

PAVING, GRADING, & DRAINAGE PLANS & DETAILS

n.t.s.

SEC. 04, TWP. 46, RGE. 43



INDEX

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PD-02..... Paving, Grading, & Drainage Plan

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PD-04 - PD-05 Grading Cross-Sections

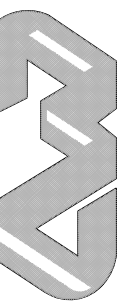
PD-06 - PD-10 Paving, Grading, & Drainage Details

PD-11 Pollution Prevention Plan

REVISIONS		DATE	BY

FILE NAME: 85776D.DWG

FIELD & WHEELER, INC.
CIVIL ENGINEERING - LAND PLANNING
LANDSCAPE ARCHITECTURE - SURVEYING
7900 GLADES ROAD - SUITE 100
BOCA RATON, FLORIDA 33434
PHONE (561)-392-1991 / FAX (561)-750-1452

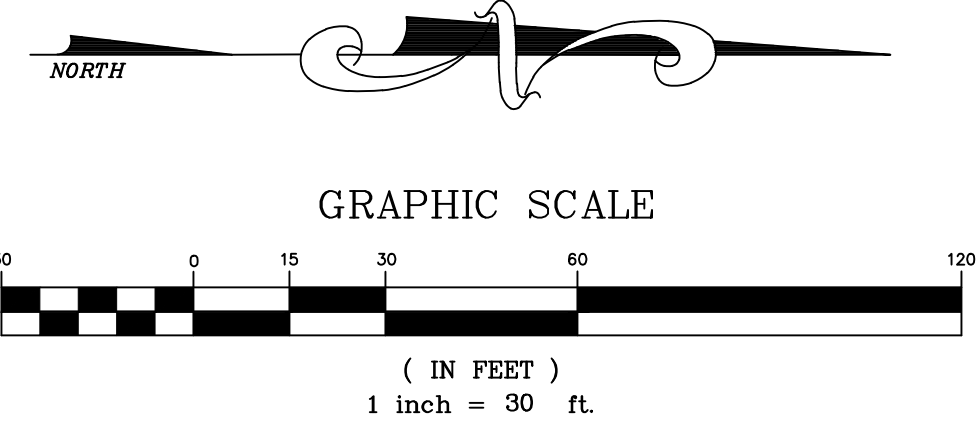
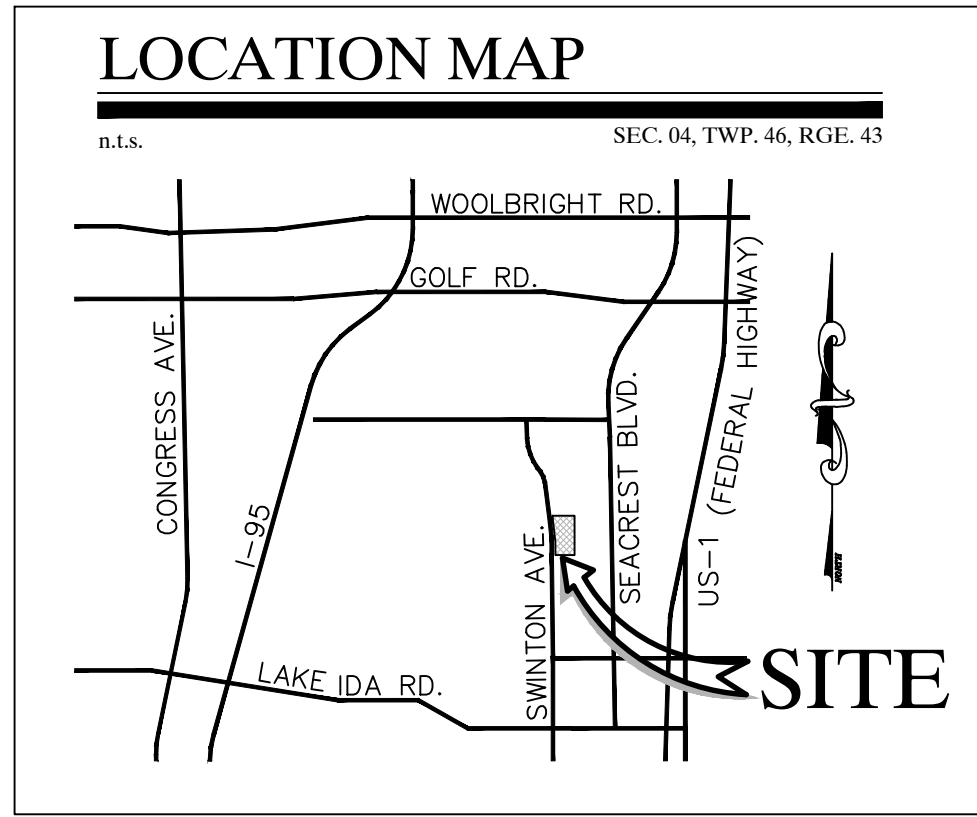
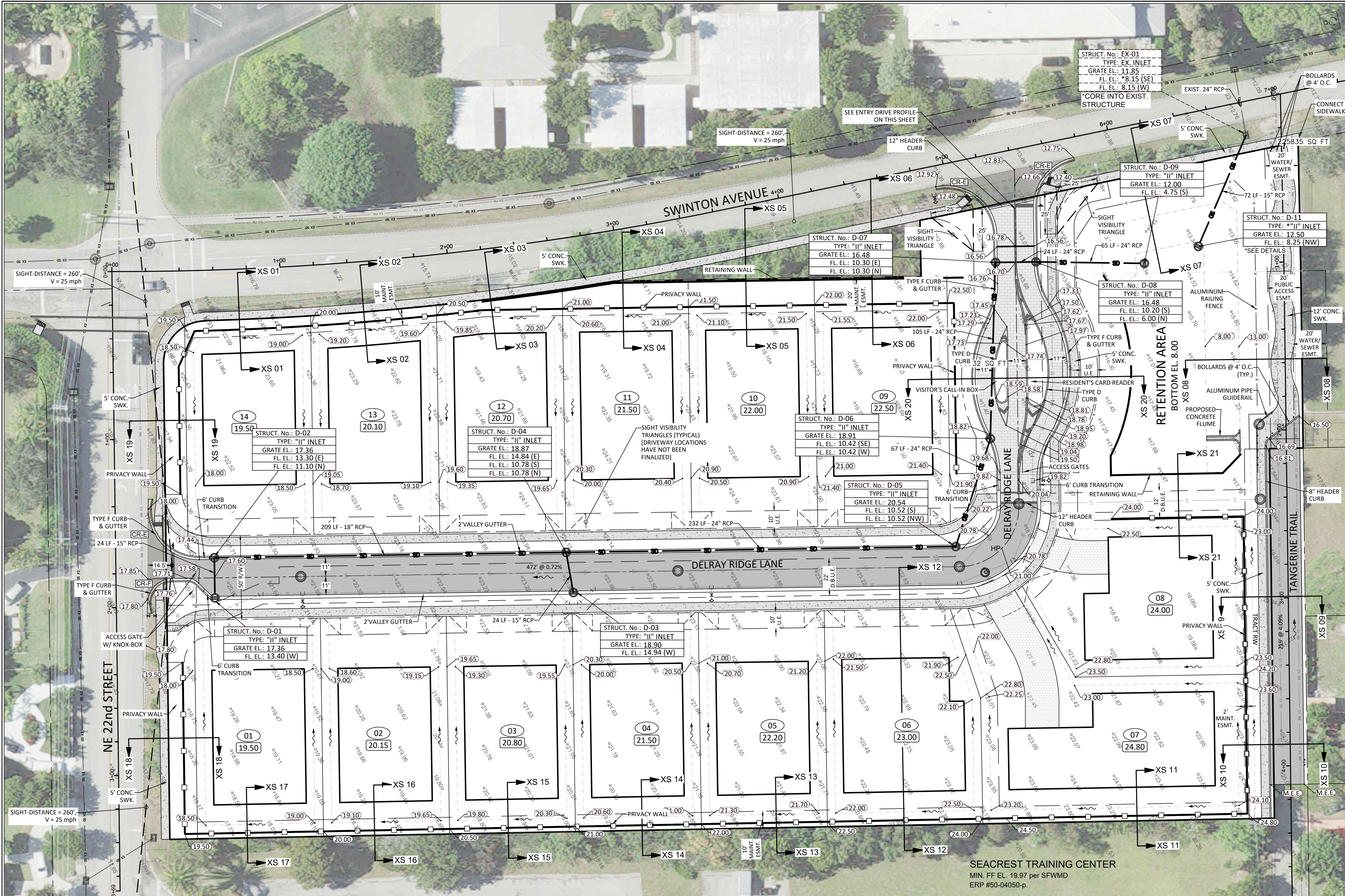


DELRAY RIDGE
COVER SHEET
DELRAY BEACH, FLORIDA

DATE	12/17/20
DRAWN BY	RHT
F.B./ PG.	N/A
SCALE	N/A

RYAN D. WHEELER
PROFESSIONAL ENGINEER
LICENSE NO. 71477
STATE OF FLORIDA
- FOR THE FIRM -
DATED Nov 24, 2021

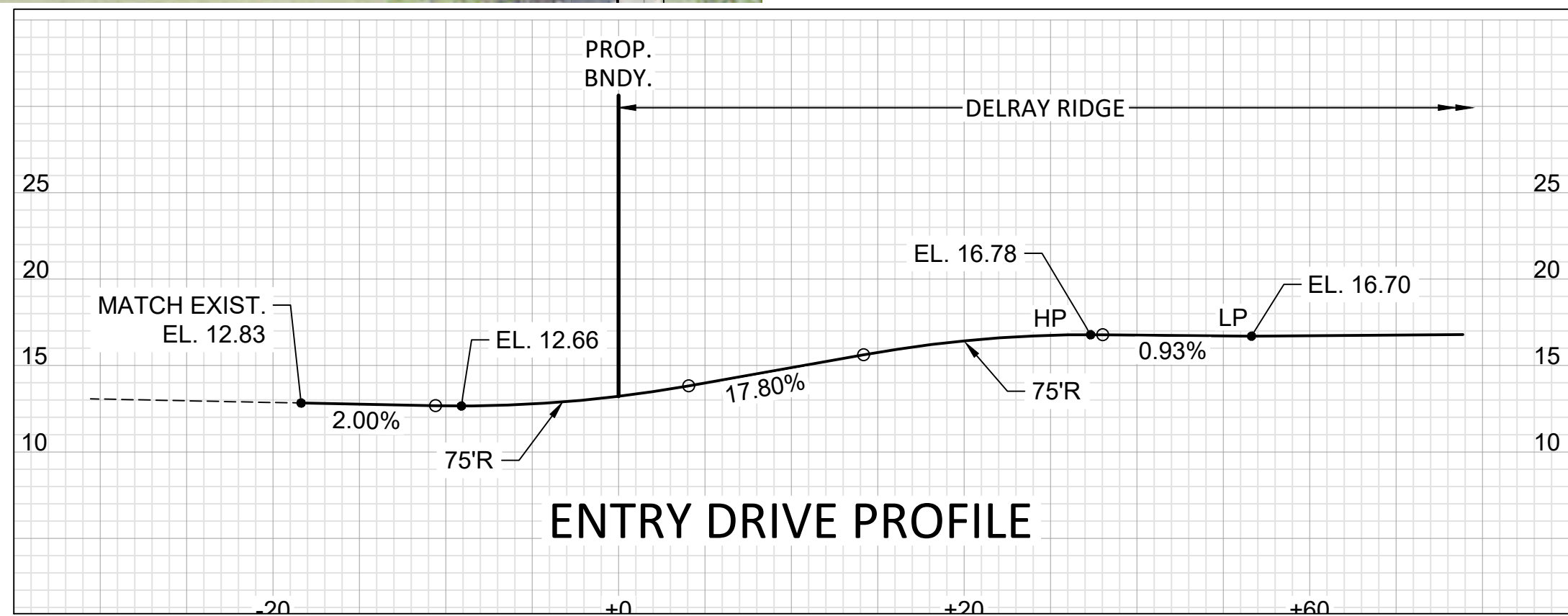
JOB #8577
SHT. NO.
PD-01
OF 11 SHEETS



LEGEND

- ## FINISHED FLOOR EL.
- ## LOT NUMBER
- ## PROPOSED GRADE
- ## EXISTING GRADE
- FLOW ARROW
- ### @ 0.##% ROADWAY PROFILE DISTANCE, GRADE AND DIRECTION
- PROPOSED PAVEMENT
- PROPOSED CONCRETE
- PROPOSED PAVERS
- DETECTABLE WARNING MAT
- LITTORAL ZONE
- PROPOSED SWALE
- M.E.E. MATCH EXISTING ELEVATION
- # GRADING CROSS-SECTION

- GENERAL NOTES:
- 1.) CONTRACTOR TO VERIFY DEPTH AND LOCATION OF EXISTING UTILITIES PRIOR TO ANY CONSTRUCTION.
 - 2.) ALL DRAINAGE SYSTEMS SHALL BE PUMPED COMPLETELY DRY AND LAMPED AS A REQUIREMENT OF THE FINAL DRAINAGE INSPECTIONS.
 - 3.) ALL SIDEWALK SHALL BE CONSTRUCTED AT 1.5% MAXIMUM CROSS SLOPE.
 - 4.) SIDEWALKS ABUTTING LOTS/UNITS/CLUBHOUSE TO BE CONSTRUCTED AT TIME OF BUILDING CONSTRUCTION, WHILE COMMON AREA SIDEWALK WILL BE INSTALLED FROM START OF JOB.
 - 5.) STRUCTURAL FILL WILL BE REQUIRED TO BE USED UNDER ALL BUILDING PADS, RIGHTS-OF-WAY, AND OTHER STRUCTURAL ELEMENTS.
 - 6.) THE MUCK AND GUMBO SHALL BE REMOVED IN THE AREA OF AND WITHIN 10 FEET OF PROPOSED PAVEMENT OR FOUNDATION AREAS.
 - 7.) PAVEMENT MARKINGS AND GEOMETRICS SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS AND PALM BEACH COUNTY TYPICAL T-P-18.



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1-800-432-4770

Sunshine State One Call of Florida, Inc.

CONTRACTOR NOTE:
CONTRACTOR TO VERIFY DEPTH AND LOCATION OF EXISTING UTILITIES PRIOR TO ANY CONSTRUCTION.

MIN. ROADWAY CROWN EL. = 16.70-FT (10yr-24hr PEAK STAGE = 15.19-FT)
MIN. PERIMETER BERM EL. = 16.52-FT (25yr-72hr PEAK STAGE = 16.52-FT)
MIN. FINISHED FLOOR EL. = 19.50-FT (100yr-72hr 2D PEAK STAGE = 18.53-FT)

ALL ELEVATIONS SHOWN IN NAVD88 UNLESS OTHERWISE NOTED
CONVERSION: NAVD88 = NGVD - 1.53'

REVISIONS	DATE	BY
REMOVED ROADWALK & SWK FROM TRACTS F. 033 PER FSBP	07/13/2019	RHT
FILE NAME: 8577PD.DWG		

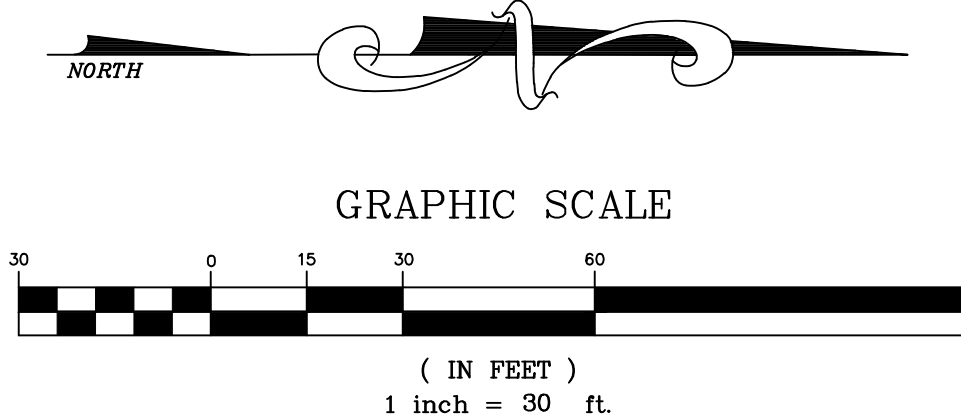
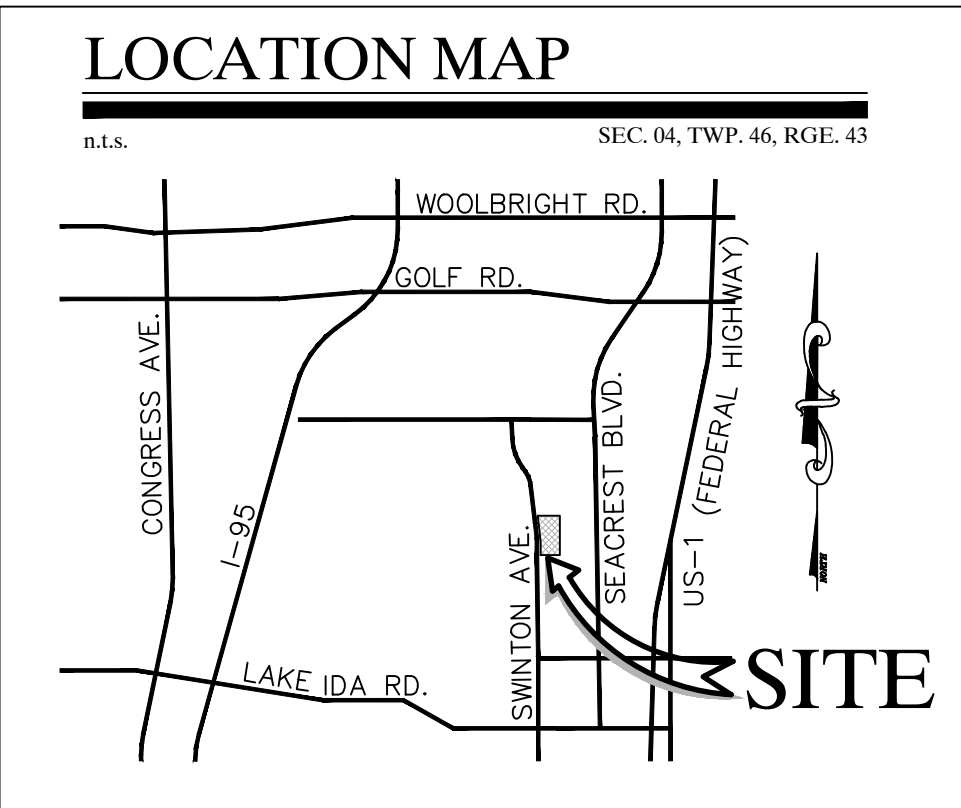
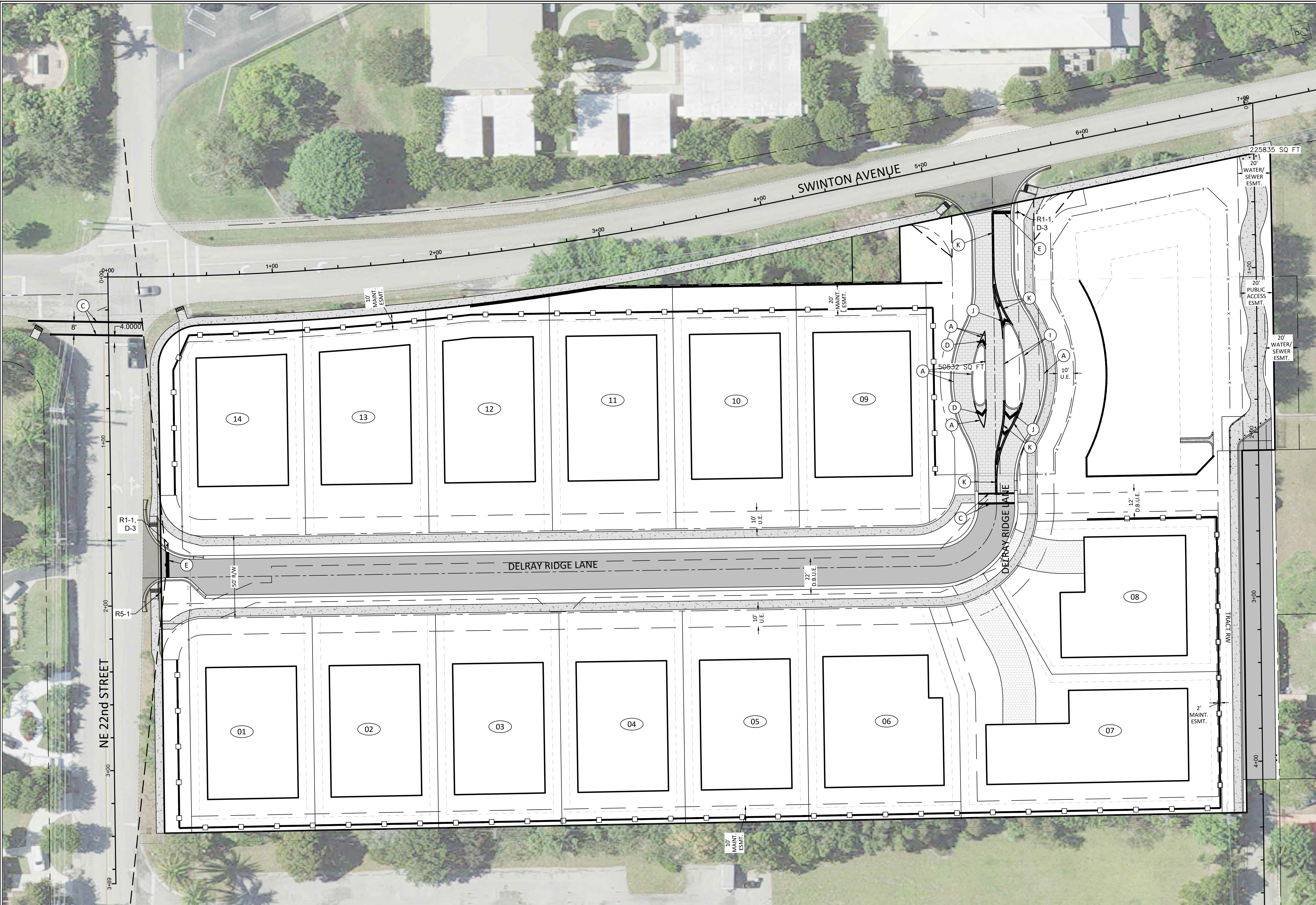
CAULFIELD & WHEELER, INC.
CIVIL ENGINEERING - LAND PLANNING
LANDSCAPE ARCHITECTURE - SURVEYING
7900 GLADES ROAD - SUITE 100
BOCA RATON, FLORIDA 33434
PHONE (561)-592-1991 / FAX (561)-750-1452

DELRAY RIDGE
PAVING, GRADING, & DRAINAGE PLAN
DELRAY BEACH, FLORIDA

DATE 12/17/20
DRAWN BY RHT
F.B./ PG. N/A
SCALE 1"=30'

RYAN D. WHEELER
PROFESSIONAL ENGINEER
LICENSE NO. 71477
STATE OF FLORIDA
FOR THE FIRM -
DATE Nov 24, 2021

JOB #8577
SHT. NO.
PD-02
OF 11 SHEETS



PAVEMENT MARKING LEGEND

- A - 6" SOLID WHITE
- B - 8" SOLID WHITE
- C - 12" SOLID WHITE
- D - 18" SOLID WHITE
- E - 24" SOLID WHITE
- F - 6" WHITE - SKIP (10'-30')
- G - 6" WHITE - SKIP (6'-10')
- H - 6" WHITE - SKIP (2'-4')
- I - 6" SOLID YELLOW
- J - 18" SOLID YELLOW
- K - 6" DOUBLE SOLID YELLOW
- L - 6" YELLOW - SKIP (10'-30')
- M - 6" YELLOW - SKIP (6'-10')
- N - 6" YELLOW - SKIP (2'-4')
- P - RPM BI-DIRECTIONAL AMBER/AMBER
- R - FDP WHITE
- S - FDP YELLOW
- T - RPM BI-DIRECTIONAL WHITE/RED
- U - RPM BI-DIRECTIONAL RED/YELLOW



MIN. ROADWAY CROWN EL. = 16.70-FT (10yr-24hr PEAK STAGE = 15.19-FT)
MIN. PERIMETER BERM EL. = 16.52-FT (25yr-72hr PEAK STAGE = 16.52-FT)
MIN. FINISHED FLOOR EL. = 19.50-FT (100yr-72hr ZD PEAK STAGE = 18.53-FT)

ALL ELEVATIONS SHOWN IN NAVD88 UNLESS OTHERWISE NOTED
CONVERSION: NAVD88 = NGVD - 1.53'

CONTRACTOR NOTE:
CONTRACTOR TO VERIFY DEPTH AND
LOCATION OF EXISTING UTILITIES PRIOR
TO ANY CONSTRUCTION.

REMOVED BOARDWALK & SWK FROM TRACTS F, O33 PER FSBP	07/13/2019	RHT	BY
REVISIONS	DATE		
FILE NAME: 8577PD.DWG			

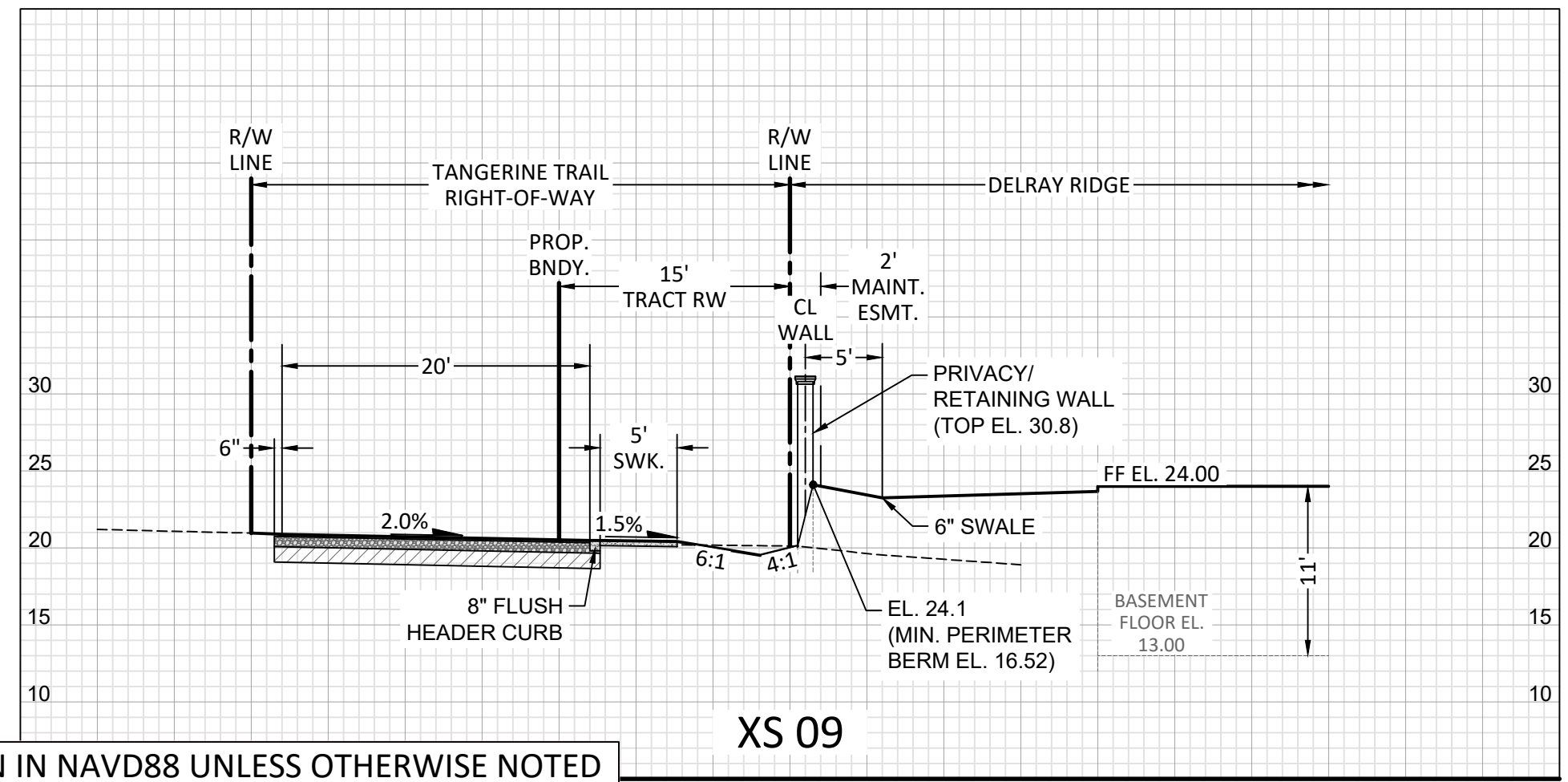
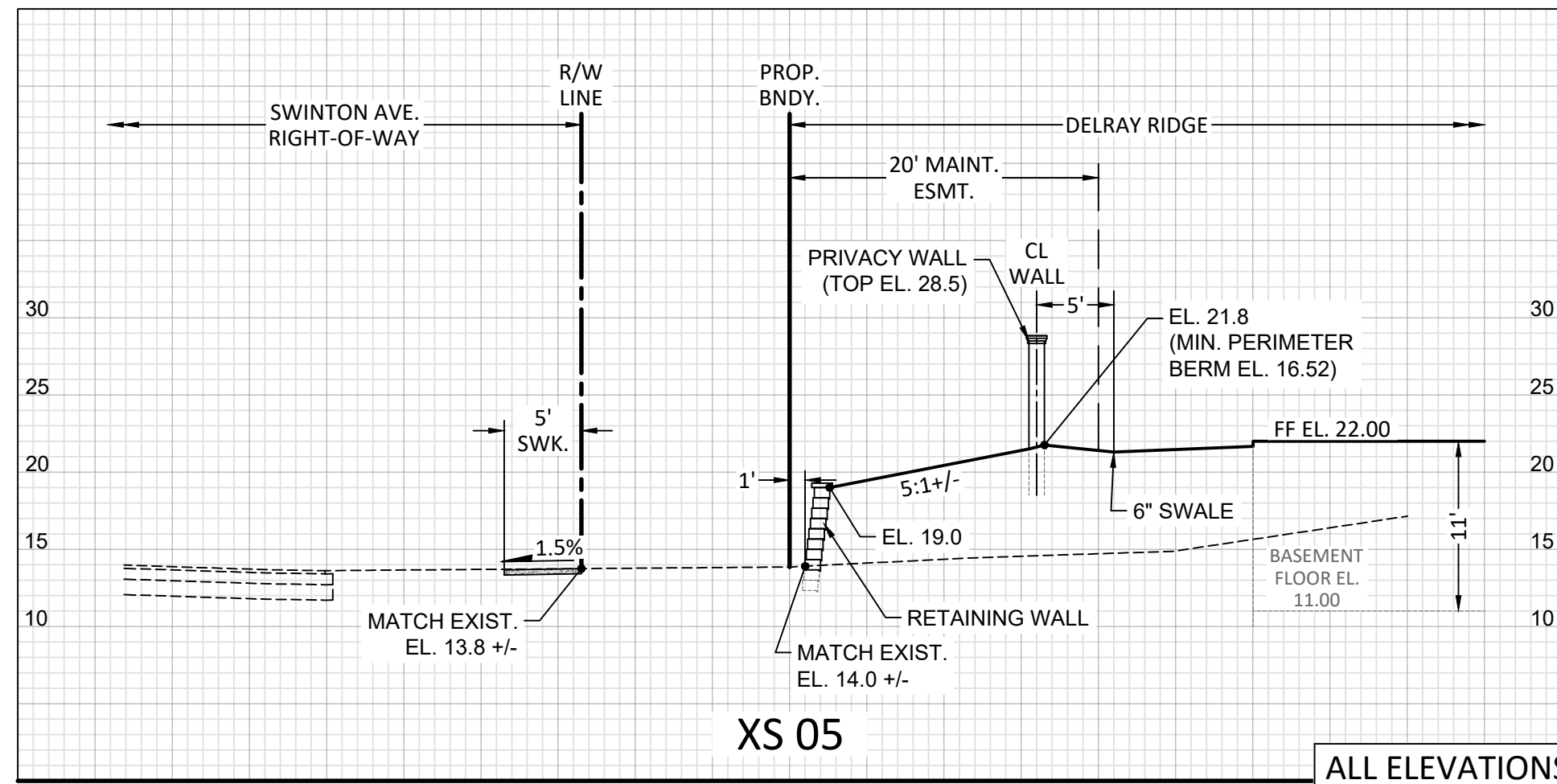
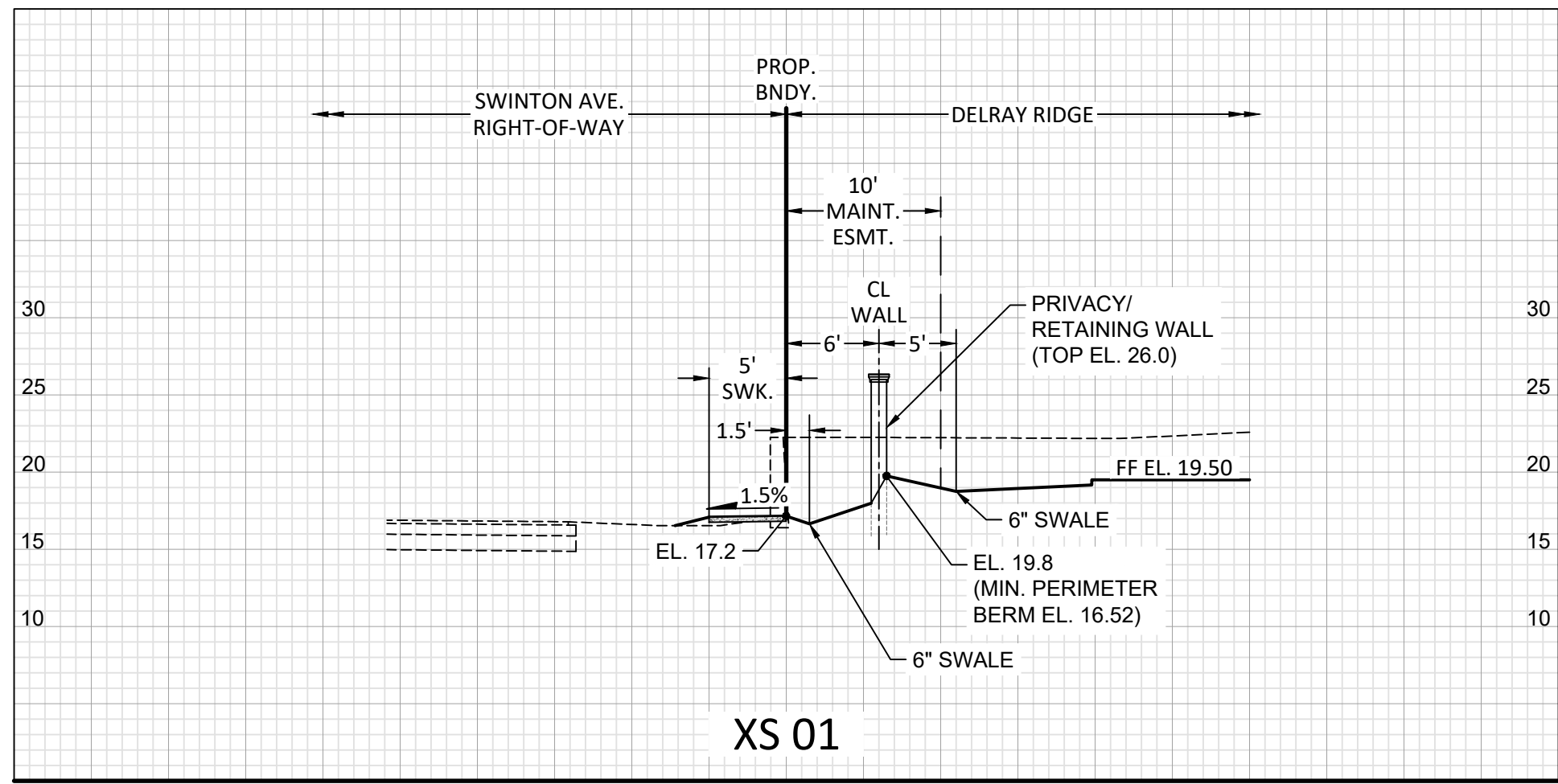
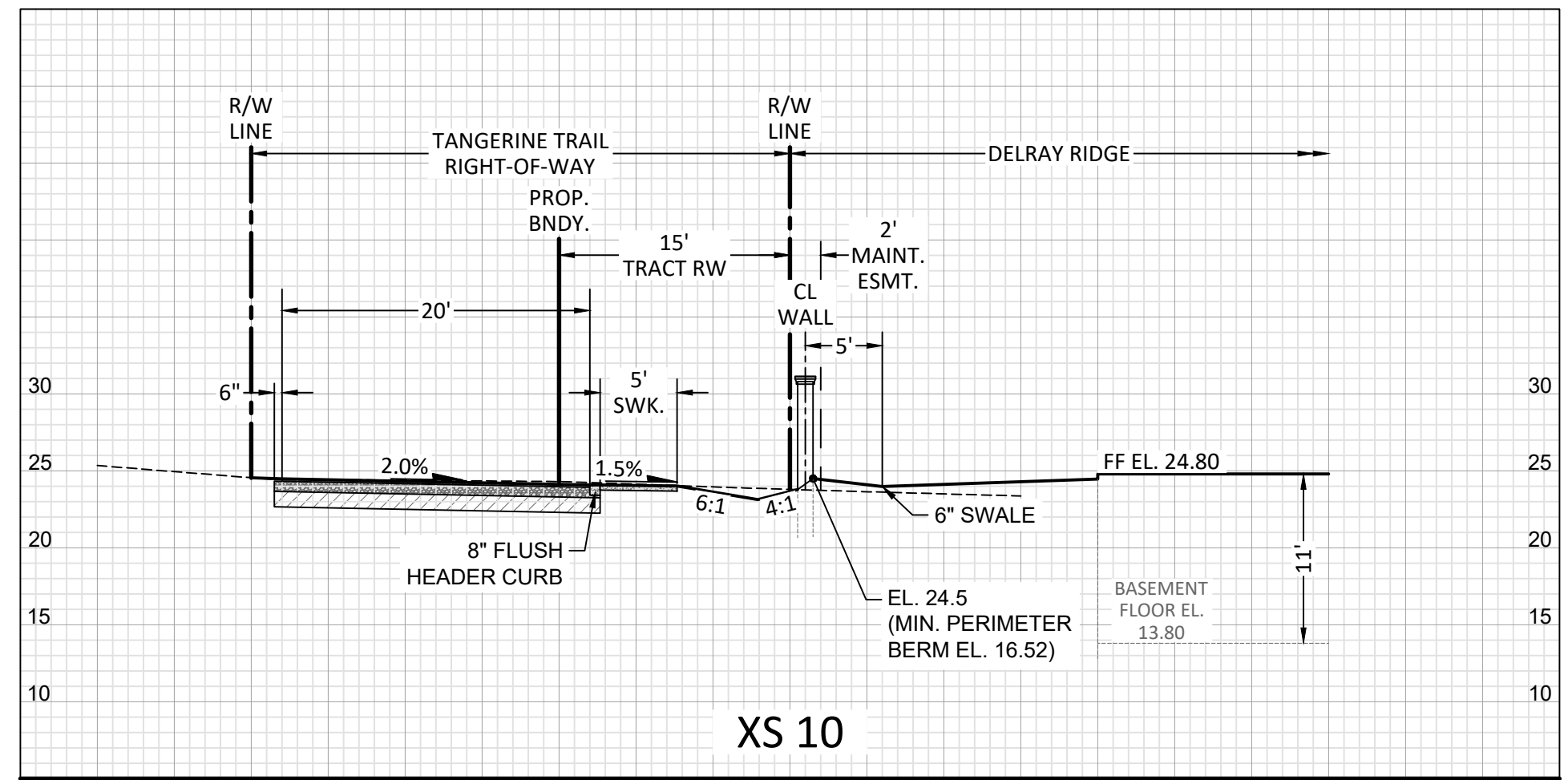
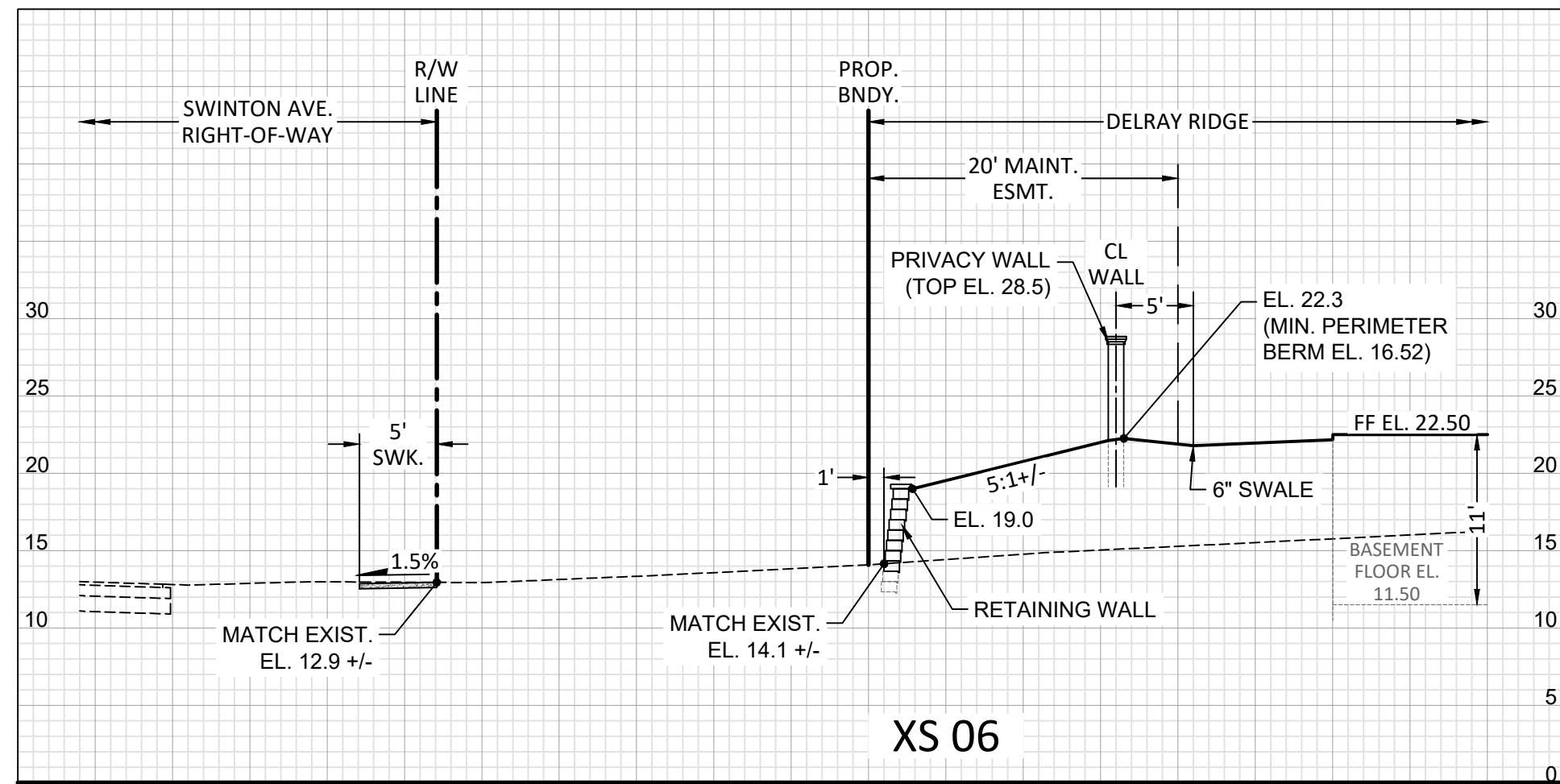
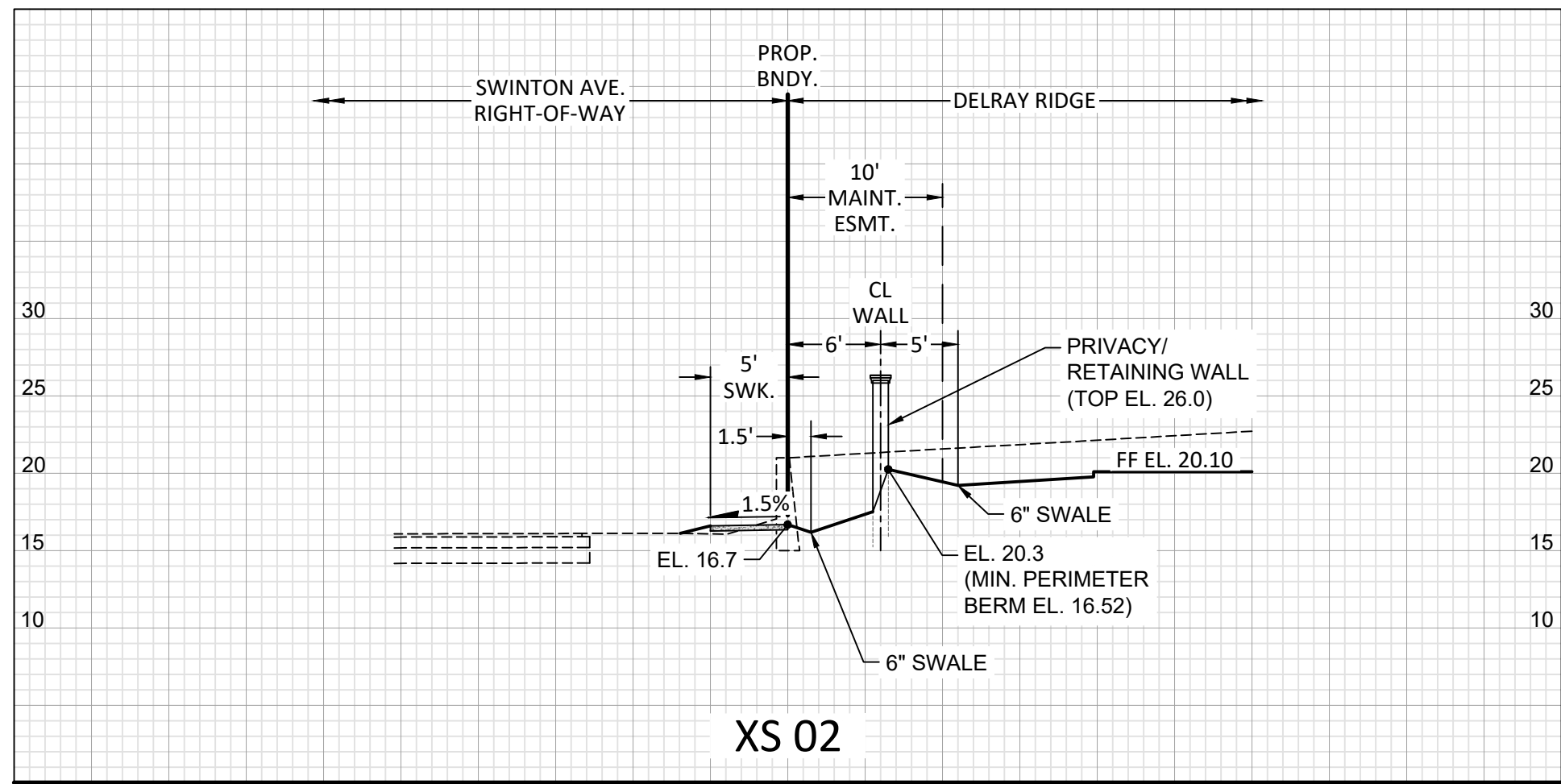
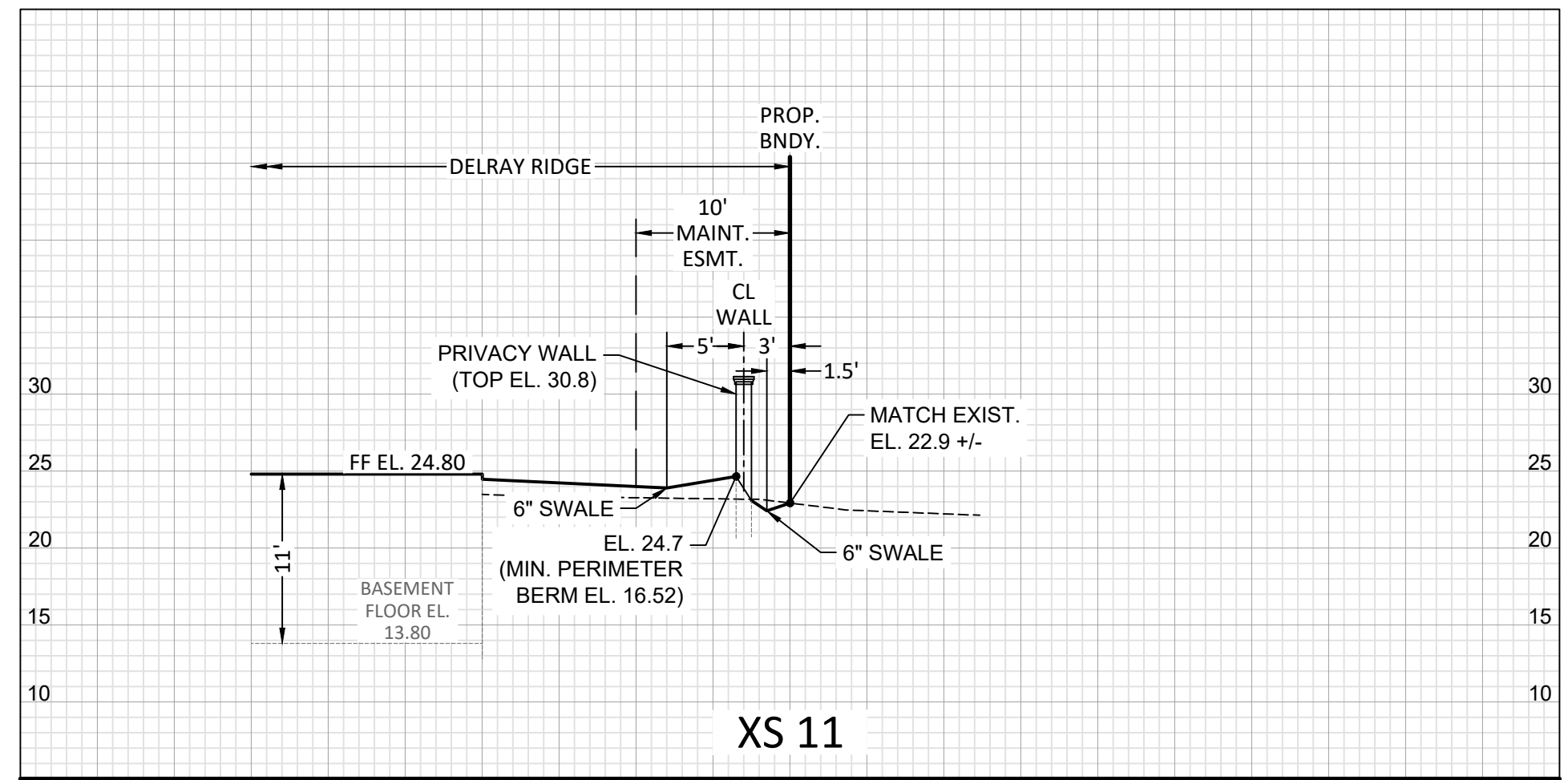
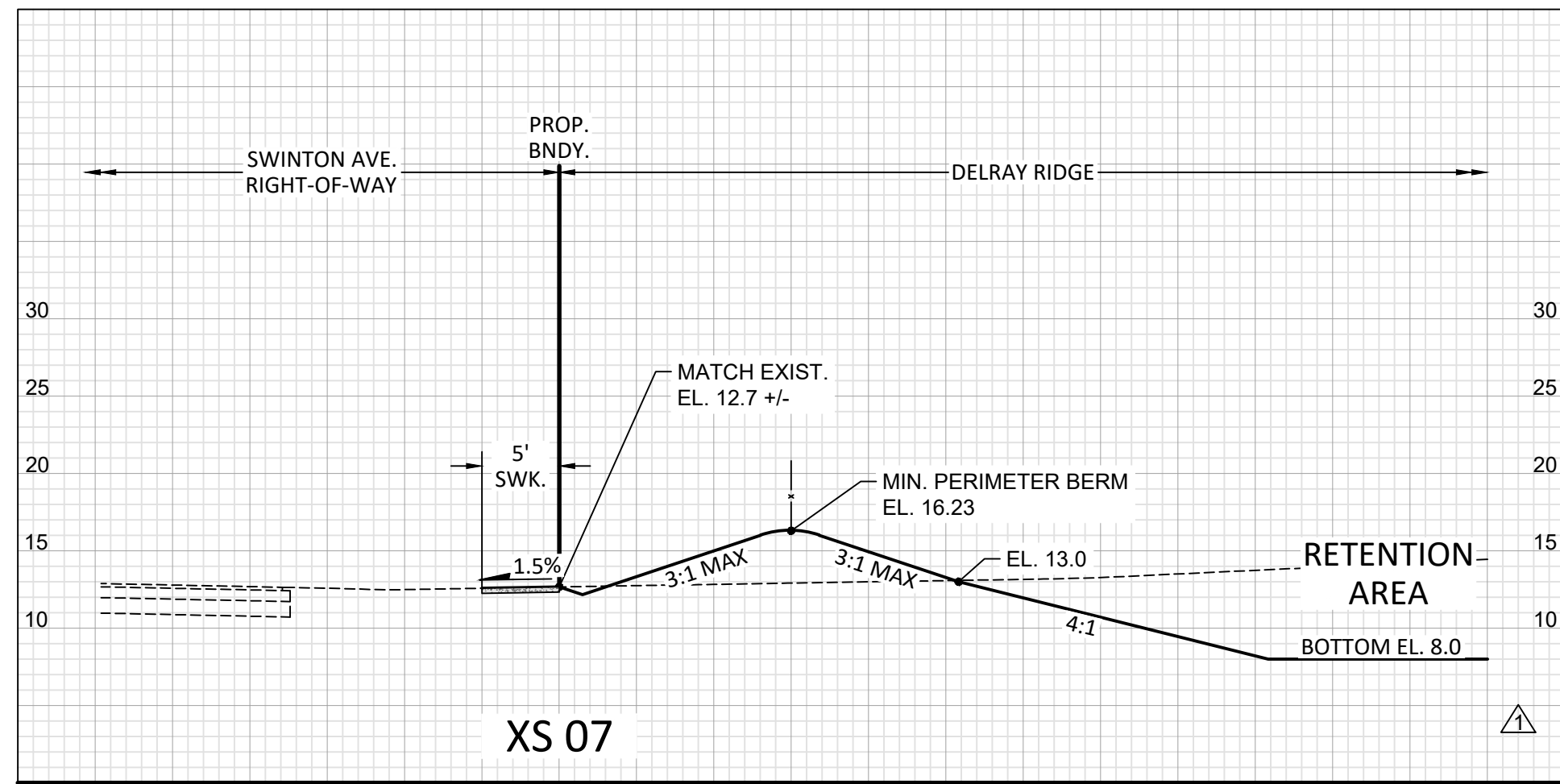
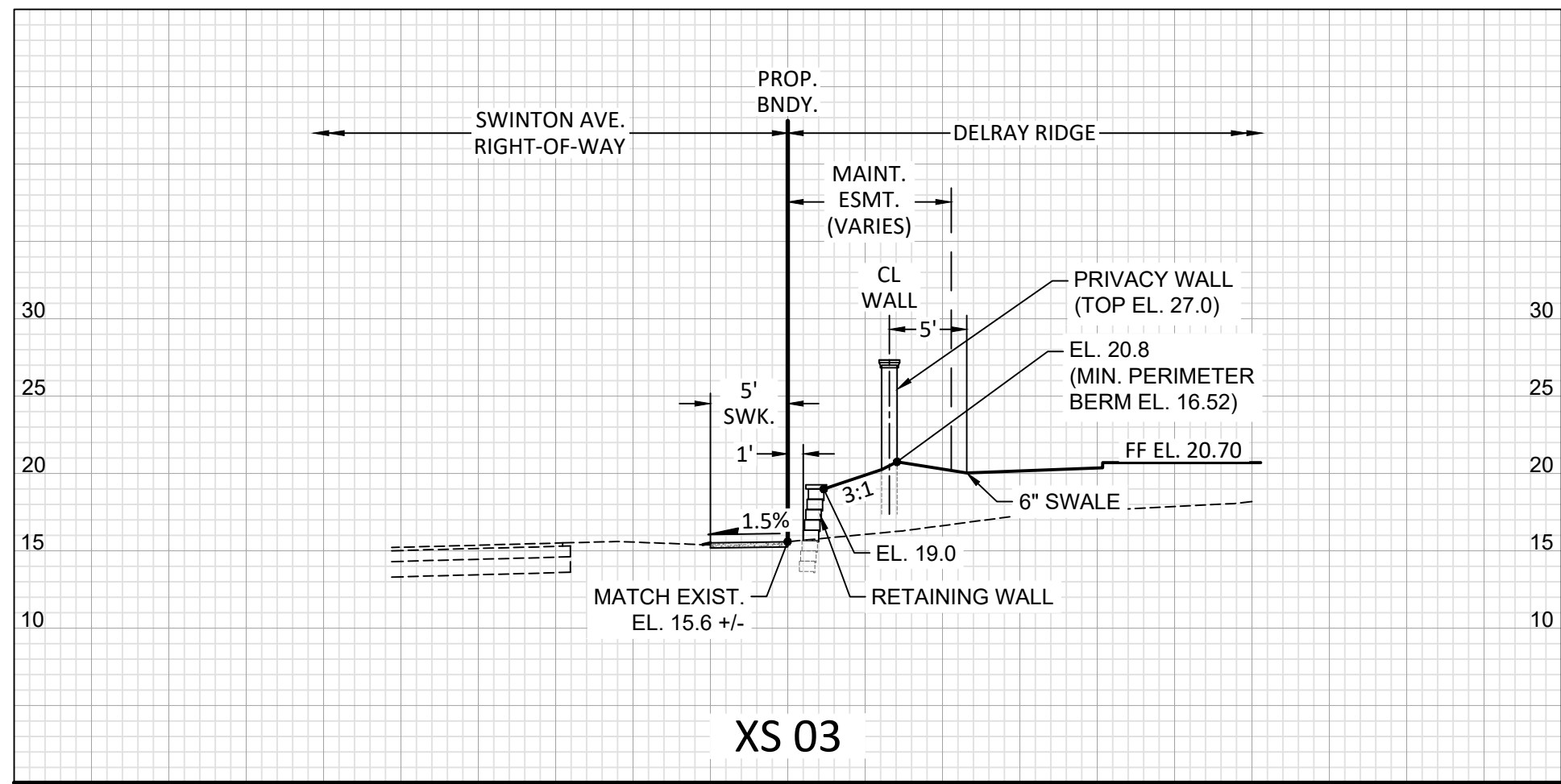
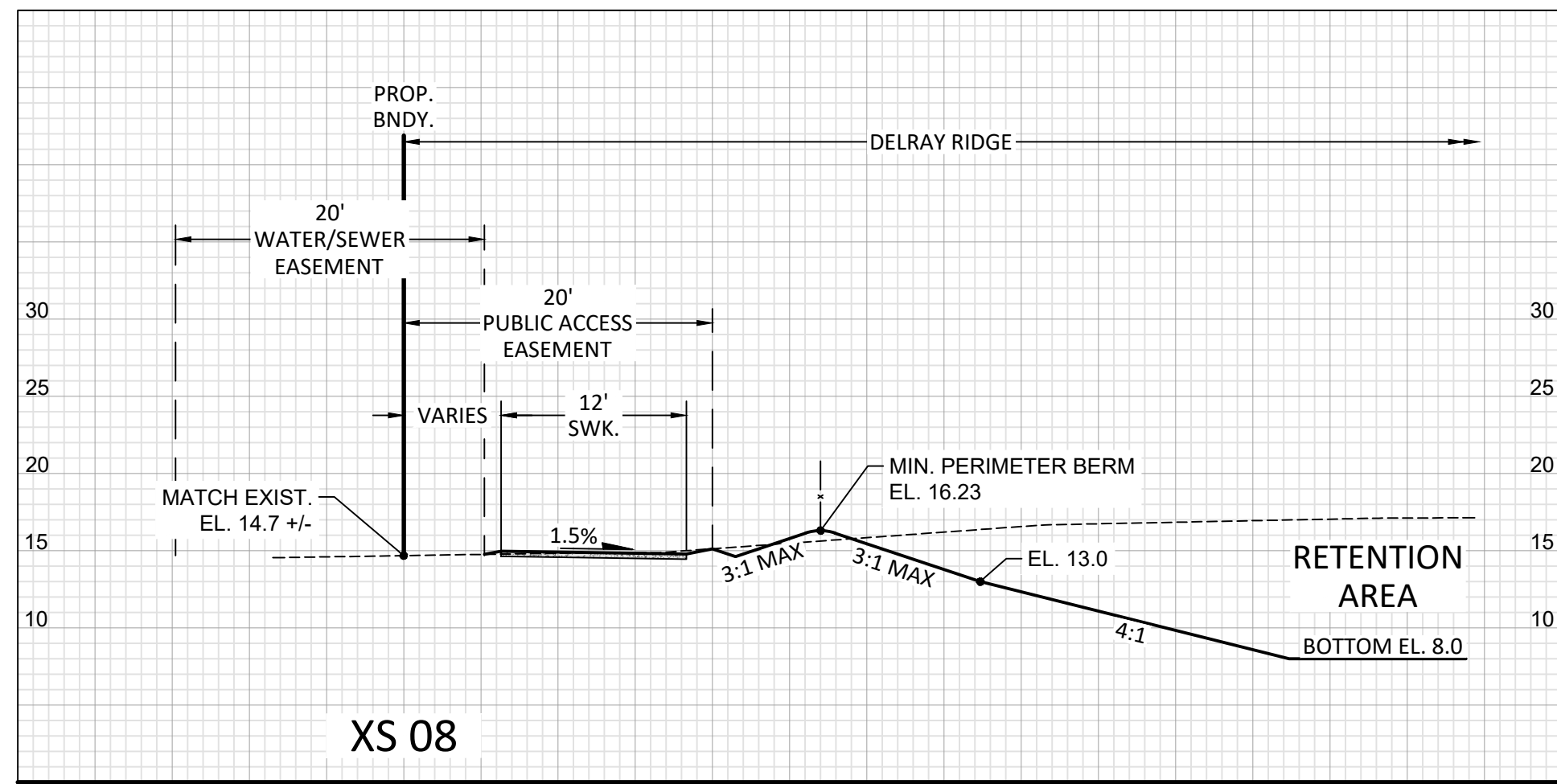
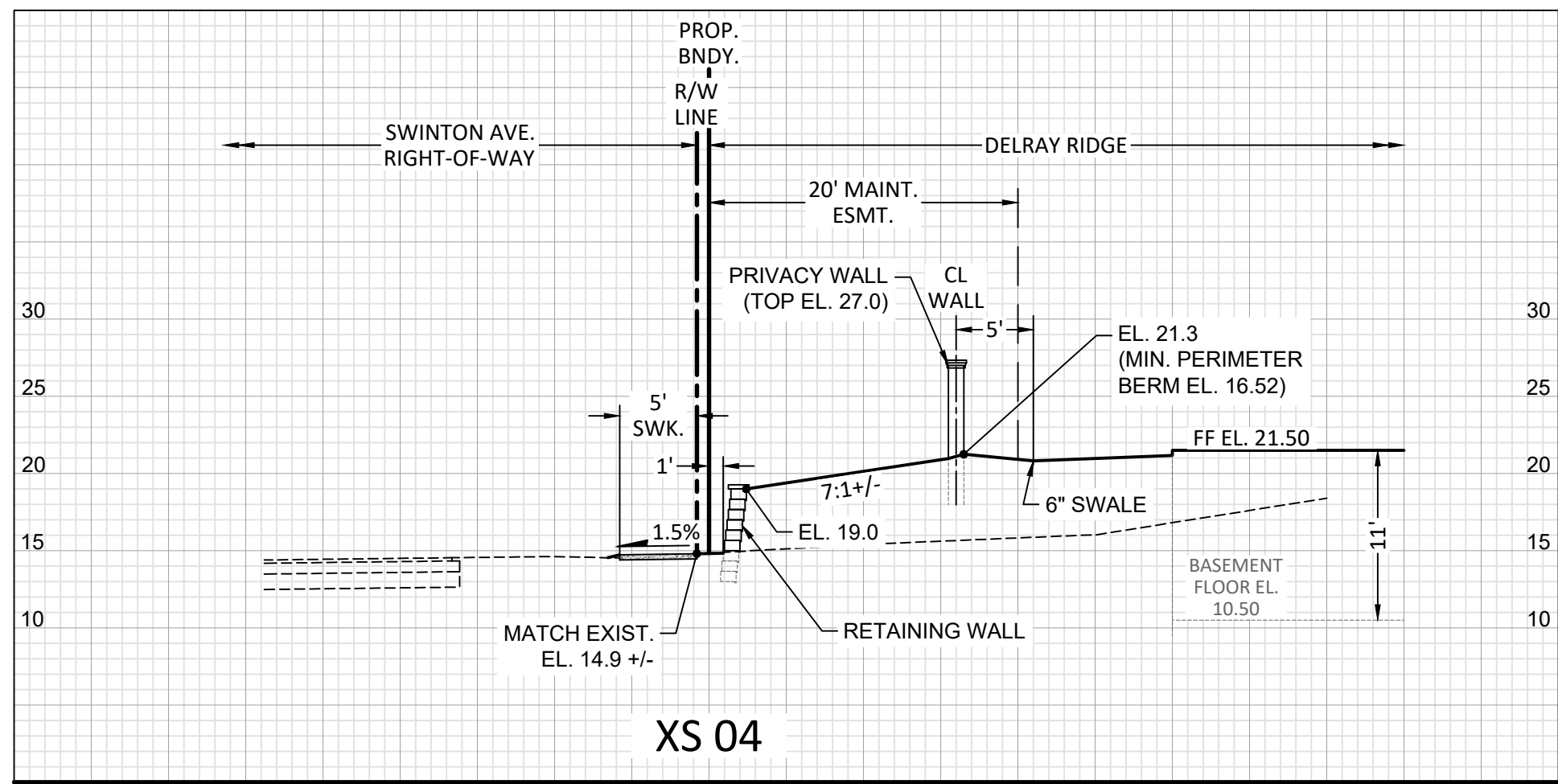
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BOCA RATON, FLORIDA 33434
PHONE (561) 592-1991 / FAX (561) 750-1452

DELRAY RIDGE
SIGNING & PAVEMENT MARKING PLAN
DELRAY BEACH, FLORIDA

DATE	06/08/20
DRAWN BY	RHT
F.B./ PG.	N/A
SCALE	1"=30'

RYAN D. WHEELER
PROFESSIONAL ENGINEER
LICENSE NO. 71477
STATE OF FLORIDA
- FOR THE FIRM -
DATE Nov 24, 2021

JOB #8577
SHT. NO.
PD-03
OF 11 SHEETS



ALL ELEVATIONS SHOWN IN NAVD88 UNLESS OTHERWISE NOTED
CONVERSION: NAVD88 = NGVD - 1.53'

REV	DATE	BY
01/15/2019	DATE	BY
REMOVED SWK FROM TRACTS F. 053 PER F88P		
REVISIONS		
FILE NAME: 8577PD.DWG		

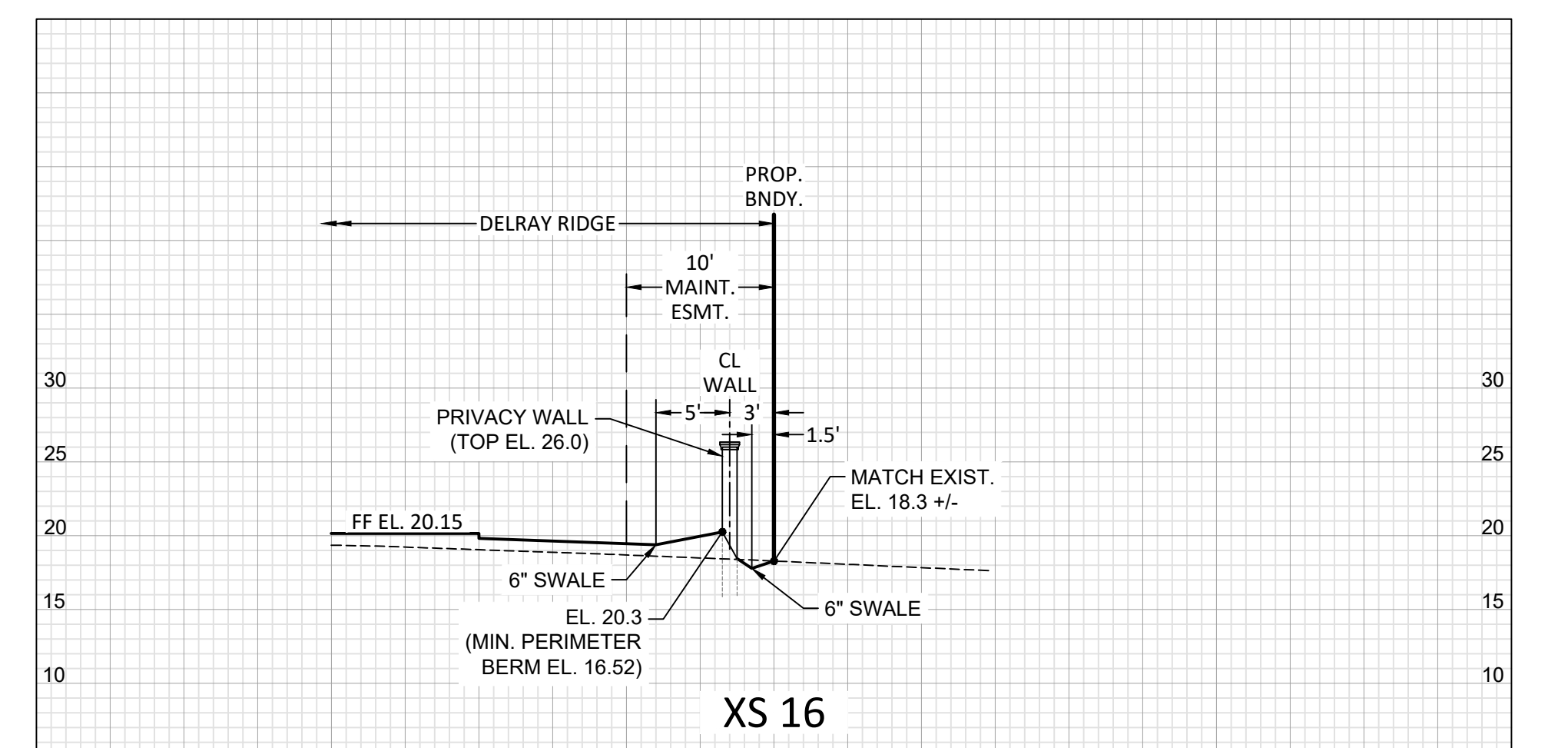
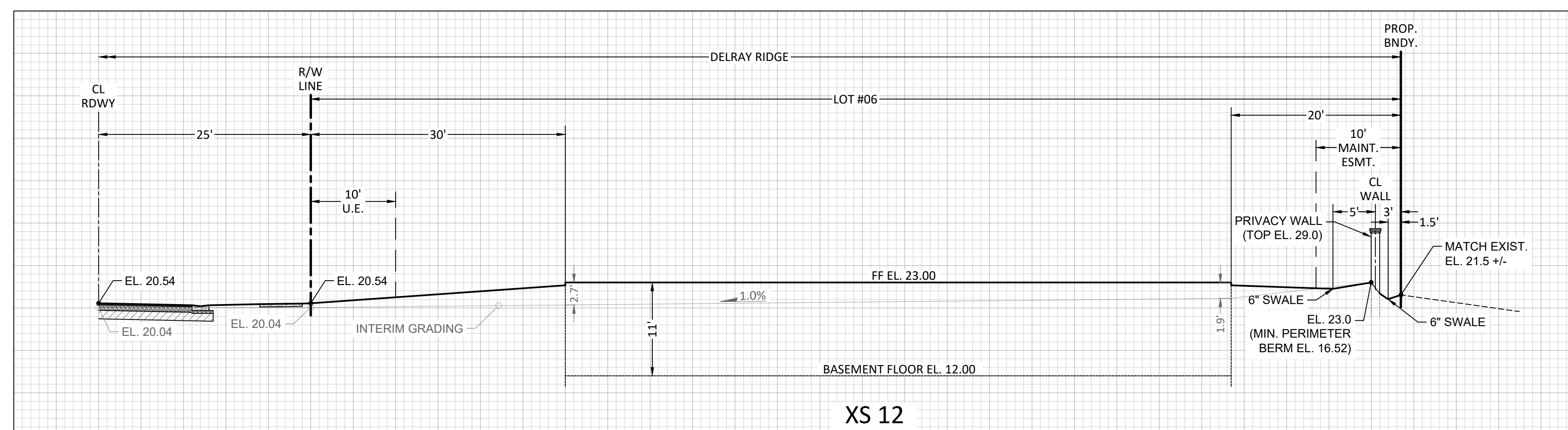
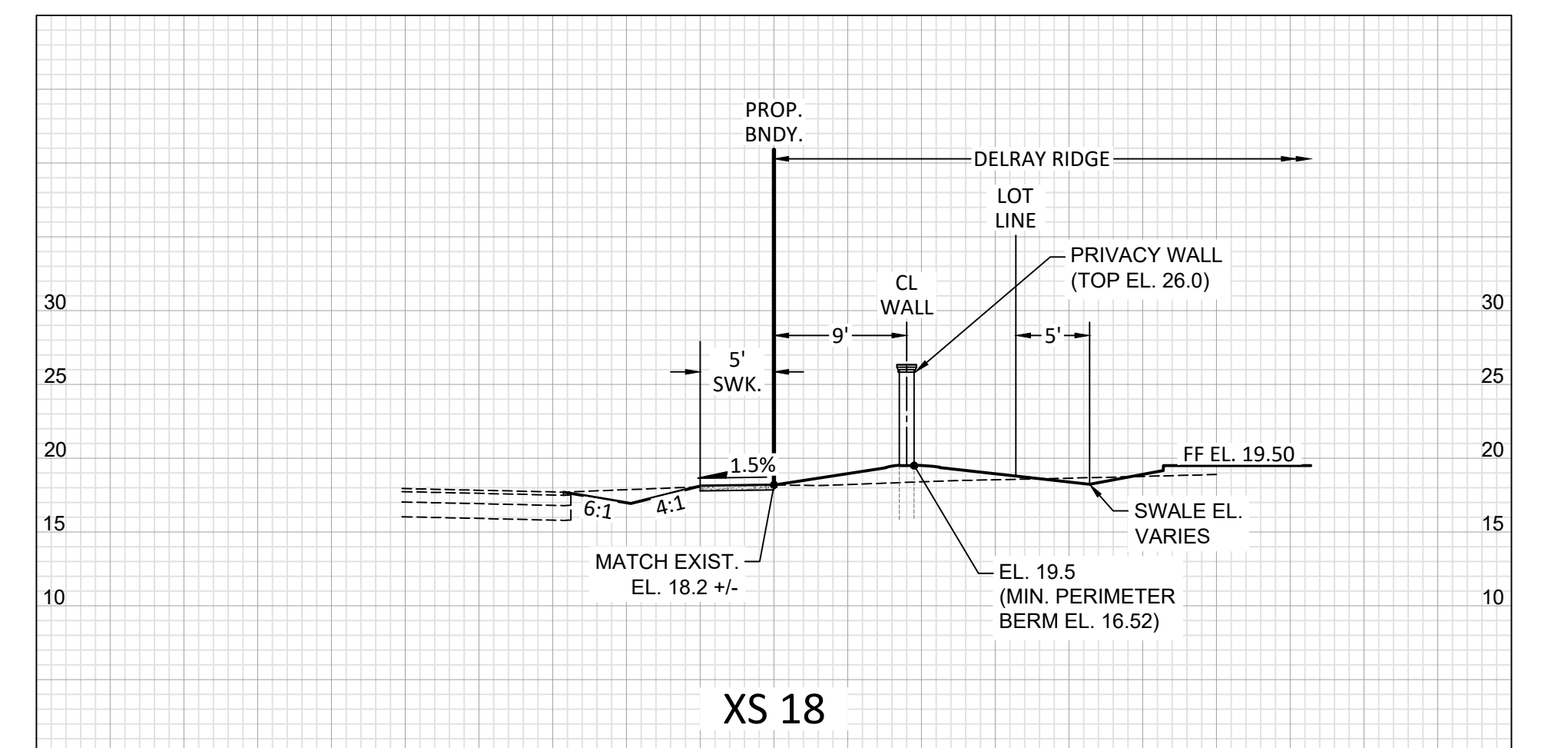
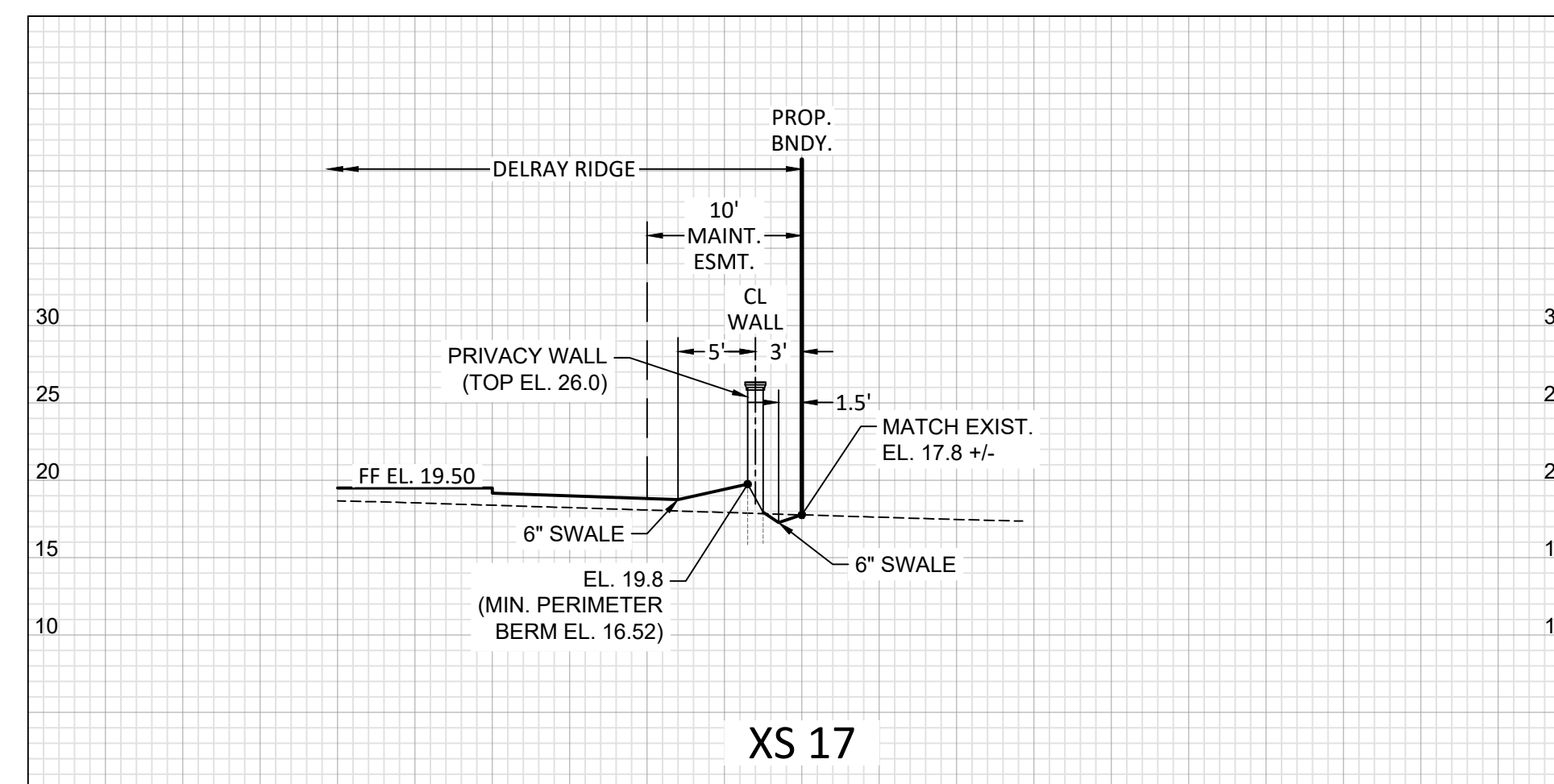
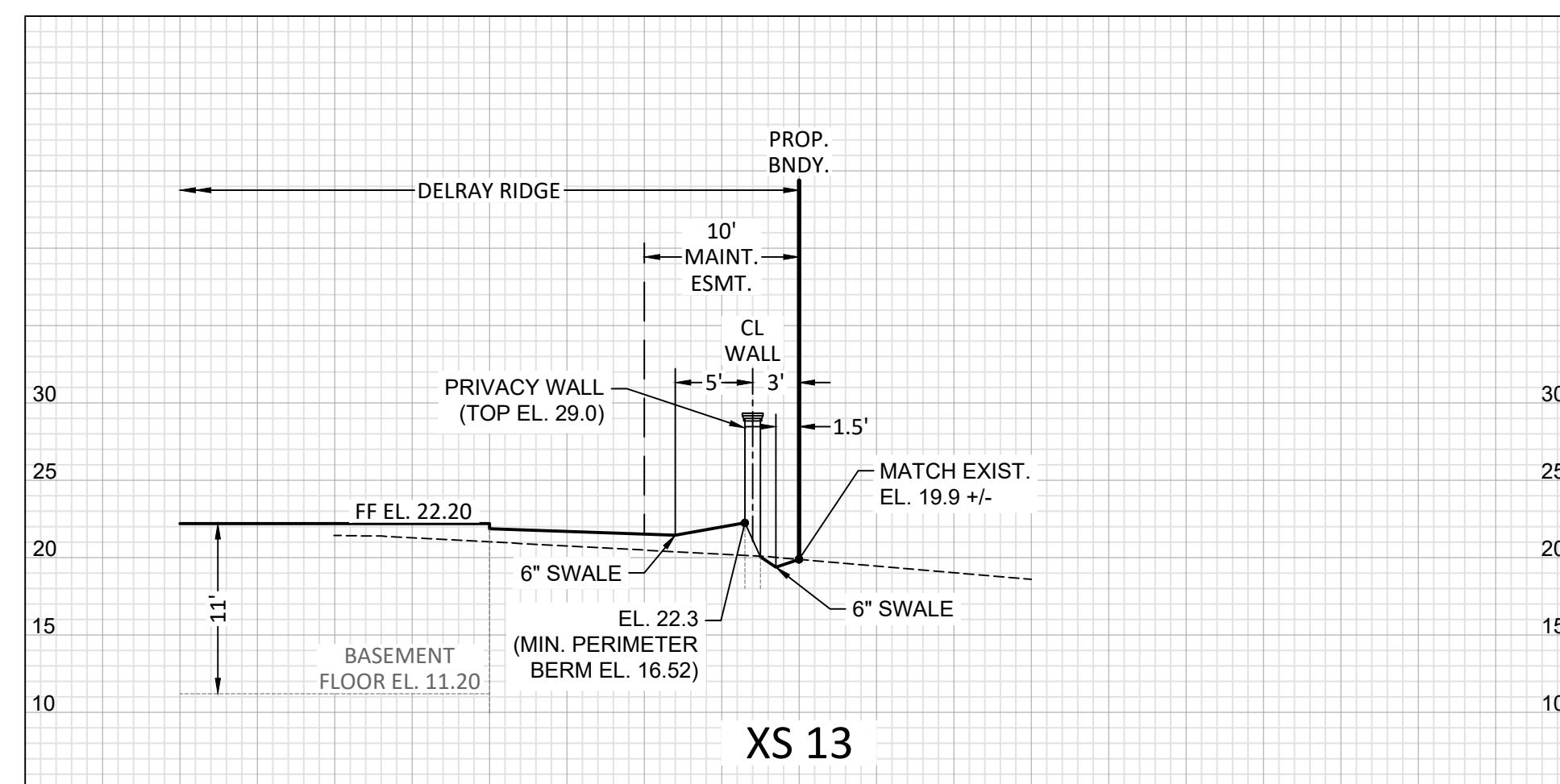
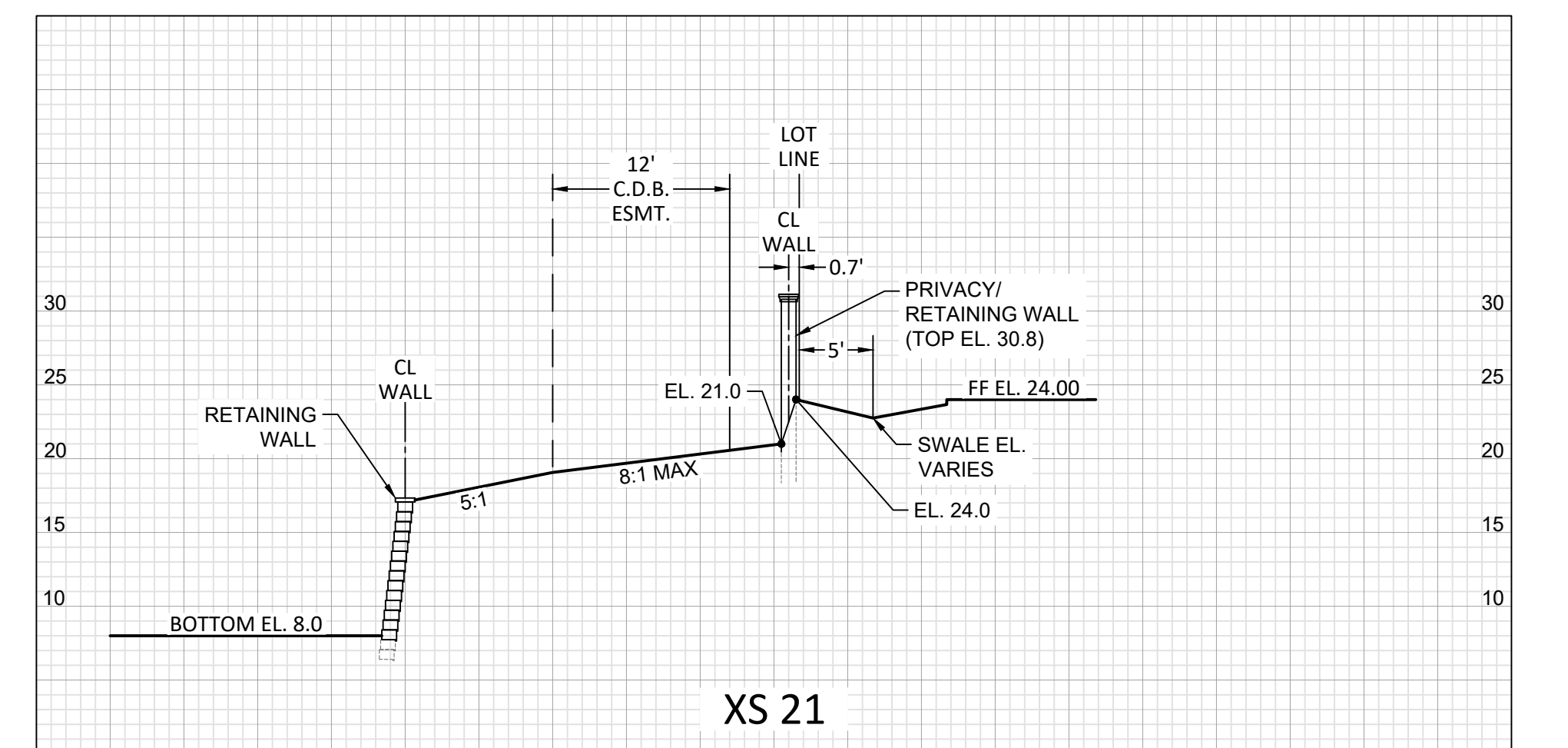
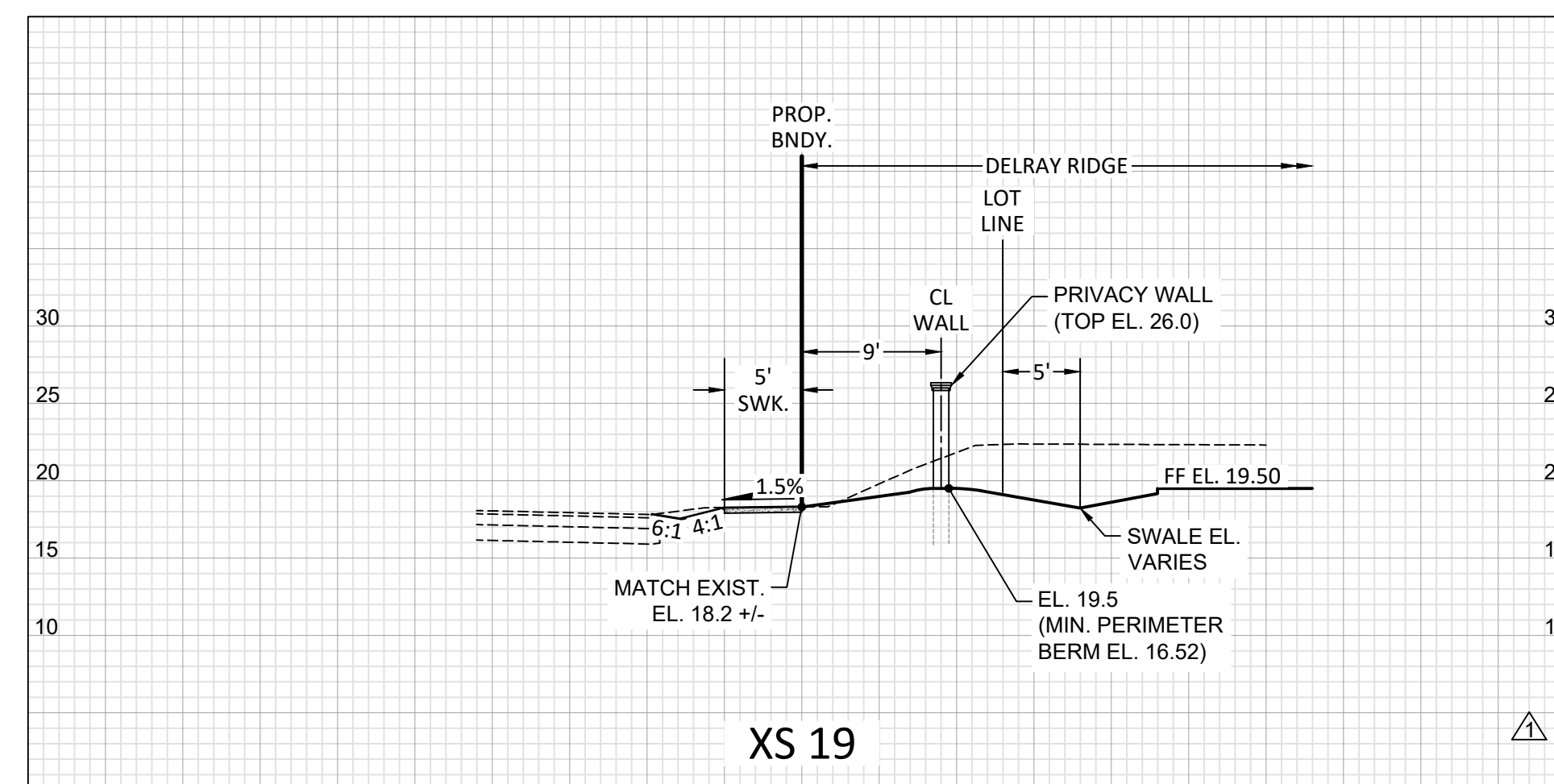
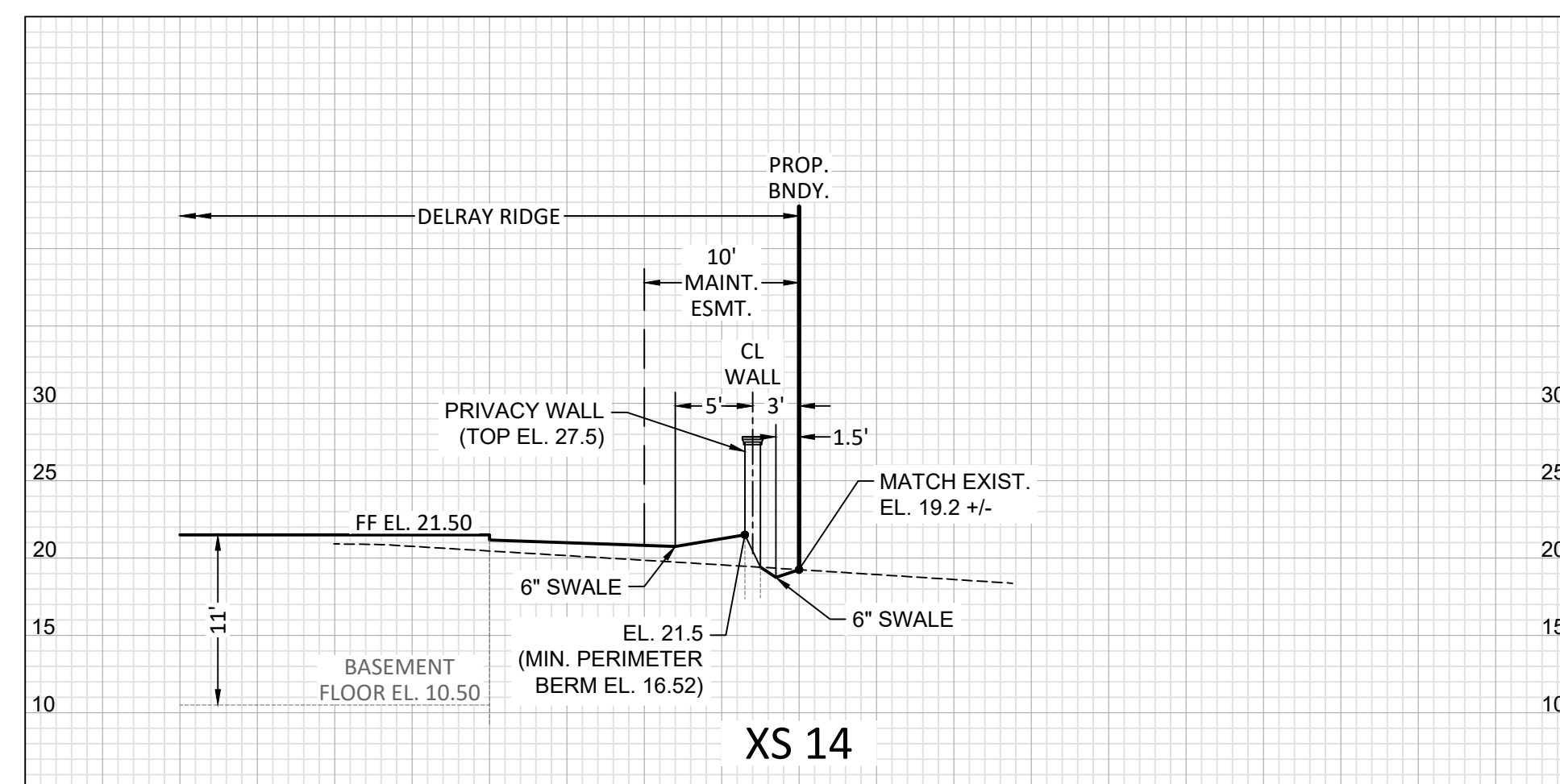
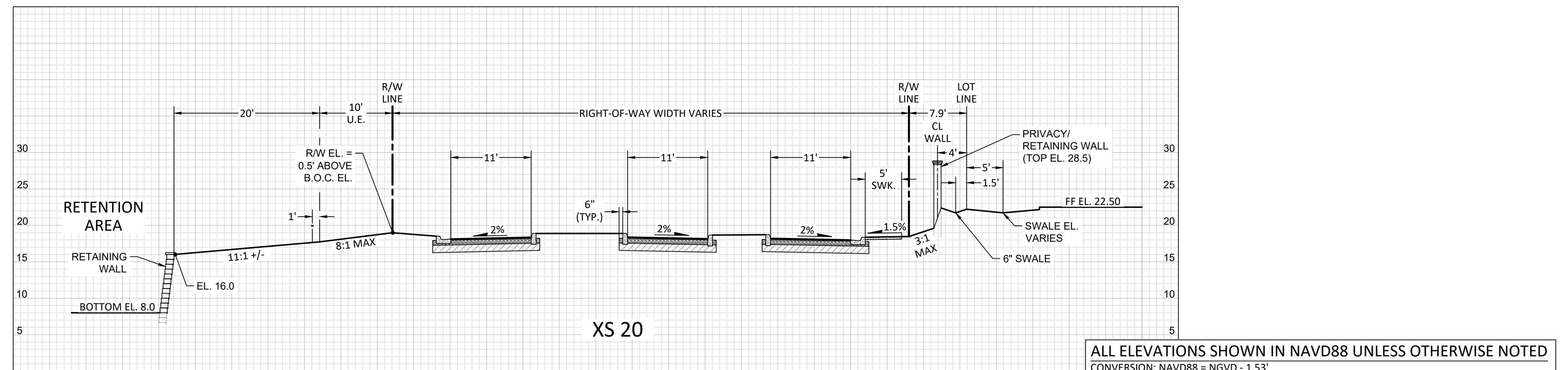
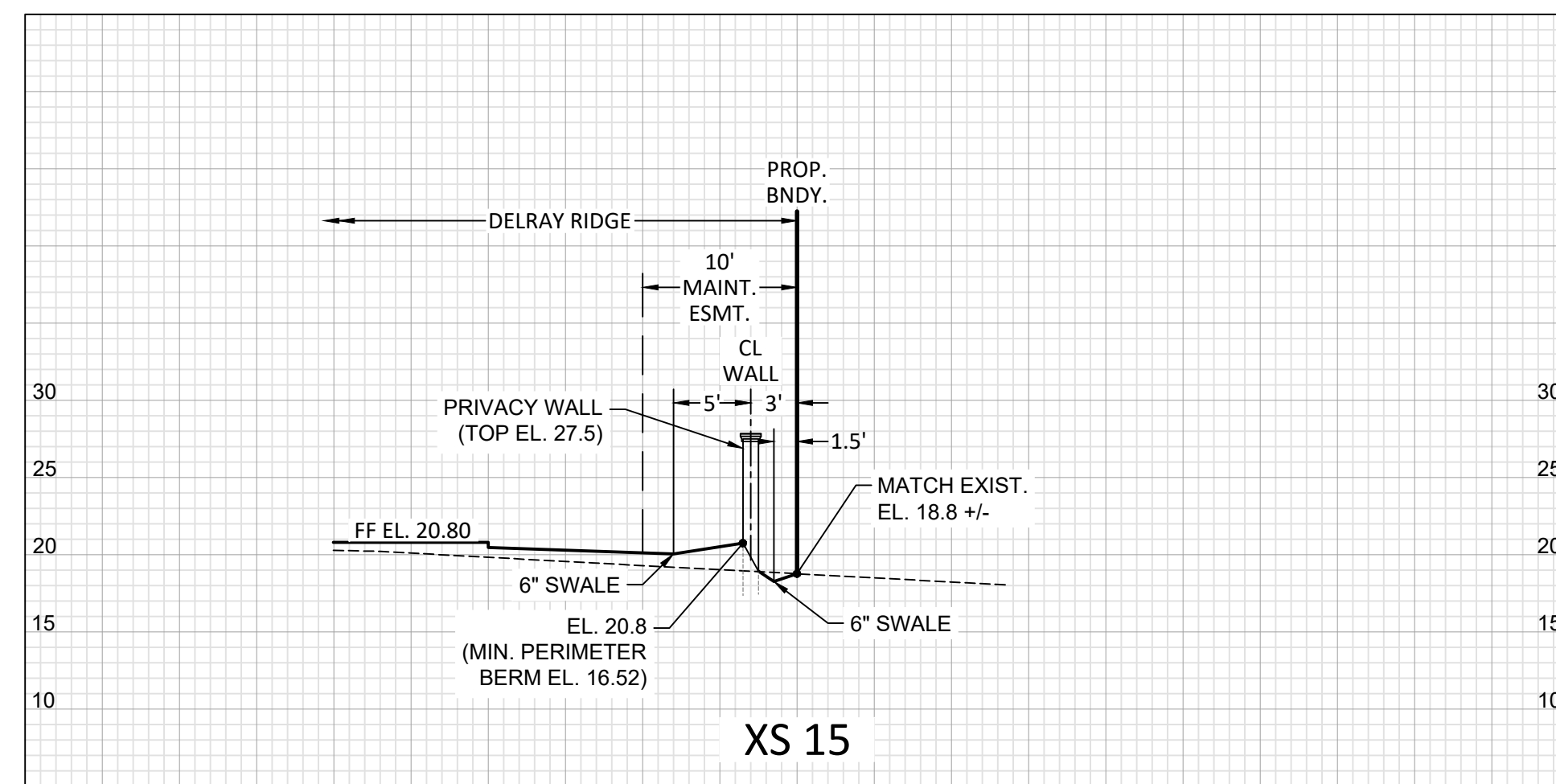
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CIVIL ENGINEERING - LAND PLANNING
LANDSCAPE ARCHITECTURE - SURVEYING
7900 GLADES ROAD - SUITE 100
BOCA RATON, FLORIDA 33434
PHONE (561) 392-1991 / FAX (561) 750-1452

DELRAY RIDGE
GRADING CROSS-SECTIONS
DELRAY BEACH, FLORIDA

DATE 06/08/20
DRAWN BY RHT
F.B./ PG. N/A
SCALE N/A

RYAN D. WHEELER
PROFESSIONAL ENGINEER
LICENSE NO. 71477
STATE OF FLORIDA
FOR THE FIRM -
DATE Nov 24, 2021

JOB #8577
SHT. NO.
PD-04
OF 11 SHEETS

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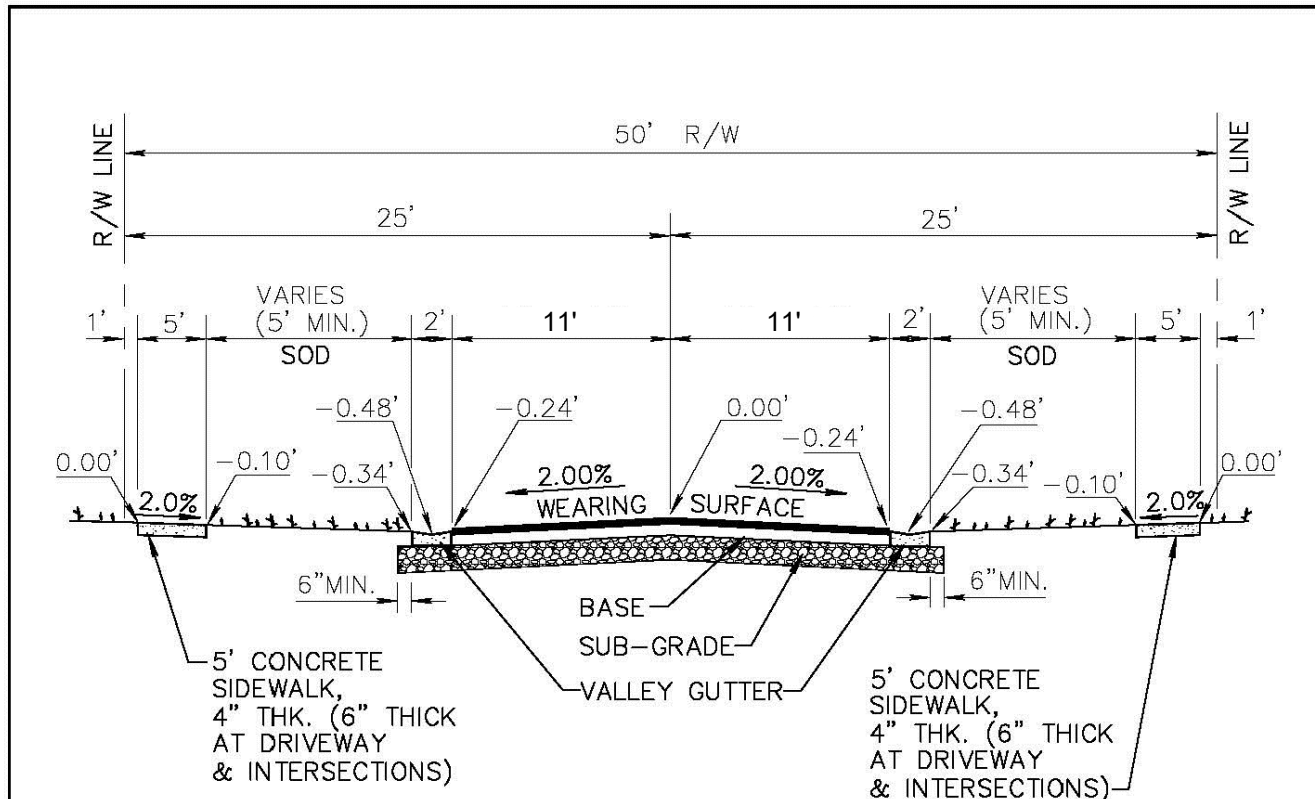
**CIVIL ENGINEERING - LAND PLANNING
LANDSCAPE ARCHITECTURE - SURVEYING**
7900 GLADES ROAD - SUITE 100
BOCA RATON, FLORIDA 33434
PHONE (561)-392-1991 / FAX (561)-750-1452

GRADING CROSS-SECTIONS

DATE	06/08/20
DRAWN BY	RHT
SB./ PG.	N/A
SCALE	N/A

RYAN D. WHEELER
PROFESSIONAL ENGINEER
LICENSE NO. 71477
STATE OF FLORIDA
FOR THE FIRM -
ATTEN Nov 24, 2021

JOB #8577
 HT.NO.
 PD-05
 OF 11 SHEETS



PAVEMENT SPECIFICATIONS	
WEARING SURFACE	1 1/2" TYPE S-III (2 LIFTS) SEE NOTE 2
BASE	8" LIMEROCK OR 10" CRUSHED CONCRETE COM- PACTED TO 98% MAX. DENSITY PER AASHTO T-180. PRIME & TACK COAT PER FDOT SECTION 300.
SUBGRADE	12" STABILIZED (75 P.S.I. FBV) AND COMPACTED TO 98% MAX. DENSITY PER AASHTO T-180.

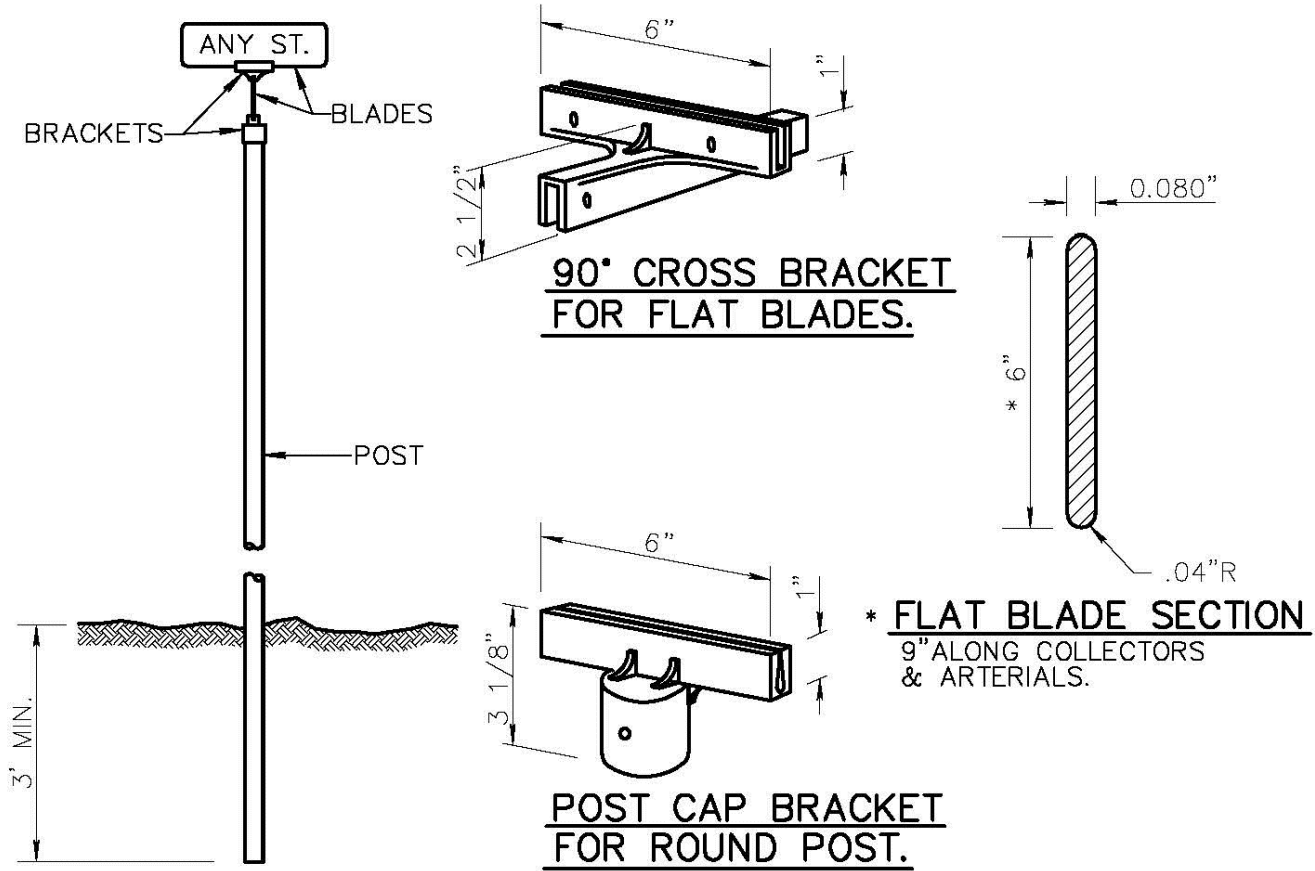
NOTE:

1. VARIATION FROM MATERIAL SPECIFICATIONS WILL BE CONSIDERED ON A CASE BY CASE BASIS BY THE CITY ENGINEER.
2. 2ND LIFT SHALL NOT TO BE PAVED UNTIL CONSTRUCTION VEHICLES AND EQUIPMENT HAVE COMPLETED WORK.

CITY of DELRAY BEACH
 ENVIRONMENTAL SERVICES DEPARTMENT
 434 SOUTH SWINTON AVENUE, DELRAY BEACH, FLORIDA 33444

TYPICAL 50' R/W SECTION WITH VALLEY GUTTER

DATE: 07-02-2014
RT 1.1a



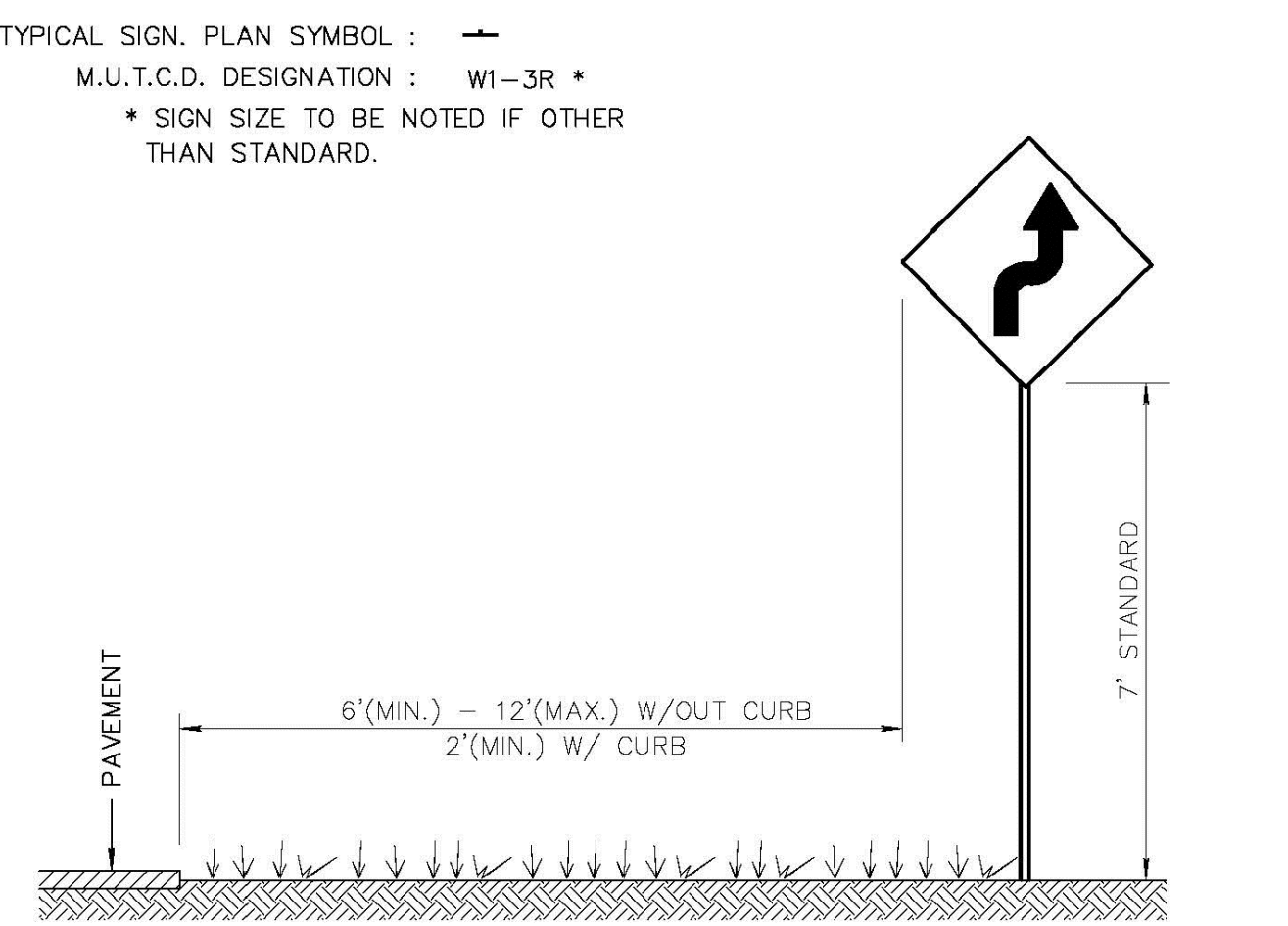
GENERAL SPECIFICATIONS:

- * BLADE: ALCOA NO.86054,6063-T6 ALLOY, ETCHED, DEGREASED, AND DEBURRED WITH NO.1200 ALDOLINE FINISH WITH HIGH INTENSITY GREEN BACKGROUND DIMENSIONS: 6" OR 9" IN HEIGHT, AND 24", 30", OR 36" IN LENGTH
- * LETTERS: NAME 4" SERIES "B" HIGH INTENSITY (SILVER) SUFFIX 2" SERIES "B" HIGH INTENSITY (SILVER) ALL LETTERS FOR SIGNS ALONG COLLECTOR OR ARTERIAL ROADWAYS SHALL BE 7" SERIES "B" WITH 4" SERIES "B" SUFFIX ON 9" HIGH BLADES.
- * POST: STEEL FLANGED GALVANIZED CHANNEL PER A.S.T.M. A123 WITHOUT ANCHOR PLATES.
- * BRACKETS: DIE CAST HIGH STRENGTH ALUMINUM ALLOY, MIN. TENSILE STRENGTH 45,000 P.S.I., DEGREASED, TUMBLED, AND POLISHED SIDES OF ALL SLOTS SHALL BE SOLID METAL WITH TWO HOLES PER SLOT (SAME SIDE) DRILLED TO 7/32" AND TAPPED TO 1/4" TO RECEIVE STAINLESS STEEL ALLENHEAD SET SCREWS, SKIRT OF POST CAP BRACKET TO BE DRILLED AND TAPPED FOR 3 SCREWS OF WHICH NO TWO IS TO BE LESS THAN 90° OR MORE THAN 135° APART. (METRO HUSKEY NO.6 OR EQUAL.)

CITY of DELRAY BEACH
 ENVIRONMENTAL SERVICES DEPARTMENT
 434 SOUTH SWINTON AVENUE, DELRAY BEACH, FLORIDA 33444

STREET SIGN DETAIL

DATE: 01-12-2009
RT 2.1a



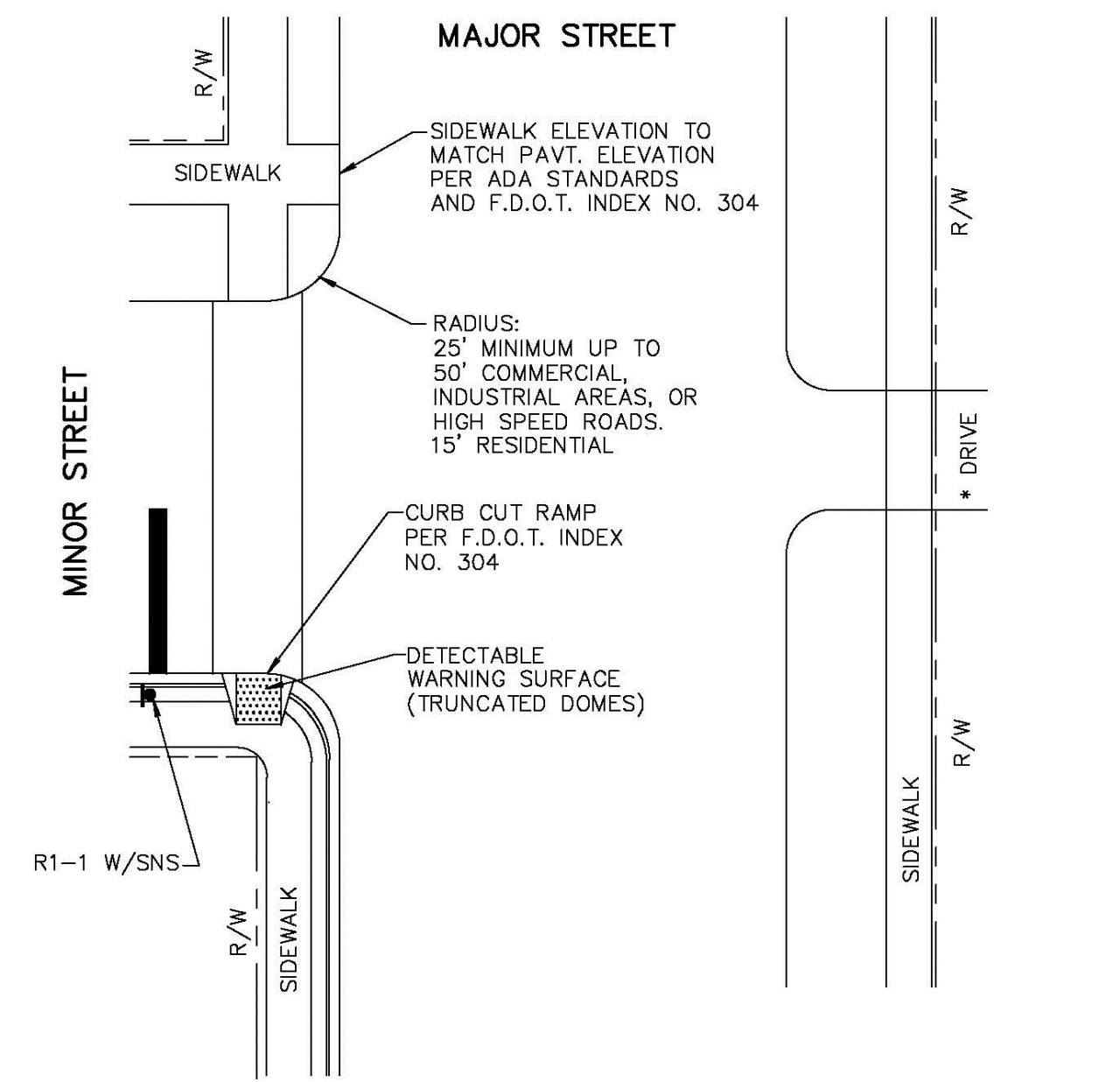
NOTES:

1. ALL SIGNS SHALL BE SPECIFIED USING THE M.U.T.C.D. DESIGNATION.
2. ALL SIGNS SHALL BE FACED WITH HIGH INTENSITY SHEETING MATERIAL OR BETTER.
3. SIGNS SHALL BE MANUFACTURED WITH 0.080" ALUMINUM BLANK.
4. POSTS SHALL BE GALVANIZED CHANNEL AT 2 LBS/L.F.
5. USE SHALL FOLLOW THE M.U.T.C.D. AND F.D.O.T. STANDARD DESIGN SPECIFICATIONS
6. ANY DEVIATION FROM THIS TYPICAL SHALL BE APPROVED BY THE CITY ENGINEER PRIOR TO INSTALLATION.
7. REFLECTIVE POSTS MAY BE USED IF M.U.T.C.D. STANDARD IS FOLLOWED.

CITY of DELRAY BEACH
 ENVIRONMENTAL SERVICES DEPARTMENT
 434 SOUTH SWINTON AVENUE, DELRAY BEACH, FLORIDA 33444

STREET SIGN DETAIL

DATE: 01-12-2009
RT 2.1b

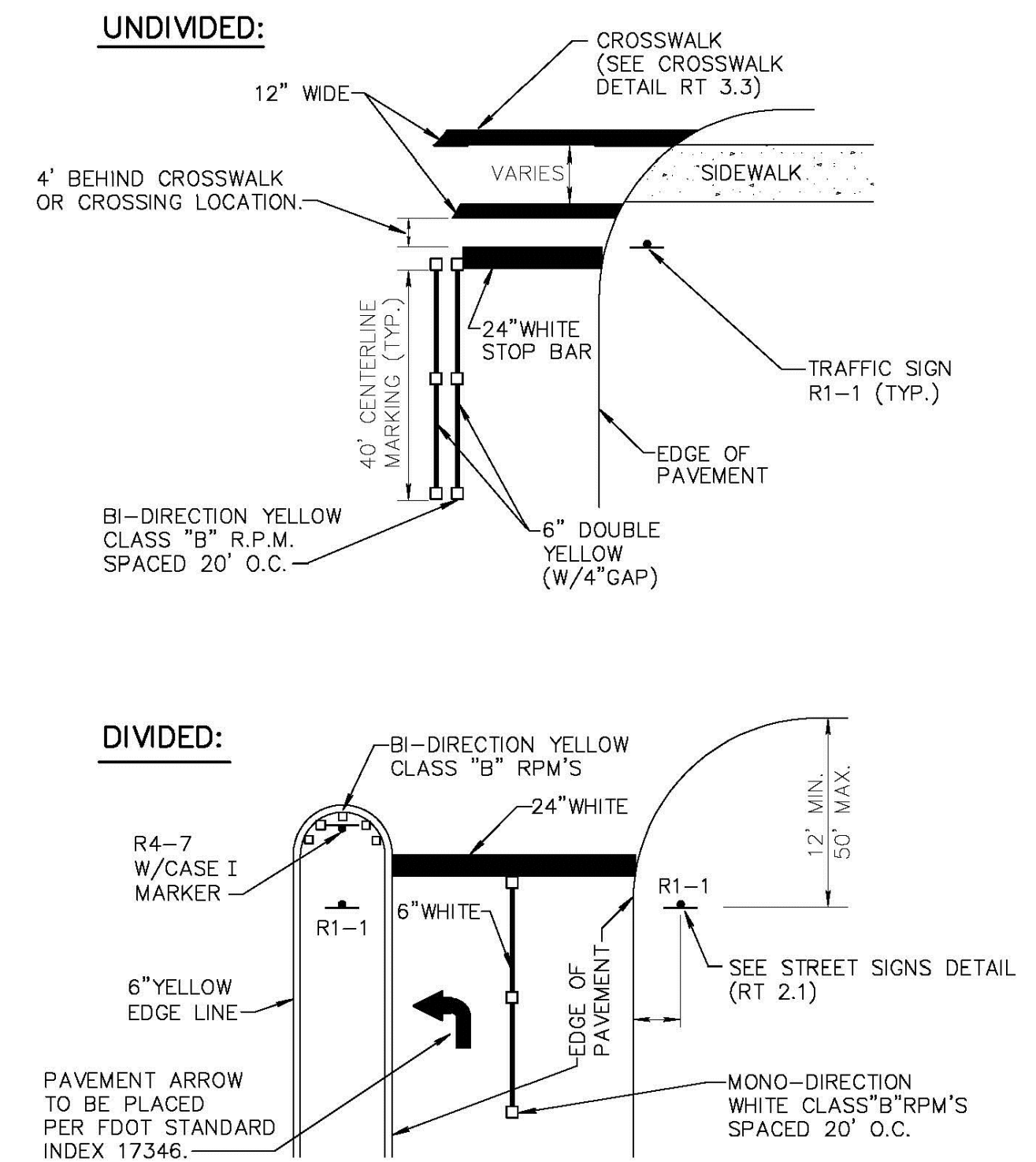


- * DRIVEWAY DESIGN TO BE PER CITY LAND DEVELOPMENT REGULATIONS, FDOT STANDARD SPECIFICATIONS. ALL DESIGNS SUBJECT TO CITY ENGINEER APPROVAL.
- * ALL WALKS CROSSING A VEHICULAR AREA SHALL HAVE A DETECTABLE WARNING SURFACE (TRUNCATED DOME) IN ACCORDANCE WITH THE FLORIDA BUILDING CODE, CHAPTER II, FL. ACCESSIBILITY CODE FOR BUILDING CONSTRUCTION.

CITY of DELRAY BEACH
 ENVIRONMENTAL SERVICES DEPARTMENT
 434 SOUTH SWINTON AVENUE, DELRAY BEACH, FLORIDA 33444

INTERSECTION DETAIL

DATE: 07-02-2014
RT 3.1

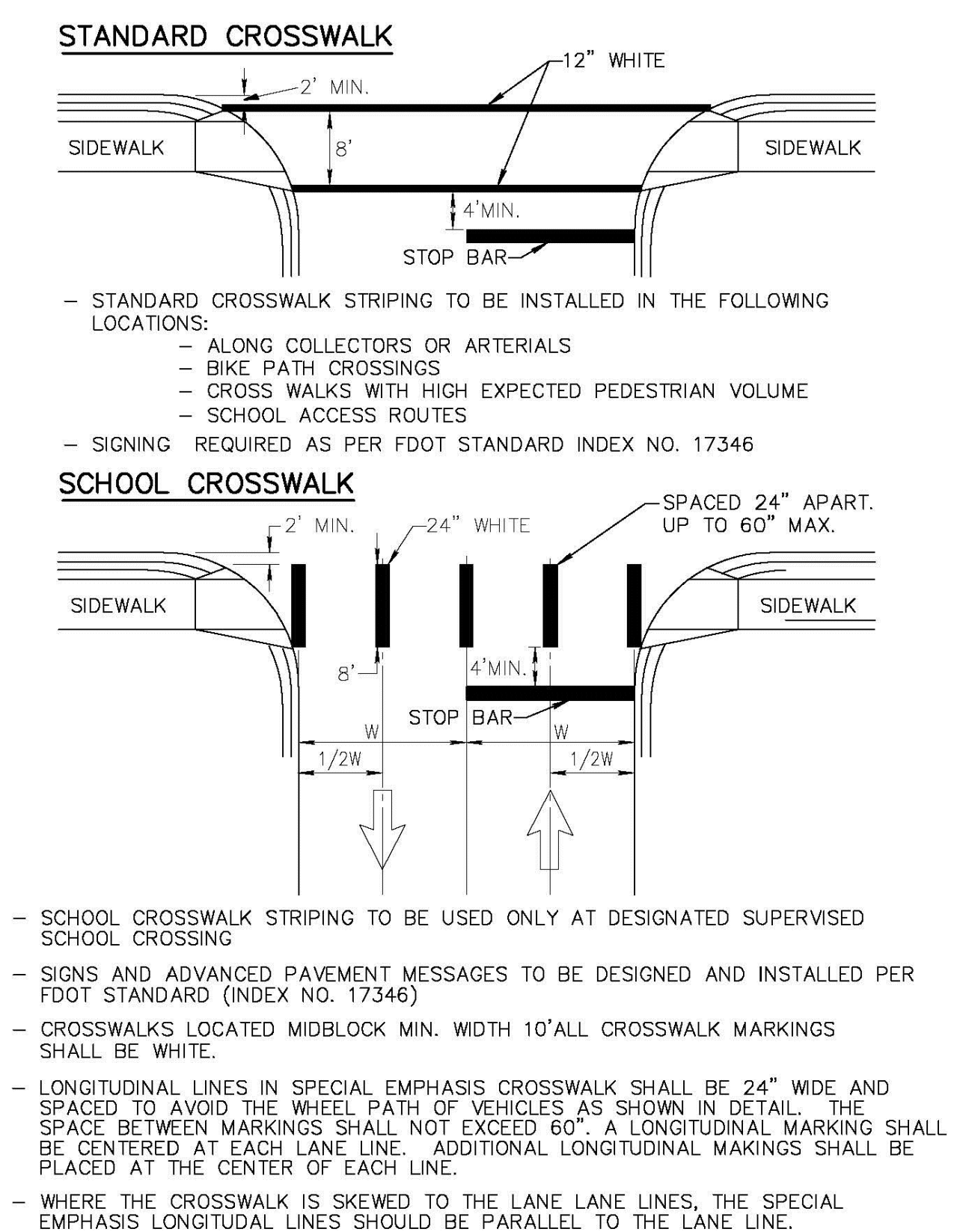


NOTE: ALL STRIPING AND DELINEATION TO CONFORM TO THE REQUIREMENTS OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, (MUTCD) LATEST ED.

CITY of DELRAY BEACH
 ENVIRONMENTAL SERVICES DEPARTMENT
 434 SOUTH SWINTON AVENUE, DELRAY BEACH, FLORIDA 33444

INTERSECTION TRAFFIC CONTROL STOP CONDITION

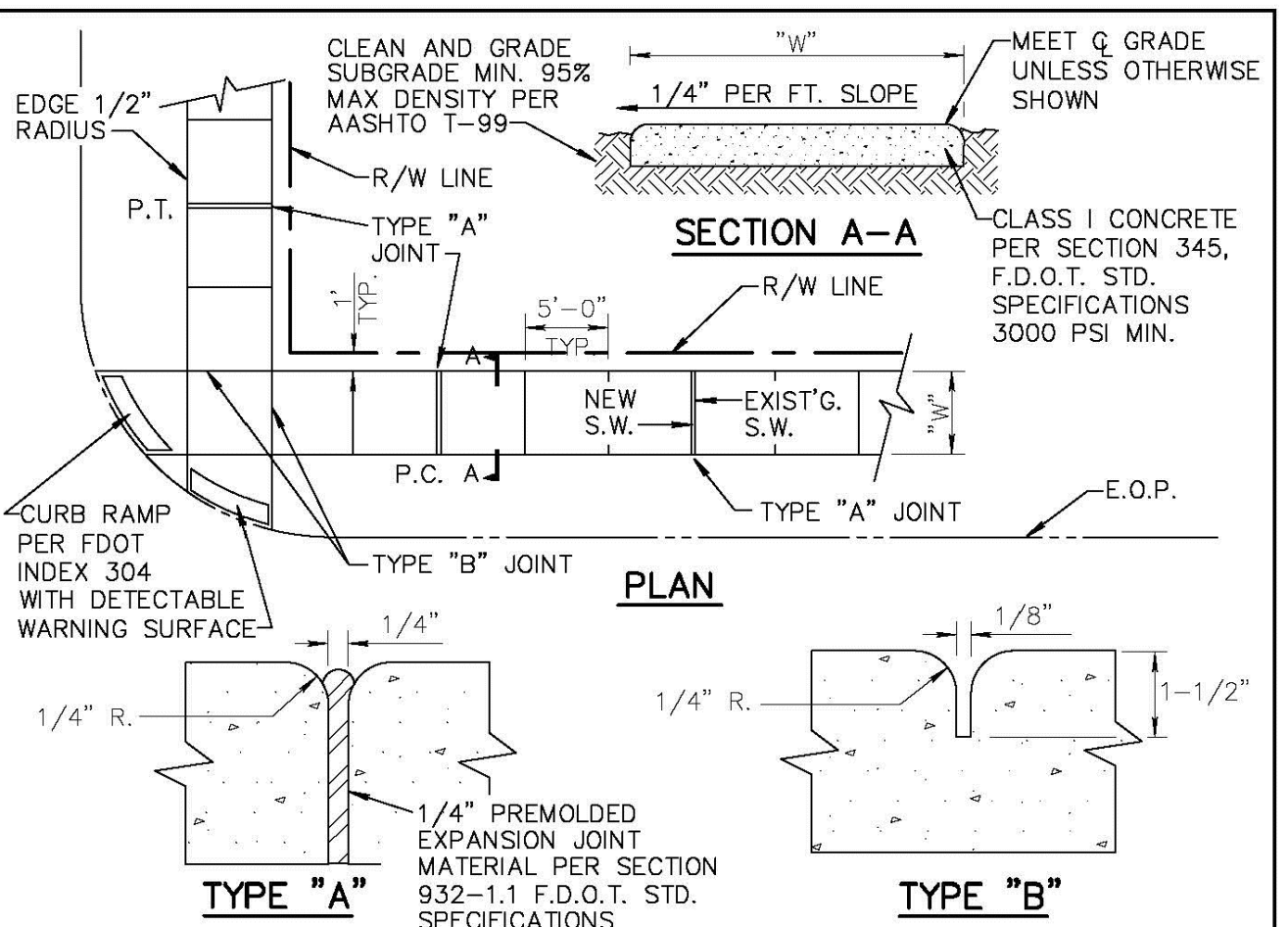
DATE: 08-03-2011
RT 3.2



CITY of DELRAY BEACH
 ENVIRONMENTAL SERVICES DEPARTMENT
 434 SOUTH SWINTON AVENUE, DELRAY BEACH, FLORIDA 33444

CROSSWALK DETAILS

DATE: 08-03-2011
RT 3.3



- NOTE:
1. ALL SIDEWALKS SHALL BE CONSTRUCTED THRU DRIVEWAYS.
 2. ALL SIDEWALKS SHALL INCLUDE ADA COMPLIANT RAMPS @ INTERSECTIONS.
 3. ALL SIDEWALKS SHALL INCLUDE CROSS SLOPE AND RUNNING SLOPE IN ACCORDANCE WITH ADA REQUIREMENTS.
 4. CURB RAMP DETECTABLE WARNING SURFACE SHALL EXTEND THE FULL WIDTH OF THE RAMP AND 24" DEEP

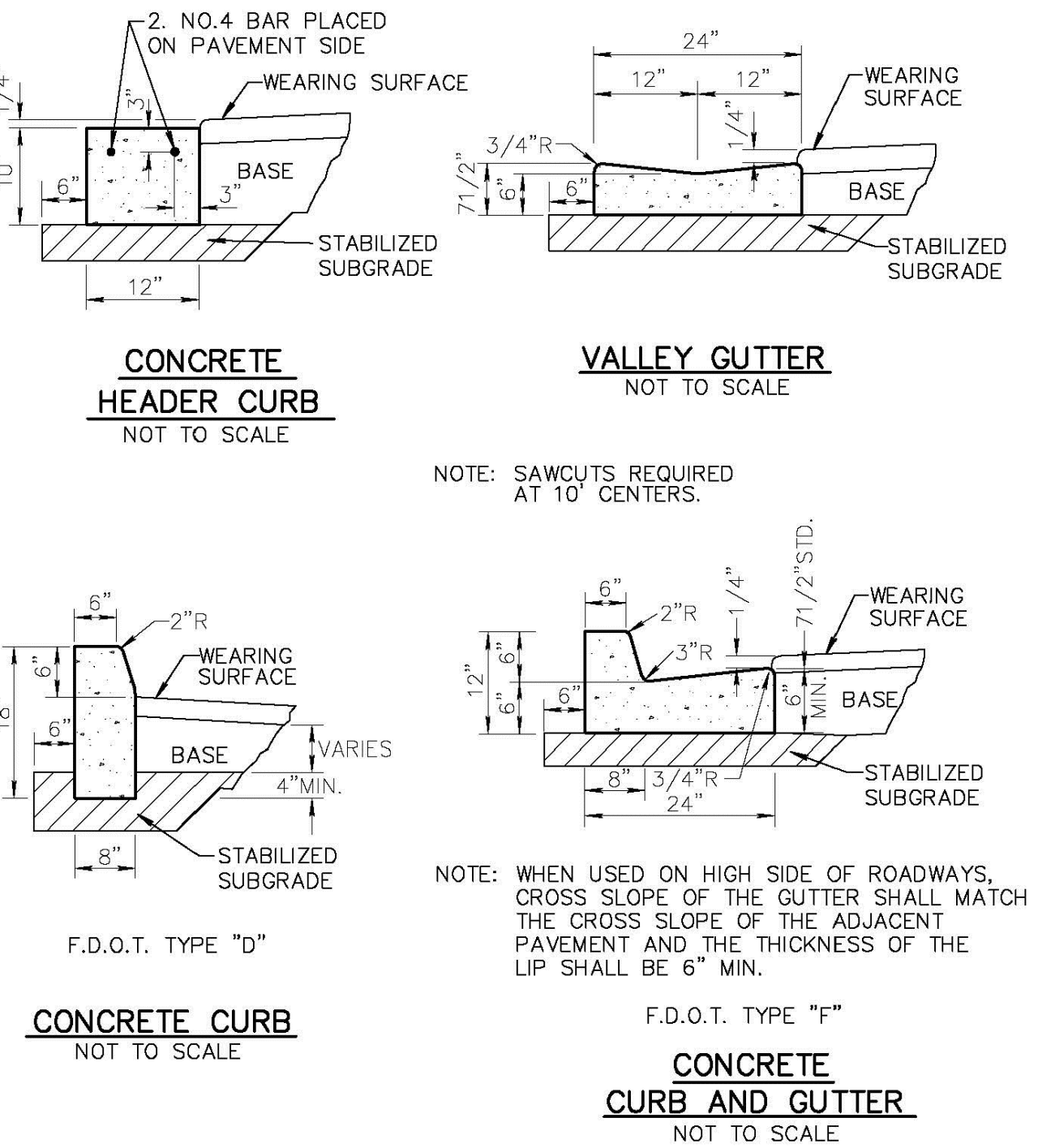
TABLE OF SIDEWALK THICKNESS - "T"	
RESIDENTIAL AREAS	4"
WITHIN 10' OF CROSS-STREETS, AT DRIVEWAYS & OTHER AREAS	6" 9" @ E.O.P.
TABLE OF SIDEWALK WIDTHS - "W"	
SINGLE-FAMILY AREAS	5'
MULTI-FAMILY AREAS	5'
OTHER AREAS AS SPECIFIED BY THE CITY ENGINEER.	

TABLE OF SIDEWALK JOINTS	
TYPE	LOCATION
"A"	P.C. AND P.T. OF CURVES JUNCTION OF EXISTING & NEW SIDEWALKS & EVERY 30'
"B"	5'-0" CENTER TO CENTER ON SIDEWALKS SCORED DURING PLACEMENT OR SAWCUT WITHIN 24 HOURS OF PLACEMENT.
"A"	WHERE SIDEWALK ABUTS CONCRETE CURBS, DRIVEWAYS, AND SIMILAR STRUCTURES.

CITY of DELRAY BEACH
 ENVIRONMENTAL SERVICES DEPARTMENT
 434 SOUTH SWINTON AVENUE, DELRAY BEACH, FLORIDA 33444

SIDEWALK CONSTRUCTION

DATE: 07-02-2014
RT 5.1



NOTE: ALL STRIPING AND DELINEATION TO CONFORM TO THE REQUIREMENTS OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, (MUTCD) LATEST ED.


CITY of DELRAY BEACH
 ENVIRONMENTAL SERVICES DEPARTMENT
 434 SOUTH SWINTON AVENUE, DELRAY BEACH, FLORIDA 33444

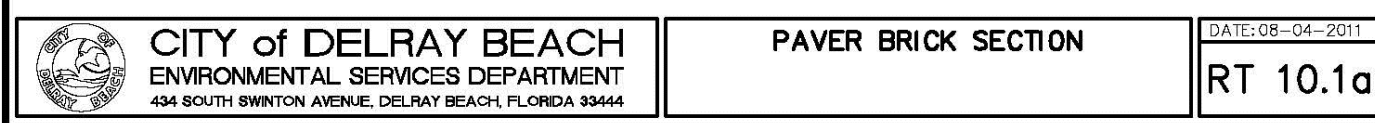
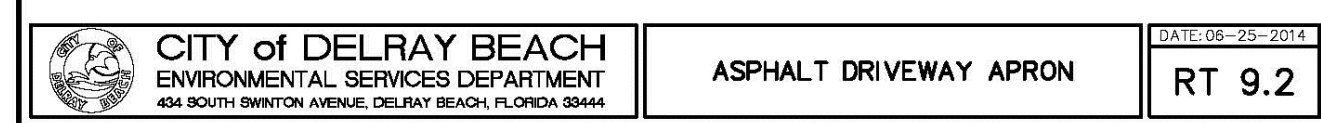
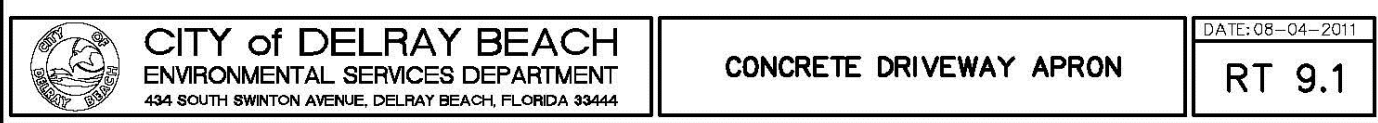
CURB AND GUTTER SECTIONS

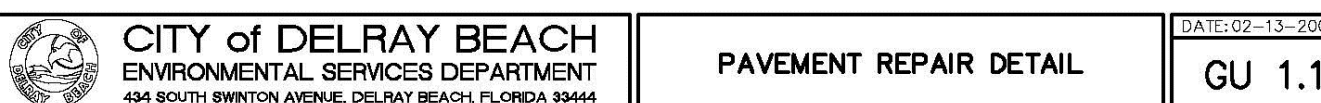
DATE: 04-08-08
RT 6.1



 CITY of DELRAY BEACH ENVIRONMENTAL SERVICES DEPARTMENT 434 SOUTH SWINTON AVENUE, DELRAY BEACH, FLORIDA 33444	PAVEMENT MARKING SPECIFICATIONS (SHEET 1 OF 2)	DATE: 12-30-2002
		RT 8.1a

 CITY of DELRAY BEACH ENVIRONMENTAL SERVICES DEPARTMENT 434 SOUTH SWINTON AVENUE, DELRAY BEACH, FLORIDA 33444	PAVEMENT MARKING SPECIFICATIONS (SHEET 2 OF 2)	DATE: 06-04-2011
		RT 8.1b





1. ALL DIMENSIONS SHOWN ON THESE DRAWINGS ARE SCALED DISTANCES. THE CONTRACTOR SHALL CONFIRM ALL MEASUREMENTS IN THE FIELD AND NOTIFY THE ENGINEER PRIOR TO WRITING OF ANY DISCREPANCY PRIOR TO PERFORMING THE WORK. ALL QUANTITIES SHALL BE PAID ON THE BASIS OF FIELD MEASUREMENTS OF COMPLETED WORK.
2. REINFORCED CONCRETE PIPE (R.C.P.) SHALL BE IN ACCORDANCE WITH F.D.O.T. STANDARDS SPECIFICATIONS SEC. 941. CORRUGATED ALUMINUM PIPE (C.A.P.) SHALL BE IN ACCORDANCE WITH F.D.O.T. STANDARDS SPECIFICATIONS SEC. 945.
3. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO MAKE SUCH EXAMINATION OF THE SITE OF THE WORK, AND OF ANY MATERIAL SOURCES INDICATED IN THE PLANS, AS MAY BE NECESSARY TO INFORM HIMSELF OF THE CONDITIONS UNDER WHICH WORK IS TO BE PERFORMED.
4. PROPOSED GRADES SHOWN IN PAVED AREAS REFER TO FINISH PAVEMENT GRADES.
5. PAVEMENT MARKING AND GEOMETRICS SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS AND PALM BEACH COUNTY TYPICAL NO. T-P-18.
6. ALL LOTS, ROADWAYS AND BORROW AREAS SHALL BE STRIPPED OF ALL DELETERIOUS (UNSUITABLE) MATERIALS AND MATERIALS SHALL BE DISPOSED WITHIN THE SITE.
7. ALL GRADING OF STREETS, INCLUDING THE REMOVAL OF ALL MATERIALS AND THE FINISHING OF ALL SHOULDERS, SUBGRADE PREPARATION, SWALES AND BACKSLOPES, IN ACCORDANCE WITH THE TYPICAL SECTIONS SHOWN HEREON SHALL BE INCLUDED IN THE BID PRICE FOR PAVING.
8. ANY EXISTING ROADWAY AND/OR UTILITY THAT IS DAMAGED BY THE CONTRACTOR SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE ENGINEER, AND UTILITY.
9. THE FULL DEPTH OF ALL EXISTING ORGANIC AND DELETERIOUS MATERIALS WITHIN THE RIGHT-OF-WAY AND UTILITIES AND DRAINAGE EASEMENT SHALL BE COMPLETELY REMOVED. NO MATERIALS OF F.D.O.T. CLASS A-5, A-7, OR A-8 SHALL BE ALLOWED.
10. ANY MUCK POCKETS OR GUMBO ENCOUNTERED SHALL BE REMOVED WITHIN THE ROADWAY TO 1.0' BELOW SUBGRADE AND TO OUTSIDE EDGE OF BOTH SHOULDERS. THE MUCK AND GUMBO SHOULD BE REMOVED IN THE AREA OF AND WITHIN 10 FEET OF PROPOSED PAVEMENT OR FOUNDATION AREAS.
11. ALL PAVING AND DRAINAGE WORK TO BE CONSTRUCTED IN FULL ACCORDANCE WITH PALM BEACH COUNTY STANDARDS AND SPECIFICATIONS.
12. THE SEQUENCE OF CONSTRUCTION SHALL BE SUCH THAT ALL UNDERGROUND INSTALLATIONS OF EVERY KIND THAT WILL BE BENEATH THE PAVEMENT CURRENTLY TO BE CONSTRUCTED SHALL BE INSTALLED PRIOR TO THE COMPACTION OF SUBGRADE.
13. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO ENGINEER AND COUNTY ON ALL PIPE, PIPE BANDS, DRAINAGE STRUCTURES, GRATES, FRAMES AND COVERS.
14. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE LOCATION OF EXISTING UTILITIES WHETHER SHOWN OR NOT SHOWN ON THESE DRAWINGS AND SHALL VERIFY ALL UTILITIES BEFORE STARTING CONSTRUCTION. ALL EXISTING UTILITIES DAMAGED BY THE CONTRACTOR SHALL BE RESTORED TO EXISTING OR BETTER CONDITIONS BY THE CONTRACTOR AT NO EXPENSE TO OWNER.
15. WHERE CONNECTIONS TO AN EXISTING DRAINAGE SYSTEM ARE PROPOSED, SAID EXISTING DRAINAGE STRUCTURES AND LINES SHALL BE PURGED OF ALL SILT AND DEBRIS PRIOR TO ANY CONNECTION AND WHERE EXISTING DRAINAGE SYSTEM INCLUDES DITCHES, SAID DITCHES SHALL BE CLEARED AND REWORKED, AS NECESSARY, TO RESTORE THEM TO THEIR APPROVED DESIGN SECTION.
16. ALL PIPE JOINTS ARE TO BE INSPECTED BY A REPRESENTATIVE OF THE ENGINEER PRIOR TO BACKFILLING. ALL INSPECTIONS SHOULD BE ARRANGED NO LESS THAN 48 HOURS IN ADVANCE.
17. ALL CATCH BASIN GRATES MUST HAVE LOCKING CHAINS IN ACCORDANCE WITH FDOT INDEX 201.

18. WORK SHALL CONSIST OF THE COMPLETE REMOVAL AND DISPOSAL OF ALL BUILDINGS, TIMBER, BRUSH, STUMPS, ROOTS, RUBBISH, AND DEBRIS AND ALL OTHER OBSTRUCTIONS RESTING ON OR PROTRUDING THROUGH THE SURFACE OF THE EXISTING GROUND AND THE SURFACE OF EXCAVATED AREAS, AND OF ALL OTHER STRUCTURES AND OBSTRUCTIONS NECESSARY TO BE REMOVED, INCLUDING SEPTIC TANKS, BUILDING FOUNDATIONS, AND PIPES.
19. ROOTS AND OTHER DEBRIS SHALL BE REMOVED TO A DEPTH OF AT LEAST ONE FOOT BELOW THE GROUND SURFACE. ALL STUMPS WITHIN THE CONSTRUCTION AREA SHALL BE COMPLETELY REMOVED AND DISPOSED OF BY THE CONTRACTOR.
20. EXISTING TREES TO REMAIN WHERE SO DIRECTED BY THE ENGINEER, SHALL BE TRIMMED, PROTECTED AND LEFT STANDING.
21. PROPERTY OBSTRUCTIONS WHICH ARE TO REMAIN IN PLACE, SUCH AS BUILDINGS, SEWERS, DRAINS, WATER OR GAS PIPES, CONDUITS, POLES, WALLS, POSTS, BRIDGES, ETC. ARE TO BE CAREFULLY PROTECTED FROM INJURY AND ARE NOT TO BE DISPLACED.
22. CLEARING AND GRUBBING MATERIALS SHALL BE DISPOSED OF BY THE CONTRACTOR IN LOCATIONS AND BY METHODS APPROVED BY THE ENGINEER.

23. UTILIZATION OF MATERIAL IN SUBGRADE CONSTRUCTION SHALL BE IN ACCORDANCE WITH PLAN DETAILS OR AS DIRECTED BY THE ENGINEER.

- BASE:

- ASPHALTIC CONCRETE SURFACE COURSE:

- ### NOTIFICATION, TESTING

- SODDING:

40. WORK CONSISTS OF THE ESTABLISHING OF A STAND OF GRASS WITHIN THE AREAS CALLED FOR BY THE FURNISHING AND PLACING OF GRASS SOD AND FERTILIZING, WATERING, AND MAINTAINING SODDED AREAS SUCH AS TO ASSURE A HEALTHY STAND OF GRASS.
41. THE AREA OVER WHICH THE SOD IS TO BE PLACED SHALL BE SCARIFIED OR LOOSENEED TO SUITABLE DEPTH. THE SOD SHALL BE PLACED ON THE PREPARED SURFACE WITH EDGES IN CLOSE CONTACT AND SHALL BE FIRMLY AND SMOOTHLY EMBEDDED BY LIGHT TAMPING WITH APPROPRIATE TOOLS. ON AREAS WHERE THE SOD MAY SLIDE DUE TO HEIGHT AND SLOPE, THE ENGINEER MAY DIRECT THAT THE SOD BE PEGGED WITH PEGS DRIVEN THROUGH THE SOD BLOCKS INTO FIRM EARTH AT SUITABLE INTERVALS.



-ELEVATIONS SHOWN ARE IN NAVD 88
DATUM

-ALL DRAINAGE SYSTEMS SHALL BE PUMPED COMPLETELY DRY AND LAMPED AS A REQUIREMENT OF THE FINAL DRAINAGE INSPECTIONS.

PERMANENT MARKINGS

Installation:

- All the
- Markin

- Chalk shall be used for all layout markings

Materials:

- All materials shall be alkyl thermoplastic meeting all State specifications.

Thickness:

- All markings shall be installed to yield 90 mm of material measured above the pavement surface.

Beads:

- Reflective beads are to be installed per TDOT specifications on all markings.

Layout:

- It is recommended that marking layout be inspected by the City Engineer prior to the placement of final markings.

TEMPORARY MARKINGS

Temporary markings may be used only as specified in this section, or as approved or directed by the Palm Beach County Engineer.

Final Pavement Surface:

- Only roll backed marking tape is allowed.
- All tape shall be totally removed concurrent with permanent marking placement.

Other Pavement Surfaces:

- intermediate pavement surfaces may be marked with FDOT approved materials, designs, and specifications.

ALL PAVEMENT MARKINGS

All paved surfaces shall be properly marked prior to the hours of darkness.

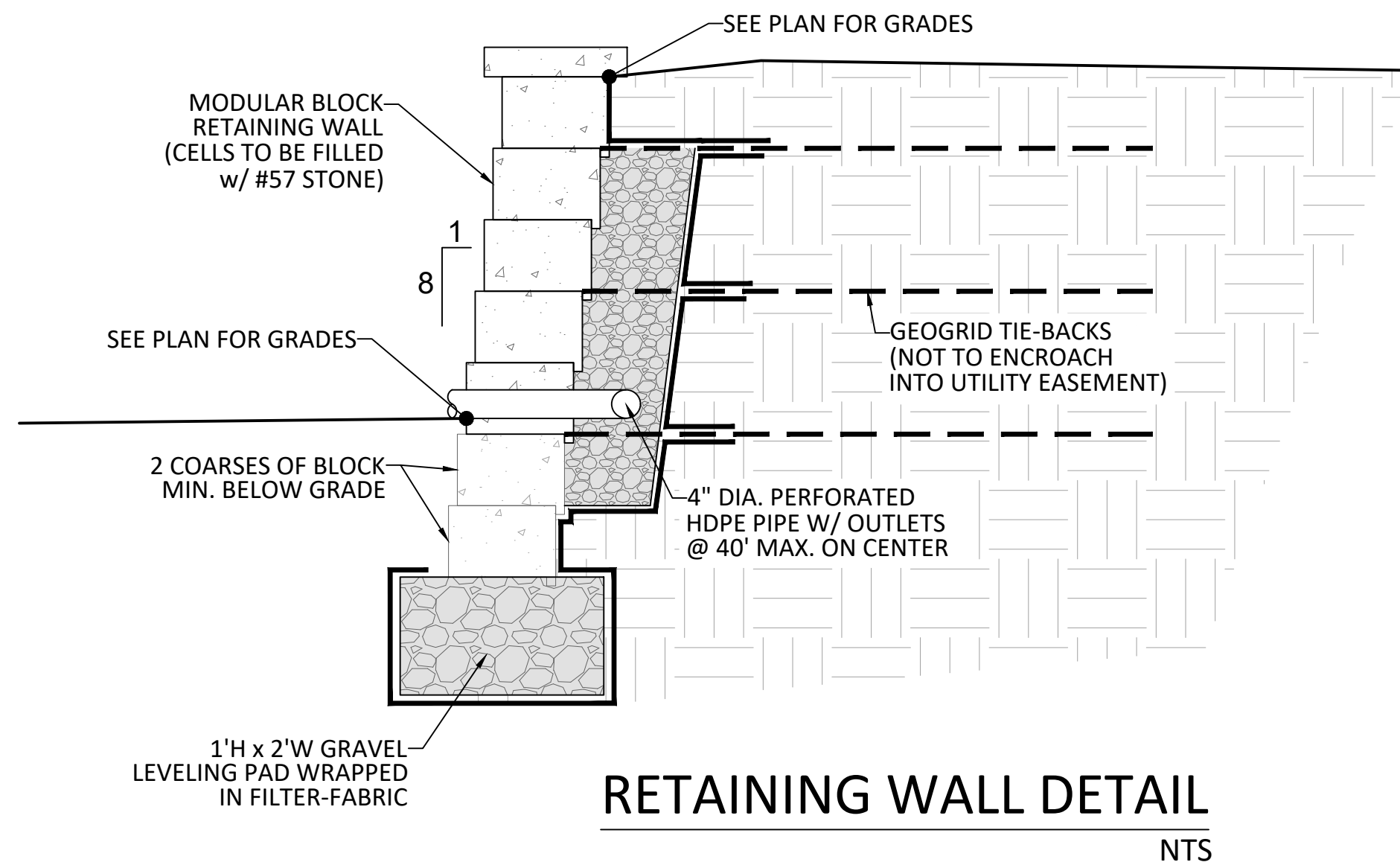
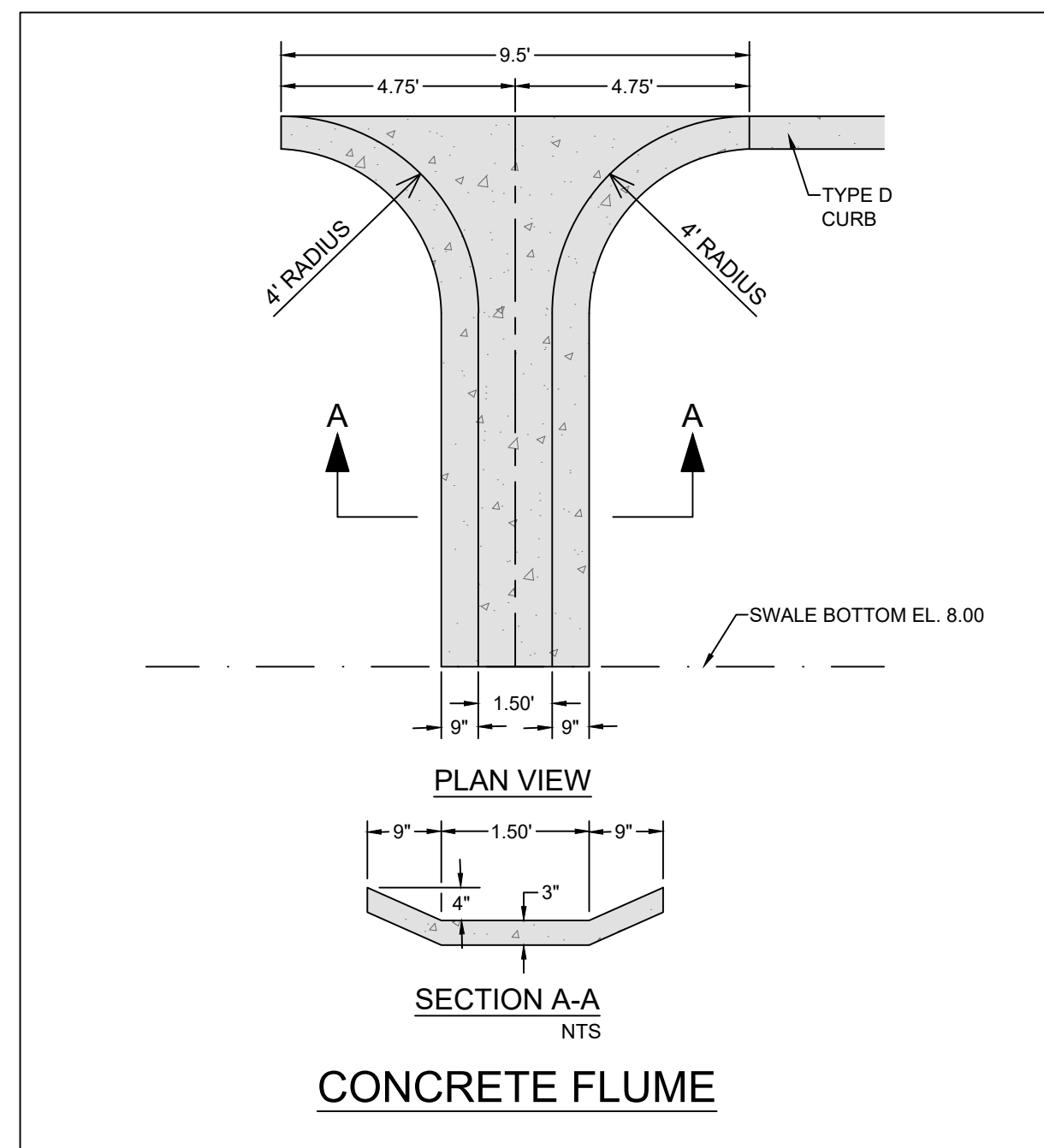
RAISED PAVEMENT MARKERS

- R.P.M.s shall be installed on all lane lines and centerlines, spaced at 20' or 40'.
- R.P.M.s shall be a 4 x 4 type class "B" marker meeting FDOT specifications and shall be approved by the Engineer prior to use.
- R.P.M.'s shall be installed using alkyl thermoplastic on asphalt and epoxy on concrete.



1. COLLAR IS REQUIRED ONLY WHEN MANHOLE IS OUT OF PAVEMENT.
2. FRAME AND COVER SHALL BE U.S. FOUNDRY 420 A (OR EQUAL).

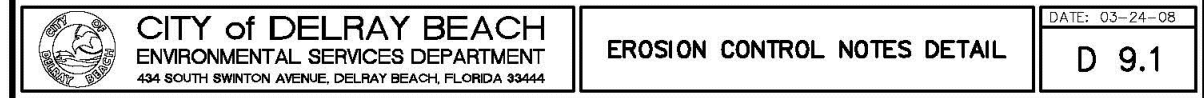
STORM SEWER MANHOLE FRAME AND COVER



JOB #8577
SHT.NO. PD-10
OF 11 SHEETS

1. COUNTY - PALM BEACH COUNTY
2. CONTRACTOR - UTILITY CONTRACTOR AND ALL UTILITY SUBCONTRACTORS
3. ENGINEER - ENGINEER RESPONSIBLE FOR INSPECTION AND CERTIFICATION

1. A PRE-CONSTRUCTION MEETING IS TO BE HELD PRIOR TO DELIVERY OF MATERIALS AND INITIATION OF ANY WATER AND SEWER CONSTRUCTION. THE MEETING SHALL BE ATTENDED BY THE COUNTY, CONTRACTOR, SUBCONTRACTORS, ENGINEER AND OTHER INTERESTED PARTIES.
2. ANY REVISIONS TO THE APPROVED PLANS MUST BE APPROVED BY THE COUNTY PRIOR TO THE PRE-CONSTRUCTION MEETING.
3. A MINIMUM OF THREE (3) COPIES OF THE CURRENT APPROVED PRODUCT LIST AND ALL NECESSARY SHOP DRAWINGS SHALL BE SUBMITTED FOR APPROVAL PRIOR TO SCHEDULING THE PRE-CONSTRUCTION MEETING. ALL PIPE MANUFACTURERS SHALL SUBMIT THREE (3) COPIES OF AN AFFIDAVIT THAT THE PIPE AND COATINGS WERE MANUFACTURED IN ACCORDANCE WITH AWWA C151/A21.51-91.
4. ALL APPLICABLE PERMITS MUST BE OBTAINED WITH COPIES PROVIDED TO THE COUNTY PRIOR TO COMMENCEMENT OF CONSTRUCTION.
5. THE CONTRACTOR SHALL MAINTAIN A CURRENT APPROVED SET OF CONSTRUCTION DOCUMENTS ON SITE AT ALL TIMES.
6. ALL MATERIALS SUPPLIED SHALL CONFORM TO PRODUCT LIST AND SHOP DRAWINGS AS APPROVED BY THE COUNTY PRIOR TO CONSTRUCTION. ALL REQUESTS FOR MATERIAL SUBSTITUTION SHALL BE APPROVED PRIOR TO DELIVERY OF THESE MATERIALS TO THE JOB SITE.
7. THE LOCATION OF THE EXISTING UTILITIES AS SHOWN ON THE PLANS ARE APPROXIMATE ONLY. THE EXACT LOCATIONS SHALL BE DETERMINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. IN ADDITION, THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY IF OTHER UTILITIES (NOT SHOWN ON PLANS) EXIST WITHIN THE AREA OF CONSTRUCTION. SHOULD THERE BE UTILITY CONFLICTS, THE CONTRACTOR SHALL INFORM THE COUNTY AND NOTIFY THE RESPECTIVE UTILITY OWNER TO RESOLVE THE UTILITY CONFLICTS AND THE UTILITY ADJUSTMENTS AS REQUIRED.
8. THE CONTRACTOR SHALL BE RESPONSIBLE AT ALL TIMES THROUGHOUT THE DURATION OF CONSTRUCTION FOR THE PROTECTION OF EXISTING AND NEW UTILITIES FROM DAMAGE OR DISRUPTION OF SERVICE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TAKING SUCH MEASURES AS NECESSARY TO PROTECT THE HEALTH, SAFETY, AND WELFARE OF THOSE PERSONS HAVING ACCESS TO THE WORK SITE.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING LOCATIONS OF ALL OTHER UTILITY FACILITIES.
10. THE CONTRACTOR SHALL SCHEDULE INSPECTIONS AND TESTS WITH THE COUNTY A MINIMUM OF 24 HOURS IN ADVANCE.
11. CONTRACTOR SHALL NOT DISTURB EXISTING COUNTY MAINS OR STRUCTURES WITHOUT THE PRESENCE OF A COUNTY INSPECTOR. COUNTY UTILITY SYSTEM VALVES AND APPURTENANCES MAY ONLY BE OPERATED BY COUNTY PERSONNEL.
12. FACILITIES PROPOSED HEREIN SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE APPROVED PLANS. DEVIATIONS FROM THE APPROVED PLANS MUST BE APPROVED IN ADVANCE BY THE COUNTY.
13. UPON COMPLETION OF CONSTRUCTION AND PRIOR TO FINAL ACCEPTANCE OF THE WORK, A FINAL INSPECTION SHALL VERIFY PROPER ADHERENCE TO ALL FACETS OF THE PLANS AND SPECIFICATIONS.
14. PAVING, DRAINAGE AND TRAFFIC CONSTRUCTION SHALL CONFORM TO FLORIDA DEPARTMENT OF TRANSPORTATION ROADWAY AND DESIGN STANDARDS, STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND PALM BEACH COUNTY TRITICAL NO. T-1-P-18 UNLESS SHOWN OTHERWISE.
15. AS-BUILT DRAWINGS SHALL BE PREPARED BY A REGISTERED LAND SURVEYOR, REGISTERED IN THE STATE OF FLORIDA, AND SUBMITTED BY THE CONTRACTOR TO THE COUNTY.
16. PRIOR TO COMMENCEMENT OF ANY EXCAVATION, THE CONTRACTOR SHALL COMPLY WITH FLORIDA STATUTE 553-851 FOR PROTECTION OF UNDERGROUND GAS PIPE LINES.
17. CONTRACTOR SHALL NOTIFY SUNSHINE STATE ONE (1-800-432-4770) 48 HOURS IN ADVANCE OF CONSTRUCTION.
18. GRADES SHOWN ON PLANS ARE FINISHED GRADES. THE CONTRACTOR SHALL BE REQUIRED TO ADJUST EXISTING SANITARY SEWER MANHOLE TOPS AND VALVE BOX COVERS TO FINISHED GRADE.
19. CONTRACTOR SHALL MAINTAIN LOCAL TRAFFIC AT ALL TIMES DURING CONSTRUCTION AND SHALL BE REQUIRED TO PROVIDE ALL BARRICADES, LIGHTING, SIGNAGE AND FLAGMEN AS NECESSARY TO PROVIDE FOR THE SAFETY OF THE PUBLIC IN THE WORK AREA. THE CONTRACTOR SHALL SUBMIT A DETAILED TRAFFIC MAINTENANCE PLAN PRIOR TO CONSTRUCTION.
20. EXISTING BASE MATERIAL THAT IS REMOVED DURING CONSTRUCTION SHALL NOT BE USED IN THE CONSTRUCTION OF NEW LIMEROCK BASE.
21. ALL VEGETATION, DEBRIS, CONCRETE OR OTHER UNSUITABLE MATERIAL SHALL BE LEGALLY DISPOSED OF OFF-SITE IN AN AREA AT THE CONTRACTORS EXPENSE.
22. CONTRACTOR SHALL UTILIZE CONSTRUCTION METHODS AND DEVICES, SUCH AS TURBIDITY SCREENS, CURTAINS AND FLOATING SILT BARRIERS WHERE NECESSARY IN ORDER TO COMPLY WITH ALL STATE AND LOCAL WATER QUALITY STANDARDS.
23. ALL REINFORCED CONCRETE STORM SEWER PIPE SHALL BE CLASS III, UNLESS OTHERWISE NOTED.
24. ALL PAVED SURFACES SHALL BE PROPERLY MARKED PRIOR TO HOURS OF DARKNESS. PERMANENT PAVEMENT MARKING STALLS SHALL BE LAID OUT USING MARKING CHALK. LAYOUT TO BE REVIEWED BY THE COUNTY PRIOR TO PLACEMENT OF FINAL MARKING.
25. EMBANKMENT (FILL) AND EXCESS MATERIAL REQUIRED FOR ROADWAY RECONSTRUCTION AND UTILITY INSTALLATIONS SHALL BE SUPPLIED AND/OR DISPOSED OF BY THE CONTRACTOR. ALL COSTS ASSOCIATED WITH EARTHWORK REQUIREMENTS TO COMPLETE THE ROADWAY RECONSTRUCTION AND UTILITY IMPROVEMENTS SHALL BE INCLUDED IN THE COSTS OF OTHER APPROPRIATE PAY ITEMS.
26. CONTINUITY OF WATER AND SEWER SERVICE TO COUNTY UTILITY CUSTOMERS SHALL BE MAINTAINED THROUGHOUT THE DURATION OF THIS PROJECT. IF A BREAK IN SERVICE IS UNAVOIDABLE TO ACCOMMODATE CONNECTION OF NEW FACILITIES, IT SHALL BE SCHEDULED FOR OFF PEAK HOURS WITH THE COUNTY. DETERMINATION OF SERVICE BREAK REQUIREMENT WILL BE MADE BY THE COUNTY.
27. SITE INFORMATION BASED ON A SURVEY PREPARED BY: **CAULFIELD & WHEELER, INC.**
28. RELOCATION OF UTILITY POLES AND GAS PIPE LINES SHALL BE COORDINATED BY THE CONTRACTOR WITH FLORIDA POWER AND LIGHT, AND FLORIDA PUBLIC UTILITIES, RESPECTIVELY. EACH UTILITY HAS BEEN NOTIFIED THAT THEY WILL BE REQUIRED TO RELOCATE THEIR UTILITIES.



CAULFIELD & WHEELER, INC.
CIVIL ENGINEERING - LAND PLANNING
LANDSCAPE ARCHITECTURE - SURVEYING
7900 GLADES ROAD - SUITE 100
BOCA RATON, FLORIDA 33434
PHONE (561)-392-1991 / FAX (561)-750-1452

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