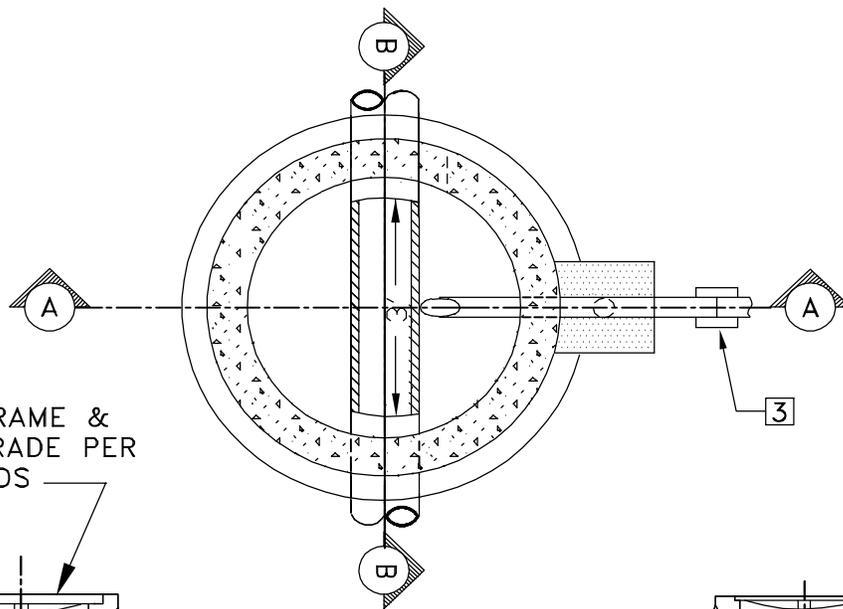


NOTES:

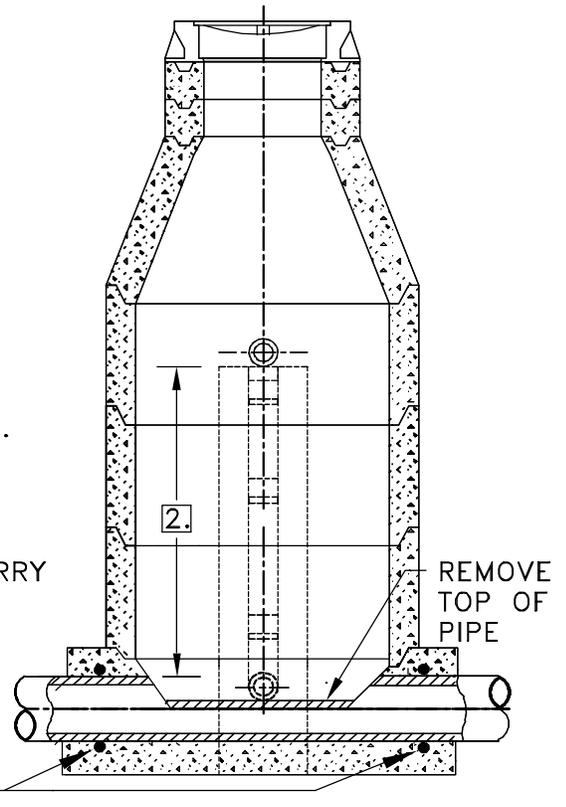
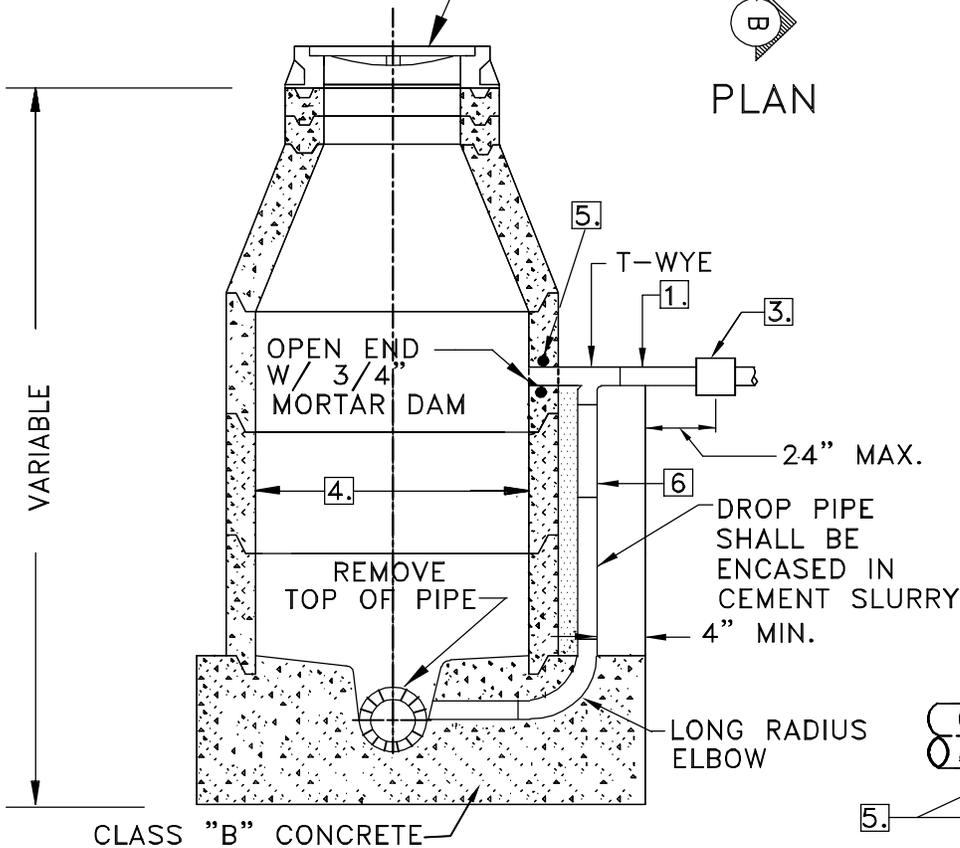
1. FOR PIPES 33" DIAMETER AND SMALLER.
- [2] ECCENTRIC REINFORCED CONCRETE CONE MAY BE USED ON APPROVAL OF AGENCY
- [3] PRECAST REINFORCED CONCRETE MAINTENANCE HOLE UNIT SHALL CONFORM TO A.S.T.M. C-478
- [4] CONSTRUCT FLEXIBLE PIPE JOINT AT 2 FEET MAXIMUM FROM BASE OF MAINTENANCE HOLE FOR RIGID PIPE. (EXCEPT CAST-IN-PLACE).
- [5] INTERIOR COATING WHERE REQUIRED BY AGENCY.
- [6] RUBBER RING WATERSTOP OR ADAPTER REQUIRED FOR PVC PIPE INSTALLATIONS.
7. FOR UNPAVED AREAS LEAVE MAINTENANCE HOLE ABOVE GROUND AS REQUIRED BY AGENCY

REVISION	DATE	COUNTYWIDE IMPROVEMENT STANDARDS COUNTY OF SAN JOAQUIN	APPROVED BY
		<h1>TYPE I MAINTENANCE HOLE</h1>	SAN JOAQUIN COUNTY DATE DIRECTOR OF PUBLIC WORKS
			IMPROVEMENT CW-S7 STANDARD NO.



PLAN

MAINTENANCE HOLE FRAME & COVER, ADJUST TO GRADE PER COUNTYWIDE STANDARDS



SECTION B-B

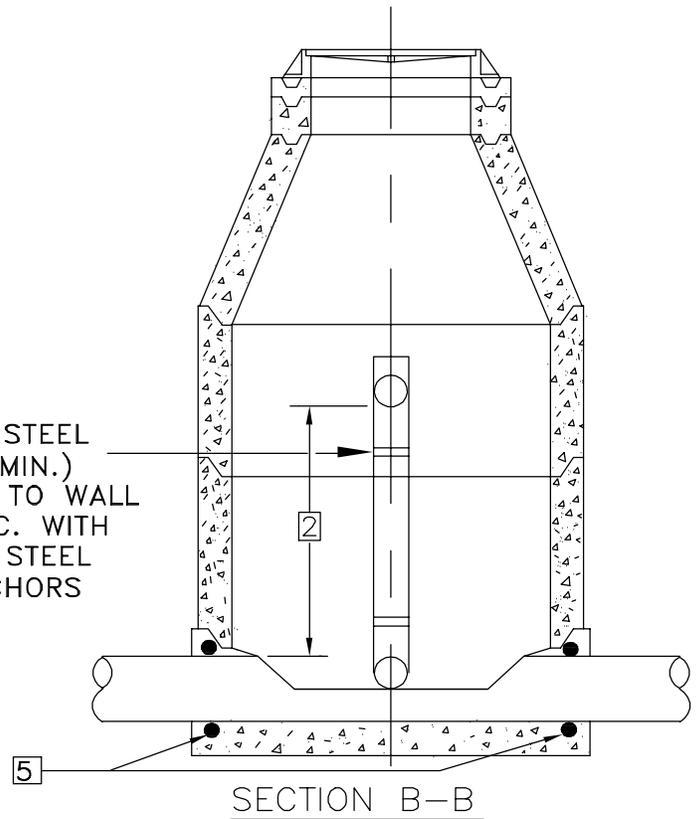
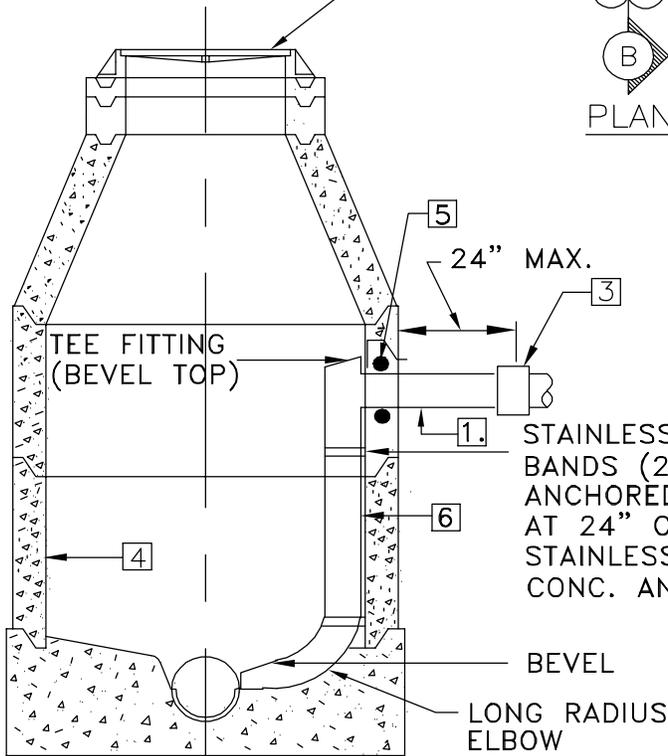
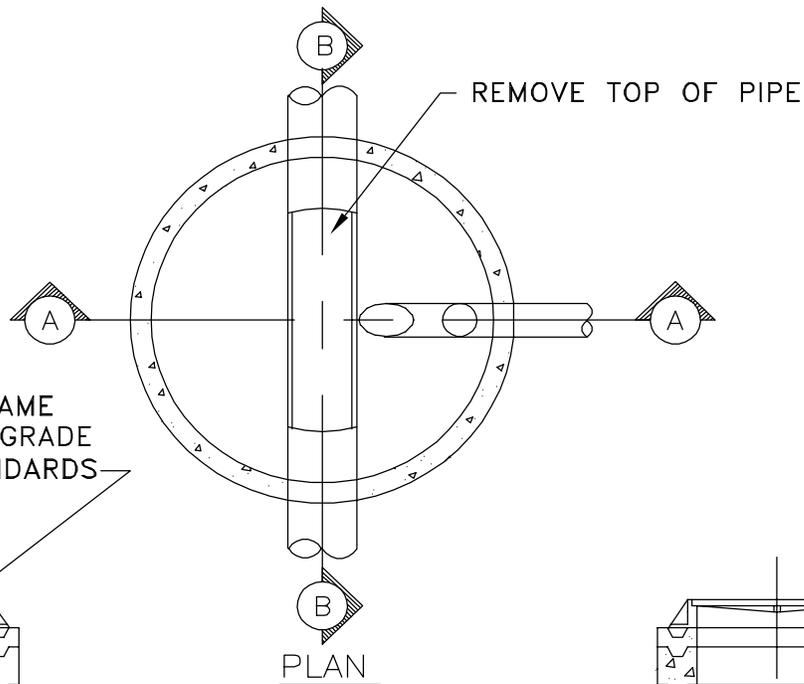
NOTES

SECTION A-A

1. 8" DIAMETER MAX. SIZE OF FEEDER PIPE.
2. THIS TYPE MAINTENANCE HOLE SHALL BE USED WHERE THE DIFFERENCE IN ELEVATION BETWEEN THE TOP OF OUTLET PIPE AND THE INVERT OF THE FEEDER PIPE EXCEEDS 24".
3. FLEXIBLE JOINT-BELL & SPIGOT OR CAULDER COUPLING. SOLVENT WELDED JOINT NOT PERMITTED
4. INTERIOR COATING WHERE REQUIRED BY AGENCY.
5. RUBBER RING WATERSTOP OR ADAPTER REQUIRED FOR PVC PIPE INSTALLATIONS .
6. DROP PIPE TO BE ONE SIZE LARGER THAN INCOMMING PIPE

REVISION	DATE	COUNTYWIDE IMPROVEMENT STANDARDS COUNTY OF SAN JOAQUIN	APPROVED BY
		OUTSIDE SANITARY SEWER DROP MAINTENANCE HOLE	SAN JOAQUIN COUNTY DATE DIRECTOR OF PUBLIC WORKS
			IMPROVEMENT STANDARD NO. CW-S9

MAINTENANCE HOLE FRAME
& COVER, ADJUST TO GRADE
PER COUNTYWIDE STANDARDS

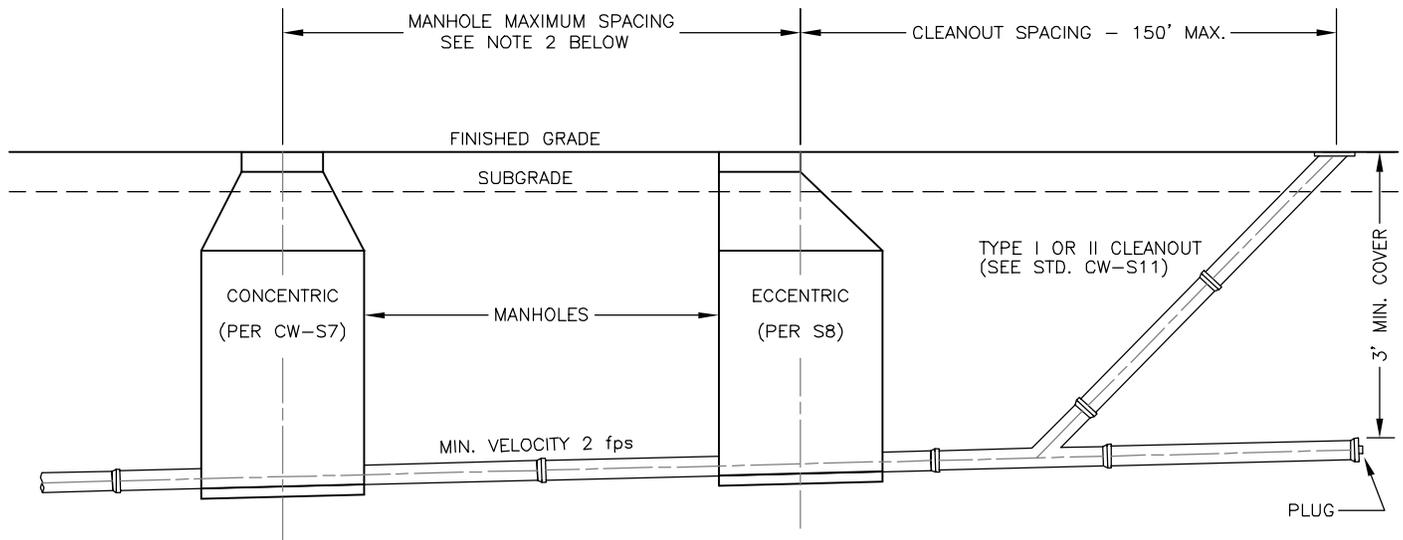


NOTES:

SECTION A-A

1. 8" DIAMETER MAX. SIZE OF FEEDER PIPE.
2. THIS TYPE MAINTENANCE HOLE SHALL BE USED WHERE THE DIFFERENCE IN ELEVATION BETWEEN THE TOP OF OUTLET PIPE AND THE INVERT OF THE FEEDER PIPE EXCEEDS 24".
3. FLEXIBLE JOINT-BELL & SPIGOT OR CAULDER COUPLING. SOLVENT WELDED JOINT NOT PERMITTED
4. INTERIOR COATING WHERE REQUIRED BY AGENCY
5. RUBBER RING WATERSTOP OR MANHOLE ADAPTER REQUIRED FOR PVC PIPE INSTALLATIONS
6. DROP PIPE TO BE ONE SIZE LARGER THAN INCOMING PIPE.
7. INSIDE DROP MAY BE USED WHERE APPROVED BY AGENCY.

REVISION	DATE	COUNTYWIDE IMPROVEMENT STANDARDS COUNTY OF SAN JOAQUIN	APPROVED BY
		INSIDE SANITARY SEWER DROP MAINTENANCE HOLE	SAN JOAQUIN COUNTY DATE DIRECTOR OF PUBLIC WORKS
			IMPROVEMENT CW-S10 STANDARD NO.

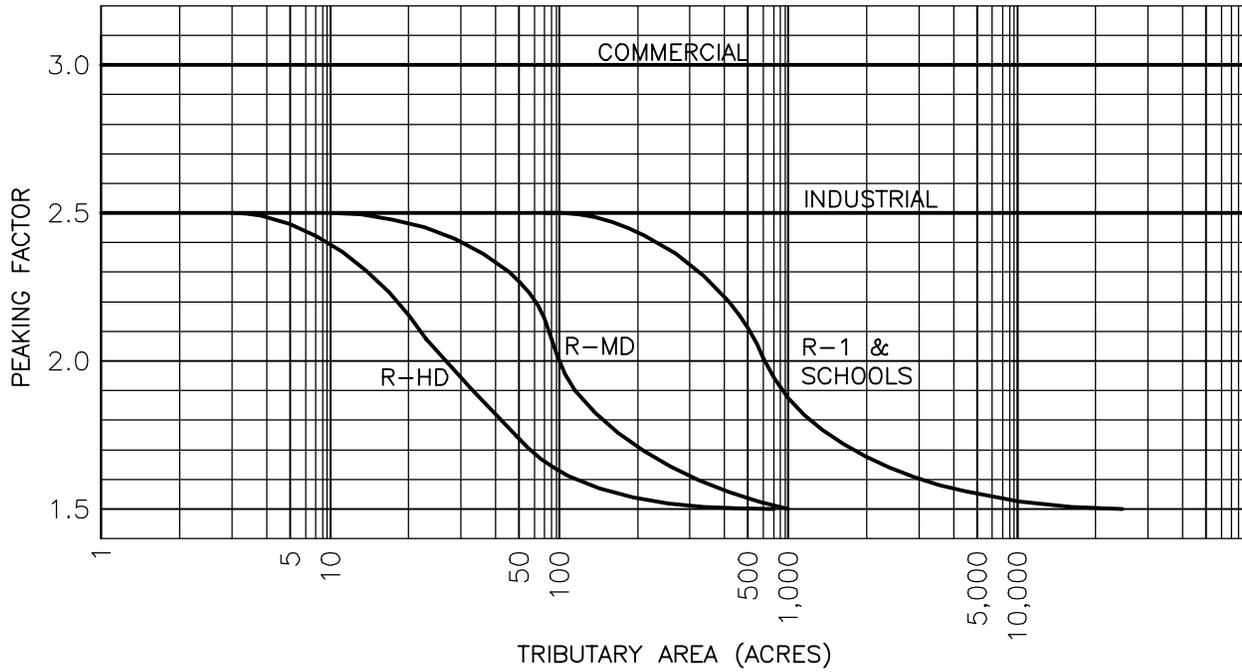


PIPE SIZE	MIN. "n"	MIN. SLOPE
8"φ	0.013	0.0032 FT./FT.
10"φ	0.013	0.0025 FT./FT.
12"φ	0.013	0.0020 FT./FT.
14"φ	0.013	0.0015 FT./FT.
18"φ	0.013	0.0012 FT./FT.
>18"φ	PER CITY ENGINEER'S DIRECTION	

NOTES:

1. A 6"φ PIPE MAY BE USED WHEN APPROVED BY THE CITY ENGINEER
2. MANHOLE SPACING FOR SEWERS 10" AND LESS SHALL NOT EXCEED 400'. MANHOLES ON 12" OR LARGER SEWERS MAY BE SPACED UP TO 700' WITH SPECIAL APPROVAL OF THE CITY ENGINEER
3. MANHOLES SHALL BE PLACED AT THE INTERSECTIONS OF ALL SANITARY SEWERS AND AT ALL CHANGES IN ALIGNMENT AND/OR PIPE SIZE
4. ALL SERVICE CONNECTIONS TO SANITARY SEWERS SHALL BE MADE OF WYES OR BY SAWING A HOLE AND INSTALLING A WYE SADDLE PER CITY OF ESCALON STANDARDS. NO CONNECTIONS WILL BE PERMITTED IN LINES OVER 15"φ, EXCEPT AT MANHOLES
5. MINIMUM COVER SHALL BE 3.0' TO TOP OF PIPE. WHERE MINIMUM COVER CANNOT BE MET, CONCRETE ENCASEMENT OR DUCTILE IRON PIPE SHALL BE USED
6. MINIMUM SLOPE SHALL BE SUFFICIENT TO MAINTAIN AN EFFLUENT VELOCITY OF 2 FT./SEC. OR GREATER AT HALF FULL
7. ALIGNMENT SHALL BE PARALLEL TO STREET CENTERLINE WHEREVER POSSIBLE
8. ALL SEWER LINES SHALL BE BALLED AND TESTED FOR LEAKAGE PRIOR TO PAVING, PER SPECIFICATIONS

REVISION	DATE	<h1>CITY OF ESCALON</h1>	APPROVED BY:
DATE: APR. 2003			<h2>SANITARY SEWER DESIGN DATA</h2>
DRAWN BY: DBR			IMPROVEMENT STANDARD NO. S1
CHECKED BY: AJA			
SCALE: NONE			



THE TOTAL DESIGN FLOW SHALL BE DETERMINED BY MULTIPLYING THE AVERAGE DESIGN FLOW BY A PEAKING FACTOR FROM THE ABOVE GRAPH

ZONE	UNITS/ACRE	CAPITA/UNIT
R-E	1/2.5	3.0
R-L	6.0	3.0
R-M	12.0	2.5
R-H	26.0	2.5

DESIGN FLOWS

RESIDENTIAL	
AVERAGE FLOW	100 GAL./CAP./DAY
COMMERCIAL	
AVERAGE FLOW	2,500 GAL./ACRE/DAY *
PEAK FLOW	7,500 GAL./ACRE/DAY
INDUSTRIAL (NON-SEASONAL)	
AVERAGE FLOW	3,500 GAL./ACRE/DAY *
PEAK FLOW	8,750 GAL./ACRE/DAY

NOTE:

* DESIGN FLOWS MAY BE GREATER IN CERTAIN CIRCUMSTANCES, AS DETERMINED BY CALCULATIONS

REVISION	DATE
DATE: APR. 2003	
DRAWN BY: DBR	
CHECKED BY: AJA	
SCALE: NONE	

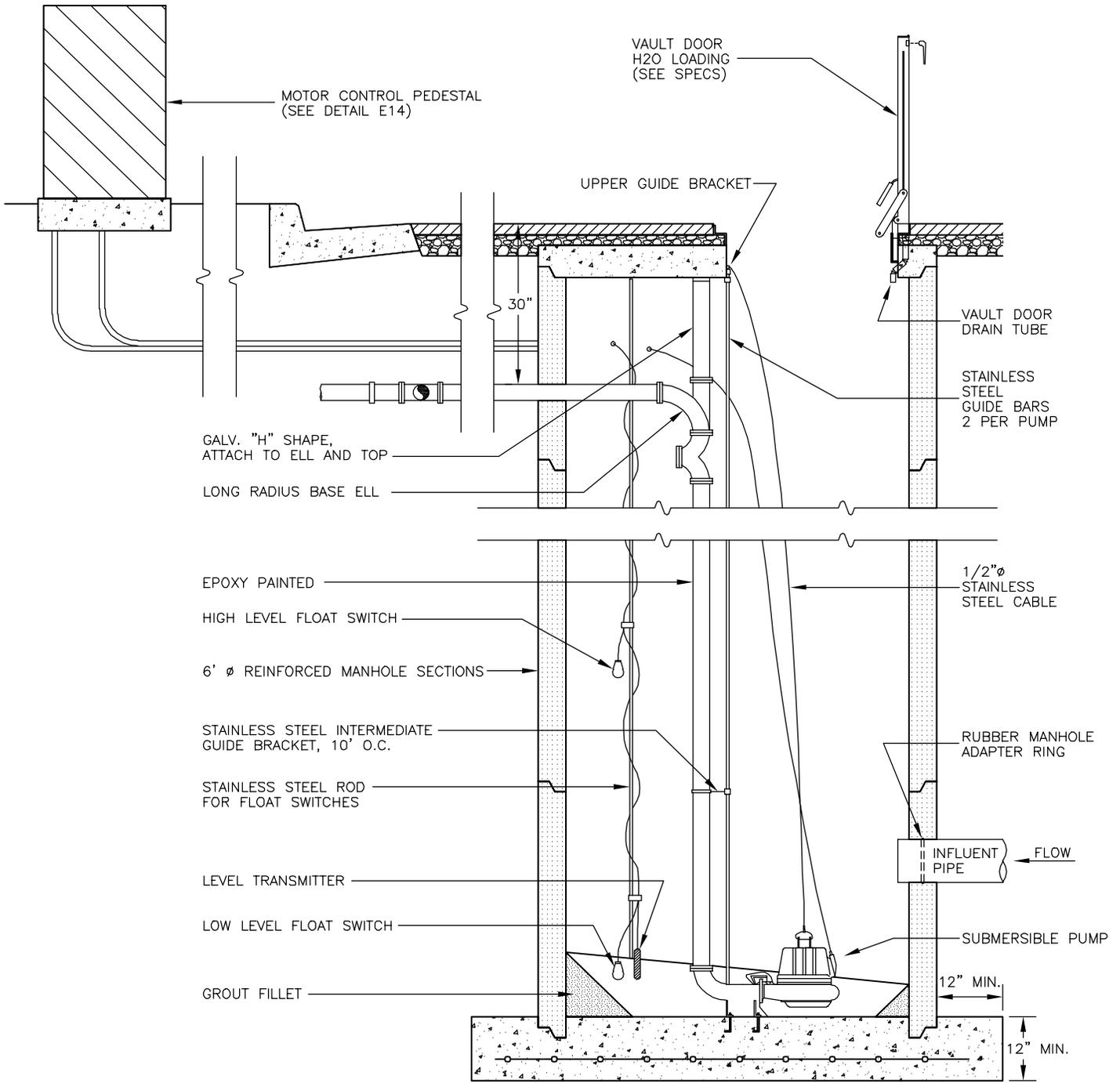
CITY OF ESCALON

SANITARY SEWER
DESIGN DATA

APPROVED BY:

Doug Strickham
CITY ENGINEER

IMPROVEMENT STANDARD NO. S2



NOTE:

SEE CITY OF ESCALON STANDARD S4b FOR PLAN VIEW AND LID DETAIL

REVISION	DATE
DATE: APR. 2003	
DRAWN BY: DBR	
CHECKED BY: AJA	
SCALE: NONE	

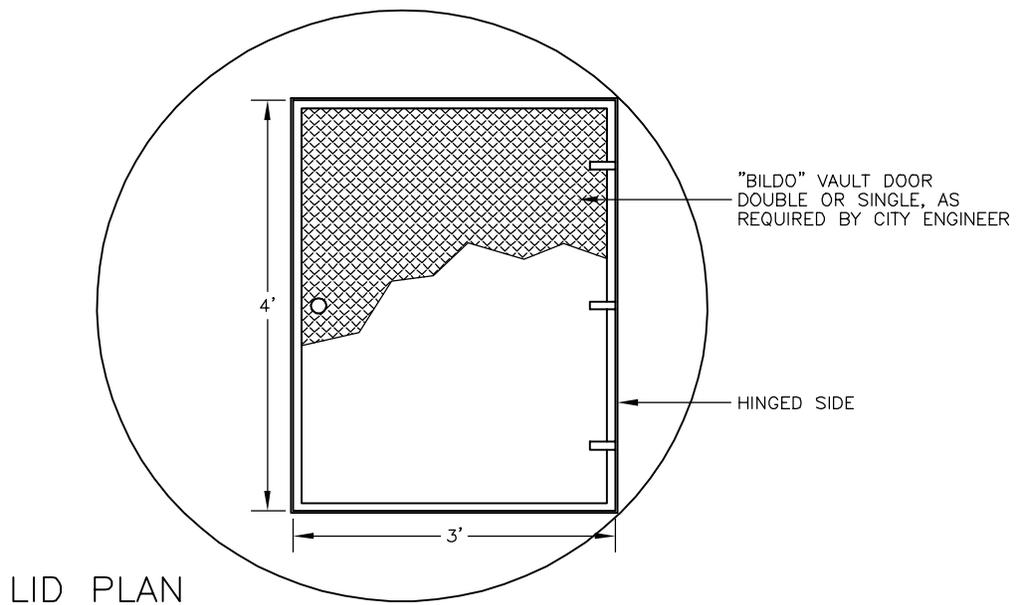
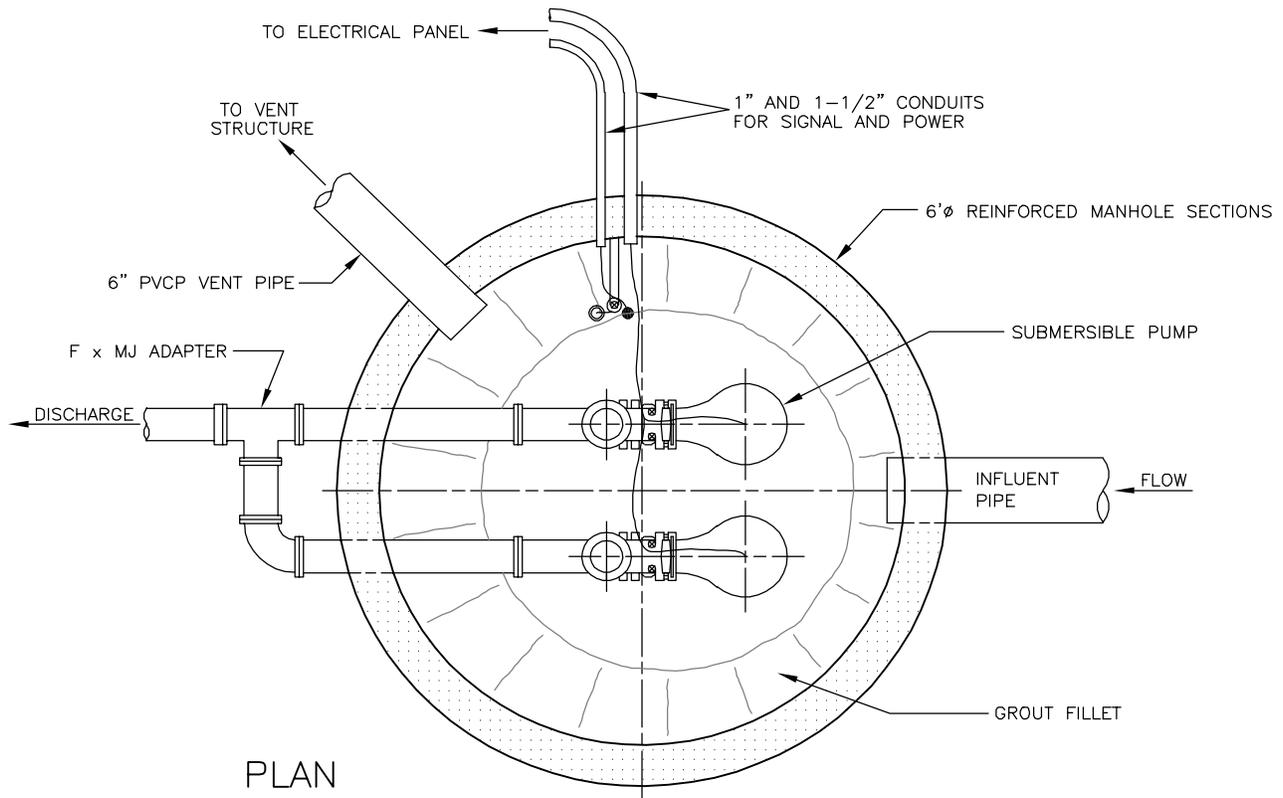
CITY OF ESCALON

SANITARY SEWAGE LIFT STATION
SUBMERSIBLE PUMPS

APPROVED BY:

Doug Trilham
CITY ENGINEER

IMPROVEMENT STANDARD NO. S4a



NOTE:

SEE CITY OF ESCALON STANDARD S4a FOR CROSS SECTION OF LIFT STATION

REVISION	DATE
DATE: APR. 2003	
DRAWN BY: DBR	
CHECKED BY: AJA	
SCALE: NONE	

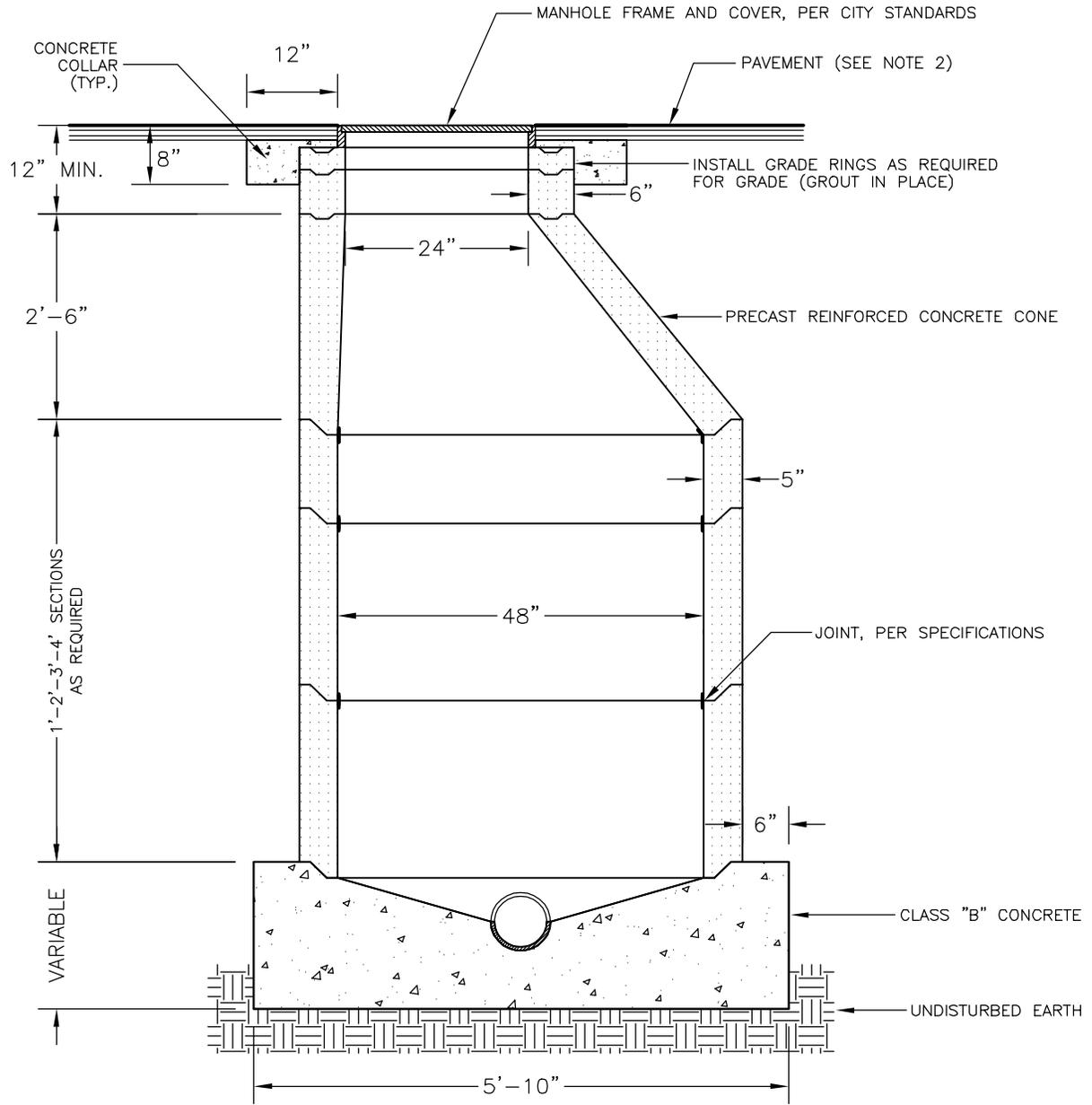
CITY OF ESCALON

SANITARY SEWAGE LIFT STATION
SUBMERSIBLE PUMPS

APPROVED BY:

Doug Strickham
CITY ENGINEER

IMPROVEMENT STANDARD NO. S4b



NOTES:

1. ECCENTRIC CONE MAINTENANCE HOLE TO BE USED ONLY WHERE APPROVED BY THE CITY ENGINEER
2. MAINTENANCE HOLE BASE AND BARREL PER COUNTYWIDE STANDARD CW-57
3. WHEN NOT IN TRAVELLED WAY, SET ELEVATION OF MANHOLE COVER 6" ABOVE GRADE

REVISION	DATE
DATE: APR. 2003	
DRAWN BY: DBR	
CHECKED BY: AJA	
SCALE: NONE	

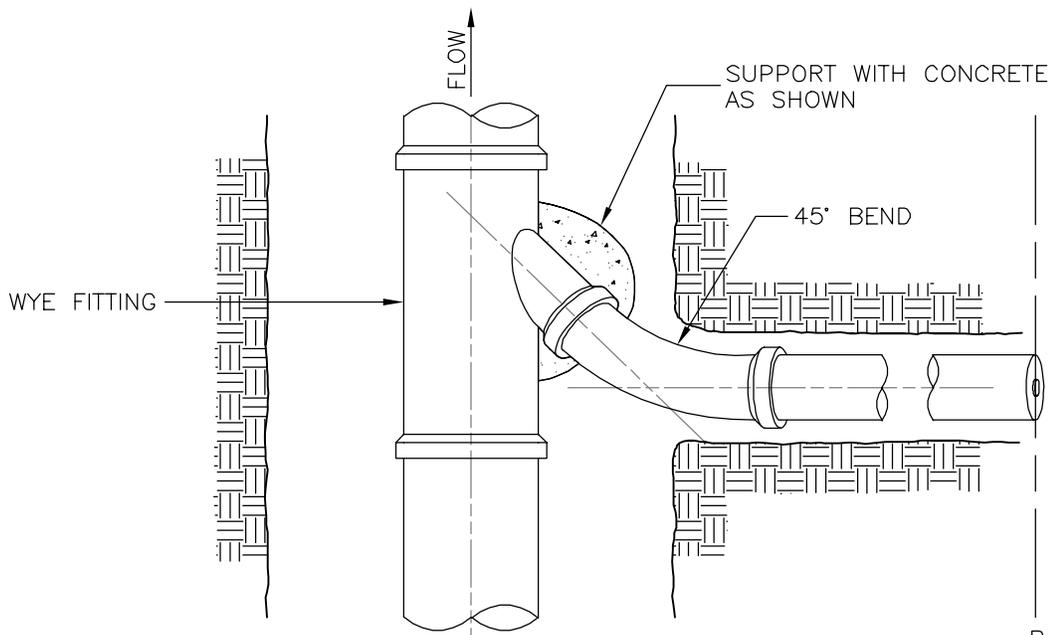
CITY OF ESCALON

ECCENTRIC CONE
MAINTENANCE HOLE

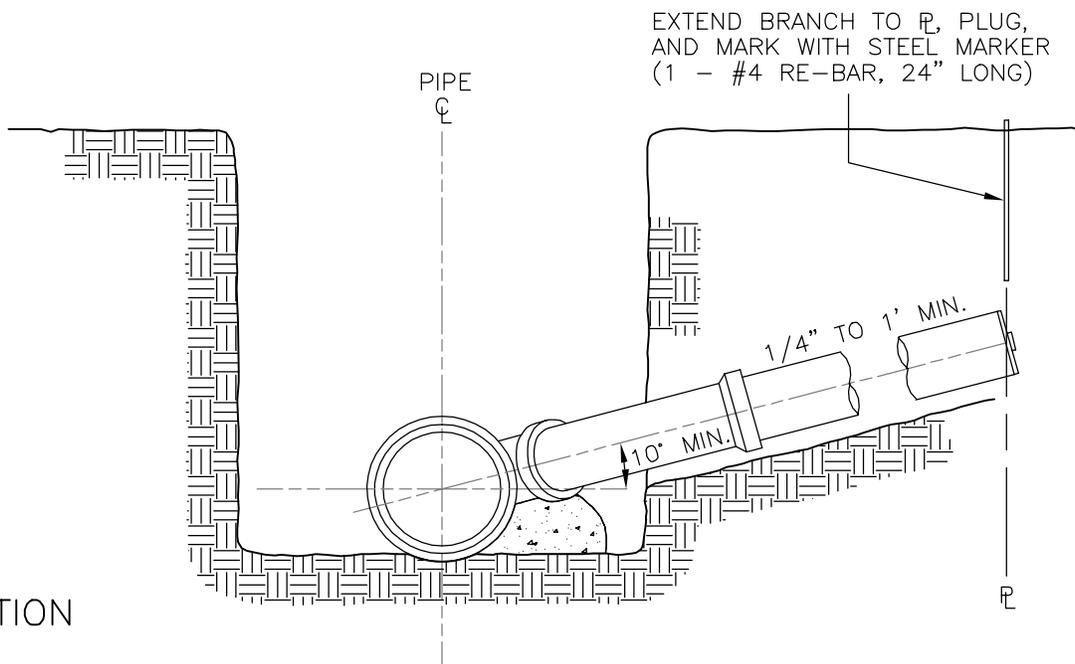
APPROVED BY:

Doug Trilham
CITY ENGINEER

IMPROVEMENT
STANDARD NO. S8



PLAN VIEW



ELEVATION

NOTE:

ALL CONNECTIONS REQUIRE WYE BRANCH FITTINGS UNLESS OTHERWISE SPECIFIED AND APPROVED BY CITY ENGINEER

REVISION	DATE
DATE: APR. 2003	
DRAWN BY: DBR	
CHECKED BY: AJA	
SCALE: NONE	

CITY OF ESCALON

WYE BRANCH

APPROVED BY:

Doug Strickland

CITY ENGINEER

IMPROVEMENT STANDARD NO. S12