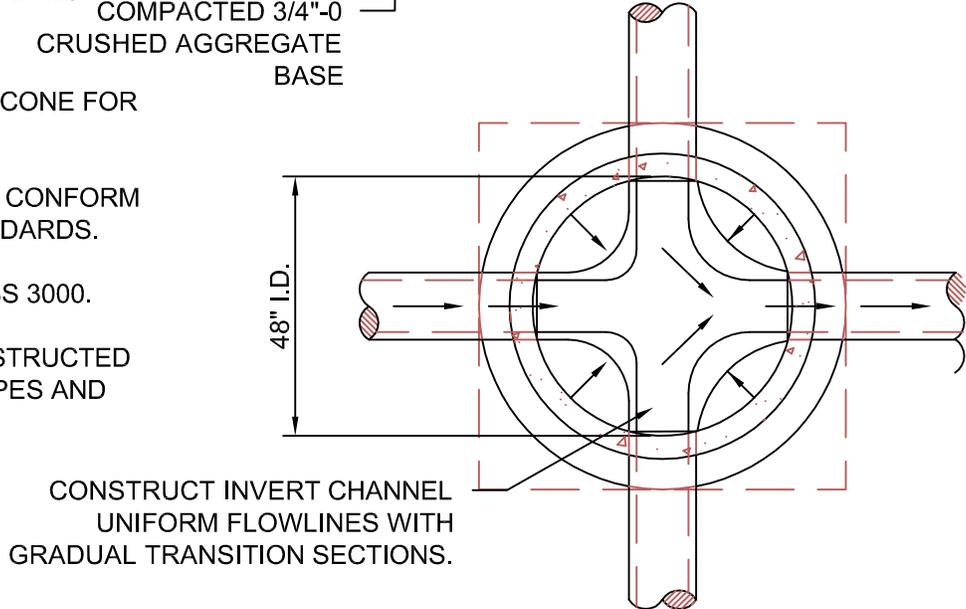


- NOTES:**
1. USE ECCENTRIC PRECAST CONE FOR ALL MANHOLES.
 2. PIPE CONNECTIONS SHALL CONFORM WITH PUBLIC WORKS STANDARDS.
 3. CONCRETE SHALL BE CLASS 3000.
 4. CHANNELS SHALL BE CONSTRUCTED TO PROVIDE SMOOTH SLOPES AND RADII TO OUTLET PIPE.



CONSTRUCT INVERT CHANNEL UNIFORM FLOWLINES WITH GRADUAL TRANSITION SECTIONS.



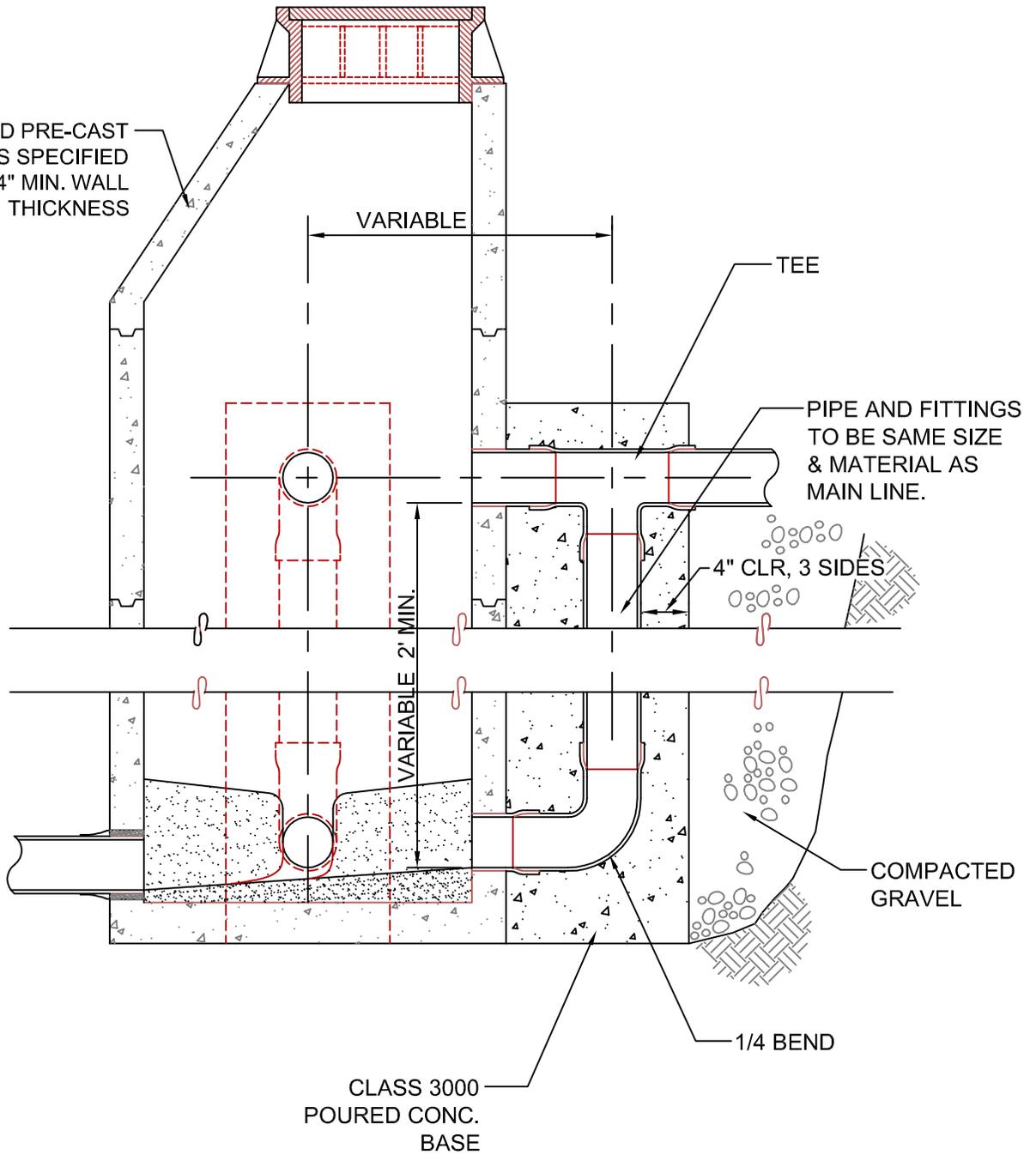
City of Sisters • Standard Detail

STANDARD
MANHOLE

SCALE:	NONE
DRAWN BY:	EH
APPROVED BY:	PB
REVISION DATE:	12/03/2013

DRAWING
NO.
3-1

STANDARD PRE-CAST
MANHOLE AS SPECIFIED
WITH 4" MIN. WALL
THICKNESS



CLASS 3000
POURED CONC.
BASE

COMPACTED
GRAVEL

1/4 BEND



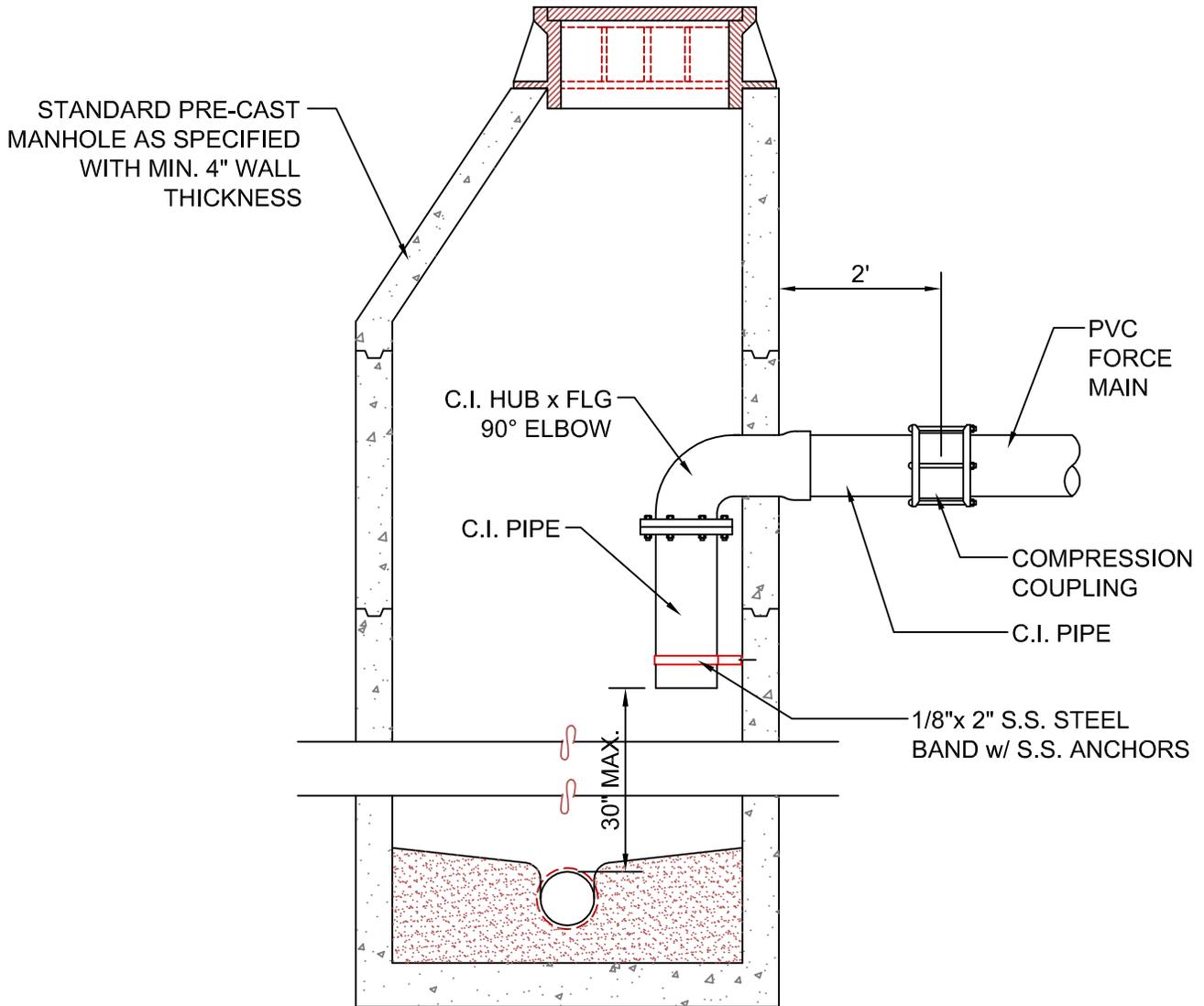
City of Sisters • Standard Detail

DROP
MANHOLE

SCALE:	NONE
DRAWN BY:	EH
APPROVED BY:	PB
REVISION DATE:	12/03/2013

DRAWING
NO.

3-2



City of Sisters • Standard Detail

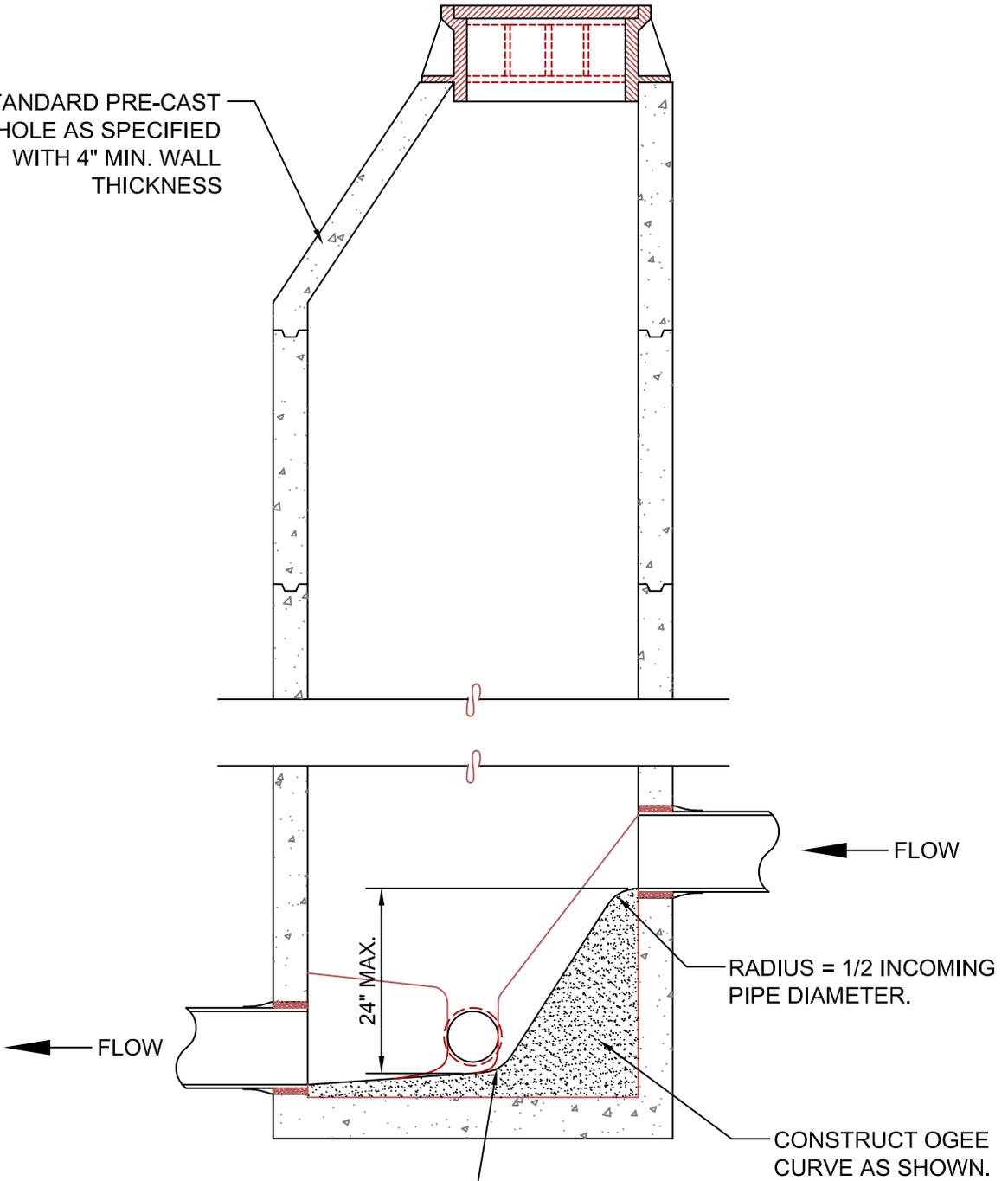
SPECIAL DROP
MANHOLE

SCALE:	NONE
DRAWN BY:	EH
APPROVED BY:	PB
REVISION DATE:	12/03/2013

DRAWING NO.

3-3

STANDARD PRE-CAST
MANHOLE AS SPECIFIED
WITH 4" MIN. WALL
THICKNESS



PROVIDE SMOOTH TRANSITION TO
MAIN CHANNEL. DO NOT INTERFERE
WITH SIDE CHANNEL FLOW LINE.



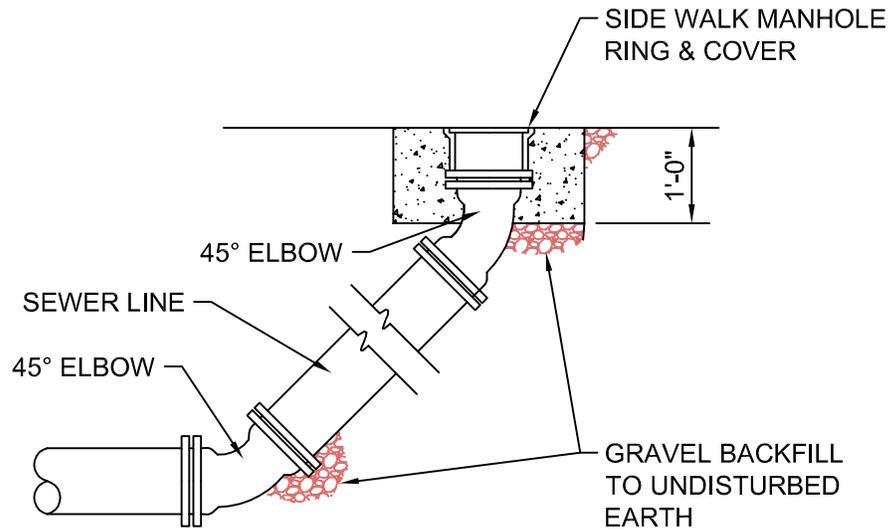
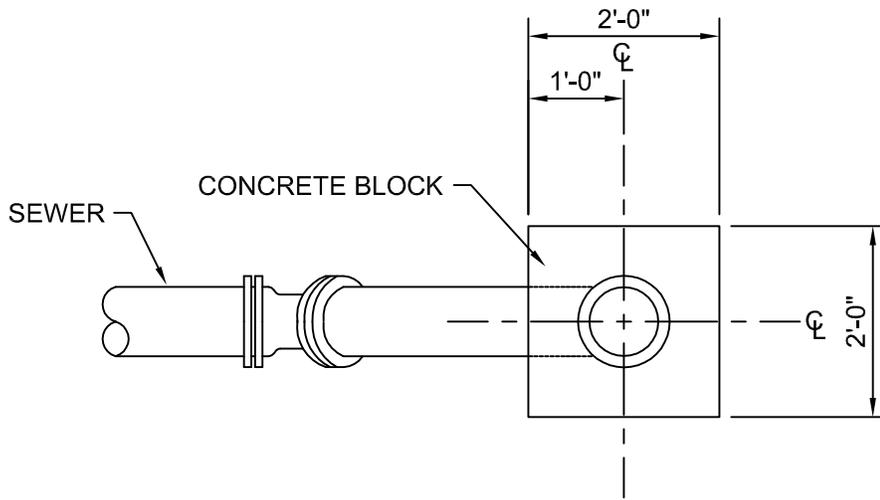
City of Sisters • Standard Detail

INSIDE DROP
MANHOLE

SCALE:	NONE
DRAWN BY:	EH
APPROVED BY:	PB
REVISION DATE:	12/03/2013

DRAWING
NO.

3-4



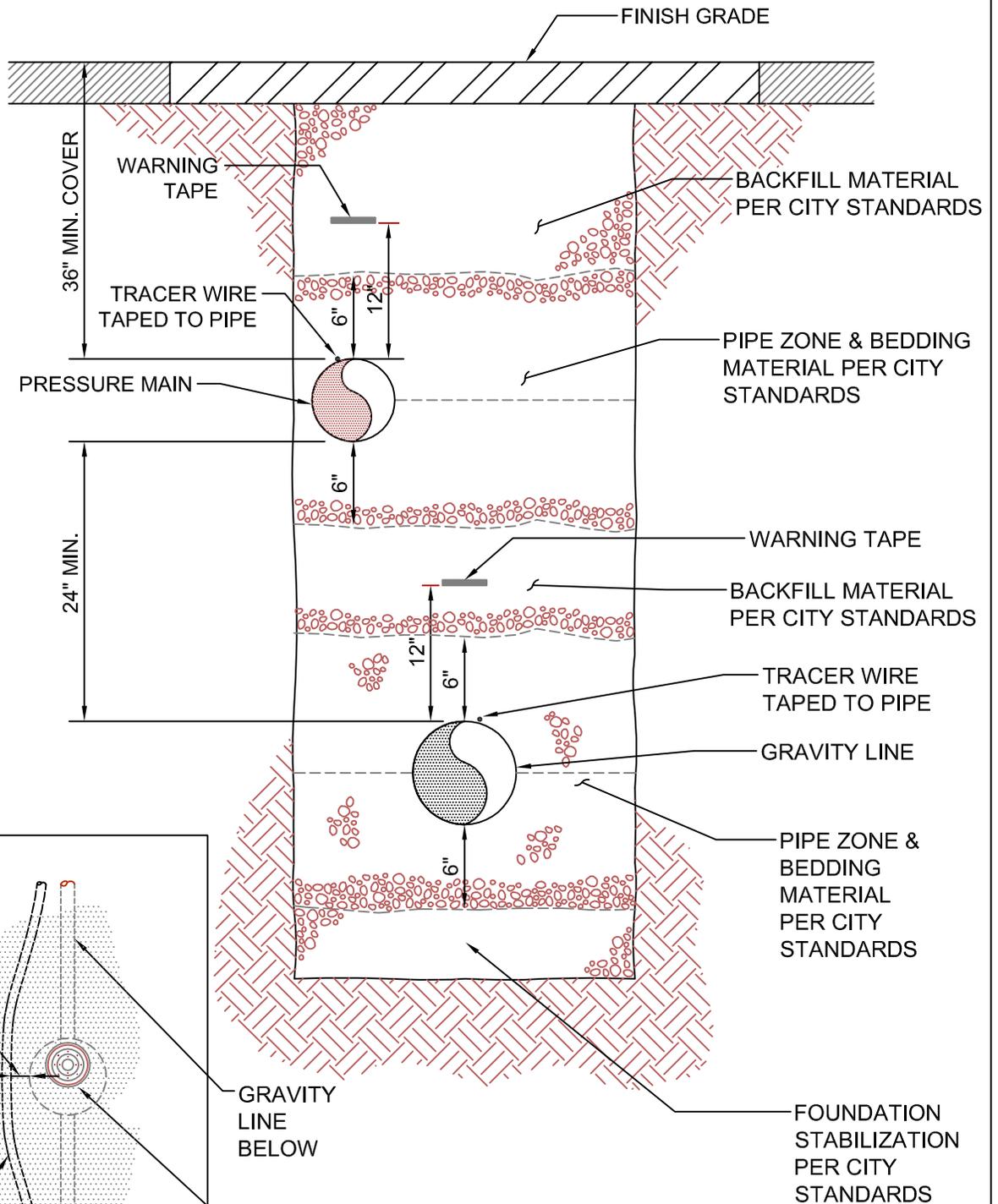
City of Sisters • Standard Detail

MAIN LINE
CLEANOUT

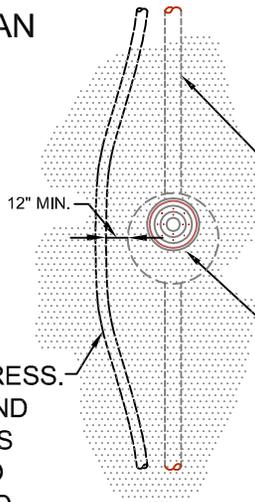
SCALE:	NONE
DRAWN BY:	EH
APPROVED BY:	PB
REVISION DATE:	12/03/2013

DRAWING
NO.

3-5



PLAN



DEFLECT PRESS. MAIN AROUND MANHOLE AS SHOWN. DO NOT EXCEED MANUFACTURER'S SPECIFIED MAX. DEFLECTION ANGLE.

GRAVITY LINE BELOW
MANHOLE

FOUNDATION STABILIZATION PER CITY STANDARDS

City of Sisters ° Standard Detail

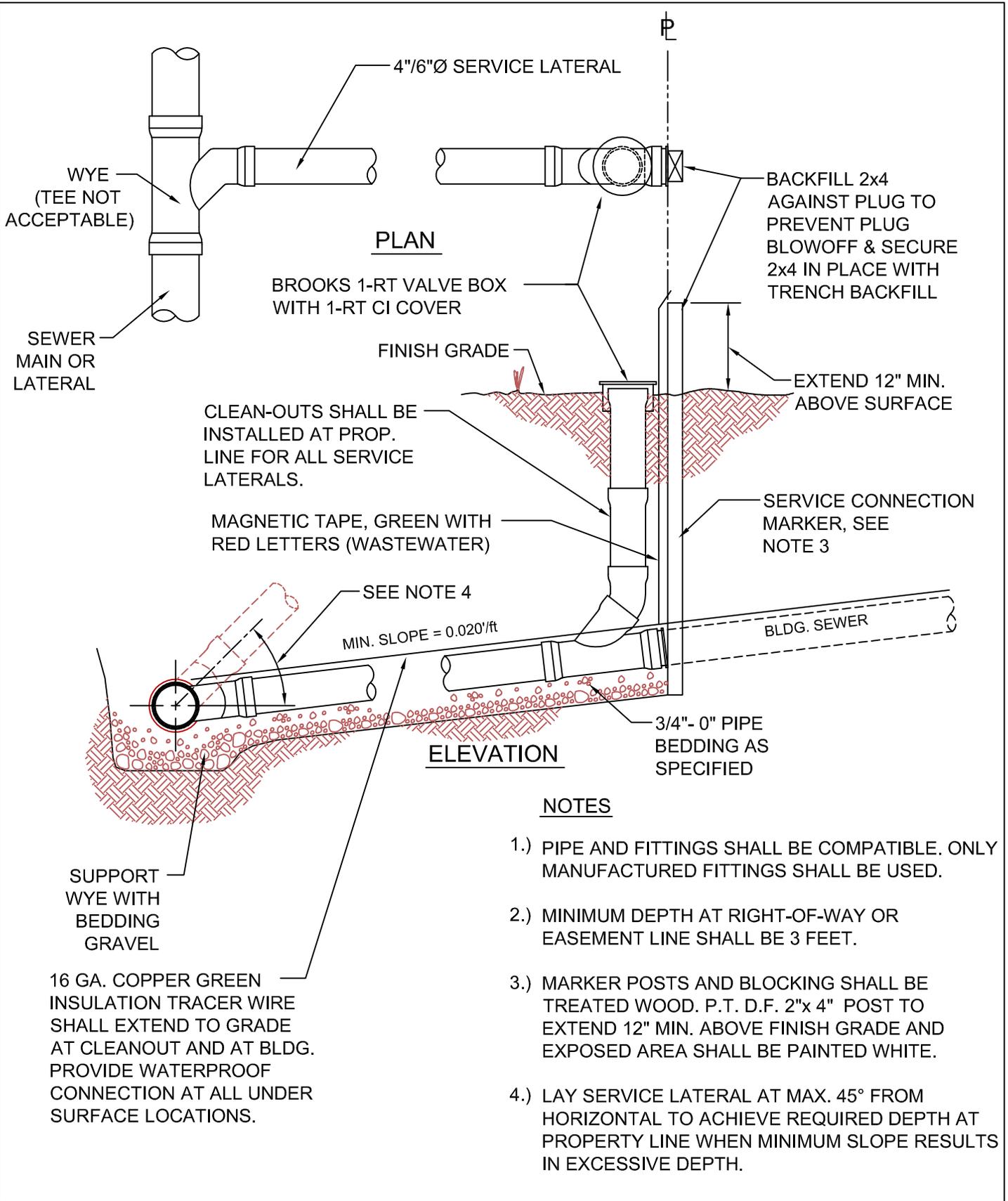
COMMON SEWER LINE
TRENCH

SCALE:	NONE
DRAWN BY:	EH
APPROVED BY:	PB
REVISION DATE:	12/03/2013

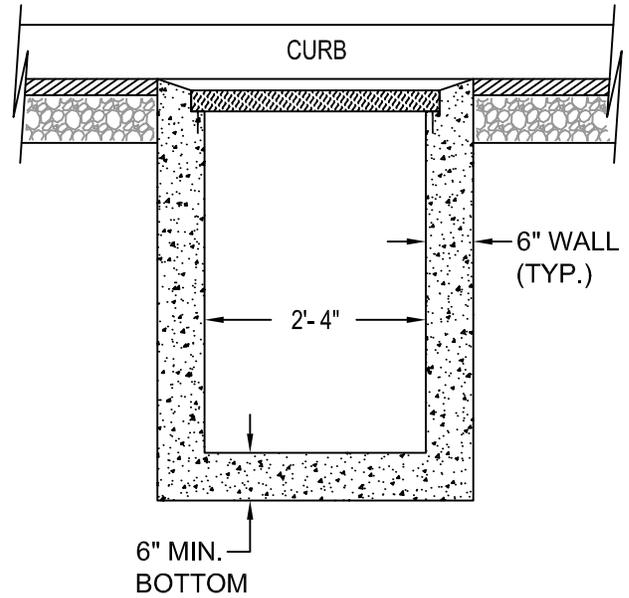
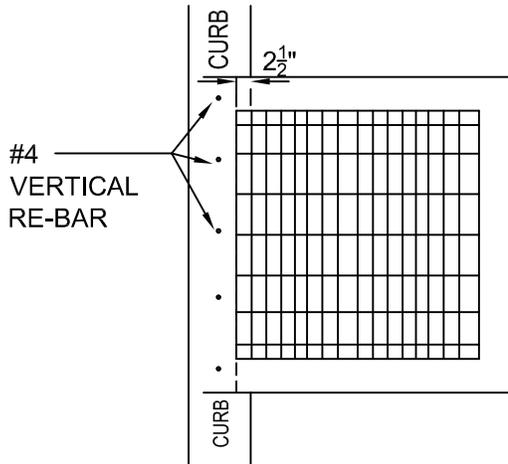
DRAWING NO.

3-6





	<p align="center">City of Sisters • Standard Detail</p>	SCALE: NONE	DRAWING No. 3-7
		DRAWN BY: EH	
SERVICE LATERAL	APPROVED BY: pb		
	REVISION DATE: 12/03/2013		



DETAIL SHOWING GRATE ORIENTATION TO CURB LINE



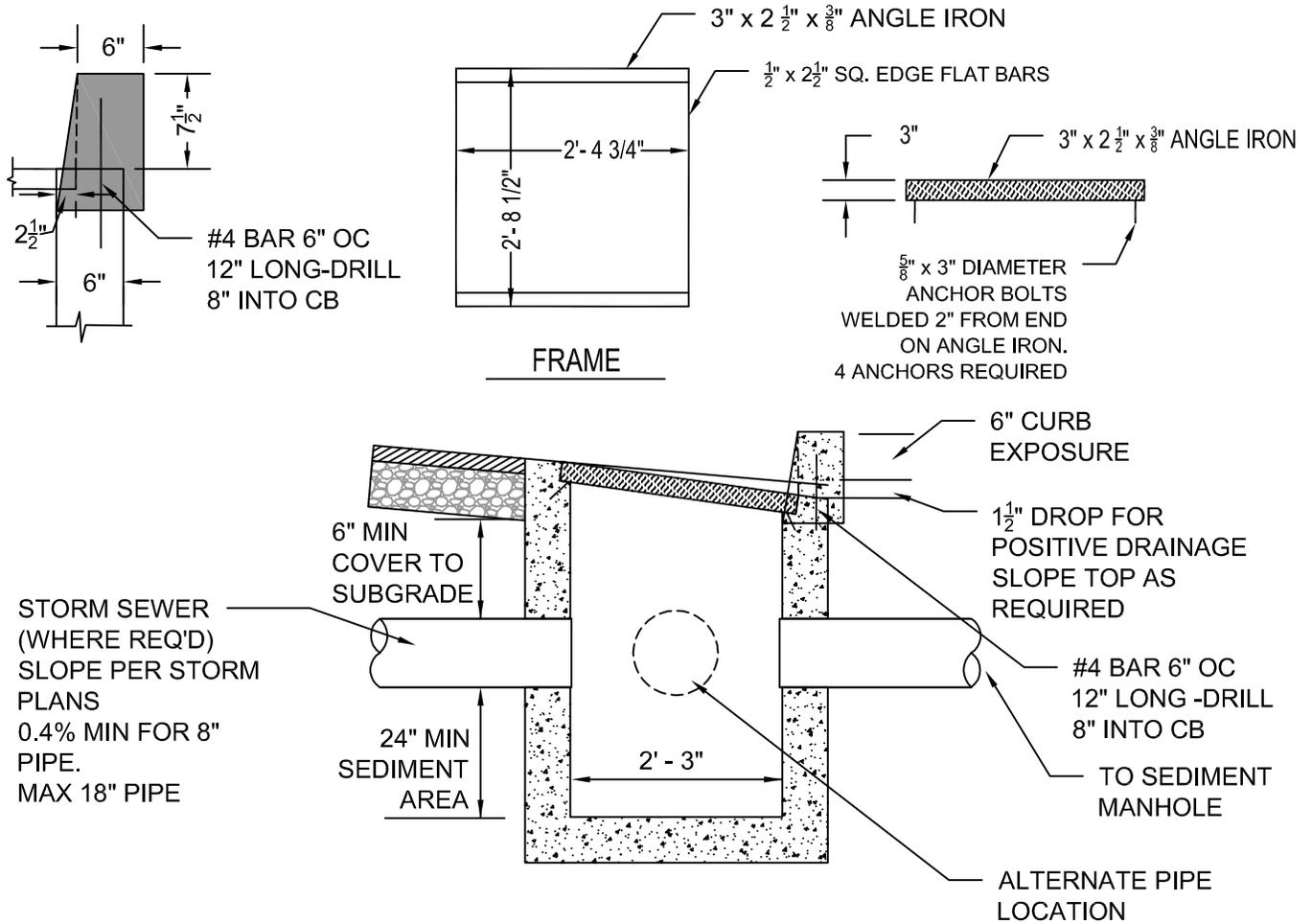
City of Sisters • Standard Detail

STANDARD CATCH BASIN
DOUBLE & SINGLE

SCALE: NONE
DRAWN BY: EH
APPROVED BY: PB
REVISION DATE: 12/03/2013

DRAWING NO.

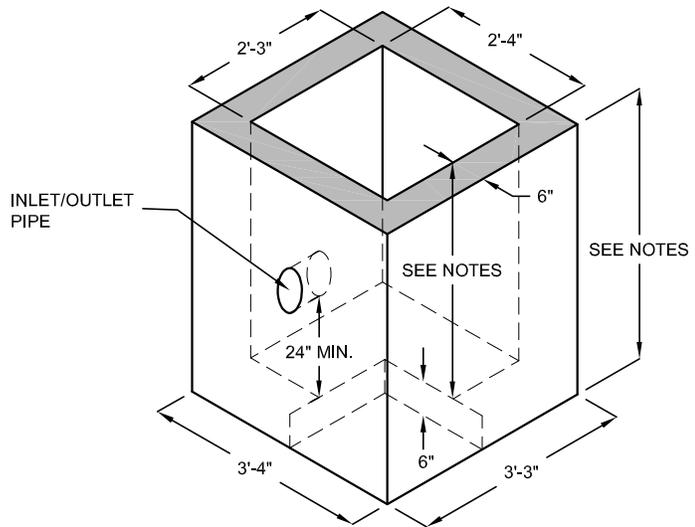
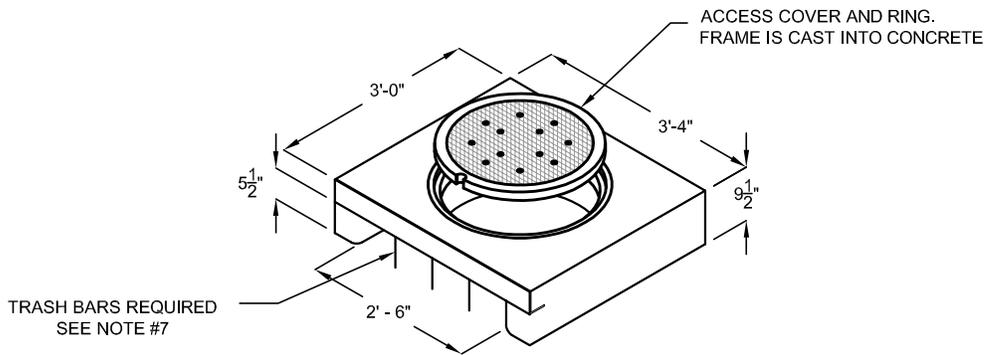
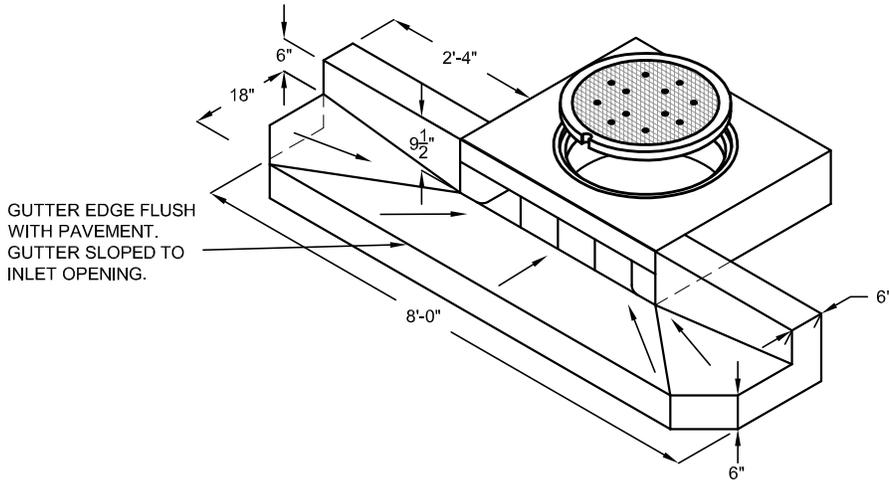
3-8



NOTES:

1. PRECAST CATCH BASINS ARE PREFERRED. CAST IN-PLACE CATCH BASINS ARE ALLOWED WITH CITY ENGINEER APPROVAL ONLY. AS A CONDITION OF EXCEPTION TO THE PRE-CAST STANDARDS, INTERIOR AND EXTERIOR FORMS ARE REQUIRED TO ENSURE CATCH BASIN WALLS ARE UNIFORM 6" THICK WALLS.
2. BACKFILL TO BE COMPACTED TO 95% OF OPTIMUM AASHTO T-99.
3. WATER JETTING OF BACKFILL MATERIAL AROUND CATCH BASIN IS REQUIRED.
4. DURING CONSTRUCTION, FILTER MATERIAL, PLANKING, OR OTHER ACCEPTABLE MEANS SHALL BE USED TO COVER CATCH BASINS UNTIL PROJECT IS ACCEPTED.
5. CATCH BASIN FRAME AND GRATE TO BE RECESSED INTO CURB AS SHOWN.
6. GROUT ALL PIPES INSIDE AND OUTSIDE OF STRUCTURE.
7. INLET / OUTLET PIPE SHALL NOT PROTRUDE MORE THAN 1" INTO CATCHBASIN.

	City of Sisters • Standard Detail	SCALE: NONE	DRAWING NO. 3-9
	STANDARD CATCH BASIN DOUBLE & SINGLE	DRAWN BY: EH	
	APPROVED BY: PB		
	REVISION DATE: 12/03/2013		



NOTES:

1. CURB INLET TOP IS PRECAST WITH STANDARD STORM WATER LID.
2. CURB INLET BASE PRECAST IS PREFERRED. CAST-IN-PLACE ARE ALLOWED WITH CITY ENGINEER APPROVAL ONLY. AS A CONDITION OF EXCEPTION TO THE PRE-CAST STANDARDS, INTERIOR AND EXTERIOR FORMS ARE REQUIRED TO ENSURE CATCH BASIN WALLS ARE UNIFORM 6" THICK WALLS.
3. CONCRETE SHALL BE CLASS 3000.
4. DEPTH OF VAULT IS 30" + PIPE DIAMETER + PAVING SECTION
5. DEPTH OF SUMP IS MINIMUM OF 24" MEASURED FROM INVERT OF PIPE.
6. INLET AND OUTLET PIPE OPENINGS TO BE GROUT SEALED
7. TRASH BARS MIN. 3/8" DIAMETER HOT DIPPED GALVANIZED STEEL.



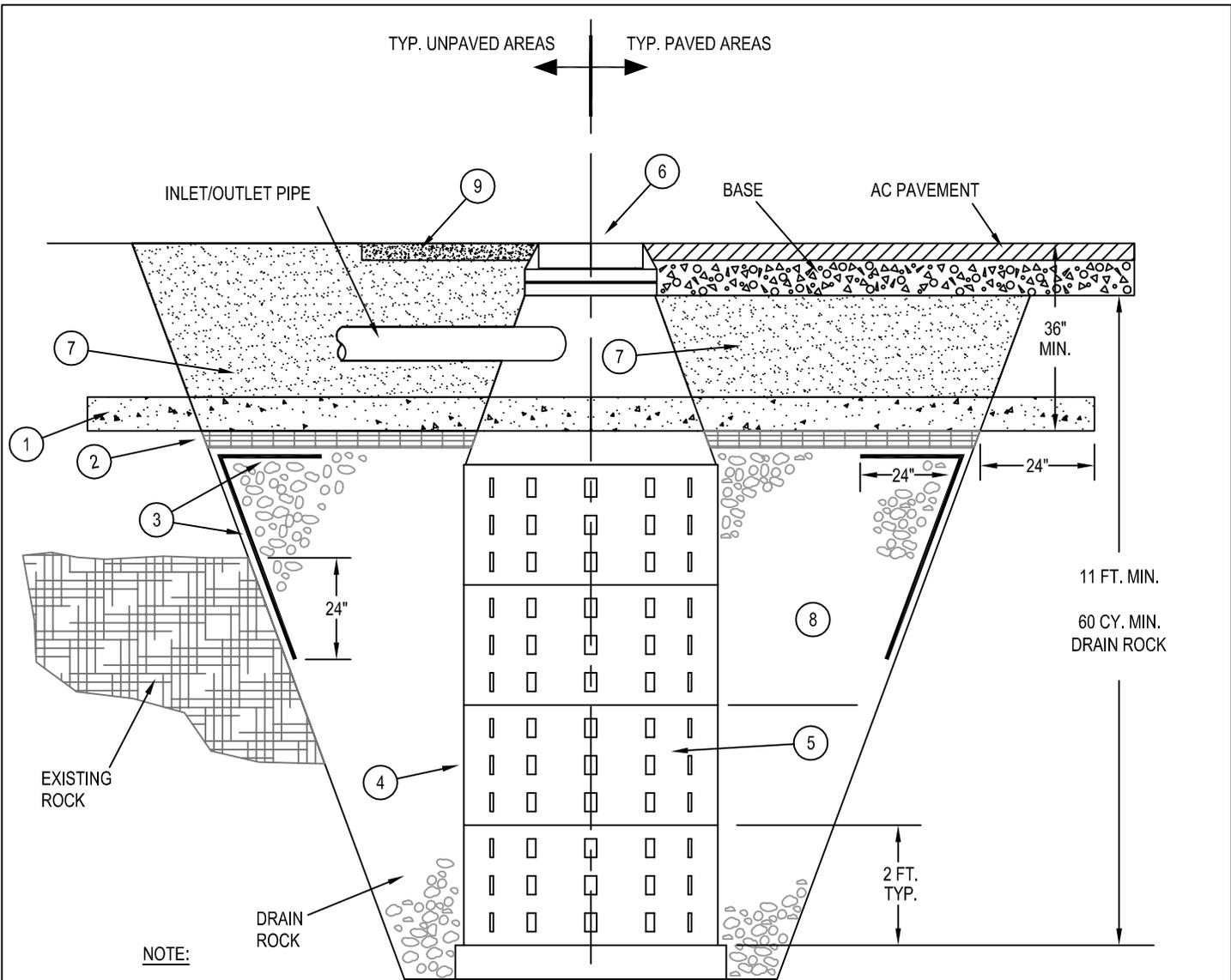
City of Sisters • Standard Detail

CURB INLET
CATCH BASIN

SCALE:	NONE
DRAWN BY:	EH
APPROVED BY:	PB
REVISION DATE:	12/03/2013

DRAWING
NO.

3-10



NOTE:

SEE ALSO THE CENTRAL OREGON STORMWATER MANUAL FOR DESIGN CRITERIA.

1. 6" CONCRETE CAP CL 3000, REQUIRED TO 24" BEYOND EXCAVATION.
2. MOISTURE BARRIER - 2 LAYERS OF 4 MIL. POLYETHYLENE ON ALL INSTALLATIONS.
3. GEOTEXTILE FILTER FABRIC ON ALL EARTH OR GRAVEL EXCAVATION TO 24" INTO ROCK. OVER LAP 24" WITH MOISTURE BARRIER.
4. LINE INSIDE OF PERFORATED BARREL WITH HEAVY WEIGHT VINYL SCREEN, SUCH AS "FULLFLOW VINYL SCREEN (a0706)". TOP AND BOTTOM OF SCREEN SHALL BE ATTACHED TO BARREL WALL. INLET PIPE SHALL BE EXTENDED THROUGH THE SCREEN.
5. PRECAST SECTIONS SHALL CONFORM TO THE REQUIREMENTS OF ASTM C-478. CONCRETE SHALL BE CL - 3300, AIR ENTRAINED CONCRETE.
6. CLASS "B" BACKFILL (1"-0 OR 3/4" - 0 CRUSHED ROCK) COMPACTED TO 95% OF AASHTO T-99.
7. DRAIN ROCK SHALL CONSIST OF CLEAN 6" - 2" HARD CINDER, RIVER ROCK, CRUSHED OR PIT RUN AGGREGATE CONTAINING LITTLE OR NO FINES.
8. WHEN DRYWELL IS LOCATED OUTSIDE OF PAVED AREAS, PROVIDE A 6" THICK CONCRETE PAD, 5' SQUARE CENTERED ON THE MANHOLE LID.
10. AN ADJUSTMENT SYSTEM SUCH AS EAST JORDAN IRON WORKS INFRA-RISER, OR APPROVED EQUAL, SHALL BE USED TO ADJUST MANHOLE FRAME AND COVER TO FINISH GRADE.
11. INLET / OUTLET PIPE SHALL NOT EXTEND INTO DRYWELL MORE THAN 2".



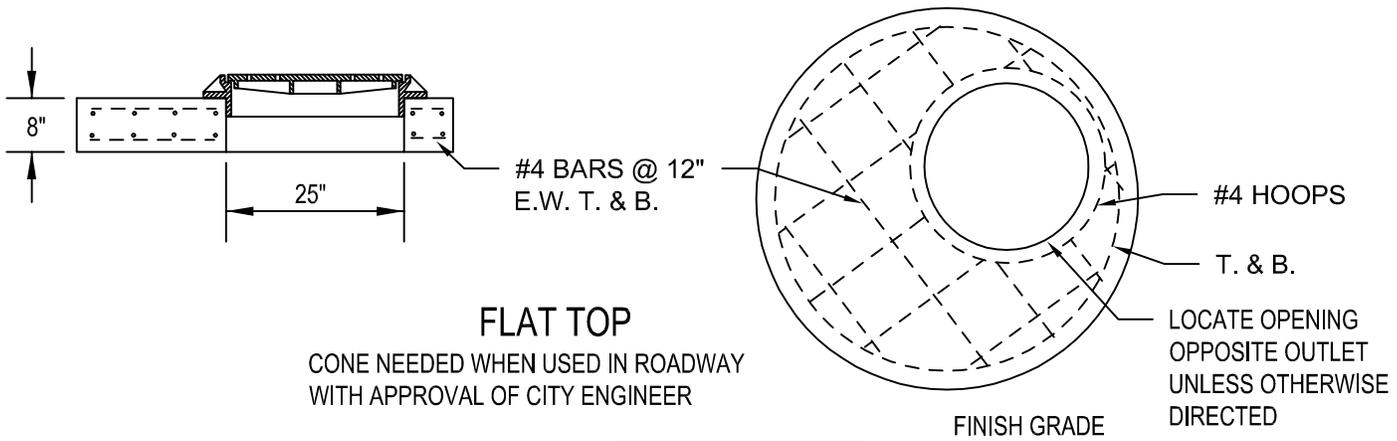
City of Sisters • Standard Detail

STANDARD
PRE-CAST DRYWELL

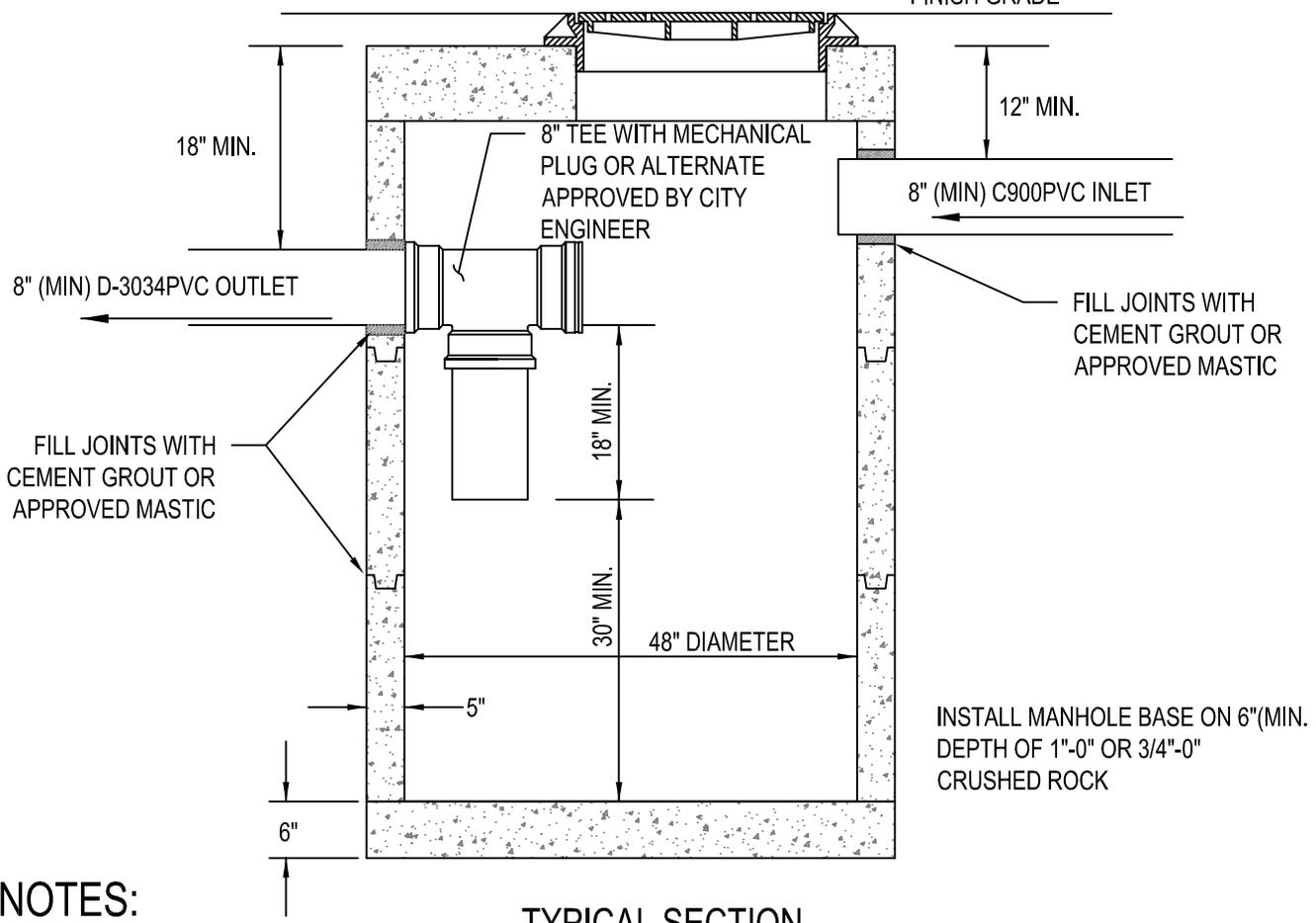
SCALE:	NONE
DRAWN BY:	EH
APPROVED BY:	PB
REVISION DATE:	12/03/2013

DRAWING
NO.

3-11



FLAT TOP
 CONE NEEDED WHEN USED IN ROADWAY
 WITH APPROVAL OF CITY ENGINEER

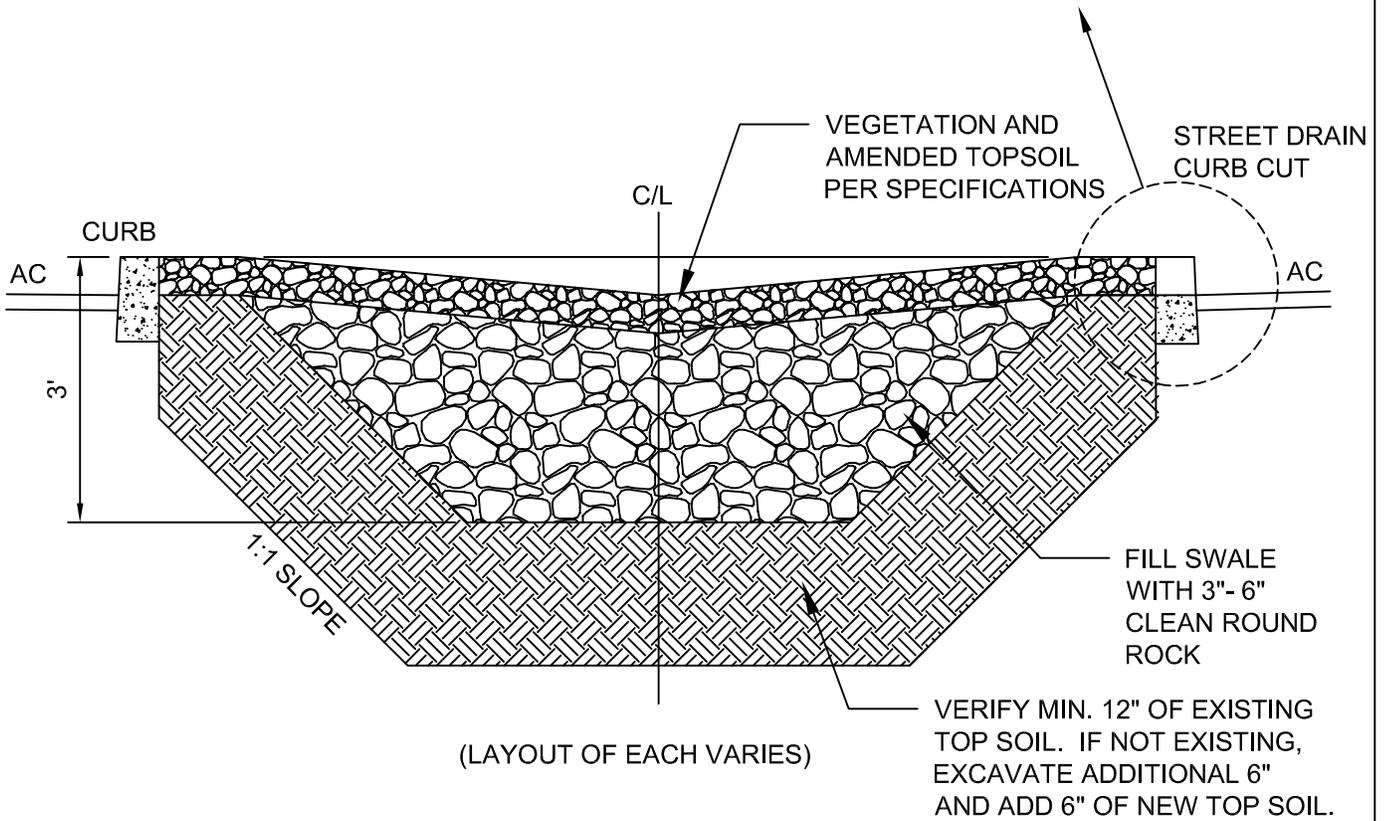
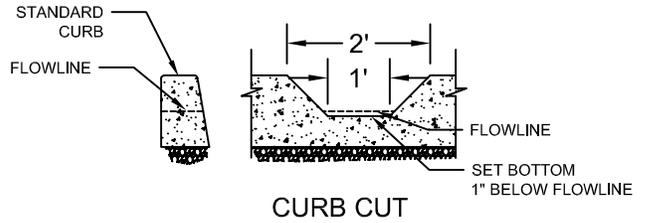


NOTES:

TYPICAL SECTION

1. ALL MANHOLES OUTSIDE OF PAVED AREAS SHALL HAVE A 6" THICK CONCRETE PAD, 5' SQUARE CENTERED ON THE MANHOLE LID.
2. ALL PRECAST SECTIONS SHALL CONFORM TO REQUIREMENTS OF ASTM C-478.
3. ALL CONNECTING PIPE SHALL HAVE A FLEXIBLE JOINT WITHIN 18" OF THE MANHOLE WALL
4. ALL LADDER RUNG HOLES SHALL BE GROUT FILLED.
5. AN ADJUSTMENT SYSTEM SUCH AS EAST JORDAN IRON WORKS INFRA-RISER, OR APPROVED EQUAL, SHALL BE USED TO ADJUST MANHOLE FRAME AND COVER TO FINISH GRADE.

	City of Sisters ◦ Standard Detail	SCALE: NONE	DRAWING NO. 3-12
	SEDIMENTATION MANHOLE	DRAWN BY: EH	
		APPROVED BY: PB	
		REVISION DATE: 12/03/2013	



NOTES

- 1.) PROVIDE DESIGN FOR SIZING AND TREATMENT BASED ON CENTRAL OREGON STORMWATER MANUAL AND PUBLIC WORKS CONSTRUCTION STANDARDS



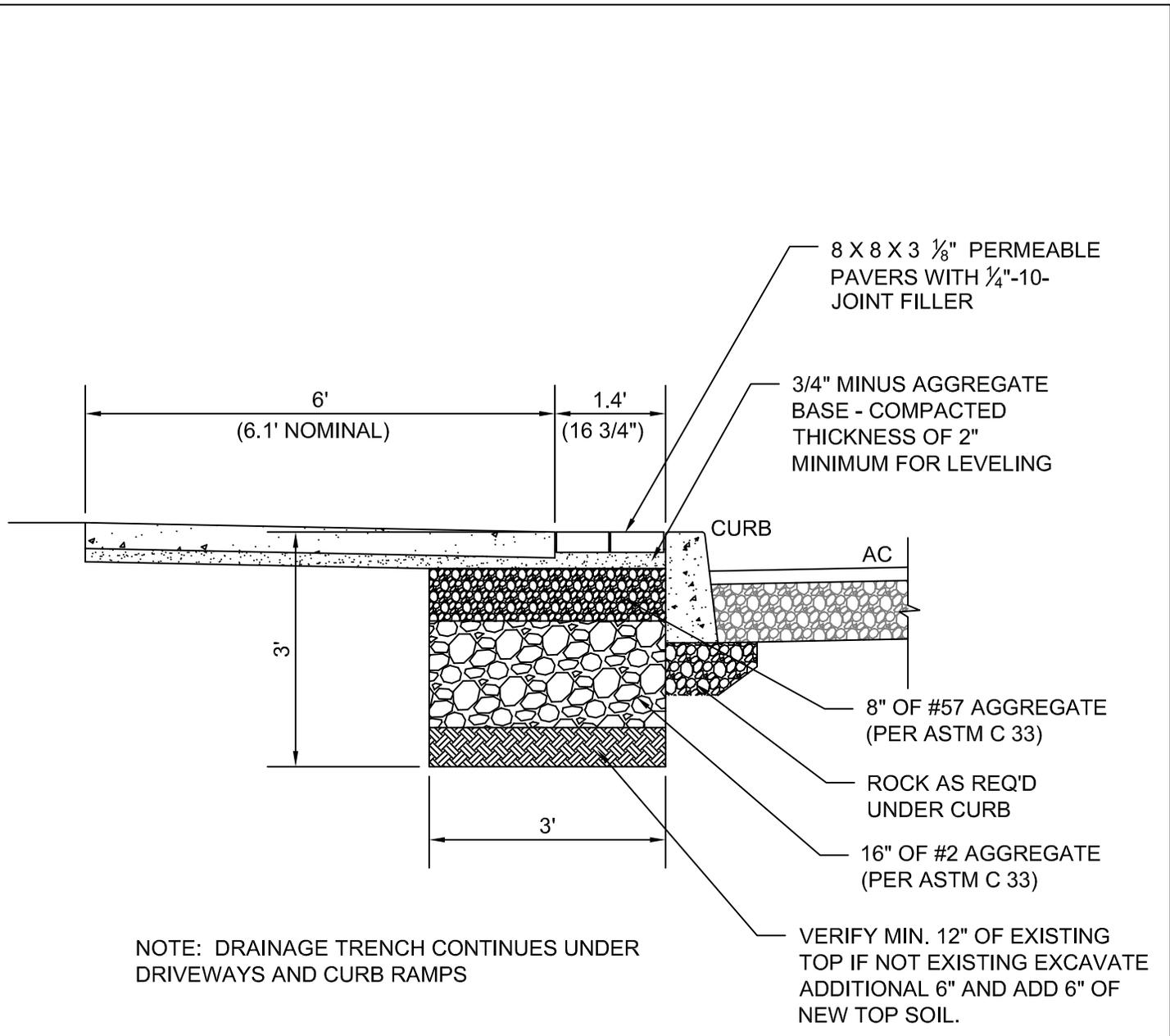
City of Sisters • Standard Detail

INFILTRATION SWALE
SECTION

SCALE:	NONE
DRAWN BY:	EH
APPROVED BY:	PB
REVISION DATE:	12/03/2013

DRAWING
NO.

3-13



	City of Sisters ◦ Standard Detail	SCALE: NONE	DRAWING NO. 3-14
		SIDEWALK INFILTRATION SWALE	
		APPROVED BY: PB	
		REVISION DATE: 12/03/2013	