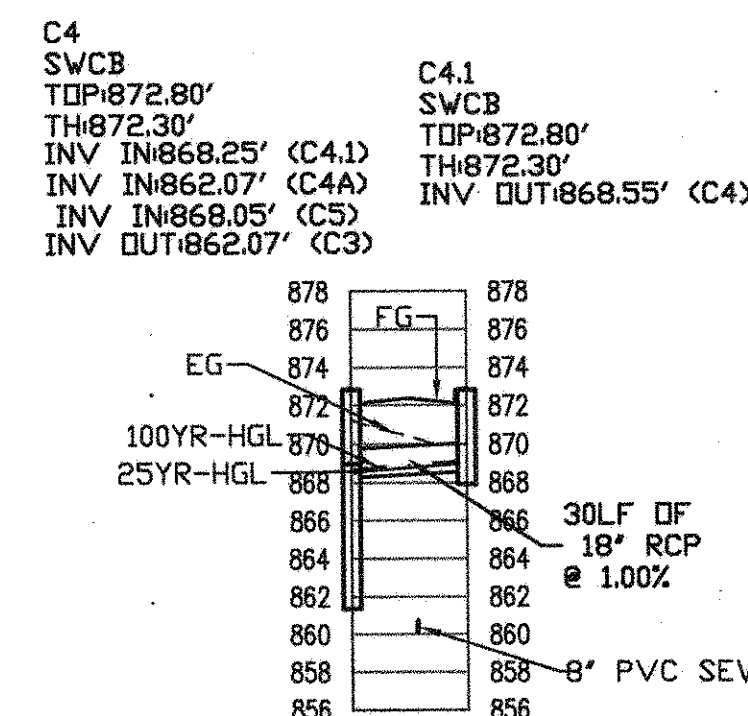
C4d-C4 STORM PIPE PROFILE



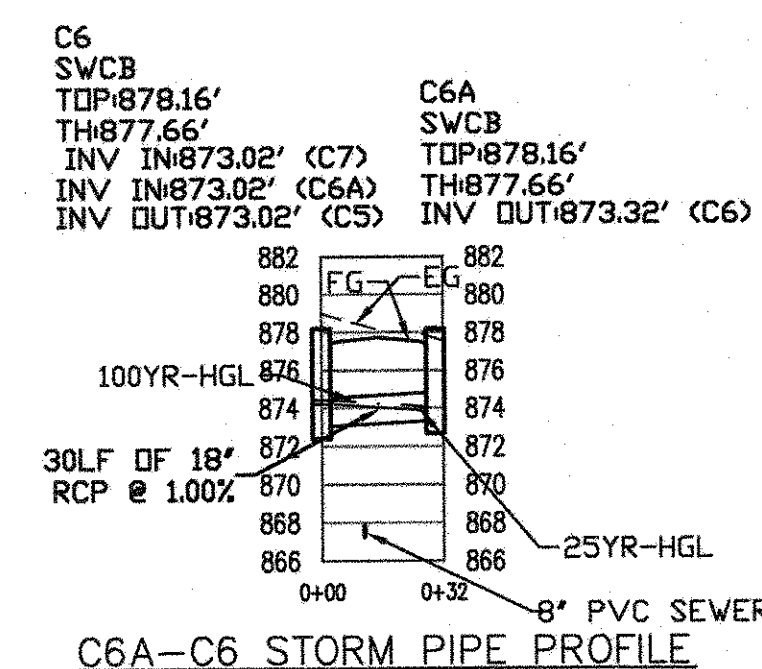
C2d-C2 STORM PIPE PROFILE



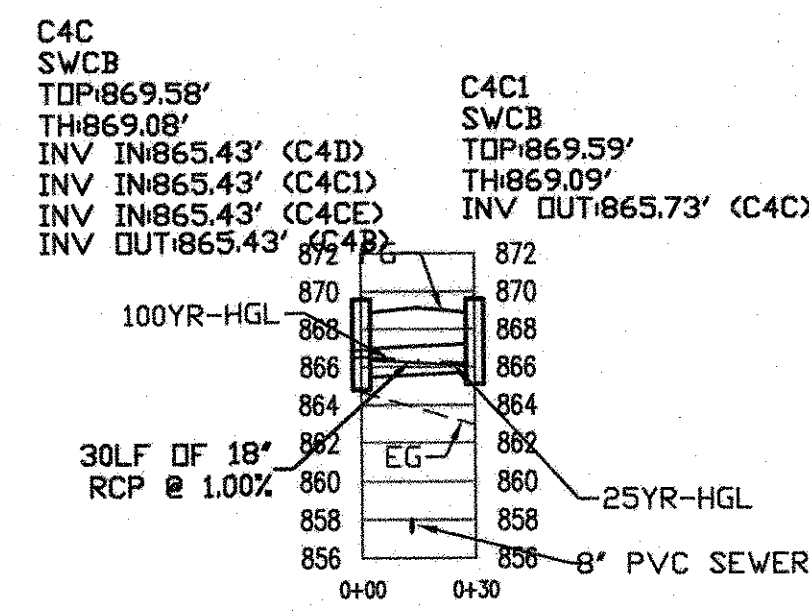
C2a2-C2a STORM PIPE PROFILE



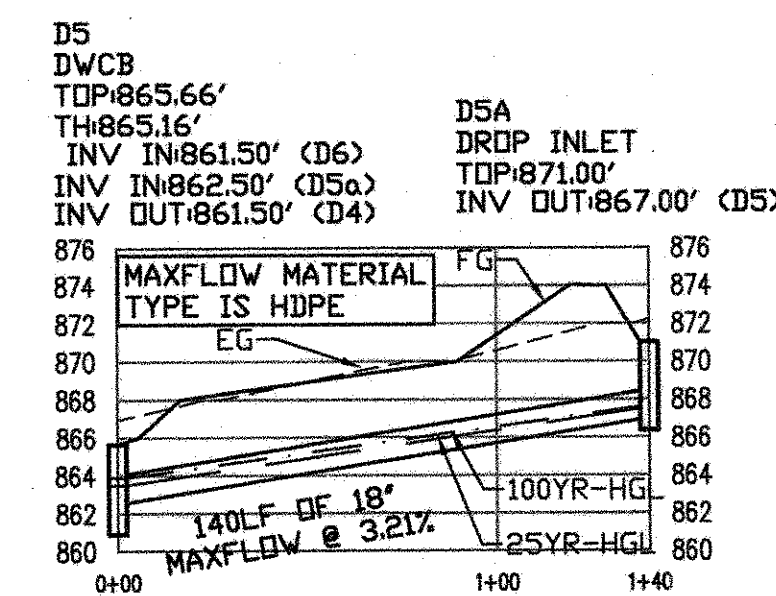
C4.1 STORM PIPE PROFILE



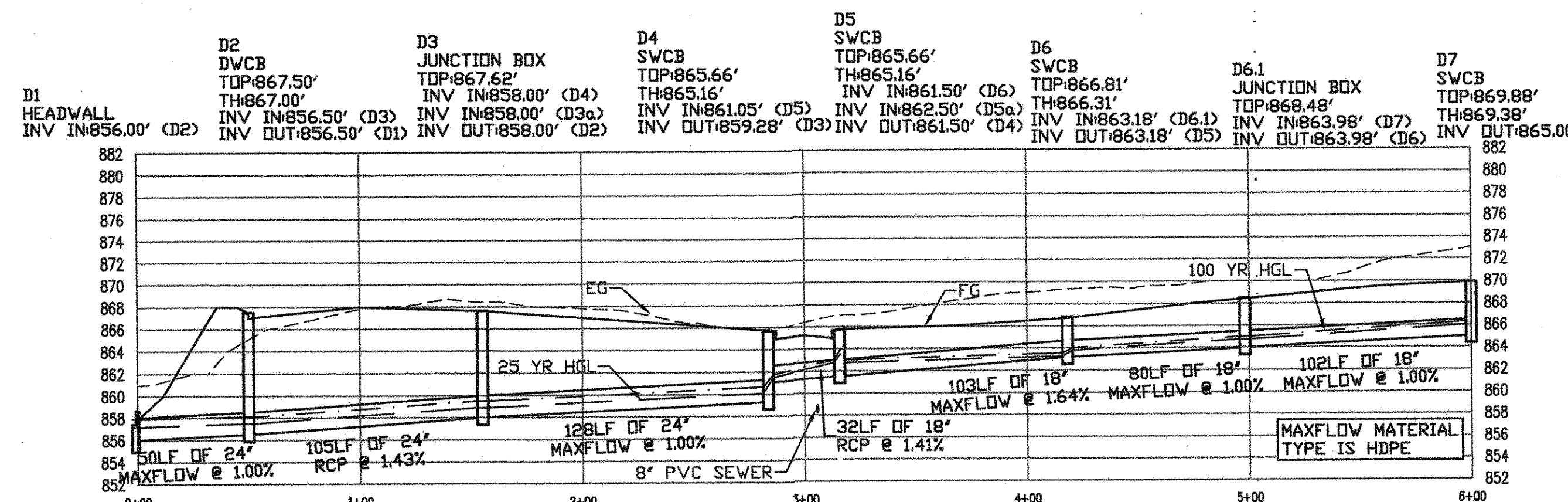
C6A-C6 STORM PIPE PROFILE



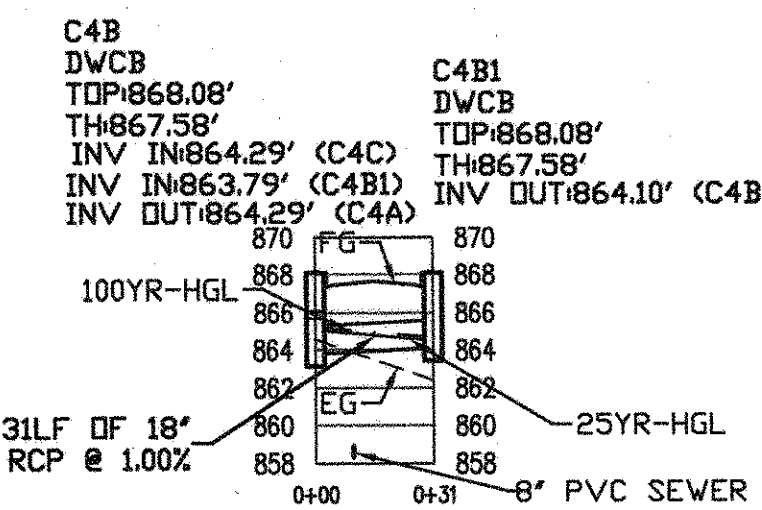
C4c1-C4c STORM PIPE PROFILE



D5a-D5 STORM PIPE PROFILE



D7-D1 STORM PIPE PROFILE



C4B1-C4B STORM PIPE PROFILE

ST OUTLET PROTECTION CHART

HEADWALL NO.	PIPE SIZE	WIDTH OF APRON	LENGTH OF APRON	WIDTH OF APRON	THICKNESS OF APRON	RIP-RAP SIZE
A-1	24"	6'	12'	14'	0.60'	0.4"
B-1	36"	9'	20'	23'	0.90'	0.6"
C-1	30"	7.5'	16'	18.5'	0.75'	0.5"
D-1	24"	6'	12'	14'	0.60'	0.4"
E-1	24"	6'	12'	14'	0.60'	0.4"
F-1	60"	15.0'	32'	37'	1.50'	1.0"
G-1	48"	12.0'	28'	30'	1.2'	0.8"

APPROVED  
DATE: 11/1/19  
BY: [Signature]

Liberty Square Park Phase 5  
STORM DRAIN PROFILES (SHEET 1)  
LAND LOT 229 AND 230 OF THE 6TH DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA

SHEET  
11 OF 34

WHITLEY  
ENGINEERING INC.  
DESIGN NPDES PROJECT MANAGEMENT  
TEL: (770) 946-0256  
38 E. MAIN STREET N.  
HAMPTON, GA 30228

REV.	DATE	DESCRIPTION
1	05/08/19	REVISED PER CITY COMMENTS
2	05/16/19	REVISED PER CITY COMMENTS
3	06/25/19	REVISED PER CITY COMMENTS
4	07/19/19	REVISED PER CITY COMMENTS
5	07/25/19	REVISED PER CITY COMMENTS
6	08/02/19	REVISED PER CITY COMMENTS
7	10/22/2019	REVISED PER CITY COMMENTS

Not Released For Construction

GSWCC  
MARK G. WHITLEY, PE  
0000901036  
LEVEL I A CERTIFIED PERSONNEL  
LEVEL I B CERTIFIED INSPECTOR  
LEVEL I CERTIFIED DESIGN PROF.

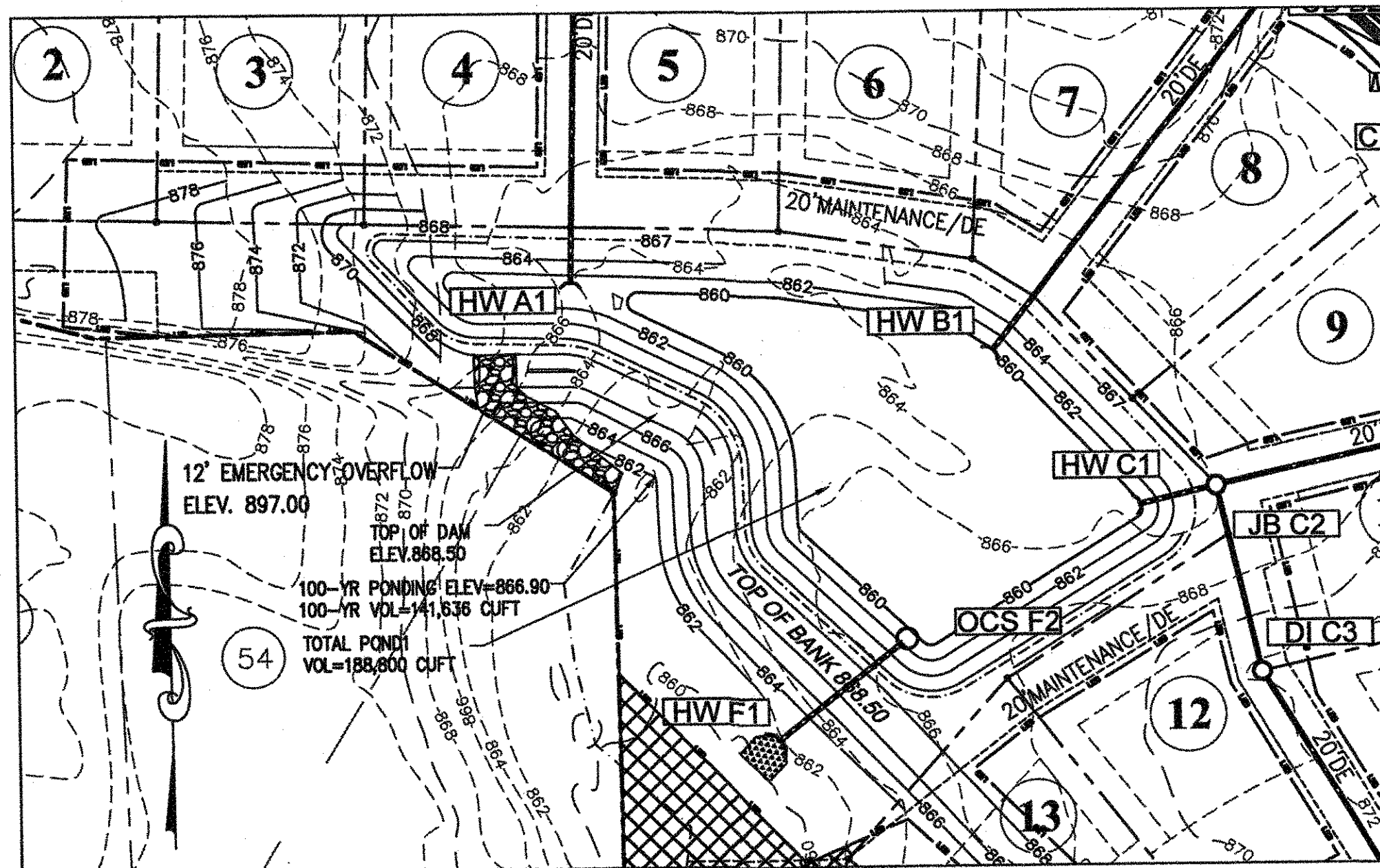




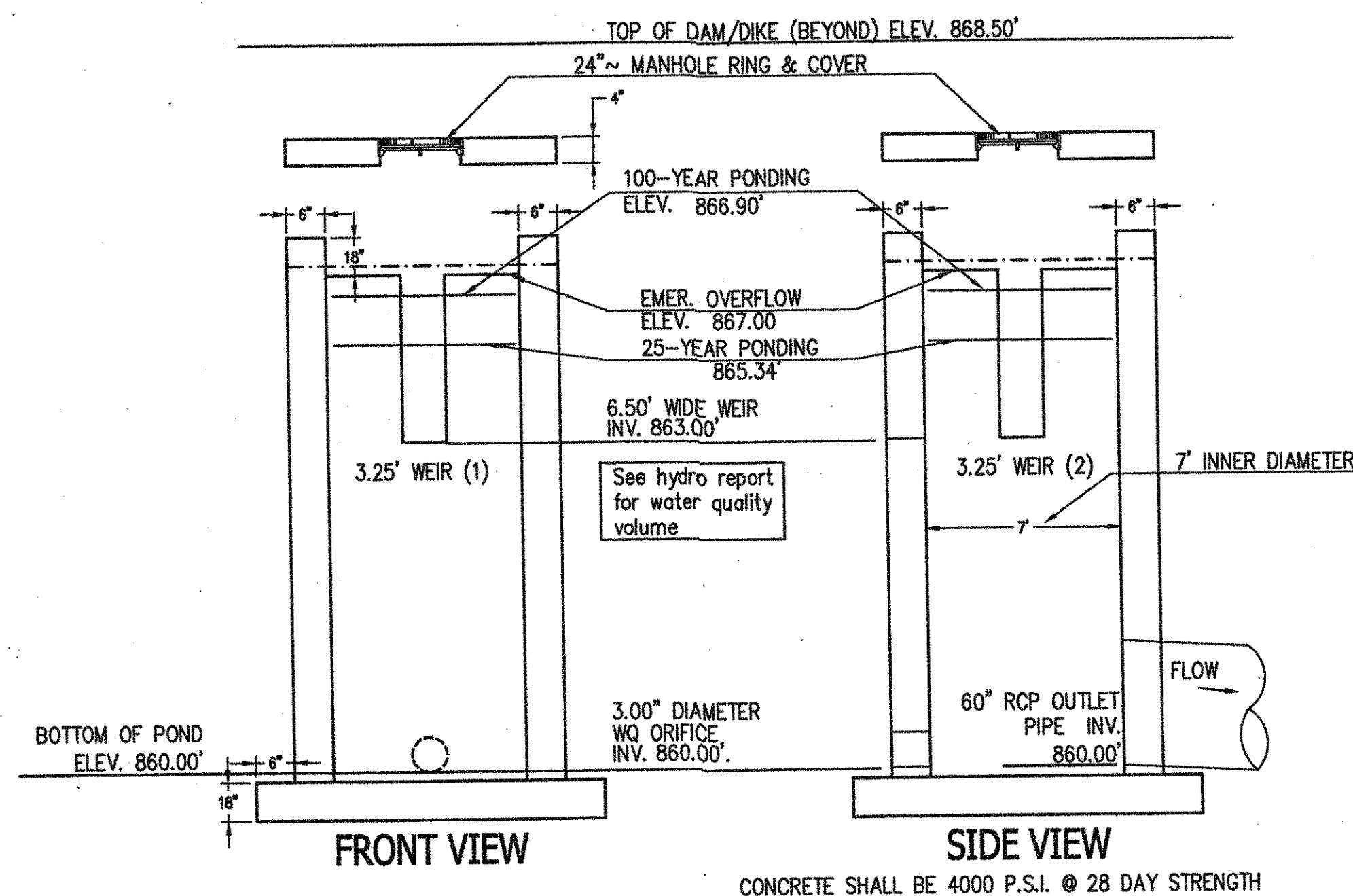
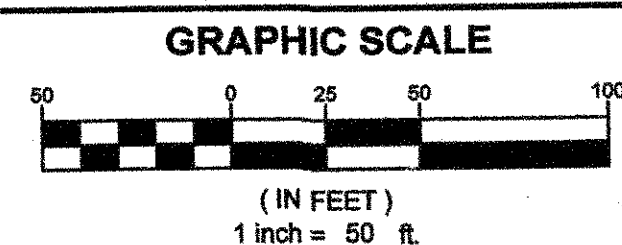
APPROVED  
DATE: 11/2/13  
BY: [Signature] Major by [Signature]

HEADWALL NO.	PIPE SIZE	WIDTH OF APRON @ PIPE	LENGTH OF APRON	WIDTH OF APRON @ END OF APRON	THICKNESS OF APRON	RIP-RAP SIZE
A-1	24"	6"	12'	14'	0.60'	0.4'
B-1	36"	9"	20'	23'	0.90'	0.6'
C-1	30"	7.5"	16'	18.5'	0.75'	0.5'
D-1	24"	6"	12'	14'	0.60'	0.4'
E-1	24"	6"	12'	14'	0.60'	0.4'
F-1	60"	15.0"	32'	37'	1.50'	1.0'
G-1	48"	12.0"	26'	30'	1.2'	0.8'

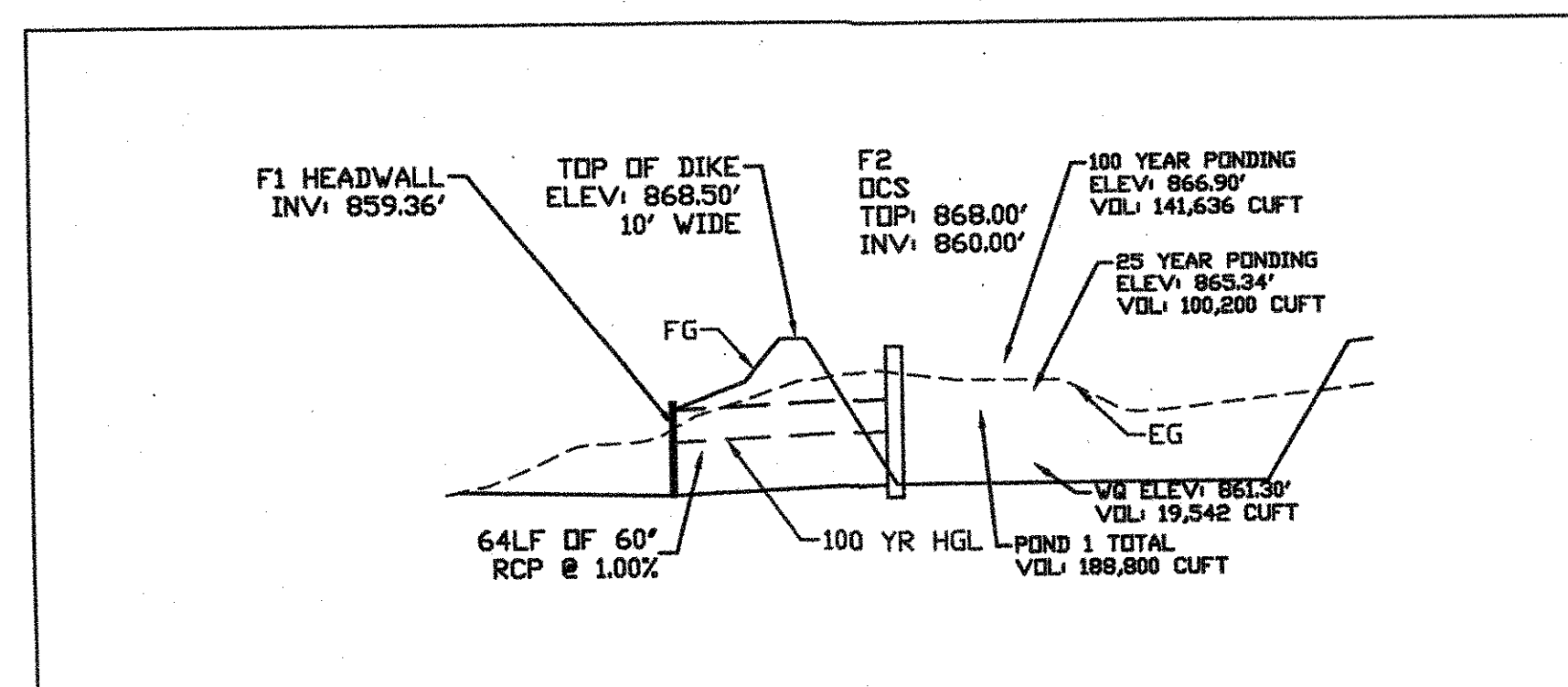




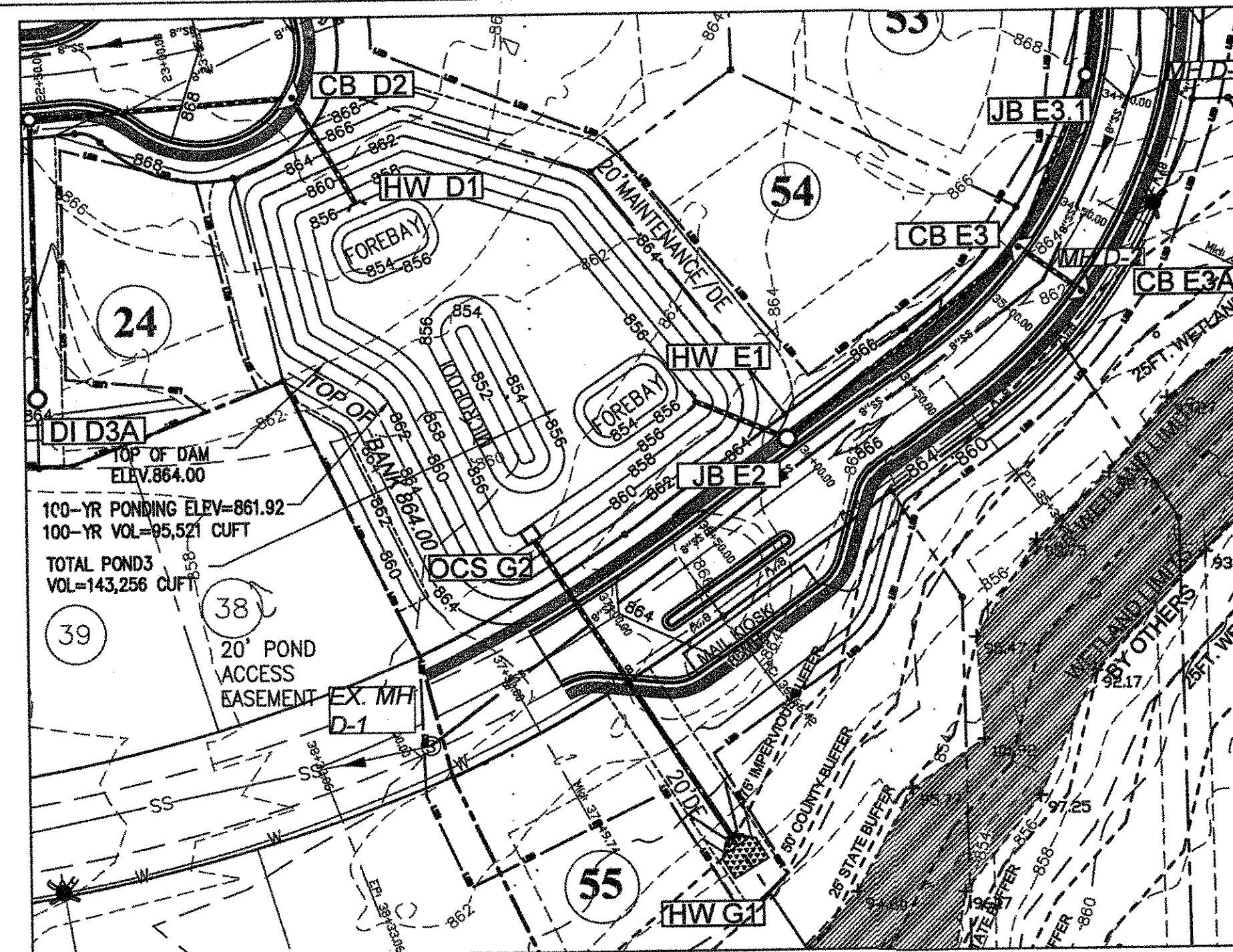
POND 1 PART PLAN



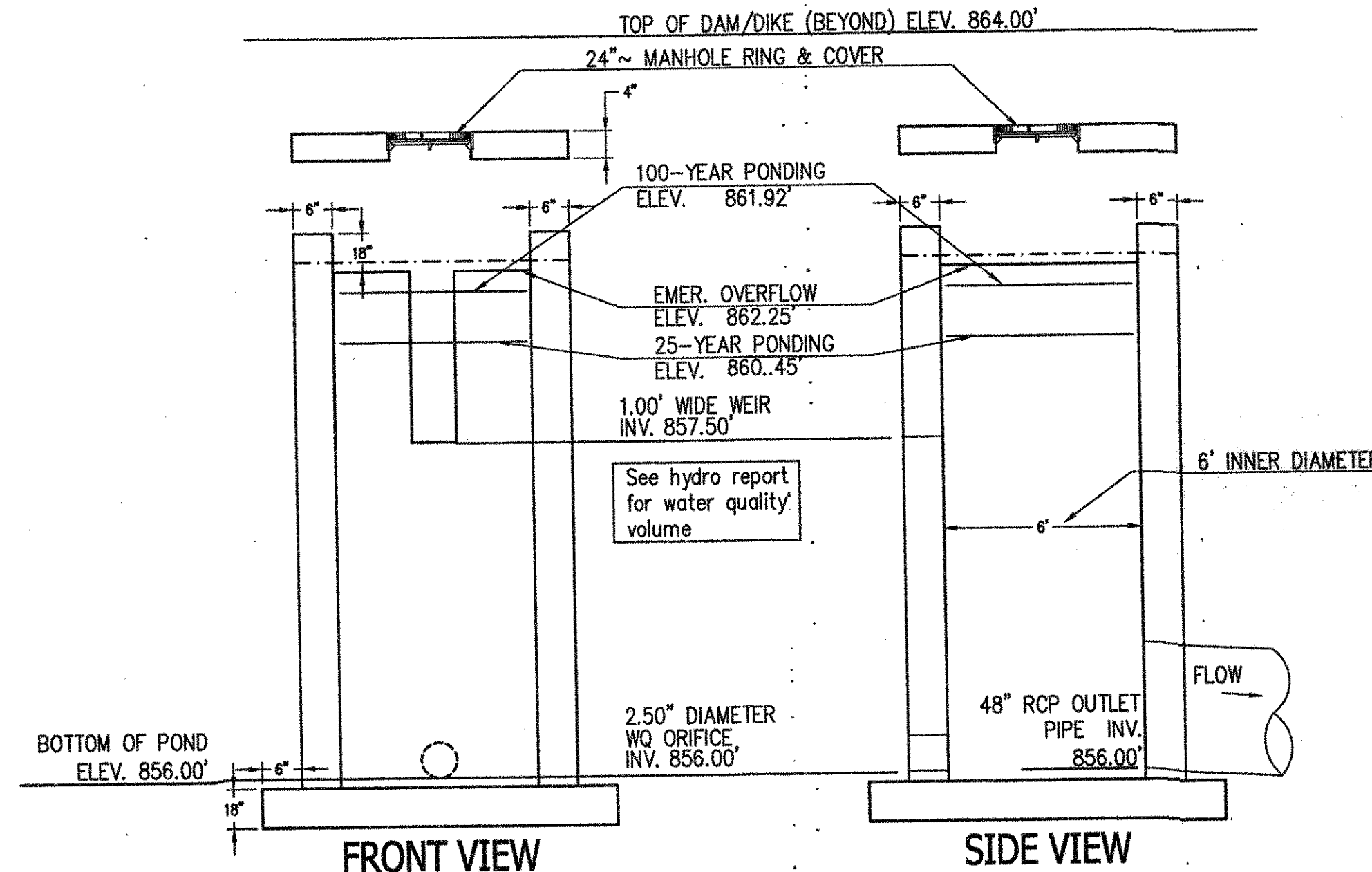
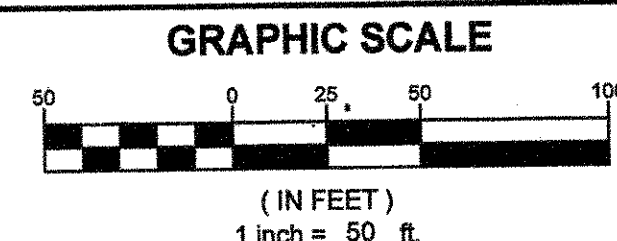
1 POND 1 CONCRETE OUTLET CONTROL STRUCTURE (O.C.S.)  
NOT TO SCALE



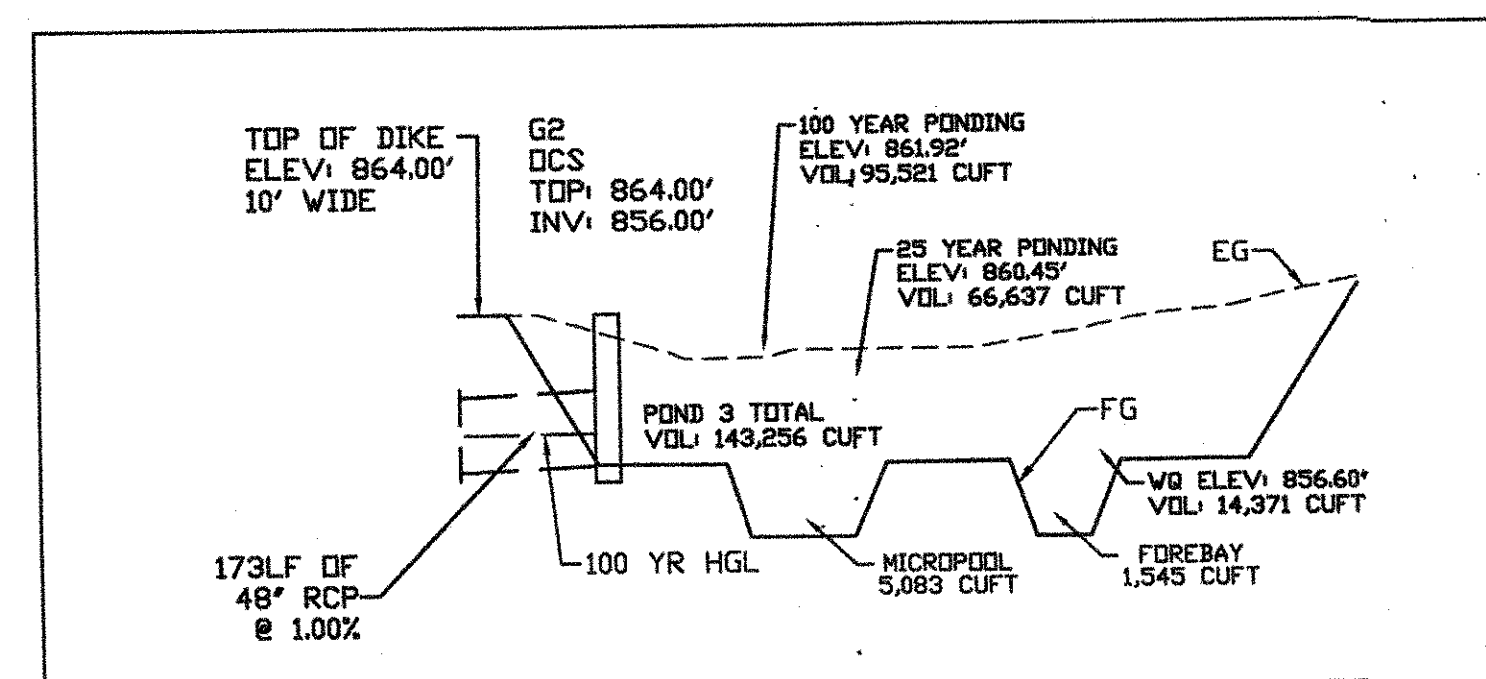
SCALE: H: 1"=50'  
V: 1"=10'



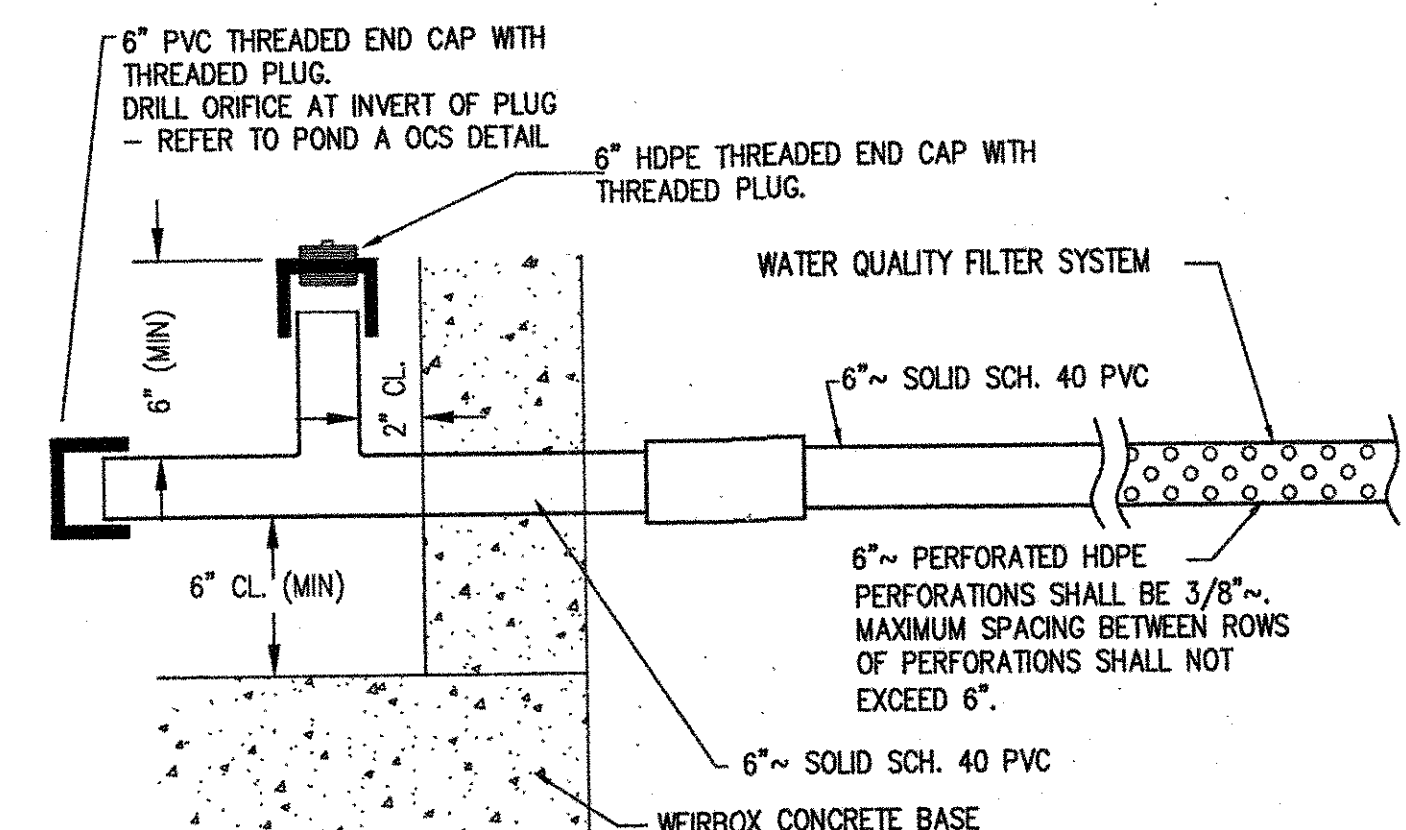
POND 3 PART PLAN



1 POND 3 CONCRETE OUTLET CONTROL STRUCTURE (O.C.S.)  
NOT TO SCALE



SCALE: H: 1"=50'  
V: 1"=10'



- NOTES
1. FILL GAP BETWEEN STRUCTURE & HDPE WITH MORTAR OR INSTALL A FERNO ADAPTER.
  2. FASTEN END CAP TO SYSTEM WITH HDPE CEMENT.
  3. CONTRACTOR SHALL PREPARE SHOP DRAWINGS FOR FABRICATION OF WATER QUALITY FILTER SYSTEM.
  4. PERFORATED HDPE SHALL BE INSTALLED ONLY UNDER SAND FILTER. SOLID PVC SHALL BE INSTALLED ELSEWHERE, AS SHOWN ON PLANS.

3 WATER QUALITY (WQ) FILTER SYSTEM  
NOT TO SCALE

NOTES APPLYING TO ALL CP PONDS:

LOCATION OF PONDS SHALL BE CALCULATED BY THE CONSTRUCTION SURVEYOR AND STAKED OUT PRECISELY AS SHOWN ON THESE PLANS. ANY REQUIRED DEVIATIONS BECAUSE OF FIELD CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGN ENGINEER BEFORE CLEARING.

NO FILL SHALL BE PLACED IN THE FLOOD PLAIN WITHOUT PRIOR WRITTEN APPROVAL BY FEMA VIA AN APPROVED LOMR AND ALL FILL WILL REQUIRE VOLUME COMPENSATION APPROVED BY HENRY COUNTY AND APPROVED NO-RISE CERTIFICATE.

PONDS SHALL BE USED AS TEMPORARY SEDIMENT BASINS UNTIL SUCH TIME AS THE SITE HAS BEEN COMPLETELY STABILIZED AND SILT ACCUMULATION HAS BEEN REDUCED TO A MINIMUM. AT SUCH TIME, THE CONTRACTOR SHALL CLEAN THE POND OF ALL SILT AND PERMANENT STABILIZATION SHALL BE INSTALLED PER THE DETAILS LOCATED ON THESE PLANS.

NO WOODY VEGETATION SHALL BE PLANTED OR ALLOWED TO GROW ON THE DAM, 15' FROM TOE OF EMBANKMENT, IN EMERGENCY OVERFLOW OR 20' FROM PRINCIPAL SPILLWAY.

APPROVED  
DATE: 11/28/19  
BY: *ASCE N. Moore by R. Ryan*

Know what's below.  
Call before you dig.

WHITLEY  
ENGINEERING INC.

DESIGN NPDES PROJECT MANAGEMENT  
TEL: (770)946-0256  
38 E. MAIN STREET N.  
HAMPTON, GA 30228

REV.	DATE	DESCRIPTION
1	04/30/19	REVISED PER CITY/COUNTY COMMENTS
2	05/08/19	REVISED PER CITY/COUNTY COMMENTS
3	05/16/19	REVISED PER HOWSA COMMENTS
4	06/22/19	REVISED PER CITY/COUNTY COMMENTS
5	07/17/19	REVISED PER CITY/COUNTY COMMENTS
6	07/25/19	REVISED PER CITY/COUNTY COMMENTS
7	09/02/19	REVISED PER CITY/COUNTY COMMENTS

Liberty Square Park Phase 5	DATE: 02/02/2019
STORMWATER POND DETAILS	SCALE: AS SHOWN
LAND LOT 229 AND 230 OF THE 6TH DISTRICT	CITY OF HAMPTON, HENRY COUNTY, GA

GSWCC  
MARK G. WHITLEY, PE  
000001036  
LEVEL I A CERTIFIED PERSONNEL  
LEVEL I B CERTIFIED INSPECTOR  
LEVEL II CERTIFIED DESIGN PROF.





JACK & BORE 41 LF 12" MIN CASING WITH MIN. WALL THICKNESS OF 0.25" ANY VOIDS BETWEEN BORE AND CASING PIPE SHALL BE PRESSURE GROUTED PER HCWSA.

EXISTING FH  
PROPOSED 8" TAPPING VALVE AND SLEEVE

SSMH  
TOP 881.83  
INV 879.39

REVOLUTIONARY DR. (50' R/W)

**VALVES NOTE:**  
VALVES ARE NOT TO BE LOCATED WITHIN THE PAVEMENT, CURB AND GUTTER, OR SIDEWALK

LEGEND	
SS	EXISTING SANITARY SEWER MAIN
SS	PROPOSED SANITARY SEWER MAIN
W	EXISTING WATER MAIN
W	PROPOSED WATER MAIN
P	EXISTING POWER LINE
18" RCP	EXISTING STORM PIPE
18" RCP	PROPOSED STORM PIPE
	EXISTING FIRE HYDRANT
	PROPOSED FIRE HYDRANT
	EXISTING SEWER MANHOLE
	PROPOSED SEWER MANHOLE
	EXISTING POWER POLE
	EXISTING CONTOURS
	PROPOSED CONTOURS
	DROP INLET - DI
	JUNCTION BOX - JB
	DOUBLE-WING CATCH BASIN - DWCB
	SINGLE-WING CATCH BASIN - SWCB
	HEADWALL

REVERE WAY

WATER METER BOX (TYP)

STORMWATER POND 1

TYP. WATER SERVICE

TYP. WATER SERVICE

PROP FH

WATER METER BOX (TYP)

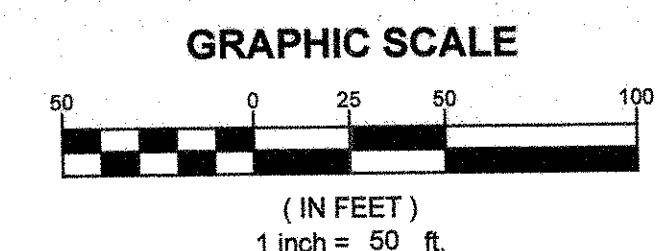
PROP FH

CONTRACTOR SHALL MAKE SURE THERE IS A MINIMUM CLEARANCE OF 18 INCHES VERTICALLY BETWEEN WATER LINE AND STORM LINE

SUMMARY OF WATER QUANTITIES  
NUMBER OF FIRE HYDRANTS: 9 EA.  
TOTAL OF 8" DIP = 4130 L.F.  
NUMBER OF 8" GATE VALVES = 7 EA.

- WATER NOTES:
1. ALL WATER MAINS INSTALLED WITHIN THE HENRY COUNTY WATER AUTHORITY JURISDICTION SHALL BE DUCTILE IRON PIPING CLASS 350.
  2. ALL SERVICES REQUIRING A 1" METER OR LESS, 1" TYPE "K" SOFT ANNEALED COPPER TUBING SHALL BE INSTALLED FROM THE WATER MAIN TO THE METER.
  3. ONLY ONE LOT WITHIN A SUBDIVISION MAY BE SERVED OFF AN INDIVIDUAL SERVICE LINE.
  4. THE DEVELOPER'S CONTRACTOR WILL PERFORM ALL SERVICE TAPS, INSTALL ALL SERVICE TUBING AND SET ALL METER BOXES.
  5. A 2" PVC SERVICE SLEEVE SHALL BE PROVIDED FOR EACH LOT REQUIRING A LONG SIDE SERVICE AND SHALL BE INSTALLED BY THE DEVELOPER'S CONTRACTOR.
  6. STANDARD HOUSE SERVICE IS 3/4".
  7. ALL GATE VALVES ARE TO BE INSTALLED OUTSIDE OF PAVEMENT.
  8. ALL GATE VALVES TO BE RODDED TO TEE.
  9. WATER MAIN SHALL EXTEND UNDER CUL-DE-SAC TO PROPERTY LINE FIRE HYDRANT SHALL BE INSTALLED APPROX. 1' INSIDE R/W
  10. ALL SERVICES AROUND CUL-DE-SACS SHALL MAINTAIN A DISTANCE OF 8' FROM THE BACK OF CURB.
  11. CURB AND GUTTER REQUIRED PRIOR TO WATER LINE CONSTRUCTION.
  12. A PRE-CONSTRUCTION CONFERENCE IS REQUIRED WITH HCWA.
  13. SEE CUL-DE-SAC WATER LINE TERMINATION DETAIL ON WATER DETAIL SHEET.
  14. CONTRACTOR MUST HAVE STATE APPROVED LICENSE AND BE ON APPROVED LIST FOR HCWA.

APPROVED  
DATE: 10/25/19  
BY: [Signature]



Liberty Square Park Phase 5  
WATER PLAN (SHEET 1)  
LAND LOT 229 AND 230 of the 6th DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA

SHEET  
14 OF 34

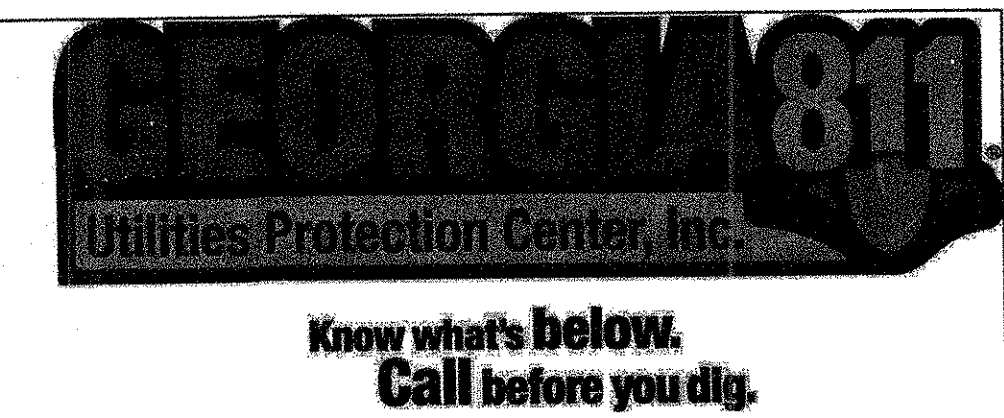
WHITLEY ENGINEERING INC.  
DESIGN NPDES PROJECT MANAGEMENT  
TEL: (770) 946-0256  
38 E. MAIN STREET N.  
HAMPTON, GA 30228

REV.	DATE	DESCRIPTION
1	04/30/19	REVISED PER CITY/COUNTY COMMENTS
2	05/08/19	REVISED PER CITY COMMENTS
3	05/16/19	REVISED PER HCWSA COMMENTS
4	06/25/19	REVISED PER CITY COMMENTS
5	07/15/19	REVISED PER CITY COMMENTS
6	07/25/19	REVISED PER CITY COMMENTS
7	08/09/2019	REVISED PER CITY COMMENTS

Not Released For Construction  
These drawings are the property of Whitley Engineering, Inc. and may not be used, reproduced and/or incorporated into another work for any reason without the written consent of the design professional.



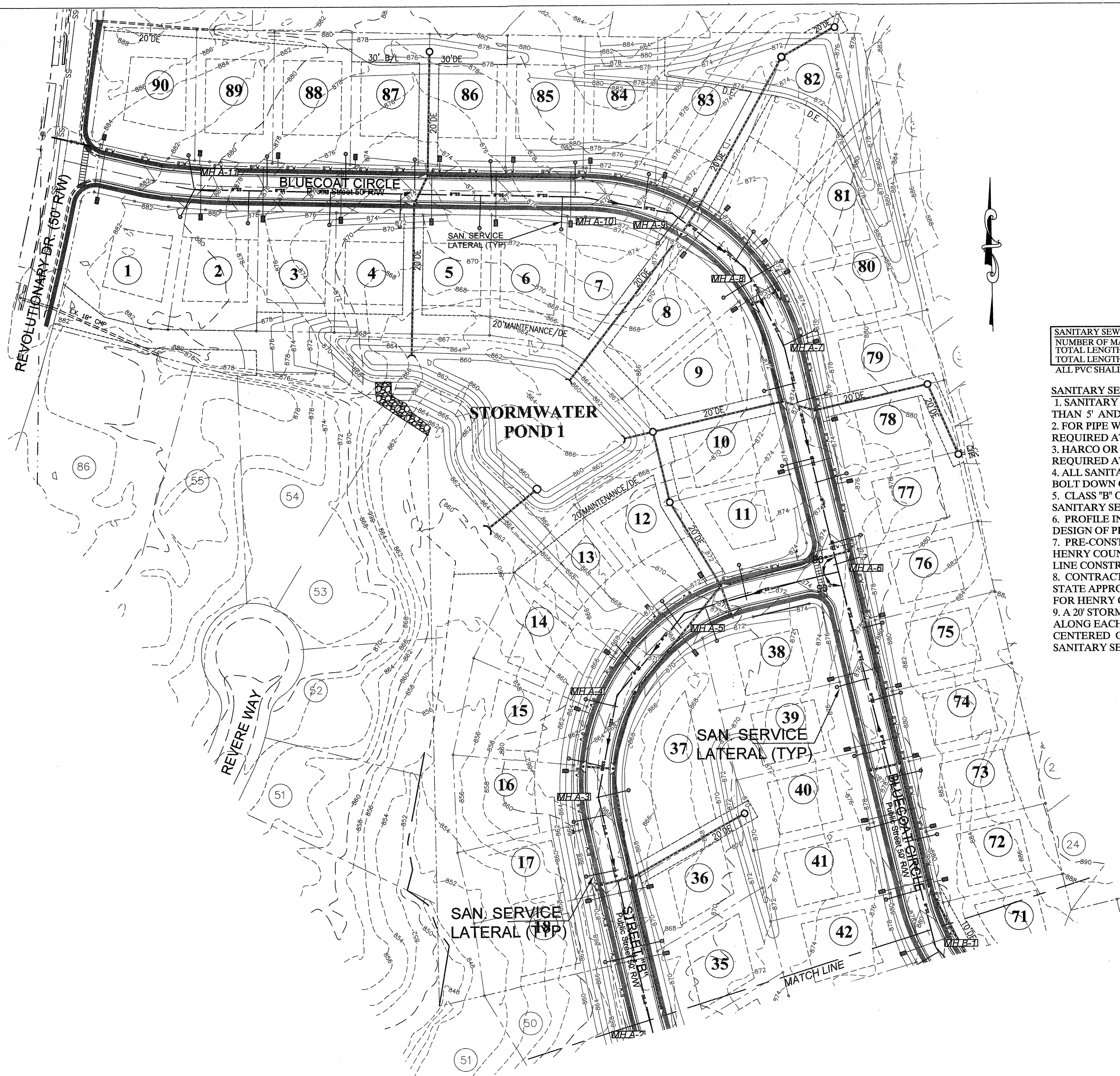
GSWCC  
MARK G. WHITLEY, PE  
000000438  
LEVEL 1A CERTIFIED PERSONNEL  
LEVEL 1B CERTIFIED INSPECTOR  
LEVEL 1I CERTIFIED DESIGN PROF.









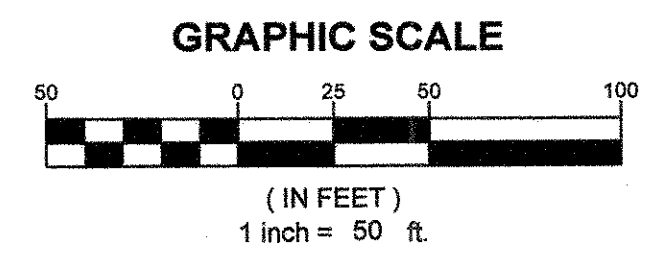


**Utilities Protection Center, Inc.**  
Know what's below.  
Call before you dig.

**SANITARY SEWER QUANTITIES**  
NUMBER OF MANHOLES = 24  
TOTAL LENGTH OF 8" PVC = 3895 LF  
TOTAL LENGTH OF 8" DIP = 140 LF  
ALL PVC SHALL BE SPEC. SDR 35

- SANITARY SEWER NOTES:**
1. SANITARY SEWERS ON SLOPES OF MORE THAN 10%, LESS THAN 5' AND MORE THAN 16' DEEP, SHALL BE DUCTILE IRON.
  2. FOR PIPE WITH SLOPES OVER 15%, CONCRETE COLLARS ARE REQUIRED AT JOINTS.
  3. HARCO OR EQUAL COUPLINGS W/STAINLESS STEEL BANDS REQUIRED AT ALL JOINTS BETWEEN PVC AND DIP.
  4. ALL SANITARY SEWER MANHOLES OUTSIDE STREET REQUIRE BOLT DOWN COVERS.
  5. CLASS "B" OR BETTER BEDDING IS REQUIRED FOR ALL SANITARY SEWER LINES.
  6. PROFILE INFORMATION TAKEN FROM FIELD RUN TOPO AND DESIGN OF PROPOSED ROADWAY.
  7. PRE-CONSTRUCTION CONFERENCE IS REQUIRED WITH THE HENRY COUNTY WATER AUTHORITY PRIOR TO WATER/SEWER LINE CONSTRUCTION.
  8. CONTRACTOR FOR THE WATER/SEWER LINE MUST HAVE A STATE APPROVED LICENSE AND BE ON THE APPROVED LIST FOR HENRY COUNTY WATER AUTHORITY.
  9. A 20' STORM SEWER AND SANITARY SEWER EASEMENT EXISTS ALONG EACH PROPERTY LINE AND ALONG EACH LOT LINE, CENTERED ON LOT LINES FOR FUTURE DRAINAGE AND SANITARY SEWER LINES.

**APPROVED**  
DATE: 10/25/19  
BY: *[Signature]*



GSWCC  
MARK G. WHITLEY, PE  
0000001036  
LEVEL I A CERTIFIED PERSONNEL  
LEVEL I B CERTIFIED INSPECTOR  
LEVEL II CERTIFIED DESIGN PROF.

**GEORGIA**  
REGISTERED PROFESSIONAL ENGINEER  
No. 111147  
Exp. 12/31/24  
G.W. WHITLEY, PE

**WHITLEY ENGINEERING INC.**  
DESIGN NPDES PROJECT MANAGEMENT  
TEL: (770)946-0256  
38 E. MAIN STREET N.  
HAMPTON, GA 30228

REV.	DATE:	DESCRIPTION:
1	04/30/19	REVISED PER CITY/COUNTY COMMENTS
2	05/08/19	REVISED PER CITY COMMENTS
3	05/16/19	REVISED PER HENRY COUNTY COMMENTS
4	06/25/19	REVISED PER CITY COMMENTS
5	07/15/19	REVISED PER CITY COMMENTS
6	07/25/19	REVISED PER CITY COMMENTS
7	08/09/2019	REVISED PER CITY COMMENTS

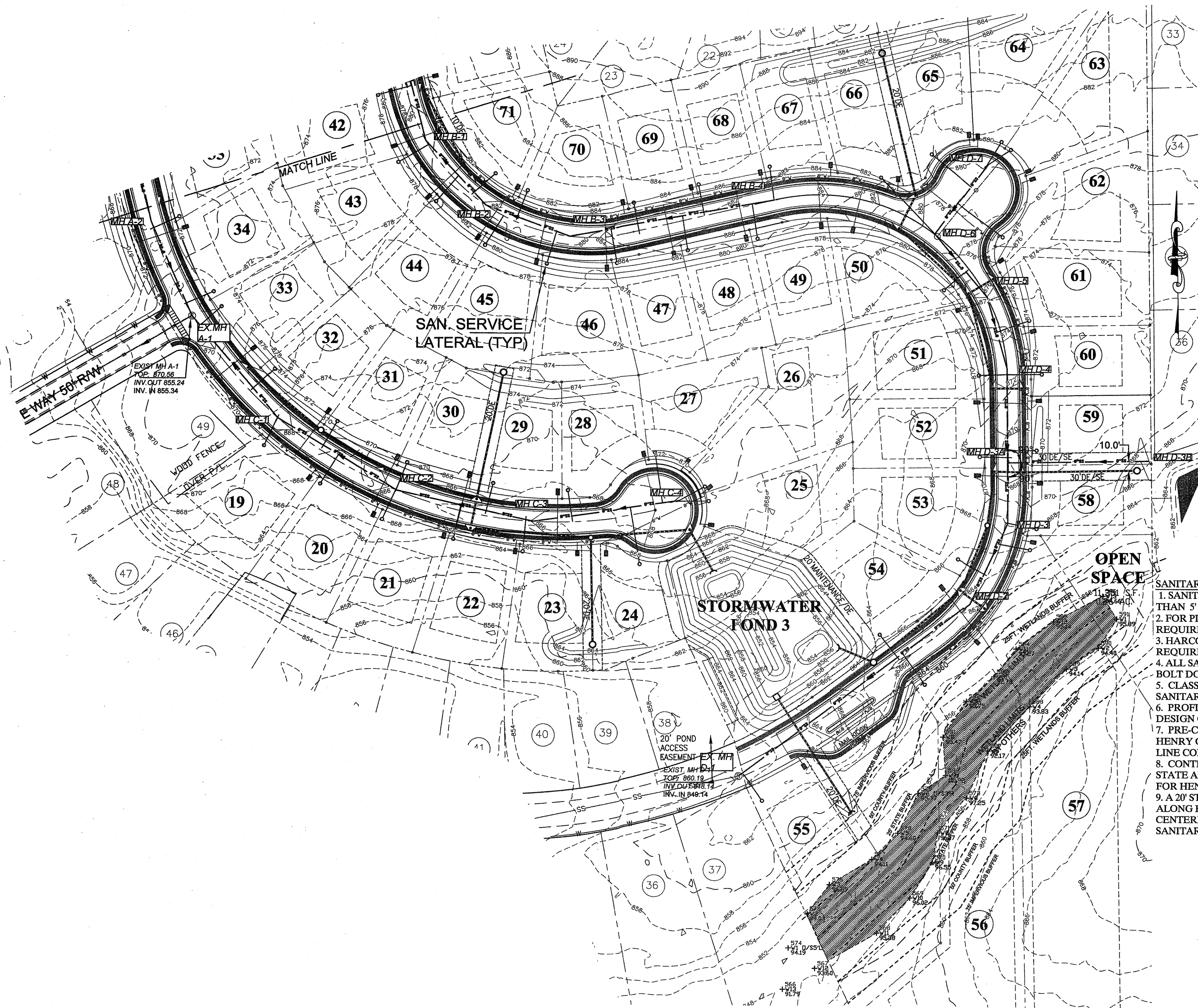
☒ Not Released For Construction  
☐ Released For Construction

**Liberty Square Park Phase 5**  
**SANITARY SEWER PLAN (SHEET 1)**  
LAND LOT 229 AND 230 OF THE 6TH DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA  
SCALE: AS SHOWN  
DATE: 02/04/2019

THESE DRAWINGS ARE THE PROPERTY OF WHITLEY ENGINEERING, INC. AND MAY NOT BE USED, REPRODUCED AND OR INCORPORATED INTO ANOTHER WORK FOR ANY REASON WITHOUT THE WRITTEN CONSENT OF THE DESIGN PROFESSIONAL.

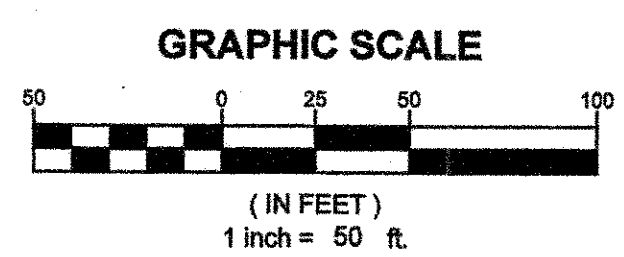
**SHEET**  
**16 OF 34**





- SANITARY SEWER NOTES:**
1. SANITARY SEWERS ON SLOPES OF MORE THAN 10%, LESS THAN 5' AND MORE THAN 16' DEEP, SHALL BE DUCTILE IRON.
  2. FOR PIPE WITH SLOPES OVER 15%, CONCRETE COLLARS ARE REQUIRED AT JOINTS.
  3. HARCO OR EQUAL COUPLINGS W/STAINLESS STEEL BANDS REQUIRED AT ALL JOINTS BETWEEN PVC AND DIP.
  4. ALL SANITARY SEWER MANHOLES OUTSIDE STREET REQUIRE BOLT DOWN COVERS.
  5. CLASS "B" OR BETTER BEDDING IS REQUIRED FOR ALL SANITARY SEWER LINES.
  6. PROFILE INFORMATION TAKEN FROM FIELD RUN TOPO AND DESIGN OF PROPOSED ROADWAY.
  7. PRE-CONSTRUCTION CONFERENCE IS REQUIRED WITH THE HENRY COUNTY WATER AUTHORITY PRIOR TO WATER/SEWER LINE CONSTRUCTION.
  8. CONTRACTOR FOR THE WATER/SEWER LINE MUST HAVE A STATE APPROVED LICENSE AND BE ON THE APPROVED LIST FOR HENRY COUNTY WATER AUTHORITY.
  9. A 20' STORM SEWER AND SANITARY SEWER EASEMENT EXISTS ALONG EACH PROPERTY LINE AND ALONG EACH LOT LINE, CENTERED ON LOT LINES FOR FUTURE DRAINAGE AND SANITARY SEWER LINES.

APPROVED  
DATE: 10/25/20  
BY: [Signature]



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

GSWCC  
MARK G. WHITLEY, PE  
000001036  
LEVEL II CERTIFIED PERSONNEL  
LEVEL II CERTIFIED INSPECTOR  
LEVEL II CERTIFIED DESIGN PROFESSIONAL

SEAL

**WHITLEY ENGINEERING INC.**  
DESIGN NPDES PROJECT MANAGEMENT  
TEL: (770) 946-0256  
38 E. MAIN STREET N.  
HAMPTON, GA 30228

REV.	DATE	DESCRIPTION
1	04/20/19	REVISED PER CITY COMMENTS
2	05/08/19	REVISED PER CITY COMMENTS
3	05/16/19	REVISED PER HWSA COMMENTS
4	06/25/19	REVISED PER CITY COMMENTS
5	07/15/19	REVISED PER CITY COMMENTS
6	07/25/19	REVISED PER CITY COMMENTS
7	08/02/2019	REVISED PER CITY COMMENTS

☒ Not Released For Construction  
Released For Construction

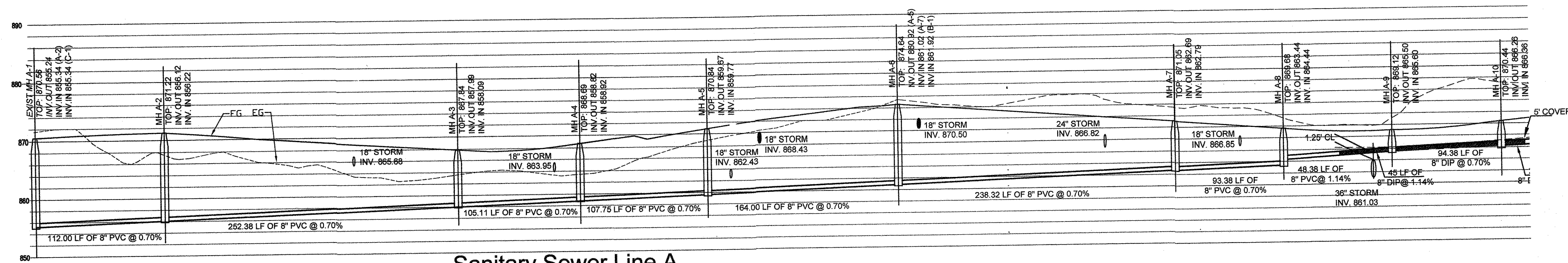
**Liberty Square Park Phase 5**  
**SANITARY SEWER PLAN (SHEET 2)**  
LAND LOT 229 AND 230 OF THE 6TH DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA

DATE: 02/04/2019  
SCALE: AS SHOWN

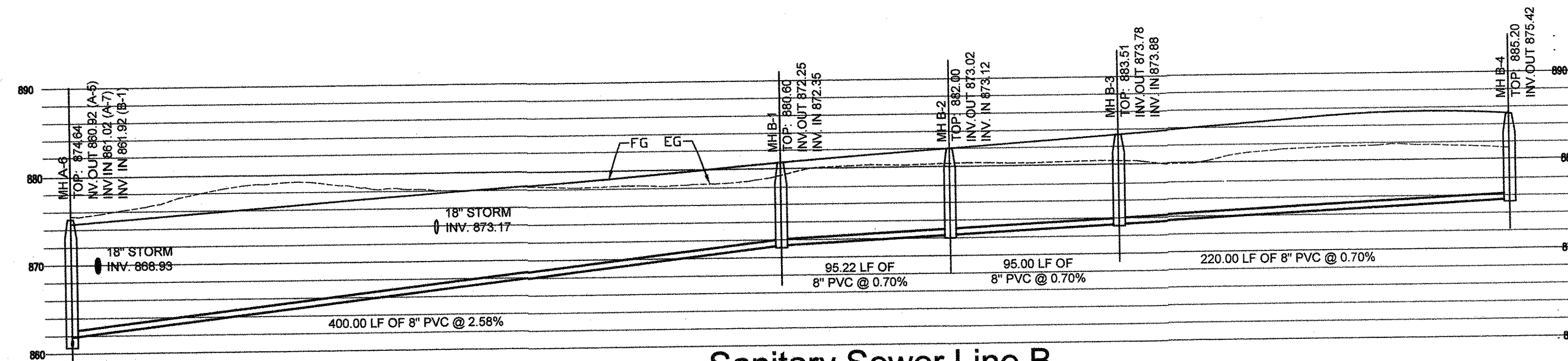
THESE DRAWINGS ARE THE PROPERTY OF WHITLEY ENGINEERING, INC. AND MAY NOT BE USED, REPRODUCED AND/OR INCORPORATED INTO ANOTHER WORK FOR ANY REASON WITHOUT THE WRITTEN CONSENT OF THE DESIGN PROFESSIONAL.

**SHEET  
17 OF 34**

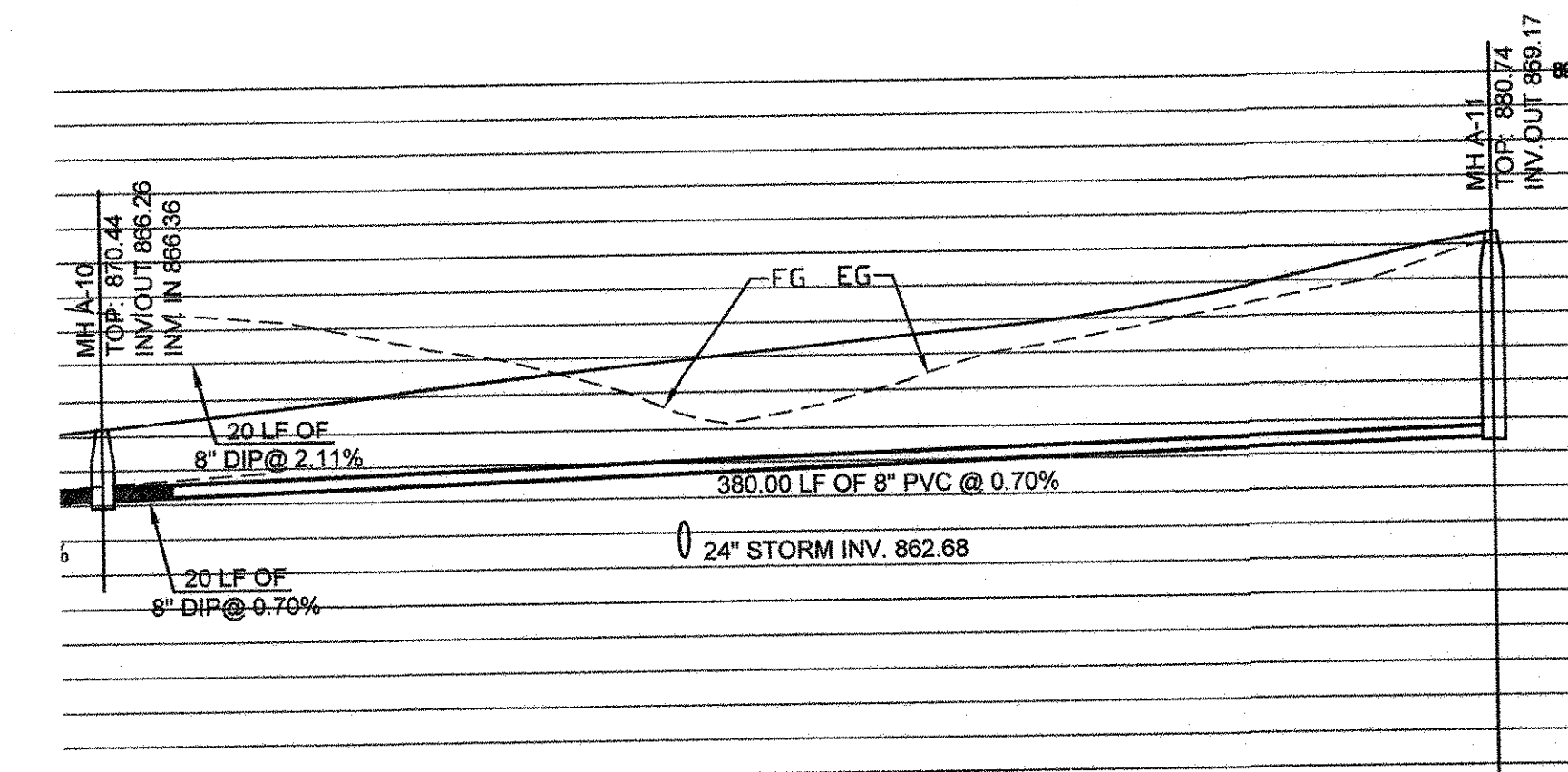




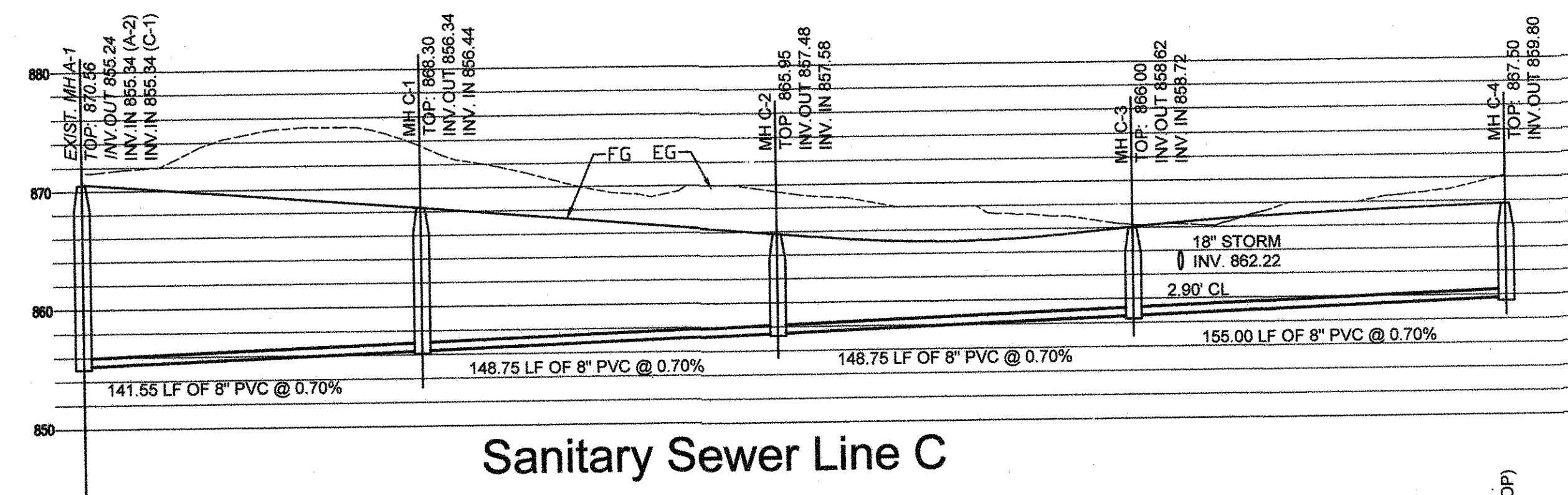
Sanitary Sewer Line A



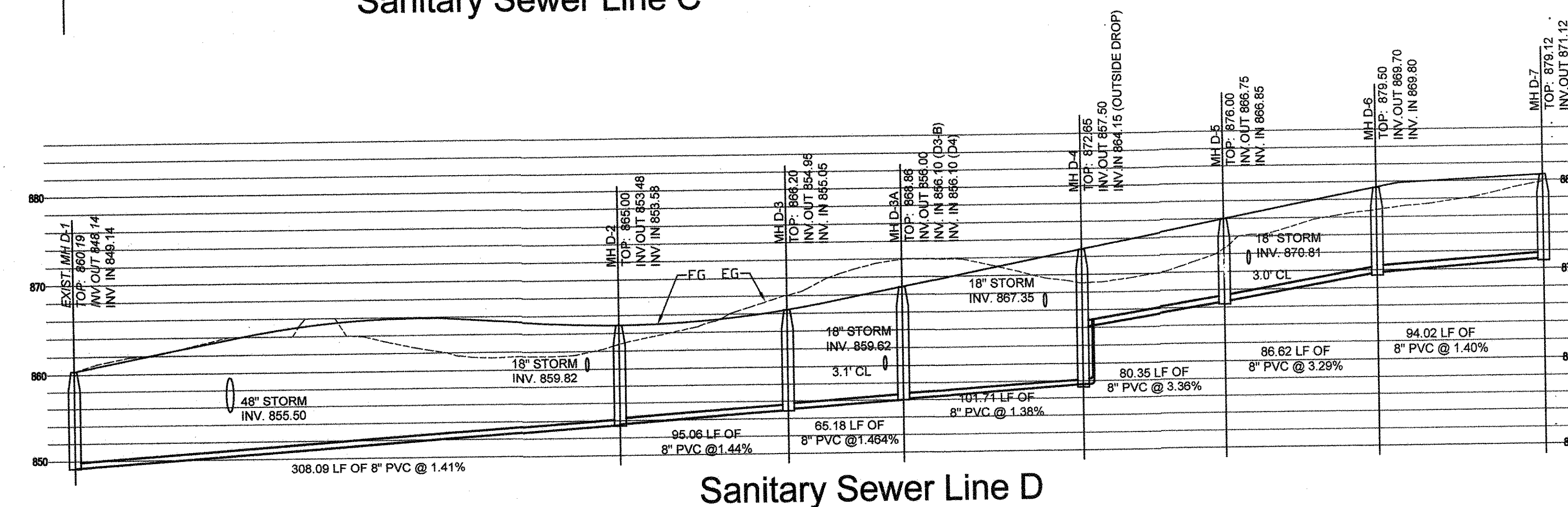
Sanitary Sewer Line B



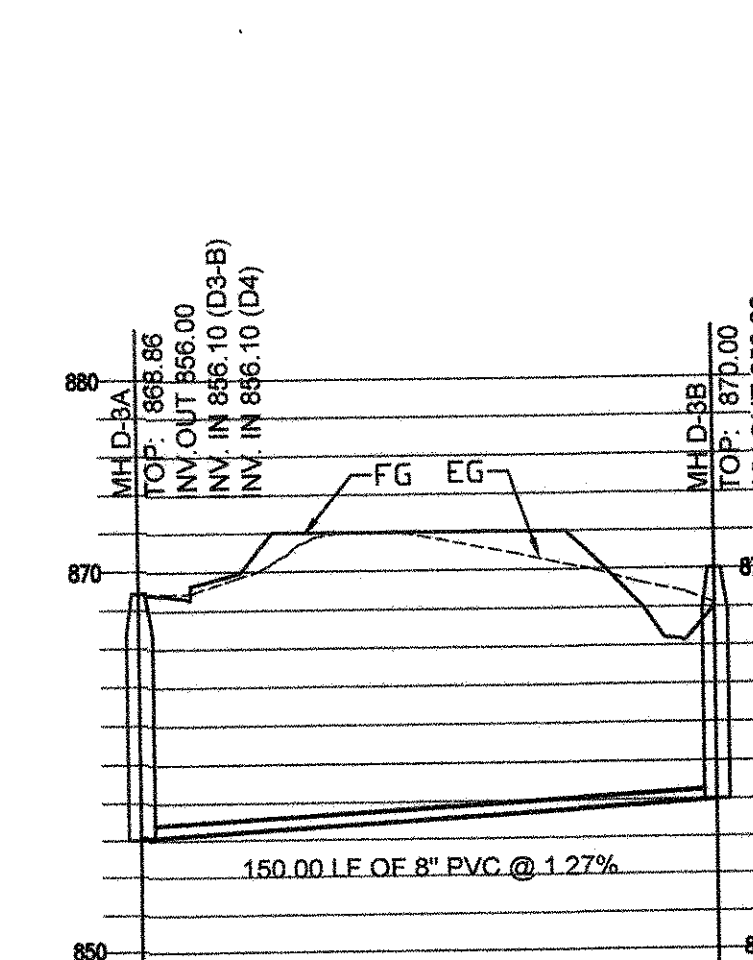
Sanitary Sewer Line A (con't)



Sanitary Sewer Line C



Sanitary Sewer Line D



Sanitary Sewer Line D3A

APPROVED  
DATE: 10/28/19  
BY: [Signature]

SCALE: 1"= 50' HORIZ.  
1"=10' VERT.

GSWCC  
MARK G. WHITLEY, PE  
000001036  
LEVEL I A CERTIFIED PERSONNEL  
LEVEL I B CERTIFIED INSPECTOR  
LEVEL I CERTIFIED DESIGN PROF.

**WHITLEY ENGINEERING INC.**  
DESIGN NPDES PROJECT MANAGEMENT  
TEL: (770)946-0256  
38 E. MAIN STREET N.  
HAMPTON, GA 30228

REV.	DATE	DESCRIPTION
1	04/30/19	REVISED PER CITY/COUNTY COMMENTS
2	05/08/19	REVISED PER CITY/COUNTY COMMENTS
3	05/16/19	REVISED PER HOWSA COMMENTS
4	06/25/19	REVISED PER CITY/COUNTY COMMENTS
5	07/15/19	REVISED PER CITY/COUNTY COMMENTS
6	07/25/19	REVISED PER CITY/COUNTY COMMENTS
7	09/09/2019	REVISED PER CITY/COUNTY COMMENTS

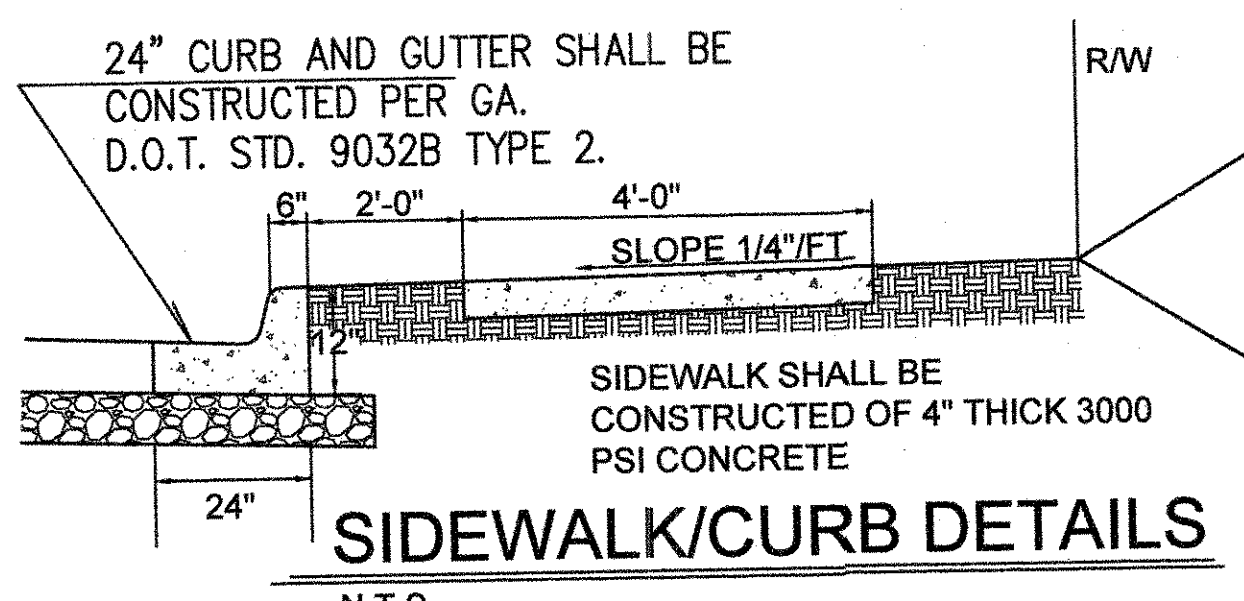
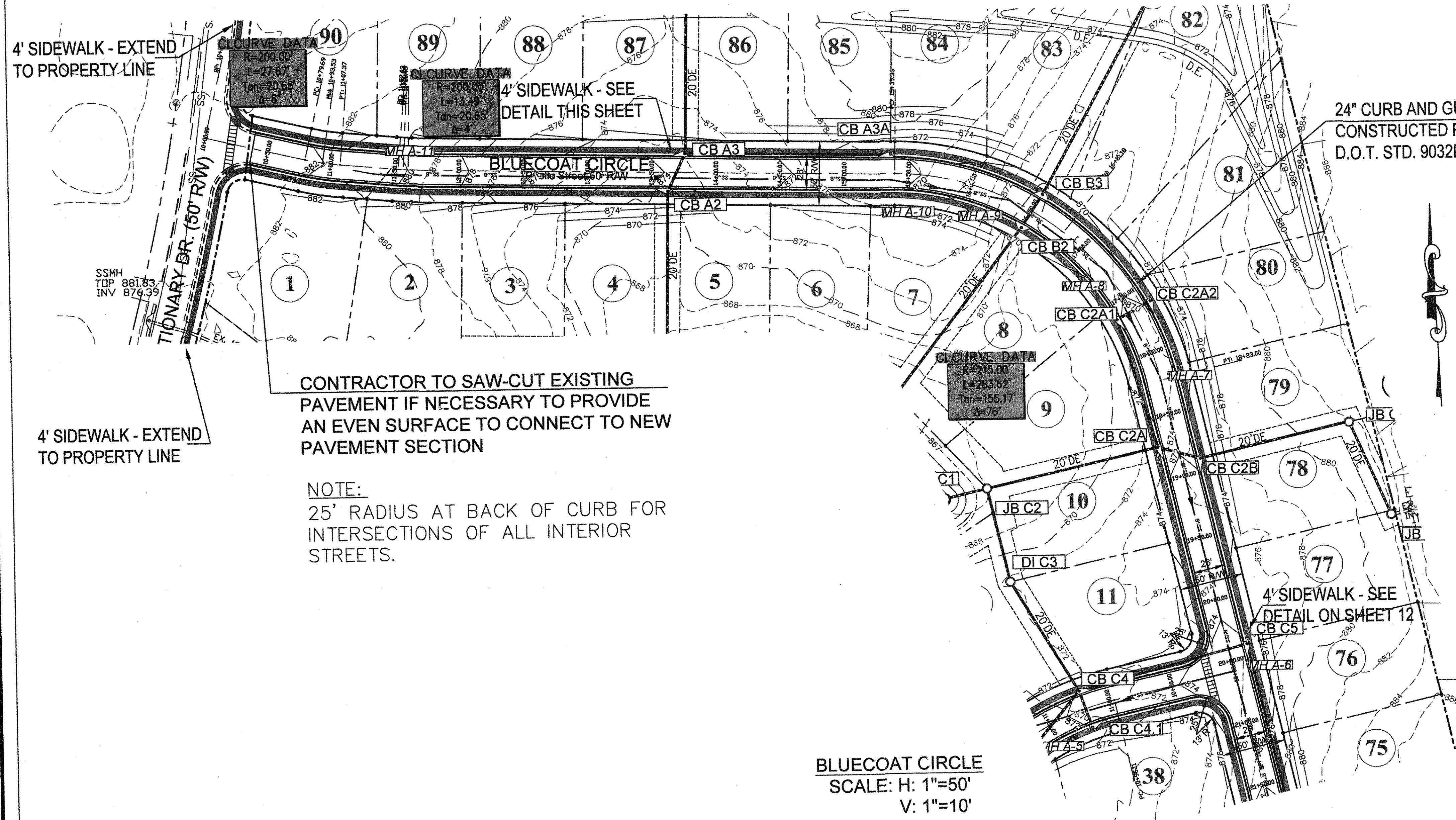
☒ Not Released For Construction  
☐ Released For Construction

**Liberty Square Park Phase 5**  
**SANITARY SEWER PROFILES**  
LAND LOT 229 AND 230 OF THE 6TH DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA  
SCALE: AS SHOWN  
DATE: 02/04/2019

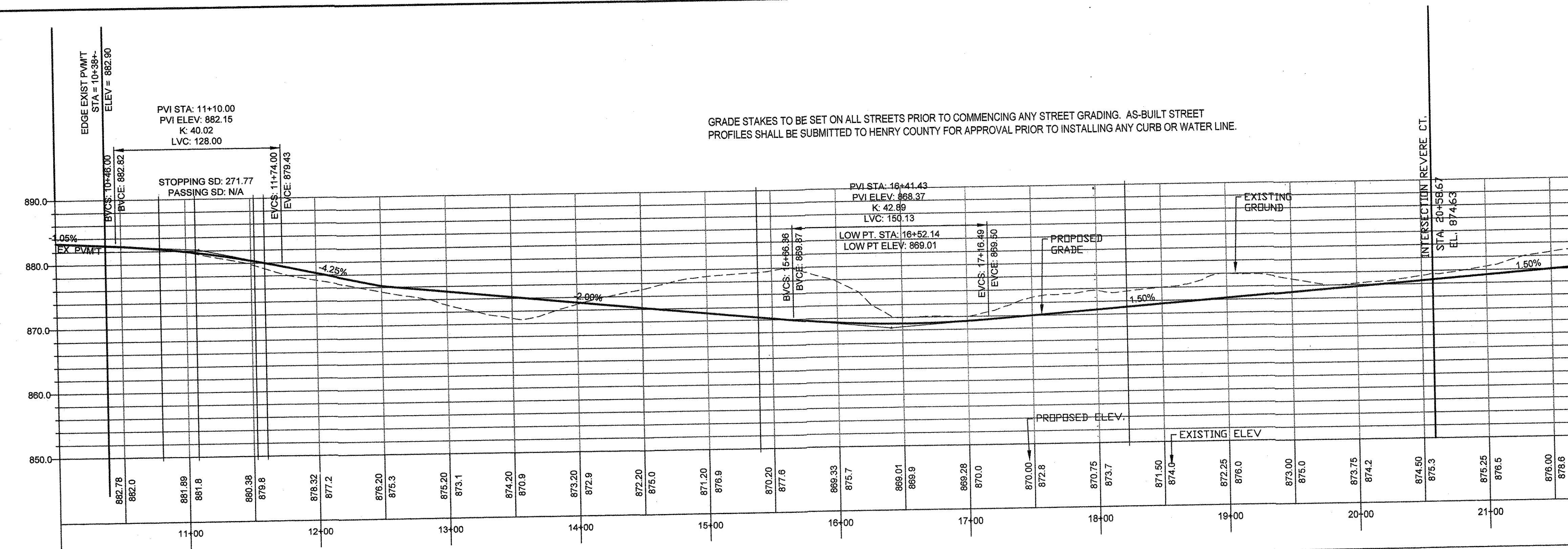
THESE DRAWINGS ARE THE PROPERTY OF WHITLEY ENGINEERING, INC. AND MAY NOT BE USED, REPRODUCED AND/OR INCORPORATED INTO ANOTHER WORK FOR ANY REASON WITHOUT THE WRITTEN CONSENT OF THE DESIGN PROFESSIONAL.

SHEET  
18 OF 34





- NOTES:
1. CONCRETE TO BE PLACED 4" THICK AND FINISHED WITH TAMPS, WOOD FLOATS AND STIFF-BRISTLED BROOMS.
  2. TRANSVERSE CONTRACTION JOINTS SHALL BE PLACED AT 10' INTERVALS. ALL EDGES TO BE ROUNDED TO 1/4" RADIUS.
  3. 1/2" EXPANSION JOINTS SHALL BE PLACED WHERE SIDEWALKS TIE INTO A STRUCTURE OR TERMINATE AT CURBS, RAMPS OR DRIVEWAYS OR A MAXIMUM OF 150' APART.
  4. HANDICAP RAMPS SHALL BE PLACED AT ALL CROSS-WALKS AND AT ALL STREET INTERSECTIONS PER GDOT DETAILS A-3 AND A-4.
  5. SIDEWALKS SHALL BE CONSTRUCTED FROM PL TO PL ON EACH INDIVIDUAL LOT BEFORE A CERTIFICATE OF OCCUPANCY IS ISSUED FOR THAT LOT.
  6. THE DEVELOPER SHALL CONSTRUCT SIDEWALKS ALONG THE ROADWAY IN ALL AREAS WITHIN THE DEVELOPMENT THAT DO NOT FRONT RESIDENTIAL LOTS BEFORE APPROVAL OF THE FINAL PLAT.



**UNDERDRAIN NOTE:**

PERFORATED UNDERDRAINS MAY BE REQUIRED AND NEEDED SHOULD STREET GRADING INDICATED SUBSURFACE ISSUES THAT AFFECT THE INTEGRITY OF THE STREET CONSTRUCTION. THE CITY MAY REQUIRE UNDERDRAINS IN SUCH CONDITIONS AND WILL BE DETERMINED DURING THE SUBGRADE PREPARATION

**STREET NOTES:**

OWNER WILL OBTAIN APPROVAL FOR ALL STREET NAMES TO BE PROVIDED ON THE FINAL PLAT.

NO PASSING ON SUBDIVISION STREETS SHALL BE ALLOWED.

PER AASHTO POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS, 2018, 7TH EDITION, FOR A STREET WITH A DESIGN SPEED OF 25 MPH WHEN THE HEIGHT OF EYE AND THE HEIGHT OF OBJECT ARE 3.50 FT AND 2.00 FT, RESPECTIVELY, THE STOPPING SIGHT DISTANCE IS 155 FT WITH A DESIGN RATE OF VERTICAL CURVATURE K=12

**APPROVED**  
DATE: 10/28/19  
BY: [Signature]

**GRAPHIC SCALE**  
1 inch = 50 ft.

Utilities Protection Center, Inc.

Know what's below.  
Call before you dig.

GSWCC  
MARK G. WHITLEY, PE  
000001036  
LEVEL I A CERTIFIED PERSONNEL  
LEVEL I B CERTIFIED INSPECTOR  
LEVEL II CERTIFIED DESIGN PROF.

GEORGIA  
REGISTERED PROFESSIONAL ENGINEER  
MARK G. WHITLEY  
NO. 10181  
EXPIRATION DATE 12/31/2021

**WHITLEY ENGINEERING INC.**  
DESIGN NPDES PROJECT MANAGEMENT  
TEL: (770)946-0256  
38 E. MAIN STREET N.  
HAMPTON, GA 30228

REV.	DATE	DESCRIPTION
1	04/03/19	REVISED PER CITY/COUNTY COMMENTS
2	05/09/19	REVISED PER CITY/COUNTY COMMENTS
3	05/16/19	REVISED PER CITY/COUNTY COMMENTS
4	06/25/19	REVISED PER CITY/COUNTY COMMENTS
5	07/15/19	REVISED PER CITY/COUNTY COMMENTS
6	07/25/19	REVISED PER CITY/COUNTY COMMENTS
7	09/08/2019	REVISED PER CITY/COUNTY COMMENTS

Not Released For Construction

Released For Construction

**Liberty Square Park Phase 5**  
BLUECOAT CIRCLE PLAN AND PROFILE SHEET 1  
LAND LOT 229 AND 230 OF THE 6TH DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA

SCALE: AS SHOWN  
DATE: 02/04/2019

THESE DRAWINGS ARE THE PROPERTY OF WHITLEY ENGINEERING, INC. AND MAY NOT BE USED, REPRODUCED AND/OR INCORPORATED INTO ANOTHER WORK FOR ANY REASON WITHOUT THE WRITTEN CONSENT OF THE DESIGN PROFESSIONAL.

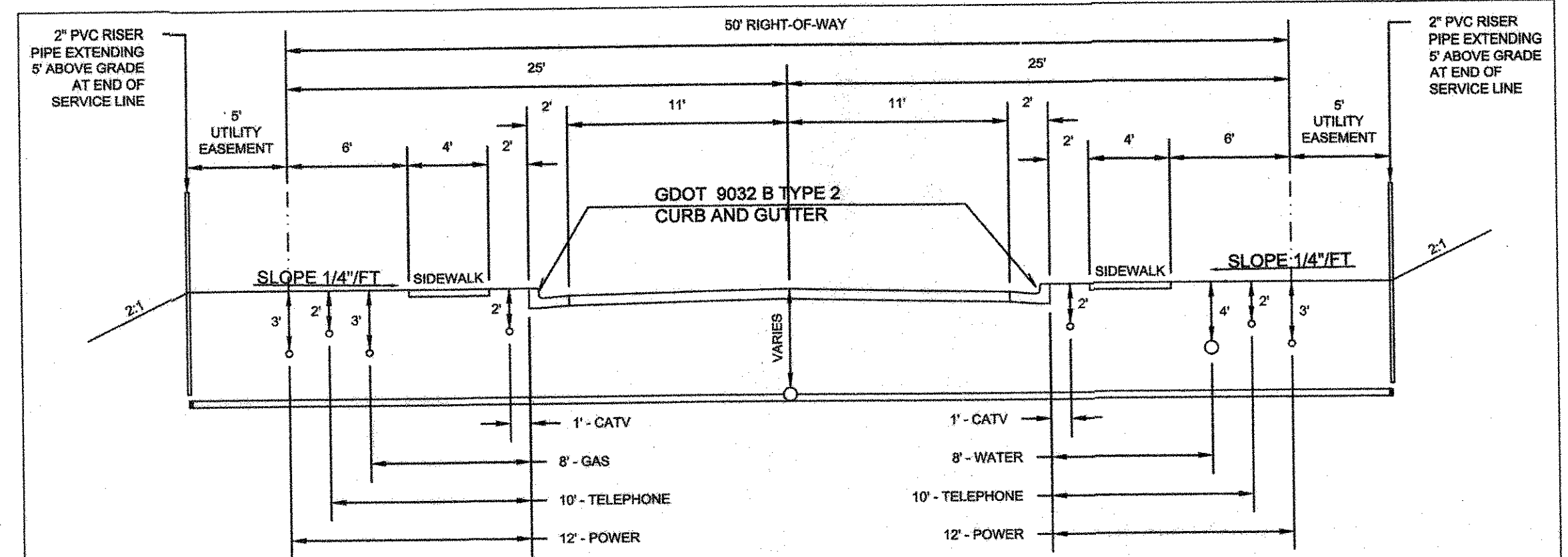
SHEET  
19 OF 34



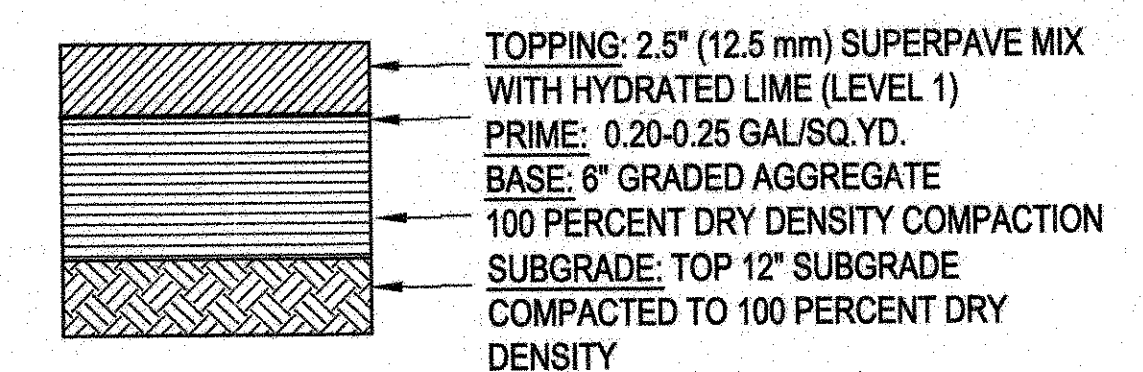


Know what's below.  
Call before you dig.

**STREET TREES NOTE:**  
LOCATION OF STREET TREES TO BE DETERMINED BY THE CITY DURING THE CONSTRUCTION OF THE STREETS AND BEFORE INSTALLATION OF TREES AND SUBMITTAL OF FINAL PLAT.



- NOTES:**
- NO TREES OR FENCES ALLOWED WITHIN THE ROAD R/W OR UTILITY EASEMENT EXCEPT WHERE REQUIRED BY CITY, COUNTY, OR OTHER GOVERNMENT ORDINANCE.
  - ALL TREES SHALL BE CLEARED AND SHOULDERS GRADED WITHIN 6" OF FINAL GRADE (INCLUDING UTILITY EASEMENT) PRIOR TO THE INSTALLATION OF ANY UTILITIES.
  - UTILITY PLACEMENT SHALL REMAIN CONSISTENT FROM BACK OF CURB THROUGHOUT THE PROJECT REGARDLESS OF ANY INCONSISTENCIES IN ROAD CONSTRUCTION. EXAMPLES: STORM SEWERS, CULVERTS, CUL-DE-SACS, ETC. (EXCEPT CATV).
  - AFTER VERIFICATION OF FINAL GRADE, UTILITIES SHOULD BE INSTALLED AS FOLLOWS: WATER, ELECTRIC, GAS, TELEPHONE, AND CABLE TELEVISION.
  - TOTAL CLEARED AND GRADED WIDTH TO BE 60' MINIMUM.
  - PROPERTY CORNER REFERENCE SHALL BE PLACED ON CURB AND GUTTER AND ON 10' OFFSET STAKE.
  - UTILITY EASEMENT SHALL BE SHOWN AND RECORDED WITH THE FINAL PLAT.
  - WATER METER BOXES SHALL BE LOCATED 6" BACK OF R/W. SEWER SERVICES SHALL BE STUBBED OUT 10" BACK OF R/W.
  - WATER LATERALS SHALL BE MARKED WITH A BLUE "W" ON CURB AS SOON AS POSSIBLE AFTER CURB HAS BEEN INSTALLED. SEWER LATERALS SHALL BE MARKED WITH A GREEN "S" ON CURB.
  - DEPTH REQUIREMENTS INDICATE MINIMUM DEPTH AT TIME OF INSTALLATION BELOW CURB LINE.
  - THIS STANDARD MAY BE COMBINED WITH JOINT USE STANDARD.
  - CATV PEDESTALS, TELEPHONE PEDESTALS, TRANSFORMERS, AND WATER METERS SHALL BE PLACED IN 5' UTILITY EASEMENT.
  - UTILITIES SHALL BE LOCATED WITHIN PLUS/MINUS 6" OF PLAN LOCATION.



**PAVEMENT SECTION**

PAVEMENT SECTION SHALL BE USED FOR ALL STREETS

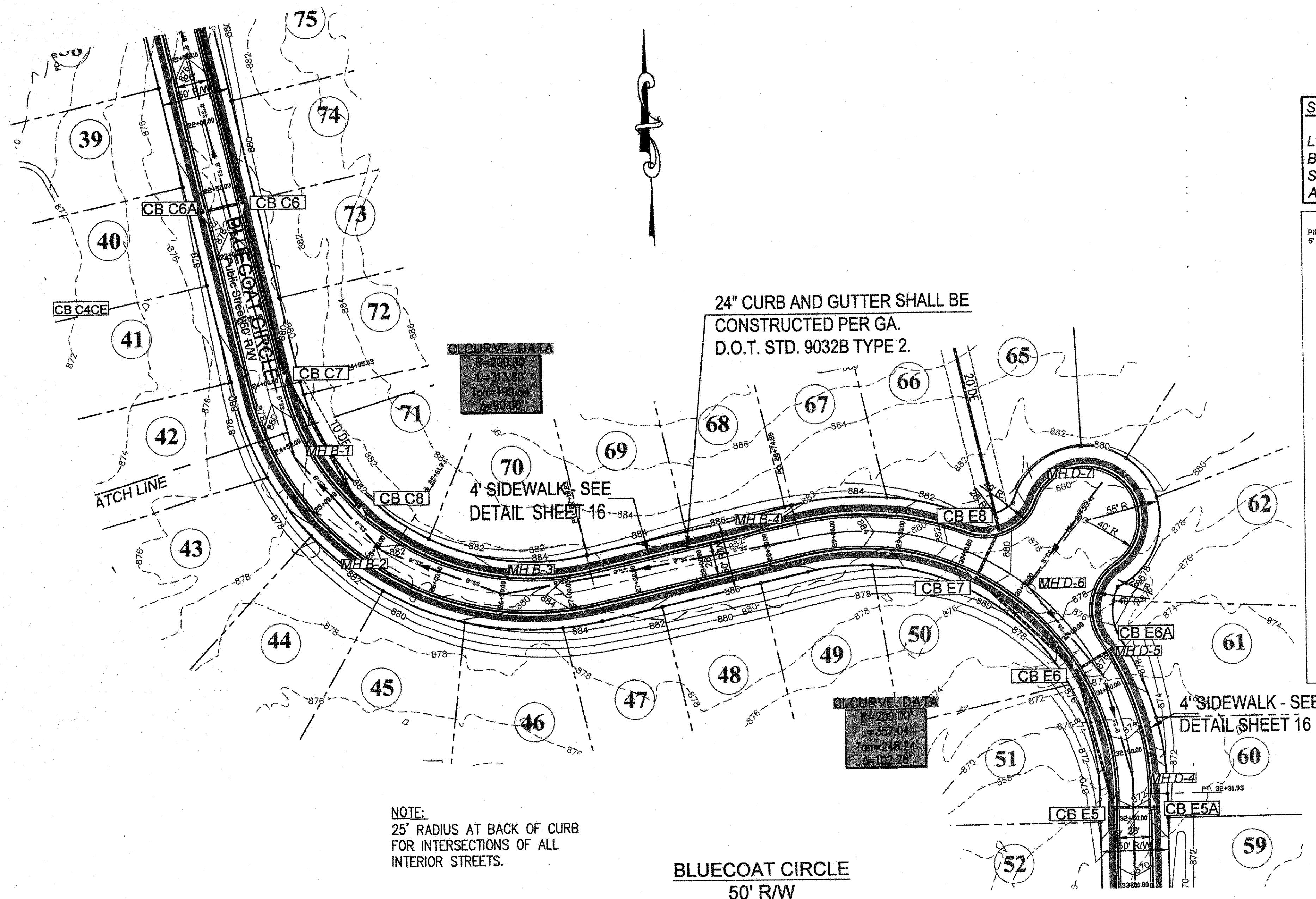
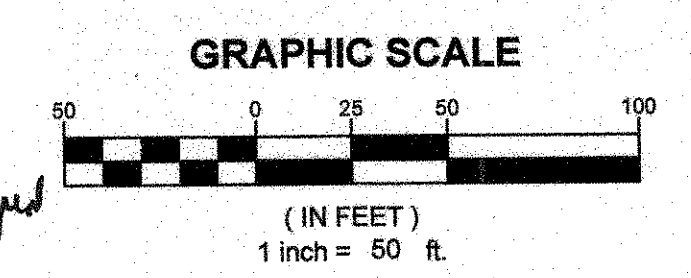
**UNDERDRAIN NOTE:**  
PERFORATED UNDERDRAINS MAY BE REQUIRED AND NEEDED SHOULD STREET GRADING INDICATED SUBSURFACE ISSUES THAT AFFECT THE INTEGRITY OF THE STREET CONSTRUCTION. THE CITY MAY REQUIRE UNDERDRAINS IN SUCH CONDITIONS AND WILL BE DETERMINED DURING THE SUBGRADE PREPARATION

**STREET NOTES:**  
OWNER WILL OBTAIN APPROVAL FOR ALL STREET NAMES TO BE PROVIDED ON THE FINAL PLAT.

NO PASSING ON SUBDIVISION STREETS SHALL BE ALLOWED.

PER AASHTO POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS, 2018, 7TH EDITION, FOR A STREET WITH A DESIGN SPEED OF 25 MPH WHEN THE HEIGHT OF EYE AND THE HEIGHT OF OBJECT ARE 3.50 FT AND 2.00 FT, RESPECTIVELY, THE STOPPING SIGHT DISTANCE IS 155 FT WITH A DESIGN RATE OF VERTICAL CURVATURE K=12

APPROVED  
DATE: 10/25/19  
BY: [Signature]



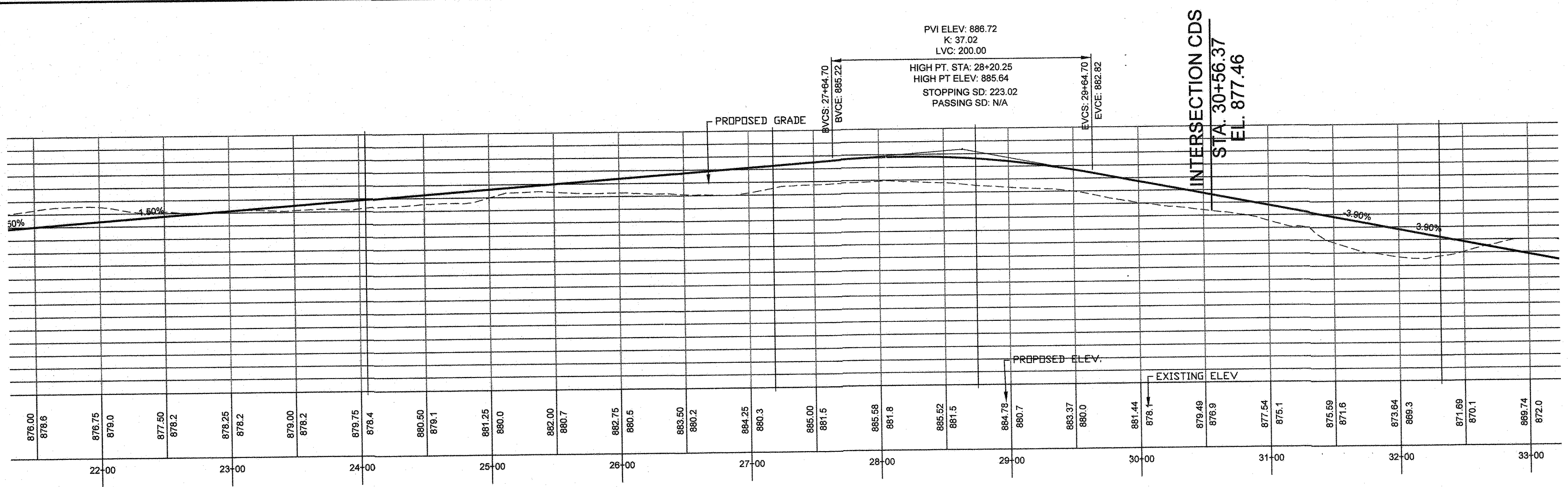
24" CURB AND GUTTER SHALL BE CONSTRUCTED PER GA. D.O.T. STD. 9032B TYPE 2.

**CL CURVE DATA**  
R=200.00'  
L=313.80'  
Tan=199.64'  
Δ=90.00'

**CL CURVE DATA**  
R=200.00'  
L=357.04'  
Tan=245.24'  
Δ=102.28'

**NOTE:**  
25' RADIUS AT BACK OF CURB FOR INTERSECTIONS OF ALL INTERIOR STREETS.

**BLUECOAT CIRCLE**  
50' R/W  
SCALE: H: 1"=50'  
V: 1"=10'



GSWCC  
MARK G. WHITLEY, PE  
000001036  
LEVEL I A CERTIFIED PERSONNEL  
LEVEL I B CERTIFIED INSPECTOR  
LEVEL II CERTIFIED DESIGN PROF.

GEORGIA  
REGISTERED  
PROFESSIONAL  
ENGINEER  
MARK G. WHITLEY

**WHITLEY ENGINEERING INC.**  
DESIGN NPDES PROJECT MANAGEMENT  
TEL: (770) 946-0256  
38 E. MAIN STREET N.  
HAMPTON, GA 30228

REV	DATE	DESCRIPTION
1	04/30/19	REVISED PER CITY COMMENTS
2	05/08/19	REVISED PER CITY COMMENTS
3	05/16/19	REVISED PER HOWA COMMENTS
4	06/25/19	REVISED PER CITY COMMENTS
5	07/15/19	REVISED PER CITY COMMENTS
6	07/25/19	REVISED PER CITY COMMENTS
7	09/02/19	REVISED PER CITY COMMENTS

☒ Not Released For Construction  
☐ Released For Construction

**Liberty Square Park Phase 5**  
BLUECOAT CIRCLE PLAN AND PROFILE SHEET 2  
LAND LOT 229 AND 230 OF THE 6TH DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA  
SCALE: AS SHOWN  
DATE: 02/04/2019

THESE DRAWINGS ARE THE PROPERTY OF WHITLEY ENGINEERING, INC. AND MAY NOT BE USED, REPRODUCED AND OR INCORPORATED INTO ANOTHER WORK FOR ANY REASON WITHOUT THE WRITTEN CONSENT OF THE DESIGN PROFESSIONAL.

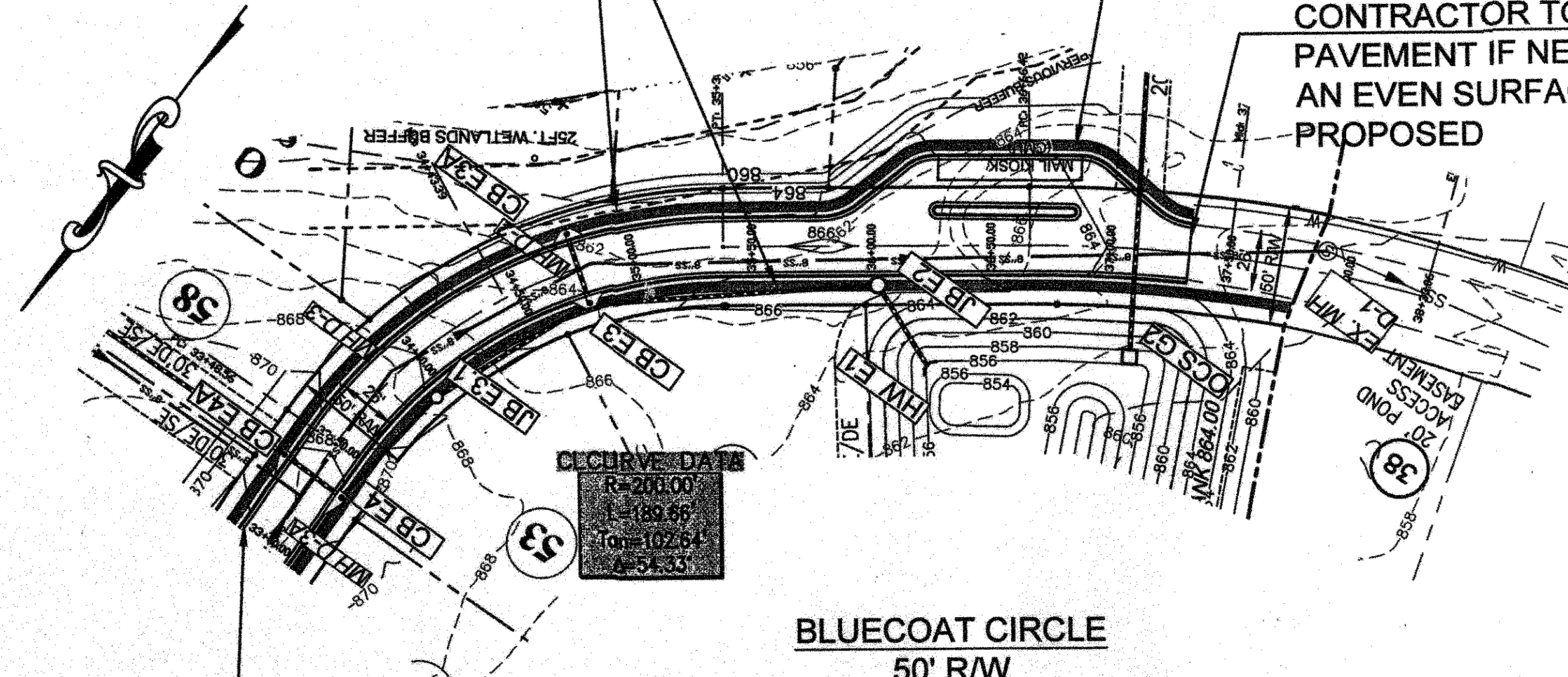
SHEET  
20 OF 34



DEVELOPER TO CONSTRUCT 4' SIDEWALK THE FULL LENGTH OF OPEN SPACE AND AREA ACROSS STREET FULL LENGTH OF DETENTION POND

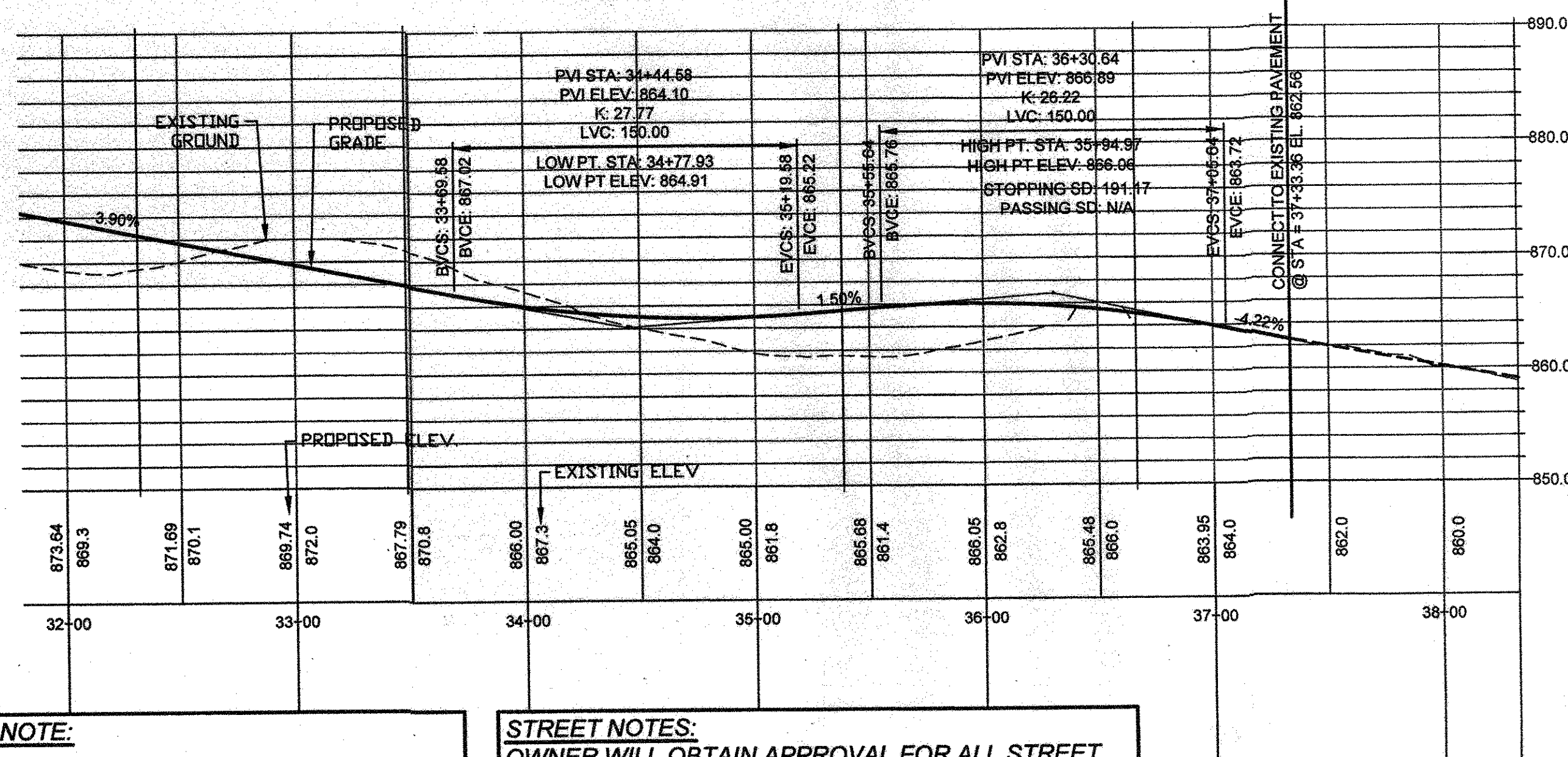
MAIL KIOSK TO BE PERMITTED SEPARATELY

CONTRACTOR TO SAW-CUT EXISTING PAVEMENT IF NECESSARY TO PROVIDE AN EVEN SURFACE TO CONNECT TO PROPOSED



24" CURB AND GUTTER SHALL BE CONSTRUCTED PER GA. D.O.T. STD. 9032B TYPE 2.

BLUECOAT CIRCLE  
50' R/W  
SCALE: H: 1"=50'  
V: 1"=10'



#### UNDERDRAIN NOTE:

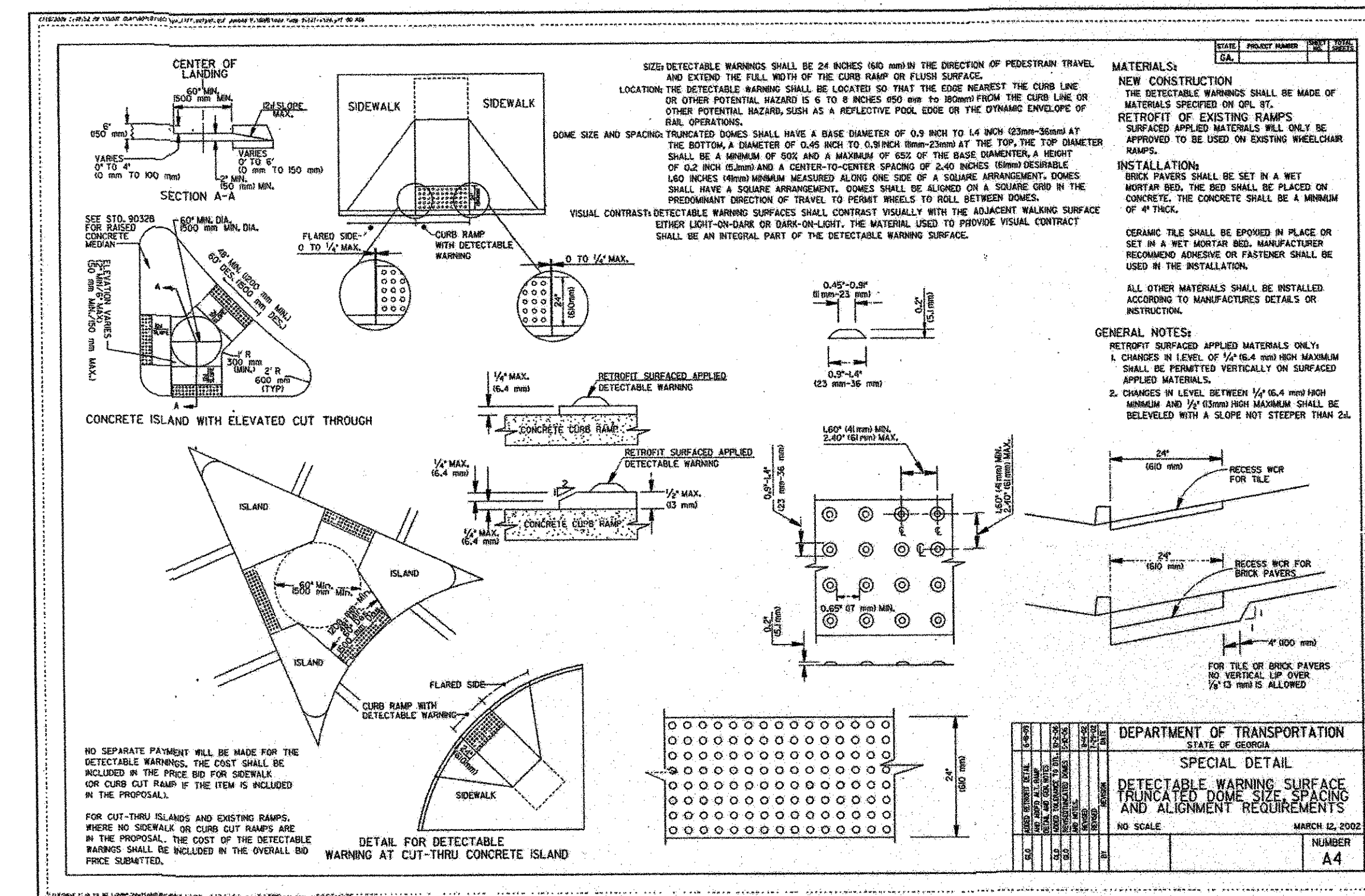
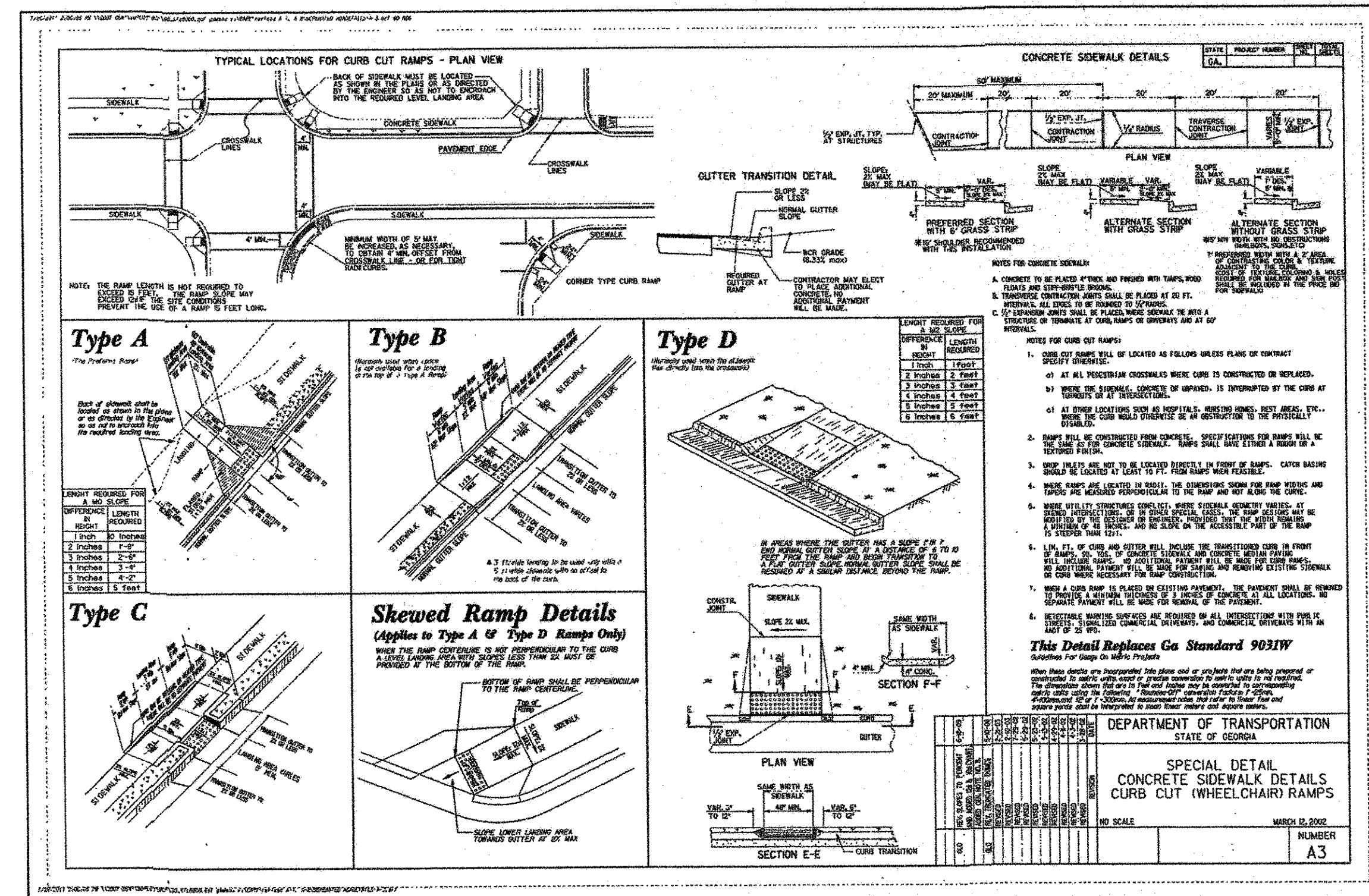
PERFORATED UNDERDRAINS MAY BE REQUIRED AND NEEDED SHOULD STREET GRADING INDICATED SUBSURFACE ISSUES THAT AFFECT THE INTEGRITY OF THE STREET CONSTRUCTION. THE CITY MAY REQUIRE UNDERDRAINS IN SUCH CONDITIONS AND WILL BE DETERMINED DURING THE SUBGRADE PREPARATION

#### STREET NOTES:

OWNER WILL OBTAIN APPROVAL FOR ALL STREET NAMES TO BE PROVIDED ON THE FINAL PLAT.

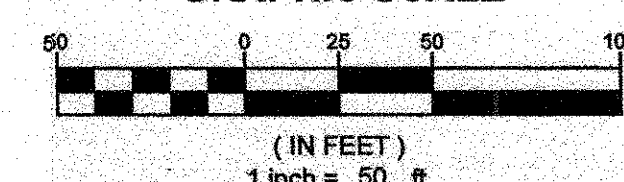
NO PASSING ON SUBDIVISION STREETS SHALL BE ALLOWED.

PER AASHTO POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS, 2018, 7TH EDITION, FOR A STREET WITH A DESIGN SPEED OF 25 MPH WHEN THE HEIGHT OF EYE AND THE HEIGHT OF OBJECT ARE 3.50 FT AND 2.00 FT, RESPECTIVELY, THE STOPPING SIGHT DISTANCE IS 155 FT WITH A DESIGN RATE OF VERTICAL CURVATURE K=12



APPROVED  
DATE: 10/20/19  
BY: [Signature]

GRAPHIC SCALE



GSWCC  
MARK G. WHITLEY, PE  
000001036  
LEVEL 1A CERTIFIED PERSONNEL  
LEVEL 1B CERTIFIED DESIGNER  
LEVEL 1C CERTIFIED DESIGNER



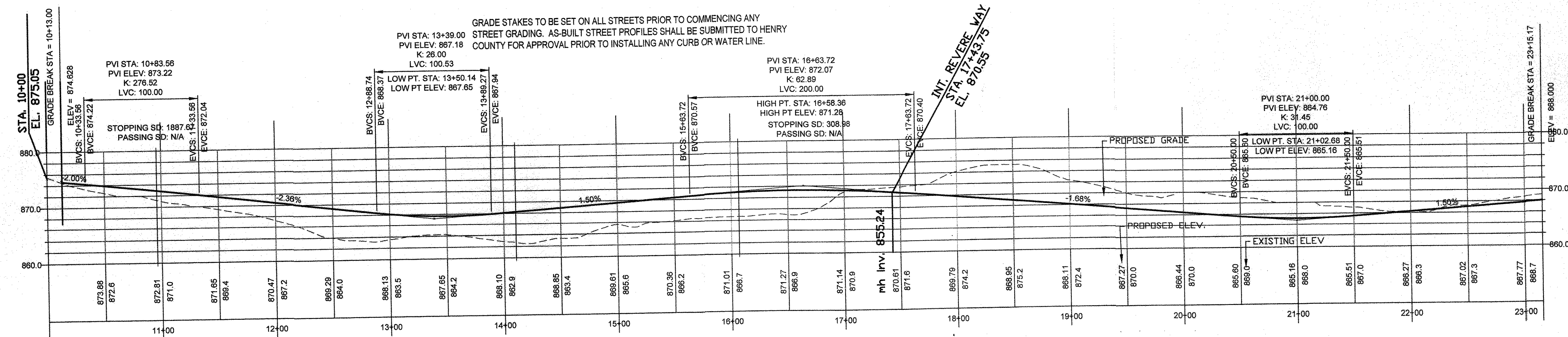
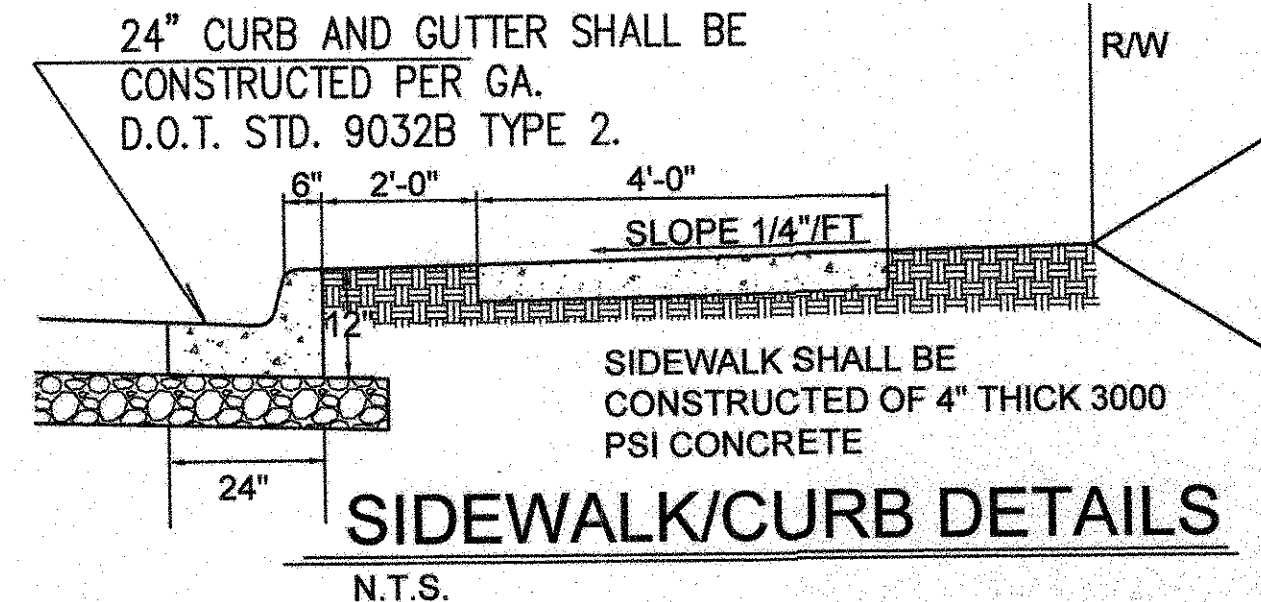
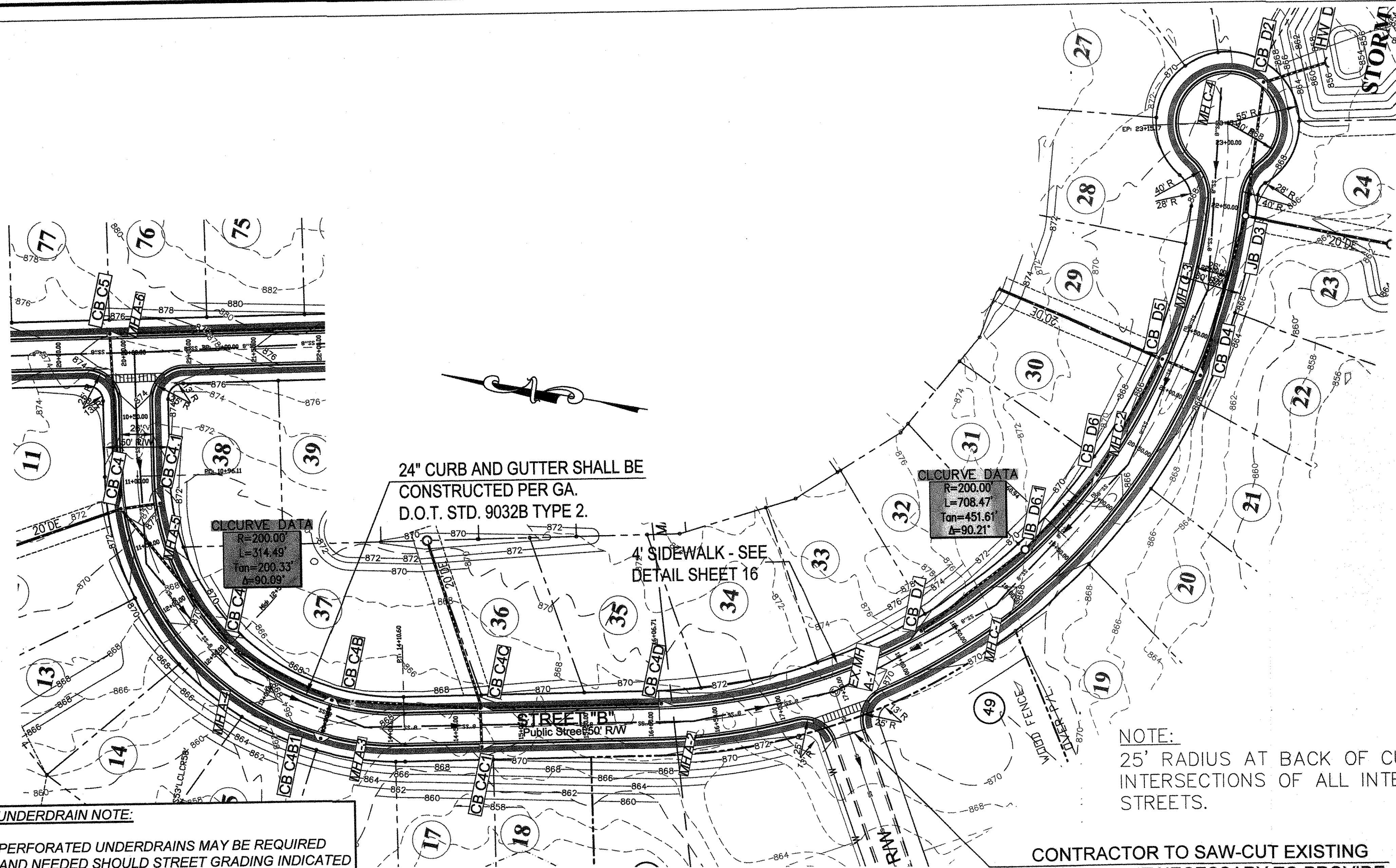
WHITLEY  
ENGINEERING INC.  
DESIGN - NPDES PROJECT MANAGEMENT  
TEL: (770) 946-0256  
38 E. MAIN STREET N.  
HAMPTON, GA 30228

REV.	DATE	DESCRIPTION
1	04/30/19	REVISED PER CITY COMMENTS
2	05/09/19	REVISED PER CITY COMMENTS
3	05/16/19	REVISED PER CITY COMMENTS
4	06/25/19	REVISED PER CITY COMMENTS
5	07/15/19	REVISED PER CITY COMMENTS
6	07/25/19	REVISED PER CITY COMMENTS
7	08/02/2019	REVISED PER CITY COMMENTS

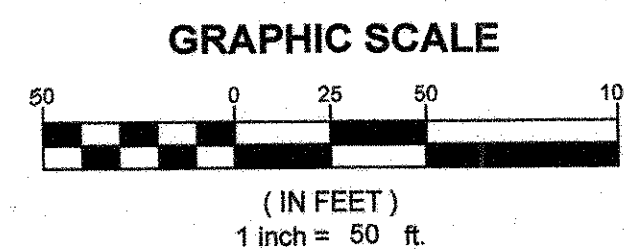
Liberty Square Park Phase 5  
BLUECOAT CIRCLE PLAN AND PROFILE SHEET 3  
LAND LOT 229 AND 230 OF THE 8TH DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA  
SCALE: AS SHOWN  
DATE: 02/04/2019  
NOT RELEASED FOR CONSTRUCTION  
Released For Construction

SHEET  
21 OF 34





**APPROVED**  
DATE: 10/18/24  
BY: [Signature]



**Liberty Square Park Phase 5**  
STREET "B" PLAN AND PROFILE  
LAND LOT 229 AND 230 OF THE 6TH DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA

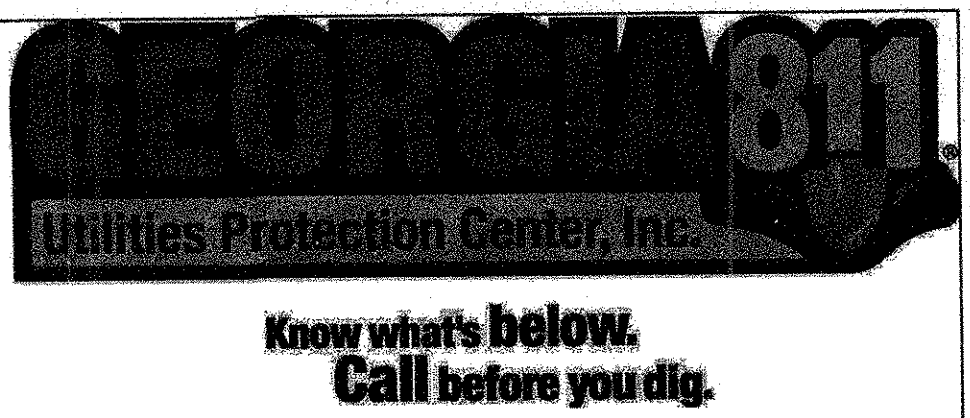
**DATE:** 02/04/2019  
**SCALE:** AS SHOWN  
THESE DRAWINGS ARE THE PROPERTY OF WHITLEY ENGINEERING, INC. AND MAY NOT BE USED, REPRODUCED OR INCORPORATED INTO ANOTHER WORK FOR ANY REASON WITHOUT THE WRITTEN CONSENT OF THE DESIGN PROFESSIONAL.

REV. DATE:	DESCRIPTION:
1 04/09/19	REVISED PER CITY COMMENTS
2 05/08/19	REVISED PER CITY COMMENTS
3 05/16/19	REVISED PER HONSA COMMENTS
4 06/25/19	REVISED PER CITY COMMENTS
5 07/15/19	REVISED PER CITY COMMENTS
6 07/25/19	REVISED PER CITY COMMENTS
7 08/02/2019	REVISED PER CITY COMMENTS

**WHITLEY ENGINEERING INC.**  
DESIGN NPDES PROJECT MANAGEMENT  
TEL: (770)946-0256  
38 E. MAIN STREET N.  
HAMPTON, GA 30228



CSWCC  
MARK G. WHITLEY, PE  
000001008  
LEVEL I A CERTIFIED INSPECTOR  
LEVEL I B CERTIFIED DESIGN PROF.  
LEVEL II CERTIFIED DESIGN PROF.





1

EROSION, SEDIMENTATION & POLLUTION CONTROL PLAN CHECKLIST  
COMMON DEVELOPMENT CONSTRUCTION PROJECTS (Primary and Tertiary Permittees)

SWCD: HENRY COUNTY

Project Name: LIBERTY SQUARE PARK SUBDIVISION

City/County: CITY HAMPTON, HENRY COUNTY

Address: HWY 41 HAMPTON GEORGIA

Date on Plans: 02-04-2019

Plan	Included		TO BE SHOWN ON ES&PC PLAN												
Page #	Y/N														
23	YES	1	The applicable Erosion, Sedimentation and Pollution Control Plan Checklist established by the Commission as of January 1 of the year in which the land-disturbing activity was permitted.												
ALL	YES	2	Level II certification number issued by the Commission, signature and seal of the certified design professional.												
N/A	N/A	3	Limits of disturbance shall be no greater than 50 acres at any one time without prior written authorization from the EPD District Office. If EPD approves the request to disturb 50 acres or more at any one time, the plan must include at least 4 of the BMPs listed in Appendix 1 of this checklist.*												
1, 23	YES	4	The name and phone number of the 24-hour local contact responsible for erosion, sedimentation and pollution controls.												
1, 23	YES	5	Provide the name, address, email address and phone number of primary permittee or tertiary permittee.												
23	YES	6	Note total and disturbed acreage of the project or phase under construction.												
23	YES	7	Provide the GPS location of the construction exit for the site. Give the Latitude and Longitude in decimal degrees.												
ALL	YES	8	Initial date of the Plan and the dates of any revisions made to the Plan including the entity who requested the revisions.												
23	YES	9	Description of the nature of construction activity.												
23	YES	10	Provide vicinity map showing site's relation to surrounding areas, include designation of specific phase, if necessary.												
23	YES	11	Identify the project receiving waters and describe all sensitive adjacent areas including streams, lakes, residential areas, wetlands, marshlands, etc. which may be affected.												
23	YES	12	Design professional's certification statement and signature that the site was visited prior to development of the ES&PC Plan as stated on Part IV page 23 of the permit.												
23	YES	13	Design professional's certification statement and signature that the permittee's ES&PC Plan provides for an appropriate and comprehensive system of BMPs and sampling to meet permit requirements as stated on Part IV page 22 of the permit.												
23	YES	14	Clearly note the statement that "The design professional who prepared the ES&PC Plan is to inspect the installation of the initial sediment storage requirements and perimeter control BMPs within 7 days after installation."												
23	YES	15	Clearly note the statement that "Non-exempt activities shall not be conducted within the 25 or 50-foot undisturbed stream buffers as measured from the point of westered vegetation or within 25-feet of the coastal marshland buffer as measured from the Jurisdictional Determination Line without first acquiring the necessary variances and permits."												
23	YES	16	Provide a description of any buffer encroachments and indicate whether a buffer variance is required.												
23	YES	17	Clearly note the statement that "Amendments/revisions to the ES&PC Plan which have a significant effect on BMPs with a hydraulic component must be certified by the design professional."												
23	YES	18	Clearly note the statement that "Waste materials shall not be discharged to waters of the State, except as authorized by a section 404 permit."												
23	YES	19	Clearly note statement that "The escape of sediment from the site shall be prevented by the installation of erosion and sediment control measures and practices prior to land disturbing activities."												
23	YES	20	Clearly note statement that "Erosion control measures will be maintained at all times. If full implementation of the approved plan does not provide for effective erosion control, additional erosion and sediment control measures shall be implemented to control or treat the sediment source."												
23	YES	21	Clearly note the statement "Any disturbed area left exposed for a period greater than 14 days shall be stabilized with mulch or temporary seeding."												
24	YES	22	Indication that the applicable portion of the primary permittees ES&PC Plan is to be provided to each secondary permittee prior to the secondary conducting any construction activity and that each secondary shall sign the Plan or portion of the Plan applicable to their site. List the names and addresses of all secondary permittees.*												
24	YES	23	Any construction activity which discharges storm water into an Impaired Stream Segment, or within 1 linear mile upstream of and within the same watershed as any portion of an Impaired Stream Segment must comply with Part III, C. of the Permit. Include the completed Appendix 1 listing all the BMPs that will be used for those areas of the site which discharge to the Impaired Stream Segment.*												
24	YES	24	If a TMDL Implementation Plan for sediment has been finalized for the Impaired Stream Segment (identified in item 23 above) at least six months prior to submittal of NOI, the ES&PC Plan must address any site-specific conditions or requirements included in the TMDL Implementation Plan.*												
9, 23 & 27	N/A	25	BMPs for concrete washdown of tools, concrete mixer chutes, hoppers and the rear of the vehicles. Washout of the drum at the construction site is prohibited.*												
24	YES	26	Provide BMPs for the remediation of all petroleum spills and leaks.												
4,5,6,7,8,9 & 24	YES	27	Description of practices to provide cover for building materials and building products on site.*												
24	YES	28	Description of the measures that will be installed during the construction process to control pollutants in storm water that will occur after construction operations have been completed.												
24	YES	29	Description of the practices that will be used to reduce the pollutants in storm water discharges.												
24	YES	30	Description and chart or timeline of the intended sequence of major activities which disturb soils for the major portions of the site (i.e., initial perimeter and sediment storage BMPs, clearing and grubbing activities, excavation activities, utility activities, temporary and final stabilization).												
24	YES	31	Provide complete requirements of inspections and record keeping by the primary permittee or tertiary permittee.												
24	YES	32	Provide complete requirements of sampling frequency and reporting of sampling results.*												
24	YES	33	Provide complete details for retention of records as per Part IV.F. of the permit.												
25	YES	34	Description of analytical methods to be used to collect and analyze the samples from each location.*												
25	YES	35	Appendix B rationale for NTU values at all outfall sampling points where applicable.*												
25	YES	36	Delineate all sampling locations if applicable, perennial and intermittent streams and other water bodies into which storm water is discharged.*												
25	YES	37	A description of appropriate controls and measures that will be implemented at the construction site including: (1) initial sediment storage requirements and perimeter control BMPs, (2) intermediate grading and drainage BMPs, and (3) final BMPs. For construction sites where there will be no mass grading and the initial perimeter control BMPs, intermediate grading and drainage BMPs, and final BMPs are the same, the plan may combine all of the BMPs into a single phase.*												
25	YES	38	Plan addresses BMPs for all phases of common development including individual building lots and out-parcels, etc. regardless of who owns or operates the individual sites. Include a typical and any situational lots applicable.												
4-7	YES	39	Graphic scale and North arrow.												
3-10	YES	40	Existing and proposed contour lines with contour lines drawn at an interval in accordance with the following: <table><thead><tr><th>Map Scale</th><th>Ground Slope</th><th>Contour Intervals, ft.</th></tr></thead><tbody><tr><td>1 inch = 100 ft or</td><td>Flat 0 - 2%</td><td>0.5 or 1</td></tr><tr><td>larger scale</td><td>Rolling 2 - 8%</td><td>1 or 2</td></tr><tr><td></td><td>Steep 8% +</td><td>2.5 or 10</td></tr></tbody></table>	Map Scale	Ground Slope	Contour Intervals, ft.	1 inch = 100 ft or	Flat 0 - 2%	0.5 or 1	larger scale	Rolling 2 - 8%	1 or 2		Steep 8% +	2.5 or 10
Map Scale	Ground Slope	Contour Intervals, ft.													
1 inch = 100 ft or	Flat 0 - 2%	0.5 or 1													
larger scale	Rolling 2 - 8%	1 or 2													
	Steep 8% +	2.5 or 10													
25	N/A	41	Use of alternative BMPs whose performance has been documented to be equivalent to or superior to conventional BMPs as certified by a Design Professional (unless disapproved by EPD or the Georgia Soil and Water Conservation Commission). Please refer to the Alternative BMP Guidance Document found at <a href="http://www.gswcc.org">www.gswcc.org</a> .												
25	N/A	42	Use of alternative BMP for application to the Equivalent BMP List. Please refer to Appendix A-2 of the Manual for Erosion & Sediment Control in Georgia 2016 Edition.*												
25	N/A	43	Delineation of the applicable 25-foot or 50-foot undisturbed buffers adjacent to State waters and any additional buffers required by the Local Issuing Authority. Clearly note and delineate all areas of impact.												
25	N/A	44	Delineation of on-site wetlands and all state waters located on and within 200 feet of the project site.												
25	YES	45	Delineation and acreage of contributing drainage basins on the project site.												
25	N/A	46	Provide hydrology study and maps of drainage basins for both the pre- and post-developed conditions.*												
25	YES	47	An estimate of the runoff coefficient or peak discharge flow of the site prior to and after construction activities are completed.*												
25	YES	48	Storm-drain pipe and weir velocities with appropriate outlet protection to accommodate discharges without erosion. Identify/Delineate all storm water discharge points.												
8, 25	YES	49	Soil series for the project site and their delineation.												
6-10	YES	50	The limits of disturbance for each phase of construction.												
9	YES	51	Provide a minimum of 67 cubic yards of sediment storage per acre drained using a temporary sediment basin, retrofitted detention pond, and/or excavated inlet sediment traps for each common drainage location. Sediment storage volume must be in place prior to and during all land disturbance activities until final stabilization of the site has been achieved. A written justification explaining the decision to use equivalent controls when a sediment basin is not attainable must be included in the plan for each common drainage location in which a sediment basin is not provided. A written justification as to why 67 cubic yards of storage is not attainable must also be given. Worksheets from the Manual must be included for structural BMPs and all calculations used by the design professional to obtain the required sediment storage when using equivalent controls. When discharging from sediment basins and impoundments, permittees are required to utilize outlet structures that withdraw water from the surface, unless infeasible. If outlet structures that withdraw water from the surface are not feasible, a written justification explaining this decision must be included in the plan.												
8, 9 & 10	YES	52	Location of Best Management Practices that are consistent with and no less stringent than the Manual for Erosion and Sediment Control in Georgia. Use uniform coding symbols from the Manual, Chapter 6, with legend.												
26 & 27	YES	53	Provide detailed drawings for all structural practices. Specifications must, at a minimum, meet the guidelines set forth in the Manual for Erosion and Sediment Control in Georgia.												
8, 9, 10, & 28	YES	54	Provide vegetative plan, noting all temporary and permanent vegetative practices. Include species, planting dates and seeding, fertilizer, lime and mulching rates. Vegetative plan shall be site specific for appropriate time of the year that seeding will take place and for the appropriate geographic region of Georgia.												

\*This requirement of the Common Development permit is not applicable to Tertiary Permittees with a Plan(s) for a typical individual lot(s), if the total land disturbance within the construction site is less than five (5) acres and the total land disturbance within each individual lot is less than one (1) acre. If applicable, the checklist item would be N/A.

Effective January 1, 2019

2

LEVEL II CERTIFICATION:  
SHOWN ON ALL SHEETS, UPPER  
RIGHT HAND CORNER OF TITLE

4

5

DEVELOPER/PRIMARY PERMITTEE  
LSVP, LLC  
P.O. Box 1796  
MONROE, GA. 30655  
24 HOUR CONTACT:  
R. NEIL KOELBL  
P.O. Box 2422  
McDONOUGH, GA. 30253  
404-925-9103  
neil@libertycommunities.com

3

Limit of disturbance shall be no greater than 50 acres at any one time without prior written authorization from the EPD District Office. If EPD approves the request to disturb 50 acres or more at any one time, the plan must include at least 4 of the BMPs listed in Appendix 1 of this checklist.

6

TOTAL SITE AREA = 33.82Ac. Disturbed area = 13.50 ac.  
LIMIT OF DISTURBANCE WILL NOT BE GREATER THAN 50 ACRES  
NO PRIOR WRITTEN AUTHORIZATION FROM EPD OFFICE.  
PLAN DOES NOT INCLUDE BMPs LISTED IN APPENDIX 1

7

GPS location of the Construction Exit of the site  
LAT= N33° 23' 59.11"  
LONG= E84° 18' 17.11"

11

PROJECT RECEIVING WATERS:  
THE PROJECT DRAINS INTO UN-NAMED TRIBUTARY  
OF BEAR CREEK.  
THERE ARE NO SENSITIVE ADJACENT AREAS WHICH  
MAY BE AFFECTED.

10

Vicinity map showing site's relation to surrounding areas:

8

REV.	DATE:	DESCRIPTION:
	02-04-2019	INITIAL DATE

9

NATURE OF CONSTRUCTION ACTIVITY:  
1) THE PURPOSE OF THESE PLANS ARE TO PERMIT THE CLEARING AND ASSOCIATED GRADING OF THE SITE FOR THE CONSTRUCTION OF STREETS AND UTILITIES FOR A SINGLE FAMILY SUBDIVISION.  
2) PRIOR TO, DURING AND AFTER ALL CONSTRUCTION ACTIVITIES, THE OWNER WILL ENSURE ALL EROSION AND SEDIMENTATION MEASURES SHOWN ON THE PLANS WILL BE ADHERED TO.  
3) AFTER SITE CONSTRUCTION, ALL DISTURBED AREAS WILL BE PERMANENTLY STABILIZED AND VEGETATED

12

"I certify under penalty of law that this Plan was prepared after a site visit to the locations described herein by myself or my authorized agent, under my direct supervision"

13

"I certify that the permittee's Erosion, Sedimentation and Pollution Control Plan provides for an appropriate and comprehensive system of best management practices required by the Georgia Water Quality Control Act and the document "Manual for Erosion and Sediment Control in Georgia" (Manual) published by the State Soil and Water Conservation Commission as of January 1 of the year in which the land-disturbing activity was permitted, provides for the sampling of the receiving water(s) or the sampling of the storm water outfalls and that the designed system of best management practices and sampling methods is expected to meet the requirements contained in the General NPDES Permit NO. GAR 100003."

14

"The design professional who prepared the ES&PC Plan is to inspect the installation of the initial sediment storage requirements and perimeter control BMPs within 7 days after installation."

"I certify that the Permittee's ES&PC Plan provides for an appropriate and comprehensive system of BMPs and sampling to meet Permit requirements."

"I understand as the plan preparer, retained by the Primary Permittee, I must visit the site within seven days once the construction activities commence, to verify that all BMPs are installed according to the approved plan."

SIGNATURE OF PLAN PREPARER

9-11-19

DATE

14

"I certify as the primary permittee that: "The design professional who prepared the ES&PC Plan is to inspect the installation of the initial sediment storage requirements, perimeter control BMPs and sediment basins in accordance with part IV.A.5. within 7 days after installation"

"I certify that if the design professional who prepared the ES&PC Plan is not readily available for the 7 days inspections after the BMPs installation, an alternative professional approved by EPD in writing is to inspect the installation of the initial sediment storage requirements, perimeter control BMPs and sediment basins in accordance with part IV.A.5. within 7 days after installation"

OWNER/ PRIMARY PERMITTEE

10/18/19

DATE

15

NO NON-EXEMPT ACTIVITIES  
There are live streams on or within 200' of the site.  
"Non-exempt activities shall not be conducted within the 25 or 50-foot undisturbed stream buffers as measured from the point of westered vegetation or within 25-feet of the coastal marshland buffer as measured from the Jurisdictional Determination Line without first acquiring the necessary variances and permits."

16

BUFFER ENCROACHMENTS:  
There will be no buffer encroachments on this property.

17

"Amendments/revisions to the ES&PC Plan which have a significant effect on BMPs with a hydraulic component must be certified by the design professional."\*  
The primary permittee shall amend their plan whenever there is a change in design, construction, operation, or maintenance, which has a significant effect on BMPs with a hydraulic component (i.e. those BMPs where the design is based upon rainfall intensity, duration and return frequency of storms) or if the plan proves to be ineffective in eliminating or significantly minimizing pollutants from sources identified under Part IV.D.3. of this permit.  
Amendments to the plan must be certified by a design professional as provided in this permit.

18

Waste materials shall not be discharged to waters of the State, except as authorized by a Section 404 permit.  
All hazardous waste materials will be disposed of in the manner specified by local, state, and/or federal regulations and by the manufacturer of such products. The job site superintendent, who will also be responsible for seeing that these practices are followed, will instruct site personnel in these practices. Material safety data sheets (MSDS's) for each substance with hazardous properties that is used on the job site will be obtained and used for the proper management of potential wastes that may result from these products. An MSDS will be posted in the immediate area where such product is stored and/or used and another copy of each MSDS will be maintained in the ES&PC file at the job site construction trailer office. Each employee who must handle a substance with hazardous properties will be instructed on the use of MSDS sheets and the specific information in the applicable MSDS for the product he/she is using, particularly regarding spill control techniques.  
The contractor will implement the Spill Prevention Control And Countermeasures (SPCC) plan found within this ES&PCP and will train all personnel in the proper cleanup and handling of spilled materials. No spilled hazardous materials or hazardous wastes will be allowed to come in contact with storm water discharges. If such contact occurs, the storm water discharge will be contained on site until appropriate measures in compliance with state and federal regulations are taken to disposed of such contaminated storm water. It shall be the responsibility of the job site superintendent to properly train all personnel in the use of the SPCC plan.

19

The escape of sediment from the site shall be prevented by the installation of erosion and sediment control measures and practices prior to land disturbing activities.

20

Erosion control measures will be maintained at all times. If full implementation of the approved plan does not provide for effective erosion control, additional erosion and sediment control measures shall be implemented to control or treat the sediment source.

21

Any disturbed area left exposed for a period greater than 14 days shall be stabilized with mulch or temporary seeding.

APPROVED

DATE: 10/24/19

BY: R. S. [Signature]

GSWCC  
MARK G. WHITLEY, PE  
0000001036  
LEVEL I A SEPA CERTIFIED PERSONNEL  
LEVEL I A SEPA CERTIFIED DESIGN PROF.

GEORGIA

DESIGN PROFESSIONAL

MARK G. WHITLEY, PE

WHITLEY ENGINEERING INC.

DESIGN NPDES PROJECT MANAGEMENT

TEL: (770)946-0256

38 E. MAIN STREET N.

HAMPTON, GA 30228

REV.	DATE:	DESCRIPTION:
1	04/30/19	REVISED PER CITY/COUNTY COMMENTS
2	06/08/19	REVISED PER CITY COMMENTS
3	05/16/19	REVISED PER HOU/SA COMMENTS
4	06/25/19	REVISED PER CITY COMMENTS
5	07/15/19	REVISED PER CITY COMMENTS
6	07/25/19	REVISED PER CITY COMMENTS
7	08/09/2019	REVISED PER CITY COMMENTS

Not Released For Construction

Released For Construction

Liberty Square Park Phase 5

NPDES NOTES & CHECKLIST SHEET 1

LAND LOT 229 AND 230 of the 6th DISTRICT

CITY OF HAMPTON, HENRY COUNTY, GA

DATE: 02/04/2019

SCALE: N.T.S.

THESE DRAWINGS ARE THE PROPERTY OF WHITLEY ENGINEERING, INC. AND MAY NOT BE USED, REPRODUCED AND OR INCORPORATED INTO ANOTHER WORK FOR ANY REASON WITHOUT THE WRITTEN CONSENT OF THE DESIGN PROFESSIONAL.

SHEET

23 OF 34







# 34 Description of analytical methods used to collect and analyze the samples from each location.

## **Sampling Requirements.**

This permit requires the monitoring of nephelometric turbidity in receiving water(s) or outfalls in accordance with this permit. The following procedures constitute EPD's guidelines for sampling turbidity for this site

### a. Sampling Requirements shall include the following:

Determine sampling locations:

- (1) A USGS topographic map was used to locate all perennial and intermittent streams and other water bodies as shown on a USGS topographic map as well as all the receiving water from the site
- (2) A USGS topographic map was used to determine the sampling locations.
- (3) All sampling shall be collected by "grab samples" and the analysis of these samples must be conducted in accordance with methodology and test procedures established by 40 CFR Part 136 (unless other test procedures have been approved); the guidance document titled "NPDES Storm Water Sampling Guidance Document, EPA 833-B-92-001" and guidance documents that may be prepared by the EPD.

### (4) Sample Points:

**SAMPLE POINT 1**  
LOCATION: HWY 11 at exit of 60" pipe from stormwater pond  
Size of construction area = 14.92 Ac.  
Disturbed area within basin = 14.03 Ac.  
Size of Surface Water Drainage area = 0.499 Sq. mi.  
Receiving Stream : Bear Creek (Warm Water fisheries)  
The maximum allowable NTU will be 50 NTU

### Sample Points:

**SAMPLE POINT 2**  
LOCATION: HWY 11 at exit of 48" pipe from stormwater pond  
Size of construction area = 11.40 Ac.  
Disturbed area within basin = 10.20 Ac.  
Size of Surface Water Drainage area = 0.499 Sq. mi.  
Receiving Stream : Bear Creek (Warm Water fisheries)  
The maximum allowable NTU will be 50 NTU

## SEE SHEET 8 FOR SAMPLING LOCATIONS

- (5). Permittee must provide any additional information EPD determines necessary to be part of the Plan. EPD will provide written notice to the permittee of the information necessary and the time line for submittal
- (6) Sample containers should be labeled prior to collecting the samples, and should be well mixed before transferring to a secondary container, all sample bottles shall be large mouth, well cleaned and rinsed glass or plastic jars should be used for collecting samples. The jars should be cleaned thoroughly to avoid contamination.
- (7). Manual, automatic or rising stage sampling may be utilized. Samples required by this permit should be analyzed immediately, but in no case later than 48 hours after collection. However, samples from automatic samplers must be collected no later than the next business day after their accumulation, unless flow through automated analysis is utilized. Dilution of samples is not required. Samples may be analyzed directly with a properly calibrated turbidimeter. Samples are not required to be cooled.
- (8). Sampling and analysis of the receiving water(s) or outfalls beyond the minimum frequency stated in this permit must be reported to EPD as specified in Part IV.E.

## 35 Appendix B rationale for NTU values at all outfall sampling points where applicable.

Site Size, Acres	APPENDIX B NEPHELOMETRIC TURBIDITY UNIT (NTU) TABLES WARM WATER (SUPPORTING WARM WATER FISHERIES)						
	SURFACE WATER DRAINAGE AREA, SQUARE MILES						
	0-4.99	5-9.9	10-24.99	25-49.99	50-99.99	100-249.99	250-499.99
1.00-10	75	150	200	400	750	750	750
10.01-25	50	100	100	200	300	500	750
25.01-50	50	50	100	100	200	300	750
50.01-100	50	50	50	100	100	150	300
100.01+	50	50	50	50	50	100	200

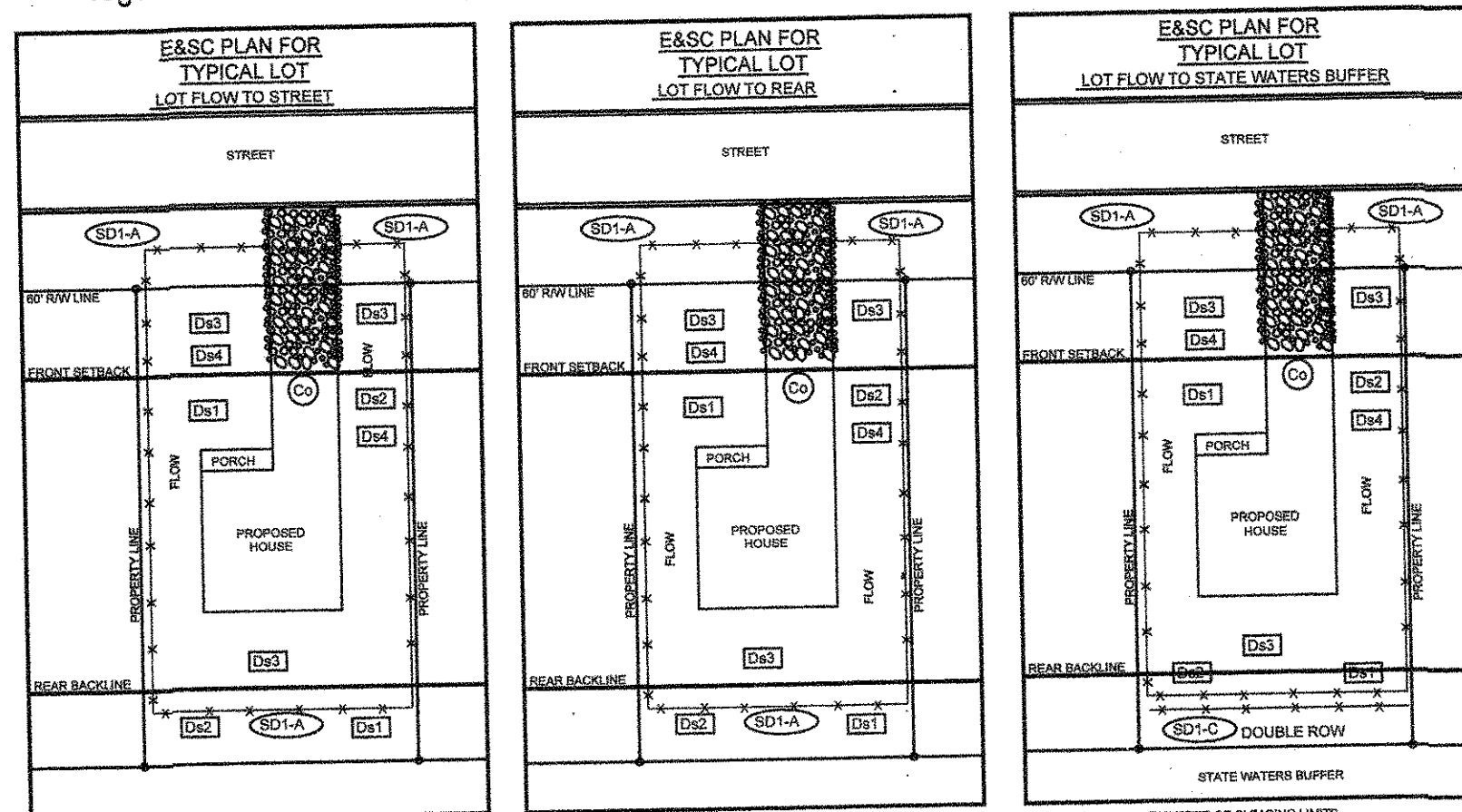
- 36 Delineate all sampling locations, perennial and intermittent streams and other water bodies into which storm water is discharged also provide a summary chart of the justification and analysis for the representative sampling as applicable.

Refer to sheet 24 checklist item 33 under section 6.a.4 for summary of each sampling location

- 37 A description of appropriate controls and measures that will be implemented at the construction site including: (1) initial sediment storage requirements and perimeter control BMPs, (2) intermediate grading and drainage BMPs, and (3) final BMPs. For Construction sites where there will be no mass grading and the initial perimeter control BMPs, intermediate grading and drainage BMPs, and final BMPs are the same, the plan may combine all of the BMPs into a single phase.

See sheets 8,9 and 10 for appropriate construction and maintenance of erosion control measures.

- 38 Plan addresses BMPs for all phases of common development including individual lots and out-parcels, etc, regardless of who owns or operates the individual sites. Include a typical and any situational lots applicable.



Existing and proposed contour lines are to be shown.

- 39 Graphic scale and north arrow.

Refer to each individual plan sheets for Graphic Scale and North arrow

- 40 Existing and Proposed contour lines

Refer to sheet 6 & 7 "Grading Plan" for Existing and Proposed Contours lines.

- 41 Use of alternative BMPs whose performance has been documented to be equivalent to or superior to conventional BMPs as certified by a Design Professional

N/A for this site, however if any BMPs have proven not to function properly and the need for an alternative BMP is arisen, the following procedures documented below should be followed by the Design Professional

Use of alternative BMPs whose performance has been documented to be equivalent or superior to conventional BMPs as certified by a Design Professional may be allowed (unless disapproved by EPD or the Georgia soil and Water Conservation Commission).

Required documentation for alternative BMPs:

1. One page summary detailing why the alternative BMP is equivalent or superior to the conventional BMPs found in the "Manual for Erosion and Sedimentation Control in Georgia" (manual).
2. Documented side by side testing (alternative BMP vs. conventional BMP) using the appropriate design requirements and specifications contained in the Manual.
3. Proof that the alternative BMP was previously installed and worked under conditions comparable to the environmental conditions of the proposed site. This can be documented with photographs.
4. All specifications including the design requirements and the procedures for proper installation and maintenance.

All forms of documentation must be signed and certified by the Design Professional who is preparing the ES&PC Plan and must include the Design Professional's seal and GSWCC design Professional certification.

- 42 Use of alternative BMP for application to the Equivalent BMP List. Please refer to Appendix A-2 of the Manual for Erosion & Sediment Control in Georgia 2016 Edition.\*

- 43 Delineation of the applicable 25-foot or 50-foot undisturbed buffers adjacent to state waters and any additional buffers required by the Local Issuing Authority. Clearly note and delineate all areas of impact.  
No State waters are present on this site.

- 44 Delineation of on-site wetlands and all state waters located on and within 200 feet of the project site.

No wetlands are present on the site.

- 45 Delineation and acreage of contributing drainage basins on the project site.

Refer to sheet 4 and Hydro Study for delineation and acreage of contributing drainage basins on the project site.

- 46 Provide hydrology study and maps of drainage basins for both the pre-and post-developed conditions.

Hydrological Study has been completed and is has been presented for approval to appropriate governing authority.

- 47 An estimate of the runoff coefficient or peak discharge flow of the site prior to and after construction activities are completed.

## **RUNOFF COEFFICIENT**

WEIGHTED PRE-CONSTRUCTION CURVE NUMBER (CN): 55  
OR PEAK DISCHARGE FLOW (Q pre): 25 cfs

WEIGHTED POST-CONSTRUCTION CURVE NUMBER (CN): 79  
OR PEAK DISCHARGE FLOW (Q post): 25 cfs

- 48 Storm-drain pipe and weir velocities with appropriate outlet protection to accommodate discharges without erosion. Identify/Delineate all storm water discharge points.  
Refer to sheet 7 for all storm water discharge calculations.

- 49 Soil series for the project site and their delineation.  
Soil series type and delineation are shown on sheet 8

- 50 The limits of disturbance for each phase of construction.  
Limits of Disturbance is shown on sheets 6, 7 and 8

- 51 A minimum of 67 cubic yards of sediment storage per acre drained using temporary excavated Sd2's.  
See sheet 9 for sediment trap calculations and sizing.

- 52 Location of Best Management Practices that are consistent with and no less stringent than the Manual for Erosion and Sediment Control in Georgia. Use uniform coding symbols from the Manual, Chapter 6, with legend.

## GEORGIA UNIFORM CODING SYSTEM FOR SOIL EROSION AND SEDIMENT CONTROL PRACTICES GEORGIA SOIL AND WATER CONSERVATION COMMISSION

### STRUCTURAL PRACTICES

CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION
Cd	CHANNEL STABILIZATION			A small temporary barrier or dam constructed across a small drainage ditch or area of concentrated flow.
Ch	CHANNEL STABILIZATION			Improving, constructing or stabilizing an open channel, existing stream, or ditch.
Co	CONSTRUCTION SITE			A washed stone pad located at the construction site and to provide a place for removing mud from tires thereby protecting public streets.
Cr	CONSTRUCTION SITE STABILIZATION			A temporary structure constructed to prevent erosion of exposed soil on a construction site.
Dc	STREAM CHANNEL			A temporary channel constructed to convey flow around a construction site while permanent structure is being constructed.
Di	DIVERSION			An earth channel or dike located above, below or across a slope to divert runoff. This may be a temporary or permanent structure.
Dn1	TEMPORARY DOWNSTREAM STRUCTURE			A flexible curtain of heavy-duty fabric or other material designed to safely conduct surface runoff down a slope. This is temporary and temporary.
Dn2	PERMANENT DOWNSTREAM STRUCTURE			A paved ditch pipe, vertical runoff or similar structure designed to safely conduct surface runoff down a slope.
Fr	FILTER RIBB			A temporary stone barrier constructed of clean stone and post outlets.
Gs	GRASS			Rock filter baskets which are hand-placed into position forming and stabilizing structures.
Gr	GRASS STABILIZATION STRUCTURE			Permanent structures installed to protect channels or structures where otherwise the slope would be sufficient for the running water to form gullies.
Lv	LEVEL SPREADER			A structure to convert concentrated flow of water into less erosive sheet flow. This should be constructed only on undisturbed soils.
Rd	ROCK FILTER DAM			A permanent or temporary stone filter dam located across small streams or drainages.
Rg	RETAINING WALL			A wall installed to stabilize cut and fill slopes where maximum permissible slopes are not obtainable. Each situation will require special design.
Rl	RETAINING WALL			A device or structure placed in front of a permanent structure to prevent sediment from leaving the construction site. It may be a wall, a pile of stone or log, brush, logs and poles, gravel, or a concrete structure.
Sd1	SEDIMENT BARRIER			A barrier to prevent sediment from leaving the construction site. It may be a wall, a pile of stone or log, brush, logs and poles, gravel, or a concrete structure.
Sd2	SEDIMENT BARRIER			A barrier to prevent sediment from leaving the construction site. It may be a wall, a pile of stone or log, brush, logs and poles, gravel, or a concrete structure.
Sd3	TEMPORARY SEDIMENT BASIN			A basin created by excavation or a dam across a waterway. The surface water runoff is temporarily stored allowing the bulk of the sediment to drop out.
Sd4	TEMPORARY SEDIMENT TRAP			A small temporary pond that traps a disturbed area so that sediment can settle out. The principle feature distinguishing a temporary sediment trap from a temporary sediment basin is the lack of a pipe or clear.
Sk	FLATTING SEDIMENT TRAP			A horizontal device that releases/drops water from the surface of sediment ponds, traps, or basins at a controlled rate of flow.
Snd	SEED BERM			Linear control device constructed on a diversion perpendicular to the direction of runoff to enhance deposition and infiltration, while creating multiple sedimentation chambers with the employment of intermediate dikes.

### STRUCTURAL PRACTICES

CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION
Sr	TEMPORARY STREAM PROTECTION			A temporary bridge or culvert-type structure protecting a stream or watercourse from damage by crossing construction.
St	STORMWATER DETENTION			A paved or short section of riprap channel at the outlet of a storm drain system preventing erosion from the concentrated runoff.
Su	SURFACE ROUGHENING			A rough soil surface with horizontal depressions on a contour or slope left in a roughened condition after grading.
Tc	TURBIDITY CURTAIN			A floating or stacked barrier installed within the water (it may also be referred to as a floating boom, air barrier, or air curtain).
Tp	TOPSOILING			The practice of stripping off the more fertile topsoil and spreading it over the disturbed area after completion of construction activities.
Tr	TRIPLE PROTECTION			To protect disturbed areas from heavy during construction activities.
Vw	VEGETATIVE WATERWAY OR EXISTING OR EXCAVATED CHANNEL			Placed or vegetative water outlets for ditches, terraces, berms, dikes or similar structures.

### VEGETATIVE PRACTICES

CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION
Bf	BUFFER ZONE			Strip of undisturbed original vegetation, enhanced or restored existing vegetation or the reestablishment of vegetation surrounding an area of disturbance or working stream.
Cs	CUTSLOPE EROSION CONTROL (SEE VEGETATION)			Planting vegetation on dunes that are denuded artificially constructed, or re-touristed.
Ds1	DEFERRED AREA STABILIZATION (SEE VEGETATION)			Establishing temporary protection for disturbed areas where seedlings may not have a suitable growing season to produce an erosion retarding cover.
Ds2	DEFERRED AREA STABILIZATION (SEE VEGETATION)			Establishing a temporary vegetative cover with fast growing seedlings on disturbed areas.
Ds3	DEFERRED AREA STABILIZATION (SEE VEGETATION)			Establishing a permanent vegetative cover with fast growing seedlings on disturbed areas.
Ds4	DEFERRED AREA STABILIZATION (SEE VEGETATION)			A permanent vegetative cover using seeds and highly erodible or critically eroded lands.
Du	DEVELOPMENTAL AREA STABILIZATION (SEE VEGETATION)			Controlling surface and air movement of dust on construction site, roadways and similar areas.
Fl-Cd	FLATTING SEDIMENT TRAP			Substance formulated to assist in the solid/liquid separation of suspended particles in solution.
Sb	SEEDING			The use of readily available native plant material to maintain and enhance streambanks, or to prevent, or restore and repair erosion and sediment problems.
Ss	SEED STABILIZATION			A protective covering used to prevent erosion and erosion temporary or permanent vegetation on steep slopes, bare lines, or ditches.
Tac	TERRACE AND TRAP			Substance used to anchor stone or hay mulch by coating the organic material to shed together.

GSWCC (Amended - 2013)

- 53 Provide detailed drawings for all structural practices. Specifications must, at a minimum, meet the guidelines set forth in the Manual for Erosion and Sediment Control in Georgia.

Refer to Sheets 26 and 27 EROSION CONTROL DETAILS" for detailed drawings for all structural practices that meet the guidelines set forth in the Manual for Erosion and Sediment Control in Georgia.

- 54 Provide vegetative plan, noting all temporary and permanent vegetative practices. Include species, planting dates and seeding, fertilizer, lime and mulching rates. Vegetative plan shall be site specific for appropriate time of year that seeding will take place and for the appropriate geographic region of Georgia.

Refer to Sheet 28 EROSION CONTROL DETAILS" for all vegetative plan noting all temporary and permanent vegetative practice including species, planting dates and seeding, fertilizer, lime and mulching rates.

APPROVED

DATE: 10/25/18

BY: [Signature]

Liberty Square Park Phase 5

NPDES NOTES & CHECKLIST SHEET 3

LAND LOT 229 AND 230 of the 6th DISTRICT

CITY OF HAMPTON, HENRY COUNTY, GA

SCALE: N.T.S.

DATE: 02/04/2019

NOT RELEASED FOR CONSTRUCTION

WHITLEY ENGINEERING INC.

DESIGN NPDES PROJECT MANAGEMENT

TEL: (770)946-0256

38 E. MAIN STREET N.

HAMPTON, GA 30228



GSWCC  
MARK G. WHITLEY, PE  
000001036  
LEVEL I A CERTIFIED PERSONNEL  
LEVEL I B CERTIFIED INSPECTOR  
LEVEL II CERTIFIED DESIGN PROF.





THE TEMPORARY SILT FENCE SHALL BE INSTALLED ACCORDING TO THE SPECIFICATION, AS SHOWN ON THIS PLANS OR AS DIRECTED BY THE ENGINEER. FOR INSTALLATION OF THE FABRIC, SEE DETAIL.

POST INSTALLATION SHALL START AT THE CENTER OF THE LOW POINT (IF APPLICABLE) WITH THE REMAINING POSTS SPACED 4 FEET APART FOR TYPE C SILT FENCE. ONLY STEEL POST SHALL BE USED WITH TYPE S AND TYPE N SILT FENCE. POSTS SHALL BE 4' IN LEFT FENCE. POSTS SHALL BE 13' IN RIGHT FENCE. ADDITIONAL TREATHS AND OTHER SENSITIVE AREAS, TWO ROWS OF TYPE C SILT FENCE OR ONE ROW OF TYPE C SILT FENCE BACKED BY HAYBALS SHALL BE USED.



ENTRANCE ELEVATION

Co CONSTRUCTION EXIT



**Sd2** INLET SEDIMENT BARRIER

SEDIMENT SHALL NOT BE WASHED INTO THE INLET. IT SHALL BE REMOVED FROM THE SEDIMENT TRAP AND DISPOSED OF AND STABILIZED SO THAT IT WILL NOT ENTER THE INLET, AGAIN.

WHEN THE CONTRIBUTING DRAINAGE AREA HAS BEEN PERMANENTLY STABILIZED, ALL MATERIALS AND ANY SEDIMENT SHALL BE REMOVED, AND EITHER SALVAGED OR DISPOSED OF PROPERLY. THE DISTURBED AREA SHALL BE BROUGHT TO PROPER GRADE, THEN SMOOTHED AND COMPACTED. ALL DISTURBED AREAS AROUND THE INLET SHALL BE APPROPRIATELY STABILIZED.



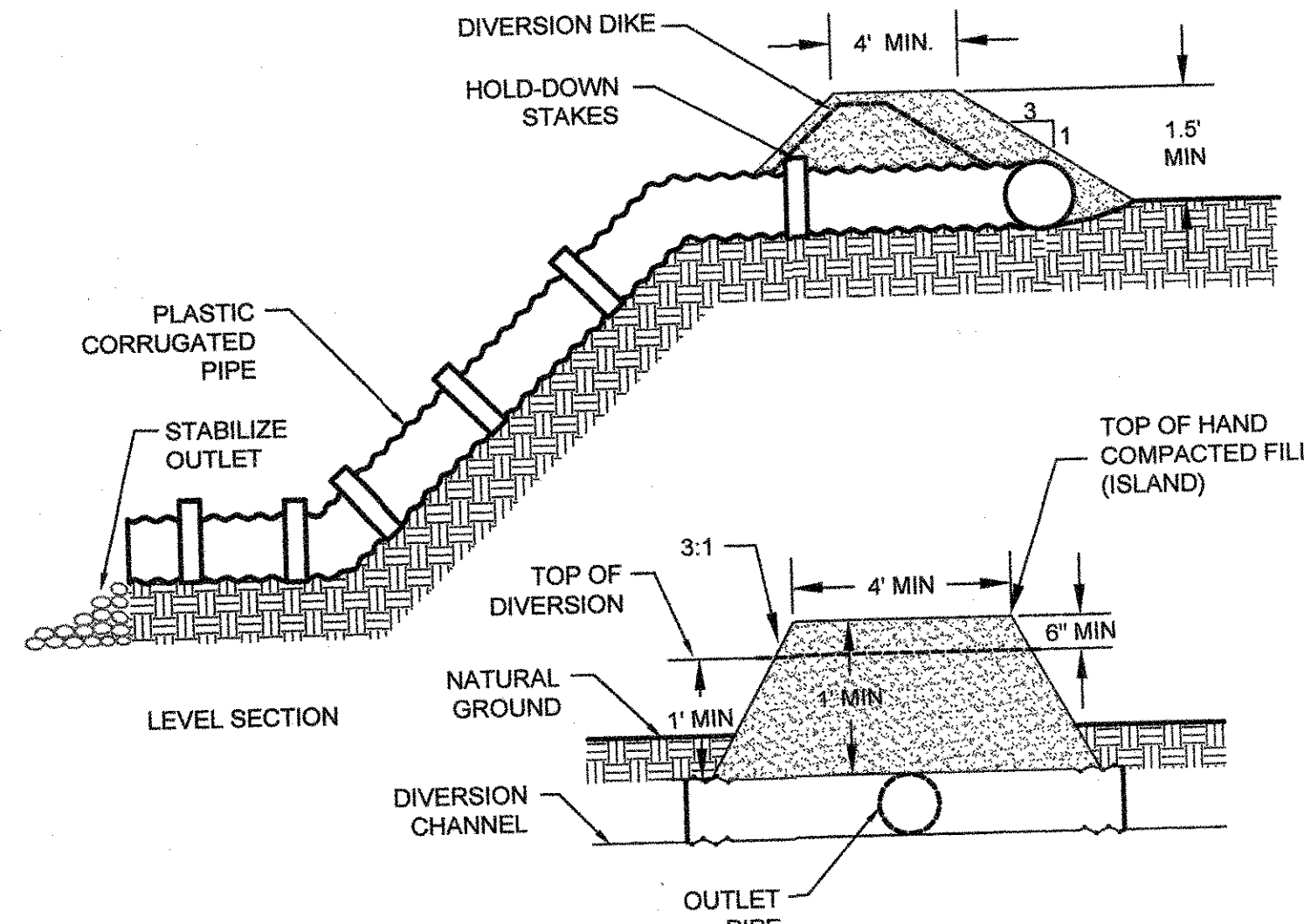
# TEMPORARY DOWNDRAIN

CONDUIT MATERIAL SHALL BE HEAVY DUTY FLEXIBLE MATERIAL SUCH AS NON-PERFORATED CORRUGATED PLASTIC TUBING OR SPECIALLY DESIGNED FLEXIBLE TUBING. USE REINFORCED HOLD-DOWN GROMMETS OR STAKES TO ANCHOR THE PIPE AT INTERVALS NOT TO EXCEED 10 FEET WITH THE OUTLET END SECURELY FASTENED IN PLACE. THE PIPE MUST EXTEND BEYOND THE TOE OF THE SLOPE.

## CONSTRUCTION SPECIFICATIONS

1. PLACE SLOPE DRAINS ON UNDISTURBED SOIL OR WELL COMPACTED FILL AT LOCATIONS AND ELEVATIONS SHOWN ON THE PLAN.
2. SLIGHTLY SLOPE THE SECTION OF PIPE UNDER THE DIKE TOWARD ITS OUTLET.
3. HAND TAMP THE SOIL UNDER AND AROUND THE ENTRANCE SECTION IN LIFTS NOT TO EXCEED 6 INCHES.
4. ENSURE THAT FILL OVER THE DRAIN AT THE TOP OF THE SLOPE HAS MINIMUM DIMENSIONS OF 1.5 FT. DEPTH, 4 FT. TOP WIDTH, AND 3:1 SIDE SLOPES.
5. ENSURE THAT ALL SLOPE DRAIN CONNECTIONS ARE WATERTIGHT.
6. ENSURE THAT ALL FILL MATERIAL IS WELL-COMPACTED. SECURELY FASTEN THE EXPOSED SECTION OF THE DRAIN WITH GROMMETS OR STAKES SPACED NO MORE THAN 10 FEET APART.
7. PLACE THE DRAIN SLIGHTLY DIAGONALLY ACROSS THE SLOPE, EXTENDING THE DRAIN BEYOND THE TOE OF THE SLOPE. CURVE THE OUTLET UPHILL AND ADEQUATELY PROTECT THE OUTLET FROM EROSION.
8. IF THE DRAIN IS CONVEYING SEDIMENT-LADEN RUNOFF, DIRECT ALL FLOWS INTO A SEDIMENT TRAP OR SEDIMENT BASIN.
9. MAKE THE SETTLED, COMPACTED DIKE RIDGE NO LESS THAN ONE FOOT ABOVE THE TOP OF THE PIPE AT EVERY POINT.
10. IMMEDIATELY STABILIZE ALL DISTURBED AREAS FOLLOWING CONSTRUCTION.

**MAINTENANCE**  
INSPECT THE SLOPE DRAIN AND SUPPORTING DIVERSION AFTER EVERY RAINFALL AND PROMPTLY MAKE NECESSARY REPAIRS. WHEN THE PROTECTED AREA HAS BEEN PERMANENTLY STABILIZED AND THE PERMANENT STORMWATER DISPOSAL SYSTEM IS FULLY FUNCTIONAL, TEMPORARY MEASURES MAY BE REMOVED, MATERIAL DISPOSED OF PROPERLY, AND ALL DISTURBED AREAS STABILIZED APPROPRIATELY.



TEMPORARY DOWNDRAIN STRUCTURE

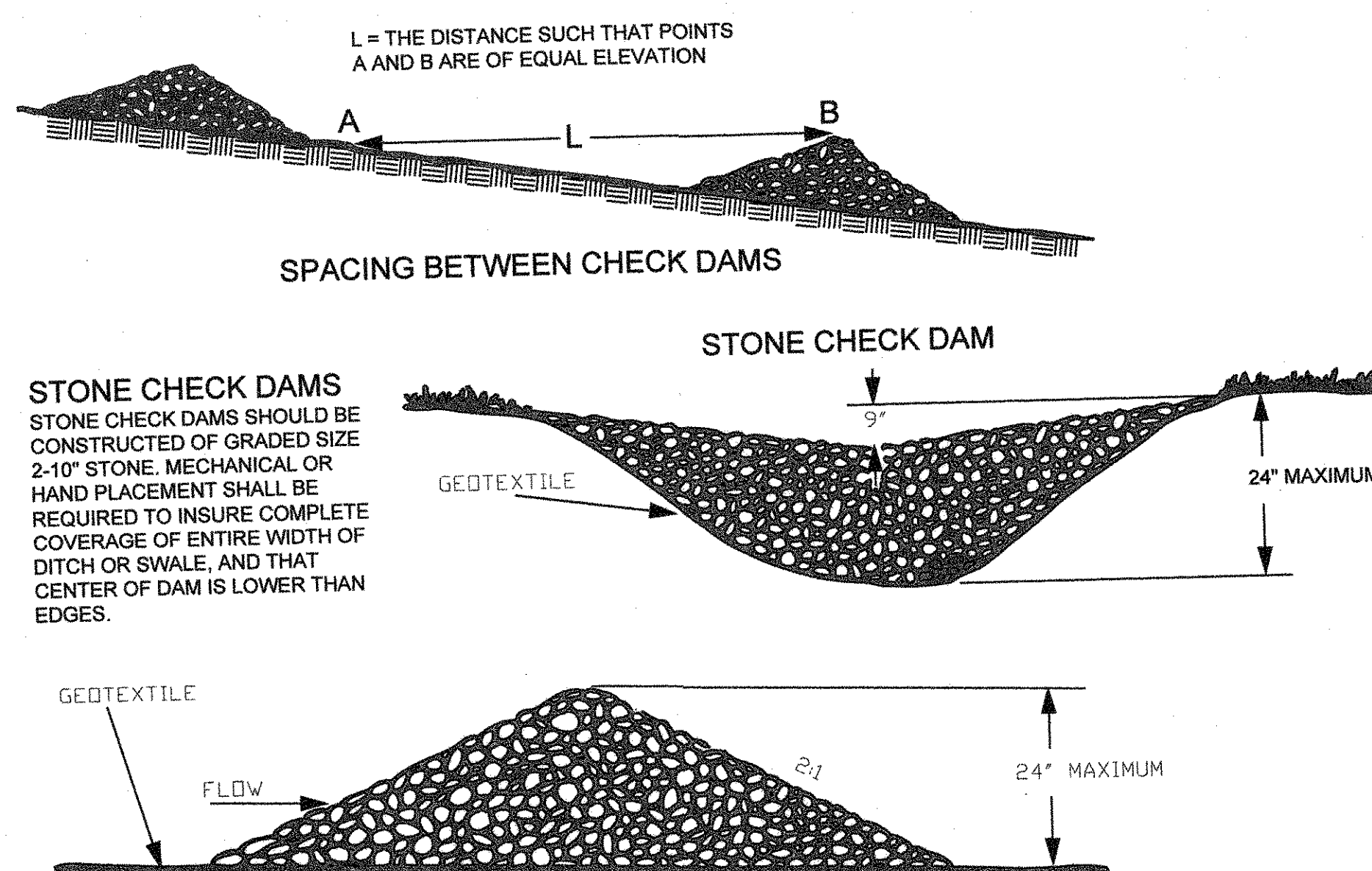
## TO BE SHOWN ON THE EROSION AND SEDIMENT CONTROL PLAN

1. THE DRAINAGE AREA FOR EACH DOWNDRAIN, IN ACRES.
2. THE DIAMETER OF EACH DOWNDRAIN, IN INCHES, BASED ON TABLE 6-14.1.
3. THE DIMENSIONS OF THE OUTLET PROTECTION, INCLUDING FLOW RATE, VELOCITY, AND APRON LENGTH, UPSTREAM AND DOWNSTREAM WIDTHS, AVERAGE STONE DIAMETER AND DEPTH.

MAXIMUM DRAINAGE AREA PER PIPE (ACRE)	PIPE DIAMETER (INCHES)
.3	10.
.5	12
1.0	18

TABLE 6-14.1

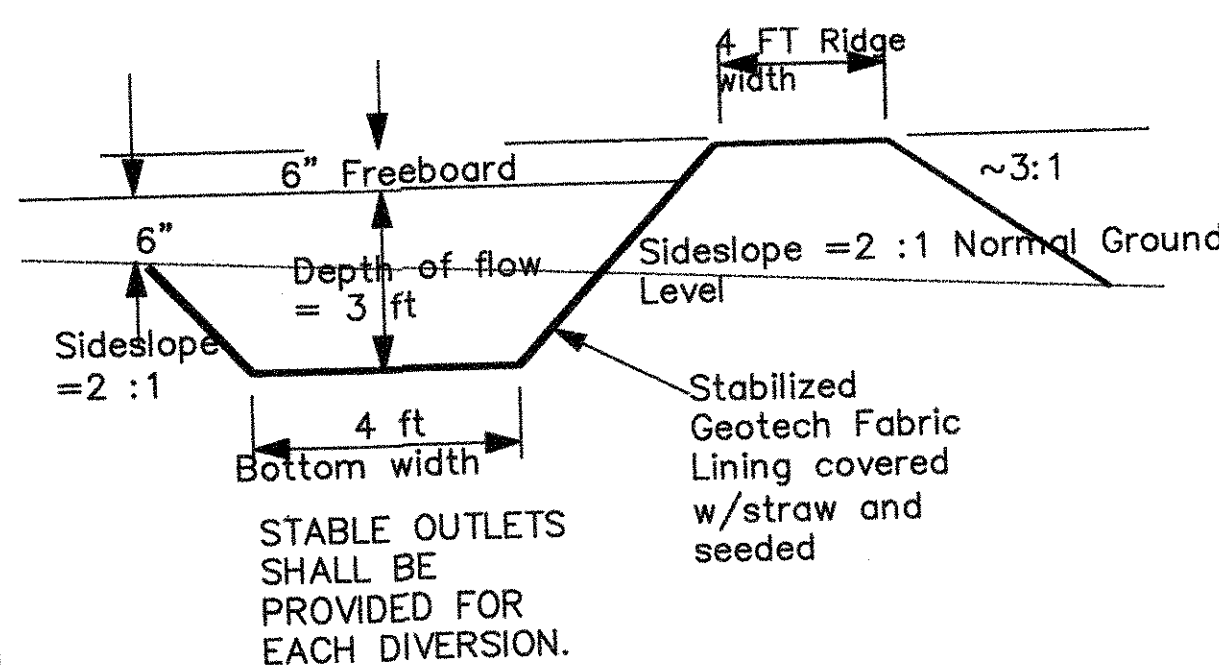
Dn-1 TEMPORARY DOWNDRAIN STRUCTURE



**STONE CHECK DAMS**  
STONE CHECK DAMS SHOULD BE CONSTRUCTED OF GRADED SIZE 2-10" STONE. MECHANICAL OR HAND PLACEMENT SHALL BE REQUIRED TO INSURE COMPLETE COVERAGE OF ENTIRE WIDTH OF DITCH OR SWALE, AND THAT CENTER OF DAM IS LOWER THAN EDGES.

**MAINTENANCE**  
PERIODIC INSPECTION AND REQUIRED MAINTENANCE MUST BE PROVIDED. SEDIMENT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF ONE-HALF THE ORIGINAL DAM HEIGHT OR BEFORE, IF THE AREA IS TO BE MOVED, CHECK DAMS SHALL BE REMOVED ONCE FINAL STABILIZATION HAS OCCURRED. OTHERWISE, CHECK DAMS MAY REMAIN IN PLACE PERMANENTLY. AFTER REMOVAL, THE AREA BENEATH THE DAM SHALL BE SEEDED AND MULCHED IMMEDIATELY.

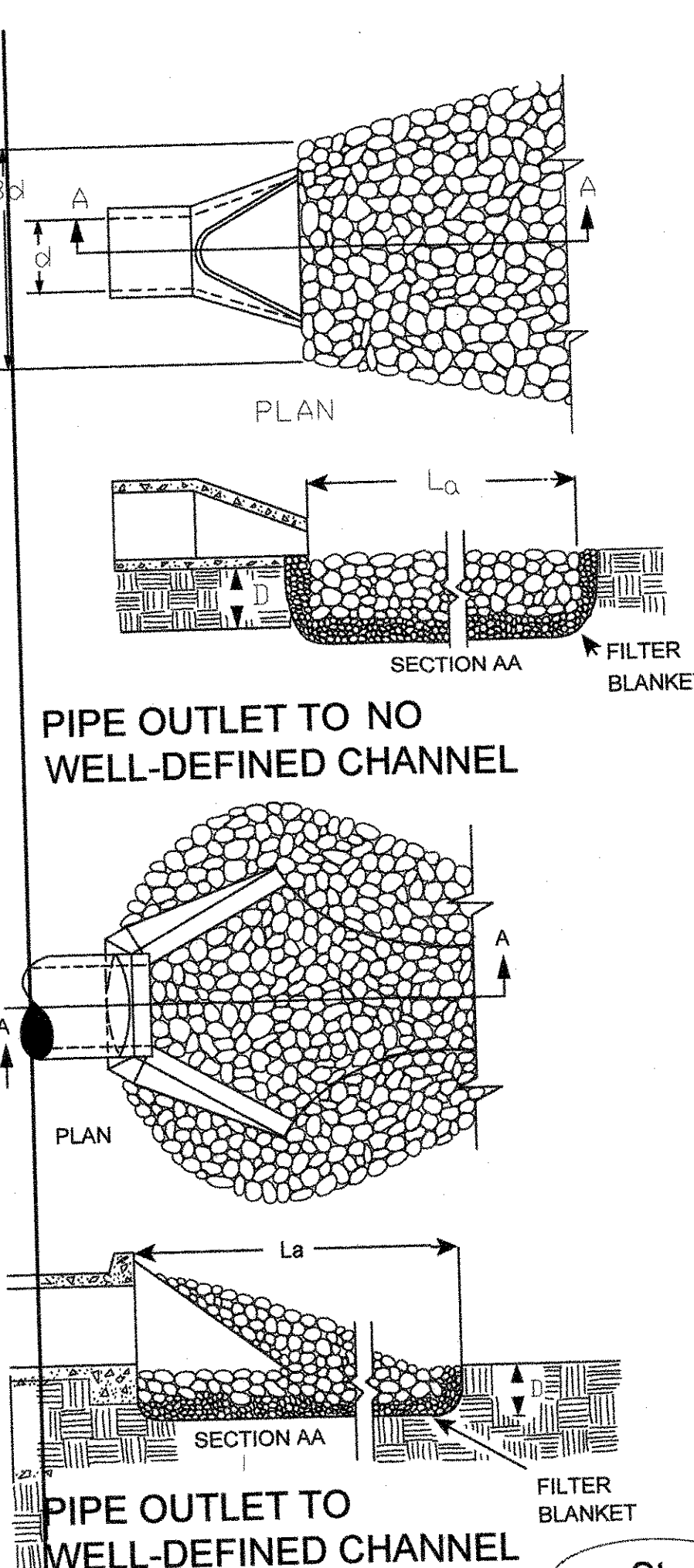
Cd-S CHECK DAM (STONE)



## DIVERSION

- CONSTRUCTION SPECIFICATIONS**
1. ALL TREES, BRUSH, STUMPS, OBSTRUCTIONS, AND OTHER OBJECTIONABLE MATERIAL SHALL BE REMOVED AND DISPOSED OF SO AS NOT TO INTERFERE WITH THE PROPER FUNCTIONING OF THE DIVERSION.
  2. THE DIVERSION SHALL BE EXCAVATED OR SHAPED TO LINE, GRADE, AND CROSS SECTION AS REQUIRED TO MEET THE CRITERIA SPECIFIED HEREIN AND FREE OF IRREGULARITIES WHICH WILL IMPEDE NORMAL FLOW.
  3. ALL FILLS SHALL BE MACHINE COMPACTED AS NEEDED TO PREVENT UNEQUAL SETTLEMENT THAT WOULD CAUSE DAMAGE IN THE COMPLETED DIVERSION.
  4. ALL EARTH REMOVED AND NOT NEEDED IN CONSTRUCTION SHALL BE SPREAD OR DISPOSED OF SO THAT IT WILL NOT INTERFERE WITH THE FUNCTIONING OF THE DIVERSION.
  5. DIVERSION CHANNEL SHALL BE STABILIZED IN ACCORDANCE WITH SPECIFICATION CH - CHANNEL STABILIZATION.

Di DIVERSION

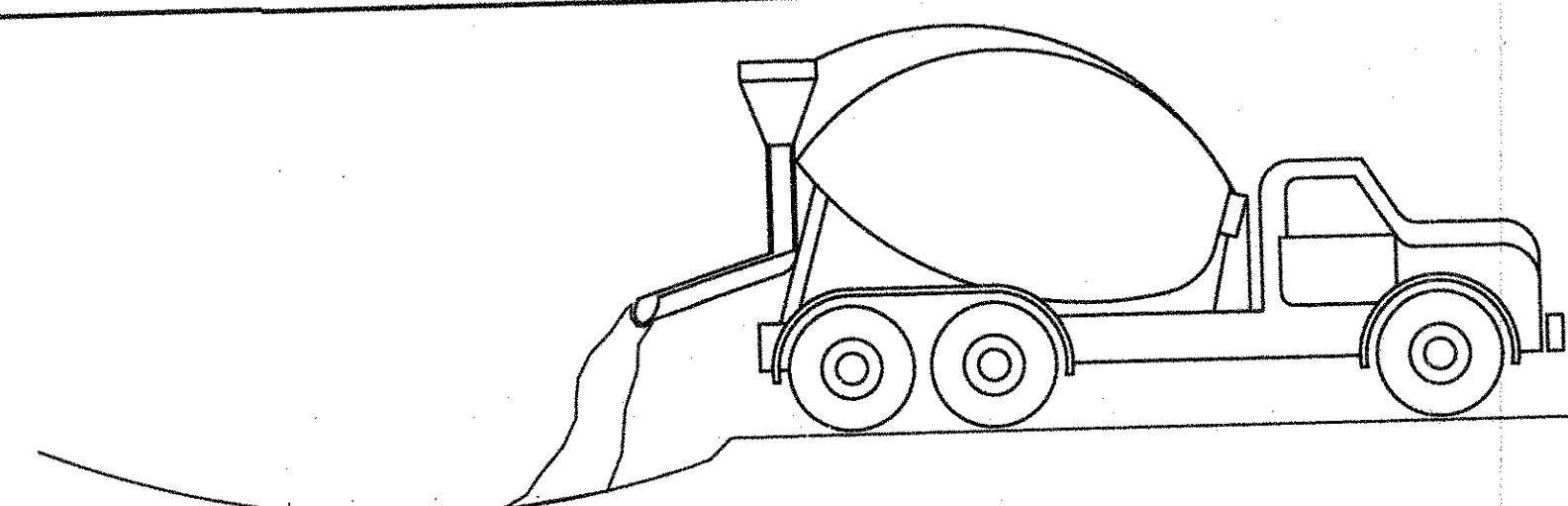


- NOTES ON DETAILS**
1.  $L_a$  IS THE LENGTH OF THE RIPRAP APRON.
  2.  $D = 1.5$  TIMES THE MAXIMUM STONE DIAMETER BUT NOT LESS THAN 6".
  3. IN A WELL-DEFINED CHANNEL EXTEND THE APRON UP THE CHANNEL BANKS TO AN ELEVATION OF 6" ABOVE THE MAXIMUM TAILWATER DEPTH OF TO THE TOP OF THE BANK, WHICHEVER IS LESS.
  4. A FILTER BLANKET OR FILTER FABRIC SHOULD BE INSTALLED BETWEEN THE RIPRAP AND SOIL FOUNDATION.

- CONSTRUCTION SPECIFICATIONS**
1. ENSURE THAT THE SUBGRADE FOR THE FILTER AND RIPRAP FOLLOWS THE REQUIRED LINES AND GRADES SHOWN IN THE PLAN. COMPACT ANY FILL REQUIRED IN THE SUBGRADE TO THE DENSITY OF THE SURROUNDING UNDISTURBED MATERIAL. LOW AREAS IN THE SUBGRADE ON UNDISTURBED SOIL MAY ALSO BE FILLED BY INCREASING THE RIPRAP THICKNESS.
  2. THE RIPRAP AND GRAVEL FILTER MUST CONFORM TO THE SPECIFIED GRADING LIMITS SHOWN ON THE PLANS.
  3. GEOTEXTILE MUST MEET DESIGN REQUIREMENTS AND BE PROPERLY PROTECTED FROM PUNCHING OR TEARING DURING INSTALLATION. REPAIR ANY DAMAGE BY REMOVING THE RIPRAP AND PLACING ANOTHER PIECE OF FILTER FABRIC OVER THE DAMAGED AREA. ALL CONNECTING JOINTS SHOULD OVERLAP A MINIMUM OF 1 FT. IF THE DAMAGE IS EXTENSIVE, REPLACE THE ENTIRE FILTER FABRIC.
  4. RIPRAP MAY BE PLACED BY EQUIPMENT, BUT TAKE CARE TO AVOID DAMAGING THE FILTER FABRIC.
  5. THE MINIMUM THICKNESS OF THE RIPRAP SHOULD BE 1.5 TIMES THE MAXIMUM STONE DIAMETER.
  6. CONSTRUCT THE APRON ON ZERO GRADE WITH NO OVERFALL AT THE END. MAKE THE TOP OF THE RIPRAP AT THE DOWNSTREAM END LEVEL WITH THE RECEIVING AREA OR SLIGHTLY BELOW IT.
  7. ENSURE THAT THE APRON IS PROPERLY ALIGNED WITH THE RECEIVING STREAM AND PREFERABLY STRAIGHT THROUGHOUT ITS LENGTH. IF A CURVE IS NEEDED TO FIT SITE CONDITIONS, PLACE IT IN THE UPPER SECTION OF THE APRON.
  8. IMMEDIATELY AFTER CONSTRUCTION, STABILIZE ALL DISTURBED AREAS WITH VEGETATION.
  9. STONE QUALITY - SELECT STONE FOR RIPRAP FROM FIELD STONE OR QUARRY STONE. THE STONE SHOULD BE HARD, ANGULAR, AND HIGHLY WEATHER-RESISTANT. THE SPECIFIC GRAVITY OF THE INDIVIDUAL STONES SHOULD BE AT LEAST 2.5.
  10. FILTER - INSTALL A FILTER TO PREVENT SOIL MOVEMENT THROUGH THE OPENINGS IN THE RIPRAP. THE FILTER SHOULD CONSIST OF A GRADED GRAVEL LAYER OR A SYNTHETIC FILTER CLOTH. SEE APPENDIX C, P. C-1.

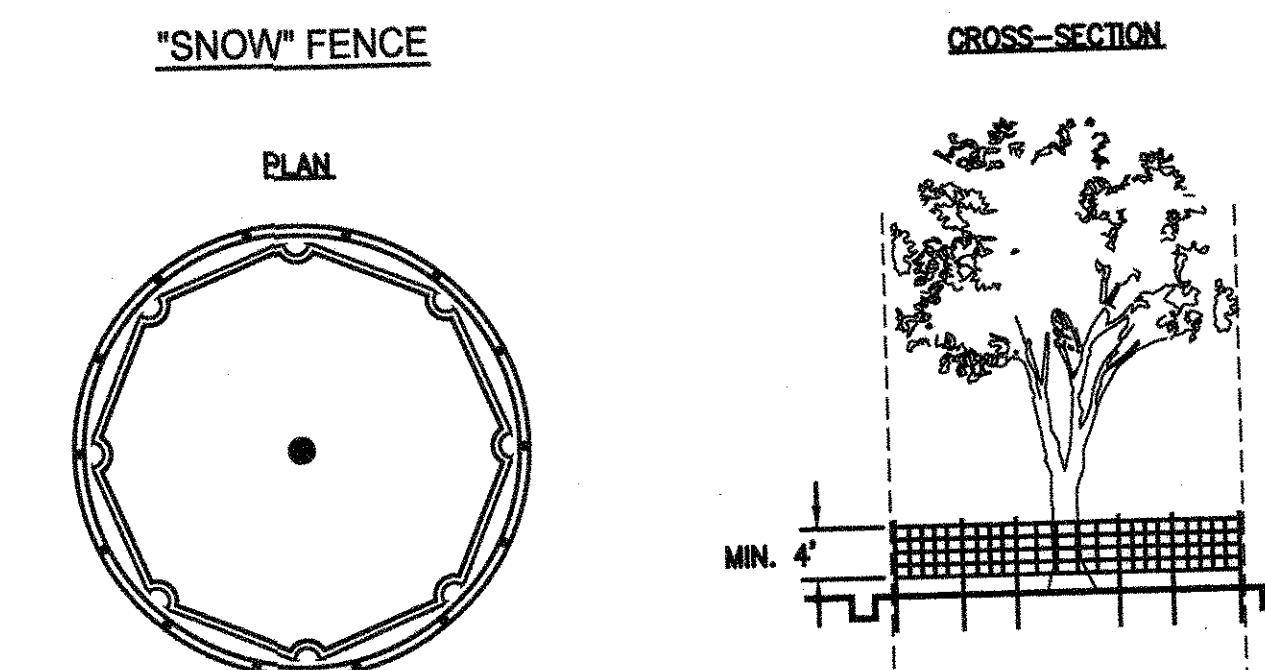
**MAINTENANCE**  
INSPECT RIPRAP OUTLET STRUCTURES AFTER HEAVY RAINS TO SEE IF ANY EROSION AROUND OR BELOW THE RIPRAP HAS TAKEN PLACE OR IF STONES HAVE BEEN DISLODGED. IMMEDIATELY MAKE ALL NEEDED REPAIRS TO PREVENT FURTHER DAMAGE.

St STORM DRAIN OUTLET PROTECTION



- Notes:**
1. DESIGNATE WASHDOWN AREA AND EXCAVATE PIT LARGE ENOUGH TO CONTAIN WASHDOWN WATER. THIS MUST BE AWAY FROM STORM DRAINS AND WATERWAYS.
  2. ADVISE CONCRETE TRUCK DRIVERS OF THE DESIGNATED WASH-OUT AREAS BEFORE THEY START THE JOB.
  3. WASHDOWN CHUTE, HOPPER, AND REAR OF VEHICLE ONLY. DO NOT WASH OUT DRUM.
  4. ENSURE THAT ALL WASHDOWN WATER STAYS IN PIT.
  5. DISPOSE OF SETTLED, HARDENED CONCRETE IN GARBAGE WITH OTHER CONSTRUCTION DEBRIS.
  6. NEVER DISPOSE OF WASHDOWN WATER IN STREETS, STORM DRAINS, OR STREAMS.

CWA CONCRETE TRUCK WASHDOWN



Tr TREE PROTECTION

- NOTES:**
1. USE TRENCHER (I.E. DITCH WHICH) TO CUT A 4"-5" W X 18" D TRENCH ALONG DRIP LINE (LIMIT OF CLEARING) AND BACKFILL WITH SAND AND LIGHTLY COMPACT.
  2. SPACE STAKES AT INTERVALS SUFFICIENT TO MAINTAIN ALL FENCING OUT OF DRIP LINE OR AS SHOWN BY ENGINEER (SET STAKES NO GREATER THAN 8 FEET ON CENTER-REBAR IS NOT TO BE USED FOR STAKES).
  3. MAINTAIN FENCE BY REPAIRING AND/OR REPLACING DAMAGED FENCE. DO NOT REMOVE FENCING PRIOR TO LANDSCAPING OPERATIONS.
  4. DO NOT STORE OR STACK MATERIALS, EQUIPMENT, OR VEHICLES WITHIN FENCED AREA.
  5. FENCE SHALL BE ORANGE VINYL "SNOW FENCE" 4' HIGH MINIMUM.

**APPROVED**  
DATE: 10/28/19  
BY: [Signature]

GSWCC  
MARK G. WHITLEY, PE  
000001036  
LEVEL I A CERTIFIED PERSONNEL  
LEVEL I B CERTIFIED INSPECTOR  
LEVEL II CERTIFIED DESIGN PROF.

WHITLEY  
ENGINEERING INC.  
DESIGN NPDES PROJECT MANAGEMENT  
TEL: (770)946-0256  
38 E. MAIN STREET N.  
HAMPTON, GA 30228

REV. DATE: DESCRIPTION:

1	04/30/19	REVISED PER CITY COMMENTS
2	05/08/19	REVISED PER CITY COMMENTS
3	05/16/19	REVISED PER CITY COMMENTS
4	06/25/19	REVISED PER CITY COMMENTS
5	07/16/19	REVISED PER CITY COMMENTS
6	07/25/19	REVISED PER CITY COMMENTS
7	09/09/2019	REVISED PER CITY COMMENTS

Not Released For Construction

Liberty Square Park Phase 5  
EROSION CONTROL DETAILS  
LAND LOT 229 AND 230 of the 6th DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA  
DATE: 02/04/2019  
SCALE: N.T.S.

SHEET  
27 OF 34



MATERIAL	QUANTITY
DRY STRAW OR HAY	2" - 4" DEPTH
WOOD WASTE (SAWDUST, BARK, CHIPS)	2" - 3" DEPTH
CUTBACK ASPHALT (SLOW CURING)	1200 GAL. PER ACRE (1/4 GAL PER SQ. YD.)
POLYETHYLENE FILM	COMPLETELY COVERING EXPOSED AREA, TRENCHED IN AT OUTER EDGES.

STRAW OR HAY MULCH SHALL BE ANCHORED IMMEDIATELY AFTER APPLICATION. MULCH MAY BE ANCHORED BY MECHANICALLY PRESSING INTO SURFACE. IF SPREAD WITH BLOWER EQUIPMENT, MULCH SHALL BE ANCHORED WITH EMULSIFIED ASPHALT (GRADE AE-5 OR SS-1)-100 GAL. ASPHALT + 100 GAL. WATER PER TON OF MULCH. NETTING SHALL BE USED TO ANCHOR WOOD WASTE AND CHIPS. POLYETHYLENE SHALL BE TRENCHED IN AT EDGES.

## Ds1 MULCHING

PLANT, PLANTING RATES, AND PLANTING DATES FOR TEMPORARY COVER OR COMBINATION CROPS 1/

Species	Broadcast Rate 2/ - PL 2/3 Per 1000 Sq. Ft.	Resource Area 4/	Planting Dates by Resource Area (Solid lines indicate optimum dates, dotted lines indicate permissible but marginal dates.)	Planting Dates (Solid lines indicate optimum dates, dotted lines indicate permissible but marginal dates.)	Remarks
BARLEY (Hordeum vulgare)		P	J F M A M J J A S O N D		14,000 seed per pound. May plant in summer months. Use on post-harvest soils.
alone	3 bu. (140 lbs.)	3.3 b.			
in mixture	10 bu. (420 lbs.)	0.9 b.			
LESPEDEZA ANNUAL (Lespedeza annua)		P	J F M A M J J A S O N D		250,000 seed per pound. May introduce for control plants. Use individual plants.
alone	40 bu. (1600 lbs.)	0.8 b.			
in mixture	10 bu. (420 lbs.)	0.2 b.			
TOURNEFORTIA (Tournefortia bicolor)		P	J F M A M J J A S O N D		1,000,000 seed per pound. May plant in summer months. Use on post-harvest soils.
alone	4 bu. (160 lbs.)	0.1 b.			
in mixture	20 bu. (800 lbs.)	0.05 b.			
MILLET, BROWNIPTOP (Panicum polyanthemum)		P	J F M A M J J A S O N D		137,000 seed per pound. Quick to establish. Use on post-harvest soils.
alone	40 bu. (1600 lbs.)	0.8 b.			
in mixture	10 bu. (420 lbs.)	0.2 b.			

PLANT, PLANTING RATES, AND PLANTING DATES FOR TEMPORARY COVER OR COMBINATION CROPS 1/

Species	Broadcast Rate 2/ - PL 2/3 Per 1000 Sq. Ft.	Resource Area 4/	Planting Dates by Resource Area (Solid lines indicate optimum dates, dotted lines indicate permissible but marginal dates.)	Planting Dates (Solid lines indicate optimum dates, dotted lines indicate permissible but marginal dates.)	Remarks
MILLET, PEARL (Pennisetum glaucum)		P	J F M A M J J A S O N D		68,000 seed per pound. Quick to establish. Use on post-harvest soils.
alone	50 bu. (2000 lbs.)	1.1 b.			
GATS (Avena sativa)		P	J F M A M J J A S O N D		13,000 seed per pound. Use on post-harvest soils. Not as winter-hardy as oats.
alone	4 bu. (160 lbs.)	2.9 b.			
in mixture	10 bu. (420 lbs.)	0.7 b.			
RYE (Secale cereale)		P	J F M A M J J A S O N D		16,000 seed per pound. Quick to establish. Use on post-harvest soils.
alone	3 bu. (120 lbs.)	3.8 b.			
in mixture	10 bu. (420 lbs.)	0.8 b.			
BERBERIS ANNUAL (Berberis annua)		P	J F M A M J J A S O N D		227,000 seed per pound. Quick to establish. Use on post-harvest soils.
alone	40 bu. (1600 lbs.)	0.9 b.			
SUDANGRASS (Sorghum sudanense)		P	J F M A M J J A S O N D		50,000 seed per pound. Good on erodible soils. Use on post-harvest soils.
alone	60 bu. (2400 lbs.)	1.4 b.			

PLANT, PLANTING RATES, AND PLANTING DATES FOR TEMPORARY COVER OR COMBINATION CROPS

Species	Broadcast Rate 2/ - PL 2/3 Per 1000 Sq. Ft.	Resource Area 4/	Planting Dates by Resource Area (Solid lines indicate optimum dates, dotted lines indicate permissible but marginal dates.)	Planting Dates (Solid lines indicate optimum dates, dotted lines indicate permissible but marginal dates.)	Remarks
VEGET (Vicia sativa)		P	J F M A M J J A S O N D		16,000 seed per pound.
alone	3 bu. (120 lbs.)	4.1 b.			
in mixture	10 bu. (420 lbs.)	0.7 b.			

1/ Temporary cover crops are very competitive and will cover soil permanently if seeded too heavily.  
2/ Refer to seed rate by 1000 sq. ft. when 1000 sq. ft. is used.  
3/ PL 2/3 is an abbreviation for Plant Line 2/3.  
4/ P represents the Southern Piedmont MRA.

## Ds2 STABILIZATION WITH TEMPORARY SEEDING

TYPE OF SPECIES	YEAR	ANALYSIS OR EQUIVALENT N-P-K	RATE	N TOP DRESSING RATE
1. Cool season grasses	First Second Maintenance	6-12-12 6-12-12 10-10-10	1500 lbs./ac. 1000 lbs./ac. 400 lbs./ac.	50-100 lbs./ac. 1/2/ 30
2. Cool season grasses and legumes	First Second Maintenance	6-12-12 6-12-12 10-10-10	1500 lbs./ac. 1000 lbs./ac. 400 lbs./ac.	0-50 lbs./ac. 1/ 30
3. Ground covers	First Second Maintenance	10-10-10 10-10-10 10-10-10	1300 lbs./ac. 3/ 1300 lbs./ac. 3/ 1100 lbs./ac.	
4. Pine seedlings	First	20-10-5	one 21-gram pellet per seedling placed in the closing hole	
5. Shrub Lespedeza	First Maintenance	0-10-10 0-10-10	700 lbs./ac. 700 lbs./ac. 4/	
6. Temporary cover crops seeded alone	First	10-10-10	500 lbs./ac.	30 lbs./ac. 5/
7. Warm season grasses	First Second Maintenance	6-12-12 6-12-12 10-10-10	1500 lbs./ac. 800 lbs./ac. 400 lbs./ac.	50-100 lbs./ac. 2/6/ 50-100 lbs./ac. 2/ 30lbs./ac.
8. Warm season grasses and legumes	First Second Maintenance	6-12-12 6-12-12 10-10-10	1500 lbs./ac. 800 lbs./ac. 400 lbs./ac.	50 lbs./ac. 1/6/ 50 lbs./ac. 1/6/ 50 lbs./ac.

1/ Apply in spring following seeding.  
2/ Apply in split applications when high rates are used.  
3/ Apply in 3 split applications.  
4/ Apply when plants are pruned.  
5/ Apply to grass species only.  
6/ Apply when plants grow to a height of 2 to 4 inches.

PLANTS, PLANTING RATES, AND PLANTING DATES FOR PERMANENT COVER

Species	Broadcast Rate 2/ - PL 2/3 Per 1000 Sq. Ft.	Resource Area 4/	Planting Dates by Resource Area (Solid lines indicate optimum dates, dotted lines indicate permissible but marginal dates.)	Planting Dates (Solid lines indicate optimum dates, dotted lines indicate permissible but marginal dates.)	Remarks
BAHIA, PENSACOLA (Stenotaphrum secundatum)		P	J F M A M J J A S O N D		160,000 seed per pound. Low growing, fast spreading. Use on post-harvest soils. May plant in summer months. Use on post-harvest soils.
alone	50 bu. (2000 lbs.)	1.4 b.			
with other perennials	20 bu. (800 lbs.)	0.7 b.			
TALL FESCUE (Festuca arvensis)		P	J F M A M J J A S O N D		200,000 seed per pound. Low growing, fast spreading. Use on post-harvest soils.
alone	50 bu. (2000 lbs.)	1.4 b.			
with other perennials	20 bu. (800 lbs.)	0.7 b.			
BERMUDA, COMMON (Cynodon dactylon)		P	J F M A M J J A S O N D		1,287,000 seed per pound. Low growing, fast spreading. Use on post-harvest soils.
alone	10 bu. (420 lbs.)	0.2 b.			
with other perennials	5 bu. (210 lbs.)	0.1 b.			

Species	Broadcast Rate 2/ - PL 2/3 Per 1000 Sq. Ft.	Resource Area 4/	Planting Dates by Resource Area (Solid lines indicate optimum dates, dotted lines indicate permissible but marginal dates.)	Planting Dates (Solid lines indicate optimum dates, dotted lines indicate permissible but marginal dates.)	Remarks
BERMUDA, COMMON (Cynodon dactylon)		P	J F M A M J J A S O N D		Plant with winter annuals.
alone	10 bu. (420 lbs.)	0.2 b.			
with other perennials	5 bu. (210 lbs.)	0.1 b.			
BERMUDA, SPREAD (Cynodon dactylon)		P	J F M A M J J A S O N D		Plant with winter annuals.
alone	40 bu. (1600 lbs.)	0.8 b.			
with other perennials	20 bu. (800 lbs.)	0.4 b.			
CENTPEDE (Dactyloctenium aegyptium)		P	J F M A M J J A S O N D		200,000 seed per pound. Low growing, fast spreading. Use on post-harvest soils.
alone	10 bu. (420 lbs.)	0.2 b.			
with other perennials	5 bu. (210 lbs.)	0.1 b.			

Species	Broadcast Rate 2/ - PL 2/3 Per 1000 Sq. Ft.	Resource Area 4/	Planting Dates by Resource Area (Solid lines indicate optimum dates, dotted lines indicate permissible but marginal dates.)	Planting Dates (Solid lines indicate optimum dates, dotted lines indicate permissible but marginal dates.)	Remarks
BERMUDA, COMMON (Cynodon dactylon)		P	J F M A M J J A S O N D		Plant with winter annuals.
alone	10 bu. (420 lbs.)	0.2 b.			
with other perennials	5 bu. (210 lbs.)	0.1 b.			
BERMUDA, SPREAD (Cynodon dactylon)		P	J F M A M J J A S O N D		Plant with winter annuals.
alone	40 bu. (1600 lbs.)	0.8 b.			
with other perennials	20 bu. (800 lbs.)	0.4 b.			
CENTPEDE (Dactyloctenium aegyptium)		P	J F M A M J J A S O N D		200,000 seed per pound. Low growing, fast spreading. Use on post-harvest soils.
alone	10 bu. (420 lbs.)	0.2 b.			
with other perennials	5 bu. (210 lbs.)	0.1 b.			

Species	Broadcast Rate 2/ - PL 2/3 Per 1000 Sq. Ft.	Resource Area 4/	Planting Dates by Resource Area (Solid lines indicate optimum dates, dotted lines indicate permissible but marginal dates.)	Planting Dates (Solid lines indicate optimum dates, dotted lines indicate permissible but marginal dates.)	Remarks
BERMUDA, COMMON (Cynodon dactylon)		P	J F M A M J J A S O N D		Plant with winter annuals.
alone	10 bu. (420 lbs.)	0.2 b.			
with other perennials	5 bu. (210 lbs.)	0.1 b.			
BERMUDA, SPREAD (Cynodon dactylon)		P	J F M A M J J A S O N D		Plant with winter annuals.
alone	40 bu. (1600 lbs.)	0.8 b.			
with other perennials	20 bu. (800 lbs.)	0.4 b.			
CENTPEDE (Dactyloctenium aegyptium)		P	J F M A M J J A S O N D		200,000 seed per pound. Low growing, fast spreading. Use on post-harvest soils.
alone	10 bu. (420 lbs.)	0.2 b.			
with other perennials	5 bu. (210 lbs.)	0.1 b.			

Species	Broadcast Rate 2/ - PL 2/3 Per 1000 Sq. Ft.	Resource Area 4/	Planting Dates by Resource Area (Solid lines indicate optimum dates, dotted lines indicate permissible but marginal dates.)	Planting Dates (Solid lines indicate optimum dates, dotted lines indicate permissible but marginal dates.)	Remarks
BERMUDA, COMMON (Cynodon dactylon)		P	J F M A M J J A S O N D		Plant with winter annuals.
alone	10 bu. (420 lbs.)	0.2 b.			
with other perennials	5 bu. (210 lbs.)	0.1 b.			
BERMUDA, SPREAD (Cynodon dactylon)		P	J F M A M J J A S O N D		Plant with winter annuals.
alone	40 bu. (1600 lbs.)	0.8 b.			
with other perennials	20 bu. (800 lbs.)	0.4 b.			
CENTPEDE (Dactyloctenium aegyptium)		P	J F M A M J J A S O N D		200,000 seed per pound. Low growing, fast spreading. Use on post-harvest soils.
alone	10 bu. (420 lbs.)	0.2 b.			
with other perennials	5 bu. (210 lbs.)	0.1 b.			

Species	Broadcast Rate 2/ - PL 2/3 Per 1000 Sq. Ft.	Resource Area 4/	Planting Dates by Resource Area (Solid lines indicate optimum dates, dotted lines indicate permissible but marginal dates.)	Planting Dates (Solid lines indicate optimum dates, dotted lines indicate permissible but marginal dates.)	Remarks
BERMUDA, COMMON (Cynodon dactylon)		P	J F M A M J J A S O N D		Plant with winter annuals.
alone	10 bu. (420 lbs.)	0.2 b.			
with other perennials	5 bu. (210 lbs.)	0.1 b.			
BERMUDA, SPREAD (Cynodon dactylon)		P	J F M A M J J A S O N D		Plant with winter annuals.
alone	40 bu. (1600 lbs.)	0.8 b.			
with other perennials	20 bu. (800 lbs.)	0.4 b.			
CENTPEDE (Dactyloctenium aegyptium)		P	J F M A M J J A S O N D		200,000 seed per pound. Low growing, fast spreading. Use on post-harvest soils.
alone	10 bu. (420 lbs.)	0.2 b.			
with other perennials	5 bu. (210 lbs.)	0.1 b.			

## Ds3 STABILIZATION WITH PERMANENT VEGETATION

### APPROPRIATE SOD VARIETIES FOR ATLANTA

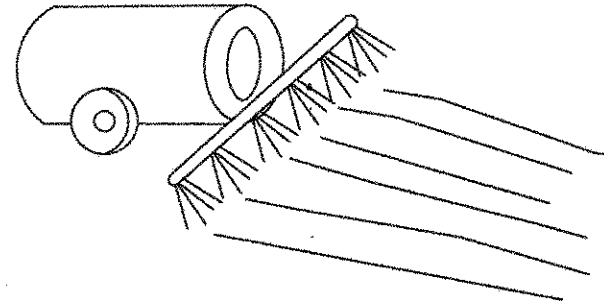
GRASS	VARIETY	GROWING SEASON
BERMUDA	COMMON TIFWAY TIFGREEN, TIFLAWN	WARM WEATHER
BAHIA	PENSACOLA	WARM WEATHER
CENTPEDE	---	WARM WEATHER
ZOYSIA	EMERALD MEYER	WARM WEATHER
TALL FESCUE	KENTUCKY	COOL WEATHER

**SOIL PREPARATION**  
BRING SOIL SURFACE TO FINAL GRADE. CLEAR SURFACE OF TRASH, WOODY DEBRIS, STONES AND CLODS LARGER THAN 1". APPLY SOD TO SOIL SURFACES ONLY AND NOT FROZEN SURFACES, OR GRAVEL TYPE SOILS.  
**MIX FERTILIZER INTO SOIL SURFACE.** FERTILIZE BASED ON SOIL TESTS OR GENERAL APPLICATION OF 10-10-10 @ 1000 LBS PER ACRE (1 LB/40 SQ. FT.)  
**AGRICULTURAL LIME SHOULD BE APPLIED BASED ON SOIL TESTS OR AT A RATE OF 1 TO 2 TONS / ACRE.**

GRASS TYPE	PLANTING YEAR	FERTILIZER (NPK)	RATE (LBS/ ACRE)	NITROGEN TOP DRESSING (LBS/ ACRE)
COOL SEASON GRASSES	1ST 2ND MAINTENANCE	6-12-12 6-12-12 10-10-10	1600 1000 400	50-100 --- 30
WARM SEASON GRASSES	1ST 2ND MAINTENANCE	6-12-12 6-12-12 10-10-10	1600 800 400	50-100 50-100 30

## Ds4 STABILIZATION WITH SODDING

### DUST CONTROL



**TEMPORARY METHODS**  
MULCHES, SEE STANDARD DS1 - DISTURBED AREA STABILIZATION (WITH MULCHING ONLY). SYNTHETIC RESINS MAY BE USED INSTEAD OF ASPHALT TO BIND MULCH MATERIAL. REFER TO STANDARD TB-TACKIFIERS AND BINDERS. RESINS SUCH AS CURASOL OR TERRATACK SHOULD BE USED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.

**VEGETATIVE COVER.** SEE STANDARD DS2 - DISTURBED AREA STABILIZATION (WITH TEMPORARY SEEDING).

**SPRAY-ON ADHESIVES.** THESE ARE USED ON MINERAL SOILS (NOT EFFECTIVE ON MUCK SOILS). KEEP TRAFFIC OFF THESE AREAS. REFER TO STANDARD TB-TACKIFIERS AND BINDERS.

**TILLAGE.** THIS PRACTICE IS DESIGNED TO ROUGHEN AND BRING CLODS TO THE SURFACE. IT IS AN EMERGENCY MEASURE WHICH SHOULD BE USED BEFORE WIND EROSION STARTS.

**IRRIGATION.** THIS IS GENERALLY DONE AS AN EMERGENCY TREATMENT. SITE IS SPRINKLED WITH WATER UNTIL THE SURFACE IS WET. REPEAT AS NEEDED.

**BARRIERS.** SOLID BOARD FENCES, SNOWFENCES, BURLAP FENCES, CRATE WALLS, BALES OF HAY AND SIMILAR MATERIAL CAN BE USED TO CONTROL AIR CURRENTS AND SOIL BLOWING. BARRIERS PLACED AT RIGHT ANGLES TO PREVAILING CURRENTS AT INTERVALS OF ABOUT 15 TIMES THEIR HEIGHT ARE EFFECTIVE IN CONTROLLING WIND EROSION.

**CALCIUM CHLORIDE.** APPLY AT RATE THAT WILL KEEP SURFACE MOIST. MAY NEED RETREATMENT.

**PERMANENT METHODS**  
**PERMANENT VEGETATION.** SEE STANDARD DS3 -DISTURBED AREA STABILIZATION (WITH PERMANENT VEGETATION). EXISTING TREES AND LARGE SHRUBS MAY AFFORD VALUABLE PROTECTION IF LEFT IN PLACE.

**TOPSOILING.** THIS ENTAILS COVERING THE SURFACE WITH LESS EROSION SOIL MATERIAL. SEE STANDARD TP - TOPSOILING.

**STONE.** COVER SURFACE WITH CRUSHED STONE OR COARSE GRAVEL. SEE STANDARD CR-CONSTRUCTION ROAD STABILIZATION.

## Du DUST CONTROL

### VEGETATION NOTES

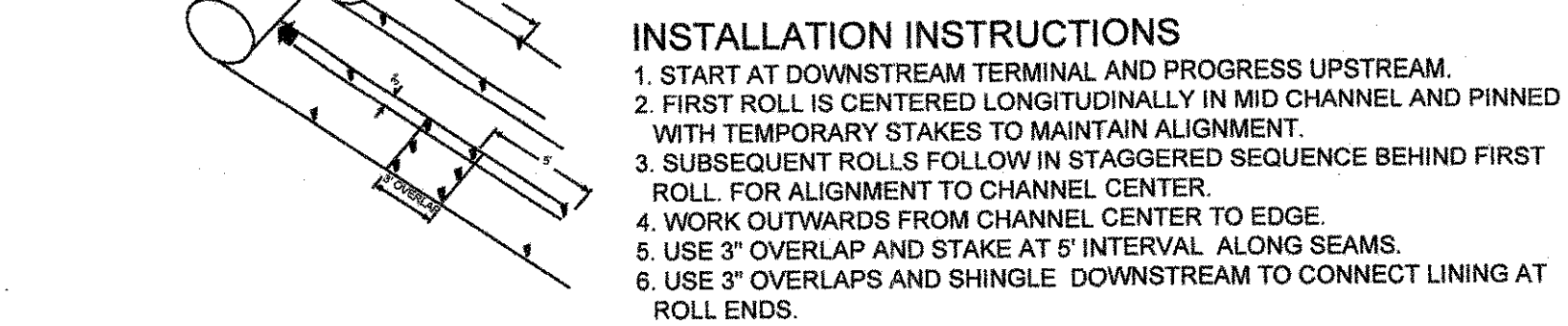
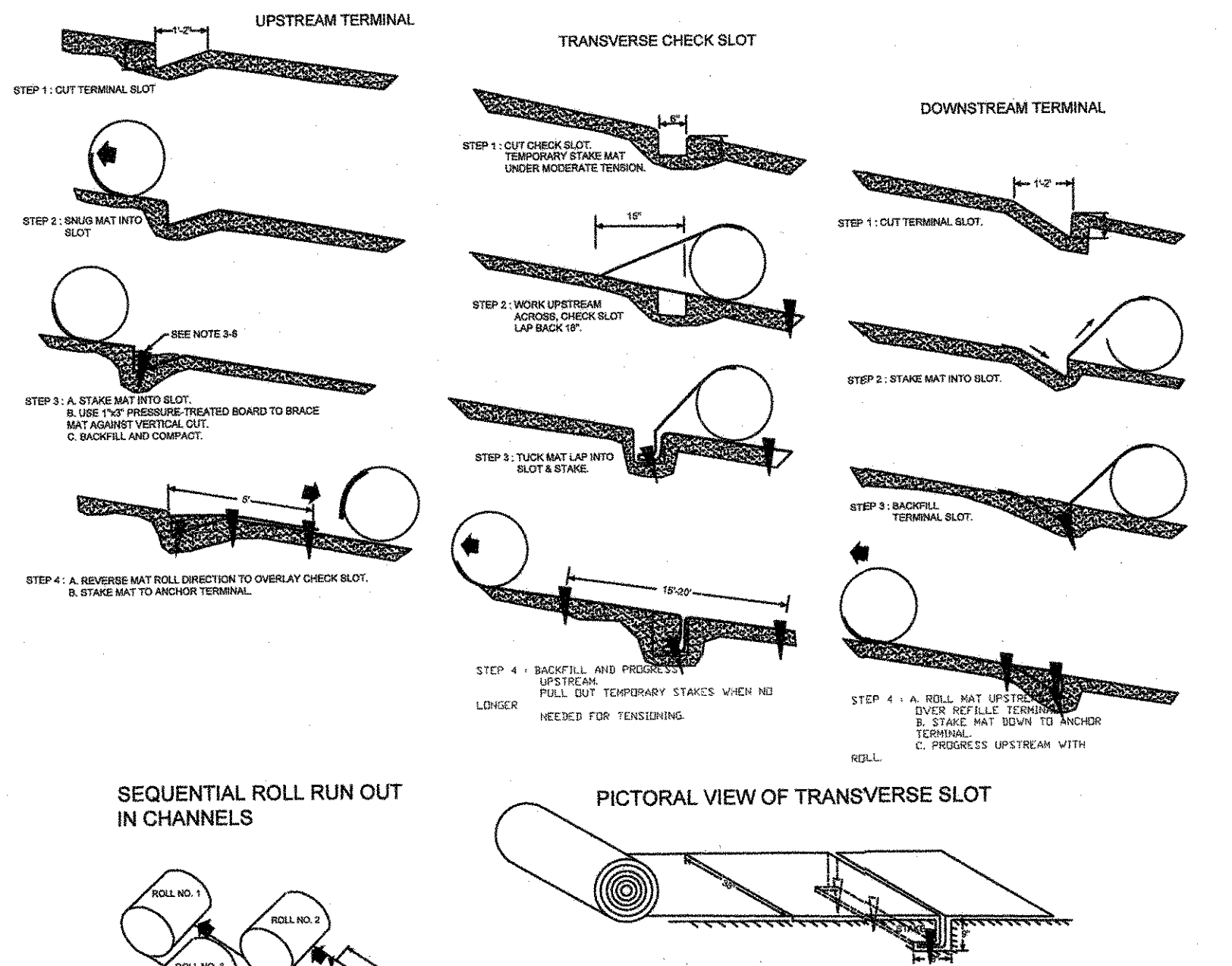
MULCH OR TEMPORARY GRASSING SHALL BE APPLIED TO ALL EXPOSED AREAS WITHIN 14 DAYS OF DISTURBANCE. TEMPORARY GRASSING, INSTEAD OF MULCH, CAN BE APPLIED TO ROUGH GRADED AREAS THAT WILL BE EXPOSED FOR LESS THAN SIX MONTHS. IF AN AREA IS EXPECTED TO BE UNDISTURBED FOR LONGER THAN SIX MONTHS, PERMANENT PERENNIAL VEGETATION SHALL BE USED. IF OPTIMUM PLANTING CONDITIONS FOR TEMPORARY GRASSING IS LACKING, MULCH CAN BE USED AS A SINGULAR EROSION CONTROL DEVICE FOR UP TO SIX MONTHS BUT IT SHALL BE APPLIED AT THE APPROPRIATE DEPTH, ANCHORED, AND HAVE A CONTINUOUS 90% COVER OR GREATER OF THE SOIL SURFACE. REFER TO SPECIFICATION DS1-DISTURBED AREA STABILIZATION (WITH MULCHING ONLY).

WHEN A HYDRAULIC SEEDER IS USED, SEEDBED PREPARATION IS NOT REQUIRED. WHEN USING CONVENTIONAL OR HANDSEEDING, SEEDBED PREPARATION IS NOT REQUIRED IF THE SOIL MATERIAL IS LOOSE AND NOT SEALED BY RAINFALL. WHEN SOIL HAS BEEN SEALED BY RAINFALL OR CONSISTS OF SMOOTH CUT SLOPES, THE SOIL SHALL BE PITTED, TRENCHED OR OTHERWISE SCARIFIED TO PROVIDE A PLACE FOR SEED TO LODGE AND GERMINATE.

**LIME AND FERTILIZER (TEMPORARY VEGETATION, DS-2)**  
AGRICULTURAL LIME IS REQUIRED UNLESS SOIL TESTS INDICATE OTHERWISE. APPLY AGRICULTURAL LIME AT A RATE OF ONE TON PER ACRE. GRADED AREAS REQUIRE LIME APPLICATION. SOILS CAN BE TESTED TO DETERMINE IF FERTILIZER IS NEEDED. ON REASONABLY FERTILE SOILS OR SOIL MATERIAL, FERTILIZER IS NOT REQUIRED. FOR SOILS WITH VERY LOW FERTILITY, 500 TO 700 POUNDS OF 10-10-10 FERTILIZER OR THE EQUIVALENT PER ACRE (12-16 LBS./1,000 SQ. FT.) SHALL BE APPLIED. FERTILIZER SHOULD BE APPLIED BEFORE LAND PREPARATION AND INCORPORATED WITH A DISK, RIPPER OR CHISEL.

**LIME AND FERTILIZER RATES AND ANALYSIS (PERMANENT VEGETATION, DS-3)**  
AGRICULTURAL LIME IS REQUIRED AT THE RATE OF ONE TO TWO TONS PER ACRE UNLESS SOIL TESTS INDICATE OTHERWISE. GRADED AREAS REQUIRE LIME APPLICATION. IF LIME IS APPLIED WITHIN SIX MONTHS OF PLANTING PERMANENT PERENNIAL VEGETATION, ADDITIONAL LIME IS NOT REQUIRED. AGRICULTURAL LIME SHALL BE WITHIN THE SPECIFICATIONS OF THE GEORGIA DEPARTMENT OF AGRICULTURE. INITIAL FERTILIZATION, NITROGEN, TOPDRESSING, AND MAINTENANCE FERTILIZER REQUIREMENTS FOR EACH SPECIES OR COMBINATION OF SPECIES ARE LISTED IN TABLE 6-5.1.

**MULCHING**  
MULCH IS REQUIRED FOR ALL PERMANENT VEGETATION APPLICATIONS. MULCH APPLIED TO SEEDED AREAS SHALL ACHIEVE 75% SOIL COVER. SELECT THE MULCHING MATERIAL FROM THE FOLLOWING AND APPLY AS INDICATED:  
1. DRY STRAW OR DRY HAY OF GOOD QUALITY AND FREE OF WEED SEEDS CAN BE USED. DRY STRAW SHALL BE APPLIED AT THE RATE OF 2 TONS PER ACRE. DRY HAY SHALL BE APPLIED AT A RATE OF 2 1/2 TONS PER ACRE.  
2. WOOD CELLULOSE MULCH OR WOOD PULP FIBER SHALL BE USED WITH HYDRAULIC SEEDING. IT SHALL BE APPLIED AT THE RATE OF 500 POUNDS PER ACRE. DRY STRAW OR DRY HAY SHALL BE APPLIED (AT THE RATE INDICATED ABOVE) AFTER HYDRAULIC SEEDING.  
3. ONE THOUSAND POUNDS OF WOOD CELLULOSE OR WOOD PULP FIBER, WHICH INCLUDES A TACKIFIER, SHALL BE USED WITH HYDRAULIC SEEDING ON SLOPES 3/4:1 OR STEEPER.  
4. SERICEA LESPEDEZZA HAY CONTAINING MATURE SEED SHALL BE APPLIED AT A RATE OF THREE TONS PER ACRE.  
5. PINE STRAW OR PINE BARK SHALL BE APPLIED AT A THICKNESS OF 3 INCHES FOR BEDDING PURPOSES. OTHER SUITABLE MATERIALS IN SUFFICIENT QUANTITY MAY BE USED WHERE ORNAMENTALS OR OTHER GROUND COVERS ARE PLANTED. THIS IS NOT APPROPRIATE FOR SEEDED AREAS.  
6. WHEN USING TEMPORARY EROSION CONTROL BLANKETS OR BLOCK SOD, MULCH IS NOT REQUIRED.  
7. BITUMINOUS TREATED ROVING MAY BE APPLIED ON PLANTED AREAS ON SLOPES, IN DITCHES OR DRY WATERWAYS TO PREVENT EROSION. BITUMINOUS TREATED ROVING SHALL BE APPLIED WITHIN 24 HOURS AFTER AN AREA HAS BEEN PLANTED. APPLICATION RATES AND MATERIALS MUST MEET GEORGIA DEPARTMENT OF TRANSPORTATION SPECIFICATIONS.



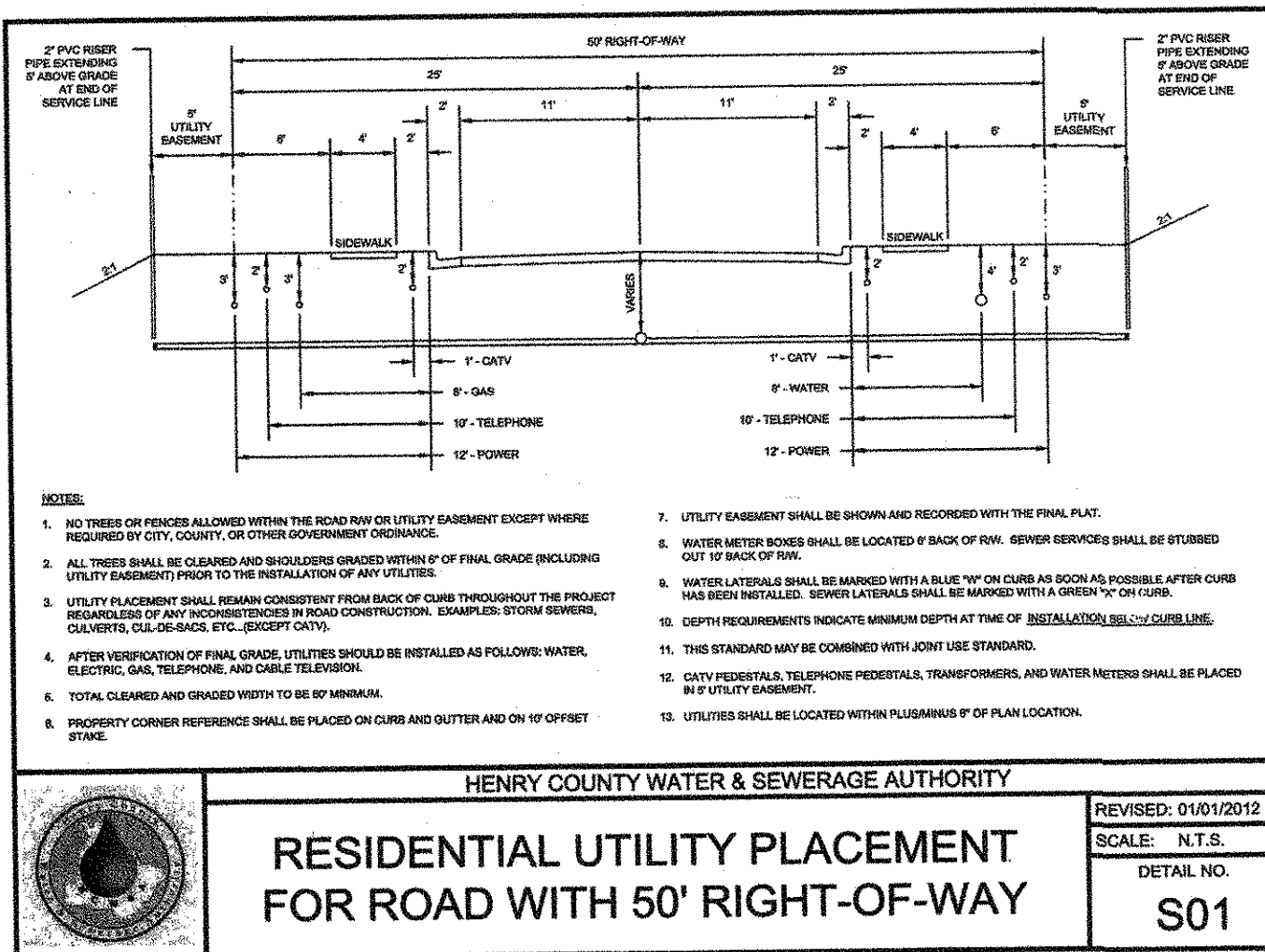
**INSTALLATION NOTES**  
**SITE PREPARATION**  
AFTER THE SITE HAS BEEN SHAPED AND GRADED TO THE APPROVED DESIGN, PREPARE A FRIABLE SEEDBED RELATIVELY FREE FROM CLODS AND ROCKS MORE THAN ONE INCH IN DIAMETER, AND ANY FOREIGN MATERIAL THAT WILL PREVENT CONTACT OF THE SOIL STABILIZATION MAT WITH THE SOIL SURFACE. SURFACE MUST BE SMOOTH TO ENSURE PROPER CONTACT OF BLANKETS OR MATTING TO THE SOIL SURFACE. IF NECESSARY, REDIRECT ANY RUNOFF FROM THE DITCH OR SLOPE DURING INSTALLATION.

**STAPLES**  
THE FOLLOWING ARE CONSIDERED APPROPRIATE STAPLING AND STAKING MATERIALS.  
**TEMPORARY BLANKETS**  
THIS INCLUDES STRAW, EXCELSIOR, COCONUT FIBER, AND WOOD FIBER BLANKETS. STAPLES SHALL BE USED TO ANCHOR TEMPORARY BLANKETS. U-SHAPED WIRE (11 GAUGE OR GREATER) STAPLES WITH LEGS AT LEAST 6 INCHES IN LENGTH AND A CROWN OF ONE INCH OR APPROPRIATE BIODEGRADABLE STAPLES CAN BE USED. STAPLES SHALL BE OF SUFFICIENT THICKNESS FOR SOIL PENETRATION WITHOUT UNDUE DISTORTION.

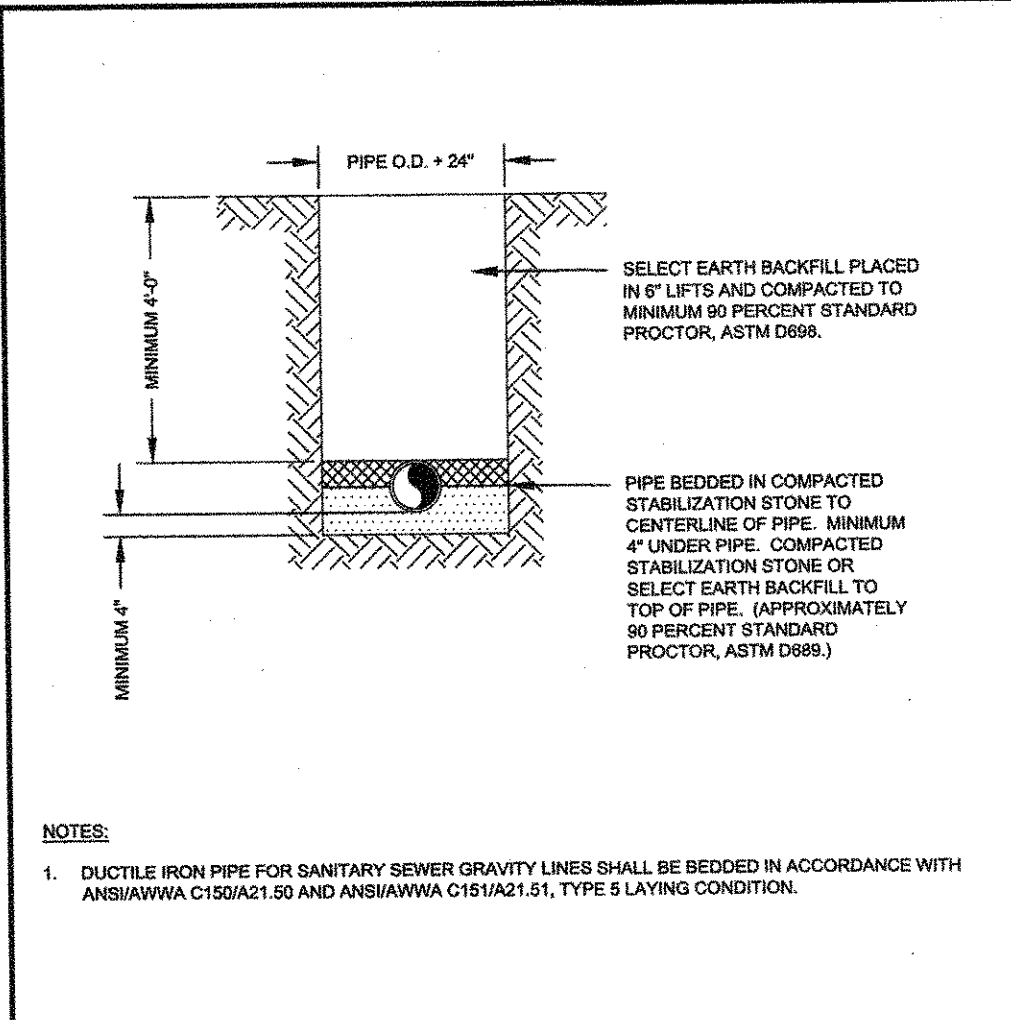
**PERMANENT MATTING**  
SOUND WOOD STAKES, 1X3 INCHES STOCK SAWN IN A TRIANGULAR SHAPE, SHALL BE USED, DEPENDING ON THE COMPACTION OF THE SOIL, SELECT STAKES WITH A LENGTH FROM 12 TO 18 INCHES. U-SHAPED STAPLES SHALL BE 11 GAUGE STEEL OR GREATER, WITH LEGS AT A MINIMUM OF 8 INCHES LENGTH WITH A 2 INCH CROWN.

**PLANTING**  
LIME, FERTILIZER, AND SEED SHALL BE APPLIED IN ACCORDANCE WITH SEEDING OR OTHER TYPE OF PLANTING PLAN COMPLETED PRIOR TO INSTALLATION OF TEMPORARY COMBINATION BLANKETS OR JUTE MESH. FOR PERMANENT MATS, THE AREA MUST BE BROUGHT TO FINAL

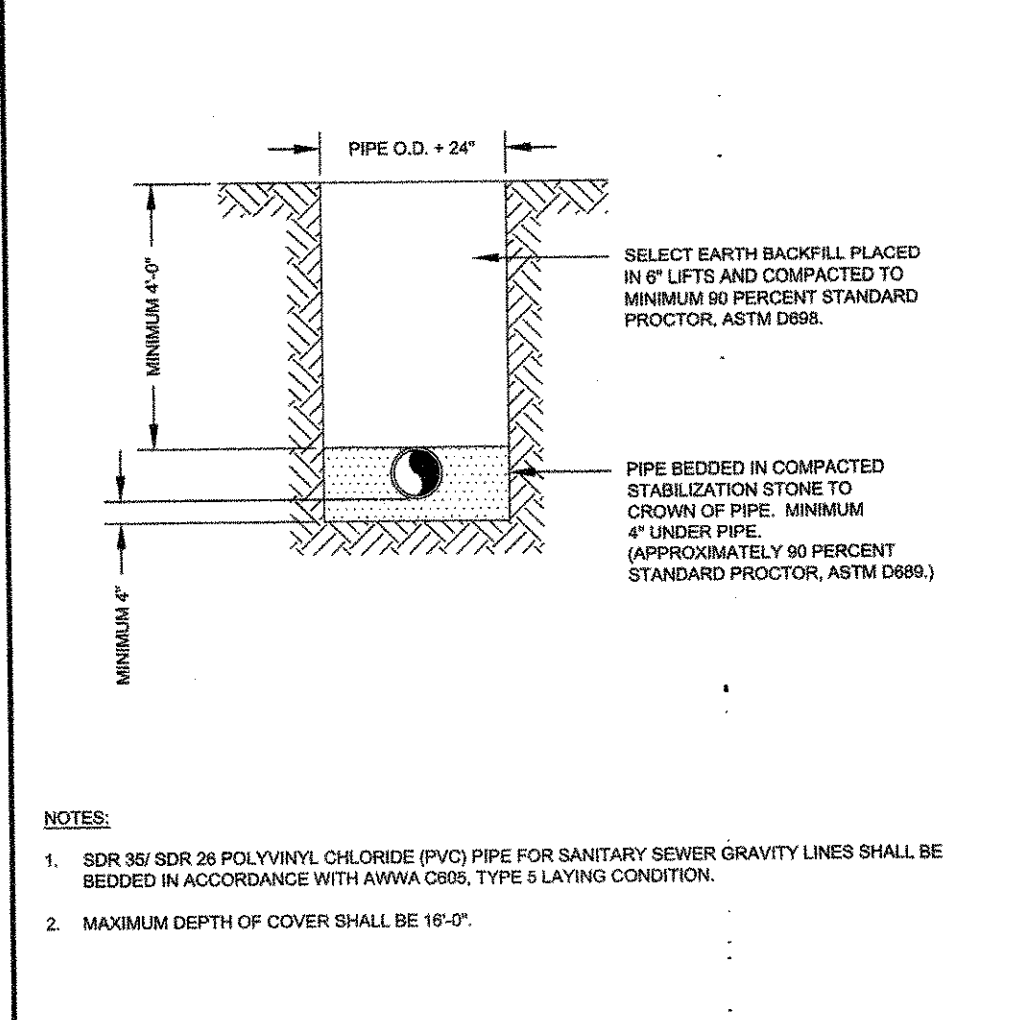




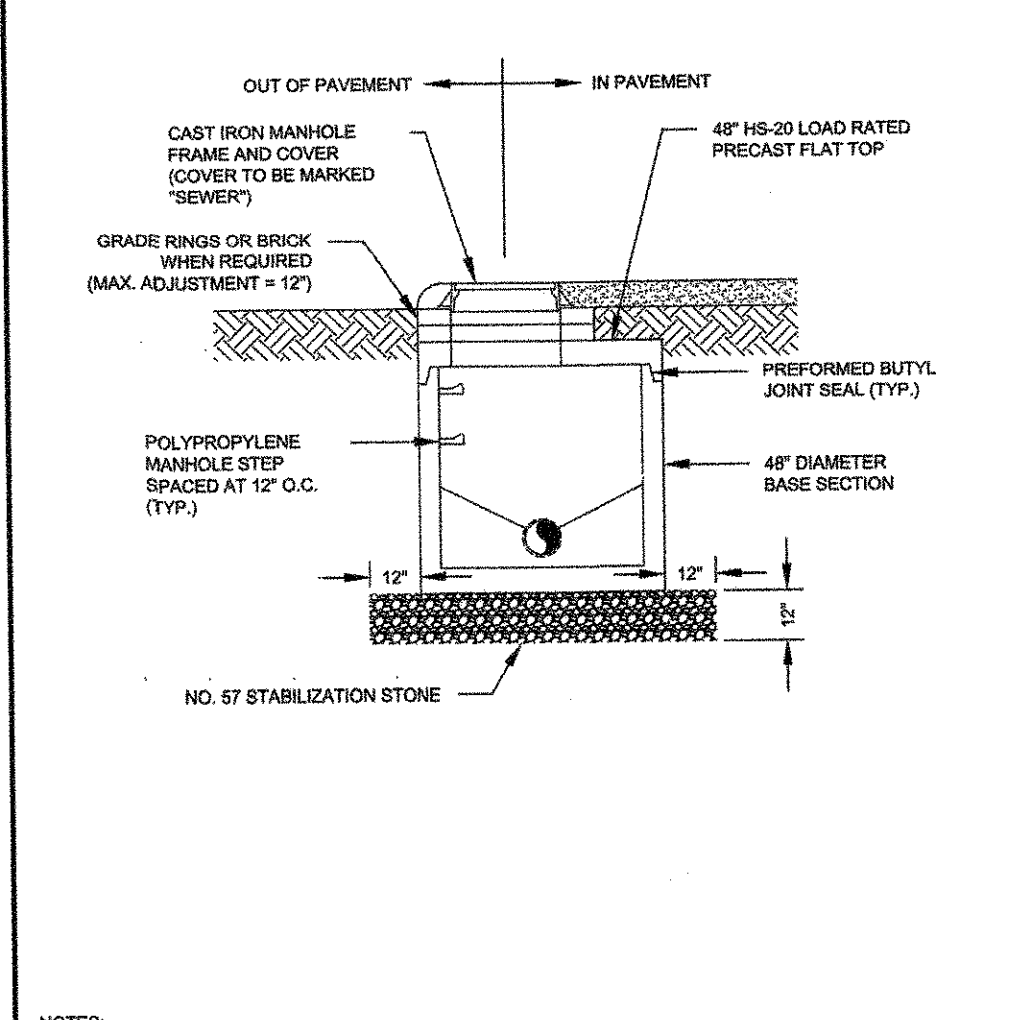
HENRY COUNTY WATER & SEWERAGE AUTHORITY  
**RESIDENTIAL UTILITY PLACEMENT  
FOR ROAD WITH 50' RIGHT-OF-WAY**  
REVISION: 01/01/2012  
SCALE: N.T.S.  
DETAIL NO. **S01**



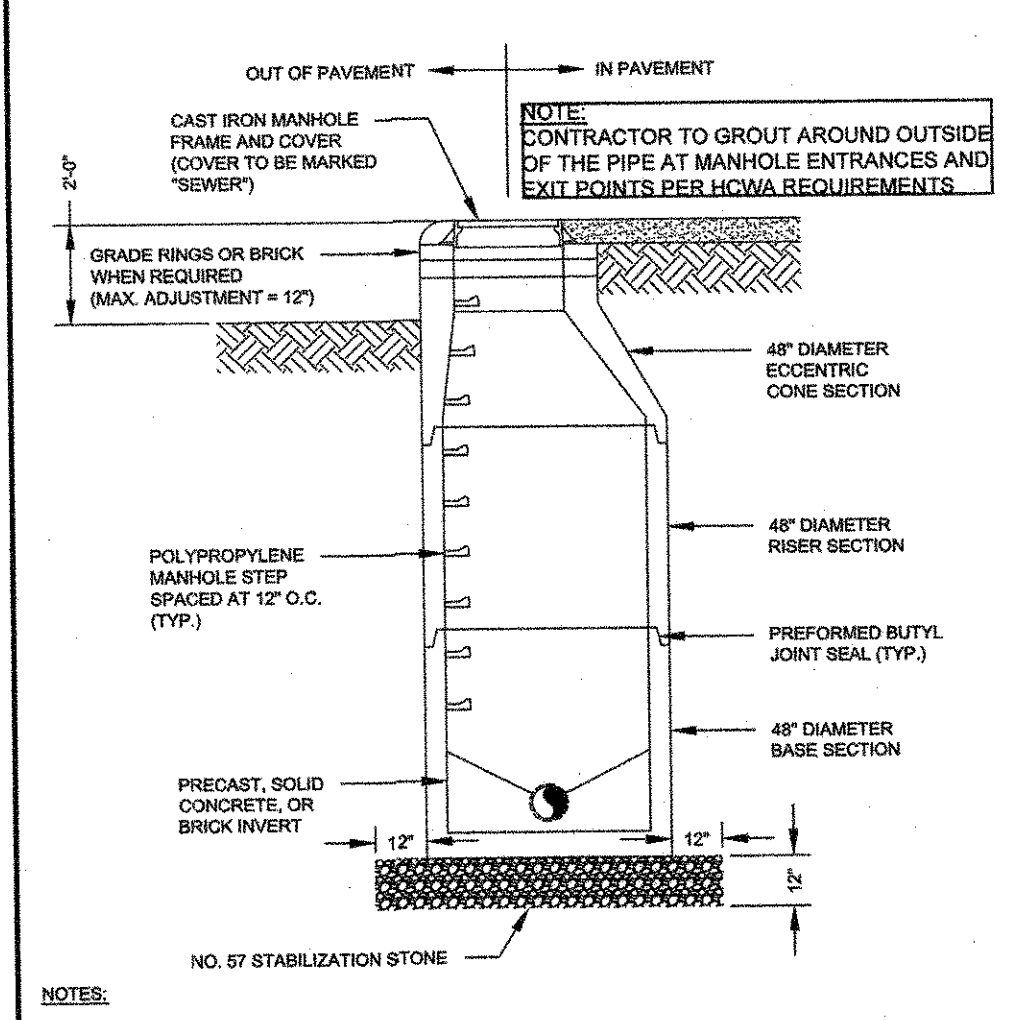
HENRY COUNTY WATER & SEWERAGE AUTHORITY  
**DUCTILE IRON  
GRAVITY SEWER  
TRENCH DETAIL**  
REVISION: 01/01/2012  
SCALE: N.T.S.  
DETAIL NO. **S04**



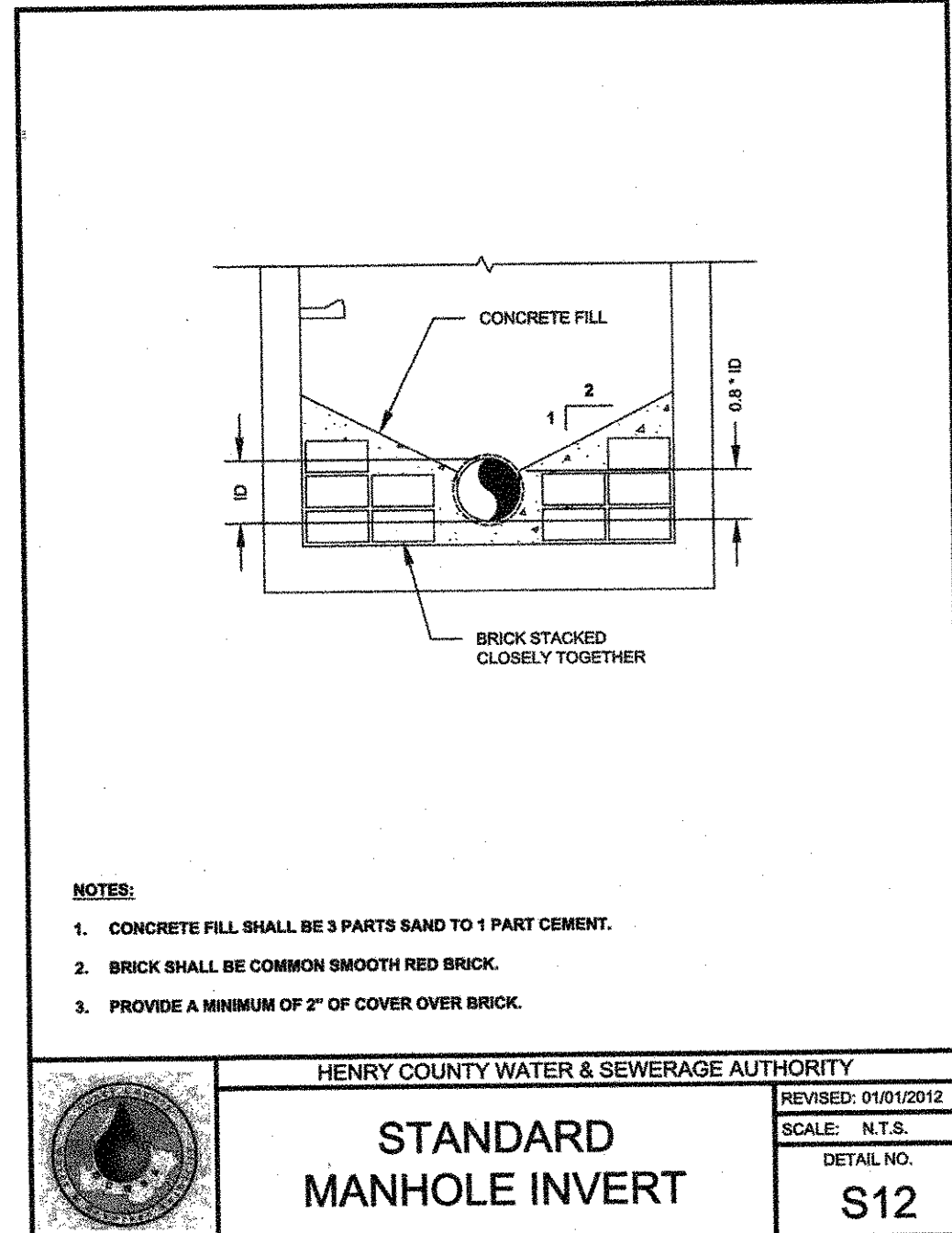
HENRY COUNTY WATER & SEWERAGE AUTHORITY  
**SDR 35/SDR 26  
GRAVITY SEWER  
TRENCH DETAIL**  
REVISION: 01/01/2012  
SCALE: N.T.S.  
DETAIL NO. **S05**



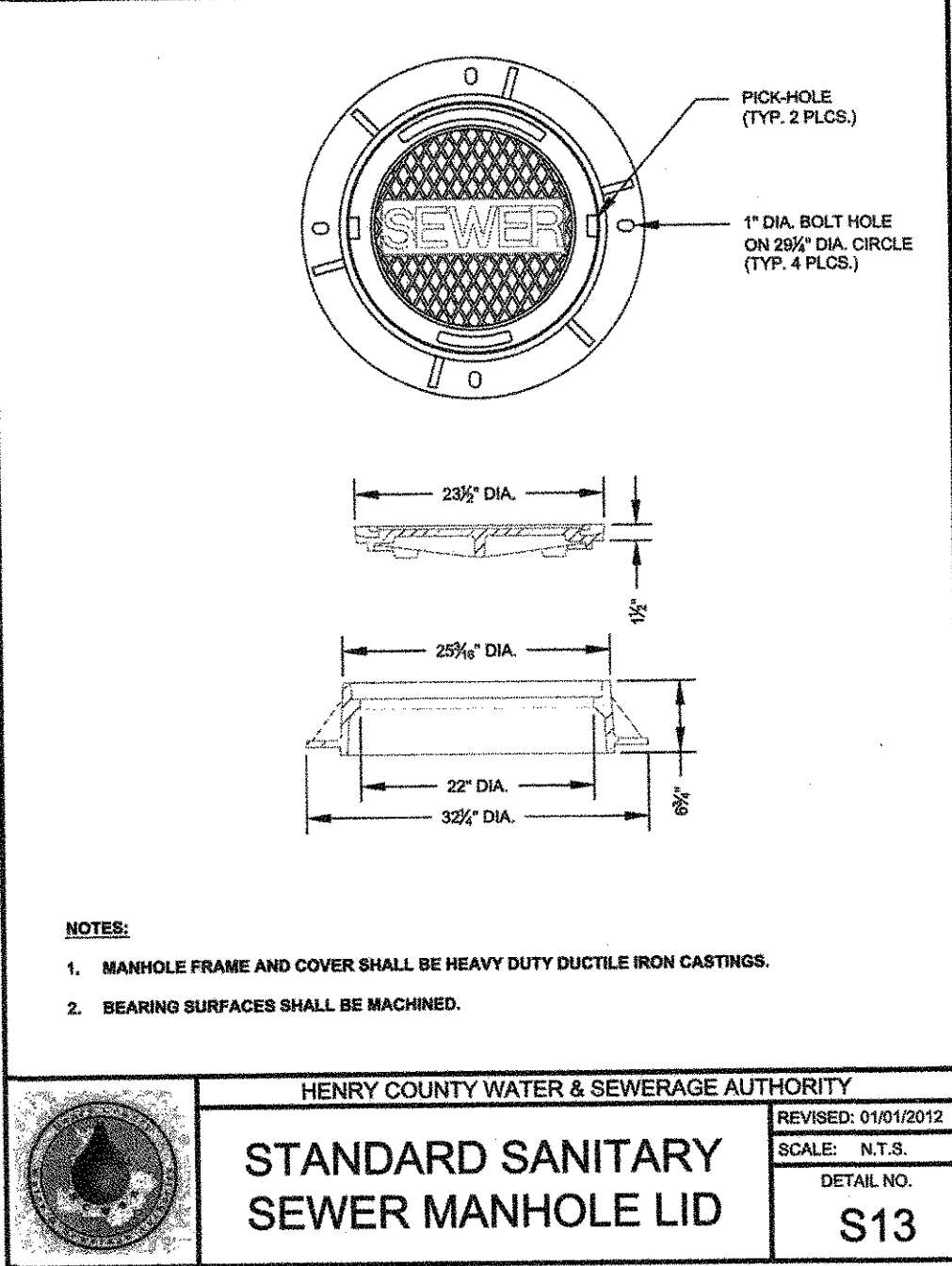
HENRY COUNTY WATER & SEWERAGE AUTHORITY  
**SHALLOW SANITARY  
SEWER MANHOLE**  
REVISION: 01/01/2012  
SCALE: N.T.S.  
DETAIL NO. **S10**



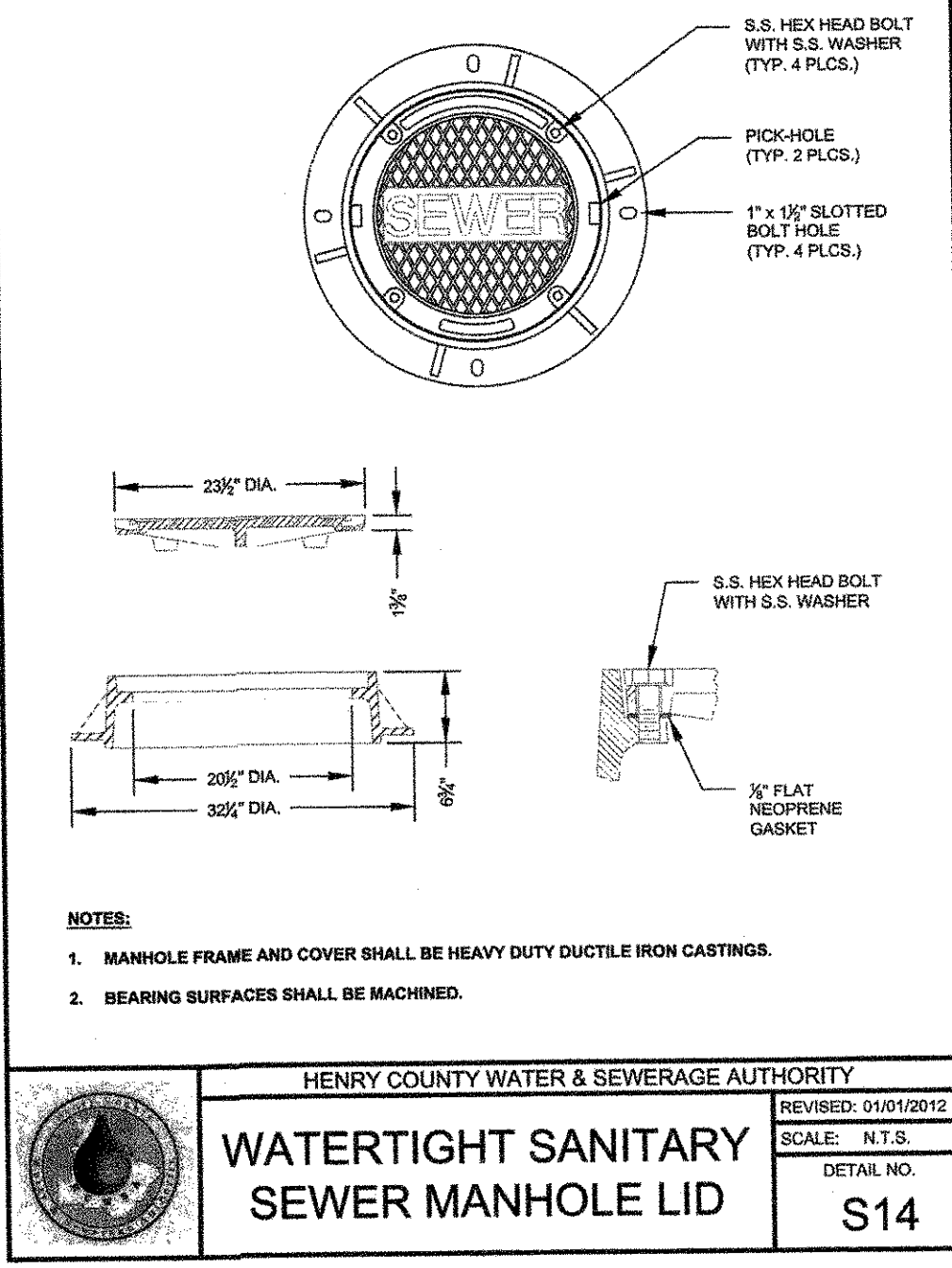
HENRY COUNTY WATER & SEWERAGE AUTHORITY  
**STANDARD SANITARY  
SEWER MANHOLE**  
REVISION: 01/01/2012  
SCALE: N.T.S.  
DETAIL NO. **S07**



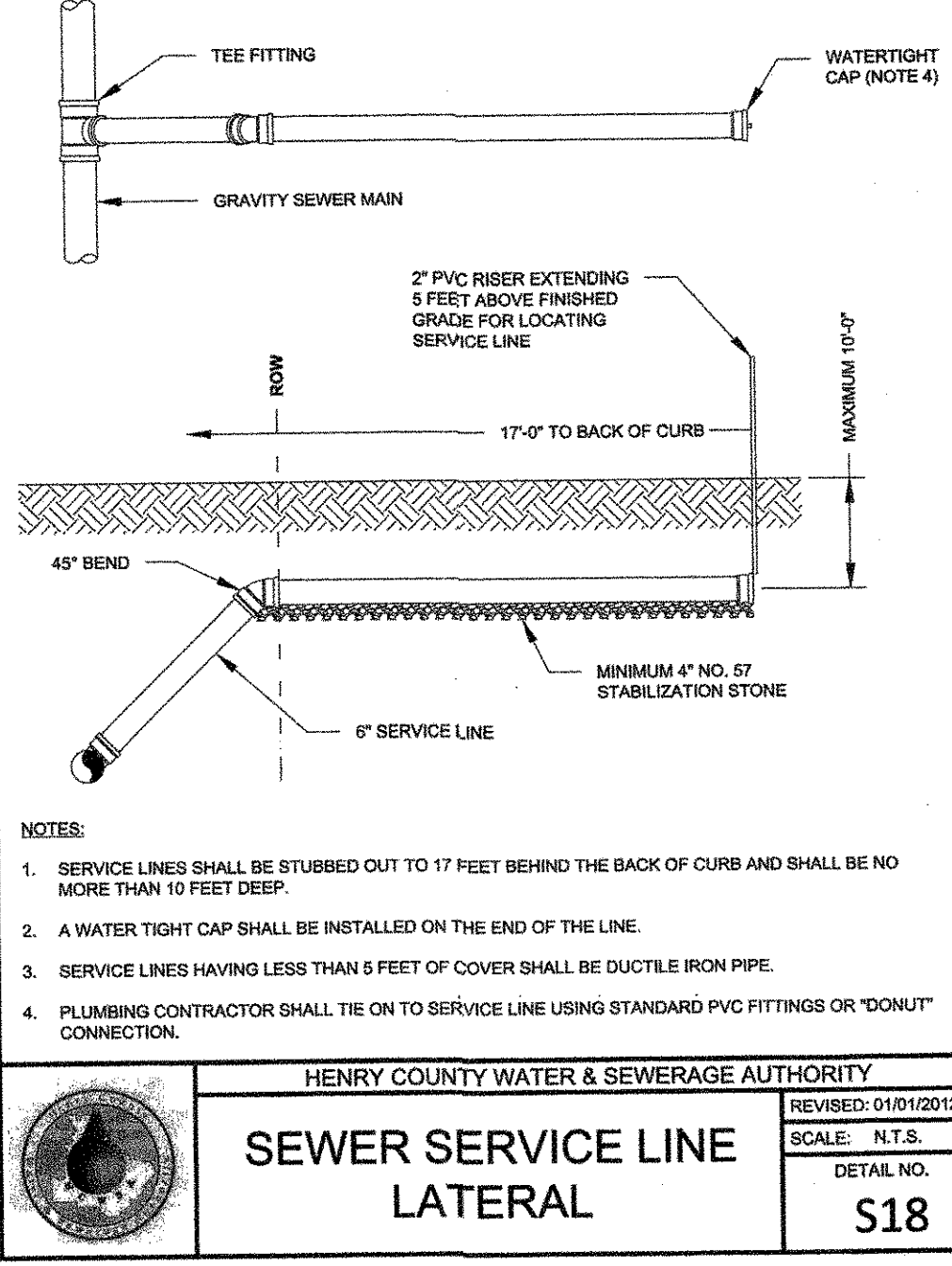
HENRY COUNTY WATER & SEWERAGE AUTHORITY  
**STANDARD  
MANHOLE INVERT**  
REVISION: 01/01/2012  
SCALE: N.T.S.  
DETAIL NO. **S12**



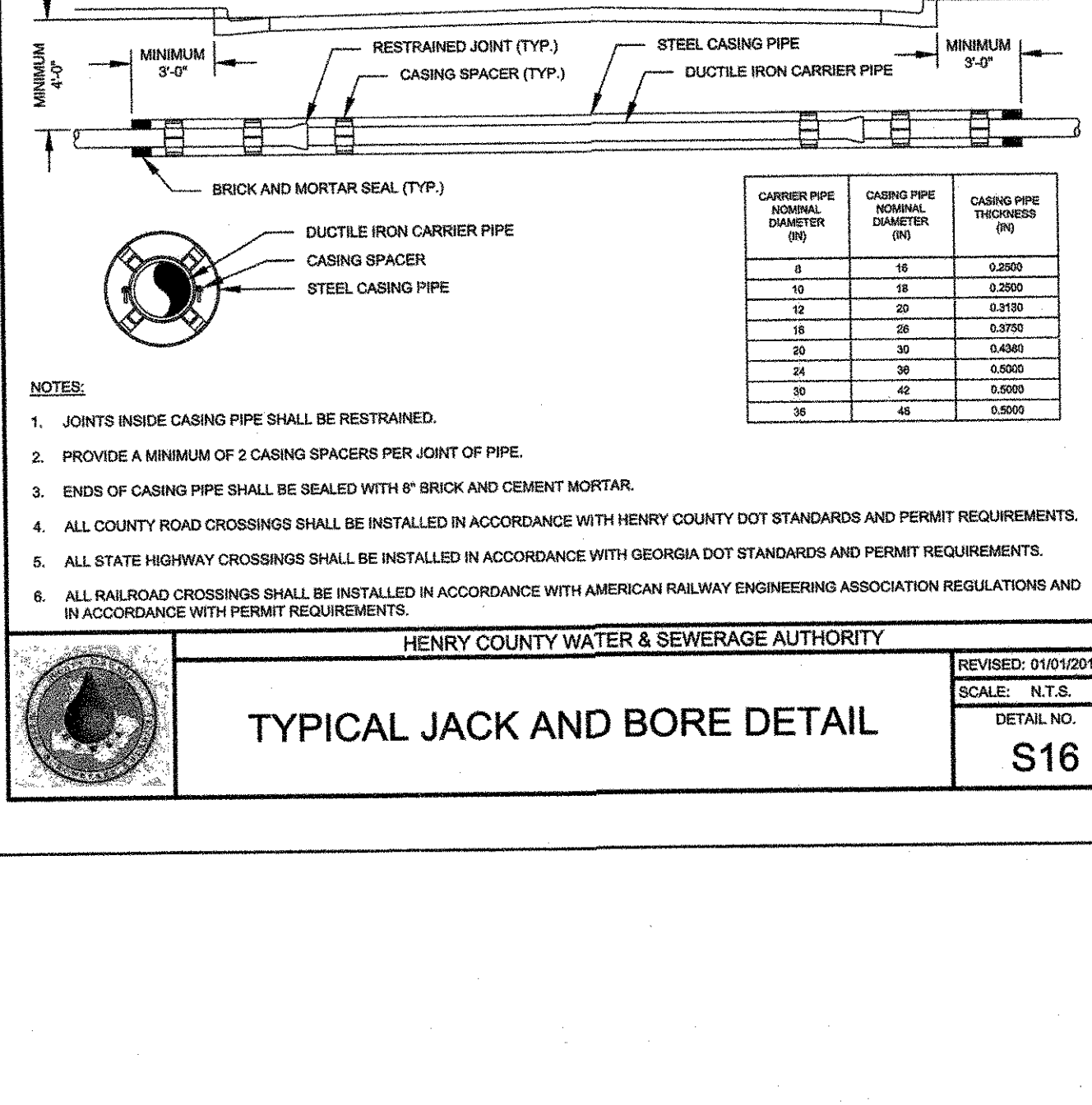
HENRY COUNTY WATER & SEWERAGE AUTHORITY  
**STANDARD SANITARY  
SEWER MANHOLE LID**  
REVISION: 01/01/2012  
SCALE: N.T.S.  
DETAIL NO. **S13**



HENRY COUNTY WATER & SEWERAGE AUTHORITY  
**WATERTIGHT SANITARY  
SEWER MANHOLE LID**  
REVISION: 01/01/2012  
SCALE: N.T.S.  
DETAIL NO. **S14**



HENRY COUNTY WATER & SEWERAGE AUTHORITY  
**SEWER SERVICE LINE  
LATERAL**  
REVISION: 01/01/2012  
SCALE: N.T.S.  
DETAIL NO. **S18**



HENRY COUNTY WATER & SEWERAGE AUTHORITY  
**TYPICAL JACK AND BORE DETAIL**  
REVISION: 01/01/2012  
SCALE: N.T.S.  
DETAIL NO. **S16**

GSWCC  
MARK G. WHITLEY, PE  
000001036  
LEVEL I CERTIFIED PERSONNEL  
LEVEL II CERTIFIED DESIGN PROF.

**WHITLEY  
ENGINEERING INC.**  
DESIGN NPDES PROJECT MANAGEMENT  
TEL: (770)946-0256  
38 E. MAIN STREET N.  
HAMPTON, GA 30228

REV.	DATE:	DESCRIPTION:
1	04/30/19	REVISED PER CITY COMMENTS
2	05/08/19	REVISED PER CITY COMMENTS
3	05/16/19	REVISED PER HCWA COMMENTS
4	06/25/19	REVISED PER CITY COMMENTS
5	07/15/19	REVISED PER CITY COMMENTS
6	07/24/19	REVISED PER CITY COMMENTS
7	08/02/19	REVISED PER CITY COMMENTS

☒ Not Released For Construction  
Released For Construction

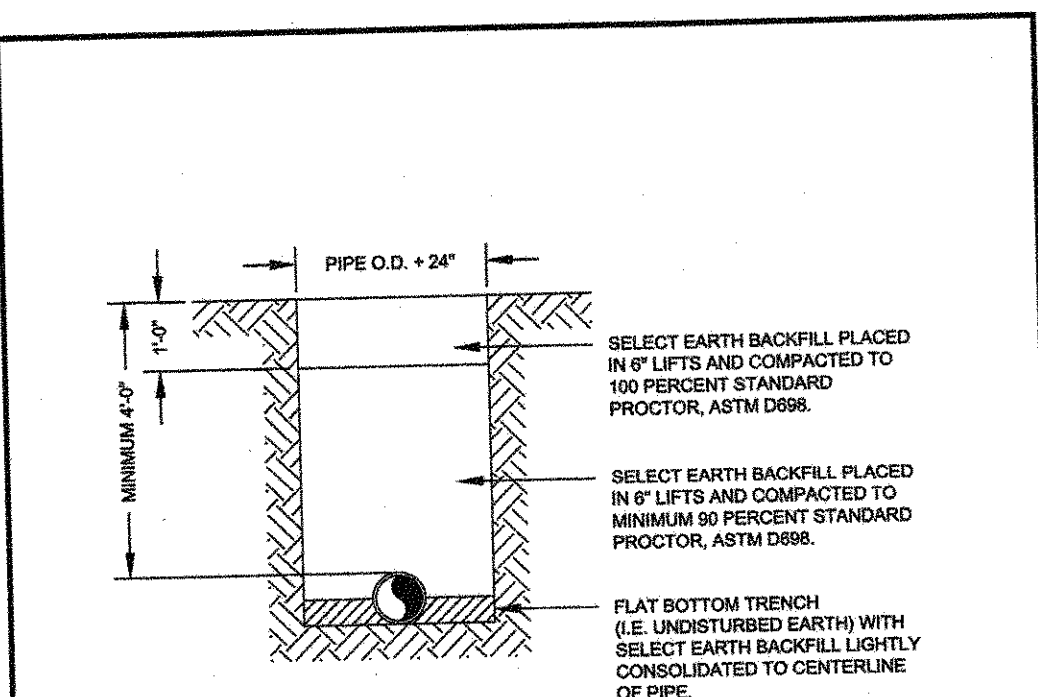
**Liberty Square Park Phase 5**  
HENRY COUNTY SEWER DETAILS  
LAND LOT 229 AND 230 OF THE 6TH DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA  
DATE: 02/04/2019  
SCALE: N.T.S.

THESE DRAWINGS ARE THE PROPERTY OF WHITLEY ENGINEERING, INC. AND MAY NOT BE USED, REPRODUCED AND OR INCORPORATED INTO ANOTHER WORK FOR ANY REASON WITHOUT THE WRITTEN CONSENT OF THE DESIGN PROFESSIONAL.

**SHEET  
29 OF 34**

APPROVED  
DATE: 10/28/19  
BY: [Signature]





- NOTES:
- DUCTILE IRON PIPE FOR WATER MAINS SHALL BE BEDDED IN ACCORDANCE WITH ANSI/AWWA C900/21.50 AND ANSI/AWWA C151/A21.51, TYPE 2 LAYING CONDITION.
  - MINIMUM DEPTH OF COVER SHALL BE 4'-0" UNLESS OTHERWISE APPROVED BY HCWSA.

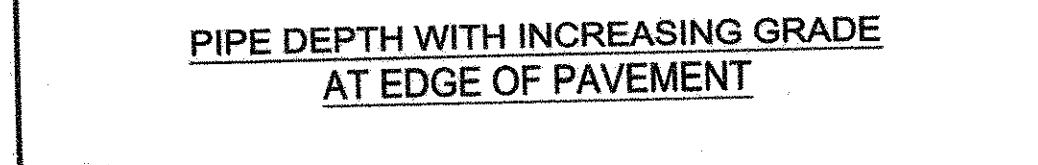
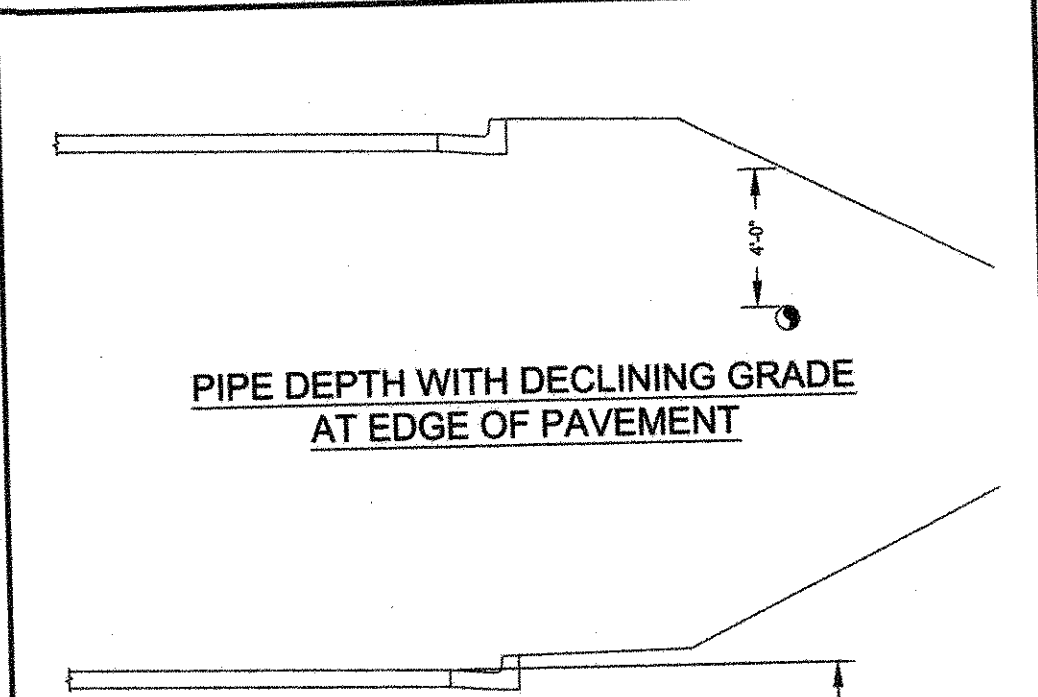
HENRY COUNTY WATER & SEWERAGE AUTHORITY

REvised: 01/01/2012

SCALE: N.T.S.

DETAIL NO. W02

**WATER LINE TRENCH DETAIL**



- NOTES:
- WATER MAINS SHALL HAVE A MINIMUM DEPTH OF COVER OF 48-INCHES UNLESS OTHERWISE APPROVED BY HCWSA.

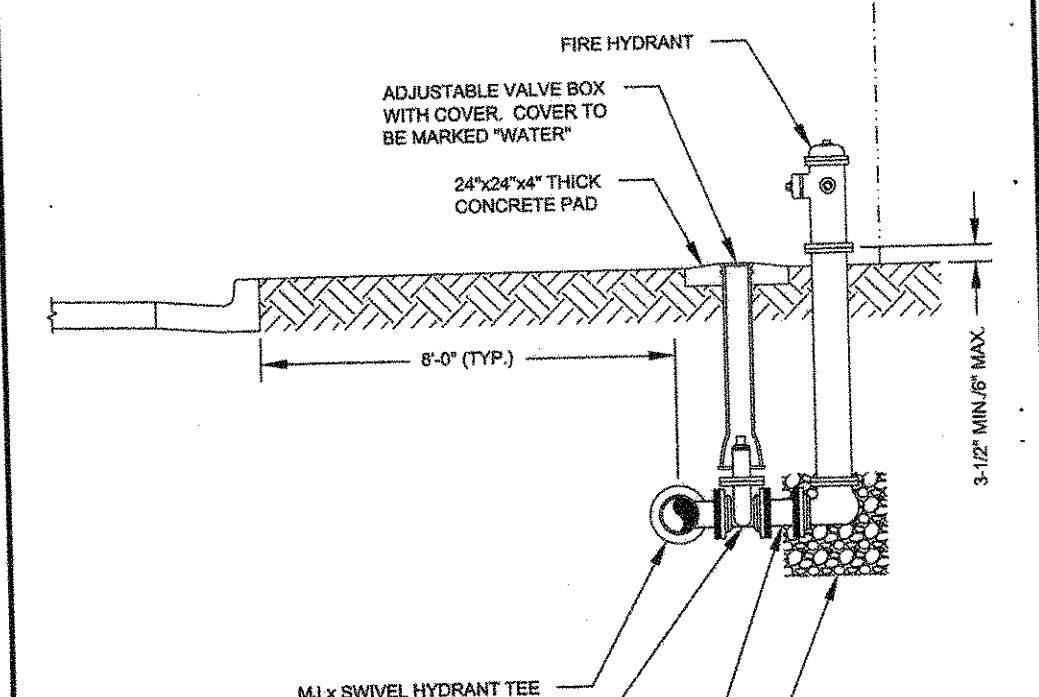
HENRY COUNTY WATER & SEWERAGE AUTHORITY

REvised: 01/01/2012

SCALE: N.T.S.

DETAIL NO. W03

**PIPE DEPTH AT EDGE OF PAVEMENT**



- NOTES:
- LONGER ANCHOR COUPLINGS MAY BE USED WHEN REQUIRED. IF ANCHOR COUPLINGS ARE NOT USED, VALVE SHALL BE RODDED TO THE TEE AND HYDRANT SHALL BE RODDED TO THE VALVE USING A MINIMUM OF TWO (2) 3/4" STAINLESS STEEL THREADED RODS ON EACH CONNECTION.

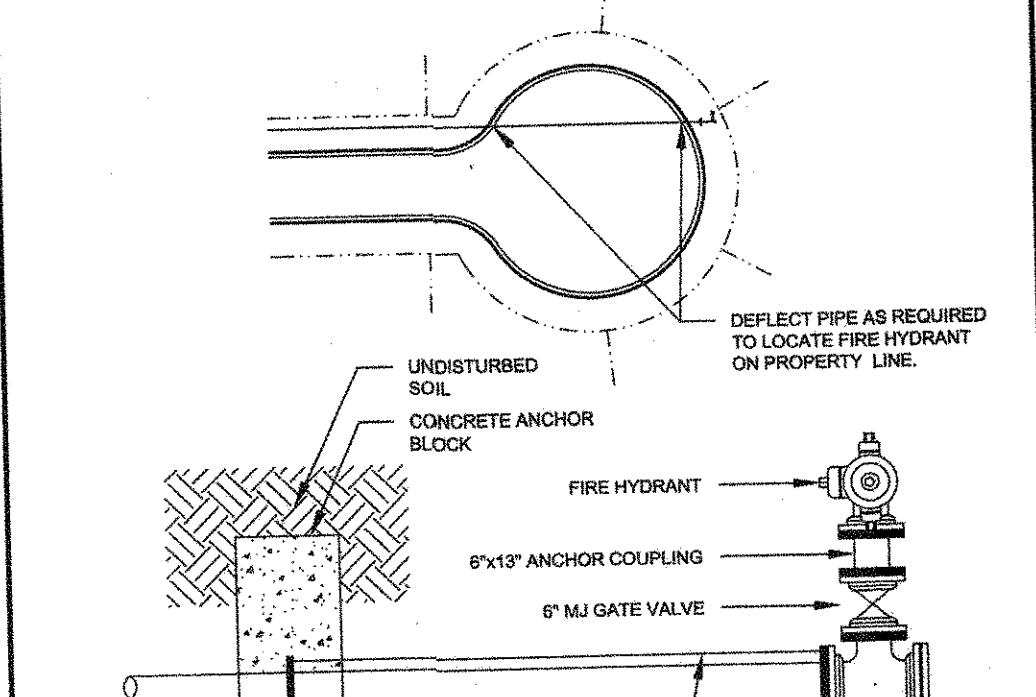
HENRY COUNTY WATER & SEWERAGE AUTHORITY

REvised: 01/01/2012

SCALE: N.T.S.

DETAIL NO. W04

**TYPICAL FIRE HYDRANT ASSEMBLY**



- NOTES:
- ALL FITTINGS AND VALVES AND THE FIRST 4 JOINTS OF PIPE FROM THE FIRE HYDRANT SHALL BE RESTRAINED.

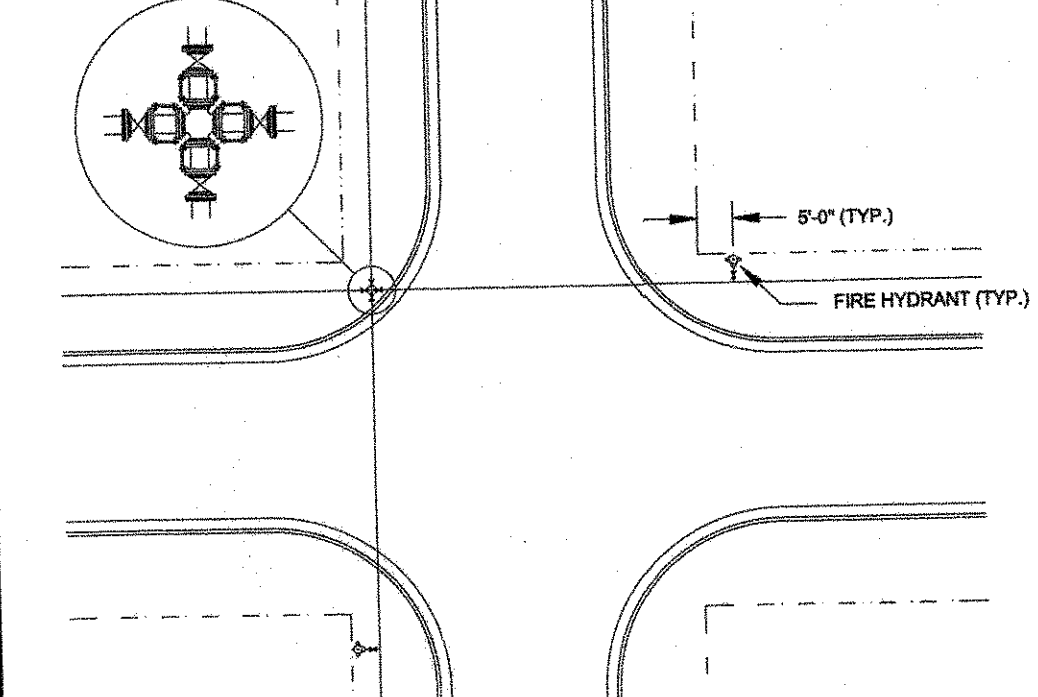
HENRY COUNTY WATER & SEWERAGE AUTHORITY

REvised: 01/01/2012

SCALE: N.T.S.

DETAIL NO. W05

**FIRE HYDRANT IN CUL-DE-SAC**



- NOTES:
- WHERE EXISTING STRUCTURES EXIST AND INTERFERE WITH THE ROUTE OF THE WATER LINE, THE WATER LINE SHALL BE ROUTED AROUND THE STRUCTURE BY PIPE JOINT DEFLECTION OR, WHERE NECESSARY, WITH MAXIMUM 45° BENDS.
  - VALVES AT CROSS CONNECTIONS SHALL BE RODDED TO THE FITTING USING A MINIMUM OF TWO (2) STAINLESS STEEL THREADED RODS. THE MJ PLUG ON THE OPPOSITE SIDE OF THE FITTING SHALL BE RESTRAINED USING A RESTRAINED JOINT GLAND.

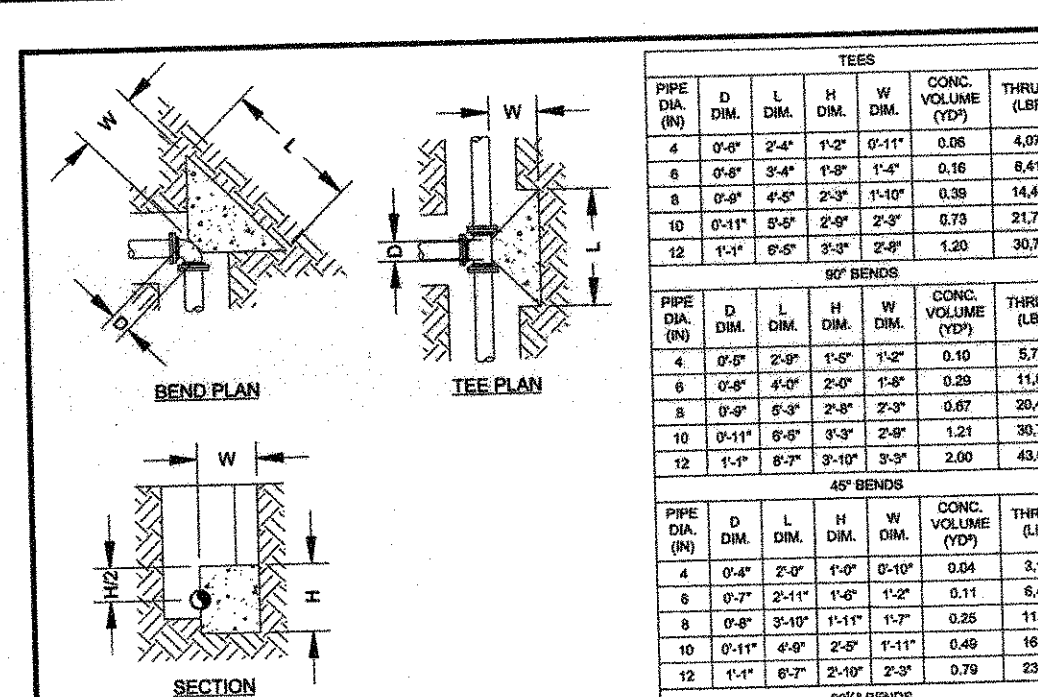
HENRY COUNTY WATER & SEWERAGE AUTHORITY

REvised: 01/01/2012

SCALE: N.T.S.

DETAIL NO. W09

**WATER LINE INTERSECTION**



TEES

PIPE DIA. (IN)	D DIA. (IN)	L DIA. (IN)	H DIA. (IN)	W DIA. (IN)	CONC. VOLUME (CY)	THRUST (LBF)
4	6-0"	2-4"	1-0"	1-11"	0.06	4,072
6	6-0"	2-4"	1-0"	1-4"	0.16	8,615
8	6-0"	2-4"	1-0"	1-10"	0.39	14,073
10	6-11"	2-4"	1-0"	1-7"	0.73	21,773
12	1-1"	2-4"	1-0"	1-0"	1.20	30,791

90° BENDS

PIPE DIA. (IN)	D DIA. (IN)	L DIA. (IN)	H DIA. (IN)	W DIA. (IN)	CONC. VOLUME (CY)	THRUST (LBF)
4	6-0"	2-0"	1-0"	1-0"	0.10	5,788
6	6-0"	2-0"	1-0"	1-0"	0.39	11,888
8	6-0"	2-0"	1-0"	1-0"	0.87	20,468
10	6-11"	2-0"	1-0"	1-0"	1.21	30,782
12	1-0"	2-0"	1-0"	1-0"	2.00	45,545

225° BENDS

PIPE DIA. (IN)	D DIA. (IN)	L DIA. (IN)	H DIA. (IN)	W DIA. (IN)	CONC. VOLUME (CY)	THRUST (LBF)
4	6-0"	1-0"	0-0"	0-0"	0.04	2,116
6	6-0"	1-0"	0-0"	0-0"	0.11	6,426
8	6-0"	1-0"	0-0"	0-0"	0.35	11,077
10	6-11"	0-0"	0-0"	0-0"	0.46	16,854
12	1-0"	0-0"	0-0"	0-0"	0.79	20,588

225° BENDS

PIPE DIA. (IN)	D DIA. (IN)	L DIA. (IN)	H DIA. (IN)	W DIA. (IN)	CONC. VOLUME (CY)	THRUST (LBF)
4	6-0"	1-0"	0-0"	0-0"	0.01	1,286
6	6-0"	1-0"	0-0"	0-0"	0.04	3,383
8	6-0"	1-0"	0-0"	0-0"	0.09	6,847
10	6-11"	0-0"	0-0"	0-0"	0.16	8,485
12	1-0"	0-0"	0-0"	0-0"	0.28	10,014

- NOTES:
- THRUST BLOCK DIMENSIONS ARE BASED ON THE FOLLOWING DESIGN CRITERIA:  
WORKING PRESSURE = 150 PSI  
SOIL BEARING CAPACITY = 1,500 PSF  
SAFETY FACTOR = 1.5  
THESE ARE THE MINIMUM DESIGN CRITERIA. IF ACTUAL WORKING PRESSURE IS GREATER THAN 150 PSI OR IF ACTUAL SOIL BEARING CAPACITY IS LESS THAN 1,500 PSF, DIMENSIONS SHALL BE RECALCULATED.
  - THRUST BLOCK CONCRETE SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 2,500 PSI.
  - THRUST BLOCK SHALL BEAR AGAINST UNDISTURBED SOIL.
  - A MINIMUM 10 MIL PLASTIC SHEET SHALL BE PLACED BETWEEN CONCRETE AND PIPE.
  - ALL BOLTS SHALL REMAIN ACCESSIBLE. DO NOT COVER WITH CONCRETE.

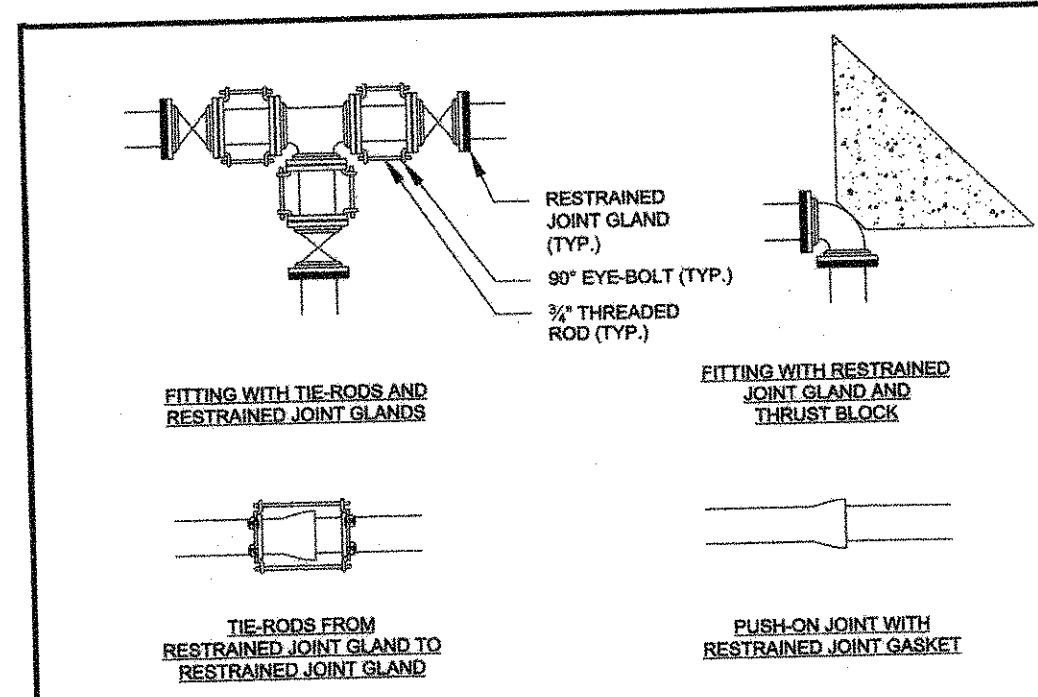
HENRY COUNTY WATER & SEWERAGE AUTHORITY

REvised: 01/01/2012

SCALE: N.T.S.

DETAIL NO. W11

**THRUST BLOCK**



TIE-ROD CHART

PIPE DIA. (IN)	ROD DIA. (IN)	# OF RODS
6	3/4"	2
10	3/4"	4
12	3/4"	4
18	3/4"	8

- NOTES:
- RESTRAINED JOINT LENGTHS SHALL BE CALCULATED BY THE DESIGN ENGINEER. CALCULATIONS SHALL BE SUBMITTED TO HCWSA.
  - THREADED ROD SHALL BE MINIMUM TYPE 304 STAINLESS STEEL AND SHALL HAVE A MINIMUM YIELD STRENGTH OF 80,000 PSI.

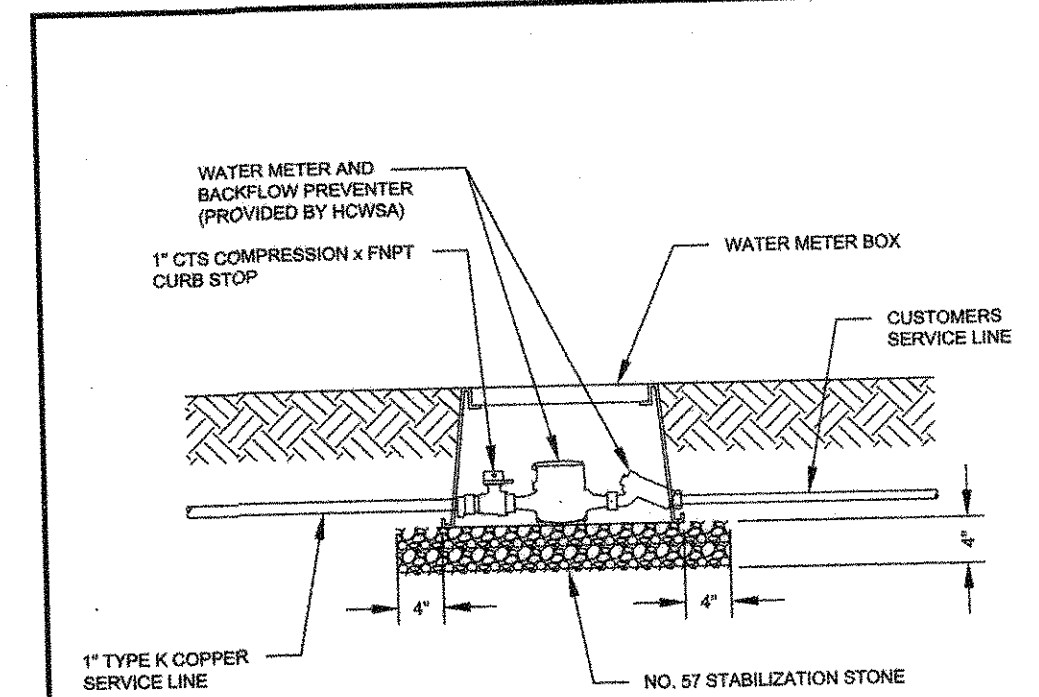
HENRY COUNTY WATER & SEWERAGE AUTHORITY

REvised: 01/01/2012

SCALE: N.T.S.

DETAIL NO. W13

**THRUST RESTRAINT**



- NOTES:
- HCWSA WILL PROVIDE RESIDENTIAL WATER METERS AND BACKFLOW PREVENTERS. ALL OTHER APPURTENANCES SHALL BE PROVIDED BY THE DEVELOPER AND/OR CONTRACTOR.
  - WATER METER BOX LIDS SHALL HAVE 2-INCH DIAMETER HOLE OFFSET FOR TOUCH READ INSTALLATION.
  - EACH SERVICE SHALL BE MARKED WITH A "W" SAW CUT INTO TOP OF CURB AND PAINTED BLUE.
  - INSERT A 4-FOOT LONG PIECE OF 1" PVC PIPE THROUGH THE HOLE IN THE METER BOX LID TO MARK THE METER LOCATION. PAINT PVC PIPE BLUE.
  - NO PERMANENT STRUCTURES SHALL BE LOCATED WITHIN 5 FEET OF WATER SERVICE.
  - TYPICAL INSTALLATION MAY BE MODIFIED AT DISCRETION OF HCWSA.

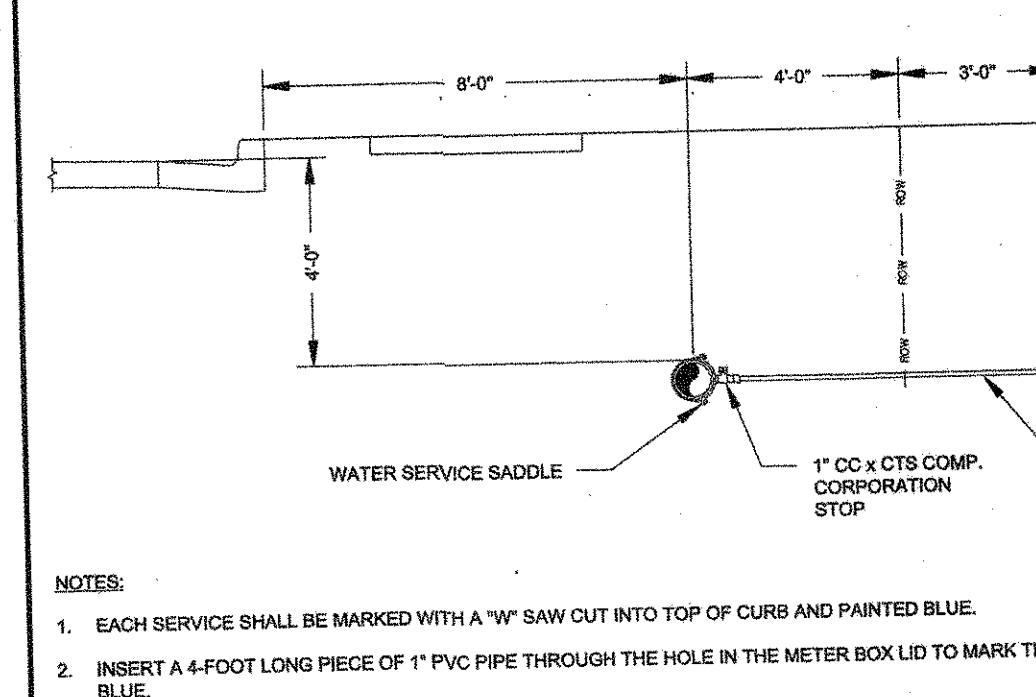
HENRY COUNTY WATER & SEWERAGE AUTHORITY

REvised: 01/01/2012

SCALE: N.T.S.

DETAIL NO. W14

**RESIDENTIAL WATER METER DETAIL**



- NOTES:
- EACH SERVICE SHALL BE MARKED WITH A "W" SAW CUT INTO TOP OF CURB AND PAINTED BLUE.
  - INSERT A 4-FOOT LONG PIECE OF 1" PVC PIPE THROUGH THE HOLE IN THE METER BOX LID TO MARK THE METER LOCATION. PAINT PVC PIPE BLUE.
  - NO PERMANENT STRUCTURES SHALL BE ALLOWED WITHIN 5 FEET OF WATER SERVICE.
  - TYPICAL INSTALLATION MAY BE MODIFIED AT THE DISCRETION OF HCWSA.

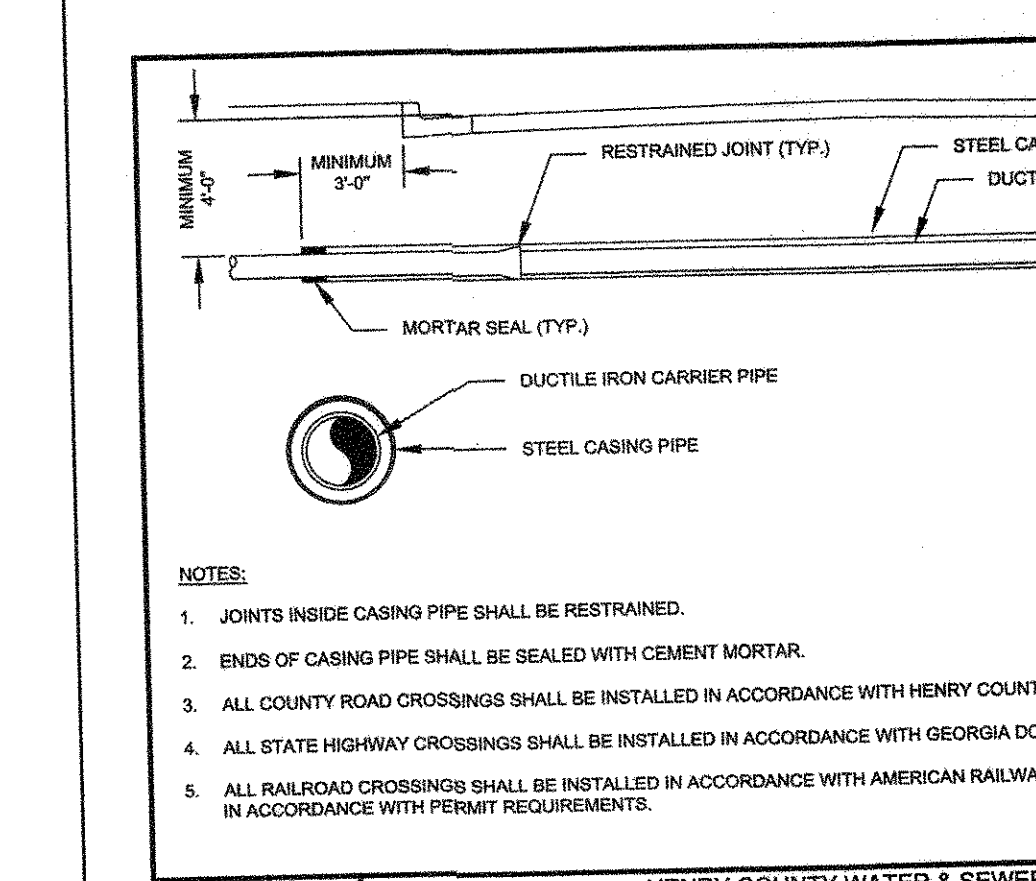
HENRY COUNTY WATER & SEWERAGE AUTHORITY

REvised: 01/01/2012

SCALE: N.T.S.

DETAIL NO. W15

**SHORT SIDE RESIDENTIAL SERVICE DETAIL**



- NOTES:
- JOINTS INSIDE CASING PIPE SHALL BE RESTRAINED.
  - ENDS OF CASING PIPE SHALL BE SEALED WITH CEMENT MORTAR.
  - ALL COUNTY ROAD CROSSINGS SHALL BE INSTALLED IN ACCORDANCE WITH HENRY COUNTY DOT STANDARDS AND PERMIT REQUIREMENTS.
  - ALL STATE HIGHWAY CROSSINGS SHALL BE INSTALLED IN ACCORDANCE WITH GEORGIA DOT STANDARDS AND PERMIT REQUIREMENTS.
  - ALL RAILROAD CROSSINGS SHALL BE INSTALLED IN ACCORDANCE WITH AMERICAN RAILWAY ENGINEERING ASSOCIATION REGULATIONS AND IN ACCORDANCE WITH PERMIT REQUIREMENTS.

HENRY COUNTY WATER & SEWERAGE AUTHORITY

REvised: 01/01/2012

SCALE: N.T.S.

DETAIL NO. W20

**TYPICAL JACK AND BORE DETAIL**

Liberty Square Park Phase 5

HENRY COUNTY WATER DETAILS

LAND LOT 229 AND 230 OF THE 6th DISTRICT

CITY OF HAMPTON, HENRY COUNTY, GA

DATE: 10/23/19

SCALE: N.T.S.

APPROVED

DATE: 10/23/19

BY: [Signature]

CSWCC MARK G. WHITLEY, PE 0000001036

LEVEL I A CERTIFIED PERSONNEL

LEVEL I B CERTIFIED INSPECTOR

LEVEL II CERTIFIED DESIGN PROF.

WHITLEY ENGINEERING INC.

DESIGN NPDES PROJECT MANAGEMENT

TEL: (770)946-0256

38 E. MAIN STREET N.

HAMPTON, GA 30228

Not Released For Construction

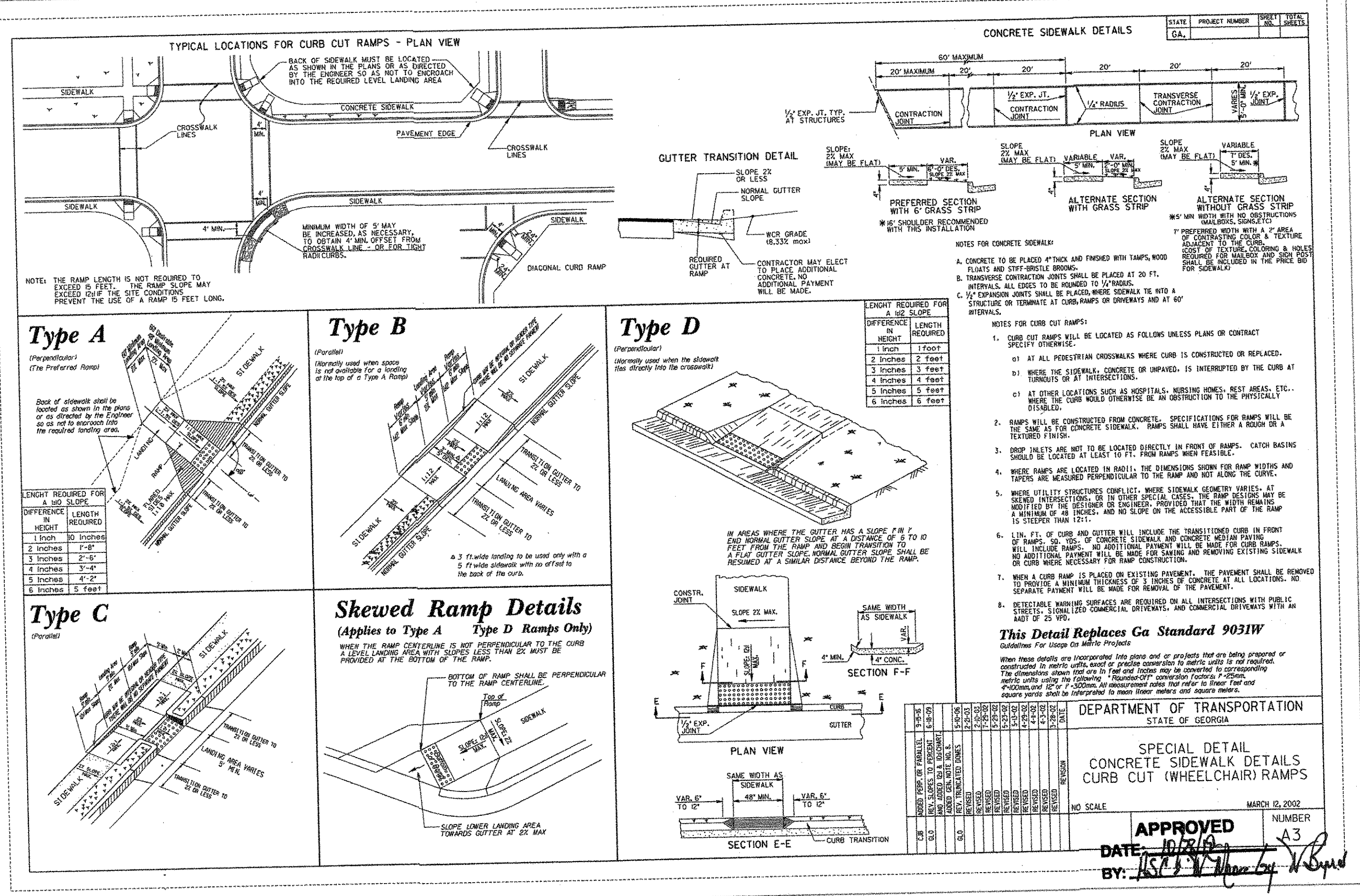
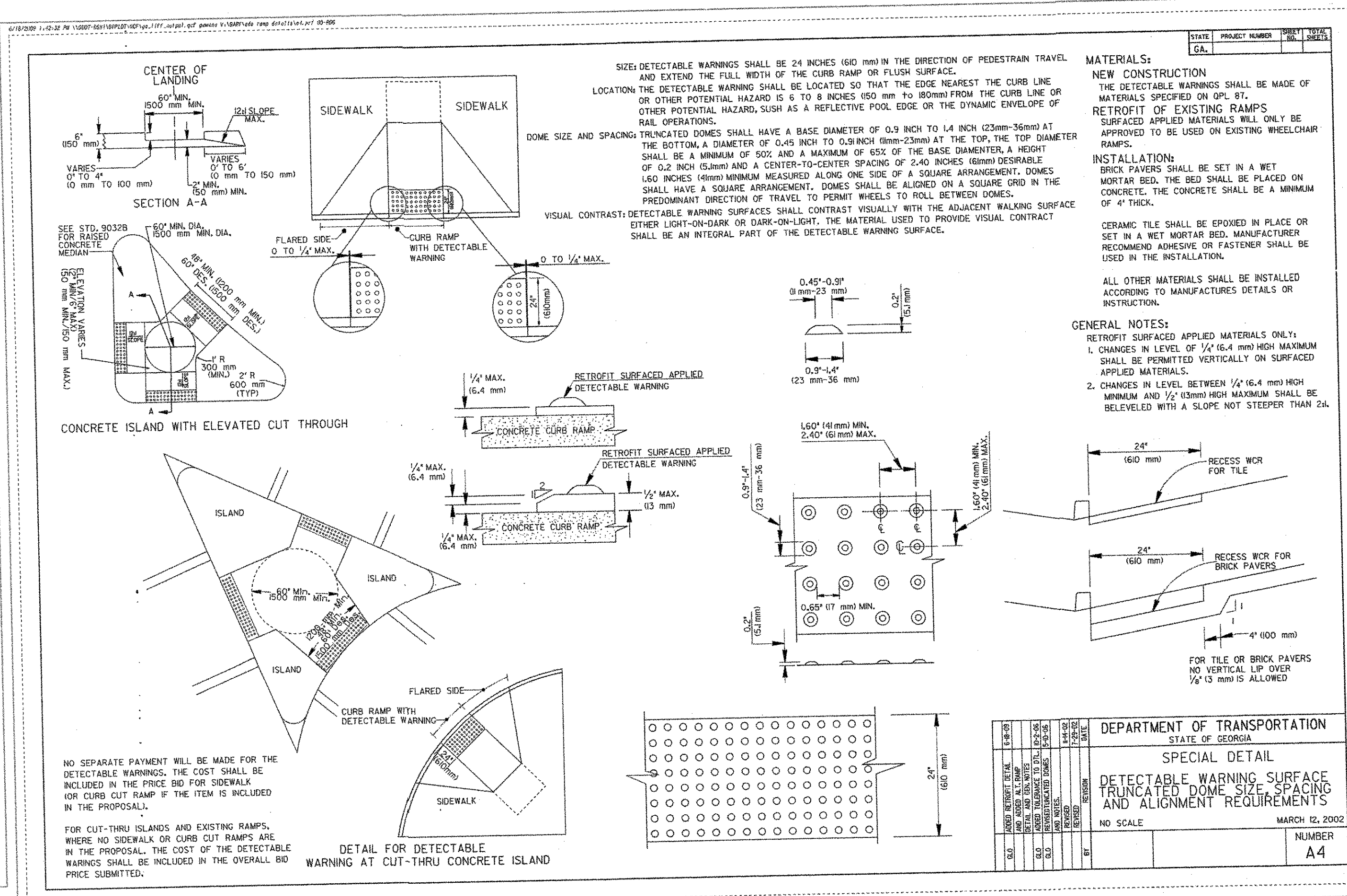
Released For Construction

SHEET 30 OF 34

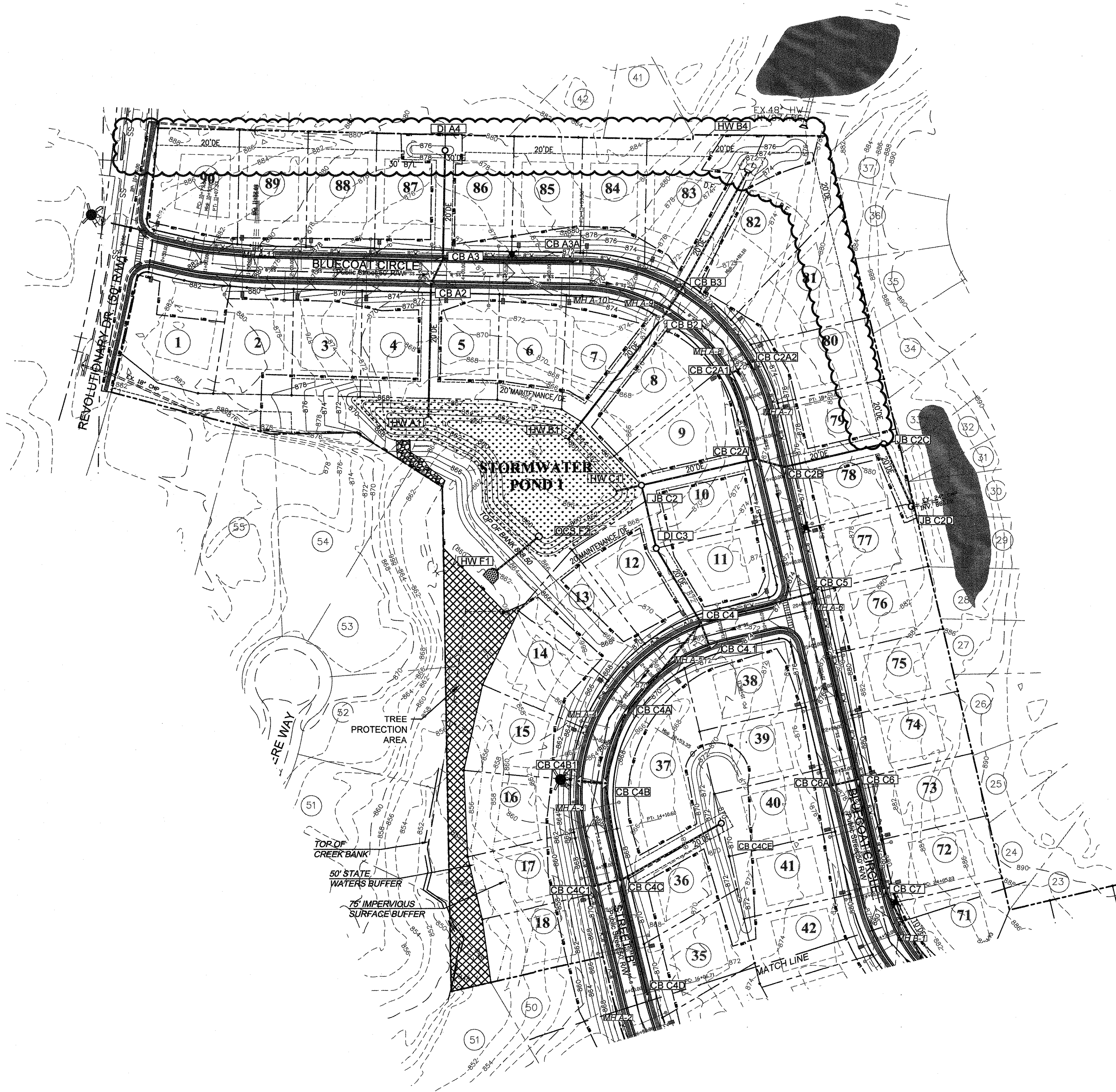












**TREE PROTECTION AREA NOTES:**

1. ALL TREE PROTECTION AREA TO BE EITHER FLAGGED OR TREE PROTECTION FENCING PLACED AROUND THE AREA PRIOR TO THE COMMENCEMENT OF ANY GRADING ACTIVITIES ADJACENT THE TREE PROTECTION AREAS.

2. LANDSCAPING AND PLANTING PLANS FOR EACH LOT TO BE APPROVED AS PART OF THE BUILDING PERMIT PROCESS.

LEGEND	
SS	EXISTING SANITARY SEWER MAIN
SS	PROPOSED SANITARY SEWER MAIN
W	EXISTING WATER MAIN
W	PROPOSED WATER MAIN
P	EXISTING POWER LINE
P	PROPOSED POWER LINE
18" RCP	EXISTING STORM PIPE
18" RCP	PROPOSED STORM PIPE
⊗	EXISTING FIRE HYDRANT
⊗	PROPOSED FIRE HYDRANT
⊗	EXISTING SEWER MANHOLE
⊗	PROPOSED SEWER MANHOLE
⊗	EXISTING POWER POLE
⊗	PROPOSED POWER POLE
⊗	EXISTING CONTOURS
⊗	PROPOSED CONTOURS
⊗	DROP INLET - DI
⊗	JUNCTION BOX - JB
⊗	DOUBLE-WING CATCH BASIN - DWCB
⊗	SINGLE-WING CATCH BASIN - SWCB
⊗	HEADWALL

APPROVED  
DATE: 11/11/19  
BY: [Signature]  
GRAPHIC SCALE  
( IN FEET )  
1 inch = 60 ft.

Liberty Square Park Phase 5  
TREE PROTECTION PLAN (SHEET 1)  
LAND LOT 229 AND 230 OF THE 8th DISTRICT  
CITY OF HAMPTON, HENRY COUNTY, GA  
DATE: 02/04/2019  
SCALE: AS SHOWN

WHITLEY ENGINEERING INC.  
DESIGN NPDES PROJECT MANAGEMENT  
TEL: (770)946-0256  
38 E. MAIN STREET N.  
HAMPTON, GA 30228

GSWCC  
MARK G. WHITLEY, PE  
000001036  
LEVEL I A CERTIFIED PERSONNEL  
LEVEL I B CERTIFIED INSPECTOR  
LEVEL II CERTIFIED DESIGN PROFESSIONAL

GEORGIA  
Professional Engineer  
Mark G. Whitley  
000001036


DESCRIPTION:  
REV. DATE: 05/08/19 REVISED PER CITY COMMENTS  
3 05/16/19 REVISED PER IOWA COMMENTS  
4 06/22/19 REVISED PER CITY COMMENTS  
5 07/15/19 REVISED PER CITY COMMENTS  
6 07/25/19 REVISED PER CITY COMMENTS  
7 08/09/2019 REVISED PER CITY COMMENTS  
8 10/29/2019

Not Released For Construction  
Released For Construction

THESE DRAWINGS ARE THE PROPERTY OF WHITLEY ENGINEERING, INC. AND MAY NOT BE USED, REPRODUCED AND OR INCORPORATED INTO ANOTHER WORK FOR ANY REASON WITHOUT THE WRITTEN CONSENT OF THE DESIGN PROFESSIONAL.

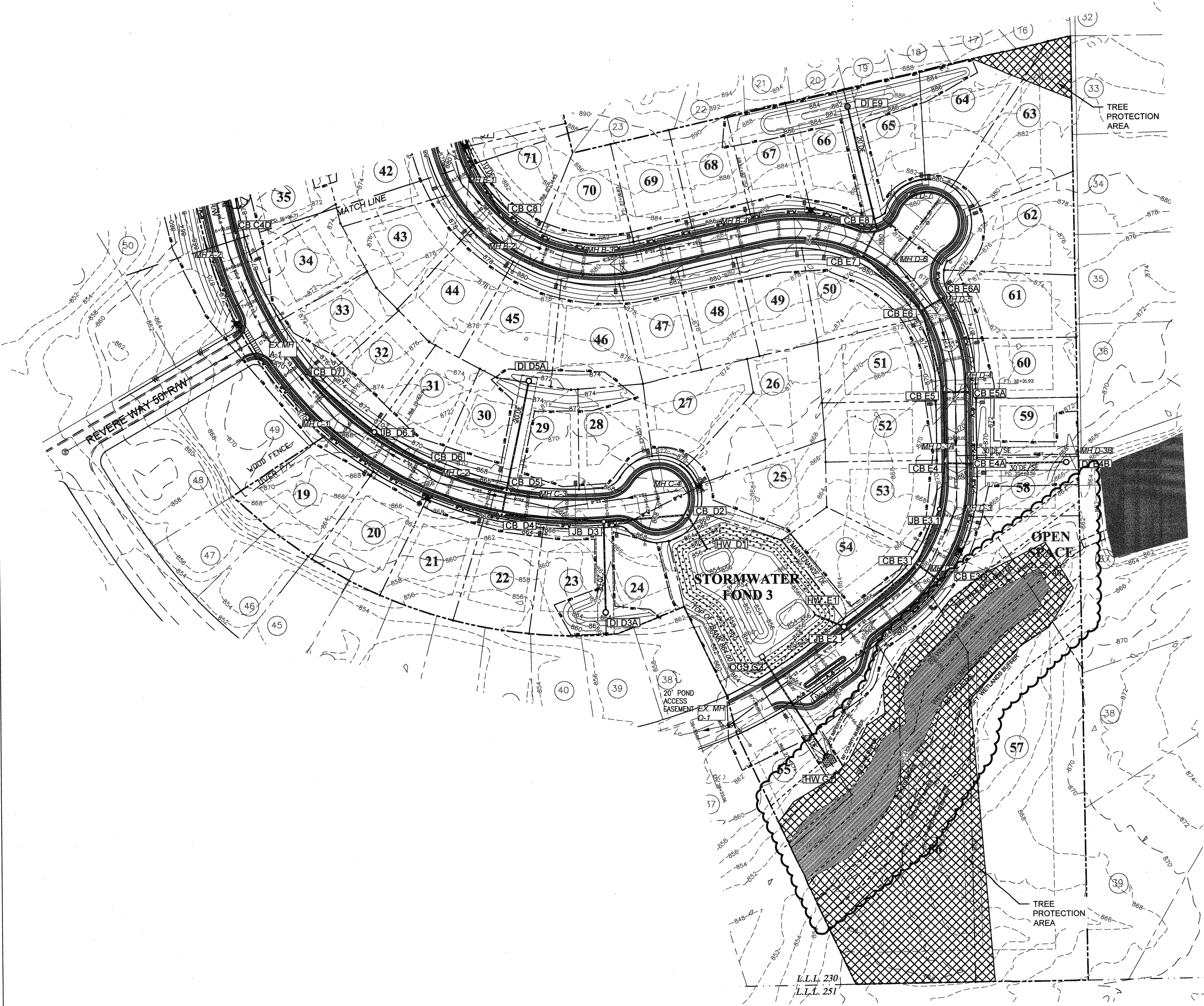
SHEET  
33 OF 34





Utilities Protection Center, Inc.

Know what's below.  
Call before you dig.



**TREE PROTECTION AREA NOTES:**

1. ALL TREE PROTECTION AREA TO BE EITHER FLAGGED OR TREE PROTECTION FENCING PLACED AROUND THE AREA PRIOR TO THE COMMENCEMENT OF ANY GRADING ACTIVITIES ADJACENT THE TREE PROTECTION AREAS.
2. LANDSCAPING AND PLANTING PLANS FOR EACH LOT TO BE APPROVED AS PART OF THE BUILDING PERMIT PROCESS.

LEGEND	
SS	EXISTING SANITARY SEWER MAIN
SS	PROPOSED SANITARY SEWER MAIN
W	EXISTING WATER MAIN
W	PROPOSED WATER MAIN
P	EXISTING POWER LINE
P	PROPOSED STORM PIPE
18" RCP	EXISTING STORM PIPE
18" RCP	PROPOSED STORM PIPE
FD	EXISTING FIRE HYDRANT
FD	PROPOSED FIRE HYDRANT
WV	EXISTING SEWER MANHOLE
WV	PROPOSED SEWER MANHOLE
WV	EXISTING POWER POLE
WV	PROPOSED POWER POLE
WV	EXISTING CONTOURS
WV	PROPOSED CONTOURS
WV	DROP INLET - DI
WV	JUNCTION BOX - JB
WV	DOUBLE-WING CATCH BASIN - DWCB
WV	SINGLE-WING CATCH BASIN - SWCB
WV	HEADWALL



APPROVED

DATE: 11/9/19

BY: [Signature]

GRAPHIC SCALE

( IN FEET )

1 inch = 60 ft.

GSWCC

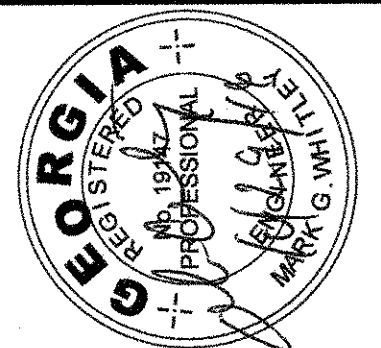
MARK G. WHITLEY, P.E.

000001036

LEVEL I A CERTIFIED PERSONNEL

LEVEL I B CERTIFIED INSPECTOR

LEVEL II CERTIFIED DESIGN PROF.



WHITLEY  
ENGINEERING INC.

DESIGN NPDES PROJECT MANAGEMENT

TEL: (770) 946-0256

38 E. MAIN STREET N.

HAMPTON, GA 30228

REV.	DATE	DESCRIPTION
2	05/08/19	REVISED PER CITY COMMENTS
3	05/16/19	REVISED PER HIC/MSA COMMENTS
4	06/25/19	REVISED PER CITY COMMENTS
5	07/15/19	REVISED PER CITY COMMENTS
6	07/25/19	REVISED PER CITY COMMENTS
7	08/02/2019	REVISED PER CITY COMMENTS
8	10/22/2019	REVISED PER CITY COMMENTS

Not Released For Construction

Liberty Square Park Phase 5

TREE PROTECTION PLAN (SHEET 2)

LAND LOT 229 AND 230 OF THE 6TH DISTRICT

CITY OF HAMPTON, HENRY COUNTY, GA

SCALE: AS SHOWN

DATE: 02/04/2019

THESE DRAWINGS ARE THE PROPERTY OF WHITLEY ENGINEERING, INC. AND MAY NOT BE USED, REPRODUCED AND OR INCORPORATED INTO ANOTHER WORK FOR ANY REASON WITHOUT THE WRITTEN CONSENT OF THE DESIGN PROFESSIONAL.

SHEET

34 OF 34