

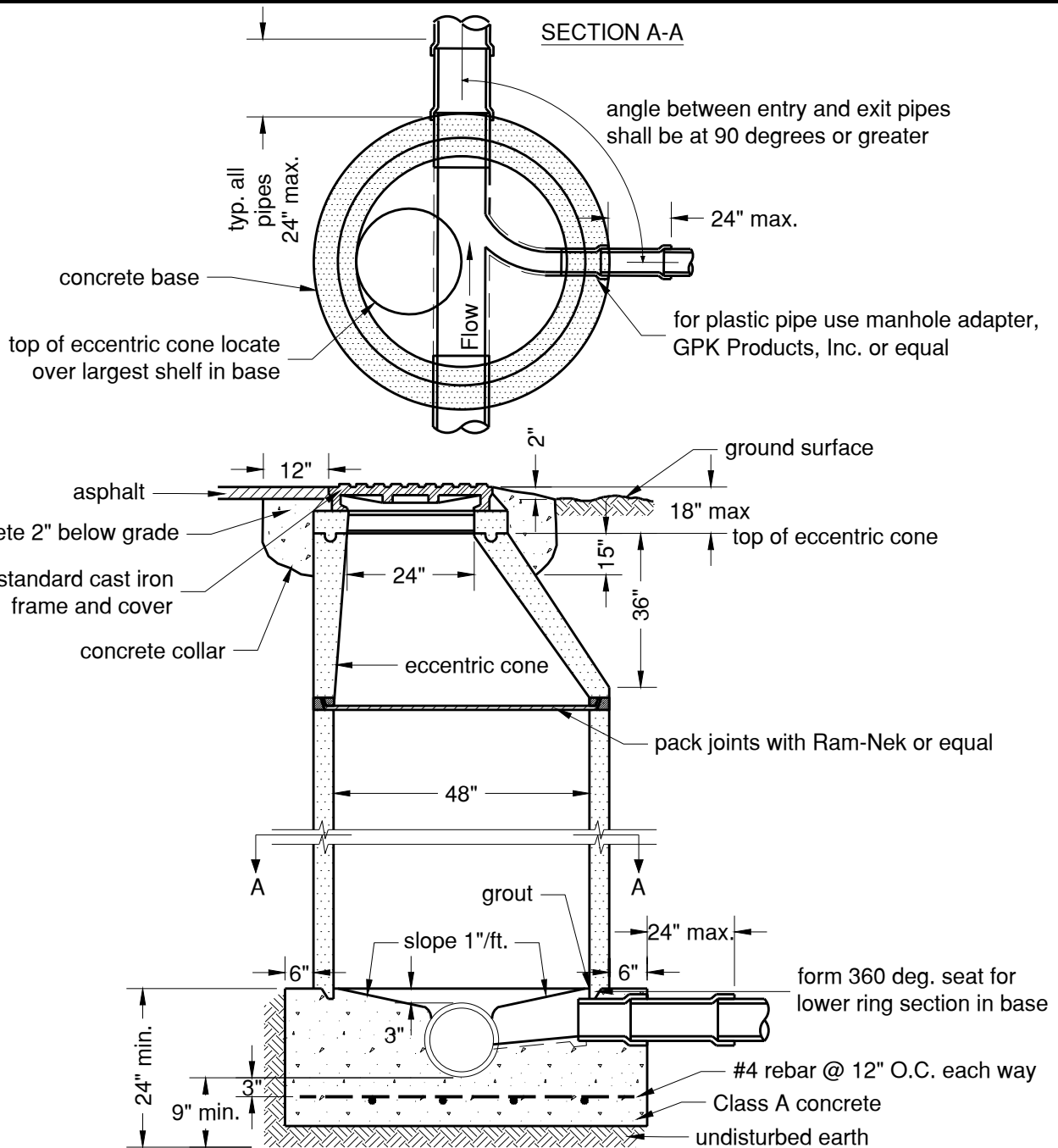
SEWER STANDARD DETAILS

FOSTER CITY
ESTERO MUNICIPAL IMPROVEMENT DISTRICT



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NOTES:

1. All manholes to be set flush with finish grade.
2. Provide a minimum slope of 1" per foot across manhole when line bends/or pipe diameter changes.
3. Cement shall be Type V.
4. Concrete shall be Class A.
5. All joints shall be made water-tight with neoprene gaskets or Ram-Nek.
6. Minimum crown elevation of a smaller diameter inlet pipe shall be no less than the crown elevation of the outlet pipe. Maximum drop from invert to inlet pipe to crown of outlet pipe shall be 1'.
7. Lay pipe through manhole when possible.
8. Top half of pipe to be removed within manhole. Trim off to neat line and finish off with grout to leave smooth finish.
9. Provide pipe joints at all entry points to manhole.
10. Provide 6" of 3/4" "Crushed" Drain Rock and fabric lining under PCC foundation if water is present in excavation.

ESTERO MUNICIPAL IMPROVEMENT DISTRICT
CITY OF FOSTER CITY, CALIFORNIA

**SEWER
TYPE I MANHOLE (PIPES 6" TO 21")**

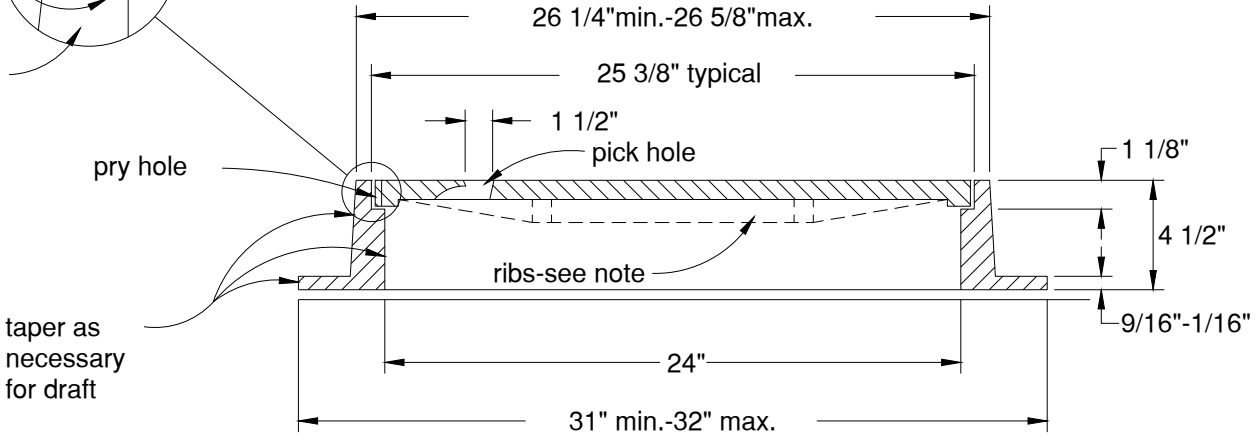
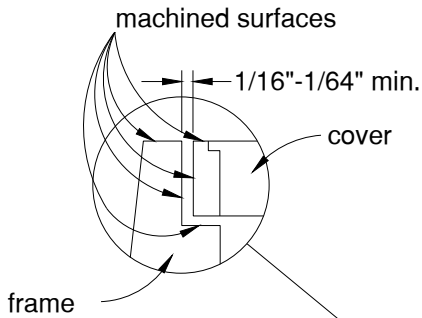
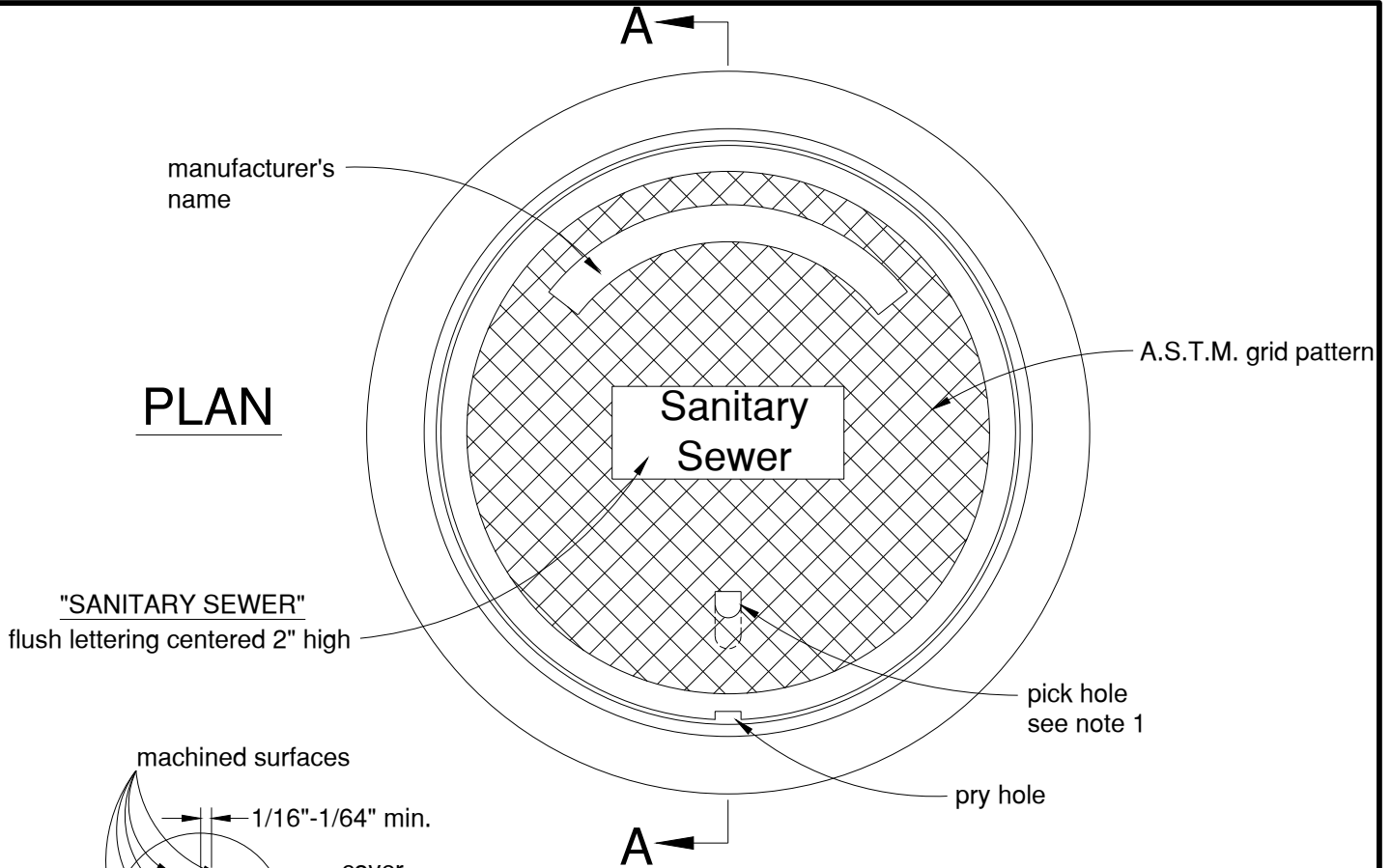
Rev	Date	Description
DWN:		Dwg No. Sewers 01
CHK:		Sheet 1 of 1

APPROVED: _____
CITY/DISTRICT ENGINEER

APPROVED: _____
DEPARTMENT SUPERVISOR

Scale: None
Date: JUNE 2015

PLAN



SECTION A-A

NOTES:

1. Cover may be furnished with or without ribs, but must be designed for H-20 highway loading. Pick holes shall fit standard pick and be formed such that bars or sticks can not fall through.
2. Frame and cover may be Phoenix Iron Works No. 1090, D & L Supply No. A-102 or approved equal.

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CITY OF FOSTER CITY, CALIFORNIA

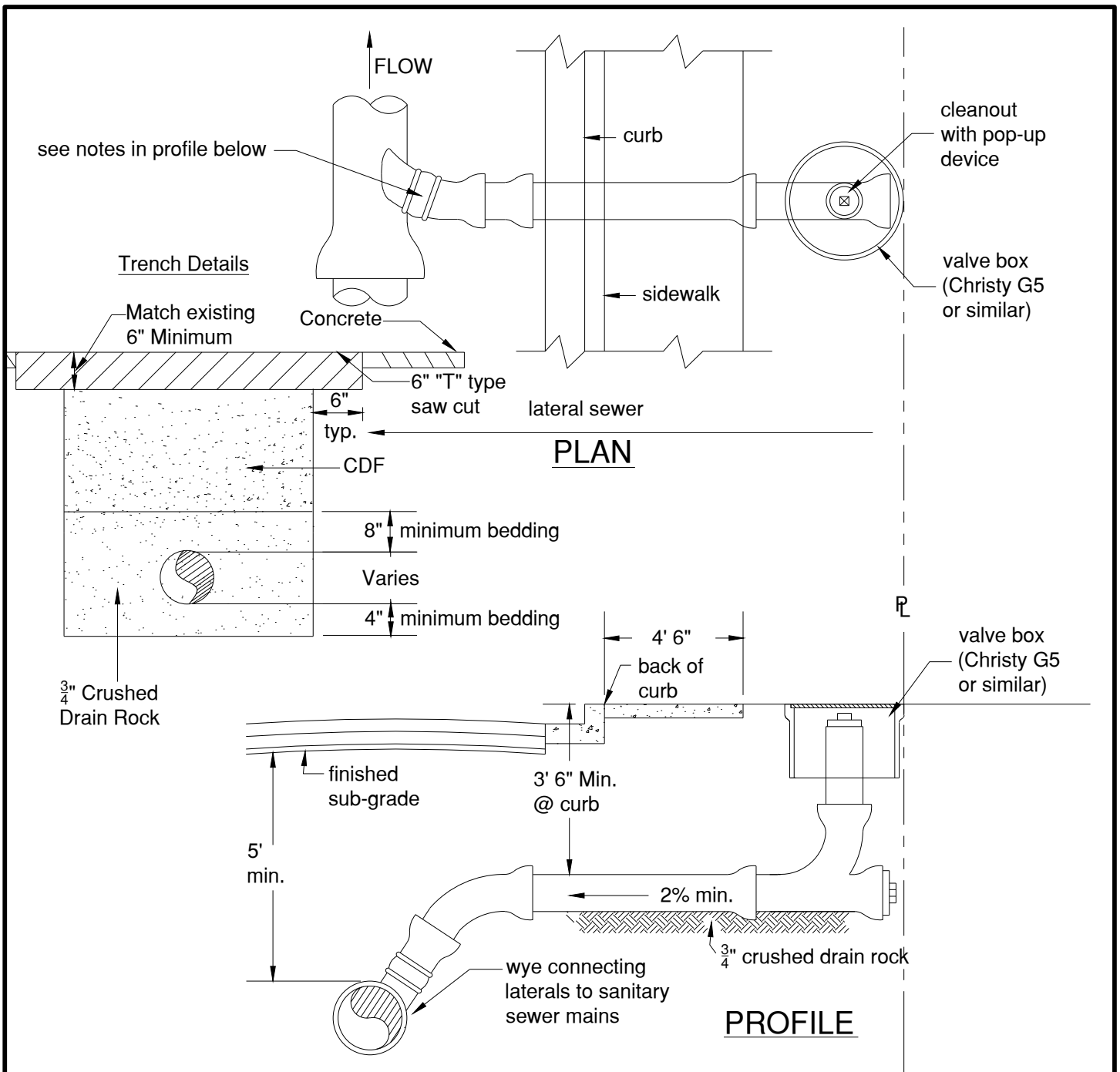
SEWER MANHOLE FRAME & COVER

Rev	Date	Description
DWN:		Dwg No. Sewers 03
CHK:		Sheet 1 of 1

APPROVED: _____
CITY/DISTRICT ENGINEER

APPROVED: _____
DEPARTMENT SUPERVISOR

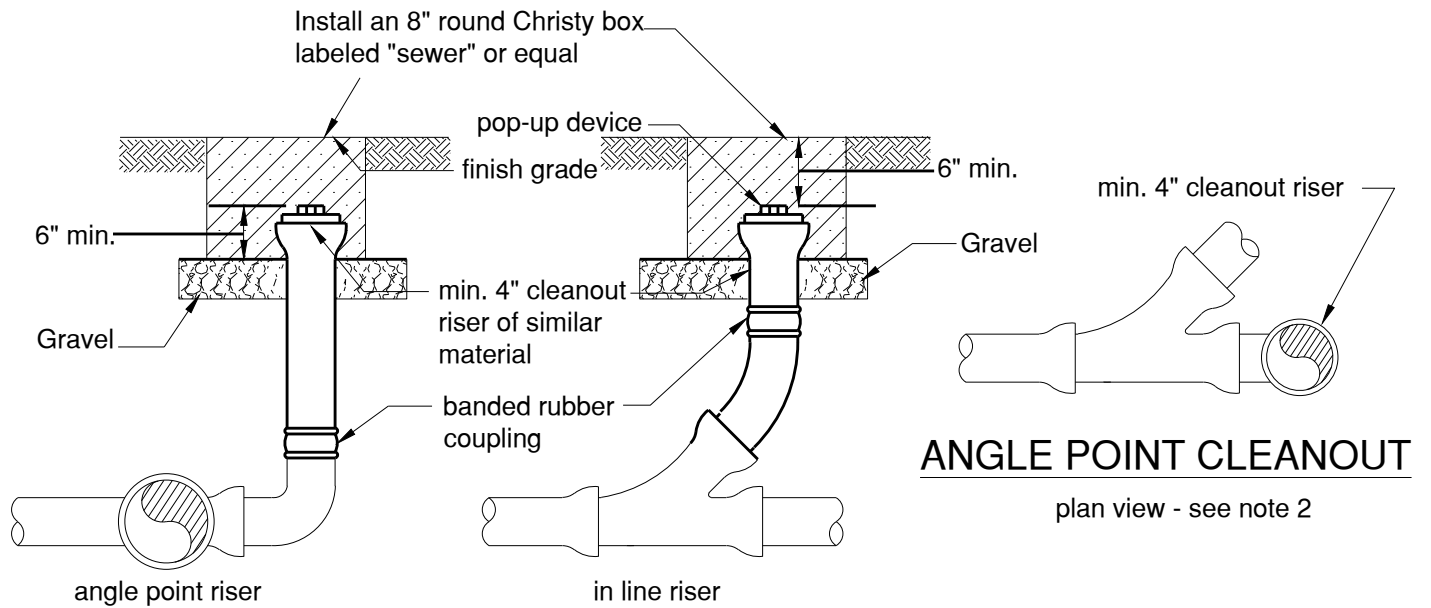
Scale: None
Date: JULY 2015



NOTES:

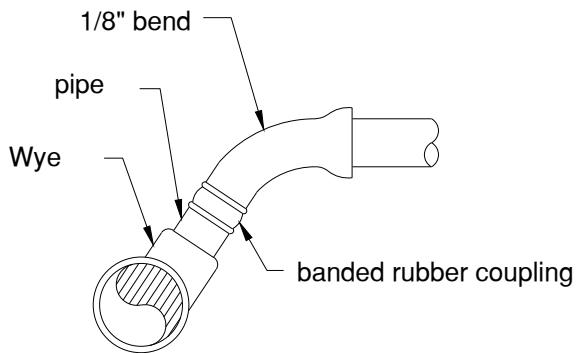
1. When a sewer lateral is installed in advance of the house sewer, it shall be terminated at or near the property line, and it shall be the responsibility of the developer to mark the location of the plugged end.
2. Swimming pool drains shall not be connected to sanitary sewer (side) laterals.
3. Pipe shall be PVC (SDR26 or SDR35) or VCP or HDPE.
4. Pipe bedding shall be 3/4" crushed drainrock.
5. Backfill shall be CDF.
6. A concrete pipe cap shall be installed if less than 30" of cover.

ESTERO MUNICIPAL IMPROVEMENT DISTRICT CITY OF FOSTER CITY, CALIFORNIA				
SEWER SANITARY SEWER LATERAL		Rev	Date	Description
		DWN:		Dwg No. Sewers 04
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APPROVED: _____	APPROVED: _____			Scale: None
CITY/DISTRICT ENGINEER	DEPARTMENT SUPERVISOR			Date: JULY 2015

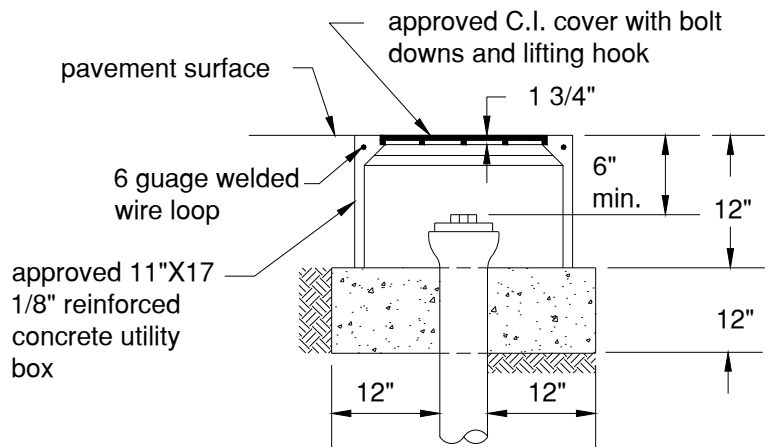


CLEANOUT RISER

see note 1



SADDLE CONNECTION



CLEANOUT RISER IN ROADWAY

NOTES:

1. If cleanout is not installed prior to installation of side sewer, it shall be the same size as the side sewer.
2. Angle point cleanout required in a side sewer deflections shall be 45 degrees or greater.
3. Pipe shall be PVC (SDR 26) or VCP (SDR 17) or HDPE.
4. See Sewers 07 for additional notes.
5. Pipe Bedding Shall be 3/4 inch crushed drainrock.
6. Backfill shall be CDF.
7. A concrete pipe cap shall be installed if less than 30" of cover.

ESTERO MUNICIPAL IMPROVEMENT DISTRICT
CITY OF FOSTER CITY, CALIFORNIA

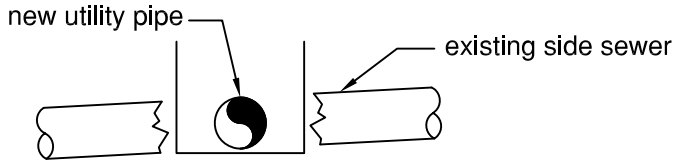
Rev	Date	Description
DWN:		Dwg No. Sewers 05
CHK:		Sheet 1 of 1

SEWER LATERAL WITH BRANCH CONNECTIONS

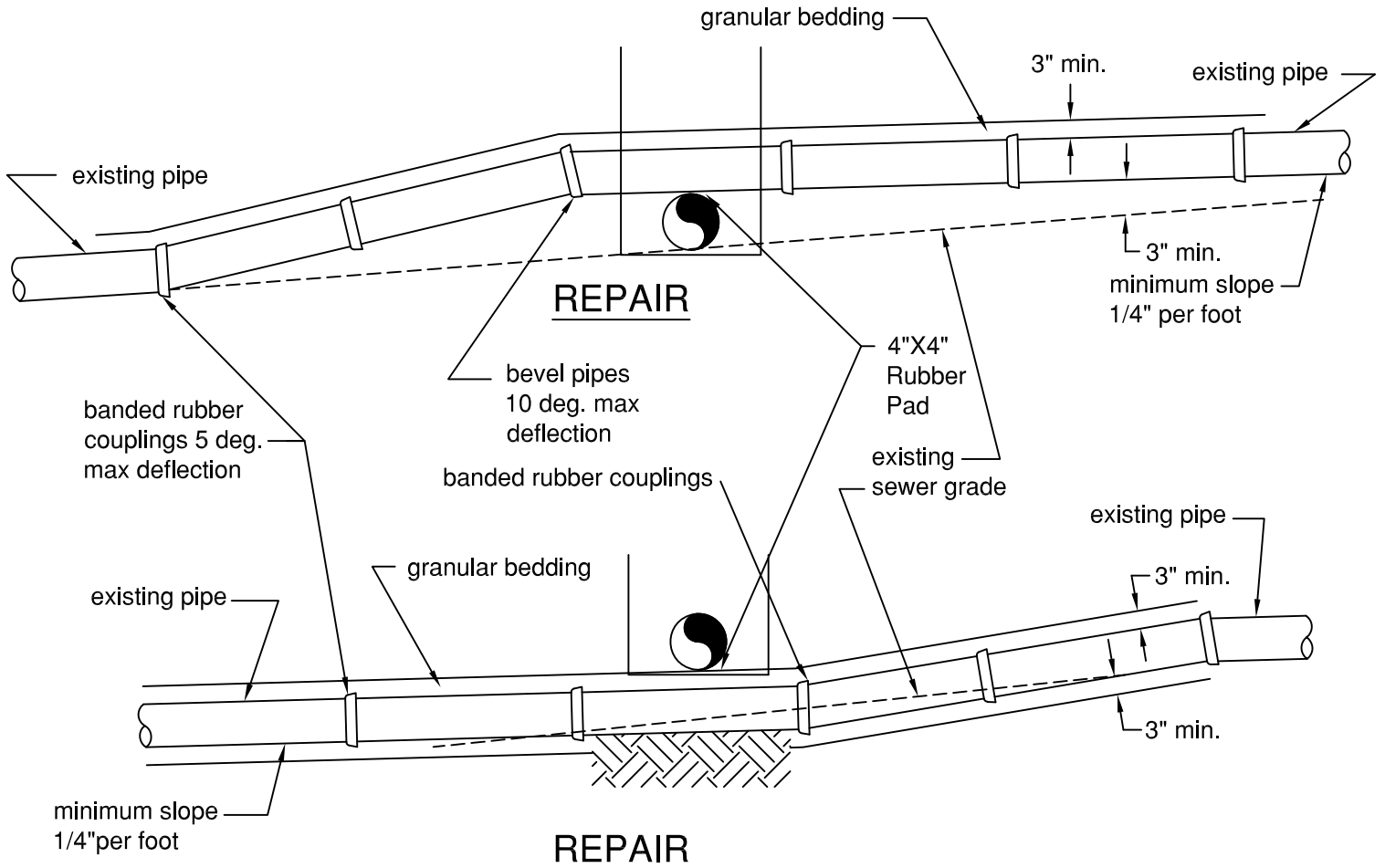
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Scale: None
Date: JULY 2015



BREAK OR CONFLICT



SIMPLE SIDE SEWER BREAK WITH CONFLICT IN GRADE

NOTE:

1. See Sewers 07, for additional notes.

ESTERO MUNICIPAL IMPROVEMENT DISTRICT
CITY OF FOSTER CITY, CALIFORNIA

SEWER
SANITARY SEWER LATERAL REPAIRS

Rev. Date	Description
DWN:	Dwg. Sewers 06
CHK:	

APPROVED: _____
CITY/DISTRICT ENGINEER

APPROVED: _____
DEPARTMENT SUPERINTENDENT

SCALE: NONE
DATE: Nov. 2007

ADDITIONAL NOTES FOR Sewers 05 and 06

REPAIR AND/OR RELOCATION PROCEDURE

1. Notify City of Foster City 48 hours in advance of work.
2. Trim side sewer pipe to a clean cut, undamaged end, a minimum of 18" into trench wall. Cut piece of new ductile iron pipe, coal tar epoxy lined and polyethylene wrapped, of equal diameter to fit space between trimmed ends with a maximum clearance of 1/4" at each end. Remove pipe stop ring from one banded rubber coupling and install the coupling on the upstream end of the side sewer. Then place another banded rubber coupling on the downstream end. Place an adapter ring of the proper size on each end of the pipe replacement section, then insert one end in the coupling on the downstream end. Align pipes at upstream end and slide coupling downstream, centering it over the joint. Tighten coupling bands.
3. Repair shall be made as shown herein. Repair may be made with the same type of pipe as the existing sewer. When O. D.'s are within 1 inch of each other, there shall be a 4" X 4" pad of 35-45 durometer rubber placed snugly between the pipes.
4. When new utility pipe or conduit conflicts with sewer grade line, the utility pipe or conduit shall be raised or lowered, if possible, to miss the sewer line. If not possible to move the utility line, written permission shall be acquired from the City of Foster City/EMID and the sewer line relocated in accordance with one of the details above. When O. D. of pipes are within 1" of each other, there shall be a 4" X 4" pad of 35-45 durometer rubber placed snugly between the pipes.

NOTES:

1. Alterations of sewer grades will be permitted only after written permission has been received from the City Engineer. All repairs shall be made by a licensed contractor at the expense of those responsible for damage, unless otherwise approved.
2. Minimum clearances between sanitary sewers and water system pipes shall conform to the latest requirements of the State of California, Department of Health Services, "Sanitary Engineering Section, California Health and Safety Code and California Administrative Code 22, Requiring separation between water mains and sanitary sewers (10 feet horizontal and 1 foot vertical)".

ESTERO MUNICIPAL IMPROVEMENT DISTRICT
CITY OF FOSTER CITY, CALIFORNIA

SEWER
SANITARY SEWER LATERAL REPAIRS

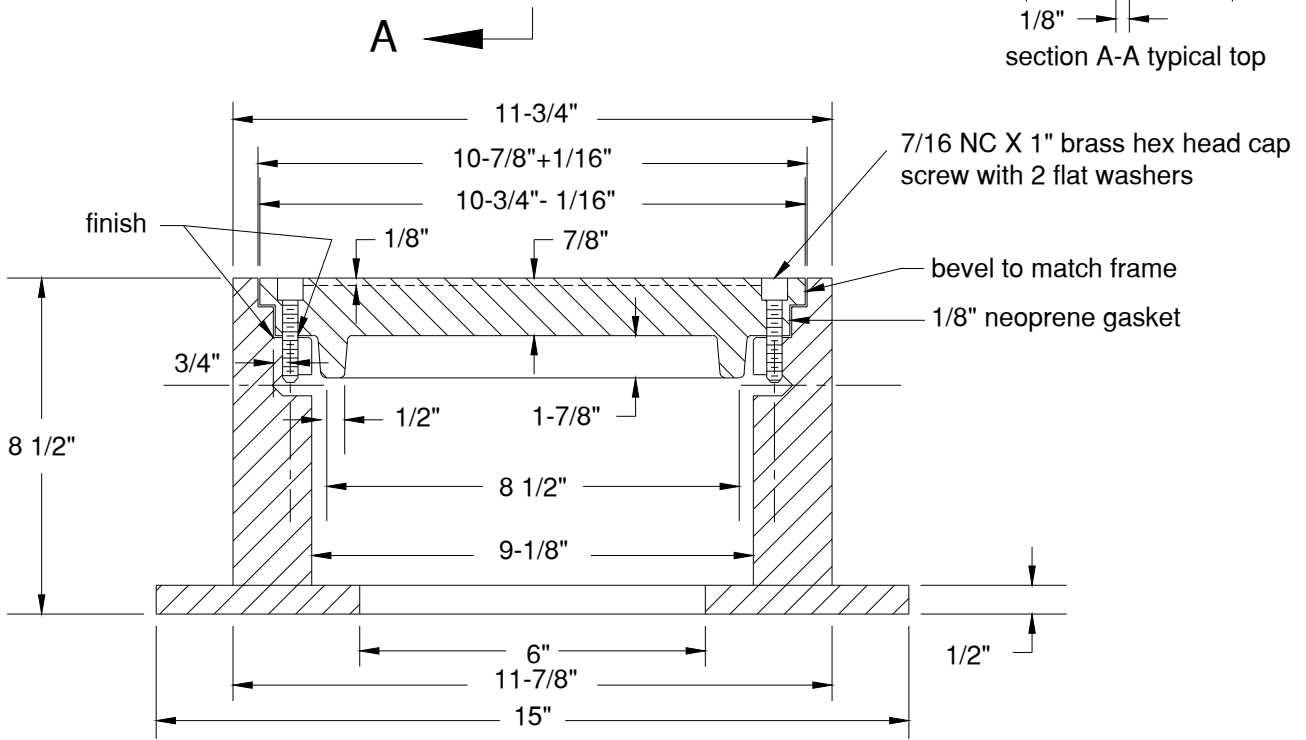
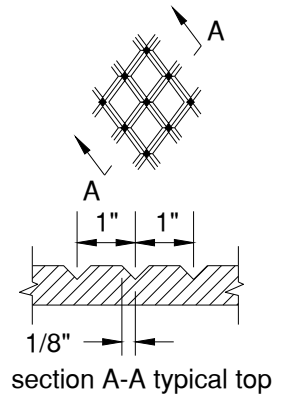
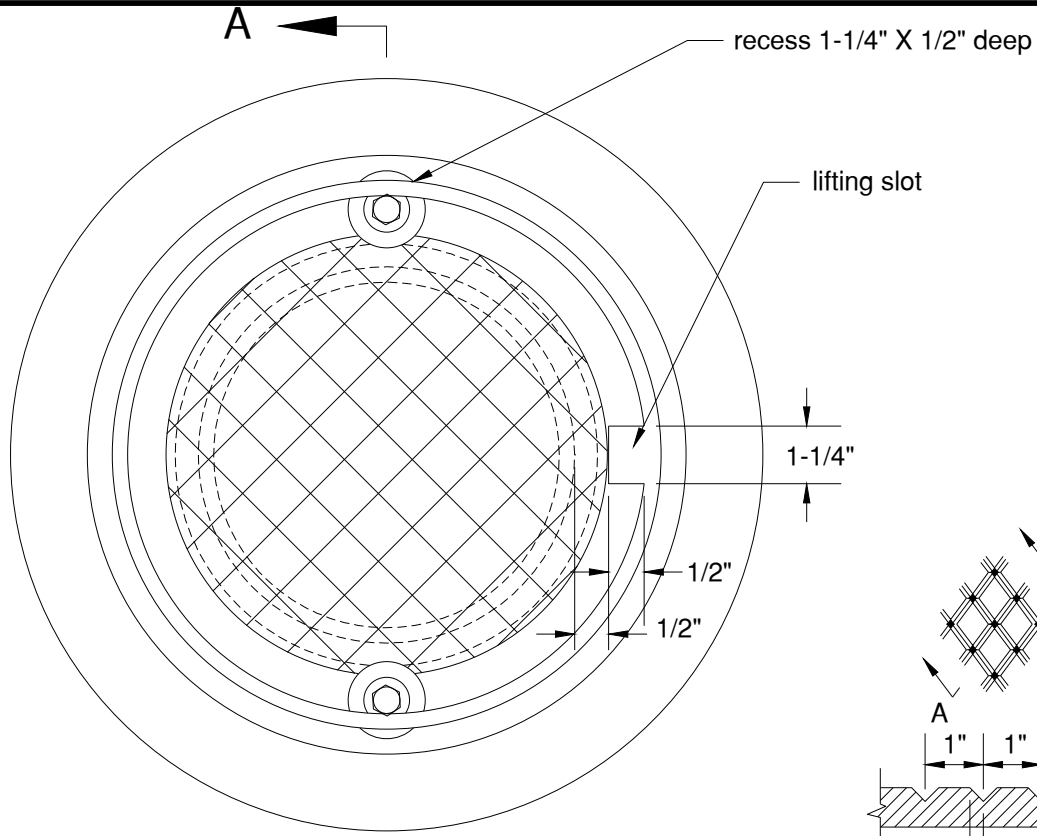
Rev. Date	Description
DWN:	Dwg. Sewers 07
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APPROVED: _____
CITY/DISTRICT ENGINEER

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DEPARTMENT SUPERINTENDENT

SCALE: NONE
DATE: Nov. 2007

PLAN



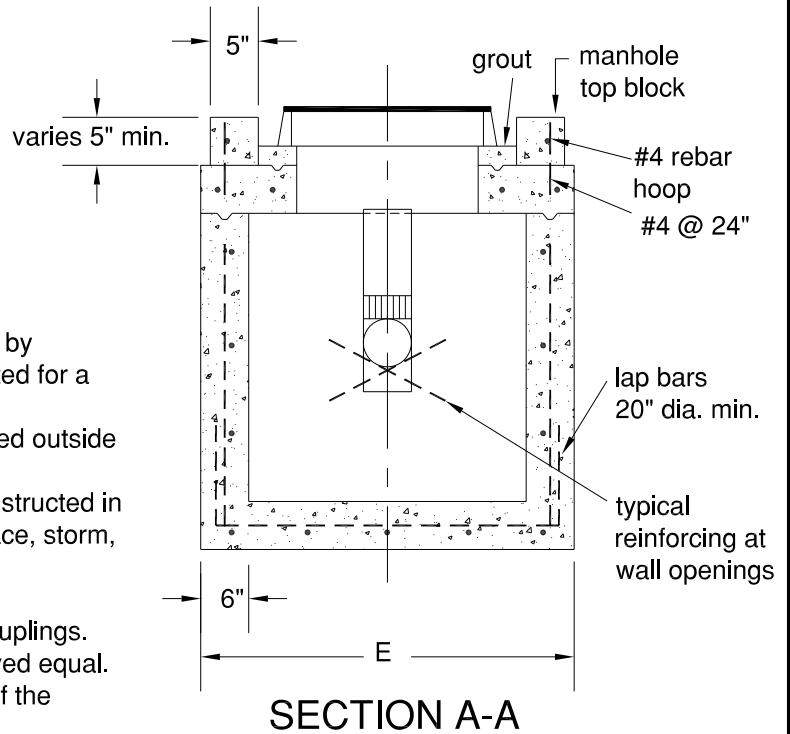
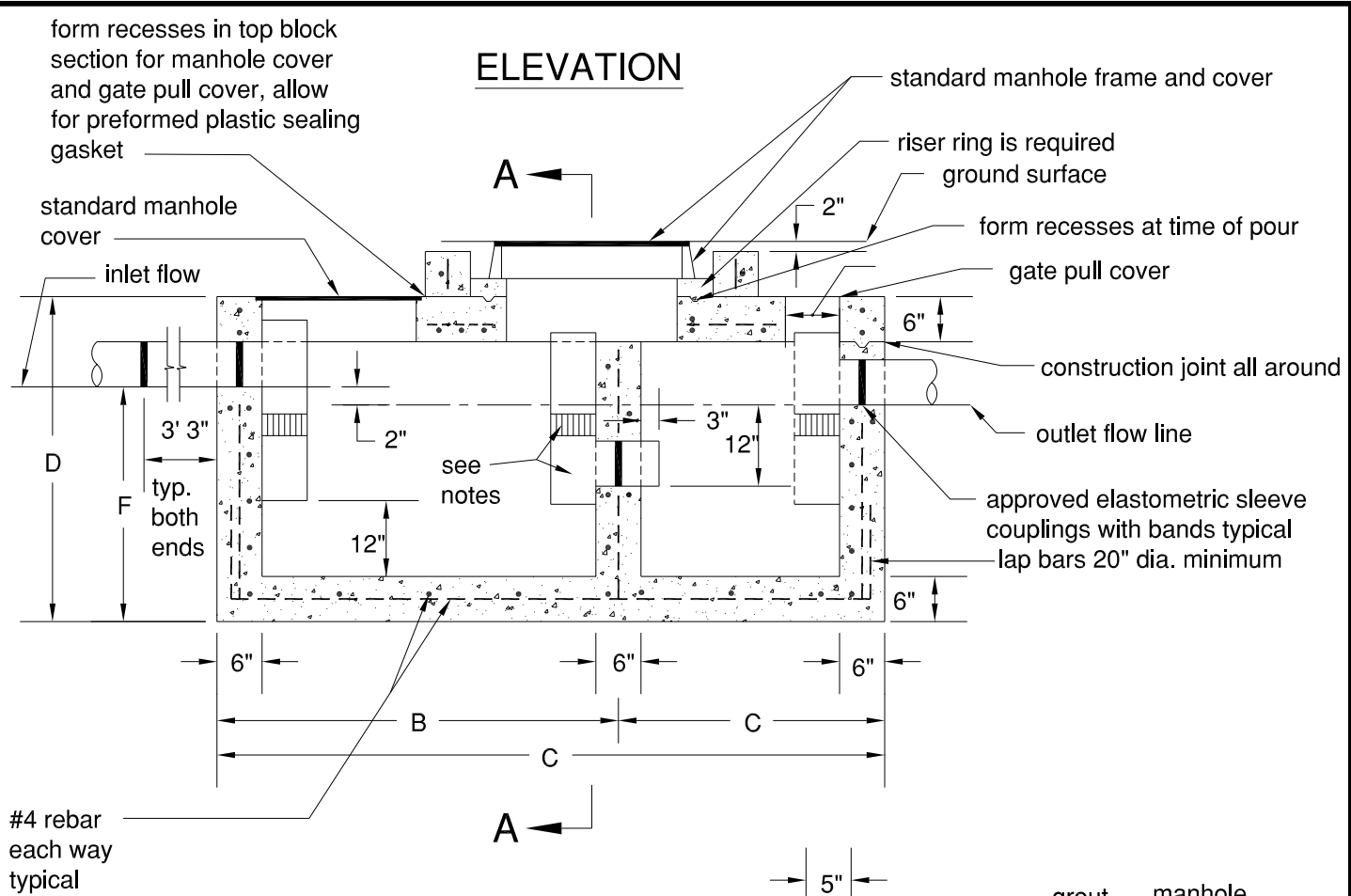
SECTION A-A

NOTE:
1. See Sewers 09 and 10

ESTERO MUNICIPAL IMPROVEMENT DISTRICT
CITY OF FOSTER CITY, CALIFORNIA

**SEWER
GATE PULL FRAME & COVER FOR GREASE INTERCEPTOR**

Rev	Date	Description
DWN:		Dwg No. Sewers 08
CHK:		Sheet 1 of 1
APPROVED: _____		Scale: None
CITY/DISTRICT ENGINEER		Date: JULY 2015
APPROVED: _____		
DEPARTMENT SUPERVISOR		



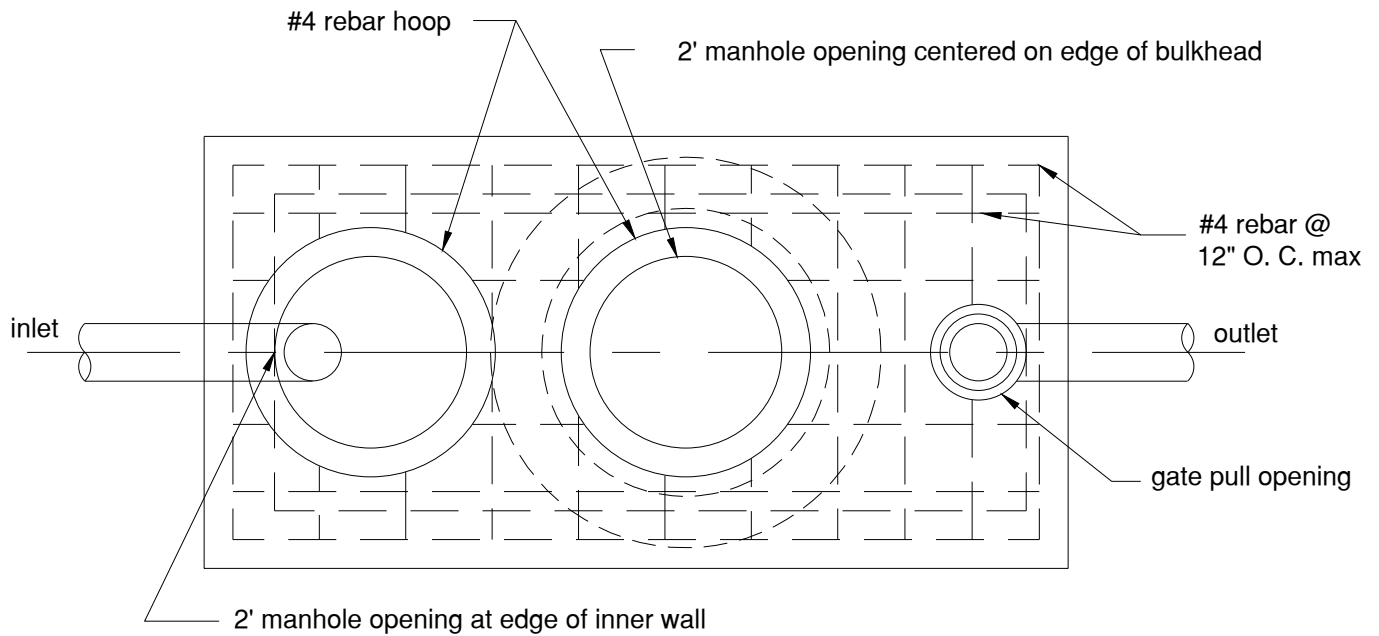
NOTES:

1. Precast concrete grease interceptor manufactured by Jensen Precast of equal capacity may be substituted for a cast in place tank as detailed on this sheet.
2. The grease interceptor shall be located and installed outside the building.
3. The grease interceptor shall be located and/or constructed in such a manner as to exclude the entrance of surface, storm, or rain water.
4. For size and dimensions see Sewers 10 detail.
5. All exposed interior couplings shall be "no-hub" couplings. All interior fittings shall be "no-hub" PVC or approved equal.
6. Standard cleanout required within 3' of the outlet of the grease interceptor.

ESTERO MUNICIPAL IMPROVEMENT DISTRICT
CITY OF FOSTER CITY, CALIFORNIA

**SEWER
SANITARY SEWER GREASE INTERCEPTOR**

Rev	Date	Description
DWN:		Dwg No. Sewers 09
CHK:		Sheet 1 of 1
APPROVED: _____		Scale: None
CITY/DISTRICT ENGINEER		Date: JULY 2015
APPROVED: _____		
DEPARTMENT SUPERVISOR		



TOP BLOCK SECTION

GALLON CAP.	DIMENSIONS IN FEET						
	350	750	1000	1500	2000	2500	3000
A	8.0	9.0	9.0	9.0	16.5	16.5	16.5
B	4.75	6.0	6.0	6.0	11.0	11.0	11.0
C	3.25	3.0	3.0	3.0	5.5	5.5	5.5
D	4.0	4.5	5.25	6.5	5.25	6.0	6.5
E	4.0	6.0	6.0	6.5	6.0	6.0	6.5
F	3.0	3.5	4.25	5.5	4.25	5.0	5.5

NOTE:

1. Dimensions for Sewers 09 detail

ESTERO MUNICIPAL IMPROVEMENT DISTRICT
CITY OF FOSTER CITY, CALIFORNIA

SEWER SANITARY SEWER GREASE INTERCEPTOR

Rev	Date	Description
DWN:		Dwg No. Sewers 10
CHK:		Sheet 1 of 1

APPROVED: _____
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APPROVED: _____
DEPARTMENT SUPERVISOR

Scale: None
Date: JULY 2015