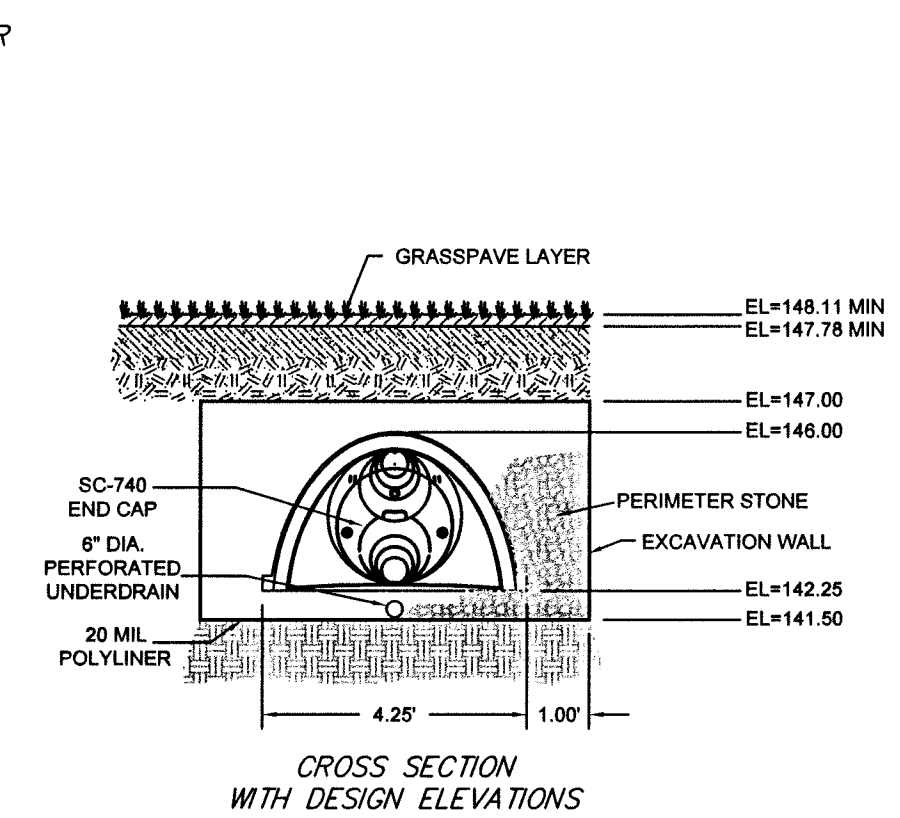
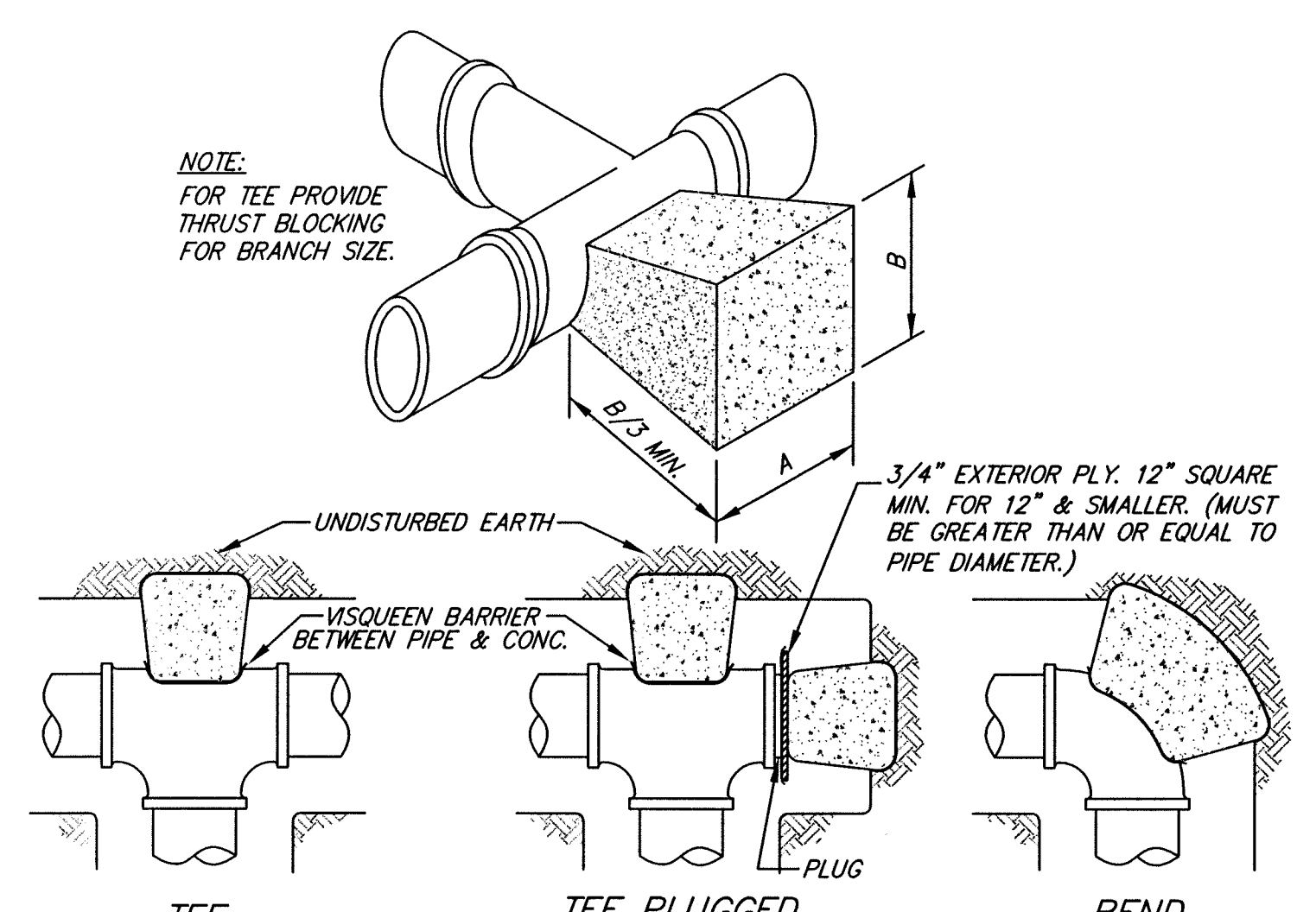


**STORMTECH CHAMBERS - ISOLATOR ROW**  
NOT TO SCALE



CROSS SECTION WITH DESIGN ELEVATIONS

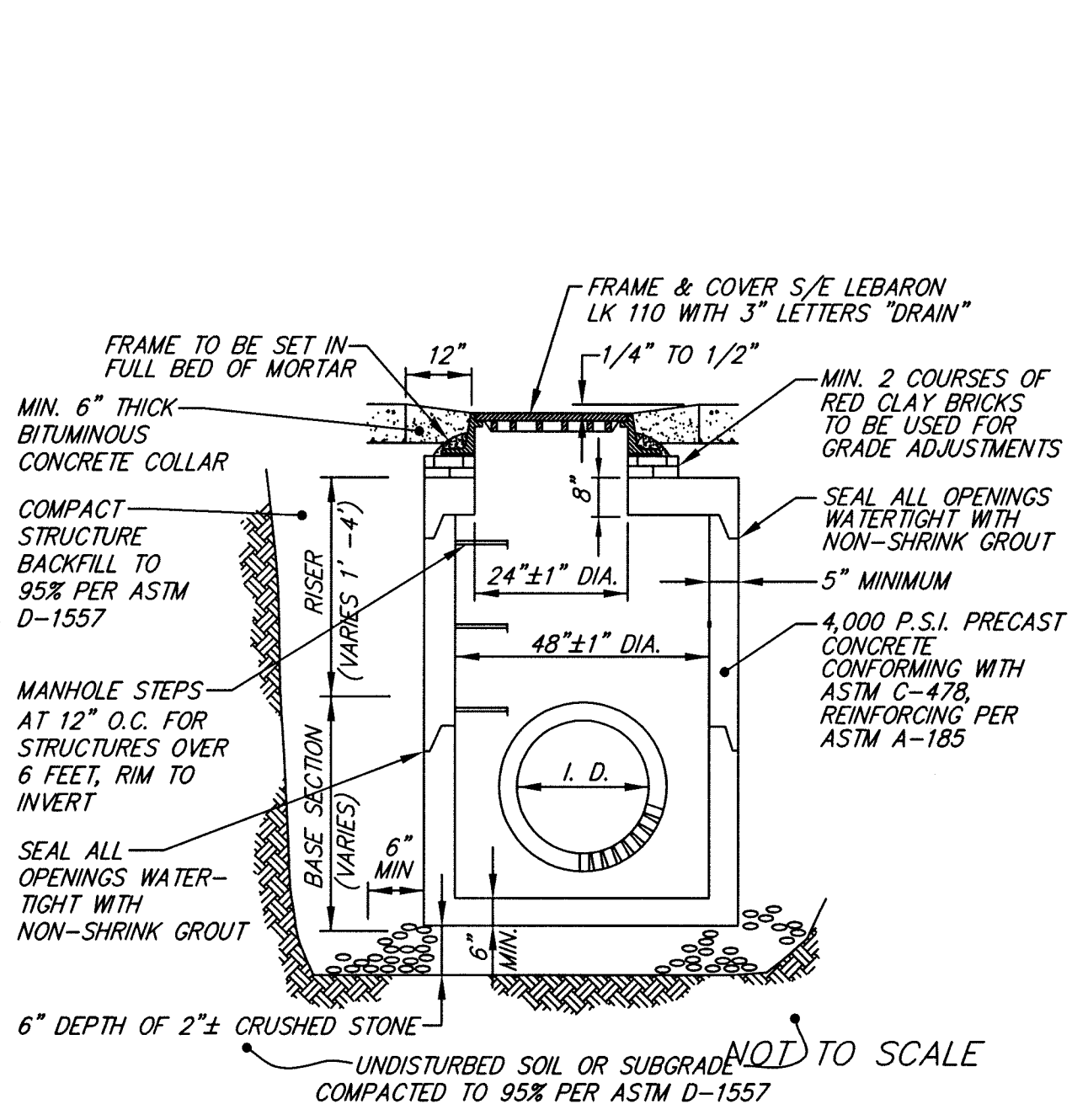


**DIMENSION FOR THRUST BLOCKING**

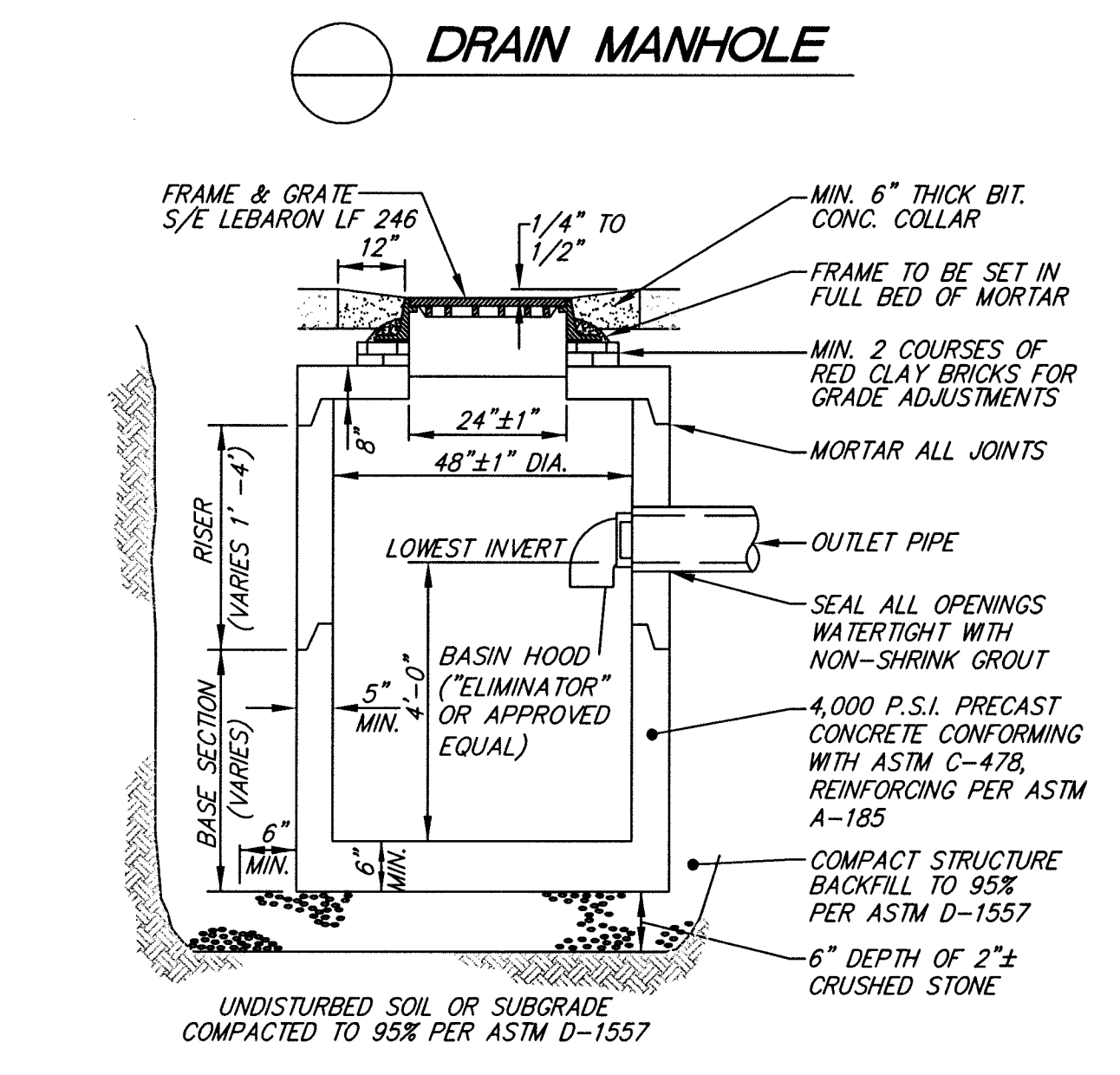
FITTING SIZES	TEES & PLUGS		90° BENDS		45° BENDS & "Y"s		22 1/2° BENDS	
	A	B	A	B	A	B	A	B
4"	1'-6"	1'-6"	1'-6"	1'-9"	1'-3"	0'-6"	1'-0"	0'-6"
6"	2'-0"	1'-0"	2'-0"	2'-0"	1'-3"	1'-6"	1'-0"	1'-5"
8"	2'-0"	1'-6"	2'-3"	2'-3"	1'-8"	1'-8"	1'-0"	1'-3"
10"	2'-6"	2'-3"	2'-9"	2'-10"	2'-3"	1'-10"	1'-3"	2'-0"
12"	3'-0"	2'-9"	3'-6"	3'-3"	2'-6"	2'-4"	2'-0"	1'-6"
14"	3'-5"	3'-0"	4'-0"	3'-8"	3'-6"	2'-4"	2'-0"	2'-3"

- THIS TABLE IS BASED ON 200 P.S.I. MAIN PRESSURE AND 2000 P.S.F. SOIL-BEARING PRESSURE. ADJUST BEARING AREAS IN ACCORDANCE WITH SOIL CONDITIONS AND PRESSURES ENCOUNTERED.
- USE VISQUEEN BARRIER BETWEEN PIPE AND CONCRETE AS SHOWN IN DETAIL ABOVE.
- CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH OF 2500 PSI AT 28 DAYS.
- BLOCKING SIZE/FREQUENCY SHALL BE INCREASED IF REQUIRED BY ENGINEER.

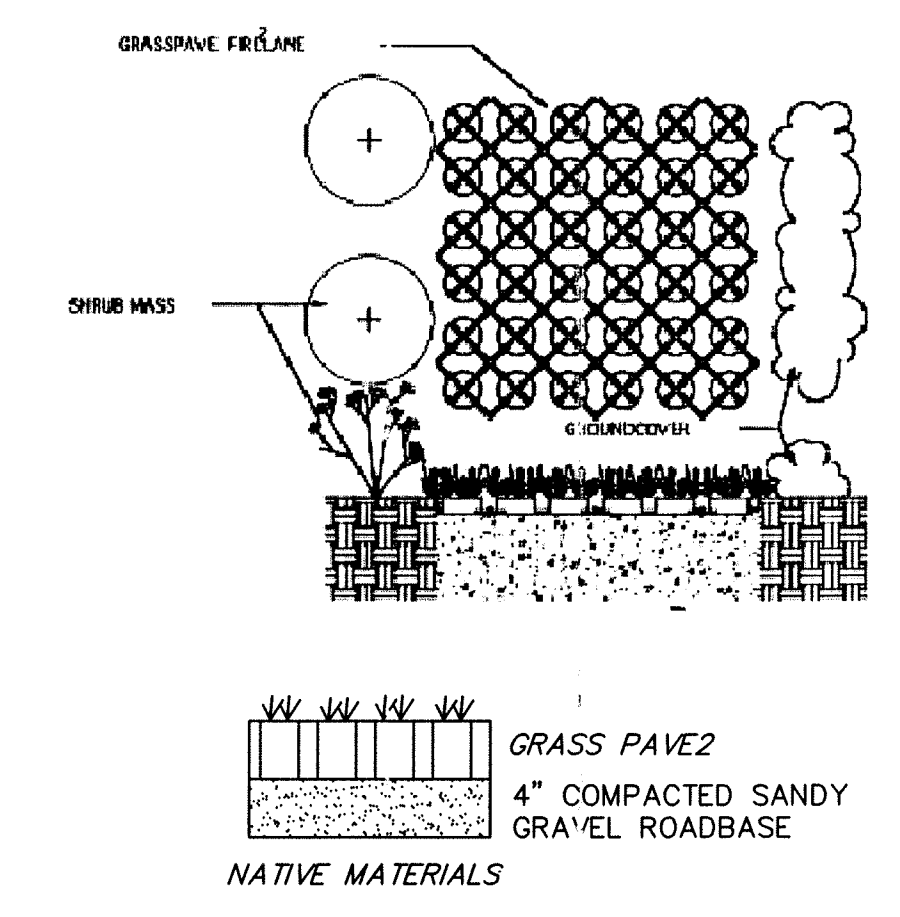
**THRUST BLOCK SCHEDULE**  
NOT TO SCALE



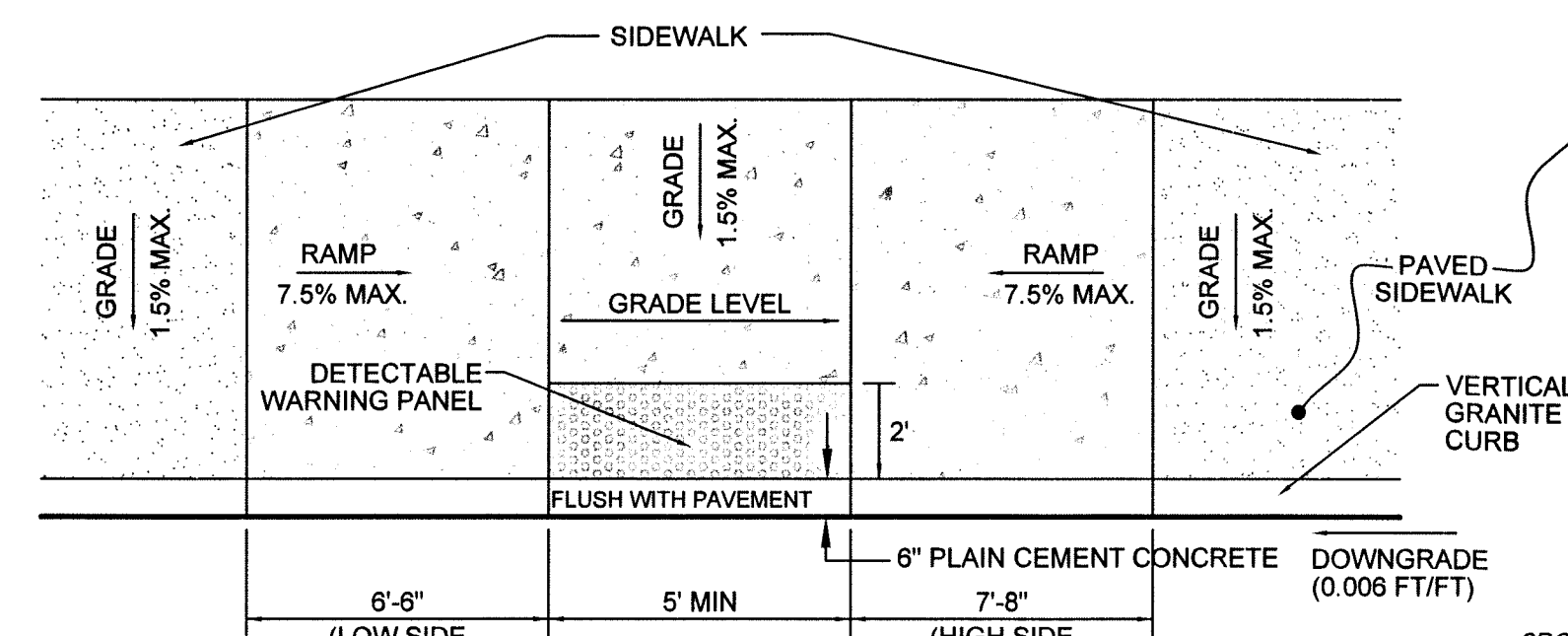
**DRAIN MANHOLE**  
NOTE: CONICAL TOP MAY ALSO BE USED



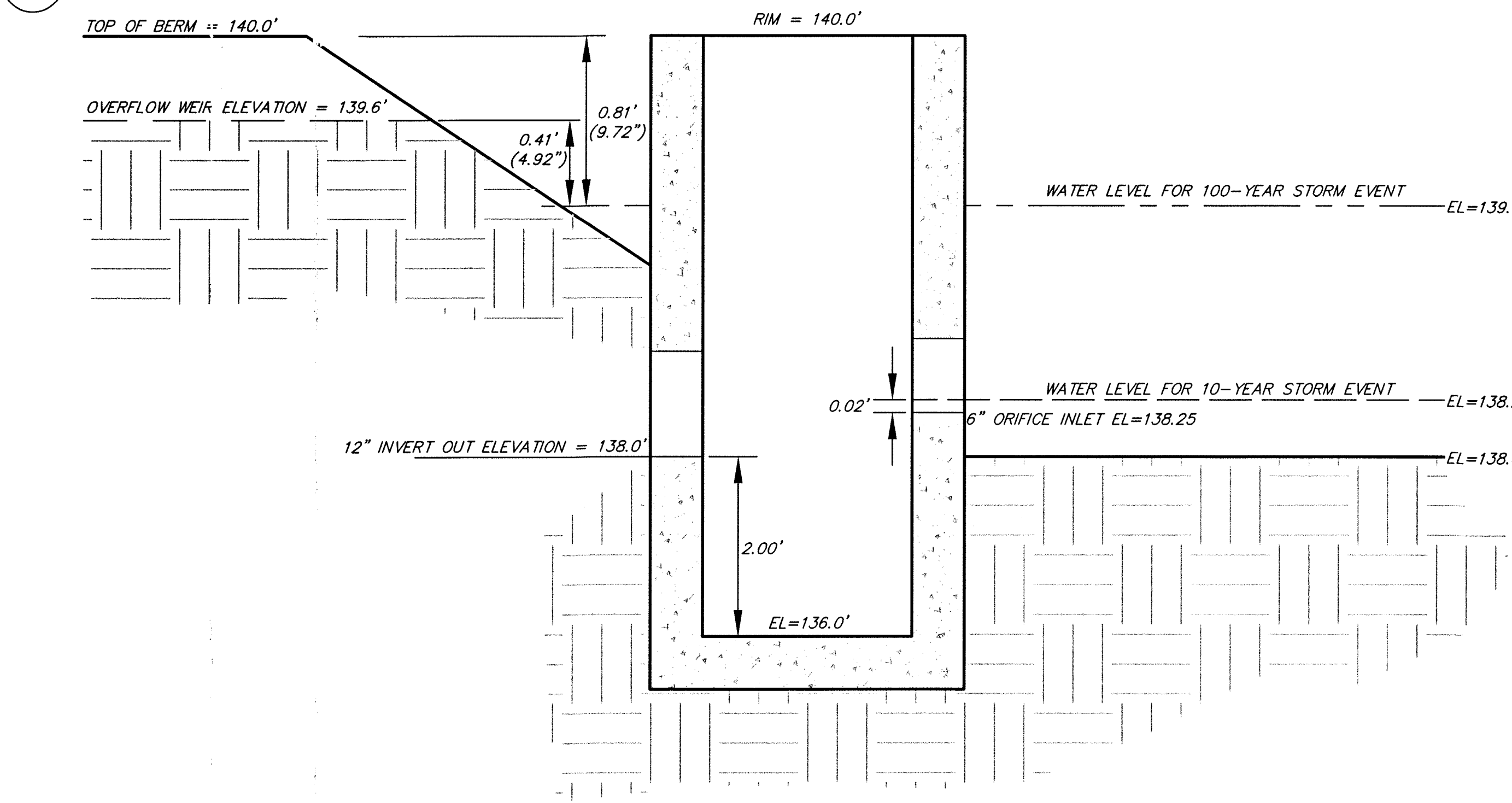
**CATCH BASIN WITH HOOD**  
TYPICAL CROSS SECTION  
NOT TO SCALE



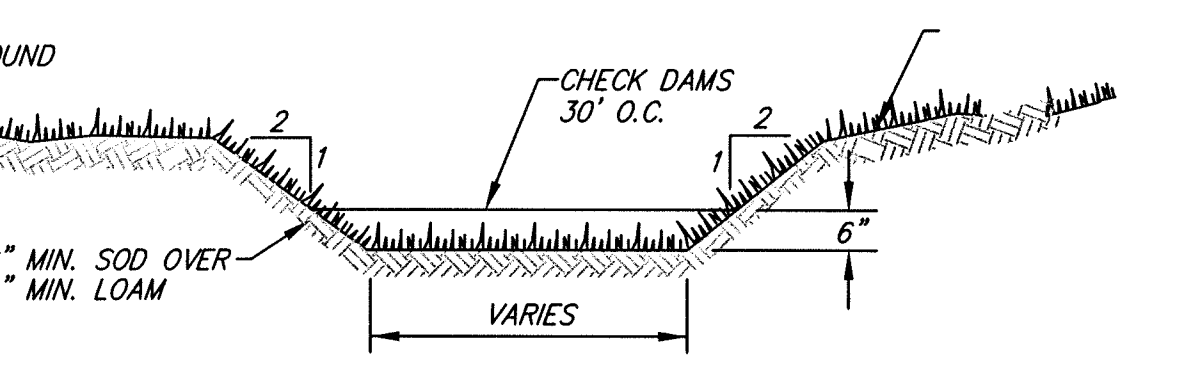
**PHASE 2 GRASSPAVE2 FIRELANE**



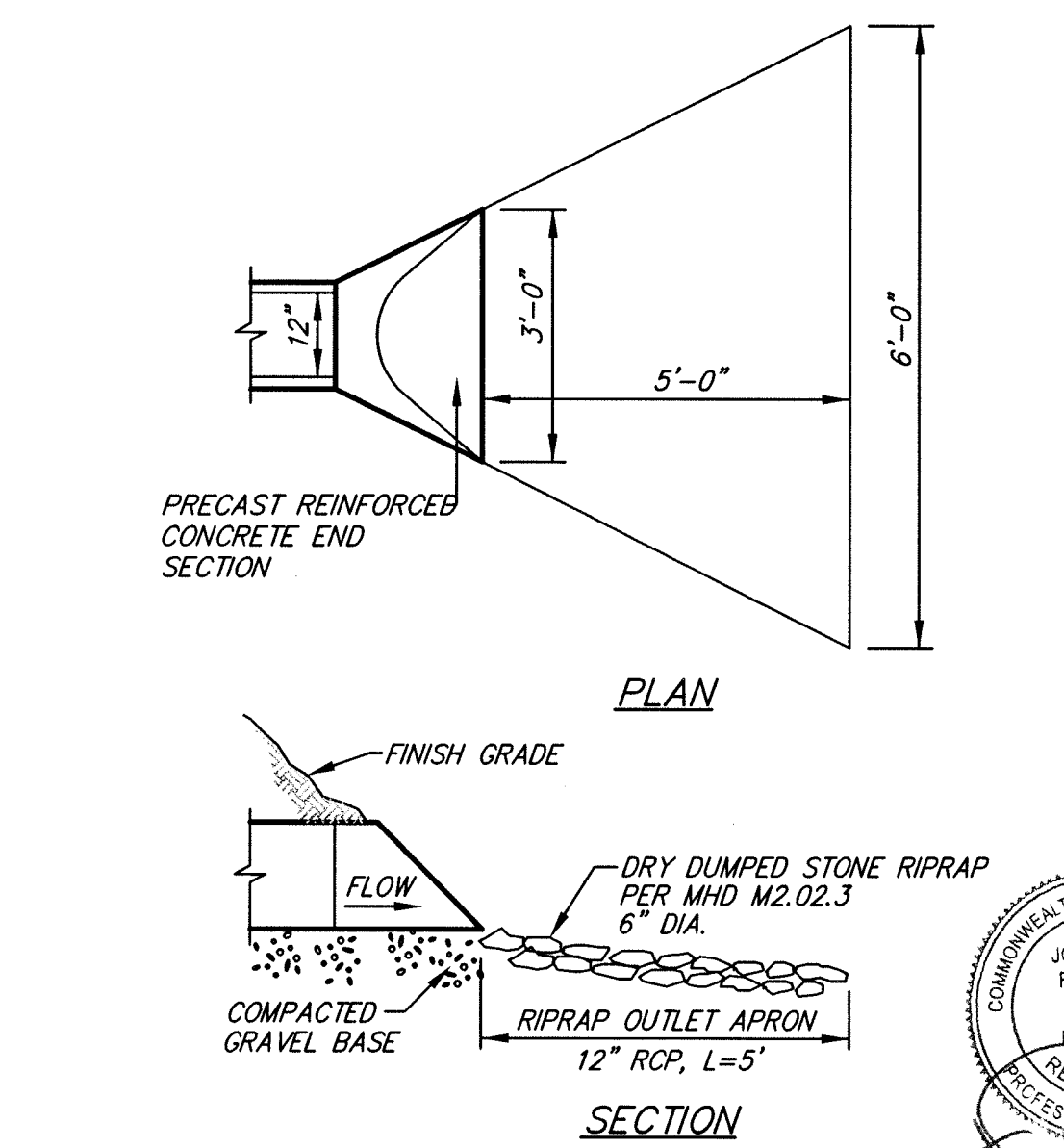
**CONCRETE HANDICAP RAMP AT CROSSWALK**  
NOT TO SCALE



**PHASE 2 OCS STRUCTURE AND INFILTRATION BASIN CROSS SECTION**  
NOT TO SCALE



**GRASSED SWALE**  
NOT TO SCALE



**DRAIN OUTLET AND APRON**  
TYPICAL CROSS SECTION  
NOT TO SCALE

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Revision:

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**THE COOLIDGE AT SUDBURY 2**

187-189 BOSTON POST RD  
SUDBURY, MA

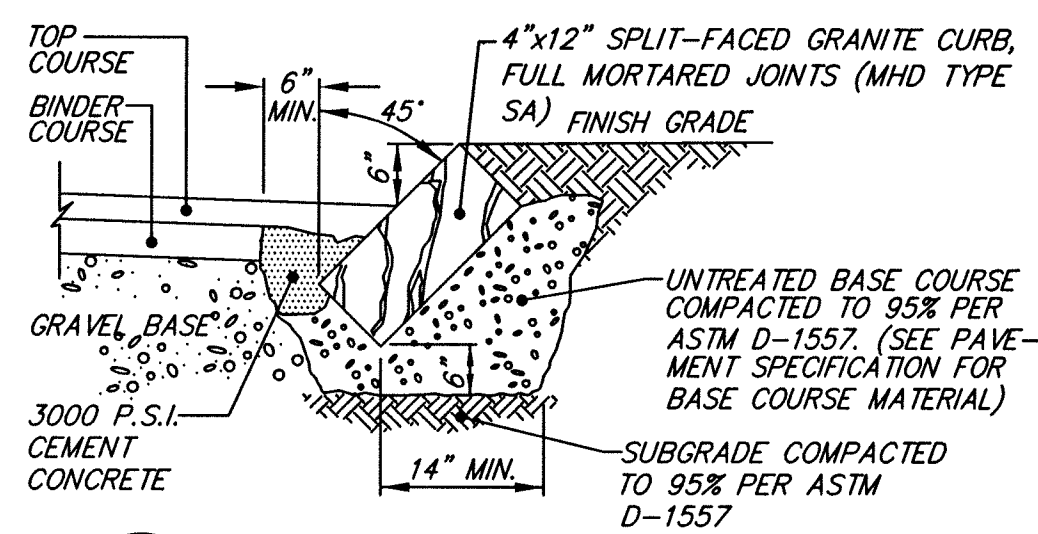
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Checked: JP  
Scale: AS NOTED  
Key Plan:

Sheet Name:

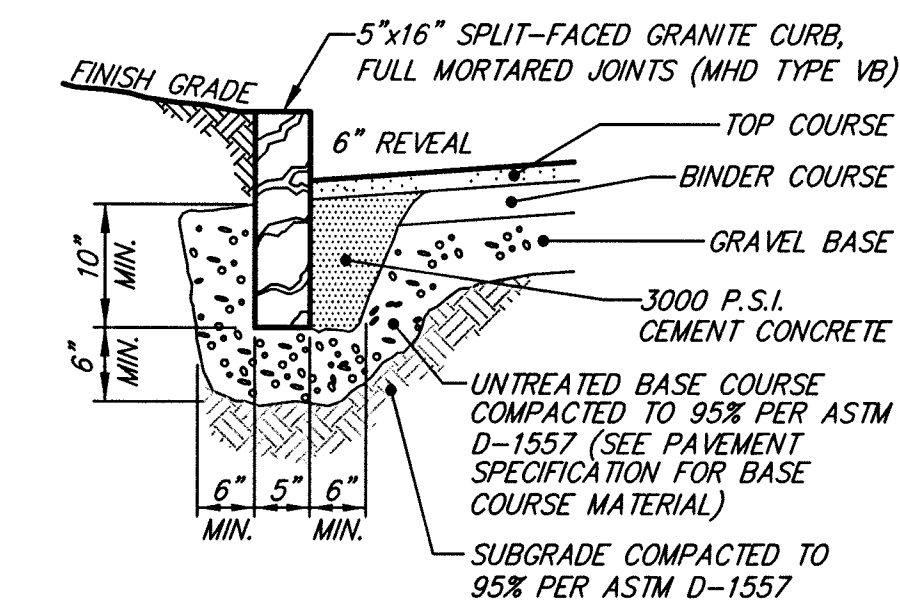
**DETAILS**

Project Number: 15526  
Project Name:  
Issue Date: JUNE 29, 2016  
Revision Date: FEBRUARY 2, 2017  
Sheet Number:

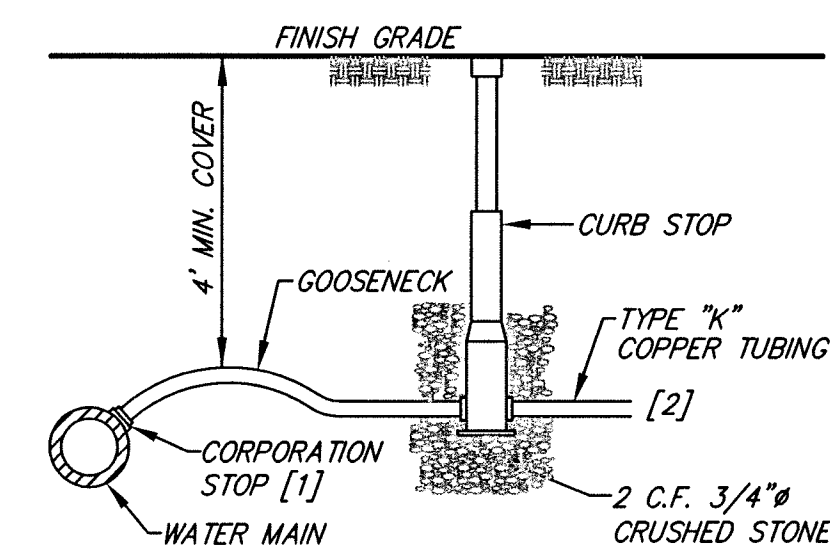
**D1**



**SLOPED GRANITE CURB**  
CROSS SECTION  
NOT TO SCALE

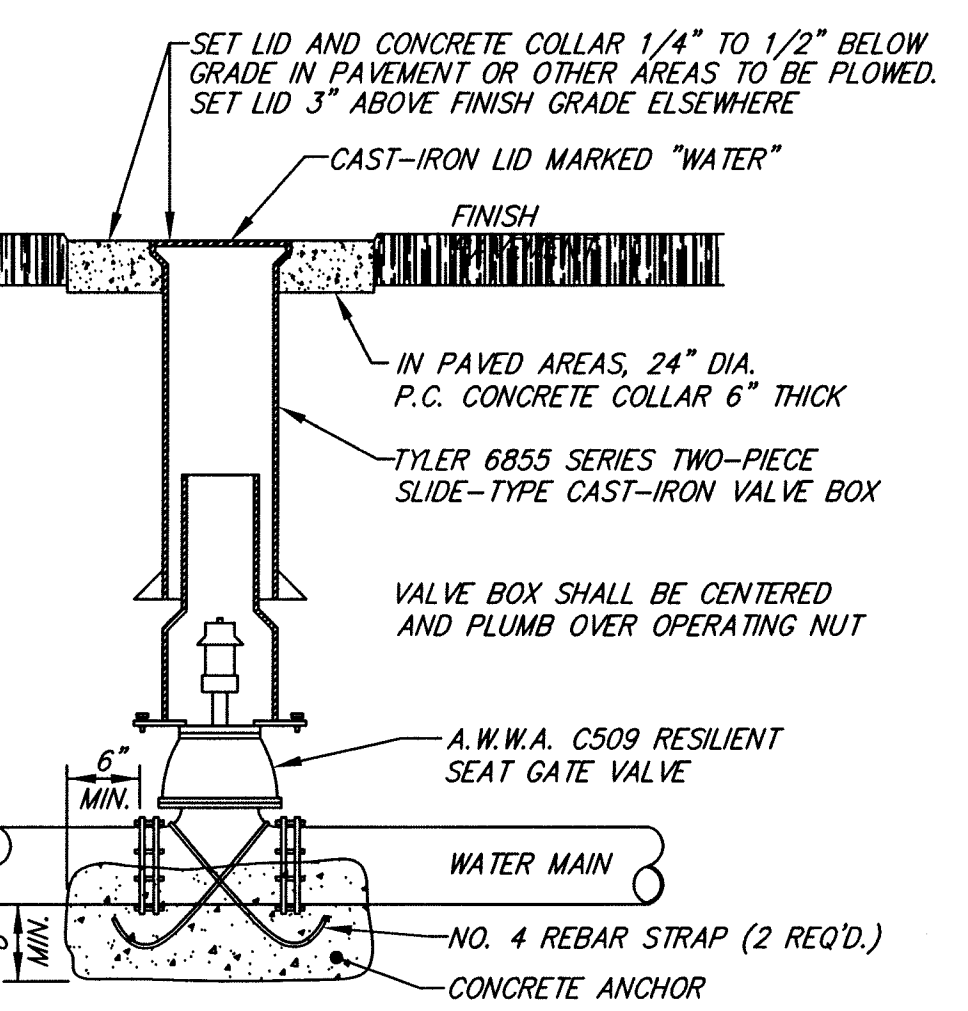


**VERTICAL GRANITE CURB**  
CROSS SECTION  
NOT TO SCALE

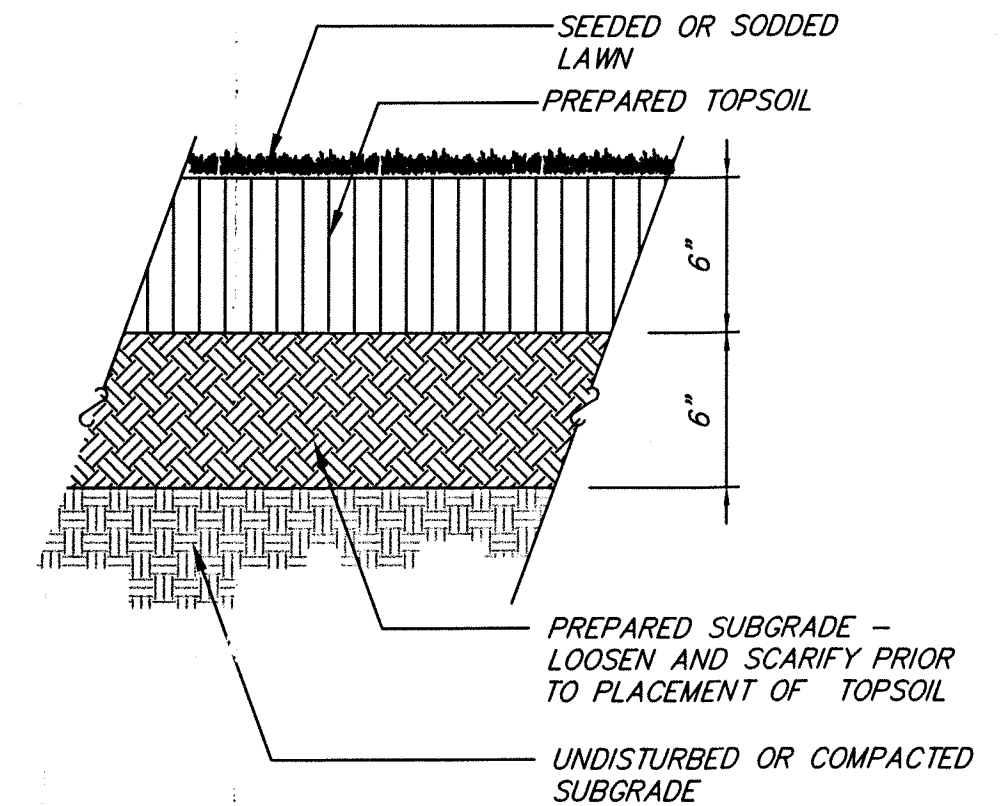


NOTES:  
[1] WATER SERVICES LARGER THAN ONE INCH ARE TO BE RESTRAINED TO MAIN WITH APPROVED SADDLE.  
[2] COORDINATE BUILDING CONNECTION WITH PLUMBING DRAWINGS.

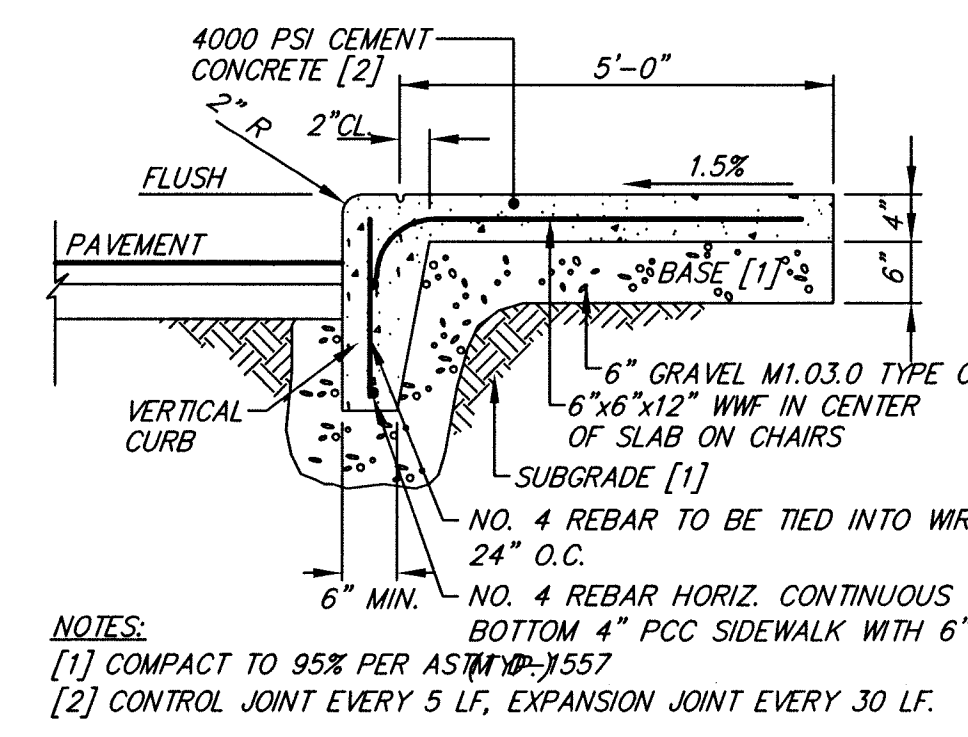
**WATER SERVICE**  
TYPICAL PROFILE  
NOT TO SCALE



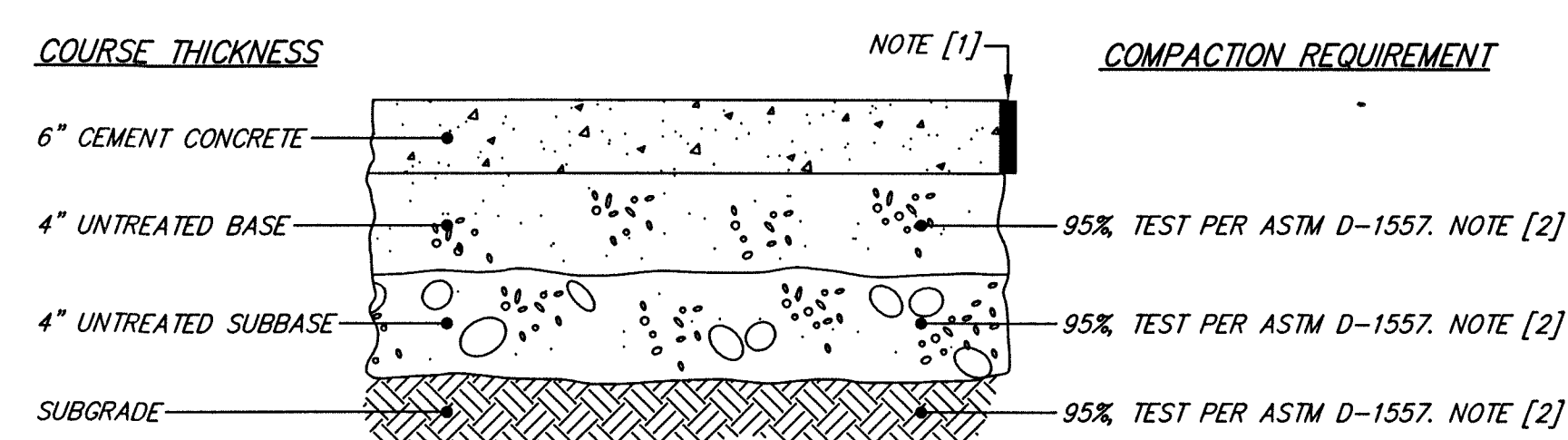
**GATE VALVE**  
TYPICAL CROSS SECTION  
NOT TO SCALE



**LOAM AND SEED**  
NOT TO SCALE



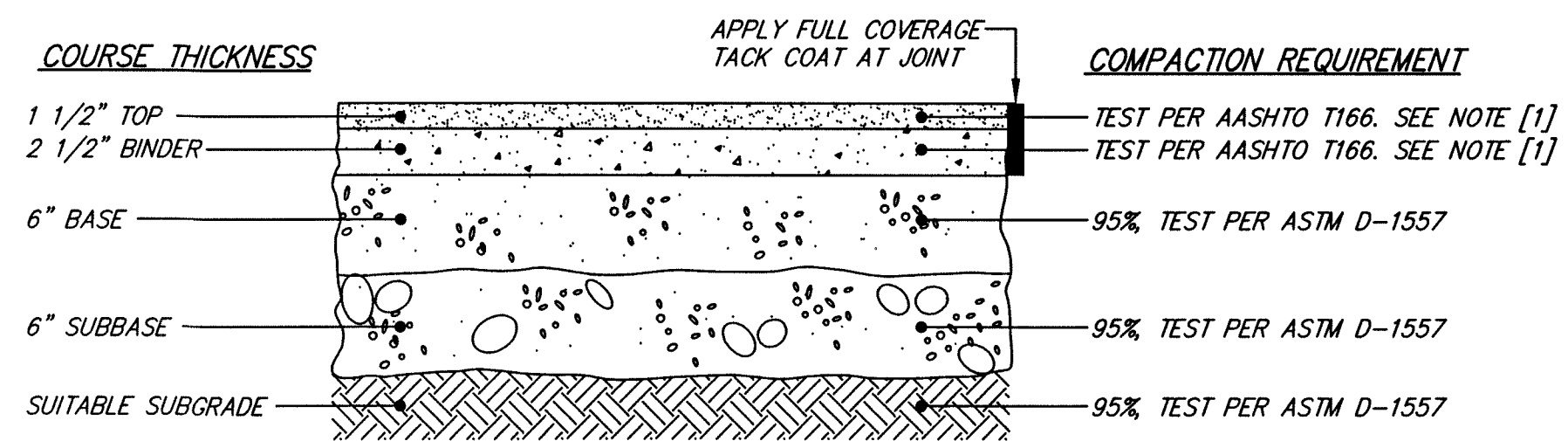
**SIDEWALK WITH INTEGRATED CURB**  
CROSS SECTION  
NOT TO SCALE



NOTES:  
[1] CONTROL JOINT EVERY 10 FEET, EXPANSION JOINT EVERY 50 FEET.  
[2] COMPACT TO TEST AVERAGE OF 95%, NO TEST LOWER THAN 93%

MATERIAL	SPECIFICATION	MAXIMUM AGGREGATE OR PARTICLE SIZE (IN.)
TOP - CEMENT CONCRETE	MHD M4.02.00 4000 PSI AT 28 DAYS	3/4
BASE - SAND BORROW	MHD M1.04.0 TYPE b	3/8
SUBBASE - GRAVEL BORROW	MHD M1.03.0 TYPE c	2
UNSUITABLE SUBGRADE - ORDINARY BORROW	MHD M1.01.0	12

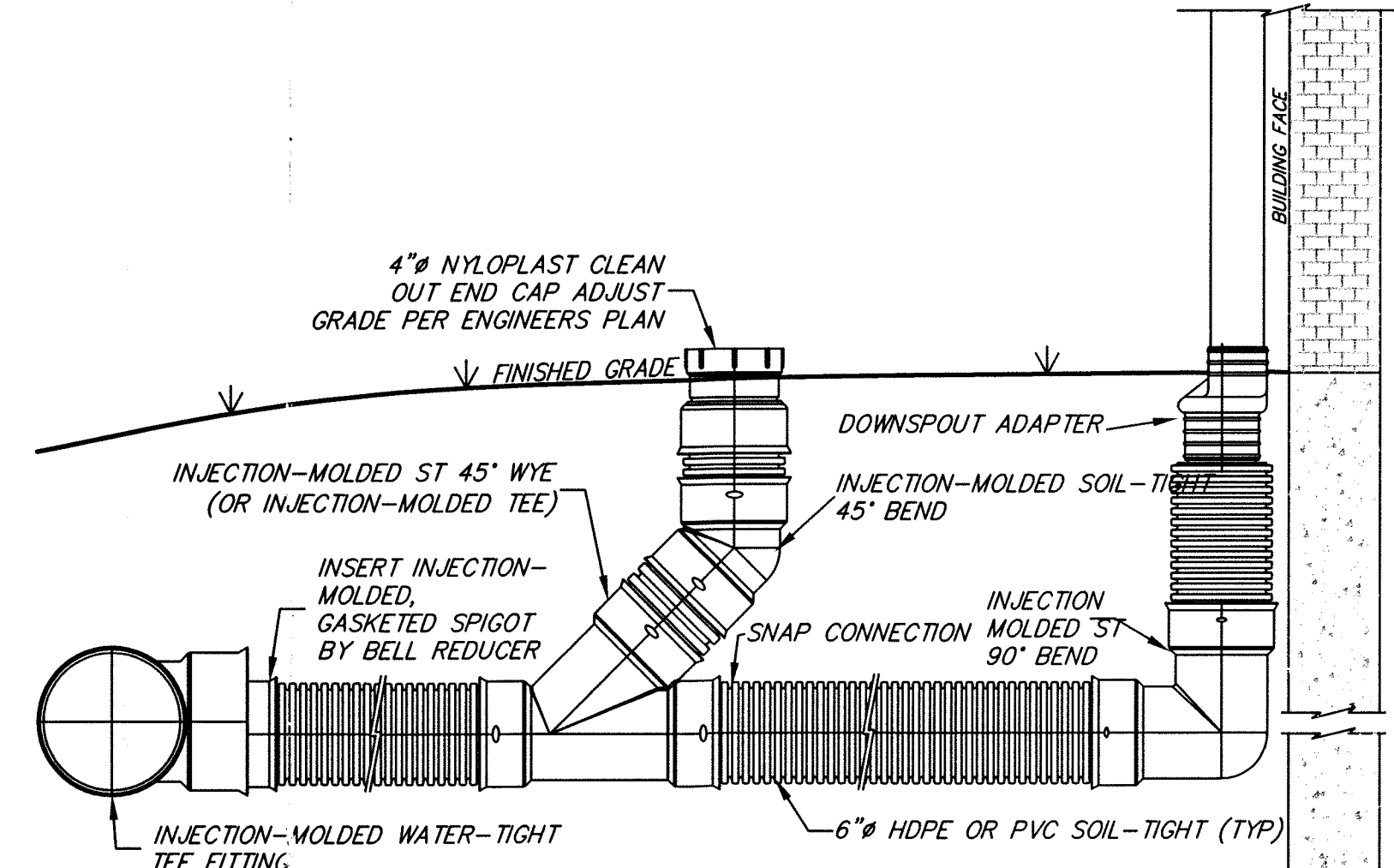
**CEMENT CONCRETE PAVEMENT**  
TYPICAL CROSS SECTION  
NOT TO SCALE



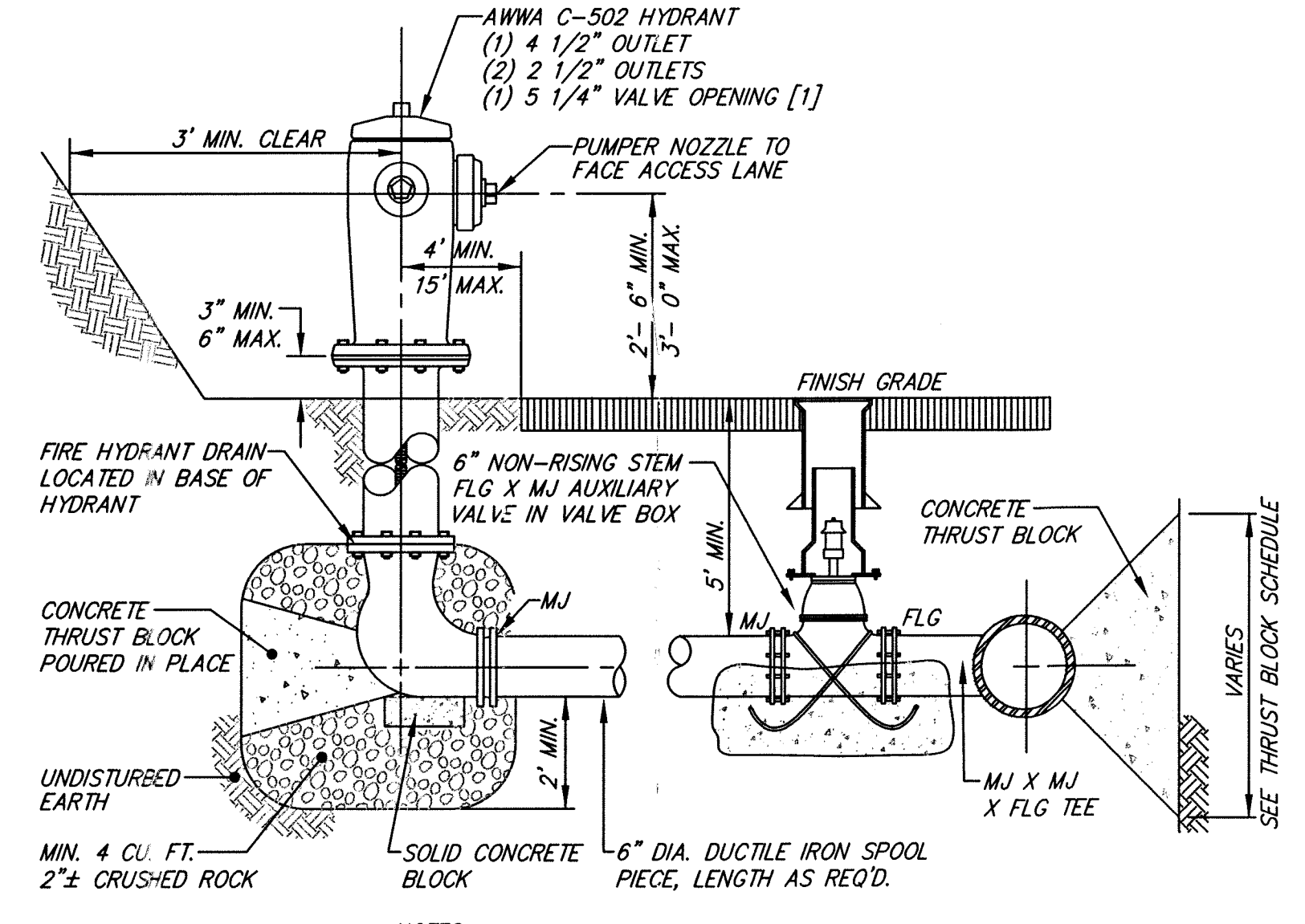
NOTES:  
[1] COMPACT TO TEST AVERAGE OF 96%, NO TEST LOWER THAN 94%

MATERIAL	SPECIFICATION	MAXIMUM AGGREGATE OR PARTICLE SIZE (IN.)
TOP - BITUMINOUS CONCRETE	MHD M3.11.03 CLASS I, TYPE I-1	1/2
BINDER - BITUMINOUS CONCRETE	MHD M3.11.03 CLASS I, TYPE I-1	1
BASE - DENSE GRADED CRUSHED STONE	MHD M2.01.7	1 1/2
SUBBASE - GRAVEL BORROW	MHD M1.03.0 TYPE C	2

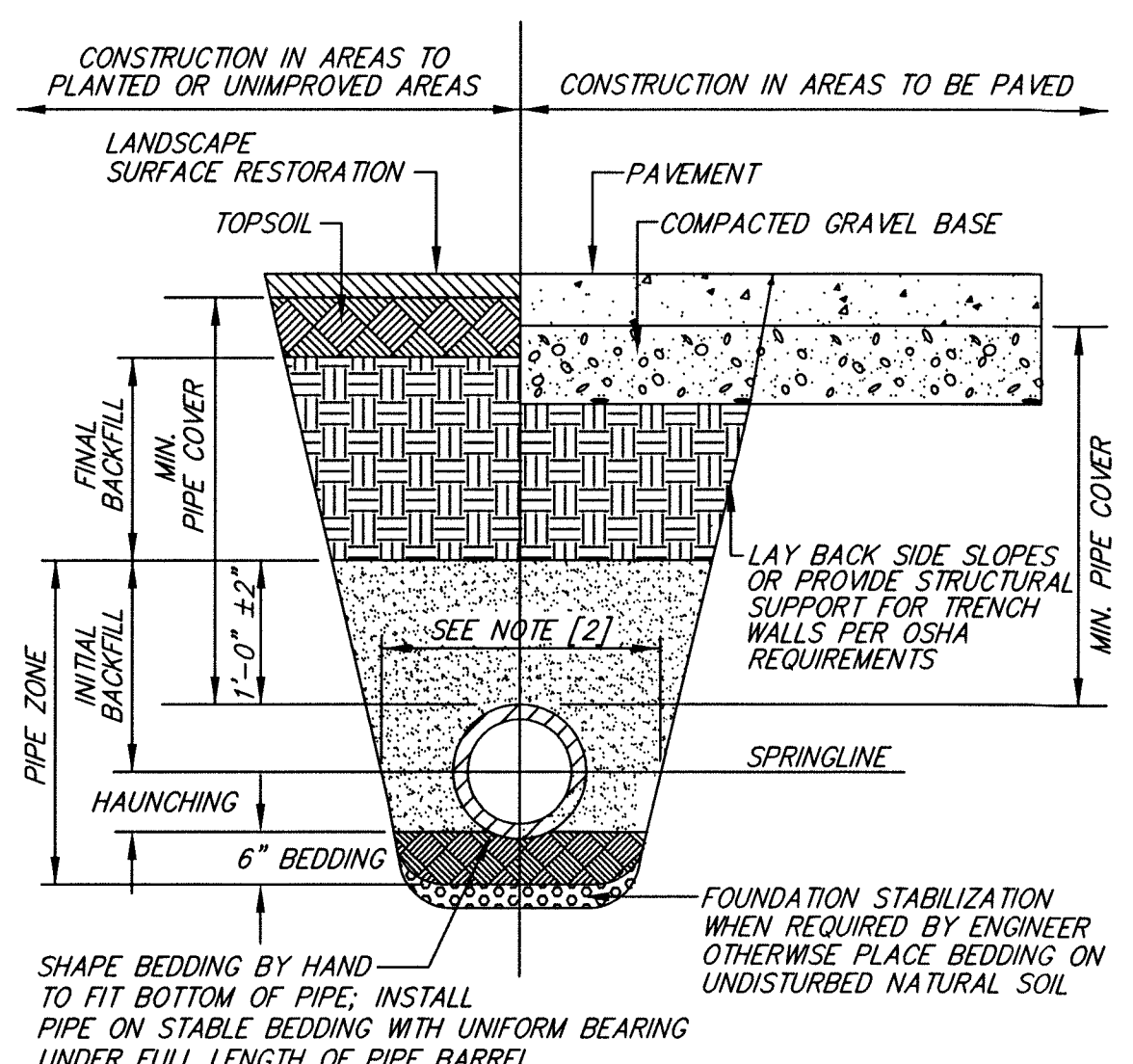
**BITUMINOUS CONCRETE PAVEMENT**  
TYPICAL CROSS SECTION  
NOT TO SCALE



**ROOF DRAIN DETAIL WITH CLEANOUT**  
NOT TO SCALE



**FIRE HYDRANT ASSEMBLY**  
TYPICAL CROSS SECTION



**PIPE TRENCH**  
TYPICAL CROSS SECTION  
NOT TO SCALE

NOTES:  
[1] PLACE 3/4"± GRADED GRANULAR BACKFILL AT OPTIMUM MOISTURE IN HORIZONTAL, 8"-DEEP, LOOSE LAYERS; COMPACT TO 95% PER ASTM D-1557.  
[2] MINIMUM WIDTH OF TRENCH MEASURED AT THE SPRINGLINE OF THE PIPE, INCLUDING ANY NECESSARY SHEATHING:  
PIPE I.D. WIDTH  
LESS THAN 21" O.D. + 12"  
21" TO 42" O.D. + 24"  
GREATER THAN 42" O.D. + 30"  
[3] INSTALL PIPE IN CENTER OF TRENCH.  
[4] IN PLANTED OR UNIMPROVED AREAS, USE ON-SITE EXCAVATED MATERIAL FOR FINAL BACKFILL. COMPACT TO 95% PER ASTM D-1557. IN PAVED AREAS, OBTAIN ENGINEER APPROVAL OF ON-SITE EXCAVATED MATERIALS FOR USE AS FINAL BACKFILL.  
[5] MINIMUM COVER OVER TOP OF PIPE:  
PIPE MATERIAL HOP, PVC RC, DI  
WATER 5'-0" 5'-0"  
SEWER 4'-0" 4'-0"  
DRAIN 1'-6" 1'-0"  
[6] FOR FOUNDATION STABILIZATION, USE 2"± CRUSHED STONE.

FOUNDATION, BEDDING, & BACKFILL MATERIALS	HOP, PVC	RC, DI
PIPE MATERIAL	[6]	[6]
FOUNDATION STABILIZATION	[1]	[1]
BEDDING	[1]	[1]
HAUNCHING	[1]	[1]
INITIAL BACKFILL	[4]	[4]
FINAL BACKFILL	[5]	[5]



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Revision:  
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**THE COOLIDGE AT SUDBURY 2**

187-189 BOSTON POST RD  
SUDBURY, MA

Drawn: JTL  
Checked: JP  
Scale: AS NOTED  
Key Plan:

Sheet Name:

**DETAILS**

Project Number: 15526

Project Name:

Issue Date:  
**JUNE 29, 2016**  
Revision Date:  
**FEBRUARY 2, 2017**

Sheet Number:

**D2**