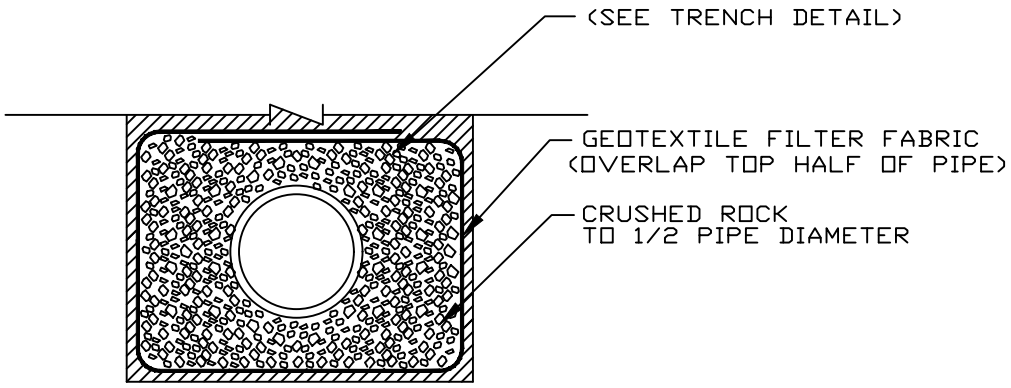
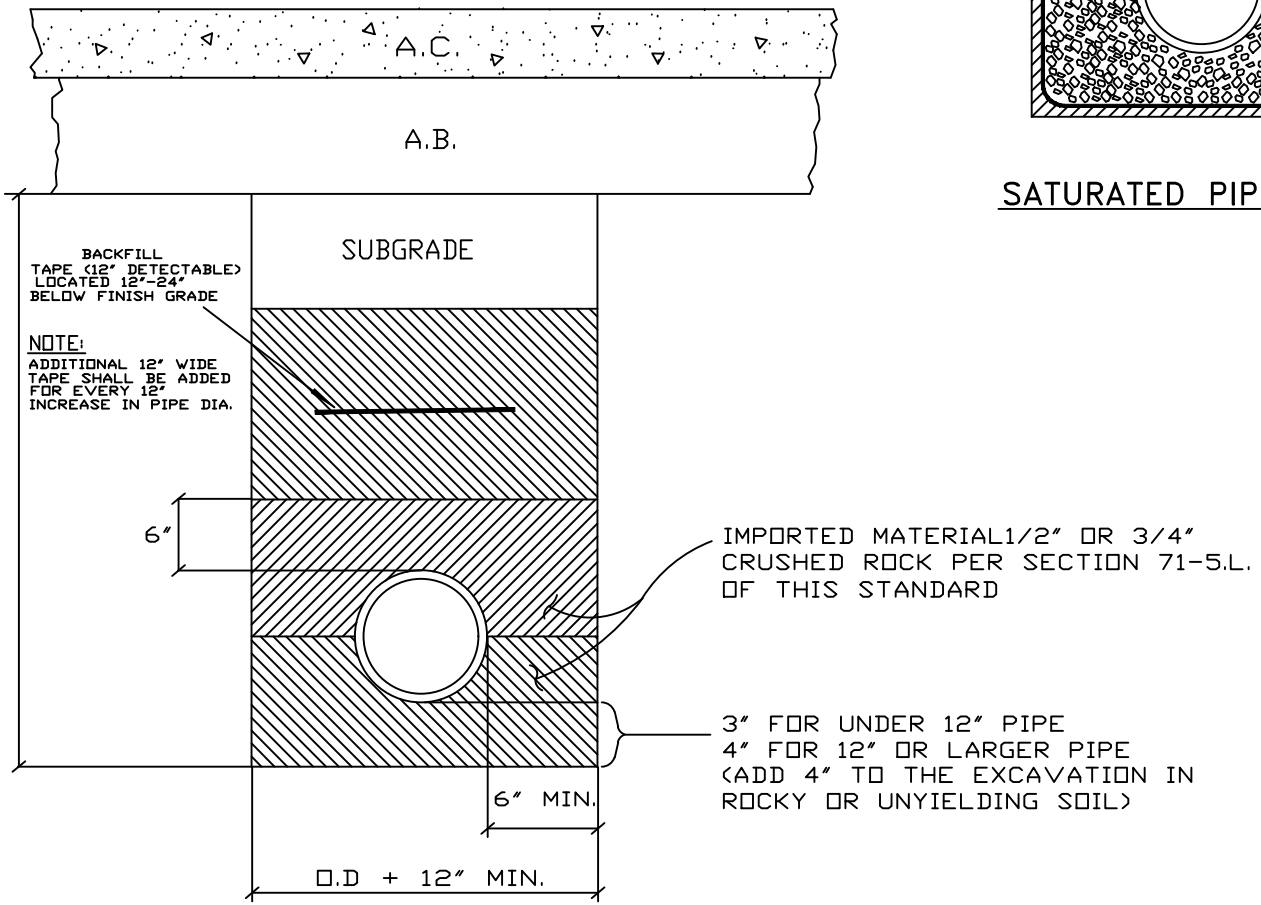
TRENCH BACKFILL REQUIREMENTS:

1. PROPOSED STREETS- REFER TO DETAIL TB-1 OF SECTION 31 FOR BACKFILL REQUIREMENTS ABOVE THE PIPE ZONE.

2. EXISTING STREETS- REFER TO DETAIL TB-1 AND TB-3 OF SECTION 31 FOR BACKFILL REQUIREMENTS ABOVE THE PIPE ZONE.



SATURATED PIPE TRENCH



NOTE: BACKFILL SHALL BE MECHANICALLY CONSOLIDATED OR SHOVEL SLICED UNDER THE HAUNCHES OF THE PIPE

RICHARD PLECKER
ENVIRONMENTAL UTILITIES DIRECTOR

CITY OF ROSEVILLE CALIFORNIA

ENVIRONMENTAL UTILITIES DEPARTMENT

SEWER MAIN TRENCH AND BACKFILL

SCALE: NONE
REVISED: JANUARY 2019
DRAWN BY: R. VAN NESS
APPROVED BY: RICHARD PLECKER

SS-1

NOTES

MANHOLE LIDS SHALL BE SEALED WITH AN APPROVED RUBBER GASKET.

JOINTS SHALL BE MORTARED INSIDE AND OUT.

UNUSED CHANNELS SHALL BE COMPLETELY FILLED WITH GROUT.

STUBS SHALL BE PLUGGED AND END MARKED ABOVE FINISHED GRADE WITH A REDWOOD 4 BY 4 POST PAINTED GREEN

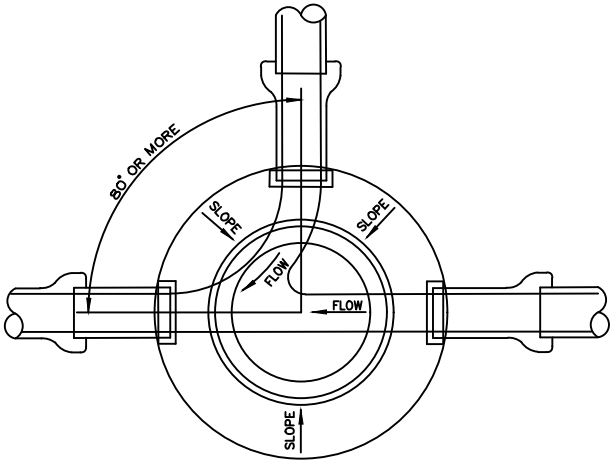
IF AN ECCENTRIC CONE IS USED, PLACE SUCH THAT THE OPENING IS OVER THE UPSTREAM INVERT.

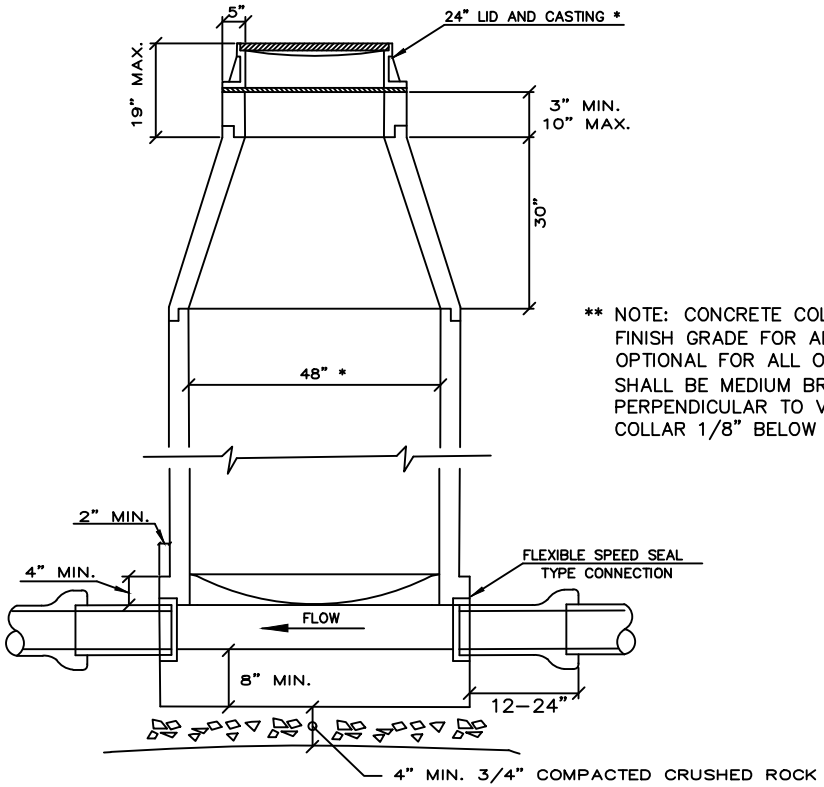
NO CAULDER OR REPAIR COUPLINGS SHALL BE USED ON NEW CONSTRUCTION

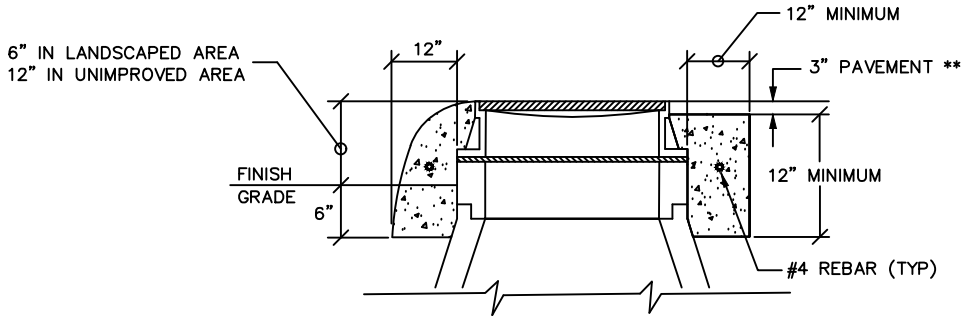
FLOW LINES SHALL HAVE A 1/10 DROP OR AS INDICATED ON PLANS

MANHOLES WITH DROPS SHALL BE EPOXY COATED. THE COATING SHALL BE APPLIED PER SEC. 91-10K OF THESE STANDARDS.

* 60" & 72" MANHOLES SHALL USE A 36" COMPOSITE LID AND FRAME,







CONCRETE COLLAR DETAIL

** NOTE: CONCRETE COLLAR SHALL BE PLACED FLUSH TO FINISH GRADE FOR ALL COLLECTORS AND ARTERIALS, OPTIONAL FOR ALL OTHER ROADWAYS. FINISH SURFACE SHALL BE MEDIUM BROOM FINISH WITH PATTERN PERPENDICULAR TO VEHICLE TRAVEL DIRECTION. SET COLLAR 1/8" BELOW ADJACENT FINISHED PAVEMENT.

RICHARD PLECKER
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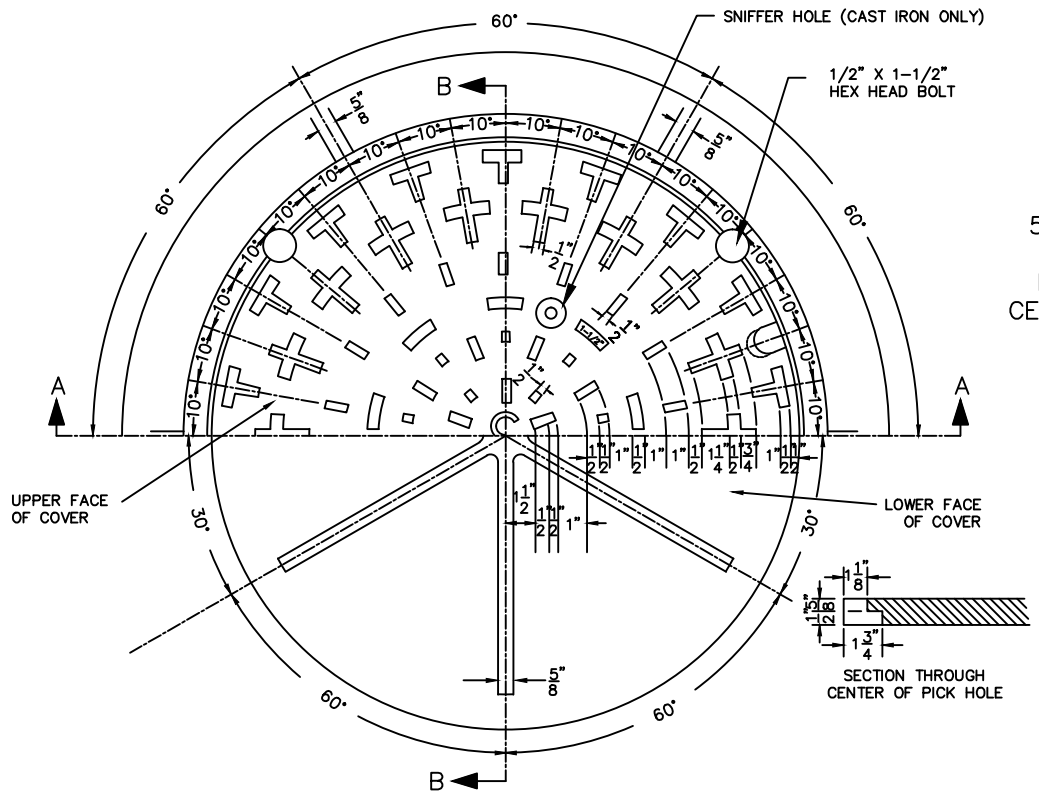
CITY OF ROSEVILLE CALIFORNIA

ENVIRONMENTAL UTILITIES DEPARTMENT

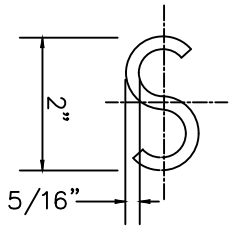
SEWER MANHOLE STANDARD 48 INCH

SCALE: NONE
REVISED: JANUARY 2020
DRAWN BY: R. VAN NESS
APPROVED BY: RICHARD PLECKER

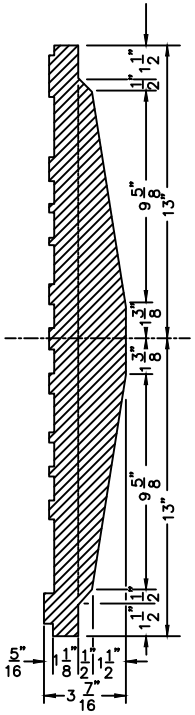
SS-2



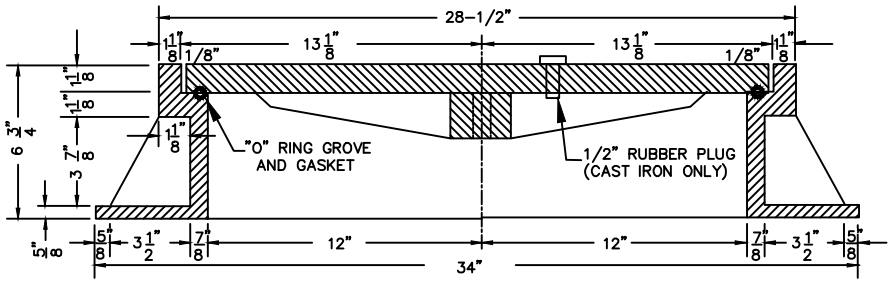
HALF PLAN OF HEAD AND COVER



LETTER 'S' AT CENTER OF COVER



SECTION B–B



SECTION A–A

NOTES: SEE SECTION 91-16.E.3 FOR APPROVED LIST OF SEWER MANHOLE FRAME AND COVER

RICHARD PLECKER
ENVIRONMENTAL UTILITIES DIRECTOR

CITY OF ROSEVILLE CALIFORNIA

ENVIRONMENTAL UTILITIES DEPARTMENT

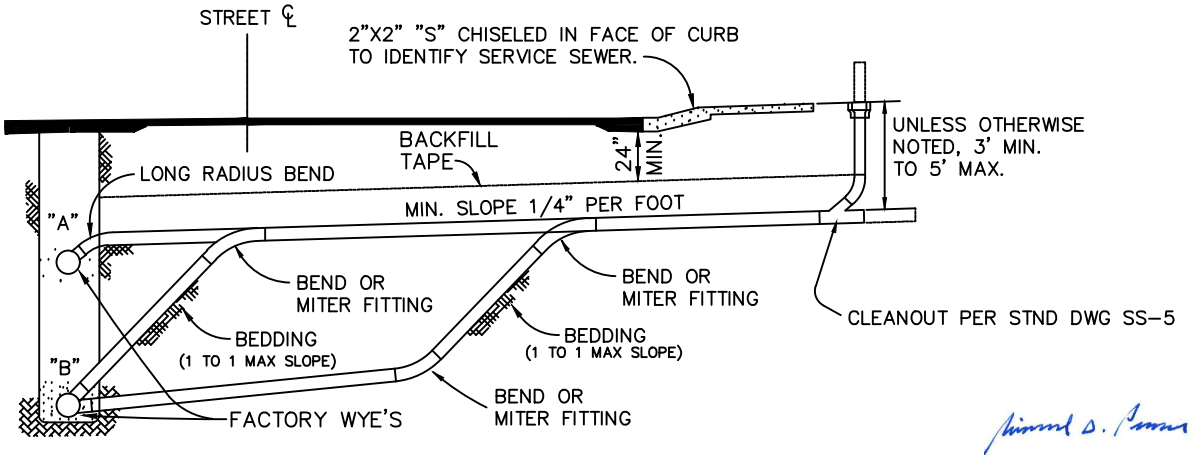
STANDARD SEWER MANHOLE FRAME AND COVER

SCALE: NONE
REVISED: JANUARY 2016
DRAWN BY: R. VAN NESS
APPROVED BY: RICHARD PLECKER

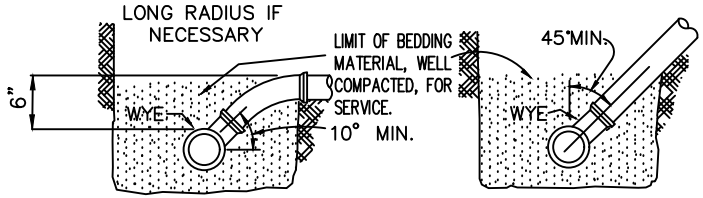
SS-3

GENERAL NOTES:

1. ALL SERVICE LINES SHALL BE 4" FOR RESIDENTIAL AND 6" FOR COMMERCIAL UNLESS OTHERWISE NOTED.
2. SERVICES SHALL HAVE SAME BEDDING AND BACKFILL AS LATERAL SEWER.
3. CONTRACTOR SHALL USE THE MOST APPROPRIATE TYPE CONNECTION (A OR B) FOR THE PARTICULAR SITUATION ENCOUNTERED.
4. SERVICE SEWER SHALL HAVE MINIMUM 3'–0" COVER AT PROPERTY LINE WHENEVER LATERAL DEPTH AND SERVICE SEWER SLOPE OF 1/4" PER FOOT (MINIMUM) PERMIT. SEE NOTE 10.
5. WHEN THE LATERAL SEWER DEPTH IS SUCH THAT MINIMUM COVER AT PROPERTY LINE CANNOT BE MET, THE MINIMUM SLOPE OF 1/4" PER FOOT SHALL GOVERN THE COVER.
6. MIN. SPECIFIED COVER AT THE PROPERTY LINE SHALL BE MEASURED FROM EXISTING GROUND SURFACE OR EDGE OF ADJACENT ROADWAY, WHICHEVER IS LOWER.
7. A SPECIFIC ELEVATION AT THE PROPERTY LINE, WHEN SHOWN ON THE PLANS OR DESIGNATED BY THE ENGINEER, SHALL GOVERN.
8. MITER FITTING SHALL BE MAX. 45°.
9. MINIMUM DEPTH OF COVER SHALL BE INCREASED TO 4'–6" WHERE A WATER MAIN IS TO BE INSTALLED AT BACK OF SIDEWALK AS PART OF THE SUBDIVISION IMPROVEMENTS. IN SUCH CASES, THE SERVICE SHALL BE EXTENDED TO A MINIMUM OF 7' BACK OF SIDEWALK; CLEANOUT TO GRADE SHALL REMAIN WITHIN 3' OF BACK OF SIDEWALK.
10. SEWER SERVICES ORIGINATING FROM SEWER MAINS 14 FT AND GREATER IN DEPTH SHALL HAVE THE CROTCH OF THE VCP "WYE" FITTING FILLED WITH CONCRETE.
11. UNDERGROUND CONTRACTOR SHALL END SEWER SERVICE 2–3' UPSTREAM OF SEWER CLEANOUT. SEE STANDARD DETAIL SS–5.



ELEVATION



TYPE A TYPE B

CONNECTION DETAILS

RICHARD PLECKER
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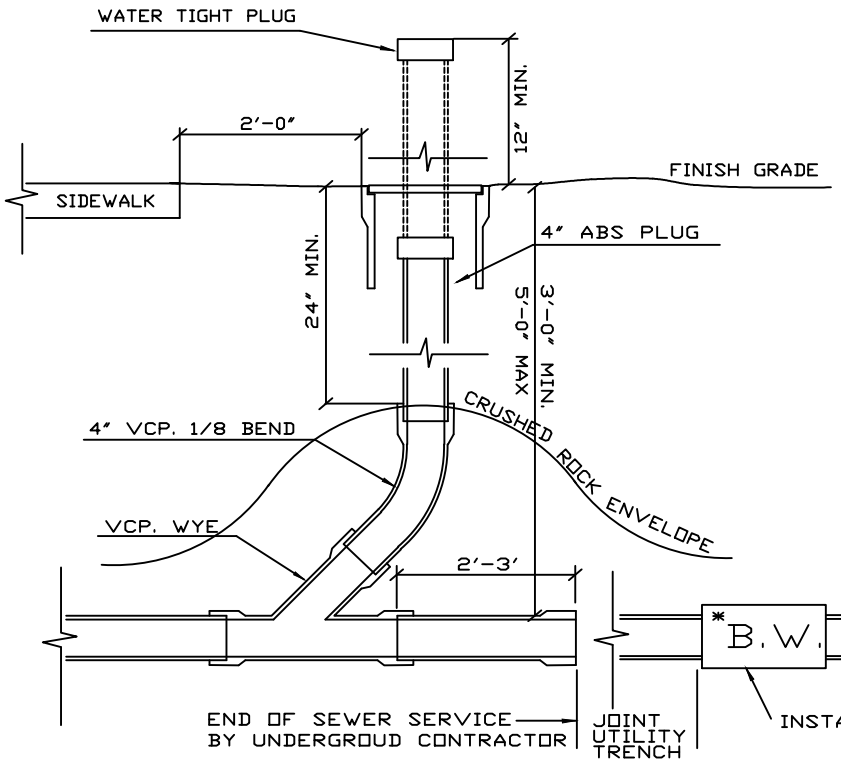
CITY OF ROSEVILLE CALIFORNIA

ENVIRONMENTAL UTILITIES DEPARTMENT

SEWER SERVICE

SCALE: NONE
REVISED: JANUARY 2017
DRAWN BY: R. VAN NESS
APPROVED BY: RICHARD PLECKER

SS–4



NOTES:

1) INSTALL ROUND NON-TRAFFIC TYPE CONCRETE VALVE BOX & COVER MARKED "SEWER" IN A NON - TRAFFIC AREA . INSTALL METAL LID MARKED "SEWER" IN AREAS WITH POTENTIAL TRAFFIC. A G5 BOX SHALL BE INSTALLED IN TRAFFIC AREAS.

2) 3' VCP STUB SHALL BE INSTALLED UPSTREAM OF CLEANOUT. 2' VCP SHALL BE INSTALLED WHERE SEWER SERVICE ENTERS OVER JOINT UTILITY TRENCH

3) CLEANOUT BOX TO BE FREE OF ALL DIRT AND READY AT TIME OF PRE-FINAL INSPECTION.

4) SERVICES OVER 100' LONG AND COMMERCIAL SERVICES REQUIRE A MIN. 6" CLEANOUT WITH 6" FITTINGS. THE CLEANOUT BOX SHALL BE A G-5 BOX FOR 4" - 6" RISERS AND A G-12 BOX FOR 8" RISERS. CONSTRUCT PER W-16.

5) CONNECTION TO MAIN SHALL BE WITH A FACTORY WYE OR AT A MANHOLE.

6) THE CLEANOUT RISER SHALL BE INSTALLED 12" ABOVE GRADE PRIOR TO BUILDING CONSTRUCTION.

7) BUILDING CONTRACTOR SHALL SET BOX TO FINISH GRADE AND INSTALL AN ABS PLUG SET 6" BELOW THE SURFACE PRIOR TO BUILDING PRE-FINAL.

* 8) BACKWATER VALVE IF REQUIRED SHALL BE INSTALLED BY THE BUILDING CONTRACTOR

9) TREES ARE TO BE PLACED 7 1/2' FROM CLEAN OUT.

10) INSTALL A CITY CLEANOUT AT A MINIMUM 5' FROM COMMERCIAL BUILDINGS.

RICHARD PLECKER
ENVIRONMENTAL UTILITIES DIRECTOR

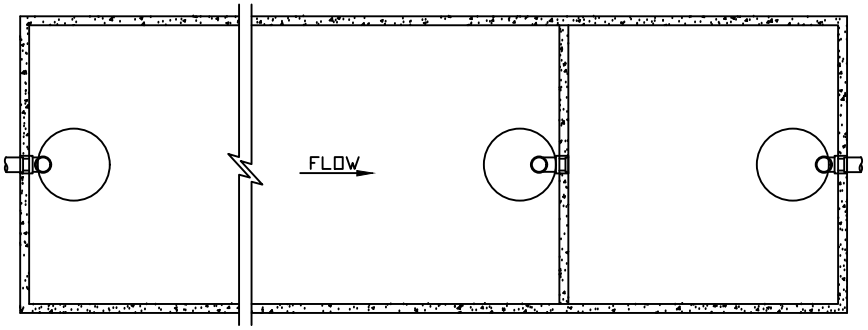
CITY OF ROSEVILLE CALIFORNIA

ENVIRONMENTAL UTILITIES DEPARTMENT

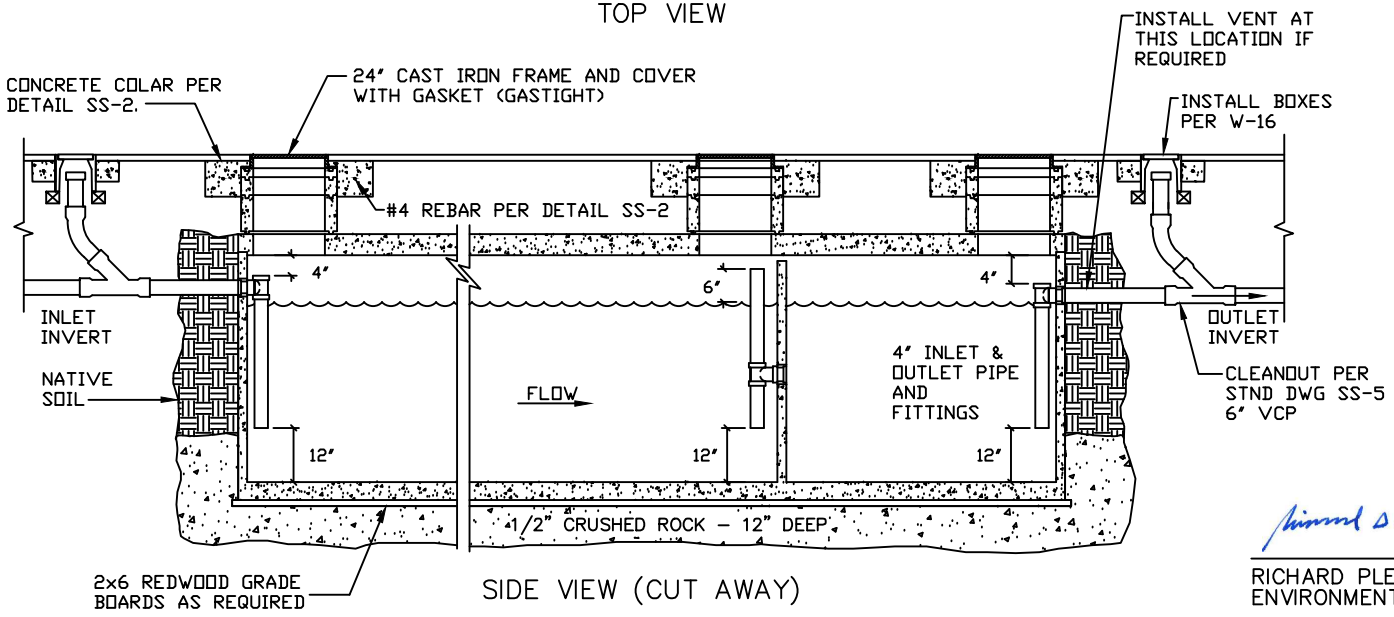
SEWER SERVICE CLEANOUT

SCALE: NONE
REVISED: JANUARY 2020
DRAWN BY: R. VAN NESS
APPROVED BY: RICHARD PLECKER

SS-5



TOP VIEW



SIDE VIEW (CUT AWAY)

MIN. BOX DESIGN LOAD: H-20 TRAFFIC

RICHARD PLECKER
ENVIRONMENTAL UTILITIES DIRECTOR

*NOTE: THE PRECAST CONCRETE UNITS SHALL BE PLACED ON LEVEL UNDISTURBED SOIL, W/1/2" CRUSHED ROCK 12" DEEP. TWO 2x6 REDWOOD GRADE BOARDS SHALL BE PLACED BELOW THE TANK SIDE WALLS ALONG THE LONG DIMENSION PER THE MANUFACTURERS GUIDELINES.

SIZING SHALL BE BASED ON THE CALIFORNIA PLUMBING CODE

*NOTE: PRIOR TO BACKFILL, INTERCEPTOR SHALL BE FILLED WITH WATER AND HELD FOR 24HRS WITH NO VISIBLE LEAKAGE.

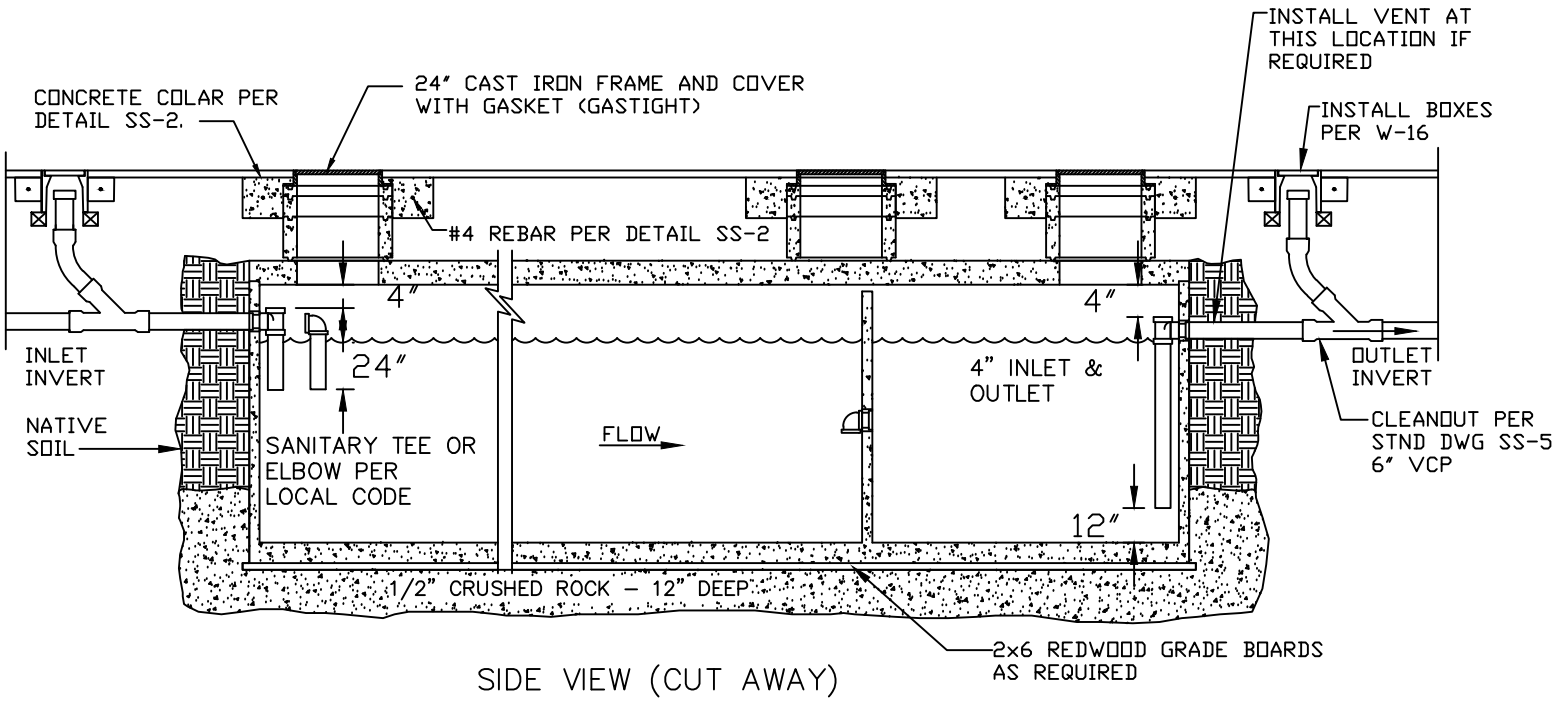
CITY OF ROSEVILLE CALIFORNIA

ENVIRONMENTAL UTILITIES DEPARTMENT

GREASE INTERECEPTOR (TYP.)

SCALE: NONE
REVISED: JANUARY 2017
DRAWN BY: R. VAN NESS
APPROVED BY: RICHARD PLECKER

SS-6



SIDE VIEW (CUT AWAY)

MIN. BOX DESIGN LOAD: H-20 TRAFFIC

RICHARD PLECKER
ENVIRONMENTAL UTILITIES DIRECTOR

*NOTE: THE PRECAST CONCRETE UNITS SHALL BE PLACED ON LEVEL UNDISTURBED SOIL, W/1/2" CRUSHED ROCK 12" DEEP. TWO 2x6 REDWOOD GRADE BOARDS SHALL BE PLACED BELOW THE TANK SIDE WALLS ALONG THE LONG DIMENSION PER THR MANUFACTURERS GUIDELINES.

SIZING SHALL BE BASED ON CALIFORNIA PLUMBING CODE

*NOTE: PRIOR TO BACKFILL, INTERCEPTOR SHALL BE FILLED WITH WATER AND HELD FOR 24HRS WITH NO VISIBLE LEAKAGE.

*NOTE: IF SIZE IS <1000 GAL, INTERCEPTOR DOES NOT HAVE MIDDLE MANHOLE

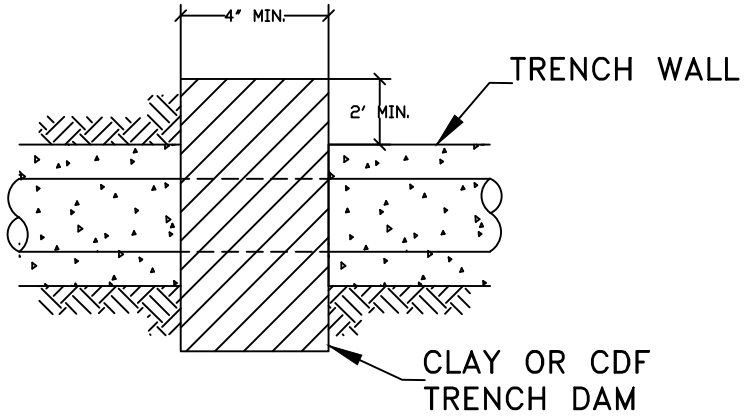
CITY OF ROSEVILLE CALIFORNIA

ENVIRONMENTAL UTILITIES DEPARTMENT

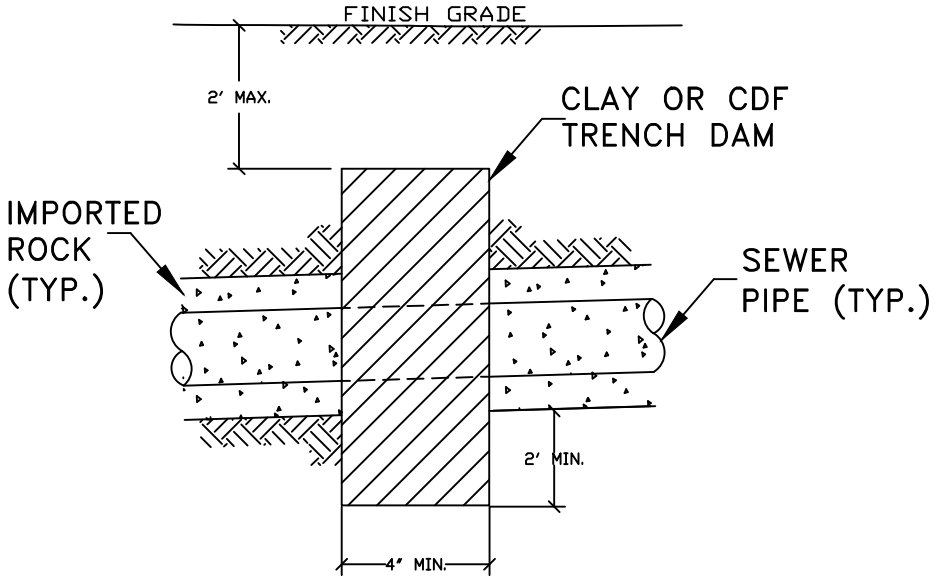
SAND/OIL INTERECEPTOR

SCALE: NONE
REVISED: JANUARY 2017
DRAWN BY: R. VAN NESS
APPROVED BY: RICHARD PLECKER

SS-7



PLAN VIEW



PROFILE VIEW

NOTE:

TRENCH DAM SHALL BE CONSTRUCTED OF
CLEAN CLAY MATERIAL OR CONTROLLED DENSITY FILL.

RICHARD PLECKER
ENVIRONMENTAL UTILITIES DIRECTOR

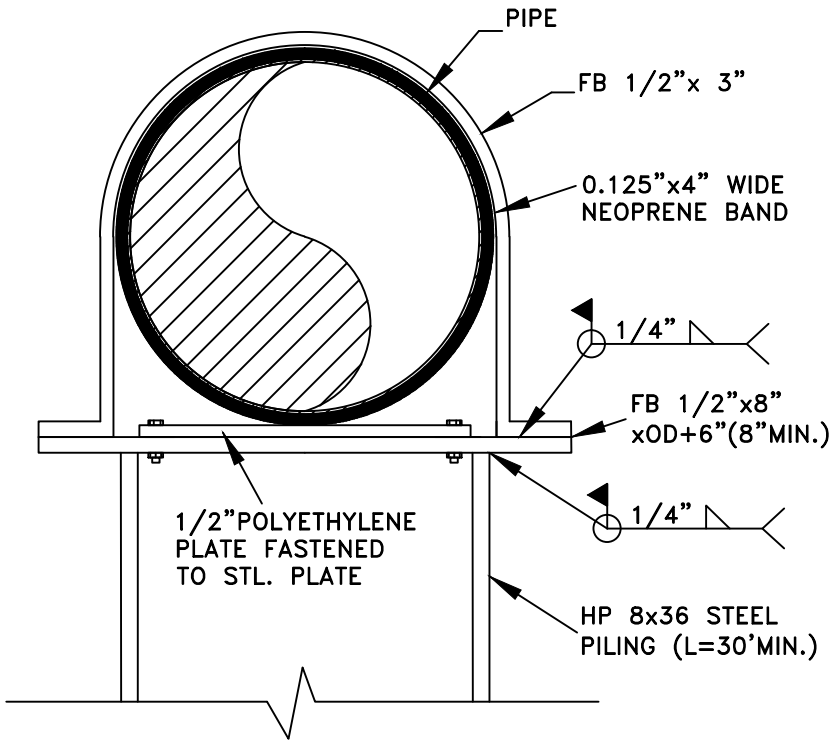
CITY OF ROSEVILLE CALIFORNIA

ENVIRONMENTAL UTILITIES DEPARTMENT

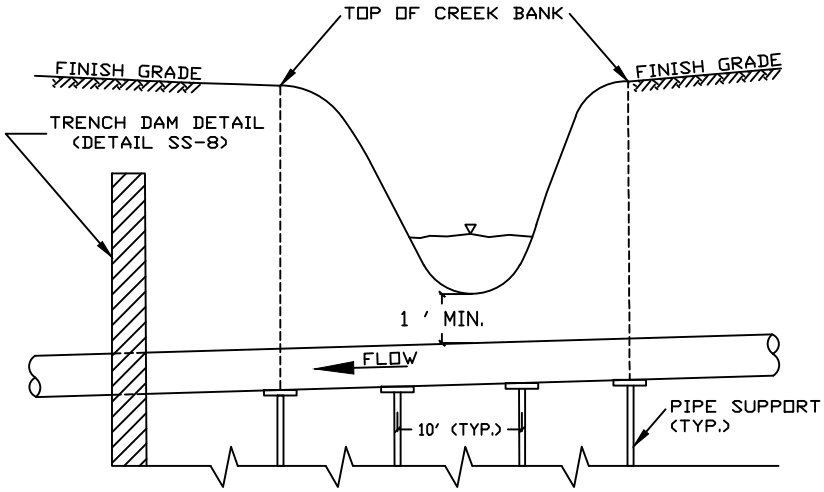
TRENCH DAM

SCALE: NONE
REVISED: JANUARY 2016
DRAWN BY: R. VAN NESS
APPROVED BY: RICHARD PLECKER

SS-8



PIPE SUPPORT DETAIL



CREEK CROSSING

MTRL. NOTES:

1. STRUCTURAL STL. SHALL BE A36 (Fy=36ksi)
2. WELDING RODS SHALL BE E70 (Fy=70ksi)

DESIGN NOTES:

1. PILES SHALL BE 10' ON CENTER BEGINNING AND ENDING AT CREEK BOTH SIDES "TOP OF BANK" AND AS NOTED ON THE PROJECT PLANS.

RICHARD PLECKER
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CITY OF ROSEVILLE CALIFORNIA

ENVIRONMENTAL UTILITIES DEPARTMENT

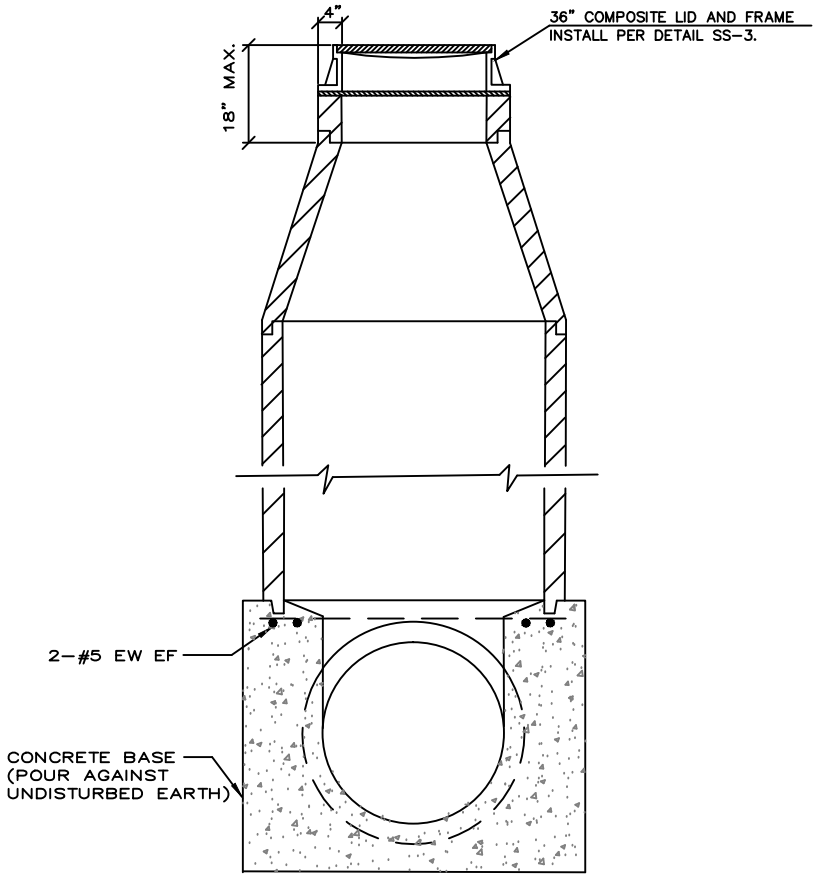
CREEK CROSSING SUPPORT

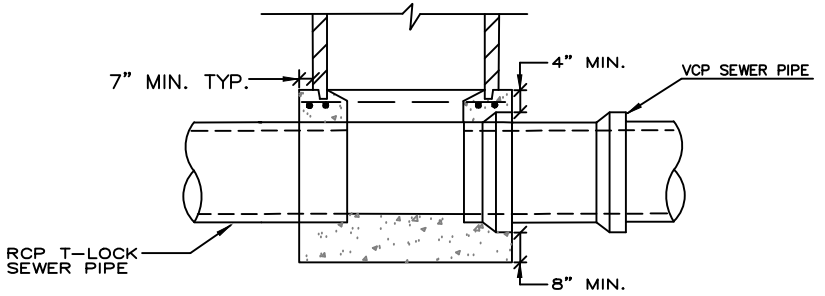
SCALE: NONE
REVISED: JANUARY 2016
DRAWN BY: R. VAN NESS
APPROVED BY: RICHARD PLECKER

SS-9

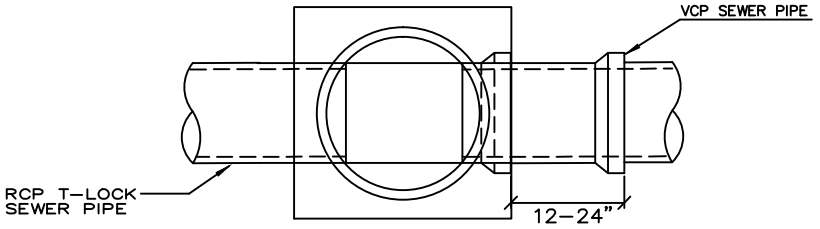
NOTES

1. MANHOLE LID SHALL BE SEALED WITH AN APPROVED RUBBER GASKET.
2. JOINTS SHALL BE MORTARED INSIDE AND OUT.
3. APPLY EPOXY COATING TO INTERIOR SURFACES OF MANHOLE IN ACCORDANCE WITH CITY STANDARDS 91-10 K.
4. PROVIDE SPARK TEST OVER ENTIRE PROTECTIVE COATINGS AFTER INSTALLATION.
5. SEE STANDARD DETAIL SS-2 FOR ADDITIONAL REQUIREMENTS.





PROFILE



PLAN

RICHARD PLECKER
ENVIRONMENTAL UTILITIES DIRECTOR

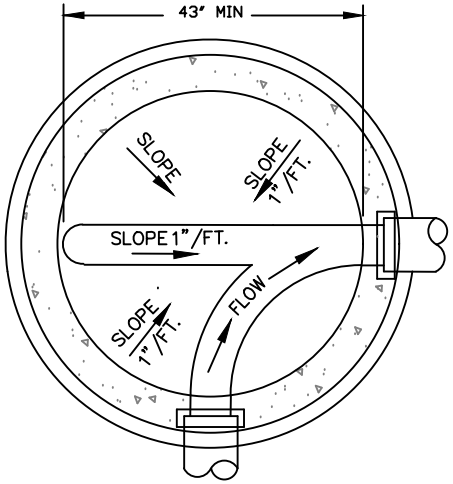
CITY OF ROSEVILLE CALIFORNIA

ENVIRONMENTAL UTILITIES DEPARTMENT

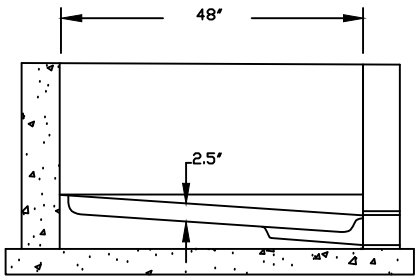
60"+ SEWER TRUNK MAIN MANHOLE

SCALE: NONE
REVISED: JANUARY 2016
DRAWN BY: R. VAN NESS
APPROVED BY: RICHARD PLECKER

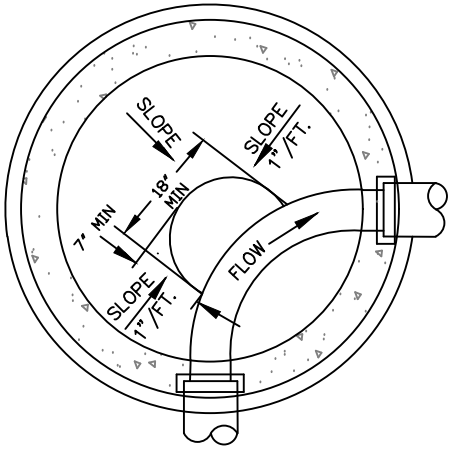
SS-10

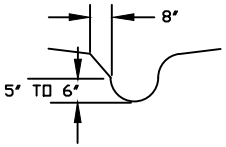


PLAN

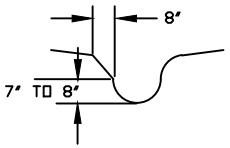


ELEVATION

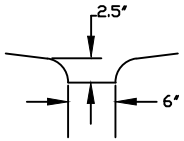


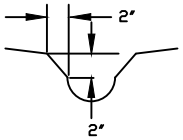


FOR 8" PIPE BASE



FOR 10" PIPE BASE





RICHARD PLECKER
ENVIRONMENTAL UTILITIES DIRECTOR

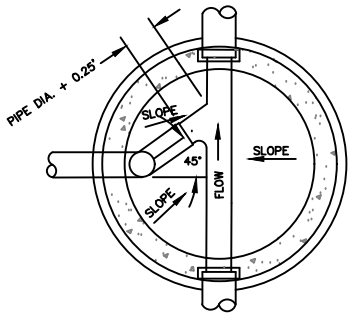
CITY OF ROSEVILLE CALIFORNIA

ENVIRONMENTAL UTILITIES DEPARTMENT

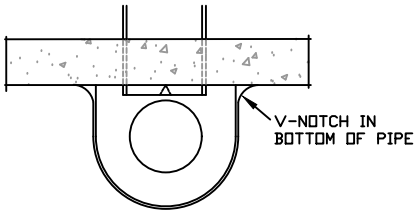
CAMERA CHANNEL MANHOLE

SCALE: NONE
REVISED: JANUARY 2018
DRAWN BY: R. VAN NESS
APPROVED BY: RICHARD PLECKER

SS-11



PLAN

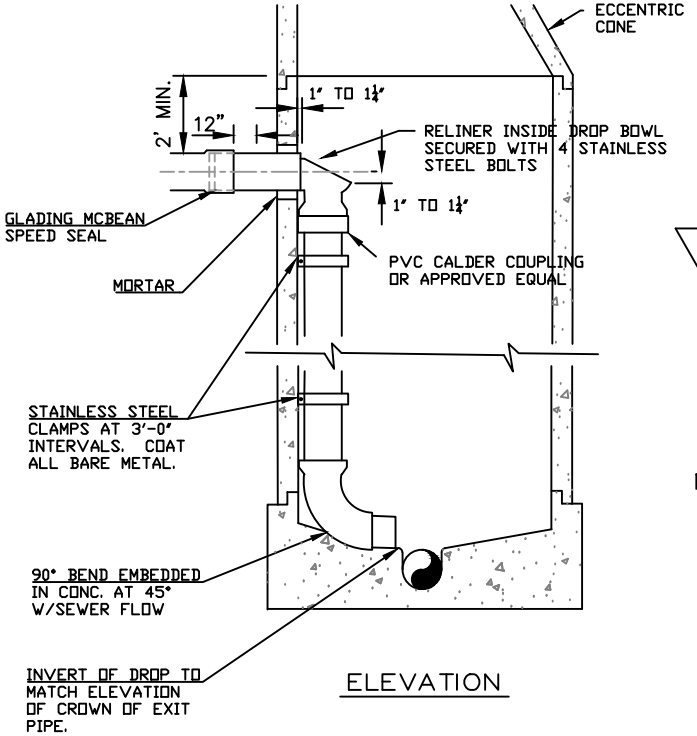


DROP BOWL
MOUNTING POSITION
TOP VIEW

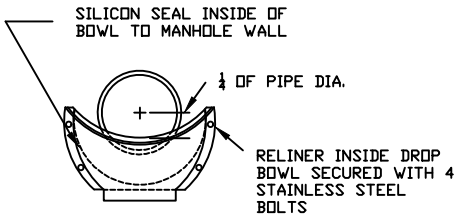
NOTES

1. INSIDE DROP PIPING SHALL BE P.V.C. PIPE, SCHEDULE 40.
2. PRIME AND CEMENT ALL JOINTS AS RECOMMENDED BY THE MANUFACTURER.
3. DROP CONNECTION PIPE & FITTINGS TO BE SAME SIZE AS ENTERING PIPE.
4. USE ECCENTRIC CONE WITH OPENING ALIGNED ABOVE DROP CONNECTION.
5. INSIDE DROP CONNECTION SHALL USE DROP BOWL AS PRODUCED BY RELINER DURAN, INC.
   53 MT ARCHER RD.
   LYME CT. 03671
   (860)434-0277 FAX: (860)434-3195 OR APPROVED EQUAL
6. ATTACH DROP BOWL & EACH CLAMPING BRACKET TO THE MANHOLE WALL WITH STAINLESS STEAL ⅜" X ¾" RAMSET/RED HEAD BOLTS. PRE-ROTO DRILL AND SET BOLTS IN PLACE WITH EPOXY PASTE. EPOXY PASTE SHALL MEET THE FOLLOWING REQUIREMENTS:

A. EPOXY PASTE SHALL BE A TWO COMPONENT 100% SOLID SYSTEM. EPOXY SHALL BE SIKADUR 31 HI-MOD GEL BY SIKA CORPORATION PHONE (592) 941-0231 OR EQUAL.
B. THE EPOXY PASTE SHALL DEVELOP A MINIMUM COMPRESSIVE STRENGTH OF 5,000 PSI IN 28 DAYS WHEN TESTED IN ACCORDANCE WITH ATSM D695 AT 73 DEGREES.
C. THE EPOXY PASTE SHALL DEVELOP A MINIMUM TENSILE STRENGTH OF 3,000 PSI IN 14 DAYS WHEN TESTED IN ACCORDANCE WITH ATSM D638.
D. THE EPOXY PASTE SHALL DEVELOP A MINIMUM BOND STRENGTH OF 2,000 PSI IN 2 DAYS WHEN TESTED IN ACCORDANCE WITH ATSM C882 (HARDENED CONCRETE TO HARDENED CONCRETE).
E. MANUFACTURER'S INSTRUCTION SHALL BE PRINTED ON EACH CONTAINER IN WHICH THE MATERIALS ARE PACKAGED.
F. DROP BOWL MODEL "A-4" SHALL BE USED FOR ALL LINES UP THROUGH FULL 6" INLETS. DROP BOWL MODEL "A-6" SHALL BE USED FOR ALL 8" INLETS. DROP BOWL MODEL "B-8" SHALL BE USED FOR ALL 10" INLETS. DROP BOWL MODEL "B-10" SHALL BE USED FOR ALL 12" INLETS.



ELEVATION



DROP BOWL
MOUNTING POSITION
FRONT VIEW

RICHARD PLECKER
ENVIRONMENTAL UTILITIES DIRECTOR

CITY OF ROSEVILLE CALIFORNIA

ENVIRONMENTAL UTILITIES DEPARTMENT

INSIDE DROP CONNECTION

SCALE: NONE
REVISED: JANUARY 2020
DRAWN BY: D. SAMUELSON
APPROVED BY: RICHARD PLECKER

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