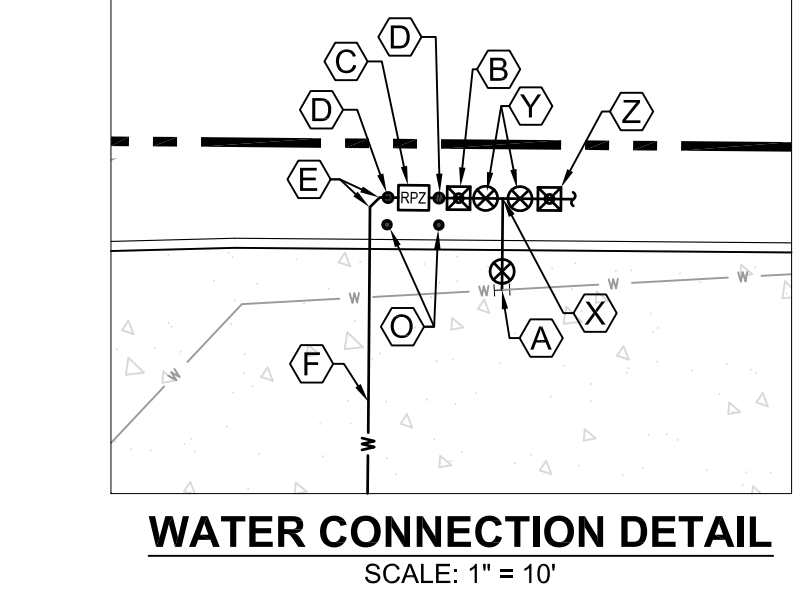


KEYED NOTES

- A. PROPOSED 2" POTABLE WATER SERVICE CONNECTION WITH SADDLE TAP. REFER TO SHEET 16 FOR DETAIL. NEW SERVICE SHALL UTILIZE THE ADJACENT LANDSCAPED AREA FOR THE WATER METER.
- B. PROPOSED 1-1/2" WATER METER.
- C. PROPOSED BACKFLOW PREVENTER.
- D. PROPOSED SAMPLE POINT.
- E. PROPOSED 2" - 45° BEND.
- F. PROPOSED 2" PVC (DR-21) DOMESTIC WATER SERVICE. MAINTAIN 36" OF COVER. (135 LF TOTAL)
- G. PROPOSED 2" TEE AND 2" x 1/4" REDUCER.
- H. PROPOSED LOCATION FOR POTABLE WATER TIE IN TO THE BUILDING. REFER TO ARCHITECTURAL PLANS FOR DETAILS.
- I. PROPOSED 1/4" PVC (DR-21) WATER SERVICE. MAINTAIN 36" OF COVER. (115 LF TOTAL)
- J. PROPOSED 1/4" - 45° BEND.
- K. PROPOSED FREE AIR AND WATER DISPENSERS. MODEL: EXCEL SC03 AIR TOWER WITH OPTIONAL WATER DISPENSER. REFER TO ARCHITECTURAL PLANS FOR ELECTRICAL SERVICE.
- L. PROPOSED 6" TAPPING SLEEVE AND GATE VALVE.
- M. PROPOSED 6" PVC WATER MAIN
- N. PROPOSED LOCATION OF FIRE HYDRANT. CONTRACTOR SHALL USE CAUTION NOT TO DAMAGE AND REUSE EXISTING HYDRANT.
- O. PROPOSED UTILITY PROTECTION BOLLARD. REFER TO SHEET CD-2 FOR DETAIL.
- P. PROPOSED SERVICE LATERAL CONNECTION TO EXISTING 8" CLAY PIPE. REFER TO SHEET 15 FOR DETAIL
- Q. PROPOSED 6" (SDR-26) PVC SANITARY SEWER SERVICE. SANITARY SEWER PIPE TO BE RUN AT A MINIMUM SLOPE OF 1%.
- R. PROPOSED 6" WYE.
- S. PROPOSED LOCATION FOR SANITARY SEWER TIE IN TO THE BUILDING. REFER TO ARCHITECTURAL PLANS FOR DETAILS.
- T. EXISTING OVERHEAD ELECTRIC LINE TO BE CONVERTED TO AN UNDERGROUND ELECTRIC WITHIN CONDUIT.
- U. PROPOSED UNDERGROUND ELECTRICAL CONDUITS. REFER TO ARCHITECTURAL PLANS.
- V. PROPOSED METER LOCATION FOR UNDERGROUND ELECTRICAL TIE IN TO THE BUILDING. REFER TO ARCHITECTURAL PLANS FOR DETAILS.
- W. NEW UNDERGROUND FUEL TANKS AND ASSOCIATED FILL CAPS. REFER TO SHEET C-6 FOR GRADING AND ELEVATIONS.
- X. PROPOSED 1-1/2" TEE.
- Y. PROPOSED 1-1/2" WATER SERVICE CONTROL VALVE.
- Z. PROPOSED 1" IRRIGATION METER. ALL LANDSCAPED AREAS TO BE IRRIGATED. REFER TO SHEETS IR-01 AND IR-02.
- AA. PROPOSED TRANSFORMER AND PAD.

NOTES:

- 1. REFER TO SHEET CV-2 FOR GENERAL NOTES
- 2. REFER TO SHEET C-4 FOR DEMOLITION PLAN
- 3. REFER TO SHEET C-6 FOR GRADING AND DRAINAGE PLAN
- 4. REFER TO SHEET L-1 FOR LANDSCAPE PLAN
- 5. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND / OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED UPON AS BEING COMPLETE OR EXACT. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
- 6. REFER TO ARCHITECTURAL PLANS FOR SITE ELECTRICAL PLANS.



PROPOSED LEGEND

- BOUNDARY LINE
- PROPOSED BUILDING
- TYPE "D" CURB
- CONCRETE PAVEMENT
- CONCRETE SIDEWALK
- UNDERGROUND ELECTRIC
- 6" SAN
- WATER MAIN
- SANITARY SEWER CLEANOUT
- SANITARY SEWER STRUCTURE SYMBOL
- STORMWATER PIPE & DIRECTION OF FLOW
- STORM CATCH BASIN
- CONDENSATION LINE (REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATION)

RECORD DRAWING NOTES:

- 1. RECORD DRAWINGS SHALL BE PREPARED IN THE STATE PLANE COORDINATE SYSTEM.
- 2. ALL UTILITY FEATURES SHALL BE SHOWN IN THEIR AS-BUILT LOCATION.
- 3. STATE PLANE COORDINATES SHALL BE DISPLAYED ON RECORD DRAWINGS FOR ALL FEATURES SPECIFIED IN PBCWUD STANDARDS.
- 4. STATE PLANE COORDINATES SHALL BE SHOWN ON PROPERTY CORNERS AS REQUIRED BY PBCWUD.

GENERAL SEWER NOTE:

ON-SITE SEWER LATERALS ARE PRIVATELY OWNED AND MAINTAINED.

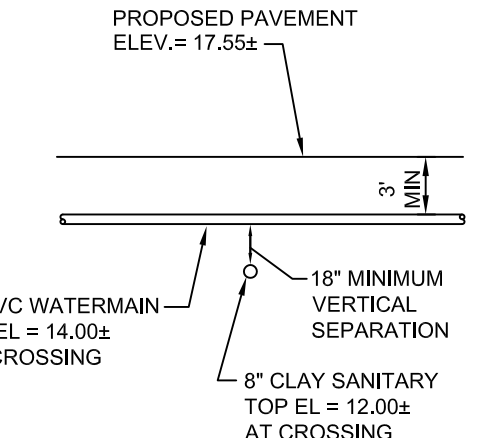
SANITARY SEWER SCHEDULE

STRUCTURE NUMBER	STRUCTURE TYPE	GRATE/EOP/ RIM ELEV.	INVERT ELEV.	DOWNSTREAM PIPE INFORMATION		
				PIPE LENGTH (FEET)	PIPE SIZE/TYPE	PERCENT SLOPE
SAN -1	CLEANOUT	19.30	15.50	38	6" PVC	4.00%
SAN -2	CLEANOUT	18.79	13.98	5	6" PVC	-
* SAN -3	WYE CONNECTION	-	10.81 (N), 10.81 (NW), 10.81 (SE)	EXIST. 8" CLAY		
* ROTATE WYE APPROXIMATELY 30° FOR VERTICAL CONNECTION.						

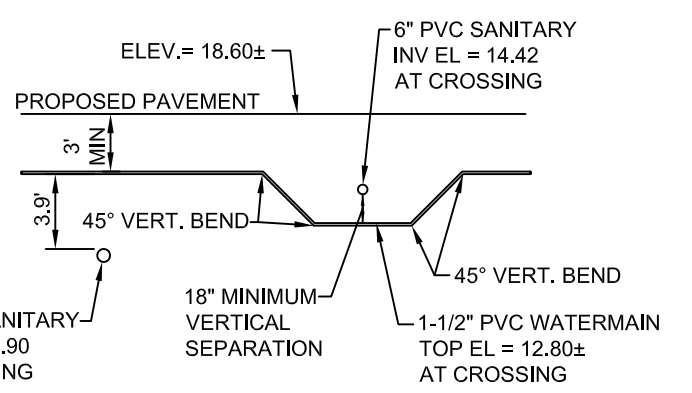


THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON DESIGN DRAWINGS, RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. CORESTATES, INC. DOES NOT GUARANTEE THAT LOCATIONS SHOWN ARE EXACT. THE CONTRACTOR MUST CONTACT THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATIONS OF UTILITIES.

WUD # -



UTILITY CROSSING-1  
SCALE: 1" = 10"



UTILITY CROSSING-2  
SCALE: 1" = 10"

Date

12/09/12

REV. PER COUNTY ENG. COMMENTS

Rev. #

1

REV. PER COUNTY BLDG. COMMENTS

Rev. #

2

REV. PER WMD COMMENTS

Rev. #

3

REV. PER COUNTY ENG. COMMENTS

Rev. #

4

REV. PER COUNTY ENG. COMMENTS

Cumberland Farms, Inc. - V#0636

22905 S.R. 7, BOCA RATON, FL.

SECTION 25, TOWNSHIP 47 S., RANGE 41 E.

CORE STATES

GROUP

3902 Corporate Park Drive, Suite 600  
Framingham, MA 01702  
Phone: (617) 460-1755  
Fax: (617) 460-1759  
csgroup@core-eg.com

Job#:

CFI/2653

Scale:

1"=20'

Date:

10-12-12

Drawn By:

RG

Checked By:

CJC

ENGINEER:

CRAIG J. CARDEN, P.E.

FLORIDA REGISTRATION NUMBER

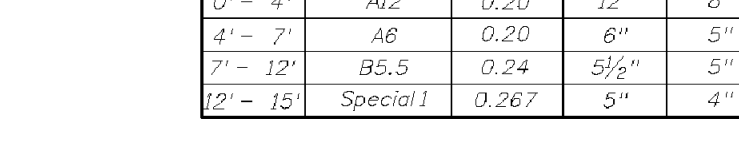
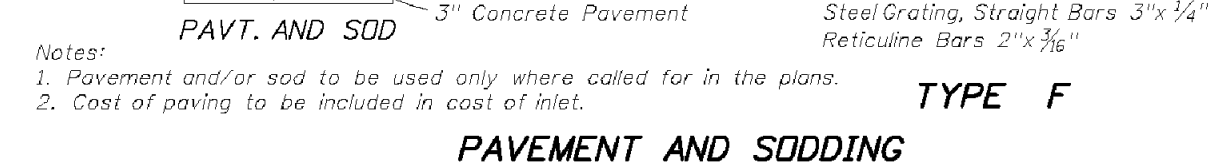
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DATE:

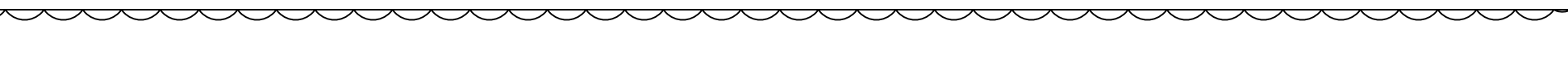
C-7

9 OF 24





Standards	Last Revision	Sheet
	07/01/05	1

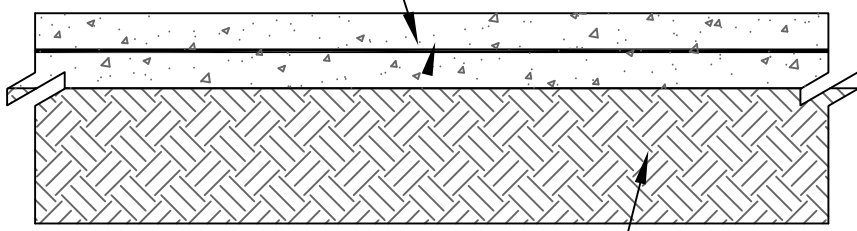


S



CONCRETE SLAB LOCATION	
SLAB COMPONENT	MEDIUM DUTY
CONCRETE PAVEMENT	5"
STABILIZED SUBBASE	10"
MINIMUM 28 DAY STRENGTH	4000 PSI

REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT PER FDOT STANDARD SPECIFICATIONS SECTION 350 (REINFORCEMENT: W5/D5 4"x4" WIRE MESH)

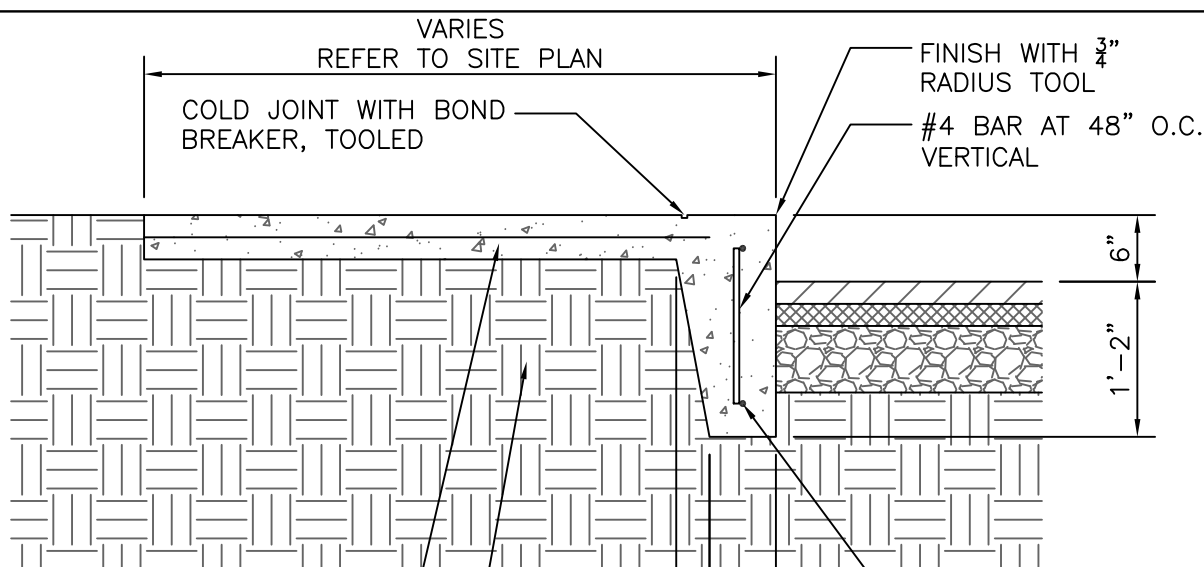


SUBBASE SHALL BE STABILIZED TO MEET A MINIMUM LBR OF 40. SUBBASE SHALL BE COMPACTED TO 95% OF THE MATERIALS M.D.D. PER ASTM D-1557

DETAIL NOTES:

- LISTED HERE ARE MINIMUM SPECIFICATIONS, REFER TO GEOTECHNICAL REPORT FOR FINAL SPECIFICATIONS.
- CONCRETE PAVEMENT SHALL MEET THE MORE STRINGENT REQUIREMENT OF EITHER THE SPECIFICATIONS PROVIDED BY THE OWNER, LOCAL CITY/COUNTY REQUIREMENTS, OF FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
- CONTRACTOR TO CONSTRUCT CONCRETE PAVEMENT WITH TRANSVERSE JOINTS AT 10' O.C. TO BE CONSTRUCTED PER DETAIL ON THIS PAGE.
- CONTRACTOR TO DOWEL AND JOINT BETWEEN CANOPY SLAB AND MONOLITHIC CURB PER DETAIL ON THIS PAGE.

CONCRETE SLAB DETAIL



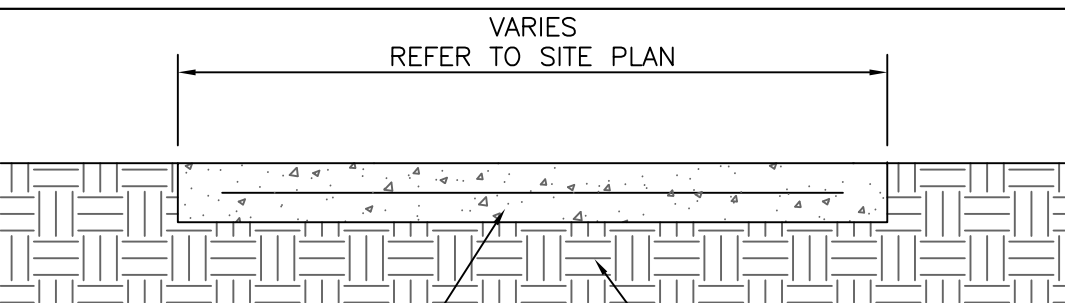
4" THICK CONCRETE SIDEWALK WITH 6X6-W1.2XW1.2 WELDED WIRE MESH REINFORCEMENT. 4000 PSI @ 28 DAYS

#5 BAR HORIZONTAL AT TOP AND BOTTOM (STOP REINFORCING AT JOINTS)

DETAIL NOTES:

- PROVIDE 1/2" PREMOLDED EXPANSION JOINT FILLER AT 60' CENTERS.
- PROVIDE TOOLED CONTRACTION JOINTS AT 10' CENTERS.
- SUBGRADE TO BE COMPACTED TO 95% OR GREATER OF MAX. DRY DENSITY PER ASTM D-1557

TURNED DOWN CONCRETE WALK DETAIL



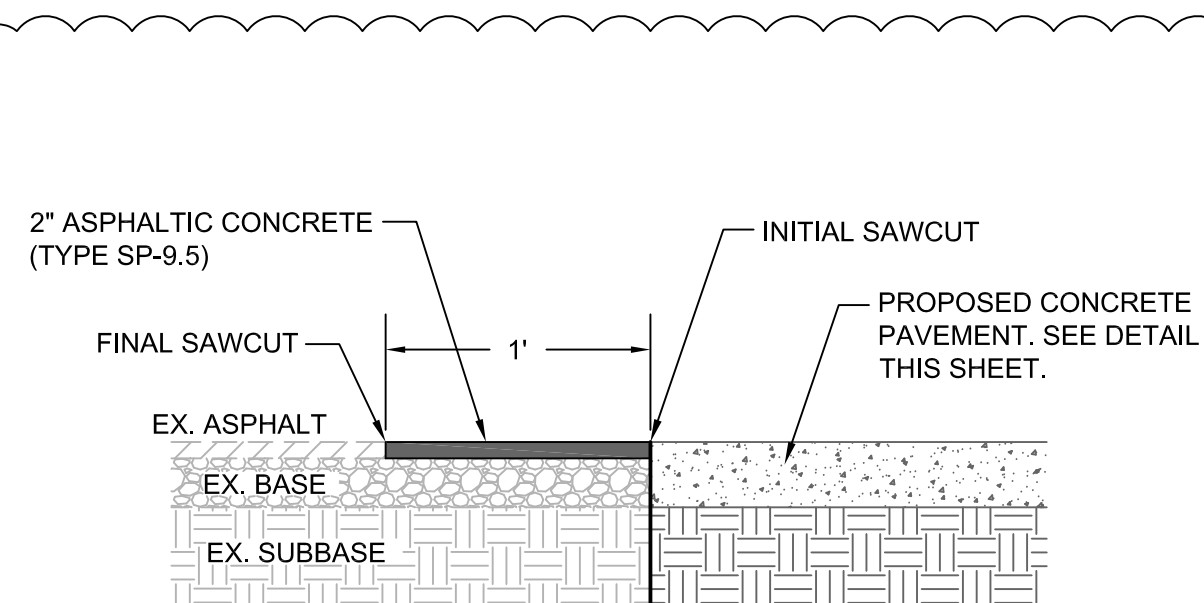
4" THICK CONCRETE SIDEWALK WITH 6X6-W1.2XW1.2 WELDED WIRE MESH REINFORCEMENT. 4000 PSI AT 28 DAYS.

PREPARED EARTH SUBGRADE (COMPACTED TO AT LEAST 95 PERCENT MODIFIED PROCTOR)

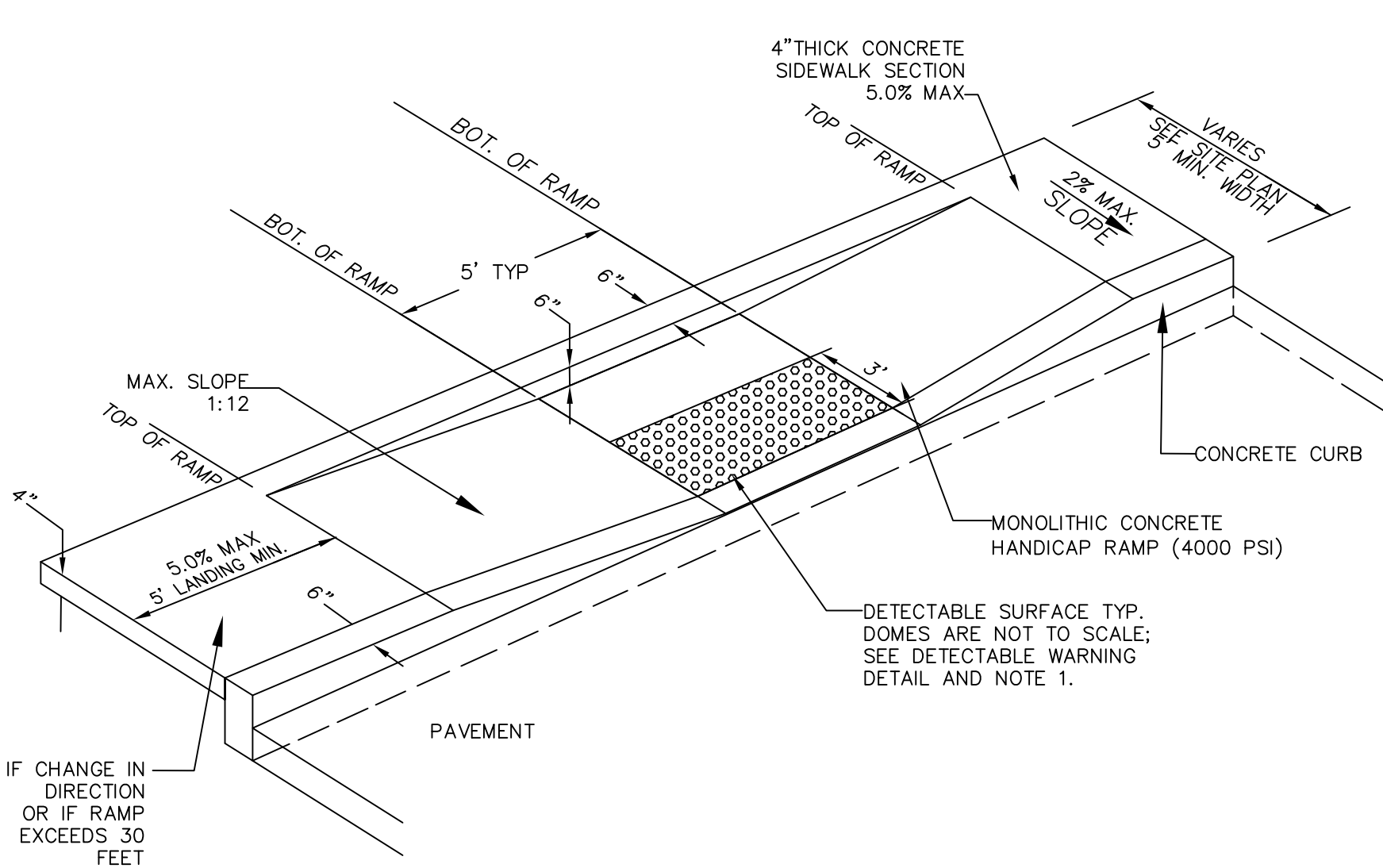
DETAIL NOTES:

- PROVIDE 1/2" PREMOLDED EXPANSION JOINT FILLER AT 60' CENTERS.
- PROVIDE TOOLED CONTRACTION JOINTS AT 10' CENTERS.
- CONTRACTOR TO PREPARE SUBGRADE BASED ON RECOMMENDATIONS IN THE GEOTECHNICAL INVESTIGATION REPORT.

CONCRETE SIDEWALK DETAIL

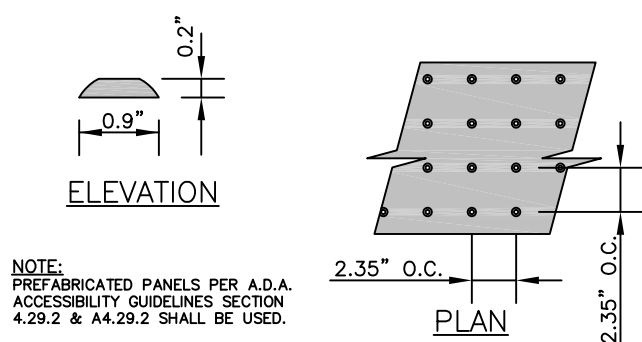


PAVEMENT CONNECTION DETAIL



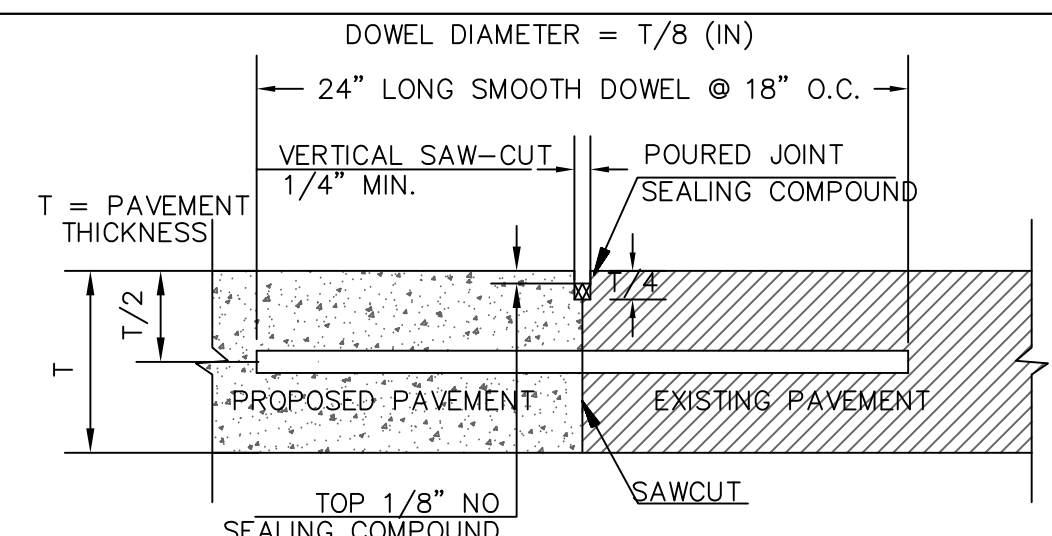
DETAIL NOTES:

- THE SURFACE OF RAMP SHALL HAVE DETECTABLE WARNINGS AS SHOWN. DETECTABLE WARNINGS SHALL CONSIST OF RAISED TRUNCATED DOMES. SEE DETECTABLE WARNINGS DETAIL.
- CONSTRUCT PER A.D.A. STANDARDS AND FLORIDA BUILDING CODE STANDARDS.
- REFER TO PLANS FOR ADJACENT SLOPES.
- THE CROSS SLOPE OF THE RAMP SURFACE SHALL BE NO GREATER THAN 1.5 %. SHOULD THE CROSS SLOPE EXCEED 2% THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING THE SIDEWALK AND CURB RAMP AS NECESSARY TO CONFORM TO THE REQUIREMENTS OF THE AMERICANS WITH DISABILITY ACT AND THE FLORIDA BUILDING CODE.
- THE LONGITUDINAL SLOPE OF THE RAMP SURFACE SHALL BE NO GREATER THAN 8.33%. SHOULD THE LONGITUDINAL SLOPE EXCEED 8.33%, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING THE SIDEWALK AND CURB RAMP AS NECESSARY TO CONFORM TO THE REQUIREMENTS OF THE AMERICANS WITH DISABILITY ACT AND THE FLORIDA BUILDING CODE.
- ALL HANDICAP RAMPS TO BE CONSTRUCTED IN ACCORDANCE WITH THE AMERICANS WITH DISABILITIES ACT (ADA) AND THE FLORIDA ACCESSIBILITY CODE.
- SEE DETAIL FOR DETECTABLE WARNING LOCATION, TYPE, AND EXTENTS.
- ALL RAMPS OUTSIDE THE PROPERTY SHALL CONFORM TO THE STANDARDS OF THE GOVERNING REGULATING AGENCY.



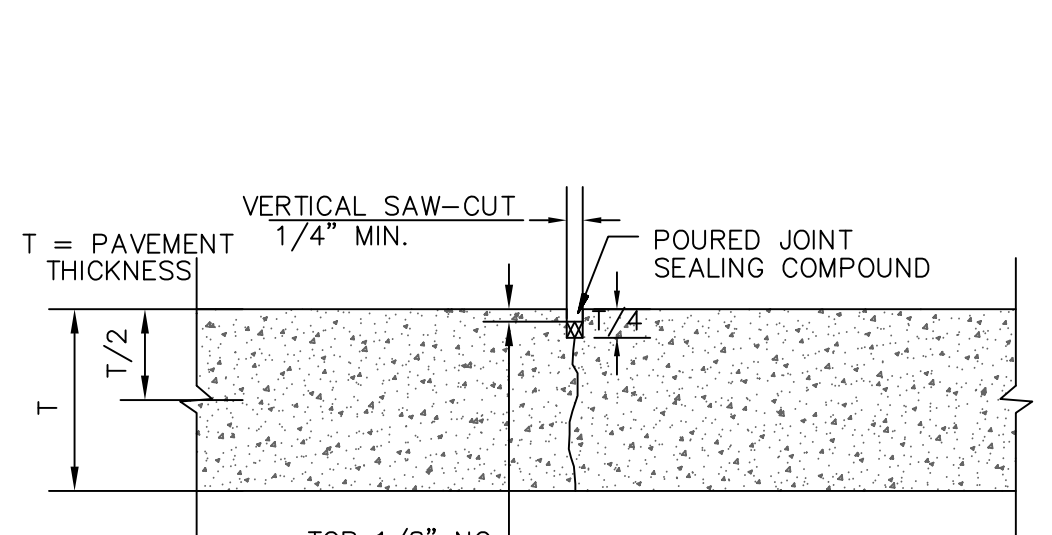
DETECTABLE WARNING DETAIL

COMMERCIAL ADA RAMP (PRIVATE PROPERTY)

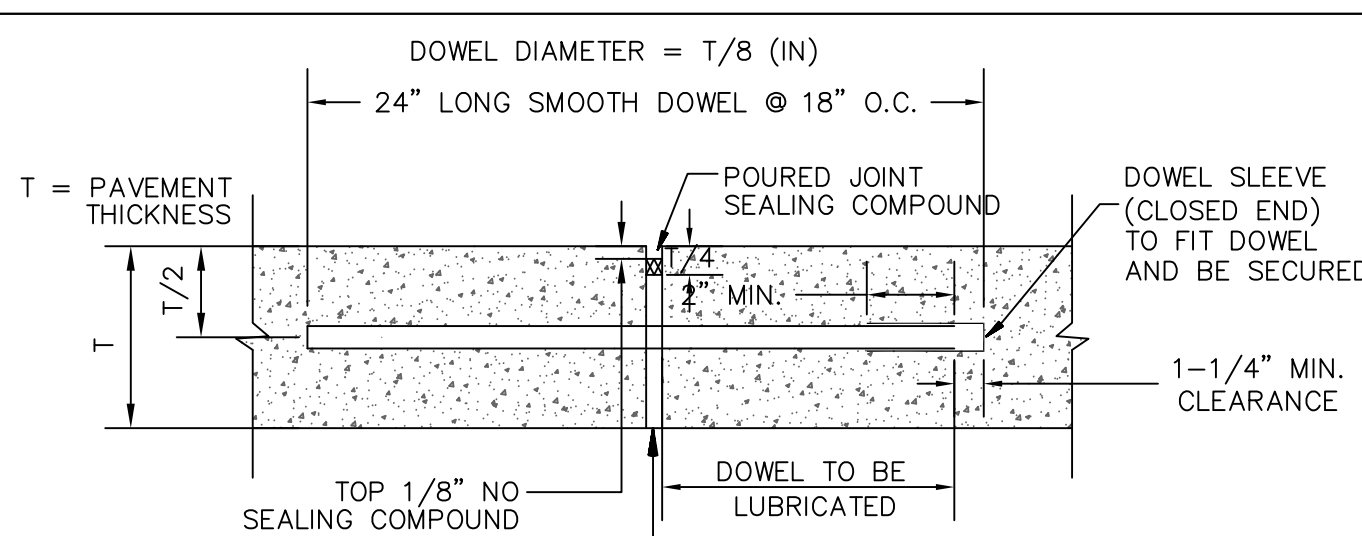


- NOTE:
- DOWEL BARS SHALL BE DRILLED INTO PAVEMENT HORIZONTALLY BY USE OF A MECHANICAL RIG.
  - DRILLING BY HAND IS NOT ACCEPTABLE, PUSHING DOWEL BARS INTO GREEN CONCRETE IS NOT ACCEPTABLE.

BUTT JOINT

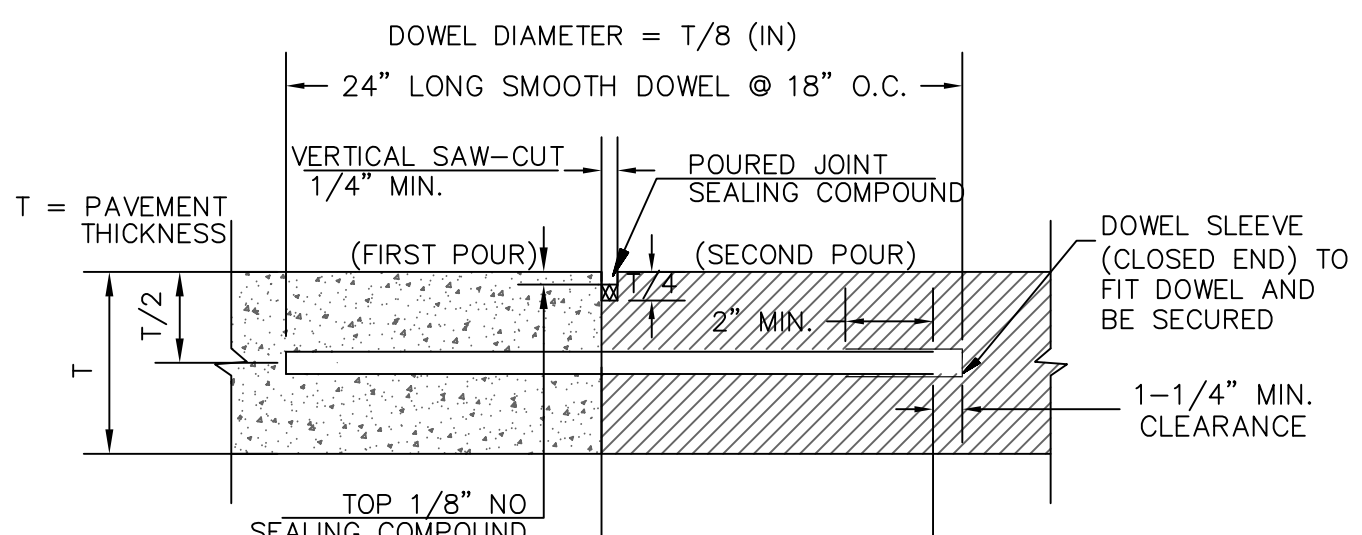


CONTRACTION JOINT



- NOTE:
- DOWELS SHALL BE SUPPORTED BY AN APPROVED DEVICE.

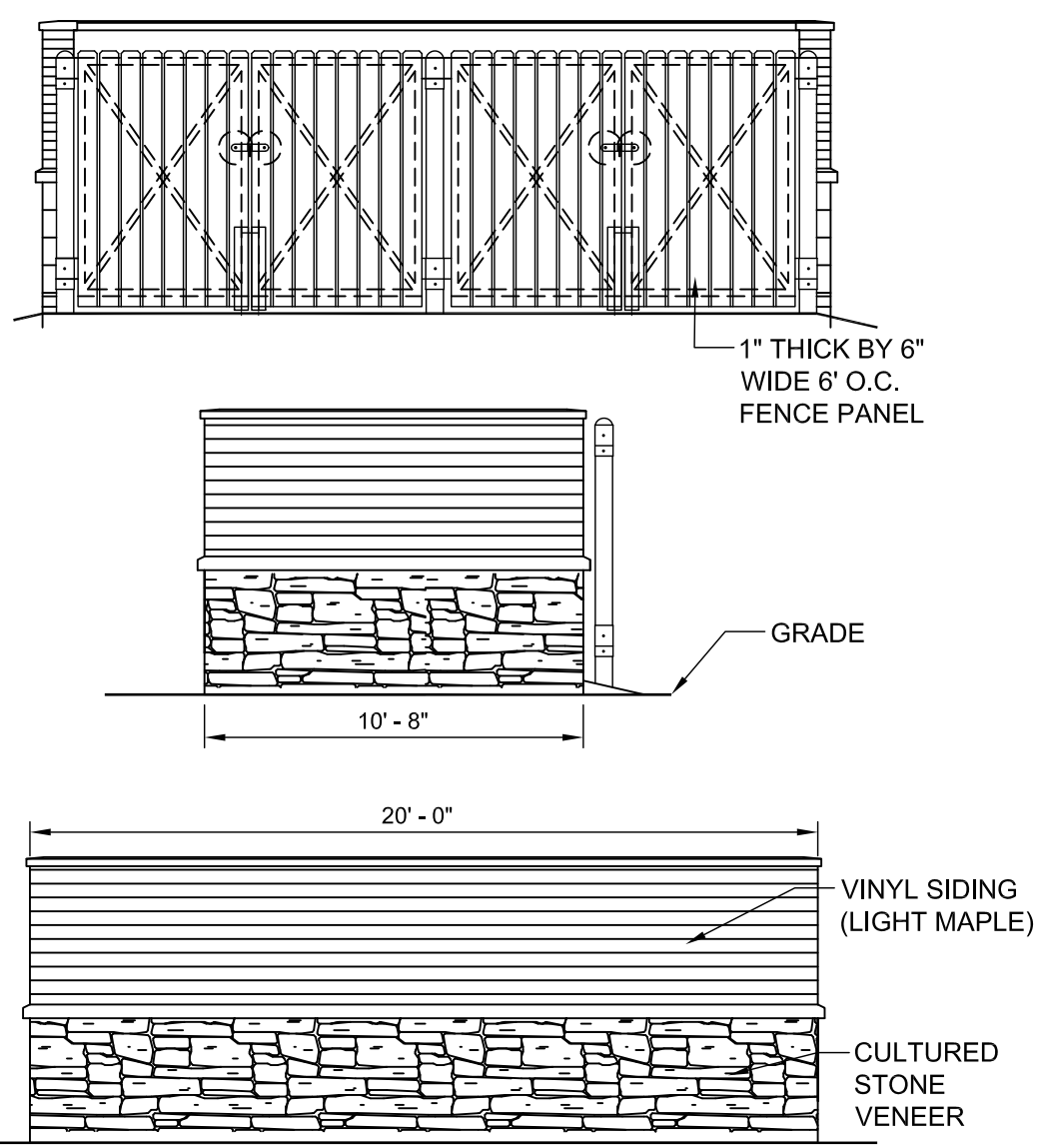
TRANSVERSE EXPANSION JOINT



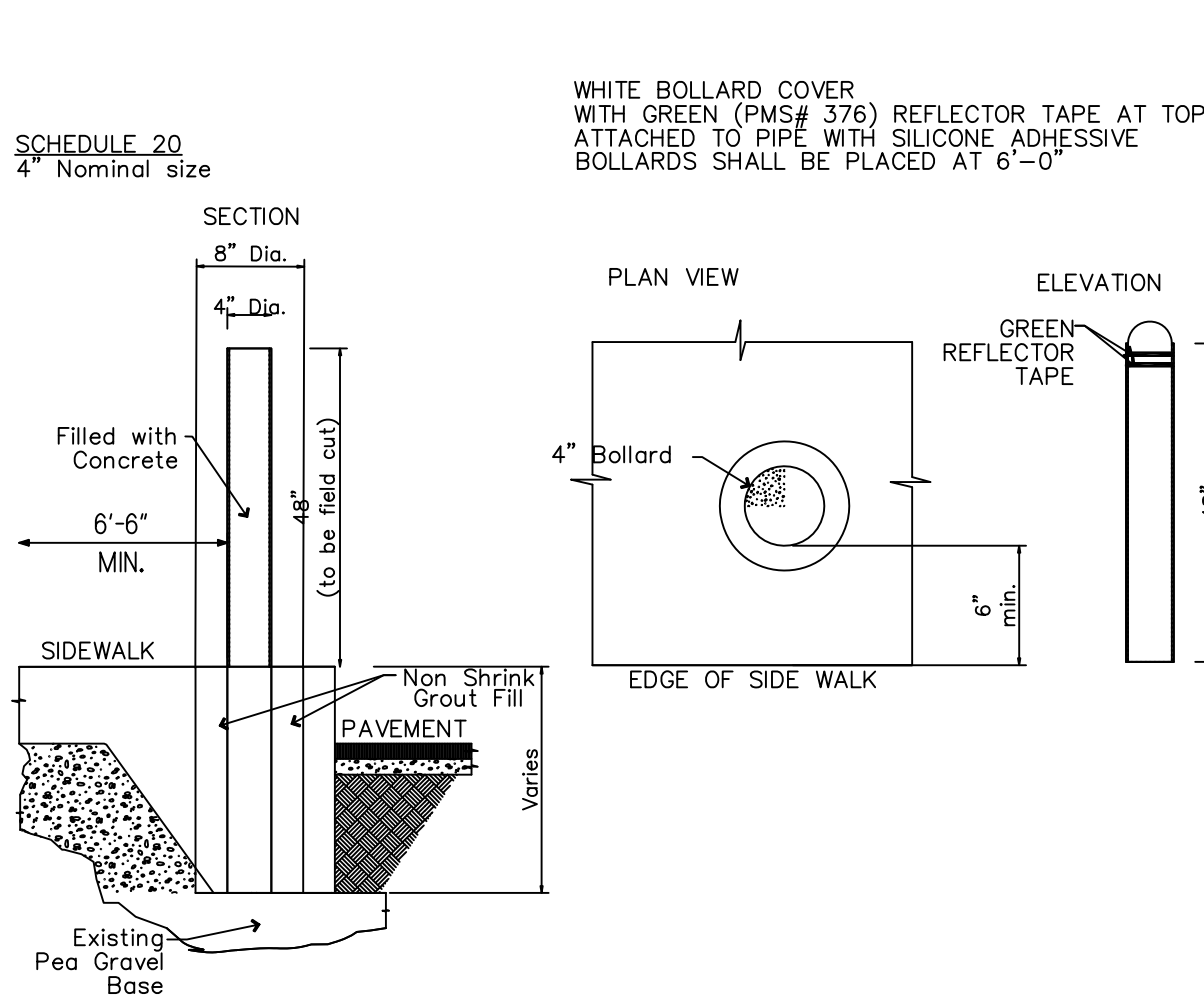
- NOTE:
- DOWELS SHALL BE SUPPORTED BY AN APPROVED DEVICE.

CONSTRUCTION JOINT

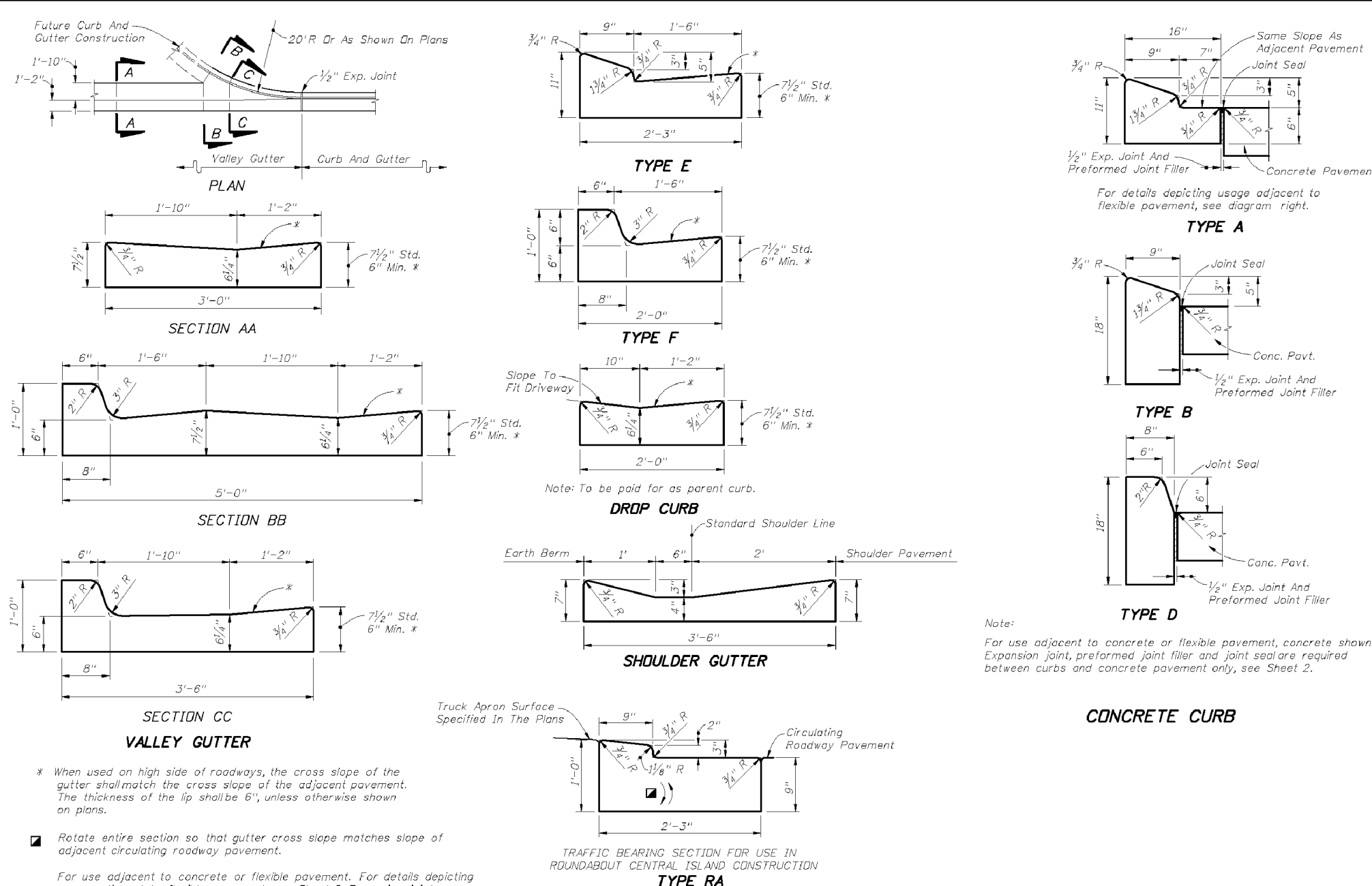
CONCRETE JOINT DETAILS



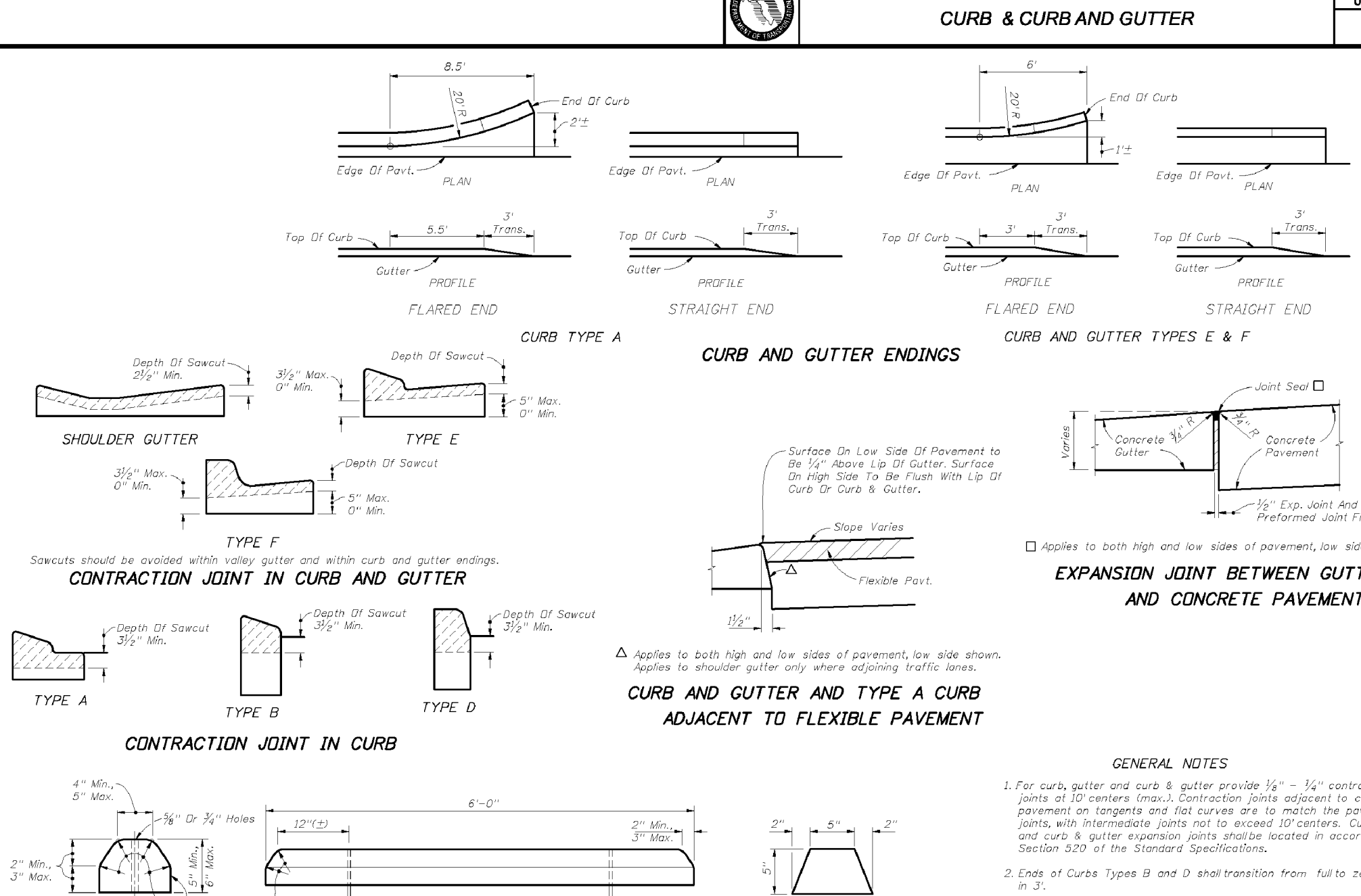
DUMPSTER ENCLOSURE DETAIL



STORE FRONT BOLLARD DETAIL



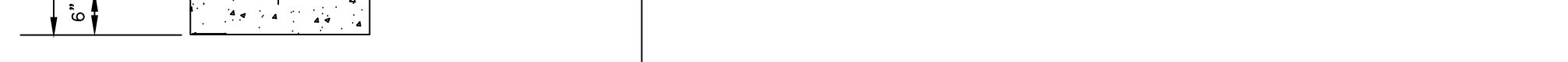
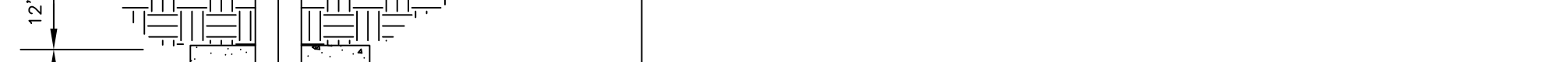
CONCRETE CURB AND GUTTER



CONCRETE BUMPER GUARD

ASPHALTIC CONCRETE CURB

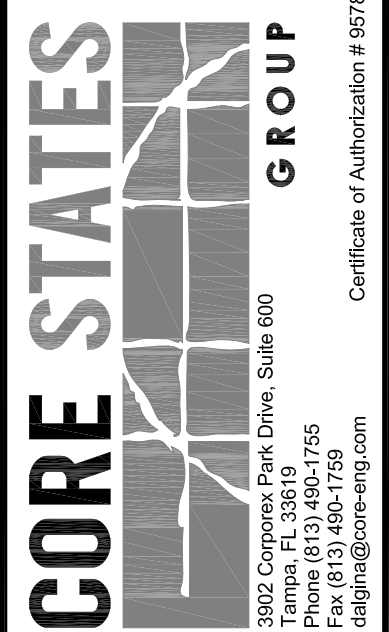
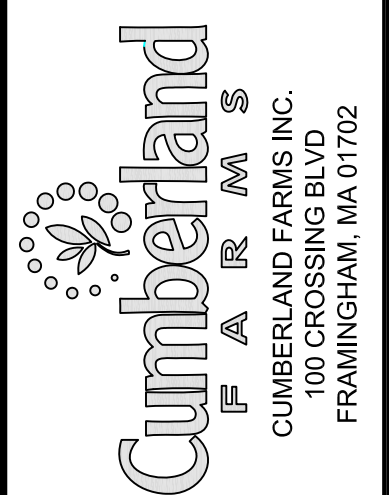
CONCRETE CURB AND GUTTER



Rev #	Date	Description
1	12/09/12	REV. PER COUNTY ENG. COMMENTS
2	12/17/12	REV. PER COUNTY BLDG. COMMENTS

Cumberland Farms, Inc. - V#0636  
22905 S.R. 7, BOCA RATON, FL.  
SECTION 25, TOWNSHIP 47 S., RANGE 41 E.

CONSTRUCTION DETAILS



Job#:	CFI-1263
Scale:	NTS
Date:	10-12-12
Drawn By:	RG
Checked By:	CC

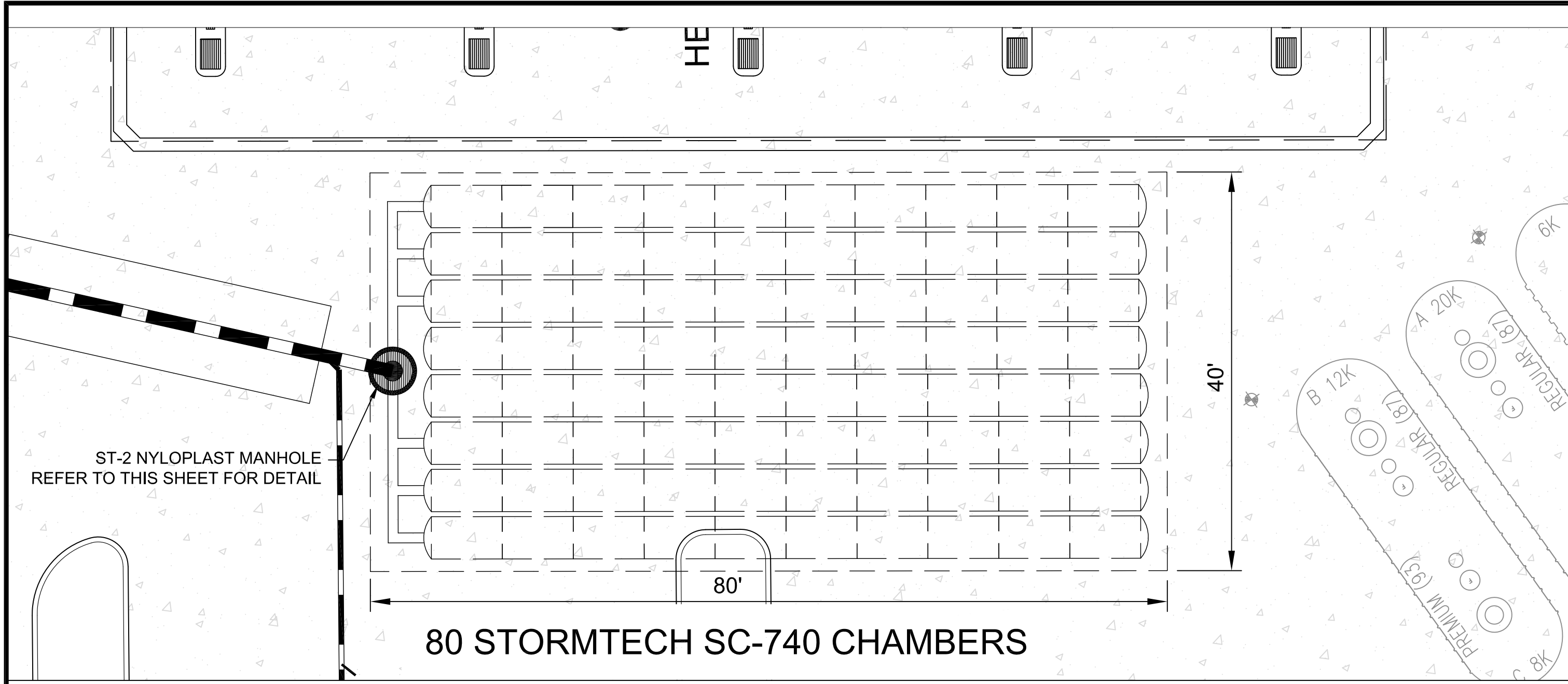
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ENGINEER:	CRAIG J. CARDEN, P.E.
FLORIDA REGISTRATION NUMBER:	# 70054
DATE:	



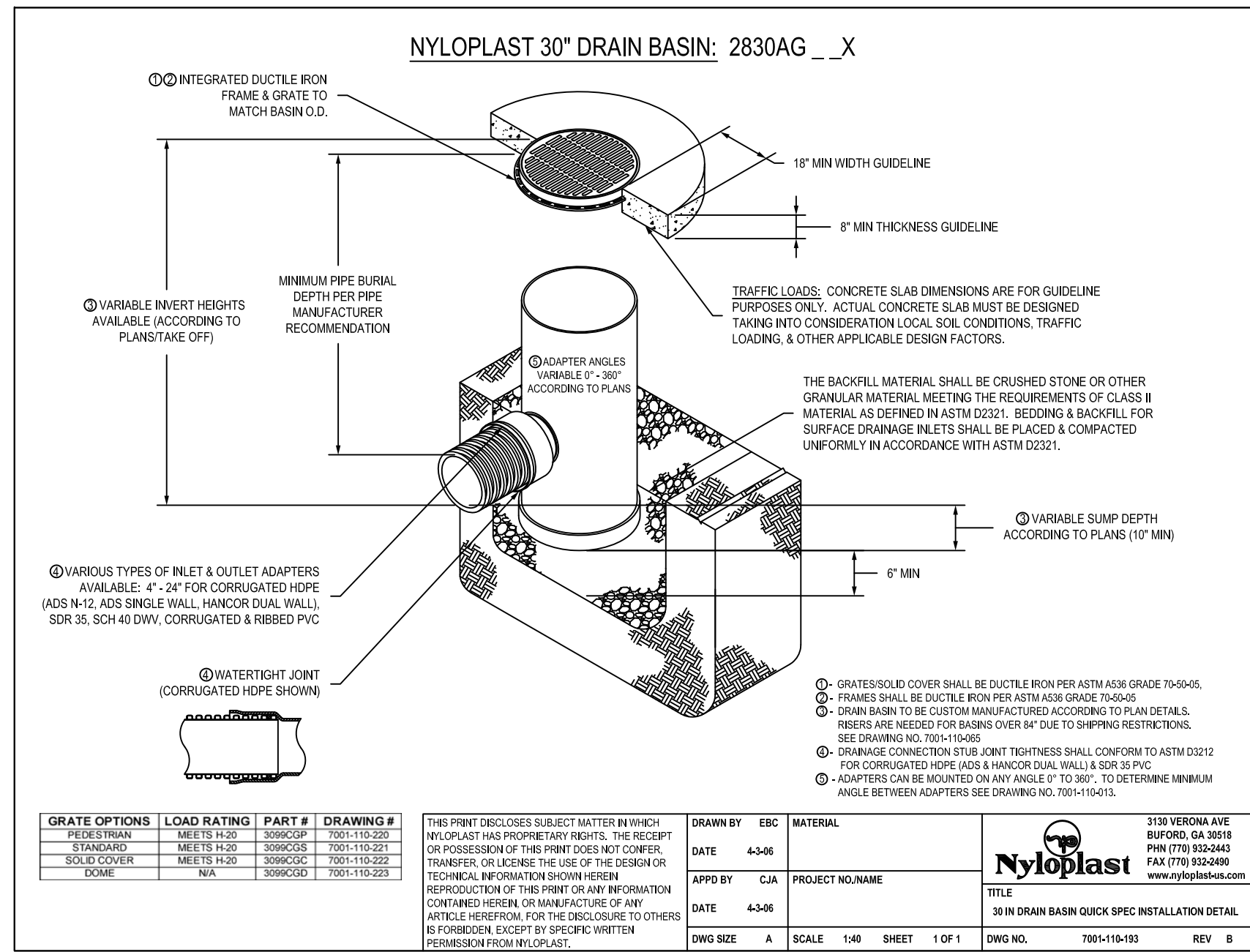






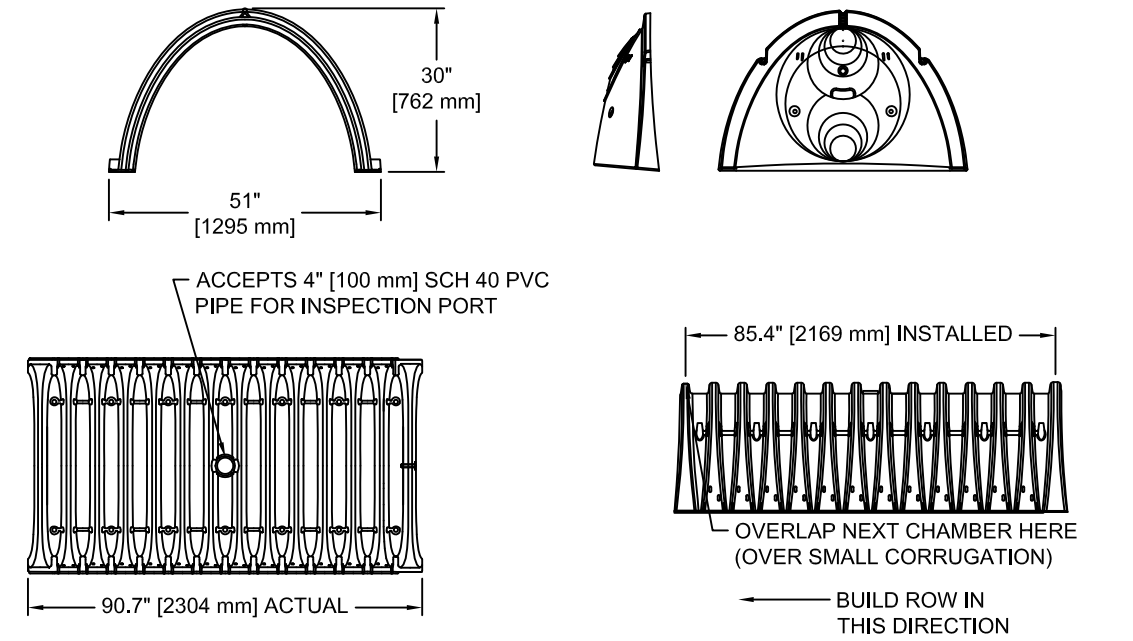
80 STORMTECH SC-740 CHAMBERS

PLAN VIEW LAYOUT



- ALL DESIGN SPECIFICATIONS FOR STORMTECH SC-740 CHAMBERS SHALL BE IN ACCORDANCE WITH THE STORMTECH DESIGN MANUAL
- THE INSTALLATION OF STORMTECH SC-740 CHAMBERS SHALL BE IN ACCORDANCE WITH THE LATEST STORMTECH INSTALLATION INSTRUCTIONS
- THE CONTRACTOR IS ADVISED TO REVIEW AND UNDERSTAND THE INSTALLATION INSTRUCTIONS PRIOR TO BEGINNING SYSTEM INSTALLATION. CALL: 1-888-892-2694 OR VISIT [WWW.STORMTECH.COM](http://WWW.STORMTECH.COM) TO RECEIVE A COPY OF THE LATEST STORMTECH INSTALLATION INSTRUCTIONS
- CHAMBERS SHALL MEET THE DESIGN REQUIREMENTS AND LOAD FACTORS SPECIFIED IN SECTION 12.12 OF THE LATEST EDITION OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS
- THE PROPOSED STORMTECH SYSTEM PROVIDES AN ADDITIONAL 0.063 AC-FT OF STORAGE AT THE TREATMENT ELEVATION AND 0.170 AC-FT OF OVERALL STORAGE.

SC-740 NOTES



NOMINAL CHAMBER SPECIFICATIONS  
SIZE (W x H x INSTALLED LENGTH)  
CHAMBER STORAGE  
MINIMUM INSTALLED STORAGE  
WEIGHT

51.0" x 30.0" x 85.4" [1295 mm x 762 mm x 2169 mm]  
45.9 CUBIC FEET [1.30 m³]  
74.9 CUBIC FEET [2.12 m³]  
75 lbs. [33.6 kg]

STUBS AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "B"  
STUBS AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "T"

PART#	STUB	A	B	C
SC740EPE06T	6" [150 mm]	10.90" [277 mm]	18.50" [470 mm]	N/A
SC740EPE06B	6" [150 mm]	10.90" [277 mm]	N/A	0.50" [13 mm]
SC740EPE08T	8" [200 mm]	12.20" [310 mm]	16.50" [419 mm]	N/A
SC740EPE08B	8" [200 mm]	12.20" [310 mm]	N/A	0.60" [15 mm]
SC740EPE10T	10" [250 mm]	13.40" [340 mm]	14.50" [368 mm]	N/A
SC740EPE10B	10" [250 mm]	13.40" [340 mm]	N/A	0.70" [18 mm]
SC740EPE12T	12" [300 mm]	14.70" [373 mm]	12.50" [318 mm]	N/A
SC740EPE12B	12" [300 mm]	14.70" [373 mm]	N/A	1.20" [30 mm]
SC740EPE15T	15" [375 mm]	18.40" [467 mm]	9.00" [229 mm]	N/A
SC740EPE15B	15" [375 mm]	18.40" [467 mm]	N/A	1.30" [33 mm]
SC740EPE18T	18" [450 mm]	19.70" [500 mm]	5.00" [127 mm]	N/A
SC740EPE18B	18" [450 mm]	19.70" [500 mm]	N/A	1.60" [41 mm]
SC740EPE24B	24" [600 mm]	18.50" [470 mm]	N/A	0.10" [3 mm]

NOTE: ALL DIMENSIONS ARE NOMINAL

ALL STUBS, EXCEPT FOR THE SC740EPE24B ARE PLACED AT BOTTOM OF END CAP SUCH THAT THE OUTSIDE DIAMETER OF THE STUB IS FLUSH WITH THE BOTTOM OF THE END CAP. FOR ADDITIONAL INFORMATION CONTACT STORMTECH AT 1-888-892-2694.

\*FOR THE SC740EPE24B THE 24" (600 mm) STUB LIES BELOW THE BOTTOM OF THE END CAP APPROXIMATELY 1.75" (44 mm). BACKFILL MATERIAL SHOULD BE REMOVED FROM BELOW THE N-12 STUB SO THAT THE FITTING SITS LEVEL.

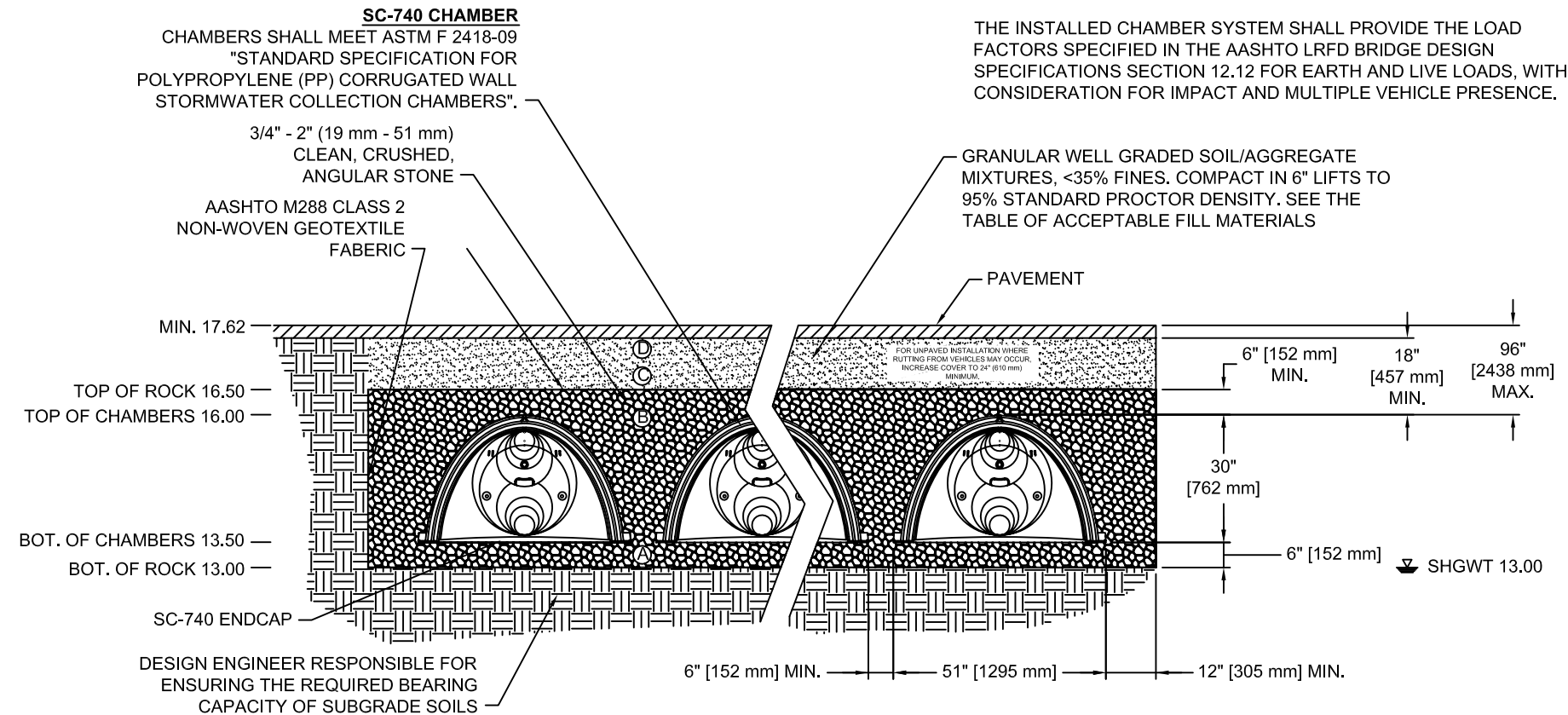
SC-740 TECHNICAL SPEC.

ACCEPTABLE FILL MATERIALS: STORMTECH SC-740 CHAMBER SYSTEMS

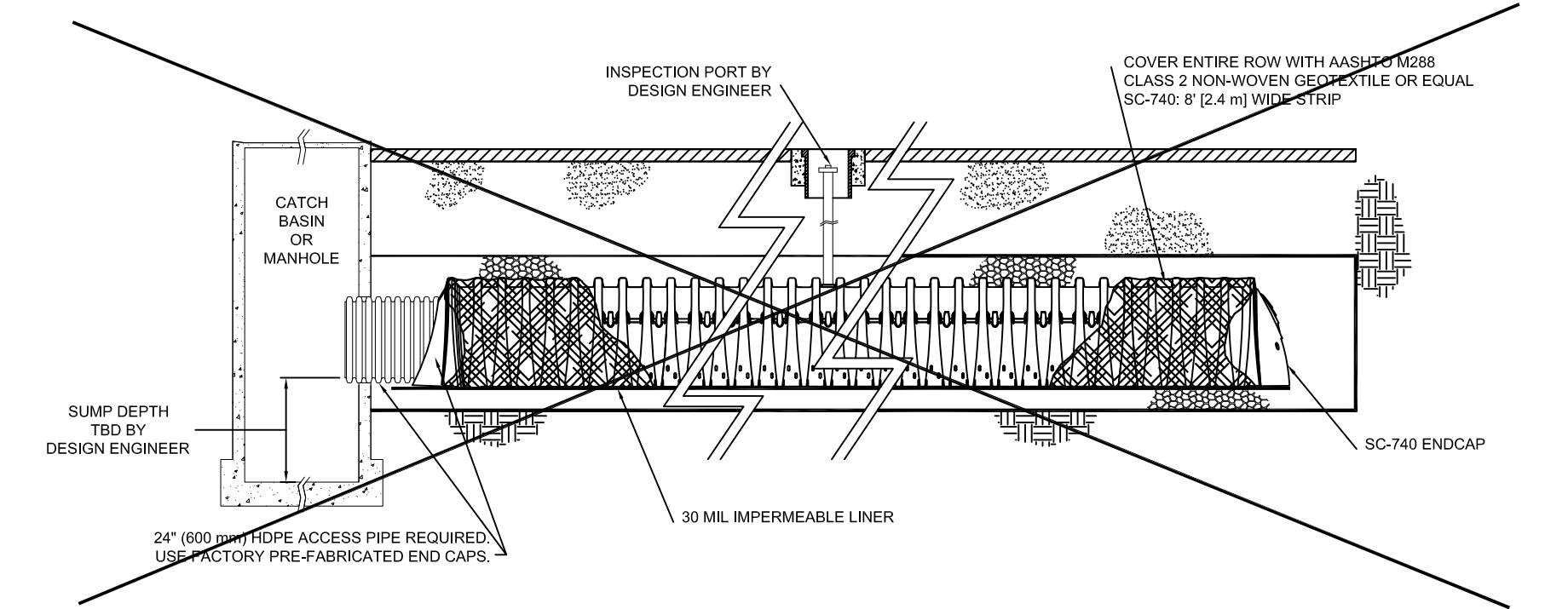
MATERIAL LOCATION	DESCRIPTION	AASHTO M43 DESIGNATION¹	COMPACTION/DENSITY REQUIREMENT
① FILL MATERIAL FOR LAYER 12 STARTS FROM THE TOP OF THE 12 LAYER TO THE BOTTOM OF THE 12 LAYER	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR FILL MATERIALS PLACED OVER FLEXIBLE PAVEMENT OR UNPAVED FINISH GRADE ABOVE. NOTE THAT PAVEMENT SUBGRADE MAY BE PART OF THIS LAYER.	N/A	PREPARE PER ENGINEER'S PLAN. PAVED INSTALLATIONS MAY HAVE STORMTECH MATERIAL AND PREPARATION REQUIREMENTS.
② FILL MATERIAL FOR LAYER 12 STARTS FROM THE TOP OF THE 12 LAYER TO THE BOTTOM OF THE 12 LAYER	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <3% FINES, MOST PAVEMENT SUBGRADE MATERIALS CAN BE USED IN LAYER 12. NOTE THAT PAVEMENT SUBGRADE MAY BE A PART OF THIS LAYER.	3.157, 4.467, 5.56, 57, 4.47, 48, 7.7, 8.9, 8, 10	BEGIN COMPACTION AFTER 12" (305 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS WITH 12" (305 mm) LIFTS TO MINIMUM STANDARD PROCTOR DENSITY. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 20,000 LBS (9,070 kg).
③ FILL MATERIAL FOR LAYER 12 STARTS FROM THE TOP OF THE 12 LAYER TO THE BOTTOM OF THE 12 LAYER	CLEAN CRUSHED ANGULAR STONE, NOMINAL SIZE DISTRIBUTION BETWEEN 3/4" - 2" (19 mm - 51 mm)	3.302, 4.467, 5, 56, 57	NO COMPACTION REQUIRED.
④ FOUNDATION STONE BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN CRUSHED ANGULAR STONE, NOMINAL SIZE DISTRIBUTION BETWEEN 3/4" - 2" (19 mm - 51 mm)	3.30, 4.467, 5, 56, 57	PLACE COMPACT OR ROLL TO ACHIEVE A 95% STANDARD PROCTOR DENSITY.

PLEASE NOTE:  
1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".  
2. AS AN ALTERNATE TO PROCTOR TESTING AND FIELD DENSITY MEASUREMENTS ON OPEN GRADED STONE, STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'X' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (152 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH AN APPROPRIATE COMPACTOR.

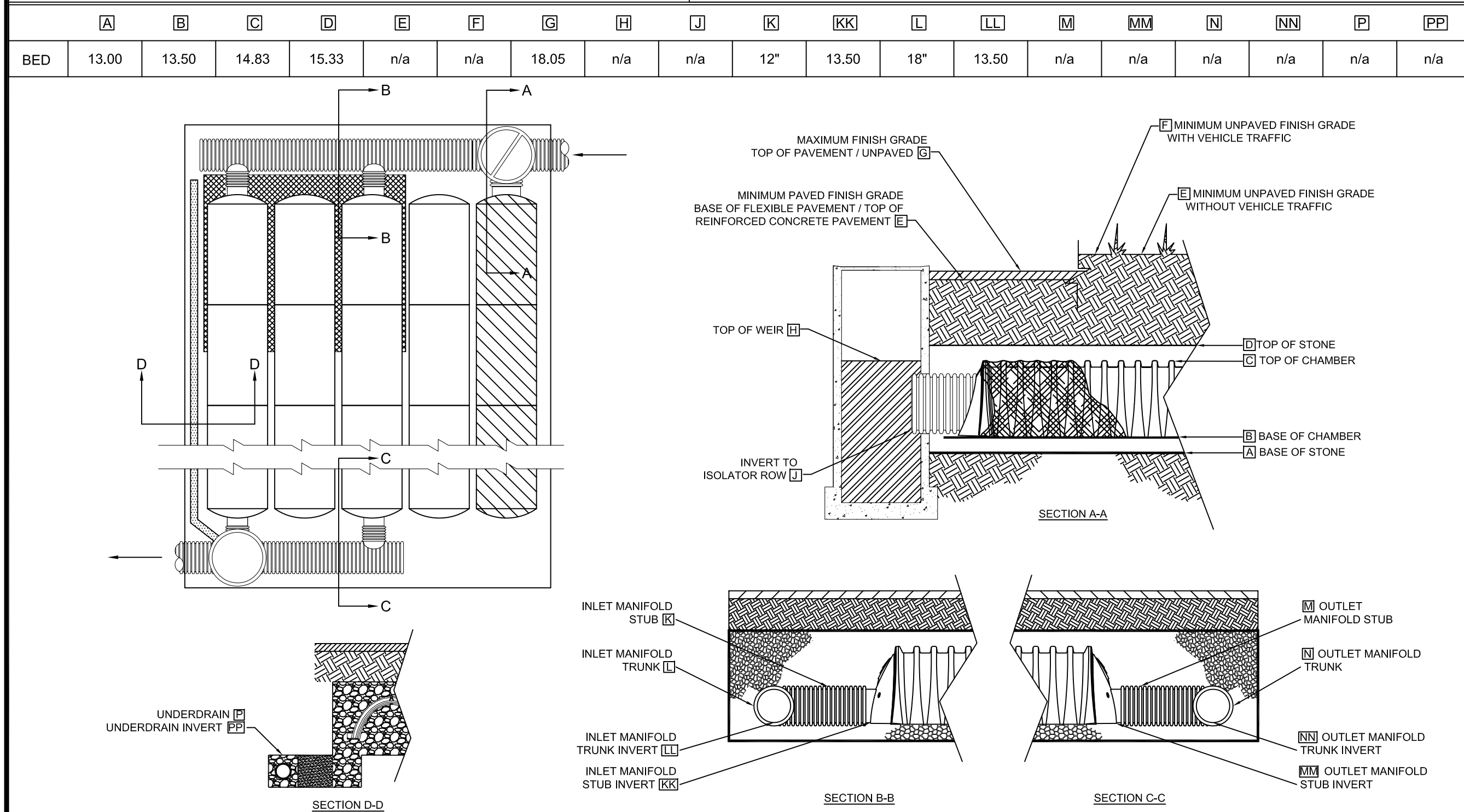
STORMTECH ACCEPTABLE FILL MATERIALS



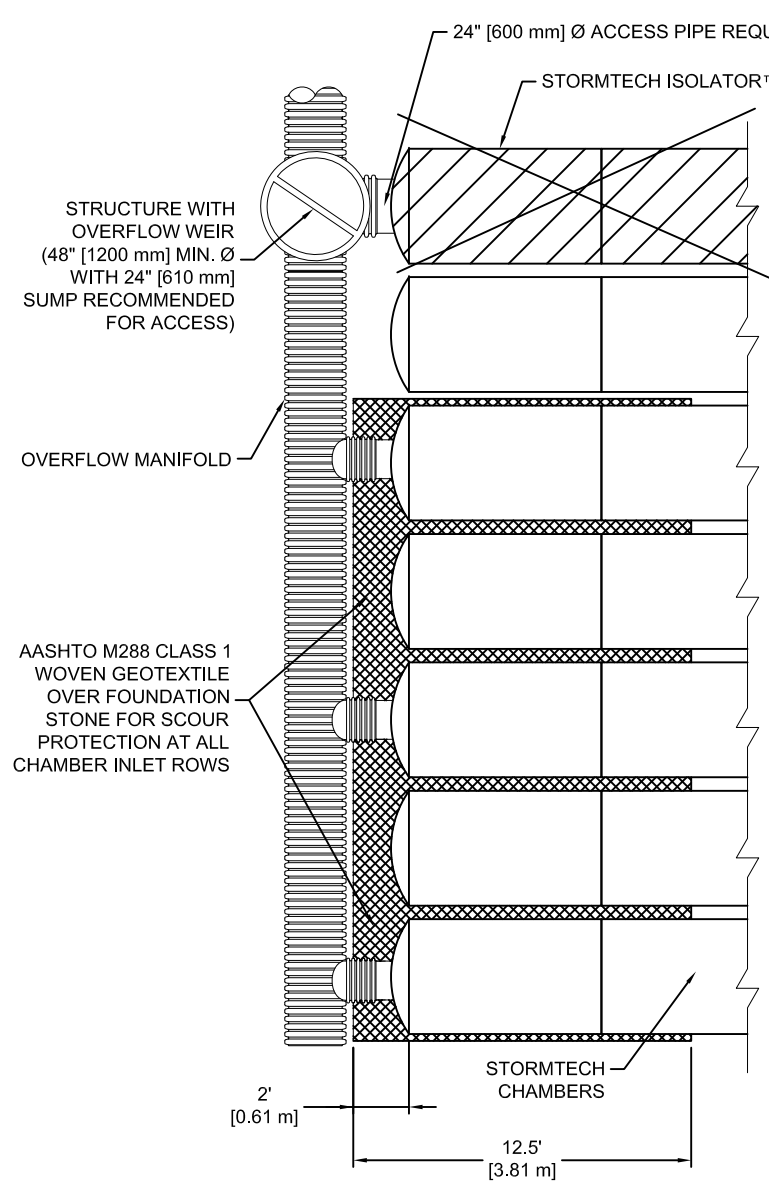
SC-740 STANDARD CROSS SECTION



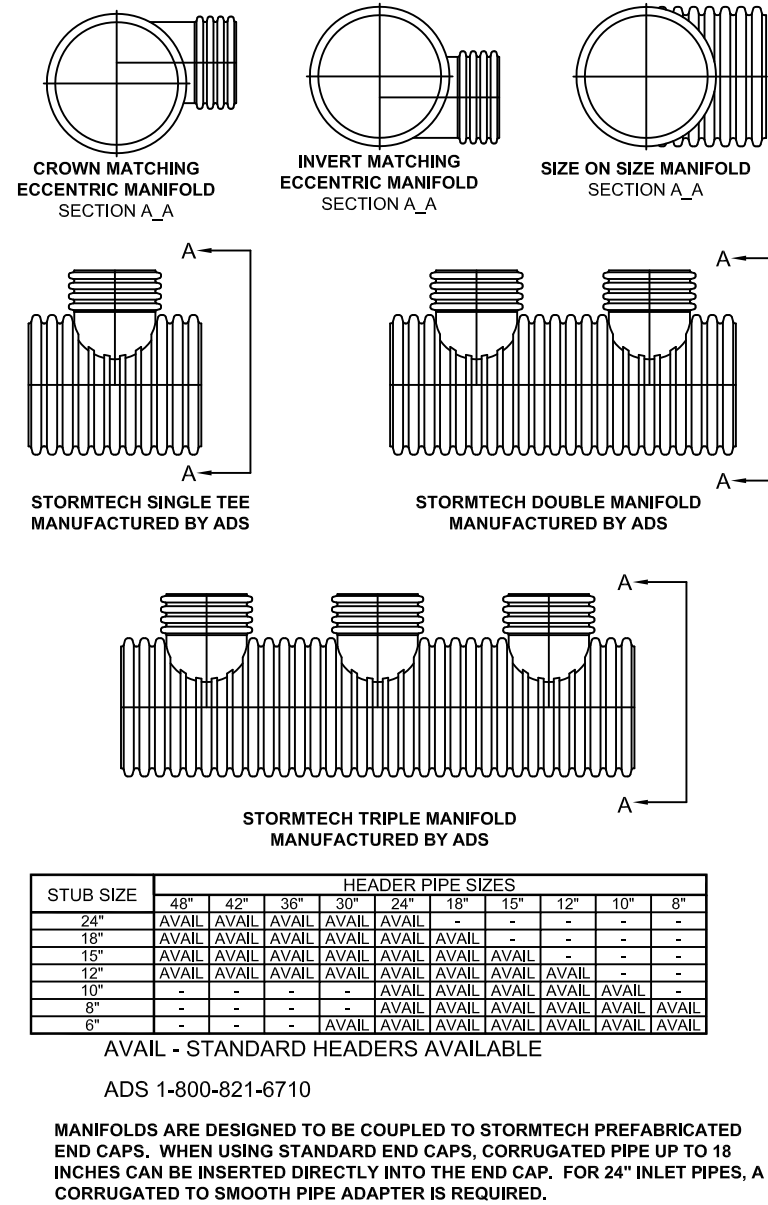
SC-740 ISOLATOR ROW™ DETAIL



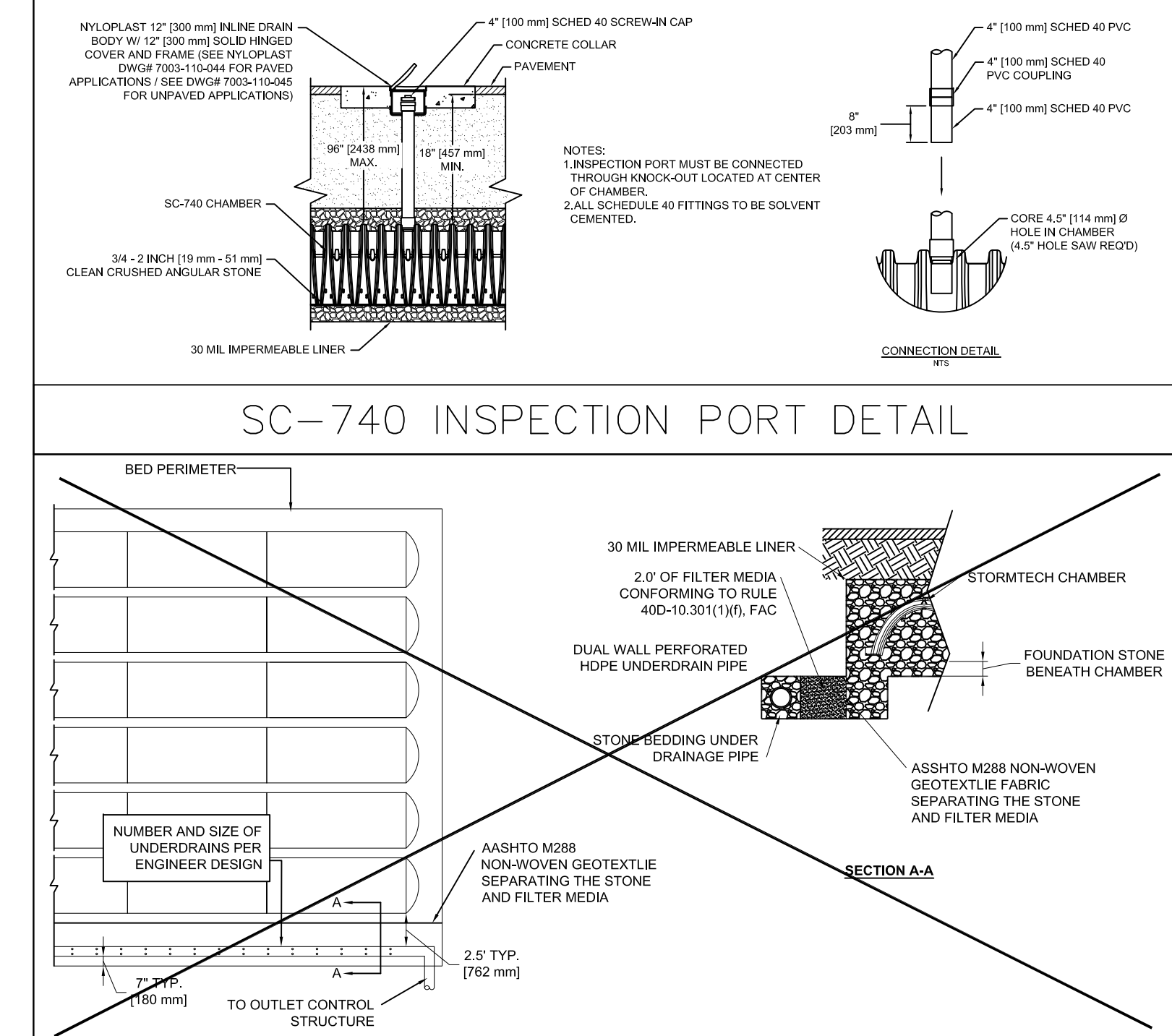
SC-740 ELEVATIONS



SC-740 MANIFOLD DETAIL



MANIFOLDS



SC-740 UNDERDRAIN DETAIL

Rev. #

Date

Description

1

12/09/12

REV. PER COUNTY ENG. COMMENTS

2

12/11/12

REV. PER COUNTY BLDG. COMMENTS

Cumberland Farms, Inc. - V#0636

22905 S.R. 7, BOCA RATON, FL.

SECTION 25, TOWNSHIP 47 S., RANGE 41 E.

CONSTRUCTION DETAILS

13 OF 24

CORE STATES GROUP

3902 Corporate Park Drive, Suite 600

Plant City, FL 33614

Phone: (813) 460-1755

Fax: (813) 460-1759

info@corestatesgroup.com

Job#:

CFI-12653

Scale:

NTS

Date:

10-12-12

Drawn By:

RG

Checked By:

CC

ENGINEER:

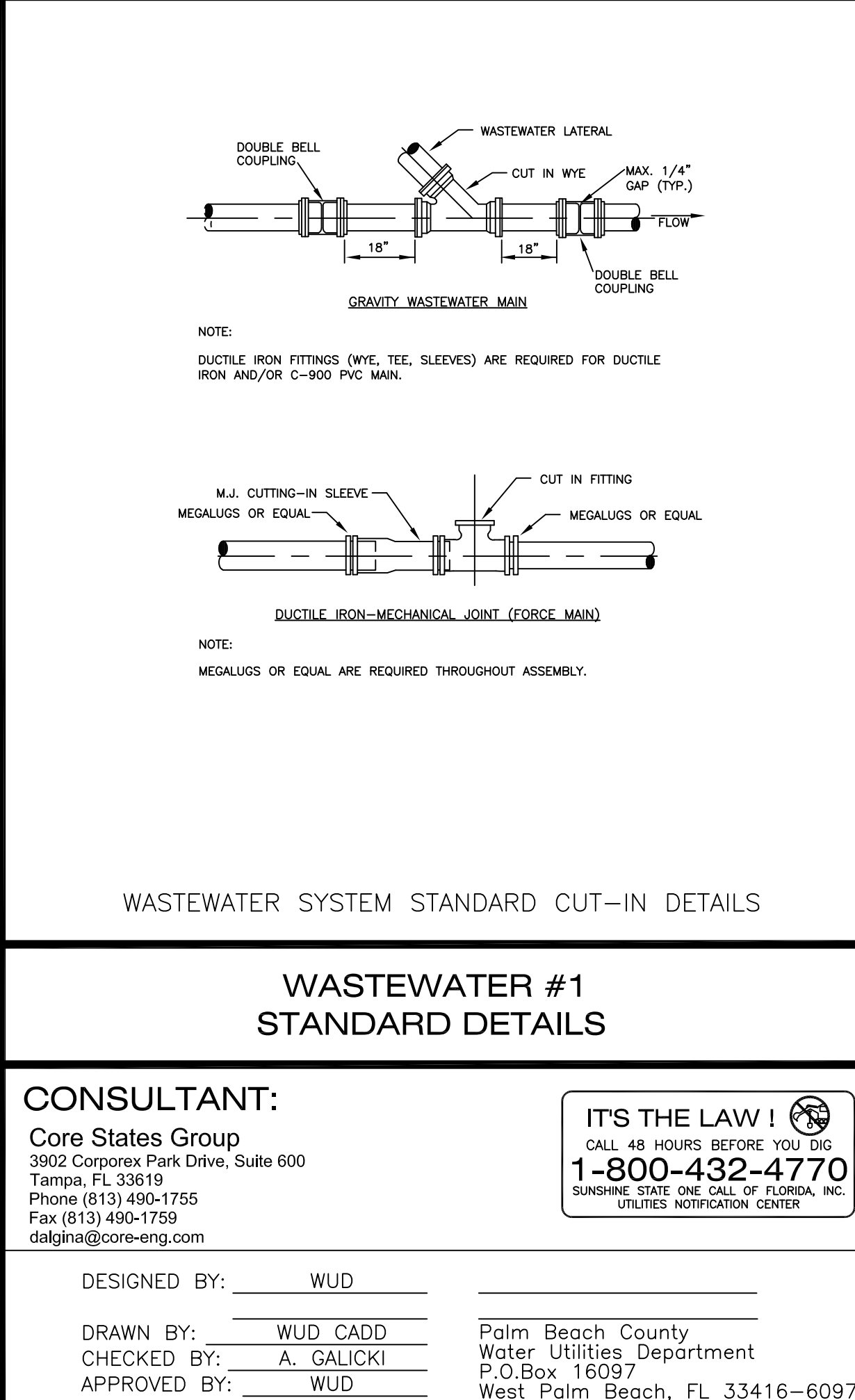
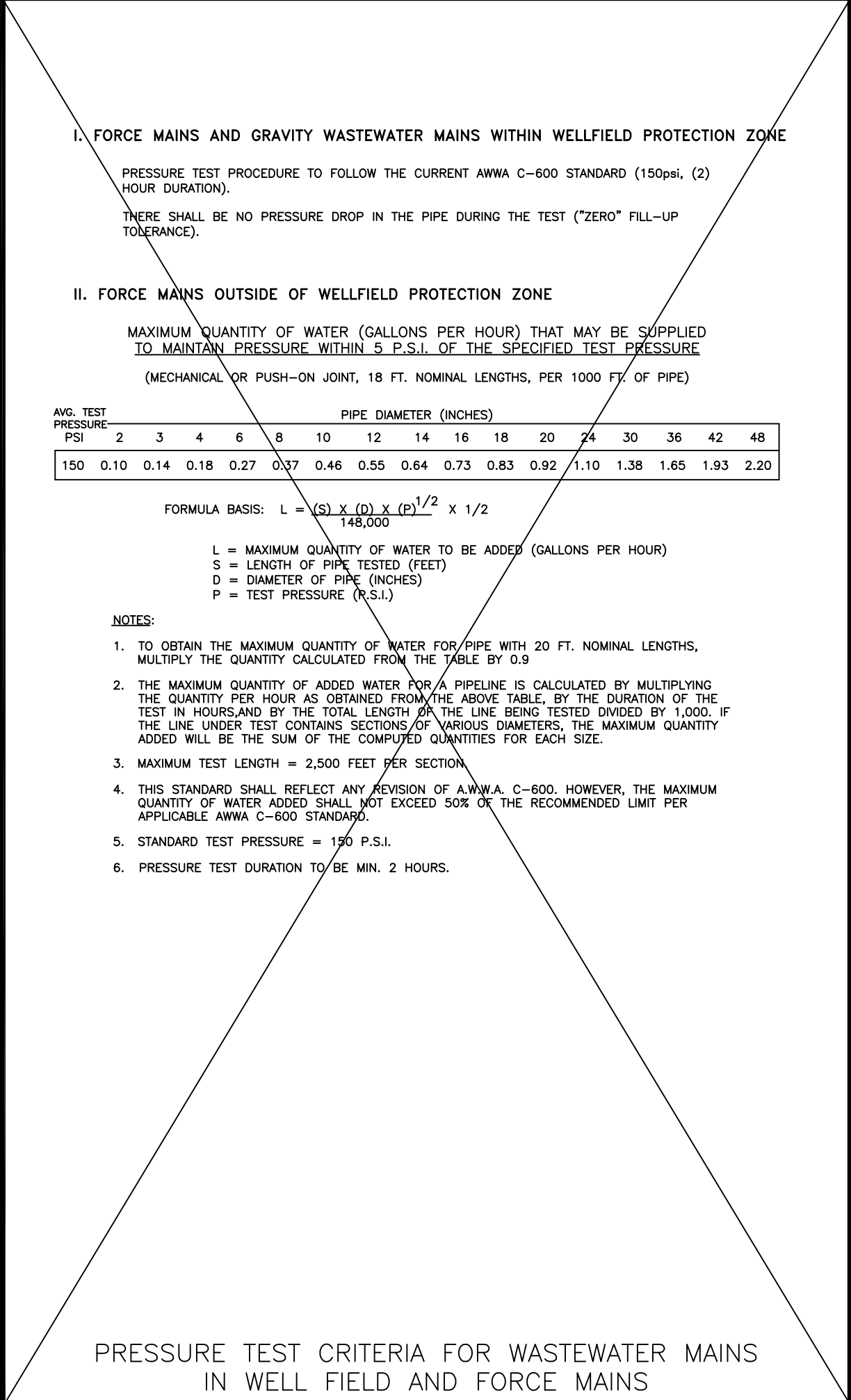
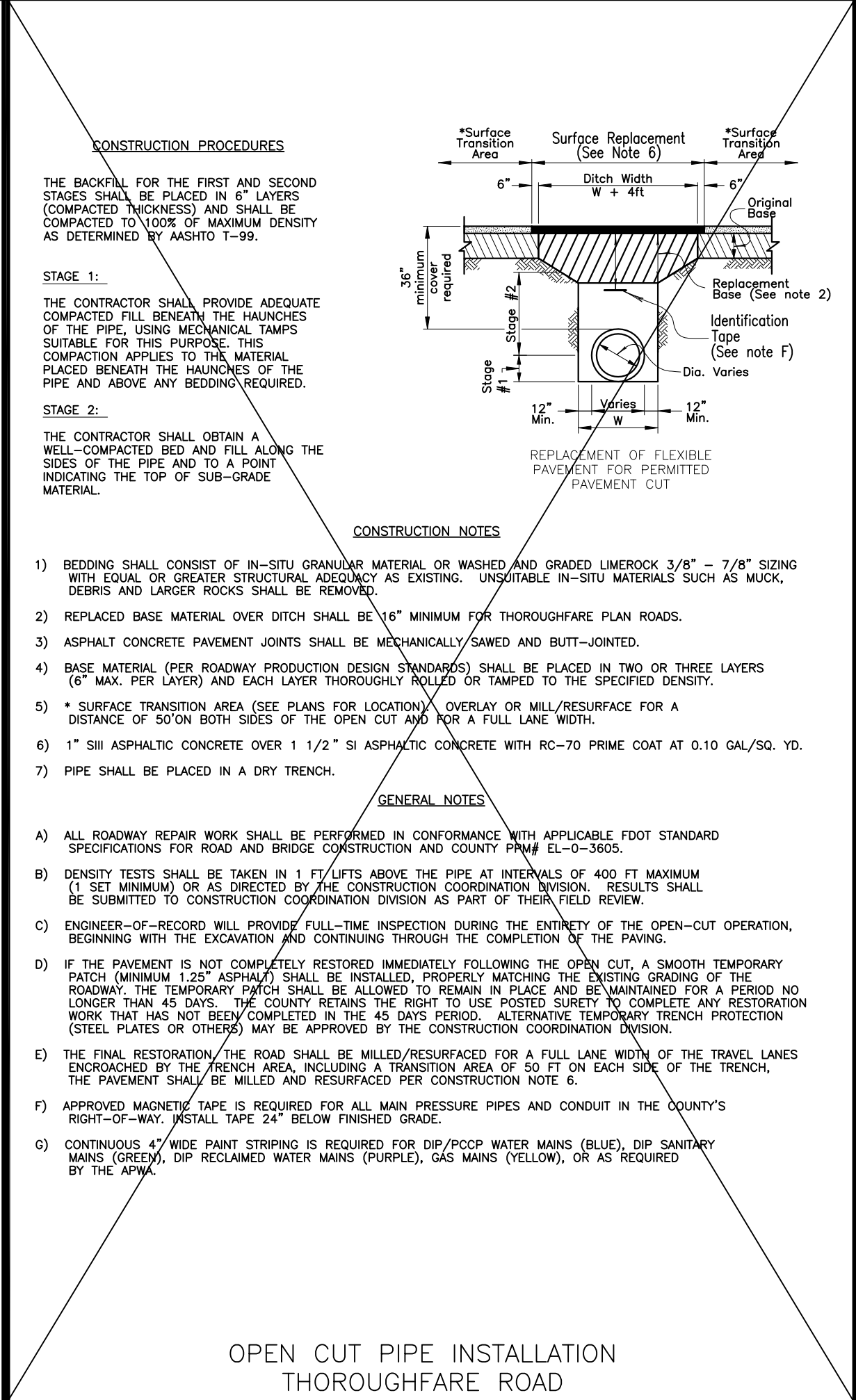
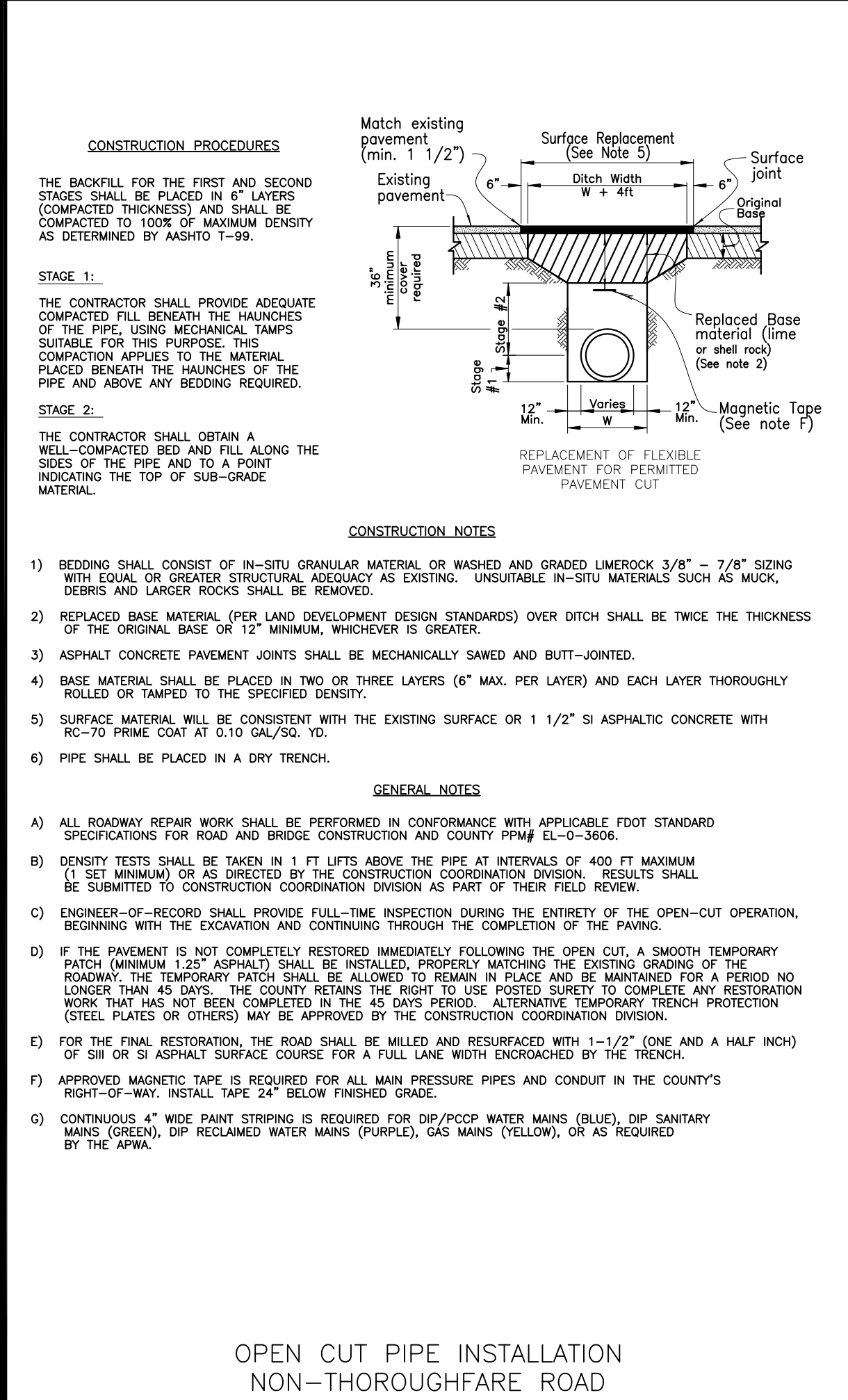
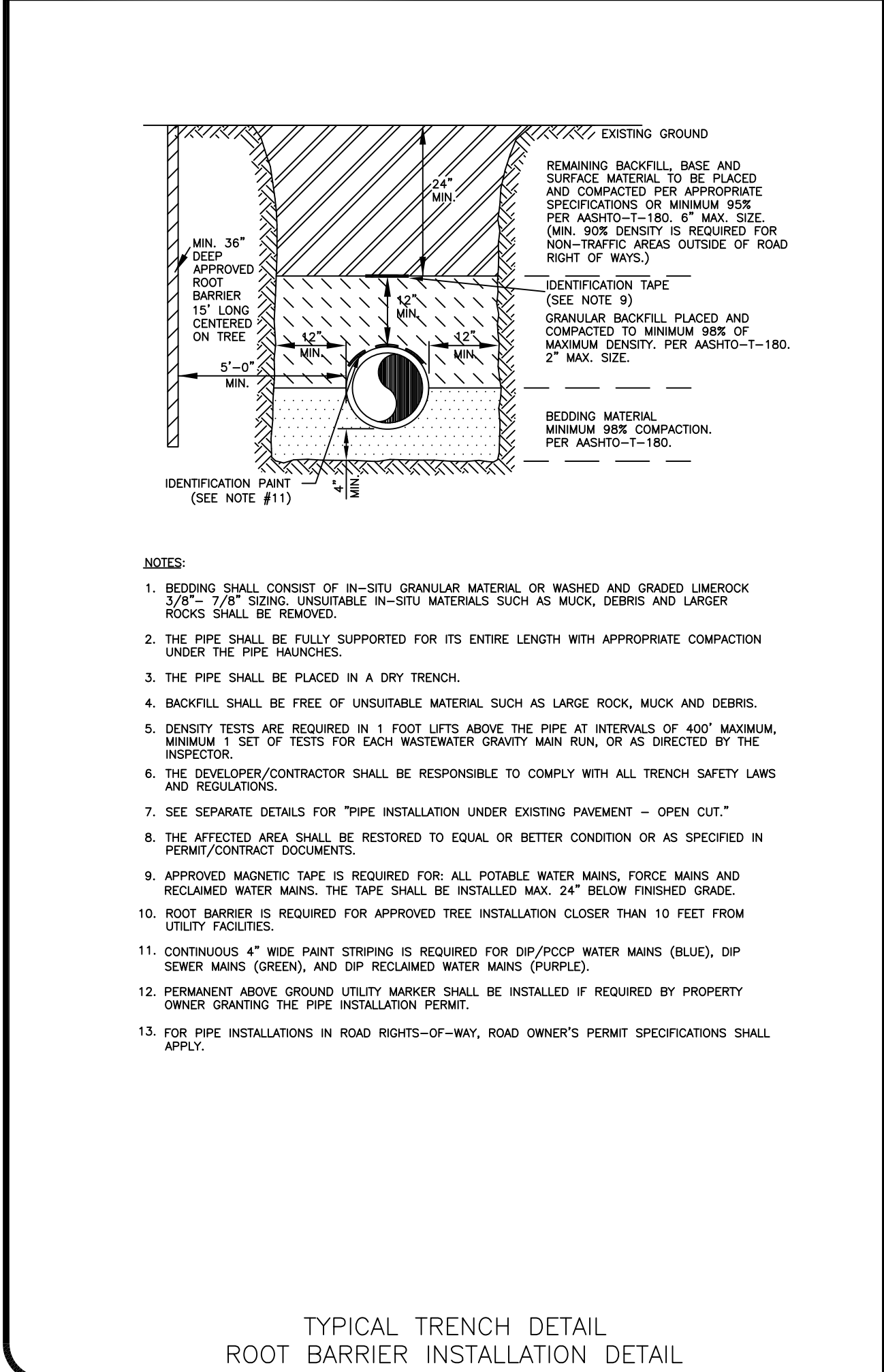
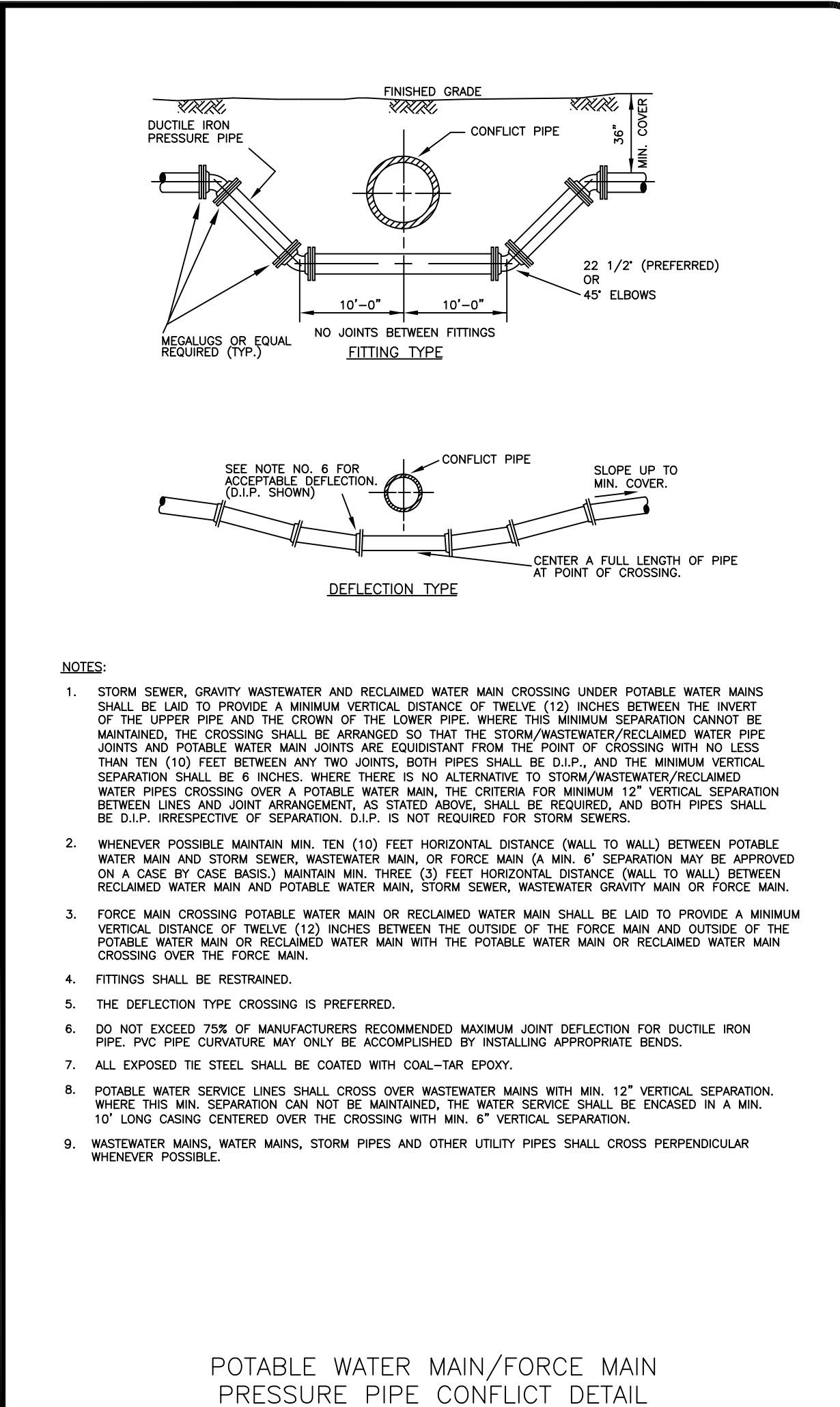
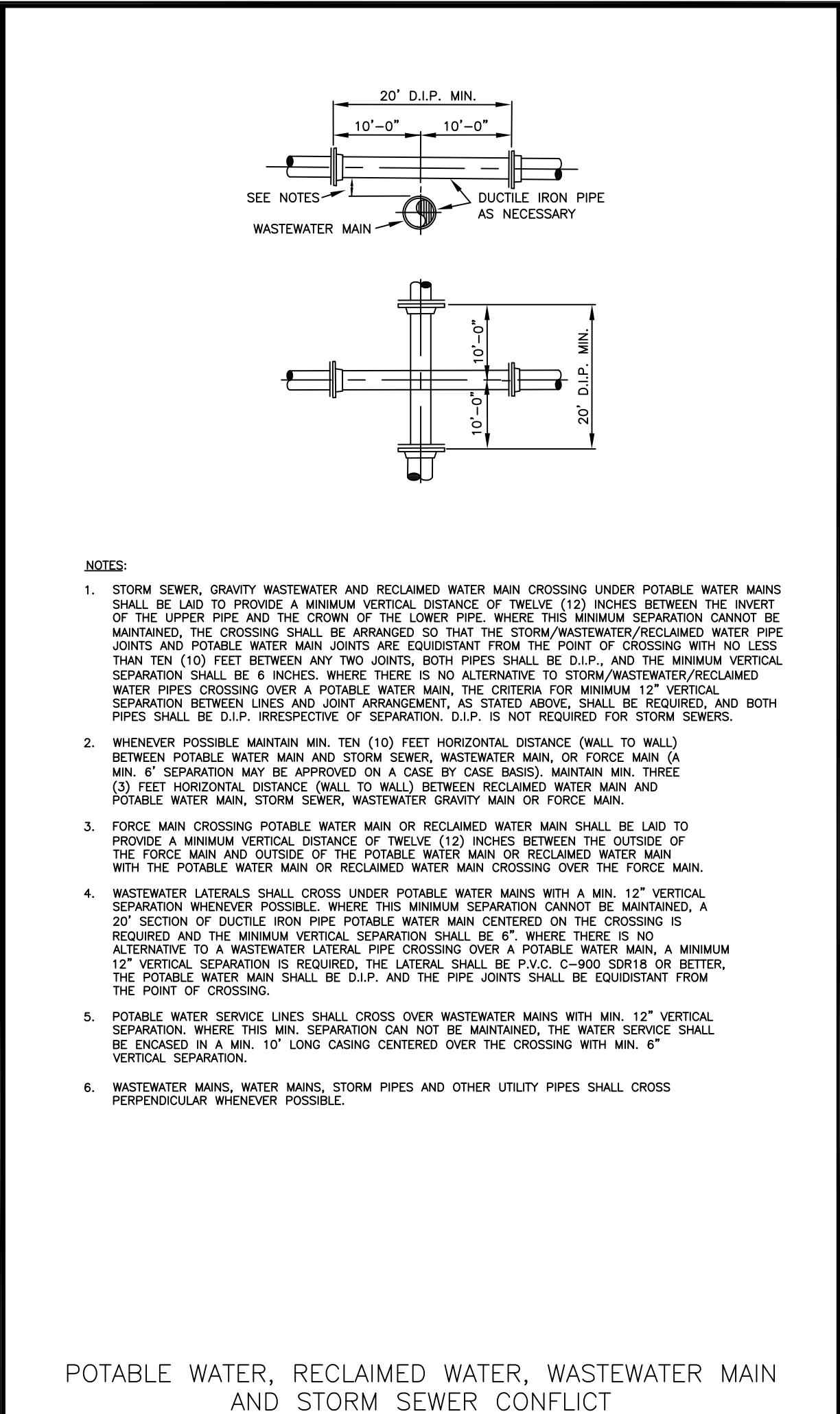
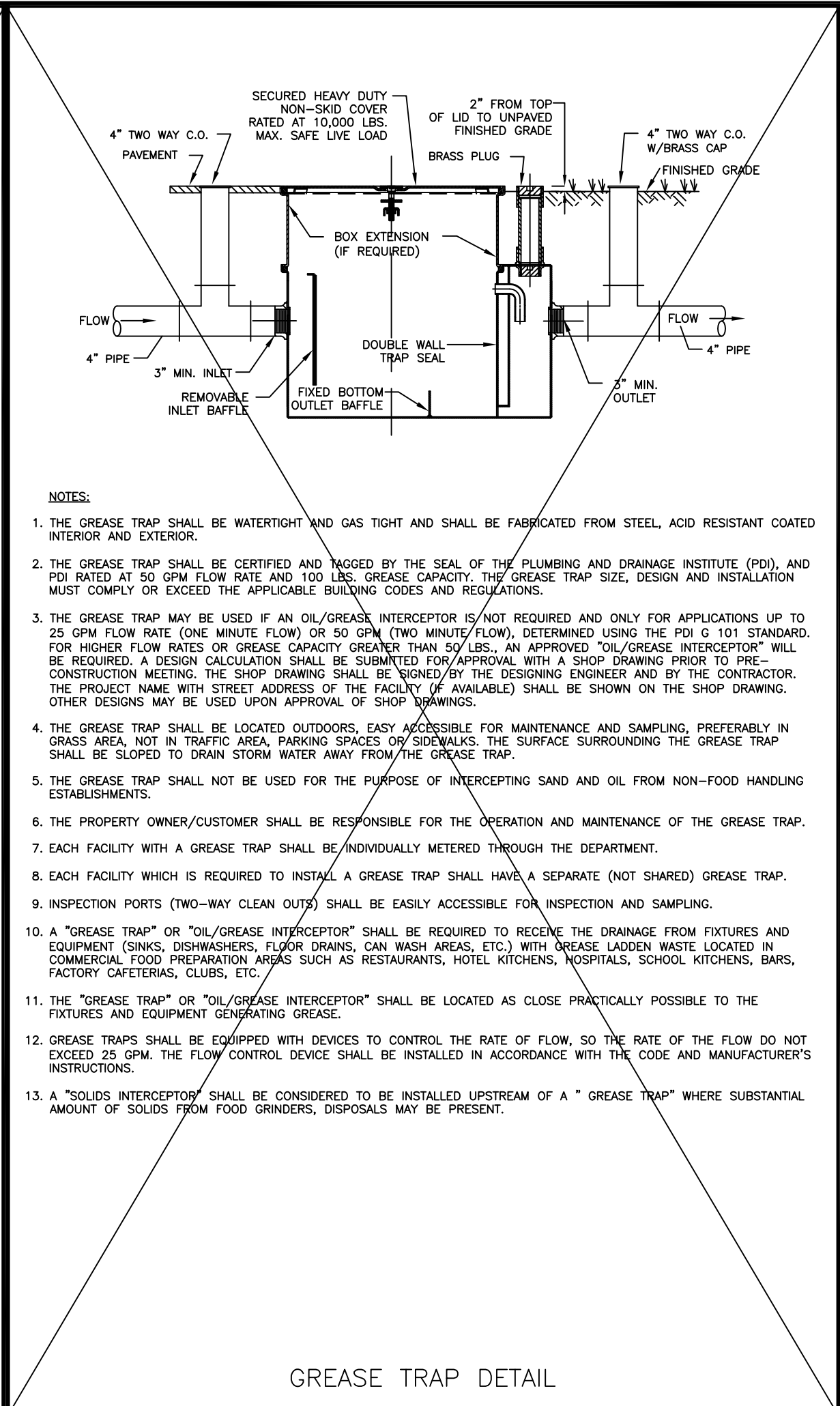
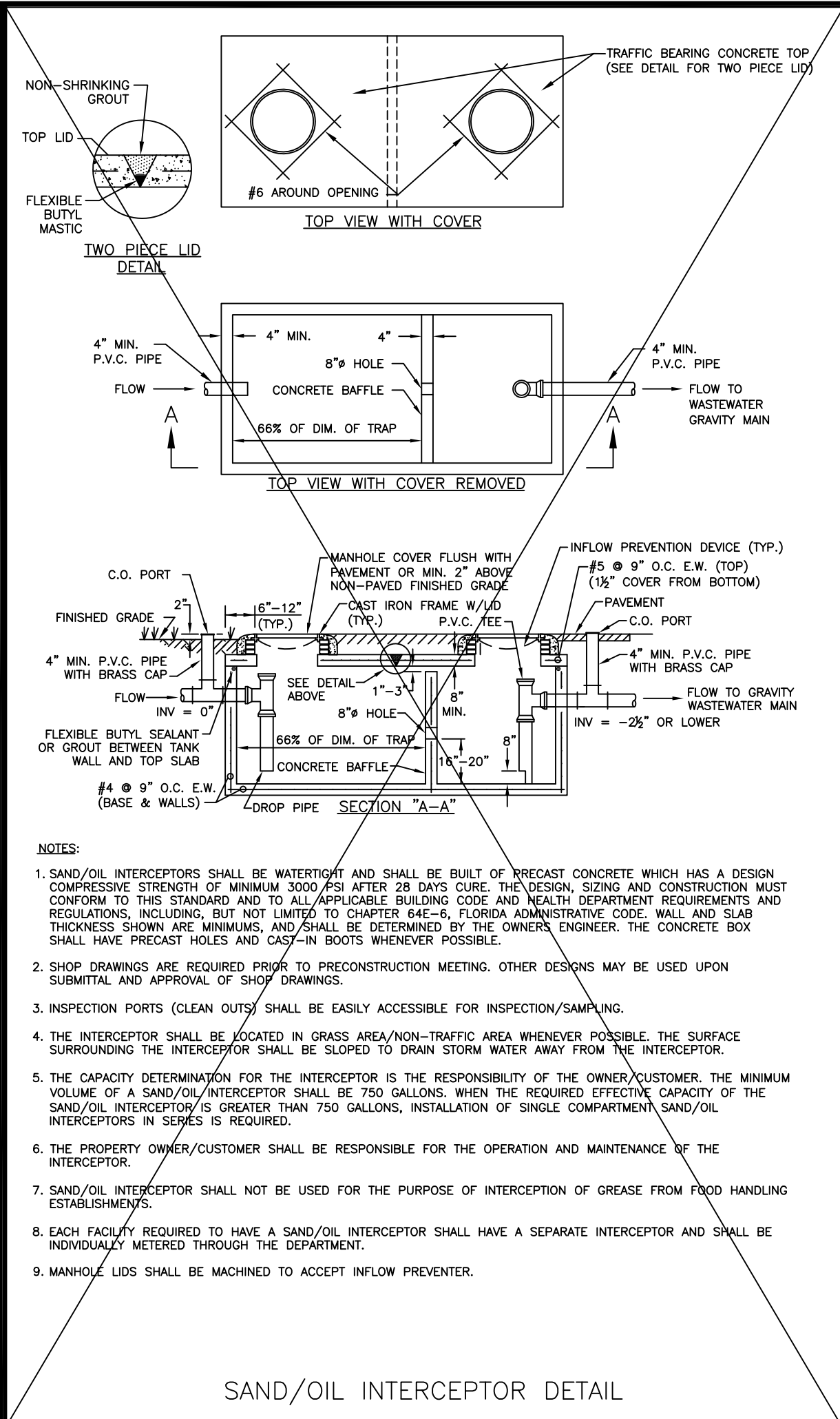
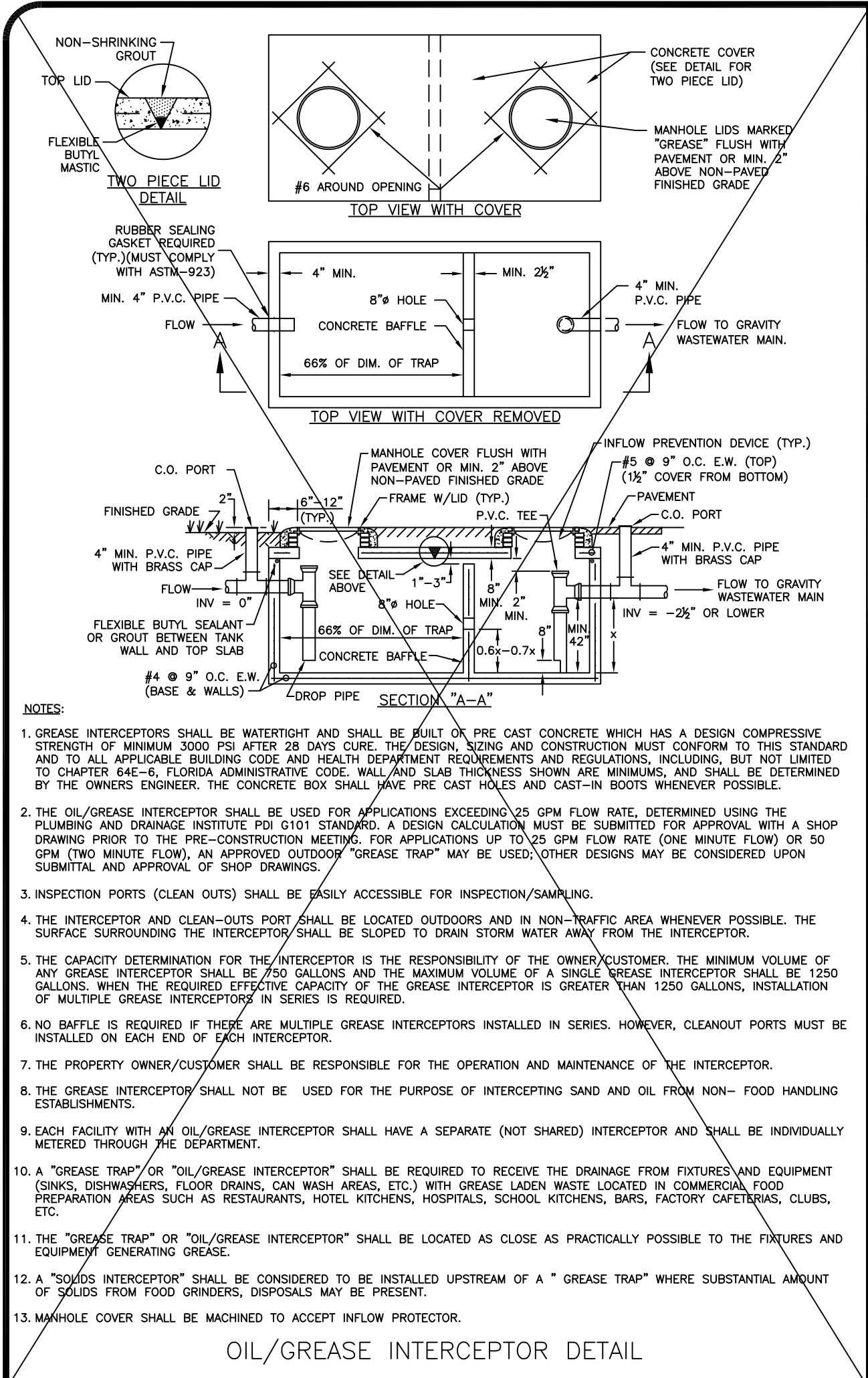
CRAG J. CARDEN, P.E.

FLORIDA REGISTRATION NUMBER

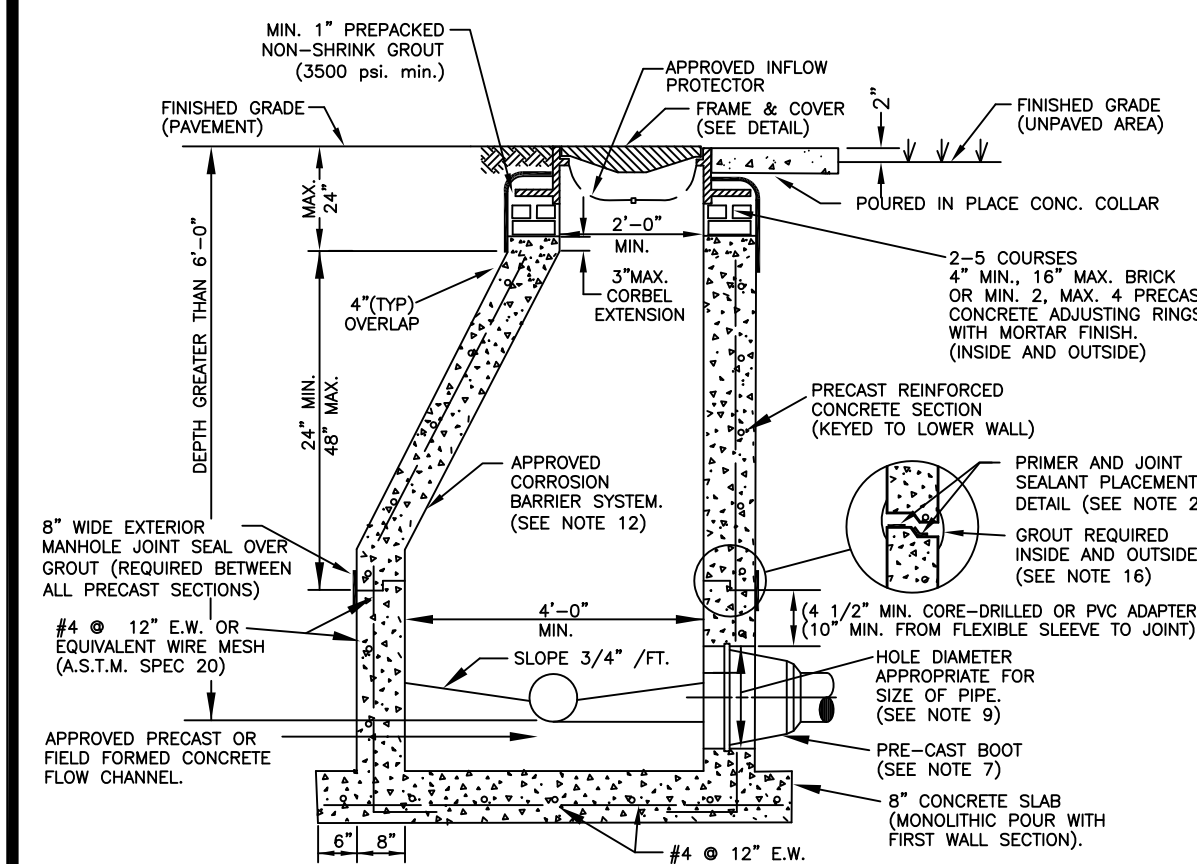
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DATE:

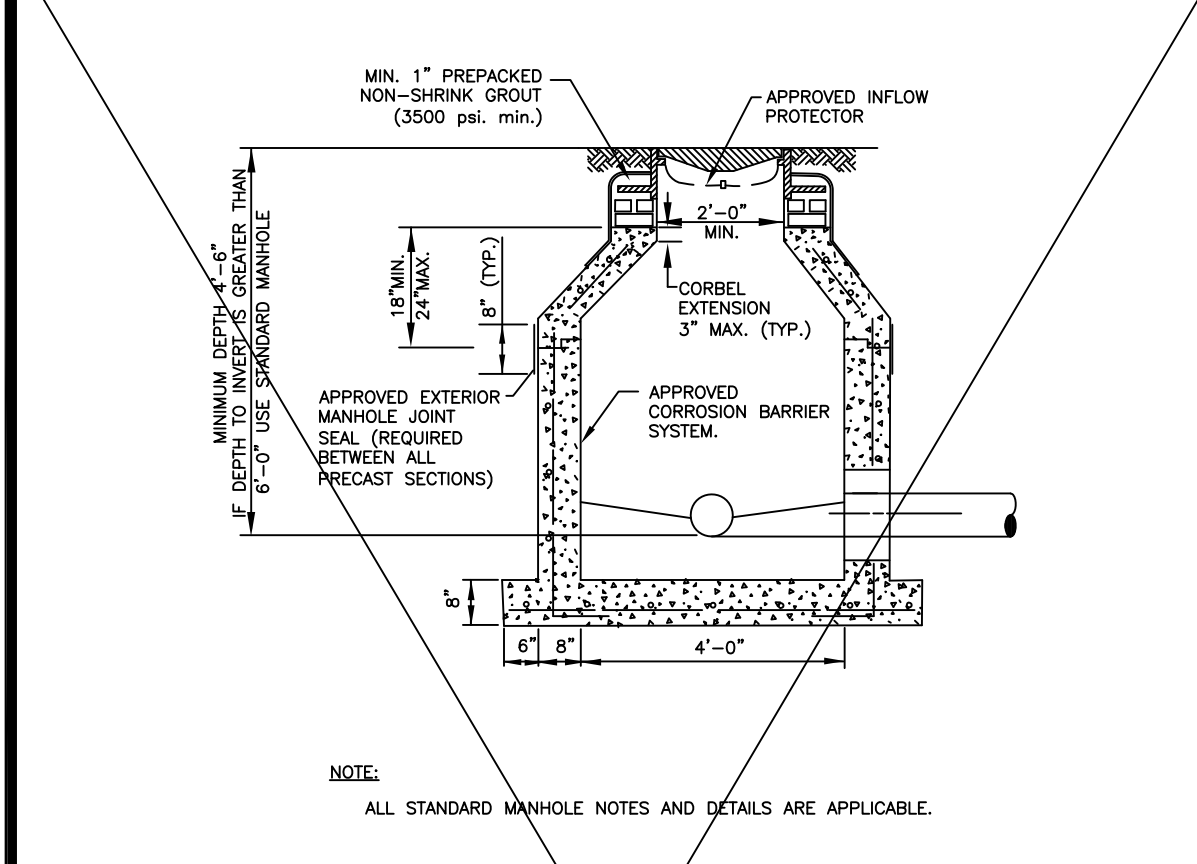




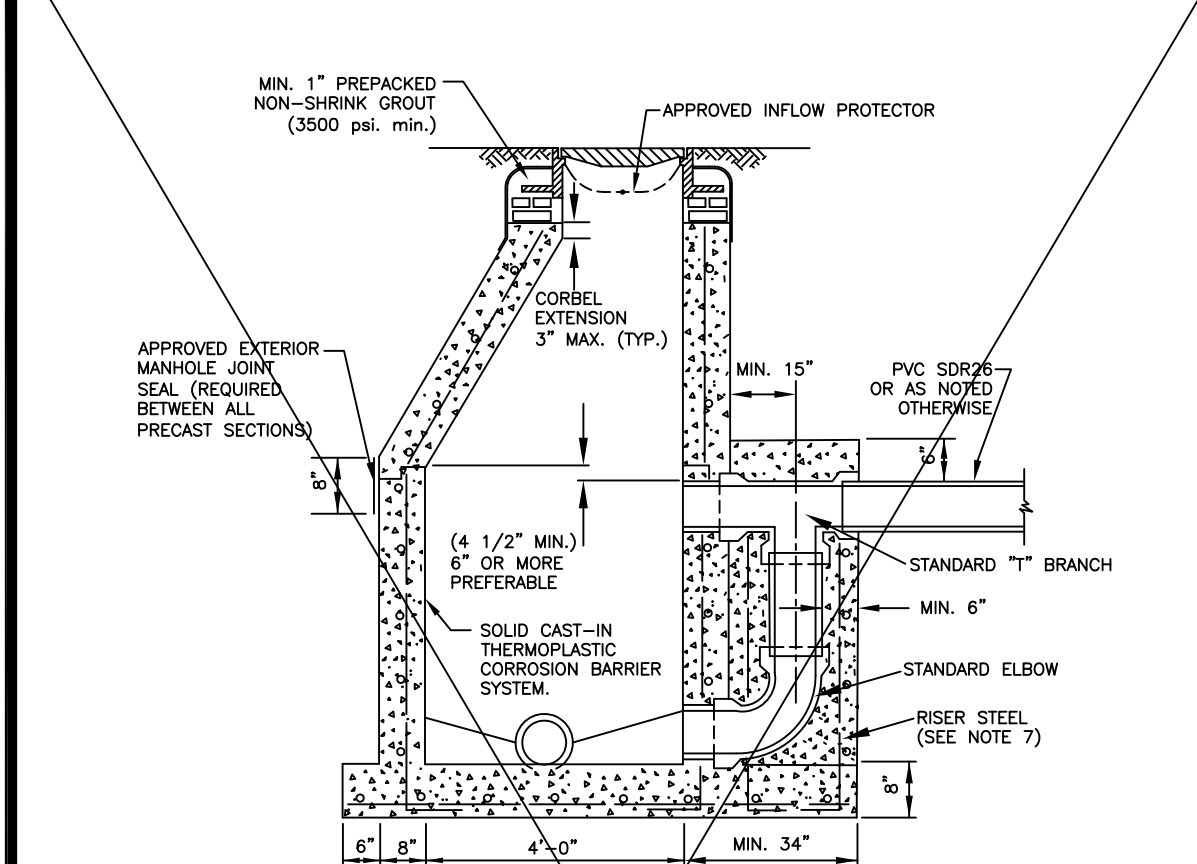




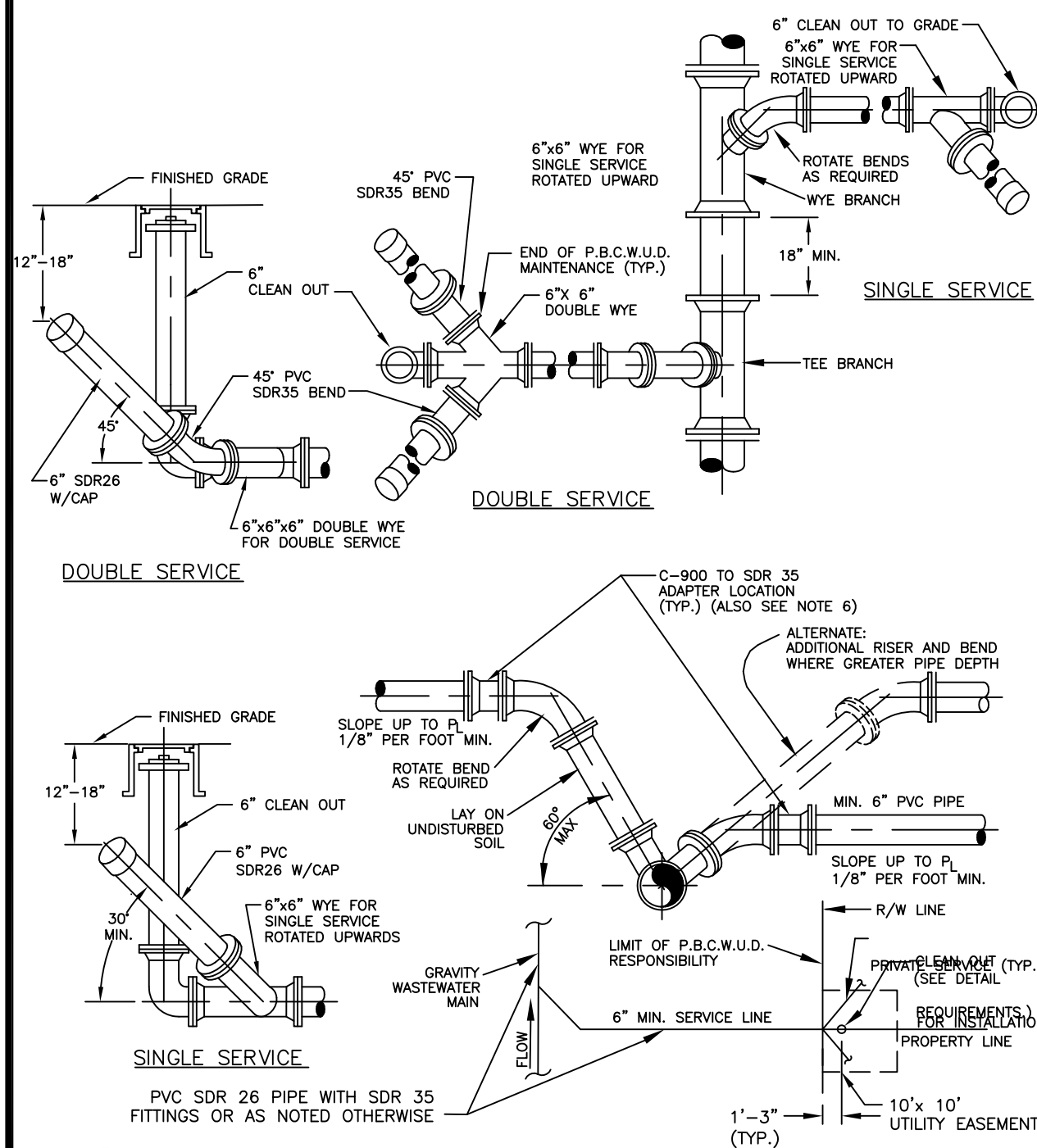
1. PRECAST CONCRETE TYPE II # 4000 P.S.I. CALCEARE AGGREGATE REQUIRED (MIN. CO<sub>2</sub>O<sub>3</sub> CONTENT: 65% IN LARGE AGGREGATE, 50% IN CONCRETE SCREENING).
2. INSTALL APPROVED JOINT SEALANT AT ALL RISER JOINTS WITH GROUT ON INSIDE AND OUTSIDE. MANHOLE SHOP DRAWINGS SHALL INDICATE THE SIZE AND PLACEMENT OF JOINT SEALANT. AN APPROVED JOINT PRIMER SHALL BE APPLIED BY THE PRECASTER.
3. ALL OPENINGS SHALL BE SEALED WITH A WATERPROOF NON-SHRINKING GROUT.
4. FLOW CHANNELS SHALL BE PRECAST OR FIELD CONSTRUCTED TO DIRECT INFLUENT INTO FLOW STREAM. (SEE DETAIL).
5. LIFT HOLES ARE PERMITTED.
6. ALL PIPE HOLES SHALL BE PRECAST OR CORE - DRILLED.
7. A. FOR PVC PIPE ENTERING MANHOLE WITH PRECAST HOLES USE THE APPROVED, PRECASTED FLEXIBLE MANHOLE SLEEVE FOR THE APPROPRIATE PIPE DIAMETER AND DIMENSION RATIO. DOUBLE BANDING IS REQUIRED FOR FLEXIBLE MANHOLE SLEEVE.
- B. CONNECTION TO A MANHOLE WITH A CORE DRILLED HOLE SHALL BE MADE USING A 5" MIN. DUCTILE IRON PIPE SECTION (EPDM LINED) OR THE APPROVED PVC-MANHOLE ADAPTER. THE ADAPTER SHALL NOT EXTEND MORE THAN TWO (2) INCHES INTO THE MANHOLE.
8. C. THE INSIDE AND OUTSIDE SPACE BETWEEN PIPE AND MANHOLE WALL SHALL BE FILLED WITH GROUT.
9. INSIDE DIPS SHALL NOT BE DESIGNED TO EXCEED 1.80 FEET AND NOT CONSTRUCTED TO EXCEED 2.00 FEET. MAX. 6" INSIDE DIP IS PERMITTED FOR MANHOLES WITH 3 OR MORE INVERTS AND MANHOLES WITH A CHANGE IN FLOW DIRECTION OF MORE THAN 45 DEGREES.
10. 8" DIAMETER PIPE: 12" HOLE FOR DIP, 15" HOLE FOR PVC - 10" DIAMETER PIPE; 14" HOLE FOR DIP; 17" HOLE FOR PVC
11. MANHOLE FABRICATION SHALL BE IN ACCORDANCE WITH ASTM C-478, LATEST STANDARD.
12. MINIMUM 5 FEET IS REQUIRED BETWEEN OUTSIDE OF MANHOLE AND SERVICE WYE.
13. MANHOLES TO BE COATED INSIDE WITH AN APPROVED CORROSION BARRIER SYSTEM. SOLID THERMOPLASTIC CAST-IN LINER REQUIRED FOR LAST MANHOLE PRIOR TO LIFT STATION. MANHOLES DEEPER THAN 14 FT., MANHOLES WITH OUTSIDE DIP, AND MANHOLES WITH A FORCE MAIN CONNECTION. (SEE APPROPRIATE DETAILS)
14. APPROVED INFLOW PROTECTORS ARE REQUIRED.
15. MANHOLES IN ROADWAYS SHALL BE LOCATED OUTSIDE OF WHEEL PATHS.
16. SPECIAL PRE-APPROVED GROUT IS REQUIRED FOR PRECAST STRUCTURES WITH ANTIMICROBIAL ADMIXTURE.



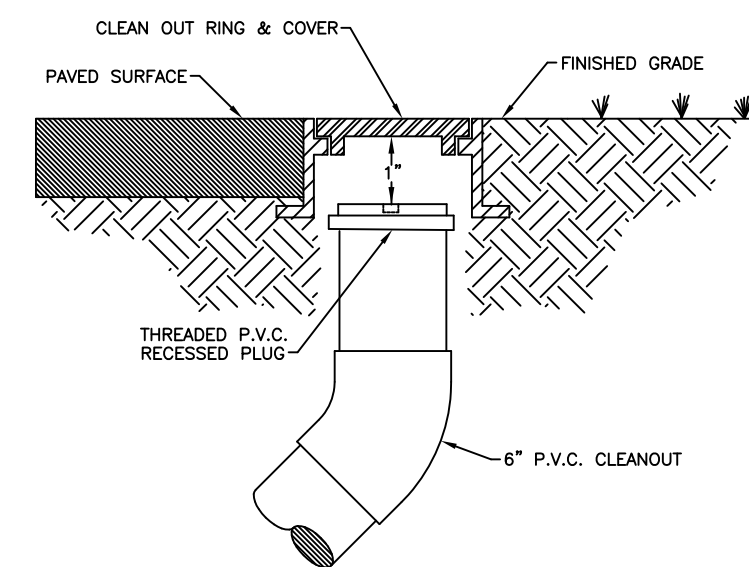
NOTE:  
ALL STANDARD MANHOLE NOTES AND DETAILS ARE APPLICABLE



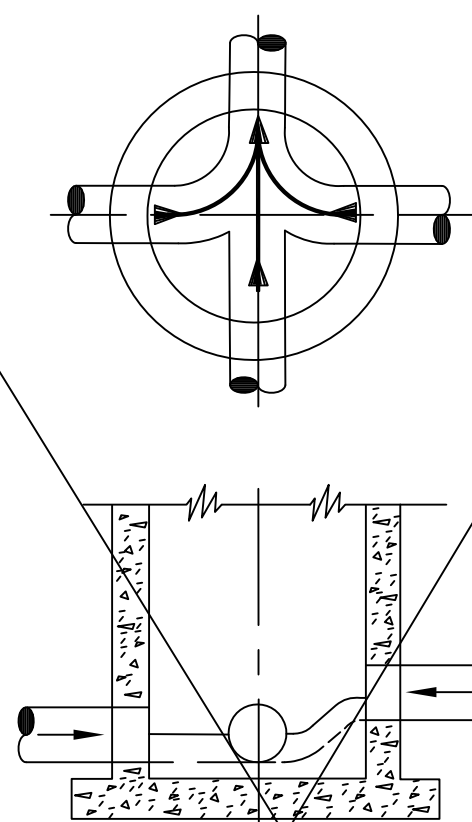
- NOTES:**
1. ALL DETAILS AND SPECIFICATIONS FOR STANDARD MANHOLES ARE APPLICABLE EXCEPT FOR REFERENCES TO DROP ASSEMBLY AND CAST IN LINERS.
  2. THE PRECAST BASE SHALL EXTEND FULLY UNDER THE DROP ASSEMBLY.
  3. MASONRY CONSTRUCTION ABOVE THE EXTENDED PRECAST BASE, IF FILLED WITH CONCRETE, IS PERMISSIBLE.
  4. BRICK AND CONCRETE REBAR ARE PERMITTED AS FILLER IN DROP ENCASMENT.
  5. DROP CONNECTIONS SHALL BE REQUIRED WHENEVER AN INFLUENT INVERT IS LOCATED 2.0 FEET OR ABOVE THE INVERT CHANNEL. DROP CONNECTIONS SHALL BE CONCRETE AND SHOULD NOT BE DESIGNED FOR LESS THAN A 2.4 FOOT DROP.
  6. PVC SDR 26 PIPE WITH PVC SDR 35 FITTINGS SHALL BE UTILIZED IN THE DROP ASSEMBLY.
  7. RISER SECT TO BE CAST IN PLACE WITH BASE (4 ROOS) OR USE 4" x 1/2" DIA. COIL INSERT AS CAST IN PLACE WITH BASE (TO BE USED WITH 1/2" COIL ROOS).
  8. LOOP INSERTS TO BE CAST IN PLACE WITH BASE 1 1/2" x 4" OR APPROVED EQUAL.



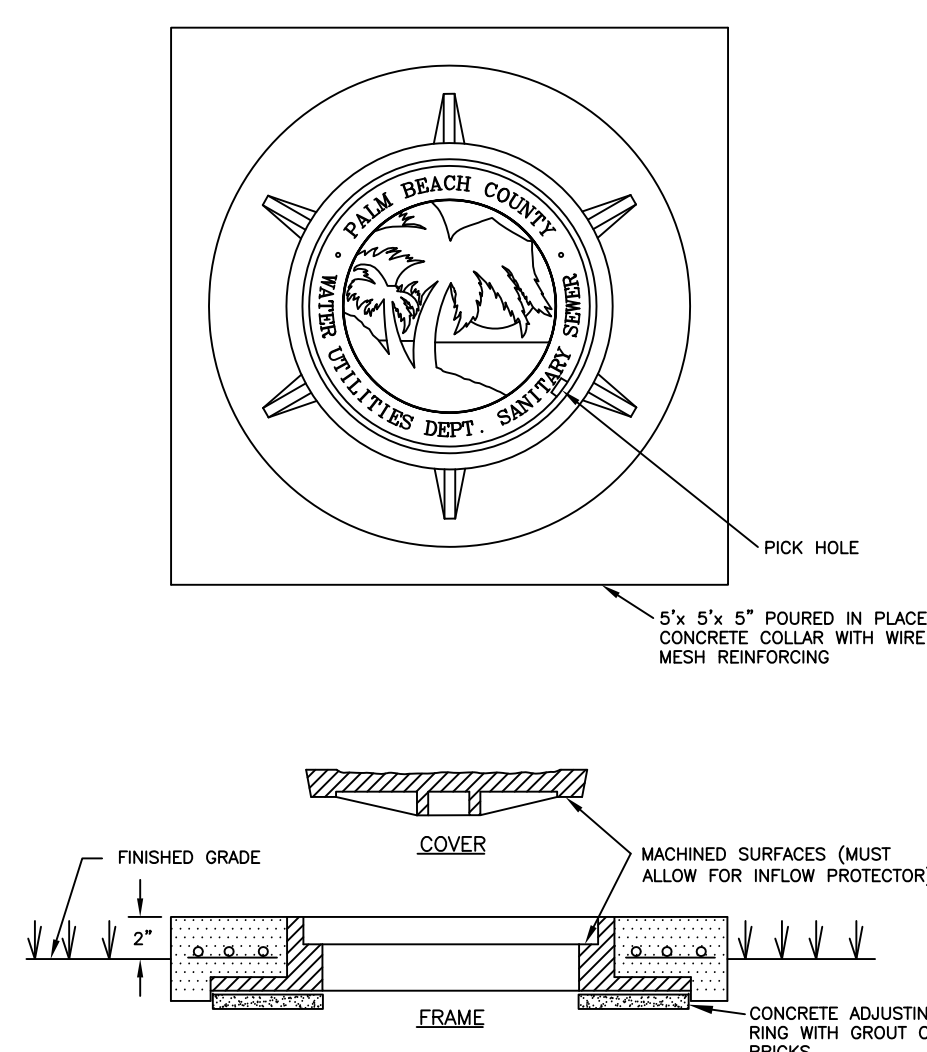
- NOTES: (TYP.)
- MIN. 3" AND 5" MAX. DEPTH IS REQUIRED, UNLESS PLANS SHOW OTHERWISE, FOR SERVICE LATERAL WYE AT THE CLEAN OUT ENDING P.B.C.W.U. OWNERSHIP AND MAINTENANCE RESPONSIBILITY.
  - CLEAN OUT IS TO BE INSTALLED PER DEPARTMENT STANDARDS PRIOR TO WATER METER INSTALLATION.
  - WASTEWATER MAY WYE BRANCH TO MATCH MAIN PIPE MATERIAL.
  - CLEAN OUTS DESIGNATING THE END OF THE DEPARTMENT'S MAINTENANCE RESPONSIBILITY SHALL BE LOCATED WITHIN AN UTILITY EASEMENT OR RIGHT-OF-WAY DEDICATED FOR UTILITIES.
  - THE DEVELOPER/PROPERTY OWNER OR ASSIGNEE SHALL BE RESPONSIBLE FOR CLEAN OUT INSTALLATION PRIOR TO WATER METER INSTALLATION AS SPECIFIED BY THE DEPARTMENT.
  - SEE MINIMUM SEWERAGE STATEMENT FOR P.V.C. -0 900 SD 18 PIPE MATERIAL REQUIREMENTS AT WASTEWATER LATERAL/POTABLE WATER MAIN CROSSINGS.
  - ALONG STRIPS WITH ADJACENT NON-EXCLUSIVE UTILITY EASEMENT, THE CLEANOUT ENDING P.B.C.W.U. MAINTENANCE RESPONSIBILITY SHALL BE INSTALLED 1'-3" INTO THE UTILITY EASEMENT.
  - MIN. 3" HORIZONTAL SEWERATION MUST BE MAINTAINED BETWEEN CLEANOUTS AND EDGE OF PAVEMENT, BACK OF CU EDGE OF DRIVEWAY, LIGHTPOLES, TRANSFORMERS, POWER POLES.



- NOTES:
1. CLEANSLOTS TO BE LOCATED IN GRASS AREA WHENEVER POSSIBLE, MIN. 3' FROM EDGE OF PAVEMENT, BACK OF CURB, EDGE OF DRIVEWAY, LIGHT POLES, TRANSFORMERS, OR POWER POLES.
  2. CLEANSLOTS SHALL NOT BE INSTALLED IN TRAFFIC LANES OR AREAS UNDER HEAVY TRAFFIC LOADS.
  3. THE COVER TO BE MARKED "S".
  4. CLEANSLOTS TO BE INSTALLED PRIOR TO WATER METER RELEASE.
  5. THE DEVELOPER/PROPERTY OWNER OR ASSIGNEE SHALL BE RESPONSIBLE FOR CLEANSLOT INSTALLATION PRIOR TO WATER METER INSTALLATION AS SPECIFIED BY THE DEPARTMENT.
  6. A CONCRETE COLLAR MAY BE REQUIRED IF CLEANSLOT IS LOCATED BETWEEN DRIVEWAYS, A SPECIAL CONSTRUCTION DETAIL WILL BE REQUIRED.
  7. ALONG STRIPS WITH ADJACENT NON-EXCLUSIVE UTILITY EASEMENTS, THE CLEANSLOTS ENGINEER PROVIDED MAINTENANCE RESPONSIBILITY SHALL BE INSTALLED MIN. 12", MAX. 18" INTO THE EASEMENT.



- NOTES:**
1. PROPERLY SHAPED INVERT CHANNELS AND SPILLWAYS SHALL BE CONSTRUCTED BETWEEN PIPES WITH DIFFERENT INVERT ELEVATIONS TO PROVIDE FOR SMOOTH FLOWS.
  2. SERVICE LATERALS SHALL NOT ENTER MANHOLES UNLESS SPECIFIED ON PLANS AND THEY MUST BE TREATED AS MANS (ELEVATIONS SHOWN, PRECAST HOLE, FLOW CHANNEL).
  3. APPROVED PRECAST POLYPROPYLENE OR FIBER REINFORCED POLYMER (FRP) FLOW CHANNELS WITH INTEGRATED PIPE INLETS (SEE SEPARATE DETAILS), PRECAST CONCRETE FLOW CHANNELS, OR FIELD INSTALLED CONCRETE FLOW CHANNELS ARE REQUIRED.
  4. SIDEWALLS OF FLOW CHANNELS SHALL BE AT LEAST HALF OF PIPE HEIGHT AT ALL POINTS.
  5. NO INSIDE DROP LARGER THAN 6" SHALL BE ALLOWED WITH 3 OR 4 MANHOLES AND MANHOLES WITH A CHANGE OF DIRECTION OF FLOW OF MORE THAN 45 DEGREES.
  6. THE FIELD AIRFLOW CORROSION PREVENTION SYSTEM SHALL BE INSTALLED AFTER INVERT CHANNEL CONSTRUCTION UNLESS PRECAST THERMOPLASTIC BASINELINE IS USED; THE FIELD AIRFLOW CORROSION PREVENTION SYSTEM SHALL BE INSTALLED AFTER THE



- NOTES:**
1. COLLAR IS REQUIRED ONLY WHEN MANHOLE IS OUT OF PAVEMENT.
  2. STANDARD FRAME AND COVER SIZE SHALL BE SEVEN INCHES (7"). A 4" FRAME MAY BE USED WITH PRIOR APPROVAL.
  3. A STEEL MANHOLE RISER, APPROVED PRECAST CONCRETE ADJUSTING RINGS OR ADDITIONAL BRICKS MAY BE USED TO ELEVATE EXISTING MANHOLE COVERS TO RESURFICED GRADE (MAX. 4" HEIGHT).
  4. COVER SHALL FIT FLUSH WITH THE FRAME WITH THE INFLOW PROTECTOR INSTALLED.

## WASTEWATER #2 STANDARD DETAILS

CONSULTANT:

**Core States Group**  
3902 Corporex Park Drive, Suite 600  
Tampa, FL 33619  
Phone (813) 490-1755  
Fax (813) 490-1759  
dalgina@core-eng.com

**IT'S THE LAW!**   
CALL 48 HOURS BEFORE YOU DIG  
**1-800-432-4770**  
SUNSHINE STATE ONE CALL OF FLORIDA, INC.  
UTILITIES NOTIFICATION CENTER

DESIGNED BY: WUD

DRAWN BY: WUD CADD  
CHECKED BY: A. GALICKI  
APPROVED BY: WUD

Palm Beach County  
Water Utilities Department  
P.O.Box 16097  
West Palm Beach, FL 33411

Palm Beach County  
Water Utilities Department  
P.O.Box 16097  
West Palm Beach, FL 33416-6097

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NO.	DATE	GENERAL	REVISION	REMARKS
1	JAN 2012			

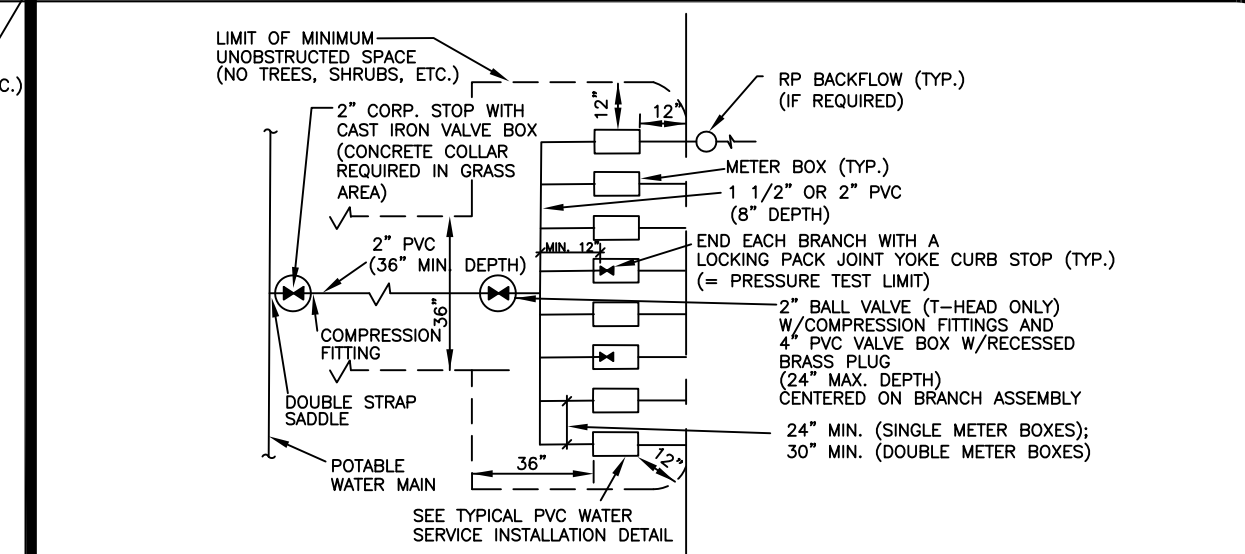
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DETAILS

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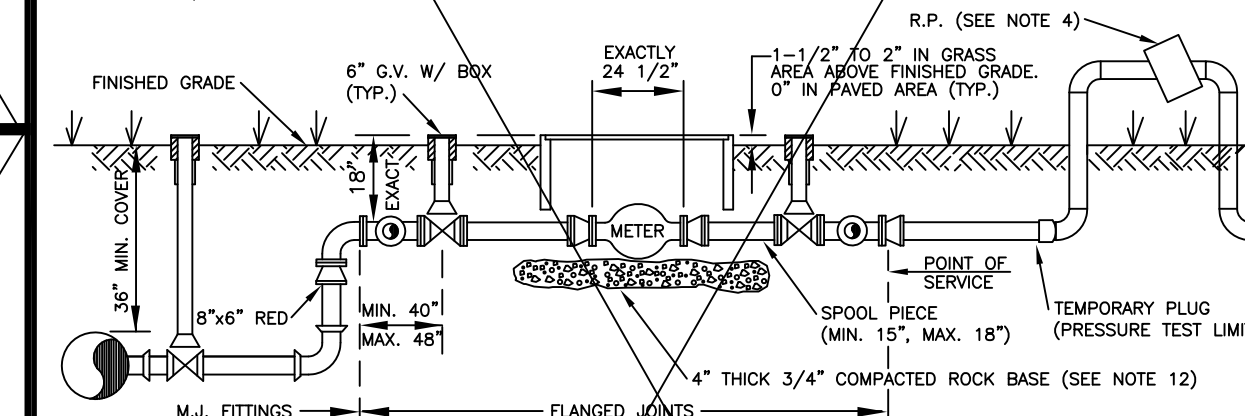
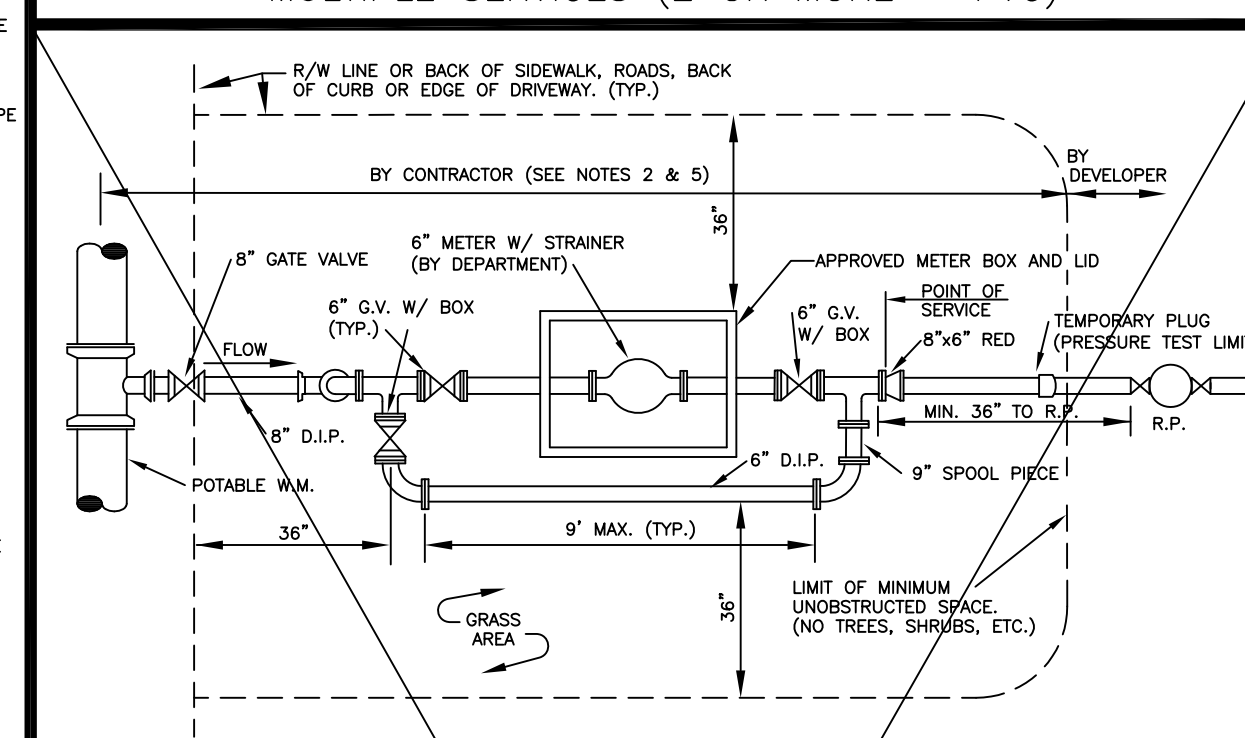
SEAL

Oct 12, 2012

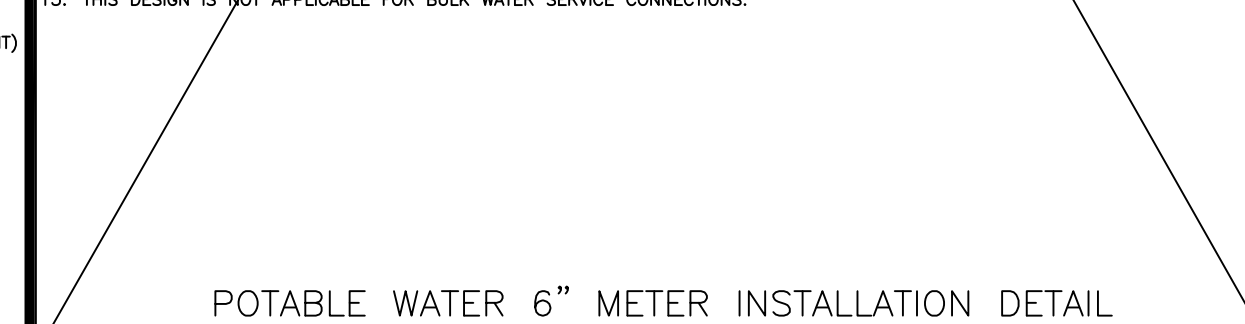


- SERVICE PIPING LARGER THAN 2" WILL NOT BE ACCEPTED. FOR SERVICE LINE UNDER PAVEMENT USE 4" SCH-40 PVC, BLACK IRON PIPE OR HOPE SDR9 CASING.
- METER LOCATION MUST CORRESPOND TO UNIT/BAY CONFIGURATION TO AVOID SERVICE LINE CROSSINGS.
- METER/SERVICE WILL NOT BE INSTALLED/ACTIVATED UNTIL:
  - FORM BOARDS FOR DRIVEWAY AND/OR SIDEWALK ARE IN PLACE OR DRIVEWAY OR SIDEWALK IS IN PLACE.
  - "MINIMUM UNOBSTRUCTED SPACE" (AS SHOWN) IS PROVIDED.
  - REQUIRED BACKFLOW PREVENTION ASSEMBLY/DEVICE IS INSTALLED AND HAS PASSED THE INITIAL TEST.
- TYPICAL SERVICE INSTALLATION DETAILS APPLY.
- THE DEVELOPER/PROPERTY OWNER OR ASSIGNEE SHALL BE RESPONSIBLE FOR SERVICE INSTALLATION BEYOND PRESSURE TEST LIMITS AS SPECIFIED BY THE DEPARTMENT.
- THREADED AREAS OF CORROSION STOP AND OTHER FITTINGS SHALL BE SPIRAL WRAPPED WITH TWO (2) WRAPS OF TEFLON TAPE.
- MAX. (8) 5/8" METERS OR MAX. (4) 1" METERS MAY BE CONNECTED TO A SINGLE SERVICE LINE.
- PLEASE NOTE THAT ADDITIONAL UNOBSTRUCTED SPACE WILL BE REQUIRED FOR THE INSTALLATION OF A BACKFLOW PREVENTERS (IF REQUIRED).

POTABLE WATER TYPICAL CONNECTION FOR MULTIPLE SERVICES (2 OR MORE - PVC)



- ALL SERVICES TO HAVE AN APPROVED REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTION ASSEMBLY (R.P.), THE INITIAL TEST OF THE R.P. SHALL BE PERFORMED BY THE DEPARTMENT. THE R.P. SHALL BE INSTALLED AS CLOSE AS POSSIBLE TO THE POINT OF SERVICE.
- 12" MINIMUM CLEARANCE TO BE MAINTAINED BETWEEN METER BOX/BYPASS AND ANY OBSTRUCTION.
- FOR INSTALLATION OF SERVICES UNDER DRIVEWAYS AND ROADWAYS USE MIN. 4" DIAMETER BLACK IRON, PVC SCH 40, OR HOPE SDR 9 CASING. CASING SHALL EXTEND MIN. 24" BEYOND EDGE OF PAVEMENT. END OF CASING TO BE SEALED WITH CEMENT. CASING SHALL BE COLOR-CODED BLACK, WHITE, BLUE, OR BLUE STRIPED.
- SUCCESSIVE TAPS INTO THE WATER MAIN SHALL BE SPACED A MINIMUM OF 18" APART. TAPS ON SAME SIDE OF A PVC PIPE SECTION SHALL BE MIN. 10' APART.
- METER SHALL NOT BE PLACED IN SIDEWALK OR DRIVEWAY AREAS. SERVICE LINES AND TAPS SHALL NOT BE PLACED UNDER DRIVEWAYS WHENEVER POSSIBLE.
- MAXIMUM SERVICE LENGTH IS 100' TO METER.
- BEDDING (MIN. 4") AND COVER (MIN. 4") OVER SERVICE LINE OR CASING SHALL CONSIST OF FINE GRANULAR MATERIAL. UNSUITABLE IN-SITU MATERIALS SUCH AS MUCK, DEBRIS AND LARGER ROCKS SHALL BE REMOVED WITH 2" MAXIMUM SIZE.
- METER/SERVICE WILL NOT BE INSTALLED/ACTIVATED UNTIL:
  - FORM BOARDS FOR DRIVEWAY AND/OR SIDEWALK ARE IN PLACE OR DRIVEWAY OR SIDEWALK IS IN PLACE.
  - "MINIMUM UNOBSTRUCTED SPACE" (AS SHOWN) IS PROVIDED. MIN. 12" VERTICAL SEPARATION IS REQUIRED TO OTHER UTILITIES.
  - REQUIRED BACKFLOW PREVENTION ASSEMBLY/DEVICE IS INSTALLED AND HAS PASSED THE INITIAL TEST.
- SERVICE COMPONENTS SHALL BE CONSTRUCTED FOR THE METER TO BE INSTALLED "TRUE" AND "PLUMB" AND TO ALLOW METER READING THROUGH THE METER READER LID.
- THE ENTIRE ASSEMBLY (WITHOUT METER/SPOOL PIECES AS SHOWN) SHALL BE PRESSURE TESTED AS REQUIRED.
- METER/SERVICE WILL NOT BE INSTALLED/ACTIVATED UNTIL:
  - FORM BOARDS FOR DRIVEWAY AND/OR SIDEWALK ARE IN PLACE OR DRIVEWAY OR SIDEWALK IS IN PLACE.
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  - REQUIRED BACKFLOW PREVENTION ASSEMBLY/DEVICE IS INSTALLED AND HAS PASSED THE INITIAL TEST.
- BYPASS PIPING SHALL BE INSTALLED ON THE RIGHT SIDE OF METER IN DIRECTION OF FLOW UNLESS OTHERWISE APPROVED BY DEPARTMENT.
- ALL HARDWARE FOR FLANGED CONNECTIONS (BOLTS, ETC.) TO BE STAINLESS STEEL.
- METER BOXES IN NON-GRASS AREAS SHALL HAVE TRAFFIC RATED LIDS.
- A 4" THICK COMPACTED 3/4" ROCK BASE IS REQUIRED. THE BASE SHALL EXTEND MINIMUM 12" BEYOND THE METER BOX PERIMETER.
- THIS DESIGN IS NOT APPLICABLE FOR BULK WATER SERVICE CONNECTIONS.



POTABLE WATER 6" METER INSTALLATION DETAIL

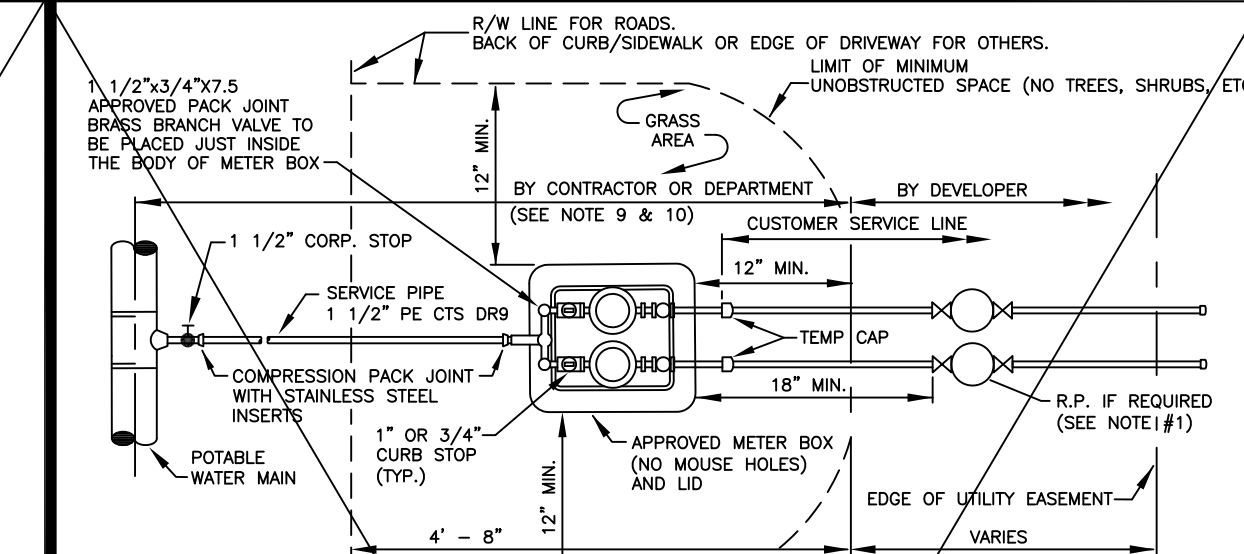
POTABLE WATER #1 STANDARD DETAILS

CONSULTANT:

Core States Group  
3902 Corporate Park Drive, Suite 600  
Tampa, FL 33619  
Phone (813) 450-1755  
Fax (813) 490-1759  
dalgin@core-eng.com

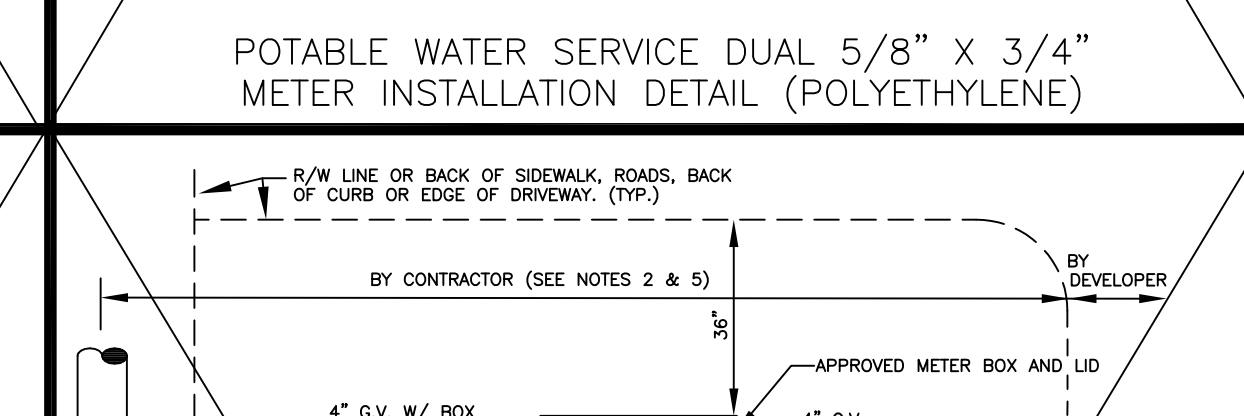
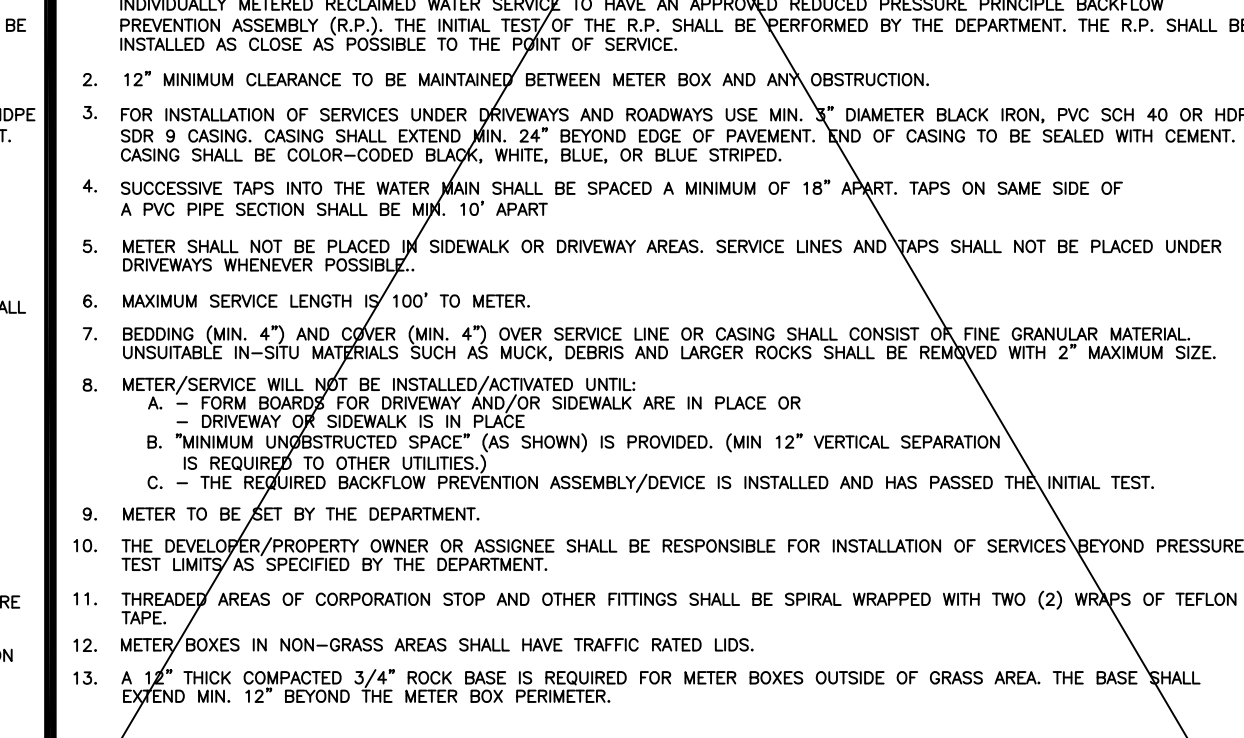
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UTILITIES NOTIFICATION CENTER

DESIGNED BY: WUD  
DRAWN BY: WUD\_CADD  
CHECKED BY: A. GALICKI  
APPROVED BY: WUD  
Palm Beach County  
Water Utilities Department  
P.O. Box 16097  
West Palm Beach, FL 33416-6097

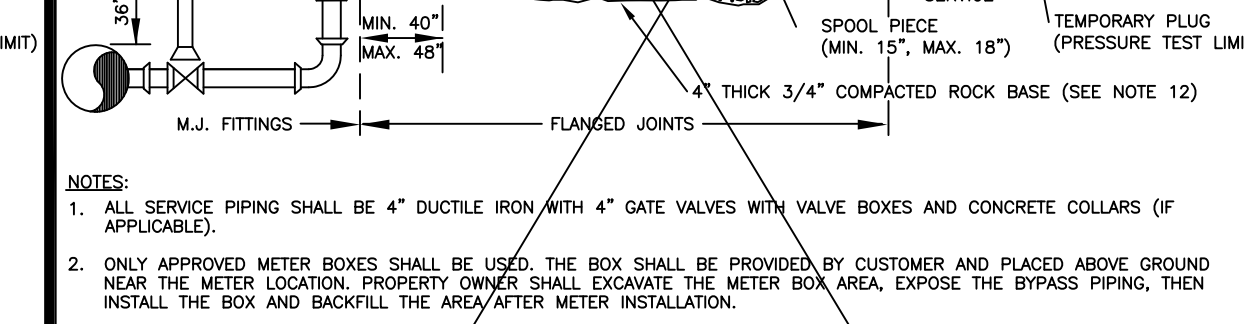


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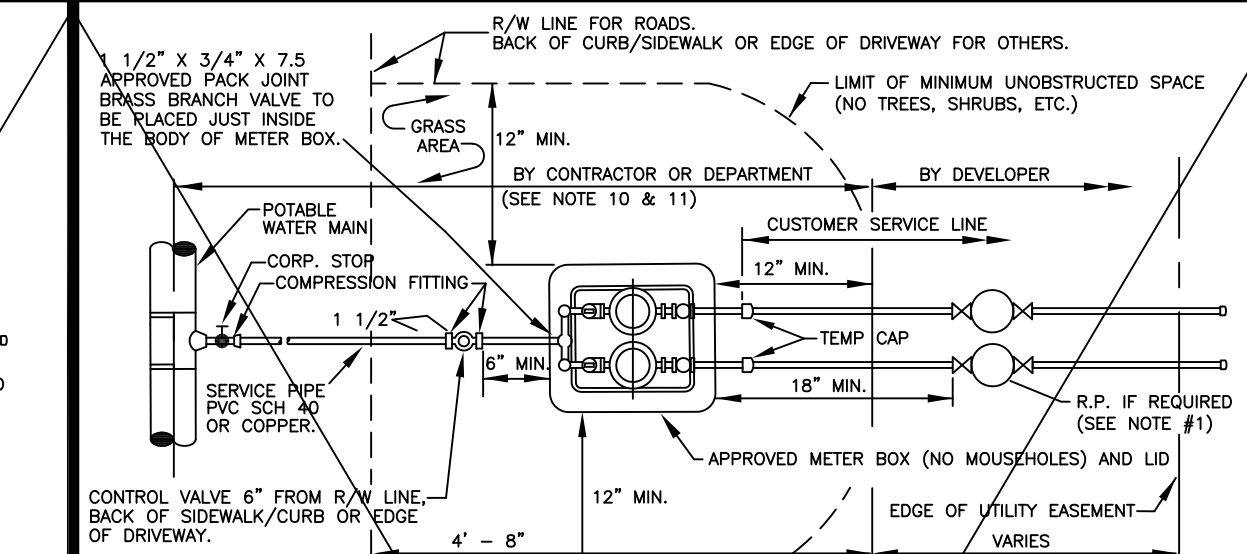
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- METER SHALL NOT BE PLACED IN SIDEWALK OR DRIVEWAY AREAS. SERVICE LINES AND TAPS SHALL NOT BE PLACED UNDER DRIVEWAYS WHENEVER POSSIBLE.
- MAXIMUM SERVICE LENGTH IS 100' TO METER.
- BEDDING (MIN. 4") AND COVER (MIN. 4") OVER SERVICE LINE OR CASING SHALL CONSIST OF FINE GRANULAR MATERIAL. UNSUITABLE IN-SITU MATERIALS SUCH AS MUCK, DEBRIS AND LARGER ROCKS SHALL BE REMOVED WITH 2" MAXIMUM SIZE.
- METER/SERVICE WILL NOT BE INSTALLED/ACTIVATED UNTIL:
  - FORM BOARDS FOR DRIVEWAY AND/OR SIDEWALK ARE IN PLACE OR DRIVEWAY OR SIDEWALK IS IN PLACE.
  - "MINIMUM UNOBSTRUCTED SPACE" (AS SHOWN) IS PROVIDED. MIN. 12" VERTICAL SEPARATION IS REQUIRED TO OTHER UTILITIES.
  - REQUIRED BACKFLOW PREVENTION ASSEMBLY/DEVICE IS INSTALLED AND HAS PASSED THE INITIAL TEST.
- SERVICE COMPONENTS SHALL BE CONSTRUCTED FOR THE METER TO BE INSTALLED "TRUE" AND "PLUMB" AND TO ALLOW METER READING THROUGH THE METER READER LID.
- THE ENTIRE ASSEMBLY (WITHOUT METER/SPOOL PIECES AS SHOWN) SHALL BE PRESSURE TESTED AS REQUIRED.
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  - REQUIRED BACKFLOW PREVENTION ASSEMBLY/DEVICE IS INSTALLED AND HAS PASSED THE INITIAL TEST.
- BYPASS PIPING SHALL BE INSTALLED ON THE RIGHT SIDE OF METER IN DIRECTION OF FLOW UNLESS OTHERWISE APPROVED BY DEPARTMENT.
- ALL HARDWARE FOR FLANGED CONNECTIONS (BOLTS, ETC.) TO BE STAINLESS STEEL.
- METER BOXES IN NON-GRASS AREAS SHALL HAVE TRAFFIC RATED LIDS.
- A 4" THICK COMPACTED 3/4" ROCK BASE IS REQUIRED. THE BASE SHALL EXTEND MINIMUM 12" BEYOND THE METER BOX PERIMETER.
- THIS DESIGN IS NOT APPLICABLE FOR BULK WATER SERVICE CONNECTIONS.

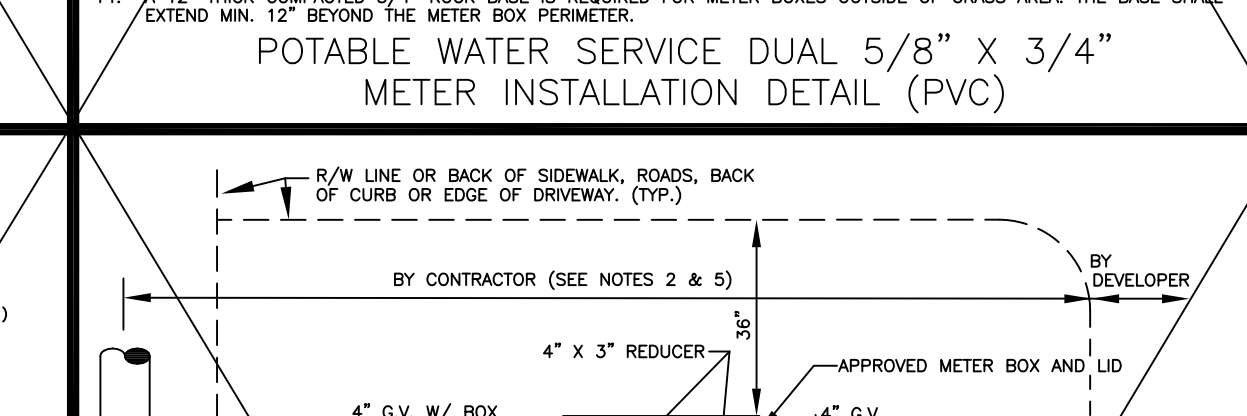
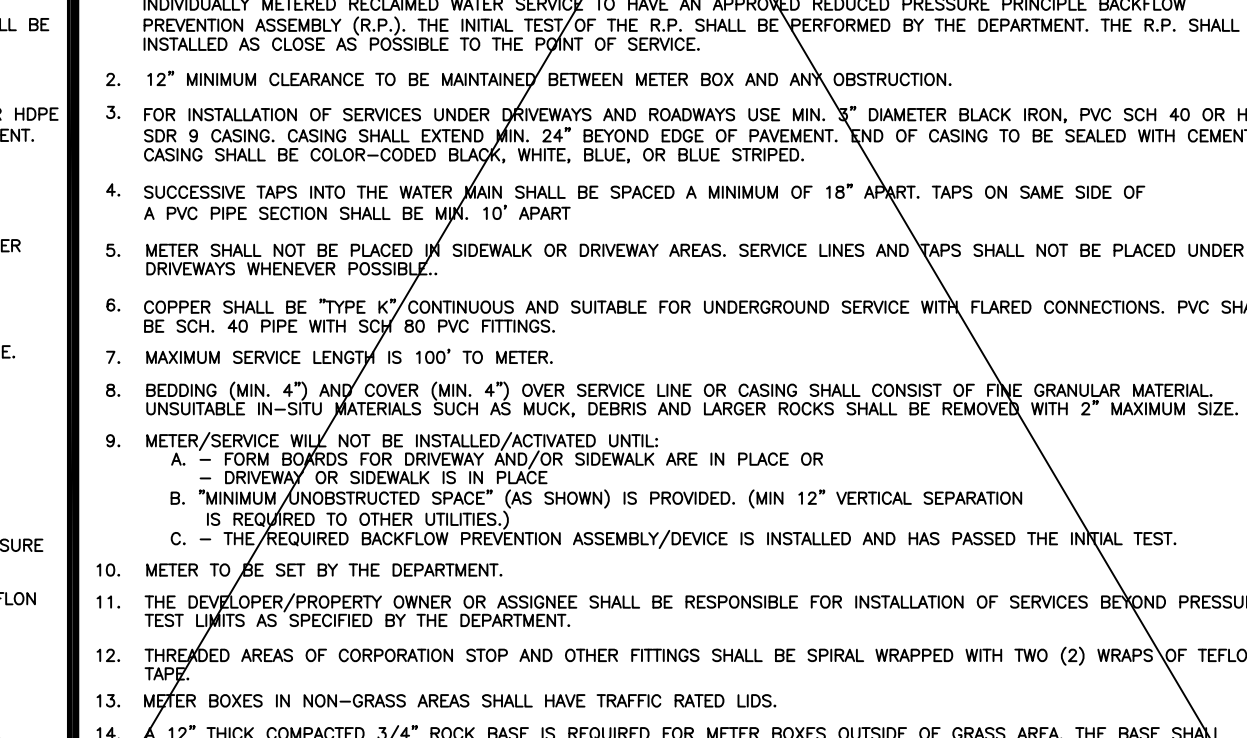


POTABLE WATER 4" METER INSTALLATION DETAIL

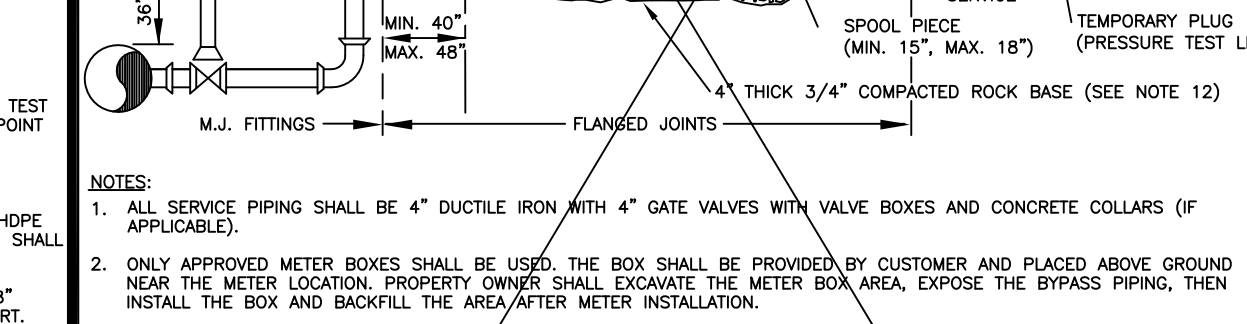


- SERVICE PIPING LARGER THAN 2" WILL NOT BE ACCEPTED. FOR SERVICE LINE UNDER PAVEMENT USE 4" SCH-40 PVC, BLACK IRON PIPE OR HOPE SDR9 CASING.
- METER LOCATION MUST CORRESPOND TO UNIT/BAY CONFIGURATION TO AVOID SERVICE LINE CROSSINGS.
- METER/SERVICE WILL NOT BE INSTALLED/ACTIVATED UNTIL:
  - FORM BOARDS FOR DRIVEWAY AND/OR SIDEWALK ARE IN PLACE OR DRIVEWAY OR SIDEWALK IS IN PLACE.
  - "MINIMUM UNOBSTRUCTED SPACE" (AS SHOWN) IS PROVIDED.
  - REQUIRED BACKFLOW PREVENTION ASSEMBLY/DEVICE IS INSTALLED AND HAS PASSED THE INITIAL TEST.
- TYPICAL SERVICE INSTALLATION DETAILS APPLY.
- THE DEVELOPER/PROPERTY OWNER OR ASSIGNEE SHALL BE RESPONSIBLE FOR SERVICE INSTALLATION BEYOND PRESSURE TEST LIMITS AS SPECIFIED BY THE DEPARTMENT.
- THREADED AREAS OF CORROSION STOP AND OTHER FITTINGS SHALL BE SPIRAL WRAPPED WITH TWO (2) WRAPS OF TEFLON TAPE.
- MAX. (8) 5/8" METERS OR MAX. (4) 1" METERS MAY BE CONNECTED TO A SINGLE SERVICE LINE.
- PLEASE NOTE THAT ADDITIONAL UNOBSTRUCTED SPACE WILL BE REQUIRED FOR THE INSTALLATION OF A BACKFLOW PREVENTERS (IF REQUIRED).

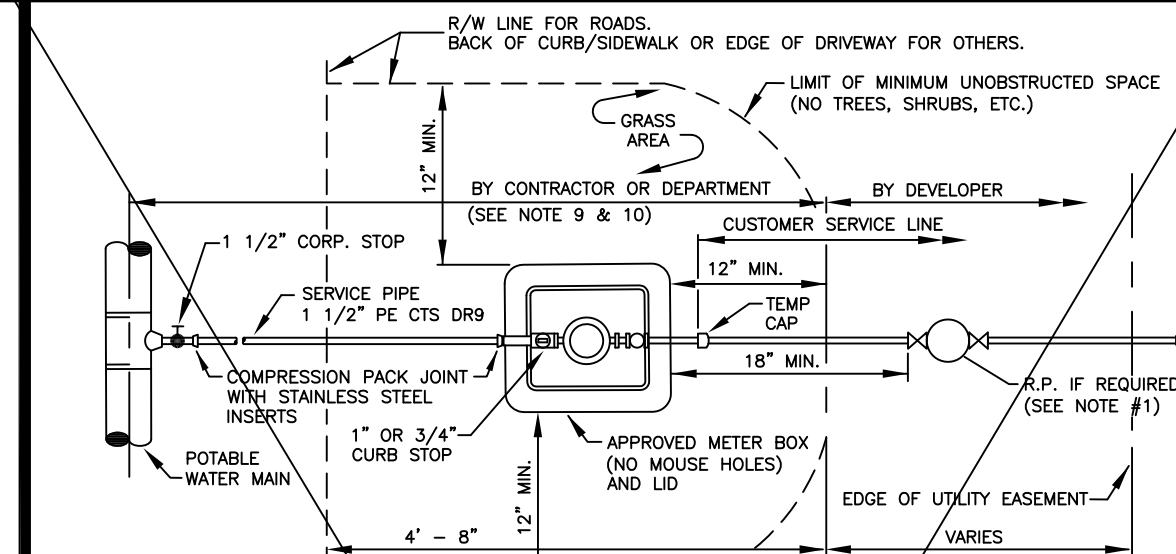
POTABLE WATER TYPICAL CONNECTION FOR MULTIPLE SERVICES (2 OR MORE - PVC)



- ALL SERVICES TO HAVE AN APPROVED REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTION ASSEMBLY (R.P.), THE INITIAL TEST OF THE R.P. SHALL BE PERFORMED BY THE DEPARTMENT. THE R.P. SHALL BE INSTALLED AS CLOSE AS POSSIBLE TO THE POINT OF SERVICE.
- 12" MINIMUM CLEARANCE TO BE MAINTAINED BETWEEN METER BOX/BYPASS AND ANY OBSTRUCTION.
- FOR INSTALLATION OF SERVICES UNDER DRIVEWAYS AND ROADWAYS USE MIN. 4" DIAMETER BLACK IRON, PVC SCH 40, OR HOPE SDR 9 CASING. CASING SHALL EXTEND MIN. 24" BEYOND EDGE OF PAVEMENT. END OF CASING TO BE SEALED WITH CEMENT. CASING SHALL BE COLOR-CODED BLACK, WHITE, BLUE, OR BLUE STRIPED.
- SUCCESSIVE TAPS INTO THE WATER MAIN SHALL BE SPACED A MINIMUM OF 18" APART. TAPS ON SAME SIDE OF A PVC PIPE SECTION SHALL BE MIN. 10' APART.
- METER SHALL NOT BE PLACED IN SIDEWALK OR DRIVEWAY AREAS. SERVICE LINES AND TAPS SHALL NOT BE PLACED UNDER DRIVEWAYS WHENEVER POSSIBLE.
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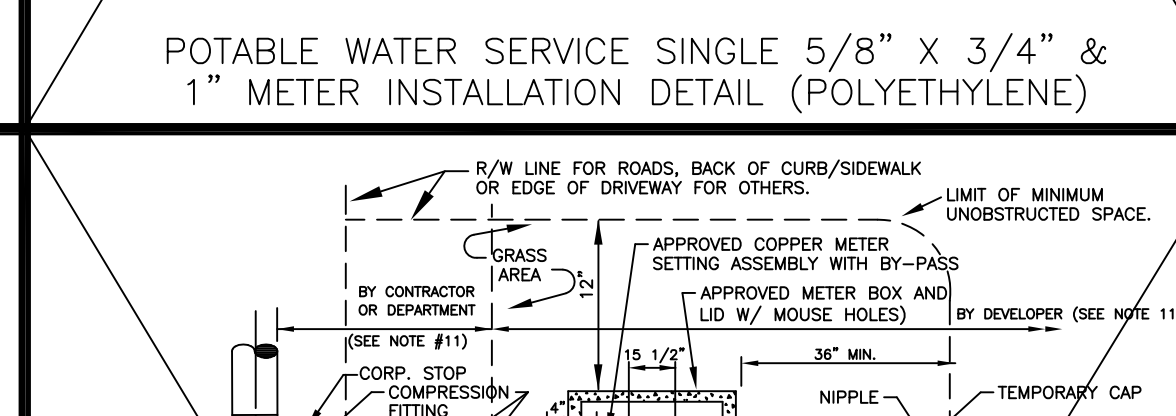
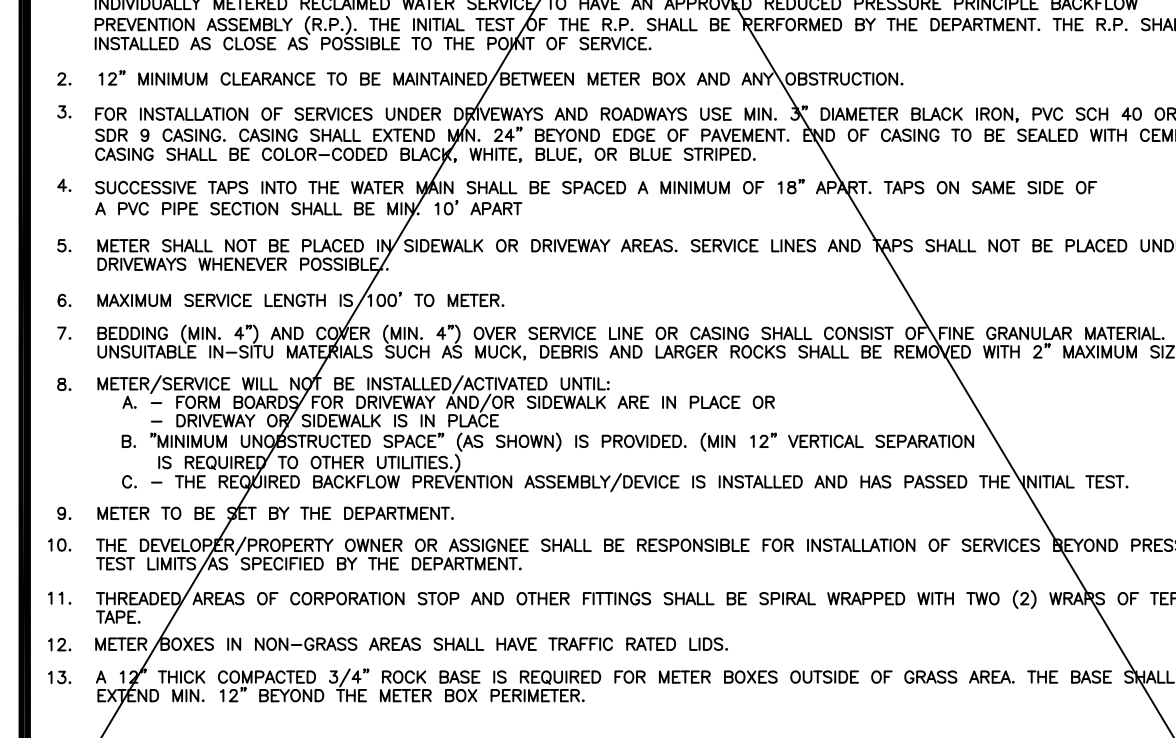


POTABLE WATER 3" METER INSTALLATION DETAIL

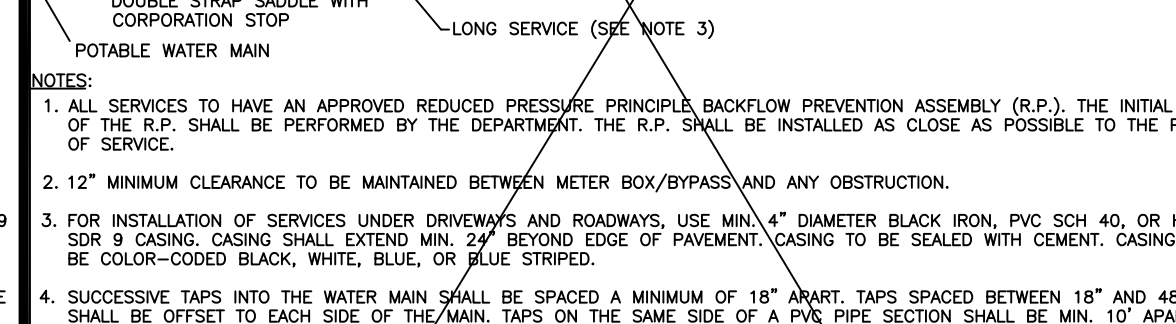


- SERVICE PIPING LARGER THAN 2" WILL NOT BE ACCEPTED. FOR SERVICE LINE UNDER PAVEMENT USE 4" SCH-40 PVC, BLACK IRON PIPE OR HOPE SDR9 CASING.
- METER LOCATION MUST CORRESPOND TO UNIT/BAY CONFIGURATION TO AVOID SERVICE LINE CROSSINGS.
- METER/SERVICE WILL NOT BE INSTALLED/ACTIVATED UNTIL:
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  - "MINIMUM UNOBSTRUCTED SPACE" (AS SHOWN) IS PROVIDED.
  - REQUIRED BACKFLOW PREVENTION ASSEMBLY/DEVICE IS INSTALLED AND HAS PASSED THE INITIAL TEST.
- TYPICAL SERVICE INSTALLATION DETAILS APPLY.
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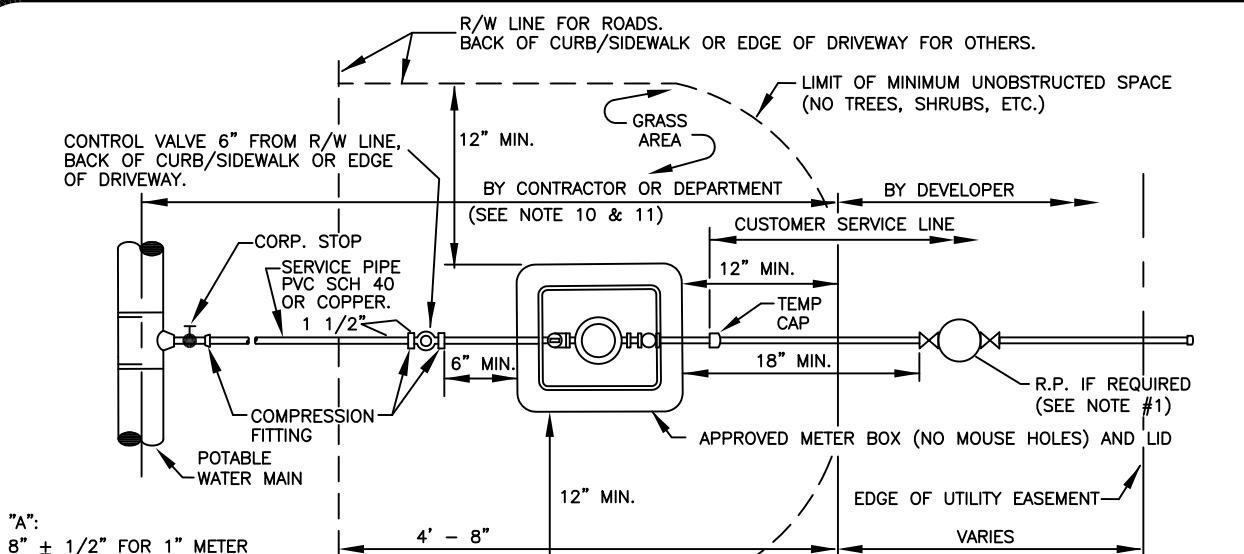
POTABLE WATER TYPICAL CONNECTION FOR MULTIPLE SERVICES (2 OR MORE - PVC)



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- THIS DESIGN IS NOT APPLICABLE FOR BULK WATER SERVICE CONNECTIONS.

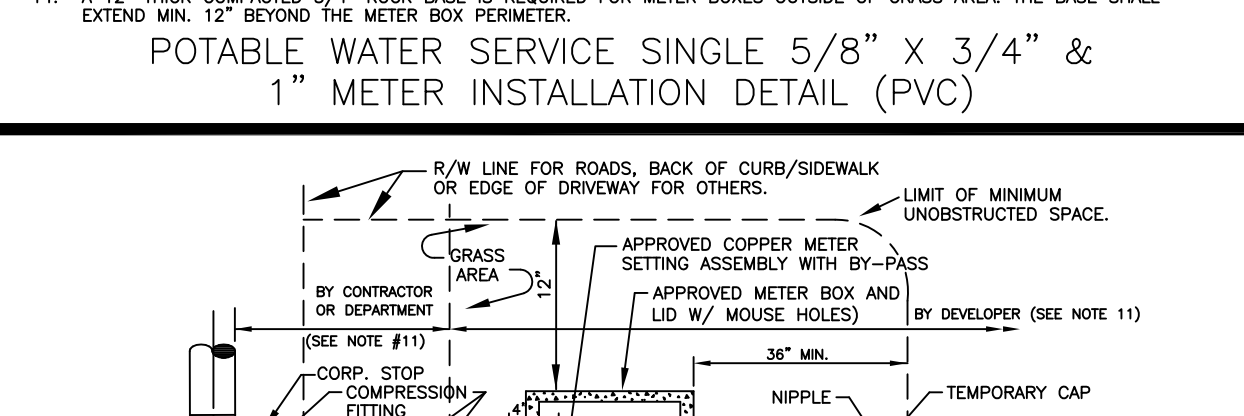
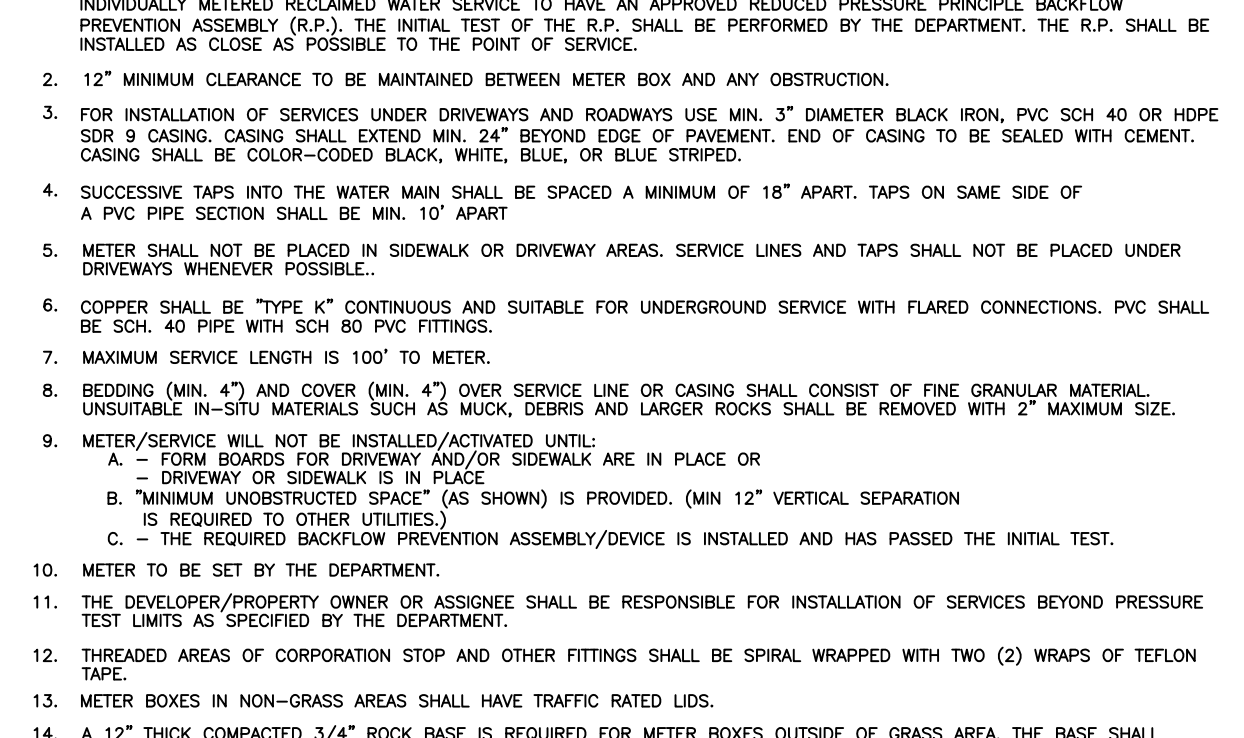


POTABLE WATER 2" METER INSTALLATION DETAIL (PVC)

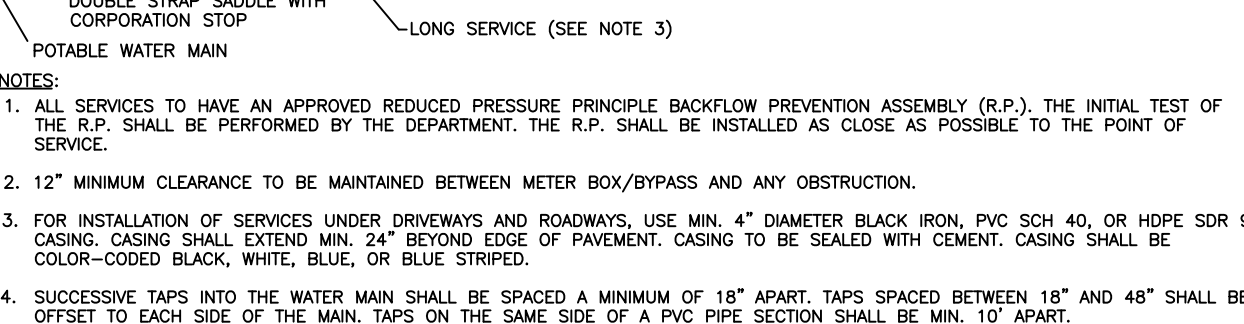


- SERVICE PIPING LARGER THAN 2" WILL NOT BE ACCEPTED. FOR SERVICE LINE UNDER PAVEMENT USE 4" SCH-40 PVC, BLACK IRON PIPE OR HOPE SDR9 CASING.
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POTABLE WATER TYPICAL CONNECTION FOR MULTIPLE SERVICES (2 OR MORE - PVC)



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POTABLE WATER SERVICE 1 1/2" METER INSTALLATION DETAIL (PVC)



