

STANDARD CONSTRUCTION DETAILS

WATER

JUNE 2025



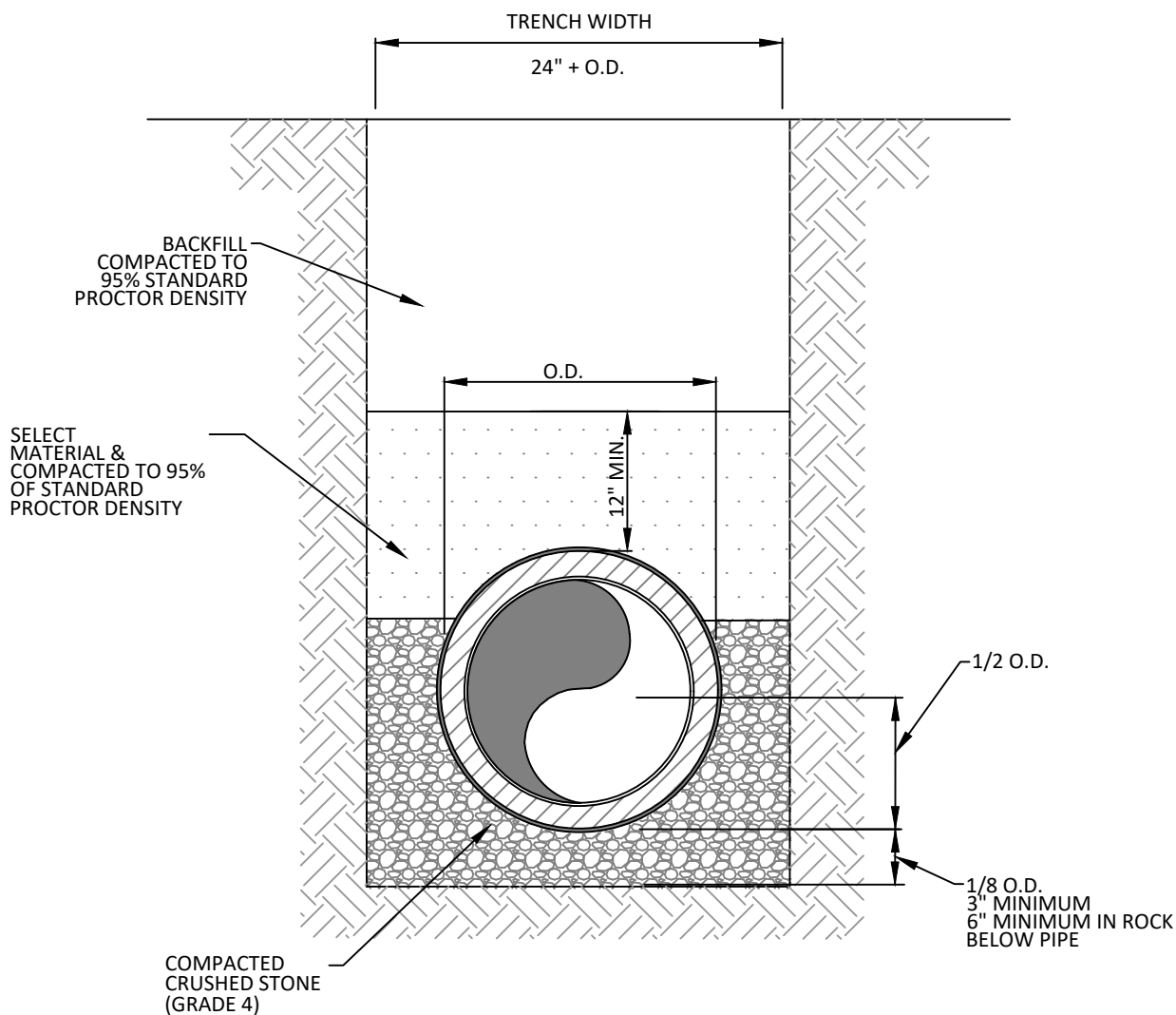
PUBLIC WORKS & ENGINEERING SERVICES

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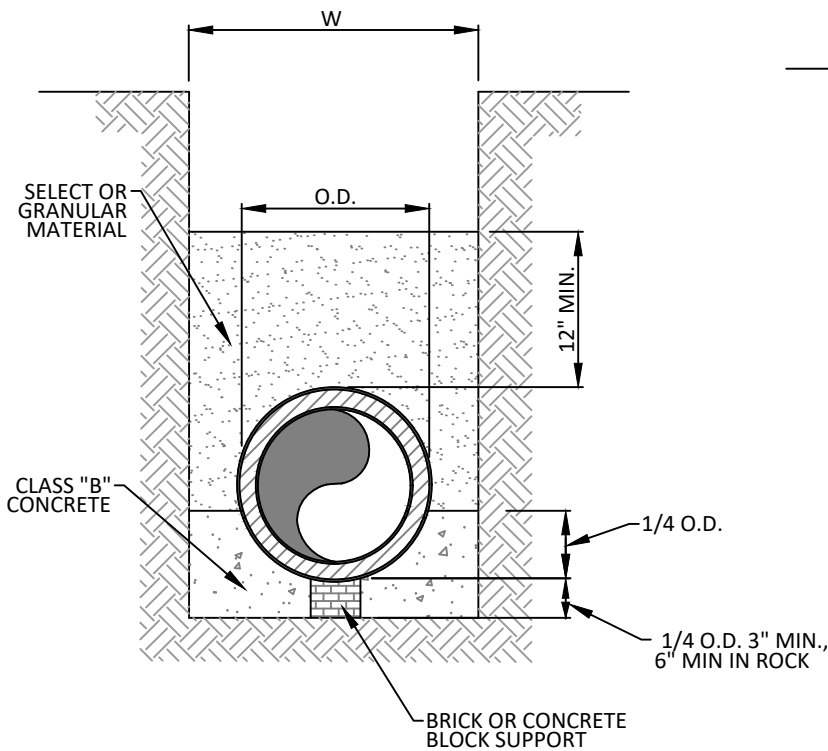
WATER

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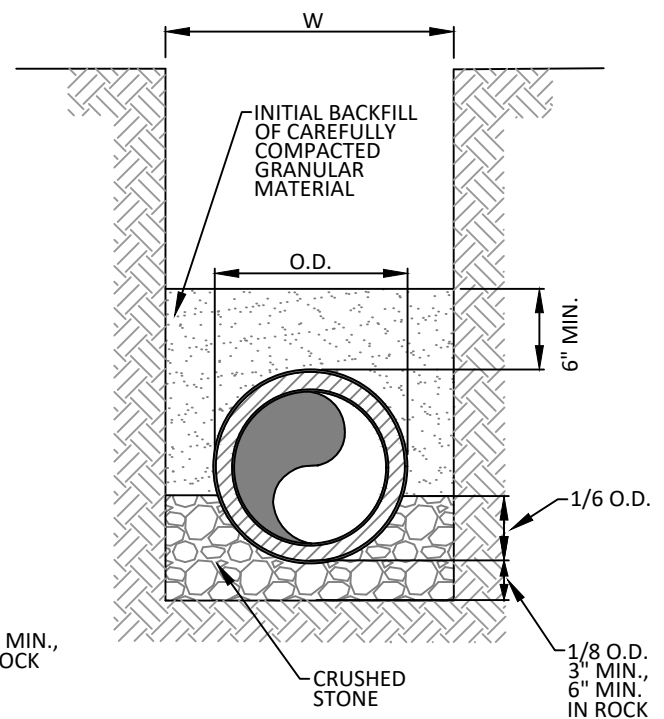
1. WATER SYSTEM GENERAL NOTES ARE IN THE TOWN OF ADDISON GENERAL CONSTRUCTION NOTES DOCUMENT.
2. CONSTRUCTION SHALL COMPLY WITH THE LATEST EDITION OF NCTCOG DETAILS AND SPECIFICATIONS, THE MOST CURRENT TCEQ REGULATIONS, AND THESE STANDARDS. WHEN THESE STANDARDS ARE IN CONFLICT, THE MORE RESTRICTIVE REGULATIONS/DETAILS SHALL GOVERN.
3. STANDARD DETAILS CONTAINED HEREIN ARE THE MINIMUM STANDARDS, MORE STRINGENT CRITERIA MAY BE REQUIRED AT THE DIRECTION OF PUBLIC WORKS SERVICES.



TYPICAL P.V.C. WATER MAIN EMBEDMENT
N.T.S.



CONCRETE CRADLE
CLASS "A" EMBEDMENT
N.T.S.



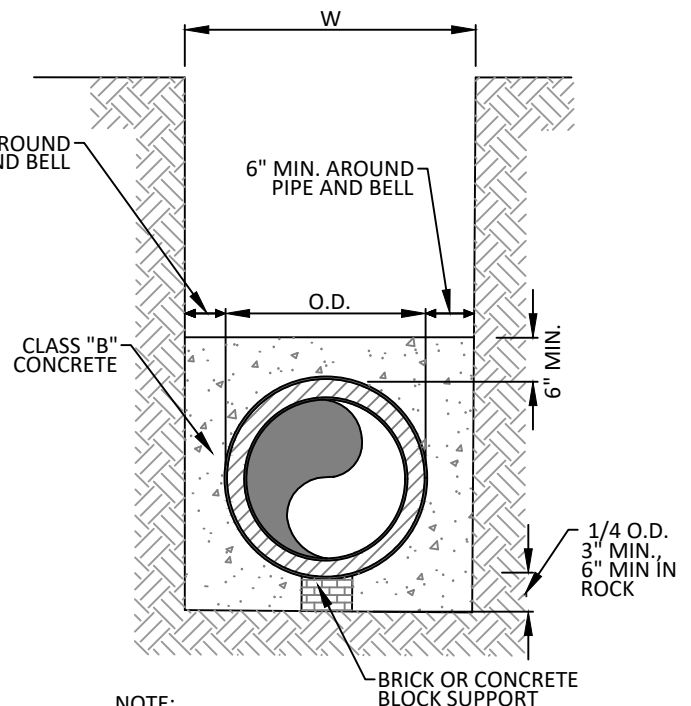
CLASS "C" EMBEDMENT
N.T.S.

W = 16" + O.D. MIN.
24" + O.D. MAX.

TABLE OF QUANTITIES OF MATERIAL IN CUBIC YARDS PER 100 LINEAR FEET						
INSIDE DIAMETER OF PIPE	OUTSIDE DIAMETER OF PIPE	TRENCH WIDTH IN IN.	TRENCH WIDTH IN FT.	CONCRETE		CRUSHED STONE CLASS "C" EMBED.
				CLASS "A" EMBED.	CLASS "G" EMBED.	
REINFORCED CONCRETE CYLINDER PIPE						
14"	17.25"	34"	2.83	6.37	10.59	4.48
16"	19.38"	36"	3.00	7.49	12.26	4.94
18"	21.78"	38"	3.17	8.77	14.33	5.43
20"	23.78"	40"	3.33	10.00	16.14	5.91
24"	27.75"	44"	3.67	12.66	20.02	7.46

NOTE:
ALL COMPACTION SHALL BE IN ACCORDANCE WITH STANDARD SPECIFICATIONS AND /OR SPECIAL PROVISIONS.

6" MIN. AROUND PIPE AND BELL



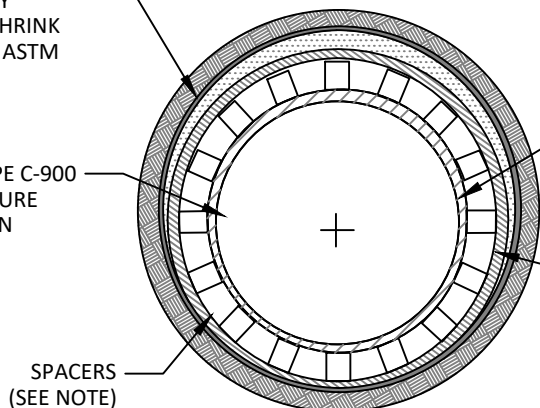
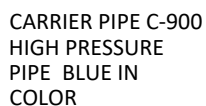
NOTE:
CONCRETE ENCASEMENT SHALL BEGIN AND END 6 INCHES FROM THE END OF JOINT

CLASS "G" EMBEDMENT
N.T.S.



CARRIER PIPE SIZE (IN)	STEEL ENCASEMENT O.D. (IN)	STEEL ENCASEMENT WALL THICKNESS (IN)
6	14	1/4
8	18	1/4
12	21	1/4
18	27	3/8
21	30	3/8
24	36	3/8
27	39	3/8

FOR ALL CARRIER PIPE OVER 27", THE STEEL ENCASEMENT PIPE SHALL BE SIZED TO ACCOMMODATE THE APPROPRIATE CASING SPACERS, AND MINIMUM WALL THICKNESS SHALL BE 1/2".

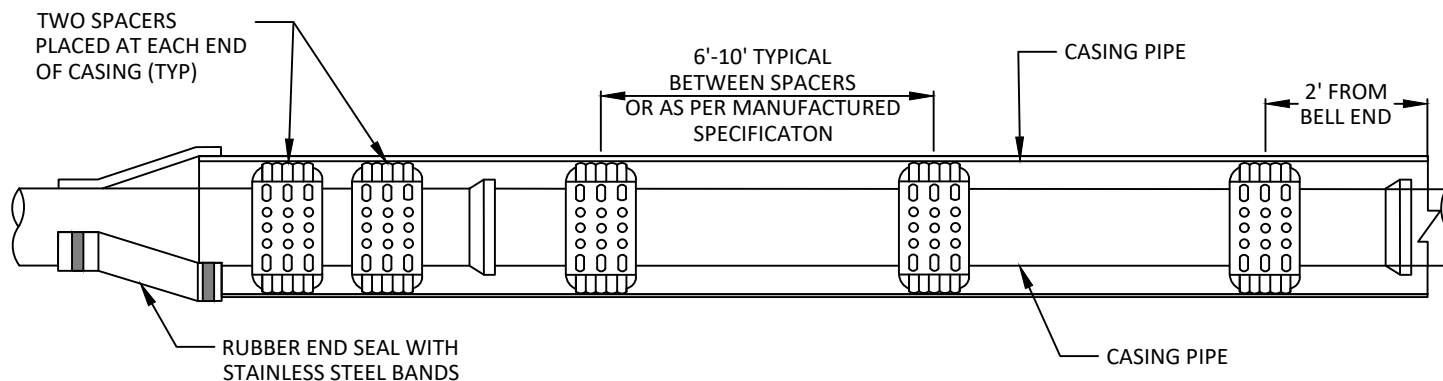


CARRIER PIPE
BELL OUT LINE
BEYOND
SECTION

ENCASEMENT PIPE: SEE NOTE 2.
(MIN. SLOPE = 0.25%)

SPACERS
(SEE NOTE)

WATER MAIN ENCASEMENT
N.T.S.



INSULATOR SPACING DETAIL
N.T.S.

1. HIGH DENSITY POLYETHYLENE SPACERS, RACI OR EQUAL, SHALL BE USED. WHERE NO CASING PIPE IS REQUIRED OVERCUTTING AROUND UTILITY SHALL BE FILLED WITH HYDRAULICALLY PLACED NON-SHRINK GROUT AS PER ASTM C476.
2. ENCASEMENT PIPE SHALL BE HIGH DENSITY STEEL PIPE. ALL JOINTS TO BE WELDED 100%



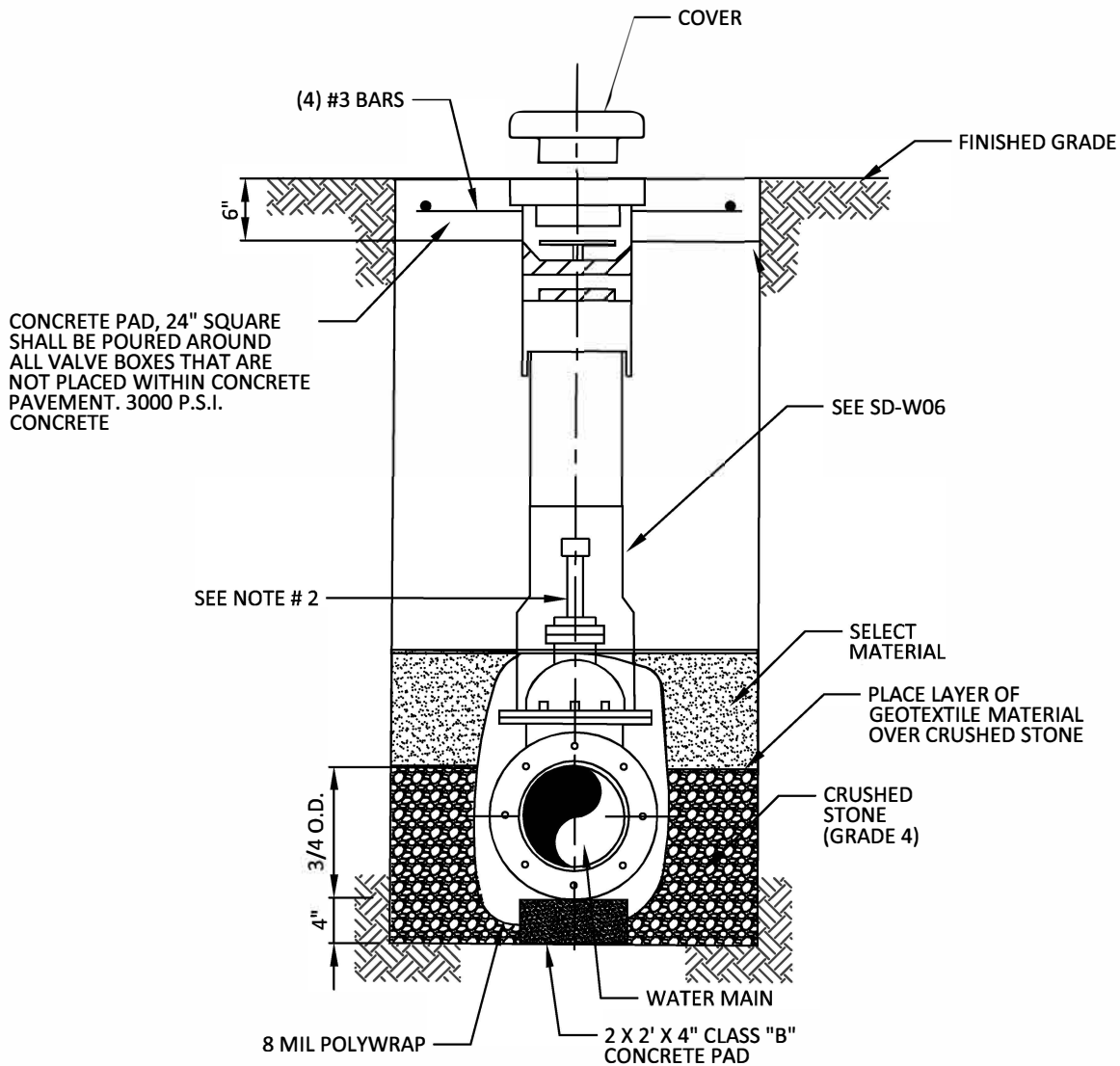
CASING

STANDARD CONSTRUCTION DETAILS WASTEWATER

DATE:
JANUARY 2022

REV DATE:

SHEET:
SD-W03



TYPICAL VALVE SETTING AND BOX

NOTES:

1. 4" THRU 12" R.S. GATE VALVES SHALL BE IN ACCORDANCE WITH TOWN OF ADDISON WATER SYSTEM REQUIREMENTS.
2. A PERMANENTLY ATTACHED VALVE EXTENSION STEM SHALL BE REQUIRED FOR ANY VALVE WHERE OPERATING NUT IS LOCATED IN EXCESS OF 5' BELOW THE TOP OF VALVE BOX. THIS EXTENSION SHALL BE OF SUFFICIENT LENGTH TO ENSURE THAT ITS TOP IS WITHIN 5' OF VALVE BOX LID.
3. BLUE "V" (3") CUT INTO FACE OF NEAREST CURB AND POINTING TOWARD THE VALVE.
4. ALL IRON MATERIALS SHALL BE DOMESTIC. (MADE IN USA)



**PUBLIC WORKS &
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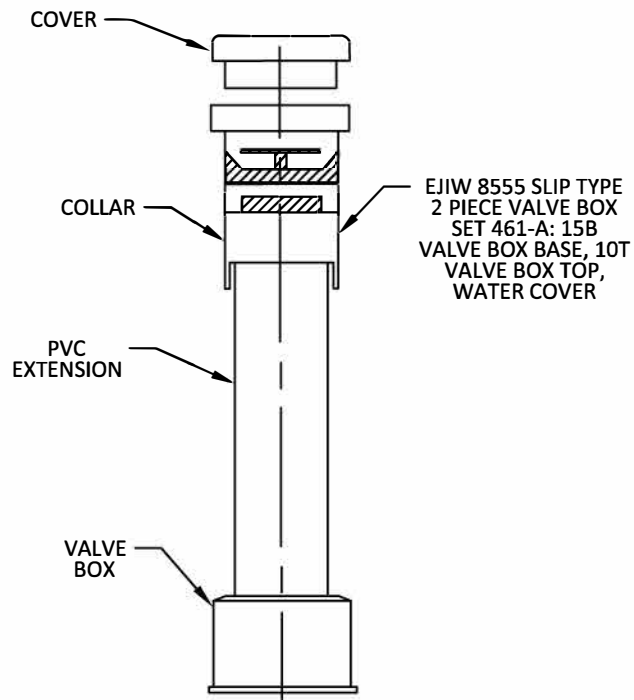
VALVE SETTING

**STANDARD CONSTRUCTION DETAILS
WASTEWATER**

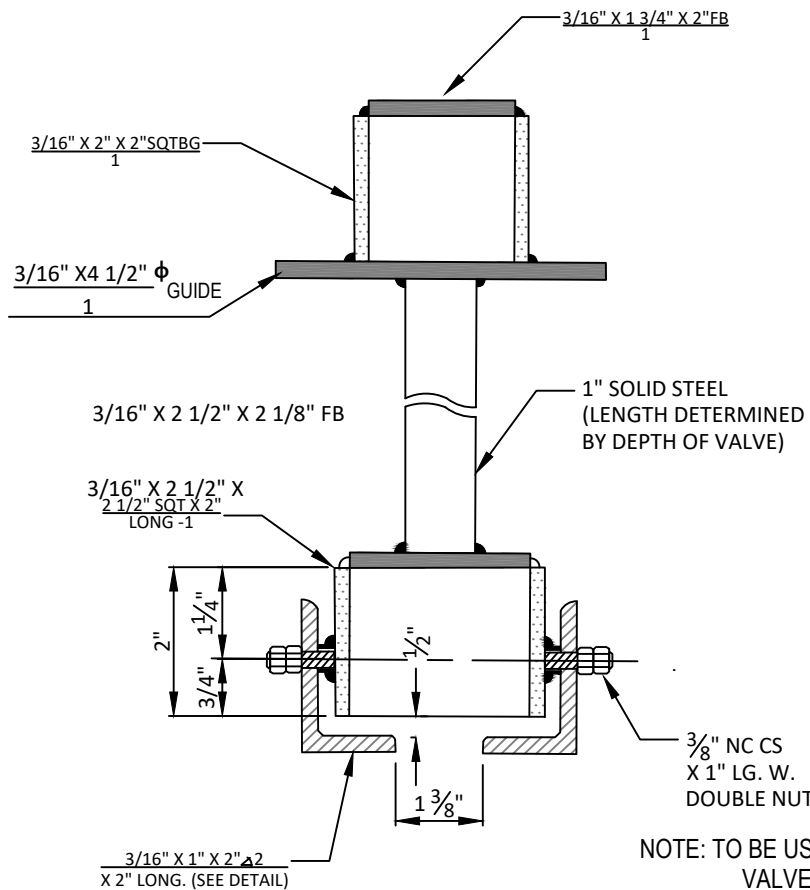
DATE:
APRIL 2024

REV DATE:
04-17-2024

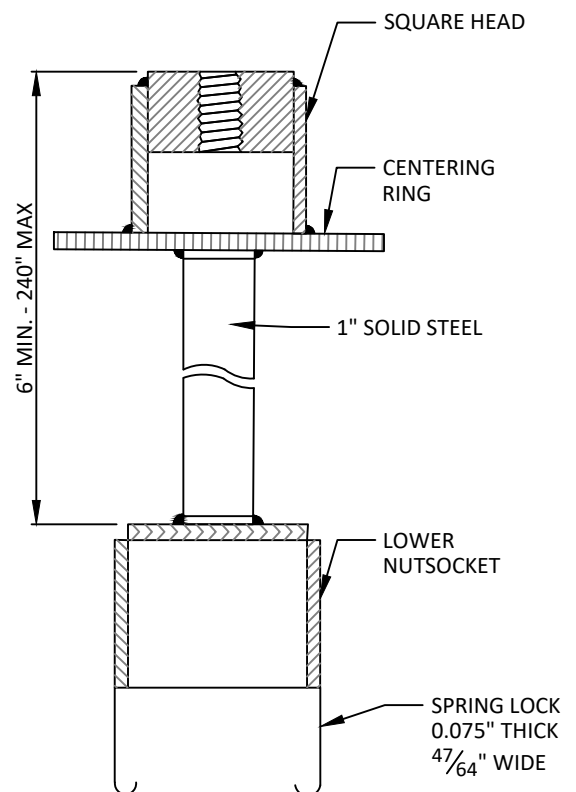
SHEET:
SD-W05



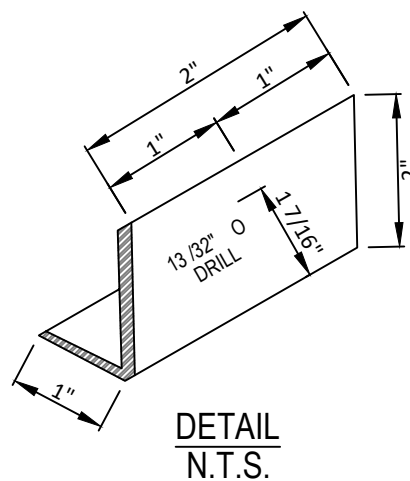
FOR ALL VALVES- 6" C-900 PVC
NTS



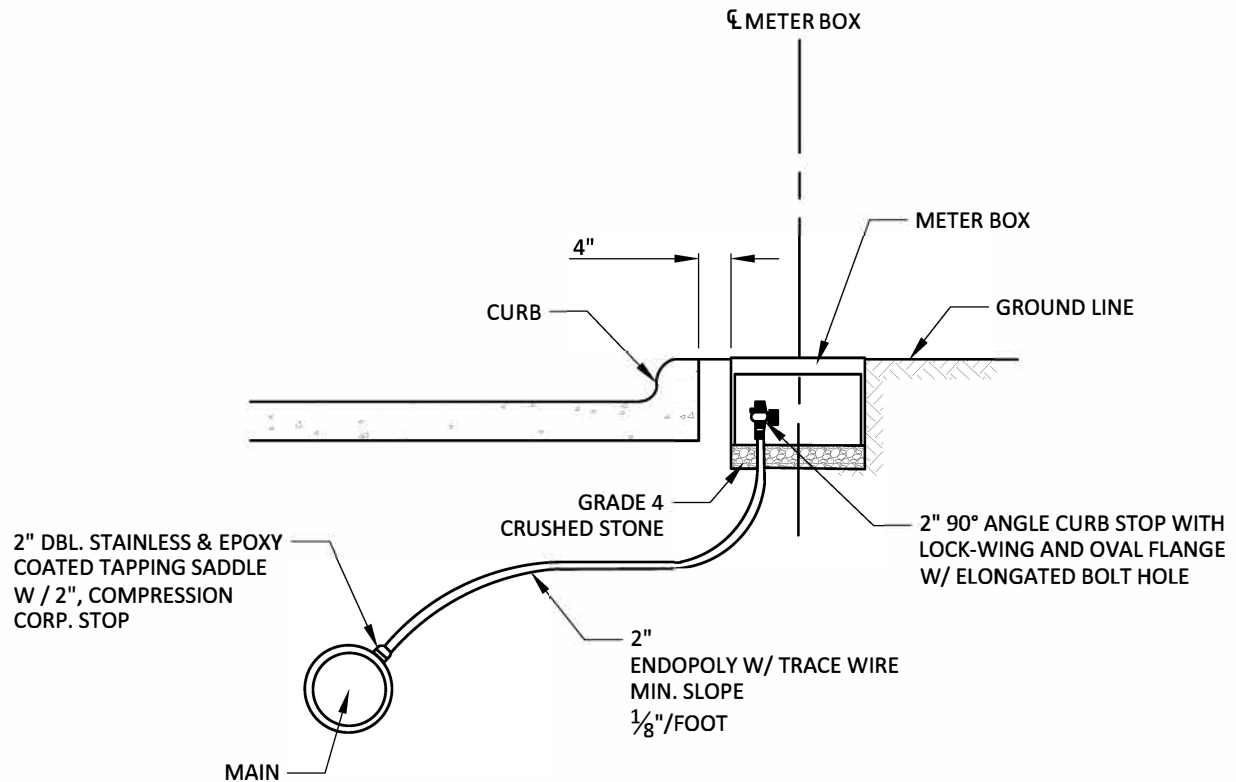
TYPE - B
VALVE EXTENSION
N.T.S.



SPRING LOCK
VALVE EXTENSION
N.T.S.



DETAIL
N.T.S.



2" BLOW OFF N.T.S.

NOTES:

1. METER RADIO READS - SENSUS MXU 520 M SINGLE PORT T/C
2. METER BOXES - COMPOSITE DFW PLASTICS PARTS NUMBER
 - $\frac{3}{4}$ " - 1" : DFW PLASTICS DFW37C-18-AF1SF (DFW37C-18-BODY & DFW37C-AF1SF-LID)
 - 1.5" - 2" : DFW PLASTICS DFW65C-14-AF1SF (DFW65C-14-BODY & DFW65C-AF1SF-LID)



**PUBLIC WORKS &
ENGINEERING SERVICES**

2" BLOW OFF WITH METER BOX

STANDARD CONSTRUCTION DETAILS
WATER

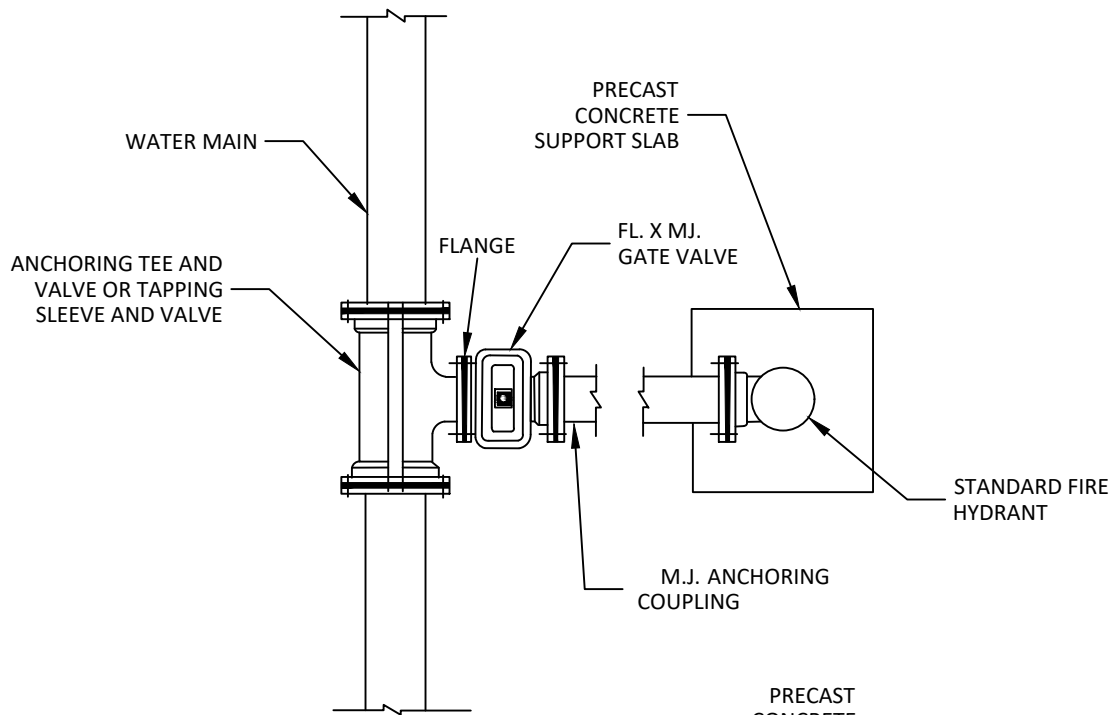
DATE:
SEPTEMBER 2023

REV DATE:
JUNE 2025

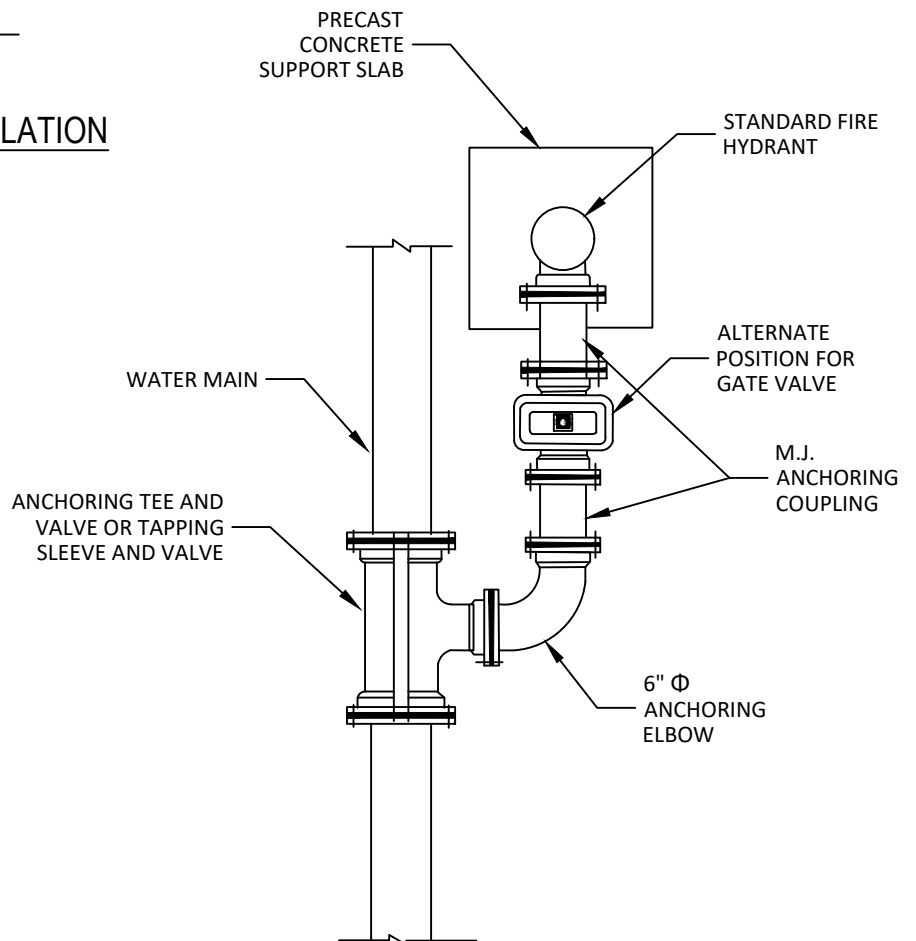
SHEET:
SD-W08

1. EJIW 5CD250 HYDRANT OR EQUIVALENT APPROVED BY THE CITY.
2. DESIGN, SITE REQUIREMENTS, THE GENERAL OPERATION, PAINTING AND DELIVERY OF ALL FIRE HYDRANTS SHALL BE IN ACCORDANCE WITH THE TOWN OF ADDISON WATER SYSTEM REQUIREMENTS.
3. FIRE HYDRANTS SHALL BE LOCATED A MINIMUM OF 24" FROM THE P.C.'S OF THE CORNER TURNING RADIUS AT INTERSECTIONS AND DRIVEWAYS (SEE PLAN VIEW).
4. FIRE HYDRANT COLORS: SHERWIN WILLIAMS ALKYD ENAMEL SEMI GLOSS: SAFETY BLUE (SW4086)





STANDARD INSTALLATION



ALTERNATE INSTALLATION

NOTE:
MEGALUGS SHALL BE USED AT ALL TEES AND BENDS.



**PUBLIC WORKS &
ENGINEERING SERVICES**

TYPICAL FIRE HYDRANT INSTALLATION

STANDARD CONSTRUCTION DETAILS
WATER

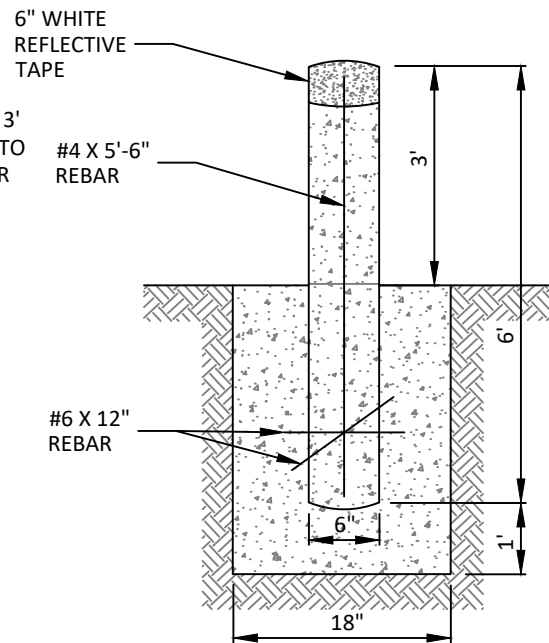
DATE:
JANUARY 2022

REV DATE:
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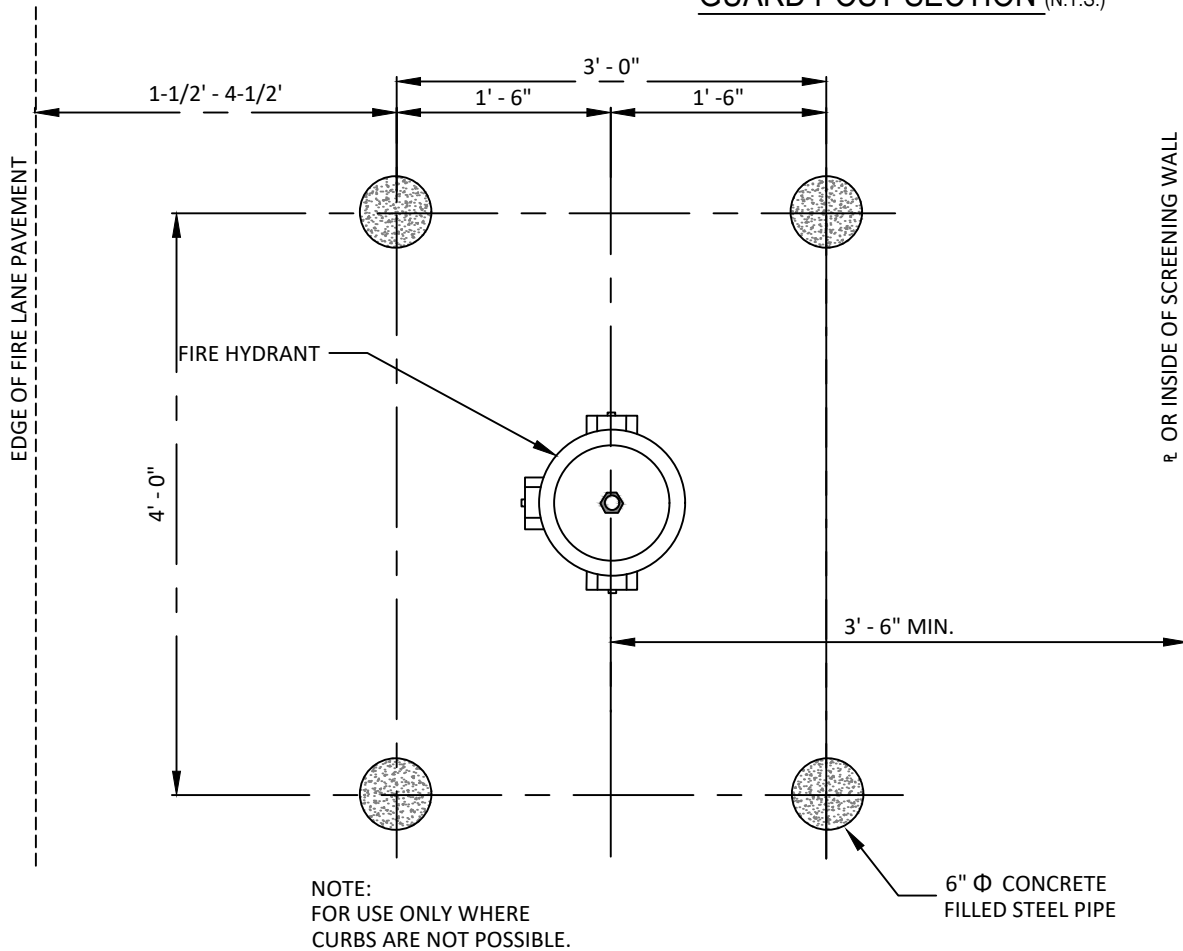
SHEET:
SD-W10

NOTES:

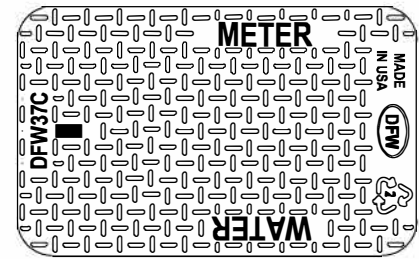
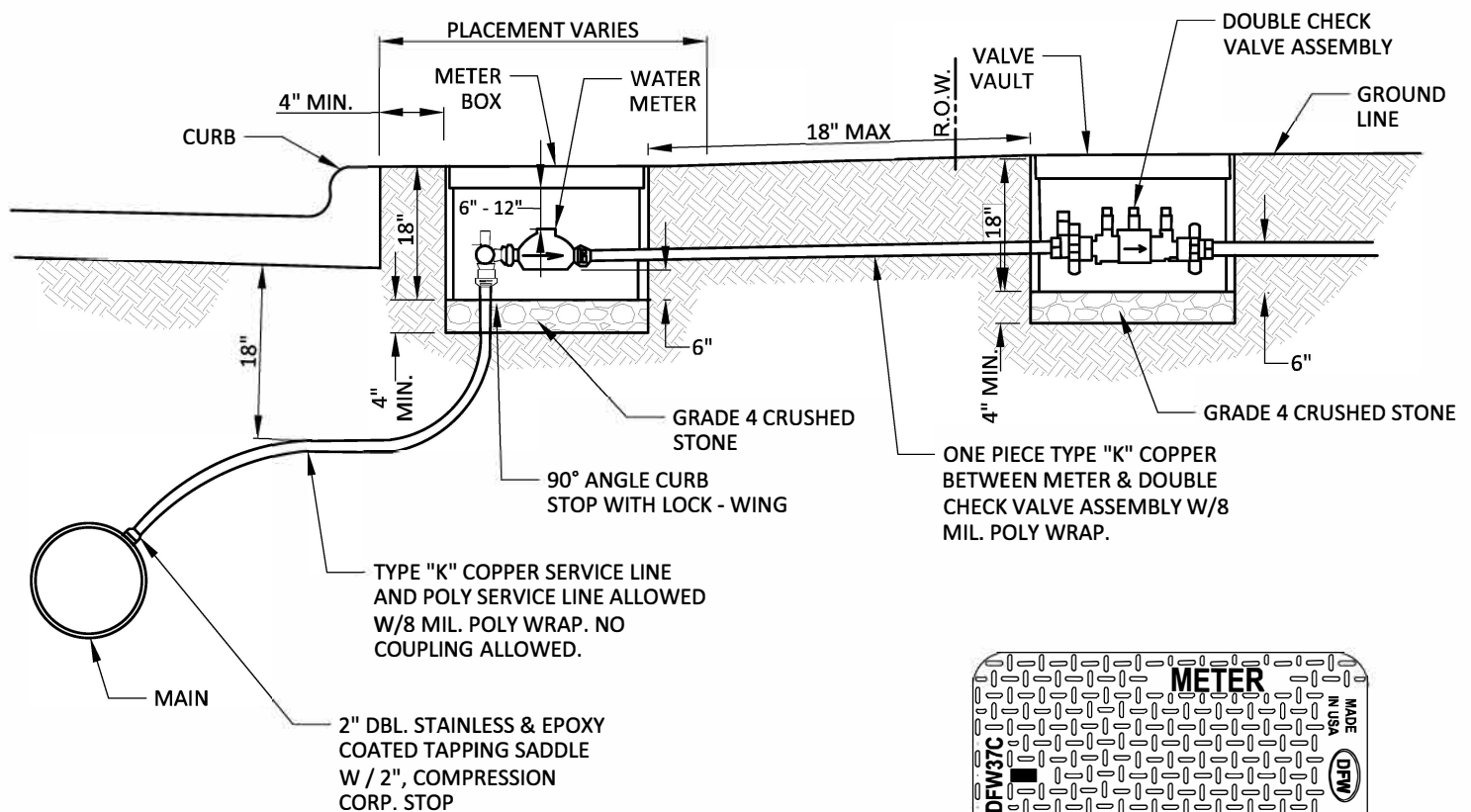
1. 6" ϕ STEEL PIPE W/CONCRETE FILL 6' LENGTH (3' ABOVE PAVING, 3' BELOW PAVING) WITH 1-#4 X 5'-6" TO BE CASED IN 18" ϕ PIER TO DEPTH OF 1'-0" BELOW BOTTOM OF PIPE. USE 2 - #6 X 12" REBAR THRU PIPE INTO CONCRETE PIER. PIPES TO BE PAINTED TRAFFIC YELLOW W/6" WHITE REFLECTOR TAPE WRAPPED AROUND TOP.
2. BLUE STIMONITE REFLECTORS SHALL BE INSTALLED BE IN ACCORDANCE WITH THE WATER DESIGN SYSTEM STANDARDS.



GUARD POST SECTION (N.T.S.)

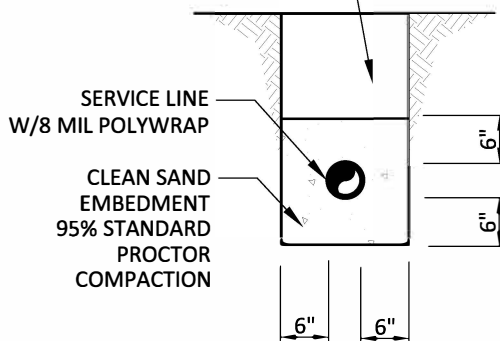


FIRE HYDRANT GUARD POST DETAIL (N.T.S.)



METER TOP

NATIVE BACKFILL AT 95%
STANDARD PROCTOR
COMPACTION (NO ROCK >
3" DIA. IN ANY DIRECTION)



GENERAL INSTALLATION NOTES:

1. WATER METER SHALL BE PLACED IN CENTER OF LOT WITH THE WASTEWATER SERVICE TO BE LOCATED 10' DOWN STREAM.
2. METER AND BOX SHALL BE SET BY THE CONTRACTOR TO ADDISON STANDARDS IN ALL CASES.
3. THE METER BOX SHALL BE SET WITHIN THE R.O.W. OR A DEDICATED UTILITY EASEMENT. IN ALL CASES, THE METER BOX SHALL BE PROTECTED FROM VEHICULAR TRAFFIC.
4. WATER SERVICES SHALL NOT BE CONNECTED TO DEAD END LINES OR FIRE HYDRANT LEADS WITHOUT PRIOR APPROVAL.
5. ALL MATERIALS SHALL CONFORM TO THE TOWN OF ADDISON WATER SYSTEM REQUIREMENTS.

METER BOXES - COMPOSITE DFW PLASTICS PARTS NUMBER

- 3/4" - 1" : DFW PLASTICS DFW37C-18-AF1SF (DFW37C-18-BODY & DFW37C-AF1SF-LID)
- 1.5" - 2" : DFW PLASTICS DFW65C-14-AF1SF (DFW65C-14-BODY & DFW65C-AF1SF-LID)