

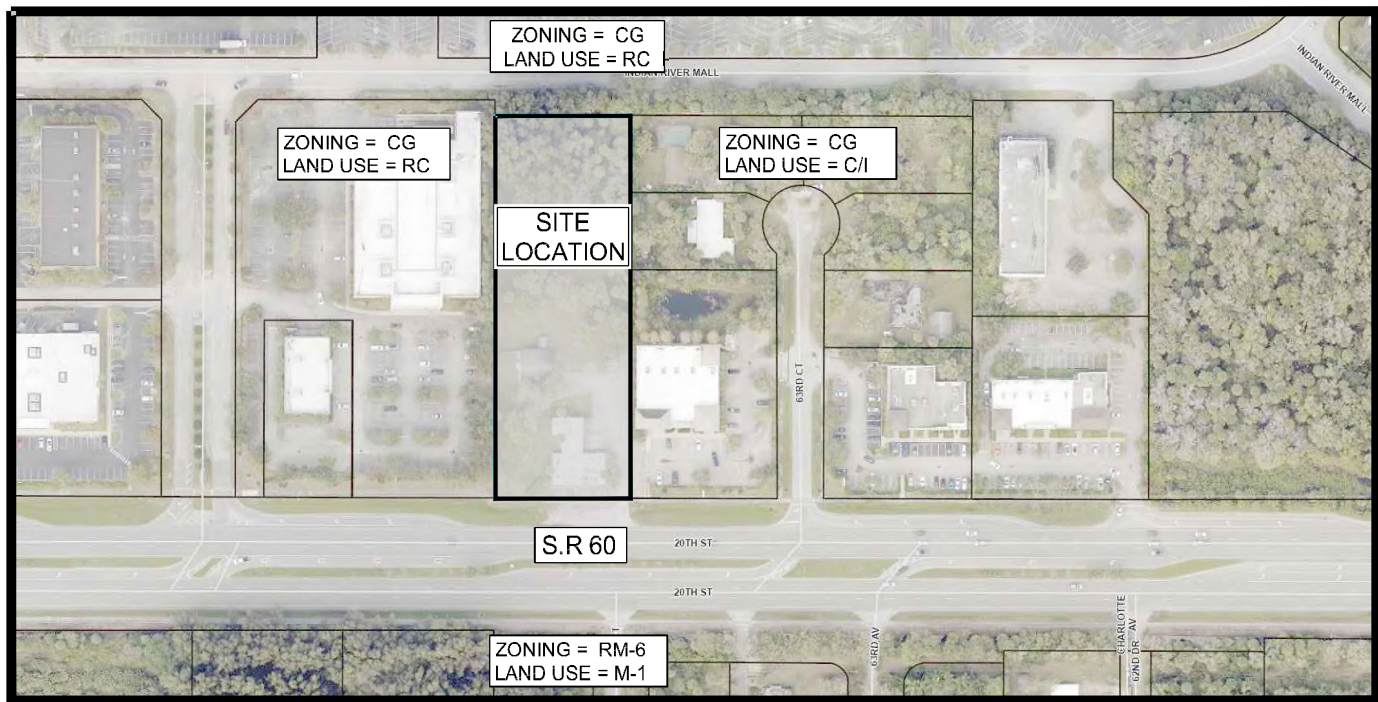
SHEET INDEX:

- G-1 TITLE SHEET
G-2 GENERAL NOTES
G-3 GENERAL NOTES
C-1 EXISTING CONDITIONS - DEMOLITION PLAN
C-2A SITE PLAN
C-2B SITE CIRCULATION PLAN
C-2C PHASING PLAN
C-3 PAVING, GRADING & DRAINAGE PLAN
C-4A PAVING, GRADING & DRAINAGE DETAILS
C-4B PAVING, GRADING & DRAINAGE DETAILS
C-5 UTILITY PLAN
C-6 UTILITY DETAILS - WATER
C-7 UTILITY DETAILS - SEWER
C-8 LIFT STATION DETAILS
C-9 STORMWATER POLLUTION PREVENTION PLAN
C-10 STORMWATER POLLUTION PREVENTION DETAILS

- LP.1 LANDSCAPE & COVER SHEET
LP.2 LANDSCAPE ENLARGEMENTS
LP.3 TREE PROTECTION PLAN
LP.4 PLANTING DETAILS & SPECIFICATIONS
LP.5 LANDSCAPE DETAILS & SECTIONS

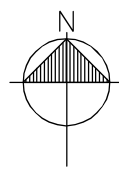
- IR-1 IRRIGATION PLAN
IR-2 IRRIGATION DETAILS & NOTES

- A1 PRELIMINARY ELEVATIONS
A2 PRELIMINARY ELEVATIONS
A3 PRELIMINARY ELEVATIONS
A4 PRELIMINARY ELEVATIONS
A5 CONSTRUCTION PLAN



VICINITY MAP

SCALE: N.T.S



LA-Z-BOY VERO

MAJOR SITE PLAN SUBMITTAL

6366 20th STREET(S.R. 60)

VERO BEACH, FL 32966

INDIAN RIVER COUNTY, FLORIDA
NOVEMBER, 2024

OWNER

VERO BEACH CAR CARE LLC

6366 20TH ST

VERO BEACH, FL 32966

APPLICANT

ICAP DEVELOPMENT

1830 NORTH HUBBARD STREET, SUITE 700

MILWAUKEE, WI 53212

920.277.4344

ENGINEER

Mills, Short & Associates

700 22nd PLACE, STE. 2C/2D

VERO BEACH, FLORIDA 32960

PHONE: 772.226.7282

SURVEYOR

GSS SURVEYING & MAPPING, INC.

4620 LIPSCOMB STREET NE,STE. 2

PALM BAY, FL 32905

PHONE: 321.914.3978

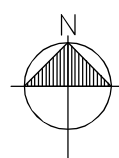
JURISDICTIONAL PERMITS:

INDIAN RIVER COUNTY LAND MAJOR SITE PLAN PERMIT
INDIAN RIVER COUNTY LAND CLEARING PERMIT
INDIAN RIVER COUNTY TREE REMOVAL PERMIT
INDIAN RIVER COUNTY TYPE "A" STORMWATER PERMIT
INDIAN RIVER COUNTY UTILITY CONNECTION PERMIT
INDIAN RIVER FARMS WATER CONTROL DISTRICT PERMIT
ST. JOHNS RIVER WATER MANAGEMENT 10/2 CERTIFICATION
FLORIDA DEP WASTEWATER COLLECTION PERMIT
FLORIDA DEP WATER MAIN EXTENSION PERMIT
FDOT DRIVEWAY CONNECTION PERMIT
FDOT DRAINAGE PERMIT



LOCATION MAP

SCALE: N.T.S



INDIAN RIVER COUNTY, FLORIDA
PLANNING & DEVELOPMENT SERVICES DEPARTMENT
ADMINISTRATIVE APPROVAL

11/13/24

Date Approved _____ Authorized Signature _____
Description Removing curb next to ADA parking space in
rear of building. Cross access to mall loop rd is to be
phased (Phase II) as a future connection.

Project # AA-25-01-03 (2017010185-97255)

Mills, Short & Associates

WEBSITE: www.MillsShortAssociates.com

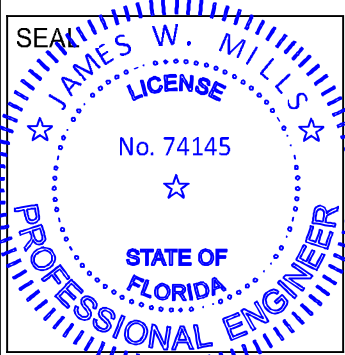
PHONE: 772.226.7282

C.A. #: 30698

700 22nd Place, Suite 2C/2D
Vero Beach, Florida 32960

James Mills

Digitally signed by James Mills
DN: cn=James Mills
E=jmills@millsshortassociates.com,
ou=James Mills, c=US
Date: 2024.11.07 14:28:00 -0500



ISSUE	DATE	COMMENTS
A	01/03/24	TRC RESUBMITTAL
A	04/23/24	TRC RESUBMITTAL NO.2
A	05/09/24	TRC RESUBMITTAL NO.3

LA-Z-BOY VERO 6366 20TH STREET VERO BEACH, FL 32966	THIS SHEET TITLE SHEET	DRAWN BY WBD	CHECKED BY JWM	APPROVED BY JWM	SCALE: N/A
---	---------------------------	-----------------	-------------------	--------------------	---------------

PROJ. NO.	23-1160
DATE	11/07/2023
SHEET NO.	

G-1

GENERAL NOTES:

1. ALL CONSTRUCTION TO BE IN ACCORDANCE WITH THE LATEST JURISDICTIONAL STANDARDS AND FDOT.
2. PAVEMENT STRIPING TO BE IN ACCORDANCE WITH JURISDICTIONAL SPECIFICATIONS AND WITH THE FLORIDA D.O.T. ROADWAY & TRAFFIC STANDARDS, INDEX 17346.
3. ALL TRAFFIC CONTROL SIGNS SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
4. WHERE MUCK OR OTHER ORGANIC MATERIAL IS FOUND, IT SHALL BE REMOVED AND REPLACED WITH QUALITY BACKFILL MATERIAL OBTAINED FROM THE GRADING OPERATIONS OR OTHER SOURCE APPROVED BY THE ENGINEER. THE ORGANIC MATERIAL SHALL BE THEN USED AS TOP DRESSING WHEN MIXED WITH CLEAN SANDY SOIL.
5. THE CONTRACTOR SHALL NOTIFY JURISDICTIONAL PUBLIC WORKS DIVISION AND MILLS, SHORT & ASSOCIATES AT LEAST ONE WEEK BEFORE COMMENCEMENT OF ANY CONSTRUCTION. CONTRACTOR SHALL OBTAIN AN FDOT R/W PERMIT PRIOR TO COMMENCING WORK WITHIN FDOT RIGHT-OF-WAYS.
6. CONTRACTOR IS RESPONSIBLE FOR CHECKING ACTUAL SITE CONDITIONS BEFORE STARTING CONSTRUCTION.
7. ANY DISCREPANCIES ON THE DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE COMMENCING WORK.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATION OF ALL EXISTING UTILITIES. THE CONTRACTOR SHALL CONTACT ALL CONCERNED UTILITIES AT LEAST 48 HOURS IN ADVANCE FOR CONSTRUCTION OPERATIONS.
9. NO FIELD CHANGES OR DEVIATIONS FROM DESIGN SHALL BE MADE WITHOUT PRIOR WRITTEN APPROVAL OF THE ENGINEER.
10. CONTRACTOR SHALL SUPPLY DENSITY TEST TO ENGINEER ON ALL SUB-GRADE AND BASE. TEST SHALL BE PREPARED PER AASHTO T-180 METHOD.
11. SLOPE GRADES FROM ELEVATIONS SHOWN TO THE EXISTING GRADE AT PROPERTY LINE.
12. CONTRACTOR SHALL NOTIFY ENGINEER AT LEAST 48 HOURS IN ADVANCE FOR ANY INSPECTIONS.
13. ANY EXISTING FLOW WELLS SHALL BE PLUGGED AS PART OF SITE DEVELOPMENT.
14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING ALL MATERIAL AND LABOR TO CONSTRUCT THE FACILITY AS SHOWN AND DESCRIBED IN THE CONSTRUCTION DOCUMENTS IN ACCORDANCE WITH THE APPROPRIATE APPROVING AUTHORITIES, SPECIFICATIONS AND REQUIREMENTS. CONTRACTOR SHALL CLEAR AND GRUB ALL AREAS UNLESS OTHERWISE INDICATED, REMOVING TREES, STUMPS, ROOTS, MUCK, EXISTING PAVEMENT AND ALL OTHER DELETERIOUS MATERIAL.
15. EXISTING UTILITIES SHOWN ARE LOCATED ACCORDING TO THE INFORMATION AVAILABLE TO THE ENGINEER AT THE TIME OF THE TOPOGRAPHIC SURVEY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR THE ENGINEER. GUARANTEE IS NOT MADE THAT ALL EXISTING UNDERGROUND UTILITIES ARE SHOWN OR THAT THE LOCATION OF THOSE SHOWN ARE ENTIRELY ACCURATE. FINDING THE ACTUAL LOCATION OF ANY EXISTING UTILITIES IS THE CONTRACTOR'S RESPONSIBILITY AND SHALL BE DONE BEFORE HE COMMENCES ANY WORK IN THE VICINITY. FURTHERMORE, THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES DUE TO THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. THE OWNER OR ENGINEER WILL ASSUME NO LIABILITY FOR ANY DAMAGES SUSTAINED OR COST INCURRED BECAUSE OF THE OPERATION IN THE VICINITY OF EXISTING UTILITIES OR STRUCTURES, NOR FOR TEMPORARY BRACING AND SHORING OF SAME. IF IT IS NECESSARY TO SHORE, BRACE, SWING OR RELOCATE A UTILITY, THE UTILITY COMPANY OR DEPARTMENT AFFECTED SHALL BE CONTACTED AND THEIR PERMISSION OBTAINED REGARDING THE METHOD TO USE FOR SUCH WORK.
16. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE VARIOUS UTILITY COMPANIES WHICH MAY HAVE BURIED OR AERIAL UTILITIES WITHIN OR NEAR THE CONSTRUCTION AREA BEFORE COMMENCING WORK.
17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED CONSTRUCTION PERMITS AND BONDS IF REQUIRED PRIOR TO CONSTRUCTION.

PAVING AND DRAINAGE NOTES:

1. PIPE LENGTHS SHOWN REPRESENT SCALED DISTANCE BETWEEN CENTERLINES OF DRAINAGE STRUCTURES.
2. DITCH BOTTOM AND CONTROL STRUCTURE INLET GRATES SHALL BE SECURED WITH CHAIN AND EYEBOLT.
3. FIVE (5) FEET OF SOD IS REQUIRED AROUND ALL DITCH BOTTOM INLETS, MANHOLES, HEADWALLS AND MITERED END SECTIONS.
4. TOP ELEVATIONS OF MANHOLES IN GRASSED AREAS SHALL BE LOCATED AT FINISHED GRADE ELEVATION.
5. AS AN ALTERNATIVE, CONTRACTOR MAY USE ALTERNATIVE PIPE MATERIALS IN LIEU OF THOSE SPECIFIED IN THE CONSTRUCTION DOCUMENTS. HOWEVER, CONTRACTOR MUST RECEIVE APPROVAL OF ALTERNATIVE PIPE MATERIALS IN WRITING BY THE CONTROLLING JURISDICTION AND MILLS, SHORT & ASSOCIATES PRIOR TO CONSTRUCTION.
6. STRIP TOPSOIL AND ORGANIC MATTER FROM ALL AREAS OF THE SITE AS REQUIRED. TOP SOIL WHICH HAS BEEN STRIPPED AND STOCK PILED DURING THE COURSE OF CONSTRUCTION SHALL BE REDISTRIBUTED ON ALL REGRADED SURFACES SO AS TO PROVIDE AT LEAST FOUR INCHES OF EVEN COVER TO ALL DISTURBED AREAS OF THE DEVELOPMENT AND SHALL BE STABILIZED BY SEEDING OR PLANTING.
7. ALL DISTURBED AREAS WITH SLOPES UP TO 6:1 SHALL BE SEEDDED AND MULCHED. SLOPES STEEPER THAN 6:1 SHALL BE SODDED AND SLOPES 3:1 OR STEEPER SHALL HAVE THE SOD PEGGED.
8. SEE TABLE 2.0 ON SHEET G-3 FOR REQUIRED STORM PIPE COVER BENEATH AN UNPAVED SECTION, RIGID PAVEMENT, AND FLEXIBLE PAVEMENT.
9. THE TABULATED VALUES ARE RECOMMENDED MINIMUM DIMENSIONS TO WITHSTAND ANTICIPATED HIGHWAY TRAFFIC LOADS. ADDITIONAL COVER MAY BE REQUIRED TO SUPPORT CONSTRUCTION EQUIPMENT LOADS OR HIGHWAY TRAFFIC LOADS BEFORE PAVEMENT IS COMPLETED. SOME SIZE THICKNESS COMBINATIONS MAY REQUIRE MINIMUM COVER GREATER THAN THOSE LISTED ABOVE. SEE FDOT INDEX 205, SHEETS 1-6.
10. ALL RCP STORM WATER PIPE SHALL MEET THE COVER & CLASS CRITERIA AS OUTLINED IN FDOT INDEX 205.
11. ALL STORM PIPE JOINTS SHALL BE WRAPPED AS SPECIFIED IN FDOT INDEX 280.
12. THE LAST FOOT OF STORM WATER POND SHALL NOT BE EXCAVATED UNTIL ALL DISTURBED AREAS ARE STABILIZED.
13. ANY FILL MATERIAL MUST BE APPROVED BY ENGINEER IN WRITING PRIOR TO PLACEMENT.
14. SIGNIFICANT CARE MUST BE TAKEN WHEN GRADING RETENTION PONDS TO ENSURE THAT POND BOTTOMS DO NOT BECOME COMPACTED DURING CONSTRUCTION OR SEALED BY CONSTRUCTION SEDIMENT. IF SEDIMENTATION OR COMPACTION OF A POND BOTTOM OCCURS, IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RESTORE THE DESIGN HYDRAULIC CONDUCTIVITY.
15. THE SAINT JOHNS RIVER WATER MANAGEMENT DISTRICT (SJRWMD), REQUIRES ALL PROPERTY OWNERS TO PERFORM A STORMWATER SYSTEM INSPECTION TO ASSURE THE PONDS, INLETS, AND PIPES ON SITE ARE BEING WELL-MAINTAINED (E.G., PROPERLY MOVED AND CLEAR OF DEBRIS). THE INTENT IS TO GUARANTEE THAT CONTAMINATED RAIN RUN-OFF FROM THE PROPERTY WILL NOT ADVERSELY AFFECT THE SURROUNDING AREA.
16. ALL PAVING, CONSTRUCTION, MATERIALS, AND WORKMANSHIP WITHIN COUNTY'S RIGHT-OF-WAY SHALL BE IN ACCORDANCE WITH LOCAL OR COUNTY SPECIFICATIONS AND STANDARDS (LATEST EDITION) OR FDOT SPECIFICATIONS AND STANDARDS (LATEST EDITION) IF NOT COVERED BY LOCAL OR COUNTY REGULATIONS.
17. ALL UNPAVED AREAS IN EXISTING RIGHTS-OF-WAY DISTURBED BY CONSTRUCTION SHALL BE REGRADED AND SODDED.
18. TRAFFIC CONTROL ON ALL FDOT, LOCAL AND COUNTY RIGHTS-OF-WAY SHALL MEET THE REQUIREMENTS OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (U.S. DOT/FHA) AND THE REQUIREMENTS OF THE STATE AND ANY LOCAL AGENCY HAVING JURISDICTION. IN THE EVENT THAT THE CONTRACT DOCUMENTS AND THE JURISDICTIONAL AGENCY REQUIREMENTS ARE NOT IN AGREEMENT, THE MOST STRINGENT SHALL GOVERN.
19. THE CONTRACTOR SHALL GRADE THE SITE TO THE ELEVATIONS INDICATED AND SHALL REGRADE WASHOUTS WHERE THEY OCCUR AFTER EVERY RAINFALL UNTIL A GRASS STAND IS WELL ESTABLISHED OR ADEQUATE STABILIZATION OCCURS.
20. ALL OPEN AREAS WITHIN THE PROJECT SITE SHALL BE SODDED UNLESS INDICATED OTHERWISE ON THE LANDSCAPE PLAN.
21. ALL AREAS INDICATED AS PAVEMENT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE TYPICAL PAVEMENT SECTIONS AS INDICATED ON THE DRAWINGS.
22. WHERE EXISTING PAVEMENT IS INDICATED TO BE REMOVED, THE CONTRACTOR SHALL SAW CUT FULL DEPTH FOR A SMOOTH AND STRAIGHT JOINT.
23. THE CONTRACTOR SHALL INSTALL FILTER FABRIC OVER ALL DRAINAGE STRUCTURES FOR THE DURATION OF CONSTRUCTION UNTIL ACCEPTANCE OF THE PROJECT BY THE OWNER. ALL DRAINAGE STRUCTURES SHALL BE CLEANED OF DEBRIS AS REQUIRED DURING AND AT THE END OF CONSTRUCTION TO PROVIDE POSITIVE DRAINAGE FLOWS.
24. IF DEWATERING IS REQUIRED, THE CONTRACTOR SHALL OBTAIN ANY APPLICABLE REQUIRED PERMITS. THE CONTRACTOR IS TO COORDINATE WITH THE OWNER AND THE DESIGN ENGINEER PRIOR TO ANY EXCAVATION.
25. FIELD DENSITY TESTS SHALL BE TAKEN AT INTERVALS IN ACCORDANCE WITH THE LOCAL JURISDICTIONAL AGENCY OR TO FDOT STANDARDS. IN THE EVENT THAT THE CONTRACTOR DOCUMENTS AND THE JURISDICTIONAL AGENCY REQUIREMENTS AS NOT IN AGREEMENT, THE MOST STRINGENT SHALL GOVERN.
26. ALL SLOPES AND AREAS DISTURBED BY CONSTRUCTION SHALL BE GRADED AS PER PLANS. THE AREAS SHALL THEN BE SODDED OR SEEDDED AS SPECIFIED IN THE PLANS, FERTILIZED, MULCHED, WATERED AND MAINTAINED UNTIL HARDY GRASS GROWTH IS ESTABLISHED IN ALL AREAS. ANY AREAS DISTURBED FOR ANY REASON PRIOR TO FINAL ACCEPTANCE OF THE JOB SHALL BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. ALL EARTHEN AREAS WILL BE SODDED OR SEEDDED AND MULCHED AS SHOWN ON THE LANDSCAPING PLAN.
27. ALL CUT OR FILL SLOPES SHALL BE 4 (HORIZONTAL):1 (VERTICAL) OR FLATTER UNLESS OTHERWISE SHOWN.
28. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTROL OF DUST AND DIRT RISING AND SCATTERING IN THE AIR DURING CONSTRUCTION AND SHALL PROVIDE WATER SPRINKLING OR OTHER SUITABLE METHODS OF CONTROL. THE CONTRACTOR SHALL COMPLY WITH ALL GOVERNING REGULATIONS PERTAINING TO ENVIRONMENTAL PROTECTION.

29. THE CONTRACTOR SHALL INSTALL ALL UNDERGROUND STORMWATER PIPING PER MANUFACTURER'S RECOMMENDATIONS.

SANITARY SEWER NOTES:

1. ALL MATERIALS AND CONSTRUCTION SHALL BE IN COMPLIANCE WITH JURISDICTIONAL MANUAL OF STANDARD SPECIFICATIONS FOR WASTEWATER CONSTRUCTION.
2. ALL MANHOLES SHALL BE 4 FT. INSIDE DIAMETER.
3. PIPE LENGTHS SHOWN REPRESENT SCALED DISTANCES BETWEEN MANHOLE CENTERLINE.
4. ALL SANITARY SERVICE LATERALS SHALL BE 6 INCH DIAMETER, UNLESS SPECIFIED OTHERWISE ON PLANS.
5. INVERTS OF SANITARY SERVICE LATERALS AT THEIR CONNECTION TO SANITARY MANHOLES SHALL BE NO MORE THAN ONE (1) FOOT ABOVE THE MANHOLE INVERT.
6. MINIMUM AS BUILT 8" PVC SEWER LINE SLOPE WILL BE 0.40% MINIMUM SLOPE OR WILL BE RELIED BY CONTRACTOR TO MEET THE MINIMUM SLOPE REQUIREMENT AT NO ADDITIONAL COST.
7. MARK LATERALS WITH 4" X 4" X 8' PT POST PAINTED GREEN ON END.
8. PIPE MATERIAL IS ASTM D3034, SDR-26 UNLESS OTHERWISE NOTED.
9. A MINIMUM OF 1.00% SLOPE SHALL BE MAINTAINED ON THE SANITARY SEWER SERVICE LATERALS. AT NO TIME SHALL A SANITARY SEWER LATERAL HAVE A SLOPE OF 15% OR GREATER.
10. SANITARY SEWER GRAVITY MAINS ARE TO BE UPGRADED IN MATERIAL TO WATER MAINS STANDARDS AND HYDROSTATICALLY PRESSURE TESTED WITH WATER TO ENSURE JOINT TIGHTNESS IF EITHER OF THE HORIZONTAL OR VERTICAL MINIMUM REQUIRED CLEARANCE FROM A WATER MAIN CANNOT BE MAINTAINED OR IF THE SEWER MAIN IS ABOVE THE WATER MAIN.
11. LEAKAGE TESTS ARE SPECIFIED REQUIRING THAT:

A. THE LEAKAGE EXFILTRATION OR INFILTRATION DOES NOT EXCEED 200 GALLONS PER INCH OF PIPE DIAMETER PER MILE PER DAY FOR ANY SECTION OF THE SYSTEM.

B. EXFILTRATION OR INFILTRATION TESTS BE PERFORMED WITH A MINIMUM POSITIVE HEAD OF 2 FEET.

C. AIR TESTS, AS MINIMAL, CONFORM TO THE TEST PROCEDURE DESCRIBED IN ASTM C-924 FOR CONCRETE PIPE, ASTM F-1417 FOR PLASTIC PIPE AND FOR OTHER MATERIALS APPROPRIATE TEST PROCEDURES, AIR TESTING, IF SPECIFIED FOR CONCRETE SEWER MANHOLES, CONFORMS TO THE TEST PROCEDURES DESCRIBED IN ASTM C-1244.
12. DEFLECTION TESTS SHALL BE PERFORMED IN ACCORDANCE WITH THE RECOMMENDED STANDARDS FOR WASTEWATER FACILITIES, CHAPTER 33.85, FOR ALL GRAVITY SANITARY SEWER LINES. TESTING IS REQUIRED AFTER THE FINAL BACKFILL HAS BEEN IN PLACE AT LEAST 30 DAYS TO PERMIT STABILIZATION OF THE SOIL-PIPE SYSTEM. TESTING REQUIREMENTS SPECIFY:

A. NO PIPE SHALL EXCEED A DEFLECTION OF 5%.

B. USING A RIGID BALL, OR MANDEL FOR THE PIPE DEFLECTION TESTS WITH A DIAMETER NOT LESS THAN 95% OF THE BASE INSIDE DIAMETER OR AVERAGE INSIDE DIAMETER OF THE PIPE, DEPENDING ON WHICH IS SPECIFIED IN THE ASTM SPECIFICATION, INCLUDING THE APPENDIX. TO WHICH THE PIPE IS MANUFACTURED.

C. PERFORMING THE TEST WITHOUT MECHANICAL PULLING DEVICES.

WATER MAIN CONSTRUCTION NOTES:

1. ALL CONSTRUCTION AND MATERIALS SHALL BE IN COMPLIANCE WITH AWWA STANDARDS AS WELL AS THE UTILITY PROVIDERS MANUAL OF STANDARDS AND SPECIFICATIONS FOR WATER MAIN CONSTRUCTION.
2. SEPARATION REQUIREMENTS (SEE TABLE 1.0-UTILITY SEPARATIONS ON SHEET G-3)

2.1. HORIZONTAL SEPARATION BETWEEN UNDERGROUND WATER MAINS, SANITARY OR STORM SEWERS, WASTEWATER OR STORM WATER FORCE MAINS, RECLAIMED WATER PIPELINES AND ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS:

2.1.1. NEW OR RELOCATED UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST 3' BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED STORM SEWER, STORM WATER FORCE MAIN OR PIPELINE CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.

2.1.2. NEW OR RELOCATED UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST 3' AND PREFERABLY 10' BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED VACUUM-TYPE SANITARY SEWER.

2.1.3. NEW OR RELOCATED UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST 6' AND PREFERABLY 10' BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED GRAVITY OR PRESSURE-TYPE SANITARY SEWER, WASTEWATER FORCE MAIN OR PIPELINE CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610 F.A.C., THE MINIMUM HORIZONTAL SEPARATION DISTANCE BETWEEN WATER MAINS AND GRAVITY-TYPE SANITARY SEWERS SHALL BE REDUCED TO 3' WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST 6' ABOVE THE TOP OF THE SEWER.
- 2.2. VERTICAL SEPARATION BETWEEN UNDERGROUND WATER MAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORM WATER FORCE MAINS OR RECLAIMED WATER PIPELINES:

2.2.1. NEW OR RELOCATED UNDERGROUND WATER MAINS CROSSING ANY GRAVITY OR VACUUM-TYPE SANITARY SEWER PIPE SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST 6" AND PREFERABLY 12" ABOVE OR AT LEAST 12" BELOW THE OUTSIDE OF THE OTHER PIPE. IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.

2.2.2. NEW OR RELOCATED UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED PRESSURE-TYPE SANITARY SEWER, WASTEWATER OR STORM WATER FORCE MAIN OR PIPELINE CONVEYING RECLAIMED WATER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAINS IS AT LEAST 12" ABOVE OR BELOW THE OUTSIDE OF THE OTHER PIPELINE. IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.

2.2.3. AT THE UTILITY CROSSINGS DESCRIBED IN THE ABOVE PARAGRAPHS, ONE FULL LENGTH OF WATER MAIN PIPE SHALL BE CENTERED ABOVE OR BELOW THE OTHER PIPELINE SO THE WATER MAIN JOINTS WILL BE AS FAR AS POSSIBLE FROM THE OTHER PIPELINE. ALTERNATIVELY, AT SUCH CROSSINGS, THE PIPES SHALL BE ARRANGED SO THAT ALL WATER MAIN JOINTS ARE AT LEAST 3' FROM ALL JOINTS IN VACUUM-TYPE SANITARY SEWERS, STORM SEWERS, STORM WATER FORCE MAINS OR PIPELINES CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C. AND AT LEAST 6' FROM ALL JOINTS IN GRAVITY OR PRESSURE-TYPE SANITARY SEWERS, WASTEWATER FORCE MAINS, OR PIPELINE CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.

2.3. NO WATER MAIN SHALL PASS THROUGH OR COME INTO CONTACT WITH ANY PART OF A SANITARY SEWER MANHOLE OR A STORM SEWER MANHOLE.

2.4. NEW OR RELOCATED FIRE HYDRANTS WITH UNDERGROUND DRAINS SHALL BE LOCATED SO THAT THE DRAINS ARE AT LEAST 3' FROM ANY EXISTING OR PROPOSED STORM SEWER, STORM WATER FORCE MAIN OR PIPELINE CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C., AT LEAST 3' BUT PREFERABLY 10' FROM ANY EXISTING OR PROPOSED GRAVITY OR PRESSURE-TYPE SANITARY SEWER, WASTEWATER FORCE MAIN OR PIPELINE CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C. AND AT LEAST 10' FROM ANY EXISTING OR PROPOSED ON-SITE SEWAGE TREATMENT OR DISPOSAL SYSTEM AS DEFINED IN SECTION 361.00652(2), F.S. AND RULE 64E-6.002, F.A.C.

2.5. EXCEPTIONS/MITIGATION:

ADHERENCE TO THE ABOVE CONSTRAINTS AND SEPARATIONS IN THE ABOVE ITEMS SHALL BE COMPLIED WITHOUT EXCEPTION. IF FOR SOME REASON WHERE IT IS NOT TECHNICALLY FEASIBLE OR ECONOMICALLY SENSIBLE THAT THE ABOVE ITEMS CANNOT BE COMPLIED WITH, CONTRACTOR IS TO STOP WORK AND NOTIFY THE ENGINEER OF RECORD FOR THE APPROPRIATE SOLUTION. THE SOLUTION WILL BE SUBMITTED TO THE DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR APPROVAL PRIOR TO WORK COMMENCEMENT.

3. PIPE LENGTHS SHOWN REPRESENT SCALED DISTANCES BETWEEN FITTINGS OF BRANCHES AND MAINS.

4. DEFLECTIONS AT PIPE JOINTS SHALL NOT EXCEED THOSE RECOMMENDED BY THE PIPE MANUFACTURER.

5. ALL GATE VALVES SHALL BE EQUIPPED WITH AN ADJUSTABLE CAST IRON VALVE BOX WITH COVER, WITH THREADED EXTENSION WHERE NEEDED.

6. ALL PUBLIC WATER SYSTEMS COMPONENTS, EXCLUDING FIRE HYDRANTS, THAT SHALL BE INSTALLED UNDER THIS PROJECT, AND THAT SHALL COME INTO CONTACT WITH DRINKING WATER SHALL CONFORM TO NSF INTERNATIONAL STANDARD 61 AND SHALL BE MARKED WITH NSF SEAL OF APPROVAL.

7. ALL PIPE AND PIPE FITTINGS INSTALLED UNDER THIS PROJECT SHALL BE COLOR CODED MARKED IN ACCORDANCE WITH SUBPARAGRAPHS 62-555.320(21)(b)3, F.A.C. USING BLUE AS A PREDOMINANT COLOR. ALL DUCTILE IRON WATER MAINS SHALL BE MARKED WITH A CONTINUOUS STRIPE LOCATED WITHIN THE TOP 90 DEGREES OF THE PIPE. SAID STRIPE SHALL BE A MINIMUM 2 INCHES IN WIDTH AND SHALL BE BLUE IN COLOR IF PAINT IS USED INSTEAD OF TAPE. BACKFILL SHALL NOT BE PLACED FOR 30 MINUTES FOLLOWING PAINT APPLICATION. FOR PIPE WITH AN INTERNAL DIAMETER OF 24" OR GREATER, TAPE OR PAINT SHALL BE APPLIED IN CONTINUOUS LINES A LONG EACH SIDE OF THE PIPE AS WELL AS A LONG THE TOP OF THE PIPE.

8. ALL NON-METALLIC WATER MAINS SHALL BE INSTALLED WITH A CONTINUOUS, INSULATED 14 GAUGE COPPER WIRE INSTALLED DIRECTLY ON TOP OF THE PIPE FOR LOCATION PURPOSES. SEE STANDARD DRAWINGS. IN ADDITION, ALL PVC WATER MAINS SHALL BE A SOLID BLUE COLOR.

9. MARK DRINKING WATER SERVICES WITH A 4" X 4" X 8' PT POST PAINTED BLUE ON END.

10. PIPE MATERIALS: ALL PIPES, PIPE FITTINGS, PIPE JOINT PACKING AND JOINTING MATERIALS, VALVES, FIRE HYDRANTS, AND METERS INSTALLED UNDER THIS PROJECT SHALL CONFORM TO APPLICABLE AWWA STANDARDS.

A. PVC WATER MAINS 4 INCHES TO 12 INCHES SHALL BE IN ACCORDANCE WITH AWWA C900, LATEST EDITION AND SHALL BE DR18. PVC WATER MAINS 14 INCHES TO 36 INCHES SHALL BE IN ACCORDANCE WITH AWWA C905, LATEST EDITION AND SHALL BE DR18. PVC PIPES LESS THAN 4 INCHES ARE NOT ALLOWED IN THE UTILITY PROVIDERS. IN OTHER JURISDICTIONS, THEY SHALL BE IN ACCORDANCE WITH ASTM D1785 (SCHEDULE 40, 80, 120) OR ASTM D2241 SDR 21. MINIMUM WORKING PRESSURE FOR ALL PVC SHALL BE 150 PSI. ALL PVC PIPE SHALL HAVE THE SAME O.D. AS DUCTILE IRON PIPE. PVC PIPE JOINTS SHALL BE IN ACCORDANCE WITH ASTM D3139 AND AWWA STANDARDS.

B. DUCTILE IRON PIPE SHALL CONFORM TO ANSI A21.51/AWWA C151 AND SHALL BE A MINIMUM OF CLASS 50. DUCTILE IRON JOINTS SHALL BE IN ACCORDANCE WITH ANSI A21.11 AND AWWA C111.

C. ALL SERVICES SHALL BE POLYETHYLENE TUBING, CLASS 160 AND SHALL BE IN ACCORDANCE WITH AWWA C901.

11. WATER MAIN CONNECTION SHALL BE MADE UNDER THE SUPERVISION OF THE UTILITIES DIVISION. ALL VALVES SHALL BE OPERATED BY PERSONNEL ONLY. WATER MAINS ARE TO BE DISINFECTED PER ANSI/AWWA C651-92 AND UTILITIES DIVISION MANUAL OF STANDARDS AND SPECIFICATIONS FOR WASTEWATER AND WATER MAIN CONSTRUCTION SECTION 51.6 WHICH INCLUDES A FULL FLUSH.

12. ALL VALVES SHALL BE LOCATED IN NON PAVED AREAS, UNLESS SPECIFIED ON PLANS.

13. FIRE HYDRANT LEADS SHALL HAVE A MINIMUM INSIDE DIAMETER OF 6" AND SHALL INCLUDE AN AUXILIARY VALVE.

14. IF AGGRESSIVE SOIL CONDITIONS ARE FOUND DURING CONSTRUCTION, WATER MAINS SHALL BE PROTECTED THROUGH THE USE OF CORROSION RESISTANT MATERIALS, THROUGH ENCASEMENT OF THE WATER MAINS IN POLYETHYLENE, OR THROUGH PROVISION OF CATHODIC PROTECTION.

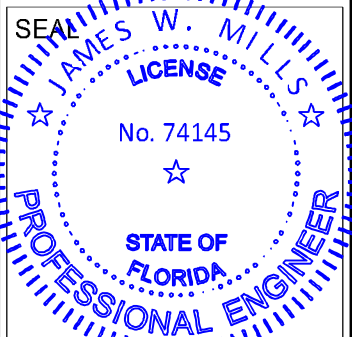
15. ALL PIPE AND PIPE FITTINGS INSTALLED UNDER THIS PROJECT SHALL CONTAIN NO MORE THAN 8.0% LEAD, AND ANY SOLDER OR FLUX USED IN THIS PROJECT SHALL CONTAIN NO MORE THAN 0.2% LEAD.




16. WHERE NEW OR ALTERED DEAD-END WATER MAINS INCLUDED IN THIS PROJECT CANNOT BE AVOIDED, THEY SHALL BE PROVIDED WITH A FIRE FLUSHING HYDRANT OR BLOW-OFF FOR FLUSHING PURPOSES.

17. ALL FIRE HYDRANTS THAT WILL BE INSTALLED UNDER THIS PROJECT SHALL BE LOCATED AT LEAST THREE FEET FROM ANY EXISTING OR PROPOSED STORM SEWER, STORM WATER FORCE MAIN, PIPELINE CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C., OR VACUUM-TYPE SANITARY SEWER, AT LEAST SIX FEET FROM ANY EXISTING OR PROPOSED GRAVITY- OR PRESSURE-TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.

18. WATER SERVICES ARE TO TERMINATE 1' OUTSIDE ROW ALONG THE PROPERTY LINE.
19. PROPOSED FIRE HYDRANTS CONNECTED TO THE POTABLE WATER MAIN, FOR THIS PROJECT, SHALL BE PAINTED PER JURISDICTION. FIRE HYDRANTS CONNECTED TO THE DESIGNATED FIRE LINE SHALL BE PAINTED PER JURISDICTION.
20. ALL PIPE AND PIPE FITTINGS INSTALLED UNDER THIS PROJECT WILL BE COLOR CODED OR MARKED IN ACCORDANCE WITH SUBPARAGRAPH 62-555.320(21)(b)3 F.A.C. USING BLUES AS A PREDOMINANT COLOR. (UNDERGROUND PLASTIC PIPE WILL 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 WILL HAVE BLUE STRIPED APPLIED TO THE PIPE WALL. PIPE STRIPED DURING MANUFACTURING OF THE PIPE WILL 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 THE PIPE, THE TAPE OR PAINT WILL 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 WILL BE PAINTED BLUE OR WILL BE COLOR CODED OR MARKED LIKE UNDERGROUND PIPE.) [FAC 62-555.320(21)(b)3]
21. THE OPEN END OF THE AIR RELIEF PIPE FROM ALL AUTOMATIC AIR RELIEF VALVES WILL BE EXTENDED TO AT LEAST ONE FOOT ABOVE GRADE AND WILL BE PROVIDED WITH A SCREENED, DOWNWARD-FACING ELBOW. [FAC 62-555.320(21)(b)3, AND RSWW.8.4.2]
22. A CONTINUOUS AND UNIFORM BEDDING WILL BE PROVIDED IN TRENCHES FOR UNDERGROUND PIPE. BACKFILL MATERIAL WILL BE TAMPED IN LAYERS AROUND UNDERGROUND PIPE TO ADEQUATELY SUPPORT AND PROTECT THE PIPE; AND UNSUITABLY SIZED STONES (AS DESCRIBED IN APPLICABLE AWWA STANDARDS OR MANUFACTURER'S RECOMMENDED INSTALLATION PROCEDURES) FOUND IN TRENCHES WILL BE REMOVED FOR A DEPTH OF AT LEAST SIX INCHES BELOW THE BOTTOM OF UNDERGROUND PIPE. [FAC 62-555.320(21)(b)3, AND RSWW.8.5.2]
23. ALL WATER MAIN TEES, BENDS, PLUGS, AND HYDRANTS WILL BE PROVIDED WITH THRUST BLOCKS OR RESTRAINED JOINTS TO PREVENT MOVEMENT. [FAC 62-555.320(21)(b)3, AND RSWW.8.5.4]
24. NEW OR ALTERED WATER MAIN INSTALLATION AND PRESSURE AND LEAKAGE TESTING, SHALL BE PROVIDED IN ACCORDANCE WITH APPLICABLE AWWA STANDARDS. PVC WATER MAIN INSTALLATION AND TESTING SHALL CONFORM TO AWWA C600.
25. NEW OR ALTERED WATER MAINS, INCLUDING FIRE HYDRANT LEADS AND 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 TESTED IN ACCORDANCE WITH AWWA C651.

Digitally signed by James Mills
DN: cn=James W. Mills
c=United States, o=Mills, Short & Associates, Inc., ou=Engineering, email=jmills@shortassociates.com, Date: 2024.11.07 14:28:22 -05'00'



ISSUE	DATE	COMMENTS
	01/03/24	TRC RESUBMITTAL
	04/23/24	TRC RESUBMITTAL NO. 2
	05/09/24	TRC RESUBMITTAL NO. 3

ADHERENCE TO THE ABOVE CONSTRAINTS AND SEPARATIONS IN THE ABOVE ITEMS SHALL BE COMPLIED WITHOUT EXCEPTION. IF FOR SOME REASON WHERE IT IS NOT TECHNICALLY FEASIBLE OR ECONOMICALLY SENSIBLE THAT THE ABOVE ITEMS CANNOT BE COMPLIED WITH, CONTRACTOR IS TO STOP WORK AND NOTIFY THE ENGINEER OF RECORD FOR THE APPROPRIATE SOLUTION. THE SOLUTION WILL BE SUBMITTED TO THE DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR APPROVAL PRIOR TO WORK COMMENCEMENT.

PIPE LENGTHS SHOWN REPRESENT SCALED DISTANCES BETWEEN FITTINGS OF BRANCHES AND MAINS.

DEFLECTIONS AT PIPE JOINTS SHALL NOT EXCEED THOSE RECOMMENDED BY THE PIPE MANUFACTURER.

ALL GATE VALVES SHALL BE EQUIPPED WITH AN ADJUSTABLE CAST IRON VALVE BOX WITH COVER, WITH THREADED EXTENSION WHERE NEEDED.

ALL PUBLIC WATER SYSTEMS COMPONENTS, EXCLUDING FIRE HYDRANTS, THAT SHALL BE INSTALLED UNDER THIS PROJECT, AND THAT SHALL COME INTO CONTACT WITH DRINKING WATER SHALL CONFORM TO NSF INTERNATIONAL STANDARD 61 AND SHALL BE MARKED WITH NSF SEAL OF APPROVAL.

ALL PIPE AND PIPE FITTINGS INSTALLED UNDER THIS PROJECT SHALL BE COLOR CODED MARKED IN ACCORDANCE WITH SUBPARAGRAPHS 62-555.320(21)(b)3, F.A.C. USING BLUE AS A PREDOMINANT COLOR. ALL DUCTILE IRON WATER MAINS SHALL BE MARKED WITH A CONTINUOUS STRIPE LOCATED WITHIN THE TOP 90 DEGREES OF THE PIPE. SAID STRIPE SHALL BE A MINIMUM 2 INCHES IN WIDTH AND SHALL BE BLUE IN COLOR IF PAINT IS USED INSTEAD OF TAPE. BACKFILL SHALL NOT BE PLACED FOR 30 MINUTES FOLLOWING PAINT APPLICATION. FOR PIPE WITH AN INTERNAL DIAMETER OF 24" OR GREATER, TAPE OR PAINT SHALL BE APPLIED IN CONTINUOUS LINES A LONG EACH SIDE OF THE PIPE AS WELL AS A LONG THE TOP OF THE PIPE.

ALL NON-METALLIC WATER MAINS SHALL BE INSTALLED WITH A CONTINUOUS, INSULATED 14 GAUGE COPPER WIRE INSTALLED DIRECTLY ON TOP OF THE PIPE FOR LOCATION PURPOSES. SEE STANDARD DRAWINGS. IN ADDITION, ALL PVC WATER MAINS SHALL BE A SOLID BLUE COLOR.

MARK DRINKING WATER SERVICES WITH A 4" X 4" X 8' PT POST PAINTED BLUE ON END.

PIPE MATERIALS: ALL PIPES, PIPE FITTINGS, PIPE JOINT PACKING AND JOINTING MATERIALS, VALVES, FIRE HYDRANTS, AND METERS INSTALLED UNDER THIS PROJECT SHALL CONFORM TO APPLICABLE AWWA STANDARDS.

PVC WATER MAINS 4 INCHES TO 12 INCHES SHALL BE IN ACCORDANCE WITH AWWA C900, LATEST EDITION AND SHALL BE DR18. PVC WATER MAINS 14 INCHES TO 36 INCHES SHALL BE IN ACCORDANCE WITH AWWA C905, LATEST EDITION AND SHALL BE DR18. PVC PIPES LESS THAN 4 INCHES ARE NOT ALLOWED IN THE UTILITY PROVIDERS. IN OTHER JURISDICTIONS, THEY SHALL BE IN ACCORDANCE WITH ASTM D1785 (SCHEDULE 40, 80, 120) OR ASTM D2241 SDR 21. MINIMUM WORKING PRESSURE FOR ALL PVC SHALL BE 150 PSI. ALL PVC PIPE SHALL HAVE THE SAME O.D. AS DUCTILE IRON PIPE. PVC PIPE JOINTS SHALL BE IN ACCORDANCE WITH ASTM D3139 AND AWWA STANDARDS.

DUCTILE IRON PIPE SHALL CONFORM TO ANSI A21.51/AWWA C151 AND SHALL BE A MINIMUM OF CLASS 50. DUCTILE IRON JOINTS SHALL BE IN ACCORDANCE WITH ANSI A21.11 AND AWWA C111.

ALL SERVICES SHALL BE POLYETHYLENE TUBING, CLASS 160 AND SHALL BE IN ACCORDANCE WITH AWWA C901.

WATER MAIN CONNECTION SHALL BE MADE UNDER THE SUPERVISION OF THE UTILITIES DIVISION. ALL VALVES SHALL BE OPERATED BY PERSONNEL ONLY. WATER MAINS ARE TO BE DISINFECTED PER ANSI/AWWA C651-92 AND UTILITIES DIVISION MANUAL OF STANDARDS AND SPECIFICATIONS FOR WASTEWATER AND WATER MAIN CONSTRUCTION SECTION 51.6 WHICH INCLUDES A FULL FLUSH.

ALL VALVES SHALL BE LOCATED IN NON PAVED AREAS, UNLESS SPECIFIED ON PLANS.

FIRE HYDRANT LEADS SHALL HAVE A MINIMUM INSIDE DIAMETER OF 6" AND SHALL INCLUDE AN AUXILIARY VALVE.

IF AGGRESSIVE SOIL CONDITIONS ARE FOUND DURING CONSTRUCTION, WATER MAINS SHALL BE PROTECTED THROUGH THE USE OF CORROSION RESISTANT MATERIALS, THROUGH ENCASEMENT OF THE WATER MAINS IN POLYETHYLENE, OR THROUGH PROVISION OF CATHODIC PROTECTION.

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 SHALL CONTAIN NO MORE THAN 0.2% LEAD.

WHERE NEW OR ALTERED DEAD-END WATER MAINS INCLUDED IN THIS PROJECT CANNOT BE AVOIDED, THEY SHALL BE PROVIDED WITH A FIRE FLUSHING HYDRANT OR BLOW-OFF FOR FLUSHING PURPOSES.

ALL FIRE HYDRANTS THAT WILL BE INSTALLED UNDER THIS PROJECT SHALL BE LOCATED AT LEAST THREE FEET FROM ANY EXISTING OR PROPOSED STORM SEWER, STORM WATER FORCE MAIN, PIPELINE CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C., OR VACUUM-TYPE SANITARY SEWER, AT LEAST SIX FEET FROM ANY EXISTING OR PROPOSED GRAVITY- OR PRESSURE-TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.

LA-Z-BOY VERO
6366 20TH STREET
VERO BEACH, FL 32966

THIS SHEET
GENERAL NOTES

DRAWN BY
WBD

CHECKED BY
JWM

APPROVED BY
JWM

SCALE:
N/A

PROJ. NO.	23-1160
DATE	11/07/2023
SHEET NO.	

FORCE MAIN NOTES:

1.

ALL CONSTRUCTION AND MATERIALS SHALL BE IN COMPLIANCE WITH THE UTILITY PROVIDERS MANUAL OF STANDARDS AND SPECIFICATIONS FOR FORCE MAIN CONSTRUCTION.
2.

PIPE LENGTHS SHOWN IN REPRESENT SCALED DISTANCES BETWEEN FITTINGS OF BRANCHES AND MAINS.
3.

DEFLECTIONS AT PIPE JOINTS SHALL NOT EXCEED THOSE RECOMMENDED BY THE PIPE MANUFACTURER.
4.

VALVES SHALL BE EQUIPPED WITH AN ADJUSTABLE CAST IRON VALVE BOX WITH COVER, THREADED EXTENSIONS WHERE NEEDED, UNLESS OTHERWISE NOTED.
5.

ALL PVC FORCE MAIN SHALL BE AS SPECIFIED IN THE CONTRACT DOCUMENTS, MARKED WITH THE SEAL OF APPROVAL OF THE NATIONAL SANITATION FOUNDATION (NSF).
6.

ALL NON-METALLIC FORCE MAINS SHALL BE INSTALLED WITH A CONTINUOUS, INSULATED 14 GAUGE COPPER WIRE INSTALLED DIRECTLY ON TOP OF THE PIPE FOR LOCATION PURPOSES. SEE STANDARD DRAWINGS. IN ADDITION, ALL PVC FORCE MAINS SHALL BE EITHER A SOLID GREEN COLOR OR WHITE WITH GREEN LETTERING. ALL LETTERING SHALL APPEAR LEGIBLY ON PIPE AND SHALL RUN THE ENTIRE LENGTH OF THE PIPE. LETTERING SHALL READ AS IS ACCEPTABLE FOR THE INTENDED USE.
7.

HYDROSTATIC & LEAKAGE TESTING OF THE FORCE MAIN SHALL BE DONE IN ACCORDANCE WITH THE AWWA STANDARDS. HYDROSTATIC TESTING TO BE DONE IN ACCORDANCE WITH AWWA C-600.
8.

PIPE MATERIALS:
PVC - SHALL BE MANUFACTURED IN ACCORDANCE WITH AWWA STANDARDS C900., LATEST EDITION. THE PVC SHALL HAVE A MINIMUM WORKING PRESSURE OF 100 PSI AND SHALL HAVE A DIMENSION RATIO (DR) OF 25 UNLESS OTHERWISE NOTED. PIPE SHALL BE THE SAME O.D. AS DUCTILE IRON PIPE. PVC JOINT- SHALL BE IN ACCORDANCE WITH ASTM D3139. DUCTILE IRON JOINT- SHALL BE IN ACCORDANCE WITH ANSI A21.11 AND AWWA C111.
9.

AIR RELEASE VALVES SHALL BE REQUIRED AT ALL HIGH POINTS IN THE PROPOSED FORCE MAIN, AS SHOWN ON PLANS. HIGH POINTS IN THE FORCE MAIN ARE DEFINED AS A CHANGE IN ELEVATION TWICE THE DIAMETER OF THE PIPE.
10.

ALL FORCE MAINS TO BE CONSTRUCTED WITH A MINIMUM OF 3' FEET OF COVER.
11.

TESTING OF THE SEWAGE COLLECTION SYSTEM IS AS FOLLOWS:

A.

ALL GRAVITY SEWER MAINS REQUIRE LOW PRESSURE AIR TESTING IN ACCORDANCE WITH THE LATEST UNI-BELL STANDARD FOR LOW PRESSURE AIR TESTS. AIR TEST, AS A MINIMUM, SHALL CONFORM TO THE TEST PROCEDURES DESCRIBED IN ASTM SPECIFICATIONS, ASTM F1417 FOR PLASTIC PIPE.

B.

ALL MANHOLES SHALL BE INSPECTED FOR INFILTRATION, ALIGNMENT, FLOW CHANNEL CONSTRUCTION AND COAL TAR EPOXY PAINT THROUGHOUT.

C.

HYDRO-STATIC TESTS CONSISTING OF A HYDROSTATIC PRESSURE TEST AND HYDROSTATIC LEAKAGE TEST SHALL BE CONDUCTED ON ALL NEWLY INSTALLED SEWER FORCE MAIN SYSTEM PRESSURE PIPES AND APPURTENANCES IN ACCORDANCE WITH AWWA C600 OR M23 AS APPLICABLE. THE PRESSURE SHALL BE 150 PSI FOR TWO (2) HOURS.

D.

DEFLECTION TESTS ARE REQUIRED FOR ALL FLEXIBLE PIPE EXCLUDING FORCE MAINS. TESTS SHALL BE PERFORMED WITHOUT MECHANICAL PULLING DEVICES.D MEASURED FROM THE INTERFACE TO THE CONCRETE CURB AND PAVEMENT SURFACE UNLESS OTHERWISE NOTED.

AS-BUILT NOTES:

1.

THE CONTRACTOR SHALL SUBMIT A CERTIFIED SET OF RECORD DRAWINGS TO THE ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RECORDING INFORMATION ON THE APPROVED PLANS CONCURRENTLY WITH CONSTRUCTION PROGRESS. RECORD DRAWINGS SUBMITTED TO THE ENGINEER AS PART OF THE PROJECT ACCEPTANCE SHALL COMPLY WITH THE FOLLOWING REQUIREMENTS.

A.

DRAWINGS SHALL BE LEGIBLY MARKED TO RECORD ACTUAL CONSTRUCTION.

B.

DRAWINGS SHALL SHOW ACTUAL LOCATION OF ALL UNDERGROUND AND ABOVE GROUND STORM DRAINAGE, WATER, REUSE AND WASTEWATER PIPING AND RELATED APPURTENANCES. ALL PIPING LOCATIONS INCLUDING HORIZONTAL AND VERTICAL LOCATIONS OF UTILITIES AND APPURTENANCES SHALL BE CLEARLY SHOWN AND REFERENCED TO PERMANENT SURFACE IMPROVEMENTS. DRAWINGS SHALL ALSO SHOW ACTUAL INSTALLED PIPE MATERIAL, CLASS, ETC.

C.

DRAWINGS SHALL CLEARLY SHOW ALL FIELD CHANGES OF DIMENSION AND DETAIL INCLUDING CHANGES MADE BY FIELD ORDER OR BY CHANGE ORDER.

D.

DRAWINGS SHALL CLEARLY SHOW ALL DETAILS NOT ON ORIGINAL CONTRACT DRAWINGS, BUT CONSTRUCTED IN THE FIELD. ALL EQUIPMENT AND PIPING RELOCATION SHALL BE CLEARLY SHOWN.

E.

LOCATION OF ALL INLETS AND MANHOLES, HYDRANTS, VALVES AND VALVE BOXES SHALL BE SHOWN. ALL VALVES SHALL BE REFERENCED FROM AT LEAST TWO PREFERABLY THREE PERMANENT POINTS.

F.

DIMENSIONS BETWEEN ALL INLETS AND MANHOLES SHALL BE VERIFIED AND SHOWN. THE INVERTS AND GRADE ELEVATIONS OF ALL INLETS, CONTROL STRUCTURES AND MANHOLES SHALL BE SHOWN.

G.

CONTRACTOR SHALL PROVIDE AS-BUILT SURVEY FOR POND GRADING. SPOT ELEVATIONS SHALL BE TAKEN AT TOP OF BANK, POND BOTTOM, AND ALL GRADE BREAKS AT 50' INTERVALS.

H.

DRAWINGS SHALL CLEARLY INDICATE VERTICAL AND HORIZONTAL SEPARATION BETWEEN WATER MAIN AND STORM DRAINAGE/SANITARY SEWER/RECLAIM WATER MAINS AT POINTS OF CROSSING IN ACCORDANCE WITH FDEP CRITERIA.

I.

WHERE THE WATER MAIN CROSSES OTHER UTILITIES (STORM, GRAVITY SEWER, FORCE MAIN AND RECLAIMED WATER), THE CERTIFIED AS-BUILT DRAWINGS SHALL CLEARLY INDICATE THE CONSTRUCTED ELEVATIONS IN SUCH A WAY THAT THE VERTICAL SEPARATION BETWEEN THE WATER MAIN AND OTHER UTILITIES MAY BE VERIFIED BY THE ENGINEER. FAILURE TO PROVIDE THIS INFORMATION WILL RESULT IN THE CONTRACTOR EXCAVATING AND SURVEYING THE UTILITIES AT NO ADDITIONAL COST TO THE OWNER.

J.

WHERE THE WATER MAIN CROSSES OTHER UTILITIES (STORM, GRAVITY SEWER, FORCE MAIN AND RECLAIMED WATER), THE CERTIFIED AS-BUILT DRAWINGS SHALL CLEARLY INDICATE THE LOCATIONS OF PIPE JOINTS IN SUCH A MANNER AS TO DEMONSTRATE THE PIPE IS CENTERED AT ALL THE CROSSING. FAILURE TO PROVIDE THIS INFORMATION WILL RESULT IN THE CONTRACTOR EXCAVATING AND SURVEYING THE UTILITIES AT NO ADDITIONAL COST TO THE OWNER.
2.

EACH SHEET OF THE PLANS SHALL BE SIGNED, SEALED AND DATED BY REGISTERED SURVEYOR WITH A NOTE READING "THESE AS-BUILT DRAWINGS ACCURATELY DEPICT THE ACTUAL IMPROVEMENTS AS CONSTRUCTED".

CLEARANCES:

1.

THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING 90 DAYS PRIOR TO THE ANTICIPATED COMPLETION OF CONSTRUCTION AND/OR CERTIFICATION OF COMPLETION APPROVAL DATE.
2.

THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH SIGNED AND SEALED AS-BUILTS OF ALL UTILITY IMPROVEMENTS, PRESSURE TESTS, BACTERIOLOGICAL TESTS, AND ANY OTHER INFORMATION NECESSARY FOR THE CLEARANCE APPROVALS WITH F.D.E.P. AND THE LOCAL UTILITY PROVIDER. THIS INFORMATION SHALL BE PROVIDED TO THE ENGINEER 60 DAYS PRIOR TO THE ANTICIPATED COMPLETION OF CONSTRUCTION AND/OR CERTIFICATION OF COMPLETION APPROVAL DATE.
3.

THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH SIGNED AND SEALED AS-BUILTS OF ALL STORM WATER SYSTEM IMPROVEMENTS AND ANY OTHER INFORMATION NECESSARY FOR THE CLEARANCE APPROVALS AND THE LOCAL UTILITY PROVIDER. THIS INFORMATION SHALL BE PROVIDED TO THE ENGINEER 60 DAYS PRIOR TO THE ANTICIPATED COMPLETION OF CONSTRUCTION AND/OR CERTIFICATION OF COMPLETION APPROVAL DATE.

DEMOLITION NOTES:

1.

ALL MATERIAL REMOVED FROM THIS SITE BY THE CONTRACTOR SHALL BE DISPOSED OF BY THE CONTRACTOR IN A LEGAL MANNER.
2.

REFER TO THE TOPOGRAPHIC SURVEY FOR ADDITIONAL DETAILS OF EXISTING STRUCTURES, ETC., LOCATED WITHIN THE PROJECT SITE. UNLESS OTHERWISE NOTED, ALL EXISTING BUILDINGS, STRUCTURES, SLABS, CONCRETE, ASPHALT, DEBRIS PILES, SIGNS, AND ALL APPURTENANCES ARE TO BE REMOVED FROM THE SITE BY THE CONTRACTOR AND PROPERLY DISPOSED OF IN A LEGAL MANNER AS PART OF THIS CONTRACT. SOME ITEMS TO BE REMOVED MAY NOT BE DEPICTED ON THE TOPOGRAPHIC SURVEY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VISIT THE SITE AND DETERMINE THE FULL EXTENT OF ITEMS TO BE REMOVED. IF ANY ITEMS ARE IN QUESTION, THE CONTRACTOR SHALL CONTACT THE OWNER PRIOR TO REMOVAL OF SAID ITEMS.

TABLE 1.0 - UTILITY SEPARATION

LOCATION OF PUBLIC WATER SYSYEM MAINS IN ACCORDANCE WITH F.A.C. RULE 62-555.314			
Other Pipe	Horizontal Separation	Crossings (1)	Joint Spacing @ Crossings (Full Joint Centered)
Storm Sewer, Stormwater Force Main, Reclaimed Water (2)			Alternate 3 ft. minimum
	3 ft. minimum	12 inches is the minimum, except for storm sewer, then 6 inches is the minimum and 12 inches is preferred	
Vacuum Sanitary Sewer			Alternate 3 ft. minimum
	10 ft. preferred 3 ft. minimum	12 inches preferred 6 inches minimum	
Gravity or Pressure Sanitary Sewer, Sanitary Sewer Force Main, Reclaimed Water (4)			Alternate 6 ft. minimum
	10 ft. preferred 6 ft. minimum (3)	12 inches is the minimum, except for gravity sewer, then 6 inches is the minimum and 12 inches is preferred	
On-Site Sewage Treatment & Disposal System	10 ft. minimum	---	---

(1) Water main should cross above other pipe. When water main must be below other pipe, the minimum separation is 12 inches.

(2) Reclaimed water regulated under Part III of Chapter 62-610, F.A.C.

(3) 3 ft. for gravity sanitary sewer where the bottom of the water main is laid at least 6 inches above the top of the gravity sanitary sewer.

(4) Reclaimed water not regulated under Part III of Chapter 62-610, F.A.C.

Disclaimer – This document is provided for your convenience only. Please refer to F.A.C. Rule 62-555.314 for additional construction requirements.

TABLE 2.0 - STORM PIPE COVER

RIGID PAVEMENT

FLEXIBLE PAVEMENT

UNPAVED

FRABLE BASE

ASPHALTIC CONCRETE BASE

EXTRA MATERIAL FOR CROSS CULVERTS UNDER PAVEMENTS

GENERAL NOTES

- The material shown above is for the purpose of showing the relative positions of the various materials and is not to be used as a guide for the actual construction.
- The material shown above is for the purpose of showing the relative positions of the various materials and is not to be used as a guide for the actual construction.
- The material shown above is for the purpose of showing the relative positions of the various materials and is not to be used as a guide for the actual construction.
- The material shown above is for the purpose of showing the relative positions of the various materials and is not to be used as a guide for the actual construction.
- The material shown above is for the purpose of showing the relative positions of the various materials and is not to be used as a guide for the actual construction.
- The material shown above is for the purpose of showing the relative positions of the various materials and is not to be used as a guide for the actual construction.
- The material shown above is for the purpose of showing the relative positions of the various materials and is not to be used as a guide for the actual construction.
- The material shown above is for the purpose of showing the relative positions of the various materials and is not to be used as a guide for the actual construction.
- The material shown above is for the purpose of showing the relative positions of the various materials and is not to be used as a guide for the actual construction.
- The material shown above is for the purpose of showing the relative positions of the various materials and is not to be used as a guide for the actual construction.
- The material shown above is for the purpose of showing the relative positions of the various materials and is not to be used as a guide for the actual construction.
- The material shown above is for the purpose of showing the relative positions of the various materials and is not to be used as a guide for the actual construction.
- The material shown above is for the purpose of showing the relative positions of the various materials and is not to be used as a guide for the actual construction.
- The material shown above is for the purpose of showing the relative positions of the various materials and is not to be used as a guide for the actual construction.
- The material shown above is for the purpose of showing the relative positions of the various materials and is not to be used as a guide for the actual construction.
- The material shown above is for the purpose of showing the relative positions of the various materials and is not to be used as a guide for the actual construction.
- The material shown above is for the purpose of showing the relative positions of the various materials and is not to be used as a guide for the actual construction.
- The material shown above is for the purpose of showing the relative positions of the various materials and is not to be used as a guide for the actual construction.
- The material shown above is for the purpose of showing the relative positions of the various materials and is not to be used as a guide for the actual construction.
- The material shown above is for the purpose of showing the relative positions of the various materials and is not to be used as a guide for the actual construction.
- The material shown above is for the purpose of showing the relative positions of the various materials and is not to be used as a guide for the actual construction.
- The material shown above is for the purpose of showing the relative positions of the various materials and is not to be used as a guide for the actual construction.
- The material shown above is for the purpose of showing the relative positions of the various materials and is not to be used as a guide for the actual construction.
- The material shown above is for the purpose of showing the relative positions of the various materials and is not to be used as a guide for the actual construction.
- The material shown above is for the purpose of showing the relative positions of the various materials and is not to be used as a guide for the actual construction.
- The material shown above is for the purpose of showing the relative positions of the various materials and is not to be used as a guide for the actual construction.
- The material shown above is for the purpose of showing the relative positions of the various materials and is not to be used as a guide for the actual construction.
- The material shown above is for the purpose of showing the relative positions of the various materials and is not to be used as a guide for the actual construction.
- The material shown above is for the purpose of showing the relative positions of the various materials and is not to be used as a guide for the actual construction.
- The material shown above is for the purpose of showing the relative positions of the various materials and is not to be used as a guide for the actual construction.
- The material shown above is for the purpose of showing the relative positions of the various materials and is not to be used as a guide for the actual construction.
- The material shown above is for the purpose of showing the relative positions of the various materials and is not to be used as a guide for the actual construction.
- The material shown above is for the purpose of showing the relative positions of the various materials and is not to be used as a guide for the actual construction.
- The material shown above is for the purpose of showing the relative positions of the various materials and is not to be used as a guide for the actual construction.
- The material shown above is for the purpose of showing the relative positions of the various materials and is not to be used as a guide for the actual construction.
- The material shown above is for the purpose of showing the relative positions of the various materials and is not to be used as a guide for the actual construction.
- The material shown above is for the purpose of showing the relative positions of the various materials and is not to be used as a guide for the actual construction.
- The material shown above is for the purpose of showing the relative positions of the various materials and is not to be used as a guide for the actual construction.
- The material shown above is for the purpose of showing the relative positions of the various materials and is not to be used as a guide for the actual construction.
- The material shown above is for the purpose of showing the relative positions of the various materials and is not to be used as a guide for the actual construction.
- The material shown above is for the purpose of showing the relative positions of the various materials and is not to be used as a guide for the actual construction.
- The material shown above is for the purpose of showing the relative positions of the various materials and is not to be used as a guide for the actual construction.
- The material shown above is for the purpose of showing the relative positions of the various materials and is not to be used as a guide for the actual construction.
- The material shown above is for the purpose of showing the relative positions of the various materials and is not to be used as a guide for the actual construction.
- The material shown above is for the purpose of showing the relative positions of the various materials and is not to be used as a guide for the actual construction.
- The material shown above is for the purpose of showing the relative positions of the various materials and is not to be used as a guide for the actual construction.
- The material shown above is for the purpose of showing the relative positions of the various materials and is not to be used as a guide for the actual construction.
- The material shown above is for the purpose of showing the relative positions of the various materials and is not to be used as a guide for the actual construction.
- The material shown above is for the purpose of showing the relative positions of the various materials and is not to be used as a guide for the actual construction.
- The material shown above is for the purpose of showing the relative positions of the various materials and is not to be used as a guide for the actual construction.
- The material shown above is for the purpose of showing the relative positions of the various materials and is not to be used as a guide for the actual construction.
- The material shown above is for the purpose of showing the relative positions of the various materials and is not to be used as a guide for the actual construction.
- The material shown above is for the purpose of showing the relative positions of the various materials and is not to be used as a guide for the actual construction.
- The material shown above is for the purpose of showing the relative positions of the various materials and is not to be used as a guide for the actual construction.
- The material shown above is for the purpose of showing the relative positions of the various materials and is not to be used as a guide for the actual construction.
- The material shown above is for the purpose of showing the relative positions of the various materials and is not to be used as a guide for the actual construction.
- The material shown above is for the purpose of showing the relative positions of the various materials and is not to be used as a guide for the actual construction.
- The material shown above is for the purpose of showing the relative positions of the various materials and is not to be used as a guide for the actual construction.
- The material shown above is for the purpose of showing the relative positions of the various materials and is not to be used as a guide for the actual construction.
- The material shown above is for the purpose of showing the relative positions of the various materials and is not to be used as a guide for the actual construction.
- The material shown above is for the purpose of showing the relative positions of the various materials and is not to be used as a guide for the actual construction.
- The material shown above is for the purpose of showing the relative positions of the various materials and is not to be used as a guide for the actual construction.
- The material shown above is for the purpose of showing the relative positions of the various materials and is not to be used as a guide for the actual construction.
- The material shown above is for the purpose of showing the relative positions of the various materials and is not to be used as a guide for the actual construction.
- The material shown above is for the purpose of showing the relative positions of the various materials and is not to be used as a guide for the actual construction.
- The material shown above is for the purpose of showing the relative positions of the various materials and is not to be used as a guide for the actual construction.
- The material shown above is for the purpose of showing the relative positions of the various materials and is not to be used as a guide for the actual construction.
- The material shown above is for the purpose of showing the relative positions of the various materials and is not to be used as a guide for the actual construction.
- The material shown above is for the purpose of showing the relative positions of the various materials and is not to be used as a guide for the actual construction.
- The material shown above is for the purpose of showing the relative positions of the various materials and is not to be used as a guide for the actual construction.
- The material shown above is for the purpose of showing the relative positions of the various materials and is not to be used as a guide for the actual construction.
- The material shown above is for the purpose of showing the relative positions of the various materials and is not to be used as a guide for the actual construction.
- The material shown above is for the purpose of showing the relative positions of the various materials and is not to be used as a guide for the actual construction.
- The material shown above is for the purpose of showing the relative positions of the various materials and is not to be used as a guide for the actual construction.
- The material shown above is for the purpose of showing the relative positions of the various materials and is not to be used as a guide for the actual construction.
- The material shown above is for the purpose of showing the relative positions of the various materials and is not to be used as a guide for the actual construction.
- The material shown above is for the purpose of showing the relative positions of the various materials and is not to be used as a guide for the actual construction.
- The material shown above is for the purpose of showing the relative positions of the various materials and is not to be used as a guide for the actual construction.
- The material shown above is for the purpose of showing the relative positions of the various materials and is not to



EXISTING SOIL CONDITIONS:
WINDER FINE SAND OF THE WINDER SERIES

EXISTING CONDITIONS:
THE SITE IS CURRENTLY BEING UTILIZED AS A COMMERCIAL RETAIL SITE. THE SITE CONTAINS EXISTING BUILDING STRUCTURES AND ASPHALT PAVEMENT.

GROUNDWATER TABLE:
THE SEASONAL HIGH WATER TABLE WAS DETERMINED TO BE AT ELEVATION 17.07 NAVD 88.

CURRENT SITE DRAINAGE PATTERN:
THE SITE CURRENTLY DRAINS FROM NORTH TO THE SOUTH AND INTO THE FOOT RIGHT-OF-WAY. THE EXISTING SITE DOES NOT HAVE A CENTRALIZED STORMWATER SYSTEM.

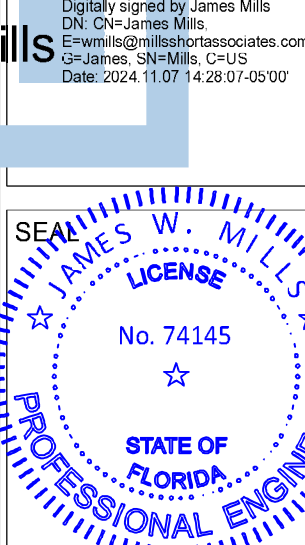
FLOOD ZONE:
ACCORDING TO THE NATIONAL FLOOD INSURANCE RATE MAP NUMBER 12061C0239 H, HAVING AN EFFECTIVE DATE OF DECEMBER 4, 2012 THIS PROPERTY APPEARS TO LIE WITHIN ZONE X, OUTSIDE SPECIAL FLOOD HAZARD AREA.

INDIAN RIVER COUNTY BENCHMARK
DESIGNATION RM105009
FINISHED ELEVATION 17.78 NAVD 1988

SITE BENCHMARK
FINAD CARTER & ASSOC. LB 205
ELEVATION = 15.14

LEGEND	
FIP = FOUND IRON PIPE "NO IDENTIFICATION"	— = STREET LIGHT
SRC = SET 1/2" IRON ROD WITH CAP "LB 807"	☆ = LIGHT POLE
CONC = CONCRETE	X 100.74 = EXISTING ELEVATION
FINAD = FOUND NAIL AND DISK	— = PROPOSED ELEVATION
SND = SET NAIL AND DISK	— = IRON ROD
FF EL = FINISHED FLOOR ELEVATION	
ST = SEPTIC TANK	
SF = SQUARE FOOT	
UP = PLAT (D) = DEED (M) = MEASURE	
CL = CENTERLINE	EDP = EDGE OF PAVEMENT
CMP = CORROSPATED METAL PIPE	
TFS = TOP OF FORMBOARD	
EL = ELEVATION	
BM = SITE BENCHMARK	
S.S. = CONCRETE BLOCK STRUCTURE	
CB = CHORD BEARING	
SP = PERMANENT CONTROL POINT	
PC = POINT OF CURVATURE	
PT = POINT OF TANGENCY	
R/W = RIGHT OF WAY	
FIR = FOUND IRON ROD "NO IDENTIFICATION"	
FIRC = FOUND IRON ROD WITH CAP	
	☐ = CATCH BASIN
	— = CABLE PEDESTAL
	— = WOOD UTILITY POLE
	— = GUY ANCHOR
	— = ELECTRIC TRANSFORMER
	— = TELEPHONE JUNCTION BOX
	— = WATER METER
	— = FIRE HYDRANT
	— = WATER VALVE
	— = EXISTING WELL
	— = SANITARY MANHOLE
	— = STORM MANHOLE

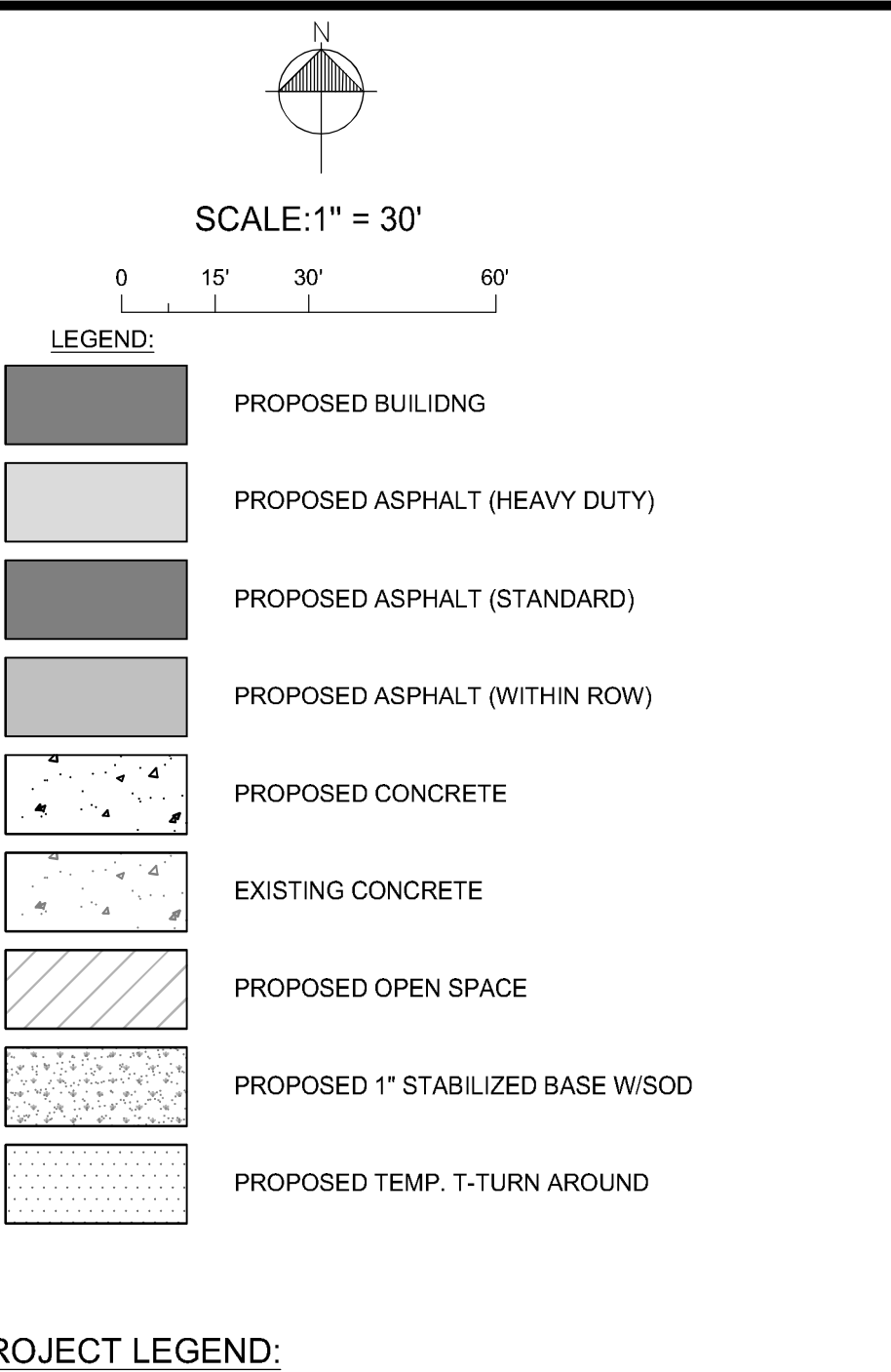
Mills, Short & Associates
WEBSITE: www.MillsShortAssociates.com
PHONE: 772.226.7282
C.A. #: 36698



ISSUE	DATE	COMMENTS
1	01/03/24	TRC RESUBMITTAL
2	04/23/24	TRC RESUBMITTAL NO. 2
3	05/09/24	TRC RESUBMITTAL NO. 3

LA-Z-BOY VERO 6366 20TH STREET VERO BEACH, FL 32966	SCALE: 1"=30'	APPROVED BY JWM	CHECKED BY JWM	EXISTING CONDITIONS / DEMOLITION PLAN	DRAWN BY WBD
PROJ. NO. 23-1160	DATE 11/07/2023	SHEET NO.			

C-1



1. COMMERCIAL/MULTI-FAMILY BUILDINGS SHALL POST A MINIMUM 6-INCH NUMERICAL ADDRESS.
2. FIRE LANES SHALL NOT BE LESS THAN 20-FT OF UNOBSTRUCTED WIDTH, ABLE TO WITHSTAND THE LIVE LOADS OF FIRE APPARATUS (32-TONS).
3. ALL BUILDINGS REQUIRE A KEY ACCESS BOX (KNOX).
4. COMBUSTIBLE CONSTRUCTION REQUIRES TEMPORARY FIRE LANES AND HYDRANT INSTALLATION PRIOR TO COMBUSTIBLES ON SITE.
5. CONTRACTOR SHALL ASSESS CONDITION OF EXISTING SIDEWALK AND REPAIR A NECESSARY.
6. BUILDING USING VERTICAL OR HORIZONTAL LIGHT-FRAME CONSTRUCTION IN ANY PORTION OF THE STRUCTURE SHALL BE MARKED WITH A SIGN AS REQUIRED BY FLORIDA STATE STATUTE 633-027 AND THE SIGN SHALL BE REQUIRED TO COMPLY WITH THE FLORIDA ADMINISTRATIVE CODE 69A-0.012 AND/OR 69A-60.0081. SIGN MUST BE 8-INCHES BY 8-INCHES.
7. NEW AND EXISTING BUILDINGS SHALL HAVE APPROVED ADDRESS NUMBERS PLACED IN A POSITION TO BE PLAINLY LEGIBLE AND VISIBLE FROM THE STREET OR ROAD FRONTING THE PROPERTY. IF THE BUILDING IS ADDRESSED ON ANOTHER STREET, SOMETIMES REFERRED TO AS A VANITY ADDRESS, THE STREET NAME SHALL ALSO BE INCLUDED IN LETTERS WITH THE SAME DIMENSIONS AS THE ADDRESS NUMBER REQUIREMENTS OF 10.11.1.2.
8. DEAD-END FIRE DEPARTMENT ACCESS ROADS IN EXCESS OF 150 FT (46 M) IN LENGTH SHALL BE PROVIDED WITH APPROVED PROVISIONS FOR THE FIRE APPARATUS TO TURN AROUND.
9. ALL EXISTING AND PROPOSED FIRE PROTECTION WATER LINES WITHIN THE BOUNDARIES OF, OR ADJACENT TO, THE SITE MUST BE SHOWN. THIS SHALL INCLUDE BACKFLOW PREVENTION DEVICES, FIRE DEPARTMENT CONNECTIONS, AND FIRE HYDRANTS
10. FIRE HYDRANTS SHALL BE LOCATED NOT MORE THAN 12 FT (3.7 M) FROM THE FIRE DEPARTMENT ACCESS ROAD.
11. FIRE DEPARTMENT ACCESS ROADS PROVIDED IN ACCORDANCE WITH 18.2.3 SHALL BE PROVIDED AT THE START OF A PROJECT AND SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION.
12. VERTICAL CLEARANCE FOR FIRE APPARATUS SHALL HAVE AN UNOBSTRUCTED VERTICAL CLEARANCE OF NOT LESS THAN 13'-6".
13. FIRE APPARATUS STABILIZED TURN AROUND SHALL BE DESIGNED TO WITHSTAND 32 TON LIVE LOAD CAPACITY.
14. WHERE UNDERGROUND WATER MAINS AND HYDRANTS ARE TO BE PROVIDED, THEY SHALL BE INSTALLED, COMPLETED, AND IN SERVICE PRIOR TO COMMENCING CONSTRUCTION WORK ON ANY STRUCTURE.
15. THE AHJ SHALL HAVE THE AUTHORITY TO REQUIRE AN ACCESS BOX(ES) TO BE INSTALLED IN AN ACCESSIBLE LOCATION WHERE ACCESS TO OR WITHIN A STRUCTURE OR AREA IS DIFFICULT BECAUSE OF SECURITY. THE ACCESS BOX(ES) SHALL BE OF AN APPROVED TYPE LISTED IN ACCORDANCE WITH UL 1037, NFPA 1:18.2.2.1

1. THE CONTRACTOR SHALL PROVIDE ADVANCED NOTICE TO THE TRAFFIC ENGINEERING DIVISION PRIOR TO COMMENCING CONSTRUCTION BY SUBMITTING A TEMPORARY TRAFFIC CONTROL PLAN (TTCP) FOR REVIEW. IT IS RECOMMEND TO SUBMIT A PROPOSED TTCP FOR THE SUBJECT PROJECT AT LEAST 72 HOURS IN ADVANCE FOR LANE CLOSURES AND TEN (1) DAYS IN ADVANCE FOR ANY ROAD CLOSURE. THE TTCP SHALL BE IN ACCORDANCE WITH THE FDOT STANDARD PLANS, FY 2020-2021, INDEX #102-600.
2. THERE SHALL BE NO EXCAVATIONS LEFT OPEN AFTER DARK.
3. ALL CONSTRUCTION EQUIPMENT AND MATERIALS SHALL BE STORED A MINIMUM OF 15 FEET FROM THE EDGE OF PAVEMENT AND SHALL BE PROTECTED BY TYPE II BARRICADES.
4. CONSTRUCTION FENCING USED IN THE WORK AREA TO PROTECT EQUIPMENT OR EXCAVATIONS SHALL NOT BLOCK SIGHT DISTANCE NEAR INTERSECTIONS OR DRIVEWAYS.
5. INDIAN RIVER COUNTY TRAFFIC ENGINEERING MAY HAVE UNDERGROUND CONDUIT FOR TRAFFIC SIGNAL INTERCONNECTIONS AND EQUIPMENT IN THIS AREA. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONTACT SUNSHINE STATE ONE CALL SYSTEM AT 1-800-432-4770 FOR LOCATIONS OF THIS EQUIPMENT AT LEAST 72 HOURS PRIOR TO ANY CONSTRUCTION.
6. ALL IMPACTS TO THE RIGHT-OF-WAY SHALL BE SODDED WITHIN THREE (3) DAYS OF FINAL GRADING.
7. PARKING STALL WIDTHS SHALL BE DIMENSIONED FROM CENTERLINE TO CENTERLINE OF THE WHITE STRIPES.
8. IT IS THE PROJECTS RESPONSIBILITY TO COORDINATE REMOVAL OR RELOCATION OF ANY ITEM ON SITE OR OFF-SITE THAT RELATES TO TRAFFIC (EX. FIBER/POWER BOXES, STREET LIGHTING, SIGNAGE, ETC.)

ISSUE	DATE	COMMENTS
1	01/03/24	TRC RESUBMITTAL
2	04/23/24	TRC RESUBMITTAL NO.2
3	05/09/24	TRC RESUBMITTAL NO.3
4	07/19/24	CONTRACTOR REV
5	09/16/24	REVISION

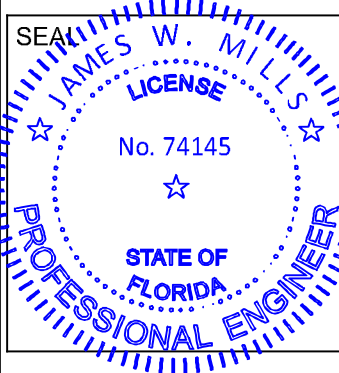
LA-Z-BOY VERO	6366 20TH STREET VERO BEACH, FL 32966	THIS SHEET	SITE PLAN	CHECKED BY JWM	DRAWN BY WBD	APPROVED BY JWM	SCALE: SEE SHEET
---------------	--	------------	-----------	-------------------	-----------------	--------------------	---------------------

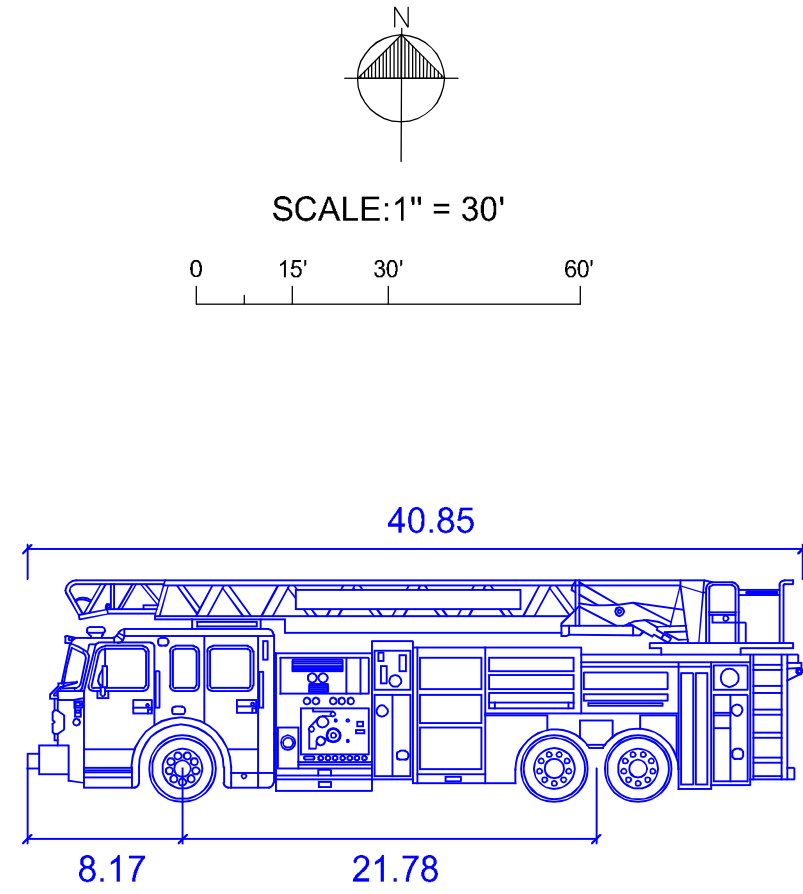
PROJ. NO.	23-1160
DATE	11/07/2023
SHEET NO.	

C-2A

Mills, Short & Associates
PHONE: 772.226.7282
C.A. #: 30696
WEBSITE:
www.MillsShortAssociates.com

Digitally signed by James Mills
DN: CN=James Mills,
E=jmills@millsshortassociates.co
G=James, SN=Mills, C=US
Date: 2024.11.07 14:28:09 -0500

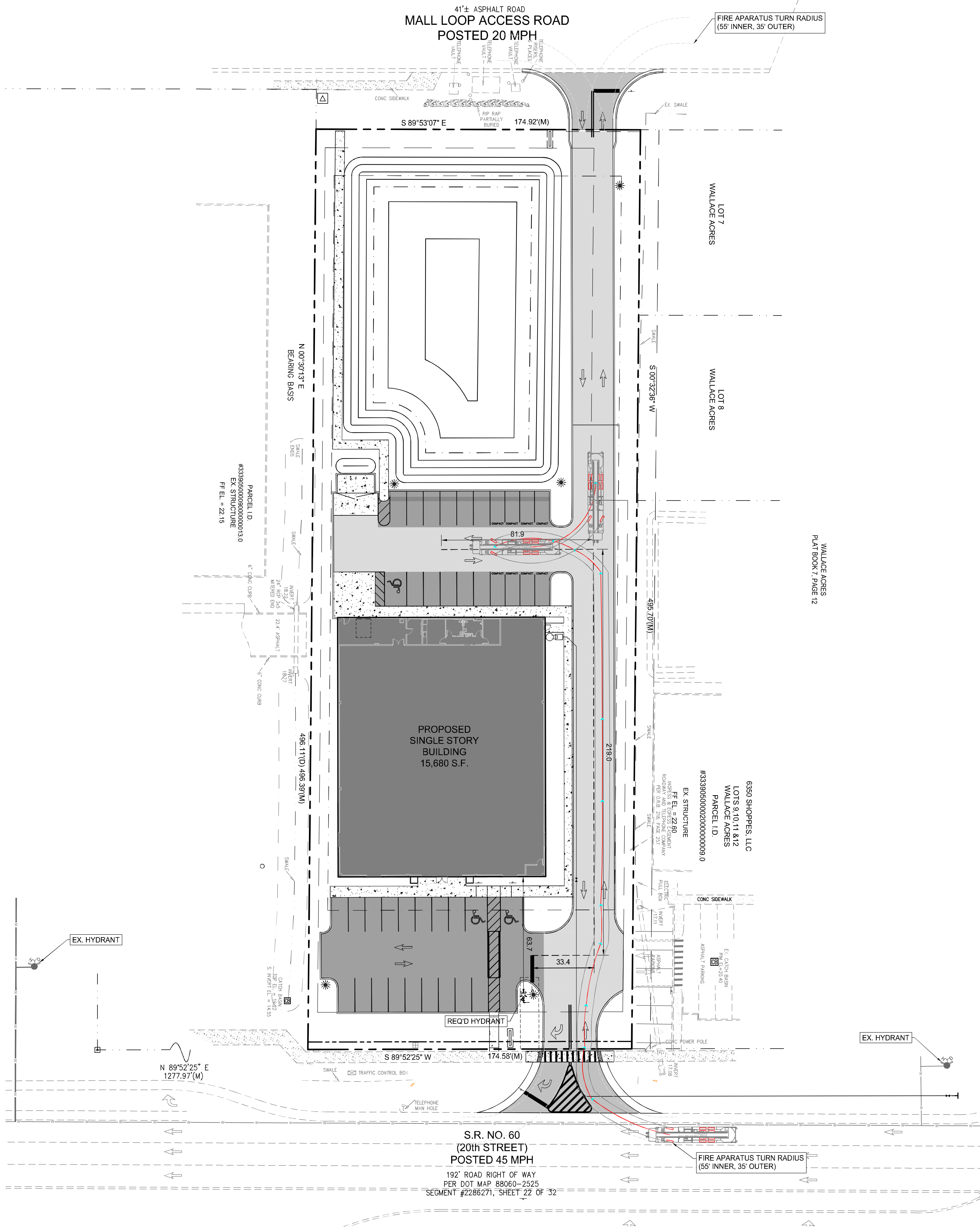




Spartan Gladiator Star Series Aerial

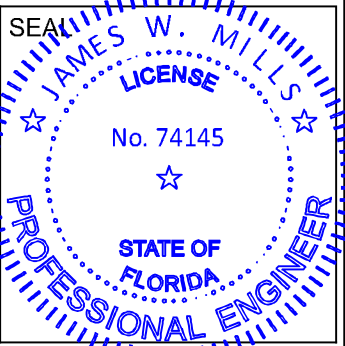
Feet
Width : 8.23
Track : 7.87
Lock to Lock Time : 6.0 s
Steering Angle : 46.3 deg

LEGEND:	
	PROPOSED BUILDING
	PROPOSED ASPHALT (HEAVY DUTY)
	PROPOSED ASPHALT (STANDARD)
	PROPOSED ASPHALT (WITHIN ROW)
	PROPOSED CONCRETE
	EXISTING CONCRETE
	PROPOSED OPEN SPACE



Mills, Short & Associates
PHONE: 772.226.7282
C.A. #: 30698
700 22nd Place, Suite 2C2D
Vero Beach, Florida 32960
WEBSITE: www.MillsShortAssociates.com

Digitally signed by James Mills
DN: cn=James Mills
e=jmills@millsshortassociates.com,
ou=James Mills, c=US
Date: 2024.11.07 14:26:11 -0500

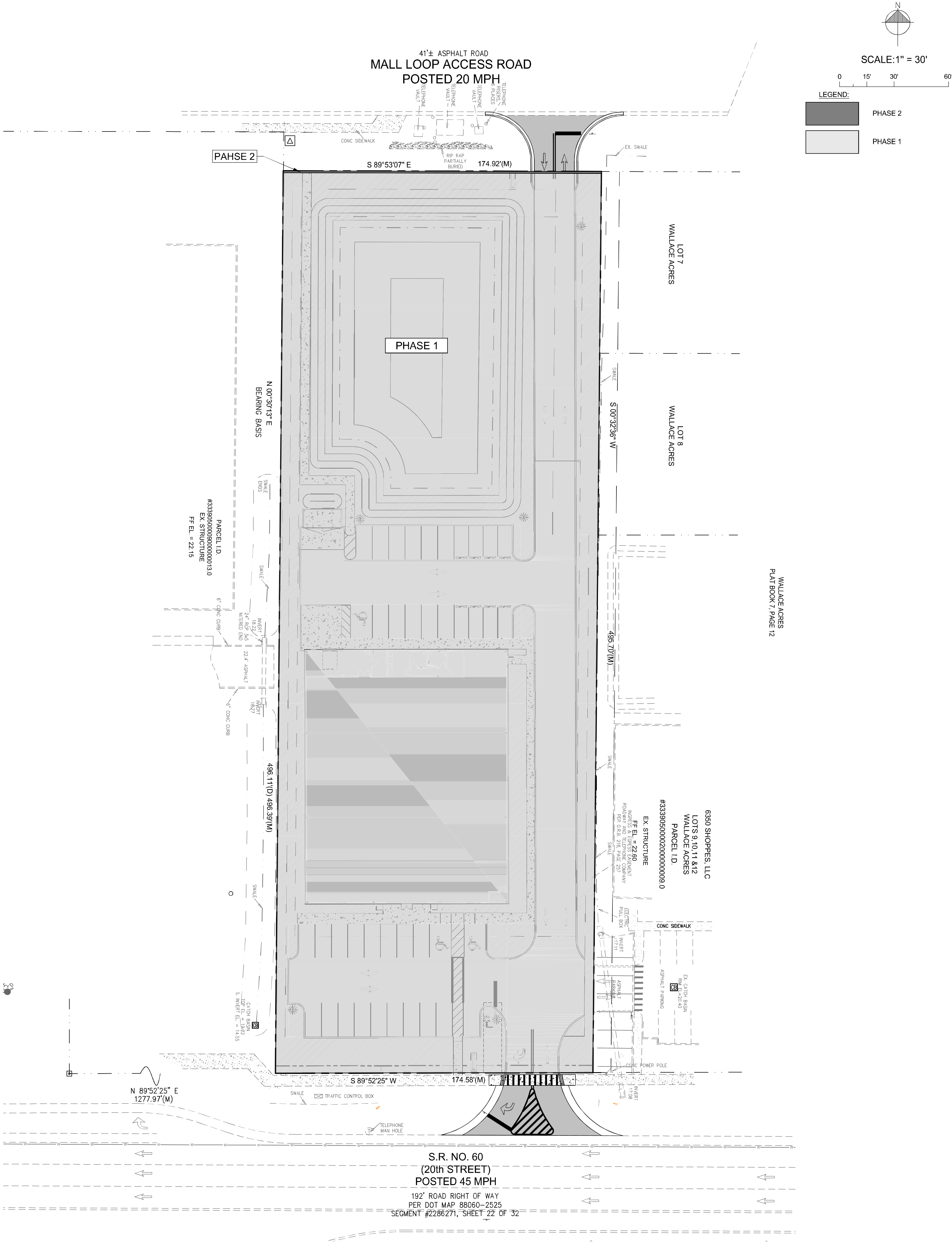


ISSUE	DATE	COMMENTS
	01/03/24	TRC RESUBMITTAL
	04/23/24	TRC RESUBMITTAL NO.2
	05/09/24	TRC RESUBMITTAL NO.3

LA-Z-BOY VERO 6366 20TH STREET VERO BEACH, FL 32966		SITE CIRCULATION PLAN	
THIS SHEET		DRAWN BY WBD	
APPROVED BY JWM		CHECKED BY JWM	
SCALE: SEE SHEET		APPROVED BY JWM	

PROJ. NO.	23-1160
DATE	11/07/2023
SHEET NO.	

C-2B



James Mills

James W. Mills, P.E.

Professional Engineer

No. 74145

STATE OF FLORIDA

Professional Engineer

Digitally signed by James Mills

CN=Jim Mills

E=jmills@mills-short.com

O=Mills-Short Associates, LLC

C=FL

DN: cn=James Mills, email=jmills@mills-short.com, o=Mills-Short Associates, LLC, c=FL

Date: 2024.11.07 14:26:13 -0500

Mills, Short & Associates

PHONE: 772.226.7282

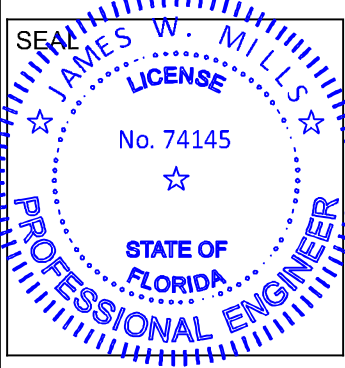
C.A. #: 30698

700 22nd Place, Suite 2C2D

Vero Beach, Florida 32960

WEBSITE:

www.MillsShortAssociates.com



ISSUE	DATE	COMMENTS
1	01/03/24	TRC RESUBMITTAL
2	04/23/24	TRC RESUBMITTAL NO.2
3	05/09/24	TRC RESUBMITTAL NO.3
4	07/19/24	CONTRACTOR REV
5	09/16/24	REVISION

LA-Z-BOY VERO

6366 20TH STREET

VERO BEACH, FL 32966

THIS SHEET

PHASING PLAN

APPROVED BY

JWM

CHECKED BY

JWM

SCALE:

SEE SHEET

PROJ. NO.

23-1160

DATE

11/07/2023

SHEET NO.

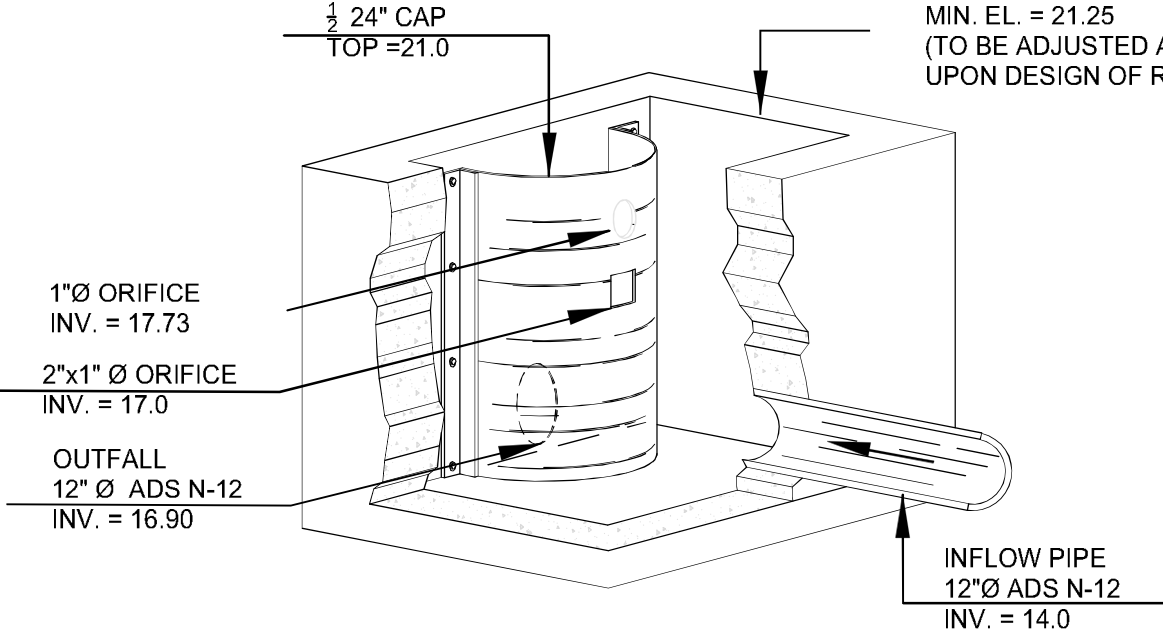
C-2C

GRADING LEGEND

- EXISTING GRADE
PROPOSED TYPE "C" D.S.
PROPOSED SPOT ELEVATION
PROPOSED EDGE OF PAVEMENT ELEVATION
PROPOSED TOP OF CURB ELEVATION
PROPOSED DRAINAGE PATTERN
PROPOSED ADS N-12 PIPE
LEGEND:
PROPOSED BUILDING
PROPOSED ASPHALT (HEAVY DUTY)
PROPOSED ASPHALT (STANDARD)
PROPOSED ASPHALT (WITHIN ROW)
PROPOSED CONCRETE
EXISTING CONCRETE
PROPOSED OPEN SPACE

SCALE: 1" = 30'

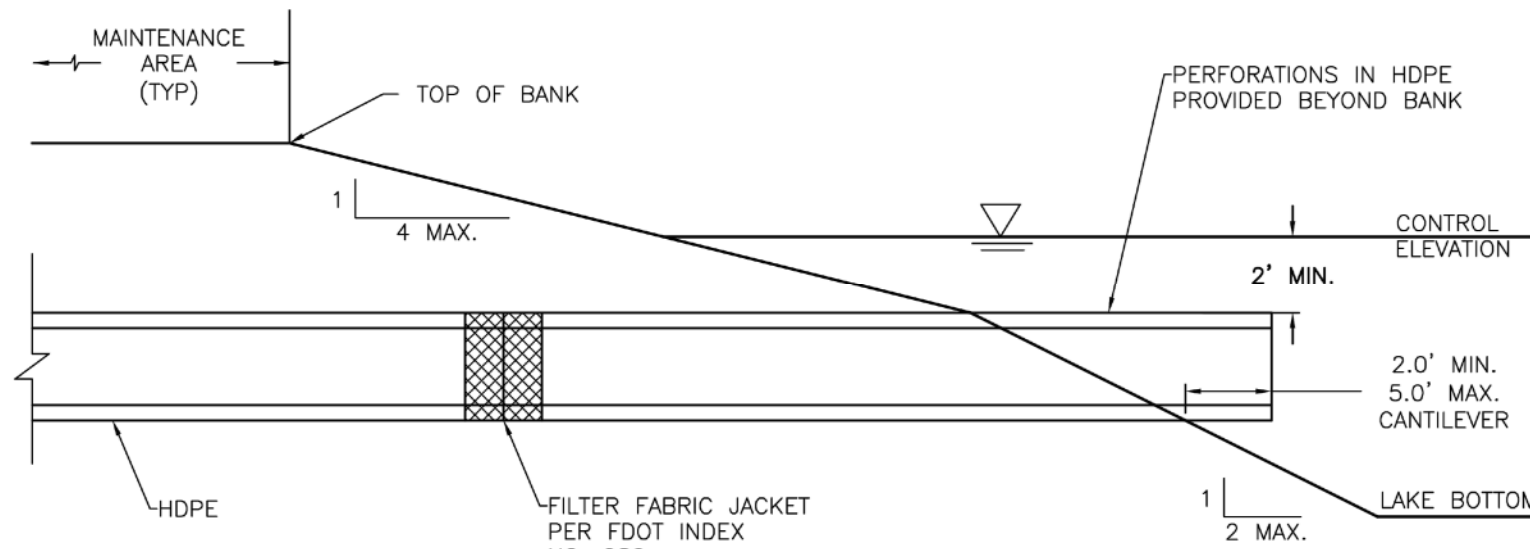
STRUCTURE TOP TO BE MANHOLE
TOP PER FDOT INDEX #425-001
MIN. EL. = 21.25
(TO BE ADJUSTED AS NEEDED
UPON DESIGN OF ROADWAY)



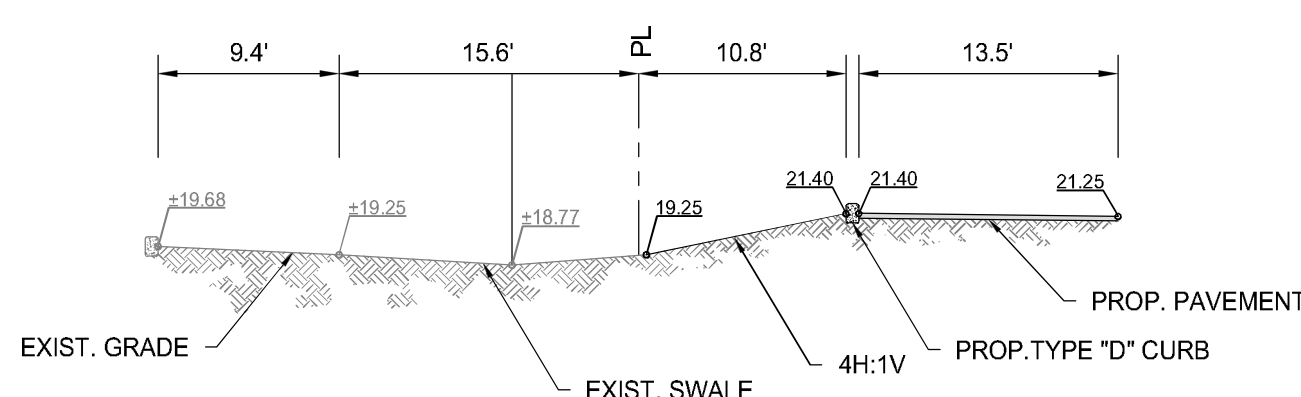
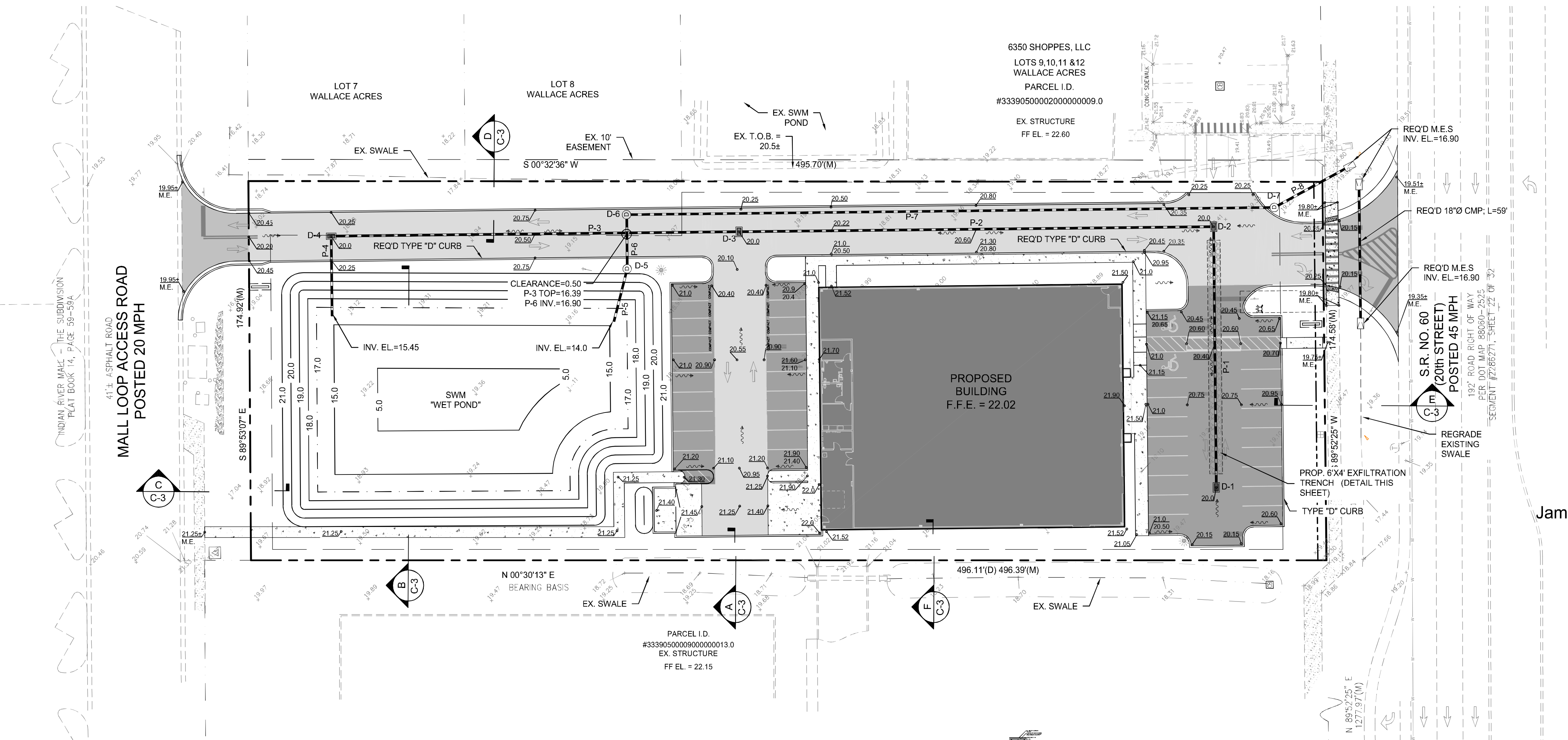
CONTROL STRUCTURE
(MODIFIED FDOT TYPE 'C' INLET)
N.T.S.

Drainage Pipe Table					
Pipe	Type	Length [ft]	Diameter [in]	Slope [ft/ft]	
P-1	ADS N-12 PERFORATED	116	18	0.28%	
P-2	ADS N-12	216	18	0.28%	
P-3	ADS N-12	185	18	0.28%	
P-4	ADS N-12	36	18	0.28%	
P-5	ADS N-12	25	15	0.28%	
P-6	ADS N-12	21	15	0.28%	
P-7	ADS N-12	296	15	0.28%	
P-8	ADS N-12	34	15	0.28%	

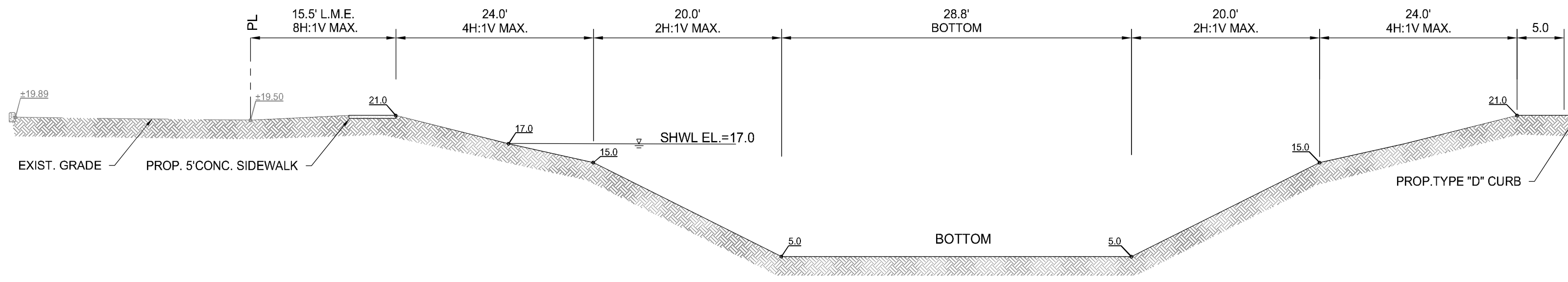
Drainage Structure Table						
Structure	Type	Top	Invert			
			North	South	East	West
D-1	Type-C	20.00			16.90	
D-2	Type-C	20.00	16.48			16.58
D-3	Type-C	20.00	15.87	15.87		
D-4	Type-C	20.00		15.35		15.35
D-5	Control Structure	21.25	See Sheet C-3 for Details			
D-6	FDOT Manhole	20.53		16.90		16.90
D-7	FDOT Manhole	19.50	16.90	16.90		



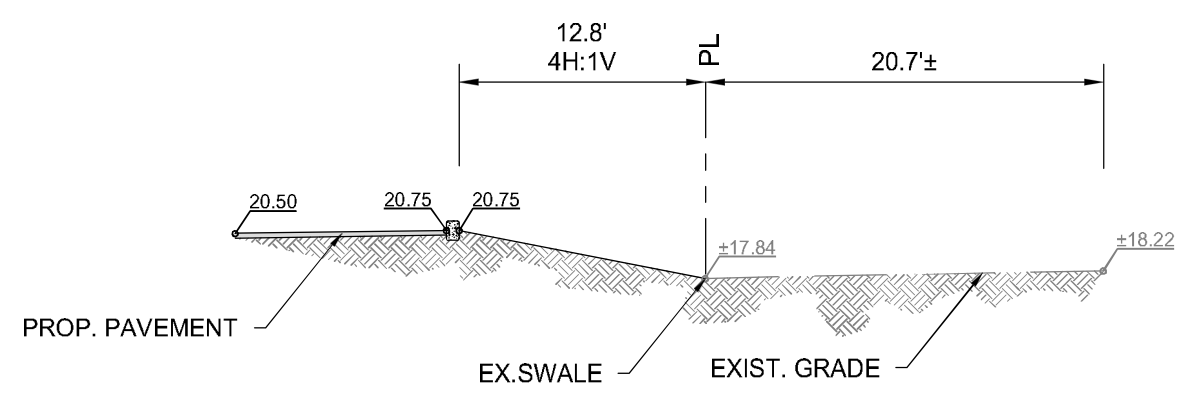
HDPE PIPE INFLOW INSTALLATION DETAIL
SCALE: N.T.S.



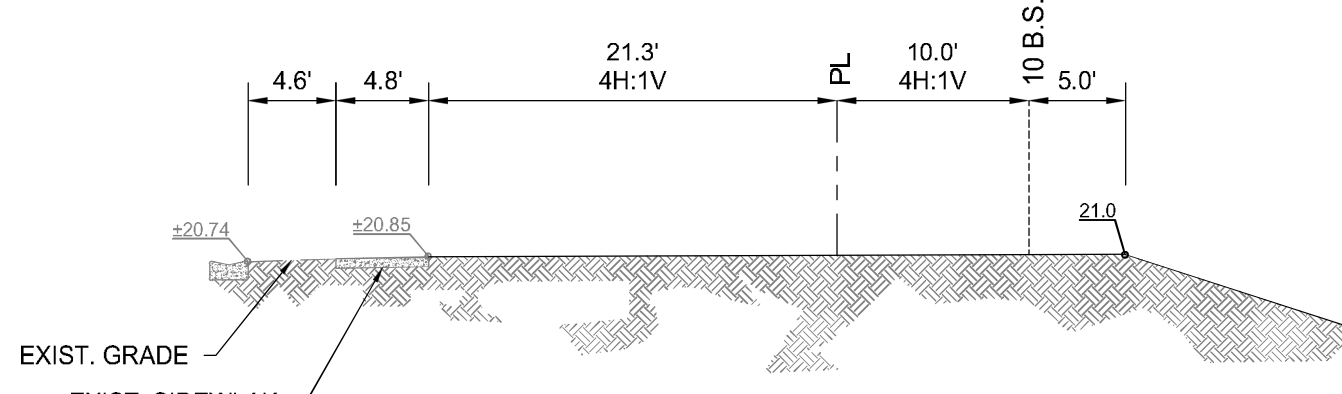
SECTION A:
N.T.S.



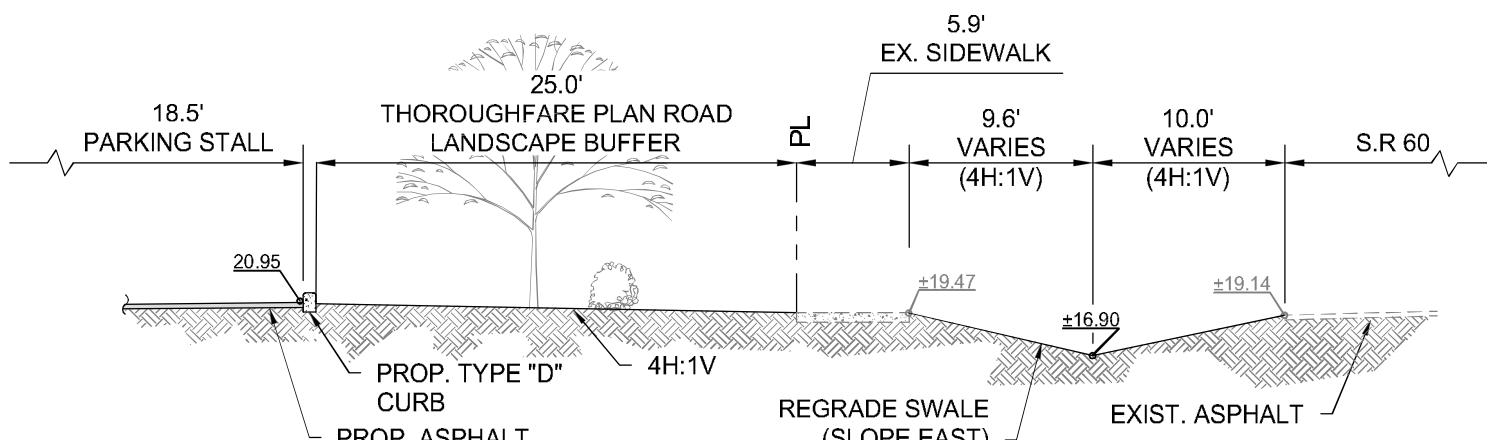
SECTION B:
N.T.S.



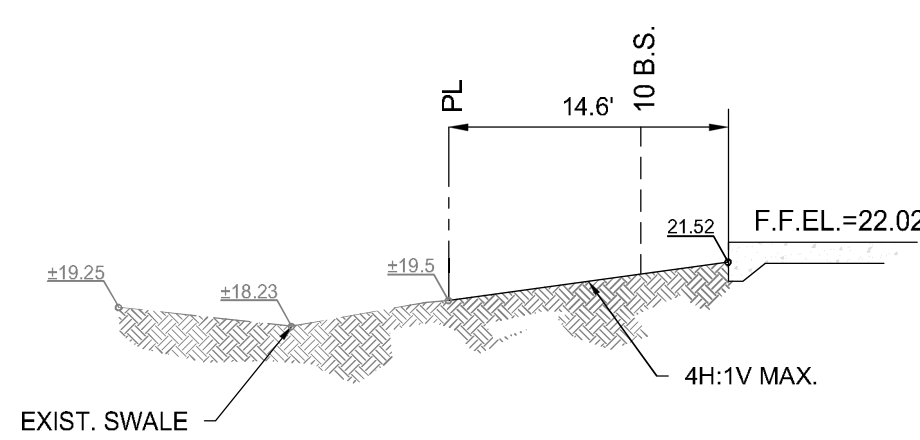
SECTION C:
N.T.S.



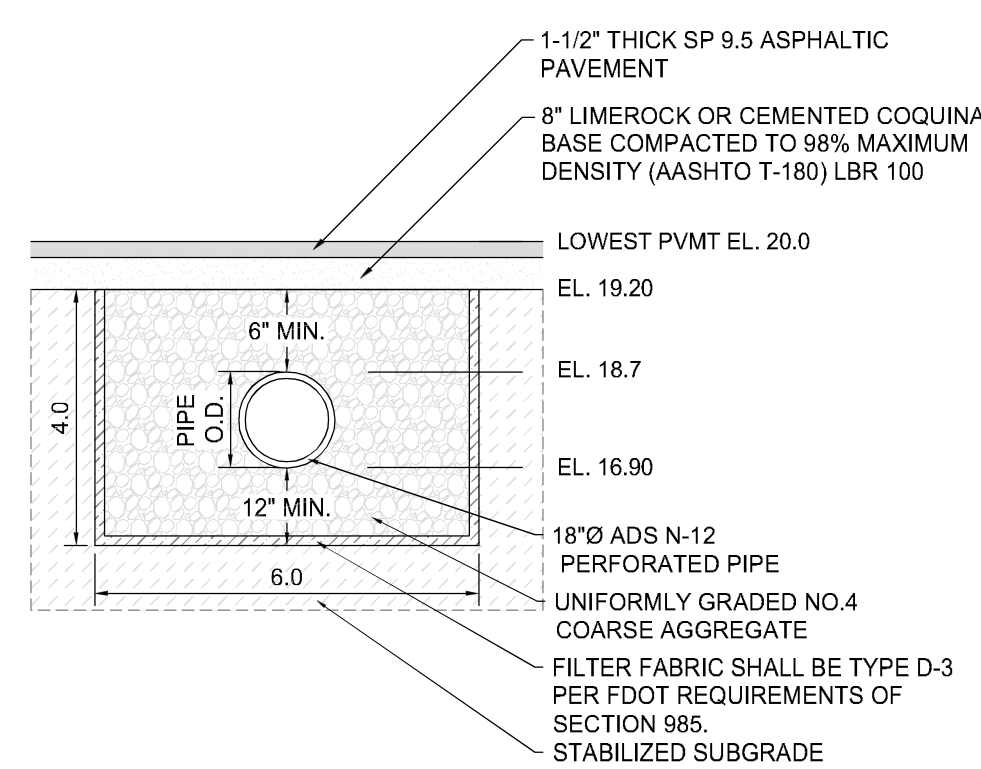
SECTION D:
N.T.S.



SECTION E:
N.T.S.

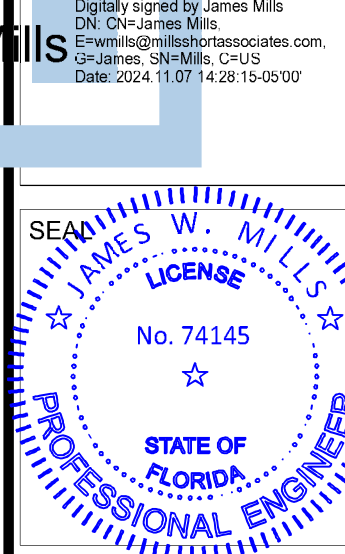


SECTION F:
N.T.S.



EXFILTRATION TRENCH DETAIL
N.T.S.

Mills, Short & Associates
WEBSITE: www.MillsShortAssociates.com
PHONE: 772.226.7282
C.A. #: 30698
700 22nd Place, Suite 2C2D
Vero Beach, Florida 32960



DATE	ISSUE	COMMENTS
01/03/24		TRC RESUBMITTAL NO. 2
01/23/24		TRC RESUBMITTAL NO. 2
05/09/24		TRC RESUBMITTAL NO. 3

DATE	ISSUE	COMMENTS
01/03/24		TRC RESUBMITTAL NO. 2
01/23/24		TRC RESUBMITTAL NO. 2
05/09/24		TRC RESUBMITTAL NO. 3

DATE	ISSUE	COMMENTS
01/03/24		TRC RESUBMITTAL NO. 2
01/23/24		TRC RESUBMITTAL NO. 2
05/09/24		TRC RESUBMITTAL NO. 3

DATE	ISSUE	COMMENTS
01/03/24		TRC RESUBMITTAL NO. 2
01/23/24		TRC RESUBMITTAL NO. 2
05/09/24		TRC RESUBMITTAL NO. 3

LA-Z-BOY VERO
6366 20TH STREET
VERO BEACH, FL 32966

PROJ. NO. 23-1160
DATE 11/07/2023
SHEET NO. C-3

[illegible]

GENERAL NOTES:

1. Use Class II concrete.
2. Reinforcing steel #4 bars are size #4. Spacing shall not exceed 16 inches. Bars to be 2'-0" minimum. Cover is 2" unless otherwise shown. Reinforced and Plain (see upper sheet details) are acceptable for concrete and 60,000 PSI steel. See AISC for bar reinforcement.
3. Endwall may be left in place or grout encased. Grout encased joints are only to be used when, or as shown in separate sheet. Reinforce into beams A21003 for seismic and grouting details.
4. Questions shall be for clarifying purposes only.

TABLE OF CONTENTS:	
Sheet	Description
1	General Notes and Contents
2	Overwalling and Reinforcing Details
3	Upper and Lower Pipe Endwall Details

**U-TYPE CONCRETE ENDWALLS 15" TO 30" PIPES WITH GRATES
(24" Pipe Shown)**

TABLE 1 SLOPE TRANSITIONS			
Base Size	Base Flow Rate (cfs)	Base Flow Rate (gpm)	Base Flow Rate (l/s)
15"	1.0	4.2	0.3
20"	1.6	6.7	0.5
24"	2.5	10.6	0.8
30"	4.1	17.3	1.3

FRONT SLOPE TRANSITION AT ENDWALL

[illegible]

Figure 10: Alternative design options for the 10' wide, 10' high concrete retaining wall. The figure shows four sets of drawings for two options, Option A and Option B. Each set includes an isometric view, a plan view, and a side elevation view. Option A features a 2' thick base and a 2' thick stem. Option B features a 2' thick base and a 2' thick stem. The drawings show the wall's relationship to the existing curb, sidewalk, and road. Dimensions are provided for the wall, base, and surrounding areas.

LAST
REVISION
11/01/21

FY 2023-24
STANDARD PLANS

INDEX
711-001

OF 13
II of 13

PAVEMENT MARKINGS

SECTION A-A
(Per Existing Roadway)

SECTION B-B
(Per Existing Roadway)

SECTION C-C

SECTION D-D

STEEL GRATE DETAIL

(Upper, 144 Lbs. - See Sheet 7 for Cast Iron Grates)

SECTION A-A
(Per Existing Roadway)

SECTION B-B
(Per Existing Roadway)

SECTION C-C

SECTION D-D

TABLE 1

HORIZONTAL WALL REINFORCING SCHEDULE

WALL DEPTH	SPACING (IN/FT)	BAR SIZE	BAR TYPE
0 - 12"	48"	#3	WFL

NOTES:

1. Grates, Concrete deck, and Cast Iron Girders on existing Roadway.
2. See Sheet 6, 8, and 10 for Grates, Girders, and Reinforcing Details.

SECTION D AND REINFORCING DETAILS

SECTION
1/0/2/1

FT 2023-24
STANDARD PLANS

INDEX
430-00

100%
1/0/2/1

Grate
Sidewalk
Concrete Apron
Ditch Area

Grate
Sidewalk
Concrete Apron
Ditch Area

GENERAL NOTES:

1. Show City Slopes with Index 420-801 and Index 425-010.
2. Clarifier All inlets except and (except 10' Clarifier or larger is 10' radius).
3. All inlets except 10' and 15' shall be 10' radius. Cover unless otherwise noted.
For all inlets 10' and 15' (except 10' and 15' apron) provide one additional 10' or 15' apron on each side of each inlet.
4. For Concrete apron or other retaining walls and inlets with non-removable walls unless noted for 10' radius.
5. Specifications are for informational and estimating purposes only.

DITCH BOTTOM INLET TYPE C

=====

TRAFFICABLE

(Without Sidewalk - Type D, E, and H Similar, Page Connection Not Shown)

DITCH BOTTOM INLET TYPE C

=====

NON-TRAFFICABLE

(Sidewalk - Type D, E, and H Similar, Page Connection Not Shown)

TABLE OF CONTENTS	
Sheet	Description
1	General Notes and Contents
2	Type C - Dimensional, Reinforcing, and Grate Details
3	Type D - Dimensional, Reinforcing, and Grate Details
4	Type E - Dimensional, Reinforcing, and Grate Details
5	Type F - Dimensional, Reinforcing, and Grate Details
6	Type G - Dimensional, Reinforcing, and Grate Details
7	Type H - Grate - Dimensional, Reinforcing, and Grate Details
8	Grate Area Grate Details
9	Non-Trafficable Inlet Details
10	Franciscan Inlet Reinforced Sidewalk Details
11	Franciscan Inlet Reinforced Sidewalk Details
12	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
13	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
14	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
15	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
16	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
17	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
18	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
19	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
20	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
21	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
22	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
23	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
24	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
25	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
26	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
27	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
28	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
29	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
30	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
31	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
32	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
33	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
34	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
35	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
36	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
37	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
38	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
39	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
40	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
41	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
42	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
43	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
44	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
45	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
46	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
47	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
48	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
49	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
50	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
51	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
52	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
53	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
54	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
55	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
56	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
57	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
58	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
59	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
60	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
61	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
62	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
63	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
64	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
65	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
66	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
67	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
68	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
69	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
70	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
71	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
72	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
73	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
74	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
75	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
76	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
77	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
78	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
79	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
80	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
81	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
82	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
83	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
84	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
85	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
86	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
87	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
88	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
89	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
90	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
91	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
92	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
93	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
94	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
95	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
96	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
97	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
98	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
99	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index
100	Grate - 1' and 1.5' Reinforced Sidewalk for Fixing Index

DATE	DESCRIPTION	PROJECT	DATE	SECTION	NO.
01/11/2021		FD 2023-24 STANDARD PLANS		DETECTABLE WARNINGS AND SIDEWALK CURB RAMPS	522-002
GENERAL NOTES:					
Note 105 (24) has been reclassified 423 and 430s 423-001.					
Type 1 detectable structure shall be 4" high, square and made from 1/2" gal. steel plate (ASTM A36). Larger detectable structure shall be reclassified Type 2. Risers are permitted for all structures.					
Riser of circular structures (80% of circumference) in place may be left as is or reclassified (source: Concrete, precast and cast-in-place concrete) (ASTM A36). Riser of rectangular structures may be left as is or reclassified with ASTM A36 (see Table 1).					
Wall thickness and reinforcement are for either reinforced cast-in-place or precast concrete with rebar. All structural walls may be furnished with walls as indicated with ASTM A36 (see Table 1).					
Type 2 detectable walls thickness and reinforcement are for precast and cast-in-place construction with Class II concrete unless other Class II concrete is shown in the Plans.					
As for A-6, all detectable structures may be used to reclassify with cast steel (see Tables 1, 2, 3, 4, 5, 6, and 7) and any surface of concrete less than 4" thick. All structures fabricated with steel shall be in accordance with Table 7 and 8, or may also fabricate.					
Acoustically detectable may be replaced as directed by the Engineer in order to facilitate construction against the structure walls and base.					
The original reinforcement (rebar) for the detectable shall remain where #2 bars are not acoustically required.					
Reinforced concrete fillers are required for rectangular structures with circular risers and ring risers, and over and on steel with rectangular risers, risers, and ring risers. Reinforced fillers in the top and on the side of concrete structures shall meet with Type 2 and 3. Reinforced fillers shall be 4" deep.					
Units larger than specified dimensions may be substituted at the contractor's option if these units will allow or increase the quantity of safety surface. Cast steel larger units will be substituted with the same quantity of safety surface.					
Units larger than specified may be substituted at the contractor's option if these units will allow or increase the quantity of safety surface. All cast steel without approval of the Engineer. These units shall be substituted with the same quantity of safety surface.					
REINFORCEMENT NOTES:					
Locate and reinforcement in rectangular structures as shown in the WALL REINFORCEMENT DETAIL (SEE TABLE 1) IN INDEX 423-001.					
Provide a minimum 3" concrete cover for all reinforcement unless otherwise noted and design for 100% CORROSION (ASTM A305).					
Reinforcing bars used to restrain hole formers for precast structures with precast plate connections may be left flush with the top surface.					
Cast in place reinforcement at slope positions as noted.					
Reinforce exposed ends of reinforcing in rectangular structures and precast joints in 1" finish the concrete with the last with a Type 2 finish (see the requirements of Specification 105).					
Equivalent cross section of reinforced welded steel reinforcement may be substituted in accordance with index 423-001.					
TABLE OF CONTENTS:					
Sheet					
1. General and Reinforcing Details					
2. Tables 1, 2, 3, and 4					
3. Tables 5 and 6					
4. Table 7 and 8					
5. Table 9					
6. Table 10					
7. Table 11					
8. Table 12					
9. Table 13					
10. Table 14					
11. Table 15					
12. Table 16					
13. Table 17					
14. Table 18					
15. Table 19					
16. Table 20					
17. Table 21					
18. Table 22					
19. Table 23					
20. Table 24					
21. Table 25					
22. Table 26					
23. Table 27					
24. Table 28					
25. Table 29					
26. Table 30					
27. Table 31					
28. Table 32					
29. Table 33					

[illegible][illegible]

ITEM NO.	DESCRIPTION	FY 2023-24 STANDARD PLANS	DITCH BOTTOM INLET TYPES C, D, E, AND H	INDEX 425-05C2	DATE 1 of 14
	<p>STANDARD PRE-PAINTED DISABLED PARKING SIGN ON $\frac{3}{8}$" THICK SHEET ALUMINUM</p> <p>WHITE BACKGROUND & SYMBOL BLUE BACKGROUND (TOP OF SIGN)</p> <p>BLACK BACKGROUND & LETTERS WHITE BACKGROUND (MIDDLE)</p> <p>BLACK BACKGROUND & LETTERS WHITE BACKGROUND (BOTTOM)</p> <p>NOTE: ALL LETTERS</p>				

NO DESCRIPTION	FY 2023-24	TYPE P		
ORDER NO.	FDOT STANDARD PLANS	STRUCTURE BOTTOMS TYPE J AND P	PRICE 476.000	SHEET 1 of 4
DIST NO.				

LAT POLYMER GEL-20		DESCRIPTION	FY 2023-24 STANDARD PLANS	DIMENSIONAL AND REINFORCING DETAILS	SHEET NO.	7 OF 8
	M			STRUCTURE BOTTOMS TYPE J AND P	\$76.00	94E.P.1

B. MINIMUM COVER: MINIMUM COVER, IN NON-TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREAS) IS 12" FROM THE TOP OF PIPE TO GROUND SURFACE. ADDITIONAL COVER MAY BE REQUIRED TO PREVENT FLOTATION. FOR TRAFFIC APPLICATIONS, MINIMUM COVER, IN IS 12" UP TO 48" DIAMETER PIPE AND 24" OF COVER FOR 60" DIAMETER PIPE, MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF RIGID PAVEMENT. FOR TRAFFIC APPLICATIONS WITH LESS THAN FOUR FEET OF COVER, EMBEDMENT OF THE PIPE SHALL BE USING ONLY A CLASS 0 OR CLASS 1 BACKFILL.

© 2006, INC.

ADVANCED DRAINAGE SYSTEMS, INC. HAS NOT PREPARED THIS DETAIL BASED ON INFORMATION PROVIDED TO ADR. THIS DRAWING IS PREPARED TO PROVIDE THE COMPONENTS AS DESCRIBED. NO GUARANTEE OR REPRESENTATION OF DESIGN BETWEEN THE DESIGNER, RECOMMENDATIONS AND ARE NOT SPECIFIC FOR THIS PROJECT. THE DESIGNER SHALL REVIEW THESE DETAILS PRIOR TO CONSTRUCTION. IT IS THE DESIGN ENGINEER'S RESPONSIBILITY TO ENSURE THE DETAILS PROVIDED HEREIN MEET ALL APPLICABLE NATIONAL, STATE, OR LOCAL REQUIREMENTS AND TO ENSURE THAT THE DETAILS PROVIDED HEREIN ARE ACCEPTABLE FOR THIS PROJECT.

#	ITEMS SCHEDULE	BY	REVISION	DATE
4	DESCRIPTION	DR	MINORITY	04/01

TRAFFIC INSTALLATION

DETAIL (N-12 TO P-16R AASHTO)

DRAWING NUMBER: STD-101

ADS
ADVANCED DRAINAGE SYSTEMS, INC.

12" MIN. COVER TO TOP OF PIPE TO GROUND SURFACE
NO HYDROSTATIC PRESSURE
UNIT WEIGHT OF SOIL (γ_S) = 120 PCF

STANDARD CROSSWALK DETAILS

SPECIAL EMPHASIS CROSSWALK DETAILS

NOTES:

- For crosswalk width, cover width of the adjacent sidewalk, but do not make width less than 6' for intersection crosswalks and 10' for median crosswalks. Measure width from the inside of the concrete curb/sidewalk curbs.
- When the Special Emphasis Crosswalk is not perpendicular to the lane lines, show the lengthmark markings parallel to the lane lines.
- Refer to Table S20-400 when Curb Ramps are present.


LAST
REVISION
01/01/21

DESCRIPTION
FY 2023-24
STANDARD PLANS

PAVEMENT MARKINGS

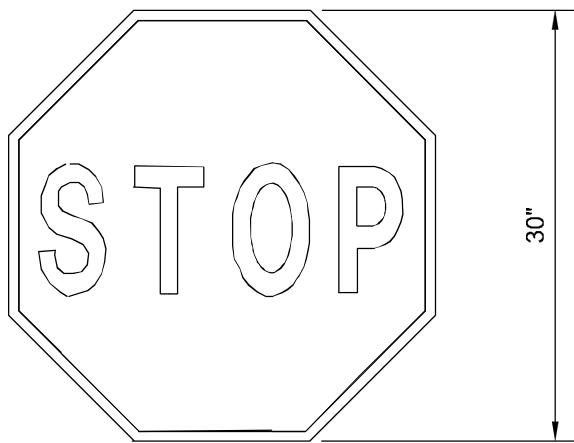
INDEX
711-001

9



WALL MOUNTED ACCESSIBLE SIGN DETAIL


SCALE: N.T.S.



R1-1

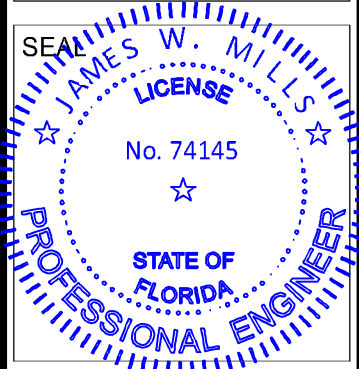
30" STOP SIGN

N.T.S.



Mills, Short & Associates
 PHONE: 772.226.7282
 C.A. #: 30698
 WEBSITE:
www.MillsShortAssociates.com

Digitally signed by James Mills
DN: CN=James Mills,
E=jmills@millsshortassociates.com
G=James, SN=Mills, C=US
Date: 2024.11.07 14:28:17.0000



ISSUE	DATE	COMMENTS
1	01/03/24	TRC RESUBMITTAL
2	04/23/24	TRC RESUBMITTAL NO.2
3	05/09/24	TRC RESUBMITTAL NO.3

			SCALE:	SEE SHEET
--	--	--	--------	-----------

APPROVED BY	JWM
-------------	-----

DESIGNED BY
M

Y VERO REET FL 32966	CH JW
----------------------------	----------

LA-Z-BC	THIS SHEET	PAV
6366 20TH ST		DRAWN BY
VERO BEACH		WBD

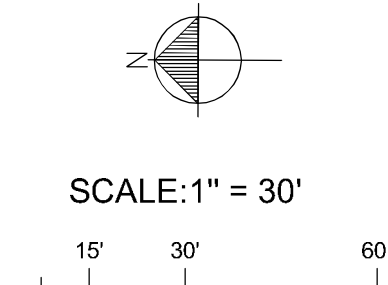
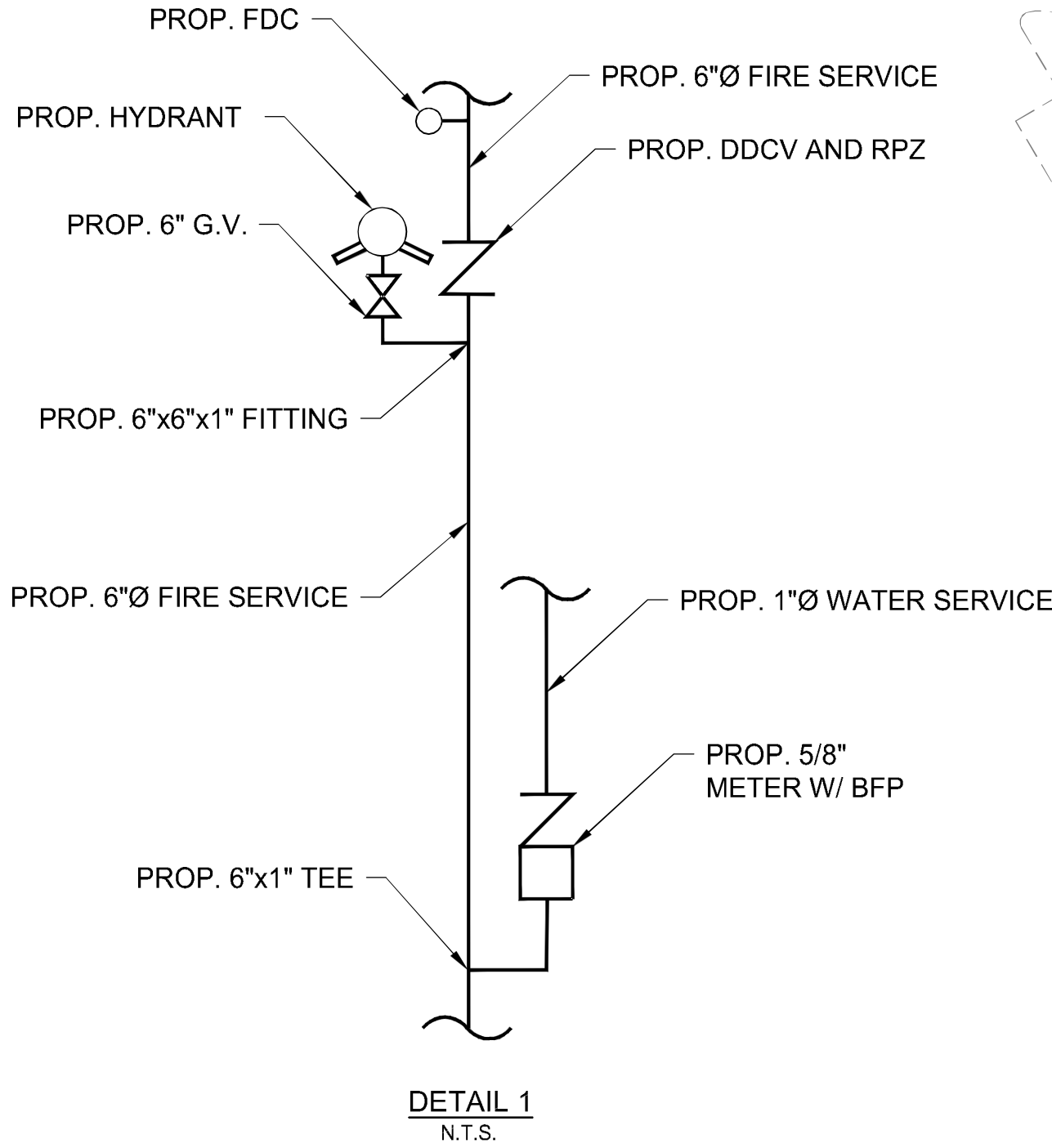
DATE	11/07/2023
SHEET NO.	

C-4A



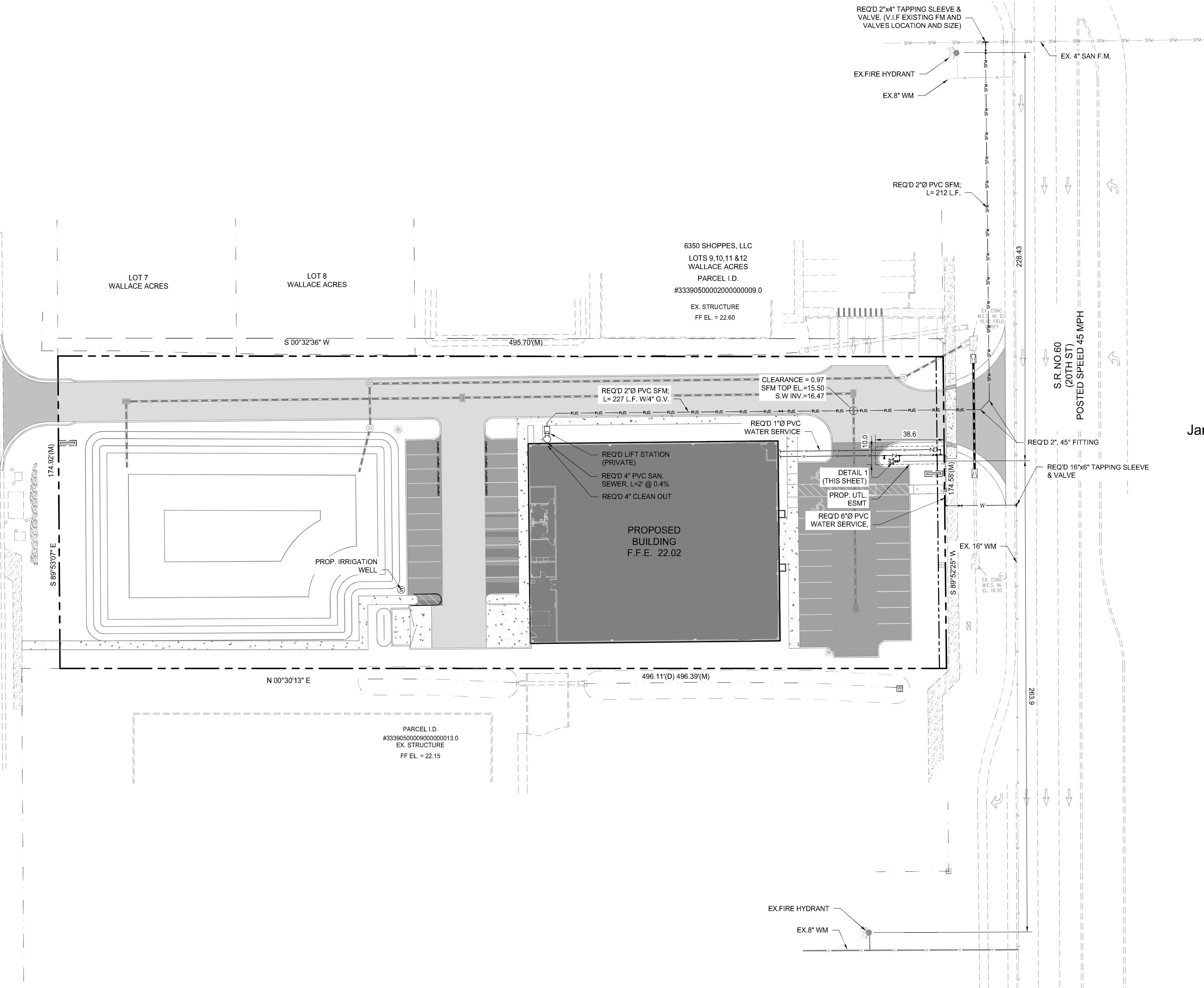
C-4B

- NOTE:
1. A 36" CLEAR SPACE SHALL BE MAINTAINED AROUND THE CIRCUMFERENCE OF FIRE HYDRANTS (FLORIDA STATE FIRE CODE 18.5.7.1).
 2. NO TREES SHALL BE PLACED WITHIN 10' OF ANY CITY UTILITY LINES. REFERENCE IRC UTILITY CONSTRUCTION STANDARDS FOR DETAILS.
 3. ALL PIPES 4" AND LARGER SHALL BE PIGGED.
 4. ALL GATE VALVES AND CURB STOPS SHALL NOT BE PLACED WITHIN ANY ROAD CURB AND GUTTER.
 5. VALVE BOX AND COVERS FOR MAIN VALVES AND CURB STOPS LOCATED WITHIN THE SIDEWALK, DRIVEWAY OR PAVEMENT SHALL BE THE THREE-PIECE SCREW TYPE SIMILAR TO STAR PIPE PRODUCTS VB-0001.
 6. CURB STOP SHALL BE USED INSTEAD OF GATE VALVES ON 2" AND SMALLER LINES. CORPORATION STOP IS NOT ALLOWED.
 7. WATER AND SANITARY SEWER IMPACT FEES WILL BE CALCULATED AND SHALL BE PAID FOR WHEN THE WATER SERVICE APPLICATIONS ARE PROCESSED PRIOR TO SETTING THE METER.
 8. OVER STORY TREES MUST BE LOCATED MORE THAN 12 FEET FROM A PUBLIC WATER, SEWER, RECLAIMED WATER, ELECTRIC, COMMUNICATION AND GAS, WITHIN THE CITY'S UTILITY SERVICE AREA, PER SECTION 19-15 OF THE CITY OF WINTER HAVEN UNIFIED LAND DEVELOPMENT CODE (ULDC).
 9. MAINTENANCE REQUIREMENTS, IT SHALL BE THE DUTY OF THE HOMEOWNER'S ASSOCIATION OR IN THE ABSENCE OF A HOA, PROPERTY OWNERS, TO PROVIDE PROPER MAINTENANCE OF THE TRAFFIC CONTROL MARKINGS AND SIGNAGE, INCLUDING PARKING LOT PAVEMENT MARKINGS AND SIGNAGE, AND STORMWATER MANAGEMENT SYSTEM SO THAT THE SYSTEM CONTINUES TO FUNCTION AS DESIGNED AND PERMITTED. THE CITY SHALL HAVE ACCESS TO INSPECT THE FACILITIES AND REQUIRE SUCH MAINTENANCE, REPAIR, AND REPLACEMENT OF FACILITIES AS NECESSARY.
 10. AS-BUILT/RECORD DRAWING REQUIREMENTS AND SUBMITTAL: UPON COMPLETION OF ALL PUBLIC UTILITY IMPROVEMENTS AND BEFORE ACCEPTANCE BY THE CITY, THE DEVELOPER'S ENGINEER SHALL SUBMIT "AS-BUILT DRAWING" FOR ALL PUBLIC WATER MAIN, RECLAIMED/REUSE WATER, GRAVITY SEWER, LIFT STATION AND FORCE MAIN IMPROVEMENTS. STATE PLANE COORDINATES (FLORIDA WEST) FOR ALL PUBLIC UTILITY INSTALLATIONS ARE REQUIRED. AS-BUILT INFORMATION SHALL INCLUDE THE LOCATION AND DEPTH OF THE UTILITY MAIN SYSTEM, INCLUDING THE TYPE OF PIPE AND FITTINGS. AS-BUILT DRAWINGS MUST BE SUBMITTED IN AUTOCAD FORMAT, INCLUDING THE POINT FILE, AND A HARD COPY SIGNED, SEALED AND DATED BY THE ENGINEER OF RECORD.
 11. ALL WATER MAINS, HYDRANT, DDCV AND METER SHALL MEET THE LANDSCAPING CLEAR ZONE REQUIREMENTS PER IRC/DUS CONSTRUCTION STANDARDS.



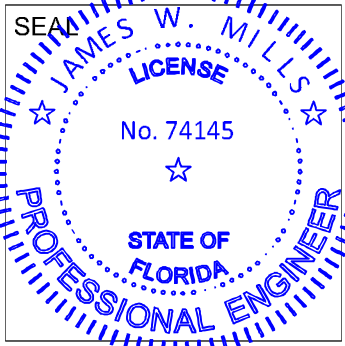
LEGEND:

	PROPOSED BUILDING
	PROPOSED ASPHALT (HEAVY DUTY)
	PROPOSED ASPHALT (STANDARD)
	PROPOSED ASPHALT (WITHIN ROW)
	PROPOSED CONCRETE
	EXISTING CONCRETE
	PROPOSED OPEN SPACE



Mills, Short & Associates
WEBSITE: www.MillsShortAssociates.com
PHONE: 772.226.7282
C.A. #: 30688
700 22nd Place, Suite 202D
Vero Beach, Florida 32960

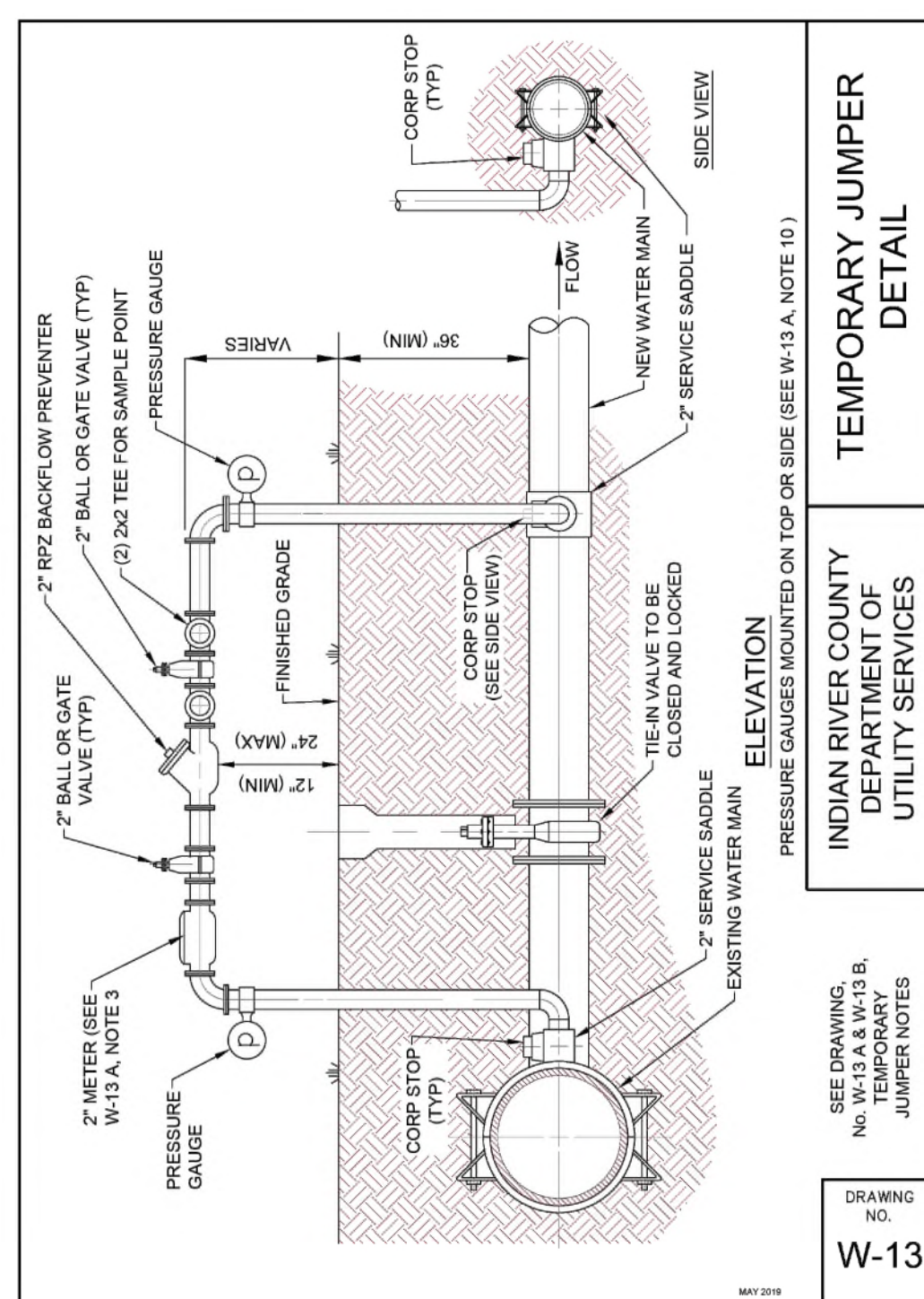
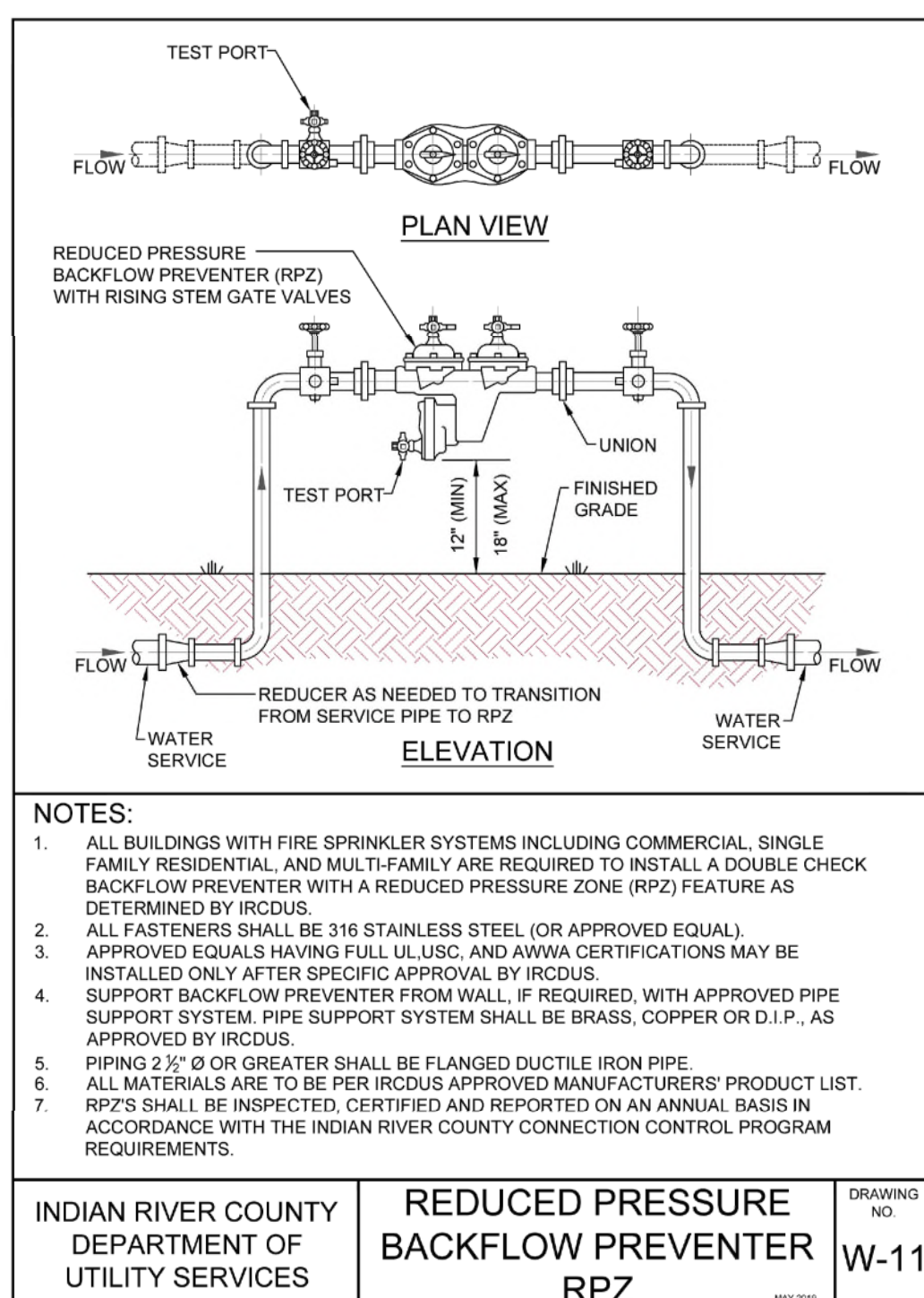
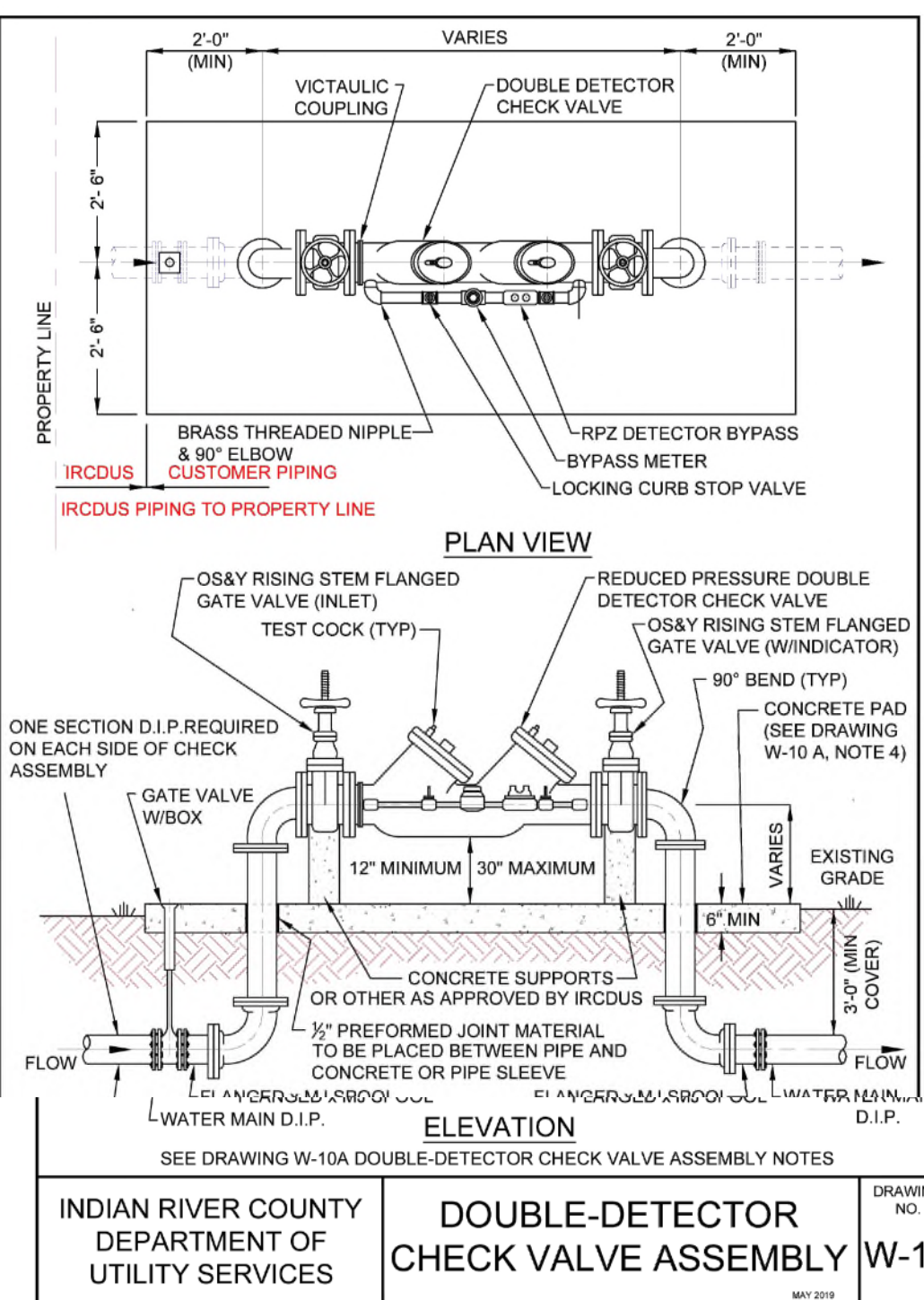
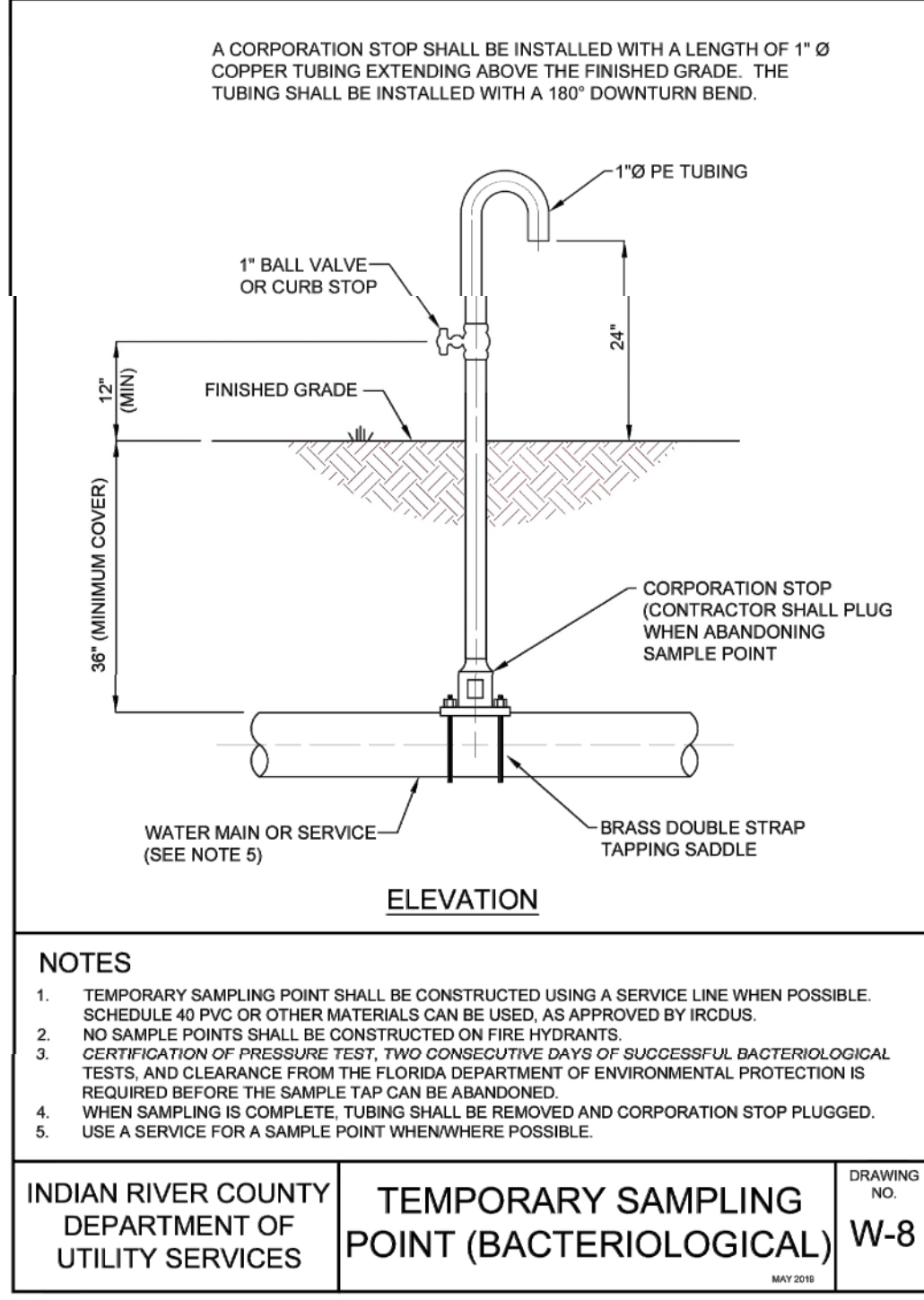
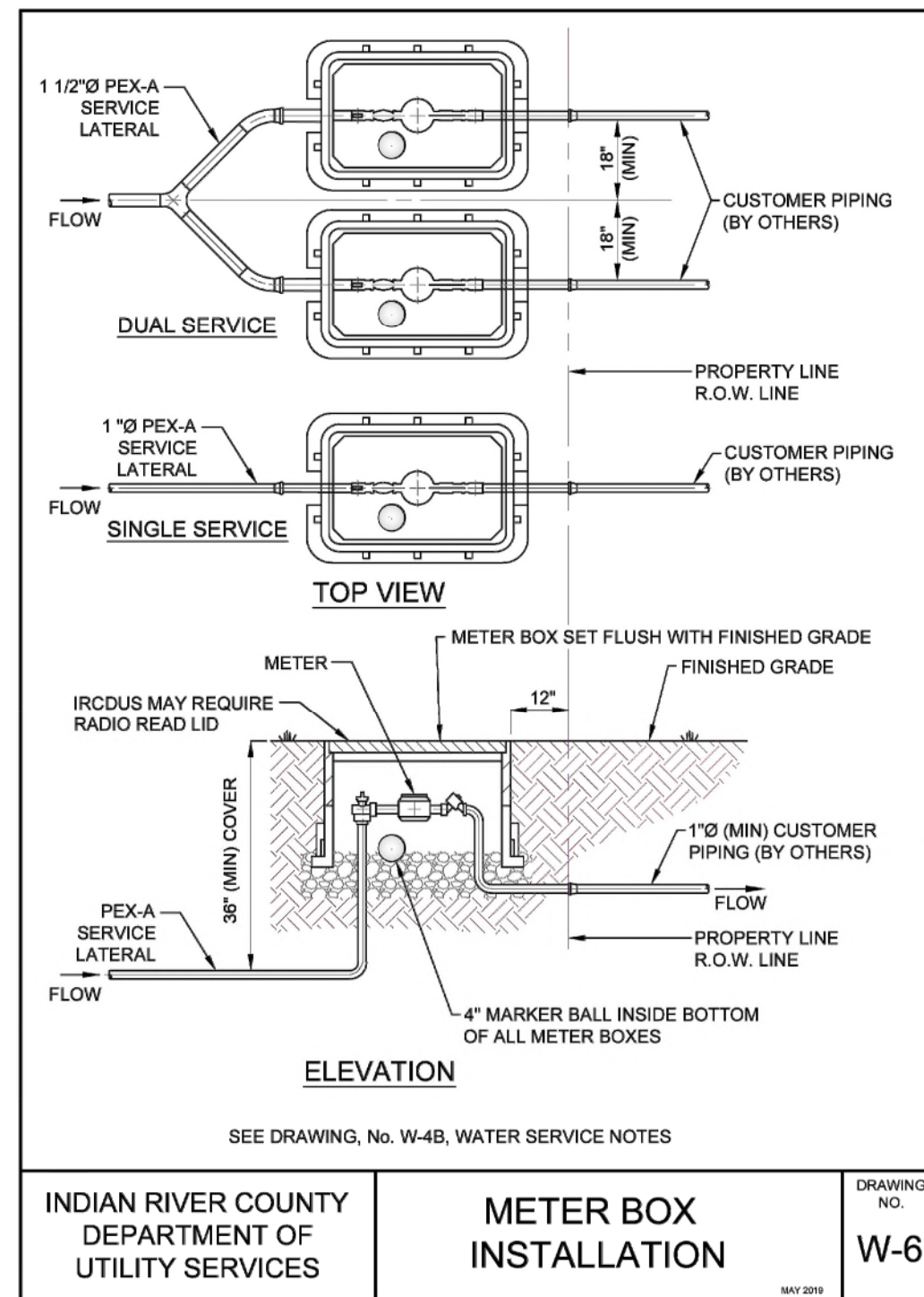
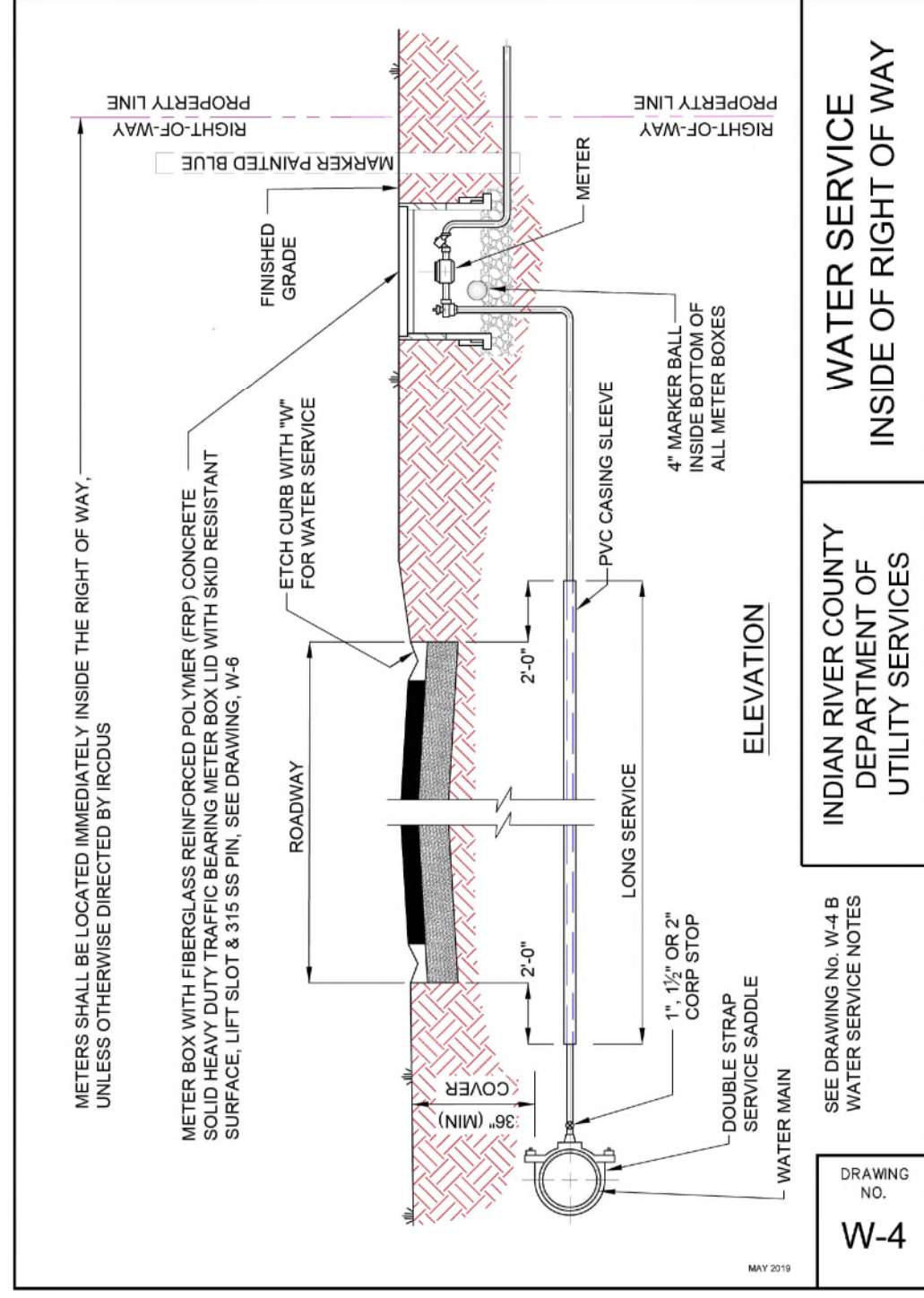
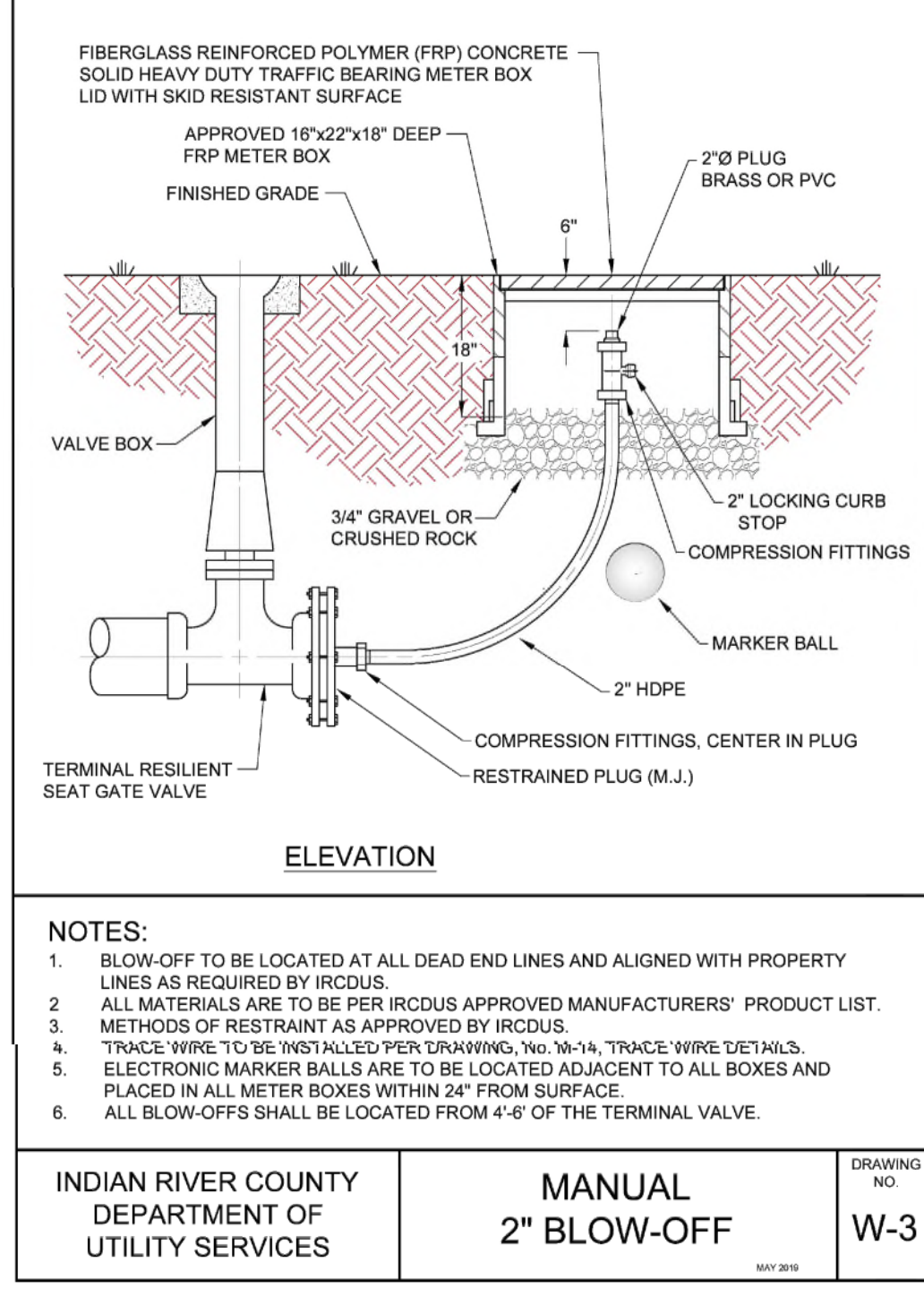
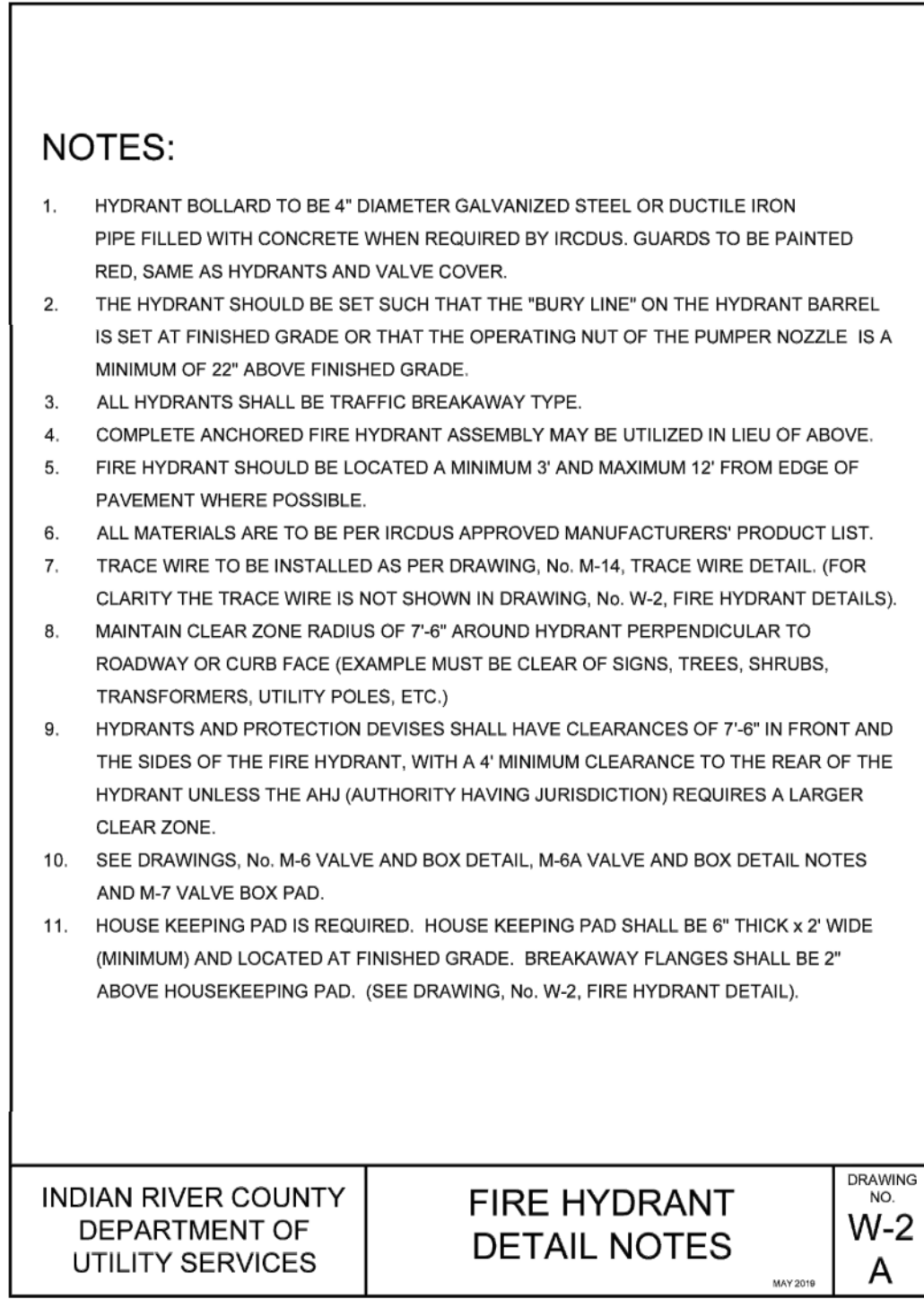
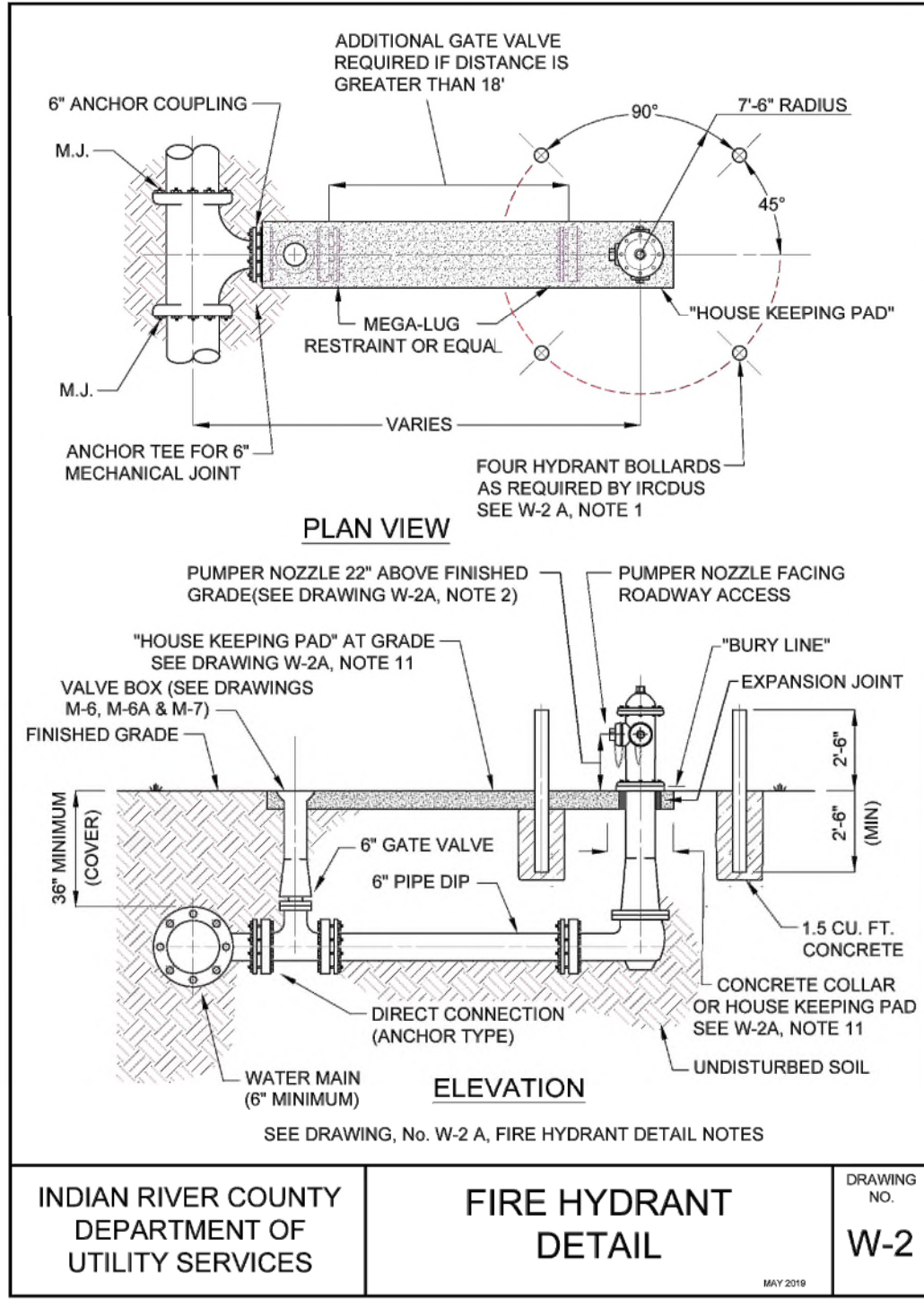
James Mills
Digitally signed by James Mills
DN: cn=James Mills
E=jmills@millsshortassociates.com,
ou=James Mills, cn=JM
Date: 2024.11.07 14:26:21 -05'07'

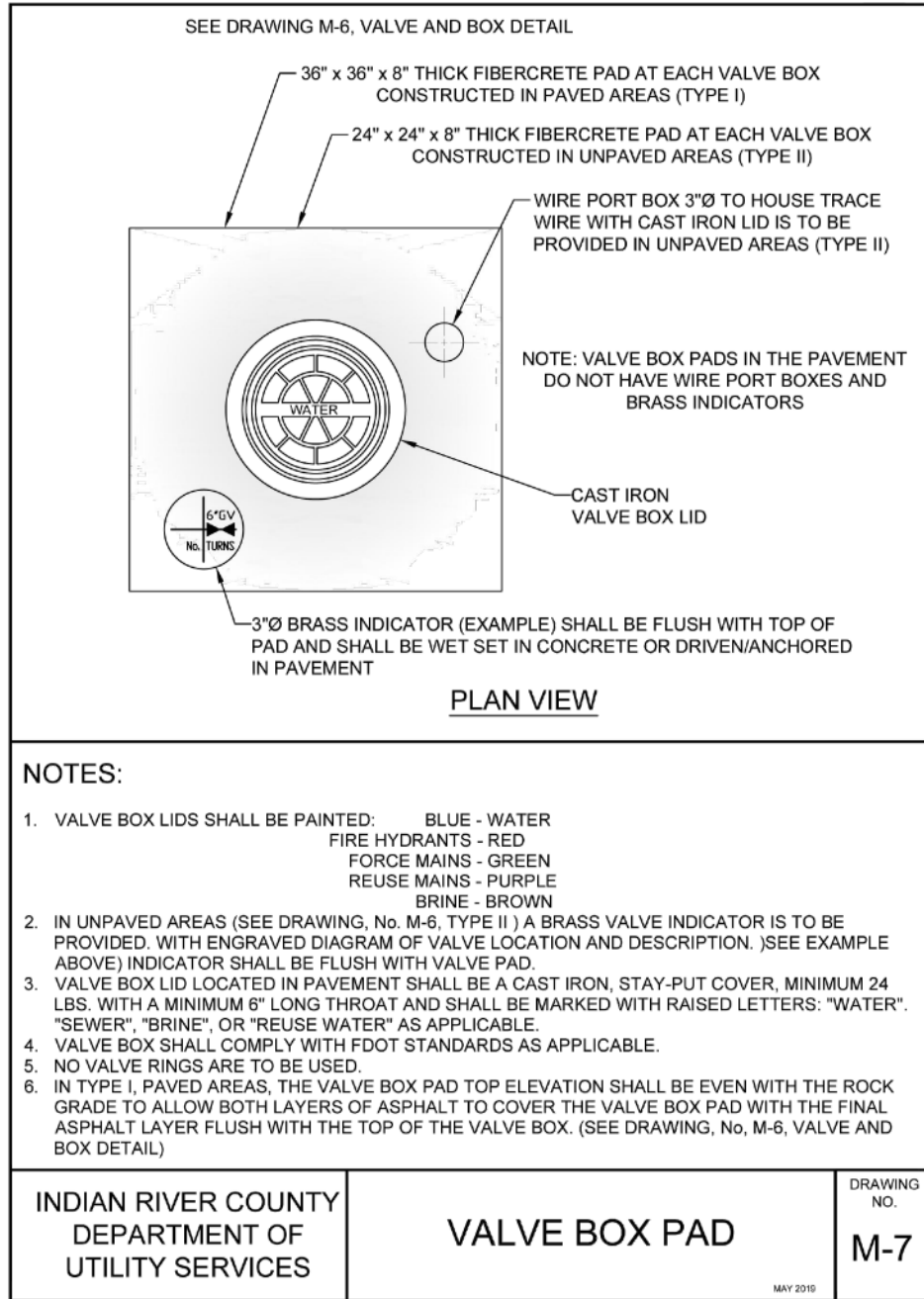
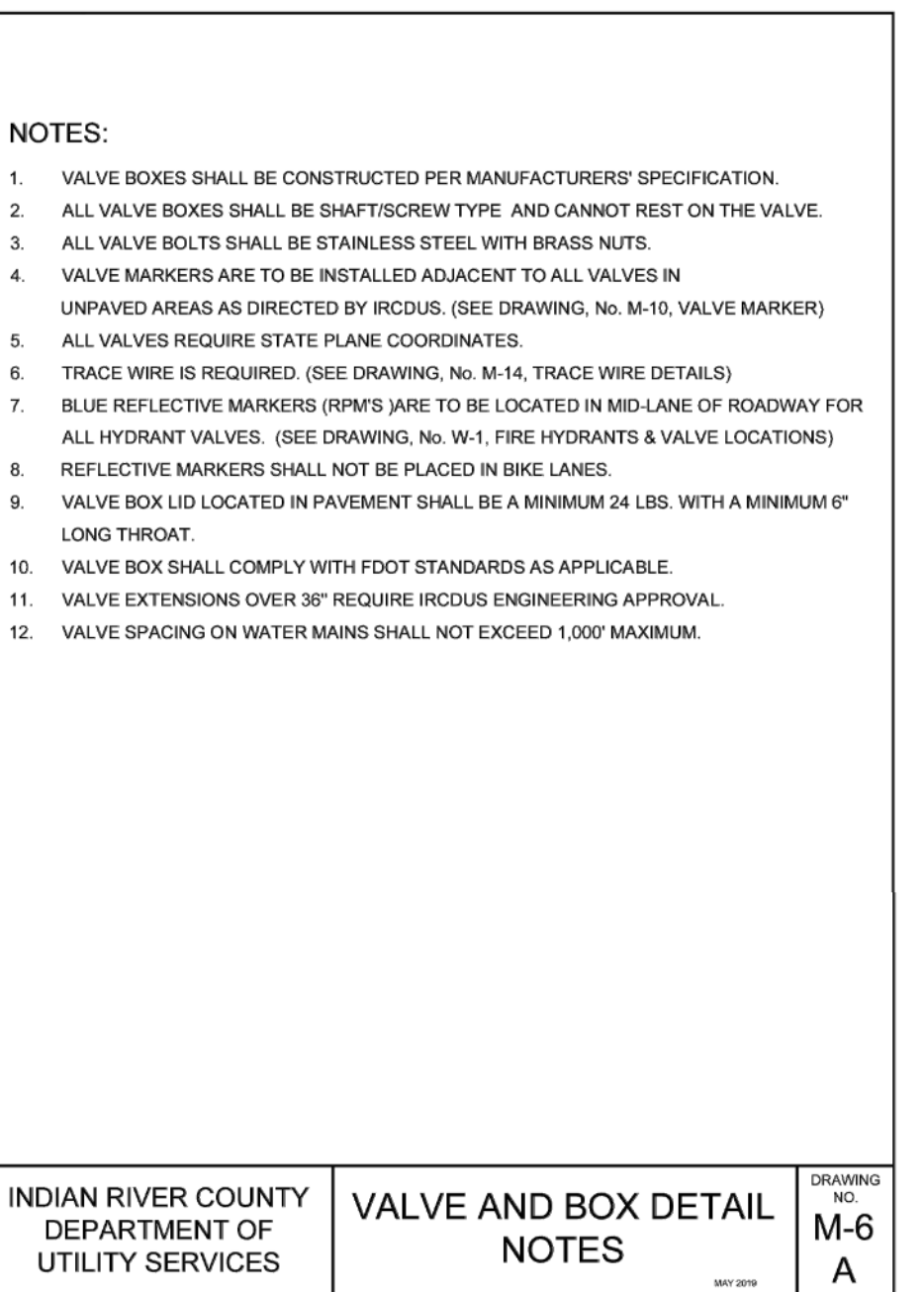
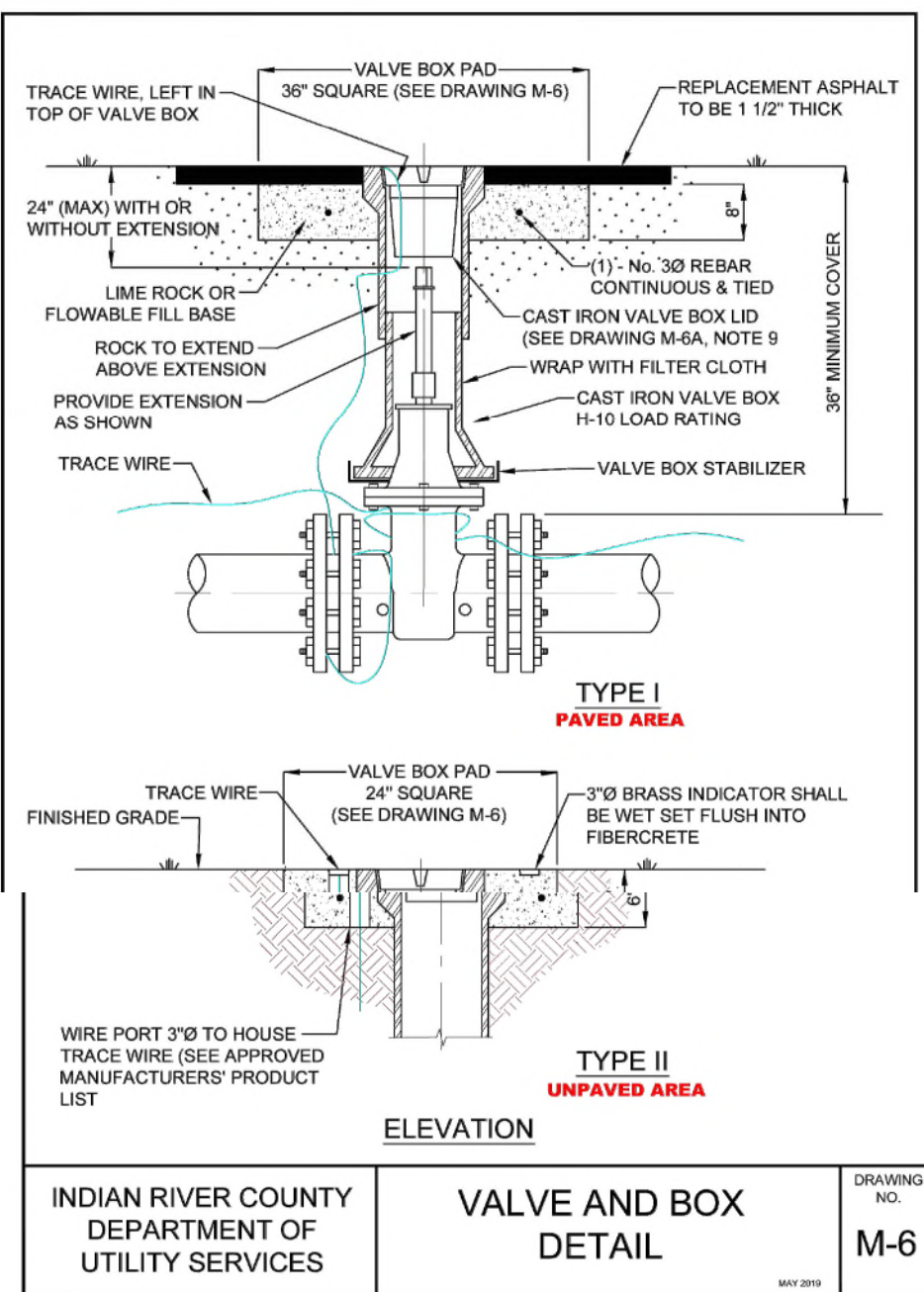
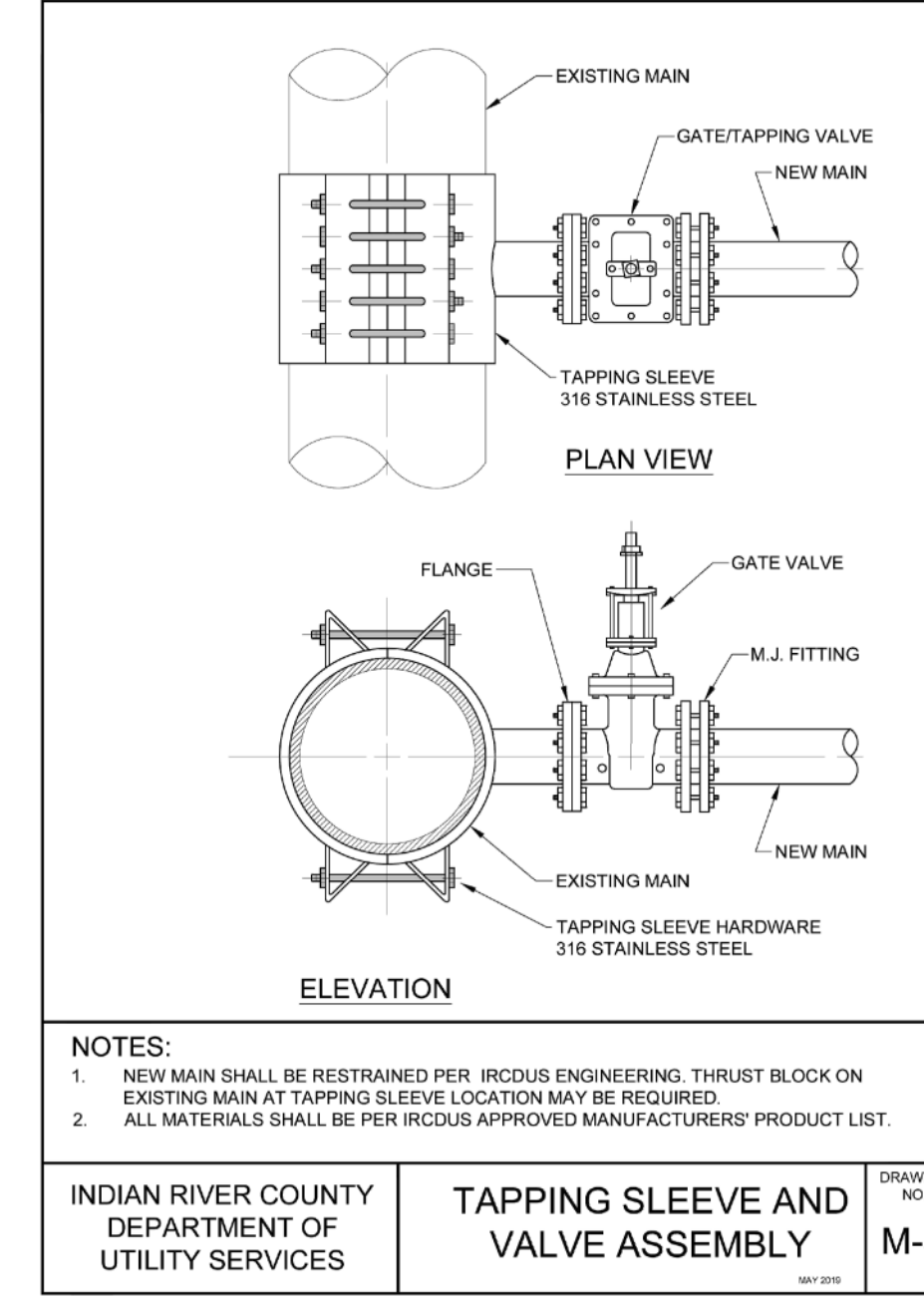
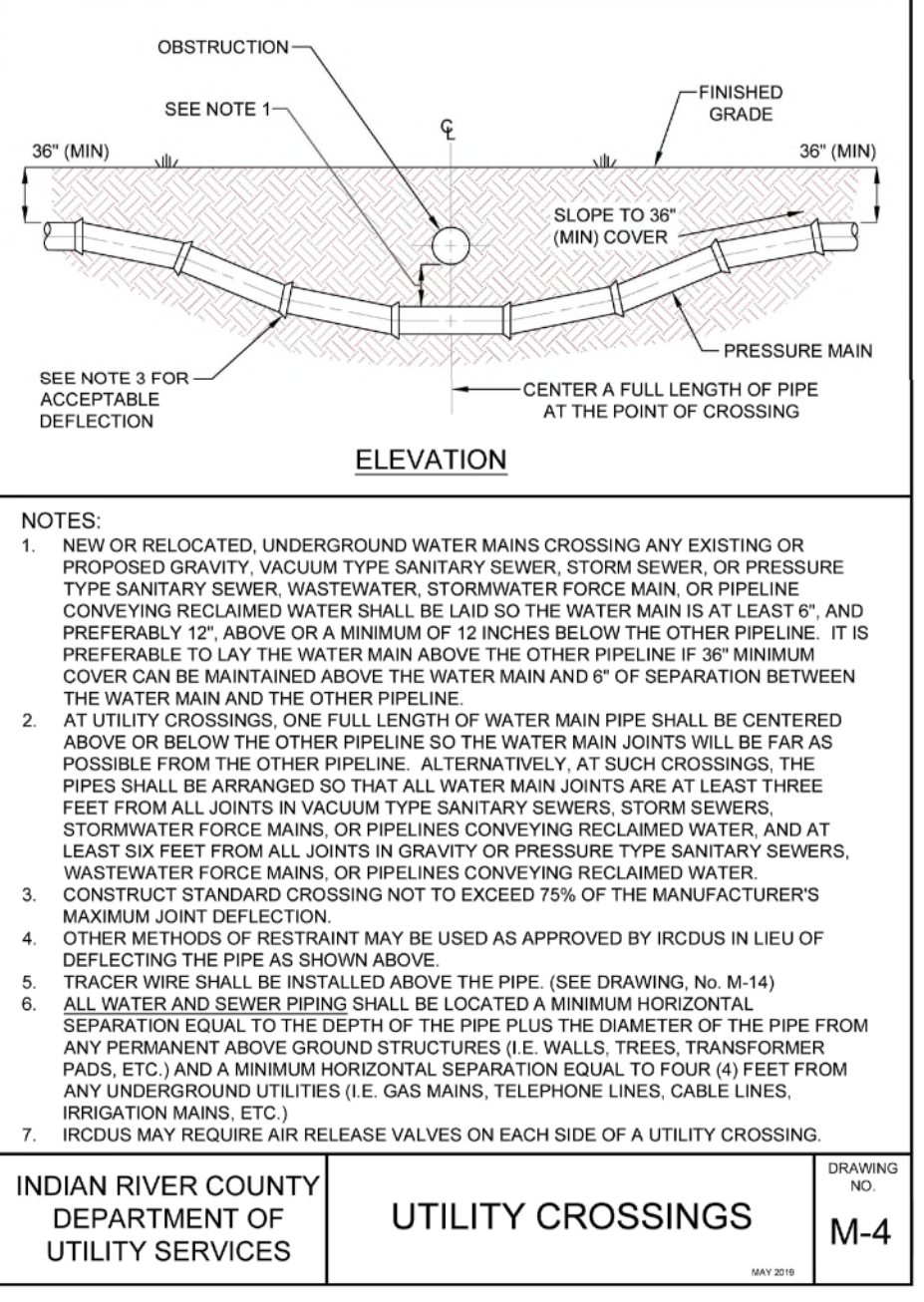
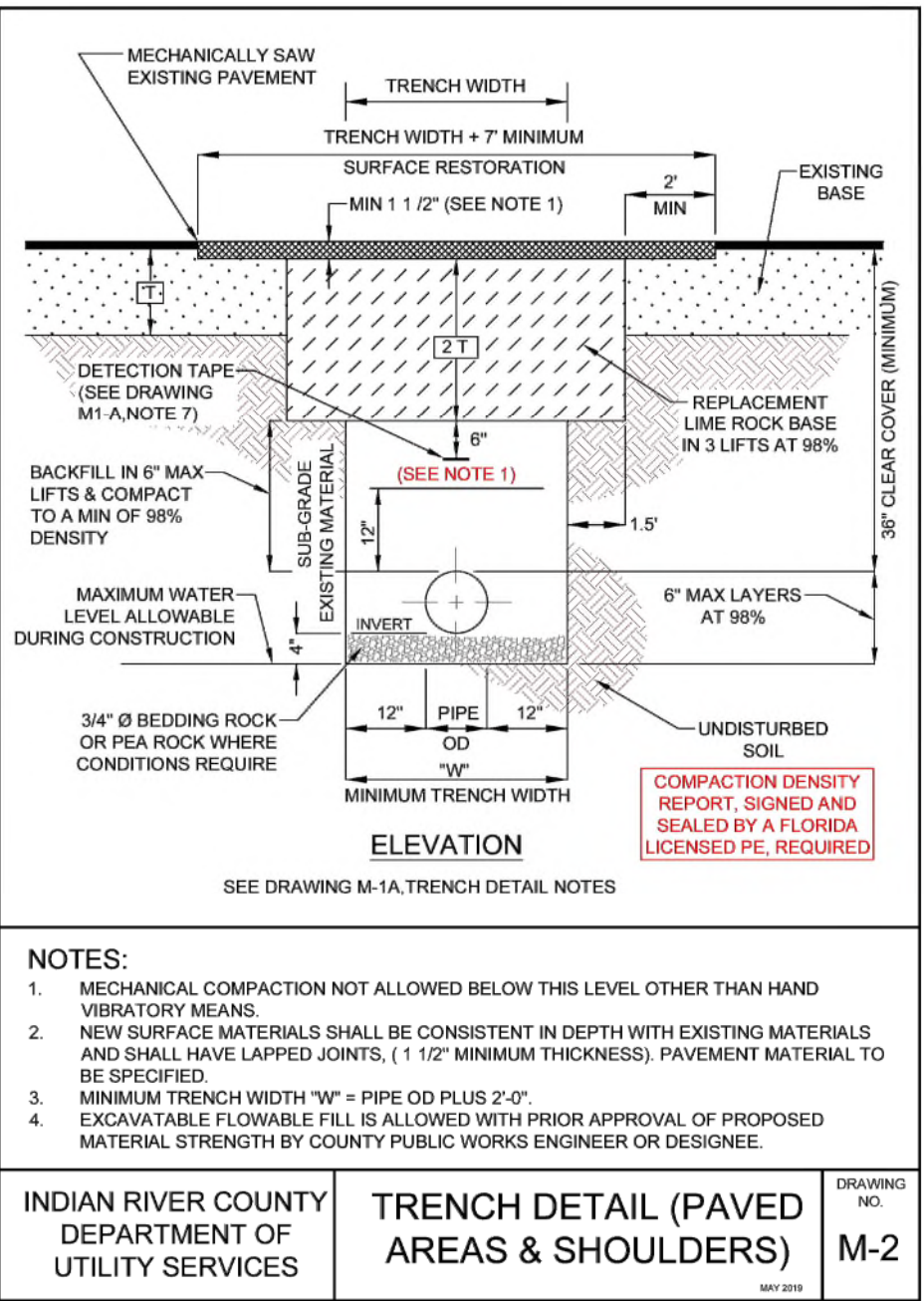
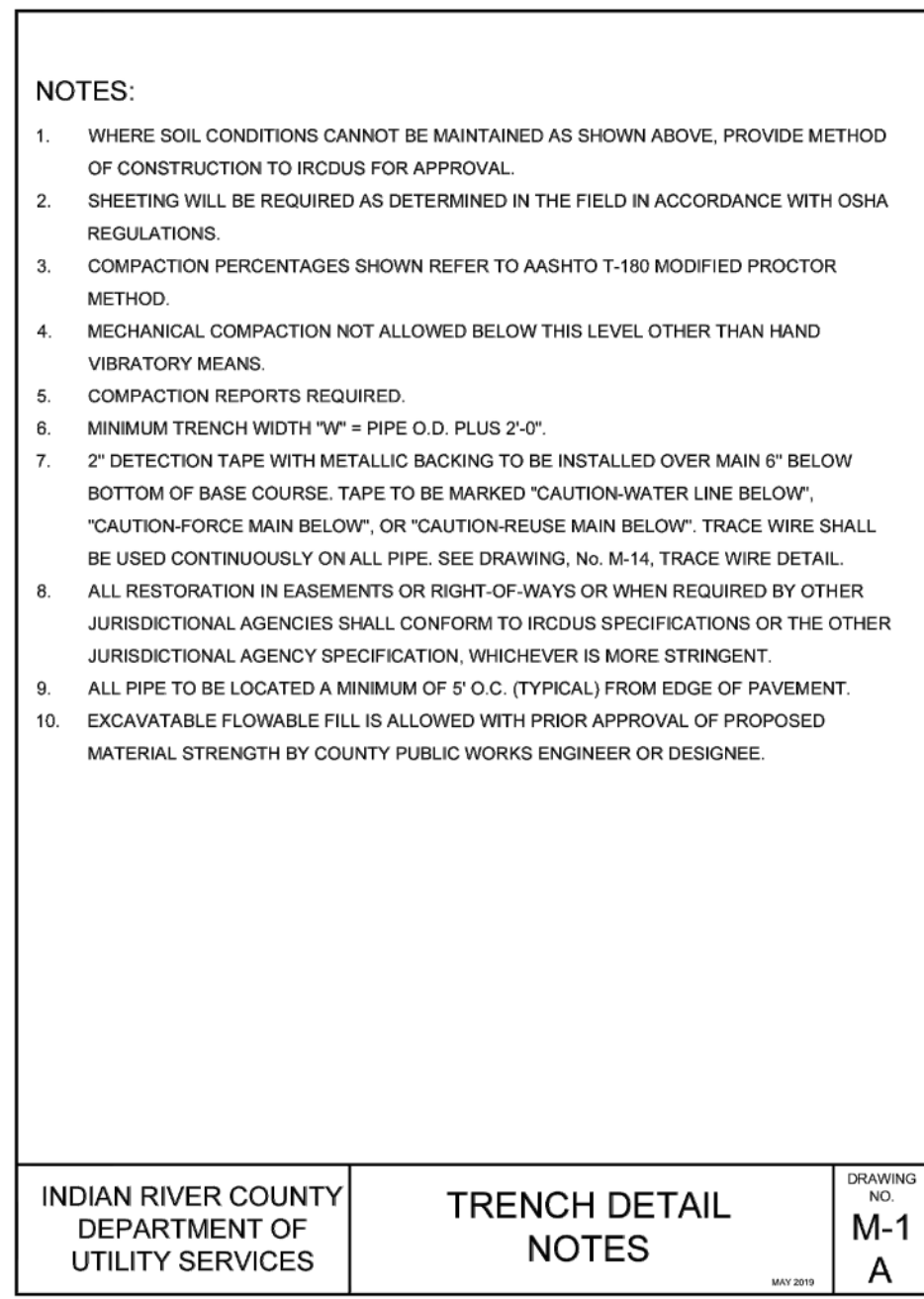
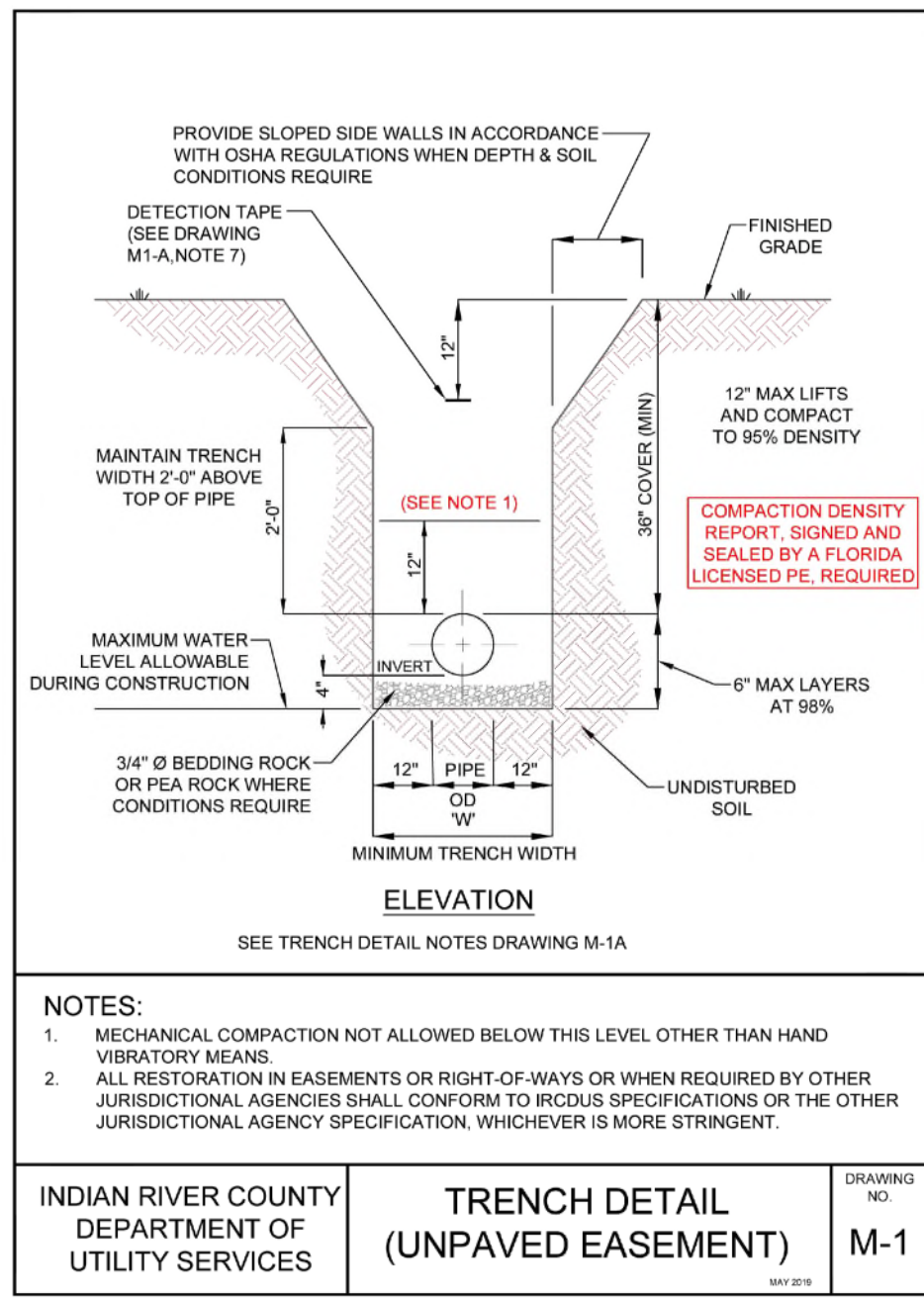
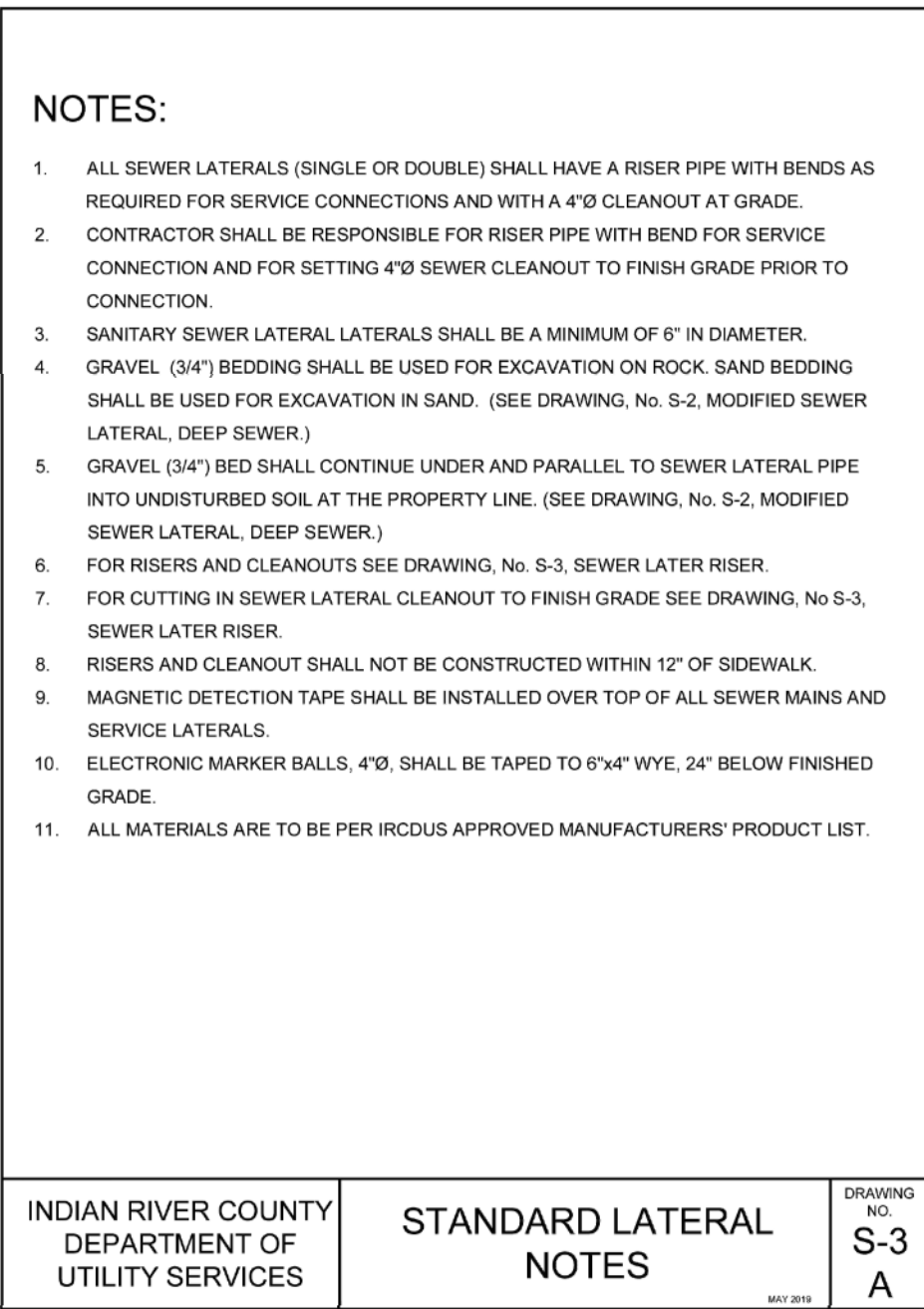
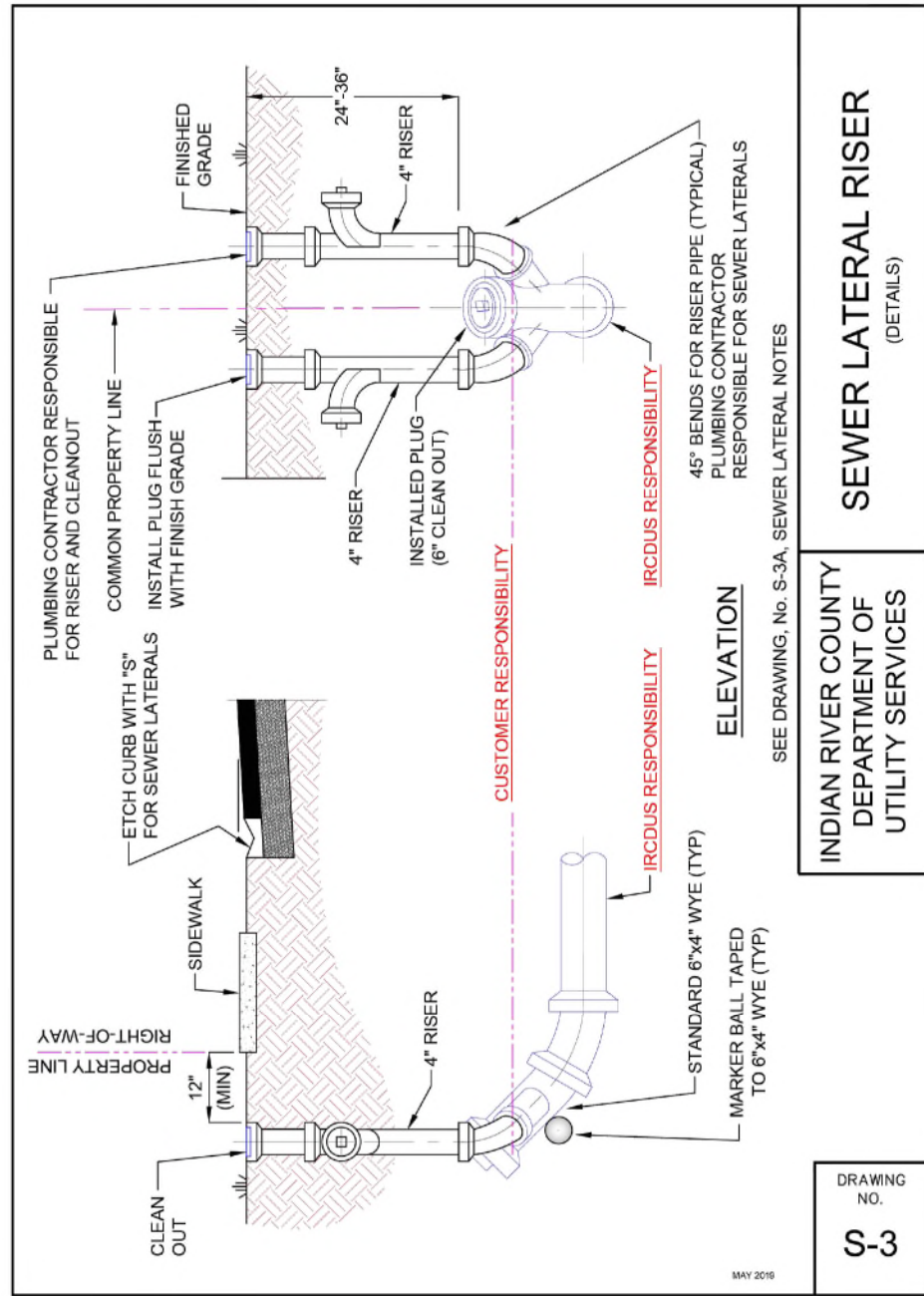
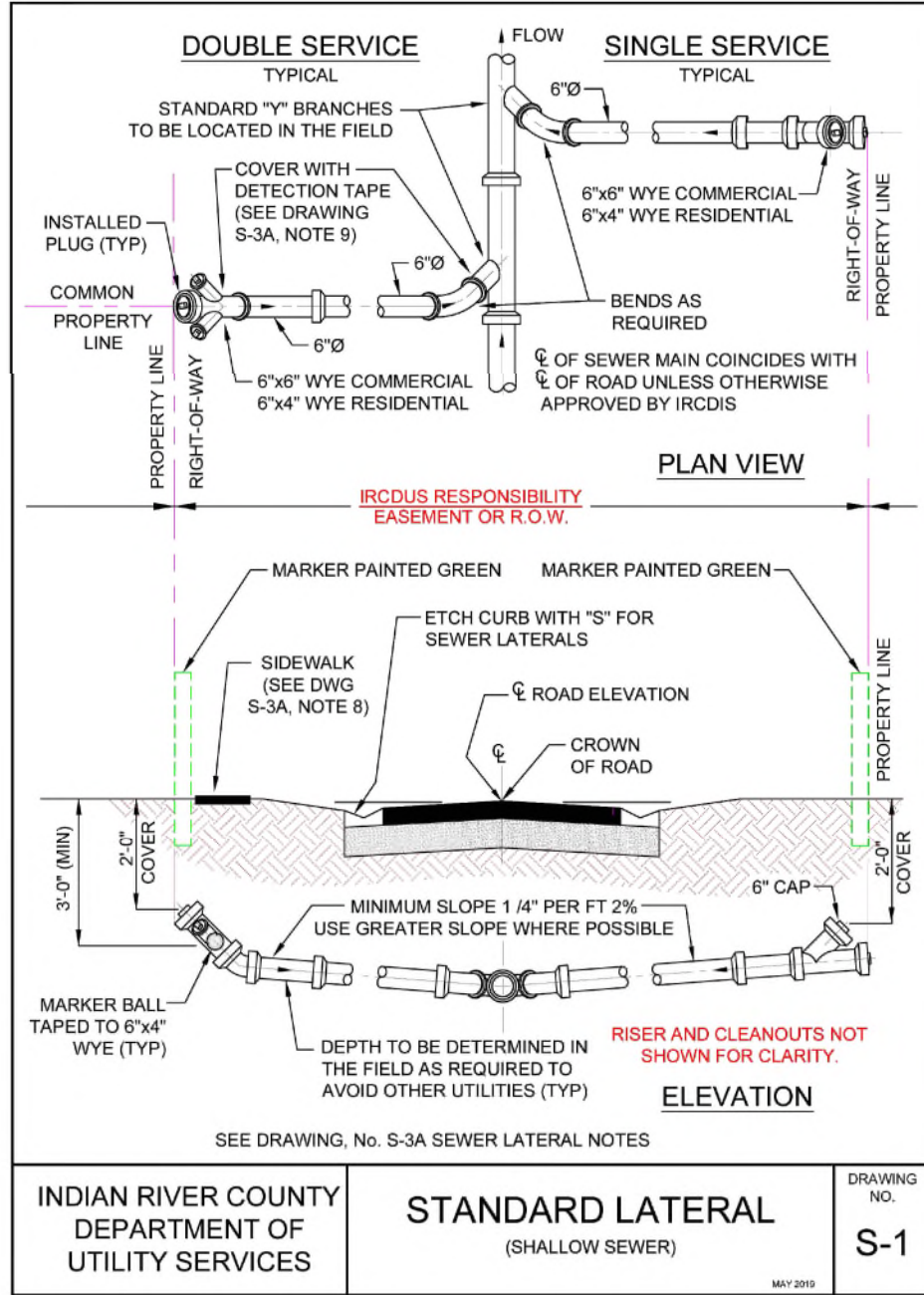


ISSUE	DATE	COMMENTS
	01/03/24	TRC RESUBMITTAL
	04/23/24	TRC RESUBMITTAL NO.2
	05/09/24	TRC RESUBMITTAL NO.3

LA-Z-BOY VERO 6366 20TH STREET VERO BEACH, FL 32966	UTILITY PLAN	APPROVED BY JWM	CHECKED BY JWM	DRAWN BY WBD	SCALE: 1"=30'
---	--------------	--------------------	-------------------	-----------------	------------------

PROJ. NO.	23-1160
DATE	11/07/2023
SHEET NO.	C-5





ISSUE	DATE	COMMENTS
1	01/03/24	TRC RESUBMITTAL NO.2
2	04/23/24	TRC RESUBMITTAL NO.3
3	05/09/24	TRC RESUBMITTAL NO.3

INDIAN RIVER COUNTY DEPARTMENT OF UTILITY SERVICES	VALVE AND BOX DETAIL NOTES	DRAWING NO. M-6 A
--	----------------------------	-------------------

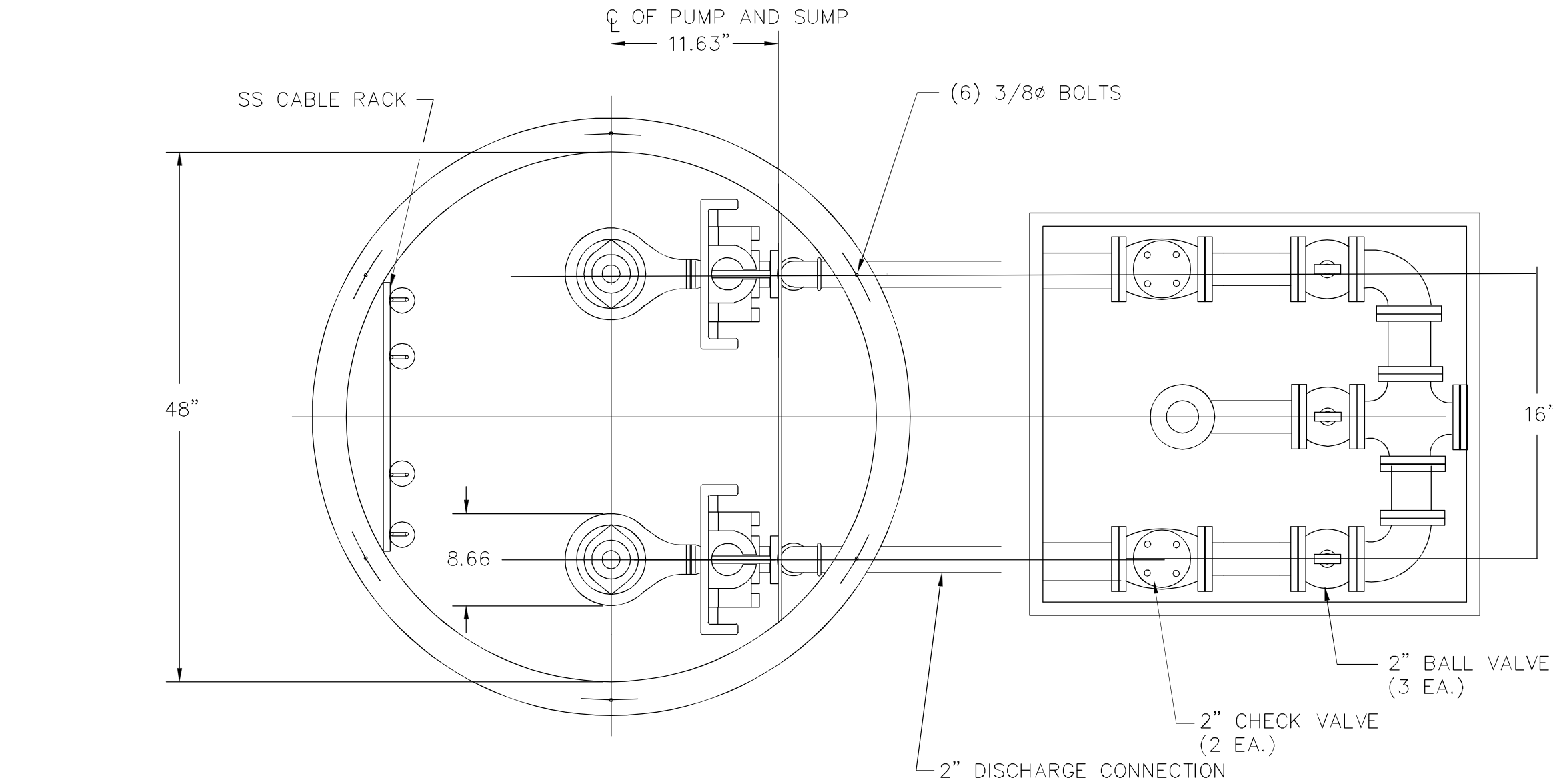
SCALE	N/A
-------	-----

APPROVED BY	JWM
-------------	-----

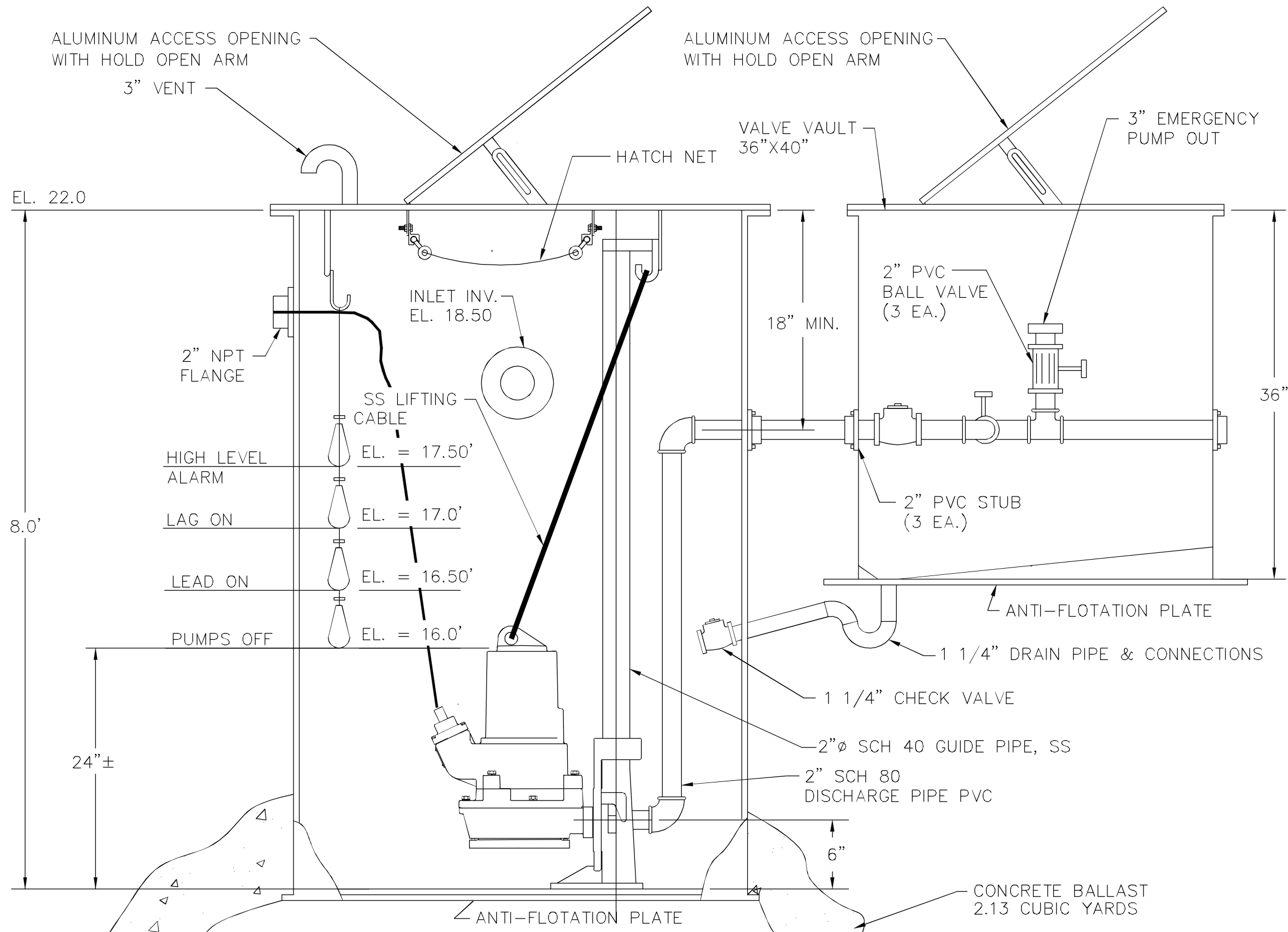
CHECKED BY	JWM
------------	-----

DRAWN BY	WBD
----------	-----

PROJ. NO.	23-1160
DATE	11/07/2023
SHEET NO.	



3' WET WELL - PLAN
SCALE: N.T.S.



3' WET WELL - ELEVATION

LIFT STATION SPECIFICATIONS:

Furnish two ABS heavy duty submersible grinder pumps. Pumps shall be connected to the discharge piping when lowered onto the discharge connection by one 2" dia. Sch40 304SS rail. Pump shall be centrifugal type with rotating cutter mounted on the pump shaft. The stationary cutter shall be mounted in the adjustable bottom plate. Shredding shall occur outside of volute to avoid clogging. The cutter shall be super abrasive material and hardness of 58-62 Rockwell C. Each pump shall be equipued with two seals. The lower shall be mechanical type with silicon carbide faces. The oil chamber shall be fitted with a moisture probe extending from the bottom of the motor housing into the oil chamber. The pump motor shall be air filled and have class "F" insulated moisture resistant windings. Bimetallic thermal switches shall be imbedded into each phase of the winding to sense high temperature. Float holder and upper guide rail brackets shall be made with 316SS only.

The fiberglass basin shall be manufactured from commercial grade polyster resin. The complete wet well shall have a dynamic loading of 16,000ft-lbs and shall not deflect vertically downward more than a 1/4" at the point of load application when loaded to 24,000lbs. The fiberglass valve vault shall be 24"x36"x30" deep and meet the requirements for incidental traffic H-10 loading as established by ASSHTO. The compression strength shall be at least 11,000psi.

Float switches shall be UL listed type "S-RotoFloat" manufactured by Anchor Scientific, Inc. with 30 feet of STO PVC cable.

Pump Model: S30/2D 60Hz Impeller Dia: 143 mm

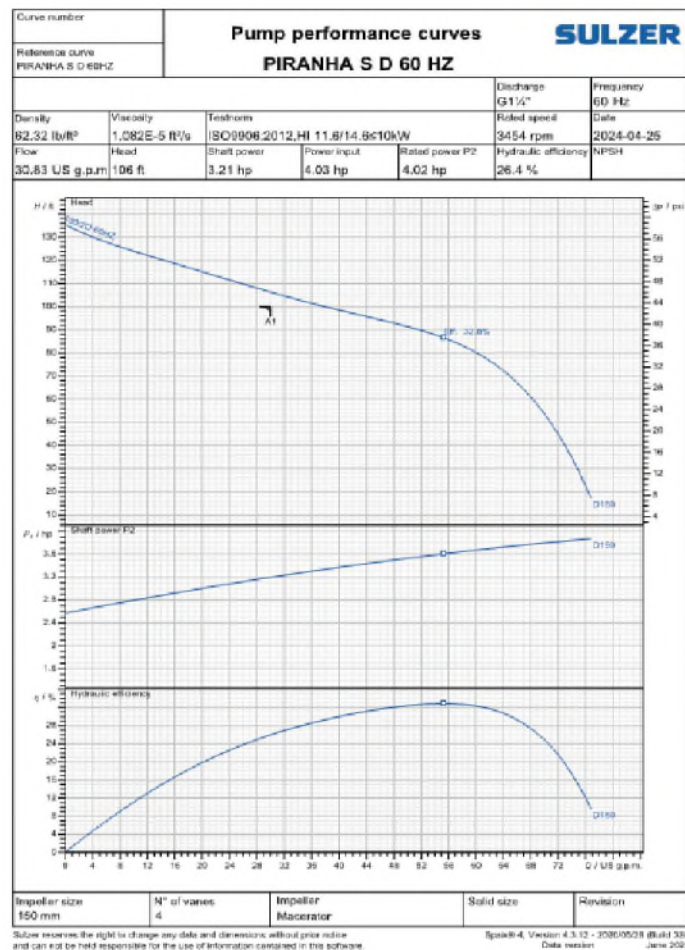
No. Pumps: TWO (2) Motor HP: 4.02 HP.

Discharge: 2" RPM: 3340

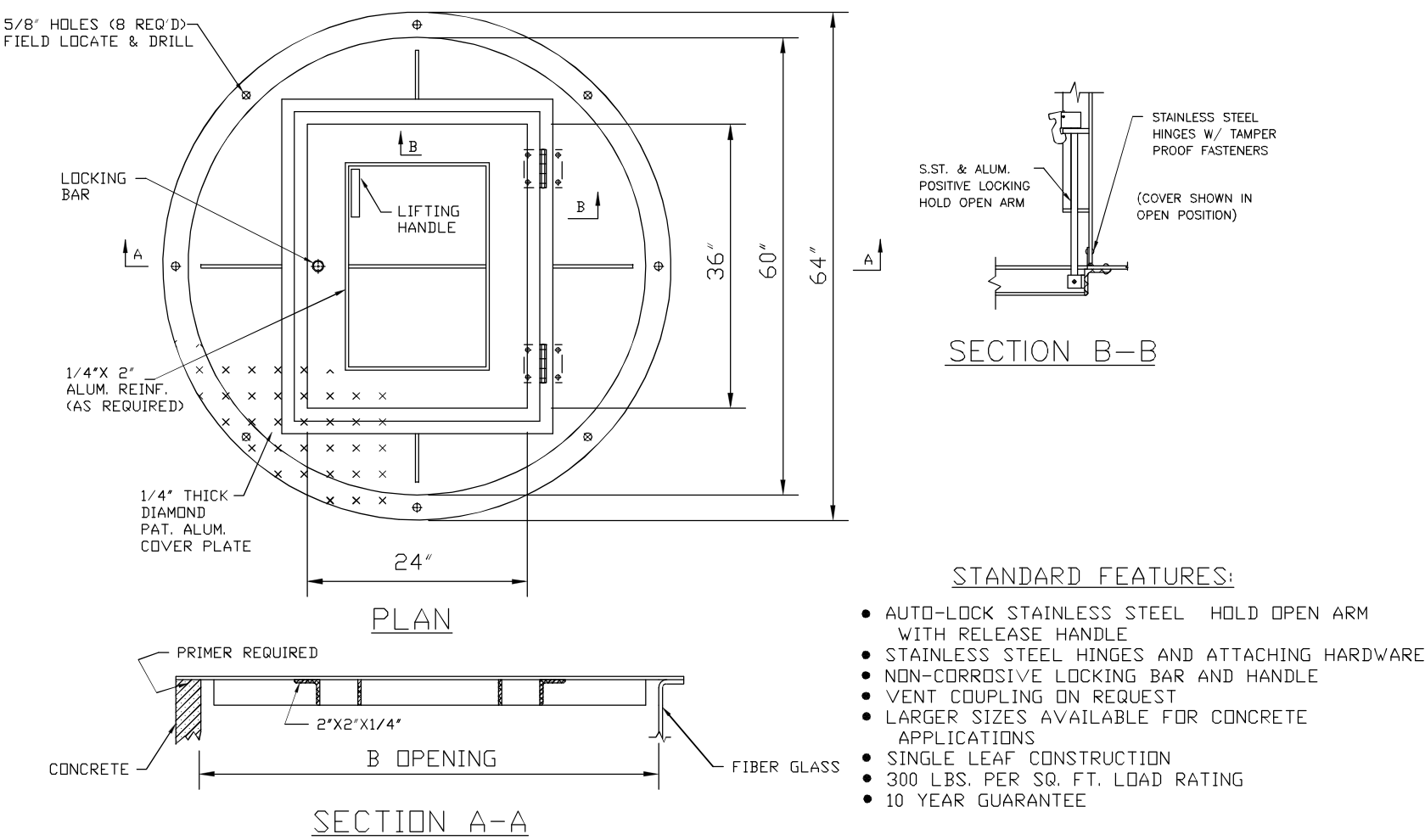
Design Flow: 30 GPM. Voltage: 208/230

Design TDH: 105 FEET. Phase: 1 PHASE

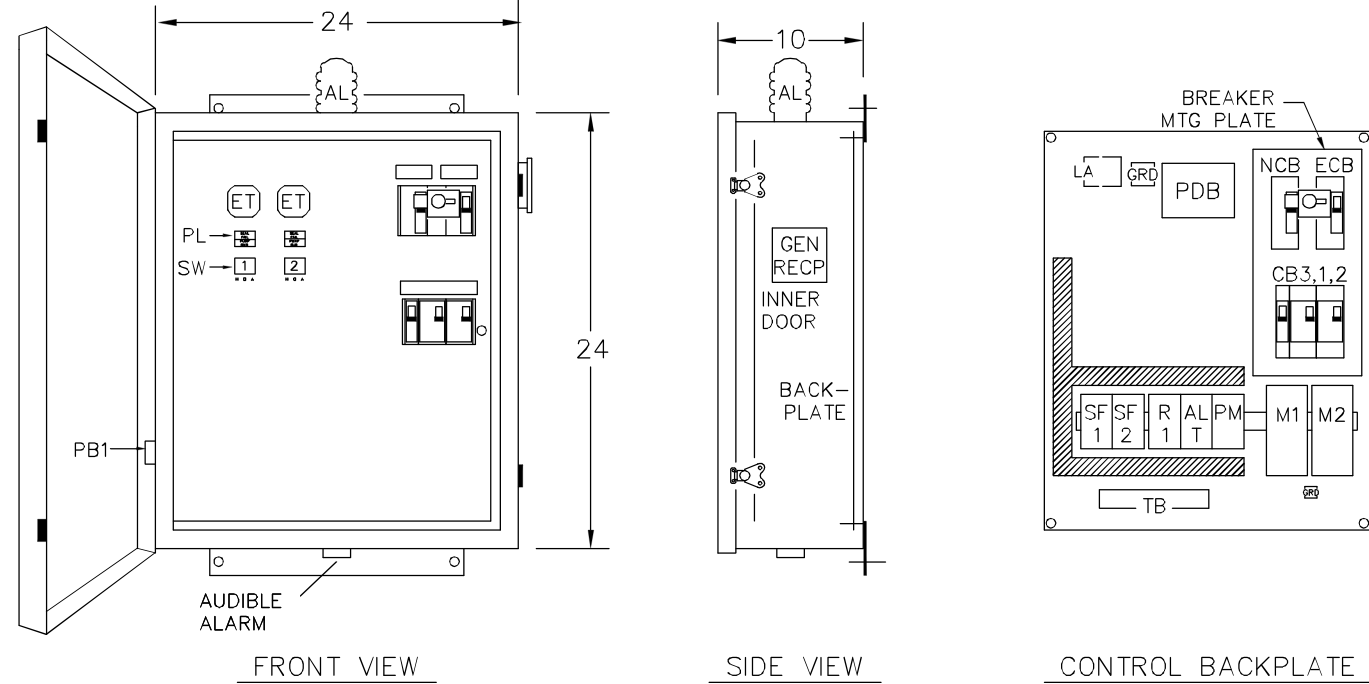
H/IL



PUMP CURVE DATA
SCALE: N.T.S.



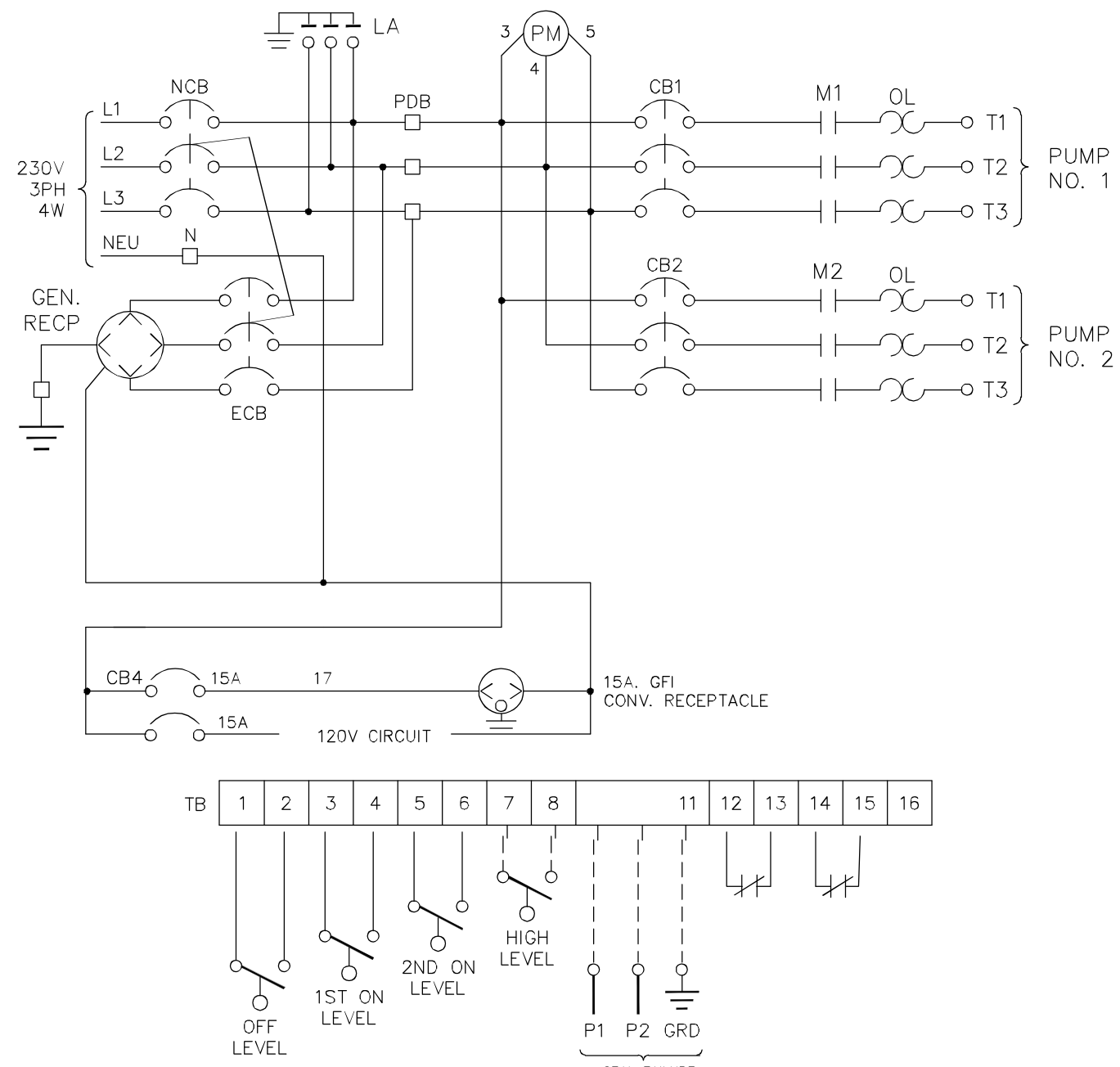
ACCESS COVER DETAILS
SCALE: N.T.S.



NOTES:
1-ENCLOSURE: NEMA 3R STAINLESS STEEL
2-MATERIAL: 14 GAUGE #304 STN STL
3-CONSTRUCTION: FORMED AND WELDED
4-FINISH: NO. 2B BRUSHED
5-HINGE: STAINLESS STEEL
6-LATCHES: STAINLESS STEEL LOCKABLE
PL-TOP SEAL FAILURE/ BOTTOM PUMP RUN
SW-HOA SINGLE POLE DOUBLE THROW SWITCH
PB1-ALARM SILENCE
ET-ELAPSE TIME METER
NCB-NORMAL CIRCUIT BREAKER
ECB-EMERGENCY CIRCUIT BREAKER
PDB-POWER DISTRIBUTION BLOCK
CB-CIRCUIT BREAKER
LA-LIGHTING ARRESTOR
PM-PHASE MONITOR
ALT-ALTERNATOR
SF-SEAL FAIL RELAY
AL-ALARM LIGHT
TB-TERMINAL BLOCK
GRD-GROUND TERMINAL

CONTROL PANEL WIRING DIAGRAM

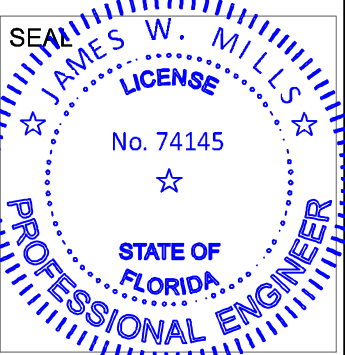
SCALE: N.T.S.



CONTROL PANEL WIRING DIAGRAM
SCALE: N.T.S.

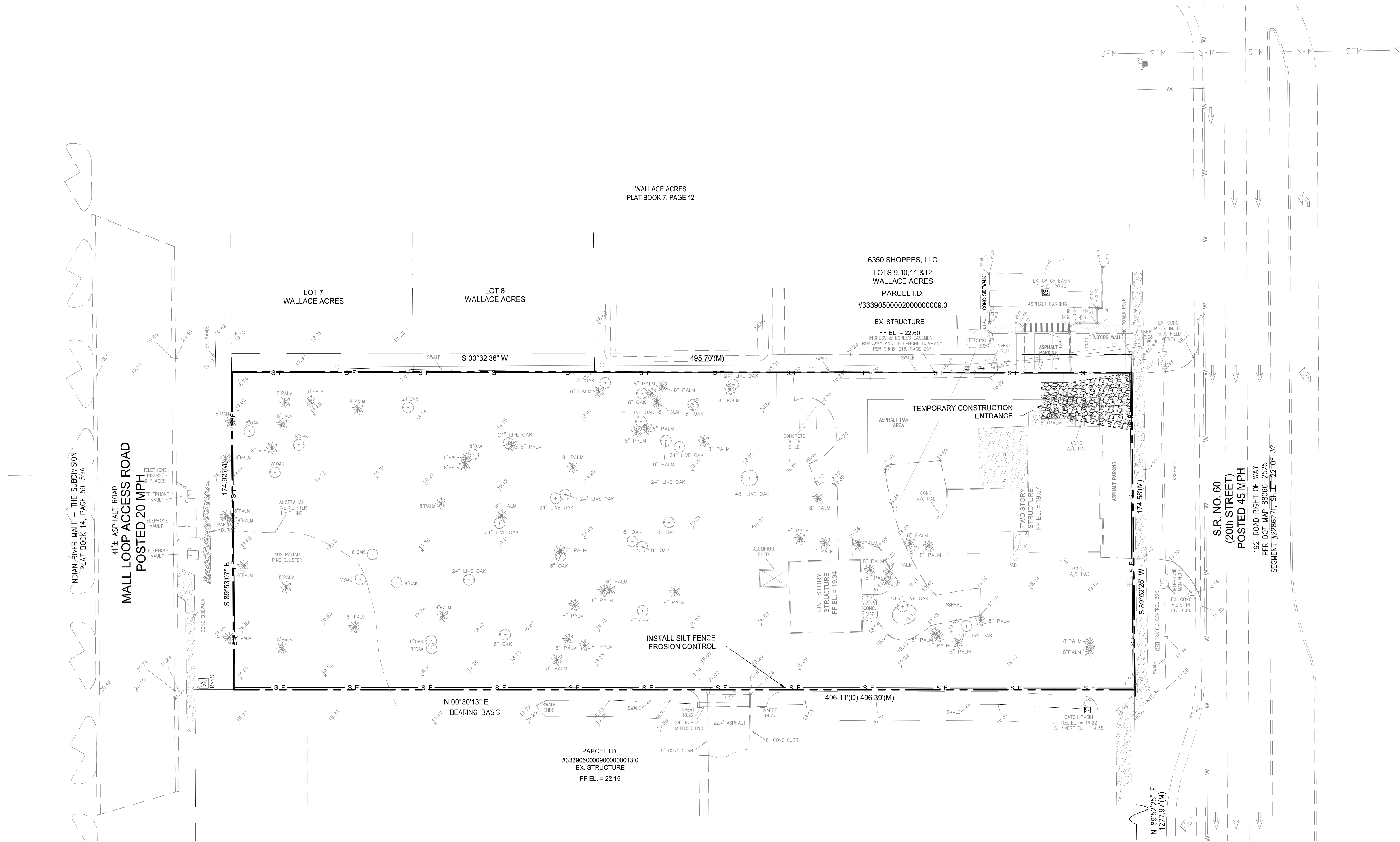
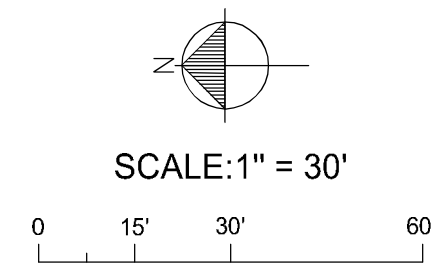
Mills, Short & Associates
WEBSITE: www.MillsShortAssociates.com
PHONE: 772.226.7282
C.A. #: 30699
700 22nd Place, Suite 2C/2D
Vero Beach, Florida 32960

James Mills
Digitally signed by James Mills
DN: cn=James Mills
E=jmills@mills-shortassociates.com,
ou=James Mills, c=US
Date: 2024.11.07 14:26:27 -0500



ISSUE	DATE	COMMENTS
1	01/03/24	TRC RESUBMITTAL NO.2
2	04/23/24	TRC RESUBMITTAL NO.2
3	05/09/24	TRC RESUBMITTAL NO.3

PROJECT NO.	23-1160
DATE	11/07/2023
SHEET NO.	C-8



LA-Z-BOY VERO
6366 20TH STREET
VERO BEACH, FL 32966

THIS SHEET
STORMWATER POLLUTION PREVENTION PLAN

DRAWN BY

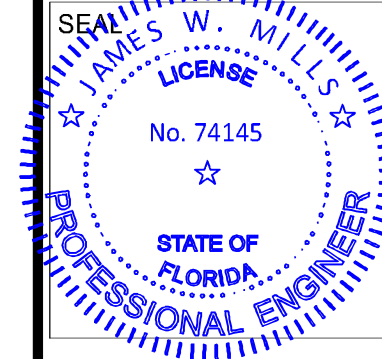
CHECKED

APPROVED BY _____

SCALE:

PROJ. NO.	23-1160
DATE	11/07/2023
SHEET NO.	

C-9



ISSUE	DATE	COMMENTS
1	01/03/24	TRC RESUBMITTAL
2	04/23/24	TRC RESUBMITTAL NO.2
3	05/09/24	TRC RESUBMITTAL NO.3

Mills, Short & Associates
PHONE: 772 226 7282 WEBSITE:

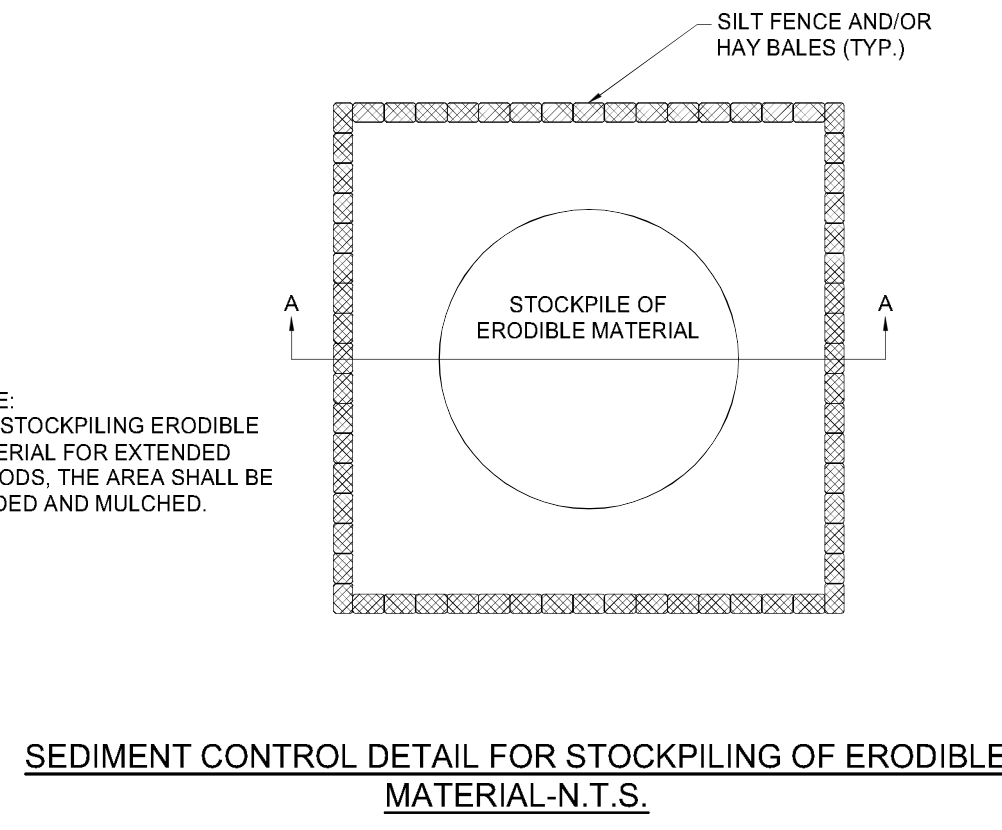
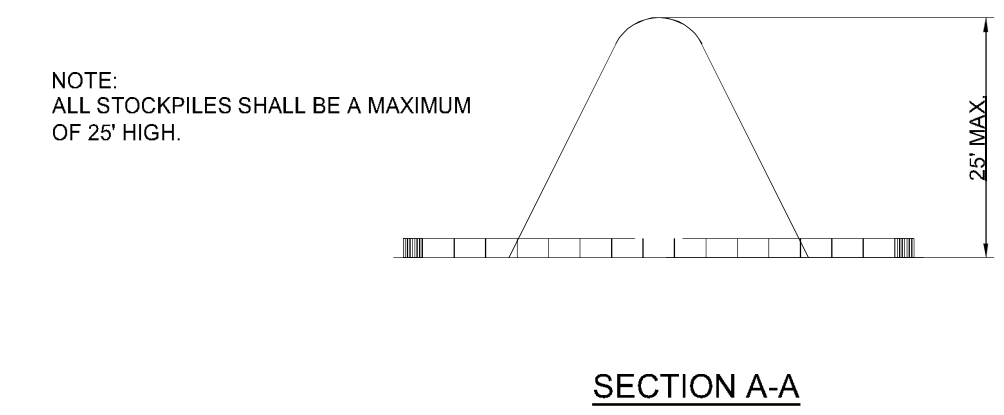
PHONE: 772.226.7282
C.A. #: 30698
WEBSITE:
www.MillsShortAssociates.com

700 22nd Place, Suite 2C/2D
Vero Beach, Florida 32960

S Digitally signed by James Mills
DN: CN=James Mills,
E=jmills@millsshortassociates.com,
G=James, SN=Mills, C=US
Date: 2024.11.07 14:28:29-0500

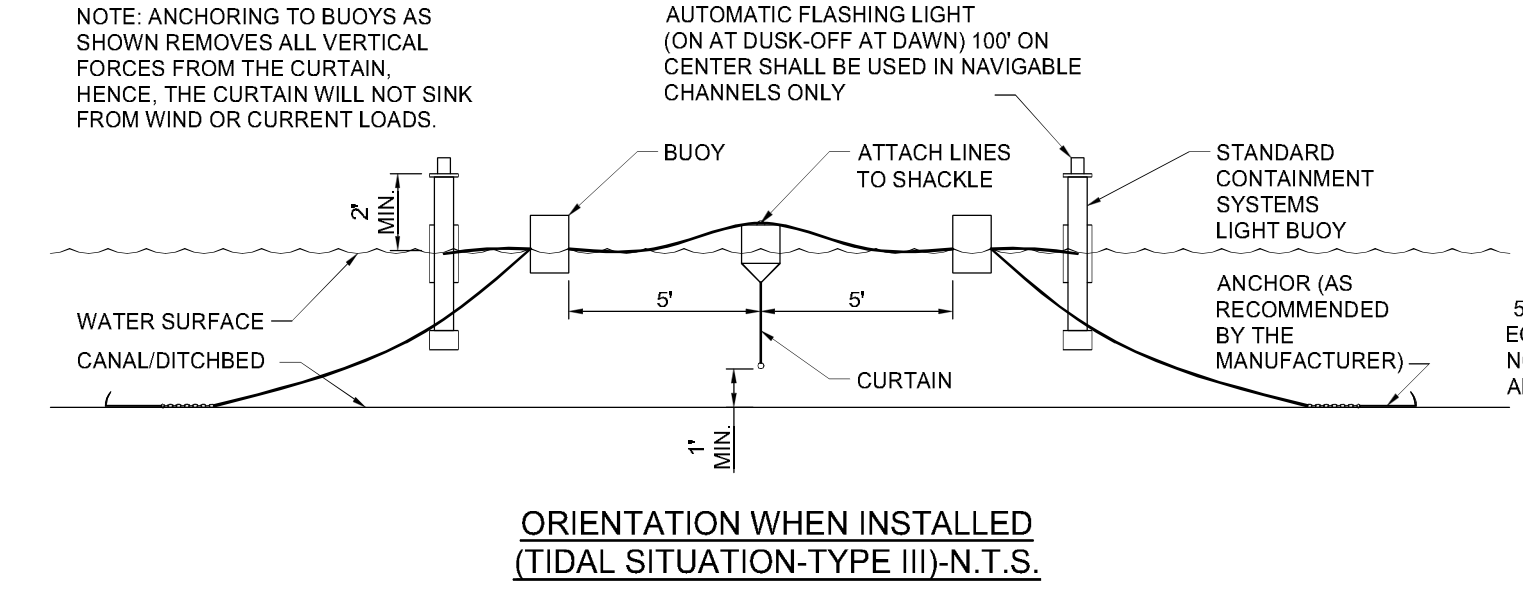
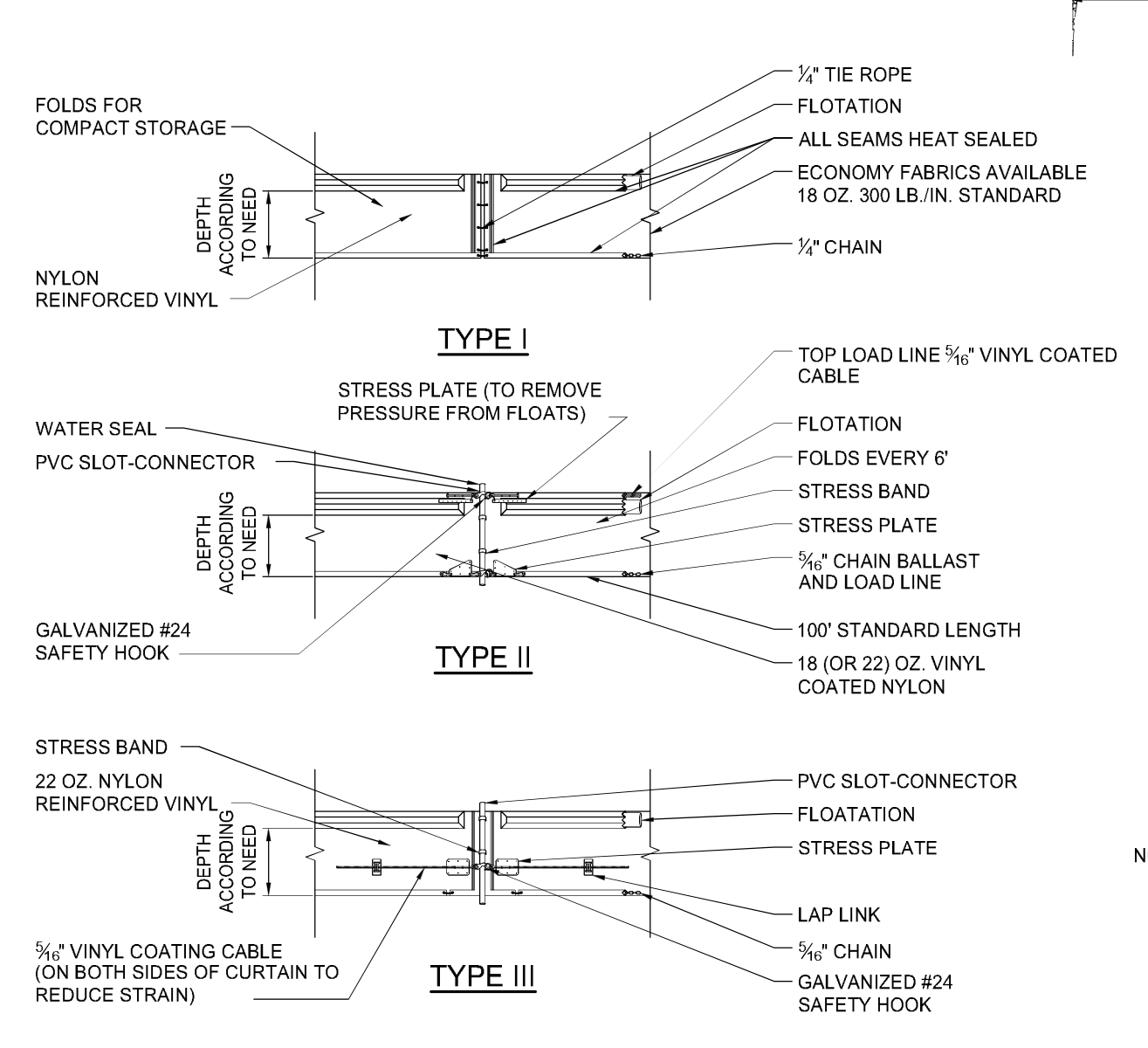
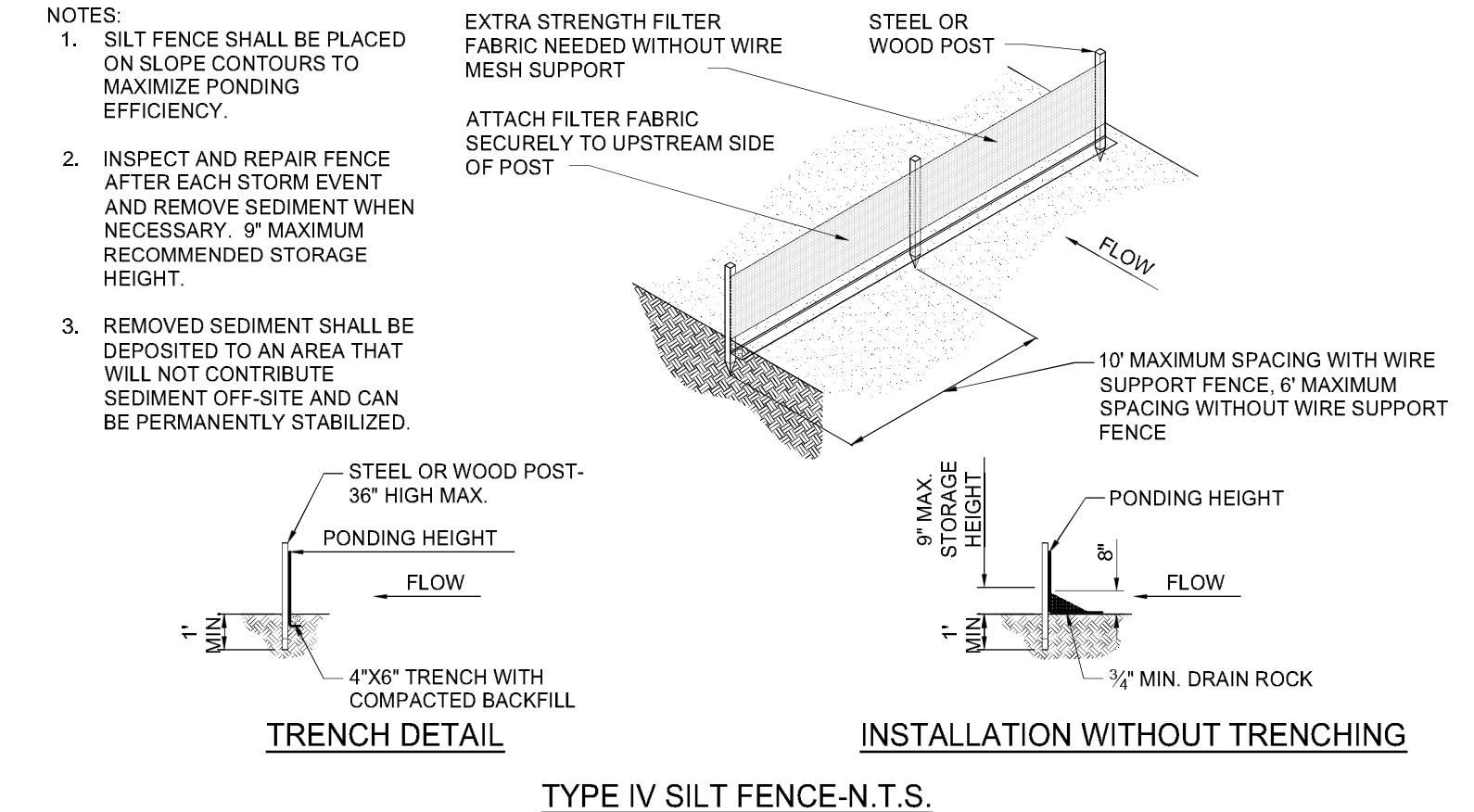
EROSION CONTROL NOTES

1. SEDIMENT BASINS AND TRAPS, PERIMETER DIKES, SEDIMENT BARRIERS AND OTHER MEASURES INTENDED TO TRAP SEDIMENT SHALL BE CONSTRUCTED AS A FIRST STEP IN ANY LAND DISTURBING ACTIVITY AND SHALL BE MADE FUNCTIONAL BEFORE UP-SLOPE LAND DISTURBANCE TAKES PLACE.
2. ALL SEDIMENT CONTROL MEASURES ARE TO BE ADJUSTED TO MEET FIELD CONDITIONS AT THE TIME OF CONSTRUCTION AND BE CONSTRUCTED PRIOR TO ANY GRADING OR DISTURBANCE OF EXISTING SURFACE MATERIAL ON BALANCE OF SITE. PERIMETER SEDIMENT BARRIERS SHALL BE CONSTRUCTED TO PREVENT SEDIMENT OR TRASH FROM FLOWING OR FLOATING ON TO ADJACENT PROPERTIES.
3. PERMANENT OR TEMPORARY SOIL STABILIZATION SHALL BE APPLIED TO DENUDED AREAS WITHIN SEVEN (7) DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE. TEMPORARY SOIL STABILIZATION SHALL BE APPLIED WITHIN SEVEN (7) DAYS TO DENUDED AREAS THAT MAY NOT BE AT FINAL GRADE BUT WILL REMAIN UNDISTURBED FOR LONGER THAN 30 DAYS. PERMANENT STABILIZATION SHALL BE APPLIED TO AREAS THAT ARE TO BE LEFT UNDISTURBED FOR MORE THAN ONE YEAR.
4. DURING CONSTRUCTION OF THE PROJECT, SOIL STOCK PILES SHALL BE STABILIZED, COVERED OR CONTAINED WITH SEDIMENT TRAPPING MEASURES. THE APPLICANT IS RESPONSIBLE FOR THE TEMPORARY PROTECTION AND PERMANENT STABILIZATION OF ALL SOIL STOCKPILES ON SITE AS WELL AS SOIL INTENTIONALLY TRANSPORTED FROM THE PROJECT SITE.
5. A PERMANENT VEGETATIVE COVER SHALL BE ESTABLISHED ON DENUDED AREAS NOT OTHERWISE PERMANENTLY STABILIZED.
6. AFTER ANY SIGNIFICANT RAINFALL, SEDIMENT CONTROL STRUCTURES WILL BE INSPECTED FOR INTEGRITY. ANY DAMAGED DEVICES SHALL BE CORRECTED IMMEDIATELY.
7. CONCENTRATED RUNOFF SHALL NOT FLOW DOWN CUT OR FILL SLOPES UNLESS CONTAINED WITHIN AN ADEQUATE TEMPORARY OR PERMANENT CHANNEL, FLUME, SLOPE DRAIN STRUCTURE OR APPROVED CONTROL.
8. SEDIMENT WILL BE PREVENTED FROM ENTERING ANY STORM WATER SYSTEM, DITCH OR CHANNEL. ALL STORM WATER INLETS THAT ARE MADE OPERABLE DURING CONSTRUCTION SHALL BE PROTECTED SO THAT SEDIMENT-LADEN WATER CANNOT ENTER THE CONVEYANCE SYSTEM WITHOUT FIRST BEING FILTERED OR OTHERWISE TREATED TO REMOVE SEDIMENT.
9. WHEN WORK IN A LIVE WATERCOURSE IS PERFORMED, PRECAUTIONS SHALL BE TAKEN TO MINIMIZE ENCROACHMENT, CONTROL SEDIMENT TRANSPORT AND STABILIZE THE WORK AREA TO THE GREATEST EXTENT POSSIBLE DURING CONSTRUCTION.
10. PERIODIC INSPECTION AND MAINTENANCE OF ALL SEDIMENT CONTROL STRUCTURES MUST BE PROVIDED TO ENSURE INTENDED PURPOSE IS ACCOMPLISHED. THE DEVELOPER, OWNER AND/OR CONTRACTOR SHALL BE CONTINUALLY RESPONSIBLE FOR ALL SEDIMENT CONTROLS. SEDIMENT CONTROL MEASURES SHALL BE IN WORKING CONDITION AT THE END OF EACH WORKING DAY.
11. WHERE CONSTRUCTION VEHICLE ACCESS ROUTES INTERSECT PAVED PUBLIC ROADS, PROVISIONS SHALL BE MADE TO MINIMIZE THE TRANSPORT OF SEDIMENT BY TRACKING ONTO THE PAVED SURFACE. WHERE SEDIMENT IS TRANSPORTED ONTO A PUBLIC ROAD SURFACE WITH CURBS AND GUTTERS, THE ROAD SHALL BE CLEANED THOROUGHLY AT THE END OF EACH DAY. SEDIMENT SHALL BE REMOVED FROM THE ROADS BY SHOVELING OR SWEEPING AND TRANSPORTED TO A SEDIMENT CONTROL DISPOSAL AREA. STREET WASHING SHALL BE ALLOWED ONLY AFTER SEDIMENT IS REMOVED IN THIS MANNER. THIS PROVISION SHALL APPLY TO INDIVIDUAL SUBDIVISION LOTS AS WELL AS TO LARGER LAND DISTURBING ACTIVITIES.
12. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED.
13. PROPERTIES AND WATERWAYS DOWNSTREAM FROM CONSTRUCTION SITES SHALL BE PROTECTED FROM SEDIMENT DEPOSITION AND EROSION AT ALL TIMES DURING CONSTRUCTION.
14. EROSION CONTROL DESIGN AND CONSTRUCTION SHALL FOLLOW THE REQUIREMENTS IN INDEX NUMBERS 101, 102 AND 103 OF F.D.O.T. ROADWAY AND TRAFFIC DESIGN STANDARDS AND COUNTY PERMITS.
15. CONTRACTOR IS RESPONSIBLE FOR ALL SURFACE WATER DISCHARGES, RAINFALL RUN OFF OR DEWATERING ACTIVITIES.
16. CONTRACTOR MUST INCORPORATE ALL BMP'S NECESSARY TO MEET OR EXCEED STATE WATER QUALITY AND SWPPP REQUIREMENTS.
17. THE POLLUTION PREVENTION PLAN IS A MINIMUM GUIDELINE ONLY. ADDITIONAL BMP'S MAY BE NECESSARY AT CONTRACTOR'S EXPENSE.
18. NOI TO BE POSTED ON SITE.
19. DEWATERING ACTIVITIES:
 - A - DISCHARGE MUST NOT EXCEED STATE WATER QUALITY STANDARDS.
 - B - CONTRACTOR MUST HAVE A TRANSFERABLE SURVIVOR CONSUMPTIVE USE PERMIT KNOWN AS A "NOTICED GENERAL PERMIT FOR SHORT TERM CONSTRUCTION DE-WATERING".
 - C - NO HYDRAULIC PUMPS MAY BE USED FOR DEWATERING UNLESS APPROVED BY THE WATER MANAGEMENT DISTRICT FOR THAT AREA.
 - D - NO TURBID DISCHARGE. TURBIDITY READINGS ARE REQUIRED ONCE A WEEK AND MUST BE REPORTED TO THE PROJECT ENGINEER.

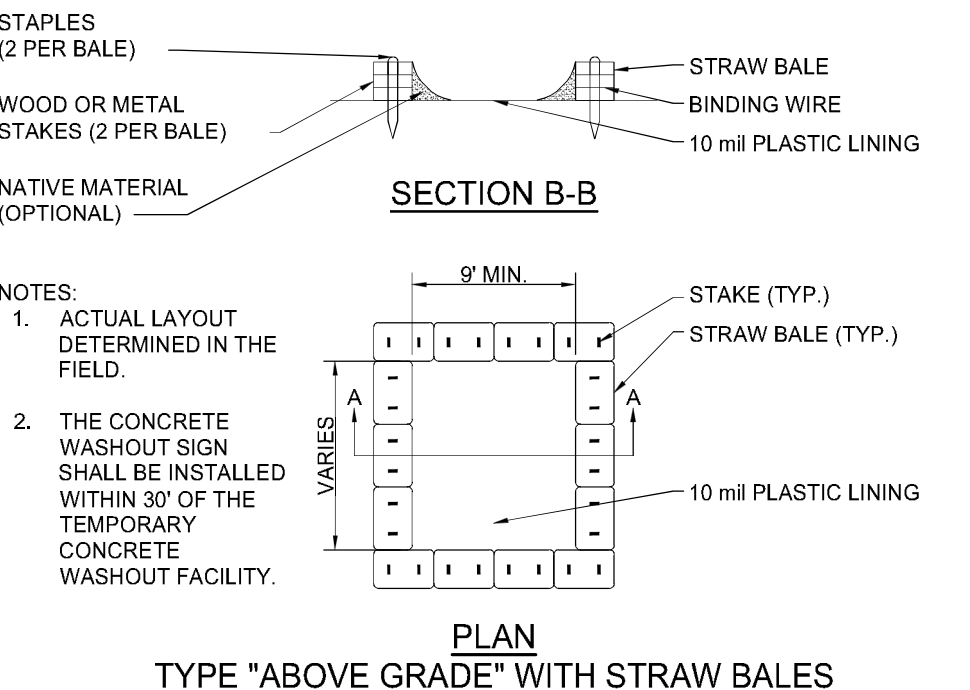
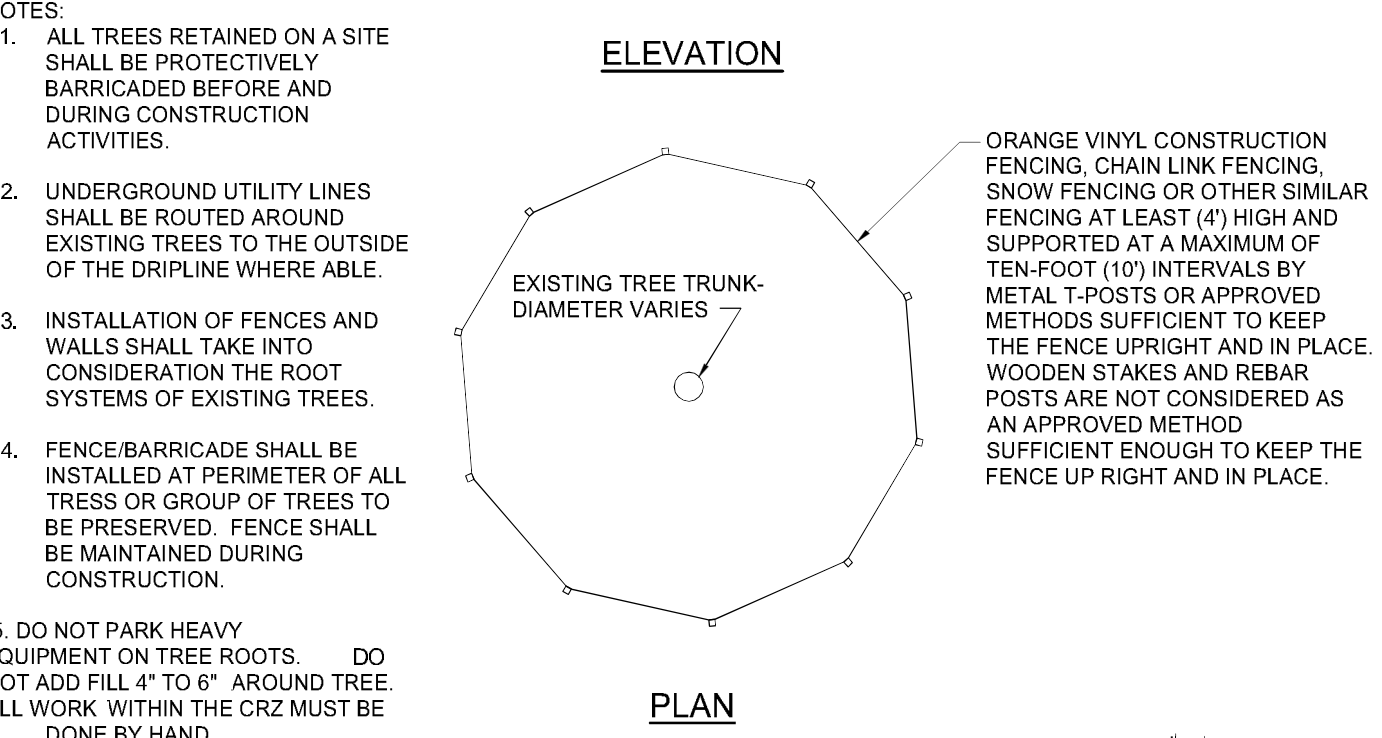
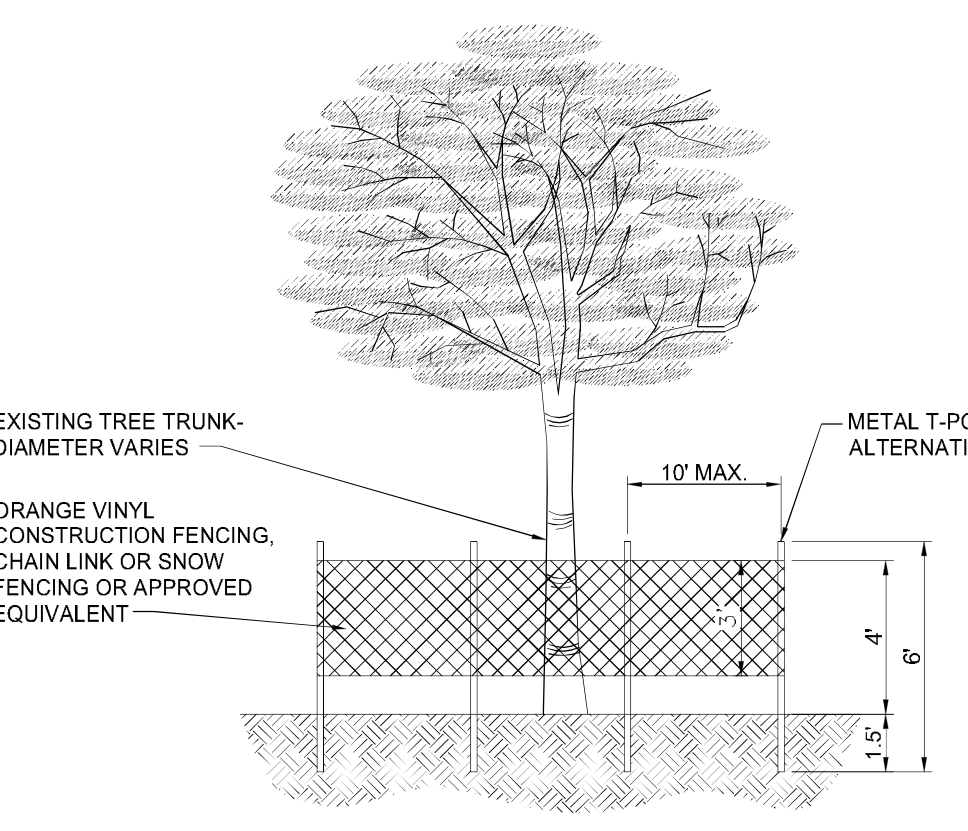
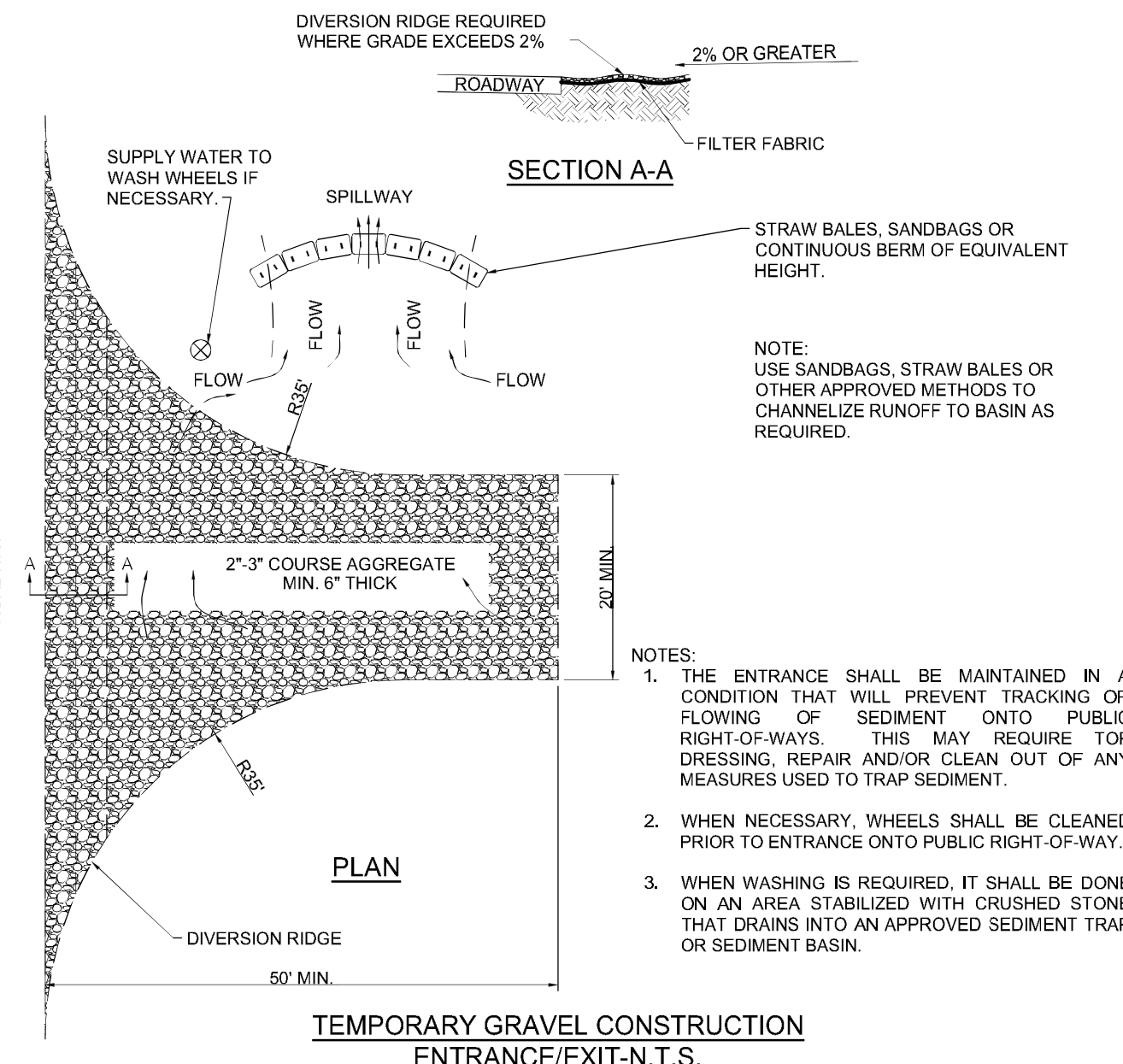
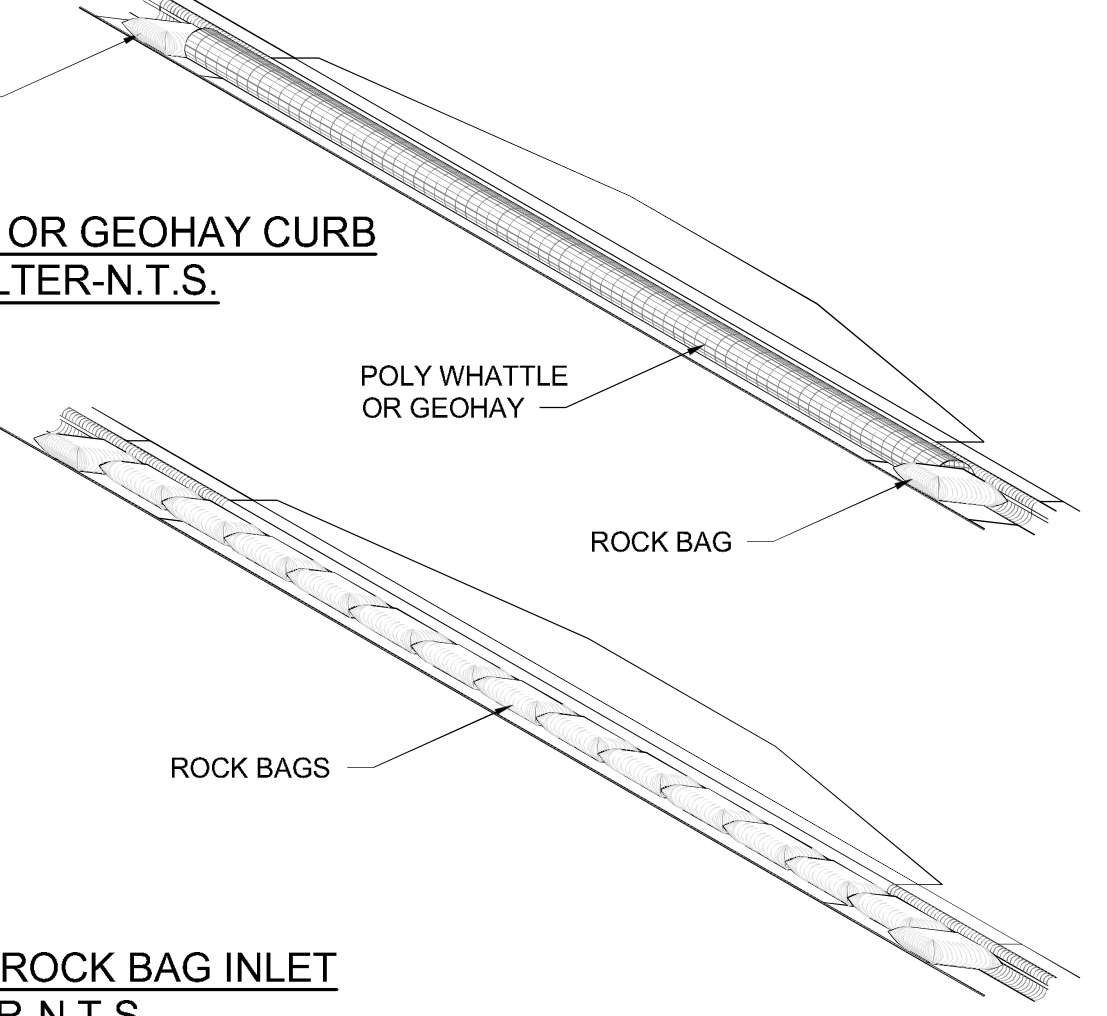


LOW TO MODERATE FLOW GEOTEXTILE FABRIC SPECIFICATION TABLE		
PROPERTIES	TEST METHOD	UNITS
GRAB TENSILE STRENGTH	ASTM D-4632	300 LBS.
GRAB TENSILE ELONGATION	ASTM D-4632	20%
PUNCTURE	ASTM D-4833	120 LBS.
MULLEN BURST	ASTM D-3786	900 P.S.I.
TRAPEZOID TEAR	ASTM D-4533	120 LBS.
UV RESISTANCE	ASTM D-4365	80%
APPARENT OPENING SIZE	ASTM D-4751	40 US SIEVE
FLOW RATE	ASTM D-4491	40 GAL./MIN./SQ. FT.
PERMEABILITY	ASTM D-4491	0.05 SEC.-1
MODERATE TO HIGH FLOW GEOTEXTILE FABRIC SPECIFICATION TABLE		
PROPERTIES	TEST METHOD	UNITS
GRAB TENSILE STRENGTH	ASTM D-4632	265 LBS.
GRAB TENSILE ELONGATION	ASTM D-4632	20%
PUNCTURE	ASTM D-4833	135 LBS.
MULLEN BURST	ASTM D-3786	420 P.S.I.
TRAPEZOID TEAR	ASTM D-4533	40 LBS.
UV RESISTANCE	ASTM D-4365	90%
APPARENT OPENING SIZE	ASTM D-4751	20 US SIEVE
FLOW RATE	ASTM D-4491	200 GAL./MIN./SQ. FT.
PERMEABILITY	ASTM D-4491	1.5 SEC.-1

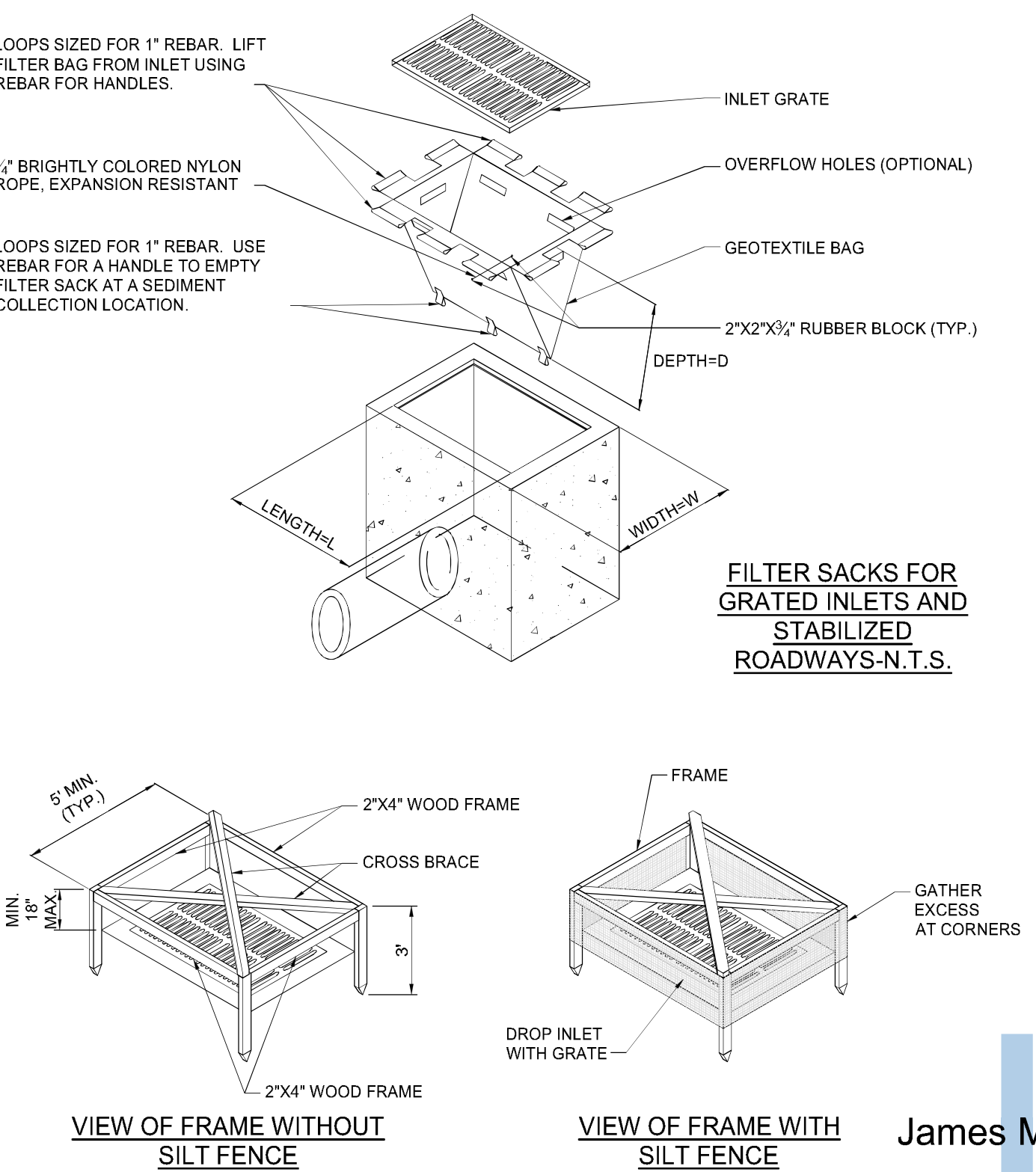
SOCK-PIPE OR ROCK BAG INLET FILTER-N.T.S.



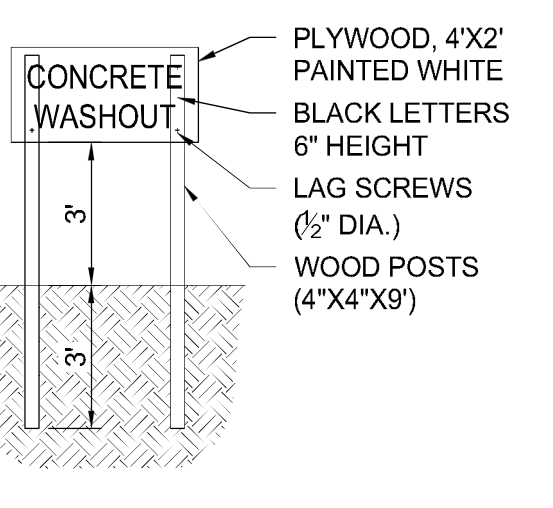
POLY WHATTLES OR GEOHAY CURB INLET FILTER-N.T.S.



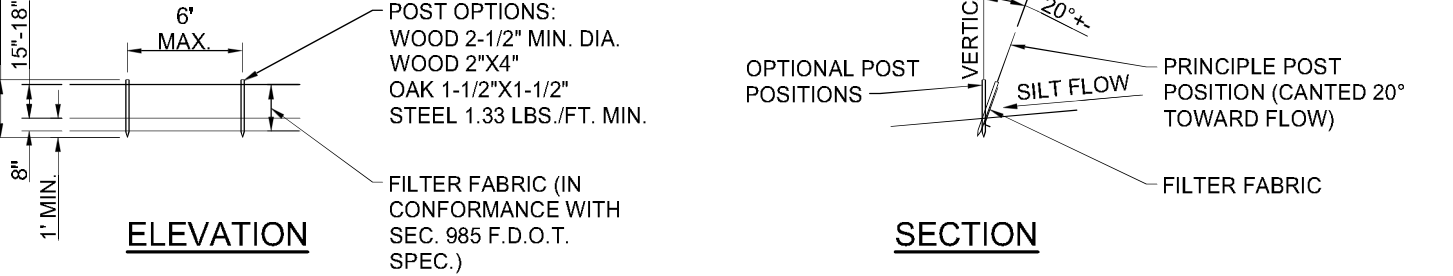
CONCRETE & STUCCO WASTE MANAGEMENT-N.T.S.



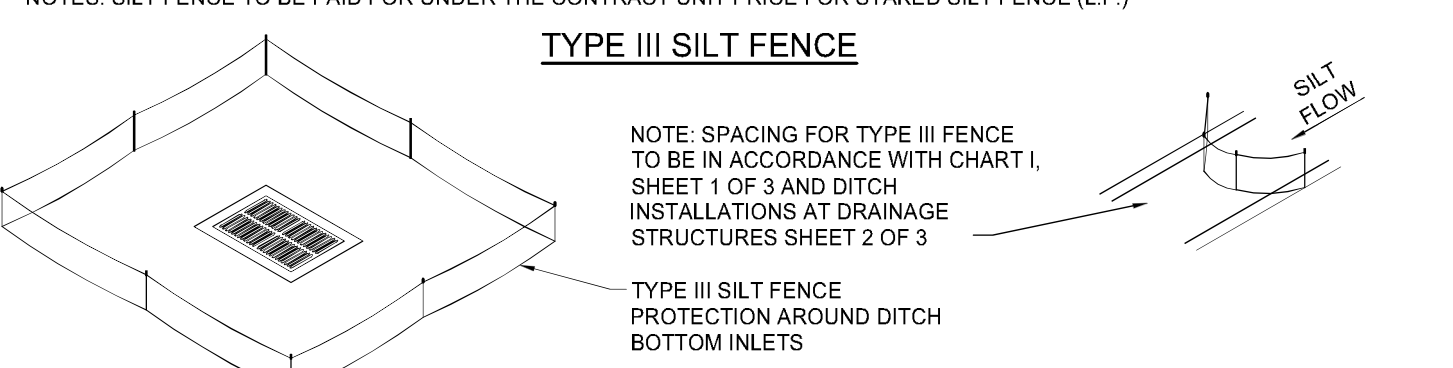
SILT FENCE INLET PROTECTION-N.T.S.



CONCRETE WASHOUT SIGN DETAIL (OR EQUIVALENT)



TYPE III SILT FENCE



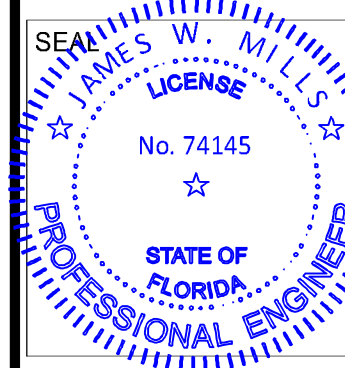
NOTE: SPACING FOR TYPE III FENCE TO BE IN ACCORDANCE WITH CHART I, SHEET 1 OF 3 AND DITCH INSTALLATIONS AT DRAINAGE STRUCTURES SHEET 2 OF 3

SILT FENCE APPLICATIONS-N.T.S.

DO NOT DEPLOY IN A MANNER THAT SILT FENCES WILL ACT AS A DAM ACROSS PERMANENT FLOWING WATERCOURSES. SILT FENCES ARE TO BE USED AT UPLAND LOCATIONS AND TURBIDITY BARRIERS USED AT PERMANENT BODIES OF WATER.

Mills, Short & Associates
WEBSITE: www.MillsShortAssociates.com
PHONE: 772.226.7282
C.A. #: 36088
700 22nd Place, Suite 2C2D
Vero Beach, Florida 32960

James Mills



ISSUE	DATE	COMMENTS
A	01/03/24	TRC RESUBMITTAL
A	04/23/24	TRC RESUBMITTAL NO.2
A	05/09/24	TRC RESUBMITTAL NO.3

STORMWATER POLLUTION PREVENTION DETAILS		
CHECKED BY	JWM	APPROVED BY
SCALE:	N/A	

LA-Z-BOY VERO
6366 20TH STREET
VERO BEACH, FL 32966

PROJ. NO.	23-1160
DATE	11/07/2023
SHEET NO.	