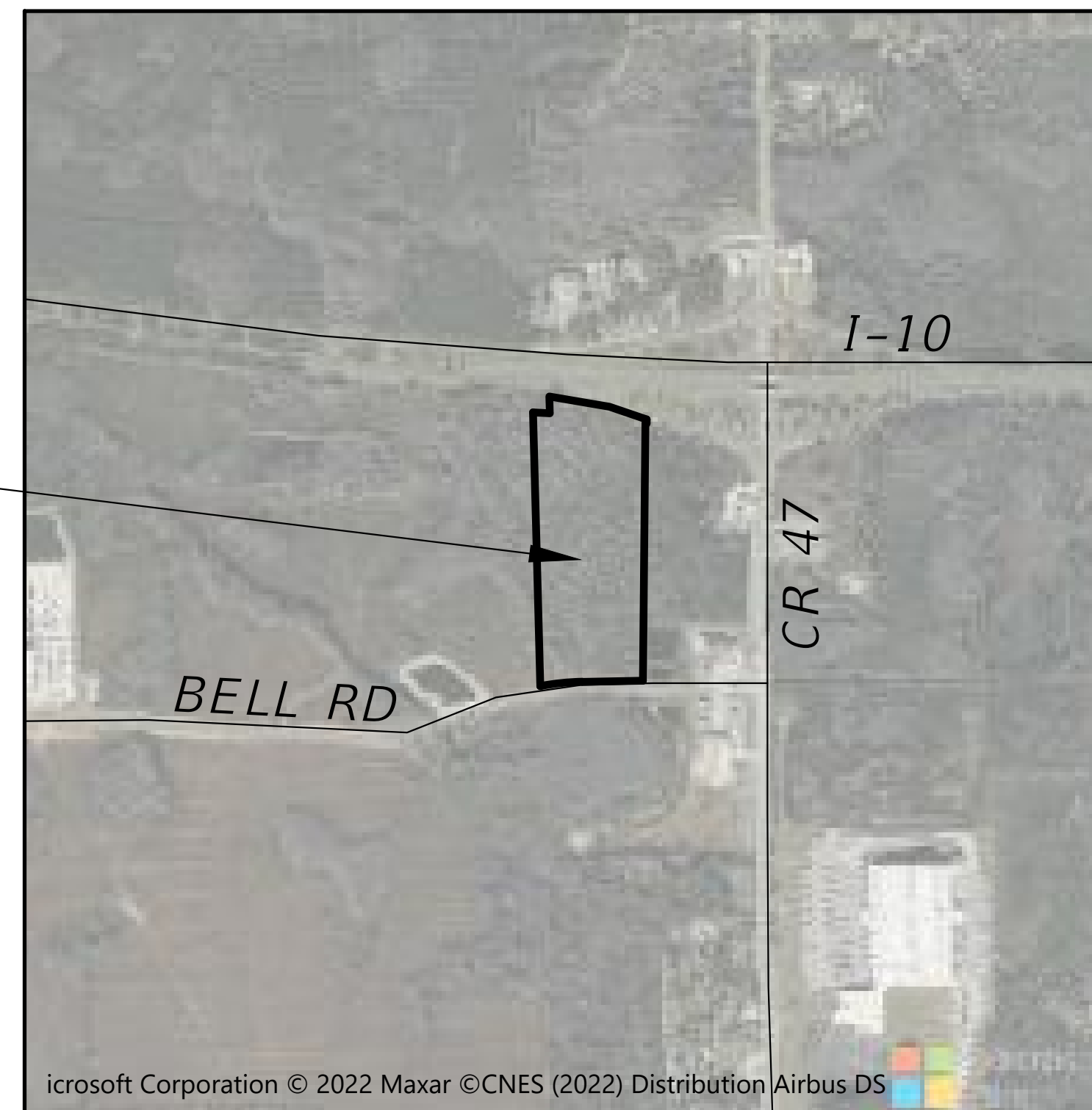


**COLUMBIA  
COUNTY**

# BELL ROAD COLUMBIA COUNTY, FLORIDA SECTION 7, TOWNSHIP 3S, RANGE 17E

## SHEET INDEX

**PROJECT LOCATION** →



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**PLANS PREPARED FOR:**

**DANIEL CRAPPS  
PO BOX 3176  
LAKE CITY, FL 32056**

**11/2022  
CITY SUBMITTAL  
NOT FOR CONSTRUCTION**

REVISIONS	
DATE	DESCRIPTION



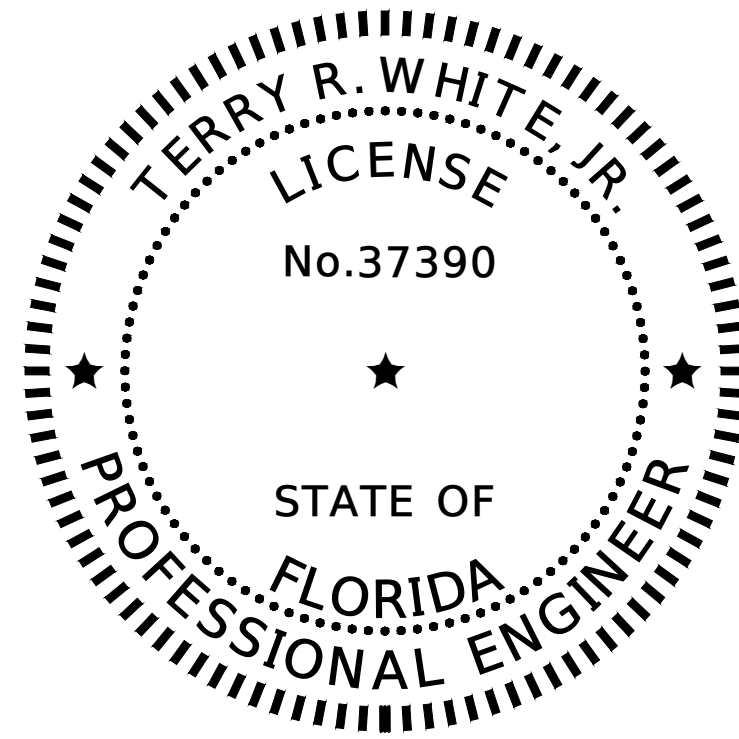
**NORTH FLORIDA PROFESSIONAL SERVICES, INC.**  
 P.O. BOX 3823  
 LAKE CITY, FL 32056  
 PH. 386-752-4675  
 LIC NO. LB8356

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 TALLAHASSEE, FL 32301  
 WWW.NFPS.NET  
 CA# 29011

JOB NUMBER:  
L220630CRA  
 EOR:  
TERRY R. WHITE, JR.  
 P.E. NO.:  
37390

# COVER SHEET

SHEET  
NO.  
**1**



THIS DOCUMENT HAS BEEN DIGITALLY SIGNED AND SEALED BY:

ON THE DATE ADJACENT TO THE SEAL

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED. THE SIGNATURE MUST BE VERIFIED IN THE ELECTRONIC DOCUMENTS.

NORTH FLORIDA PROFESSIONAL SERVICES INC.  
P.O. BOX 3823  
LAKE CITY, FL 32056  
CERTIFICATE OF AUTHORIZATION: 29011  
TERRY R. WHITE, JR., P.E. NO. 37390

THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR THE FOLLOWING SHEETS IN ACCORDANCE WITH RULE 61G15-23.004, F.A.C.

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SITE DATA TABLE					
Bell Road					
PARCEL ID NUMBER	08-35-17-04903-002				
ZONING	INDUSTRIAL				
LAND USE	INDUSTRIAL				
DISTRICT NUMBER	DISTRICT 1				
PHYSICAL ADDRESS	BELL ROAD, LAKE CITY, FL				
	PROJECT PROPERTY BOUNDARY	SQ. FT.	ACRES	% OF SITE	% OF LOC
	TOTAL PROPERTY BOUNDARY AREA	703930	16.16	100.00%	100.00%
	(LOC)	703930	16.16	100.00%	100.00%
	BOTH ON-SITE & OFF-SITE	703930	16.16	100.00%	100.00%
	EXISTING IMPERVIOUS AREA ON-SITE				
	EXISTING ASPHALT PAVEMENT	0	0.00	0.00%	0.00%
	EXISTING CONCRETE	0	0.00	0.00%	0.00%
	EXISTING BUILDING	0	0.00	0.00%	0.00%
	EXISTING STORMWATER MANAGEMENT	0	0.00	0.00%	0.00%
	TOTAL EXISTING IMPERVIOUS AREA ON-	0	0.00	0.00%	0.00%
	PROPOSED IMPERVIOUS AREA ON-SITE				
	EXISTING ASPHALT PAVEMENT TO	0	0.00	0.00%	0.00%
	EXISTING CONCRETE TO REMAIN	0	0.00	0.00%	0.00%
	EXISTING BUILDING TO REMAIN	0	0.00	0.00%	0.00%
	EXISTING STORMWATER MANAGEMENT FACILITY TO REMAIN	0	0.00	0.00%	0.00%
	PROPOSED ASPHALT PAVEMENT	307047	7.05	43.62%	43.62%
	PROPOSED CONCRETE	600	0.01	0.09%	0.09%
	PROPOSED BUILDING	5000	0.11	0.71%	0.71%
	PROPOSED STORMWATER MANAGEMENT	157968	3.63	22.44%	22.44%
	TOTAL PROPOSED IMPERVIOUS AREA ON-SITE	470615	10.80	66.86%	66.86%
	TOTAL PROPOSED PERVIOUS AREA ON-SITE	233315	5.36	33.14%	33.14%
	REQUIRED PARKING LANDSCAPE AREA ON-SITE	8960	0.21	1.27%	1.27%
	PROPOSED PARKING LANDSCAPE AREA ON SITE	9650	0.22	1.37%	1.37%
	REQUIRED PARKING	15 SPACES + 1 H.C. SPACES			
	PROVIDED PARKING	24 SPACES + 1 H.C. SPACES			

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**SIGNATURE SHEET**  
**BELL ROAD**  
**COLUMBIA COUNTY, FLORIDA**

SHEET NO.  
**2**

**GENERAL NOTES**

1. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS AT THE JOB SITE TO ENSURE THAT ALL NEW WORK WILL FIT IN THE MANNER INTENDED ON THE PLANS. SHOULD ANY CONDITIONS EXIST THAT ARE CONTRARY TO THOSE SHOWN ON THE PLANS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND THE CITY OF LAKE CITY, FLORIDA (DEPARTMENT OF GROWTH MANAGEMENT) OF SUCH DIFFERENCES IMMEDIATELY AND PRIOR TO PROCEEDING WITH THE WORK.
2. THE CONTRACTOR SHALL COMPLY WITH ALL CONDITIONS AS SET FORTH BY THE ISSUED FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION 10/2 SELF-CERTIFICATION, SUWANNEE RIVER WATER MANAGEMENT DISTRICT ENVIRONMENTAL RESOURCE PERMIT, FLORIDA DEPARTMENT OF TRANSPORTATION DRIVEWAY CONNECTION PERMIT, FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION DRINKING WATER FACILITY PERMIT, AND FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION DOMESTIC WASTEWATER COLLECTION/TRANSMISSION SYSTEM PERMIT.
3. THE CONTRACTOR SHALL MAINTAIN THE CONSTRUCTION SITE IN A SECURE MANNER. ALL OPEN TRENCHES AND EXCAVATED AREAS SHALL BE PROTECTED FROM ACCESS BY THE GENERAL PUBLIC.
4. ANY PUBLIC LAND CORNER WITHIN THE LIMITS OF CONSTRUCTION SHALL BE PROTECTED. IF A CORNER MONUMENT IS IN DANGER OF BEING DESTROYED AND HAS NOT BEEN PROPERLY REFERENCED, THE CONTRACTOR SHOULD NOTIFY THE ENGINEER.
5. THE SITE IS LOCATED IN SECTION 7, TOWNSHIP 3 SOUTH, RANGE 17 EAST, COLUMBIA COUNTY, FLORIDA.
6. THE CONTRACTOR SHALL IMPLEMENT ALL COMPONENTS OF THE EROSION AND SEDIMENTATION CONTROL PLAN PRIOR TO ANY EARTH DISTURBING ACTIVITIES. ALL COMPONENTS SHALL BE MAINTAINED BY THE CONTRACTOR UNTIL ALL VEGETATION IS ESTABLISHED, THE ENTIRE PROJECT AREA IS STABILIZED AND THE OWNER HAS ACCEPTED OPERATION AND MAINTENANCE.
7. THE STORMWATER BASIN IS DESIGNED IN ACCORDANCE WITH SRWMD APPLICANT HANDBOOK VOLUME II AND 62-330 F.A.C.
8. ALL SLOPES OF THE STORMWATER BASIN SHALL BE GRASSED. ALL SLOPES STEEPER THAN 3:1 SHALL BE STAPLED SOD.
9. ALL DISTURBED AREAS NOT SODDED SHALL BE SEEDED WITH A MIXTURE OF LONG-TERM VEGETATION AND QUICK GROWING SHORT-TERM VEGETATION FOR THE FOLLOWING CONDITIONS. FOR THE MONTHS FROM SEPTEMBER THROUGH MARCH, THE MIX SHALL CONSIST OF 70 POUNDS PER ACRE OF LONG-TERM SEED AND 20 POUNDS PER ACRE OF WINTER RYE. FOR THE MONTHS OF APRIL THROUGH AUGUST, THE MIX SHALL CONSIST OF 70 PER ACRE OF LONG-TERM SEED AND 20 POUNDS PER ACRE OF MILLET.
10. EXISTING DRAINAGE STRUCTURES WITHIN THE CONSTRUCTION LIMITS SHALL BE REMOVED.
11. THE LOCATION OF THE UTILITIES SHOWN IN THE PLANS ARE APPROXIMATE ONLY. THE EXACT LOCATION SHALL BE DETERMINED BY THE CONTRACTOR DURING CONSTRUCTION. CONTRACTOR SHALL PROTECT ALL UTILITIES WITHIN THE PROJECT AREAS.
12. ALL UTILITY CONSTRUCTION SHALL MEET THE CITY OF LAKE CITY WATER AND WASTEWATER UTILITY STANDARDS, AVAILABLE FROM CITY HALL OR PUBLIC WORKS.
13. THE CONTRACTOR SHALL WASTE ALL EXCESS EARTH ON SITE AS DIRECTED BY THE ENGINEER.
14. ALL SITE CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF LAKE CITY LAND DEVELOPMENT REGULATIONS.
15. CONTRACTOR SHALL REVIEW AND BECOME FAMILIAR WITH ALL REQUIRED UTILITY CONNECTIONS PRIOR TO BIDDING. CONTRACTOR SHALL PROVIDE ALL WORK AND MATERIALS REQUIRED TO COMPLETE CONNECTION TO THE EXISTING UTILITIES. THIS INCLUDES BUT IS NOT LIMITED TO MANHOLE CORING, WET TAPS, PAVEMENT REPAIRS AND DIRECTIONAL BORING.
16. CONTRACTOR SHALL COORDINATE ALL WORK WITH OTHER CONTRACTORS WITHIN PROJECT AREA.

17. CONTRACTOR SHALL PROVIDE ACTUAL INVERT ELEVATIONS ON ALL DRAINAGE STRUCTURES, INCLUDING CULVERTS, PRIOR TO PLACING ANY BASE MATERIAL. DEVIATIONS FROM THE PLANS SHALL BE APPROVED BY THE ENGINEER BEFORE CONTINUING WORK.
18. THIS PROJECT IS TO BE CONSTRUCTED IN ACCORDANCE WITH THE F.D.O.T. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (CURRENT EDITION) AND THE F.D.O.T. STANDARD PLANS FOR ROAD AND BRIDGE CONSTRUCTION (CURRENT EDITION), AWWA SPECIFICATIONS, AND THE CITY OF XXXX DEVELOPMENT STANDARDS UNLESS OTHERWISE NOTED.
19. THIS PROJECT IS TO BE CONSTRUCTED IN ACCORDANCE WITH THE SPECIFICATIONS PREPARED BY NORTH FLORIDA PROFESSIONAL SERVICES, INC.
20. A PRE-CONSTRUCTION MEETING WITH THE GREATER LAKE CITY REGIONAL UTILITY AUTHORITY (GLCRUA) PROJECT INSPECTOR IS REQUIRED PRIOR TO BEGINNING CONSTRUCTION.
21. IF UNSUITABLE MATERIAL IS ENCOUNTERED DURING GRADING, CONTRACTOR SHALL REMOVE UNSUITABLE MATERIAL TO A DEPTH OF 24" BELOW FINISHED GRADE WITHIN THE CONSTRUCTION LIMITS.
22. THE CONTRACTOR SHALL NOTIFY THE CITY AT LEAST 48 HOURS PRIOR TO BEGINNING OF CONSTRUCTION.
23. THE CONTRACTOR SHALL SUBMIT A NOTICE OF CONSTRUCTION COMMENCEMENT TO THE WATER MANAGEMENT DISTRICT AT LEAST 48 HOURS PRIOR TO THE BEGINNING OF CONSTRUCTION.
24. THE CONTRACTOR SHALL NOTIFY THE CITY AT LEAST 48 HOURS IN ADVANCE OF THE PRESSURE AND LEAKAGE TESTS.
25. NO FINAL TESTING OR PRESSURE TESTING WILL BE ACCEPTED UNLESS WITNESSED BY THE CITY'S REPRESENTATIVE.
26. NO WORK SHALL BE PERFORMED ON SATURDAY OR SUNDAY WITHOUT WRITTEN NOTIFICATION TO THE CITY AND CITY ENGINEER.
27. CONTRACTOR SHALL PROVIDE AN AS-BUILT SURVEY MEETING THE REQUIREMENTS OF CHAPTER 61G17 F.A.C. FOR THE STORMWATER MANAGEMENT SYSTEMS. INCLUDE HORIZONTAL AND VERTICAL DIMENSIONAL DATA SO THAT IMPROVEMENTS ARE LOCATED AND DELINEATED RELATIVE TO THE BOUNDARY. THIS AS-BUILT SURVEY SHOULD INCLUDE ALL OUTFALL STRUCTURES. PROVIDE SUFFICIENT DETAILED DATA TO DETERMINE WHETHER THE IMPROVEMENTS WERE CONSTRUCTED IN ACCORDANCE WITH THE PLANS. A COPY OF THE AS-BUILT SURVEY (IN PAPER AND DIGITAL AUTOCAD FORMAT) MUST BE SUBMITTED TO THE CITY OF LAKE CITY, FLORIDA (DEPARTMENT OF GROWTH MANAGEMENT) AND THE ENGINEER.
28. THE CONTRACTOR SHALL SUBMIT A NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM NOTICE OF INTENT ALONG WITH SUPPORTING DOCUMENTATION TO THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION AT LEAST 48 HOURS PRIOR TO BEGINNING OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PERMIT FEES.
29. IF DURING CONSTRUCTION OR OPERATION OF THE STORM WATER MANAGEMENT SYSTEM, A STRUCTURAL FAILURE IS OBSERVED THAT HAS THE POTENTIAL TO CAUSE THE DIRECT DISCHARGE OF SURFACE WATER INTO THE FLORIDAN AQUIFER SYSTEM, CORRECTIVE ACTIONS DESIGNED OR APPROVED BY A REGISTERED PROFESSIONAL SHALL BE TAKEN AS SOON AS PRACTICAL TO CORRECT THE FAILURE. SEE KARST REPAIR DETAIL #E23. IN ADDITION, A REPORT PREPARED BY A REGISTERED PROFESSIONAL MUST BE PROVIDED AS SOON AS PRACTICAL TO THE DEPARTMENT FOR REVIEW AND APPROVAL THAT PROVIDES REASONABLE ASSURANCE THAT THE BREACH WILL BE PERMANENTLY CORRECTED.
30. ALL CONCRETE SLABS ABUTTING EXTERIOR WALLS SHALL BE SOIL TREATED FOR TERMITES.
31. ALL UTILITY AND/OR DRAINAGE STRUCTURES SHALL BE PRECAST UNLESS APPROVED BY THE ENGINEER. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR APPROVAL PRIOR TO PROCUREMENT.

REVISIONS	
DATE	DESCRIPTION



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**NOTES**  
**BELL ROAD**  
**COLUMBIA COUNTY, FLORIDA**

SHEET NO.  
**3**

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

## WATER AND SEWER NOTES

1. ALL UTILITY CONSTRUCTION SHALL MEET THE TOWN OF FORT WHITE WATER AND WASTEWATER UTILITY STANDARDS.

2. THE CONTRACTOR SHALL MAINTAIN EXISTING WATER MAINS IN SERVICE DURING CONSTRUCTION. IN THE EVENT INTERRUPTIONS TO SERVICE ARE REQUIRED DURING CONSTRUCTION, SUCH INSTANCES SHALL BE MINIMIZED.

3. ALL NEW OR RELOCATED WATER MAINS THAT SERVE FIRE HYDRANTS AND ALL FIRE HYDRANT LEADS SHALL BE NO SMALLER THAN SIX INCHES IN DIAMETER. AUXILIARY VALVES SHALL BE PROVIDED ON ALL HYDRANT LEADS.

4. SUFFICIENT VALVES SHALL BE PROVIDED IN NEW AND RELOCATED WATER MAINS SO THAT INCONVENIENCE AND SANITARY HAZARDS WILL BE MINIMIZED DURING REPAIRS. (VALVES SHALL BE PLACED IN NO MORE THAN 500-FOOT INTERVALS IN COMMERCIAL DISTRICTS AND AT NO MORE THAN ONE-BLOCK OR 800-FOOT INTERVALS IN OTHER DISTRICTS.)

5. IF THERE ARE ANY NEW OR RELOCATED WATER MAINS THAT CROSS UNDER ANY SURFACE WATER, A MINIMUM COVER OF TWO FEET SHALL BE PROVIDED OVER THE WATER MAIN PIPE AT EACH SURFACE WATER CROSSING, AND IF THE SURFACE WATER IS GREATER THAN 15 FEET IN WIDTH, THE FOLLOWING FEATURES SHALL BE PROVIDED: (A) FLEXIBLE WATER TIGHT JOINTS FOR THE WATER MAIN PIPE AT THE CROSSING, (B) EASILY ACCESSIBLE VALVES LOCATED IN A MANHOLE, AND (C) PERMANENT TAPS ON EACH SIDE OF THE VALVE WITHIN THE MANHOLE TO ALLOW FOR SAMPLING AND INSERTION OF A SMALL METER TO DETERMINE LEAKAGE.

6. PROPER BACKFLOW-PREVENTION ASSEMBLIES/DEVICES SHALL BE PROVIDED IN ACCORDANCE WITH RULE 62-555.360, F.A.C., AND THE AWWA'S MANUAL M14, RECOMMENDED PRACTICE FOR BACKFLOW PREVENTION AND CROSS-CONNECTION CONTROL.

7. THIS PROJECT SHALL NOT INCLUDE ANY INTERCONNECTION BETWEEN PREVIOUSLY SEPARATE PUBLIC WATER SYSTEMS THAT HAVE SEPARATE WATER SUPPLY SOURCES. (A SPECIFIC CONSTRUCTION PERMIT IS REQUIRED FOR SUCH AN INTERCONNECTION.)

8. ALL NEW RELOCATED WATER LATERALS THAT CROSS ANY SANITARY SEWERS, STORM SEWERS, FORCE MAINS, OR RECLAIMED WATER LINES SHALL CROSS ABOVE SUCH PIPELINES.

9. COPPER TRACER WIRE SHALL BE PLACED ON ALL POTABLE WATER LINES AND WATER LATERALS. TRACER WIRE SHALL BE CONTINUOUS WITH NO INTERRUPTIONS.

10. LOCATOR BALLS SHALL BE PROVIDED AT END OF ALL WATER AND SANITARY SEWER LATERALS. THE LOCATOR BALLS SHALL BE SECURED TO THE LATERALS WITH A PLASTIC TIE STRAP.

11. WATER AND SANITARY SEWER LATERALS SHALL BE LEFT UNCOVERED UNTIL INSPECTED BY THE ENGINEER OR THE ENGINEER'S INSPECTOR.

12. CONTRACTOR SHALL PROVIDE TEMPORARY STAKES (2" BY 2" WOODEN STAKES) AT THE END OF EACH LATERAL. EACH STAKE SHALL INDICATE EITHER WATER OR SANITARY SEWER LATERAL. CONTRACTOR SHALL MAINTAIN THE STAKES UNTIL AN AS-BUILT SURVEY OF WATER AND SANITARY SEWER MAINS AND LATERALS ARE COMPLETE AND APPROVED BY THE ENGINEER.

13. MEGALUG MECHANICAL JOINT RESTRAINTS OR SERIES 1390 UNI-FLANGE BLOCK BUSTER RESTRAINT DEVICES SHALL BE USED WITH MANUFACTURER'S RECOMMENDATIONS. ALL RESTRAINED JOINTING MUST BE LEFT OPEN UNTIL VIEWED BY THE CITY INSPECTOR.

14. FOR SANITARY SEWER PERFORM HYDROSTATIC TEST. ALLOWABLE LEAKAGE IS A MAXIMUM OF 50 GAL. PER INCH OF NOMINAL PIPE SIZE PER MILE OF PIPE, DURING A 24-HOUR PERIOD. OPTION: TEST DUCTILE-IRON PIPING ACCORDING TO AWWA C600, SECTION "HYDROSTATIC TESTING". USE TEST PRESSURE OF AT LEAST 10 PSI. FOR SANITARY SEWERAGE, PERFORM AIR TEST ACCORDING TO UNI-B-6.

15. FOR SANITARY SEWERAGE ALIGNMENT: EACH SECTION OF THE COMPLETED SEWER SYSTEM SHALL BE INSPECTED FOR PROPER ALIGNMENT. INSPECTION SHALL CONSIST OF "LAMPING" FROM MANHOLE TO MANHOLE. ANY SECTION OF THE SEWER SYSTEM, WHICH DOES NOT DISPLAY TRUE, CONCENTRIC ALIGNMENT, SHALL BE INSTALLED AT NO ADDITIONAL EXPENSE TO THE OWNER.

16. CLEAN AND DISINFECT WATER DISTRIBUTION PIPING SYSTEMS AND PARTS OF EXISTING SYSTEMS THAT HAVE BEEN ALTERED, EXTENDED OR REPAIRED BEFORE USE. USE PURGING AND DISINFECTING PROCEDURE PRESCRIBED BY AUTHORITIES HAVING JURISDICTION OR USE PROCEDURE PRESCRIBED BY AUTHORITIES HAVING JURISDICTION OR USE PROCEDURE DESCRIBED IN AWWA C651.

17. PVC GRAVITY FLOW SEWER PIPE AND FITTINGS 15 INCH AND SMALLER IN DIAMETER SHALL BE SDR35 PIPE WITH BELL AND SPIGOT GASKET JOINT THAT COMPLIES WITH THE REQUIREMENTS OF ASTM D3034.

18. ALL PIPE, PIPE FITTINGS, PIPE JOINT PACKING AND JOINTING MATERIALS, VALVES, FIRE HYDRANTS, AND METERS INSTALLED UNDER THIS PROJECT SHALL CONFORM TO APPLICABLE AMERICAN WATER WORKS ASSOCIATION (AWWA) STANDARDS.

19. ALL PUBLIC WATER SYSTEM COMPONENTS, EXCLUDING FIRE HYDRANTS, THAT WILL BE INSTALLED UNDER THIS PROJECT AND THAT WILL COME INTO CONTACT WITH DRINKING WATER SHALL CONFORM TO NSF INTERNATIONAL STANDARD 61 AS ADOPTED IN RULE 62-555.335, F.A.C., OR OTHER APPLICABLE STANDARDS, REGULATIONS, OR REQUIREMENTS REFERENCED IN PARAGRAPH 62- 555.320(3)(B), F.A.C.

20. ALL PIPE AND PIPE FITTINGS INSTALLED UNDER THIS PROJECT SHALL CONTAIN NO MORE THAN 8.0% LEAD, AND ANY SOLDER OR FLUX USED IN THIS PROJECT WILL CONTAIN NO MORE THAN 0.2% LEAD.

21. ALL WATER PIPE AND PIPE FITTINGS INSTALLED UNDER THIS PROJECT SHALL BE COLOR CODED OR MARKED IN ACCORDANCE WITH SUBPARAGRAPH 62-555.320(21)(B) 3, F.A.C., USING BLUE AS A PREDOMINANT COLOR. (UNDERGROUND PLASTIC PIPE SHALL BE SOLID-WALL BLUE PIPE, WILL HAVE A CO-EXTRUDED BLUE EXTERNAL SKIN, OR WILL BE WHITE OR BLACK PIPE WITH BLUE STRIPES INCORPORATED INTO, OR APPLIED TO, THE PIPE WALL; AND UNDERGROUND METAL OR CONCRETE PIPE SHALL HAVE BLUE STRIPES APPLIED TO THE PIPE WALL. PIPE STRIPED DURING MANUFACTURING OF THE PIPE SHALL HAVE CONTINUOUS STRIPES THAT RUN PARALLEL TO THE AXIS OF THE PIPE, THAT ARE LOCATED AT NO GREATER THAN 90-DEGREE INTERVALS AROUND THE PIPE, AND THAT WILL REMAIN INTACT DURING AND AFTER INSTALLATION OF THE PIPE. IF TAPE OR PAINT IS USED TO STRIPE PIPE DURING INSTALLATION OF PIPE, THE TAPE OR PAINT SHALL BE APPLIED IN A CONTINUOUS LINE THAT RUNS PARALLEL TO THE AXIS OF THE PIPE AND THAT IS LOCATED ALONG THE TOP OF THE PIPE; FOR PIPE WITH AN INTERNAL DIAMETER OF 24 INCHES OR GREATER, TAPE OR PAINT WILL BE APPLIED IN CONTINUOUS LINES ALONG EACH SIDE OF THE PIPE AS WELL AS ALONG THE TOP OF THE PIPE. ABOVEGROUND PIPE SHALL BE PAINTED BLUE OR WILL BE COLOR-CODED OR MARKED LIKE UNDERGROUND PIPE.

22. SUFFICIENT VALVES SHALL BE PROVIDED ON NEW OR ALTERED WATER MAINS INCLUDED IN THIS PROJECT SO THAT INCONVENIENCE AND SANITARY HAZARDS WILL BE MINIMIZED DURING REPAIRS.

23. ALL FIRE HYDRANTS THAT WILL BE INSTALLED UNDER THIS PROJECT AND THAT WILL HAVE UNPLUGGED, UNDERGROUND DRAINS SHALL BE LOCATED AT LEAST THREE FEET FROM ANY EXISTING OR PROPOSED STORM SEWER, STORMWATER FORCE MAIN, PIPELINE CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C., OR VACUUM-TYPE SANITARY SEWER; CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C., OR VACUUM-TYPE SANITARY SEWER; OR PIPELINE CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-10, F.A.C.; AND AT LEAST TEN FEET FROM ANY EXISTING OR PROPOSED "ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM."

24. NEW OR ALTERED CHAMBERS, PITS, OR MANHOLES THAT CONTAIN VALVES, BLOW-OFFS, METERS, OR OTHER SUCH WATER DISTRIBUTION SYSTEM APPURTENANCES AND THAT ARE INCLUDED IN THIS PROJECT WILL NOT BE CONNECTED DIRECTLY TO ANY SANITARY OR STORM SEWER, AND BLOW-OFFS OR AIR RELIEF VALVES INSTALLED UNDER THIS PROJECT SHALL NOT BE CONNECTED DIRECTLY TO ANY SANITARY OR STORM SEWER.

25. NEW OR ALTERED WATER MAINS INCLUDED IN THIS PROJECT SHALL BE INSTALLED IN ACCORDANCE WITH APPLICABLE AWWA STANDARDS OR IN ACCORDANCE WITH MANUFACTURERS' RECOMMENDED PROCEDURES.

26. A CONTINUOUS AND UNIFORM BEDDING SHALL BE PROVIDED IN TRENCHES FOR UNDERGROUND PIPE INSTALLED UNDER THIS PROJECT; BACKFILL MATERIAL WILL BE TAMPED IN LAYERS AROUND UNDERGROUND PIPE INSTALLED UNDER THIS PROJECT AND TO A SUFFICIENT HEIGHT ABOVE THE PIPE TO ADEQUATELY SUPPORT AND PROTECT THE PIPE; AND UNSUITABLY SIZED STONES (AS DESCRIBED IN APPLICABLE AWWA STANDARDS OR MANUFACTURERS' RECOMMENDED INSTALLATION PROCEDURES) FOUND IN TRENCHES WILL BE REMOVED FOR A DEPTH OF AT LEAST SIX INCHES BELOW THE BOTTOM OF UNDERGROUND PIPE INSTALLED UNDER THIS PROJECT.

27. ALL WATER MAIN TEES, BENDS, PLUGS, AND HYDRANTS INSTALLED UNDER THIS PROJECT SHALL BE PROVIDED WITH RESTRAINED JOINTS TO PREVENT MOVEMENT.

28. NEW OR ALTERED WATER MAINS THAT ARE INCLUDED IN THIS PROJECT AND THAT WILL BE CONSTRUCTED OF ASBESTOS-CEMENT OR POLYVINYL CHLORIDE PIPE SHALL BE PRESSURE AND LEAKAGE TESTED IN ACCORDANCE WITH AWWA STANDARD C603 OR C605, RESPECTIVELY, AS INCORPORATED INTO RULE 62-555.330, F.A.C., AND ALL OTHER NEW OR ALTERED WATER MAINS INCLUDED IN THIS PROJECT SHALL BE PRESSURE AND LEAKAGE TESTED IN ACCORDANCE WITH AWWA STANDARD C600 AS INCORPORATED INTO RULE 62-555.330.

29. NEW OR ALTERED WATER MAINS, INCLUDING FIRE HYDRANT LEADS AND INCLUDING SERVICE LINES THAT WILL BE UNDER THE CONTROL OF A PUBLIC WATER SYSTEM AND THAT HAVE AN INSIDE DIAMETER OF THREE INCHES OR GREATER, SHALL BE DISINFECTED AND BACTERIOLOGICALLY EVALUATED IN ACCORDANCE WITH RULE 62-555.340, F.A.C.

30. NEW OR ALTERED WATER MAINS THAT ARE INCLUDED IN THIS PROJECT AND THAT WILL BE INSTALLED IN AREAS WHERE THERE ARE KNOWN AGGRESSIVE SOIL CONDITIONS SHALL BE PROTECTED THROUGH USE OF CORROSION-RESISTANT WATER MAIN MATERIALS, THROUGH ENCASEMENT OF THE WATER MAINS IN POLYETHYLENE, OR THROUGH PROVISION OF CATHODIC PROTECTION.

31. NEW OR RELOCATED, UNDERGROUND WATER MAINS INCLUDED IN THIS PROJECT SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED VACUUM-TYPE SANITARY SEWER, STORM SEWER, STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.

32. NEW OR RELOCATED, UNDERGROUND WATER MAINS INCLUDED IN THIS PROJECT SHALL HAVE A HORIZONTAL DISTANCE OF AT LEAST SIX AND TEN FEET IS PREFERED BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED GRAVITY-TYPE SANITARY SEWER, EXISTING OR PROPOSED PRESSURE-TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.

33. THE HORIZONTAL SEPARATION DISTANCE BETWEEN WATER MAINS AND GRAVITY-TYPE SANITARY SEWERS MAY BE REDUCED TO THREE FEET WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST TWELVE INCHES ABOVE THE TOP OF THE SEWER

34. A HORIZONTAL DISTANCE OF AT LEAST TEN FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND ALL PARTS OF ANY EXISTING OR PROPOSED "ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM."

35. NEW OR RELOCATED, UNDERGROUND WATER MAINS THAT ARE INCLUDED IN THIS PROJECT AND THAT WILL CROSS ANY EXISTING OR PROPOSED GRAVITY- OR VACUUM-TYPE SANITARY SEWER OR STORM SEWER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST 12 INCHES ABOVE THE OTHER PIPELINE. NEW OR RELOCATED, UNDERGROUND WATER MAINS THAT ARE INCLUDED IN THIS PROJECT AND THAT WILL CROSS ANY EXISTING OR PROPOSED PRESSURE-TYPE SANITARY SEWER, WASTEWATER OR STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER WILL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST 12 INCHES ABOVE THE OTHER PIPELINE.


36. AT THE UTILITY CROSSINGS DESCRIBED ABOVE, SEPARATION DISTANCE SHALL NOT APPLY WHERE A WATER SERVICE PIPE CROSSES A SEWER PIPE, PROVIDED THE WATER SERVICE PIPE IS SLEEVED TO AT LEAST FIVE FEET HORIZONTALLY FROM THE SEWER PIPE CENTERLINE ON BOTH SIDES OF SUCH CROSSINGS WITH PIPE MATERIAL LISTED IN FLORIDA BUILDING CODE SECTION 603.2.

37. NEW OR ALTERED WATER MAINS THAT ARE INCLUDED IN THIS PROJECT AND THAT WILL CROSS ABOVE SURFACE WATER SHALL BE ADEQUATELY SUPPORTED AND ANCHORED, PROTECTED FROM DAMAGE AND FREEZING, AND ACCESSIBLE FOR REPAIR OR REPLACEMENT.

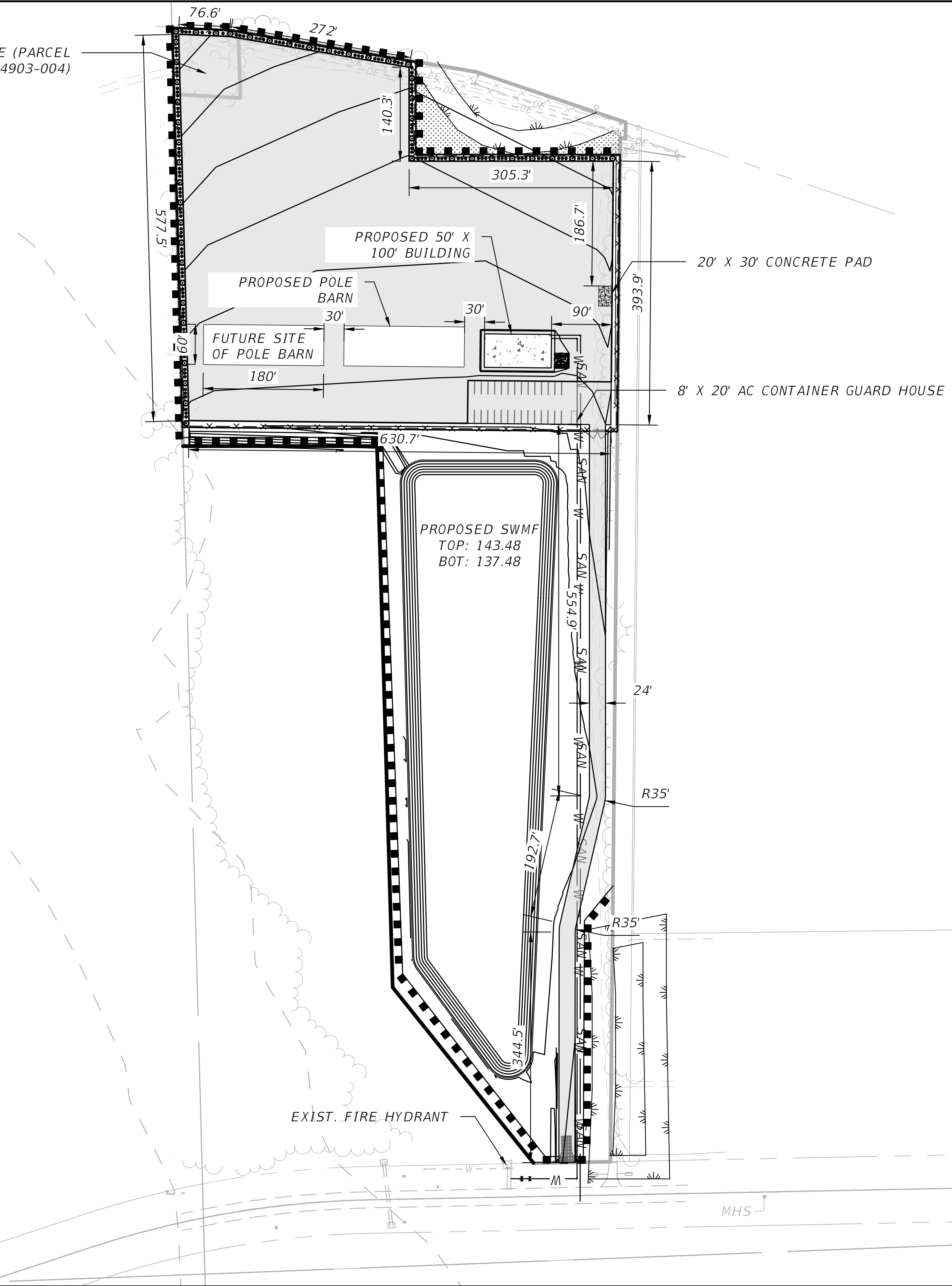
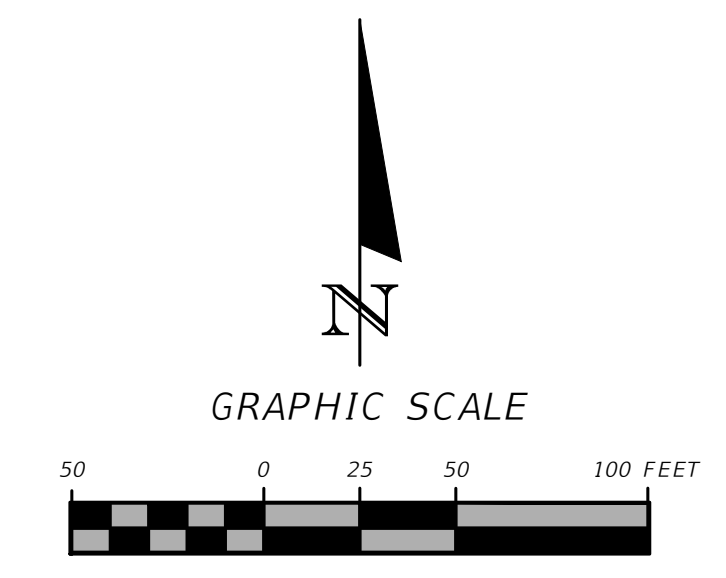
38. NEW OR ALTERED WATER MAINS THAT ARE INCLUDED IN THIS PROJECT AND THAT WILL CROSS UNDER SURFACE WATER COURSES GREATER THAN 15 FEET IN WIDTH SHALL HAVE FLEXIBLE OR RESTRAINED, WATERTIGHT PIPE JOINTS AND WILL INCLUDE VALVES AT BOTH ENDS OF THE WATER CROSSING SO THE UNDERWATER MAIN CAN BE ISOLATED FOR TESTING AND REPAIR; THE AFOREMENTIONED ISOLATION VALVES WILL BE EASILY ACCESSIBLE AND WILL NOT BE SUBJECT TO FLOODING; THE ISOLATION VALVE CLOSEST TO THE WATER SUPPLY SOURCE WILL BE IN A MANHOLE; AND PERMANENT TAPS WILL BE PROVIDED ON EACH SIDE OF THE ISOLATION VALVE WITHIN THE MANHOLE TO ALLOW FOR INSERTION OF A SMALL METER TO DETERMINE LEAKAGE FROM THE UNDERWATER MAIN AND TO ALLOW FOR SAMPLING OF WATER FROM THE UNDERWATER MAIN.

39. CONTRACTOR SHALL PROVIDE AN AS-BUILT SURVEY MEETING THE REQUIREMENTS OF CHAPTER 61G17 F.A.C. FOR THE POTABLE WATER MAIN EXTENSION AND THE SANITARY SEWER MAIN EXTENSIONS. INCLUDE HORIZONTAL AND VERTICAL DIMENSIONAL DATA SO THAT IMPROVEMENTS ARE LOCATED AND DELINEATED RELATIVE TO THE BOUNDARY. PROVIDE SUFFICIENT DETAILED DATA TO DETERMINE WHETHER THE IMPROVEMENTS WERE CONSTRUCTED IN ACCORDANCE WITH THE PLANS. A COPY OF THE AS-BUILT SURVEY (IN PAPER AND DIGITAL AUTOCAD FORMAT) MUST BE SUBMITTED TO THE CITY OF LAKE CITY, FLORIDA (DEPARTMENT OF GROWTH MANAGEMENT) AND THE ENGINEER.

40. CONTRACTOR SHALL PROVIDE POTABLE WATER TEST REPORTS IN ACCORDANCE WITH FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION REQUIREMENTS AFTER DISINFECTION OF THE SYSTEM.

REVISIONS		 <b>NORTH FLORIDA PROFESSIONAL SERVICES, INC.</b> P.O. BOX 3823 LAKE CITY, FL 32056 PH. 386-752-4675 LIC NO. LB8356	2551 BLAIRSTONE PINES DR. TALLAHASSEE, FL 32301 WWW.NFPS.NET CA# 29011	JOB NUMBER: L220630CRA EOR: TERRY R. WHITE, JR. P.E. NO.: 37390	<h2>WATER &amp; SEWER NOTES</h2> <h3>BELL ROAD</h3> <h3>COLUMBIA COUNTY, FLORIDA</h3>	SHEET NO.  <b>4</b>
DATE	DESCRIPTION					

APART OF SITE (PARCEL NUMBER 08-35-17-04903-004)



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DATE	DESCRIPTION



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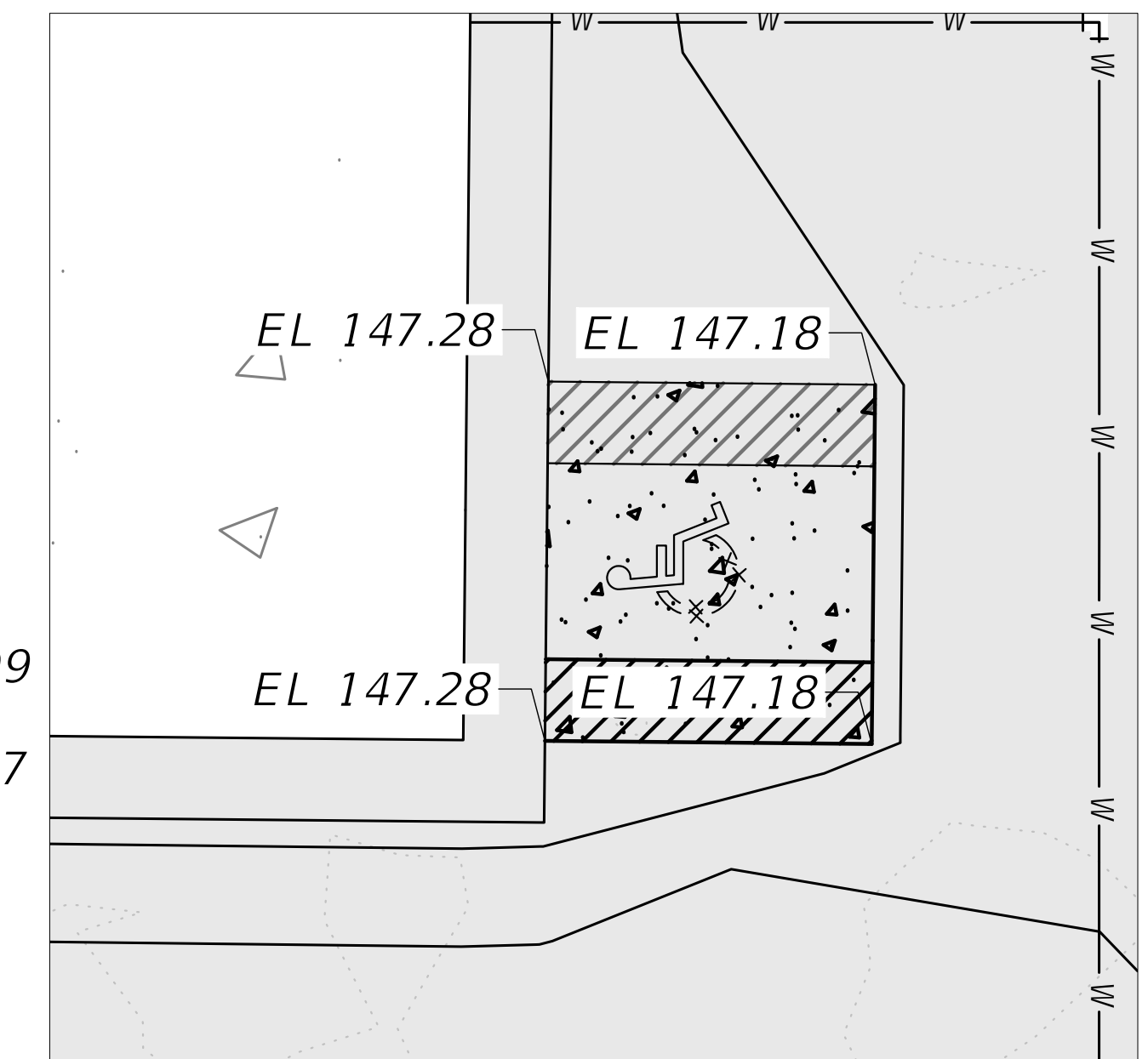
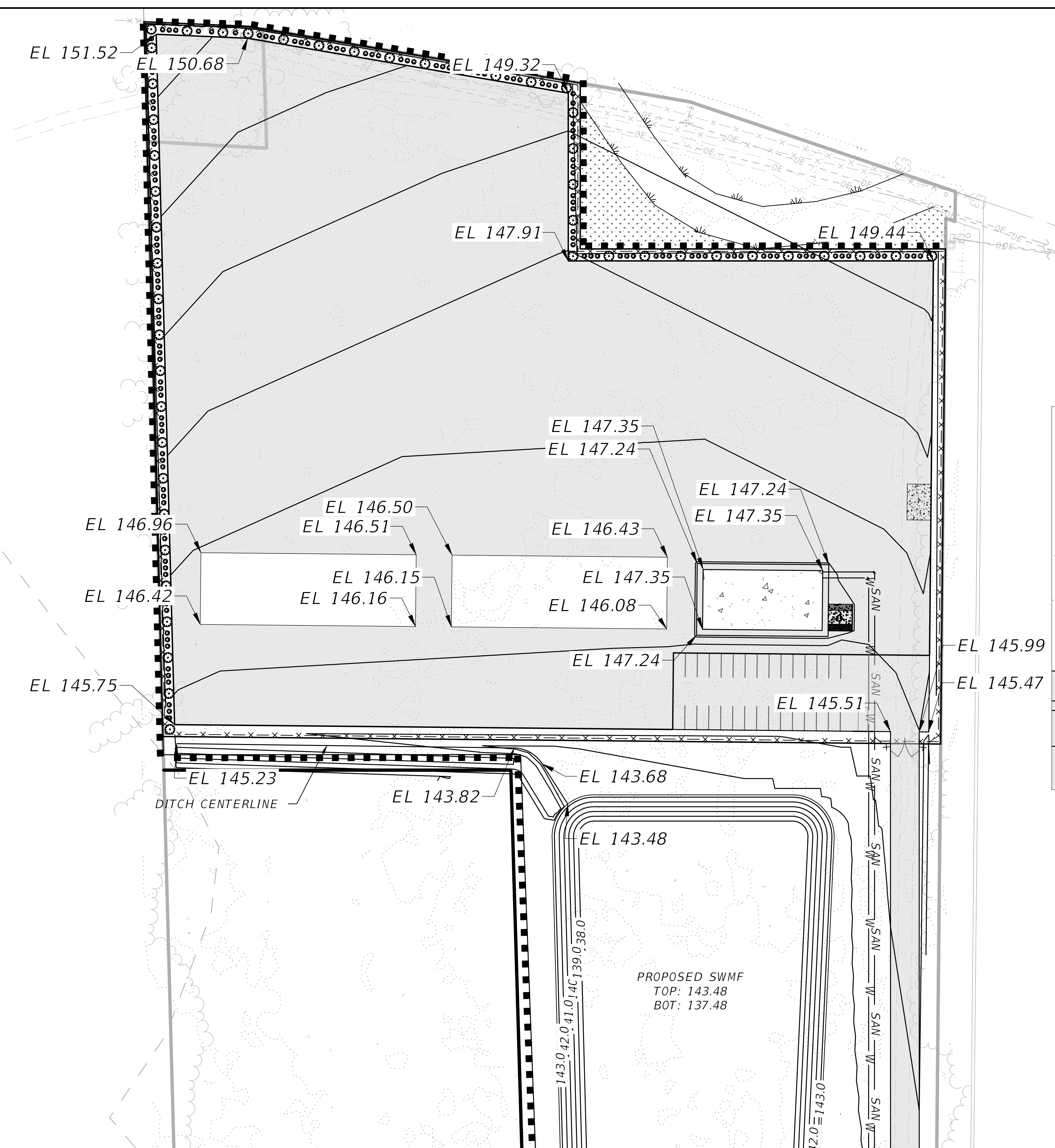
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 37390

**SITE PLAN**  
**BELL ROAD**  
**COLUMBIA COUNTY, FLORIDA**

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**5**

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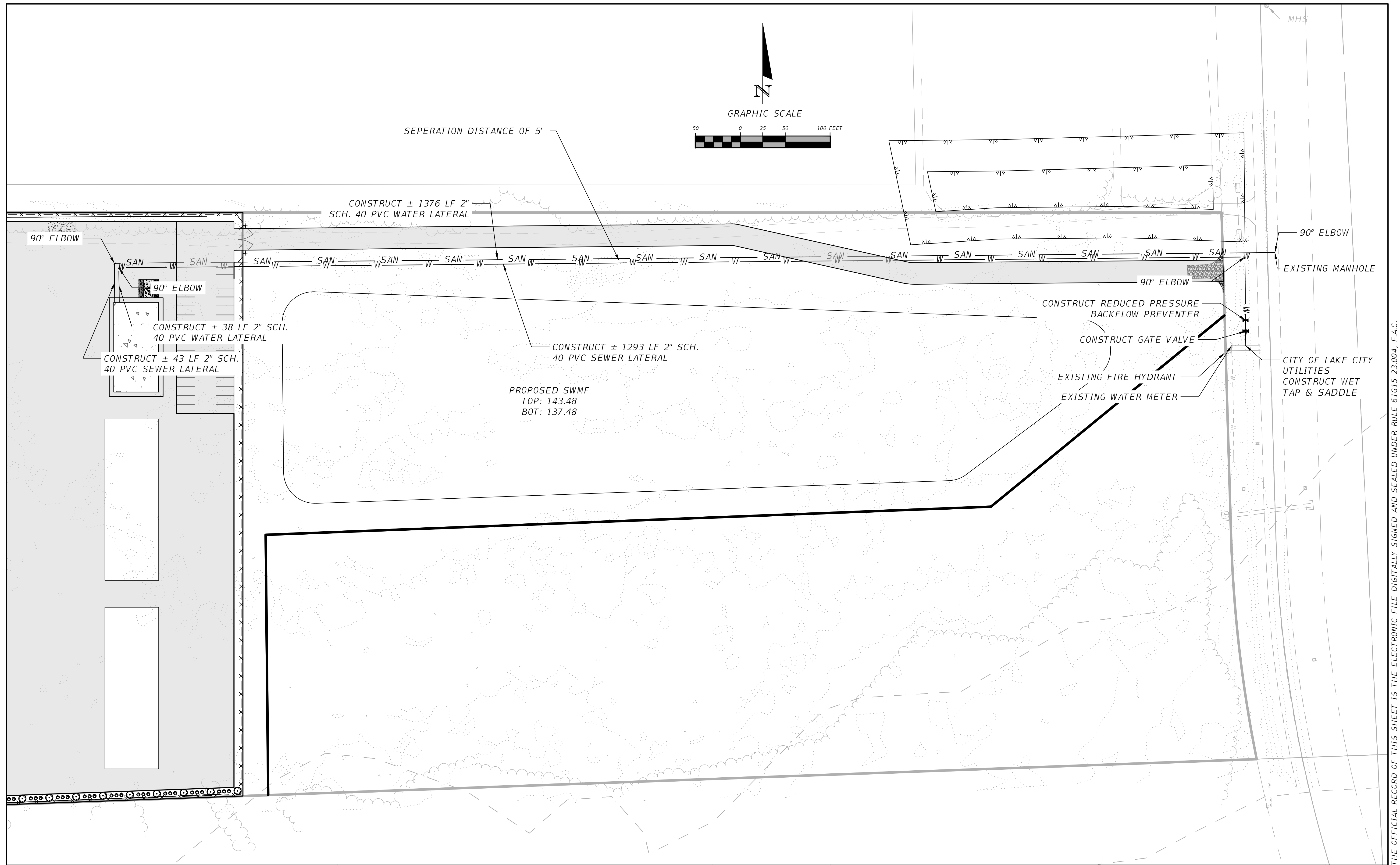
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**GRADING PLAN**  
**BELL ROAD**  
**COLUMBIA COUNTY, FLORIDA**

SHEET  
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**UTILITY PLAN**  
**BELL ROAD**  
**COLUMBIA COUNTY, FLORIDA**

SHEET NO.  
8



MATCH EXIST.

TOP ELEV.: 143.48

MATCH PAVT.

SLOPE VARIES

4:1 SLOPE

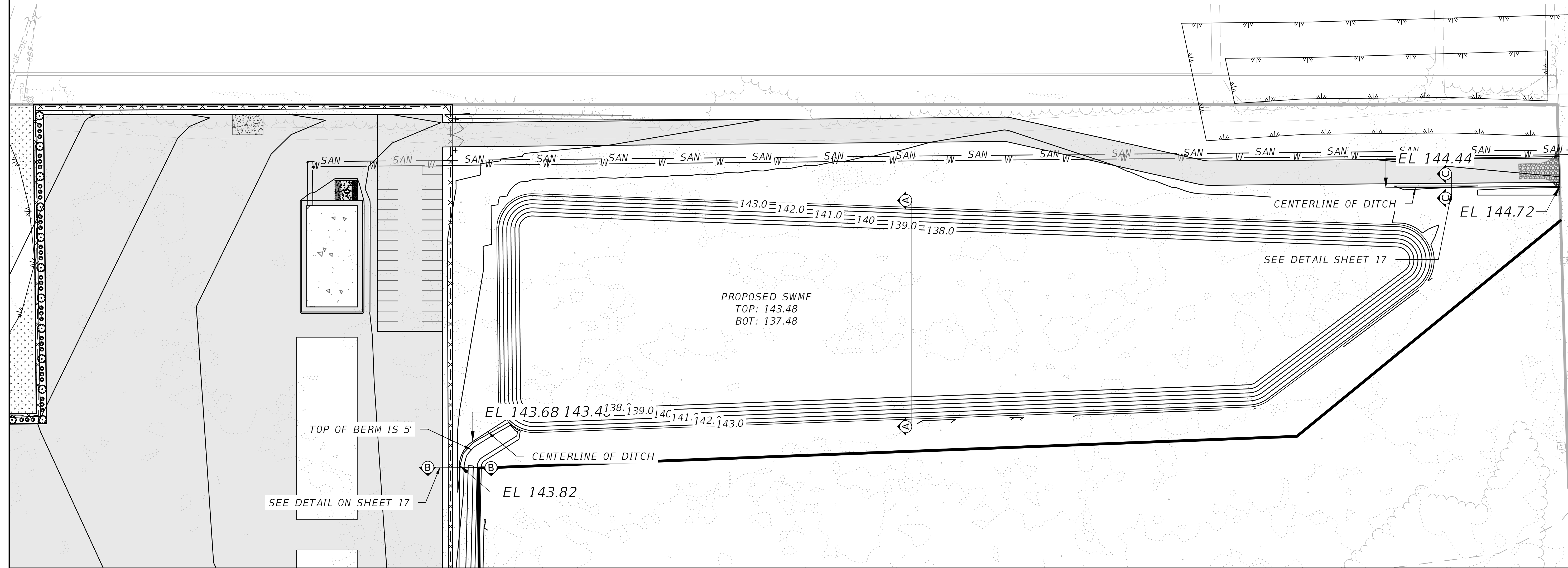
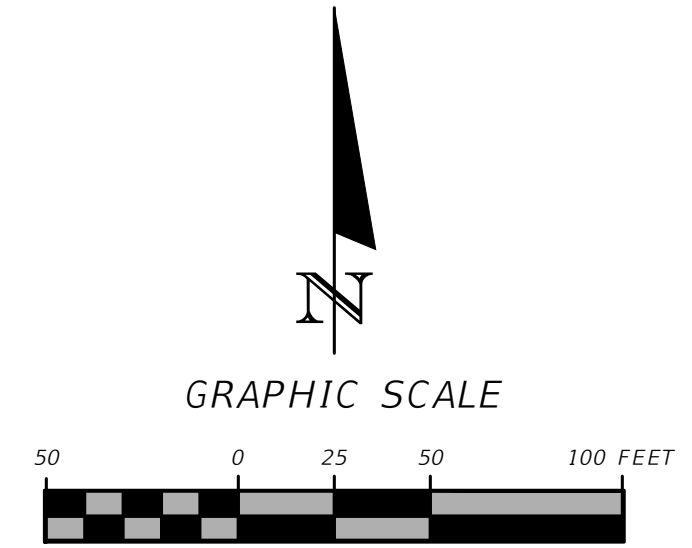
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4:1 SLOPE

SLOPE VARIES

BOTTOM OF POND ELEV.: 137.48

SECTION A-A SWMF DETAIL



REVISIONS	
DATE	DESCRIPTION

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**SWMF**  
**BELL ROAD**  
**COLUMBIA COUNTY, FLORIDA**

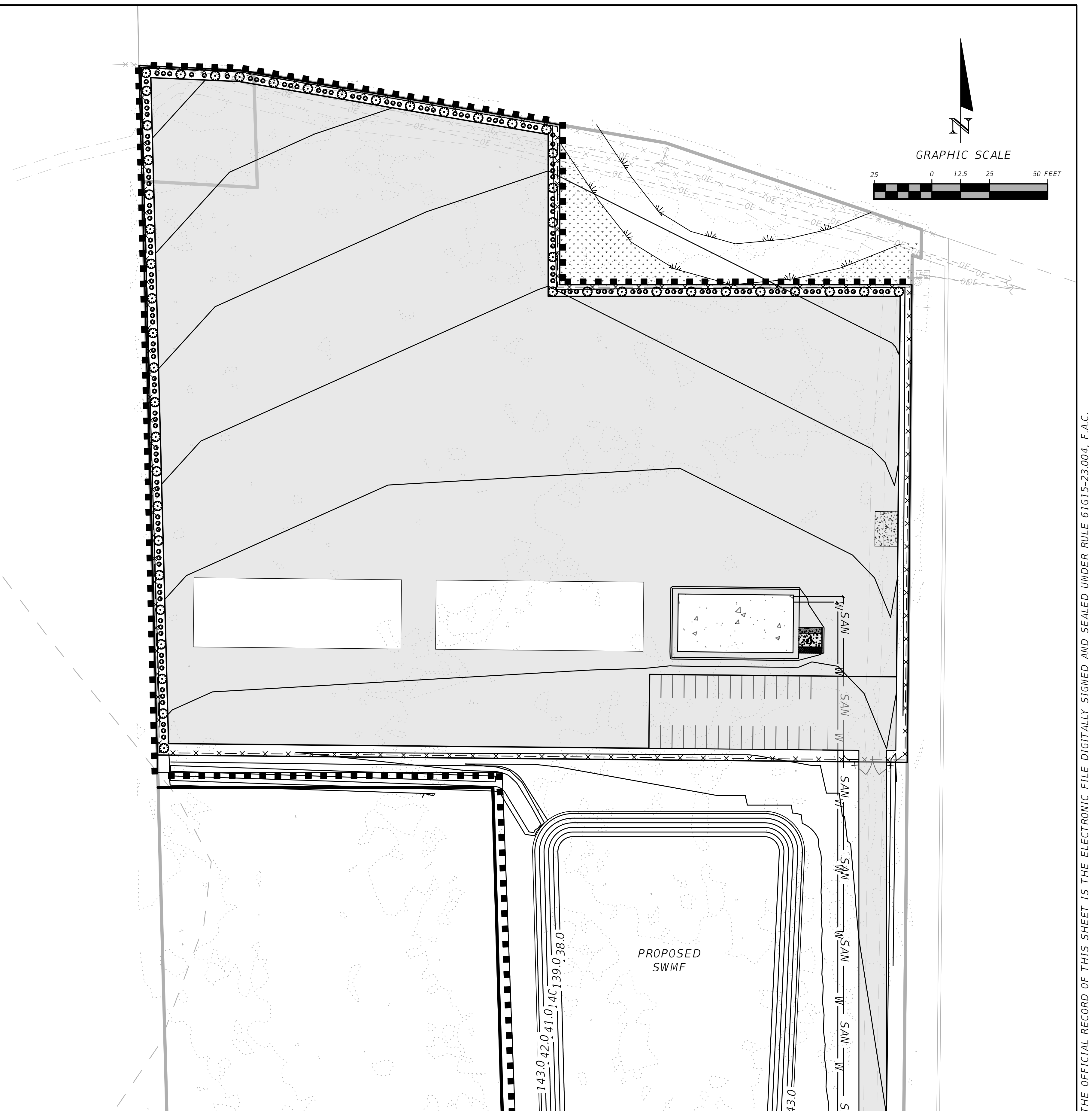
SHEET NO.  
9

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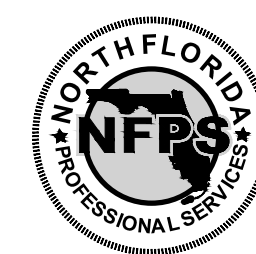
# TREE AND SHUBBERY REQUIREMENTS

MAP SYMBOL	COMMON NAME	NO.	NOTES
	GROUND COVER	N/A	1
	UNDERSTORY TREES	N/A	2 & 3
	CANOPY TREES	N/A	2 & 4

- MULCH, FLOWERS, JUNIPER, JASMINE, AND SIMILAR NATIVE GROUND COVER.
- TREES SHALL BE A MINIMUM OF FOUR FEET OVERALL HEIGHT IMMEDIATELY AFTER PLANTING.
- UNDERSTORY TREES MAY BE JUNIPER, BIRCH REDBUD, FIG, SPARKLEBERRY, CRAPE MYRTLE OR OTHER SIMILAR NATIVE SPECIES WHICH OBTAIN A MINIMUM HEIGHT OF 8 FEET.
- CANOPY TREES MAY BE LIVE OAK, WHITE OAK, MAPLE, HICKORY, RED BAY, ASH OR SIMILAR NATIVE SPECIES WHICH OBTAIN A MINIMUM HEIGHT OF 50 FEET. PINE TREES NOT PERMITTED.



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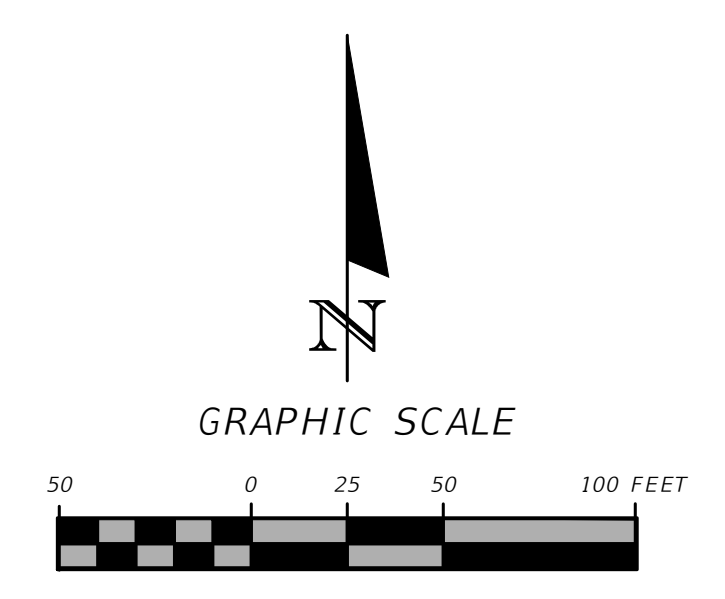
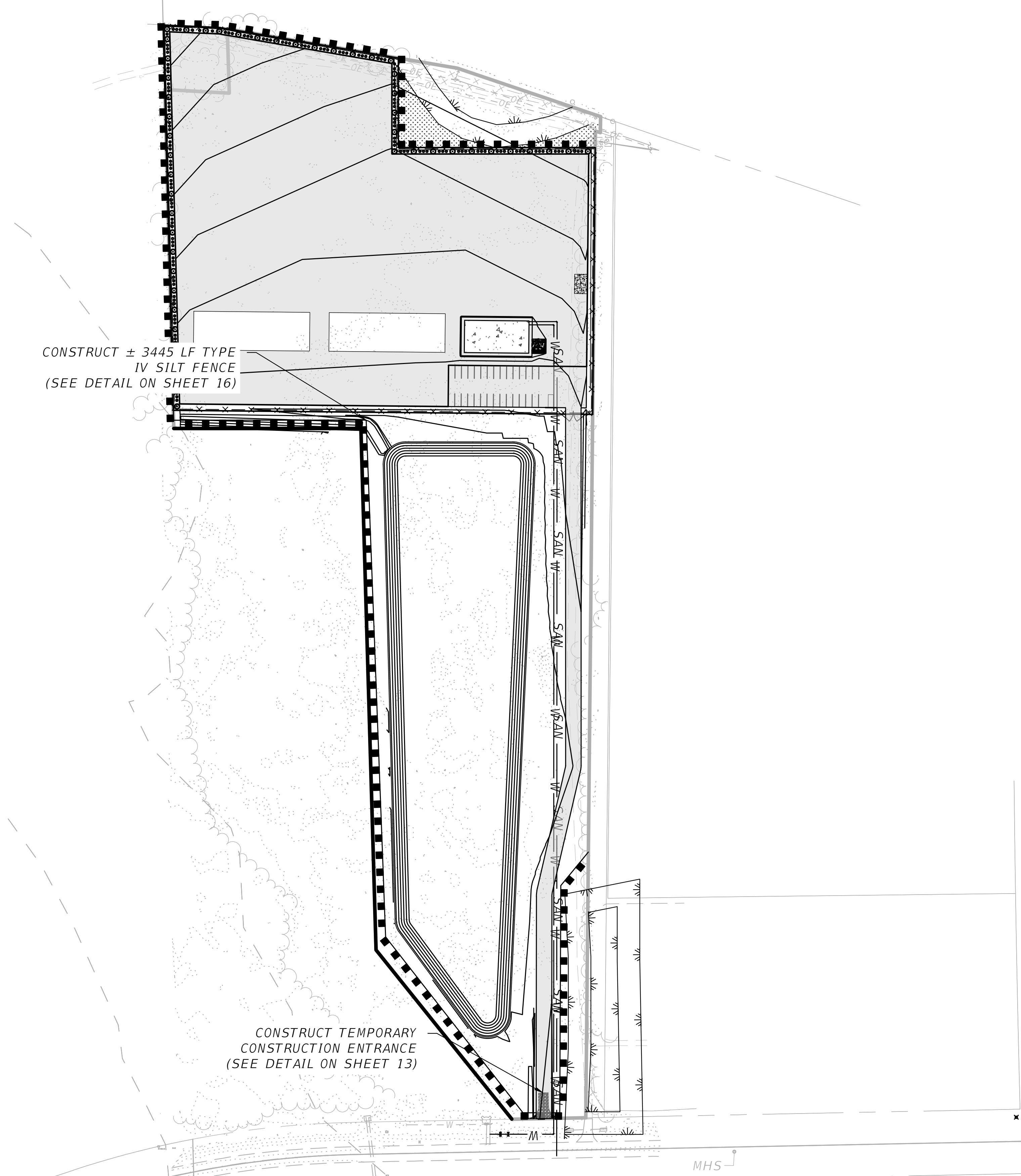
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**LANDSCAPE PLAN**  
**BELL ROAD**  
**COLUMBIA COUNTY, FLORIDA**

SHEET  
 NO.  
**10**



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**EROSION CONTROL PLAN**  
**BELL ROAD**  
**COLUMBIA COUNTY, FLORIDA**


SHEET NO.  
**11**

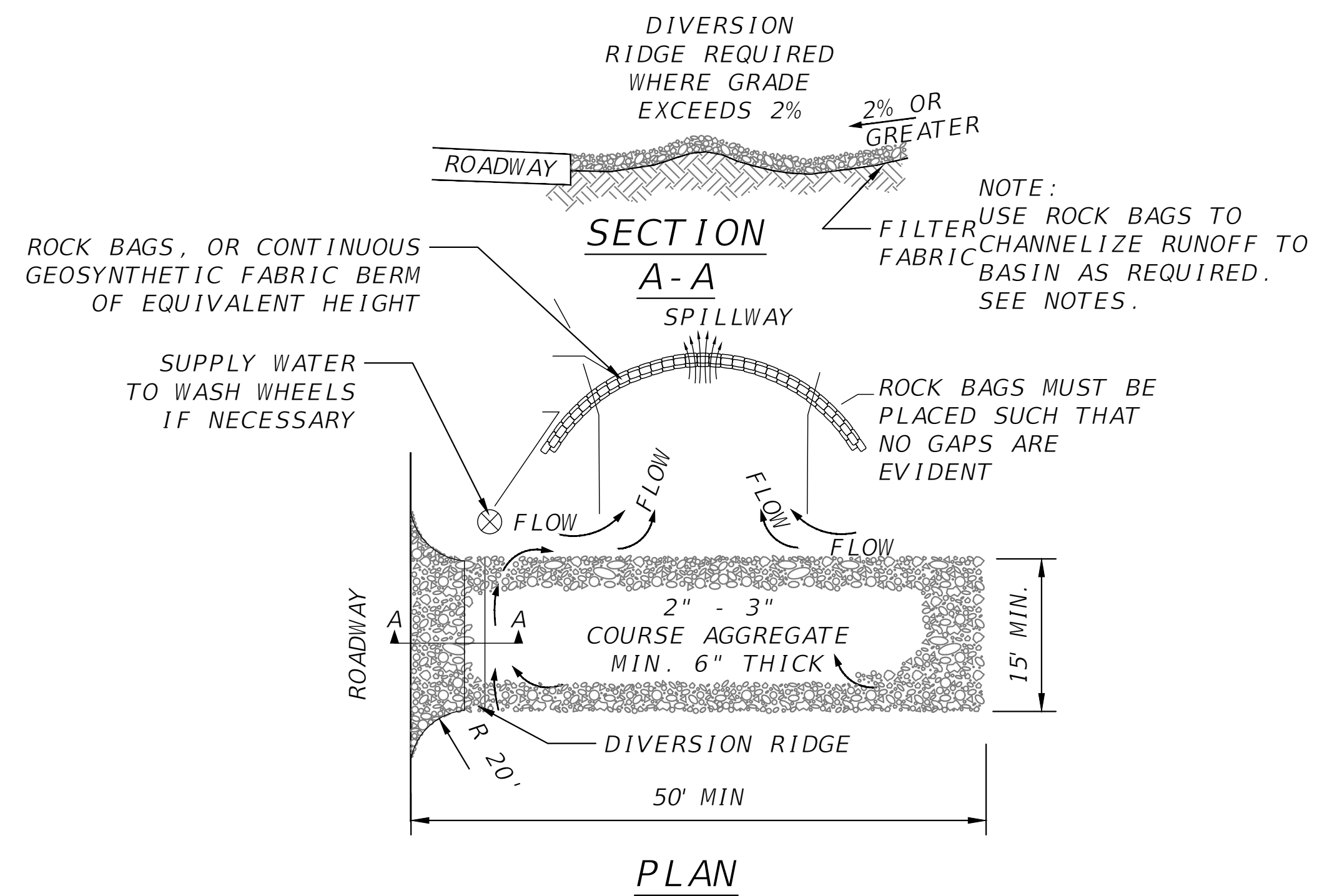
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**EROSION CONTROL NOTES**

1. THIS EROSION AND SEDIMENTATION CONTROL PLAN COMPLIES WITH THE REQUIREMENTS OF THE "FLORIDA DEVELOPMENT MANUAL" AND THE "FLORIDA EROSION AND SEDIMENT CONTROL INSPECTOR'S MANUAL".
2. THE CONTRACTOR SHALL ADHERE TO THE CITY OF LAKE CITY, SRWMD, AND OTHER GOVERNING AUTHORITIES FOR EROSION AND SEDIMENT CONTROL REGULATIONS. IF THE CONTRACTOR NEEDS TO CHANGE THIS PLAN TO MORE EFFECTIVELY CONTROL EROSION AND SEDIMENTATION, THE CONTRACTOR SHALL USE BMP'S FROM THE "FLORIDA EROSION AND SEDIMENT CONTROL INSPECTOR'S MANUAL".
3. THE CONTRACTOR SHALL ADJUST AND REVISE THIS PLAN TO MEET ACTUAL FIELD CONDITIONS. ANY REVISIONS SHALL BE APPROVED BY THE REVIEWING AGENCIES.
4. SEDIMENT AND EROSION CONTROL FACILITIES, STORM DRAINAGE FACILITIES AND DETENTION BASINS SHALL BE INSTALLED PRIOR TO ANY OTHER CONSTRUCTION.
5. EROSION CONTROL MEASURES SHALL BE INSPECTED WEEKLY AND AFTER EACH RAINFALL OF 0.5 INCHES OR GREATER, AND REPAIRED OR REPLACED AS NECESSARY.
6. SEDIMENT AND EROSION CONTROL MEASURES SHALL NOT BE REMOVED UNTIL ALL CONSTRUCTION IS COMPLETE AND UNTIL A PERMANENT GROUND COVER HAS BEEN ESTABLISHED.
7. ALL OPEN DRAINAGE SWALES SHALL BE GRASSED AND RIPRAP SHALL BE PLACED AS REQUIRED TO CONTROL EROSION.
8. SILT FENCES SHALL BE LOCATED ON SITE TO PREVENT SEDIMENT AND EROSION FROM LEAVING PROJECT LIMITS.
9. CONTRACTOR SHALL PLACE A DOUBLE ROW OF SILT FENCE IN AREAS WHERE RUNOFF FROM DISTURBED AREAS MAY ENTER WETLANDS.
10. DURING CONSTRUCTION AND AFTER CONSTRUCTION IS COMPLETE, ALL STRUCTURES SHALL BE CLEANED OF ALL DEBRIS AND EXCESS SEDIMENT.
11. ALL GRADED AREAS SHALL BE STABILIZED IMMEDIATELY WITH A TEMPORARY FAST-GROWING COVER AND/OR MULCH.
12. A PAD OF RUBBLE RIP RAP SHALL BE PLACED AT THE BOTTOM OF ALL COLLECTION FLUMES AND COLLECTION PIPE OUTLETS. GRANITE OR LIMESTONE RIPRAP IS REQUIRED, NO BROKEN CONCRETE WILL BE ACCEPTED.
13. ALL SIDE SLOPES STEEPER THAN 3:1 SHALL BE ADEQUATELY PROTECTED FROM EROSION THROUGH THE USE OF SYNTHETIC BALES OR SODDING.
14. ALL STABILIZATION PRACTICES SHALL BE INITIATED AS SOON AS PRACTICABLE IN AREAS OF THE JOB WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY STOPPED, BUT IN NO CASE SHALL THE DISTURBED AREA BE LEFT UNPROTECTED FOR MORE THAN SEVEN DAYS.
15. ALL WASTE GENERATED ON THE PROJECT SHALL BE DISPOSED OF BY THE CONTRACTOR IN AREAS PROVIDED BY CONTRACTOR.
16. LOADED HAUL TRUCKS SHALL BE COVERED WITH TARPS.
17. EXCESS DIRT SHALL BE REMOVED DAILY.
18. THIS PROJECT SHALL COMPLY WITH ALL WATER QUALITY STANDARDS. PERMIT REQUIRED FROM SRWMD HAS BEEN OBTAINED.
19. QUALIFIED PERSONNEL SHALL INSPECT THE AREA USED FOR STORAGE OF STOCKPILES, THE SILT FENCE AND STRAW BALES, THE LOCATION WHERE VEHICLES ENTER OR EXIT THE SITE, AND THE DISTURBED AREAS THAT HAVE NOT BEEN FINALLY STABILIZED, AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM OF 0.5 INCHES OR GREATER.
20. SITES THAT HAVE BEEN FINALLY STABILIZED WITH SOD OR GRASSING SHALL BE INSPECTED AT LEAST ONCE EVERY WEEK.

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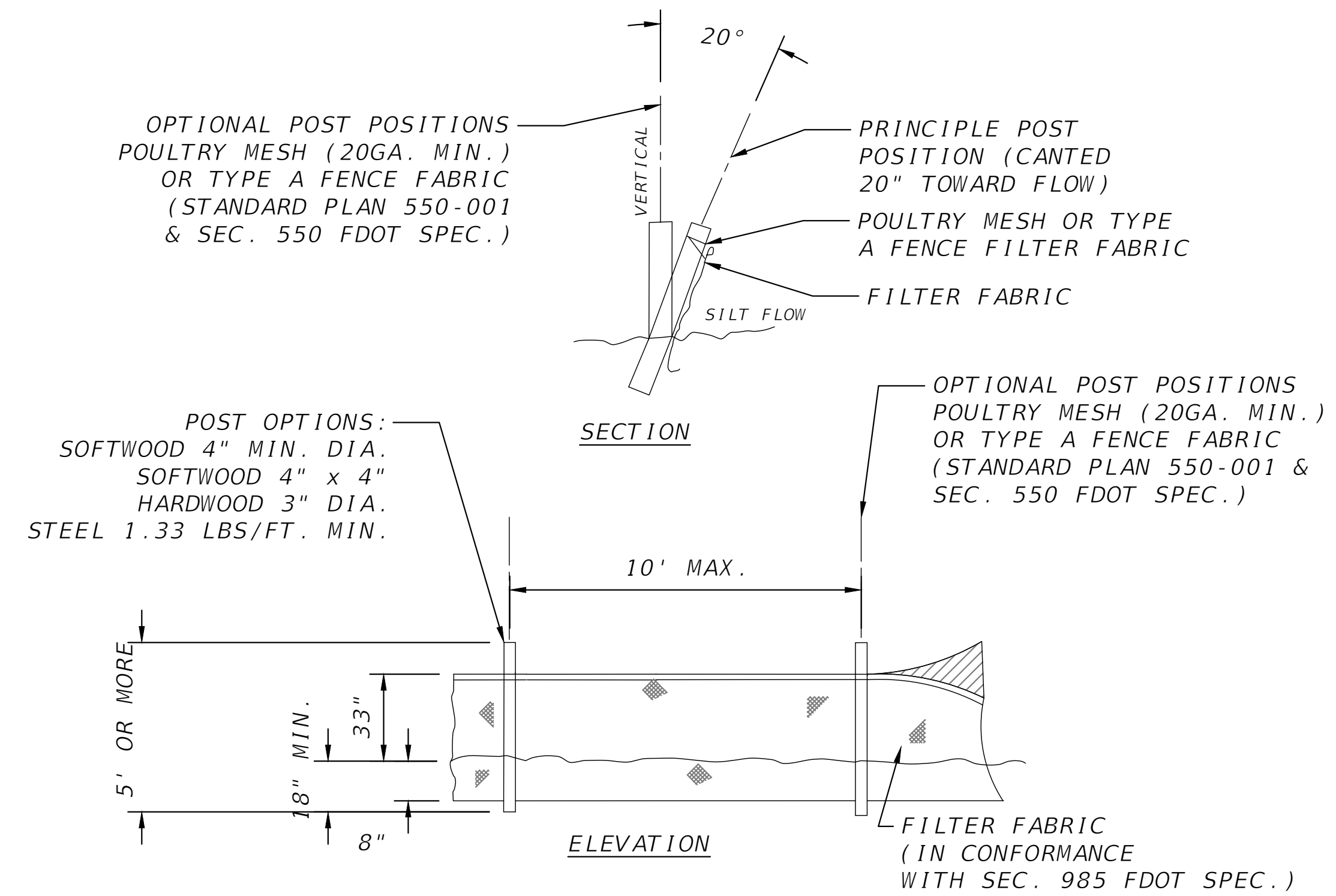
REVISIONS		 <b>NORTH FLORIDA PROFESSIONAL SERVICES, INC.</b> P.O. BOX 3823 LAKE CITY, FL 32056 PH. 386-752-4675 LIC NO. LB8356	2551 BLAIRSTONE PINES DR. TALLAHASSEE, FL 32301 WWW.NFPS.NET CA# 29011	JOB NUMBER: L220630CRA EOR: TERRY R. WHITE, JR. P.E. NO.: 37390	<b>EROSION NOTES</b> <b>BELL ROAD</b> <b>COLUMBIA COUNTY, FLORIDA</b>	SHEET NO.
DATE	DESCRIPTION					12



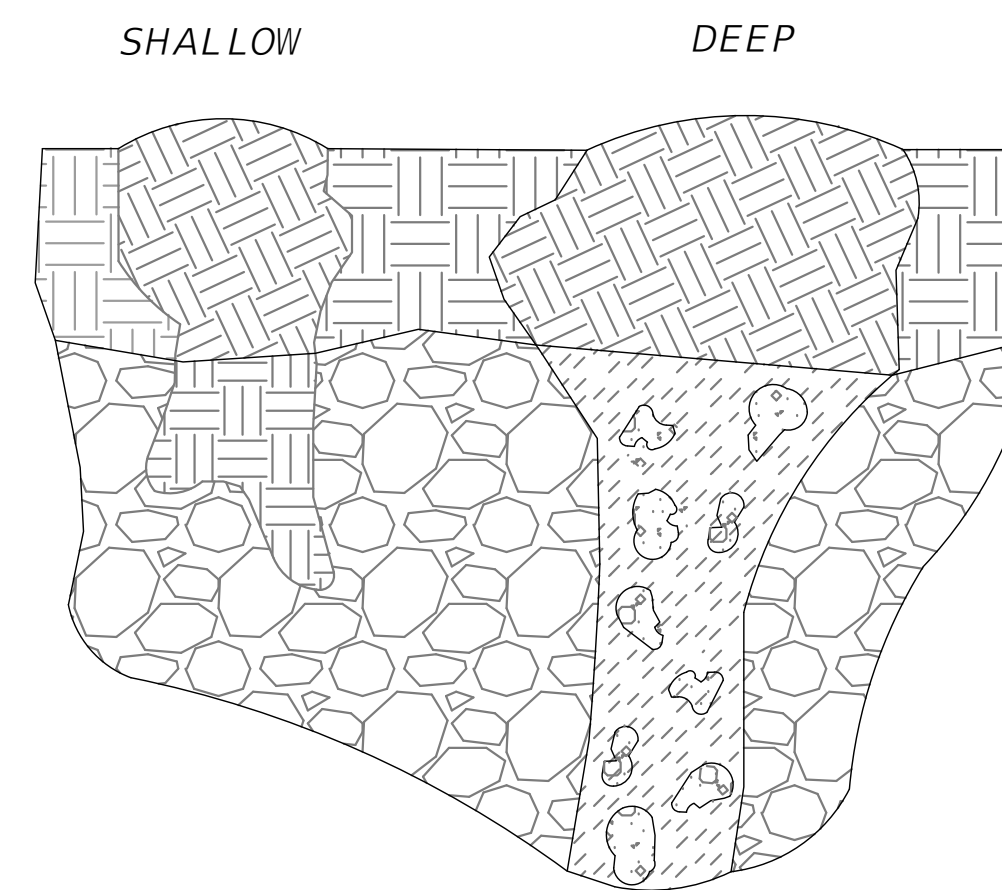
NOTES:

1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.
4. ROCK BAGS OR SANDBAGS SHALL BE PLACED SUCH THAT NO GAPS ARE EVIDENT.

**ER04** TEMPORARY CONSTRUCTION ENTRANCE  
SCALE: N.T.S.



**ER18** TYPE IV SILT FENCE  
SCALE: N.T.S.



NOTES:

THE FOLLOWING SHALL BE PERFORMED IN THE EVENT ANY KARST FEATURES FORM DURING CONSTRUCTION - E.G. SOLUTION CAVITIES, CHIMNEYS, SINKHOLES.

1. NOTIFY THE WATER MANAGEMENT DISTRICT AND THE APPLICABLE MUNICIPAL OR COUNTY PUBLIC WORKS IMMEDIATELY WHEN THE FEATURES ARE ENCOUNTERED. THE METHOD OF REPAIR SHALL BE SUBMITTED FOR REVIEW, COMMENT, AND APPROVAL PRIOR TO ATTEMPTING ANY REPAIR.
2. SHALLOW KARST FEATURES ARE TYPICALLY LESS THAN 5' DEEP AND ONLY HAVE SMALL VOIDS IN THE LIMESTONE. THE FEATURE CAN BE REPAIRED BY BACKFILLING WITH A LOWER PERMEABILITY MATERIAL SUCH AS CLAYEY-SAND OR CLAY. COMPACT THE BACKFILL AND CREATE A SMALL MOUND SLIGHTLY ABOVE GRADE TO ACCOUNT FOR SETTLING.
3. DEEP KARST FEATURES SHALL BE REPAIRED MORE PERMANENTLY. EXCAVATE THE FEATURE TO THE LIMESTONE BEDROCK. PLUG VOIDS IN THE BEDROCK WITH CLEAN GROUT. BACKFILL OVER THE PLUG WITH A LOWER-PERMEABILITY MATERIAL SUCH AS CLAYEY-SAND OR CLAY. COMPACT THE BACKFILL TO GRADE.

**ER23** KARST FEATURE REPAIR DETAIL  
SCALE: N.T.S.

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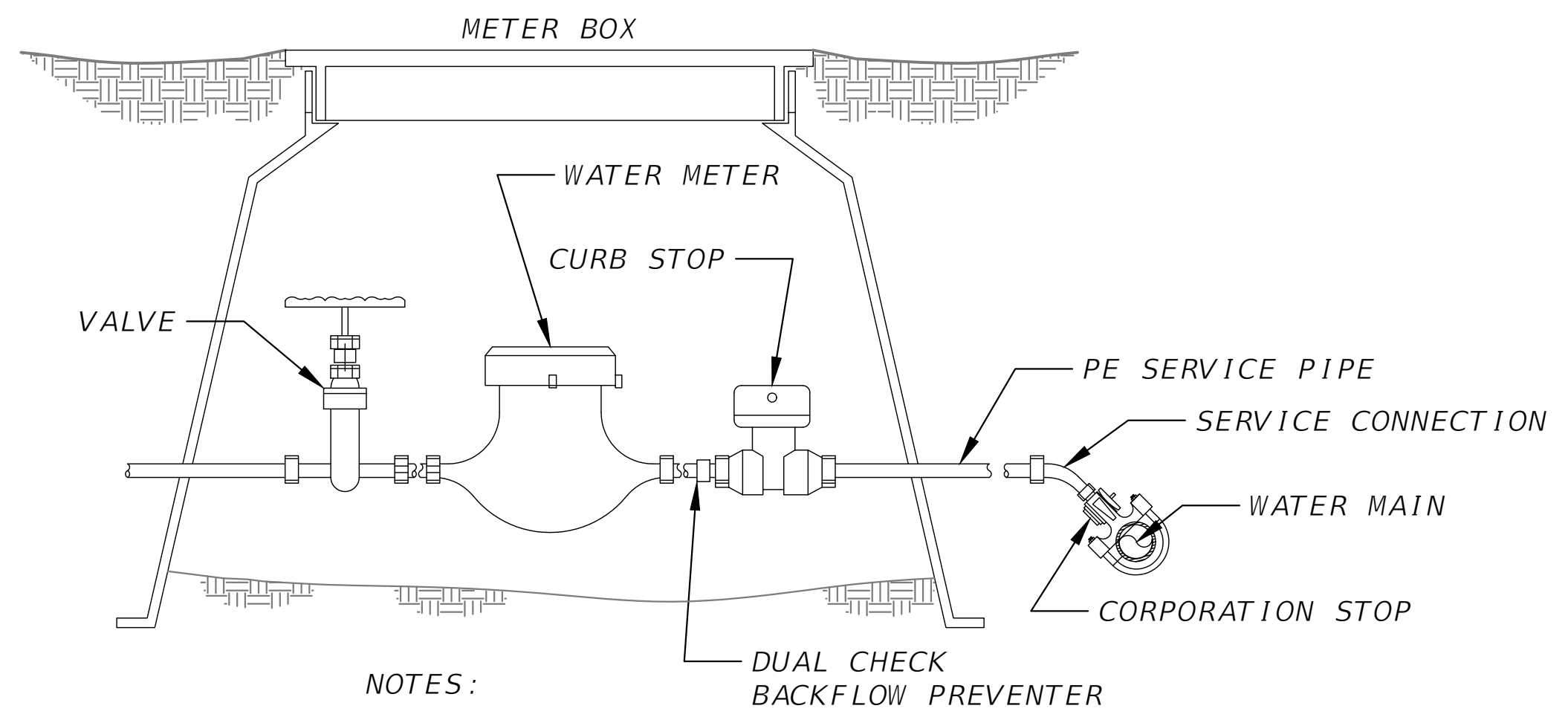
**NORTH FLORIDA PROFESSIONAL SERVICES, INC.**  
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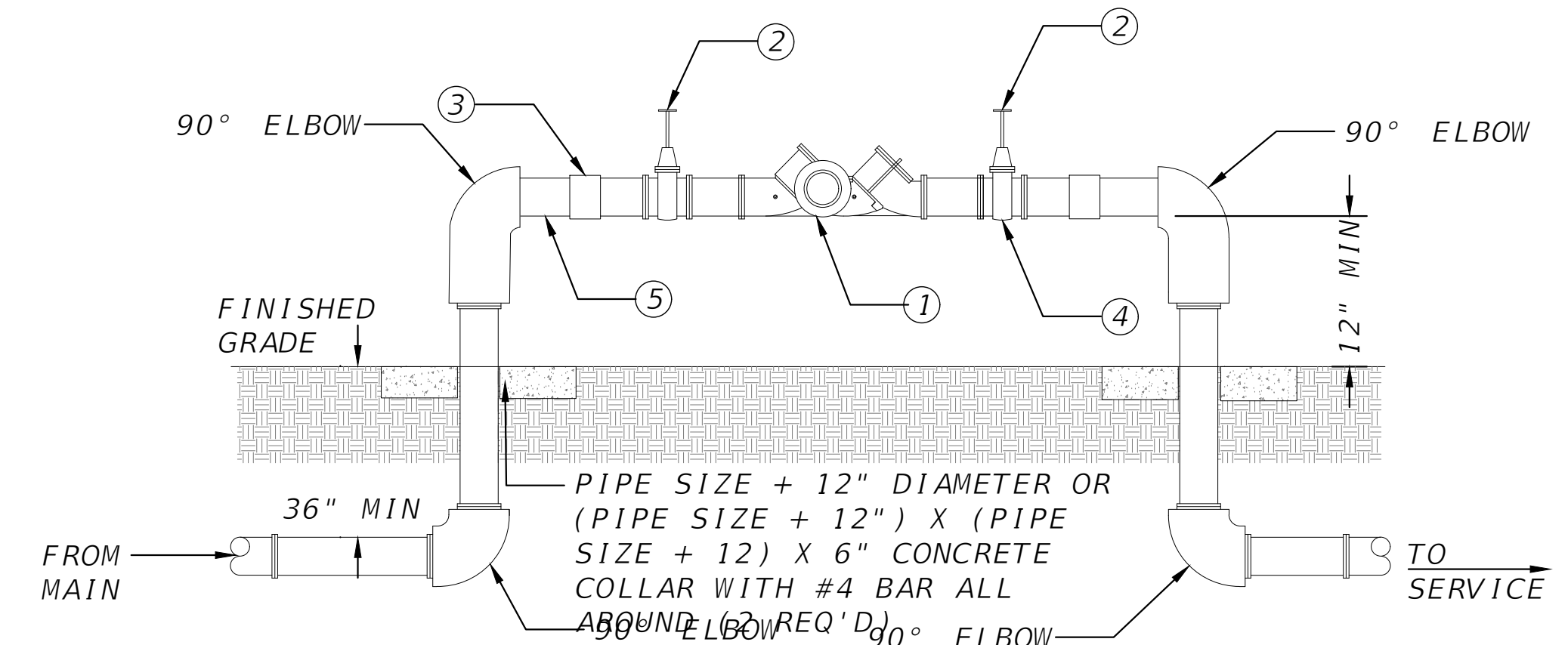
**EROSION CONTROL DETAILS**  
**BELL ROAD**  
**COLUMBIA COUNTY, FLORIDA**

SHEET NO.  
**13**



- NOTES:
1. P.E. TUBING IS TO BE BACKFILLED BY HAND UP TO THE TOP OF THE SERVICE.

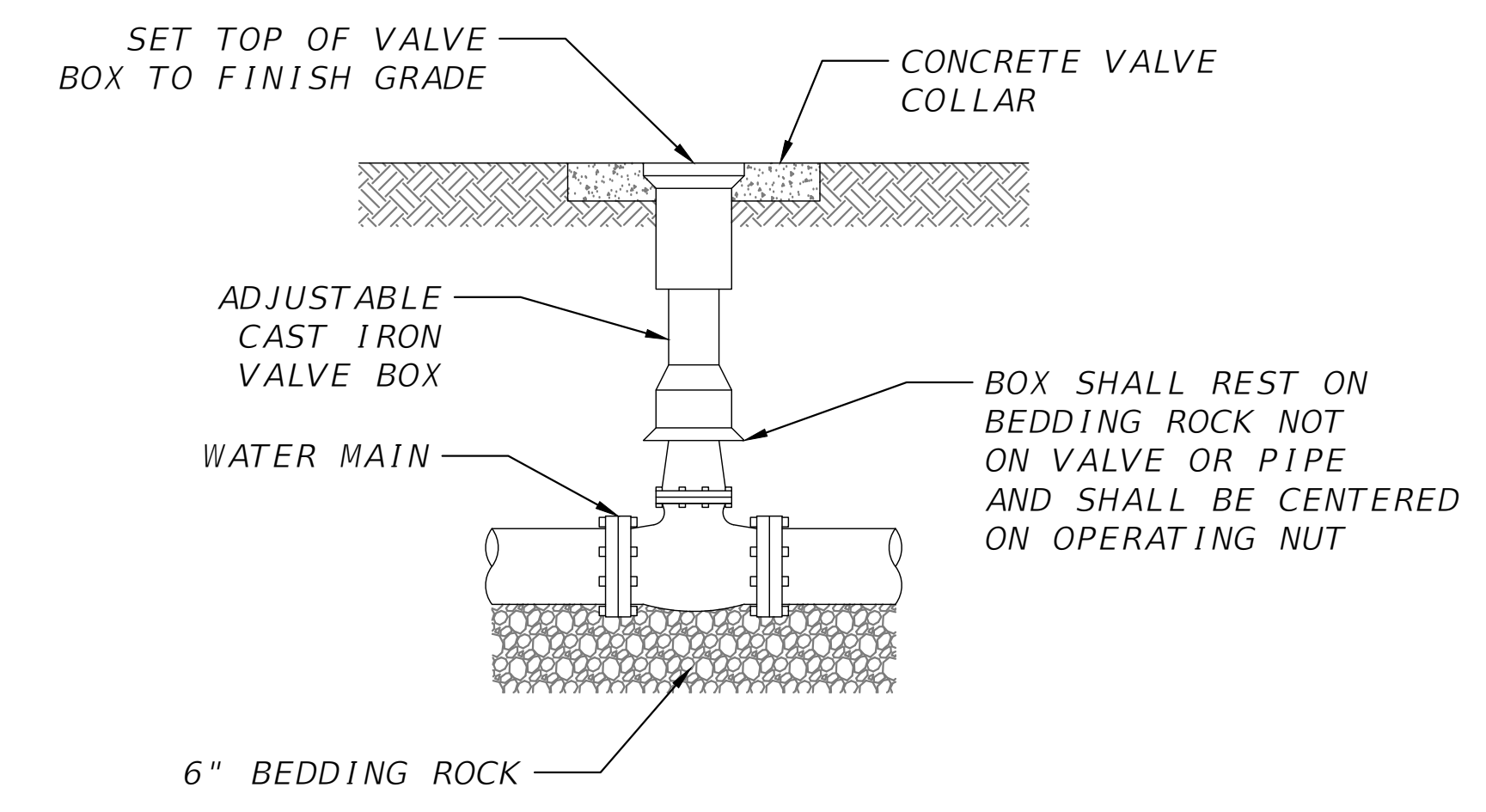
**WT02 METER BOX ASSEMBLY**  
SCALE: N.T.S



MATERIALS	
ITEM	DESCRIPTION
1	BACKFLOW PREVENTER
2	GATE VALVE
3	UNION
4	TEST COCKS
5	THREADED NIPPLE

- NOTES:
1. UNDER NO CONDITION WILL ANY CONNECTION BE ALLOWED BETWEEN THE SERVICE METER AND A BACKFLOW PREVENTER USED FOR SYSTEM CONTAINMENT. BACKFLOW PREVENTER SHALL ALWAYS BE INSTALLED DOWNSTREAM OF METER.
  2. IF A PRESSURE MONITOR IS TO BE INSTALLED, ADD A TEE, VALVE FITTINGS, AND MOUNT ON SUPPLY SIDE PRIOR TO BACKFLOW PREVENTION DEVICE: UNDER NO CIRCUMSTANCE, SHALL TEST PORTS BE MODIFIED OR UTILIZED FOR THIS OR OTHER APPLICATION OTHER THAN BACKFLOW DEVICE TESTING.
  3. A CONBRACO SERIES 40-000 FREEZE PROTECTION VALVE SHALL BE INCLUDED.
  4. PROVIDE AND INSTALL COVER OVER BACKFLOW PREVENTER AS REQ'D BY LOCAL AUTHORITIES.

**WT05 REDUCED PRESSURE BACKFLOW PREVENTER**  
SCALE: N.T.S



- NOTES:
1. PVC EXTENSIONS SHALL NOT BE USED ON VALVE BOX INSTALLATION.
  2. THE ACTUATING NUT FOR DEEPER VALVES SHALL BE EXTENDED TO COME UP TO 4 FOOT DEPTH BELOW FINISHED GRADE.

**WT03 VALVE AND BOX DETAIL**  
SCALE: N.T.S

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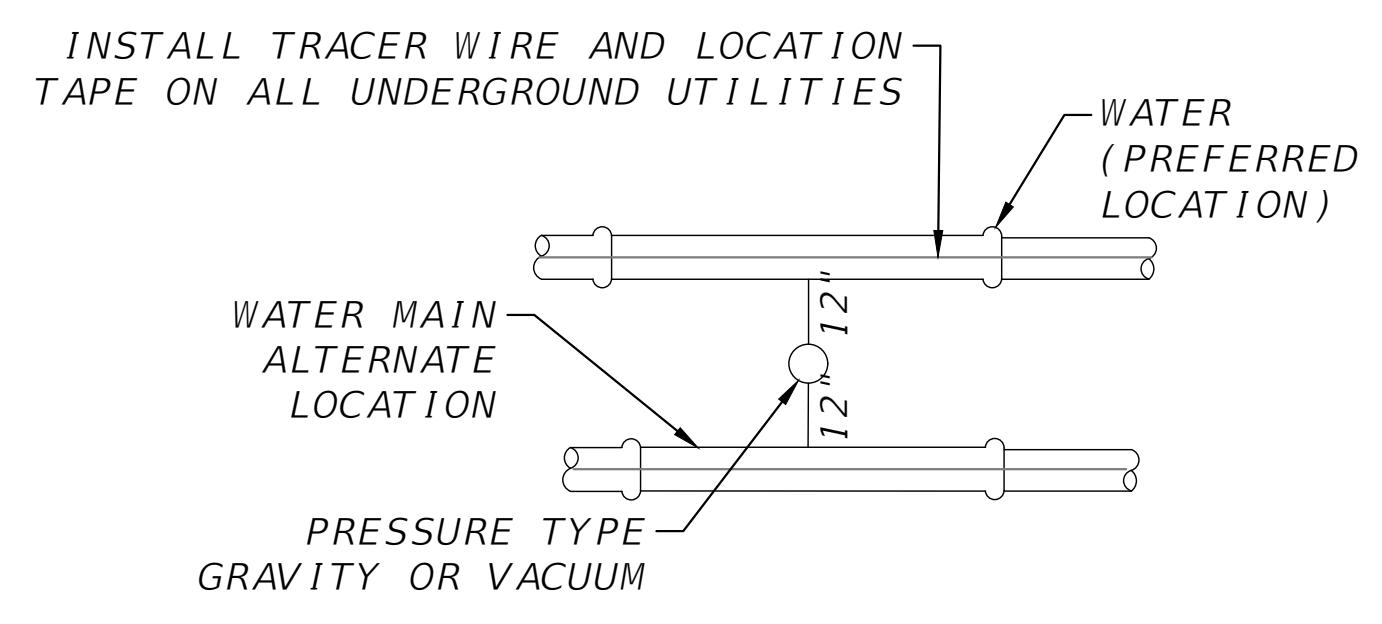
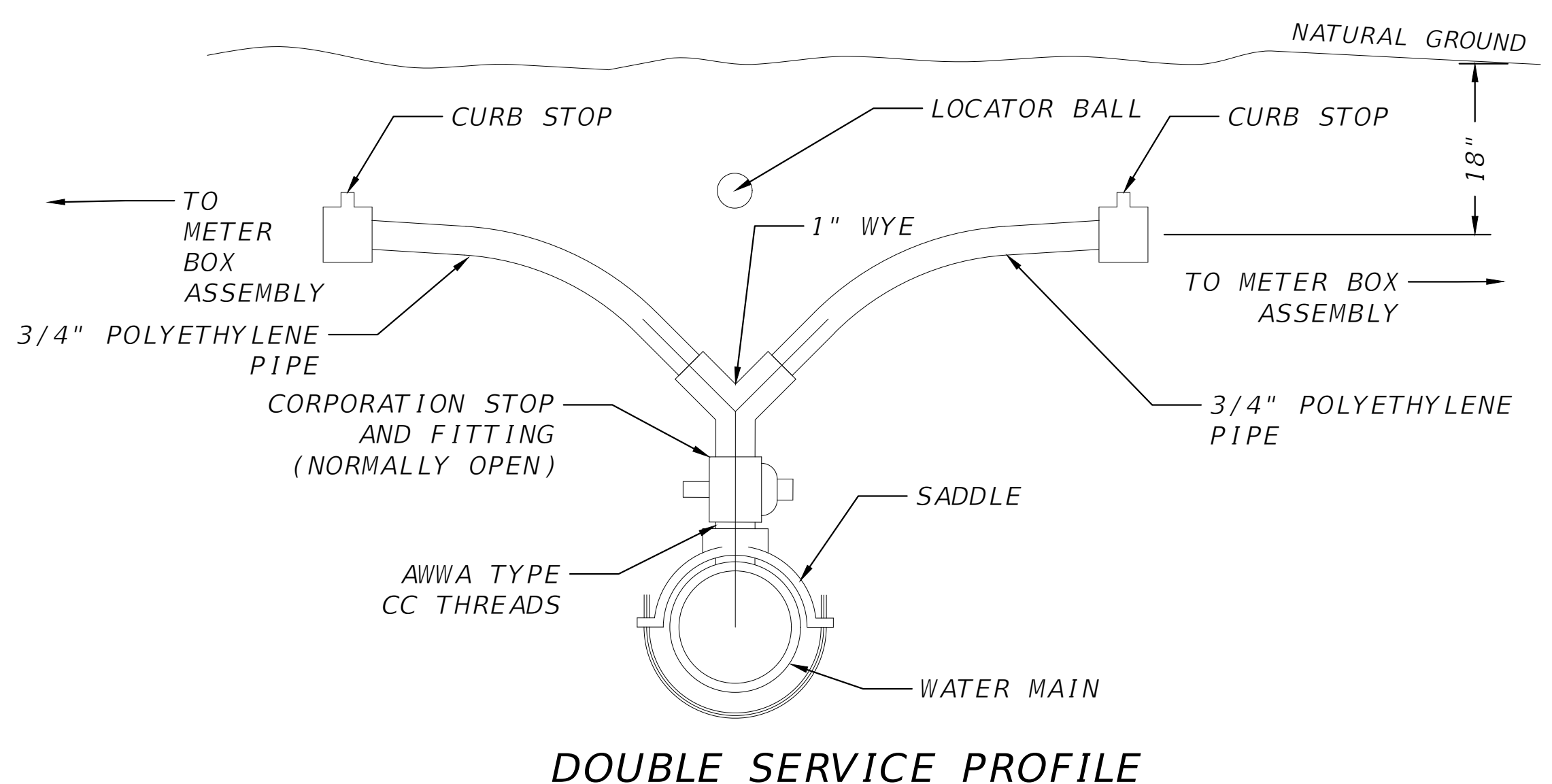
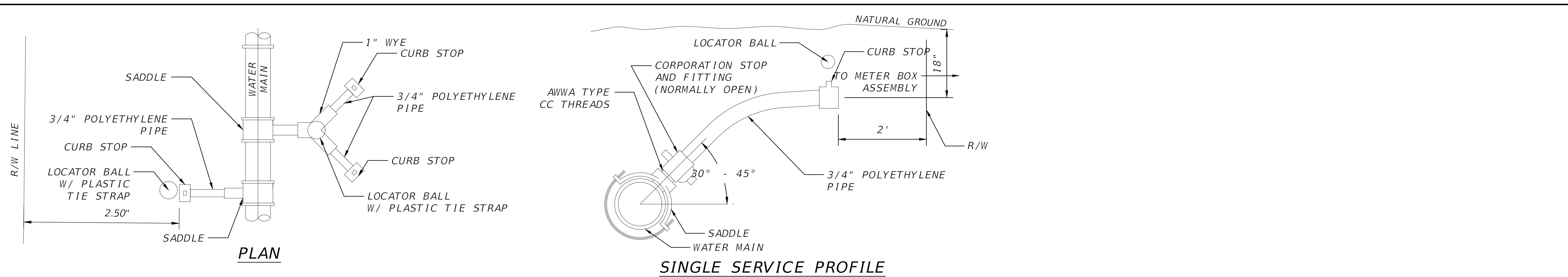
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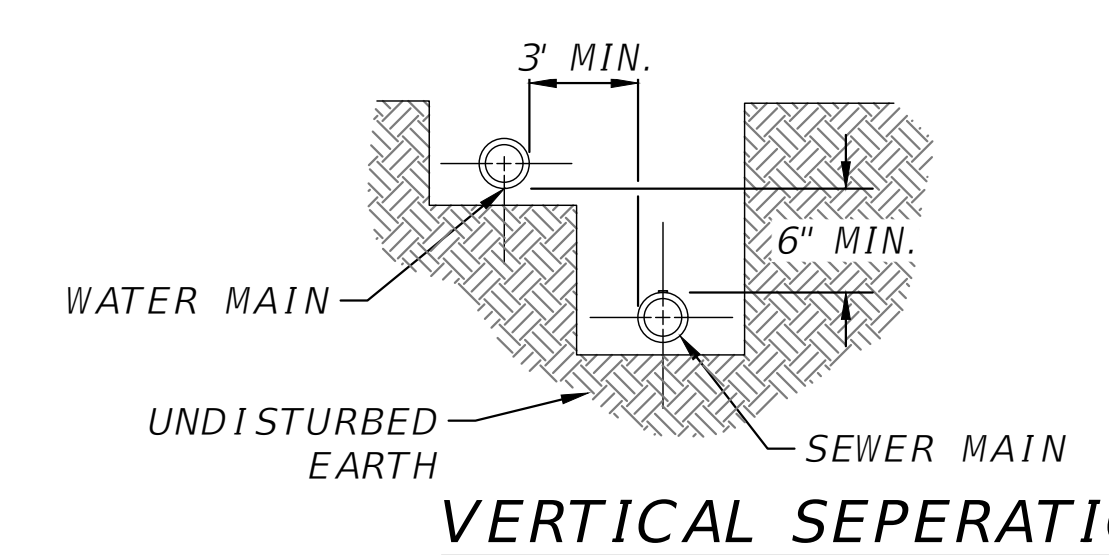
**MISCELLANEOUS DETAILS**  
**BELL ROAD**  
**COLUMBIA COUNTY, FLORIDA**

SHEET NO.  
14

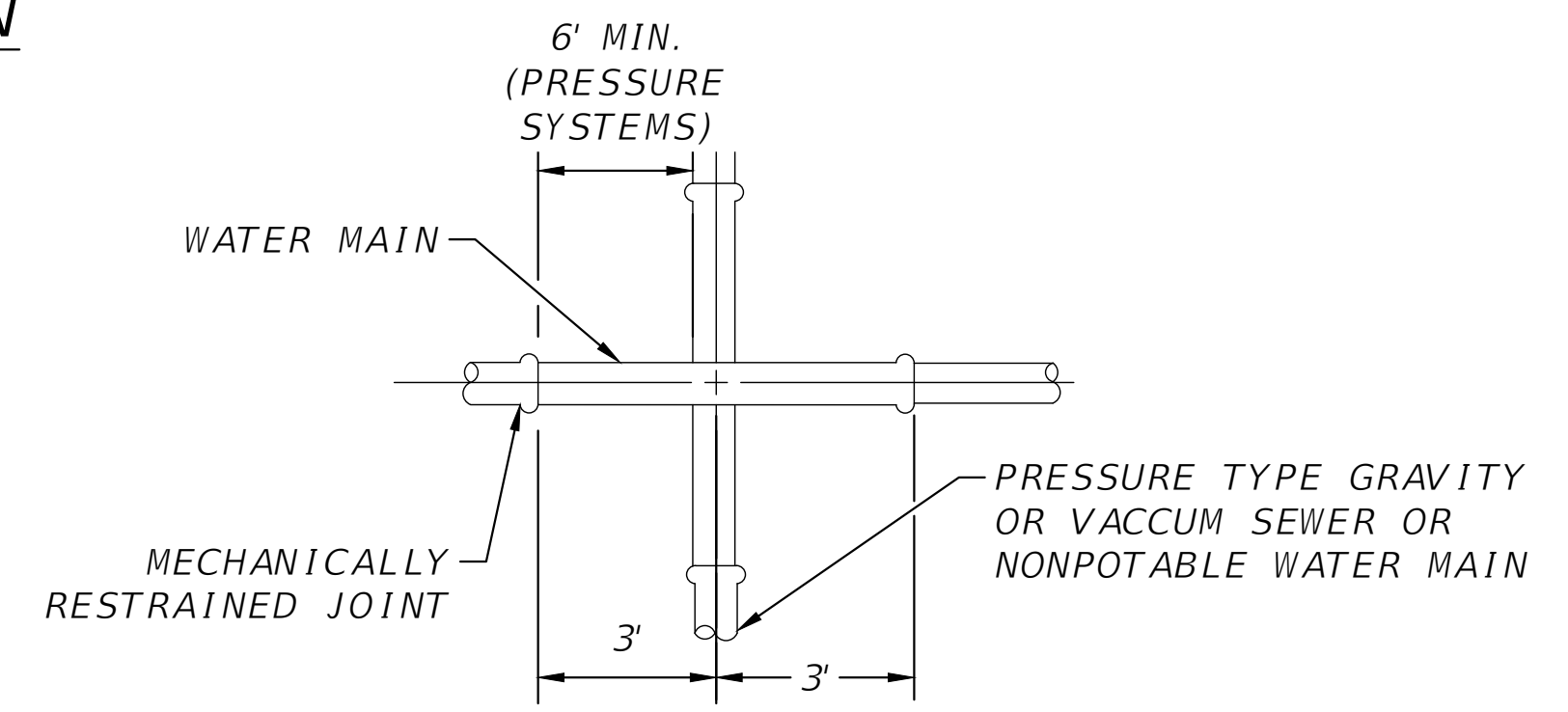
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**VERTICAL SEPERATION INCLUDING ALT. WATER MAIN**



**VERTICAL SEPERATION**



**CROSSINGS @ CENTERED JOINTS**

**NOTES:**

1. ALL FITTINGS SHALL BE BRASS WITH COMPRESSION/ PACK JOINT TYPE CONNECTIONS.
2. NO SERVICE LINE SHALL TERMINATE UNDER A DRIVEWAY.
3. EACH SERVICE SHALL TERMINATE AT A CURB STOP WHICH SHALL BE BURIED APPROXIMATELY 3" BELOW FINAL GRADE AND SHALL BE CLEARLY MARKED WITH A 2" x 2" x 18" STAKE WITH THE TOP PAINTED BLUE AND MARKED WITH THE NUMBER OF THE LOT TO BE SERVED.
4. CONTRACTOR SHALL PROVIDE LOCATOR BALLS W/ PLASTIC TIE STRAPS. LOCATOR BALLS SHOULD BE SECURED TO LATERAL W/ TIE STRAP.

**WT07 WATER SERVICE CONNECTION DETAILS SCALE: N.T.S**

**NOTES:**

1. THE MINIMUM HORIZONTAL DISTANCE BETWEEN THE OUTSIDE OF A WATER MAIN AND SEWER MAIN SHALL BE 6' WITH A PREFERRED 10' SEPARATION.
2. WHERE A 10 FOOT PARALLEL SEPARATION CANNOT BE MAINTAINED BETWEEN A WATERMAIN AND A SEWER MAIN OR NON-POTABLE WATER MAIN, THEN THE WATER MAIN SHALL BE LAID IN A SEPARATE TRENCH OR ON AN UNDISTURBED EARTH SHELF AT LEAST 6 INCHES ABOVE THE TOP OF THE SEWER MAIN OR NON-POTABLE WATER MAIN. THE HORIZONTAL SEPARATION SHALL BE NO LESS THAN 3'. WHEN A SEWER MAIN AND A WATER MAIN CROSS, THE WATERMAIN SHOULD BE A MINIMUM OF 3' ABOVE OR BELOW THE SEWER.
3. FOR ALL PIPE CROSSINGS, THE PIPE JOINTS SHALL BE ARRANGED SO THAT ALL PIPE JOINTS ARE EQUIDISTANT FROM THE POINT OF CROSSING WITH NO LESS THAN SIX FEET BETWEEN ANY TWO JOINTS.
4. IF THE HORIZONTAL OR VERTICAL CLEARANCE LISTED HEREIN CANNOT BE ACHIEVED THE WATERMAIN CAN BE ENCASED IN 4" OF CONCRETE.

**WT08 WATER/SEWER SEPARATION DETAILS SCALE: N.T.S**

REVISIONS	
DATE	DESCRIPTION



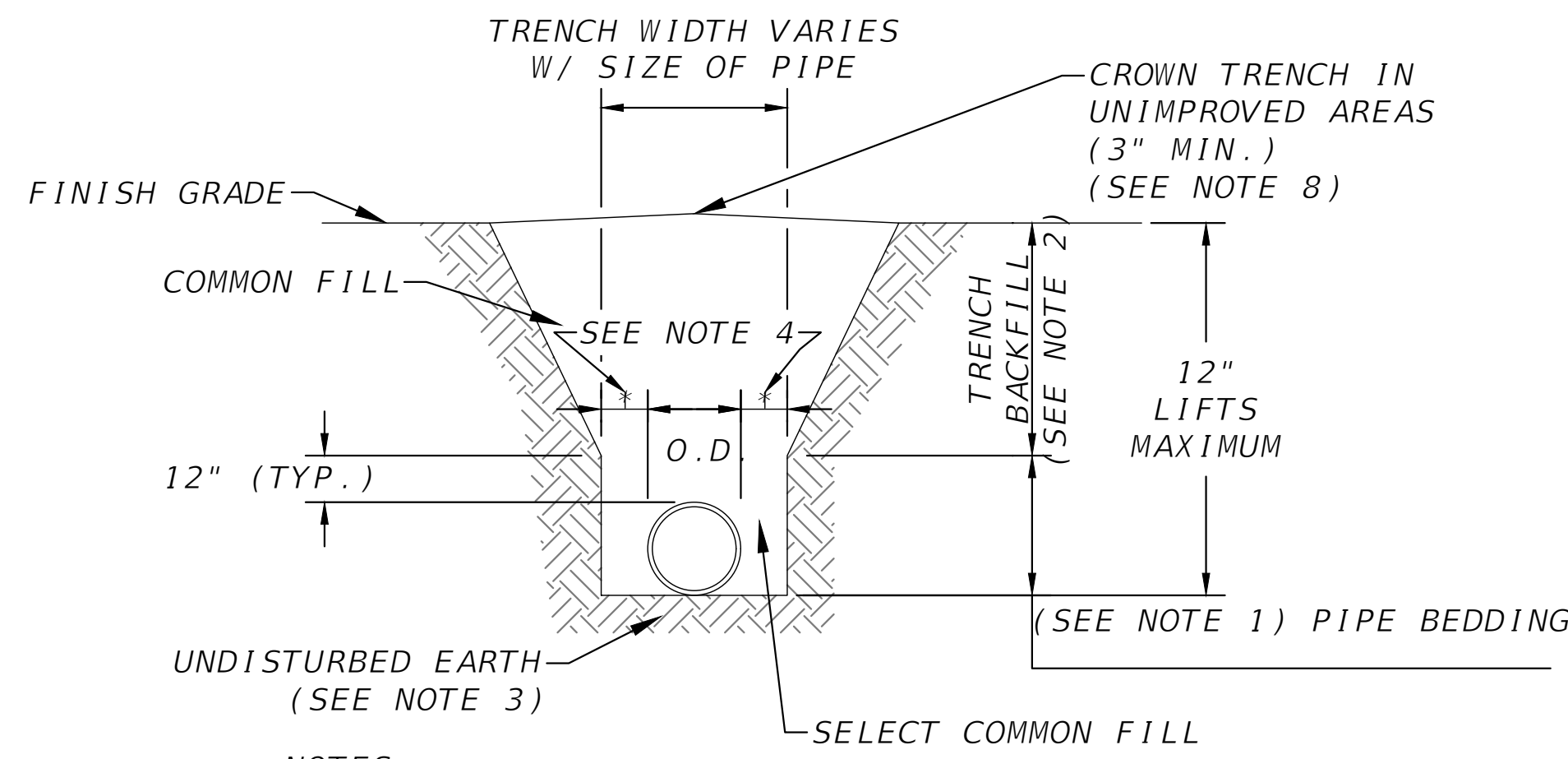
**NORTH FLORIDA PROFESSIONAL SERVICES, INC.**  
 P.O. BOX 3823 LAKE CITY, FL 32056  
 PH. 386-752-4675 LIC NO. LB8356  
 2551 BLAIRSTONE PINES DR. TALLAHASSEE, FL 32301  
 WWW.NFPS.NET CA# 29011

JOB NUMBER: L220630CRA  
 EOR: TERRY R. WHITE, JR.  
 P.E. NO.: 37390

**MISCELLANEOUS DETAILS**  
**BELL ROAD**  
**COLUMBIA COUNTY, FLORIDA**

SHEET NO.  
**15**

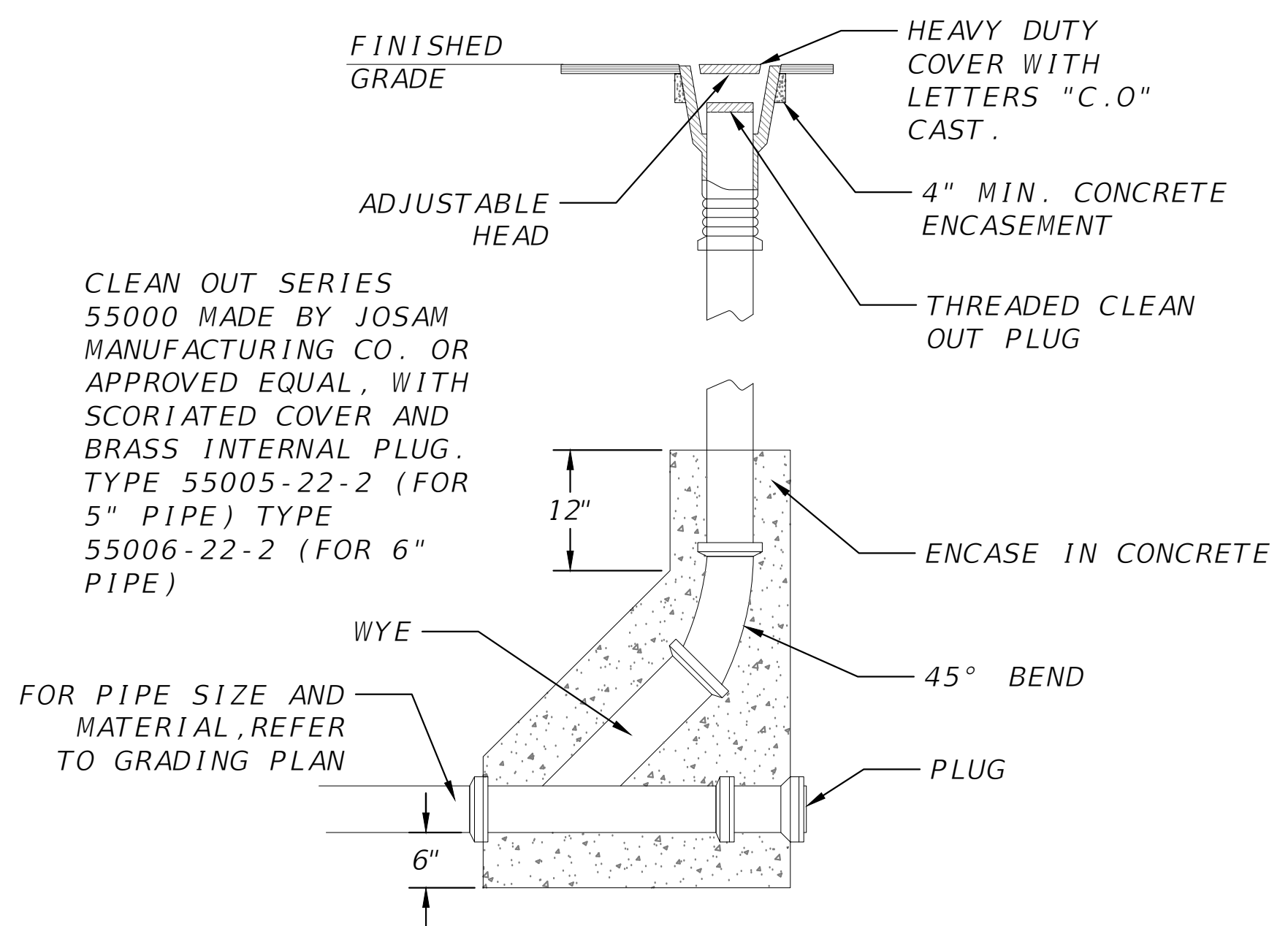
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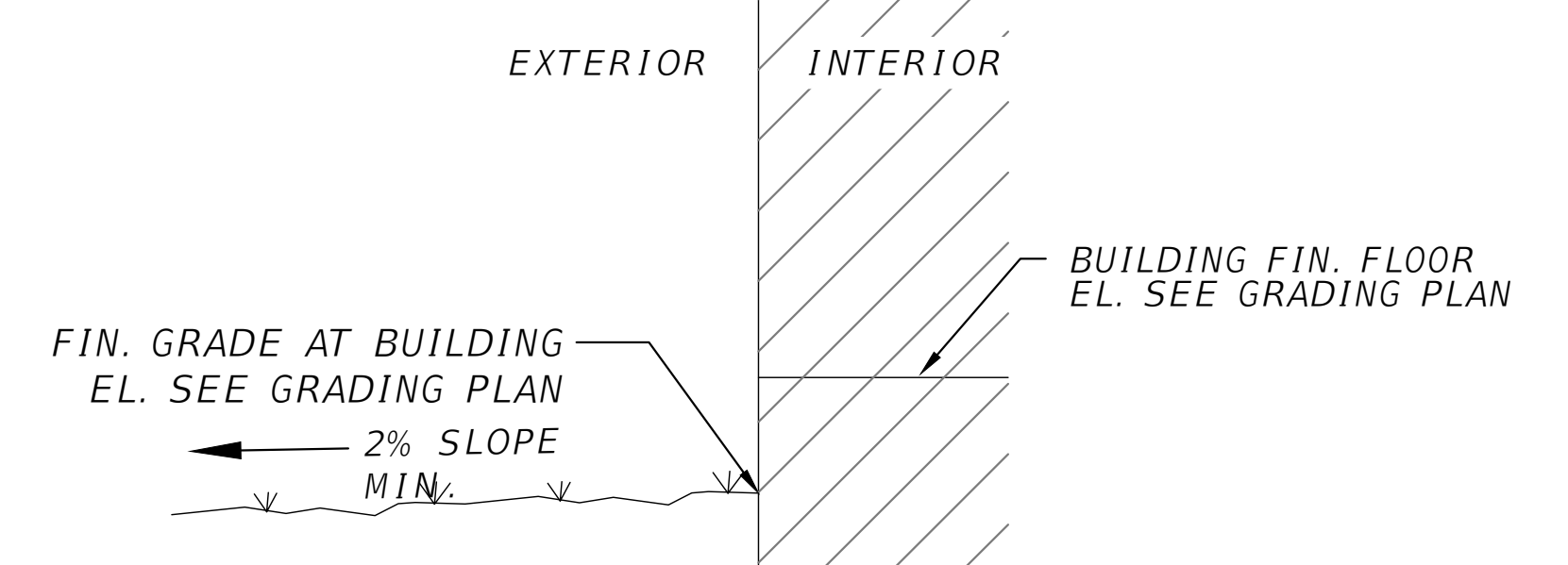
NOTES:

1. PIPE BEDDING: SELECT COMMON FILL COMPACTED TO 95% OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
2. TRENCH BACKFILL: COMMON FILL COMPACTED TO 95% OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
3. PIPE BEDDING UTILIZING SELECT COMMON FILL OR BEDDING ROCK WILL BE REQUIRED IF OVER-EXCAVATION OCCURS.
4. (\*): 15" MAX. FOR PIPE DIAMETER LESS THAN 24", AND 24" MAX. FOR PIPE DIAMETER 24" AND LARGER.
5. WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION.
6. ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF THE FLOW.
7. PROVIDE TRENCH SLOPING AND BRACING AS REQUIRED FOR SAFETY.
8. FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS OF GOVERNING AGENCIES. SURFACE RESTORATION WITHIN PAVED AREAS SHALL COMPLY WITH THE REQUIREMENTS OF THE ROAD CONSTRUCTION SPECIFICATIONS.

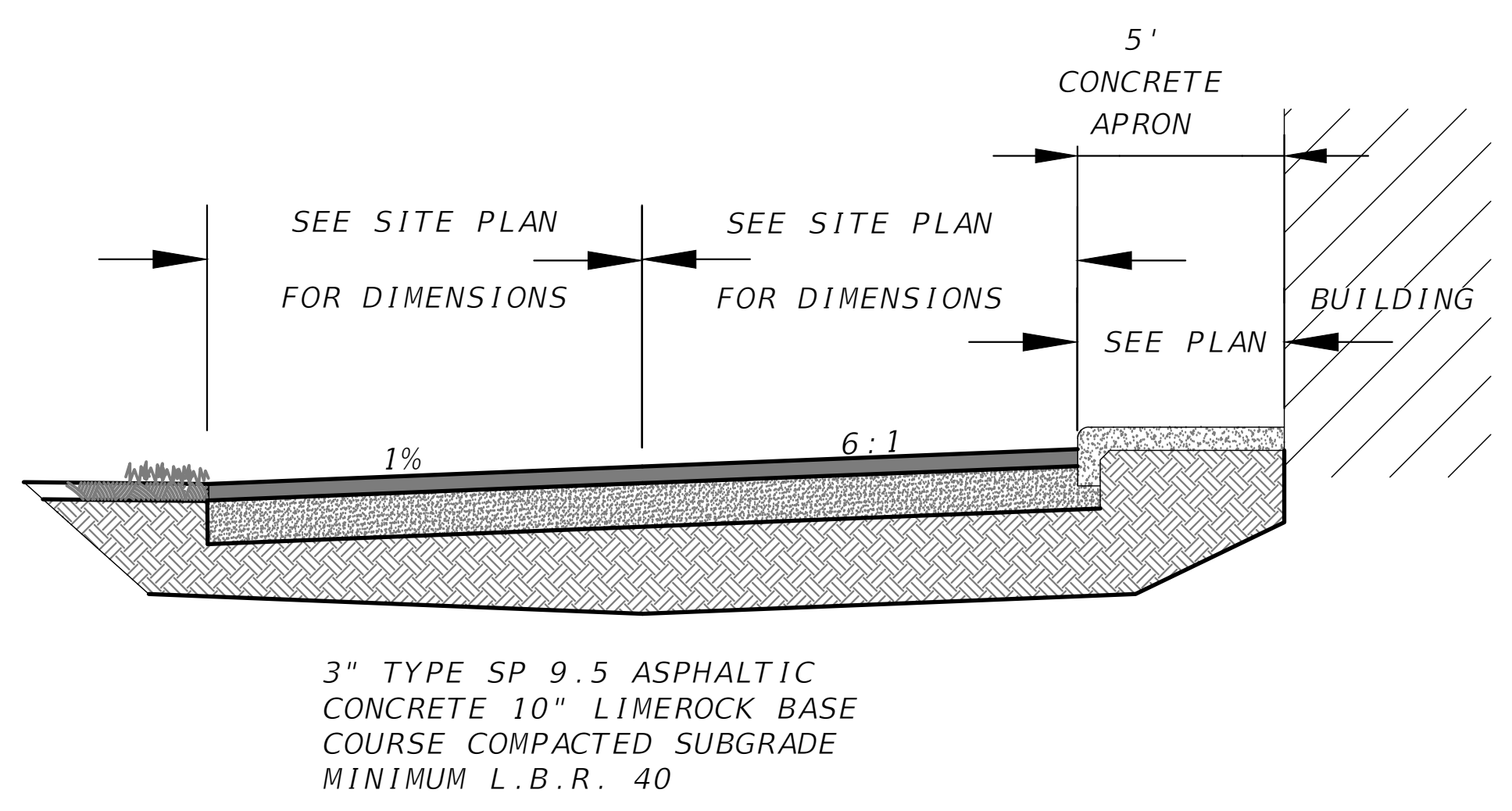
**WT11 TRENCH AND BACKFILL DETAILS**  
SCALE: N.T.S



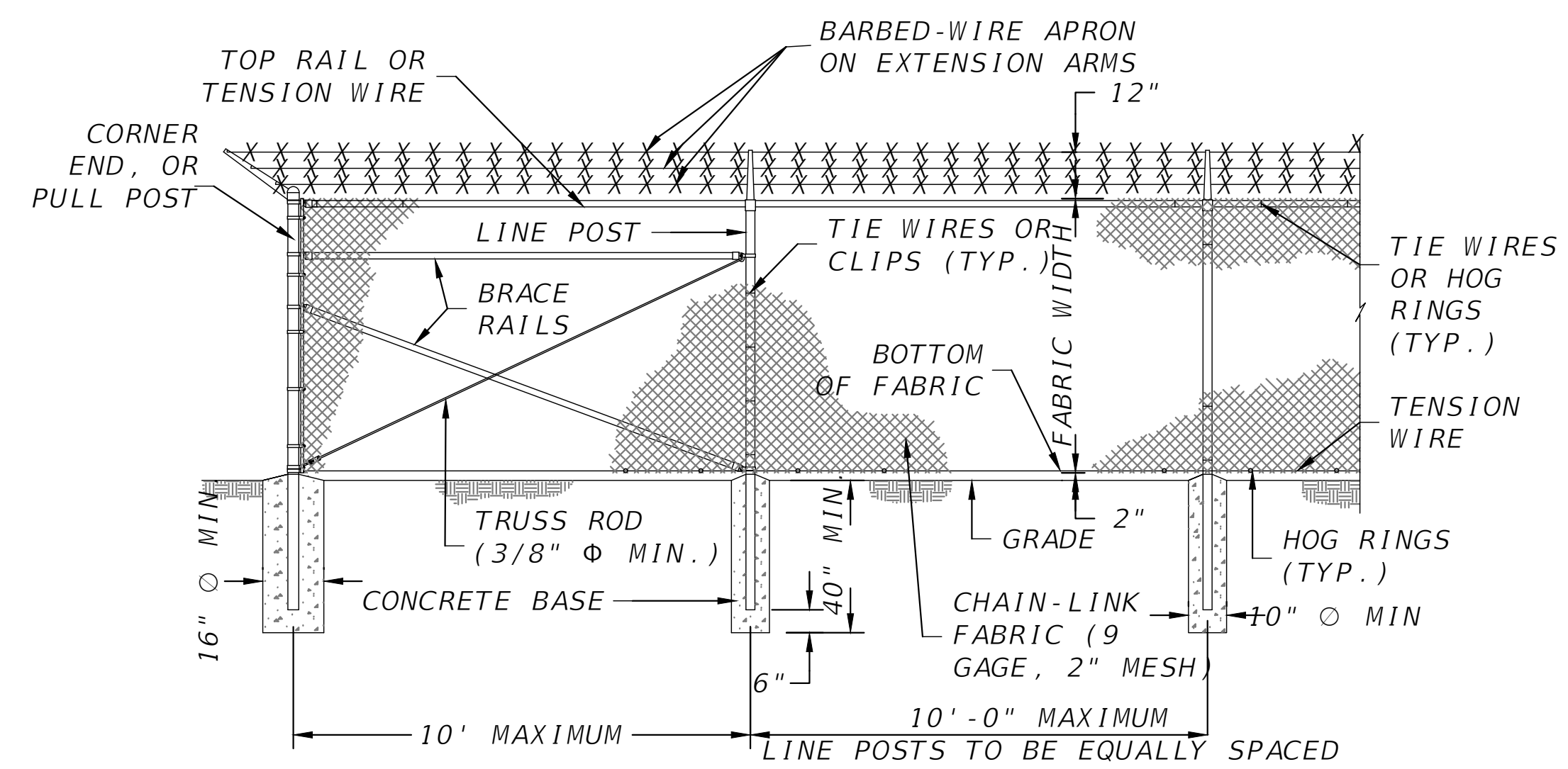
**SN01 CLEANOUT DETAIL**  
SCALE: N.T.S



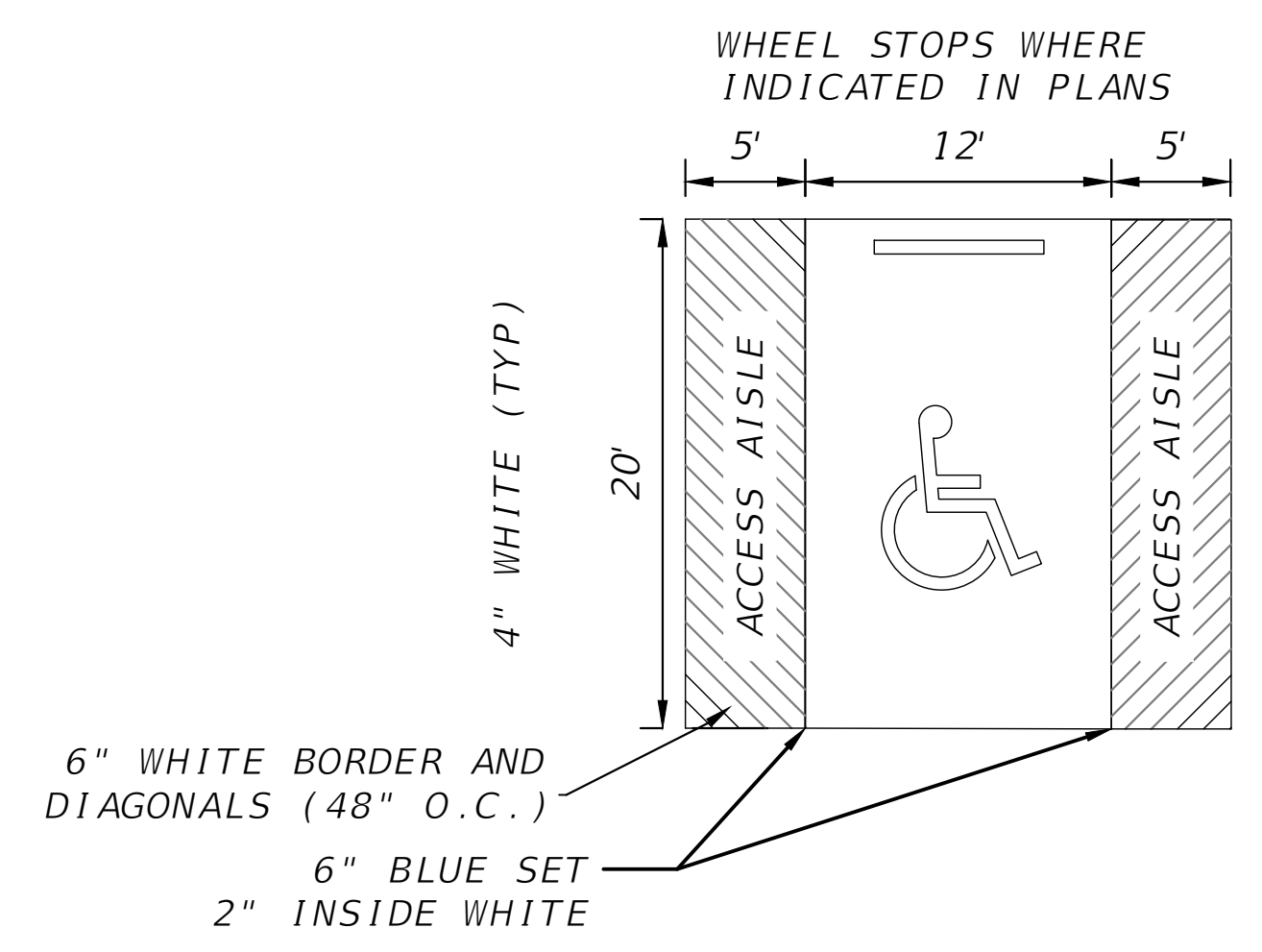
**MS14 GRADE AT BUILDING DETAIL**  
SCALE: N.T.S



**MS26 PARKING APRON TYPICAL SECTION**  
SCALE: N.T.S



**MS13 CHAIN LINK FENCE DETAIL**  
SCALE: N.T.S



NOTES:

1. SIGN SHALL BE PLACED IN FRONT OF ALL DESIGNATED HANDICAPPED SPACES. SIGN HEIGHT SHALL BE 7' FROM PAVEMENT TO BOTTOM OF SIGN.
2. 5' HANDICAPPED AISLE MAY BE PLACED ON THE RIGHT OR LEFT SIDE OF PARKING STALL.
3. HANDICAPPED PARKING SYMBOL SHALL BE 3 OR 5 FT. HIGH.
4. BLUE PAVEMENT MARKINGS SHALL BE TINTED TO MATCH SHADE 15180 OF FEDERAL STANDARDS 595A.

**MS23 HANDICAP PARKING STALL DETAIL**  
SCALE: N.T.S

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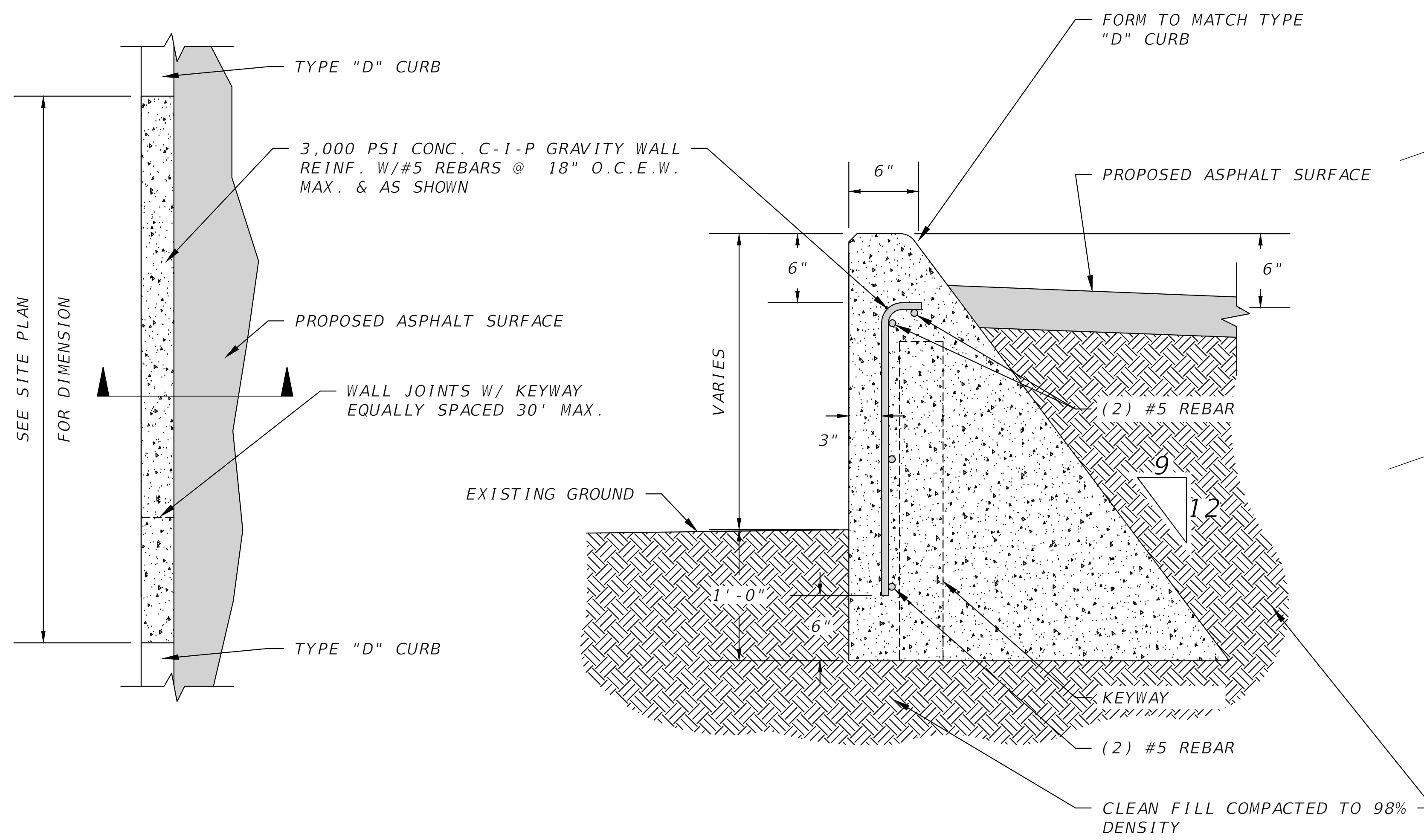
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TERRY R. WHITE, JR.  
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37390

**MISCELLANEOUS DETAILS**  
**BELL ROAD**  
**COLUMBIA COUNTY, FLORIDA**

SHEET NO.  
16

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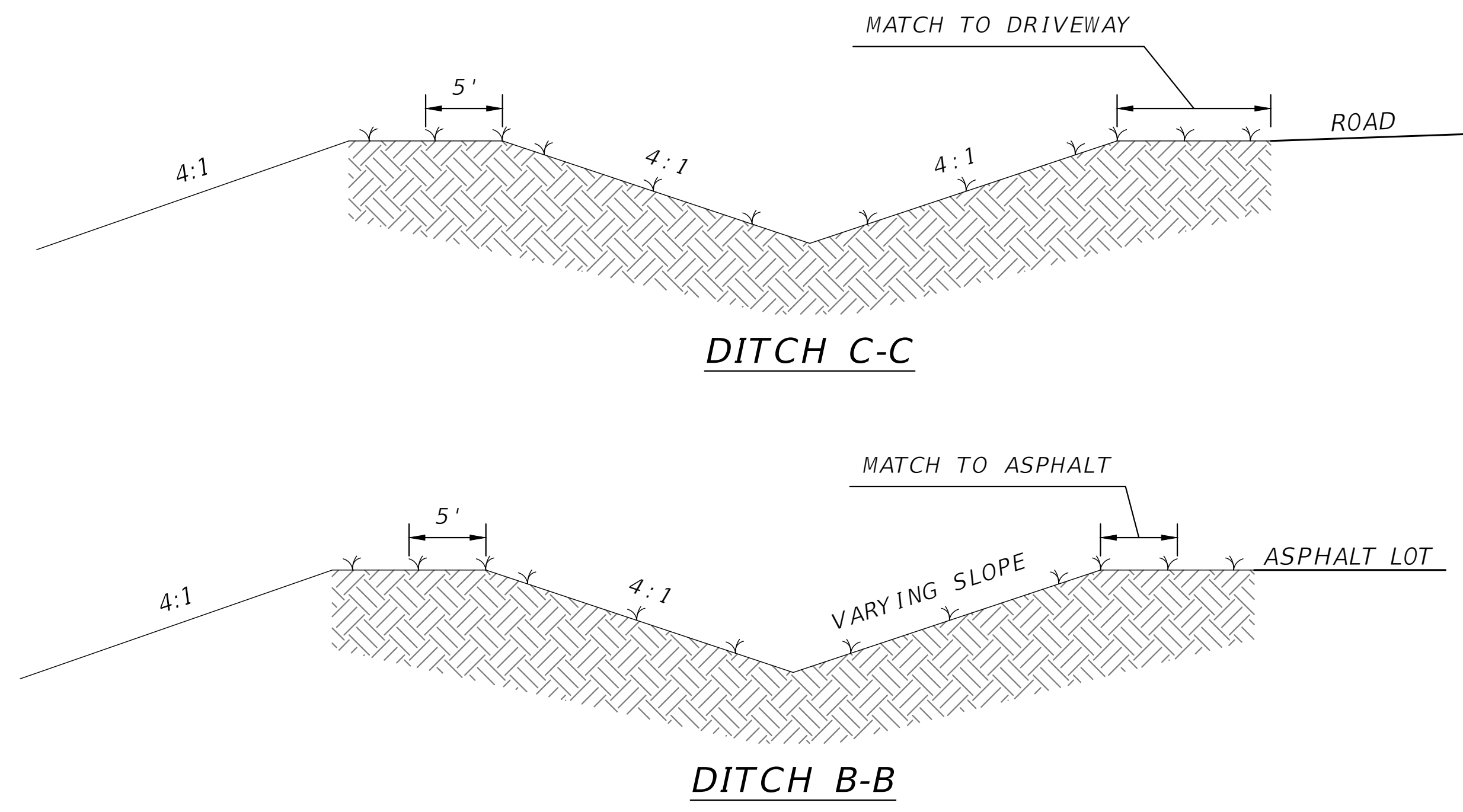




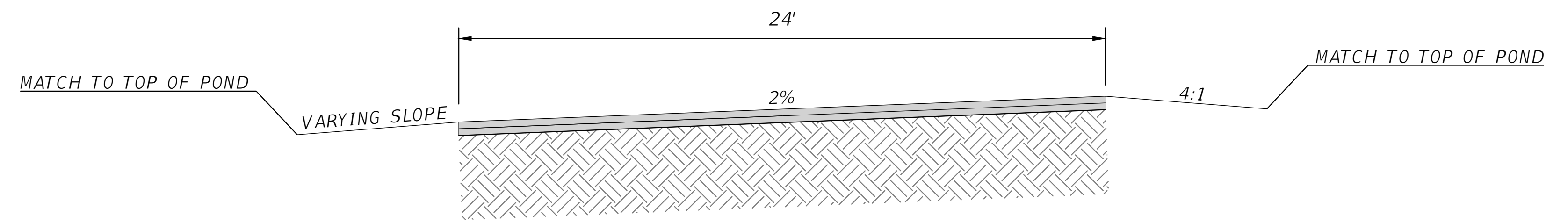
**PLAN**

**SECTION**

**MS30 C-I-P GRAVITY WALL DETAILS**  
**SCALE: N.T.S**

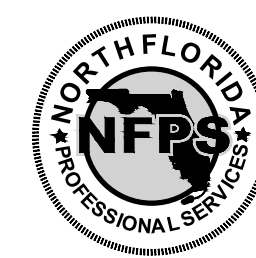


**DITCH TYPICAL SECTIONS**  
**SCALE: N.T.S**



**TYPICAL DRIVEWAY SECTION**  
**SCALE: N.T.S**

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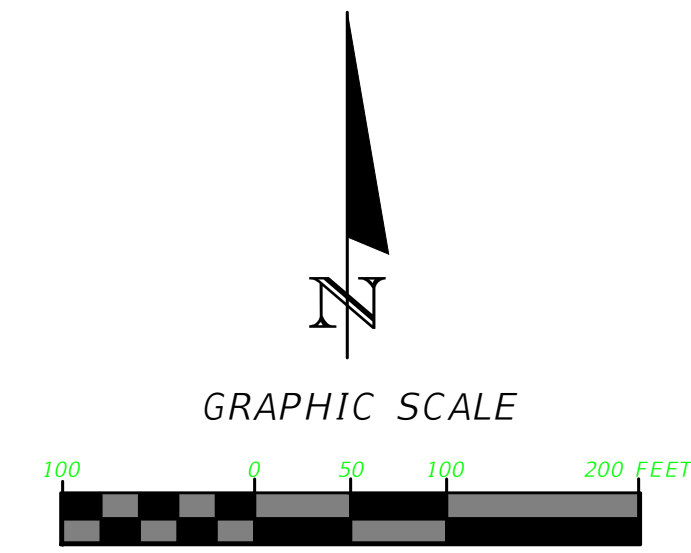
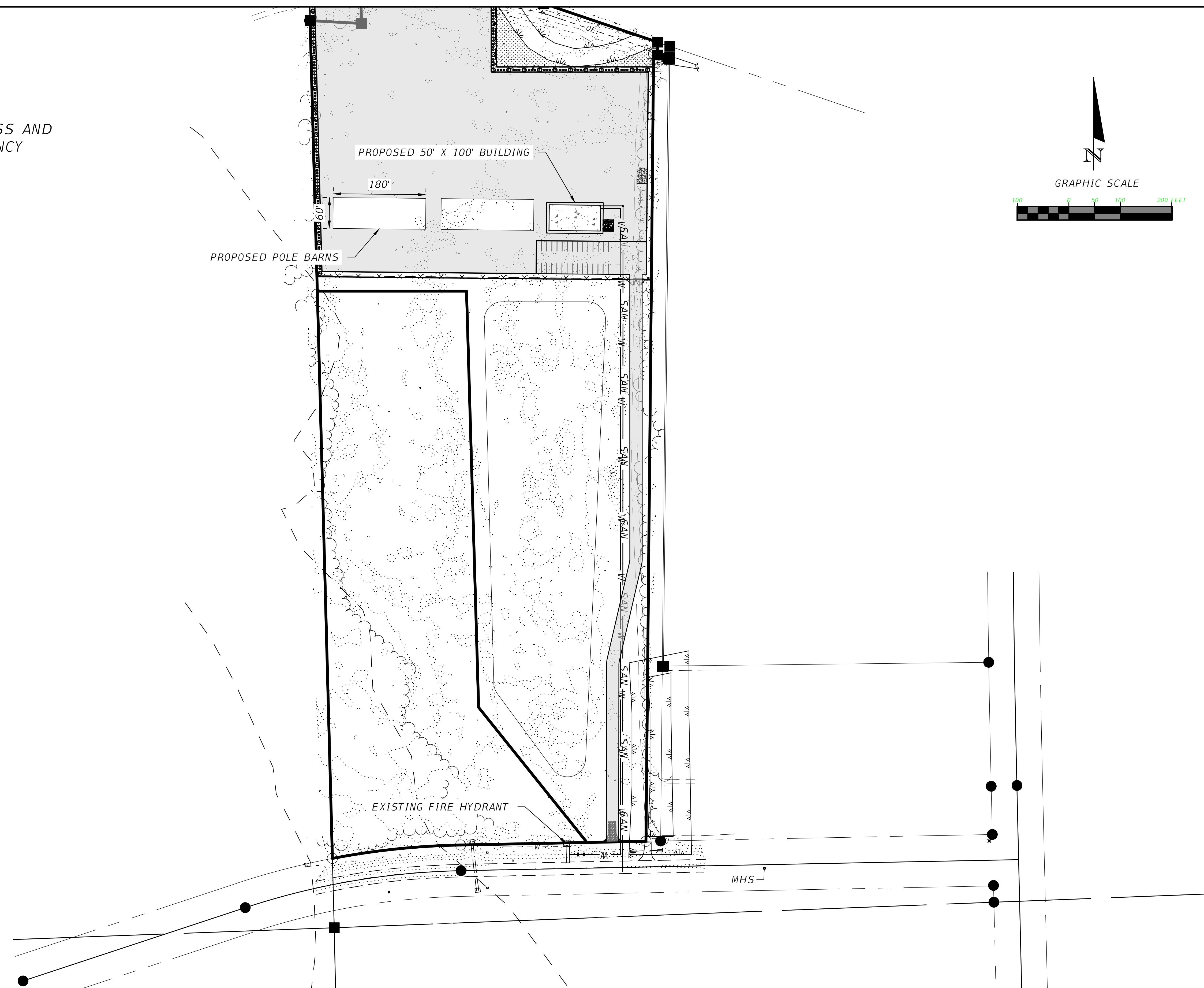
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**MISCELLANEOUS DETAILS**  
**BELL ROAD**  
**COLUMBIA COUNTY, FLORIDA**

SHEET NO.  
**17**

NOTES:

1. SITE ALLOWS INGRESS AND EGRESS OF EMERGENCY VEHICLES



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**FIRE ACCESS PLAN**  
**BELL ROAD**  
**COLUMBIA COUNTY, FLORIDA**

SHEET NO.  
FA-1

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