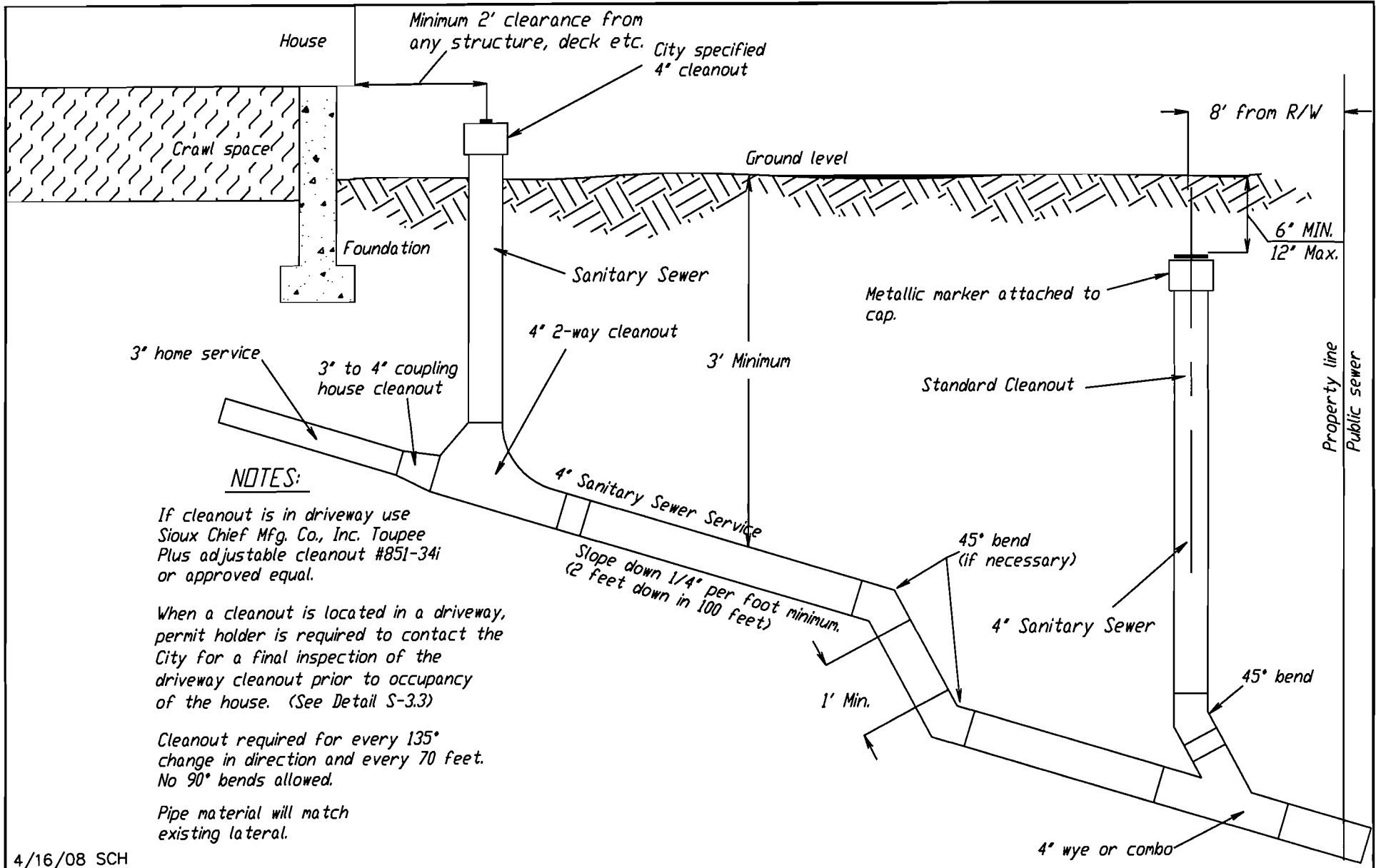


## STANDARD DETAIL LIST

(Continued)

### Sewer Details

<b>Dwg.</b>	<b>Title</b>
S-1.2	Blank
S-1.3	Typical House Side Sewer
S-1.4	Service Lateral Connections
S-1.5	Anchor Walls
S-1.6	Concrete Encased Sewer Pipe
S-2.1	Standard Precast Manhole
S-2.2	Standard Manhole Frames and Covers
S-2.3	Standard Manhole Steps
S-2.4	Standard Manhole Connection
S-2.5	Top Slab for Standard Precast Manhole
S-2.6	Outside Drop Connection
S-2.7	Inside Drop Connection
S-2.9	Standard Manhole Joint
S-3.0	Manhole – Concrete Closure Collar
S-3.1	Standard Sewer Cleanout
S-3.2	Pressure Main Connection
S-3.3	Residential Sewer Cleanouts in Driveways
S-3.6	Air Vacuum/Release Vault-With Odor Control
S-3.7	Location Station Detail
S-3.8	Valve Stand Detail
S-3.9	Toning Wire and Locator Tape Detail
S-3.10	Typical Grinder Pump Pressure Sewer Site Plan
S-3.11	Typical House Grinder Pump Valve Box
S-3.12	Pressure House Grinder Pump Service Connection
S-3.13	Pressure House Grinder Pump Service Connection to Existing Gravity Lateral
S-4.1	Standard Sampling Manhole
S-4.2	Standard Grease Interceptor
S-4.3	Standard Oil/Water Separator



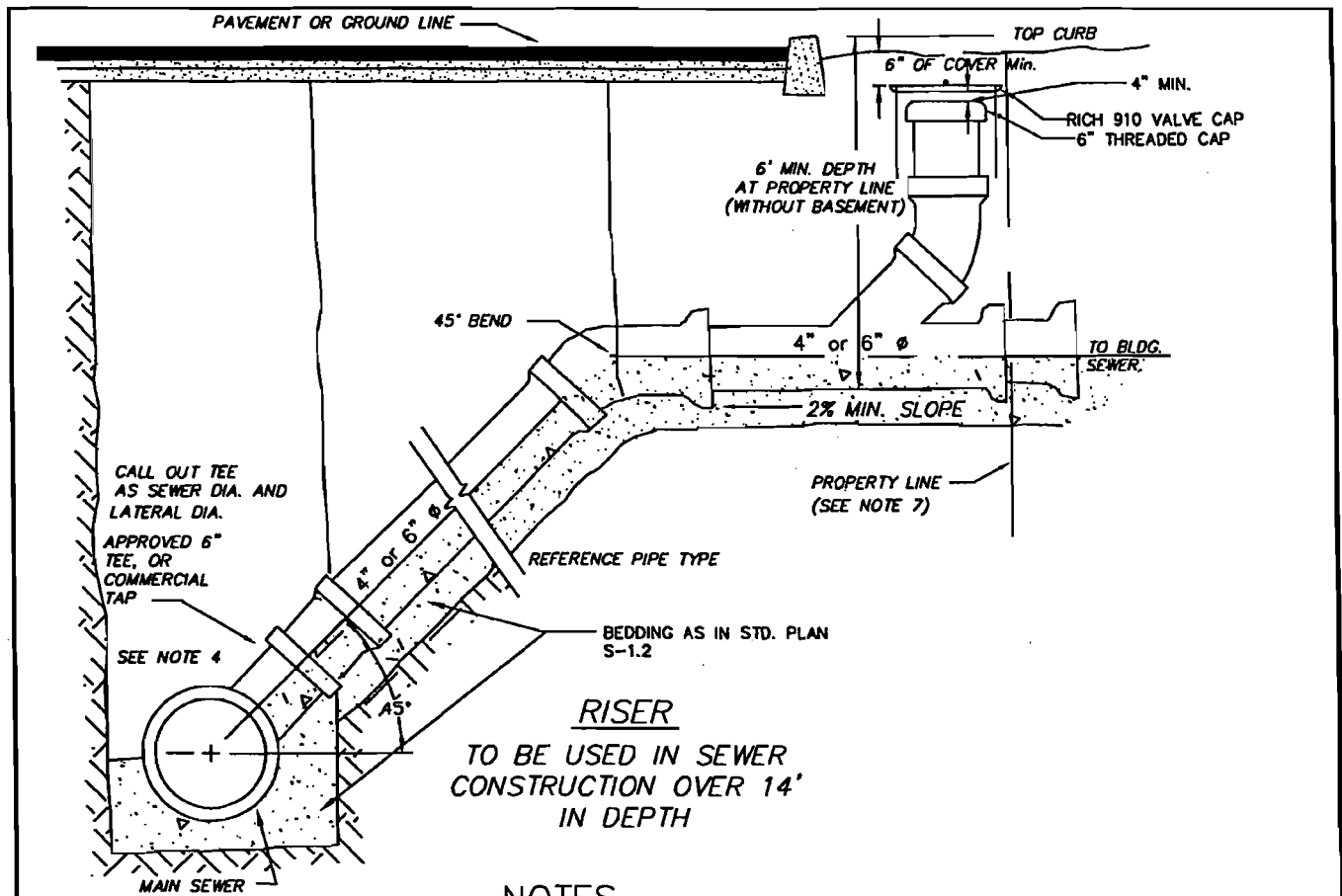
4/16/08 SCH

TYPICAL HOUSE SIDE SEWER

STANDARD  
DETAILS

CITY OF RIDGEFIELD

SHEET  
S-1.3



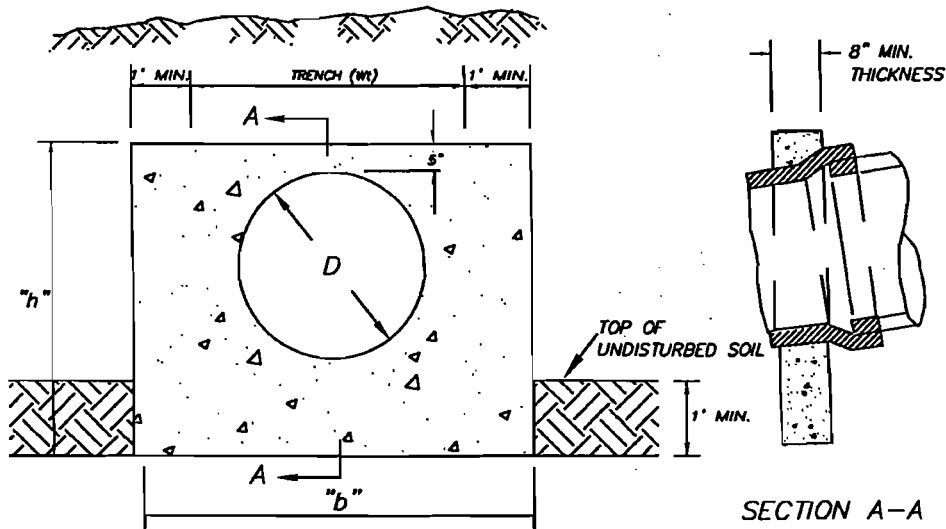
NOTES

1. Service laterals shall be installed per Section 7.08.3 of the Standard Specifications.
2. Service laterals shall be plugged per Section 7-08.3(2)f of the Standard Specifications. Service laterals shall be clearly marked per Section 7-18.3(5) of the Standard Specifications.
3. All service laterals shall be a minimum of 6-inches in diameter, except for single family lots which may be 4-inch.
4. In new subdivisions all single-family side sewers (laterals) shall be 4" PVC Wye.
5. Approved commercial taps:
  - SEALTIGHT® TYPE "C" OR "D" SEWER SADDLE.
  - FOWLER QUIK-WAY® SEWER TAP.
  - FOWLER "T & L"® SEWER TEE.
  - "TAP-TITE"® SEWER TEE.
6. Service laterals connecting to ductile iron pipe shall also be ductile iron.
7. Transitions between dissimilar pipe materials or sizes shall be made with approved adaptors (Fernco, Caulder or equal).
8. In new subdivisions and other construction involving new roads, install laterals to 8 feet behind property line for sewers in street Right-of-Way and mark with a vertical 2x4 painted green. Refer to Standard Sanitary note 10 (G-4.1)

rev. 3/05/08 SCH

SERVICE LATERAL CONNECTIONS

STANDARD DETAILS	CITY OF RIDGEFIELD	SHEET S-1.4
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**NOTES:**

1. ALL CONCRETE TO BE 3000 P.S.I., 2" TO 4" SLUMP.
2. WALLS WILL BE PLACED WHERE GRADE IS 20% OR OVER.
3. ANCHOR WALLS TO BE EQUALLY SPACED WITH MAXIMUM DISTANCE BETWEEN WALLS TO BE AS SHOWN IN TABLE "A".
4. PLACE WALL IMMEDIATELY BELOW BELL OF PIPE WHERE POSSIBLE.
5. CONCRETE SHALL BE POURED AGAINST FORMS OR STABLE UNDISTURBED SOIL.

TABLE "A"		
SLOPE %		MAXIMUM ALLOWABLE SPACING (FT.) (MEASURED ON SLOPE)
OVER	TO	
20	35	36'
35	50	24'
50	100	16'

TABLE "B"				
PIPE SIZE (D)	TRENCH WIDTH MAX. (Wt)	h	b	VOLUME OF CONCRETE (APPROX.)
6", 8", 10"	2.5'	3.0'	4.0'	0.29 C.Y.
12", 15"	2.5'	4.0'	4.0'	0.37 C.Y.
18", 21", 24"	3.5'	4.0'	5.0'	0.42 C.Y.
30", 36"	4.5'	5.0'	6.0'	0.62 C.Y.

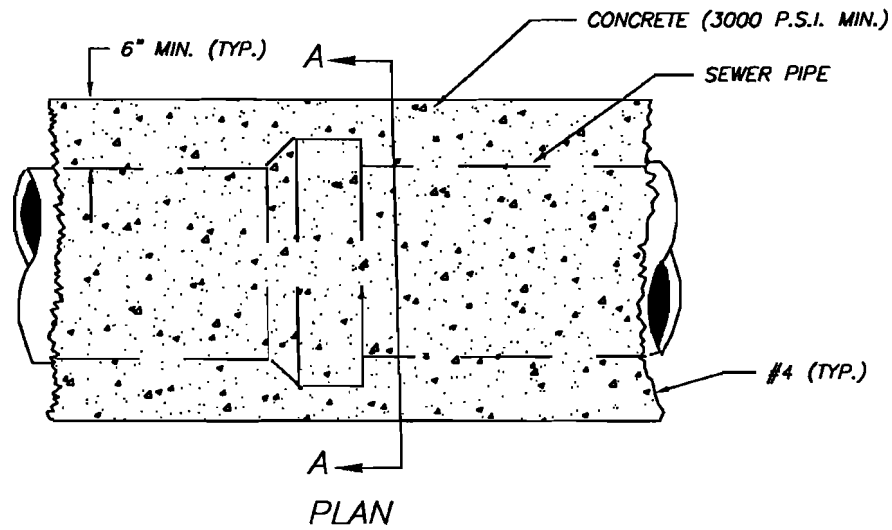
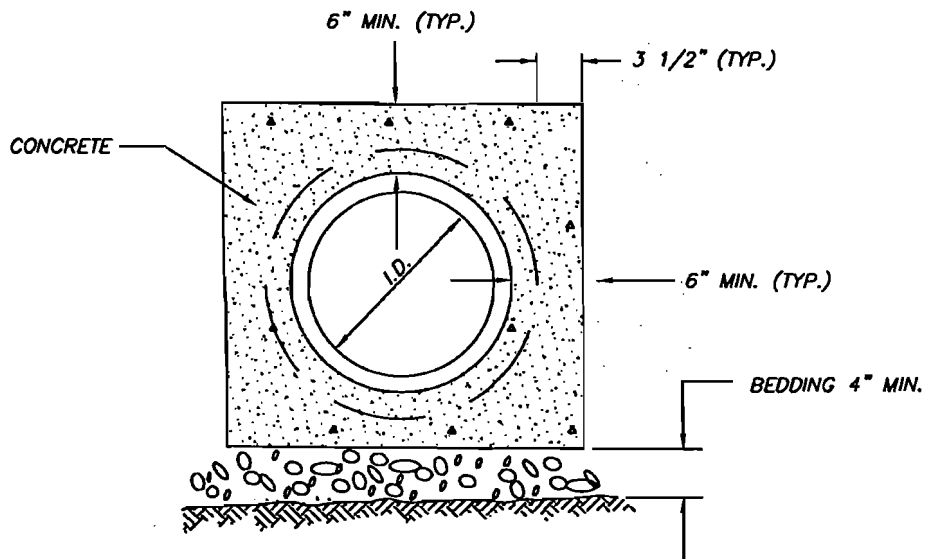
REV. 2/11/08 SCH

ANCHOR WALLS

STANDARD  
DETAILS

CITY OF RIDGEFIELD

SHEET  
S - 1.5



- PIPE SECTIONS SHALL BE ENCASED IN CONCRETE WHEN:
- 1) SEPARATION BETWEEN WATER AND SEWER LINE AT CROSSING IS LESS THAN 18". ENCASEMENT SHALL EXTEND A MINIMUM OF 3' BEYOND WATERLINE TRENCH. CONCRETE COMPRESSIVE STRENGTH SHALL BE 300 PSI.
  - 2) PIPE WILL BE LAID IN AN AREA WITH POTENTIAL FOR SETTLING SUCH AS IN A ROADWAY OR BELOW A STREAM. CONCRETE COMPRESSIVE STRENGTH SHALL BE 3000 PSI MINIMUM. REBAR SHALL BE REQUIRED PER THE DESIGN ENGINEER.
  - 3) AS DIRECTED BY THE CITY ENGINEER.

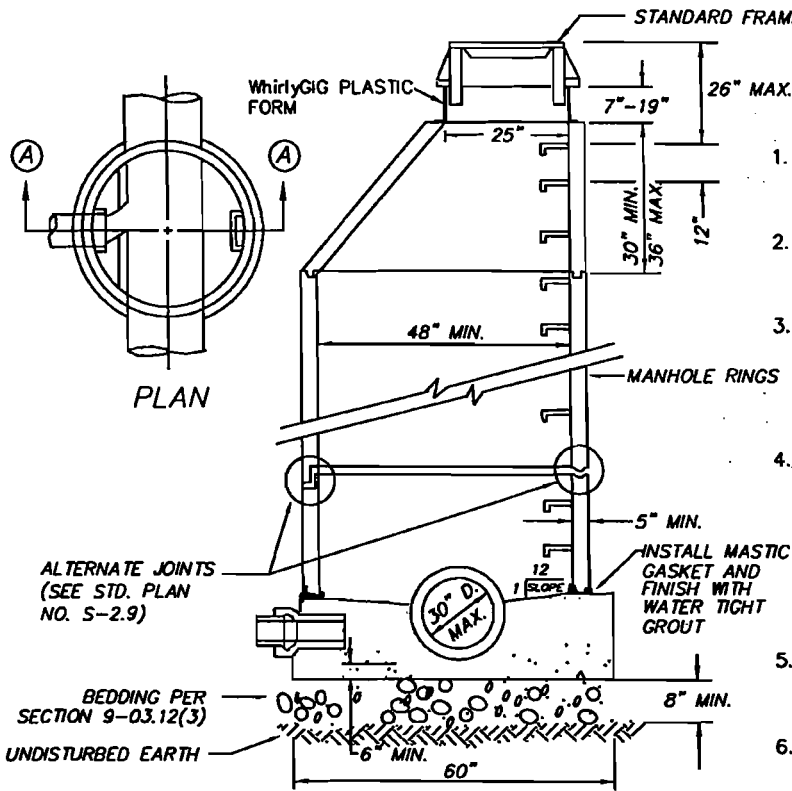
CONCRETE ENCASED SEWER PIPE

REV. 4/07

STANDARD  
DETAILS

CITY OF RIDGEFIELD

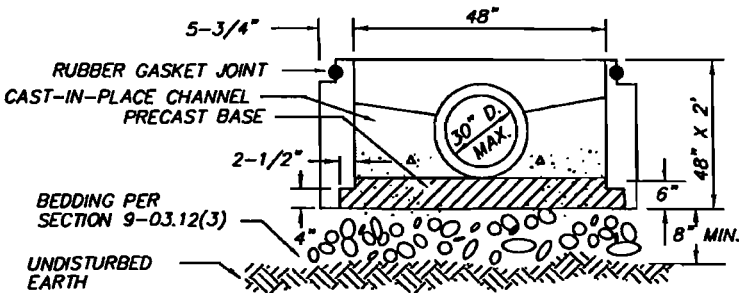
SHEET  
S - 1.6



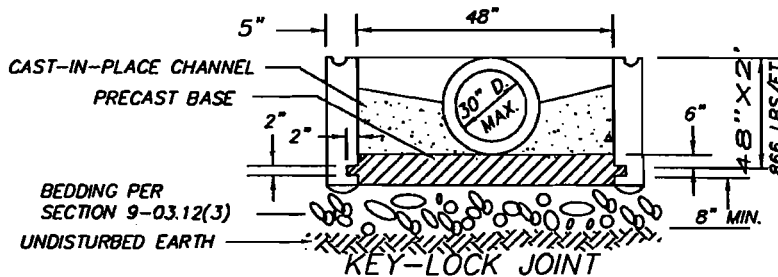
**NOTES:**

1. All precast manhole rings and cones shall conform to ASTM C-478 with cast in steps. (See Standard Plan No. S-2.3)
2. All manhole installations shall be cored and banded. See Standard Plan S-2.4 for manhole connection details.
3. In ever excavated areas, provide support for the pipe as follows: place 3/4" minus crushed rock over undisturbed ground in 6" layers and compact using hand tamper.
4. Base concrete shall be 3,000 p.s.i., 2-4 in. slump. Flow lines and inside surfaces shall be trowled smooth & uniform at time of pour. Manhole base may be monolithically cast to 8" above borrel of main sewer. Channels shall conform accurately to sewer grade. Install benches to elevation of springline of pipe.
5. Cast-in-place, monolithic manhole may be substituted with specific approval of the Engineer.
6. Joints shall be constructed so as to be watertight. See Standard Plan No. S-2.9. Seal all manhole joints with Infil-Shield "Seal Wrap" Exterior Seal System or equal.
7. Manholes under 6'-0" in depth from rim to shelf shall have a top slab in lieu of cone (See Standard Plan No. S-2.5).
8. Vacuum testing of manholes will be required.
9. Locking covers are required in easements, or at the discretion of the City Inspector.
10. WhirlyGIG® Manhole Riser/Collar System shall be used in place of riser rings unless otherwise approved.
11. All manholes shall be provided with Rain Shields to prevent infiltration of stormwater.

**SECTION A-A CAST IN PLACE BASE**



**RUBBER GASKET JOINT**



**PRECAST MANHOLE BASE (ALTERNATE)**

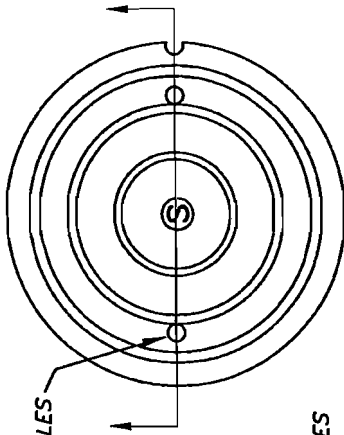
REV. 3/05/08 SCH

**STANDARD PRECAST MANHOLE**

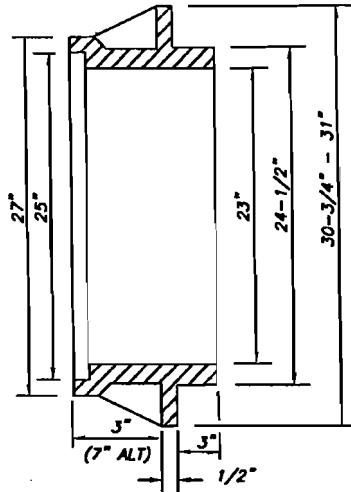
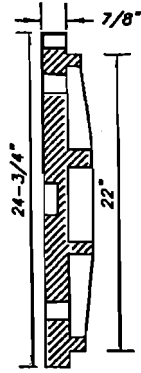
STANDARD  
DETAILS

CITY OF RIDGEFIELD

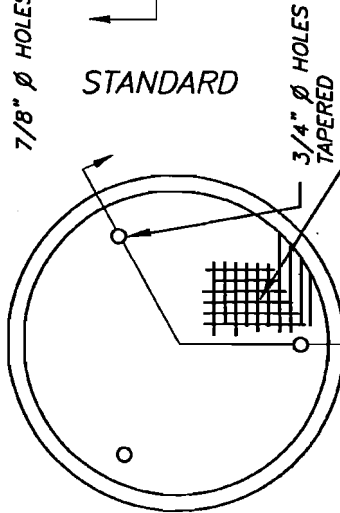
SHEET  
S-2.1



2 HOLE COVER, SANITARY SEWER  
(16 HOLE STORM SEWER ONLY)  
MANUFACTURED BY: OLYMPIC  
FOUNDRY, SEATTLE OR INLAND  
FOUNDRY, SPOKANE

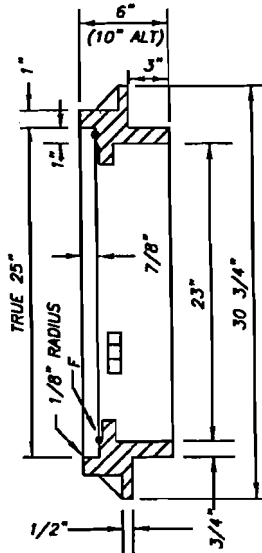
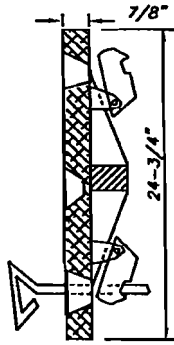


STANDARD & LOCKING  
FRAME

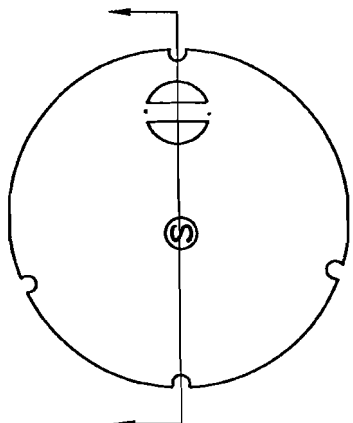


STANDARD

3/4"  $\varnothing$  HOLES  
TAPERED  
ALL GROOVES 1/8" WIDE X 1/8" DEEP  
AND 3/4" O.C. INSIDE 21-3/4"  $\varnothing$  1/8"  
GROOVE



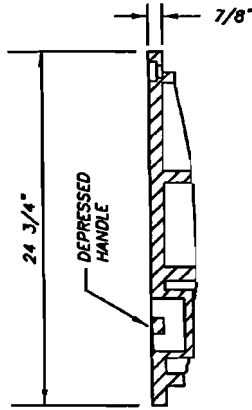
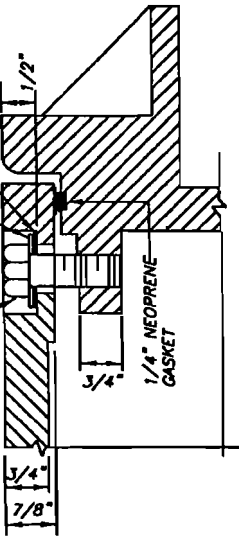
WATERTIGHT FRAME



LOCKING

WATERTIGHT

1/2" - 13 M.C. x 1 1/8"  
HEX. HD. S. STEEL CAP  
SCREW 3 REQ'D PER  
COVER 120° APART  
1 1/4" O.D. S. STEEL WASHER  
3/32" THICK, 3 REQ'D PER  
COVER  
FLAT RUBBER  
WASHER, 3 REQ'D



NOTES:

- COVER & FRAME TO BE MACHINED TO A TRUE BEARING ALL AROUND.
- MATERIAL SHALL BE OF GREY CAST IRON, A.S.T.M. A-48, CLASS 30.

STANDARD MANHOLE FRAMES AND COVERS

STANDARD  
DETAILS

CITY OF RIDGEFIELD

SHEET  
S-2.2

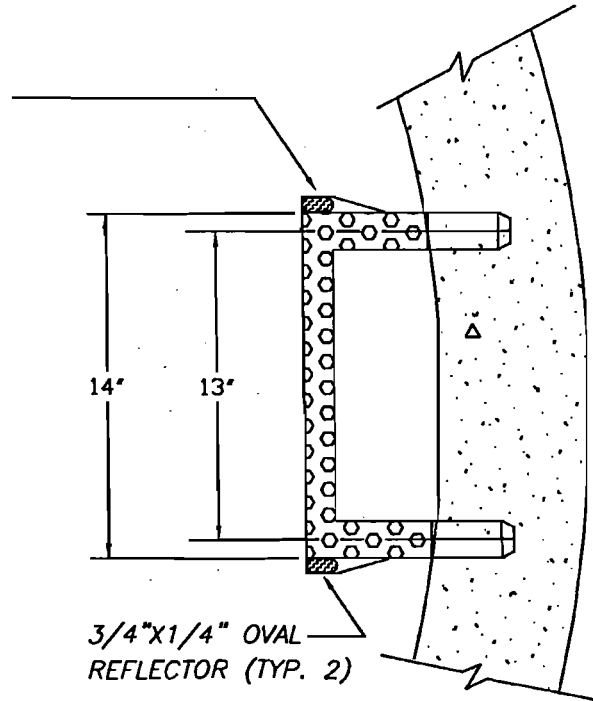
LANE INTERNATIONAL CORPORATION  
 POLYPROPYLENE MANHOLE SAFETY  
 STEP P-14850 WITH REFLECTORS.

NOTES:

All steps must meet ASTM C-478 and AASHTO M-199 Specifications, polypropylene ASTM D-4104, the 1/2" Grade 60 deformed reinforcing bar ASTM-A--615.

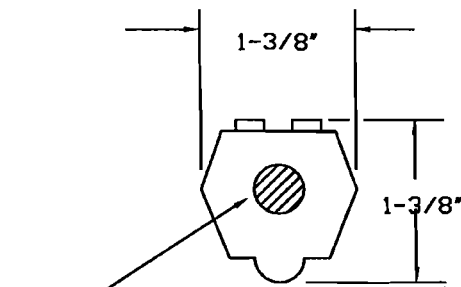
Installation method must resist 1,500 lb. horizontal pull out force and 500 lb. vertical load.

Locate steps over bench whenever possible (not over the main).

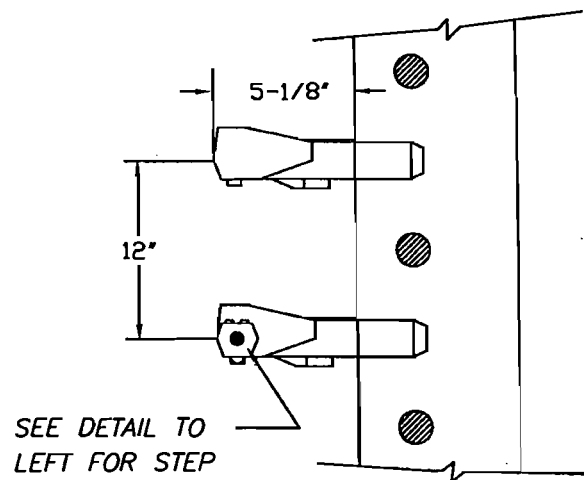


3/4"x1/4" OVAL REFLECTOR (TYP. 2)

PLAN



1/2" GRADE 60 STEEL REINFORCING BAR



SEE DETAIL TO LEFT FOR STEP REINFORCING BAR

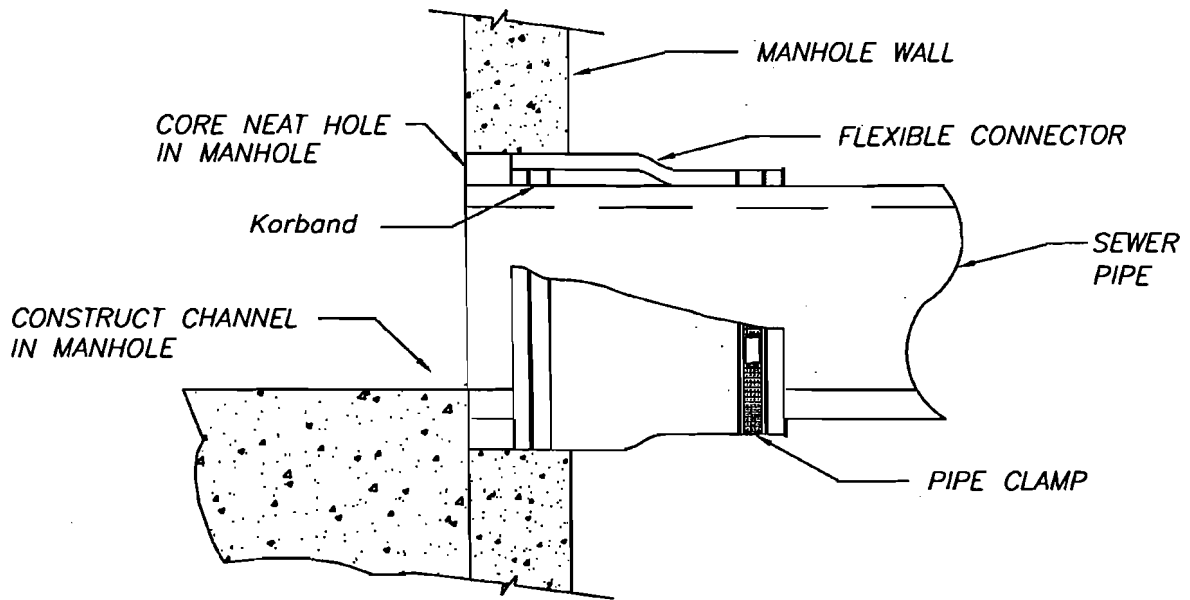
ELEVATION

STANDARD MANHOLE STEPS

STANDARD  
 DETAILS

CITY OF RIDGEFIELD

SHEET  
 S-2.3



**NOTES:**

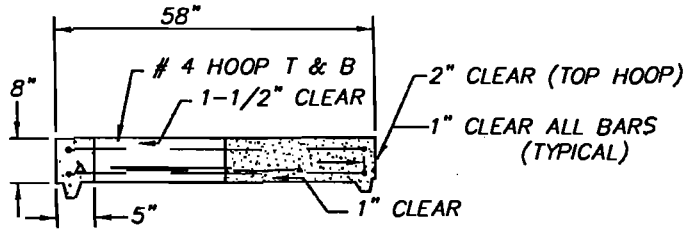
1. CONNECTIONS TO MANHOLE SHALL BE MADE WITH AN APPROVED EXPANSION TYPE RUBBER BOOT; KOR-N-SEAL® OR SEALTITE®, (NO FLEX JOINT REQUIRED), FOR ALL PIPES UP TO 18". LARGER PIPES WILL BE HANDLED ON A CASE-BY-CASE BASIS.
2. CORE NEAT HOLE IN MANHOLE AND INSTALL BOOT AS REQUIRED PER MANUFACTURER'S SPECIFICATIONS.
3. STUB-OUTS INSTALLED FOR FUTURE EXTENSIONS ARE TO BE PLUGGED AT BOTH ENDS.

STANDARD MANHOLE CONNECTION DETAIL

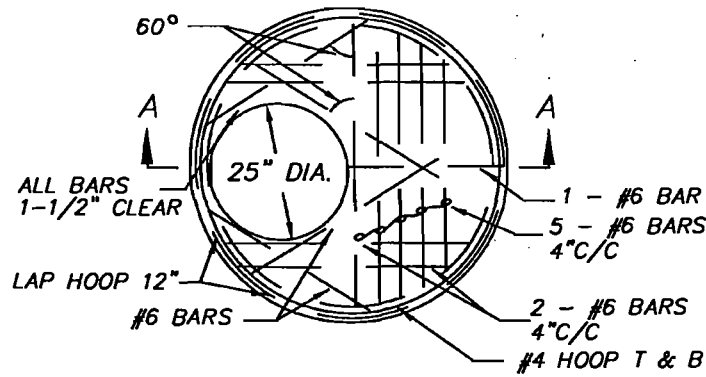
STANDARD  
DETAILS

CITY OF RIDGEFIELD

SHEET  
S-2.4



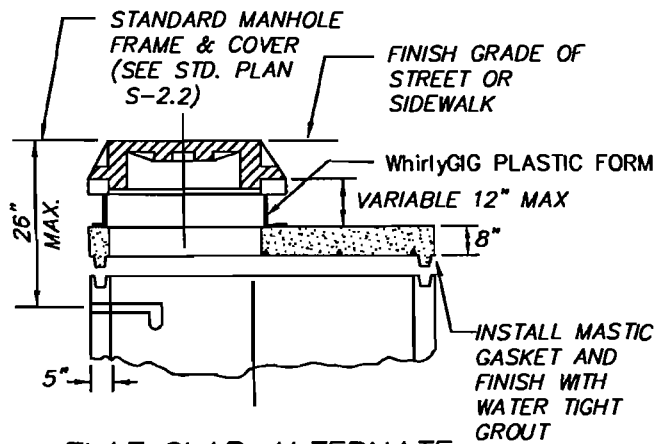
SECTION A-A



UNIT "MH"

**NOTES:**

1. CONSTRUCTION SHALL CONFORM TO STD. PLAN NO. S-2.1 IF NOT OTHERWISE SHOWN.
2. ALL PRECAST SECTIONS SHALL CONFORM TO THE REQUIREMENTS OF ASTM C-478. ALL POURED IN PLACE CONCRETE SHALL HAVE A 28 DAY STRENGTH OF 3000 P.S.I. & 2" TO 4" SLUMP.
3. ALL REINFORCING SHALL BE GRADE 40 STEEL.
4. MANHOLES UNDER 6'-0" IN DEPTH FROM RIM TO SHELF SHALL HAVE UNIT "MH" TOP SLAB IN LIEU OF CONE AS SHOWN ON STD. PLAN S-2.1.
5. REFER TO STD. PLAN S-2.1 FOR JOINT SEALING REQUIREMENTS.
6. WhirlyGIG MANHOLE RISER/COLLAR SYSTEM SHALL BE USED IN PLACE OF RISER RINGS UNLESS OTHER WISE APPROVED.



FLAT SLAB ALTERNATE

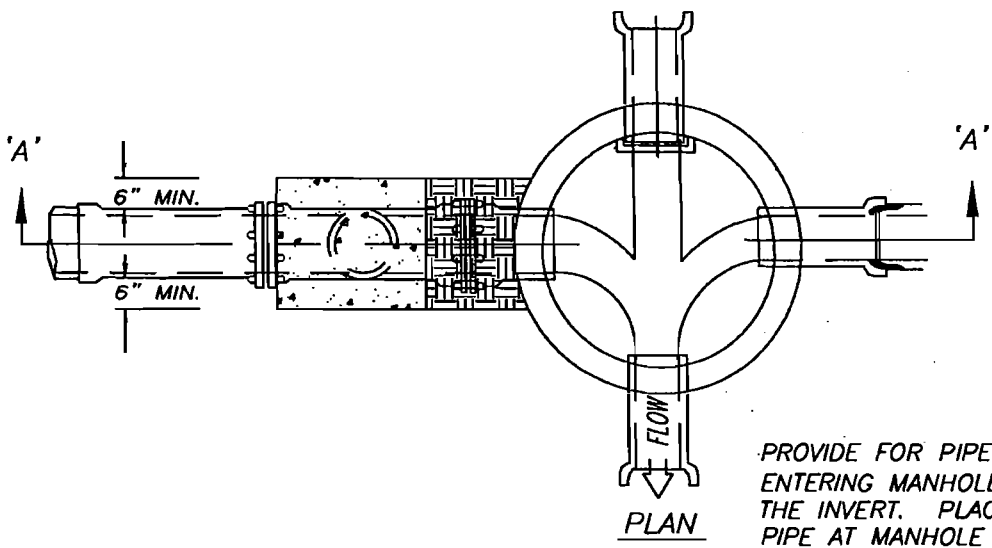
REV. 3/05/08 SCH

TOP SLAB FOR STANDARD PRECAST MANHOLE

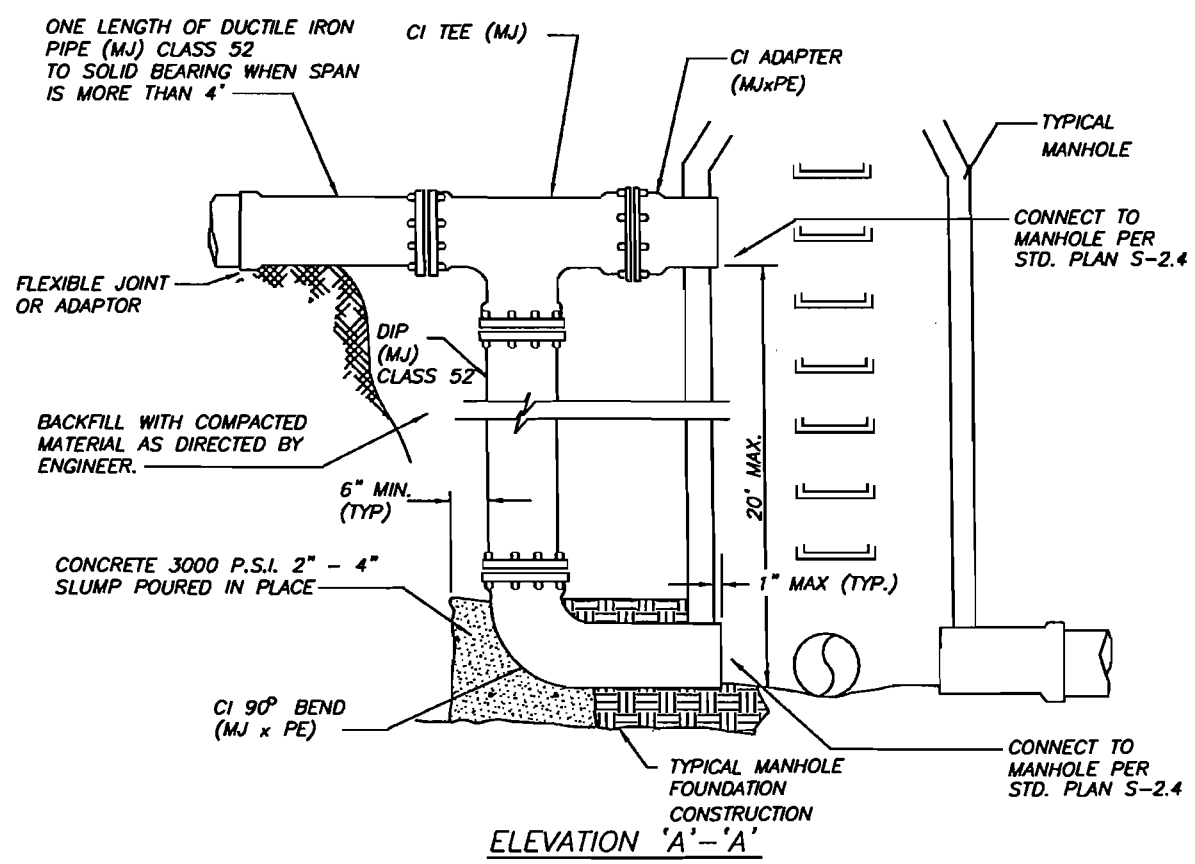
STANDARD  
DETAILS

CITY OF RIDGEFIELD

SHEET  
S - 2.5



PROVIDE FOR PIPES <12" WHEN ENTERING MANHOLE >24" ABOVE THE INVERT. PLACE LARGER PIPE AT MANHOLE INVERT.



OUTSIDE DROP CONNECTION

STANDARD DETAILS	CITY OF RIDGEFIELD	SHEET S-2.6
---------------------	--------------------	----------------

CUT NEAT HOLE, AND  
CONNECT PER  
STD. PLAN S-2.4

(TYP.) MANHOLE WALL

PVC TEE, SDR 35,  
ASTM D 3034.

PE x PE PVC SPOOL

PVC/CONCRETE  
TRANSITION COUPLING  
(CAULDER, FERNCO OR  
EQUAL)

CONCRETE  
PIPE

PE x PE PVC

SECURE ASSEMBLY TO  
MANHOLE WALL WITH  
MIN. 1-1/2", 16 GA SSSL  
STRAPS AT EACH JOINT  
SECTION, USING 1/4" x 4"  
SSSL EXPANSION ANCHORS

BELL x PE PVC

IN EXISTING MANHOLE, PLACE PVC ELBOW ON  
BENCH, GROUT NEW BENCH TO SPRINGLINE AND  
TROWEL SMOOTH. FORM SMOOTH CHANNEL TO  
INVERT

NOTE: INSIDE DROP ASSEMBLY MAY BE USED ONLY WHEN SPECIFICALLY  
APPROVED BY CITY ENGINEER. MAXIMUM ONE ASSEMBLY PER  
48" MANHOLE.

### INSIDE DROP CONNECTION

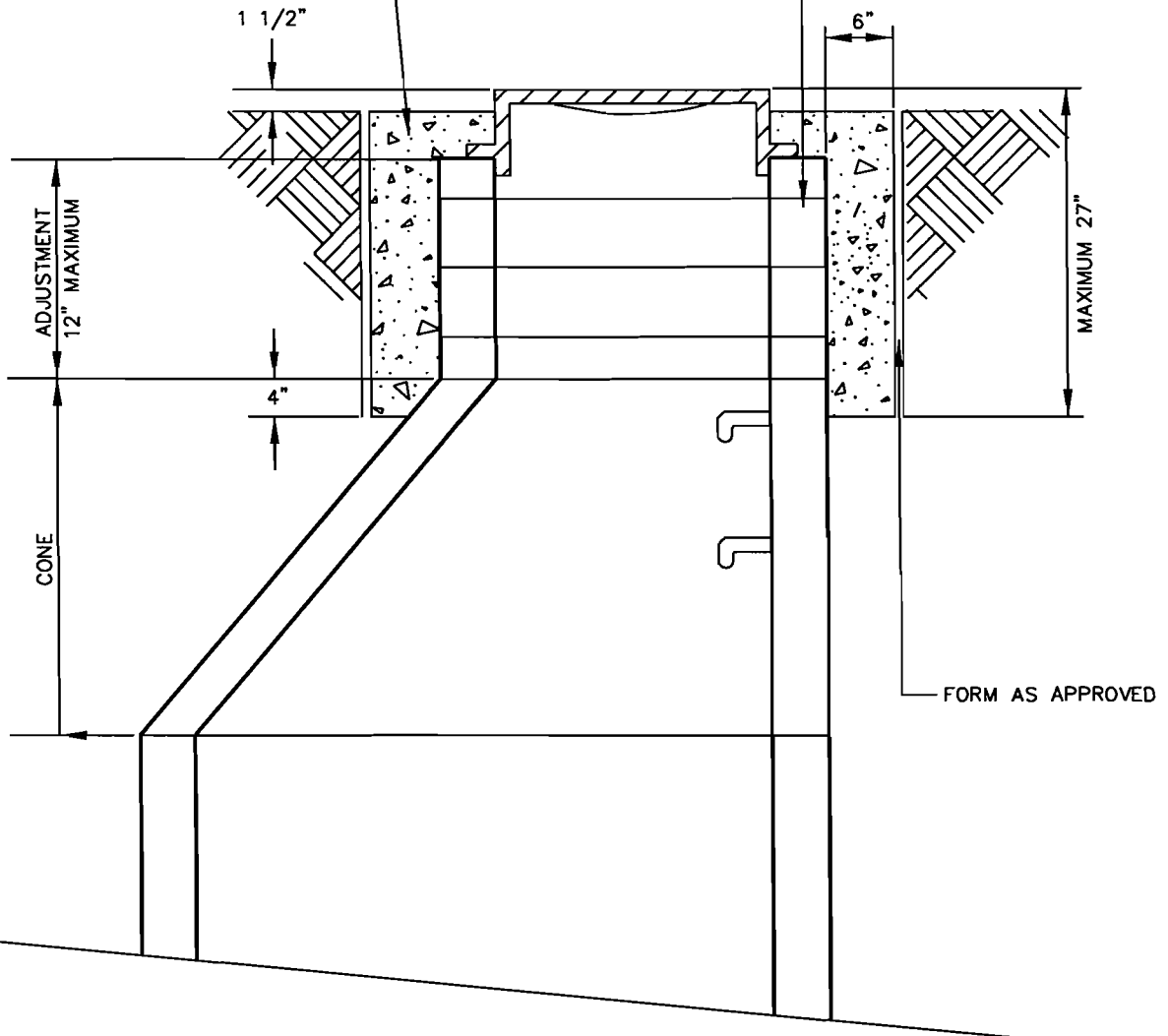
STANDARD  
DETAILS

CITY OF RIDGEFIELD

SHEET  
S-2.7

CONCRETE FOR CLOSURE COLLAR SHALL BE READY-MIXED CONFORMING WITH ASTM C94, ALTERNATE 2 AND SHALL HAVE A COMPRESSIVE STRENGTH OF 3000 PSI @28 DAYS.

ADJUSTMENT GRADE RINGS AND CASTING FRAME SET IN 1" OF NON-SHRINKING GROUT



**NOTES:**

1. Whilry-GIG MANHOLE RISER/COLLAR SYSTEM SHALL BE USED IN PLACE OF RISER RINGS WITHIN THE CITY'S PUBLIC ROADWAYS. CONCRETE CLOSURE COLLARS SHALL BE PROVIDED AROUND ALL MANHOLES ADJUSTMENT SECTIONS IN EASEMENTS.

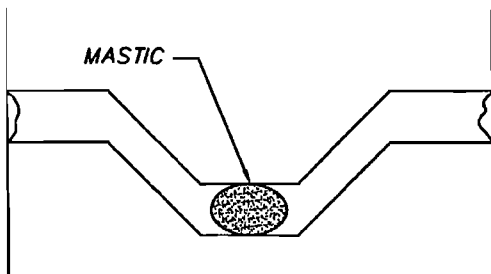
REV. 4/16/08 SCH

MANHOLE - CONCRETE CLOSURE COLLAR

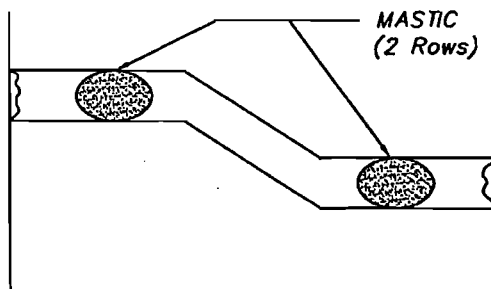
STANDARD  
DETAILS

CITY OF RIDGEFIELD

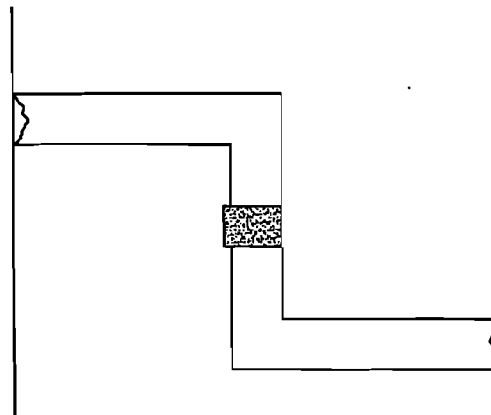
SHEET  
S-3.0



KEYLOCK



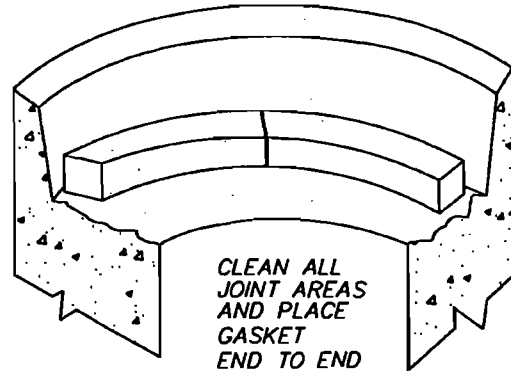
TONGUE & GROOVE



RUBBER JOINT GASKET

MANHOLE JOINTS

FINISH SURFACE OF JOINT WITH WATER TIGHT GROUT. (TYPICAL ALL JOINTS) STRIKE EVEN WITH WALL.



CORRECT MASTIC PLACEMENT

NOTES:

1. SEAL THE MANHOLE JOINTS WITH INFI-SHIELD "SEAL WRAP" EXTERNAL SEAL SYSTEM.
2. GROUT FOR SEALING JOINTS SHALL BE FIVE STAR, SIKA 212, EUCCO N-5, OR APPROVED NON-SHRINK GROUT. STANDARD GROUT WILL NOT BE ACCEPTED.

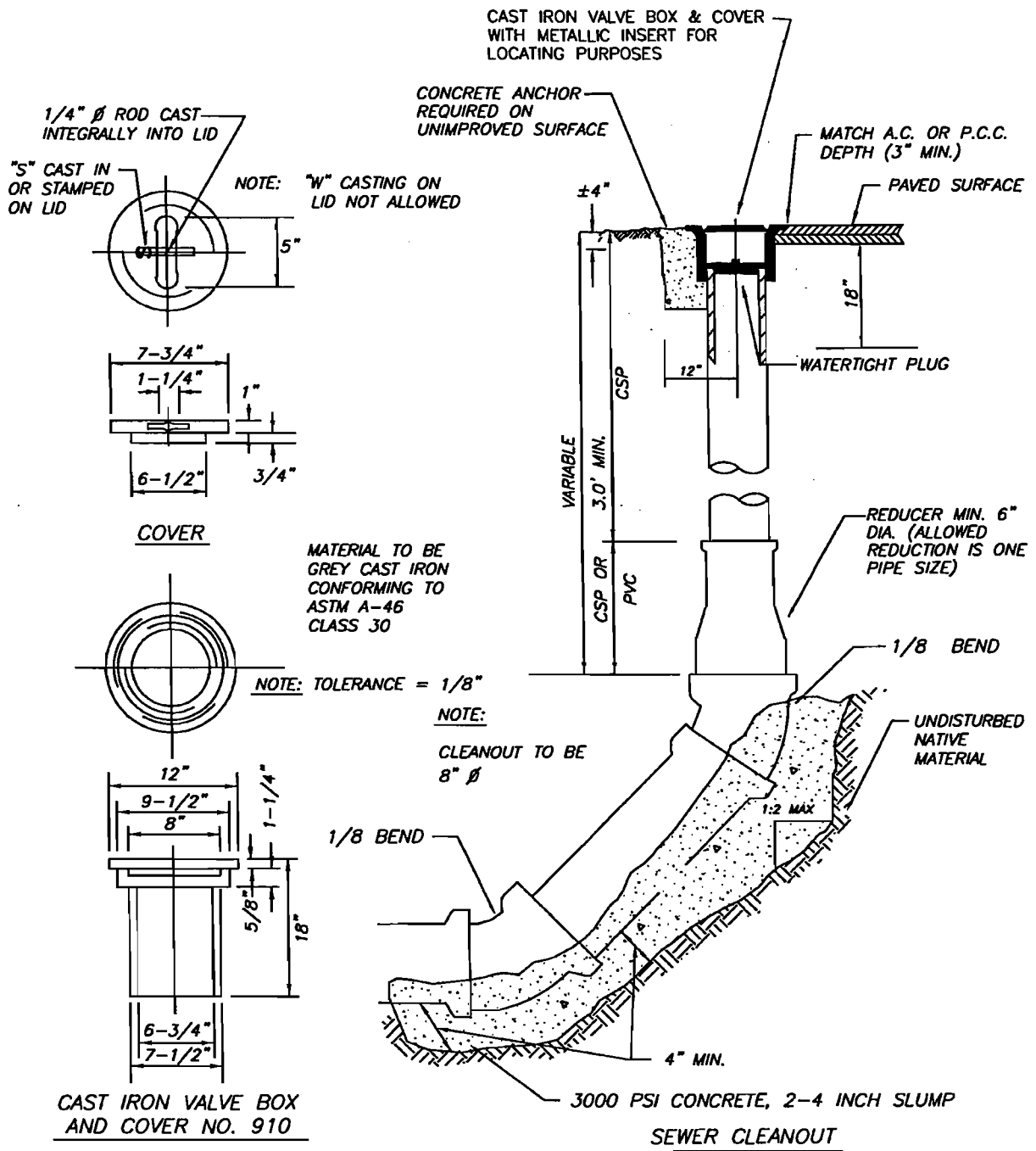
REV. 3/05/08 SCH

STANDARD MANHOLE JOINT DETAILS

STANDARD  
DETAILS

CITY OF RIDGEFIELD

SHEET  
S-2.9



**NOTES:**

1. VALVE BOX SHALL BE FORT VANCOUVER PATTERN NO. 910 CAST IRON OR APPROVED EQUAL
2. SEE DETAIL S-3.3 FOR ADDITIONAL REQUIREMENTS

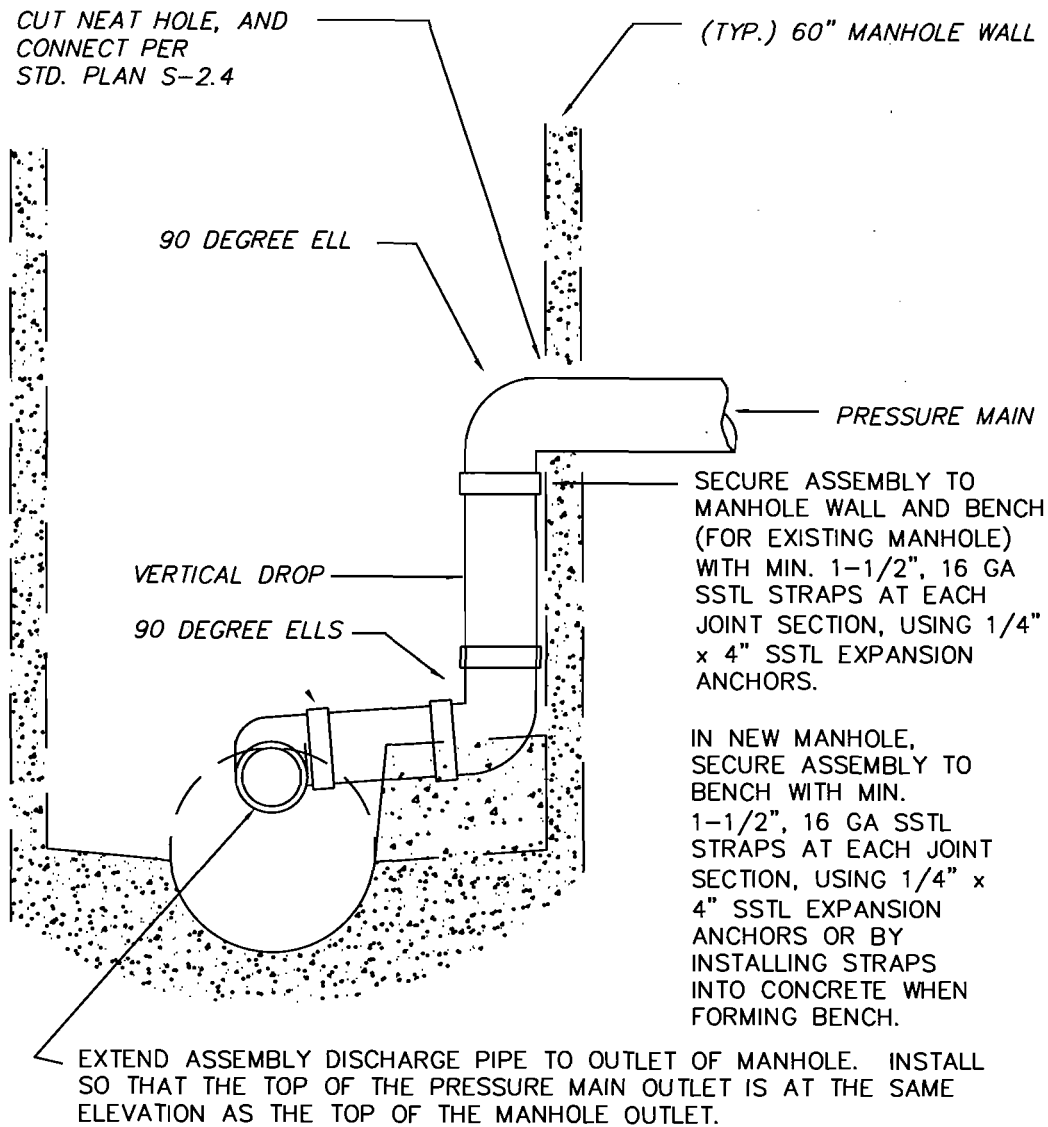
REV. 3/05/08 SCH

STANDARD SEWER CLEANOUT

STANDARD  
DETAILS

CITY OF RIDGEFIELD

SHEET  
S-3.1



NOTES:

1. PRESSURE MAIN CONNECTION ASSEMBLY MAY BE USED ONLY WHEN SPECIFICALLY APPROVED BY THE CITY ENGINEER. MAXIMUM OF ONE ASSEMBLY PER 60" MANHOLE.
2. ALL PIPES AND JOINTS SHALL BE CONSTRUCTED OF MATERIALS APPROVED FOR FORCE MAIN CONSTRUCTION. ALL JOINTS, PIPES AND ANCHORS SHALL BE DESIGNED TO HANDLE THE PRESSURES AND FORCES GENERATED BY THE FORCE MAIN FLOW.
3. THE DISCHARGE MANHOLE AND TWO MANHOLES DOWNSTREAM MUST BE COATED WITH 120 MIL RAVEN EPOXY SYSTEM OR EQUAL.

REV. 4/15/08 SCH

PRESSURE MAIN CONNECTION DETAIL

STANDARD  
DETAILS

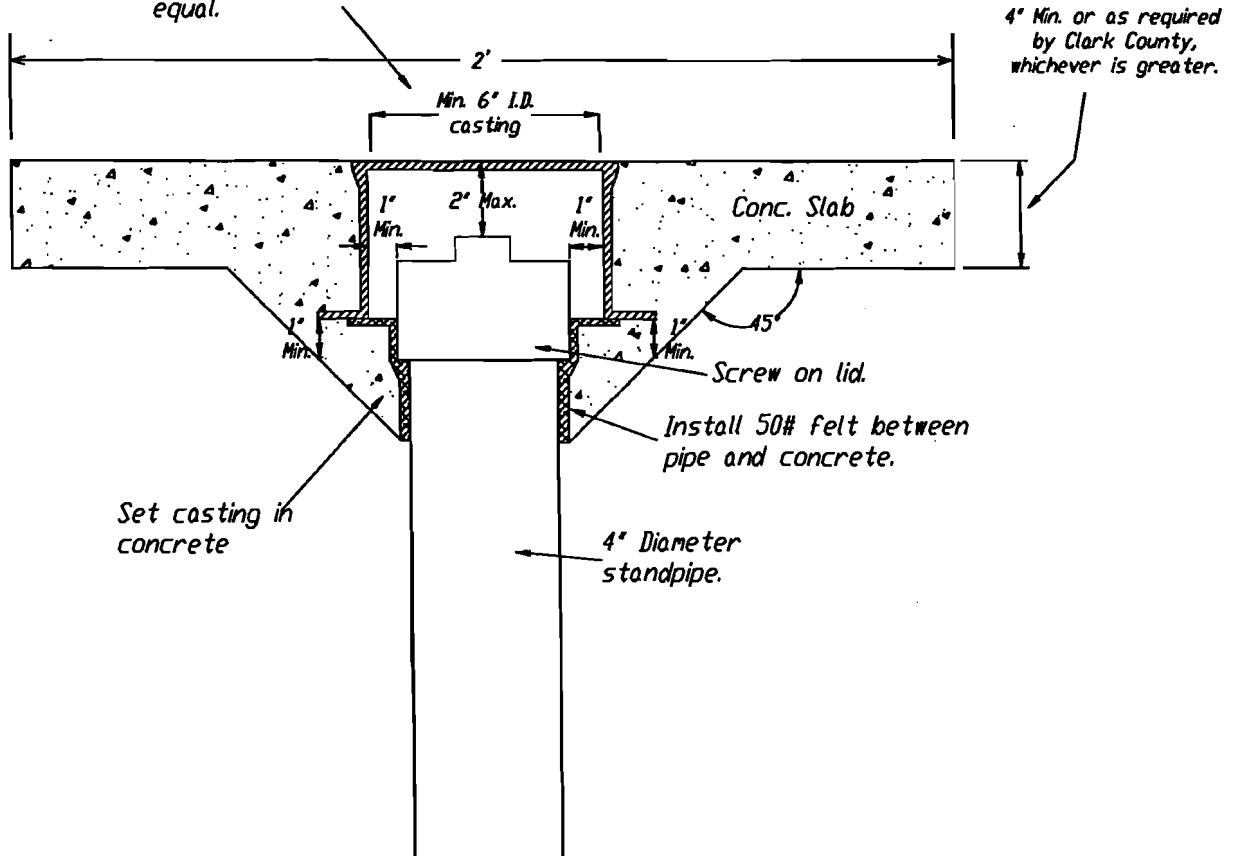
CITY OF RIDGEFIELD

SHEET  
S - 3.2

## CLEAN-OUTS IN DRIVEWAYS

Where residential clean-outs occur in driveways in new construction, a casting shall be installed to protect it. The cast iron casting is to be a min. of 2" greater I.D. than the size of pipe it is installed over, it shall be set in concrete at finished grade. Casting shall conform to the requirements of AASHTO M 105, grade 30B. See the following sketch for further details.

Standard cast iron frame Sioux Chief Mfg. Co., Inc.  
Toupee plus adjustable cleanout #851-34i or approved equal.



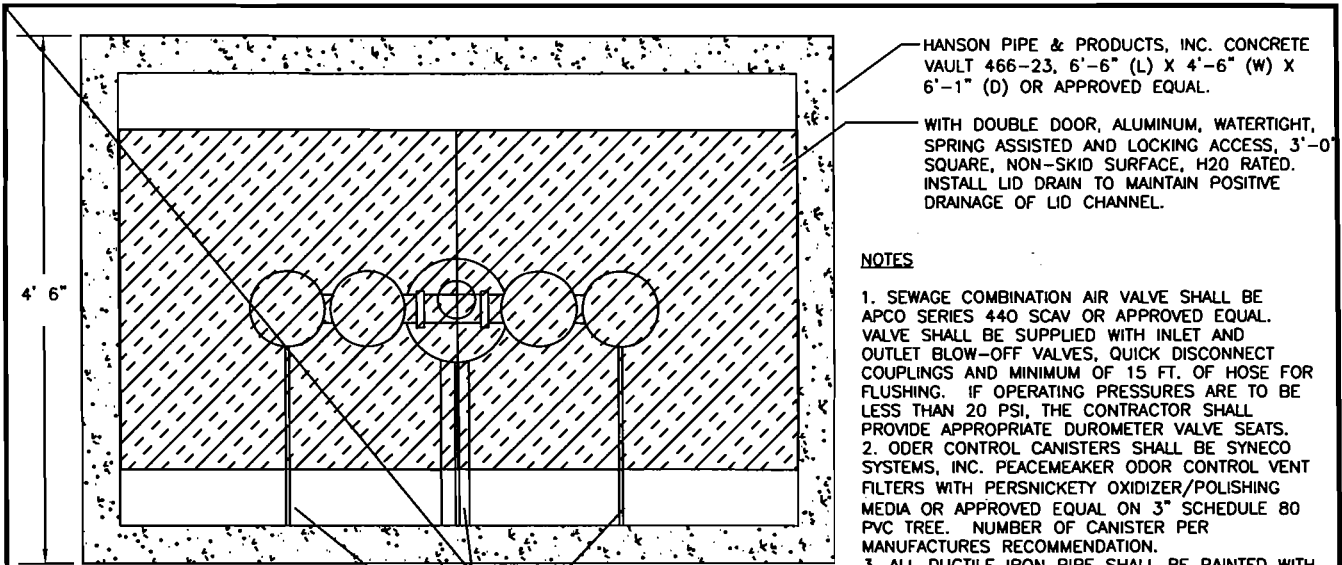
2/11/08 SCH

### RESIDENTIAL SEWER CLEANOUTS IN DRIVEWAYS

STANDARD  
DETAILS

CITY OF RIDGEFIELD

SHEET  
S-3.3



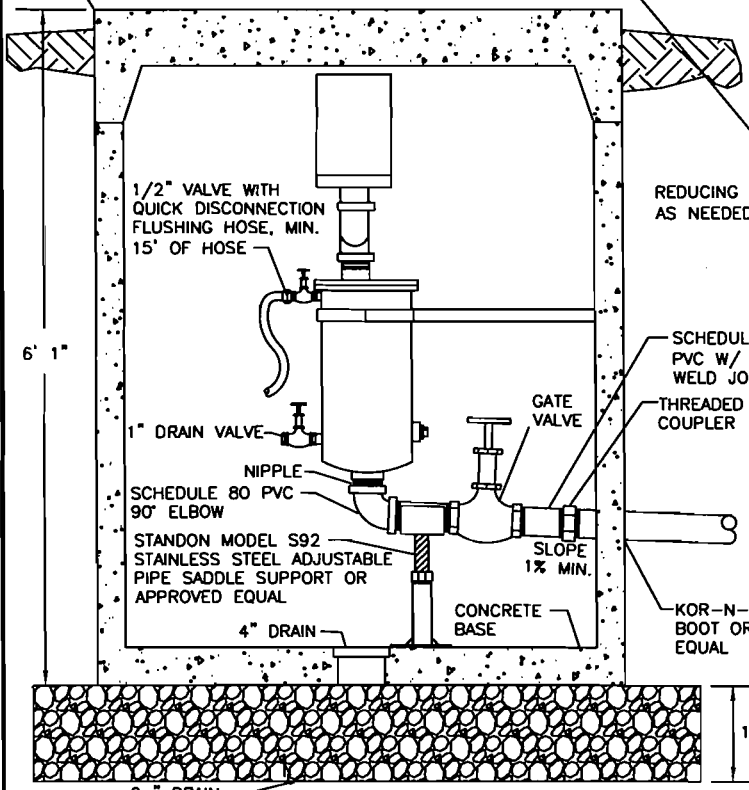
**NOTES**

1. SEWAGE COMBINATION AIR VALVE SHALL BE APCO SERIES 440 SCAV OR APPROVED EQUAL. VALVE SHALL BE SUPPLIED WITH INLET AND OUTLET BLOW-OFF VALVES, QUICK DISCONNECT COUPLINGS AND MINIMUM OF 15 FT. OF HOSE FOR FLUSHING. IF OPERATING PRESSURES ARE TO BE LESS THAN 20 PSI, THE CONTRACTOR SHALL PROVIDE APPROPRIATE DUROMETER VALVE SEATS.
2. ODOR CONTROL CANISTERS SHALL BE SYNECO SYSTEMS, INC. PEACEMAKER ODOR CONTROL VENT FILTERS WITH PERSNICKETY OXIDIZER/POLISHING MEDIA OR APPROVED EQUAL ON 3" SCHEDULE 80 PVC TREE. NUMBER OF CANISTER PER MANUFACTURERS RECOMMENDATION.
3. ALL DUCTILE IRON PIPE SHALL BE PAINTED WITH A THREE COAT SYSTEM PER WSDOT STD. SPEC. 6-07.3(1), METHOD B, PAINT SHALL MEET THE REQUIREMENTS OF WSDOT STD. SPEC. 9-08.1

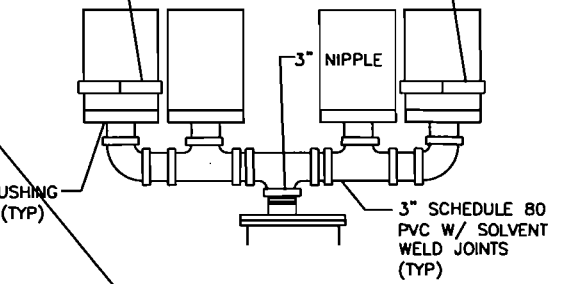
**PLAN**

PIPE SUPPORT, 1" STAINLESS STEEL STRAP, FASTENED TO WALL USING 3/8" STAINLESS STEEL SINGLE OR DOUBLE CONCRETE EXPANSION ANCHOR (TYP.)

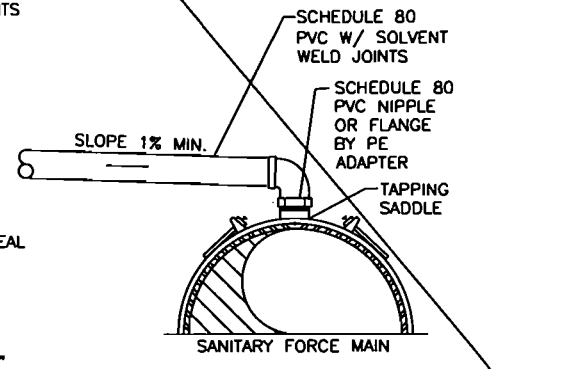
VAULT SHALL BE 0.1' HIGHER THAN FINISHED GRADE WITH POSITIVE GRADES AWAY FROM VAULT



**SECTION**



**ODOR CONTROL CANISTER TREE SECTION**



**AIR VACUUM/RELEASE VAULT WITH ODOR CONTROL**

4/15/08 SCH

STANDARD DETAILS	CITY OF RIDGEFIELD	SHEET S-3.6
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12" dia. x 6" deep 3000psi concrete collar around valve box.

Rich no. 910 cast iron valve box w/cover marking "SEWER"

Finished pavement grade.



Riser pipe to be cut off 4" min. and 5" max. below finished grade.

1/4" plastic nut and bolt, 1" below top of pipe.

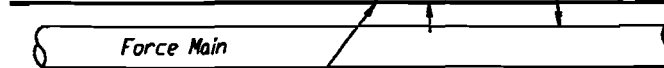
25' min.

Toning wire.

Riser pipe, 4" ABS pipe (or approved equal).

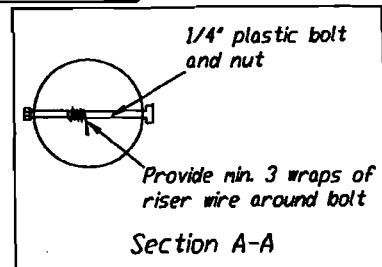
90°

5'



Solder junction and protect with heat shrink tape.

### STANDARD LOCATOR STATION



2" minimum

Mainline wire

Locator station wire

Soldered connection with heat shrink tape

Toning wire connection schematic

1. Bare mainline toning wire (do not sever).
2. Solder house toning wire to mainline (minimum 2" solder cap).
3. Encase with 3M scotch #2200 vynal nastic pads (3 1/2" by 4 1/2") or 3M Scotch 33 electrical tape and coated with scotchkote electrical coating #1485 (repeat process after first coating dries), or approved equal.
4. Mainline toning wire shall be one piece - no splices.
5. Individual locator station toning wires shall be one piece.

2/11/08 SCH

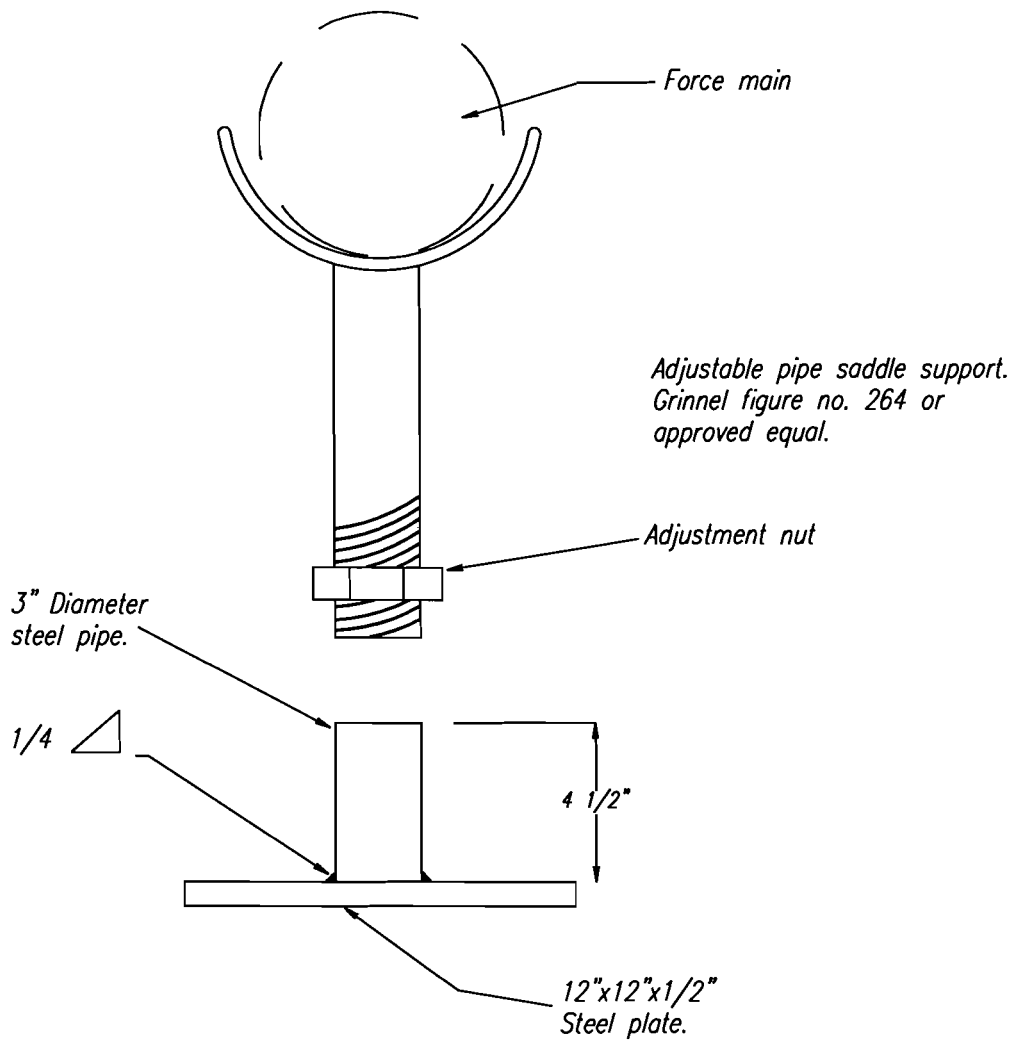
### LOCATER STATION DETAIL

STANDARD  
DETAILS

CITY OF RIDGEFIELD

SHEET  
S-3.7

*Note: After fabrication, the valve stand base shall be cleaned, primed with Fuller O'Brian 621-04 Blox-Rust alkyd metal primer or approved equal and then painted with Fuller O'Brian 612-XX heavy duty alkyd enamel or approved equal.*



NO SCALE

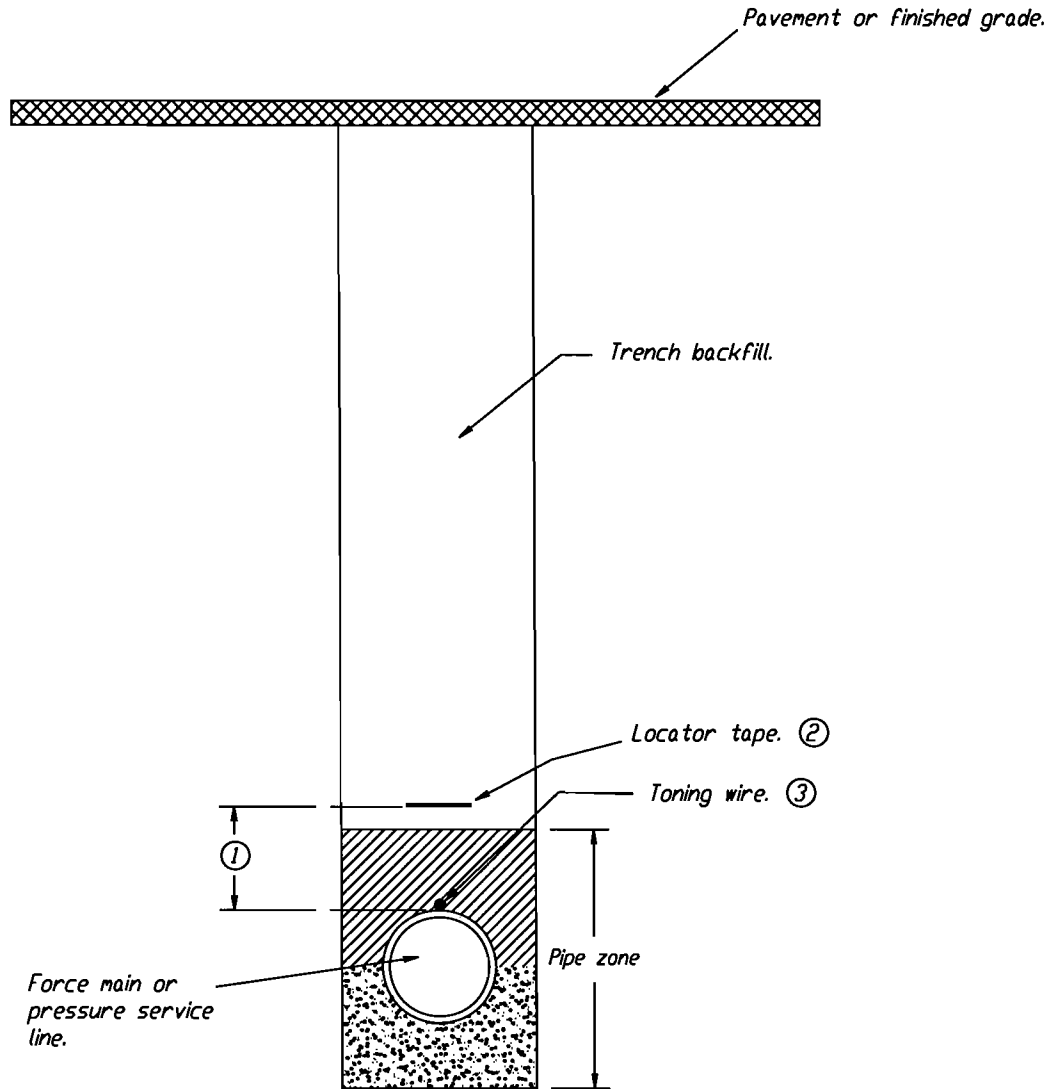
2/11/08 SCH

### VALVE STAND DETAIL

STANDARD  
DETAILS

CITY OF RIDGEFIELD

SHEET  
S-3.8



① Locator tape to be located eighteen (18) inches above a force main and twelve (12) inches above a pressure service line.

② The locator tape should be marked with continuous three (3) inch wide green six (6) mil thick locator tape three (3) inch high black letters every three (3) feet with "Warning - Buried Pressure Sewer".

③ A continuous toning wire shall be attached to the top of the pressure service line. The toning wire shall be 12 gauge insulated toning wire. The toning wire shall end in the valve box with a minimum of one (1) foot coil of wire. The toning wire shall be tested for continuity prior to acceptance. All splices will be soldered a minimum of two (2) inches in length and encased with 3M Scotch #220 vinyl mastic pads (3 1/2" by 4 1/2") or 3M Scotch 33 electrical tape and coated with Scotchkote electrical coating #1485 (repeat process after first coating dries), or approved equal.

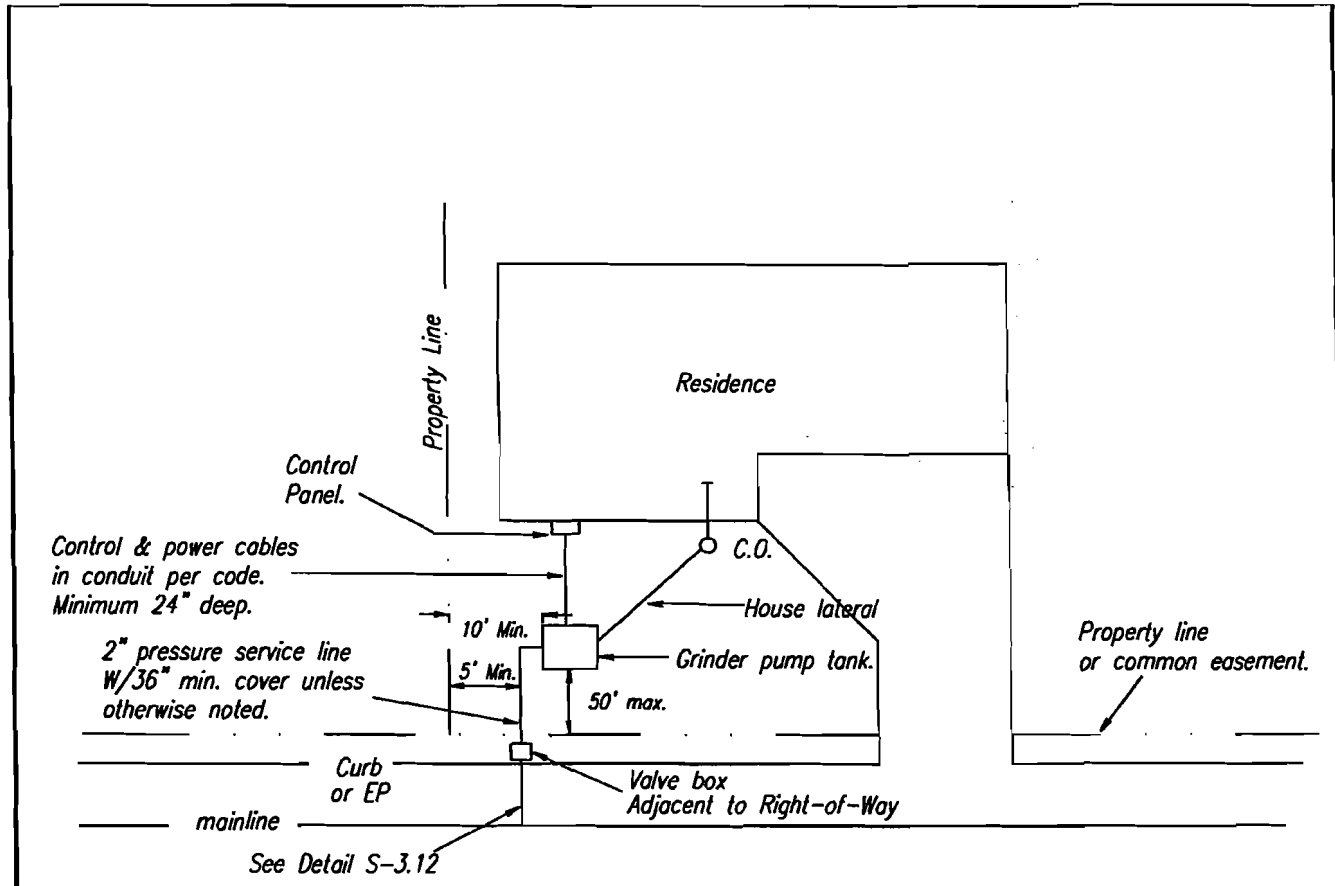
2/12/08 SCH

## TONING WIRE AND LOCATOR TAPE DETAIL

STANDARD  
DETAILS

CITY OF RIDGEFIELD

SHEET  
S-3.9

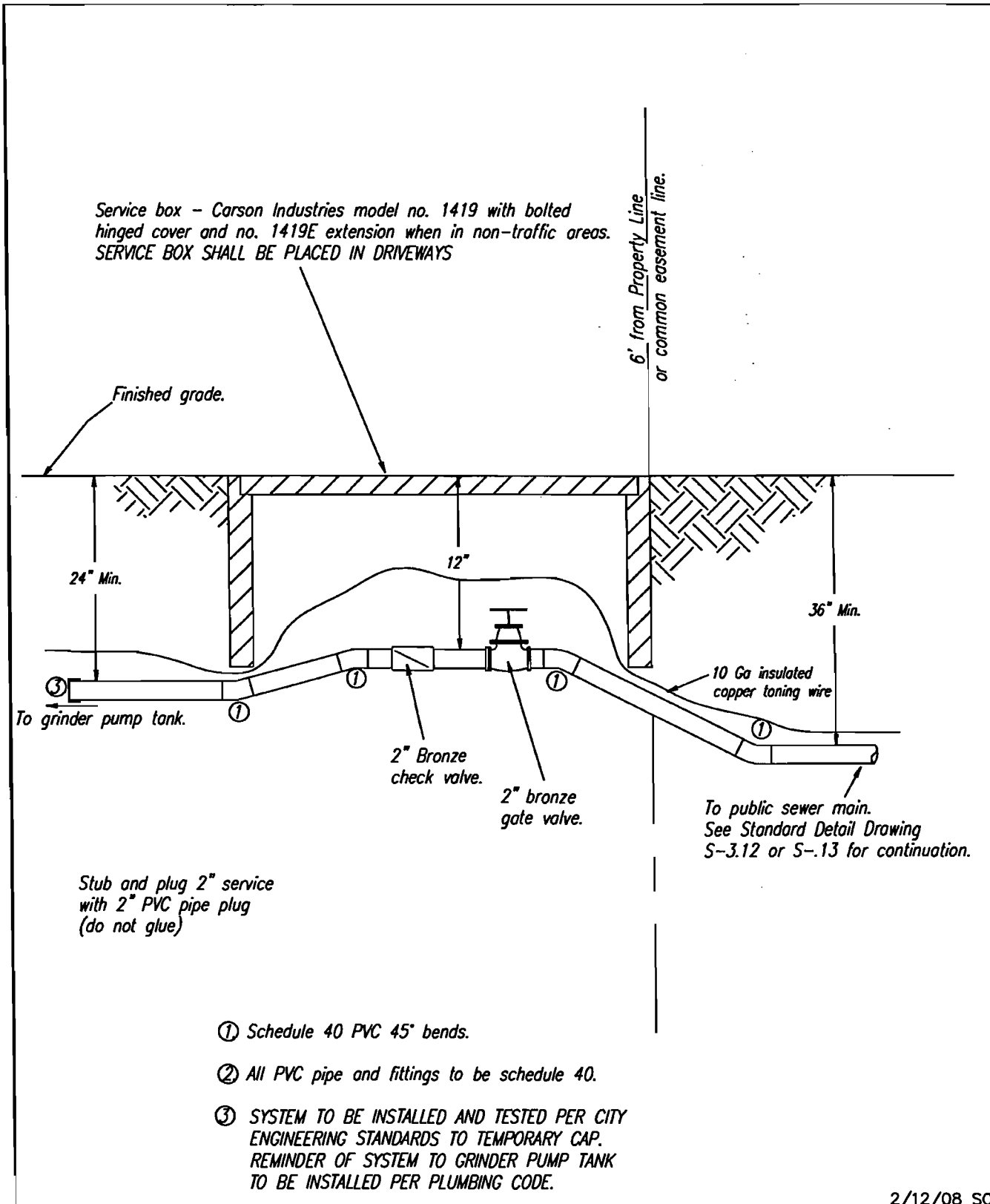


**NOTES:**

1. PUMPS SHALL BE ENGINEERED POSITIVE DISPLACEMENT SYSTEMS E/ONE, W-SERIES, WH231 "SQUAT", OR CITY APPROVED EQUAL AND SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURE'S RECOMMENDATIONS. TANK SHALL BE AT LEAST 237 GALLON CAPACITY.
2. LOCATE PUMP AND TANK MINIMUM 5' FROM BUILDING AND BETWEEN BUILDING AND STREET.
3. MAINTAIN ACCESS TO TANK.
4. MOUNT CONTROL PANEL ON FRONT OF HOUSE, AS CLOSE TO TANK AS POSSIBLE AND VISIBLE FROM TANK.
5. VALVE BOX SHALL NOT BE IN DRIVEWAY, AND SHALL BE AT PUBLIC R/W OR BACK OF COMMON EASEMENT.
6. SITE PLAN AND PUMP SUBMITTAL APPROVAL REQUIRED PRIOR TO INSTALLATION.
7. GRINDER PUMP SHALL BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE BUILDING, PLUMBING, AND ELECTRICAL CODES.
8. SUBMITTALS ON ALL GRINDER SYSTEM COMPONENTS WILL BE REQUIRED WITH BUILDING PERMIT SUBMITTAL.
9. OPERATION AND MAINTENANCE OF EACH INDIVIDUAL GRINDER PUMP SYSTEM SHALL BE THE SOLE RESPONSIBILITY OF THE HOME OWNER.

2/12/08 SCH

<b>TYPICAL GRINDER PUMP PRESSURE SEWER SITE PLAN</b>		
STANDARD DETAILS	CITY OF RIDGEFIELD	SHEET S-3.10



2/12/08 SCH

TYPICAL HOUSE GRINDER PUMP VALVE BOX

STANDARD  
DETAILS

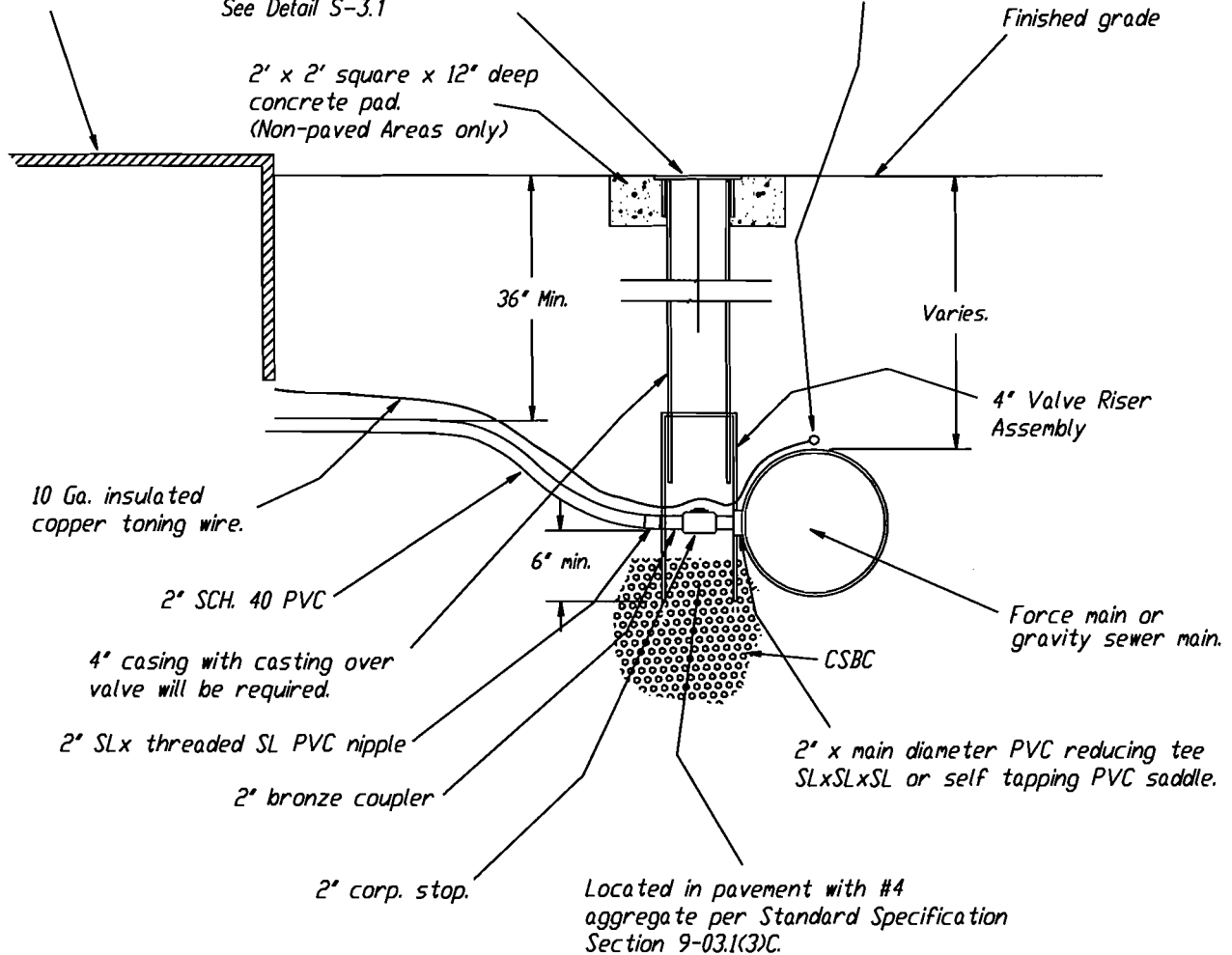
CITY OF RIDGEFIELD

SHEET  
S-3.11

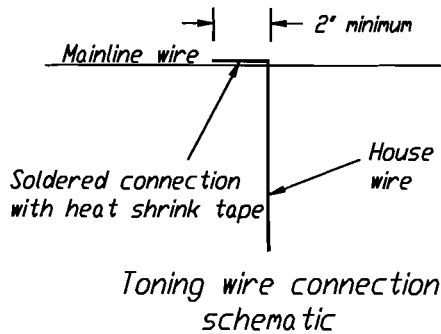
Valve box.  
See detail S-3.11

Standard cast iron frame and cover.  
Sioux Chief Mfg. Co., Inc. Toupee Plus  
adjustable cleanout marked "SEWER".  
See Detail S-3.1

Connect toning wire for service to  
mainline toning wire. See note  
below and schematic.



Note: All PVC pipe & fittings shall be schedule 40 PVC.



1. Bare mainline toning wire (do not sever).
2. Solder house toning wire to mainline (minimum 2" solder cap).
3. Encase with 3M Scotch #2200 vinyl mastic pads (3 1/2" by 4 1/2") or 3M Scotch 33 electrical tape coated Scotchkote electrical coating #1485 (repeat process after first coating dries), or approved equal.
4. Mainline toning wire shall be one piece - no splices.
5. Individual house toning wires shall be one piece.

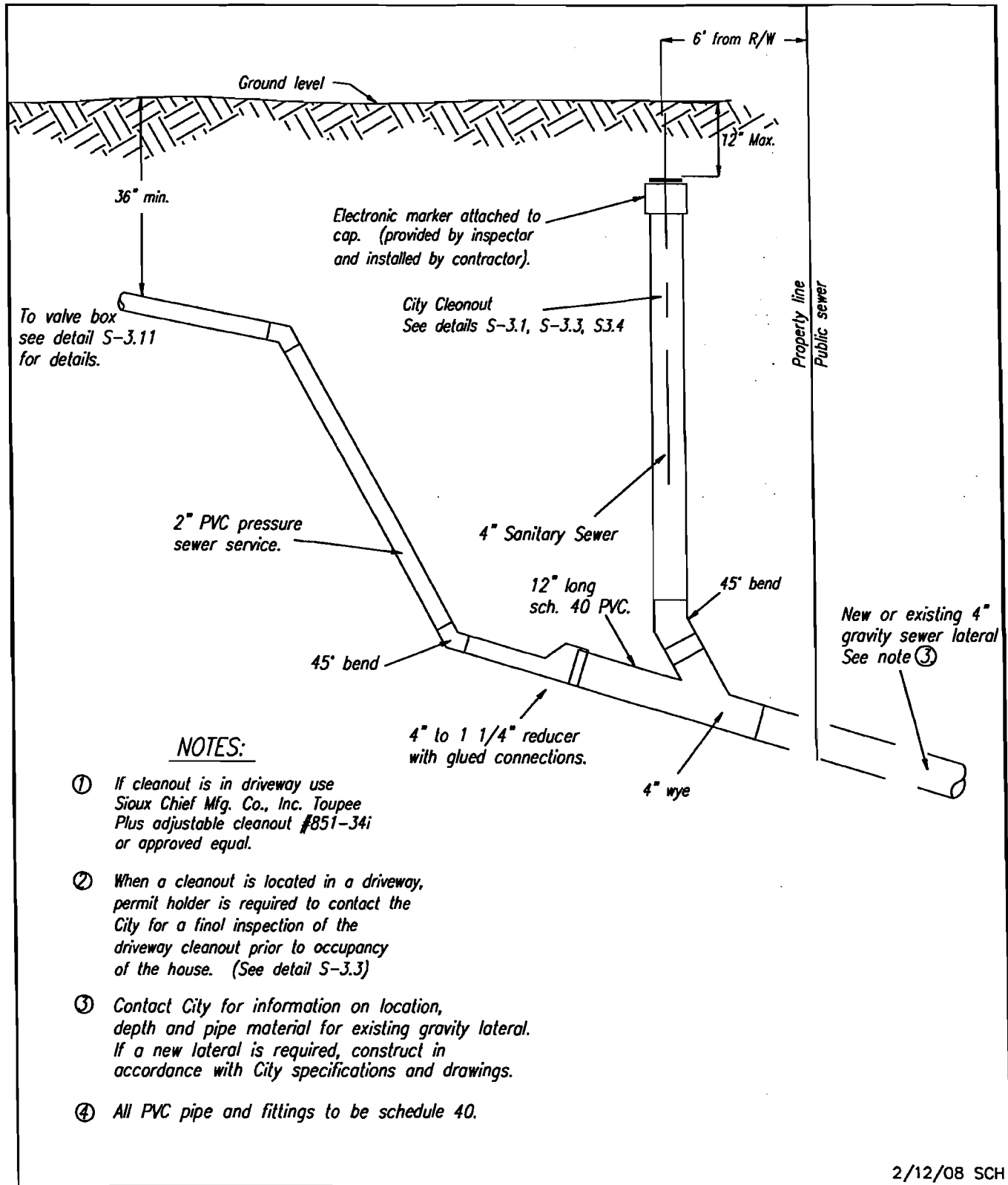
2/12/08 SCH

PRESSURE HOUSE GRINDER PUMP SERVICE CONNECTION

STANDARD  
DETAILS

CITY OF RIDGEFIELD

SHEET  
S-3.12



PRESSURE HOUSE GRINDER PUMP SERVICE CONNECTION  
TO EXISTING GRAVITY LATERAL

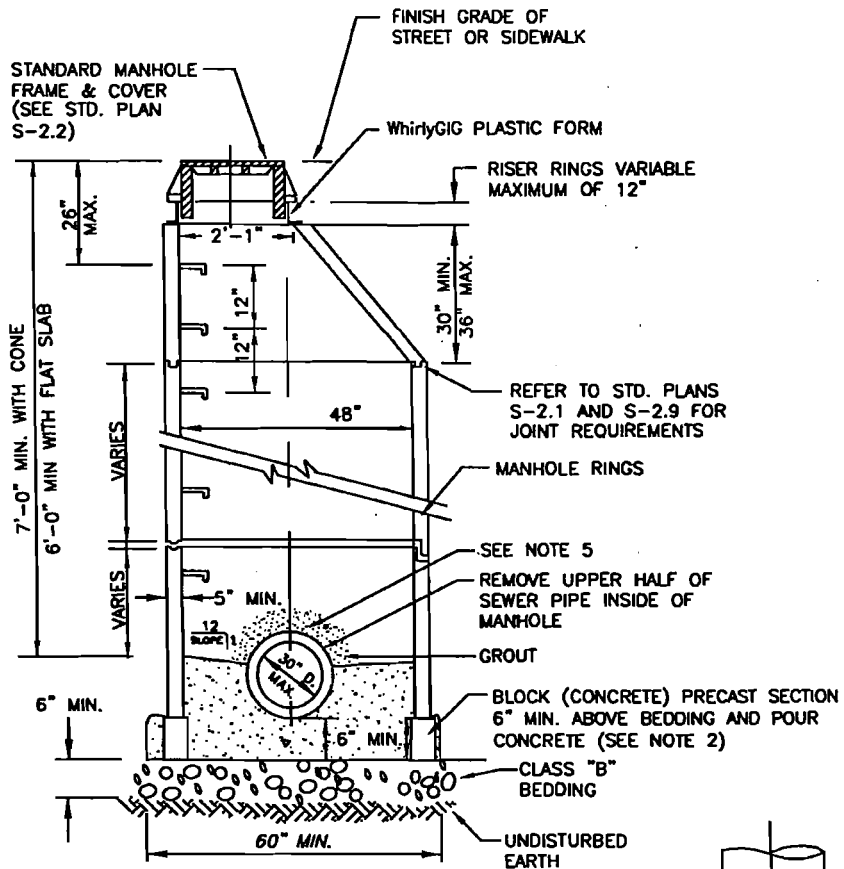
STANDARD  
DETAILS

CITY OF RIDGEFIELD

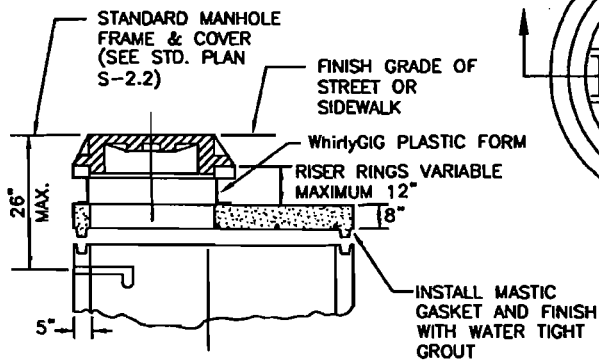
SHEET  
S-3.13

**NOTES:**

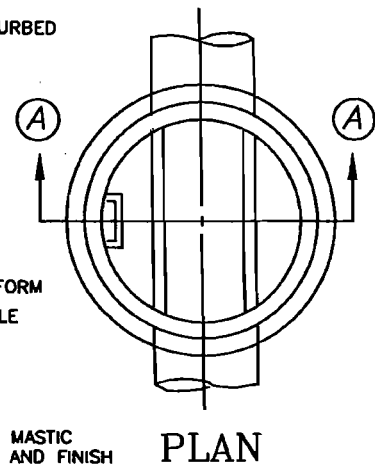
1. CONSTRUCTION SHALL CONFORM TO STD. PLAN NO. S-2.1, IF NOT OTHERWISE SHOWN.
2. ALL PRECAST SECTIONS SHALL CONFORM TO THE REQUIREMENTS OF ASTM C-478. ALL POURED IN PLACE CONCRETE SHALL HAVE A 28 DAY STRENGTH OF 3000 P.S.I. AND 2" TO 4" SLUMP.
3. THE MANHOLE BASE MAY BE POURED MONOLITHIC TO 8" ABOVE THE BARREL OF THE MAIN SEWER.
4. MANHOLES UNDER 6'-0" IN DEPTH FROM RIM TO SHELF SHALL HAVE A TOP SLAB IN LIEU OF CONE. SEE DETAIL S-2.5
5. FOR CONNECTIONS, THIS HOLE DIAMETER SHALL BE EQUAL TO THE OUTSIDE PIPE DIAMETER PLUS THE MANHOLE WALL THICKNESS.
6. CHANNELS SHALL CONFORM ACCURATELY TO SEWER GRADE. INSTALL BENCHES TO ELEVATION OF SPRINGLINE OF PIPE.
7. Joints shall be constructed so as to be watertight. See Standard Plan No. S-2.9. Seal all manhole joints and frame with Infi-Shield "Seal Wrap" Exterior Seal System or equal.
8. Vacuum testing of manholes will be required.
9. Locking covers are required in easements, or at the discretion of the City Inspector.
10. WhirlyGIG® Manhole Manhole Riser/Collar System shall be used in place of riser rings unless otherwise approved.
11. All manholes shall be provided with Rain Shields to prevent infiltration of stormwater.



**SECTION A - A**



**FLAT SLAB ALTERNATE**



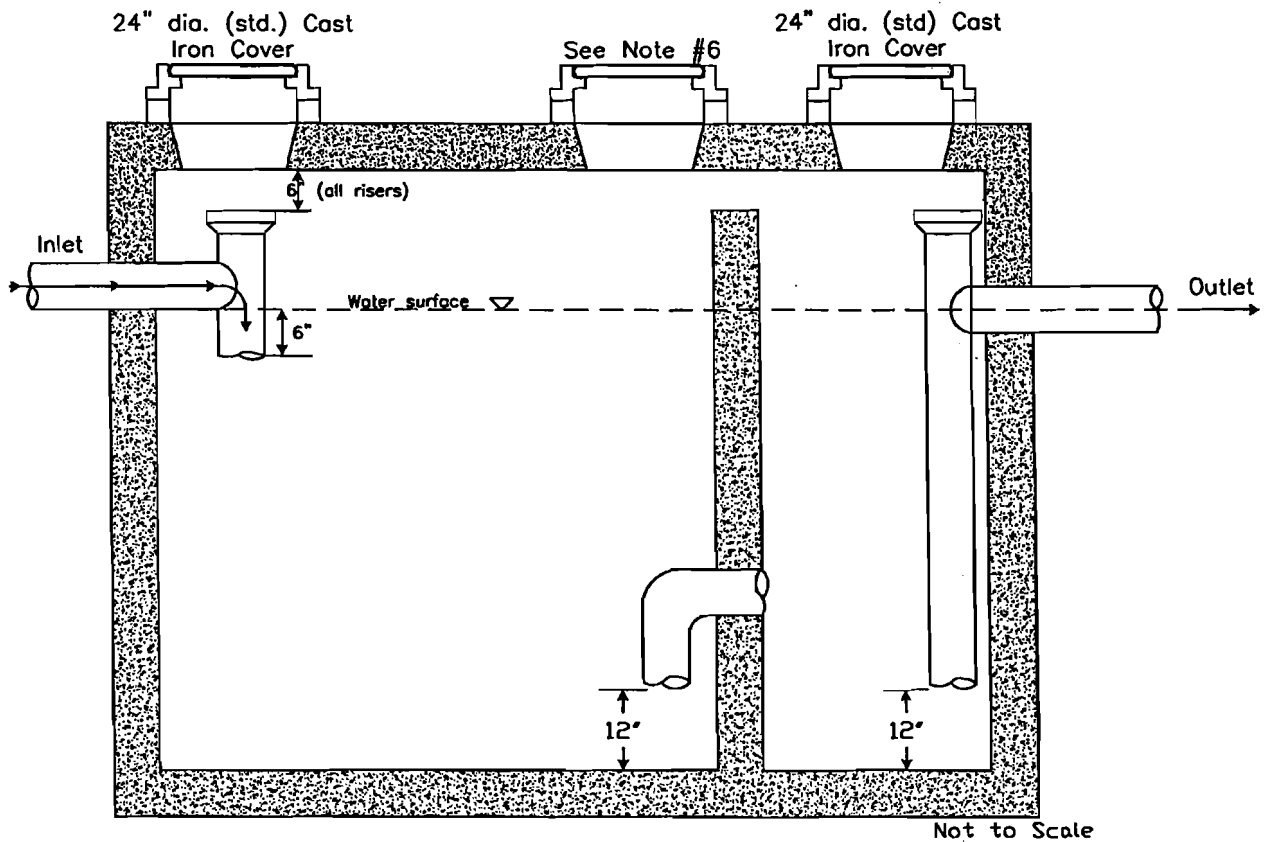
2/26/08 SCH

**STANDARD SAMPLING MANHOLE DETAIL**

STANDARD  
DETAILS

CITY OF RIDGEFIELD

SHEET  
S-4.1



**NOTES:**

1. Position risers below and off-center of manholes to allow access and entry.
2. No concrete plugs below cast iron manhole covers.
3. Place interceptor in location which allows for pump truck/maintenance access.
4. Fill with clean water prior to start-up and after pumpouts.
5. **Gray Water Only.** Domestic (sanitary) water shall be conveyed by separate line.
6. For capacities equal to or greater than 1,500 gallons, a center manhole is required and the cover shall be a standard 24" diameter cover.
7. Unit shall be rated for H-20 AASHTO loading (certified).
8. Submit vault specs with site/civil plans for final approval.

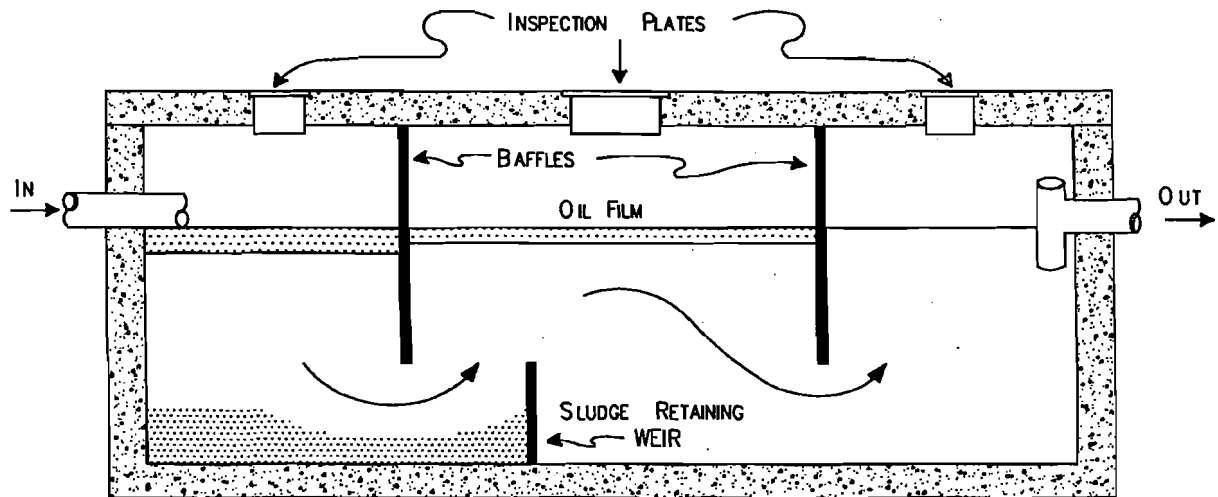
2/26/08 SCH

STANDARD GREASE INTERCEPTER

STANDARD  
DETAILS

CITY OF RIDGEFIELD

SHEET  
S-4.2



#### **RECOMMENDED MANAGEMENT PRACTICES**

1. SIZE SEPERATOR FOR A 45 MINUTE RETENTION TIME AT PEAK FLOW, OR EQUIVALENT RETENTION IF USING COALESCING PLATES.
2. BEFORE INSTALLATION, SUBMIT ALL PLANS TO THE CITY ENGINEER FOR REVIEW. INDICATE ALL SOURCES OF WATER TO SEPERATE AND PROVIDE ESTIMATES OF EXPECTED AVERAGE AND MAXIMUM FLOW RATES.
3. INSPECT SEPERATOR EVERY 6 MONTHS. USE A LONG STICK TO CHECK SLUDGE BUILD-UP IN FIRST CHAMBER. HAVE SEPERATOR CLEANED IF SLUDGE BUILD-UP IS OVER 8" INCHES OR IF THERE ARE MORE THAN 2" INCHES OF OIL FLOATING ON THE SURFACE IN ANY CHAMBER.
4. FOR COALESING PLATE SEPERATOR, CLEAN THE PLATES BEFORE THEY BECOME COATED WITH SILT OR SOLIDS.
5. DO NOT ALLOW THE FOLLOWING TO ENTER THE SEPERATOR AS THEY WILL EMULISFY THE OIL: ANTIFREEZE, DEGREASERS, DETERGENTS, ALCOHOL & SOLVENTS. ALSO, AVOID OVERLOADING THE SYSTEM WITH CONCENTRATED OILS OR HEAVY METAL-BEARING WASTEWATER.
6. TO REDUCE MAINTENANCE, REMOVE FLOATING OIL WITH ABSORBENT PADS OR VACUUM OUT OIL FILM. IF NECESSARY, INSTALL A CATCH BASIN BEFORE THE SEPERATOR TO REDUCE SLUDGE LOAD.

### STANDARD OIL/WATER SEPARATOR

STANDARD  
DETAILS

CITY OF RIDGEFIELD

SHEET  
S-4.3