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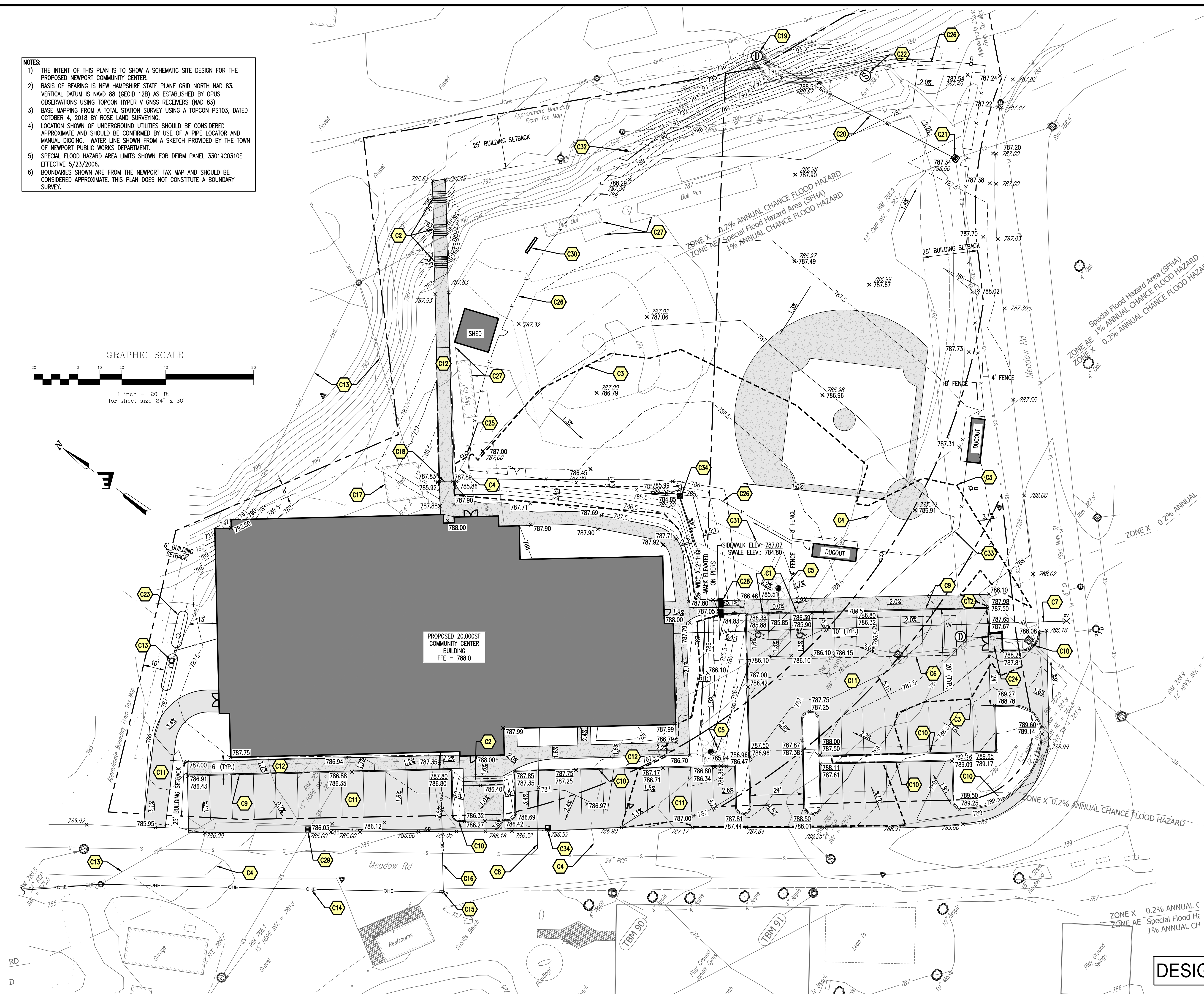
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Seal:

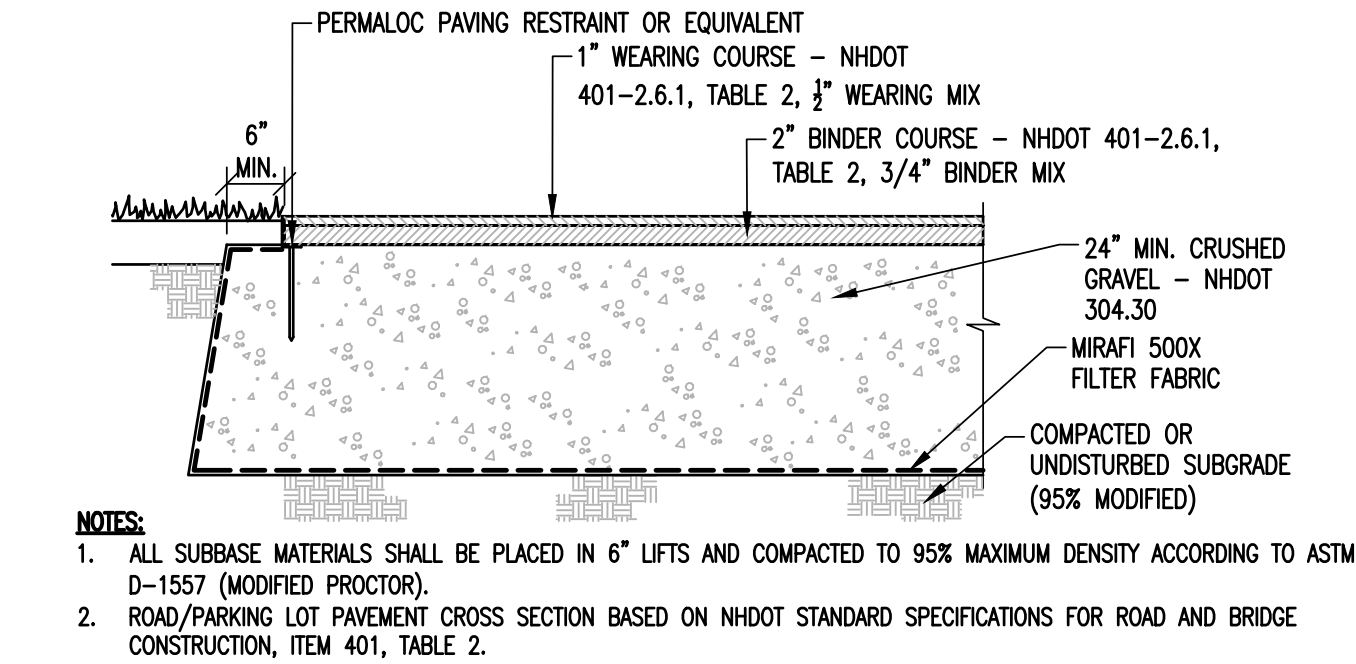
- C1** ADA COMPLIANT RAMP TO TWO VAN ACCESSIBLE HANDICAP PARKING SPACES.
- C2** CONCRETE STAIRS
- C3** AREA OF COMPENSATORY FLOODPLAIN STORAGE = 500 CY
- C4** 100-YR REGULATORY FLOODPLAIN BOUNDARY NOTE: FILL IN FLOODPLAIN CALCULATED TO BE 326 CY BASED ON INTERPOLATING BETWEEN FEMA CROSS SECTIONS BD AND A
- C5** FOCAL POINT BIOFILTRATION SYSTEM, 100 SF
- C6** ACF ENVIRONMENTAL R-TANK UNDERGROUND STORMWATER CHAMBER SYSTEM. 658 R-TANK HD DOUBLE UNITS.
- C7** 4" DI WATER SERVICE, 180± LF WET TAP AND 4" VALVE AT EXISTING MAIN
- C8** 6" SDR 35 SEWER SERVICE, 60± LF CONNECT TO EXISTING 24" RCP
- C9** VERTICAL GRANITE CURB
- C10** SLOPED GRANITE CURB
- C11** ASPHALT PARKING AREA
- C12** CONCRETE SIDEWALK
- C13** EXISTING ELECTRIC LINES AND POLE TO BE REMOVED
- C14** NEW 3-PHASE OVERHEAD ELECTRIC.
- C15** NEW ELECTRIC UTILITY POLE.
- C16** NEW UNDERGROUND ELECTRIC SERVICE.
- C17** SHED TO BE RELOCATED. NEW LOCATION TB
- C18** 8" HDPE CULVERT
- C19** NEW DRAIN MANHOLE CONNECT TO EXISTING CULVERT IN SLOPE PROVIDE NEW 15" HDPE OUTLET PIPE
- C20** NEW 15" HDPE STORM PIPE
- C21** RAISE FRAME AND GRATE, CORE HOLE FOR NEW 15" HDPE AND CONNECT NEW PIPE.
- C22** ADJUST SEWER RIM TO FINISHED GRADE. REPLACE BARREL SECTION AS REQUIRED.
- C23** 2 X 2,000 GALLON BURIED PROPANE TANKS
- C24** 6' BY 8' DUMPSITER PAD AND ENCLOSURE.
- C25** NEW BALL FIELD LIGHTING (BY OTHERS)
- C26** NEW BALL FIELD FENCING
- C27** EXISTING FIELD ELEMENTS TO BE REMOVED
- C28** 24" HDPE CULVERT
- C29** NEW CATCH BASIN, CONNECT EXISTING PIPE PROVIDE 2' DEEP SUMP DEPTH TO INVERT APPROXIMATELY 5'
- C30** SCOREBOARD
- C31** PORTABLE BLEACHERS
- C32** FLAGPOLE
- C33** BACKSTOP
- C34** NEW CATCH BASIN, PROVIDE 2' DEEP SUMP DEPTH TO INVERT APPROXIMATELY 5'

C-2.0

## DESIGN DEVELOPMENT

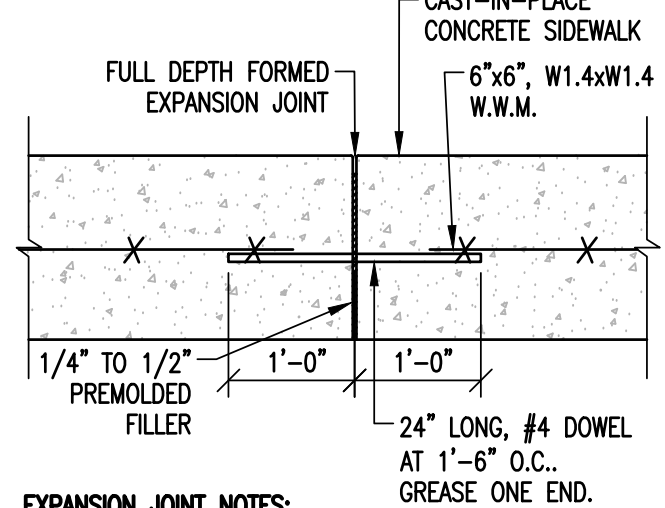




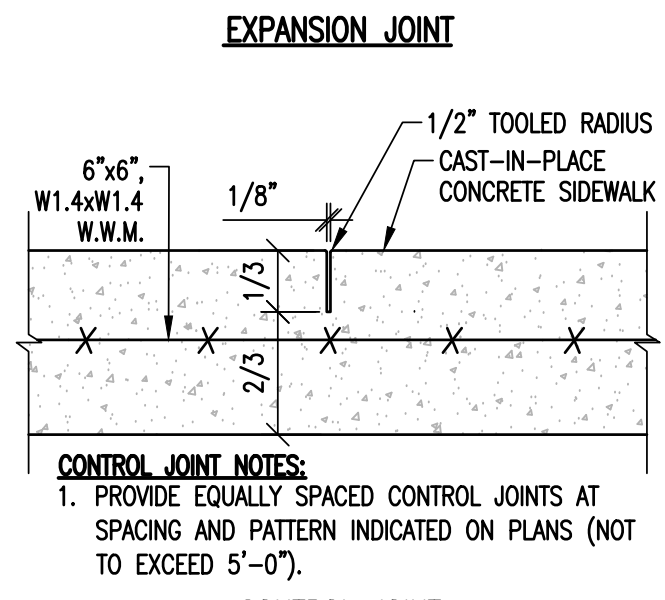


ROADWAY AND SIDEWALK PAVEMENT SECTION  
NOT TO SCALE 1

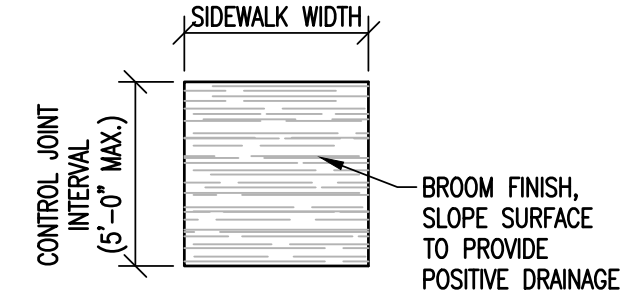
- CONCRETE NOTES:**
- CLASS B CONCRETE SHALL HAVE:  
A. MIN. COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS  
B. AIR ENTRAINMENT OF 5% TO 7% BY VOLUME.  
C. MAXIMUM WATER-CEMENT RATIO= 0.60.  
D. SLUMP: 2-4 INCHES BEFORE ADDITION OF WATER REDUCER, 6-8 INCHES AFTER THE ADDITION OF WATER REDUCER.
  - PLACE NO CONCRETE WHEN AMBIENT TEMPERATURE IS BELOW 40 DEGREES FAHRENHEIT OR MORE THAN 90 DEGREES FAHRENHEIT.
  - NO CONCRETE SHALL BE DROPPED MORE THAN SIX FEET INSIDE A FORM.
  - MAINTAIN TEMPERATURE OF CONCRETE SURFACE AT MINIMUM 50 DEGREES FAHRENHEIT FOR 72 HOURS AFTER PLACING CONCRETE. PREHEAT ALL ENCLOSURES FOR A MINIMUM OF 2 HOURS TO PROVIDE A MIN. SURFACE TEMPERATURE OF 45 DEGREES FAHRENHEIT.
  - ALLOW TO SET AND CURE ALL THRUST BLOCKS, CONCRETE SUPPORTS, AND ANCHORS A MINIMUM OF 24 HOURS BEFORE BACKFILLING.
  - COMPLETELY CURE AND SET CONCRETE BEFORE ANY HYDROSTATIC OR LEAKAGE TESTING OF PIPELINE NONSHRINK GROUT SHALL BE HALCO TRADEMARK, AS MANUFACTURED BY LEHN & FINK INDUSTRIAL PRODUCTS.
  - DO NOT PLACE ANY MORTAR OR GROUT WHEN AMBIENT TEMPERATURE IS BELOW 40 DEGREES FAHRENHEIT.
  - MORTAR FOR MANHOLES SHALL CONSIST OF THE FOLLOWING:  
A. CEMENT-TYPE II, ASTM C150.  
B. HYDRATED LIME-TYPE N, ASTM C207.  
C. SAND- ASTM C 33, FINE AGGREGATES FOR CONCRETE.  
D. WATER-CLEAN, SUITABLE FOR DRINKING.
  - MIX(BY VOLUME): 1 PART CEMENT, 1/2 PART LIME, 4 1/2 PARTS SAND.



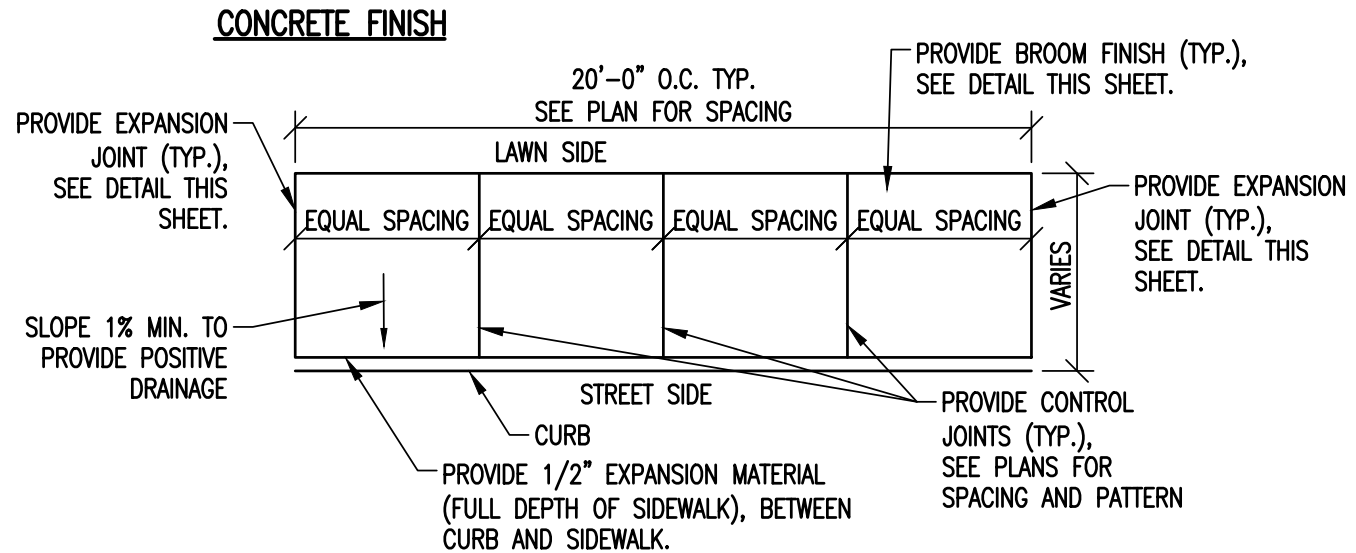
- EXPANSION JOINT NOTES:**
- PROVIDE (1) EXPANSION JOINT EVERY 20'-0" MAX.
  - PROVIDE (2) EXPANSION JOINTS AT EVERY DRIVEWAY INTERSECTION
  - WHERE SIDEWALK IS ADJACENT TO CURB, BOLLARD OR OTHER HARD FEATURE, INSTALL 1/2" EXPANSION MATERIAL (FULL DEPTH OF SIDEWALK), BETWEEN FEATURE AND SIDEWALK.
  - WHERE SIDEWALK IS ADJACENT TO ENTRY/EXIT DOOR PADS WITH FROST WALL FOUNDATIONS, SIDEWALK SHALL BE DOWELED TO PAD WITH 24" LONG #4 DOWELS (CENTERED) AT 1'-6" oc (PORTION OF DOWEL IN SIDEWALK TO BE GREASED).
  - CAULK ALL EXPANSION JOINTS WITH COLOR MATCHING SILICONE CAULKING.



CONTROL JOINT

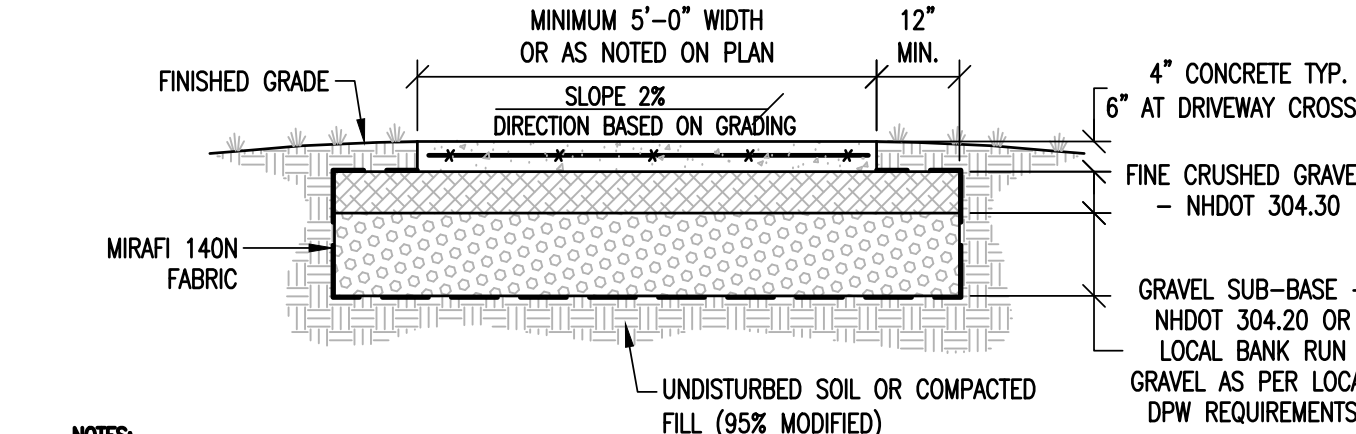


SIDEWALK FINISH NOTES:



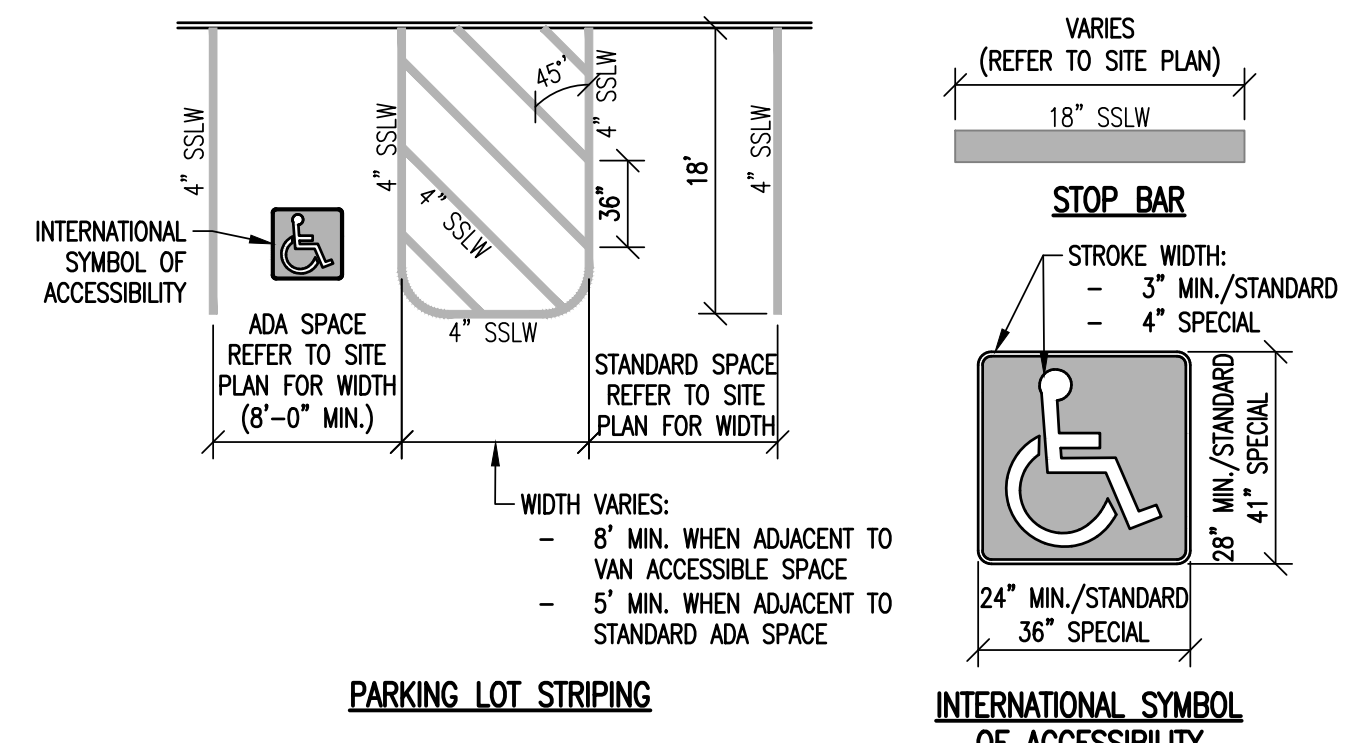
JOINT SPACING AND LAYOUT

CONC. SIDEWALK JOINTS, FINISH, AND NOTES  
NOT TO SCALE 2

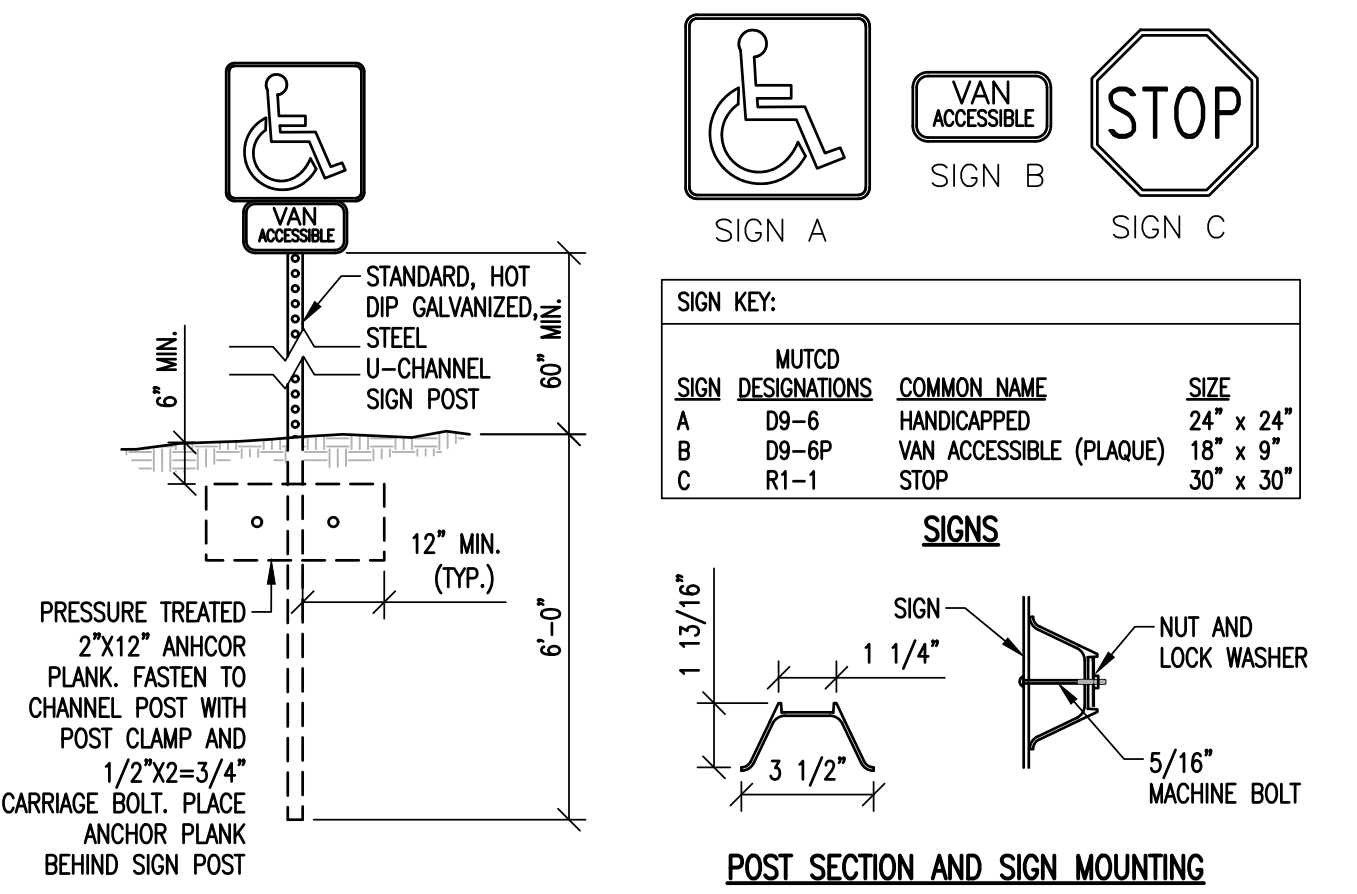


- NOTES:**
- PLACE A TOOLED JOINT 1/8" WIDE AND AT LEAST 1/3 OF THE DEPTH, TYPICALLY AT INTERVALS MATCHING THE SIDEWALK WIDTH, OR AS NOTED ON PLANS (NOT TO EXCEED 10'-0").
  - PLACE EXPANSION JOINT AS INDICATED ON PLANS, NOT TO EXCEED 20'-0" MAX.
  - BROOM FINISH WITH SMOOTH TROWELED EDGES. TREAT WITH SILANE-SILOXANE OR EQUAL.
  - CAST-IN-PLACE CONCRETE TO BE 4000 psi CONCRETE, 5%-7% AIR ENTRAINMENT WITH 6x6-W4.0W4.0 REINFORCING CENTERED IN SIDEWALK.
  - WHERE SIDEWALK IS ADJACENT TO ENTRY/EXIT DOOR PADS WITH FROST WALL FOUNDATIONS, SIDEWALK SHALL BE DOWELED TO PAD WITH 24" LONG #4 DOWELS (CENTERED) AT 1'-6" oc (PORTION OF DOWEL IN SIDEWALK TO BE GREASED).
  - WHERE SIDEWALK IS ADJACENT TO CURB, BOLLARD OR OTHER HARD FEATURE, INSTALL 1/2" EXPANSION MATERIAL (FULL DEPTH OF SIDEWALK), BETWEEN FEATURE AND SIDEWALK.

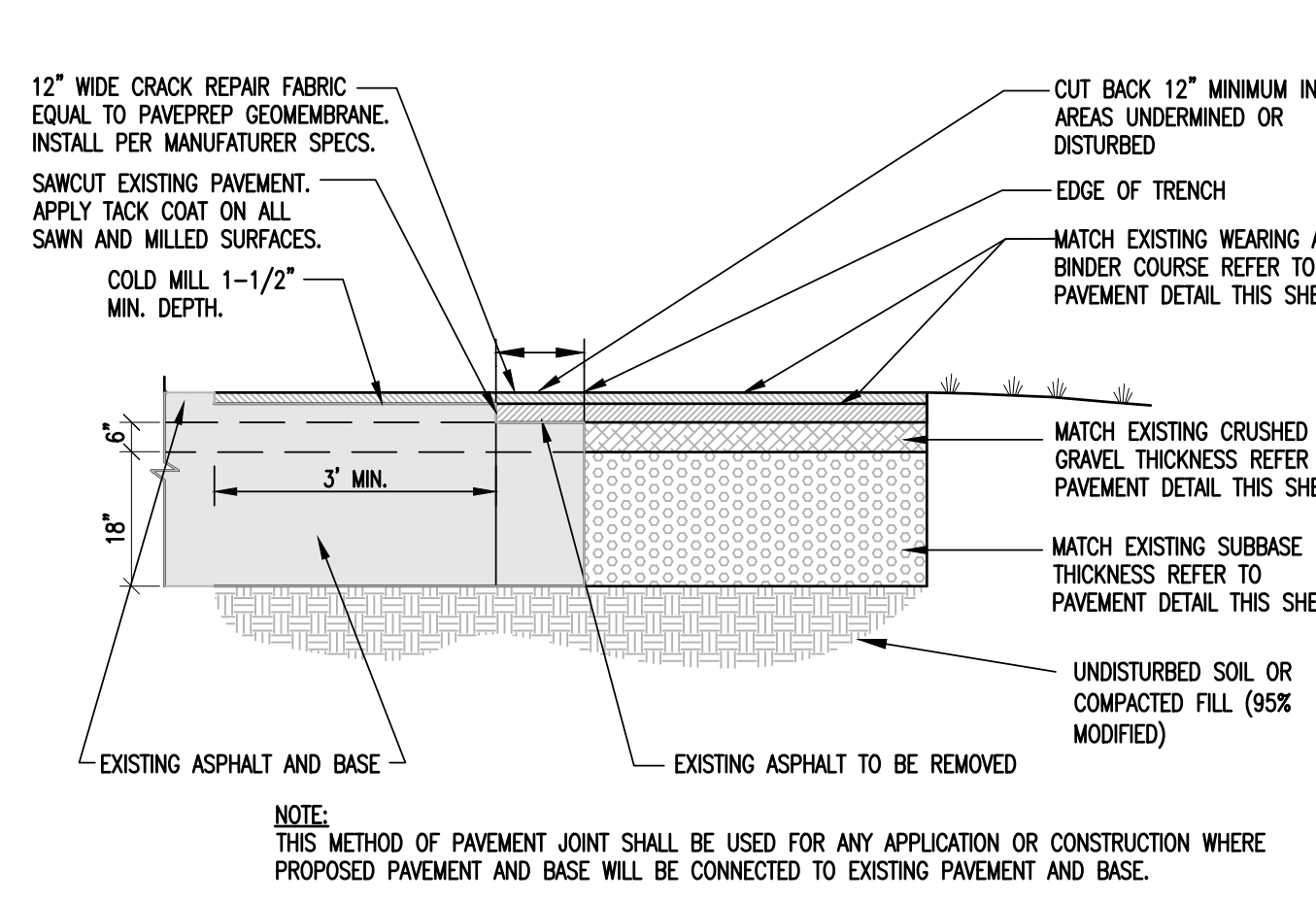
CONCRETE SIDEWALK DETAIL  
NOT TO SCALE 3



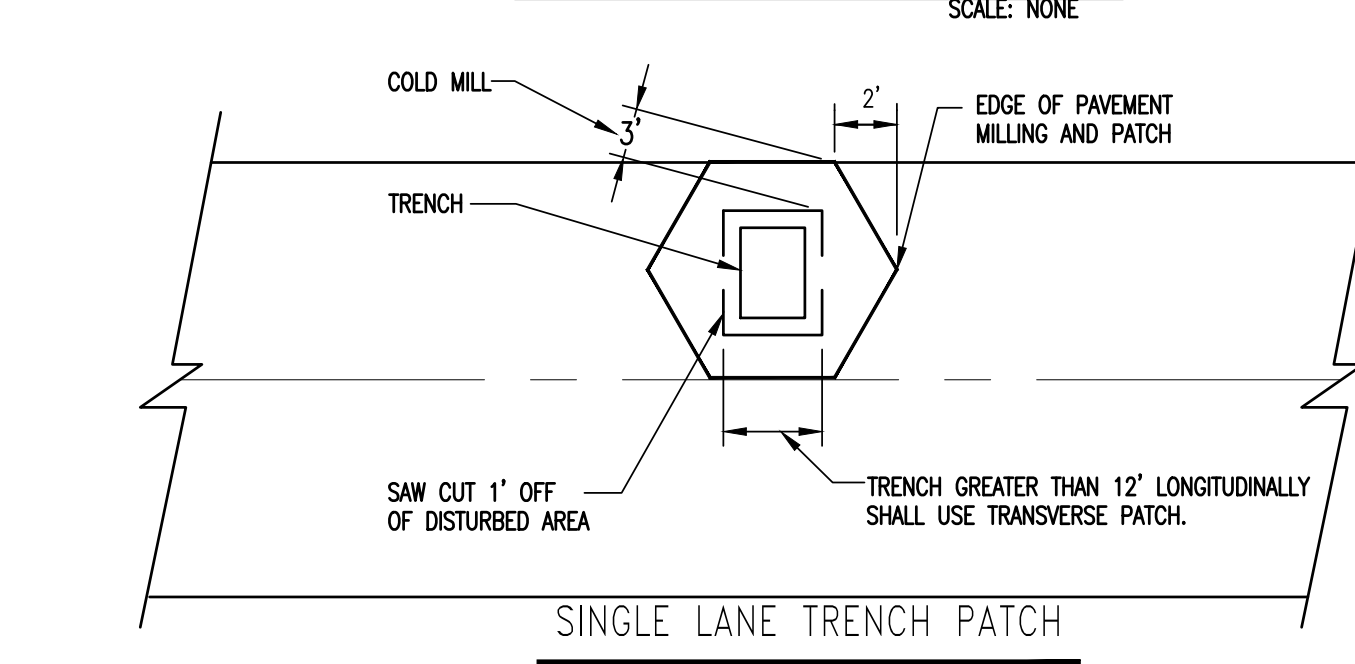
PAVEMENT MARKINGS DETAIL  
NOT TO SCALE 4



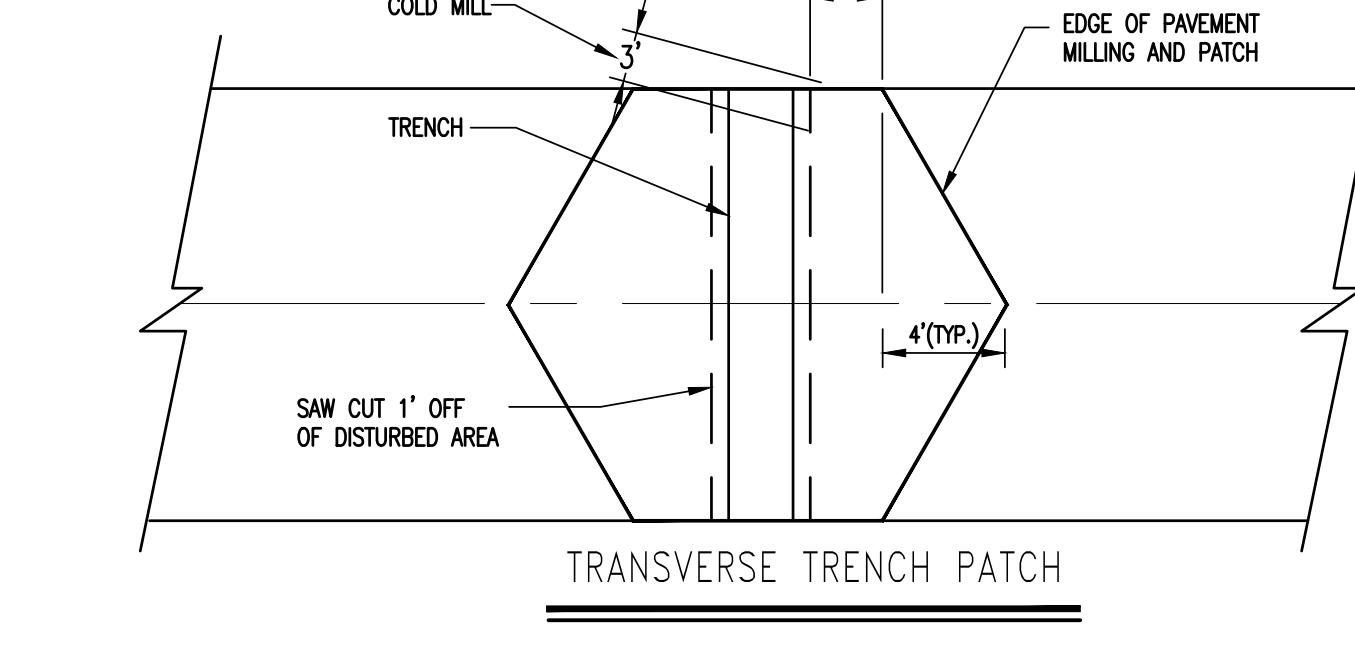
SIGN AND POST DETAILS  
NOT TO SCALE 5



TRENCH CROSS SECTION DETAIL  
SCALE: NONE

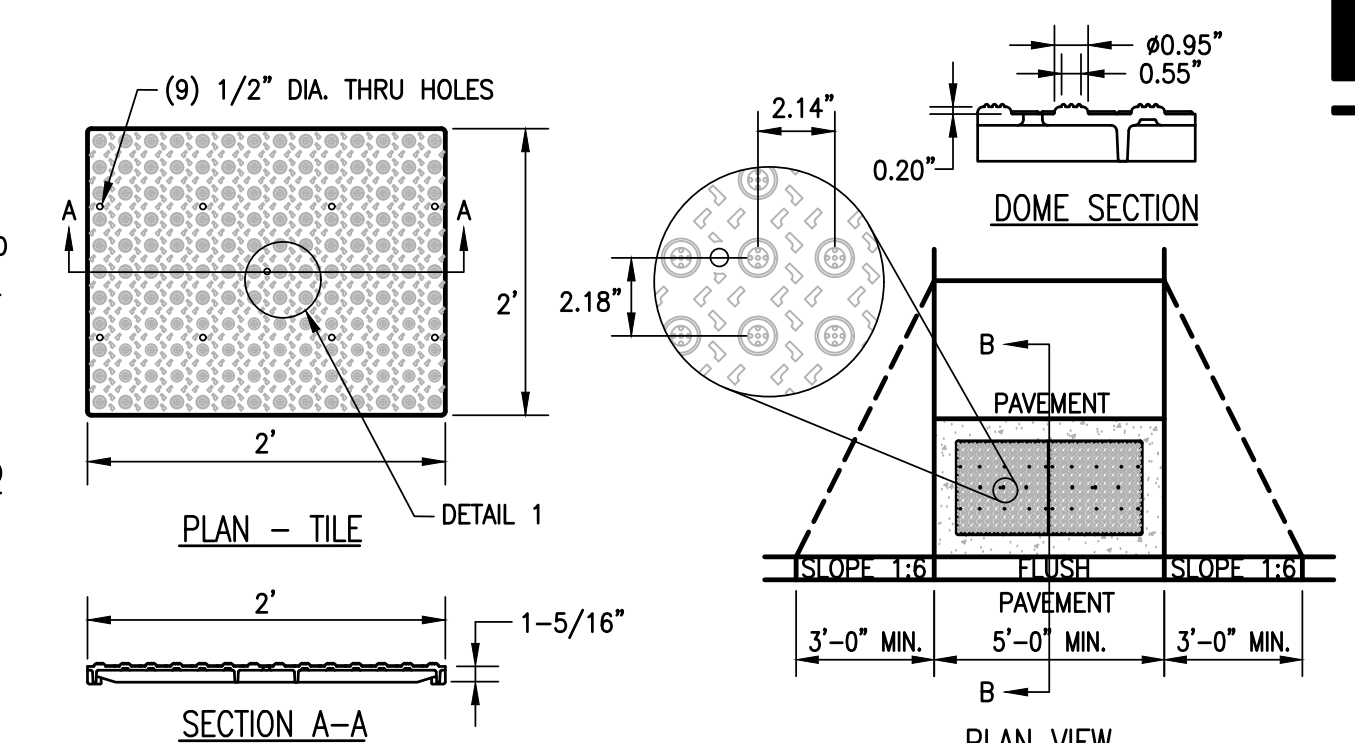


SINGLE LANE TRENCH PATCH

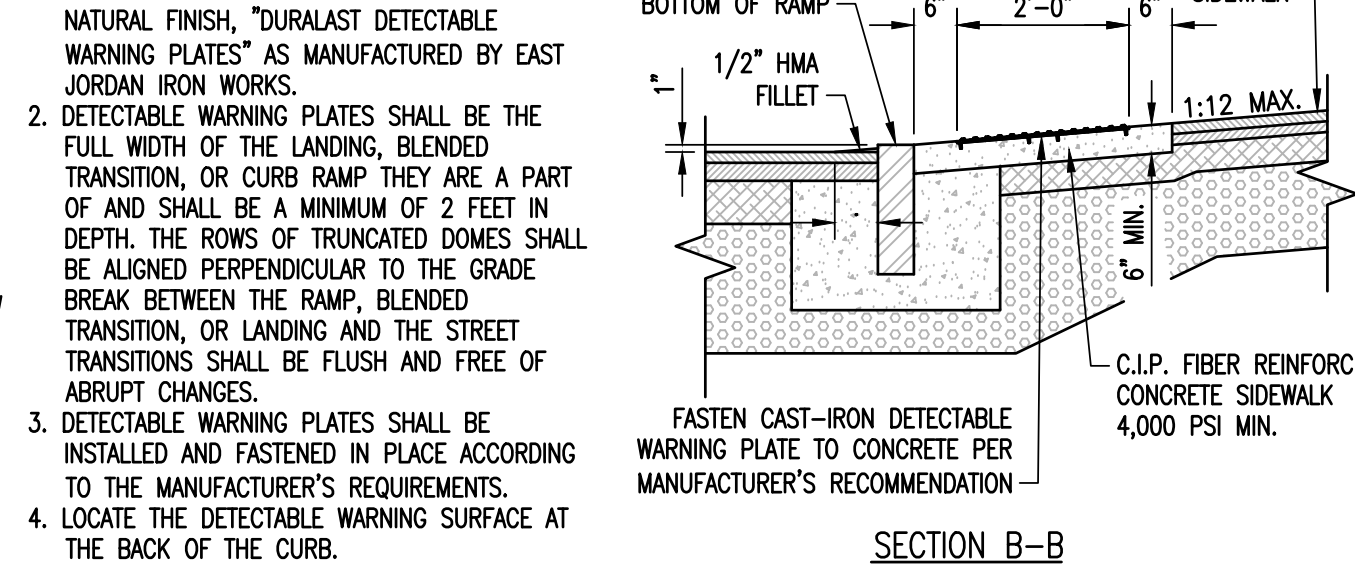


TRANSVERSE TRENCH PATCH

ASPHALT PAVEMENT TRENCH PATCH DETAIL  
SCALE: NONE 6

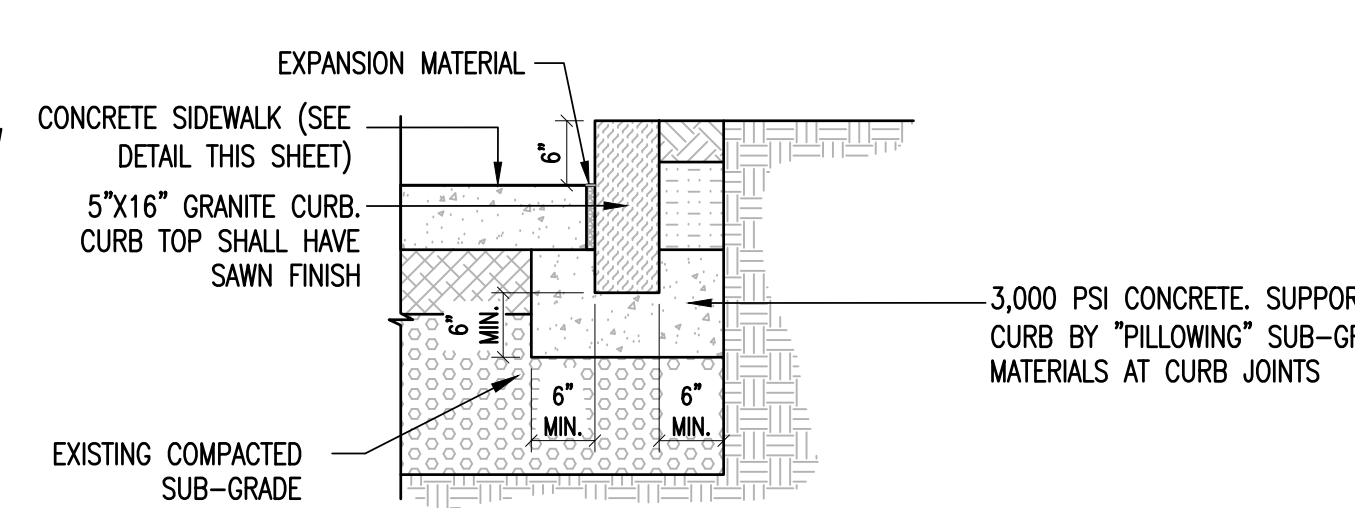


ACCESSIBLE RAMP DETECTABLE WARNING PLATES  
NOT TO SCALE 7

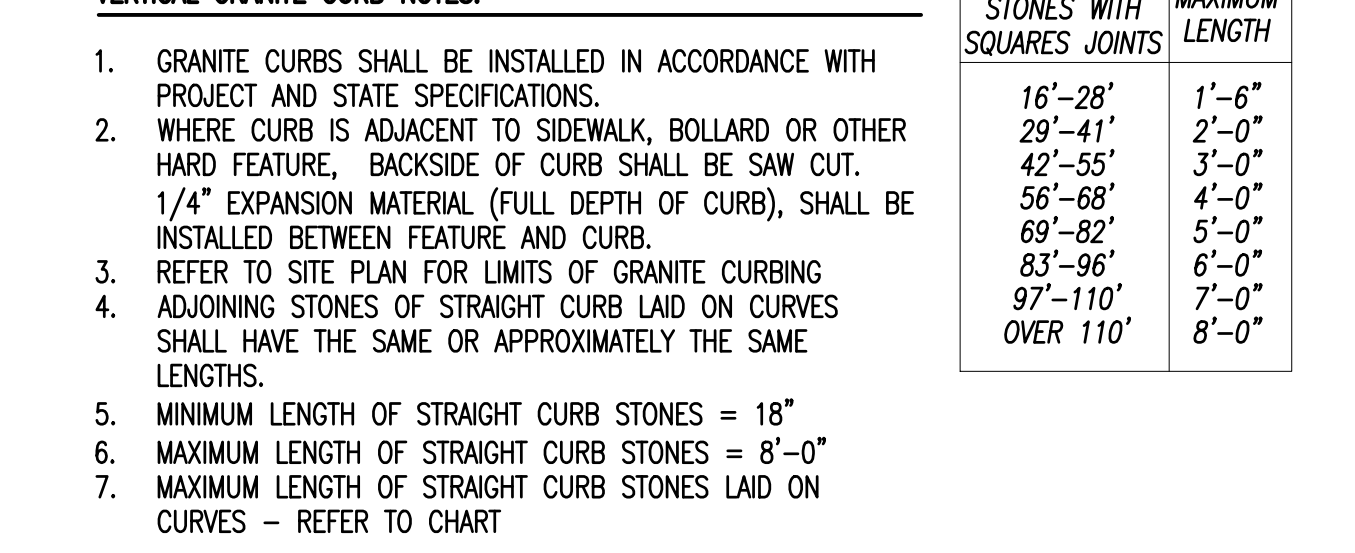


VERTICAL GRANITE CURB NOTES:

RADIUS FOR STONES WITH SQUARES JOINTS	MAXIMUM LENGTH
16'-28'	1'-6"
29'-41'	2'-0"
42'-55'	3'-0"
56'-68'	4'-0"
69'-82'	5'-0"
83'-96'	6'-0"
97'-110'	7'-0"
OVER 110'	8'-0"



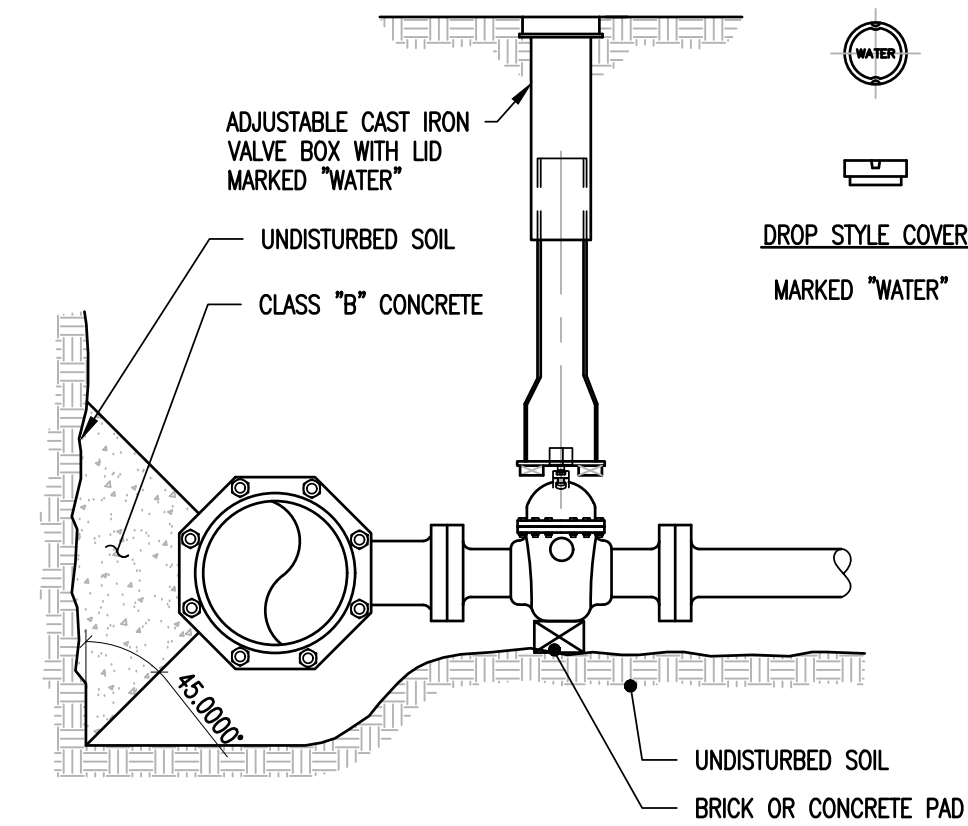
TYPICAL GRANITE CURB DETAILS  
NOT TO SCALE 8



SLOPED GRANITE CURB  
NOT TO SCALE 9

DESIGN DEVELOPMENT





- NOTES:**
1. AREA OF BEARING AGAINST UNDISTURBED SOIL SHALL BE THE SAME AS FOR 1/4" BEND (90°) THRUST BLOCK
  2. ALL PIPE SHOULD HAVE A MINIMUM DEPTH OF 5'-6" FROM TOP OF PIPE TO FINISH GRADE.

## TAPPING SLEEVE AND VALVE DETAIL

NOT TO SCALE 1

INSULATION IN PAVED AREAS:			
COVER	INSUL. WIDTH	INSUL. THICKNESS	
0'-3"		LOWER DRAIN	
3'-4"	4'-0"	3"	
4'-6"	4'-0"	2"	
> 6'	NO INSUL. REQUIRED		

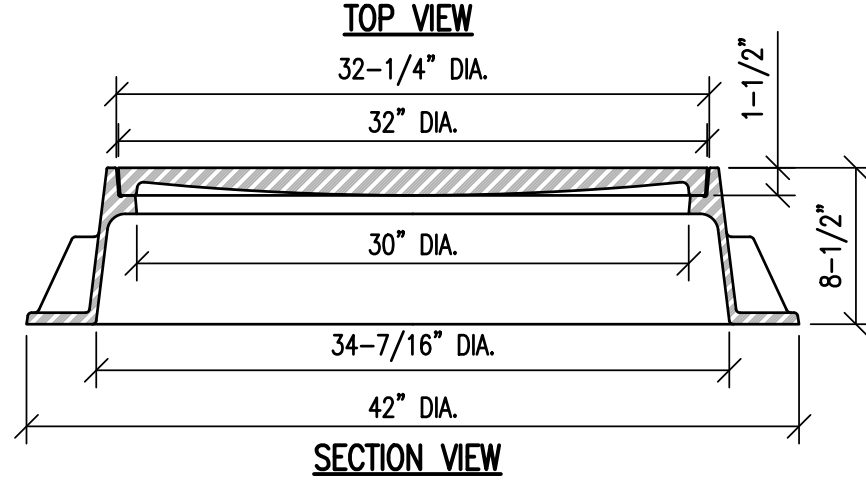
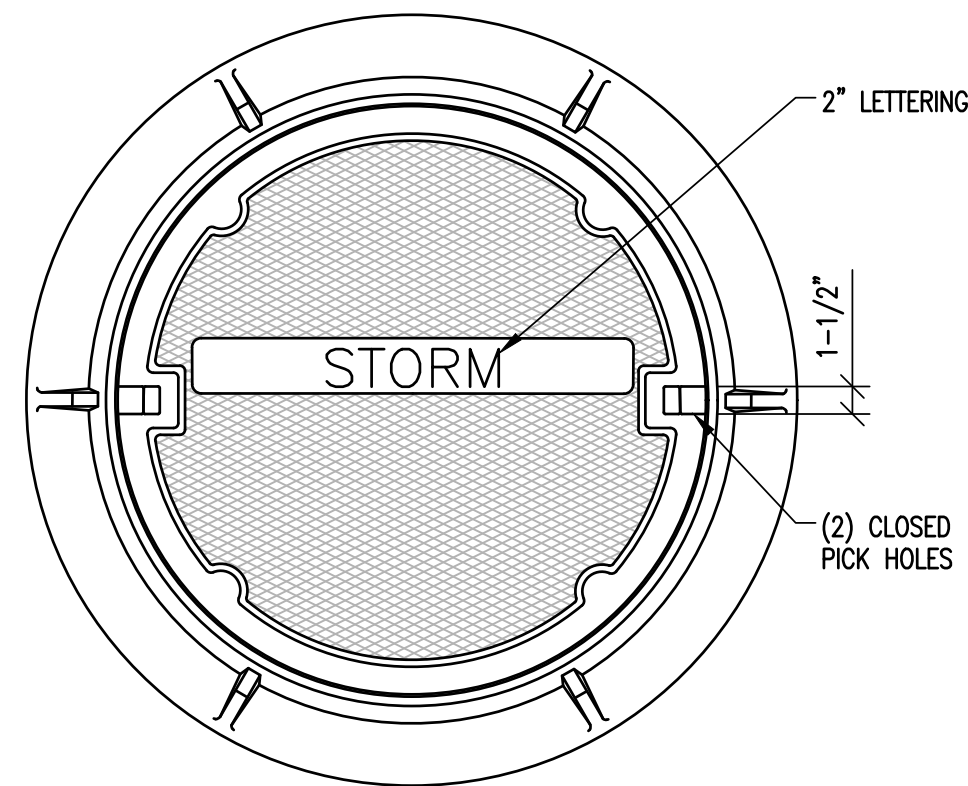
INSULATION IN UNPAVED AREAS:			
COVER	INSUL. WIDTH	INSUL. THICKNESS	
0'-2"		LOWER DRAIN	
2'-3"	4'-0"	3"	
3'-5"	4'-0"	2"	
> 5'	NO INSUL. REQUIRED		

**TRENCH NOTES**

1. REFER TO APPLICABLE TRENCH DETAIL FOR SPECIFIC BACKFILL INFORMATION.

## INSULATION OVER SHALLOW DRAIN DETAIL

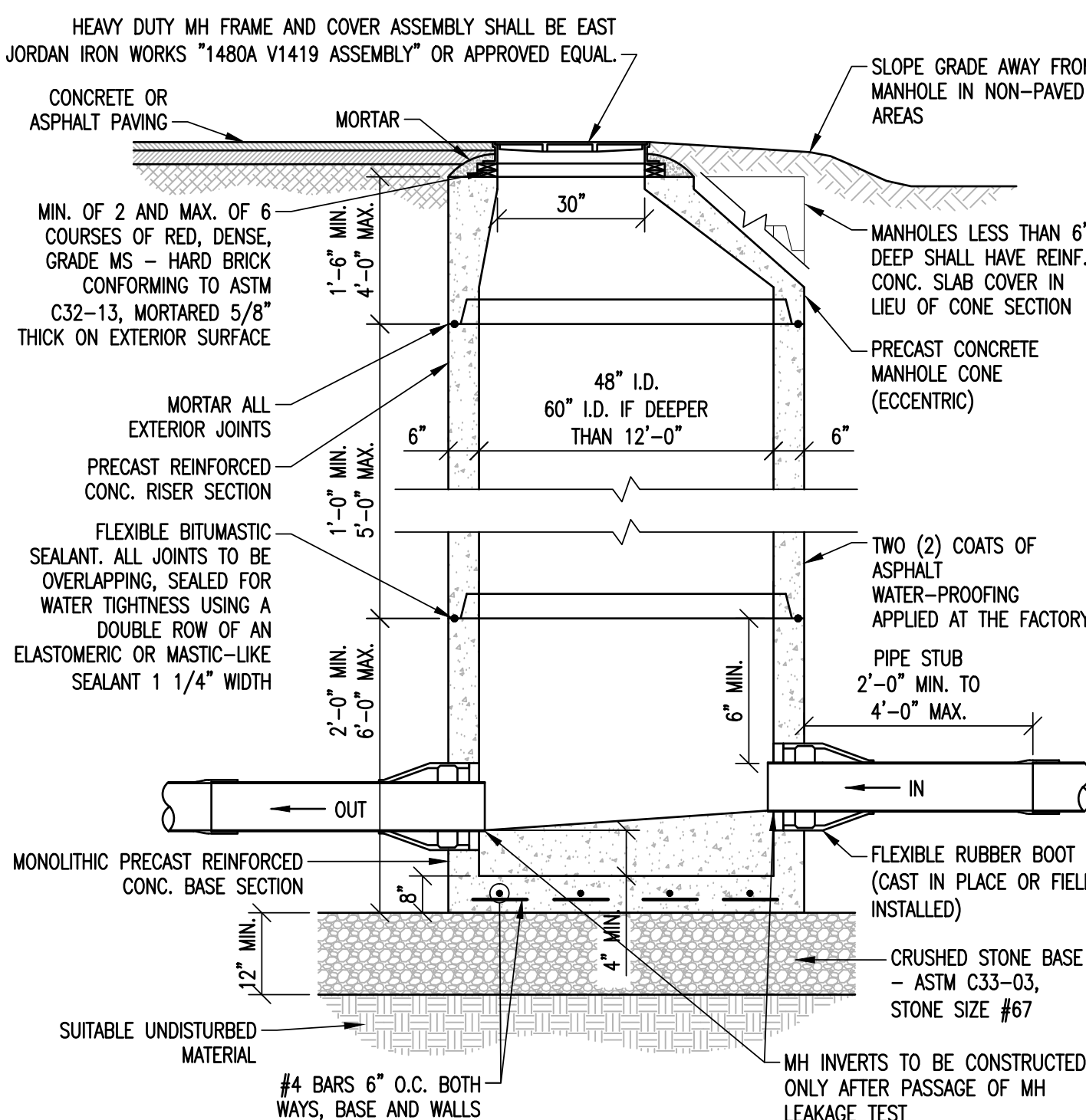
NOT TO SCALE 4



- NOTES:**
1. ALL DIMENSIONS SHOWN HERE ARE NOMINAL.
  2. COVER SHALL BE HEAVY DUTY (H-20) LOAD RATED.
  3. FRAME AND COVER ASSEMBLY SHALL BE EAST JORDAN IRON WORKS "1480A V1419 ASSEMBLY" OR APPROVED EQUAL.

## STORMWATER MANHOLE FRAME & COVER

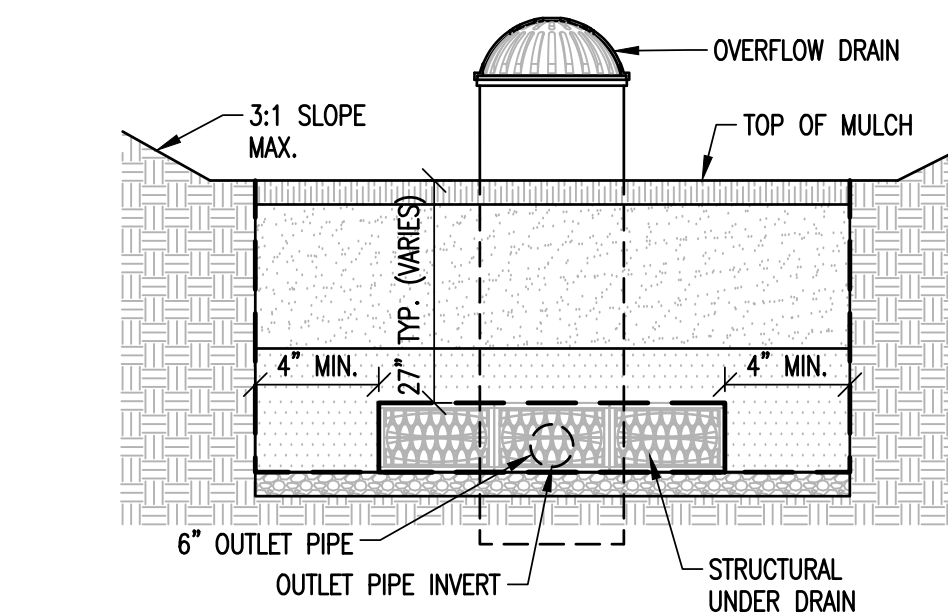
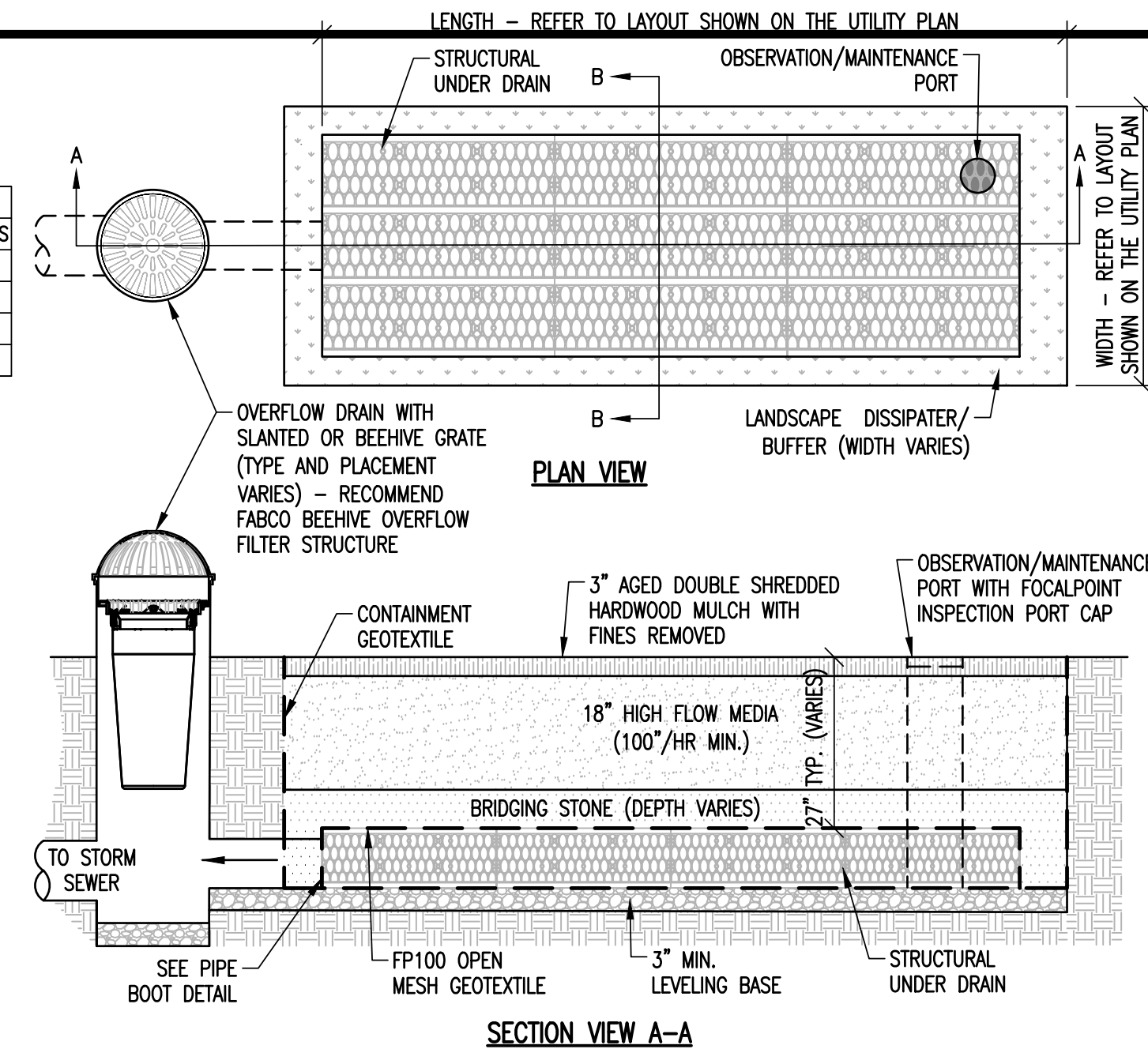
NOT TO SCALE 5



- NOTES:**
1. PROVIDE SMOOTH SWEEPING TRANSITIONS BETWEEN INVERTS OF INTERSECTING PIPE.
  2. IF DEPTH OF MANHOLE IS 6 FT. OR LESS FROM RIM TO CENTERLINE INVERT, THEN A FLAT TOP WILL BE INSTALLED. IF DEPTH OF MANHOLE FROM RIM TO CENTERLINE INVERT IS MORE THAN 6 FT., THEN AN ECCENTRIC CONICAL TOP WILL BE INSTALLED.
  3. INVERTS AND SHELVES SHALL BE PLACED AFTER TESTING.
  4. MANHOLE AND COVER SHALL BE DESIGNED FOR H2O LOADING.

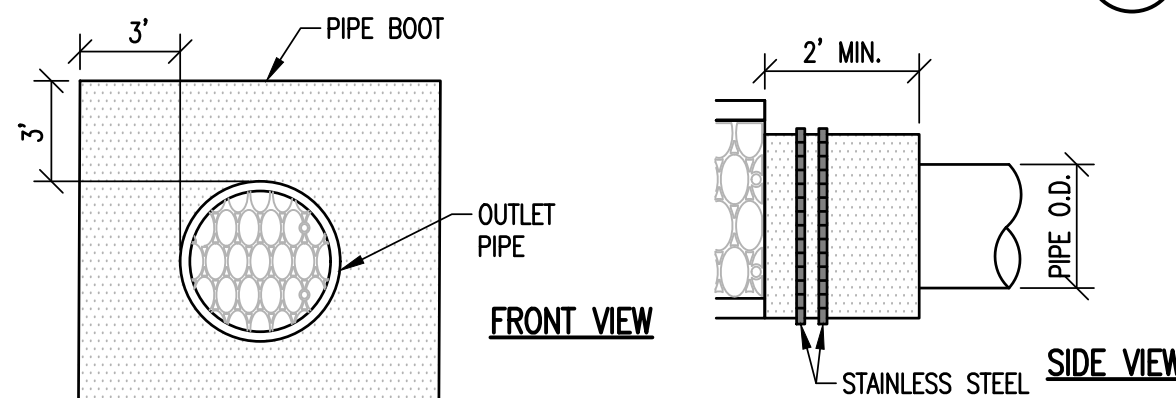
## DRAINAGE MANHOLE DETAIL

NOT TO SCALE 6



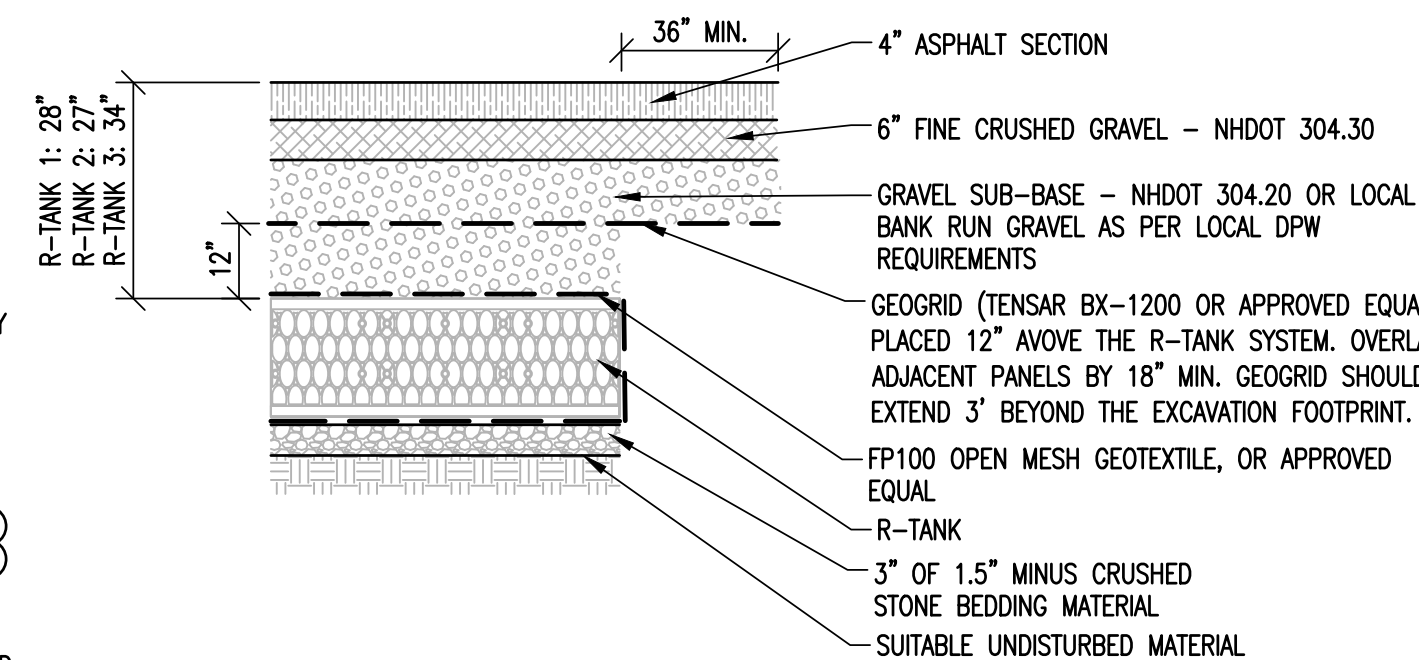
## FOCALPOINT STORMWATER SYSTEM

NOT TO SCALE 7



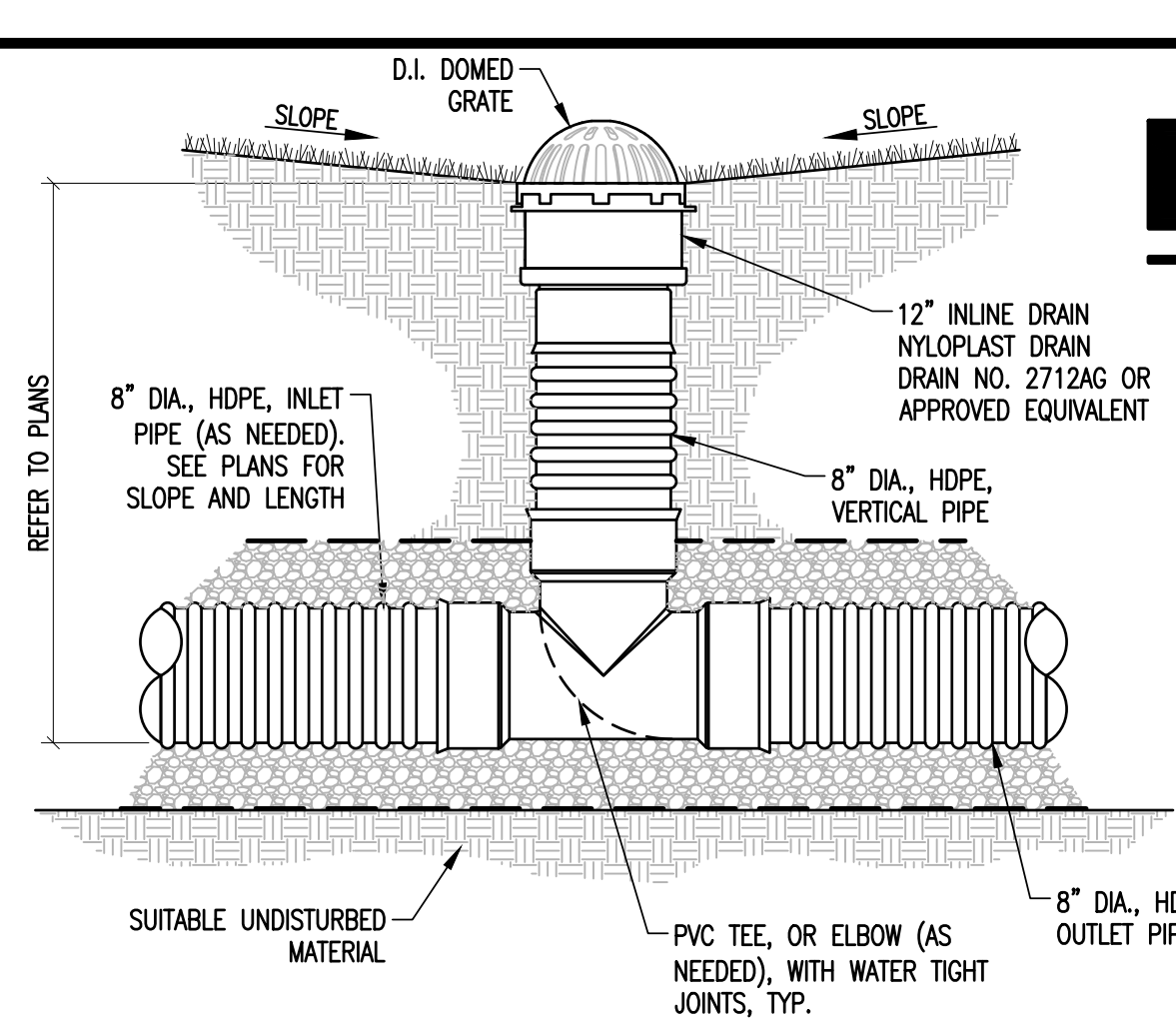
## FOCALPOINT PIPE BOOT DETAIL

NOT TO SCALE 8



## R-TANK UNDER PAVEMENT SECTION

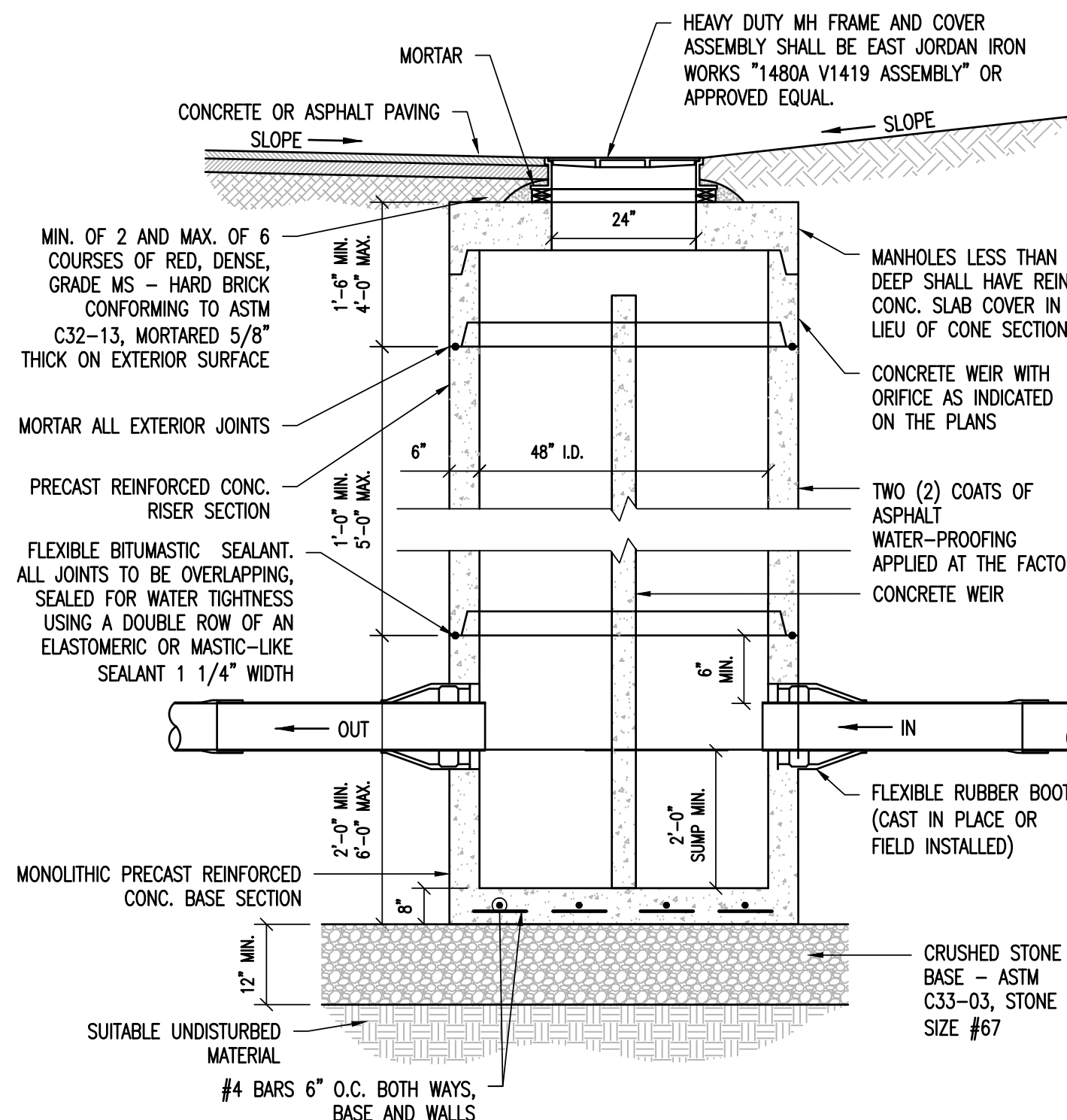
NOT TO SCALE 9



- NOTE:**
1. REPLACE 90° ELBOW WITH A TEE WHEN THERE IS AN INLET AND OUTLET PIPE. DRILL A 1/2" HOLE IN THE ELBOW (OR TEE) TO HELP DRAIN STANDING WATER FROM THE STONE AROUND THE DRAIN.

## INLINE YARD DRAIN DETAIL

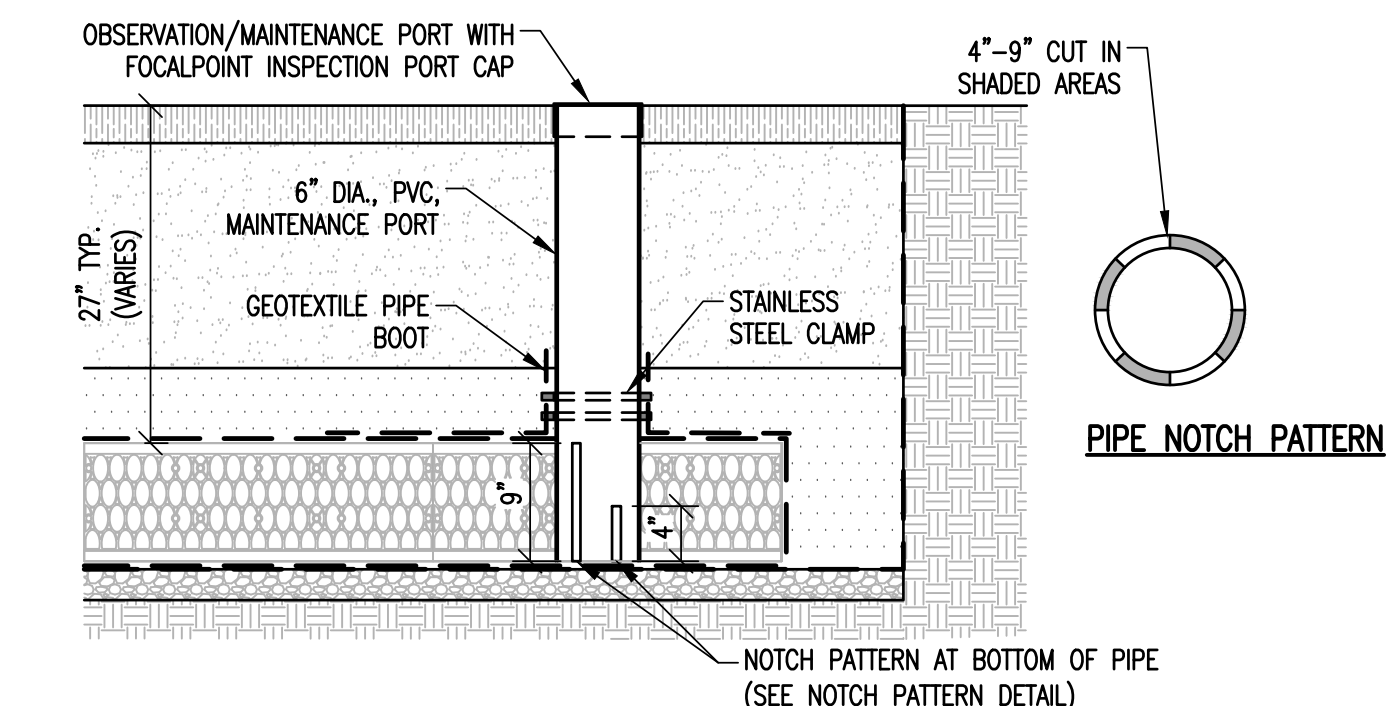
NOT TO SCALE 10



- NOTES:**
1. IF DEPTH OF MANHOLE IS 6 FT. OR LESS FROM RIM TO CENTERLINE INVERT, THEN A FLAT TOP WILL BE INSTALLED. IF DEPTH OF MANHOLE FROM RIM TO CENTERLINE INVERT IS MORE THAN 6 FT., THEN AN ECCENTRIC CONICAL TOP WILL BE INSTALLED.
  2. CATCH BASIN AND GRATE SHALL BE DESIGNED FOR H2O LOADING.

## OUTLET CONTROL STRUCTURE

NOT TO SCALE 11



## FOCALPOINT OBSERVATION PORT DETAIL

NOT TO SCALE 12

## TYPICAL STORM DRAIN TRENCH DETAIL

NOT TO SCALE 3