



LEGEND	
GRADING PLAN	
PROPERTY LINE	---
PROP ASPHALT PAVEMENT	[Pattern]
PROP CONCRETE SIDEWALK	[Pattern]
PROP CONCRETE PAVEMENT	[Pattern]
PROP SPOT ELEVATION	○
EX STORM SEWER	[Symbol]
PROP STORM SEWER	[Symbol]
PROP GRATE INLET	[Symbol]
PROP STORM CLEANOUT	[Symbol]
PROP STORM MANHOLE	[Symbol]
RIDGE LINE	---
SWALE LINE	---

BOHLER
SITE CIVIL AND CONSULTING ENGINEERING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
SUSTAINABLE DESIGN
PERMITTING SERVICES
TRANSPORTATION SERVICES

REVISIONS			
REV	DATE	COMMENT	DRAWN BY

811
Know what's below.
Call before you dig.
ALWAYS CALL 811
It's fast. It's free. It's the law.

ISSUED FOR MUNICIPAL & AGENCY REVIEW & APPROVAL

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.:	FLD24044-00-0A
DRAWN BY:	AJ
CHECKED BY:	RH
DATE:	12/06/2024
CAD ID:	P-CIVL-GRDR

PROP. SITE PLAN DOCUMENTS
FOR



PROJECT DEVELOPMENT
2007 SOUTH US HWY 1
FT PIERCE, FL 34950
S 15 - T 35 S - R 40 E

BOHLER
135 WEST CENTRAL BOULEVARD,
SUITE 600
ORLANDO, FLORIDA 32801
Phone: (321) 234-2880
FLORIDA BUSINESS CERT. OF AUTH. No. 30760

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY RYAN KEITH FLEMAN, PE, ON THE DATE ADJACENT TO THE SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

SHEET TITLE:
PAVING/ GRADING/ DRAINAGE PLAN
SHEET NUMBER:
C-401
ORG. DATE - 2/11/2025

GENERAL NOTES:

- CONTRACTOR WILL BE RESPONSIBLE FOR VERIFYING THE LOCATION AND DEPTH OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
- CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO CASTING STRUCTURES.
- COORDINATE ALL UTILITY LEADS AND BUILDING CONNECTIONS WITH THE ARCHITECTURAL PLANS.
- STANDARD INDEXES REFER TO THE LATEST EDITION OF F.D.O.T. "ROADWAY AND TRAFFIC DESIGN STANDARDS."
- ALL DISTURBED AREAS WITHIN RIGHT-OF-WAY WILL NEED TO BE SODDED.

PAVING AND GRADING NOTES:

- A. GENERAL:
- ALL ELEVATIONS SHOWN ARE IN REFERENCE TO THE SURVEYOR'S BENCHMARKS AND MUST BE VERIFIED BY THE GENERAL CONTRACTOR PRIOR TO GROUND BREAK.
 - ALL GRADES SHOWN REFERENCE PROPOSED ELEVATIONS AT EDGE OF PAVEMENT, UNLESS OTHERWISE NOTED. "TC" = TOP OF CURB ELEVATION; "G" = FINISHED GRADE; "MEG" = PROPOSED GRADE TO MATCH EXISTING GRADE; TW = TOP OF RETAINING WALL ELEVATION; BW = BOTTOM OF RETAINING WALL ELEVATION.
 - THE ALTA/ACSM LAND TITLE SURVEY SHALL BE CONSIDERED A PART OF THESE PLANS.
 - THE GEOTECHNICAL REPORT AND RECOMMENDATIONS SET FORTH THEREIN ARE A PART OF THE REQUIRED CONSTRUCTION DOCUMENTS AND IN CASE OF CONFLICT SHALL TAKE PRECEDENCE UNLESS SPECIFICALLY NOTED OTHERWISE ON THE PLANS. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING OF ANY SUCH DISCREPANCY BETWEEN GEOTECHNICAL REPORT AND PLANS, ETC.
 - ALL UNDERGROUND UTILITIES SHALL BE COMPLETED PRIOR TO CONSTRUCTION OF LIMEROCK BASE.
 - ALL EXISTING PAVEMENT, CUT OR DAMAGED BY CONSTRUCTION, SHALL BE PROPERLY RESTORED AT THE CONTRACTOR'S EXPENSE.
 - WHERE ANY PROPOSED PAVEMENT IS TO BE CONNECTED TO EXISTING PAVEMENT, THE EXISTING EDGE OF PAVEMENT SHALL BE SAWCUT TO ENSURE A PROPER JOINT.
 - PRIOR TO CONSTRUCTION OR INSTALLATION, SHOP DRAWINGS SHALL BE SUBMITTED TO AND APPROVED BY THE ENGINEER OF RECORD. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ALL OTHER AGENCY APPROVALS IF REQUIRED.

- B. MATERIALS:
- BASE COURSE SHALL BE ABC-3 PER F.D.O.T. SPECIFICATIONS OR EQUIVALENT LIMEROCK THICKNESS W/ MINIMUM LBR-100 (MAX. 6" LIFTS).
 - ASPHALT SURFACES SHALL BE TYPE S-III ASPHALTIC CONCRETE, UNLESS OTHERWISE SPECIFIED ON THE PLANS, SHALL BE A MINIMUM OF 1-1/2" THICK, AND SHALL BE CONSTRUCTED IN TWO 3/4" LIFTS, WITH TACKCOAT BETWEEN LIFTS.
 - REINFORCED CONCRETE SLABS SHALL BE CONSTRUCTED OF CLASS I CONCRETE WITH A MINIMUM STRENGTH OF 3,000 PSI AND SHALL BE REINFORCED WITH A 6" x 6" NO. 6 GAUGE WIRE MESH.
- C. INSTALLATION:
- SUBGRADE FOR ROADWAY SHALL BE COMPACTED TO A MINIMUM OF 98% OF THE MAXIMUM DENSITY (AASHTO T-180), SHALL BE A MINIMUM 12", AND SHALL HAVE A MINIMUM LBR-40.
 - BASE COURSE MATERIAL FOR PAVED AREAS SHALL BE A MINIMUM THICKNESS OF 6" PLACED IN ONE LIFT. ADDITIONALLY, BASE COURSE MATERIAL SHALL HAVE A MINIMUM MARSHALL STABILITY OF 1000, UNLESS OTHERWISE INDICATED (OR LBR-100).
 - BASE COURSE SHALL BE COMPACTED TO 98% OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
 - INSTALLATION OF THE WEARING SURFACE SHALL CONFORM TO THE REQUIREMENTS OF THE D.O.T. STANDARD SPECIFICATIONS FOR TYPE S-III ASPHALTIC CONCRETE OR THE LATEST REVISION.
- D. TESTING
- THE FINISHED SURFACE OF THE BASE COURSE AND THAT OF THE WEARING SURFACE SHALL NOT VARY MORE THAN 1/4" FROM THE TEMPLATE, ANY IRREGULARITIES EXCEEDING THIS LIMIT SHALL BE CORRECTED.
 - DENSITY TESTS SHALL BE TAKEN BY AN INDEPENDENT TESTING LABORATORY CERTIFIED BY THE STATE OF FLORIDA, WHERE DIRECTED BY THE ENGINEER.
 - ALL TESTING COSTS (PAVING) SHALL BE PAID FOR BY THE CONTRACTOR.
 - DENSITY TESTS ON THE STABILIZED SUBGRADE SHALL BE SUPPLIED TO AND APPROVED BY THE ENGINEER OF RECORD AND GEOTECHNICAL ENGINEER BEFORE ANY BASE IS CONSTRUCTED.
 - DENSITY TESTS AND "AS-BUILTS" ON THE FINISHED BASE SHALL BE SUPPLIED TO AND APPROVED BY THE GEOTECHNICAL ENGINEER BEFORE ANY ASPHALT PAVEMENT IS CONSTRUCTED.

DEWATERING NOTE:

CONTRACTOR SHALL SUBMIT DEWATERING PLAN TO THE DISTRICT 14 DAYS PRIOR TO COMMENCEMENT, SUBJECT PLANS SHALL BE REVISED AS NECESSARY.

STORM DRAINAGE NOTES:

- A. GENERAL:
- DISTANCES AND LENGTHS OF PIPE SHOWN ON PLANS ARE REFERENCED TO THE CENTER OF STRUCTURES.
- B. MATERIALS:
- REINFORCED CONCRETE PIPE (RCP) SHALL MEET THE REQUIREMENTS OF ASTM C-76, CLASS III, WALL THICKNESS "B", LATEST REVISION. RUBBER GASKETS OR OTHER MANUFACTURER SUPPLIED JOINT SEALER SHALL BE USED.
 - ALL PVC DRAINAGE PIPE AND FITTINGS SHALL BE NON-PRESSURE POLY(VINYL CHLORIDE) (PVC) PIPE CONFORMING TO ASTM D 3034, SDR 35, WITH PUSH-ON RUBBER GASKET JOINTS.
 - ALL HIGH DENSITY POLYETHYLENE PIPE AND FITTINGS SHALL MEET THE REQUIREMENTS OF AASHTO M-294 LATEST REVISIONS. ALL PIPING TO BE NON-PERFORATED TUBING.
- C. INSTALLATION:
- PIPE SHALL BE PLACED ON A MINIMUM OF 8" STABLE GRANULAR MATERIAL FREE OF ROCK FORMATION AND OTHER FOREIGN FORMATIONS, AND CONSTRUCTED TO A UNIFORM GRADE AND LINE.
 - BACKFILL MATERIAL SHALL BE WELL GRADED GRANULAR MATERIAL, WELL TAMPED IN LAYERS NOT TO EXCEED 6" TO A HEIGHT OF 12" ABOVE PIPE AS SHOWN ON THE PLANS.
 - PROVIDE A MINIMUM PROTECTIVE COVER OF 18" OVER STORM SEWER AND AVOID UNNECESSARY CROSSING BY HEAVY CONSTRUCTION VEHICLES DURING CONSTRUCTION.
- D. CONNECTIONS TO EXISTING STORM STRUCTURES:
- THE HOLE INTO THE EXISTING STRUCTURE SHALL BE SAW CUT OR CORE DRILLED.
 - USE NON-SHRINKING GROUT TO FILL ALL GAPS AROUND THE JOINT.
 - AFTER PIPE IS CONNECTED WITH THE INLET, THE END OF THE PIPE MUST BE CUT FLUSH WITH THE INSIDE SURFACE OF THE INLET.
 - REFER TO F.D.O.T. STANDARD PLAN INDEX 425-001 FOR FILTER FABRIC WRAP ON GROUTED PIPE TO STRUCTURE JOINT DETAIL.

ROOF DRAIN PIPE SCHEDULE							
FROM	FROM INV	TO	TO INV	PIPE LENGTH	SLOPE (%)	SIZE (IN)	MATERIAL TYPE
RCO-01	16.40'	RCO-02	16.09'	31 LF	1.00%	4"	HDPE
RCO-02	16.09'	RCO-03	15.65'	44 LF	1.00%	4"	HDPE
RCO-03	15.65'	EXISTING INLET	15.31'	34 LF	1.00%	4"	HDPE
RCO-01	16.40'	RCO-04	16.34'	3 LF	2.14%	4"	HDPE
RCO-04	16.34'	RCO-05	15.95'	18 LF	2.14%	4"	HDPE
RCO-05	15.95'	RCO-06	15.65'	14 LF	2.14%	4"	HDPE
RCO-06	15.65'	RCO-08	14.82'	39 LF	2.14%	8"	HDPE
RCO-01	16.40'	RCD-07	16.04'	9 LF	3.95%	4"	HDPE
RCD-07	16.04'	RCD-08	14.82'	31 LF	3.95%	8"	HDPE
RCD-08	14.82'	A-30	14.56'	12 LF	2.14%	8"	HDPE

STORM CLEANOUT SCHEDULE			
RCO-01:	RCO-02:	RCO-03:	RCO-04:
BUILDING DOWNSPOUT & CLEANOUT RIM: AT GRADE INV: 16.40'	CLEANOUT RIM: AT GRADE INV: 16.09'	CLEANOUT RIM: AT GRADE INV: 15.65'	CLEANOUT RIM: AT GRADE INV: 16.34'
RCO-05:	RCO-06:	RCO-07:	RCO-08:
CLEANOUT RIM: AT GRADE INV: 15.95'	CLEANOUT RIM: AT GRADE INV: 15.65'	CLEANOUT RIM: AT GRADE INV: 16.04'	CLEANOUT RIM: AT GRADE INV: 14.82'

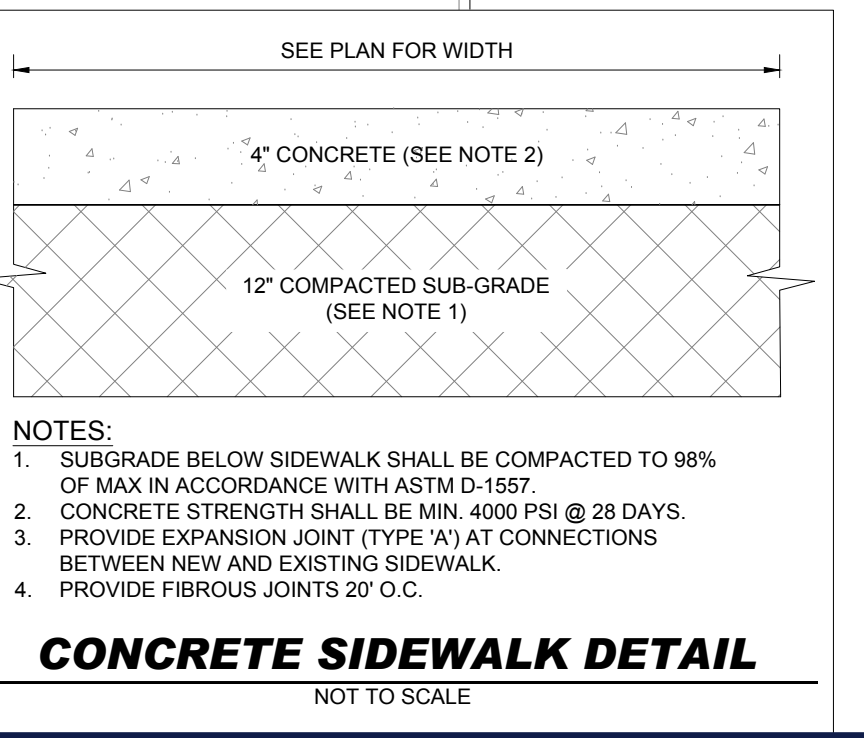
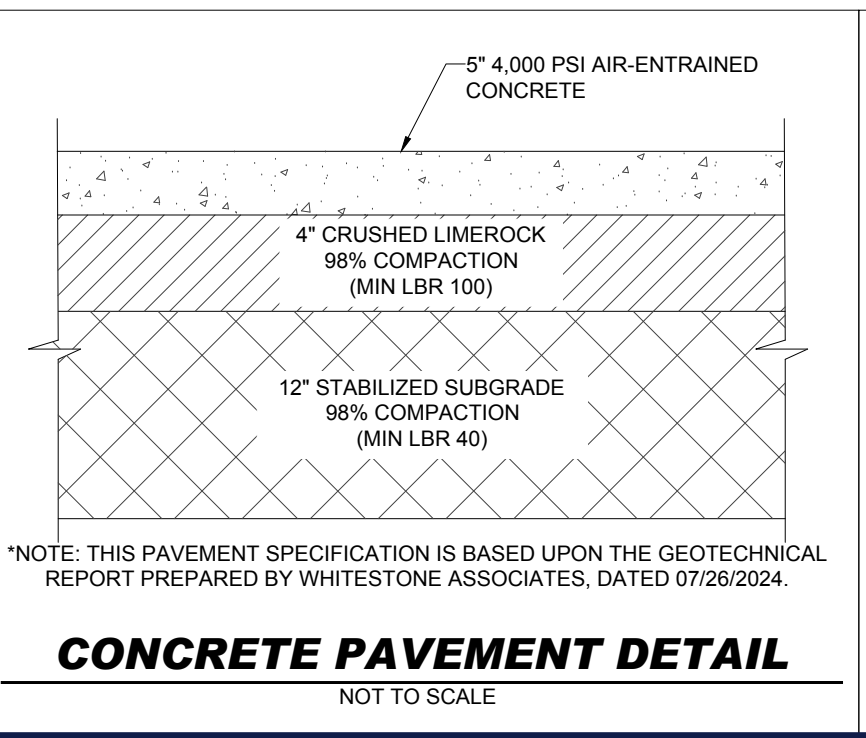
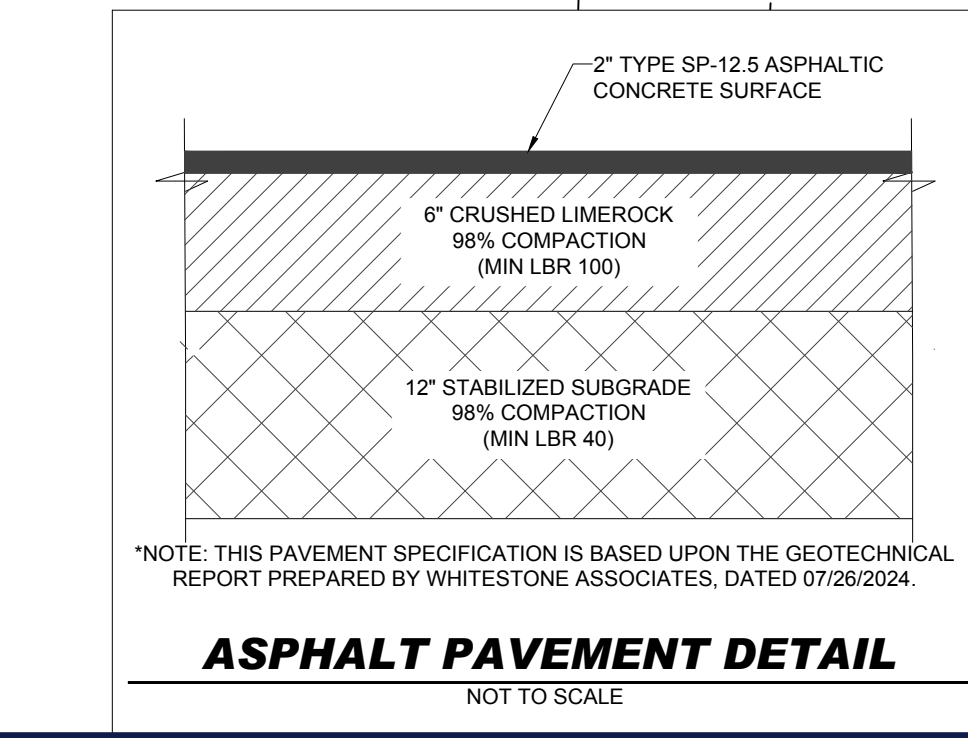
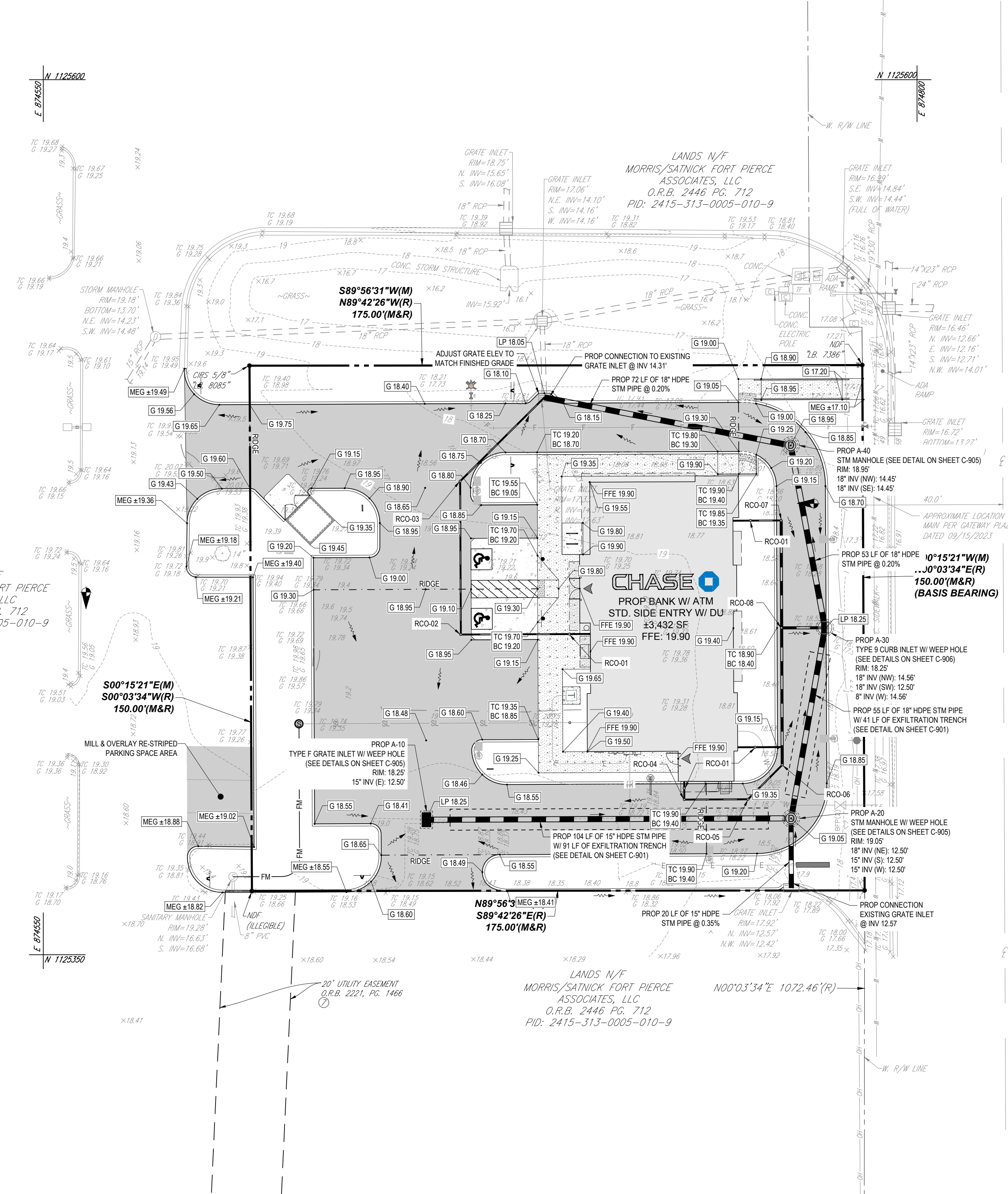
DATUM NOTE:

ELEVATIONS ARE BASED ON NAVD83 DATUM DETERMINED BY GPS OBSERVATIONS AND TIED IN TO THE NGS BENCHMARK NO. AF7505 WITH A PUBLISHED ELEVATION OF 11.96 FEET.

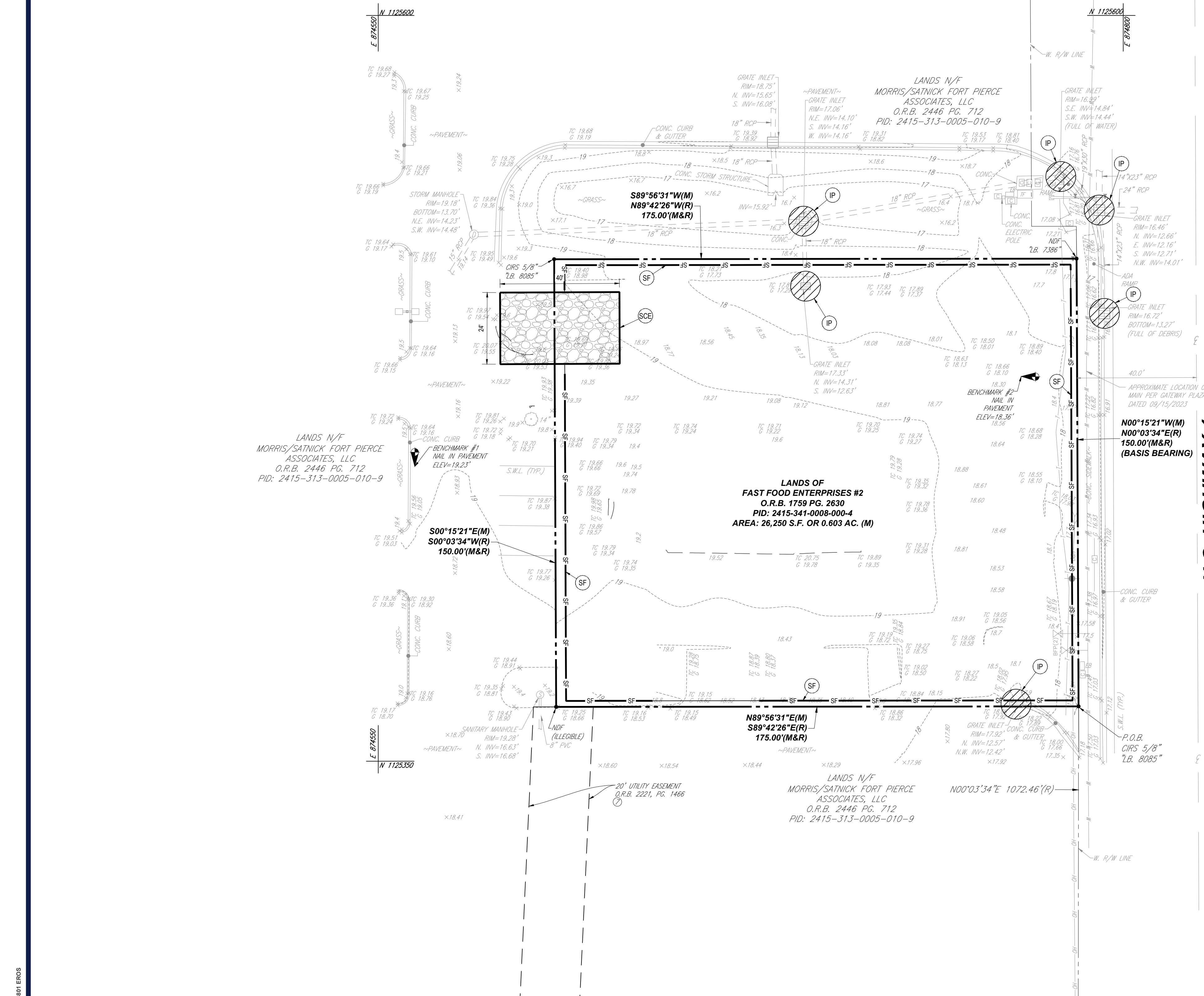
FEMA NOTE:

THE PROPERTY IS LOCATED IN OTHER AREAS ZONE X (AREAS OF MINIMAL FLOOD HAZARD), PER MAP ENTITLED "FIRM NATIONAL FLOOD INSURANCE RATE MAP, ST. LUCIE COUNTY, FLORIDA AND INCORPORATED AREAS, PANEL 187 OF 420, MAP NUMBER 1211C10187K, WITH A MAP EFFECTIVE DATE OF FEBRUARY 19, 2020.

THIS PLAN TO BE UTILIZED FOR GRADING, DRAINAGE AND UTILITIES PURPOSES ONLY



- NOTES:
- SUBGRADE BELOW SIDEWALK SHALL BE COMPACTED TO 98% OF MAX IN ACCORDANCE WITH ASTM D-1557.
 - CONCRETE STRENGTH SHALL BE MIN. 4000 PSI @ 28 DAYS.
 - PROVIDE EXPANSION JOINT (TYPE 'A') AT CONNECTIONS BETWEEN NEW AND EXISTING SIDEWALK.
 - PROVIDE FIBROUS JOINTS 20' O.C.



DATUM NOTE:

ELEVATIONS ARE BASED ON NAVD83 DATUM DETERMINED BY GPS OBSERVATIONS AND TIED IN TO THE NGS BENCHMARK NO. AF7905 WITH A PUBLISHED ELEVATION OF 11.98 FEET.

POLLUTION PREVENTION NOTES:

- EROSION AND SEDIMENT CONTROL BMP'S IN ADDITION TO THOSE PRESENTED ON THESE PLANS SHALL BE IMPLEMENTED AS NECESSARY TO PREVENT TURBID DISCHARGES FROM FLOWING ONTO ADJACENT PROPERTIES OR ROADWAYS. OFF SITE STORMWATER CONVEYANCES OR RECEIVING WATERS, OR ON SITE WETLANDS AND SURFACE WATERS, BMP'S SHALL BE DESIGNED, INSTALLED, AND MAINTAINED BY THE SITE OPERATOR TO ENSURE THAT OFF SITE SURFACE WATER QUALITY REMAINS CONSISTENT WITH FEDERAL, STATE, AND LOCAL REGULATIONS. THE OPERATOR IS THE ENTITY THAT OWNS OR OPERATES THE CONSTRUCTION ACTIVITY AND HAS AUTHORITY TO CONTROL THOSE ACTIVITIES AT THE PROJECT NECESSARY TO ENSURE COMPLIANCE.]
- OFF SITE SURFACE WATER DISCHARGES, DISCHARGES TO ONSITE WETLANDS, OR SURFACE WATERS WITH TURBIDITY IN EXCESS OF 29 NEPHELOMETRIC TURBIDITY UNITS (NTU'S) ABOVE BACKGROUND LEVEL SHALL BE IMMEDIATELY CORRECTED. SUCH INCIDENTS SHALL BE REPORTED TO WATER RESOURCES WITHIN 24 HOURS OF THE OCCURRENCE. THE REPORT SHALL INCLUDE THE CAUSE OF THE DISCHARGE AND CORRECTIVE ACTIONS TAKEN.
- THE OPERATOR SHALL ENSURE THAT ADJACENT PROPERTIES ARE NOT IMPACTED BY WIND EROSION, OR EMISSIONS OF UNCONFINED PARTICULATE MATTER IN ACCORDANCE WITH RULE 62-296.320(4)(C)1, F.A.C., BY TAKING APPROPRIATE MEASURES TO STABILIZE AFFECTED AREAS.
- FUEL AND OTHER PETROLEUM PRODUCT SPILLS THAT ENTER STORMWATER DRAINS OR WATERBODIES, OR FUEL AND OTHER PETROLEUM PRODUCT SPILLS THAT ARE IN EXCESS OF 25 GALLONS SHALL BE CONTAINED, CLEANED UP, AND IMMEDIATELY REPORTED TO WATER RESOURCES. SMALLER GROUND SURFACE SPILLS SHALL BE CLEANED UP AS SOON AS PRACTICAL.
- IF CONTAMINATED SOIL AND/OR GROUNDWATER IS DISCOVERED DURING DEVELOPMENT OF THE SITE, ALL ACTIVITY IN THE VICINITY OF THE CONTAMINATION SHALL IMMEDIATELY CEASE AND WATER RESOURCES SHALL BE CONTACTED.
- PRIOR TO DEMOLITION OF EXISTING ON SITE STRUCTURES AN ASBESTOS SURVEY AND/OR ASBESTOS NOTIFICATION MAY BE REQUIRED.
- NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM:
 - NPDES CONSTRUCTION GENERIC PERMIT COVERAGE SHALL BE OBTAINED AT LEAST 48 HOURS IN ADVANCE OF COMMENCEMENT OF CONSTRUCTION IN ACCORDANCE WITH RULE 62-621.300(4)(a), F.A.C.
 - A COPY OF THE CERTIFIED NPDES NOI, OR A COPY OF THE FDEP COVERAGE CONFIRMATION LETTER SHALL BE POSTED AT THE SITE IN ACCORDANCE WITH RULE 62-621.300(4)(a) PART III.C.2, F.A.C.
 - A COPY OF THE CERTIFIED NPDES NOI, OR A COPY OF THE FDEP COVERAGE CONFIRMATION LETTER SHALL BE PROVIDED TO WATER RESOURCES IN ACCORDANCE WITH RULE 62-621.300(4)(a) PART III.D.1, F.A.C.
 - THE SWPPP SHALL BE CERTIFIED IN ACCORDANCE WITH RULE 62-621.300(4)(a) PART V.D.8, F.A.C.
 - A COPY OF THE SWPPP, AND COPIES OF THE INSPECTION AND MAINTENANCE RECORDS SHALL BE MAINTAINED AT THE PROJECT SITE, AND SHALL BE READILY AVAILABLE TO COUNTY OR STATE INSPECTORS.
- THE DISCHARGE OF GROUNDWATER PRODUCED THROUGH DEWATERING, TO SURFACE WATERS, OR ANY PORTION OF THE MSW WILL REQUIRE SEPARATE PERMITTING FROM THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP). PERMIT(S) SHALL BE OBTAINED PRIOR TO THE COMMENCEMENT OF DEWATERING.

MAINTENANCE NOTES:

N.P.D.E.S. PERMIT COMPLIANCE REQUIRES INSPECTIONS EVERY 7 CALENDAR DAYS BY A NPDES QUALIFIED INSPECTOR AND PERIODIC INSPECTIONS WITHIN 24 HOURS OF ANY RAINFALL EVENT OF 0.5" OR GREATER. THESE INSPECTIONS MAY RESULT IN RECOMMENDATIONS FOR ROUTINE MAINTENANCE OF THE SOIL EROSION CONTROL DEVICES, AS WELL AS FURTHER MAINTENANCE AS OUTLINED BELOW. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO ENSURE N.P.D.E.S. COMPLIANCE.

- INSPECTIONS BY CONTRACTOR MUST OCCUR AT LEAST ONCE A WEEK OR WITHIN 24 HOURS OF A STORM EVENT 0.5" OR GREATER.
- THROUGHOUT THE CONSTRUCTION PERIOD, ALL MUD/SILT TRACKED ONTO EXISTING ROADS FROM THE SITE DUE TO CONSTRUCTION SHALL BE IMMEDIATELY REMOVED BY THE CONTRACTOR.
- CATCH BASIN INLET AND CONCRETE FLUME FILTERS SHALL BE MAINTAINED CLEAN AT ALL TIMES THROUGHOUT THE CONSTRUCTION PERIOD. WEEKLY INSPECTIONS WILL BE PERFORMED EVERY 7 CALENDAR DAYS. IF A FILTER HAS HOLES OR IS INUNDATED WITH SEDIMENT, THE FILTER WILL REQUIRE REPLACEMENT BY CONTRACTOR.
- CONSTRUCTION ACCESS AND TRACKING MAT MUST BE MAINTAINED BY CONTRACTOR. REPLENISH CRUSHED AGGREGATE IF PRESENT LAYER IS FILLED WITH SEDIMENT, POOLING WATER, OR HAS RUTS. A NEW LAYER MAY BE ADDED IF OLD LAYERS BECOME COMPACTED.
- SILT FENCE IS TO BE INSPECTED DAILY BY CONTRACTOR AND EVERY 7 CALENDAR DAYS BY N.P.D.E.S. QUALIFIED INSPECTOR. IF REPAIRS OR REPLACEMENT IS NECESSARY, IT SHALL BE PERFORMED IMMEDIATELY. THE SILT FENCE SHOULD BE TRENCHED IN, BACK-FILLED, AND STAPLED OR STAKED ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS. MAINTENANCE INCLUDES THE REMOVING OF BUILT-UP SEDIMENT, WHEN THE SEDIMENT ACCUMULATES TO 1/3 OF THE HEIGHT OF THE FENCE. CONTRACTOR MAY HAVE TO REMOVE, REPLACE, RETRENCH, OR RE-BACKFILL THE FENCE IF IT FAILS. IT WOULD ALSO BE NECESSARY TO REINSTALL IF ANY PORTION OF THE FENCING WAS DAMAGED BY CONSTRUCTION MACHINERY.
- SEEDING OR RESEEDING MAY BE REQUIRED IMMEDIATELY TO AREAS WHICH HAVE BEEN DAMAGED BY RUNOFF.
- THE CONTRACTOR SHALL CONTINUOUSLY ENSURE THAT THE PERIMETER OF THE SITE, INCLUDING CONSTRUCTION ENTRANCES, IS SECURED FROM ALLOWING DEBRIS TO LEAVE THE SITE DUE TO CONSTRUCTION ACTIVITY OR RAINFALL EVENTS. A WEEKLY LOG SHALL BE UPDATED AND KEPT ON-SITE IN ACCORDANCE WITH THE N.P.D.E.S. PERMIT, BY BIDDING DOCUMENTS CONTRACTOR ACKNOWLEDGES HE/SHE IS AWARE OF N.P.D.E.S. GUIDELINES AND POLICIES AS WELL AS BEST MANAGEMENT PRACTICES AND ASSUMES SOLE RESPONSIBILITY FOR FINES IMPOSED BY GOVERNMENTAL AGENCIES DUE TO VIOLATIONS.

SEQUENCE OF CONSTRUCTION:

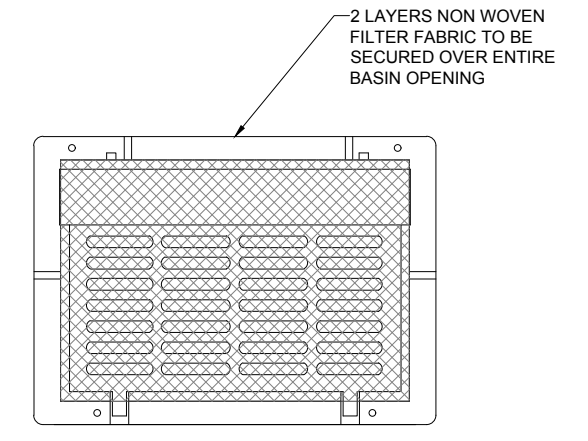
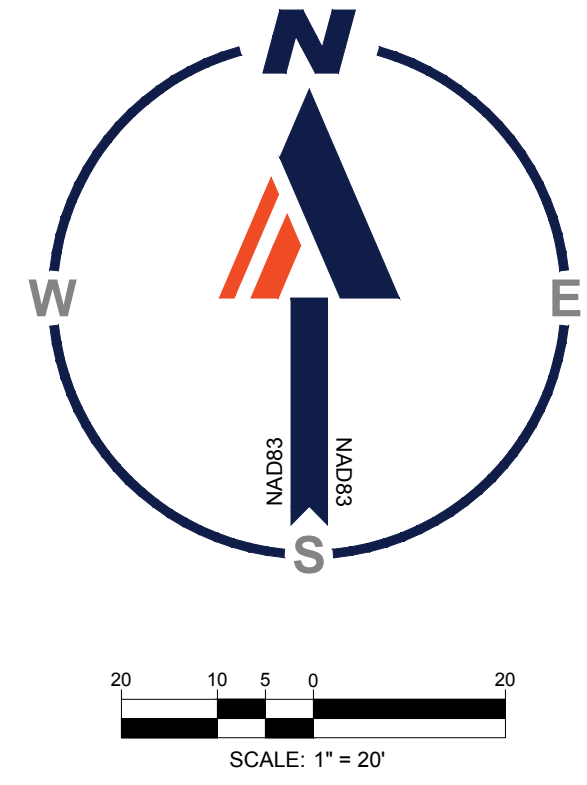
- UPON IMPLEMENTATION AND INSTALLATION OF THE FOLLOWING AREAS:
- TRAILER PARKING, LAYDOWN, PORTABLE RESTROOMS, WHEELED WASTE DISPOSAL DUMPSTER(S), WHEEL WASH, CONCRETE WASHOUT, FUEL AND MATERIAL STORAGE CONTAINERS, SOLID WASTE CONTAINERS, ETC. IMMEDIATELY DENOTE THEM ON THE SITE MAPS AND NOTE ANY CHANGES IN THEIR LOCATIONS ON THE SITE MAP.
- PHASE 1
- CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE AND INSTALL SILT FENCE.
 - INSTALL INLET PROTECTION AT EXISTING INLET(S).
 - PREPARE CLEARING AND GRUBBING OF THE SITE, IF APPLICABLE.
 - INSTALL STORMWATER CONVEYANCE STRUCTURES AND CULVERTS, ENSURE THAT NEW INLETS ARE PROTECTED PRIOR TO MAKING THE OUTFALL CONNECTION.
- PHASE 2
- PERFORM MASS GRADING, ROUGH GRADE TO ESTABLISH PROPOSED DRAINAGE PATTERNS.
 - START CONSTRUCTION OF THE PROPOSED BUILDING PAD AND STRUCTURES.
 - TEMPORARILY SEED WITH PURE LIVE SEED THROUGHOUT THE CONSTRUCTION DISTURBED AREAS THAT WILL BE INACTIVE FOR 7 DAYS OR MORE AS REQUIRED BY THE GENERIC PERMIT.

THIS PLAN TO BE UTILIZED FOR SOIL EROSION AND SEDIMENT CONTROL PURPOSES ONLY

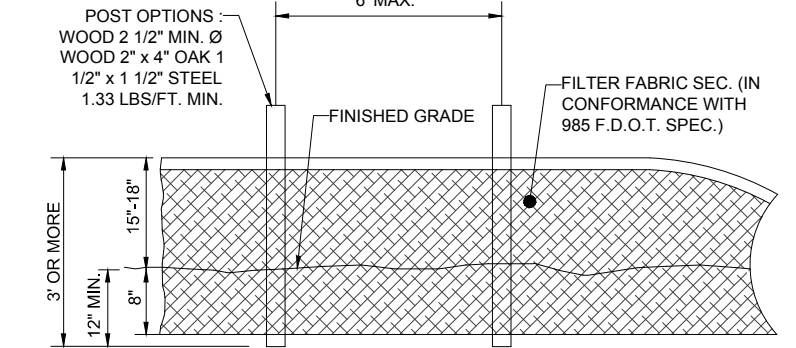
LEGEND	
SOIL EROSION AND SEDIMENT CONTROL PLAN PHASE I	
ONSITE PROPERTY LINE / R.O.W. LINE	---
NEIGHBORING PROPERTY LINE	---
EX. EASEMENT	---
EX. ROADWAY C/L	---
EX. OVERHEAD ELECTRIC	OH
EX. STORM SEWER	---
EX. SANITARY LINE	---
EX. FENCE	X X X
EX. SPOT ELEVATION	5.564 OR 5.64
EX. TREE	CUT FINE
EX. CONCRETE	---
SOIL TRACKING PREVENTION MAT	---
PROP. SILT FENCE	SF
PROP. INLET PROTECTION	IP

KEYNOTES:

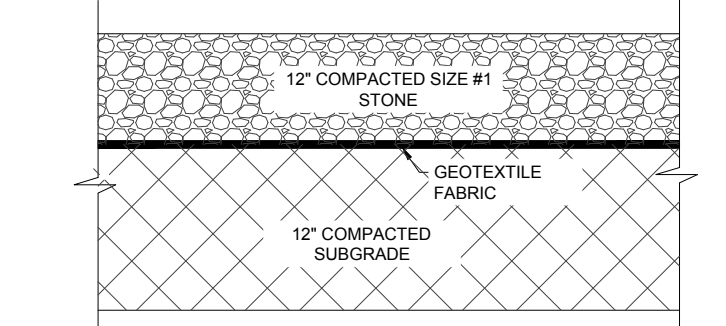
- IP INLET PROTECTION (SEE DETAIL ON THIS SHEET)
- SCE CONSTRUCTION ENTRANCE (SEE DETAIL ON THIS SHEET)
- SF SILT FENCE (SEE DETAIL ON THIS SHEET)



INLET PROTECTION
NOT TO SCALE



SILT FENCE DETAIL
NOT TO SCALE



SOIL TRACKING PAD DETAIL
NOT TO SCALE

BOHLER
 SITE CIVIL AND CONSULTING ENGINEERING
 PROGRAM MANAGEMENT
 LANDSCAPE ARCHITECTURE
 SUSTAINABLE DESIGN
 PERMITTING SERVICES
 TRANSPORTATION SERVICES

REVISIONS

REV	DATE	COMMENT	DRAWN BY	CHECKED BY

811
 Know what's below.
 Call before you dig.
 ALWAYS CALL 811
 It's fast. It's free. It's the law.

ISSUED FOR MUNICIPAL & AGENCY REVIEW & APPROVAL

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.: FL240044-00-0A
 DRAWN BY: AJ
 CHECKED BY: RH
 DATE: 12/08/2024
 CAD ID: P-CIVL-EROS

PROP. SITE PLAN DOCUMENTS
FOR

CHASE
 PROPOSED DEVELOPMENT
 2007 SOUTH US HWY 1
 FT PIERCE, FL 34950
 S 15 - T 35 S - R 40 E

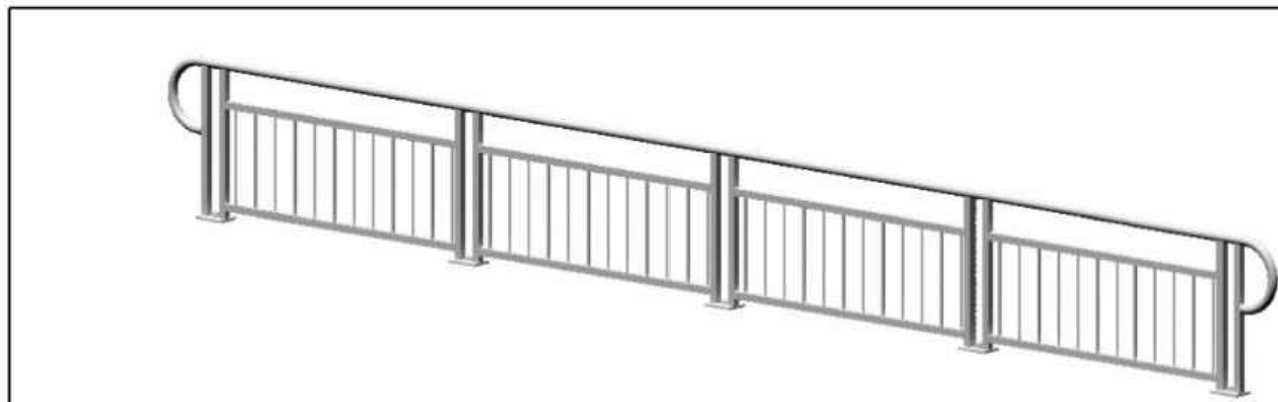
BOHLER
 135 WEST CENTRAL BOULEVARD,
 SUITE 600
 ORLANDO, FLORIDA 32801
 Phone: (321) 234-2880
 FLORIDA BUSINESS CERT. OF AUTH. NO. 30760

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY RYAN KEITH HILMAN, PE ON THE DATE ADJACENT TO THE SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

EROSION AND SEDIMENT CONTROL PLAN PHASE 1

SHEET NUMBER: **C-801**

ORG. DATE - 2/11/2025



3D VIEW OF RAILING WITH TYPE 1 - PICKET INFILL PANEL
(42" Height shown, 48" Height Similar)

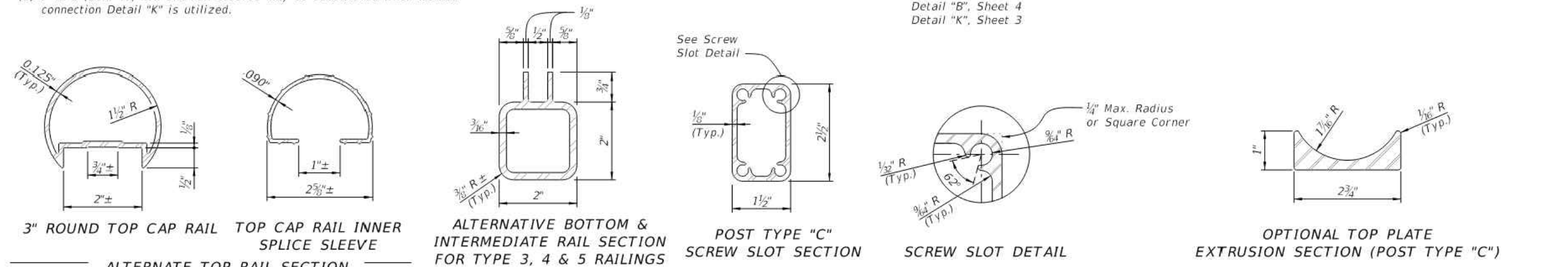
TABLE 1 - RAILING MEMBERS

MEMBER	ALLOY ⁽¹⁾	DESIGNATION	OUTSIDE DIMENSION	WALL THICKNESS
Posts (Type "A" & "B")	6061-T6	RT 2x2x0.250	2.00" x 2.00"	0.250"
Posts (Type "C")	6061-T6	Extrusion 1 1/2x2 1/2x0.125	1.50" x 2.50"	0.125"
Top Plate (Type "C")	6061-T6	Extrusion (See Details)	2 1/2" x 7"	Varies
Top Rail	6061-T6	2 1/2" NPS (Sch. 10)	2.875"	0.120"
End Hoops	6063-T5	3" Round Top Cap Rail	3.000"	0.125"
Top Rail Joint/Splice Sleeves	6063-T5	2.50 OD x 0.125 Wall	2.500"	0.125"
Intermediate & Bottom Rail	6061-T6	RT 2x2x0.250	2.00" x 2.00"	0.250 ⁽²⁾
Int. & Bottom Rail Post Connection Sleeve	6063-T5	1.50 OD x 0.125 Wall ⁽³⁾	1.500"	0.125"
Handrail Joint/Splice Sleeves	6063-T5	1" NPS (Sch. 40)	1.315"	0.133"
Handrails	6061-T6	1 1/2" NPS (Sch. 40)	1.900"	0.145"
Handrail Support Bar	6061-T6	3/8" Round Bar	0.750"	N/A
Pickets (Type 1 Infill Panel)	6061-T6	3/2" Round Bar	0.750"	N/A
Infill Panel Members (Types 2 - 5)	6063-T5	Varies (See Details)	Varies	Varies

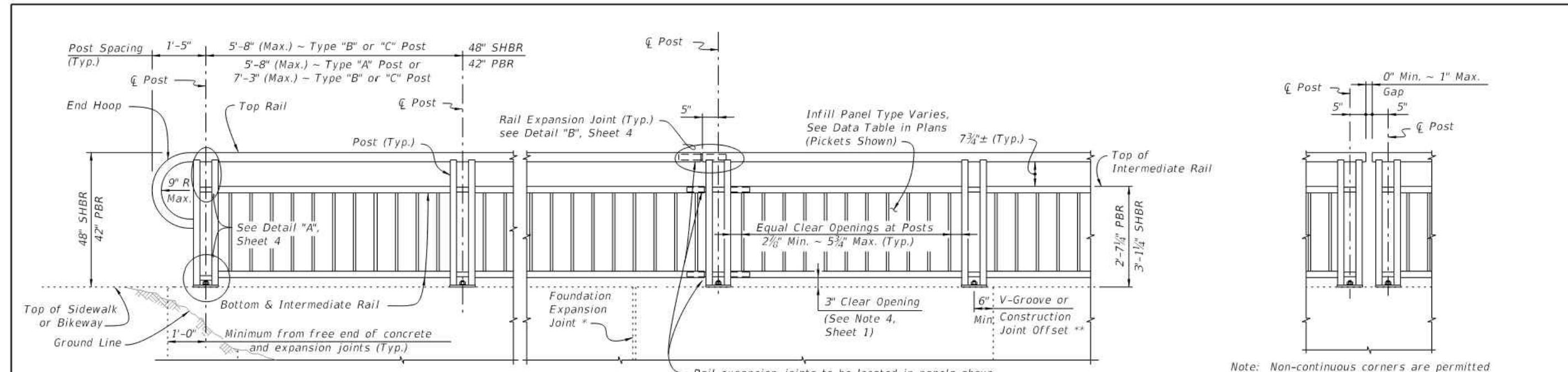
TABLE 1 NOTES:
 (1) Alloy 6061-T6 or 6063-T5 & T6 may be substituted for Alloy 6063-T5.
 (2) 0.188" wall thickness permitted for rails with post spacings less than 5'-9".
 (3) 1" NPS (Sch. 40) non-slit rail sleeves may be substituted when welded connection Detail "K" is utilized.

- NOTES**
- Shop Drawings are required, see Specification Section 315.
 - For bridge mounted railings, work this Index with Index 515-061 Bridge Bicycle/Pedestrian Railing (Aluminum)
 - Materials:
 - Structural Extrusions, Tube, Pipe and Bars: Table 1 and ASTM B221 or ASTM B429
 - Top, bottom and intermediate rail corner bands with maximum 4'-0" post spacing may be Alloy 6063-T6
 - Base Plates and Rail Caps: ASTM B209 Alloy 6061-T6
 - Perforated panels (Type 5) Alloy 3003-H14
 - Stainless steel (SS) screws: Type 316 or 18-8 Alloy
 - Aluminum screws: Alloy 2024-T4 or 7075-T73
 - Galvanized Steel Fasteners: coated in accordance with Specification Section 962.
 - Hex Head Bolts: ASTM A 307
 - 1/2" diameter single bolt option, Grade 36
 - 2/3" diameter four bolt option, Grade 55
 - Hex Nuts: ASTM A 563
 - Plate Washers: ASTM A36 or ASTM A706 Grade 36.
 - Flat Washers: ASTM F 436
 - Adhesive Anchors: ASTM F1554 fully threaded rods, Grade 55
 - Hex Nuts: ASTM A563
 - Shims: ASTM B209 Alloy 6061 or 6063
 - Bearing Pads: Provide 1/2" thick, Fabric Reinforced or Fabric Laminated Bearing Pads meeting the requirements of Specification Section 922 for Ancillary Structures.
 - Fabricate pickets and vertical panel elements parallel to the posts; except Type 2, 3 and 5 panel infills may be fabricated parallel to the longitudinal grade. Maintain a maximum clear opening of 5 1/2" for standard installations and 3 1/2" when a 4" sphere requirement is indicated in the Data Tables.
 - Locate railing expansion joints between the posts on either side of the deck expansion joint. Maximum spacing between expansion joints is 35'-0".
 - Field splices are similar to the Expansion Joint Detail and may be approved by the Engineer to facilitate handling; but the top rail must be continuous across a minimum of two posts.
 - Make corners and changes in tangential longitudinal alignment with a 9" bend radius or terminate adjoining sections with mitered end sections when handrails are not required.
 - For changes in tangential longitudinal alignment greater than 45°, position posts a maximum of 2'-0" each side of the corner.
 - For curved longitudinal alignments, shop bend the top and bottom rails and handrails to match the alignment radius.
 - Handrails are required and must be continuous at landings for:
 - Grades steeper than 5%.
 - Three or more steps.
 - Installation: Cutting of reinforcing steel is permitted for post installed anchors.

CROSS REFERENCES:
 Detail "A", Sheet 4
 Detail "B", Sheet 4
 Detail "K", Sheet 3

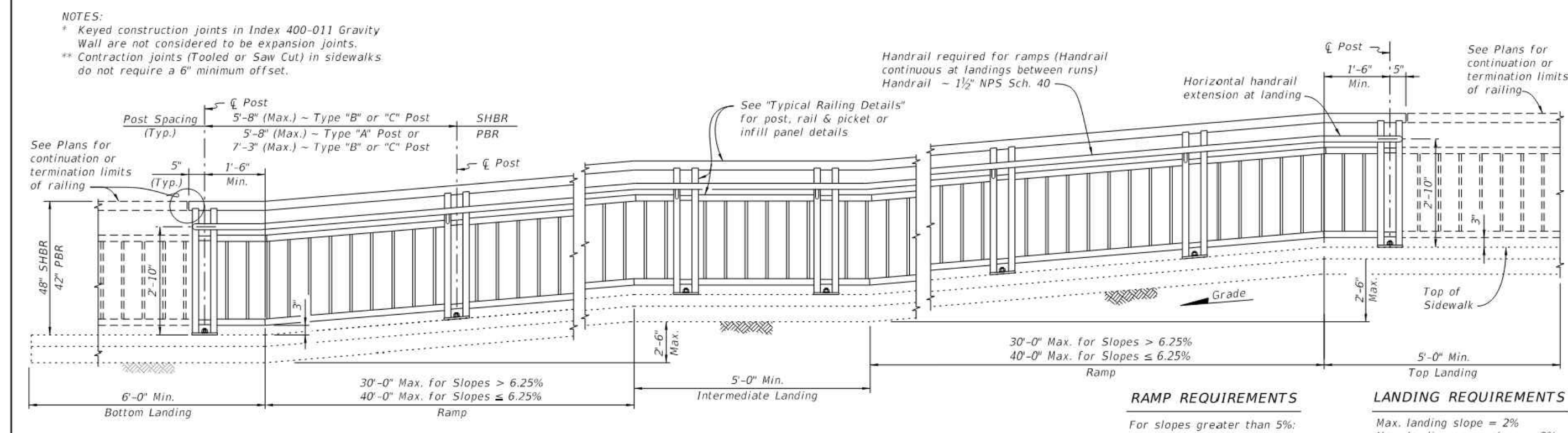


LAST REVISION	DESCRIPTION	FY 2025-26	INDEX	SHEET
11/01/18		STANDARD PLANS	PEDESTRIAN/BICYCLE RAILING (ALUMINUM)	515-062 1 of 9



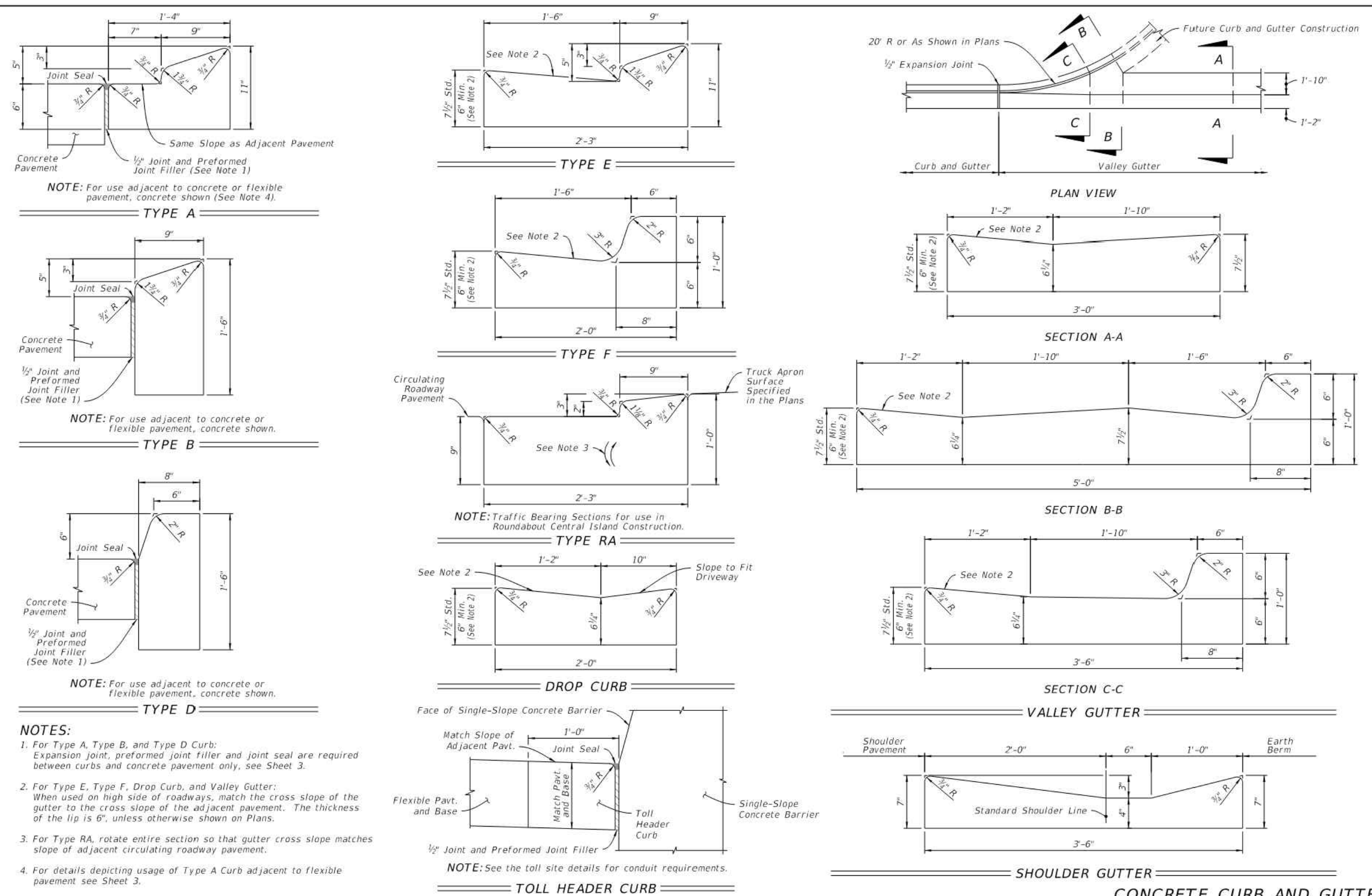
ELEVATION
 (Showing Outside Face of Railing with Type "A" Posts)
 TYPICAL RAILING DETAILS & RAILINGS ON GRADES 0% TO 5%
 (Type 1 - Picket Railing Shown, Other Types Similar)

EXPANDED ELEVATION AT CORNERS
 DETAIL FOR NON-CONTINUOUS RAILING AT CORNERS

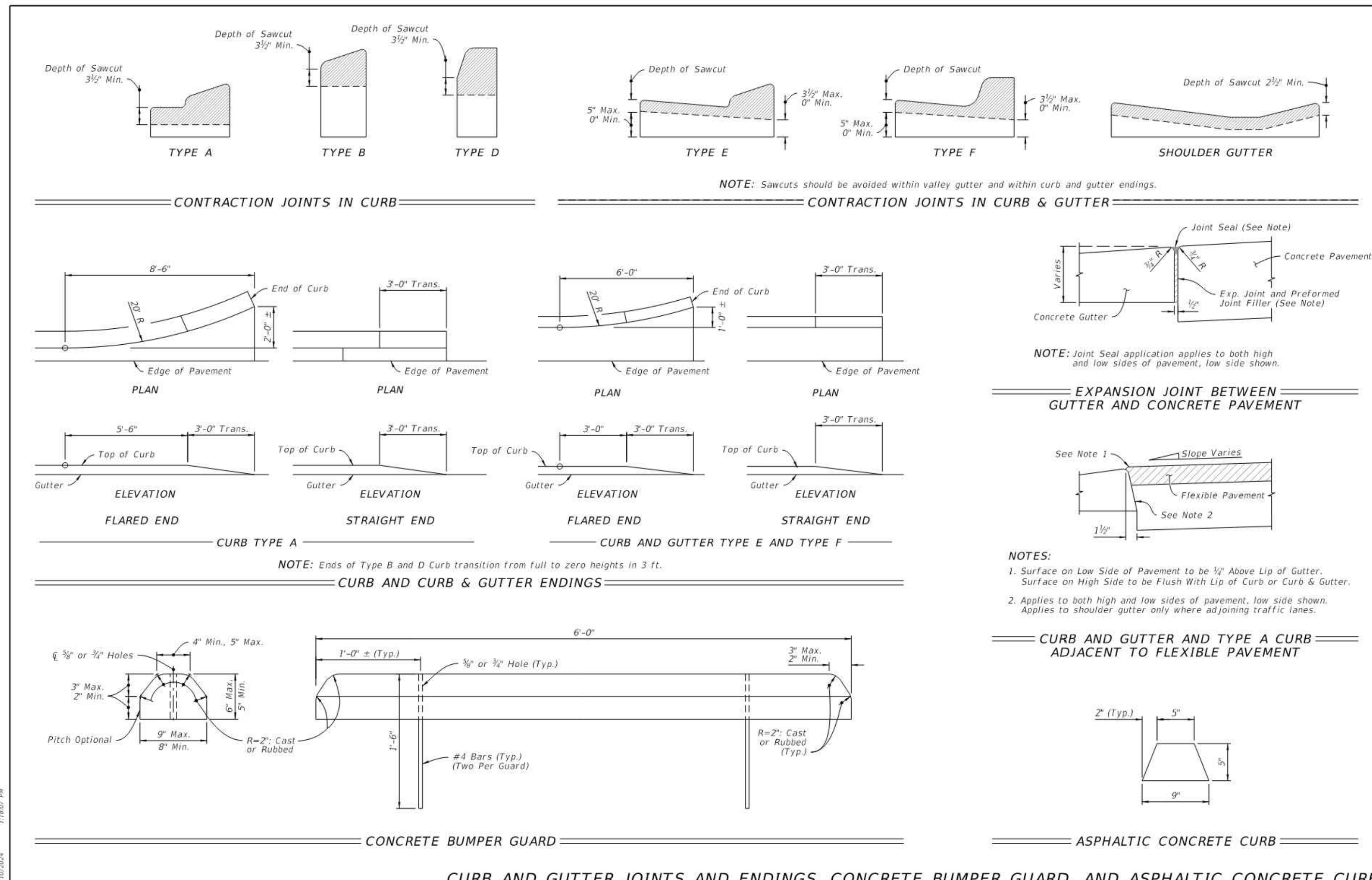


ELEVATION
 (Showing Inside Face of Railing with Type "A" Posts)
 RAILINGS ON GRADES STEEPER THAN 5%
 (Type 1 - Picket Railing Shown, Other Types Similar)

LAST REVISION	DESCRIPTION	FY 2025-26	INDEX	SHEET
11/01/15		STANDARD PLANS	PEDESTRIAN/BICYCLE RAILING (ALUMINUM)	515-062 2 of 9



LAST REVISION	DESCRIPTION	FY 2025-26	INDEX	SHEET
11/01/21		STANDARD PLANS	CURB AND GUTTER	520-001 2 of 3



LAST REVISION	DESCRIPTION	FY 2025-26	INDEX	SHEET
11/01/21		STANDARD PLANS	CURB AND GUTTER	520-001 3 of 3

BOHLER
 SITE CIVIL AND CONSULTING ENGINEERING
 PROGRAM MANAGEMENT
 LANDSCAPE ARCHITECTURE
 SUSTAINABLE DESIGN
 PERMITTING SERVICES
 TRANSPORTATION SERVICES

REVISIONS

REV	DATE	COMMENT	DRAWN BY	CHECKED BY

811
 Know what's below.
 Call before you dig.
 ALWAYS CALL 811
 It's fast. It's free. It's the law.

ISSUED FOR MUNICIPAL & AGENCY REVIEW & APPROVAL

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.: FLD240044-00-0A
 DRAWN BY: AJ
 CHECKED BY: RH
 DATE: 12/08/2024
 CAD ID: P-CIVL-00DS

PROP. SITE PLAN DOCUMENTS
 FOR
CHASE
 PROPOSED DEVELOPMENT
 2007 SOUTH US HWY 1
 FT PIERCE, FL 34950
 S 15 - T 35 S - R 40 E

BOHLER
 135 WEST CENTRAL BOULEVARD, SUITE 600
 ORLANDO, FLORIDA 32801
 Phone: (321) 234-2880
 FLORIDA BUSINESS CERT. OF AUTH. NO. 30760

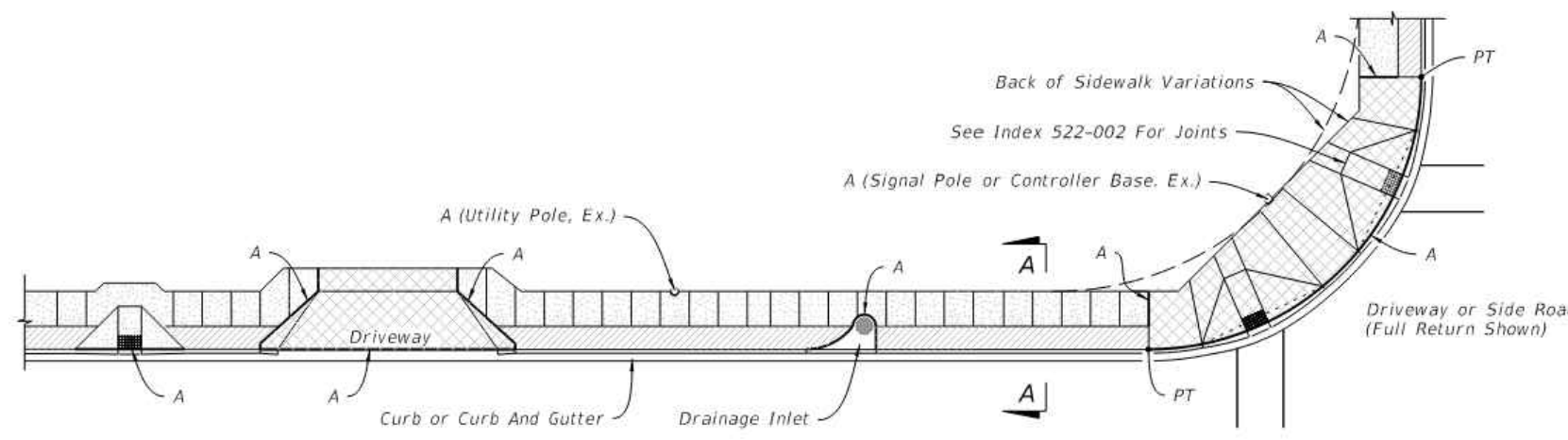
THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY RYAN KEITH HELEMAN, PE, ON THE DATE ADJACENT TO THE SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

FDOT DETAILS
 SHEET NUMBER:
C-902

ORG. DATE - 12/18/2024

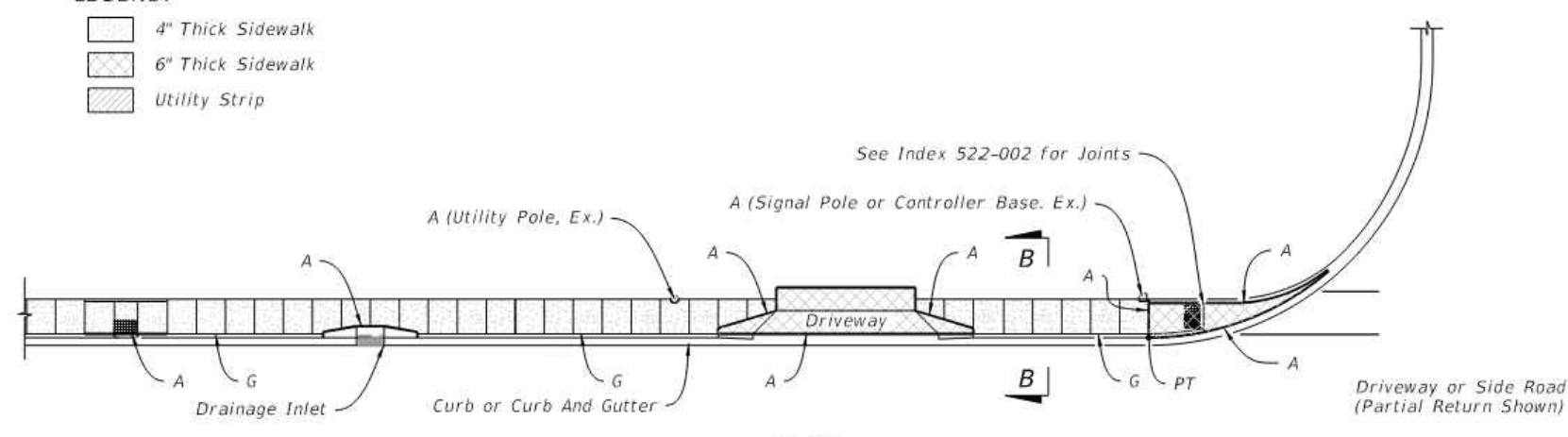
GENERAL NOTES:

- Construct sidewalks in accordance with Specification 522. Use 6" concrete for Sidewalks and Curb Ramps Located within Curb Returns (See Plan View). Install all other concrete with thickness as shown, unless otherwise detailed in the Plans.
- Include detectable warnings on sidewalk curb ramps in accordance with Index 522-002.
- For Driveways see Index 522-003.
- Bond breaker material can be any impermeable coated or sheet membrane or preformed material having a thickness of not less than 6 mils and not more than 1/2".
- Construct sidewalks with Edge Beam through the limits of any surface mounted Pedestrian/Bicycle Railing or Pipe Guide-rail shown in the plans. (See RAILING DETAIL).

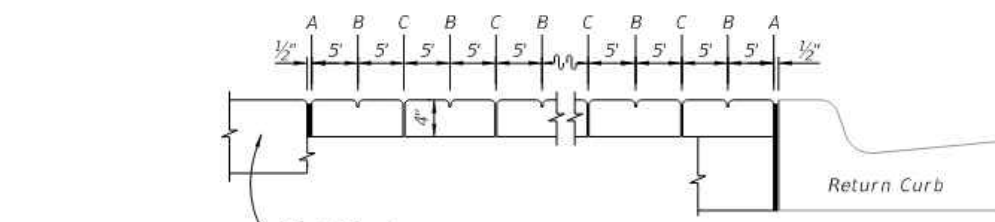


PLAN
SIDEWALK WITH UTILITY STRIP

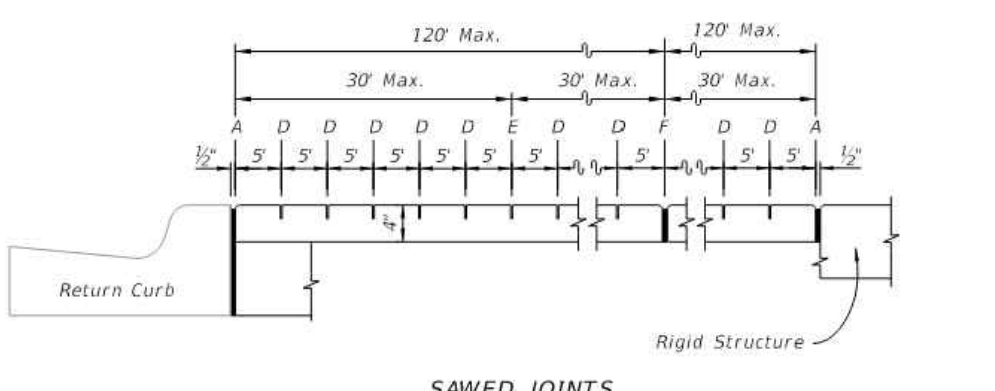
- LEGEND:**
- 4" Thick Sidewalk
 - 6" Thick Sidewalk
 - Utility Strip



PLAN
SIDEWALK WITHOUT UTILITY STRIP



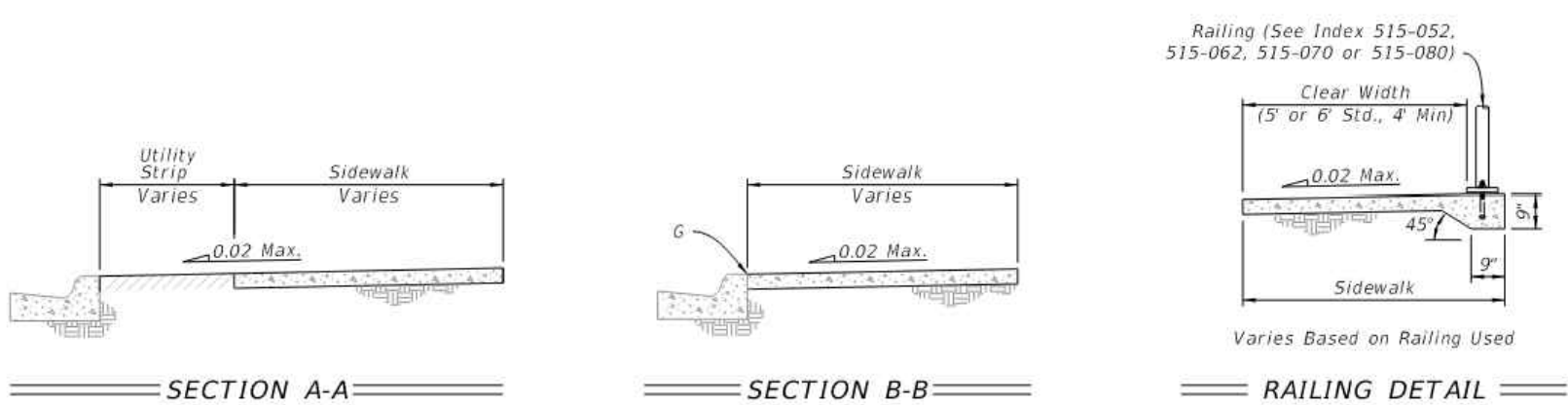
LONGITUDINAL SECTION
OPEN JOINTS



LONGITUDINAL SECTION
SAWED JOINTS

- LEGEND:**
- A- 1/2" Expansion Joints (Preformed Joint Filler) between the sidewalk and driveways, sidewalk-intersections, and all other fixed objects (e.g. drainage inlets and utility poles).
 - B- 1/2" Dummy Joints, Tooled
 - C- 1/2" Formed Open Joints
 - D- 3/4" Saw Cut Joints, 1 1/2" Deep (within 96 hours) Max. 5' Centers
 - E- 3/4" Saw Cut Joints, 1 1/2" Deep (within 12 hours) Max. 30' Centers (Joints) Required When Length Exceeds 30'
 - F- 1/2" Expansion Joint When Run of Sidewalk Exceeds 120'. Intermediate locations when called for in the plans or at locations as directed by the Engineer.
 - G- Cold Joint With Bond Breaker, Tooled

SIDEWALK JOINTS



SECTION A-A

SECTION B-B

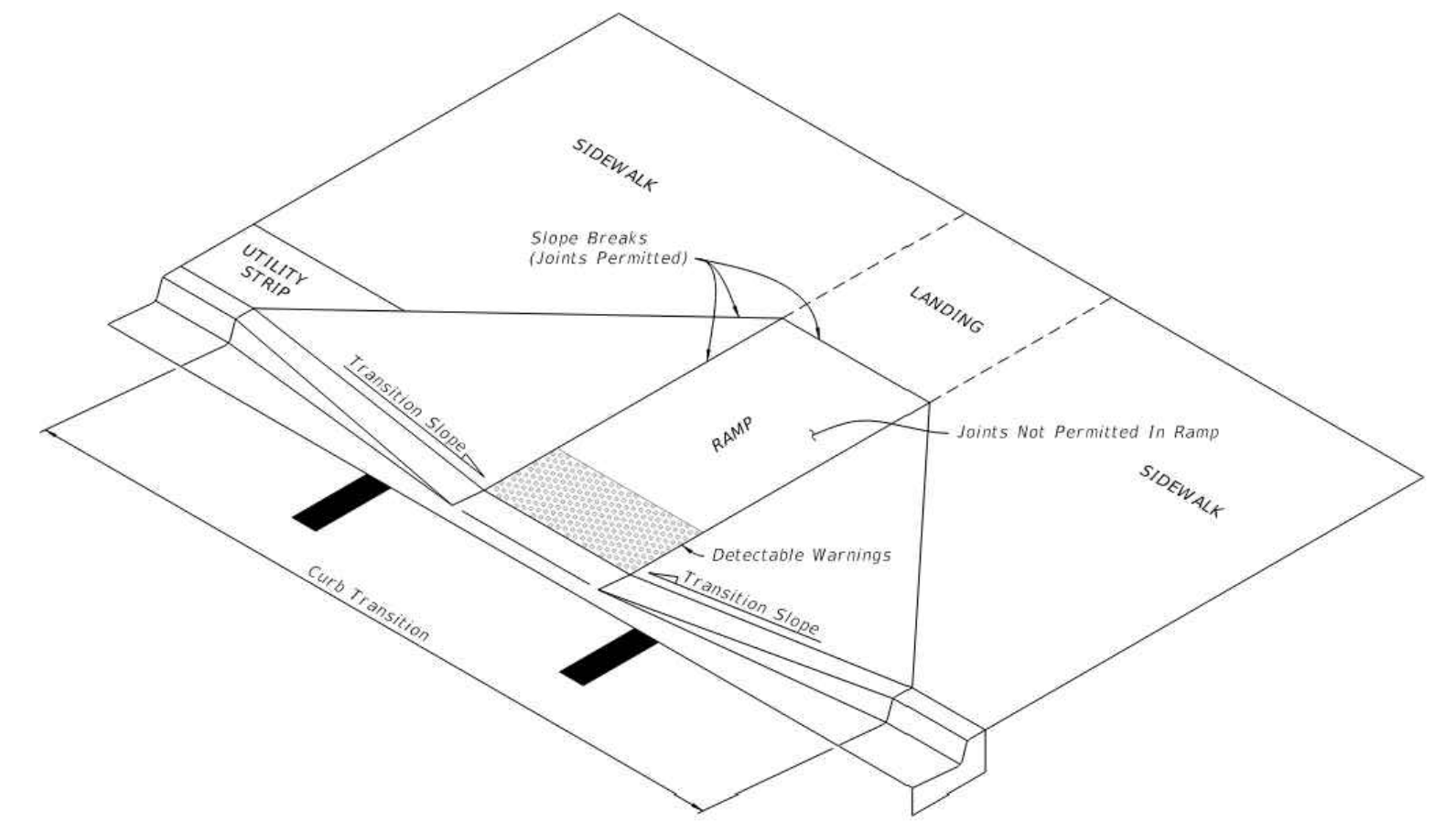
RAILING DETAIL

GENERAL NOTES AND CONCRETE SIDEWALK ON CURBED ROADWAYS

LAST REVISION 11/01/18	DESCRIPTION: CONCRETE SIDEWALK	FDOT FY 2025-26 STANDARD PLANS	INDEX 522-001	SHEET 1 of 2
---------------------------	-----------------------------------	--------------------------------------	------------------	-----------------

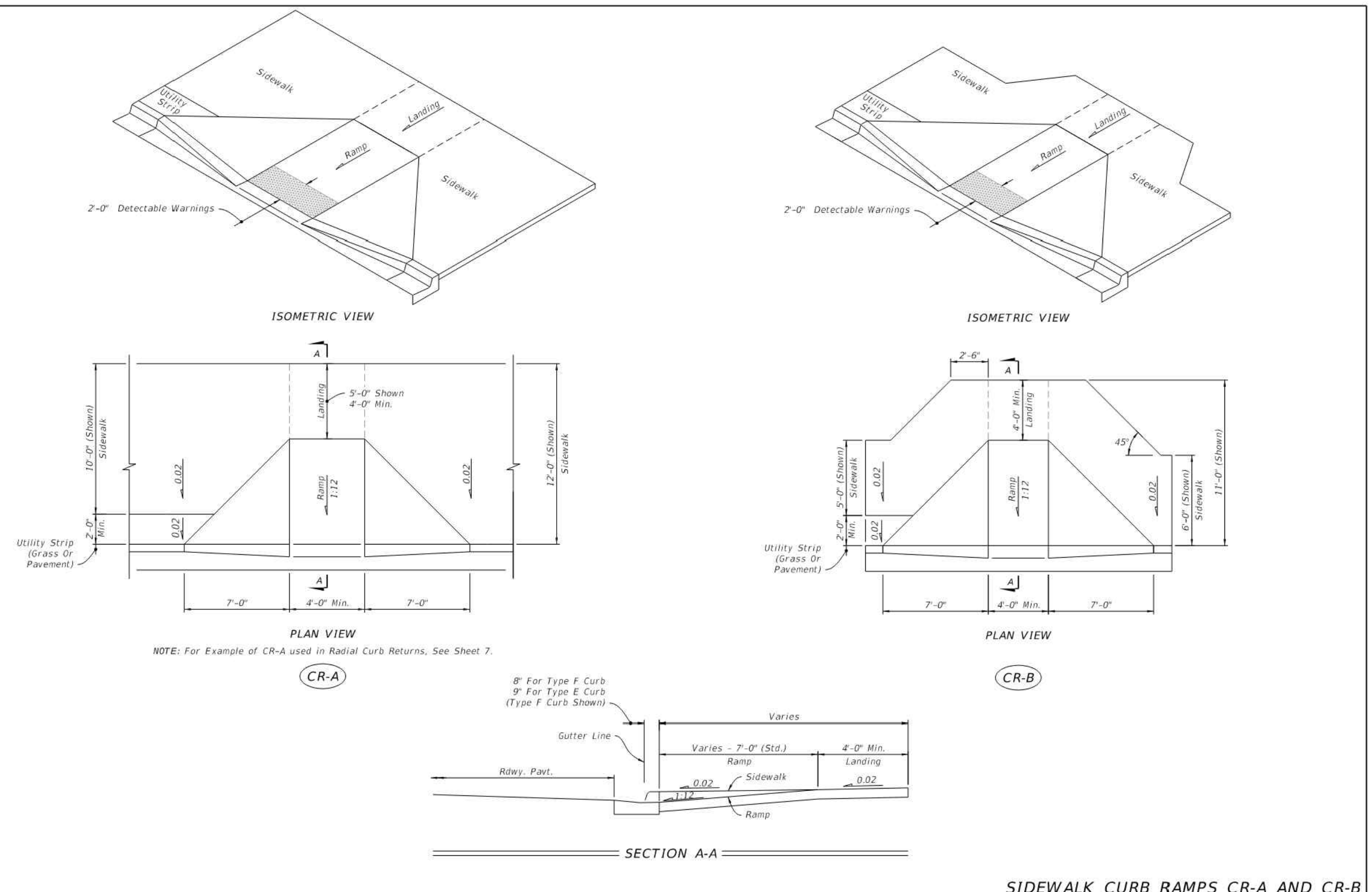
GENERAL NOTES:

- Cross Slopes and Grades:**
 - A. Sidewalk, ramp, and landing slopes (i.e. 0.02, 0.05, and 1:12) shown in this Index are maximums. With approval of the Engineer, provide the minimum feasible slope where the requirements cannot be met.
 - B. Landings must have cross-slopes less than or equal to 0.02 in any direction.
 - C. Maintain a single longitudinal slope along each side of the curb ramp. Ramp slopes are not required to exceed 15 feet in length.
 - D. Joints permitted at the location of Slope Breaks. Otherwise locate joints in accordance with Index 522-001. No joints are permitted within the ramp portion of the Curb Ramp.
- Curb, Curb and Gutter and/or Sidewalk:**
 - A. Refer to Index 522-001 for concrete thickness and sidewalk details.
 - B. Remove any existing curb, gutter, or sidewalk to the nearest joint beyond the curb transition or to the extent that no remaining section is less than 5 feet long.
 - C. Width of Curb Ramp is 4'-0" minimum. Match sidewalk or Shared Use Path width as shown in the Plans.
- Curb Ramp Alpha-Identification:**
 - A. Sidewalk curb ramp alpha-identifications (e.g. CR-A) are provided for reference purposes in the Plans.
 - B. Alpha-identifications CR-I and CR-J are intentionally omitted.
- Detectable Warnings:**
 - A. Install detectable warnings in accordance with Specification 527.
 - B. Place detectable warnings across the full width of the ramp or landing, to a minimum depth of 2 feet measured perpendicular to the curb line and no greater than 5 feet from the back of the curb or edge of pavement.
 - C. If detectable warnings are shown in the Plans on slopes greater than 5%, align the truncated domes with the centerline of the ramp; otherwise, the truncated domes are not required to be aligned.



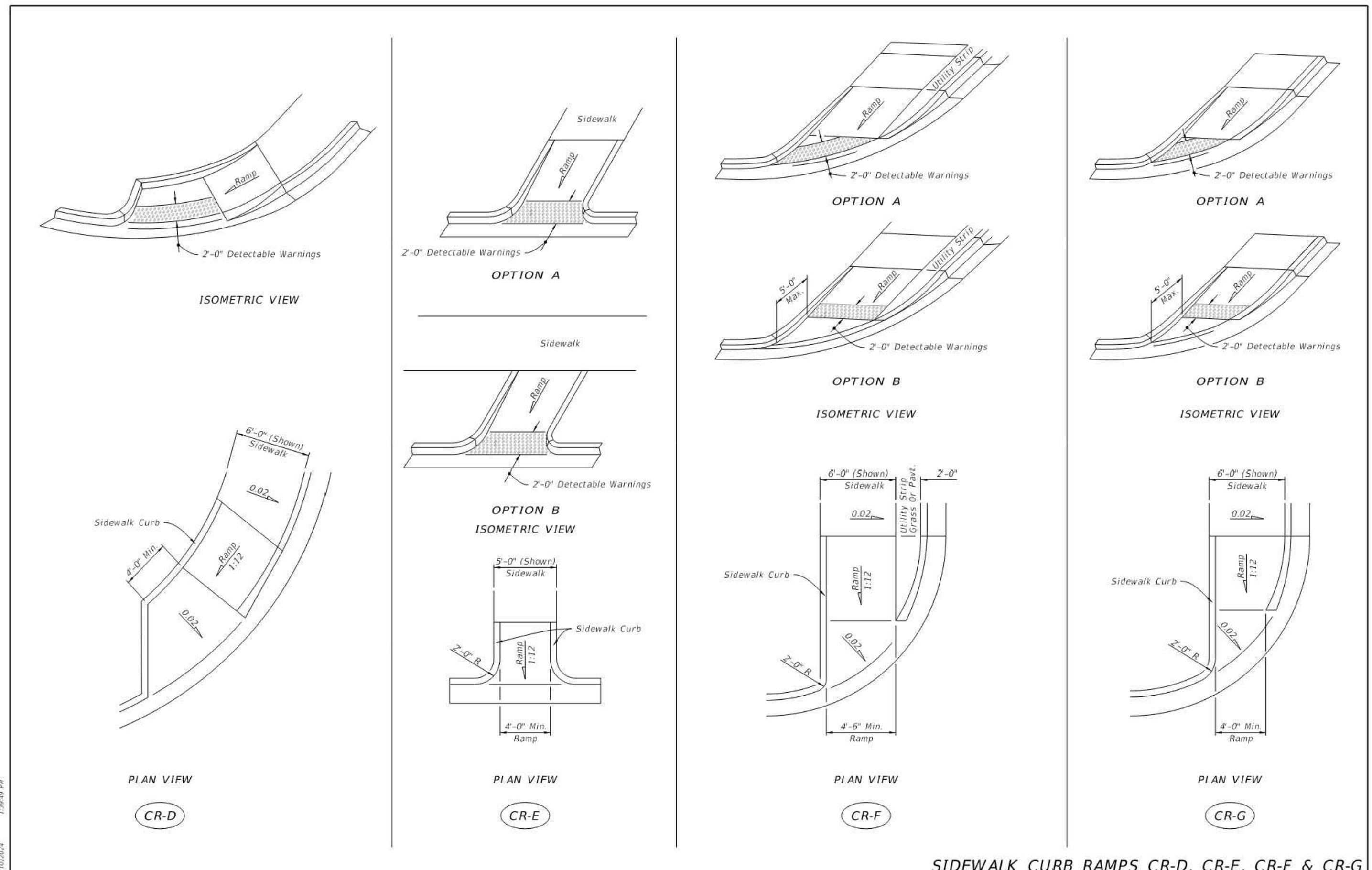
CURB RAMP NOMENCLATURE

LAST REVISION 11/01/21	DESCRIPTION: DETECTABLE WARNINGS AND SIDEWALK CURB RAMPS	FDOT FY 2025-26 STANDARD PLANS	INDEX 522-002	SHEET 1 of 7
---------------------------	---	--------------------------------------	------------------	-----------------



SIDEWALK CURB RAMPS CR-A AND CR-B

LAST REVISION 11/01/20	DESCRIPTION: DETECTABLE WARNINGS AND SIDEWALK CURB RAMPS	FDOT FY 2025-26 STANDARD PLANS	INDEX 522-002	SHEET 2 of 7
---------------------------	---	--------------------------------------	------------------	-----------------



SIDEWALK CURB RAMPS CR-D, CR-E, CR-F & CR-G

LAST REVISION 11/01/21	DESCRIPTION: DETECTABLE WARNINGS AND SIDEWALK CURB RAMPS	FDOT FY 2025-26 STANDARD PLANS	INDEX 522-002	SHEET 4 of 7
---------------------------	---	--------------------------------------	------------------	-----------------

BOHLER
SITE CIVIL AND CONSULTING ENGINEERING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
SUSTAINABLE DESIGN
PERMITTING SERVICES
TRANSPORTATION SERVICES

REVISIONS

REV	DATE	COMMENT	DRAWN BY	CHECKED BY

811
Know what's below.
Call before you dig.
ALWAYS CALL 811
It's fast. It's free. It's the law.

ISSUED FOR MUNICIPAL & AGENCY REVIEW & APPROVAL

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDING AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

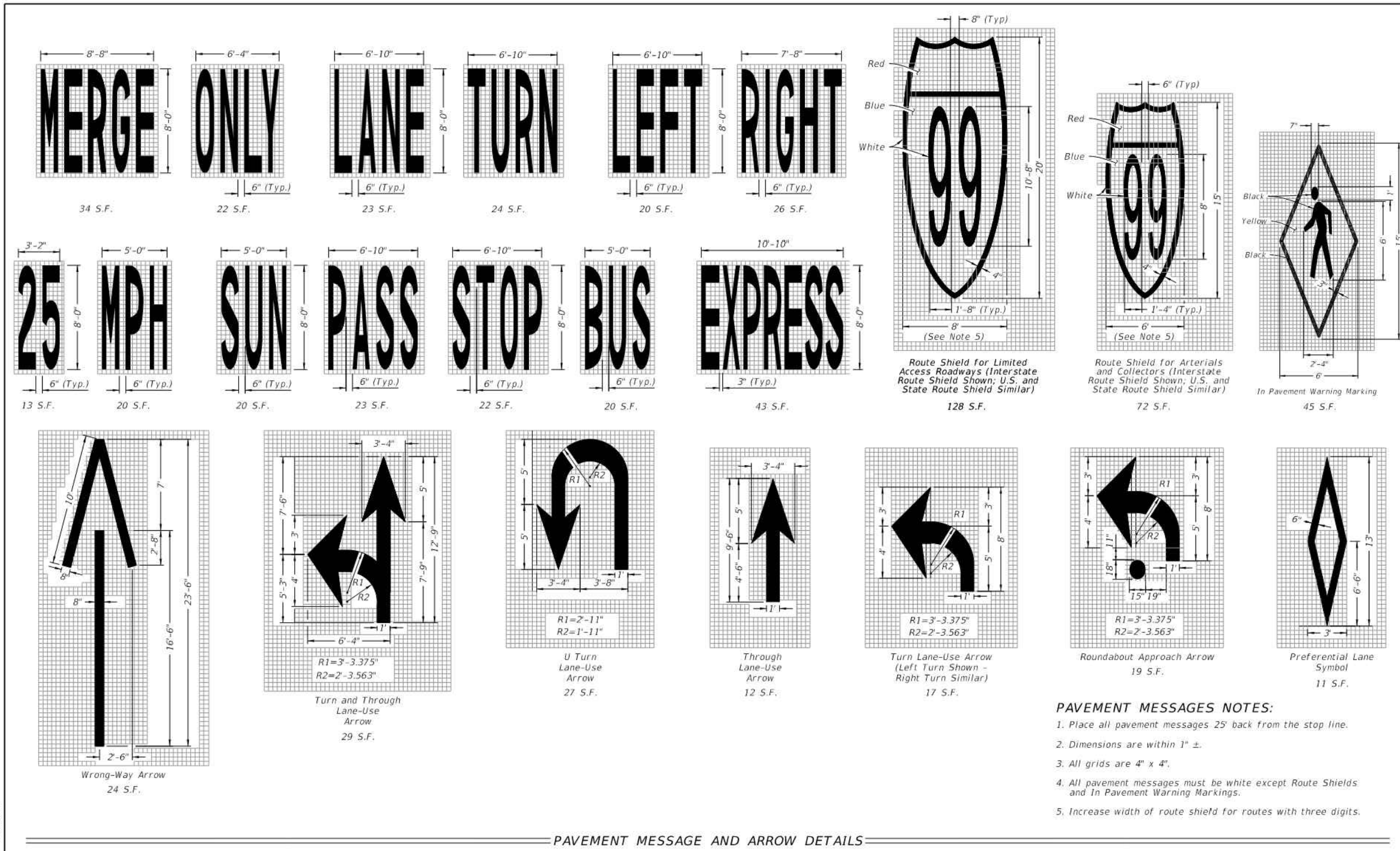
PROJECT No.:	FLD240044-00-0A
DRAWN BY:	AJ
CHECKED BY:	RH
DATE:	12/06/2024
CAD ID:	P-CIVL-OCDS

PROJECT:
PROP. SITE PLAN DOCUMENTS
FOR
CHASE
PROPOSED DEVELOPMENT
2007 SOUTH US HWY 1
FT PIERCE, FL 34950
S 15 - T 35 S - R 40 E

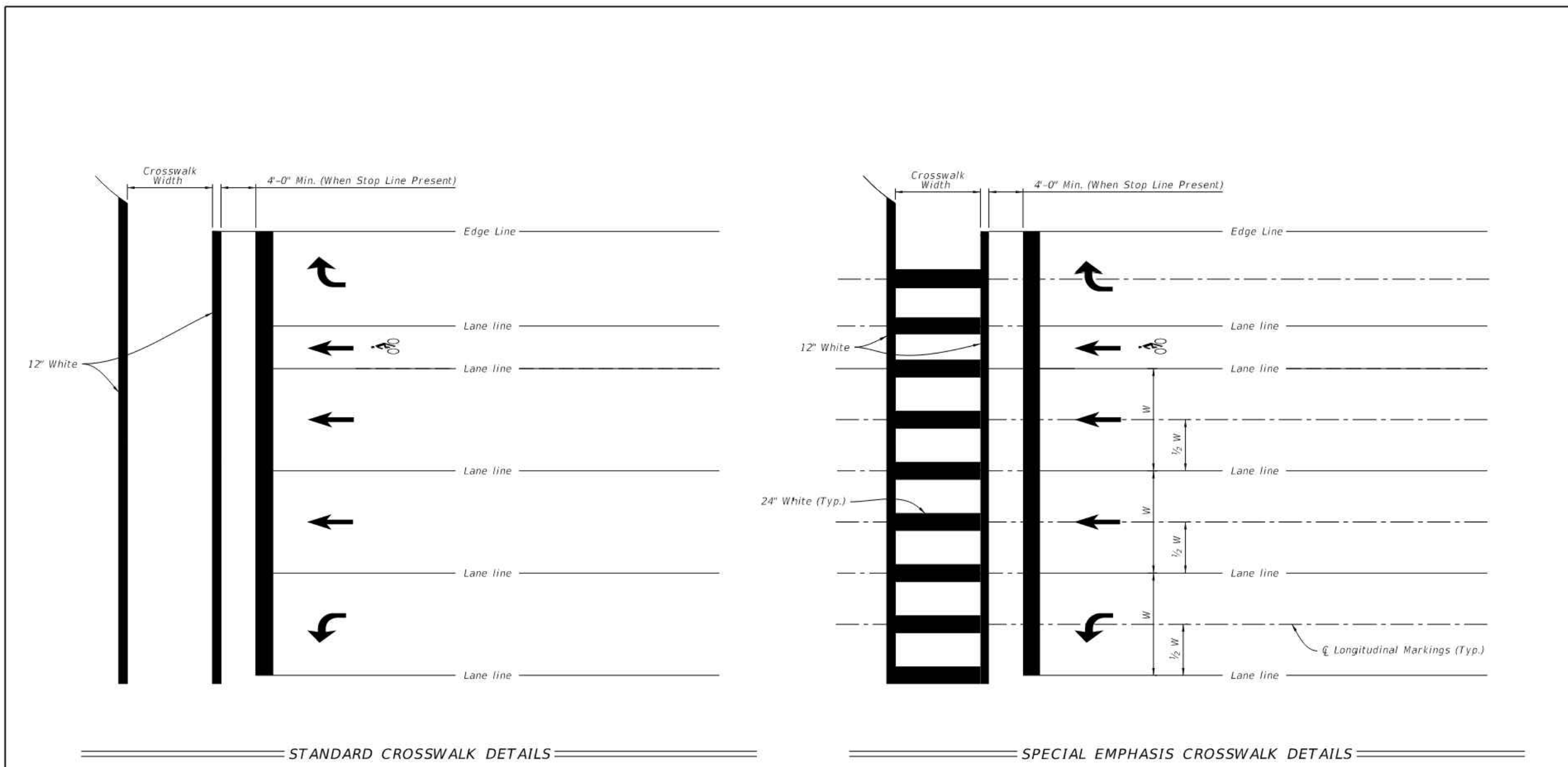
BOHLER
135 WEST CENTRAL BOULEVARD,
SUITE 600
ORLANDO, FLORIDA 32801
Phone: (321) 234-2880
FLORIDA BUSINESS CERT. OF AUTH. No. 30780

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY RYAN KEITH HLEMAN, P.E. ON THE DATE ADJACENT TO THE SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

SHEET TITLE:
FDOT DETAILS
SHEET NUMBER:
C-903
ORG. DATE - 12/18/2024

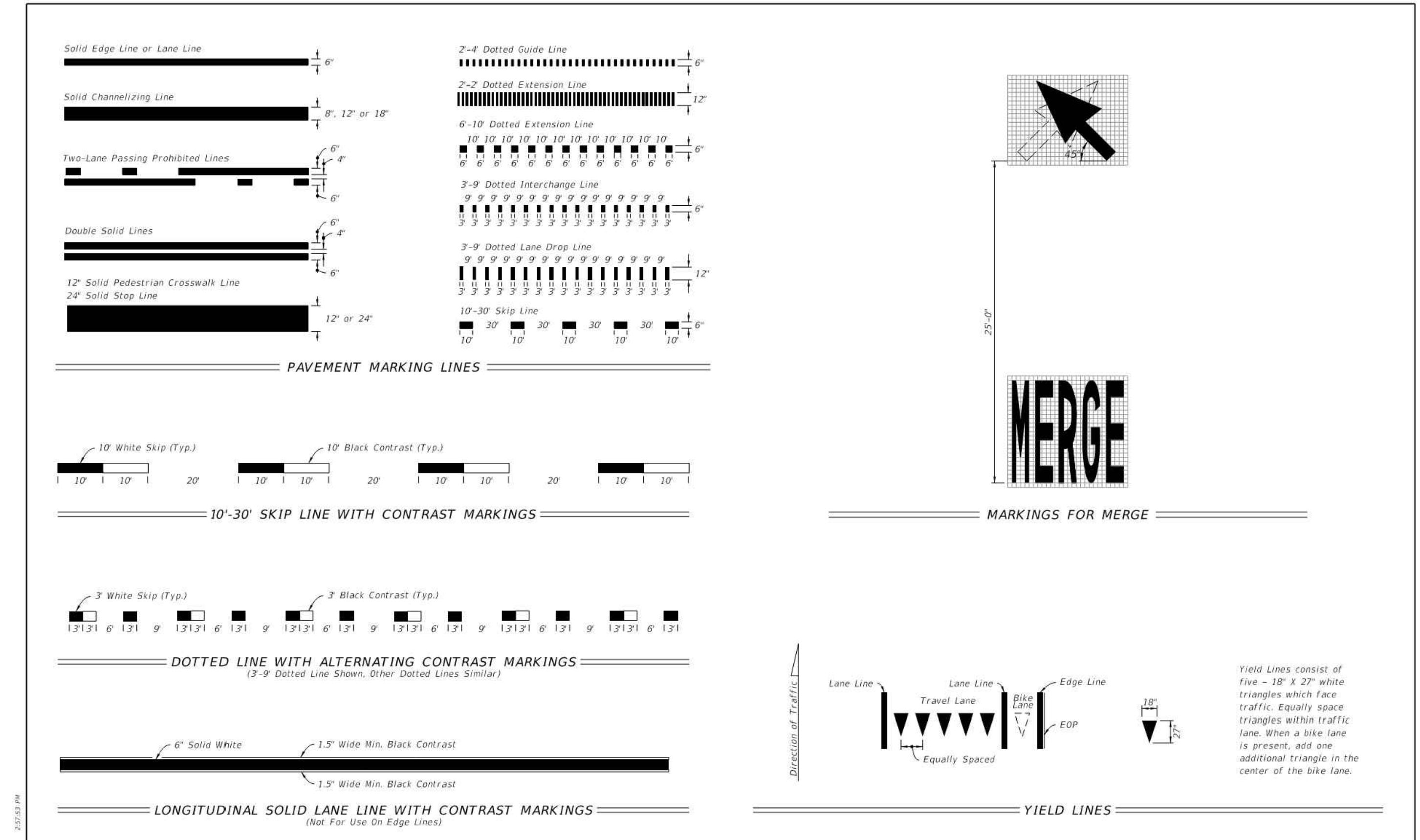


LAST REVISION 11/01/21	DESCRIPTION: STANDARD PLANS	FDOT FY 2025-26 STANDARD PLANS	PAVEMENT MARKINGS	INDEX 711-001	SHEET 1 of 13
---------------------------	--------------------------------	--------------------------------------	-------------------	------------------	------------------

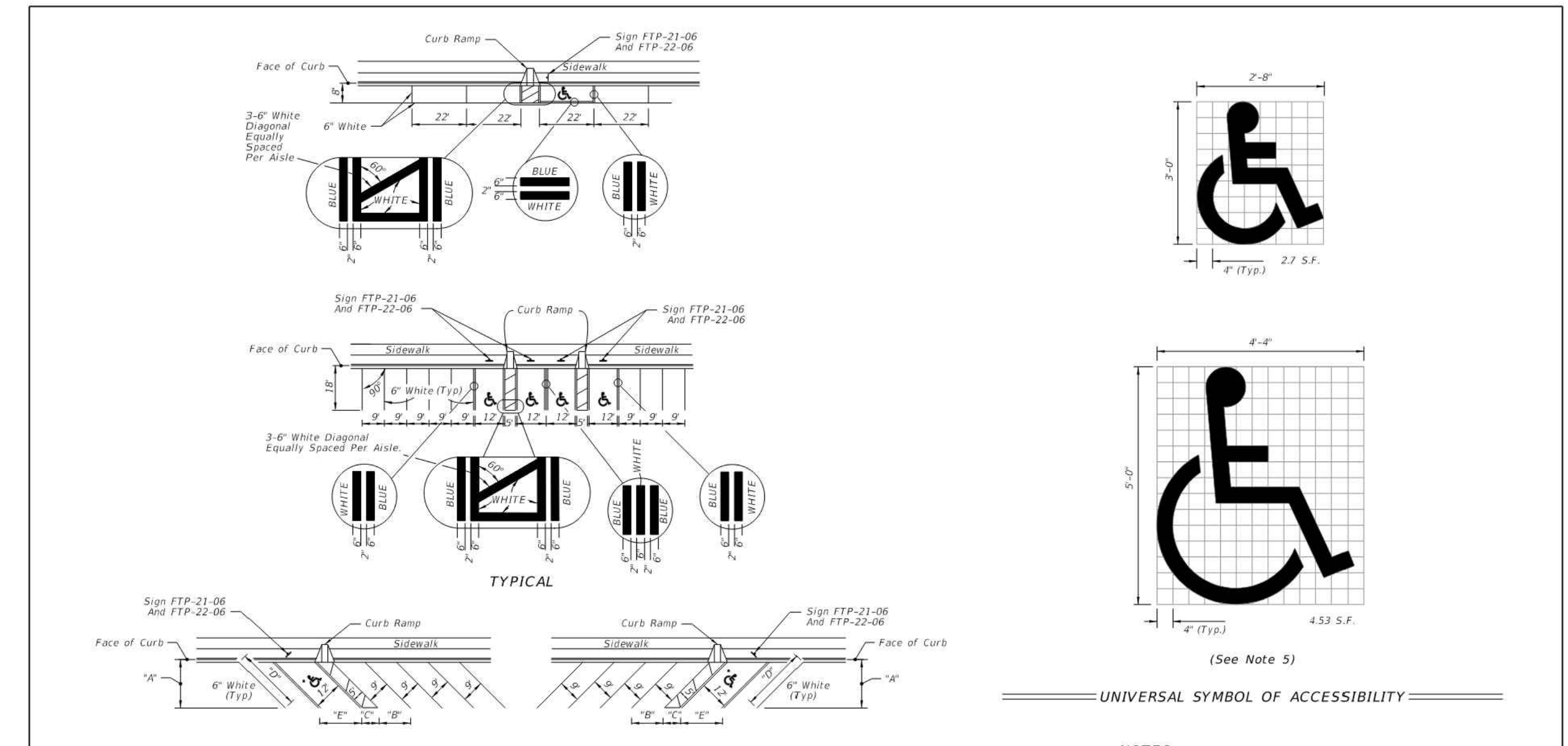


- NOTES:**
- For crosswalk width, exceed width of the adjacent sidewalk, but do not make width less than 6' for intersection crosswalks and 10' for midblock crosswalks. Measure width from the inside of the transverse crosswalk markings.
 - When the Special Emphasis Crosswalk is not perpendicular to the lane lines, make the longitudinal markings parallel to the lane lines.
 - Refer to Index 522-002 when Curb Ramps are present.

LAST REVISION 11/01/21	DESCRIPTION: STANDARD PLANS	FDOT FY 2025-26 STANDARD PLANS	PAVEMENT MARKINGS	INDEX 711-001	SHEET 9 of 13
---------------------------	--------------------------------	--------------------------------------	-------------------	------------------	------------------



LAST REVISION 11/01/22	DESCRIPTION: STANDARD PLANS	FDOT FY 2025-26 STANDARD PLANS	PAVEMENT MARKINGS	INDEX 711-001	SHEET 2 of 13
---------------------------	--------------------------------	--------------------------------------	-------------------	------------------	------------------



- NOTES:**
- Dimensions are to the centerline of markings.
 - An Access Aisle is required for each accessible space when angle parking is used.
 - Criteria for pavement markings only, not public sidewalk curb ramp locations. For ramp locations refer to plans.
 - Mount FTP-22-06 sign below the FTP-21-06 sign.
 - Use of the pavement symbol in accessible parking spaces is optional. When pavement symbol is used, the symbol is either 3'-0" or 5'-0" high and white in color.

LAST REVISION 11/01/21	DESCRIPTION: STANDARD PLANS	FDOT FY 2025-26 STANDARD PLANS	PAVEMENT MARKINGS	INDEX 711-001	SHEET 11 of 13
---------------------------	--------------------------------	--------------------------------------	-------------------	------------------	-------------------

BOHLER
SITE CIVIL AND CONSULTING ENGINEERING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
SUSTAINABLE DESIGN
PERMITTING SERVICES
TRANSPORTATION SERVICES

REVISIONS

REV	DATE	COMMENT	DRAWN BY	CHECKED BY

811
Know what's below.
Call before you dig.
ALWAYS CALL 811
It's fast. It's free. It's the law.

ISSUED FOR MUNICIPAL & AGENCY REVIEW & APPROVAL

PROJECT No.: FLD240044-00-0A
DRAWN BY: AJ
CHECKED BY: RH
DATE: 12/06/2024
CAD ID: P-CIV-LODS

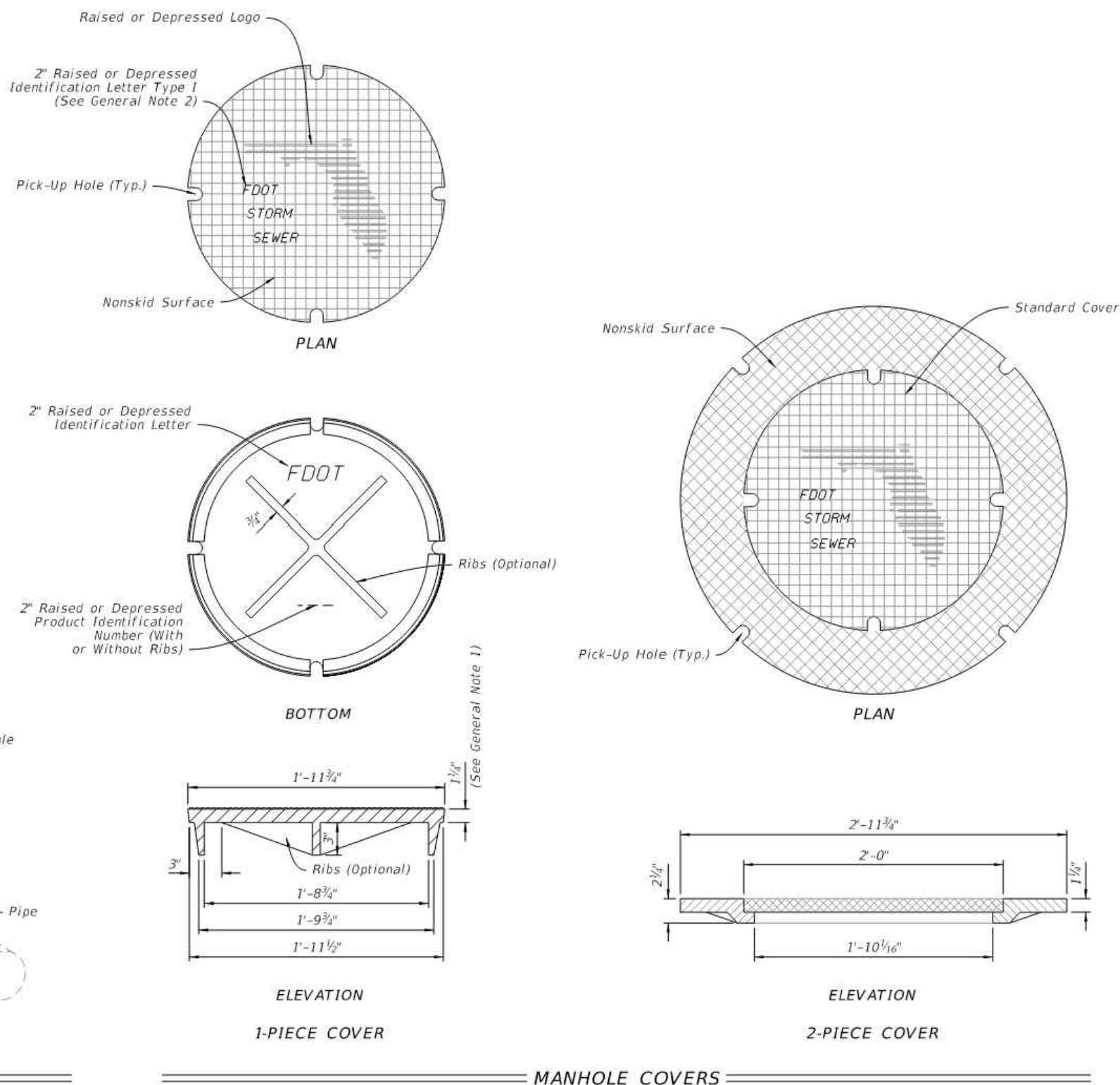
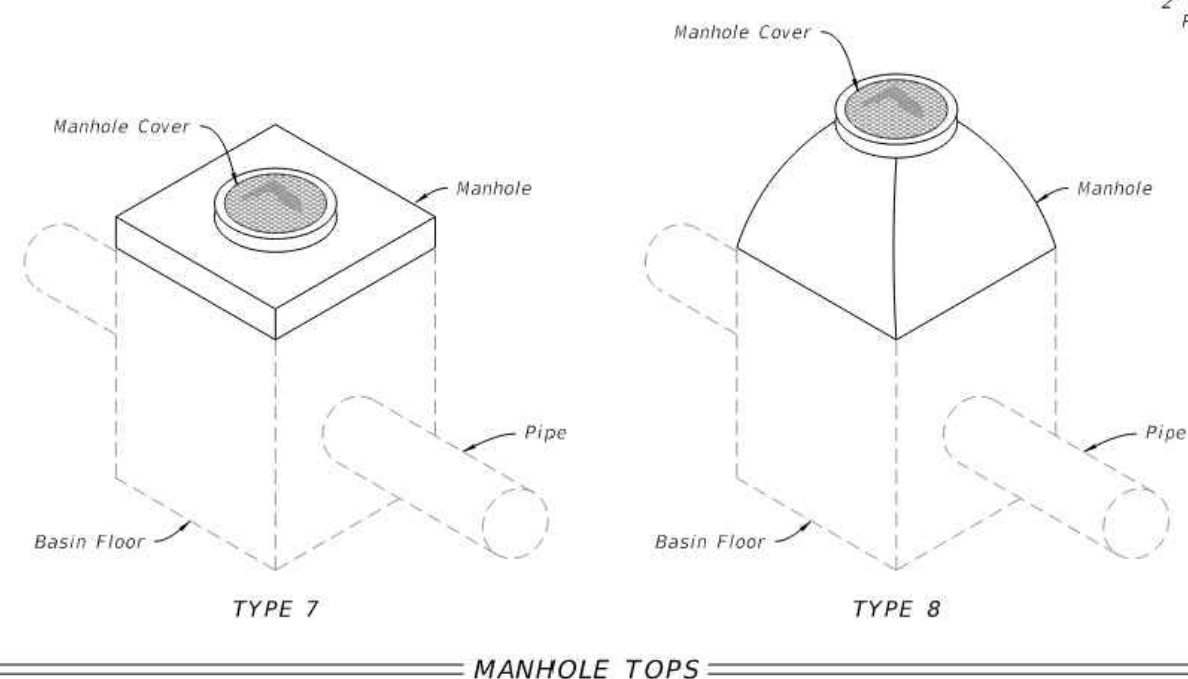
PROP. SITE PLAN DOCUMENTS
FOR
CHASE
PROPOSED DEVELOPMENT
2007 SOUTH US HWY 1
FT PIERCE, FL 34950
S 15 - T 35 S - R 40 E

BOHLER
135 WEST CENTRAL BOULEVARD,
SUITE 600
ORLANDO, FLORIDA 32801
Phone: (321) 234-2880
FLORIDA BUSINESS CERT. OF AUTH. No. 30760

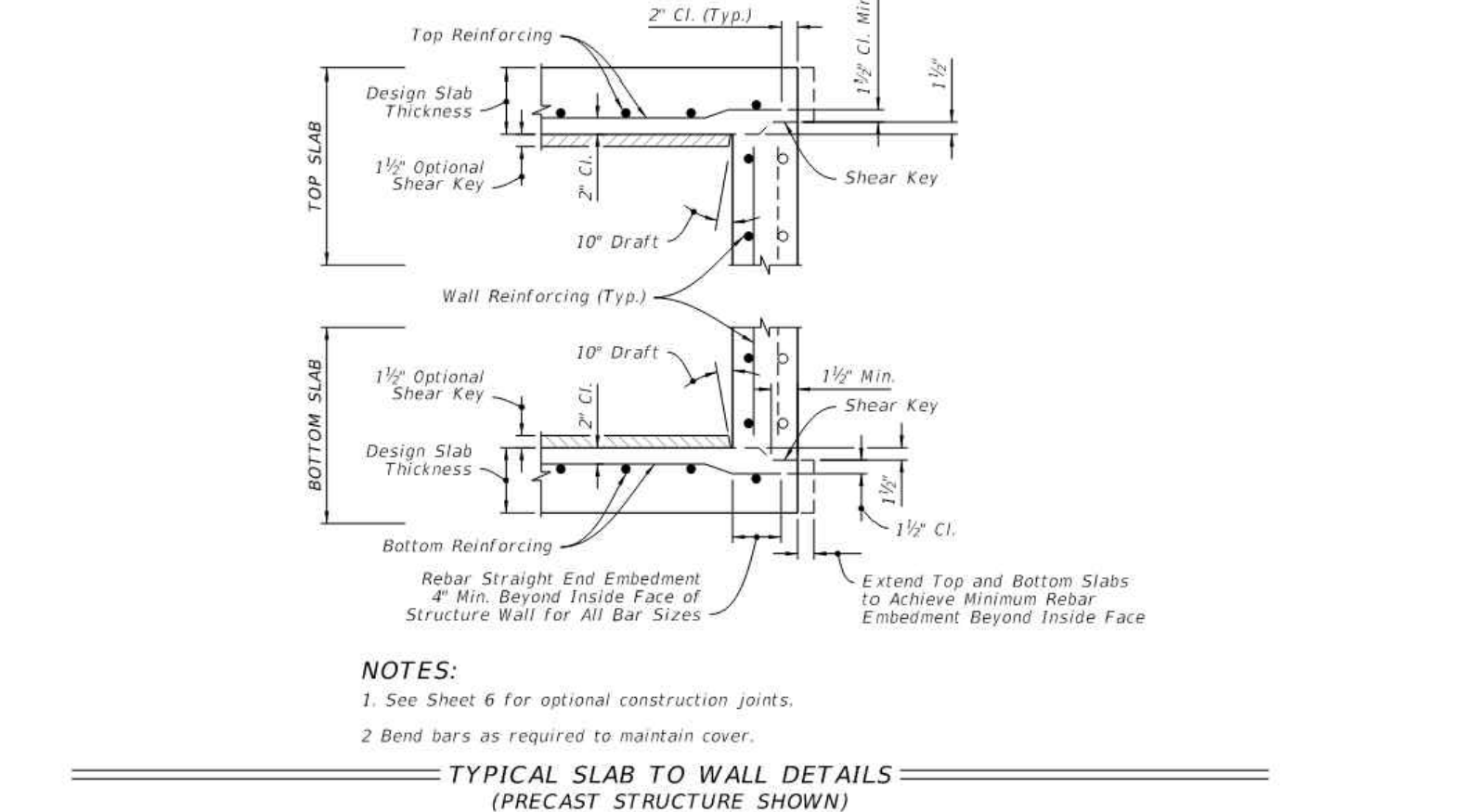
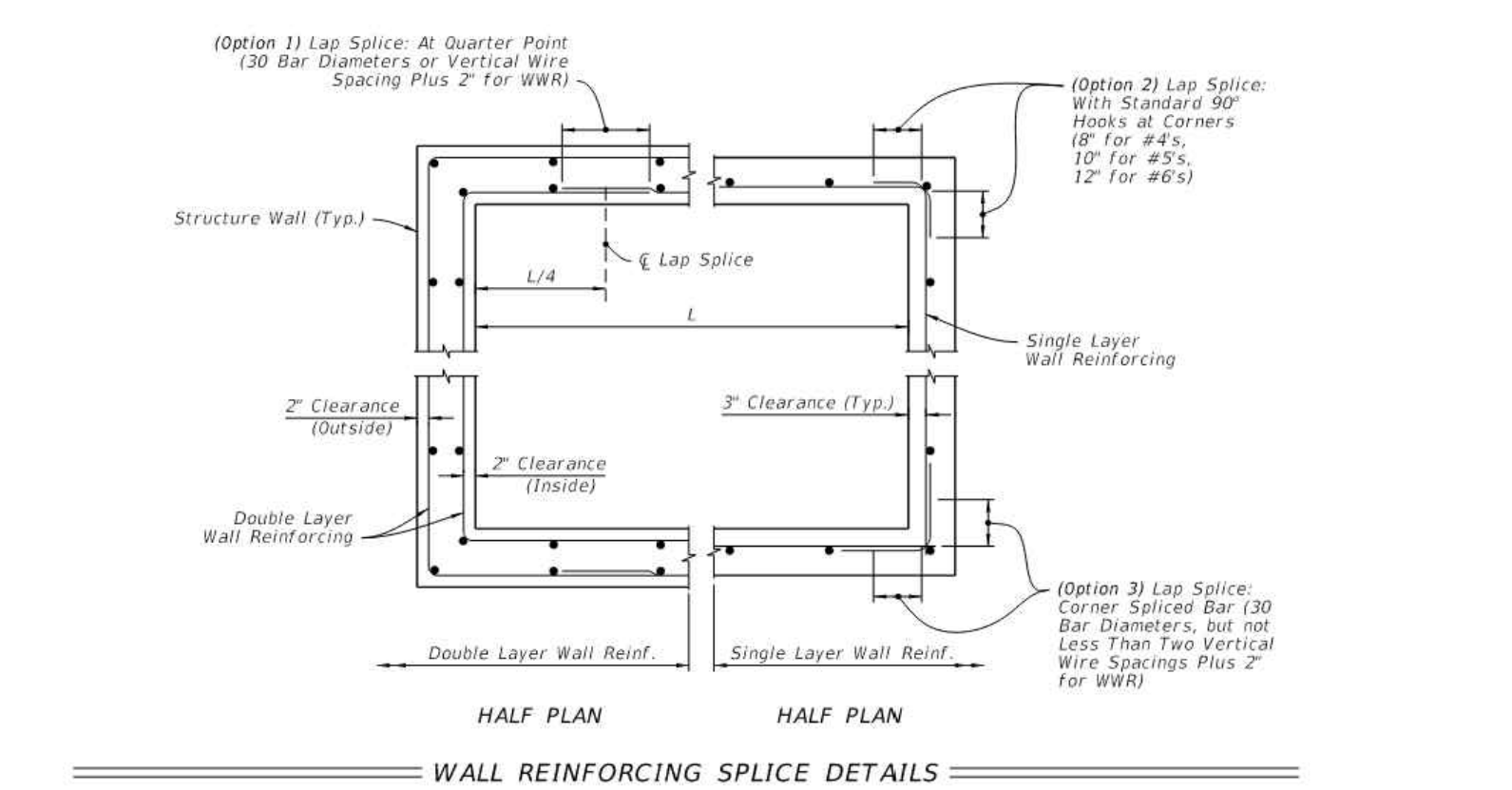
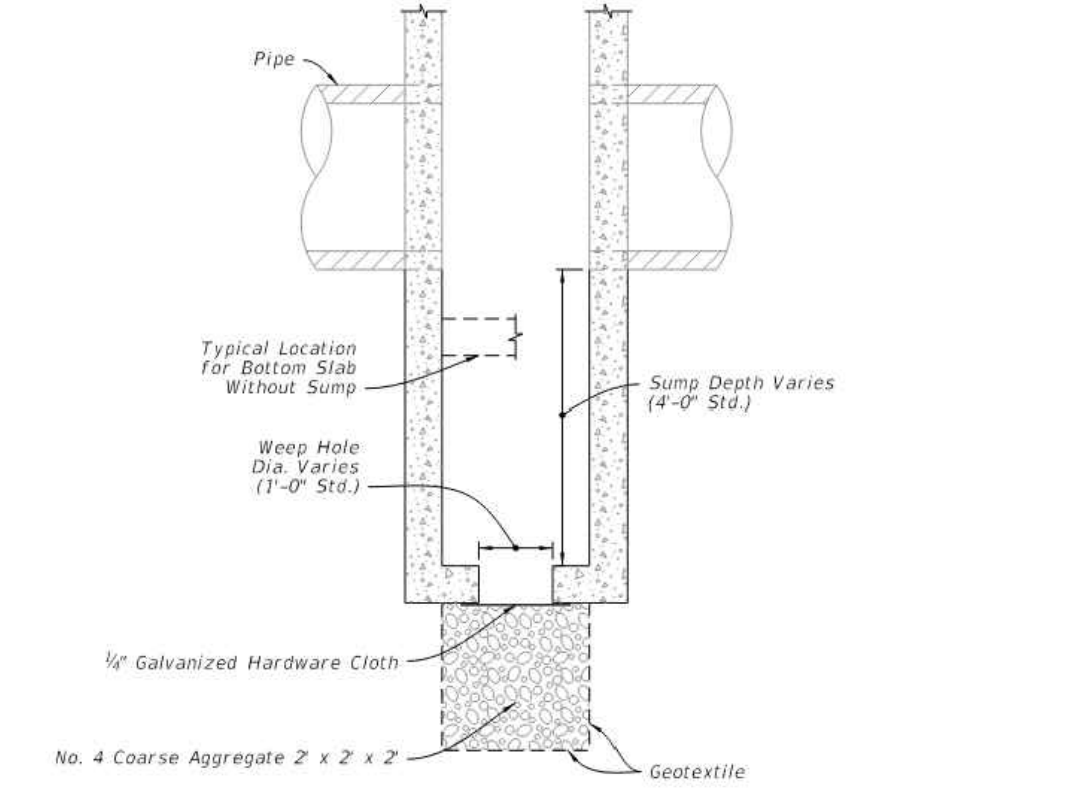
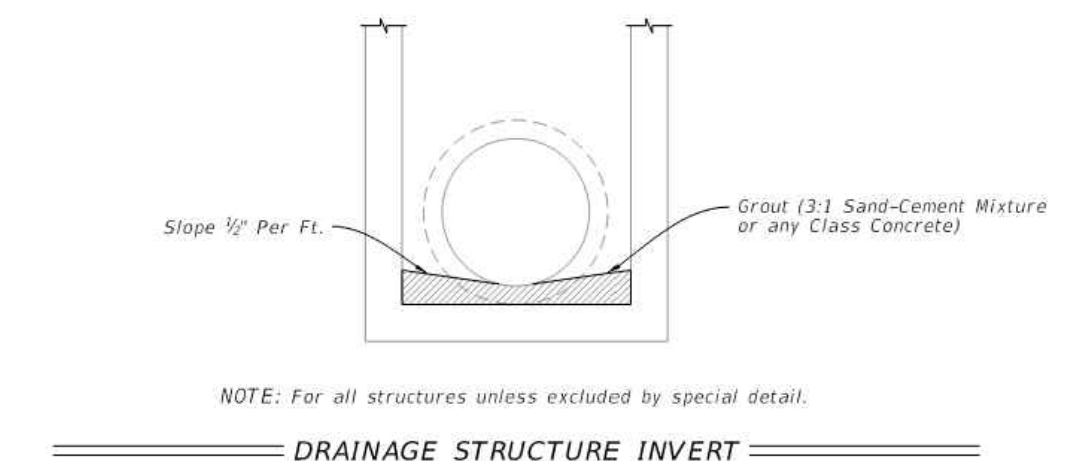
SHEET TITLE:
FDOT DETAILS
SHEET NUMBER:
C-904
ORG. DATE - 12/18/2024

- GENERAL NOTES:**
- Use a 1-piece cover when the 2-piece cover is called for in the Plans, except at inlets and manholes with sump bottoms. Use the 2-piece cover when the sump depth exceeds 2', unless otherwise noted.
 - Include "Adjustable" on the cover for Type I manhole adjustable frames.
 - For square or rectangular precast drainage structures, use either deformed or smooth WWR meeting the requirements of Specification 931. WWR must be continuous around the box and lapped in accordance with Option 1 or 3 as shown in the Wall Reinforcing Splice Details.
 - Lap splice horizontal steel in the walls of rectangular structures in accordance with Option 1, 2 or 3 as shown in the Wall Reinforcing Splice Details.
 - Welding of splices and laps is permitted. Use AASHTO M259 requirements and restrictions on welds.
 - Rebar straight end embedment of peripheral reinforcement may be used in lieu of ACI standard hooks for top and bottom slabs, except when hooks are specifically called for in the Plans.
 - Precast opening for pipe must be the pipe OD plus 6" (+2" tolerance). Use mortar to seal the pipe into the opening of such a mix that shrinkage will not cause leakage into or out of the structure. Dry-pack mortar may be used to seal openings less than 2 1/2" wide.

Sheet	Description
1	General Notes, Contents, Manhole Top Overview, and Manhole Covers
2	Manhole Frames and Manhole Tops
3	Inlet Locking Grates, Subgrade and Base Temporary Drains, and Pipe to Structure Geotextile Wrap
4	Drainage Structure Invert, Sump Bottom, Wall Reinforcing Splice Details, and Typical Slab to Wall Details
5	Precast Option and Equivalent Reinforcement substitution
6	Construction Joints and Minimum Box Riser Segment Dimensions
7	Sloped Pipe in Rectangular Structures
8	Miscellaneous Pipe Connection Details



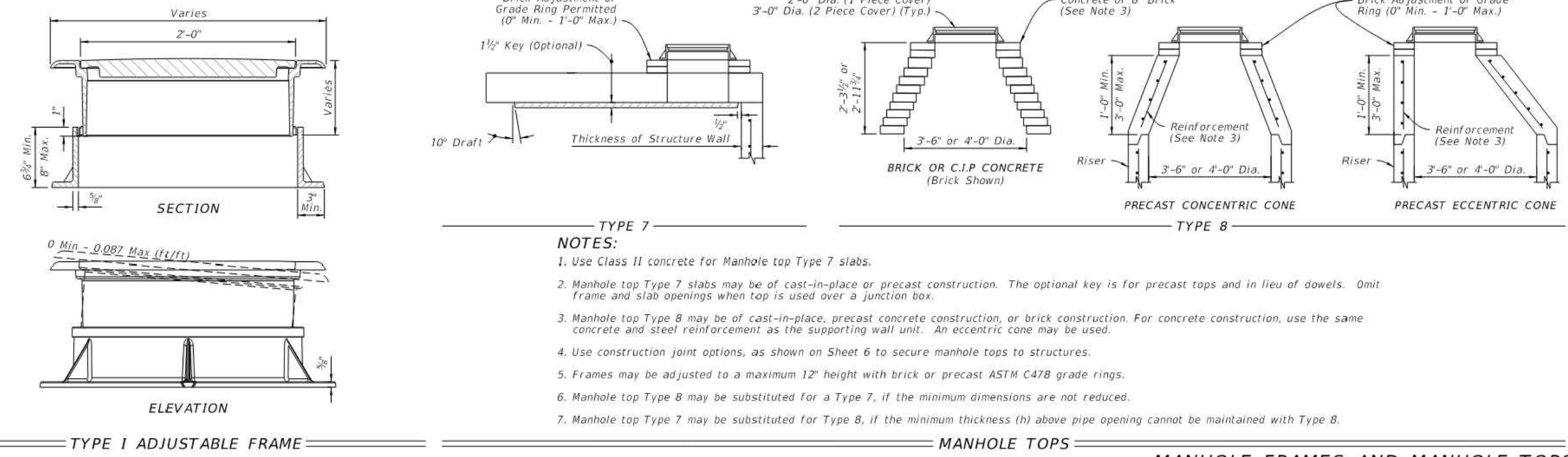
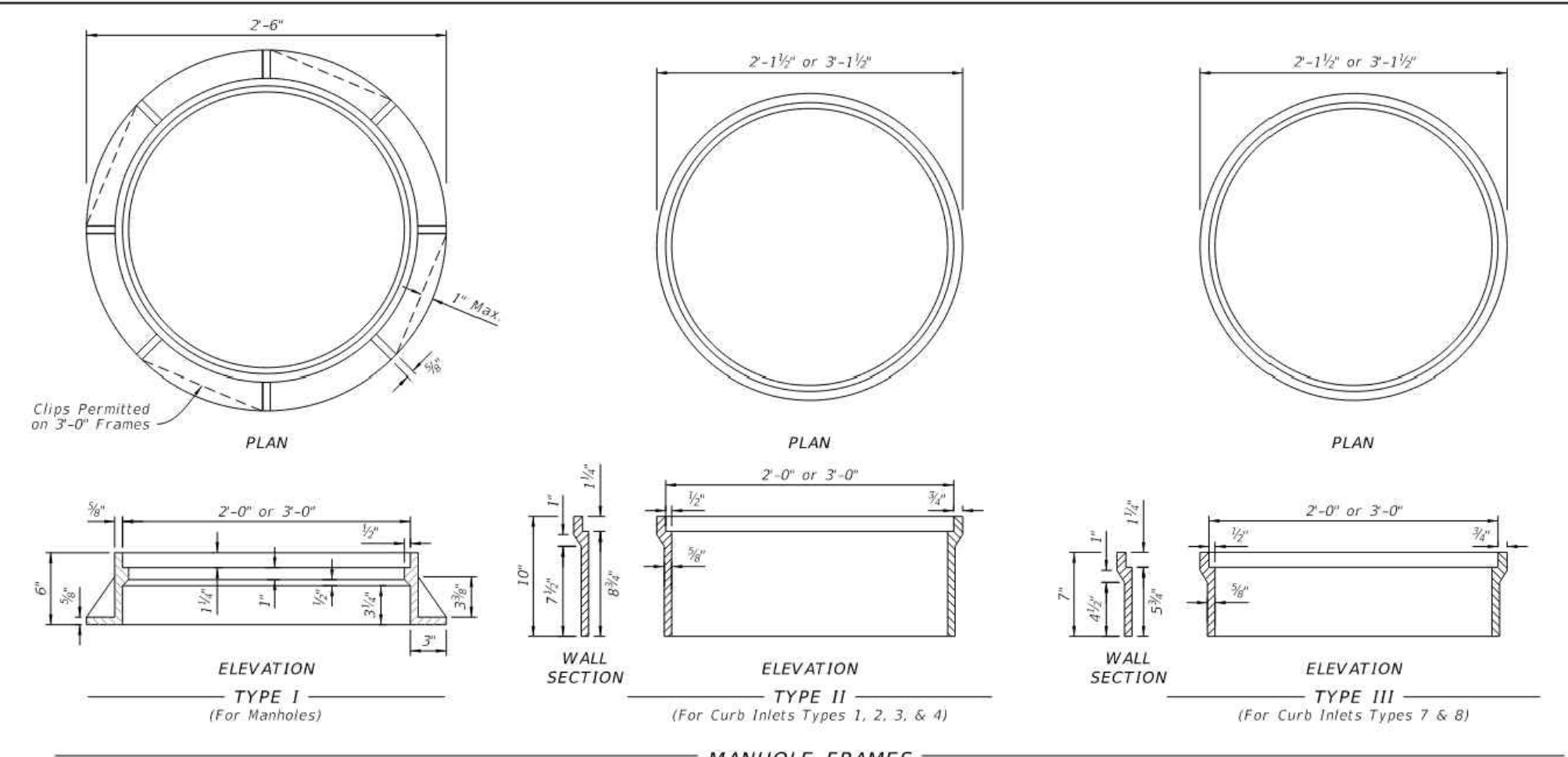
LAST REVISION	DESCRIPTION	FY 2025-26 STANDARD PLANS	SUPPLEMENTARY DETAILS FOR DRAINAGE STRUCTURES	INDEX	SHEET
11/01/23				425-001	1 of 8



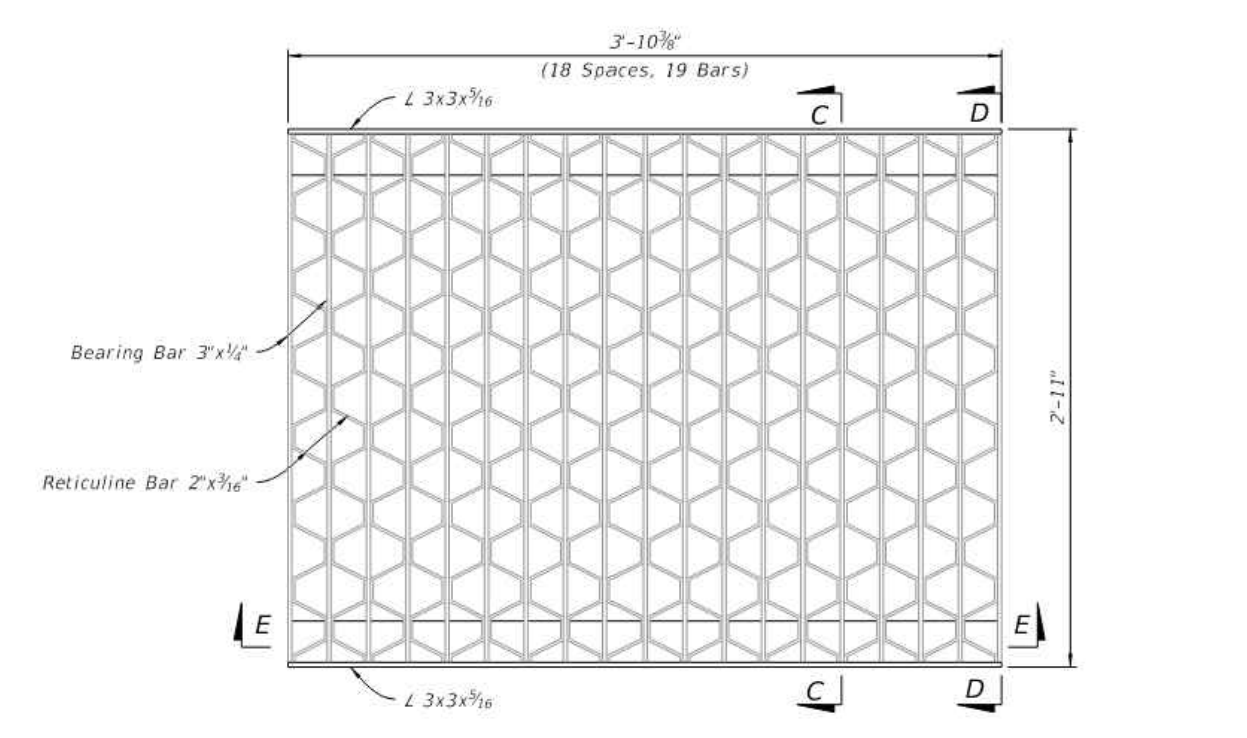
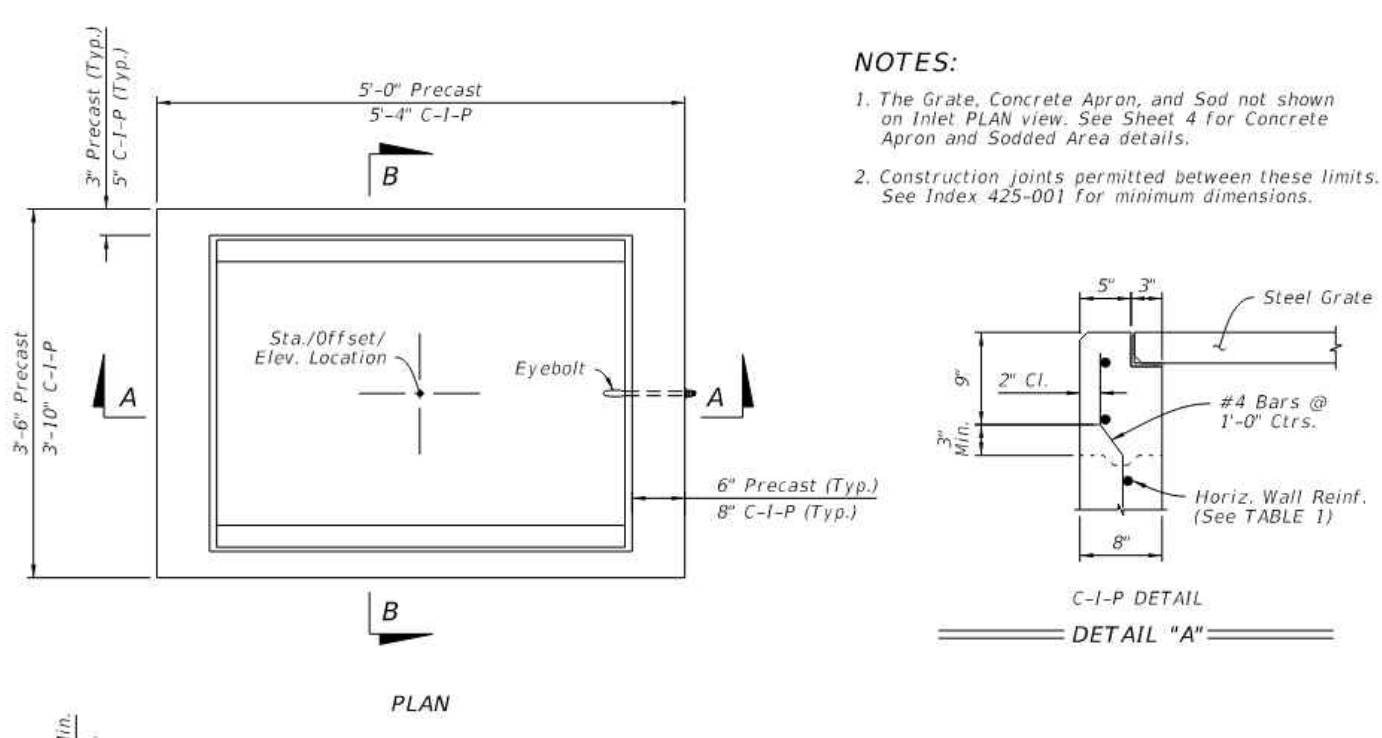
LAST REVISION	DESCRIPTION	FY 2025-26 STANDARD PLANS	SUPPLEMENTARY DETAILS FOR DRAINAGE STRUCTURES	INDEX	SHEET
11/01/23				425-001	4 of 8

Frame Type	2'-0\"/>		
	Frame	Cover (Std)	Frame
I	155	190	270
II	145	190	255
III	90	190	180
		Inside	Outside
		190	220
		190	220
		190	220
		190	220

NOTE:
Frame Type I in Table 1, includes Adjustable Frames.



LAST REVISION	DESCRIPTION	FY 2025-26 STANDARD PLANS	SUPPLEMENTARY DETAILS FOR DRAINAGE STRUCTURES	INDEX	SHEET
11/01/20				425-001	2 of 8



WALL DEPTH	SCHEDULE	AREA (in. ² /ft.)	MAX. SPACING BARS	WWR
0' - 4'	A12	0.200	12"	8"
4' - 7'	A6	0.200	6"	5"
7' - 12'	B5.5	0.240	5 1/2"	5"
12' - 15'	Special 1	0.267	5"	4"

LAST REVISION	DESCRIPTION	FY 2025-26 STANDARD PLANS	DITCH BOTTOM INLET TYPES F AND G	INDEX	SHEET
11/01/20				425-053	2 of 4



REVISIONS				
REV	DATE	COMMENT	DRAWN BY	

811
Know what's below.
Call before you dig.
ALWAYS CALL 811
It's fast. It's free. It's the law.

ISSUED FOR MUNICIPAL & AGENCY REVIEW & APPROVAL

PROJECT No.: FL24004-00-0A
DRAWN BY: AJ
CHECKED BY: RH
DATE: 12/08/2024
CAD ID: P-CIVL-00DS

PROP. SITE PLAN DOCUMENTS
FOR
CHASE

PROPOSED DEVELOPMENT
2007 SOUTH US HWY 1
FT PIERCE, FL 34950
S 15 - T 35 S - R 40 E
BOHLER
135 WEST CENTRAL BOULEVARD, SUITE 600
ORLANDO, FLORIDA 32801
Phone: (321) 234-2880
FLORIDA BUSINESS CERT. OF AUTH. NO. 30780

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY RYAN KEITH HELEMAN, PE, ON THE DATE ADJACENT TO THE SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

FDOT DETAILS
SHEET NUMBER:
C-905
ORG. DATE - 12/18/2024

**FORT PIERCE UTILITIES AUTHORITY
WATER DISTRIBUTION NOTES**

- ALL CONSTRUCTION MATERIAL, INSTALLATION AND TESTING SHALL CONFORM TO THE STANDARD SPECIFICATIONS OF THE FORT PIERCE UTILITIES AUTHORITY.
- WATER MAINS WHERE SPECIFIED AS POLYVINYL CHLORIDE (PVC) SHALL CONFORM TO AWWA C-900 OR C-905, PRESSURE CLASS 150, DR (18). WATER MAINS WHERE SPECIFIED AS POLYETHYLENE (PE) SHALL CONFORM TO AWWA C-901 OR C-906, STANDARD CODE DESIGNATION PE3408, PIPE CLASS 200, DIMENSION RATIO (DR) 17 FOR DIRECT BURY, (DR) 11 FOR DIRECTIONAL BORING, AND (DR) 9 FOR 2 INCH AND SMALLER PIPELINES.
- WATER MAIN, WHERE SPECIFIED AS DUCTILE IRON PIPE, SHALL CONFORM TO AWWA C151/A21.51 AND SHALL BE PRESSURE CLASS 250 (MINIMUM).
- POLYVINYL CHLORIDE WATER MAIN SHALL BE BLUE IN COLOR OR WHITE IN COLOR WITH BLUE STRIPES. THE USE OF IDENTIFICATION TAPE ATTACHED TO THE TOP OF THE PIPE MAY BE USED IN LIEU OF MARKING ON THE PIPE. ALSO DIP PIPE SHALL REQUIRE THE USE OF IDENTIFICATION TAPE AND THIN WIRE.
- FITTINGS SHALL BE DUCTILE IRON CONFORMING TO AWWA C-110/A21.10, CLASS 250 MIN. CEMENT LINED AND FACTORY COATED.
- GATE VALVES SHALL BE MUELLER RESILIENT SEAT, KENNEDY KEN-SEAL, AMERICAN OR APPROVED EQUAL. VALVES SHALL CONFORM TO AWWA C-509.
- WATER LINES SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH FPUA DESIGN AND CONSTRUCTION STANDARDS. THE CONTRACTOR SHALL SUBMIT CERTIFIED DENSITY TESTS AS REQUIRED BY FPUA ENGINEERING AND THE CITY/COUNTY, FOOT, IN CASES WHERE PAVED AREAS FALL WITHIN THE JURISDICTION OF LOCAL OR STATE AGENCIES, THE COMPACTION REQUIREMENTS SHALL NOT BE LESS THAN THE MINIMUM REQUIRED BY THE APPROPRIATE RESPONSIBLE AGENCY.
- NO FIELD CHANGES OR DEVIATIONS FROM THE DESIGN SHALL BE MADE WITHOUT PRIOR APPROVAL OF THE FPUA ENGINEER AND CITY/COUNTY/FOOT ENGINEER.
- THE CONTRACTOR SHALL NOTIFY FPUA ENGINEERING AND CITY/COUNTY/FOOT ENGINEER 48 HOURS PRIOR TO COMMENCING CONSTRUCTION.
- A PRE-CONSTRUCTION CONFERENCE BETWEEN THE ENGINEER, THE CONTRACTOR, FPUA, AND CITY/COUNTY/FOOT ENGINEER SHALL BE MANDATORY PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- TRAFFIC CONTROL, BARRICADES, ETC., SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARDS AND APPROVED BY THE CITY ENGINEER.
- MINIMUM COVER SHALL BE 36 INCHES EXCEPT AS APPROVED BY THE UTILITIES ENGINEER AND CITY/COUNTY/FOOT ENGINEER. PIPES WITH COVER LESS THAN 30 INCHES SHALL BE CONSTRUCTED OF DUCTILE IRON OR IN PVC CASING.
- DISTURBED AREAS SHALL BE RESTORED IN CONFORMANCE WITH THE APPLICABLE GOVERNING AGENCY REQUIREMENTS.
- EXISTING UTILITIES AND DRAINAGE SHALL BE FIELD VERIFIED PRIOR TO CONSTRUCTION AND PROTECTED BY THE CONTRACTOR.
- WATER MAINS SHALL BE TESTED AND DISINFECTED IN ACCORDANCE WITH THE APPLICABLE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION AND AWWA C-851 FOR DISINFECTION.

WATER DISTRIBUTION		G-1 NOTES	
DESIGNED BY: JAC	DATE: 2018	SCALE: N.T.S.	SHEET: 1 OF 2
FT. PIERCE UTILITIES AUTHORITY			

**FORT PIERCE UTILITIES AUTHORITY
WATER DISTRIBUTION NOTES
CONTINUED**

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING EXISTING UTILITIES AND DRAINAGE.
 - THE CONTRACTOR SHALL FURNISH RECORD DRAWING INFORMATION TO THE ENGINEER INCLUDING LOCATIONS OF VALVES, FITTINGS, SERVICE CONNECTIONS, BLOWOFFS, AIR RELEASE VALVES, AND ANY OTHER PERTINENT INFORMATION NECESSARY TO LOCATE ITEMS CONSTRUCTED UNDER THIS PROJECT, AS REQUIRED BY THE UTILITIES ENGINEER.
 - THE CONTRACTOR SHALL TAP EXISTING LINES UNDER THE SUPERVISION OF THE FORT PIERCE UTILITIES AUTHORITY ONLY AFTER TESTING AND DISINFECTION HAS BEEN COMPLETED AND APPROVED ON THE TAPPING VALVE AND SLEEVE.
 - WATER MAIN SHALL BE MARKED BY THE USE OF CONTINUOUS 10 GAUGE THIN MULTI STRANDED WIRE (BLUE IN COLOR) AND IDENTIFICATION TAPE WITH "WATER" MARKED ON TAPE, PERMANENTLY ATTACHED TO THE TOP OF THE WATER MAIN IN ACCORDANCE WITH THE FORT PIERCE UTILITIES AUTHORITY SPECIFICATIONS.
 - SERVICE TAPS SHALL BE PLACED APPROXIMATELY TEN FEET AWAY FROM GATE VALVES, AS SHOWN, FOR TESTING. FOLLOWING TESTING AND STERILIZATION OF WATER LINE, CONTRACTOR SHALL PLACE A BRASS PLUG IN CORPORATION STOPS AND CURB STOPS SHALL BE REMOVED FROM TESTING LOCATIONS.
 - MECHANICAL RESTRAINTS TO BE USED ON ALL FITTINGS AND PLACED IN ACCORDANCE WITH MANUFACTURER'S OR ENGINEER'S RECOMMENDATIONS (WHICHEVER IS MORE STRINGENT) AND FPUA REQUIREMENTS.
 - ALL MAINS SHALL BE TESTED AT A MINIMUM OF 150 PSI. TESTING METHODS SHALL CONFORM TO AWWA C-600, - 2 HR MINIMUM TEST
- $$L = \frac{SD(P)}{148,000} \times \frac{1}{2}$$
- L = LEAKAGE IN GPH
S = LENGTH OF PIPE IN FEET
D = PIPE DIAMETER IN INCHES
P = TESTING PRESSURE IN PSI
- PRIOR TO ANY TESTING, ALL MAINS 6" IN DIA. AND LARGER SHALL HAVE A SWAB PASSED THRU THE ENTIRE LENGTH OF THE LINE. NOTE: SWAB SHOULD BE PLACED IN 1st JOINT OF NEW LINE. END OF MAIN SHOULD BE "TURNED UP" AT 45% AND EXTENDED SO THAT SWABBING AND A FULL BORE FLUSH CAN BE ACCOMPLISHED. BLOW-OFF ASSY CAN THEN BE PLACED, WHERE LINES BRANCH, SWABS WILL BE PLACED IN BRANCH LINES AND SEQUENTIALLY SWABBED AND FLUSHED.
 - A MINIMUM SIX FEET AND PREFERABLY TEN FEET HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN THE WATER MAIN AND ANY WASTEWATER LINES. 6 INCHES MINIMUM VERTICAL SEPARATION IF WATER MAIN IS OVER WASTEWATER AND 12 INCHES IF WATER MAIN IS UNDER SHALL BE MAINTAINED BETWEEN THE WATER MAIN AND ANY WASTEWATER LINES. THE DISTANCE SHALL BE MEASURED FROM OUTSIDE OF PIPE TO OUTSIDE OF PIPE OR STRUCTURE, WHERE THIS MINIMUM SEPARATION CANNOT BE MAINTAINED, THE CROSSING SHALL BE ARRANGED SO THAT THE WASTEWATER PIPE JOINTS AND THE WATER MAIN PIPE JOINTS ARE EQUIDISTANT FROM THE POINT OF CROSSING, AND THE WATER MAIN SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE (DIP) AT THE CROSSING. SUFFICIENT LENGTHS OF DIP MUST BE USED TO PROVIDE A MINIMUM SEPARATION OF 10 FEET BETWEEN ANY TWO JOINTS. ALL JOINTS ON THE WATER MAIN WITHIN 20 FEET OF THE CROSSING MUST BE MECHANICALLY RESTRAINED. A MINIMUM VERTICAL CLEARANCE OF 6 INCHES MUST BE MAINTAINED AT ALL CROSSINGS.
 - WHERE A WATER MAIN IS TO BE INSTALLED BELOW A STORM DRAIN PIPE, A MINIMUM OF 6 INCHES OF VERTICAL CLEARANCE BETWEEN PIPES SHALL BE CONSTRUCTED OF DIP AT THE CROSSING, AND SHALL BE MECHANICALLY RESTRAINED WITHIN 30 FEET OF THE CROSSING.
 - CONTRACTOR SHALL COMPLY WITH FLORIDA TRENCH SAFETY ACT REQUIREMENTS.

WATER DISTRIBUTION		G-1 NOTES	
DESIGNED BY: JAC	DATE: 2018	SCALE: N.T.S.	SHEET: 2 OF 2
FT. PIERCE UTILITIES AUTHORITY			

FORT PIERCE UTILITIES AUTHORITY WASTEWATER CONSTRUCTION NOTES

- ALL CONSTRUCTION MATERIAL, INSTALLATION AND TESTING SHALL CONFORM TO THE STANDARD SPECIFICATIONS OF THE FORT PIERCE UTILITIES AUTHORITY.
- GRAVITY SEWER MAIN SHALL BE POLYVINYL CHLORIDE (PVC) 208, GREEN OR WHITE IN COLOR, GRAVITY SEWER MAIN SHALL HAVE LOCATOR TAPE WITH "SEWER" MARKED ON TAPE AND SHALL CONFORM TO ASTM D-3034.
- THE MANHOLE BASE SHALL BE SET ON A FIRM, DRY AND STABLE OR COMPACTED BASE FOUNDATION. IF NECESSARY, THE CONTRACTOR SHALL UTILIZE ROCK TO PROVIDE A FIRM AND SUITABLE MANHOLE BASE FOUNDATION.
- WASTEWATER LINES SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH FPUA DESIGN AND CONSTRUCTION STANDARDS. THE CONTRACTOR SHALL SUBMIT CERTIFIED DENSITY TESTS AS REQUIRED BY FPUA ENGINEERING AND THE CITY ENGINEERING DEPARTMENT. IN CASES WHERE PAVED AREAS FALL WITHIN THE JURISDICTION OF LOCAL OR STATE AGENCIES, THE COMPACTION REQUIREMENTS SHALL NOT BE LESS THAN THE MINIMUM REQUIRED BY THE APPROPRIATE RESPONSIBLE AGENCY.
- A 1% MINIMUM SLOPE SHALL BE MAINTAINED ON ALL SANITARY SERVICE LATERALS.
- THE CONTRACTOR SHALL FURNISH RECORD DRAWING INFORMATION TO THE ENGINEER CONSISTING OF PIPE SIZES, LOCATION OF SERVICE TEE WYES, DIAMETER OF SERVICES, LOCATION OF ANY FITTINGS, FINAL RIM AND INVERT ELEVATION OF ALL MANHOLES AND ANY OTHER PERTINENT INFORMATION NECESSARY TO LOCATE ITEMS CONSTRUCTED UNDER THIS PROJECT.
- MAINTAIN SIX FEET AND PREFERABLY 10 FEET HORIZONTAL DISTANCE BETWEEN WATER MAINS AND SEWER MAINS AS A MINIMUM.
- WASTEWATER FORCE MAINS, WASTEWATER COLLECTION LINES, AND STORM SEWERS SHOULD CROSS UNDER WATER MAINS WHENEVER POSSIBLE. A MINIMUM VERTICAL DISTANCE OF 12 INCHES BETWEEN THE INVERT OF THE UPPER PIPE AND THE CROWN OF THE LOWER PIPE SHALL BE PROVIDED WHENEVER POSSIBLE. WHERE THIS MINIMUM SEPARATION CANNOT BE MAINTAINED, THE CROSSING SHALL BE ARRANGED SO THAT THE WASTEWATER PIPE JOINTS AND THE WATER PIPE JOINTS ARE EQUIDISTANT FROM THE POINT OF CROSSING, AND THE WATER MAIN SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE (DIP) AT THE CROSSING. SUFFICIENT LENGTHS OF DIP MUST BE USED TO PROVIDE A MINIMUM SEPARATION OF 10 FEET BETWEEN ANY TWO JOINTS. ALL JOINTS ON THE WATER MAIN WITHIN 20 FEET OF THE CROSSING MUST BE MECHANICALLY RESTRAINED. A MINIMUM VERTICAL CLEARANCE OF 6 INCHES MUST BE MAINTAINED AT ALL CROSSINGS.
- A PRE-CONSTRUCTION CONFERENCE BETWEEN THE ENGINEER, THE CONTRACTOR, AND FPUA/CITY/COUNTY/FOOT SHALL BE MANDATORY PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
- NO FIELD CHANGES OR DEVIATIONS FROM THE DESIGN SHALL BE MADE WITHOUT PRIOR APPROVAL OF FPUA/CITY/COUNTY/FOOT ENGINEER.
- TRAFFIC CONTROL, BARRICADES, ETC. SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARDS.
- CONTRACTOR SHALL NOTIFY FORT PIERCE UTILITIES AUTHORITY 48 HOURS PRIOR TO COMMENCING CONSTRUCTION.
- WASTEWATER FORCE MAIN SHALL BE POLYVINYL CHLORIDE CONFORMING TO AWWA C-900, AND SHALL BE CLASS 150, DR-11.
- WASTEWATER FORCE MAIN SHALL BE GREEN IN COLOR.
- FITTINGS SHALL BE DUCTILE IRON, CONFORMING TO AWWA C-110/A21.10 CLASS 250 MIN. AND INTERIOR EPOXY COATED.
- WASTEWATER FORCE MAIN SHALL BE MARKED BY THE USE OF CONTINUOUS 10 GAUGE THIN WIRE (GREEN IN COLOR) PERMANENTLY ATTACHED TO THE TOP OF THE FORCE MAIN WITH LOCATOR TAPE MARKED "SEWER" ON TAPE IN ACCORDANCE WITH FPUA SPECIFICATIONS.
- MINIMUM COVER SHALL BE 36 INCHES, PIPES WITH COVER LESS THAN 30 INCHES SHALL REQUIRE PRIOR APPROVAL OF THE UTILITIES ENGINEER AND SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE.
- EACH SERVICE LATERAL WILL BE MARKED WITH A LOCATOR BALL AS MANUFACTURED BY 3M CORPORATION, OR APPROVED EQUAL, AS REQUIRED BY FPUA ENGINEER.
- ALL MANHOLES SHALL HAVE SEWER RAIN GUARDS INSTALLED AS REQUIRED BY FPUA ENGINEER.
- THE CONTRACTOR SHALL COMPLY WITH THE FLORIDA TRENCH SAFETY ACT REQUIREMENTS.

WASTEWATER CONSTRUCTION NOTES FPUA REQUIREMENTS		G-2 CONSTRUCTION NOTES	
DESIGNED BY: JAC	DATE: 2018	SCALE: N.T.S.	SHEET: 1 OF 1
FT. PIERCE UTILITIES AUTHORITY			

**STANDARD SEPARATION STATEMENT FOR
WATER / SEWER CONFLICTS**

- SANITARY SEWER, FORCE MAINS, AND STORM SEWERS SHOULD CROSS UNDER WATER MAINS WHENEVER POSSIBLE. SANITARY SEWERS, FORCE MAINS AND STORM SEWERS CROSSING UNDER WATER MAINS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 6 INCHES, PREFERABLY 12 INCHES BETWEEN THE INVERT OF THE UPPER PIPE AND THE CROWN OF THE LOWER PIPE WHEN ABOVE, AND AT LEAST 12 INCHES OF SEPARATION WHEN THE WATER MAIN IS BELOW.
- WHERE SANITARY SEWER, FORCE MAINS, STORM SEWERS MUST CROSS A WATER MAIN WITH LESS THAN 8 INCHES VERTICAL SEPARATION, BOTH THE SEWER AND WATER MAIN SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE (DIP) CENTERED ON THE CROSSING. (DIP IS NOT REQUIRED FOR STORM SEWERS.) SUFFICIENT LENGTHS OF DIP MUST BE USED TO PROVIDE A MINIMUM SEPARATION OF 10 FEET BETWEEN TWO JOINTS. ALL JOINTS ON THE WATER MAIN WITHIN 20 FEET OF THE CROSSING MUST BE MECHANICALLY RESTRAINED.
- ALL CROSSINGS SHALL BE ARRANGED SO THAT THE SEWER PIPE JOINTS AND WATER MAIN PIPE JOINTS ARE EQUIDISTANT FROM THE POINT OF CROSSING (PIPES CENTERED ON THE CROSSING). AT SUCH CROSSINGS PIPES SHALL BE ARRANGED SO THAT ALL WATER MAIN JOINTS ARE AT LEAST THREE FEET FROM ALL JOINTS IN VACUUM-TYPE SANITARY SEWERS, STORM SEWERS, STORMWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-810, F.A.C., AND AT LEAST SIX FEET FROM ALL JOINTS IN GRAVITY OR PRESSURE-TYPE SANITARY SEWERS, WASTEWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-810, F.A.C.
- WHERE A NEW PIPE CONFLICTS WITH AN EXISTING PIPE WITH LESS THAN 6 INCHES VERTICAL CLEARANCE, THE NEW PIPE SHALL BE CONSTRUCTED OF DIP (EXCEPT STORM SEWER) AND NEW PIPES SHALL BE ARRANGED TO MEET THE CROSSING REQUIREMENTS ABOVE.
- A MINIMUM 3-FOOT HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN ANY TYPE OF STORM SEWER AND WATER MAIN IN PARALLEL INSTALLATIONS WHENEVER POSSIBLE.
- A MINIMUM 10-FOOT HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN "ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM" AND WATER MAIN IN PARALLEL INSTALLATIONS WHENEVER POSSIBLE.
- A MINIMUM 6-FOOT, AND PREFERABLY 10-FOOT HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN GRAVITY OR PRESSURE-TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER AND WATER MAIN IN PARALLEL INSTALLATIONS WHENEVER POSSIBLE. THE MINIMUM HORIZONTAL SEPARATION DISTANCE BETWEEN WATER MAINS AND GRAVITY-TYPE SANITARY SEWERS SHALL BE REDUCED TO 3 FEET WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST SIX INCHES ABOVE THE TOP OF THE SEWER.
- IN CASES WHERE IT IS NOT POSSIBLE TO MAINTAIN A 10-FOOT HORIZONTAL SEPARATION, THE WATER MAIN MUST BE LAID IN A SEPARATE TRENCH OR ON A UNDISTURBED EARTH SHELF LOCATED ON ONE SIDE OF THE SEWER OR FORCE MAIN AT SUCH AN ELEVATION THAT THE BOTTOM OF THE WATER MAIN IS AT LEAST 6 INCHES ABOVE THE TOP OF THE SEWER.
- WHERE IT IS NOT POSSIBLE TO MAINTAIN A VERTICAL DISTANCE OF 6 INCHES IN PARALLEL INSTALLATIONS, THE WATER MAIN SHALL BE CONSTRUCTED OF DIP AND THE SEWER OR THE FORCE MAIN SHALL BE CONSTRUCTED OF DIP (EXCEPT STORM SEWER) WITH A MINIMUM VERTICAL DISTANCE OF 6 INCHES. THE WATER MAIN SHOULD ALWAYS BE ABOVE THE SEWER JOINTS ON THE WATER MAIN SHALL BE LOCATED AS FAR APART AS POSSIBLE FROM JOINTS ON THE SEWER OR FORCE MAIN (CROSSED JOINTS).
- ALL DIP SHALL BE PRESSURE CLASS 250 MIN. ADEQUATE PROTECTIVE MEASURES AGAINST CORROSION SHALL BE USED AS DETERMINED BY THE DESIGN ENGINEER.

STANDARD SEPARATION STATEMENT FOR WATER/SEWER CONFLICT		G-3 WATER/SEWER CONFLICT	
DESIGNED BY: JAC	DATE: 2018	SCALE: N.T.S.	SHEET: 1 OF 1
FT. PIERCE UTILITIES AUTHORITY			

BOHLER
SITE CIVIL AND CONSULTING ENGINEERING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
SUSTAINABLE DESIGN
PERMITTING SERVICES
TRANSPORTATION SERVICES

REVISIONS

REV	DATE	COMMENT	DRAWN BY	CHECKED BY

811
Know what's below.
Call before you dig.
ALWAYS CALL 811
It's fast. It's free. It's the law.

**ISSUED FOR MUNICIPAL &
AGENCY REVIEW & APPROVAL**

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.: FLD240044-00-0A
DRAWN BY: AJ
CHECKED BY: RH
DATE: 12/08/2024
CAD ID: P-CIVL-00DS

**PROP.
SITE PLAN
DOCUMENTS**
FOR

CHASE

PROPOSED DEVELOPMENT
2007 SOUTH US HWY 1
FT PIERCE, FL 34950
S 15 - T 35 S - R 40 E

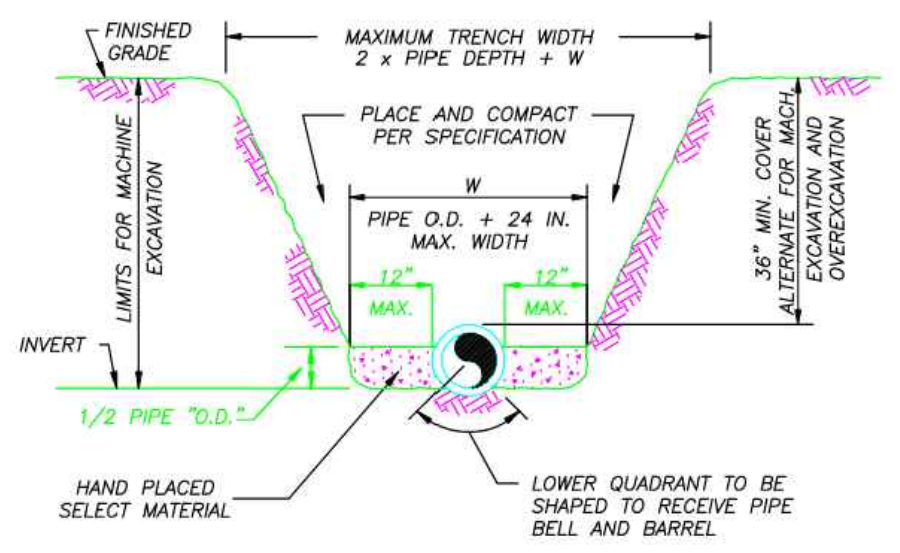
BOHLER
135 WEST CENTRAL BOULEVARD,
SUITE 600
ORLANDO, FLORIDA 32801
Phone: (321) 234-2880
FLORIDA BUSINESS CERT. OF AUTH. NO. 30760

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY RYAN KEITH FLEMING, PE, ON THE DATE ADJACENT TO THE SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

SHEET TITLE:
**UTILITY
DETAILS**

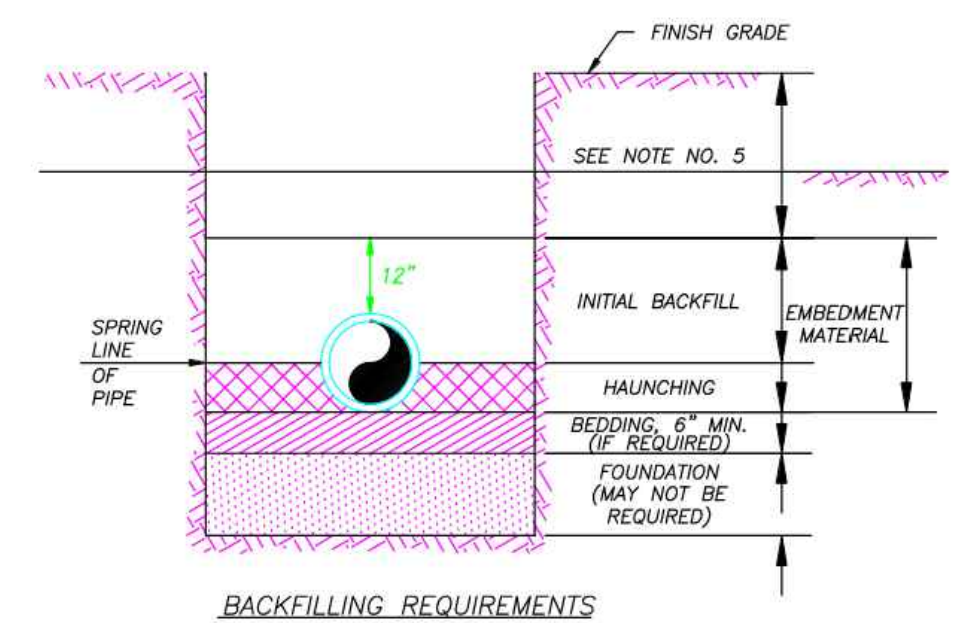
SHEET NUMBER:
C-907

ORG. DATE - 12/18/2024



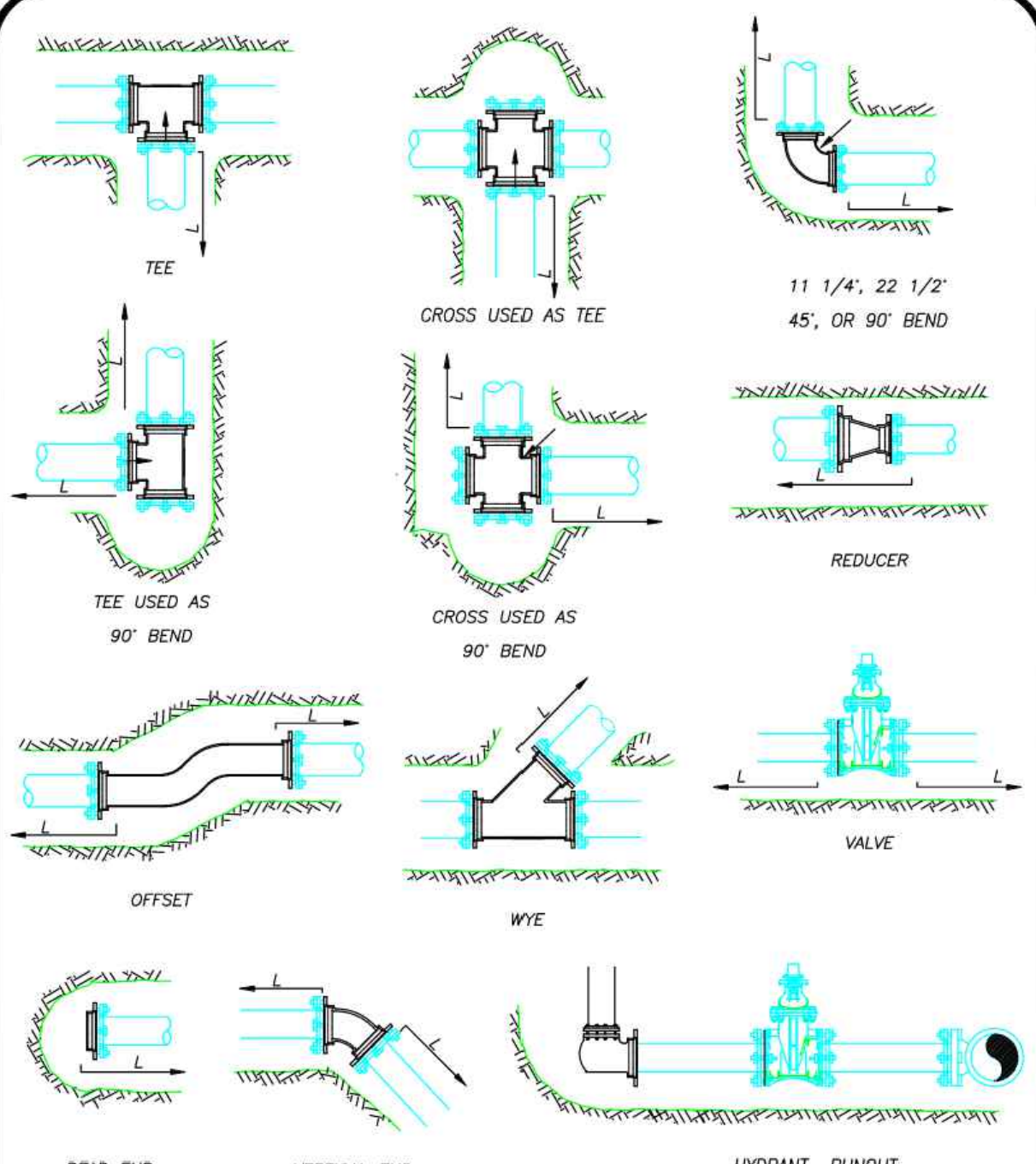
- NOTES:**
- THE CONTRACTOR SHALL COMPLY WITH REQUIREMENTS OF THE FLORIDA TRENCH SAFETY ACT.
 - INITIAL BACKFILL SHALL BE HAND PLACED TO 12" ABOVE THE PIPE. BACKFILL SHALL BE MECHANICALLY TAMPED TO A MINIMUM OF 100% OF MAX. DENSITY AS DETERMINED BY AASHTO METHOD T-99.

TYPICAL TRENCH DETAIL		M-1	
DESIGNED BY: JAC	DATE: 2018	SCALE: N.T.S.	SHEET: 1 OF 1
FT. PIERCE UTILITIES AUTHORITY			

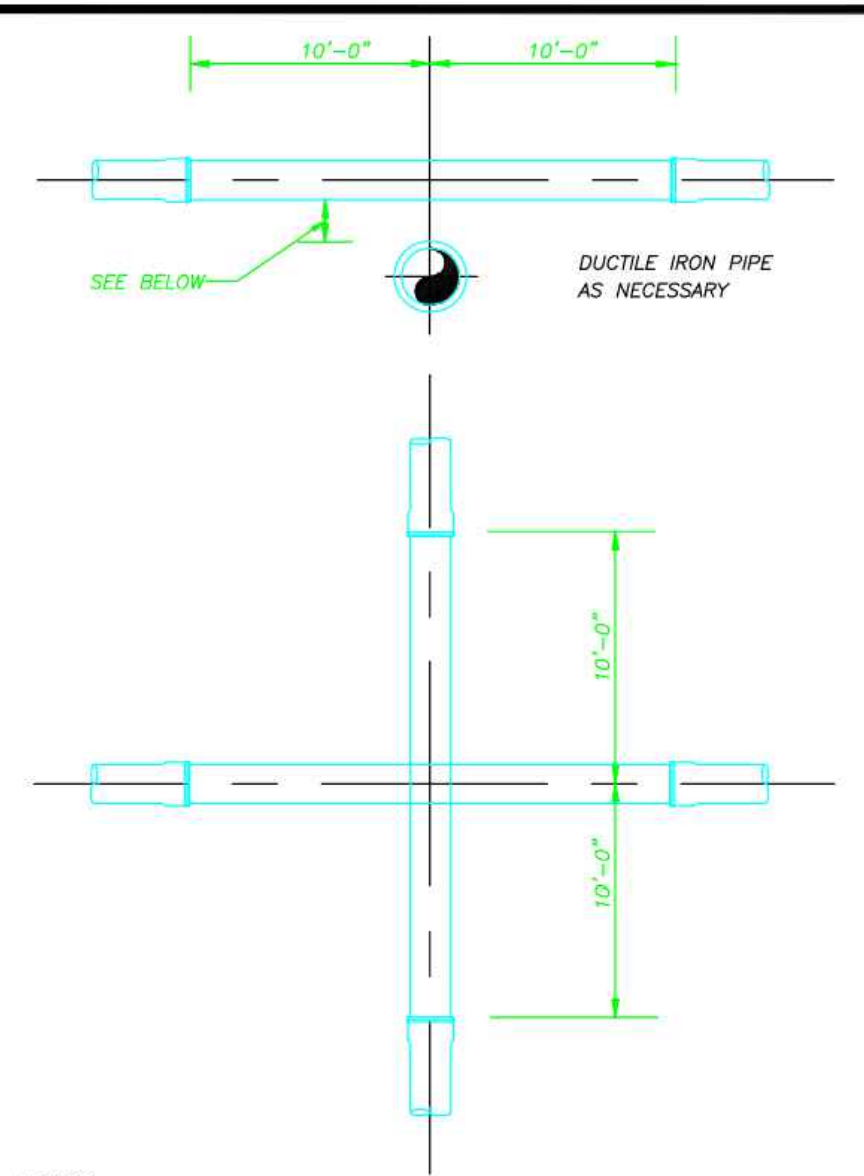


- NOTES:**
- IN CERTAIN SOIL CONDITIONS A FOUNDATION MAY BE REQUIRED.
 - BEDDING IS REQUIRED PRIMARILY TO BRING THE TRENCH BOTTOM UP TO GRADE. BEDDING MATERIALS SHALL PROVIDE A UNIFORM AND ADEQUATE LONGITUDINAL SUPPORT UNDER THE PIPE.
 - HAUNCHING MATERIAL SHALL BE HAND PLACED TO THE SPRINGLINE OF THE PIPE. MATERIAL SHALL BE CONSOLIDATED UNDER THE PIPE AND TAMPED TO PROVIDE ADEQUATE SIDE SUPPORT.
 - INITIAL BACKFILL MATERIAL SHALL BE HAND PLACED TO 12" ABOVE THE TOP OF PIPE. THE SOIL SHALL BE COMPACTED TO 100% MAX. DENSITY (AASHTO T-99).
 - BACKFILL SHALL BE COMPACTED TO 100% OF MAX. DENSITY AS PER AASHTO T-99, TO A POINT 30" BELOW PROPOSED PROFILE GRADE OR EXISTING GRADE. THE FINAL 30" OF BACKFILL SHALL BE COMPACTED TO 98% OF MAX. DENSITY AS PER AASHTO T-160.
 - DENSITY TEST SHALL BE PERFORMED AT AREAS DETERMINED BY THE UTILITIES ENGINEER OR PERMIT AGENCY HAVING JURISDICTION, AT THE CONTRACTOR'S EXPENSE.
 - CONTRACTOR TO COMPLY WITH ALL FEDERAL, STATE AND LOCAL TRENCH SAFETY REGULATIONS.

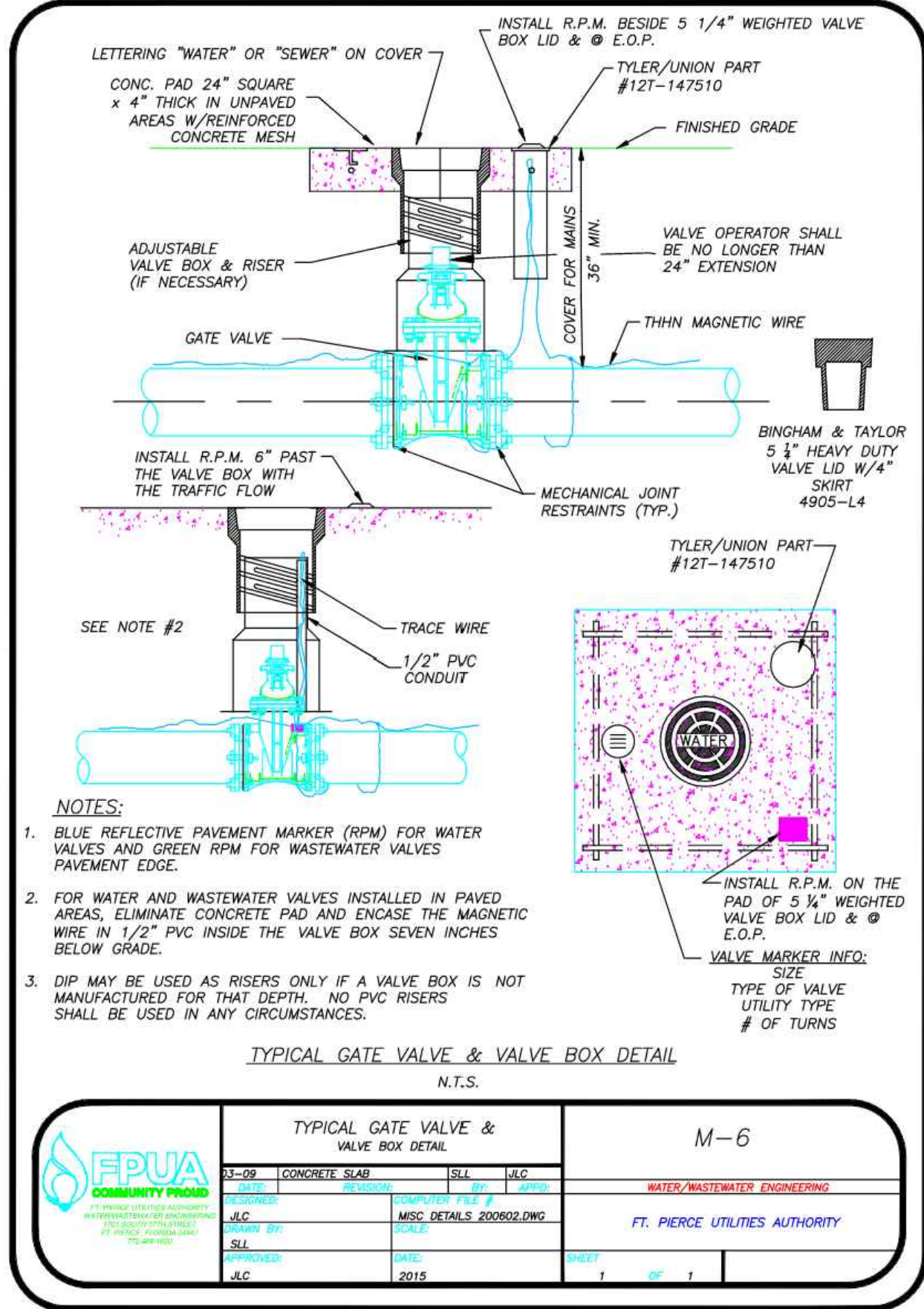
BACKFILLING REQUIREMENTS		M-2	
DESIGNED BY: JAC	DATE: 2018	SCALE: N.T.S.	SHEET: 1 OF 1
FT. PIERCE UTILITIES AUTHORITY			



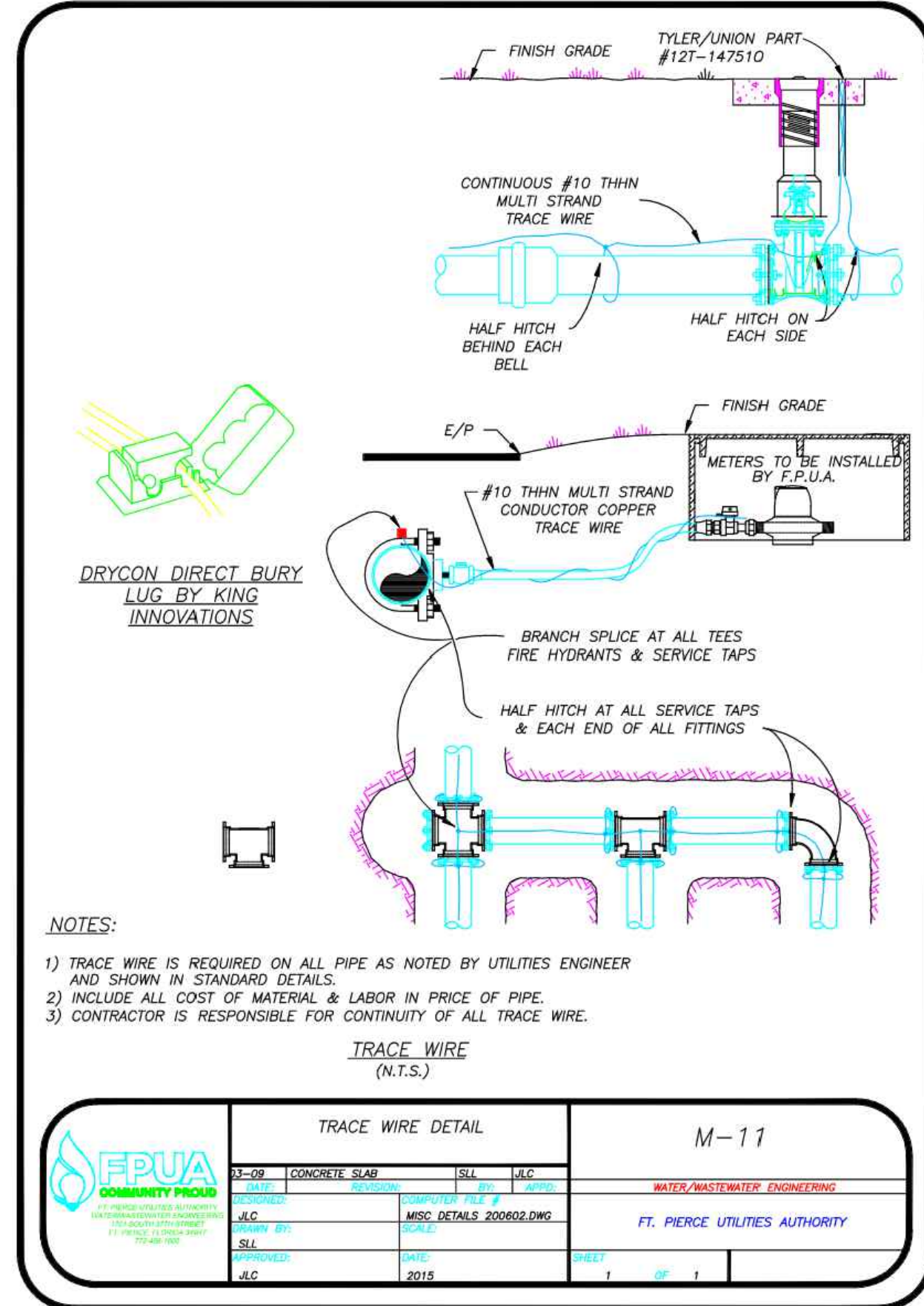
MECHANICAL JOINT ANCHORING REQUIREMENTS		M-3	
DESIGNED BY: JAC	DATE: 2018	SCALE: N.T.S.	SHEET: 1 OF 1
FT. PIERCE UTILITIES AUTHORITY			



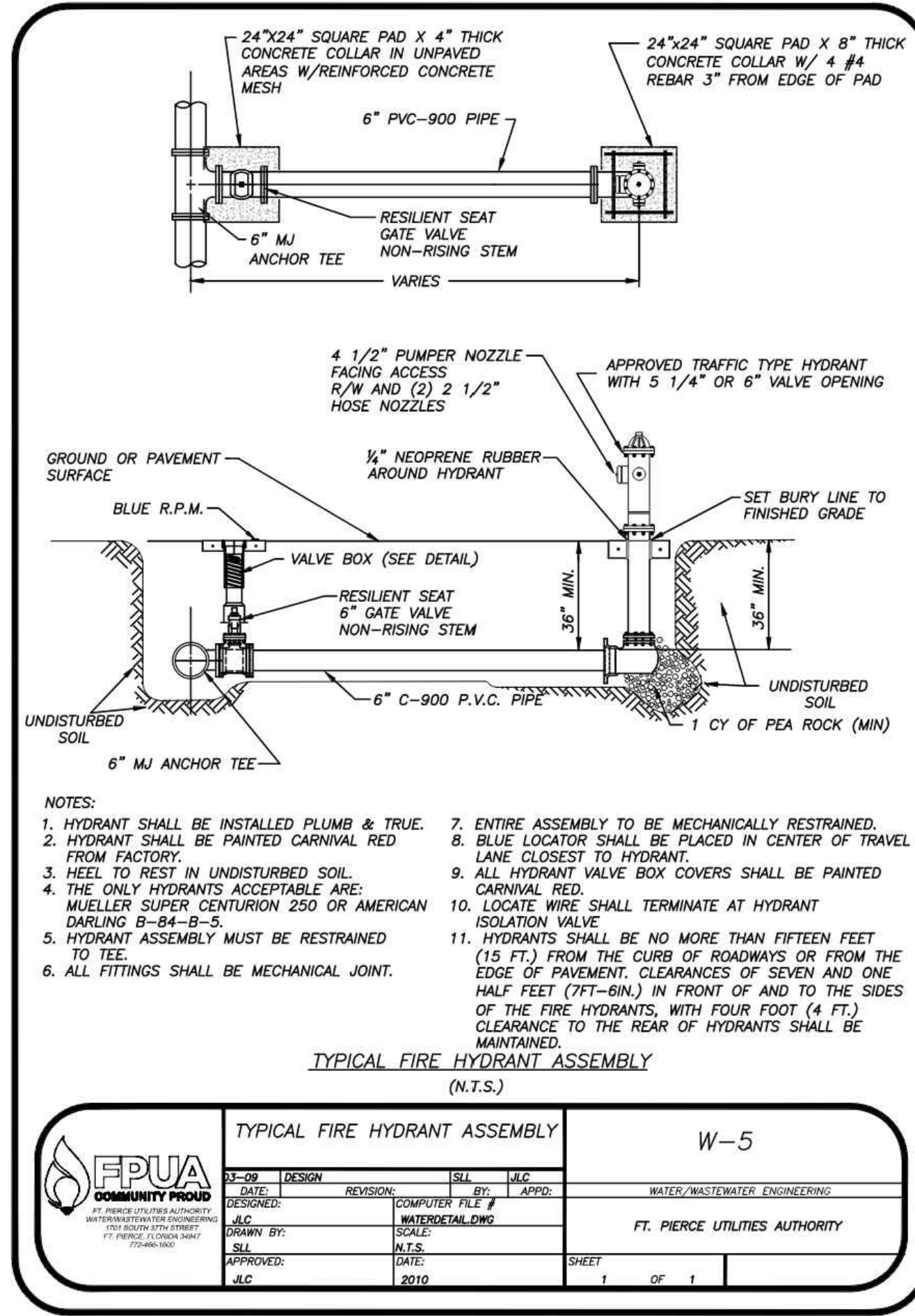
UTILITY CROSSING DETAIL		M-5	
DESIGNED BY: JAC	DATE: 2018	SCALE: N.T.S.	SHEET: 1 OF 1
FT. PIERCE UTILITIES AUTHORITY			



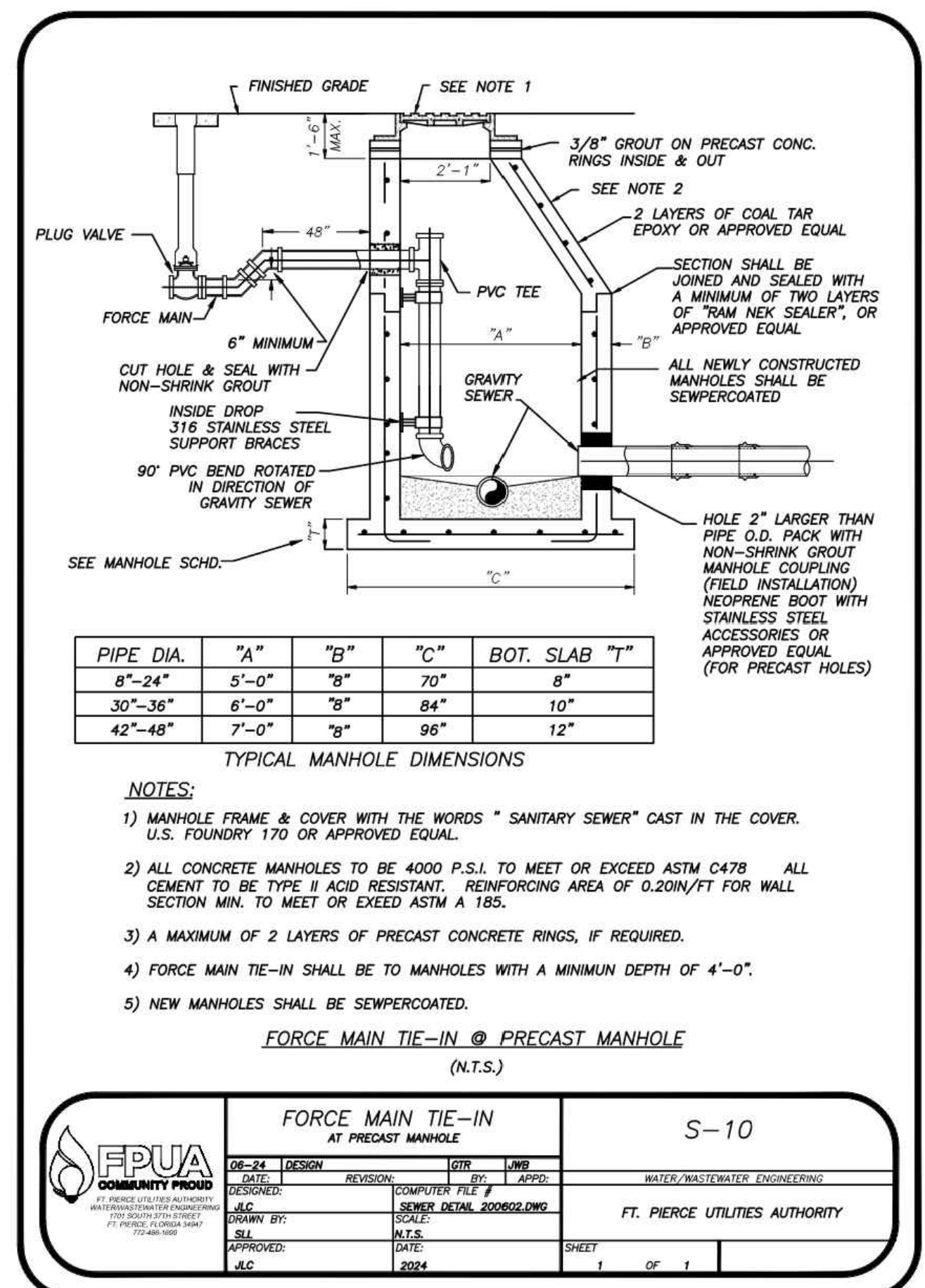
TYPICAL GATE VALVE & VALVE BOX DETAIL		M-6	
DATE:	REVISION:	BY:	APPD:
DESIGNED:	COMPUTER FILE #:	WATER/WASTEWATER ENGINEERING	
SCALE:	SCALE:	FT. PIERCE UTILITIES AUTHORITY	
APPROVED:	DATE:	2010	
DATE:	DATE:	2010	
SCALE:	SCALE:	1 OF 1	



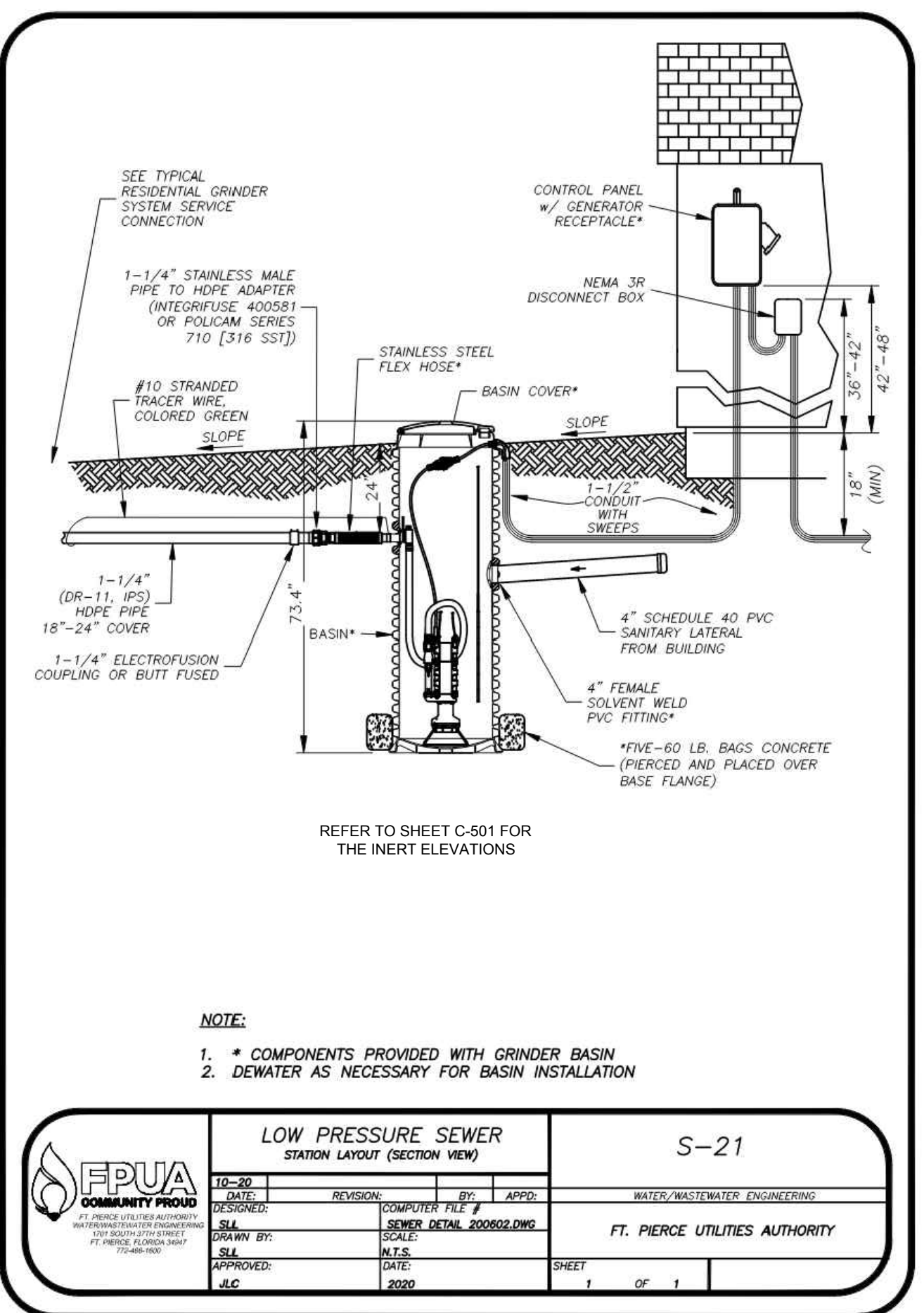
TRACE WIRE DETAIL		M-11	
DATE:	REVISION:	BY:	APPD:
DESIGNED:	COMPUTER FILE #:	WATER/WASTEWATER ENGINEERING	
SCALE:	SCALE:	FT. PIERCE UTILITIES AUTHORITY	
APPROVED:	DATE:	2010	
DATE:	DATE:	2010	
SCALE:	SCALE:	1 OF 1	



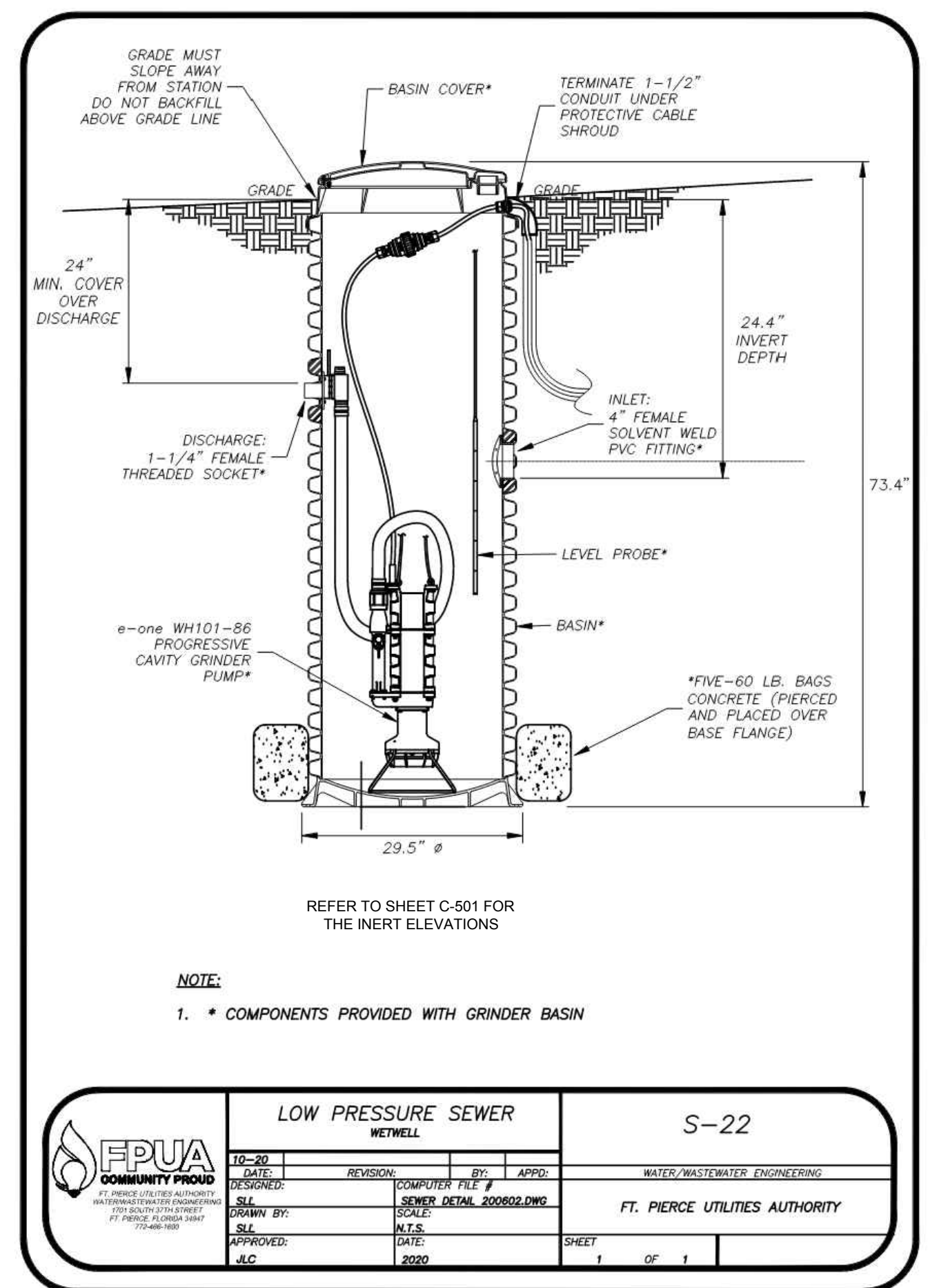
TYPICAL FIRE HYDRANT ASSEMBLY		W-5	
DATE:	REVISION:	BY:	APPD:
DESIGNED:	COMPUTER FILE #:	WATER/WASTEWATER ENGINEERING	
SCALE:	SCALE:	FT. PIERCE UTILITIES AUTHORITY	
APPROVED:	DATE:	2010	
DATE:	DATE:	2010	
SCALE:	SCALE:	1 OF 1	



FORCE MAIN TIE-IN AT PRECAST MANHOLE		S-10	
DATE:	REVISION:	BY:	APPD:
DESIGNED:	COMPUTER FILE #:	WATER/WASTEWATER ENGINEERING	
SCALE:	SCALE:	FT. PIERCE UTILITIES AUTHORITY	
APPROVED:	DATE:	2010	
DATE:	DATE:	2010	
SCALE:	SCALE:	1 OF 1	



LOW PRESSURE SEWER STATION LAYOUT (SECTION VIEW)		S-21	
DATE:	REVISION:	BY:	APPD:
DESIGNED:	COMPUTER FILE #:	WATER/WASTEWATER ENGINEERING	
SCALE:	SCALE:	FT. PIERCE UTILITIES AUTHORITY	
APPROVED:	DATE:	2010	
DATE:	DATE:	2010	
SCALE:	SCALE:	1 OF 1	



LOW PRESSURE SEWER MANHOLE		S-22	
DATE:	REVISION:	BY:	APPD:
DESIGNED:	COMPUTER FILE #:	WATER/WASTEWATER ENGINEERING	
SCALE:	SCALE:	FT. PIERCE UTILITIES AUTHORITY	
APPROVED:	DATE:	2010	
DATE:	DATE:	2010	
SCALE:	SCALE:	1 OF 1	



REVISIONS			
REV	DATE	COMMENT	DRAWN BY

811
Know what's below.
Call before you dig.
ALWAYS CALL 811
It's fast. It's free. It's the law.

ISSUED FOR MUNICIPAL & AGENCY REVIEW & APPROVAL

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.:	FLD240044-00-0A
DRAWN BY:	AJ
CHECKED BY:	RH
DATE:	12/08/2024
CAD ID:	P-CIVL-OCDS

PROP. SITE PLAN DOCUMENTS
FOR

CHASE

PROPOSED DEVELOPMENT
2007 SOUTH US HWY 1
FT PIERCE, FL 34950
S 15 - T 35 S - R 40 E

BOHLER

135 WEST CENTRAL BOULEVARD, SUITE 600
ORLANDO, FLORIDA 32801
Phone: (321) 234-2880
FLORIDA BUSINESS CERT. OF AUTH. No. 30760

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY RYAN KEITH HELEMAN, PE, ON THE DATE ADJACENT TO THE SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

SHEET TITLE:
UTILITY DETAILS

SHEET NUMBER:
C-908

ORG. DATE - 12/18/2024