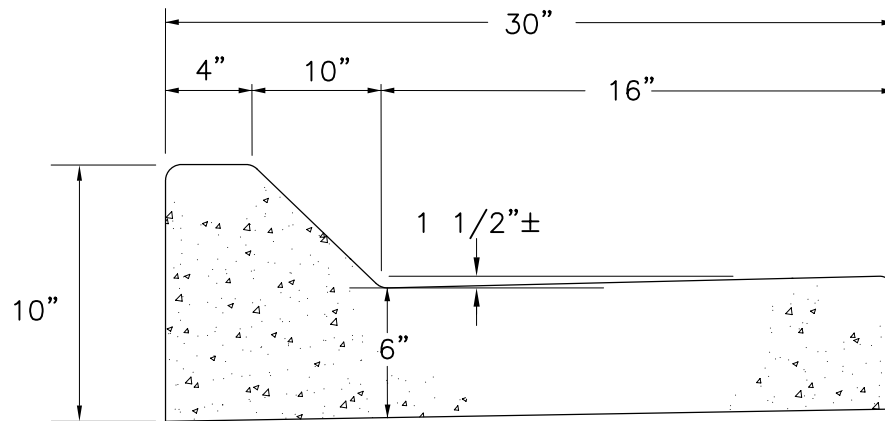


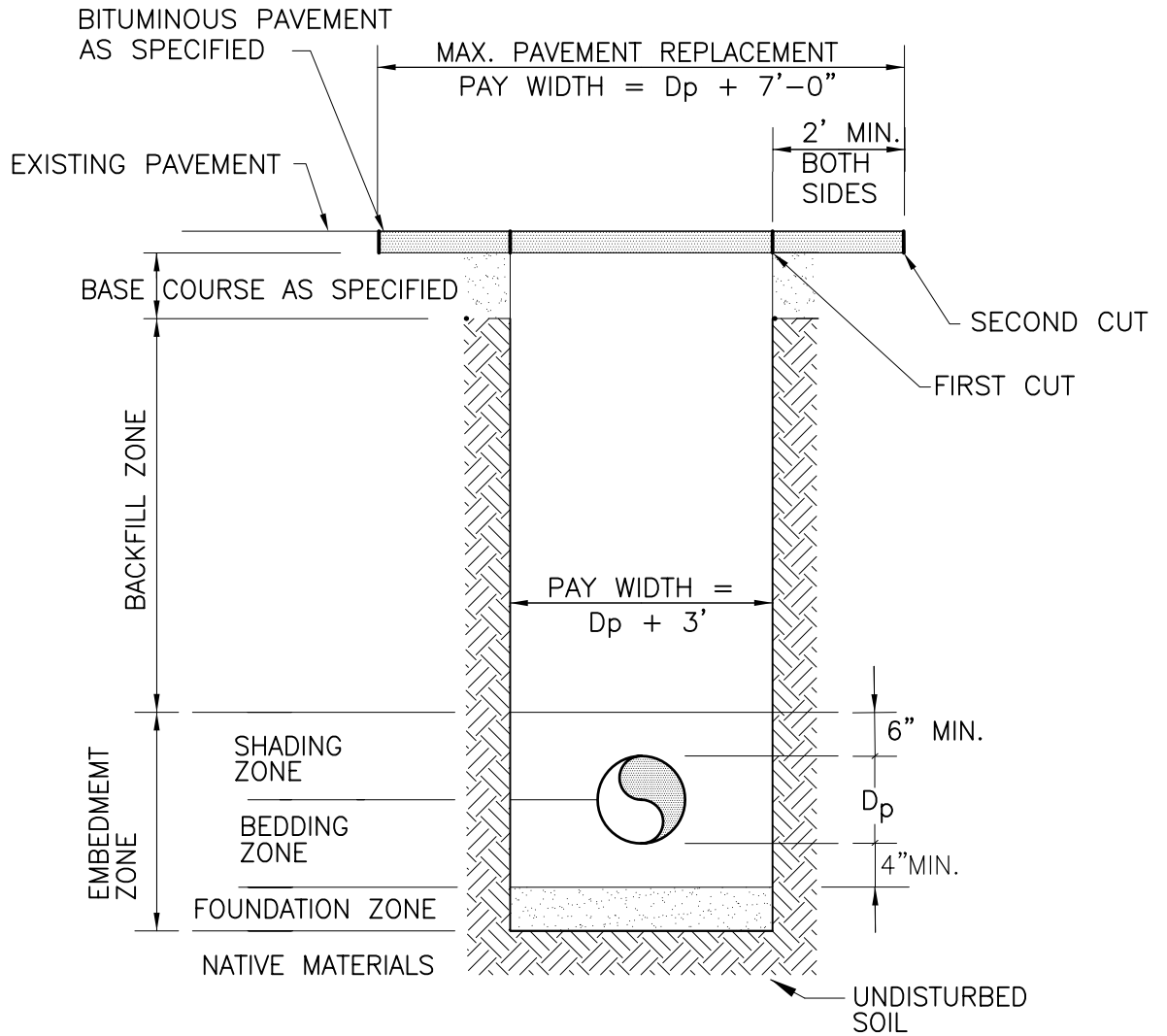
CONCRETE PAN



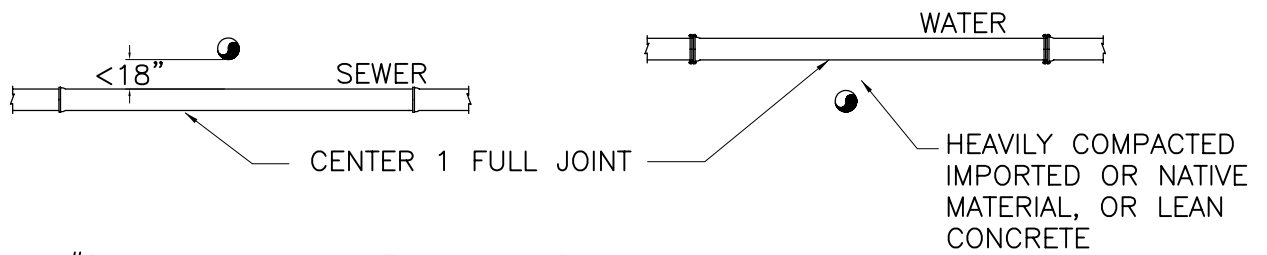
* SLOPE REVERSES FOR SPILL CURB

ALL CURBS TO BE CATCH, EXCEPT WHERE NOTED

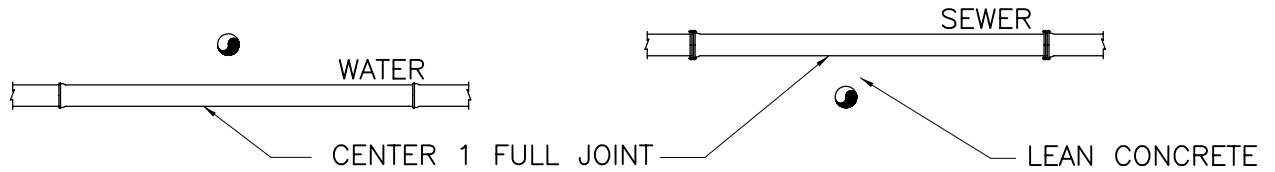
CURB DETAIL



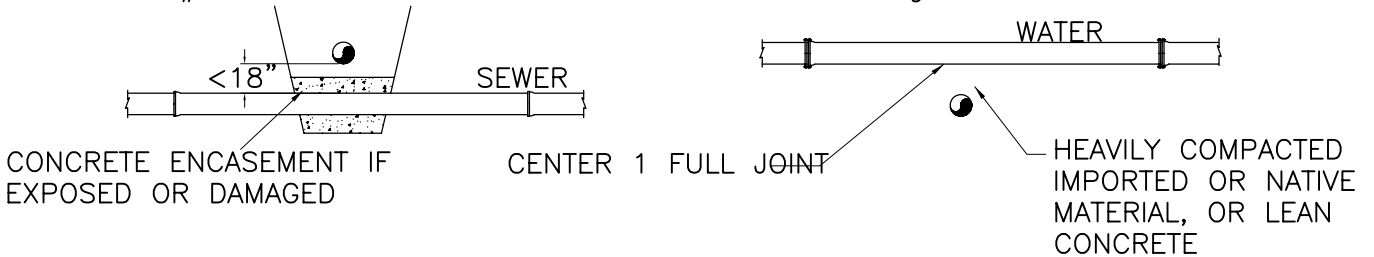
Condition #1: New Water Main less than 18" above New Sewer Main



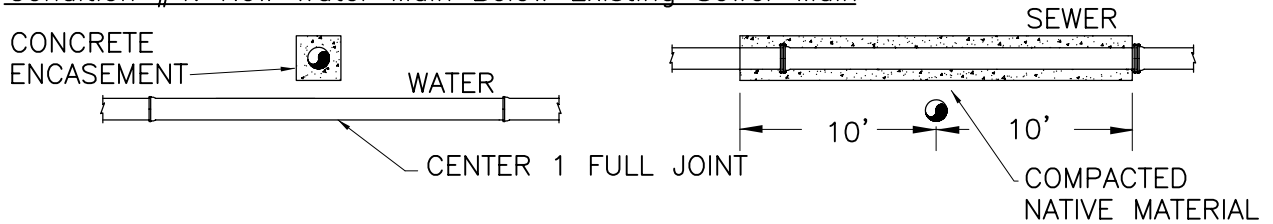
Condition #2: New Water Main Below New Sewer Main



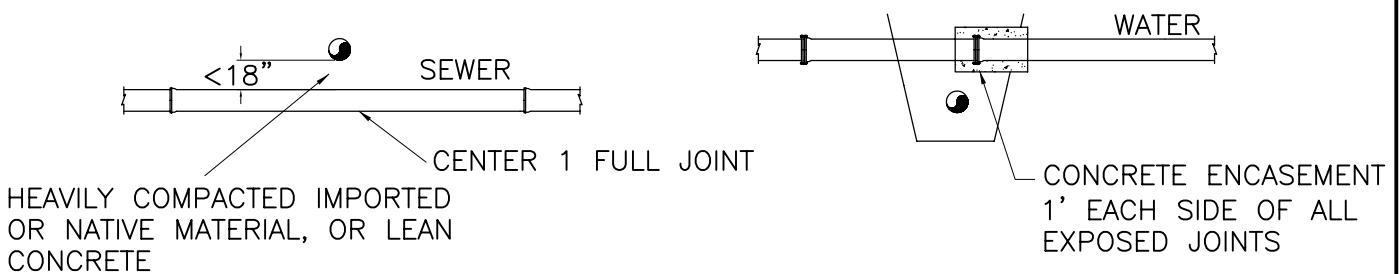
Condition #3: New Water Main less than 18" above Existing Sewer Main



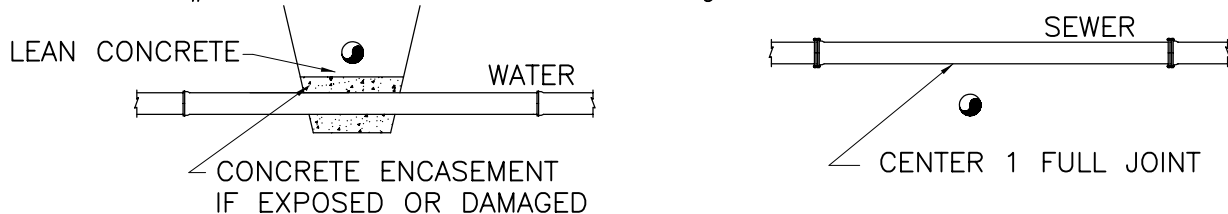
Condition #4: New Water Main Below Existing Sewer Main



Condition #5: New Sewer Main less than 18" below Existing Water Main

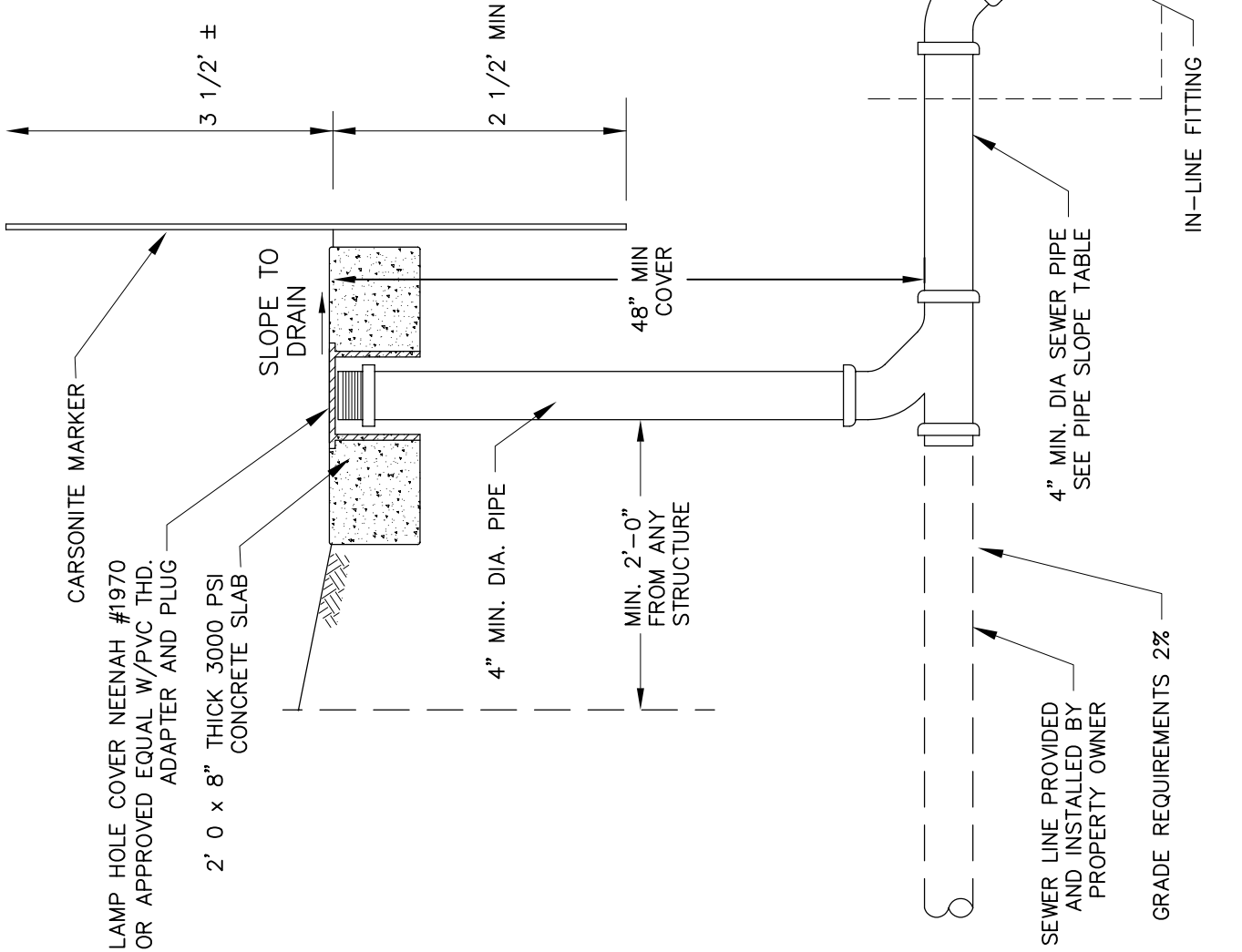


Condition #6: New Sewer Main Above Existing Water Main



- NOTES:**
1. ENGINEER SHALL OBSERVE INSTALLATION OF ALL PIPE, FITTINGS, COUPLINGS, AND GRADE PRIOR TO BACKFILL.
 2. INSTALL AND COMPACT ALL BACKFILL MATERIAL PER SPECIFICATIONS AND AS SHOWN WITHIN THE TRENCH CROSS SECTION AND PIPE EMBEDMENT DETAIL.
 3. RUBBER GASKETED BELL AND SPIGOT TYPE COUPLER FOR TRANSITION FROM SCHEDULE 40 PVC TO SDR35.
 4. ALL PVC FITTINGS SHALL MEET ASTM D3034 SPECIFICATIONS, AND SHALL ALSO MEET ASTM D3212 SPECIFICATIONS FOR RUBBER GASKETED BELL AND SPIGOT TYPE WITH INTEGRAL BELL.

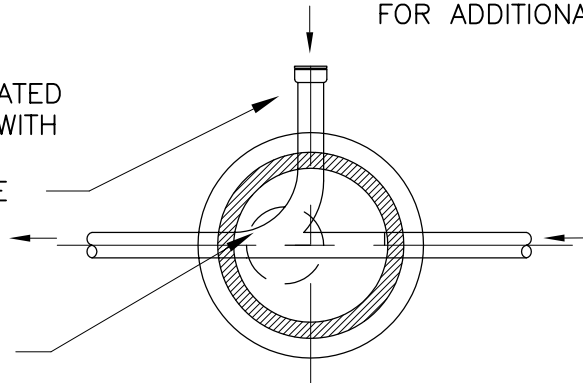
MINIMUM PIPE SLOPES FOR SEWER SERVICES		
4"	1/4" PER FOOT	2%
6"	1/8" PER FOOT	1%
8"	1/16" PER FOOT	0.5%



ALL MANHOLE MATERIALS AND FABRICATION SHALL BE IN ACCORDANCE WITH ASTM C 478. ALL MANHOLES ARE 48"Ø UNLESS INDICATED OTHERWISE ON PLANS. SEE SECTION 2523 - "MANHOLES" FOR ADDITIONAL REQUIREMENTS.

IF STUB-OUT IS INDICATED PLACE BELL SECTION WITH PLUG AND EXTEND 6" MINIMUM BEYOND BASE

USE MAXIMUM RADIUS TO PROVIDE SMOOTH TRANSITION



PLAN VIEW

GROUND SURFACE TREATMENT AND LID PLACEMENT PER SPECIFICATIONS

POSITION COVER AND STEPS TO PROVIDE BEST ACCESS TO BENCH OR PER ENGINEER

FLEXIBLE RUBBER BOOT IN CORED HOLE PER ASTM C 923; "KOR-N-SEAL", "A-LOK" OR APPROVED EQUAL

SEWER PIPE PER PLANS

IMPORTED FOUNDATION MATERIAL

UNDISTURBED NATIVE MATERIAL

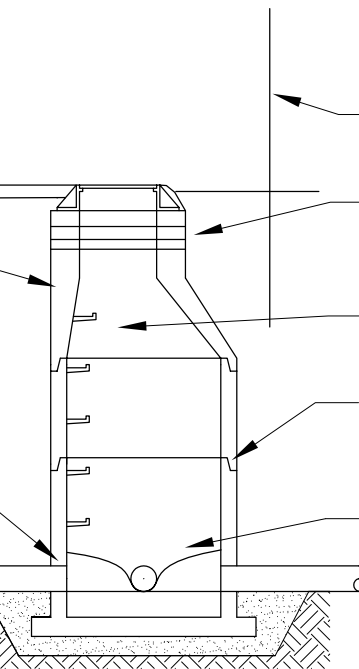
SEWER MARKER POST

AS REQUIRED - 1' MAXIMUM, GROUT ALL GRADE RINGS

MANHOLE STEPS AT 16" MAX.

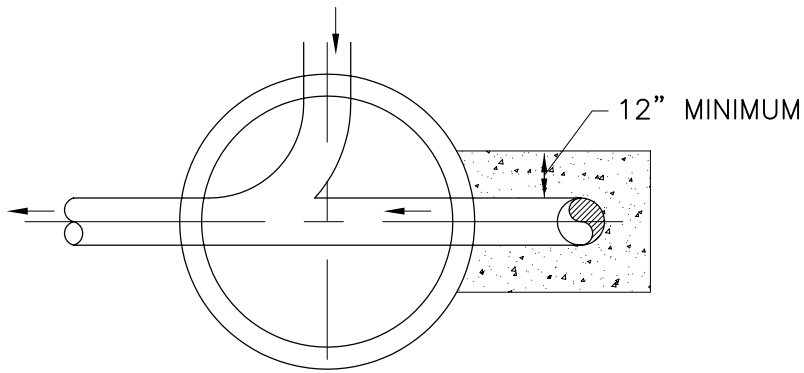
RUB'R-NEK OR APPROVED EQUAL AT ALL JOINTS, SEE SPECS.

SLOPE BENCH 1 INCH/FOOT

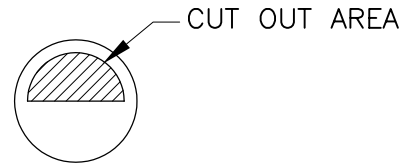


SECTION VIEW

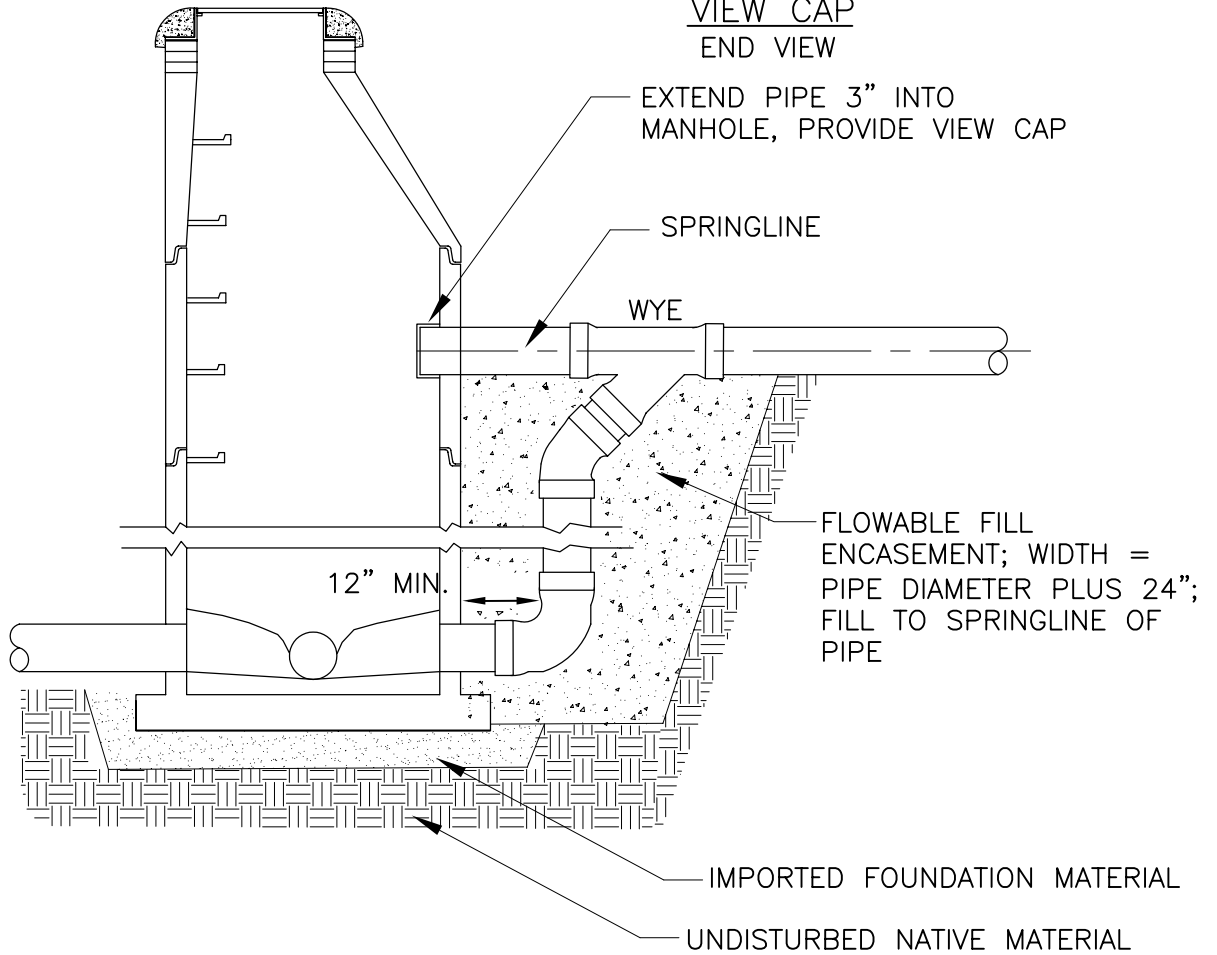
MANHOLE INVERTS AND SLOPE PER ELEVATIONS ON PLANS



PLAN VIEW

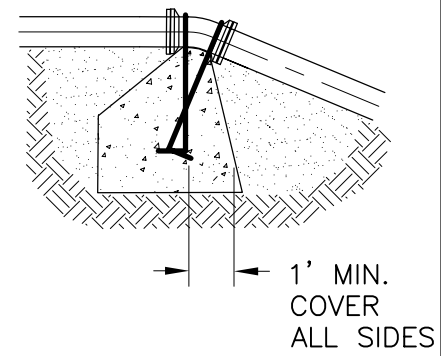
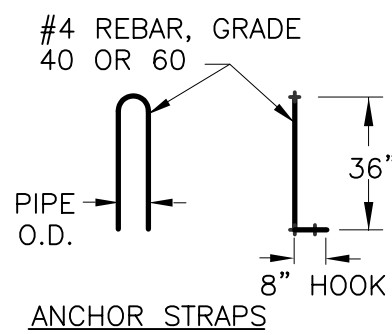
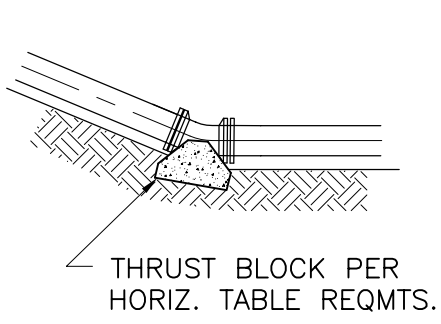


VIEW CAP
END VIEW



SECTION VIEW

SEE STANDARD MANHOLE DETAIL
FOR ADDITIONAL DETAILS

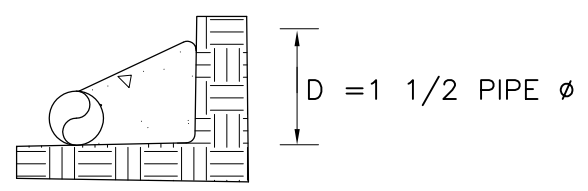


VERTICAL UNDER-BEND

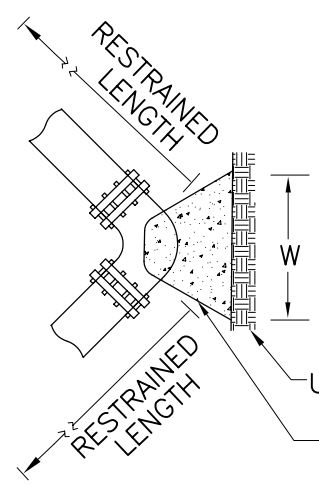
VERTICAL OVER-BEND

NOTES:

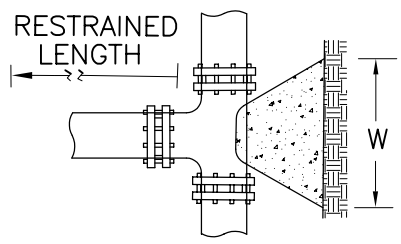
1. FOUR (4) TOTAL ANCHOR STRAPS REQUIRED, (2) EACH SIDE OF THE BEND.
2. COAT EXPOSED STEEL WITH (2) COATS BITUMINOUS COATING.
3. MINIMUM EMBEDMENT DEPTH = 1 FT.
4. MINIMUM SINGLE DIMENSION ON ANY ONE SIDE = 3 FT.
5. CONCRETE SHALL BE 3,000 PSI.
6. PLACE POLYETHYLENE BARRIER BETWEEN PIPE AND CONCRETE.
7. THRUST BLOCKS SHALL BEAR AGAINST FIRM UNDISTURBED EARTH.
8. TABLES BASED UPON MAIN PRESSURE PLUS WATERHAMMER AND 2,000 PSF SOIL BEARING PRESSURE. ADJUST BEARING AREAS IN ACCORDANCE WITH PRESSURES AND SOIL CONDITIONS. SEE SPECIFICATIONS.
9. THE BEARING AREA OF ALL THRUST BLOCKS WILL BE MEASURED PRIOR TO POURING.
10. JOINT RESTRAINT IS REQUIRED IN ADDITION TO THRUST BLOCKS.



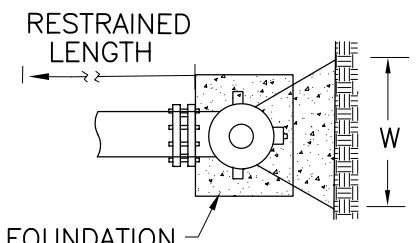
CROSS SECTION



BEND



TEE

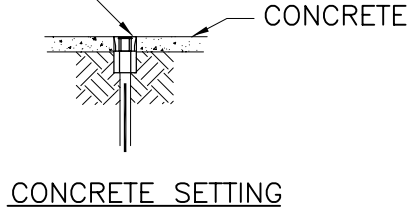


DEAD END OR FIRE HYDRANT

NOTES:

1. JOINT RESTRAINT IS REQUIRED IN ADDITION TO THRUST BLOCKS.
2. THRUST BLOCK AND RESTRAINT ARE DEPENDENT ON LINE PRESSURE. SEE SPECIFICATIONS.

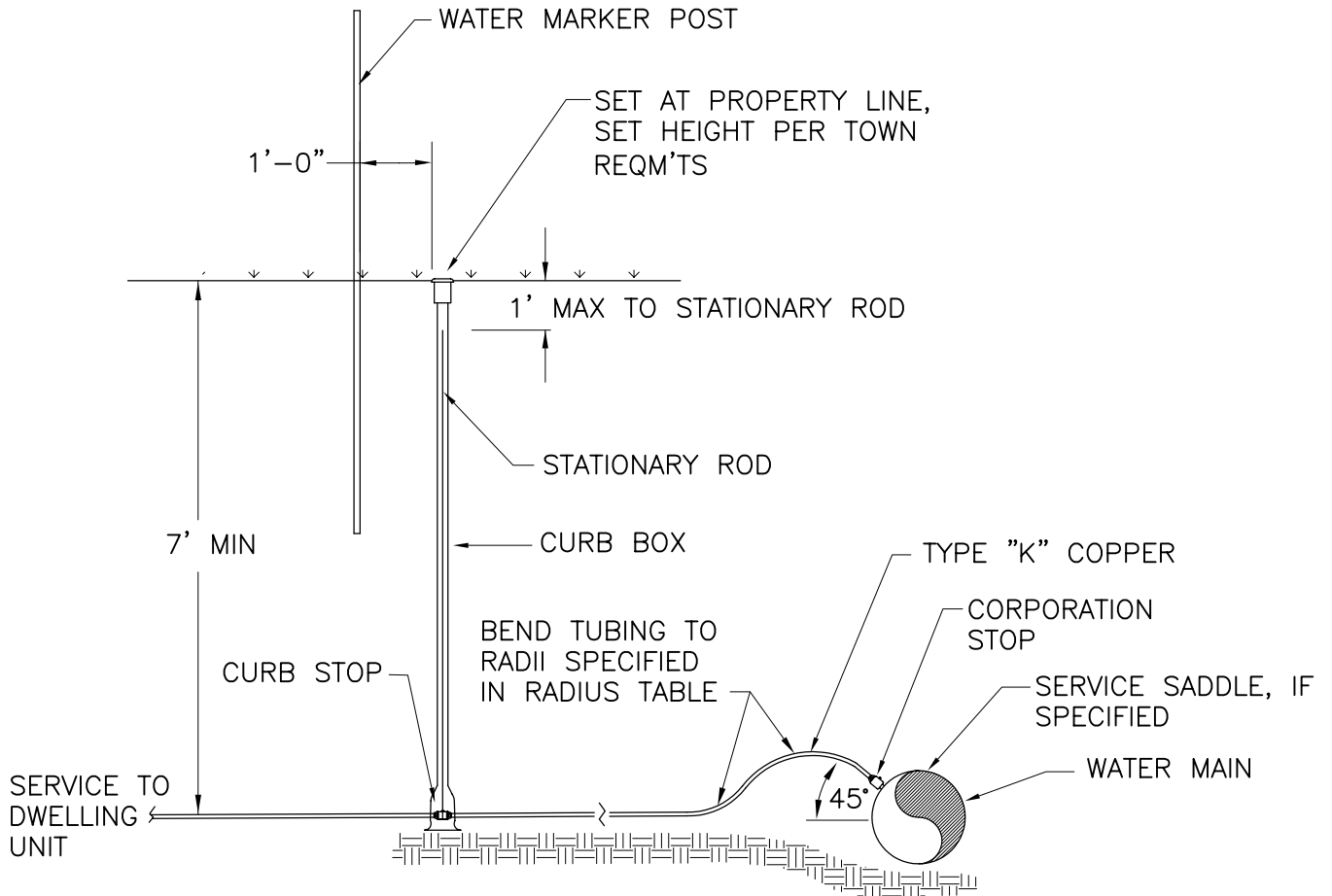
MUELLER H-10342 CURB BOX SLEEVE OR EQUIVALENT, SUITABLE FOR CONCRETE SETTING. TOP OF LID TO BE 1/4" BELOW FINISH GRADE.

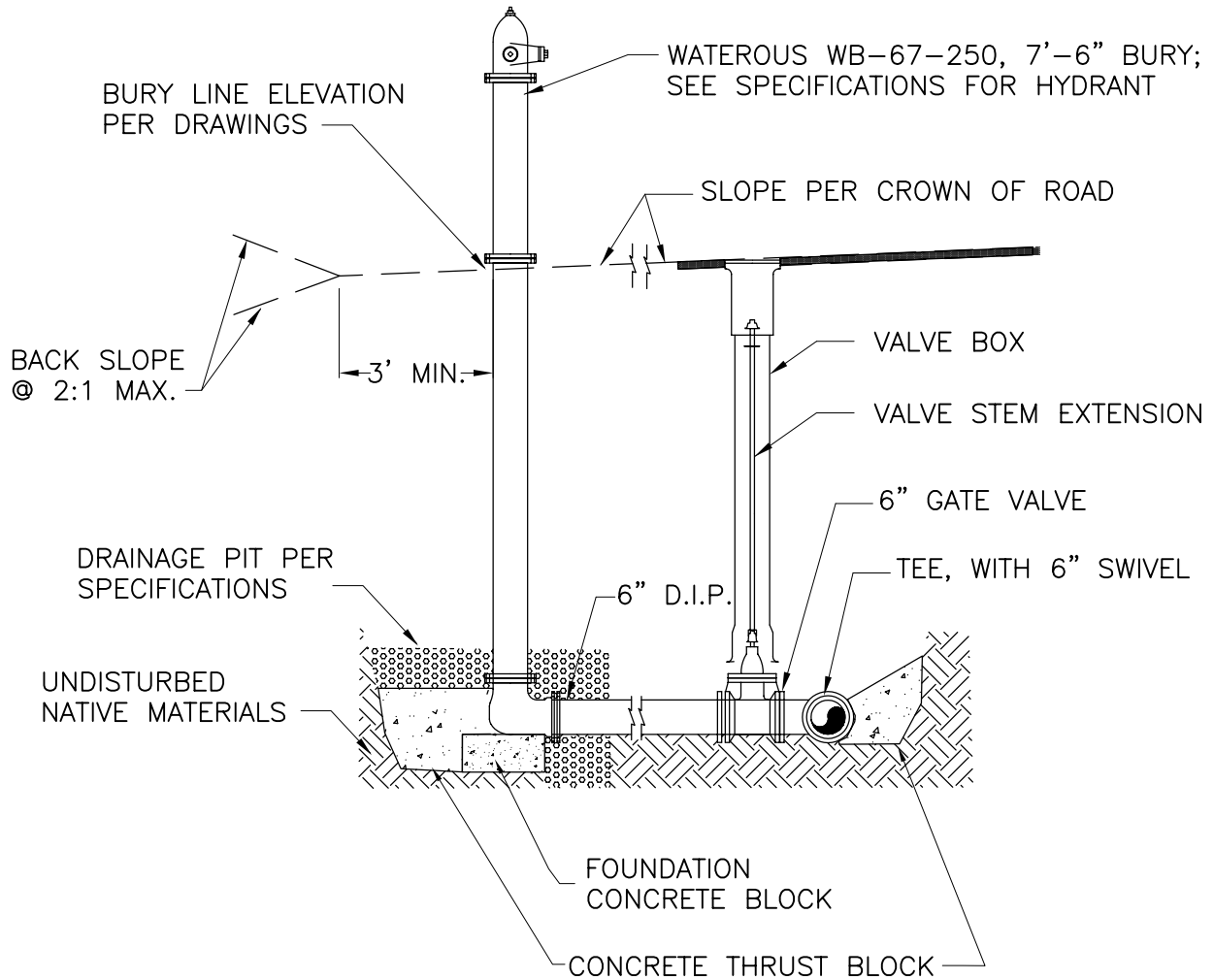


TUBE DIA.	R (MIN)
3/4"	6"
1"	7 1/2"
1 1/4"	9"
1 1/2"	10"
2"	12"

WHEN BENDING BY HAND BEND THE COPPER AROUND A CIRCULAR WOODEN DISC.

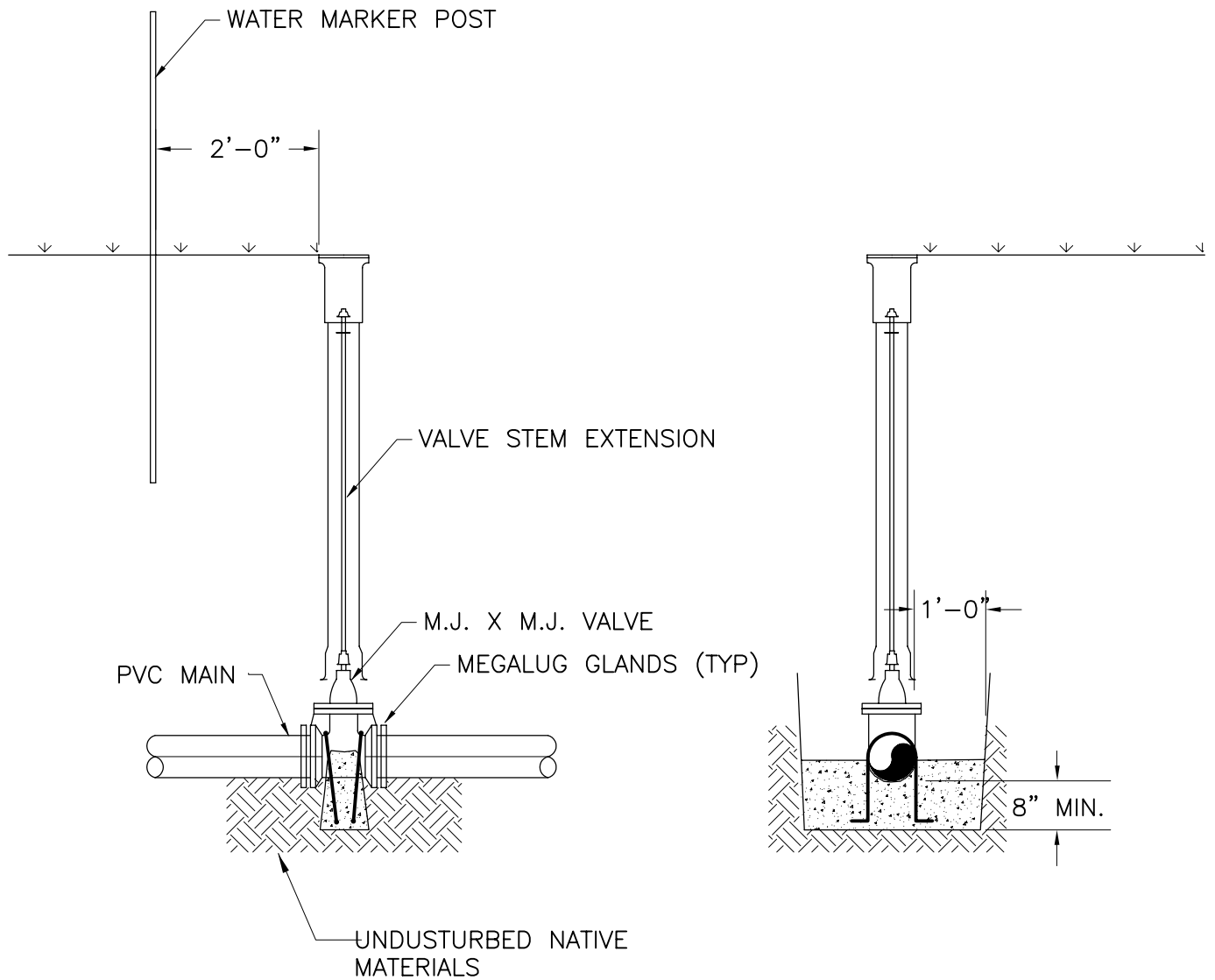
RADIUS TABLE





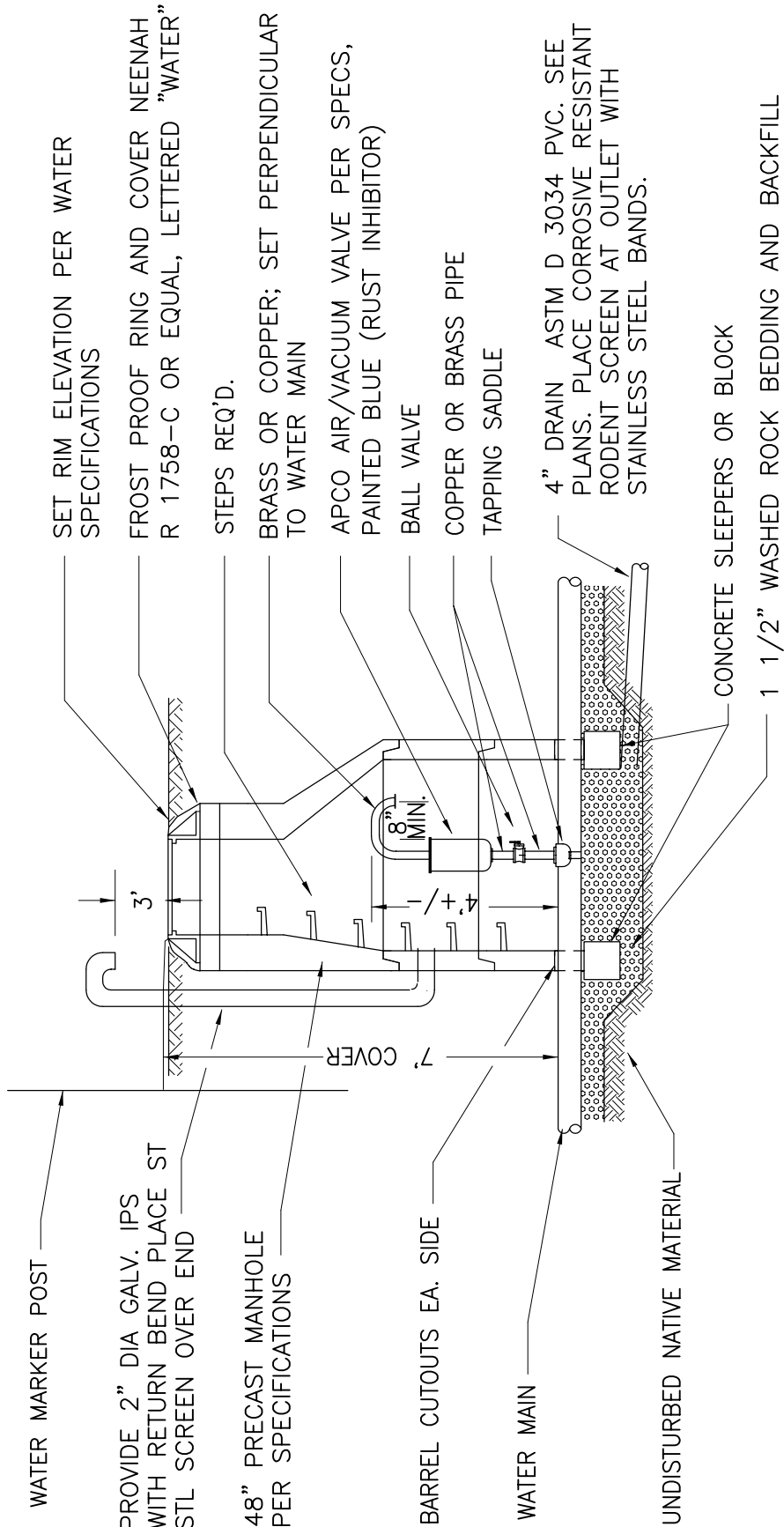
NOTES

1. ALL HYDRANT LATERAL JOINTS REQUIRE AN APPROVED JOINT RESTRAINT SYSTEM.
2. HYDRANT LATERALS REQUIRE THRUST BLOCKS AND FOUNDATION BLOCK AS SHOWN.
2. POLY ENCASE TEE, VALVE, HYDRANT AND PIPE. SEE SPECIFICATIONS.



NOTES

1. CONCRETE SHALL BE 3,000 PSI.
2. PLACE POLYETHYLENE BARRIER BETWEEN PIPE AND CONCRETE.
3. THRUST BLOCKS SHALL BEAR AGAINST FIRM UNDISTURBED EARTH.
4. POLYWRAP VALVE. SEE SPECIFICATIONS.



SET RIM ELEVATION PER WATER SPECIFICATIONS

FROST PROOF RING AND COVER NEENAH R 1758-C OR EQUAL, LETTERED "WATER" STEPS REQ'D.

BRASS OR COPPER; SET PERPENDICULAR TO WATER MAIN

APCO AIR/VACUUM VALVE PER SPECS, PAINTED BLUE (RUST INHIBITOR)

BALL VALVE

COPPER OR BRASS PIPE

TAPPING SADDLE

NOTES

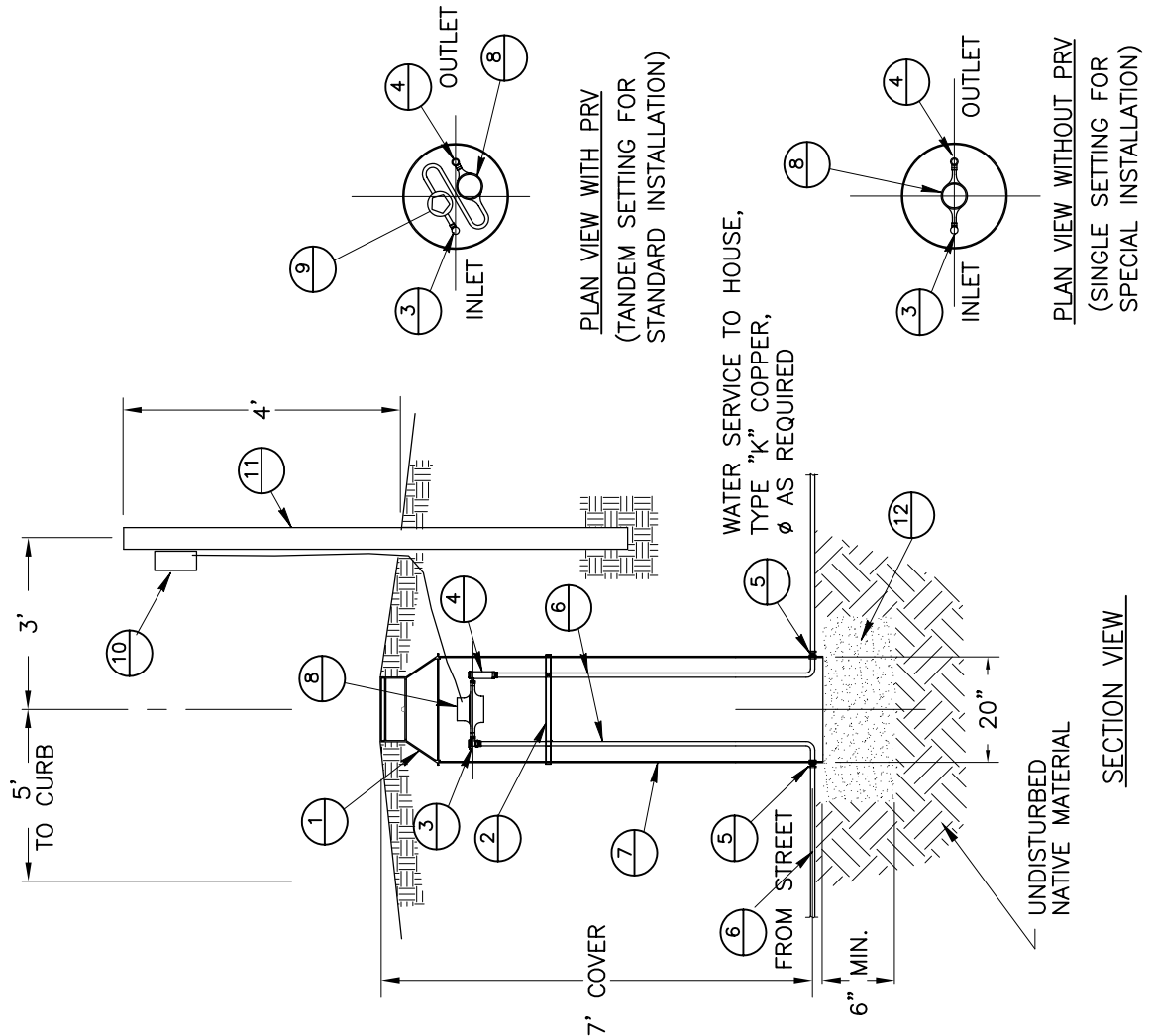
1. ORIENT STEPS, RING AND COVER TO BEST FIT SITE REQUIREMENTS.
2. SEE WATER SPECIFICATIONS FOR ADDITIONAL MATERIAL REQUIREMENTS.
3. BOTTOM BARREL SECTION TO HAVE CUTOUTS W/2" MIN. CL'R. AROUND PIPE.
4. SET BOTTOM BARREL SECTION ON TWO 12"X12"X6' REINF. PRECAST CONCRETE SLEEPERS. (12" CONCRETE BLOCKS SET RADIALLY ACCEPTABLE ALTERNATE). SHADE TO SPRING LINE INSIDE M.H.
5. FOR ARV IN ROADWAY, ELIMINATE 2" VENT, 4" DRAIN TO DAYLIGHT IS REQUIRED.
6. SIZE AIR/VACUUM VALVE FOR EACH APPLICATION.

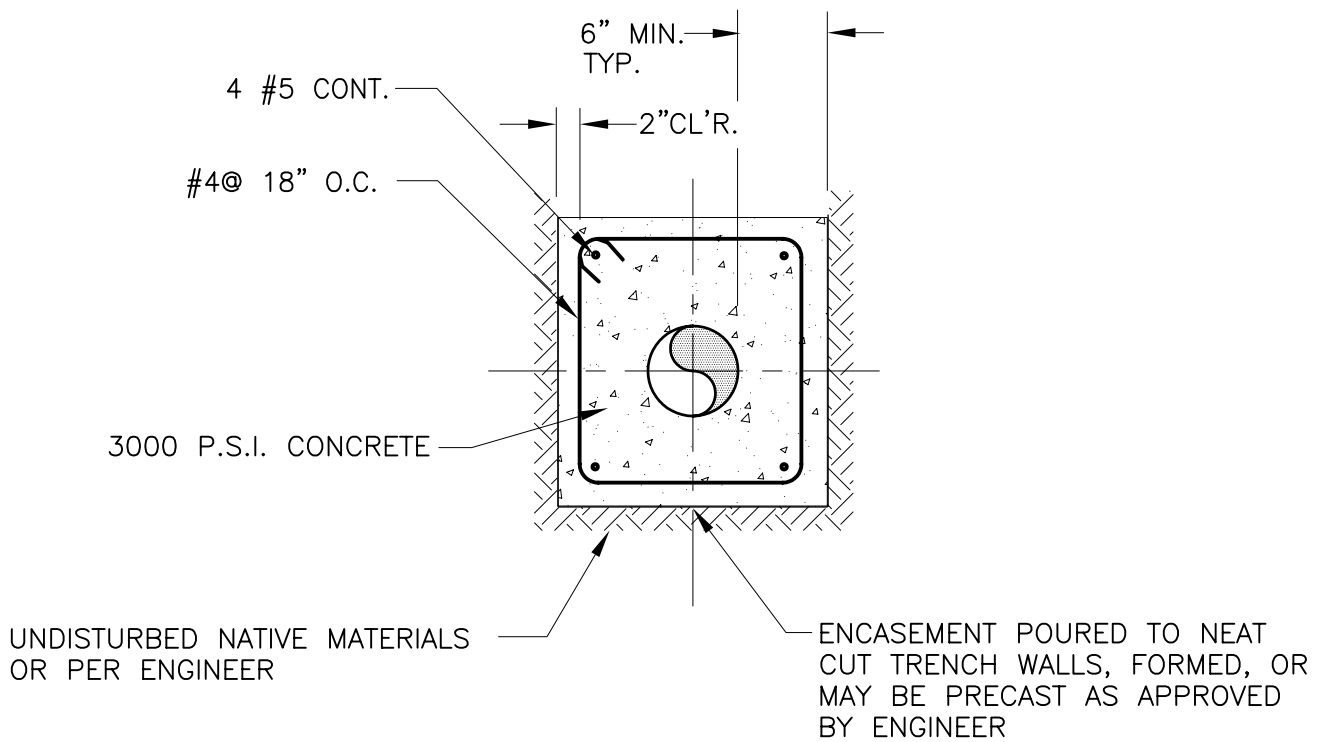
COMPONENTS LIST

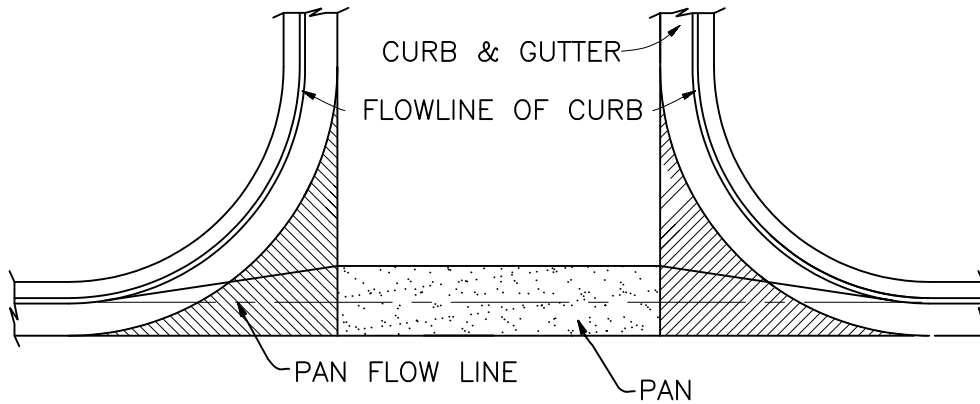
ITEM	DESCRIPTION
1	"WABASH" W3-DOUBLE INSULATED LID
2	20" ϕ FORD PLASTIC PIT SETTER
3	ANGLE BALL VALVE
4	ANGLE CARTRIDGE DUAL CHECK VALVE
5	CTS PACK JOINT, FORD C4433G; 3/4"
5	CTS PACK JOINT, FORD C4444G; 1"
6	TYPE "K" COPPER TUBING
7	BRACE
8	METER
9	"WATTS USB" PRESSURE REDUCING VALVE
10	RADIO READ MOUNTED ON POST
11	4" ϕ X 8' GREEN-TREATED FENCE POST
12	6" MIN. WASHED ROCK

NOTES

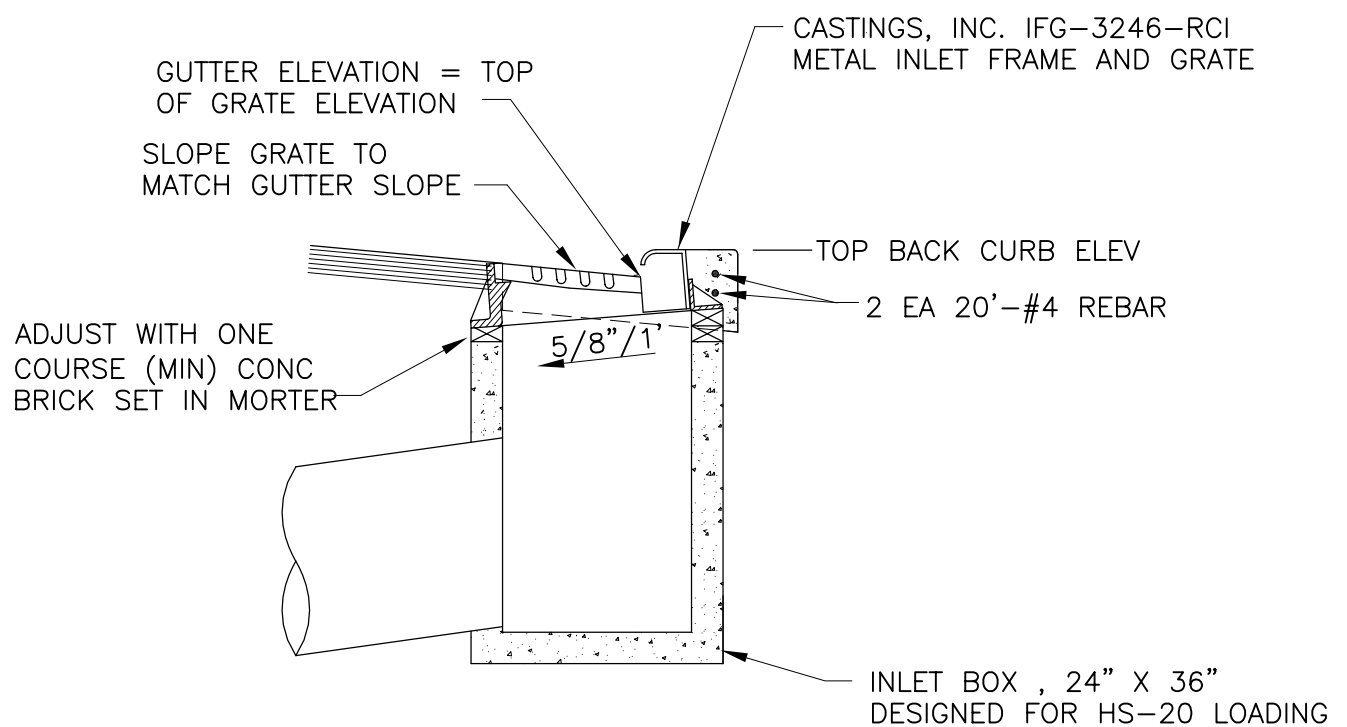
1. LOCATE PIT IN A WELL-DRAINED AREA.
2. SEE PLANS FOR SIZE OF SERVICE LINES AND METERS. METER SIZE TO BE DETERMINED BY THE DISTRICT.
3. METER PITS WITH PRV'S REQUIRE TANDEM SETTINGS.
4. SEE PLANS FOR SPECIFIC LOCATIONS REQUIRING PRV'S.
5. MAINTAIN 2" MINIMUM CLEARANCE BETWEEN ALL COMPONENTS AND PIT WALL.
6. GRADE AWAY FROM LID 2% MIN. FOR 3 FT. IN ALL DIRECTIONS.
7. SEE "WATER SERVICE DETAIL" FOR STREET SIDE CONTINUATION.
8. ITEMS 2-7 ARE PURCHASED PRE-ASSEMBLED FROM FORD METER BOX CO.; SEE PLASTIC PIT SETTERS, CAT. SECT. FA1. A TYPICAL SAMPLE NO. FOR THE 3/4" METER PIT WOULD BE: PTDBHC344-20-84. ALL OTHER ITEMS ARE PURCHASED SEPARATELY.
9. TYPE "K" COPPER WATER PIPE SHALL BE USED FROM THE WATER MAIN TO THE METER PIT; EITHER TYPE "K" COPPER OR HDPE CAN BE USED FROM THE METER PIT TO THE HOME.







 THIS AREA SHALL BE Poured MONOLITHICALLY WITH CURB AND GUTTER AND PAID FOR AS "CONCRETE PAVEMENT."



NOTES:

1. BOX SHALL BE PRECAST, AS MFCTR'D. BY AMCOR OR EQUAL.
2. CURB TO BE TRIMMED AND ADJUSTED TO MATCH BACK OF CONCRETE CURB HEIGHT. TRANSITION CONCRETE CURB AND
3. GUTTER SECTION FOR 10' EACH SIDE OF INLET TO MATCH TOP OF GRATE ELEVATION.
ADJUST DRIVE-OVER CURB BOX TO FIT CURB BACK.