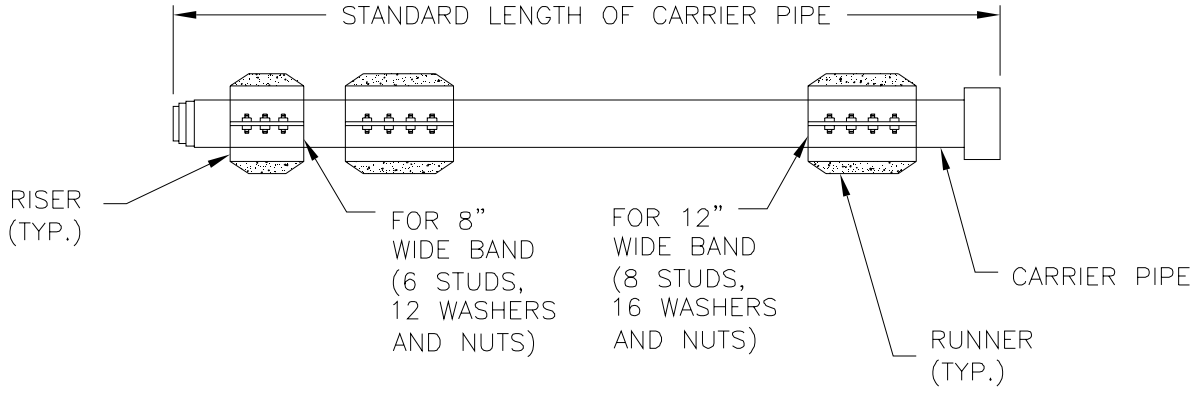
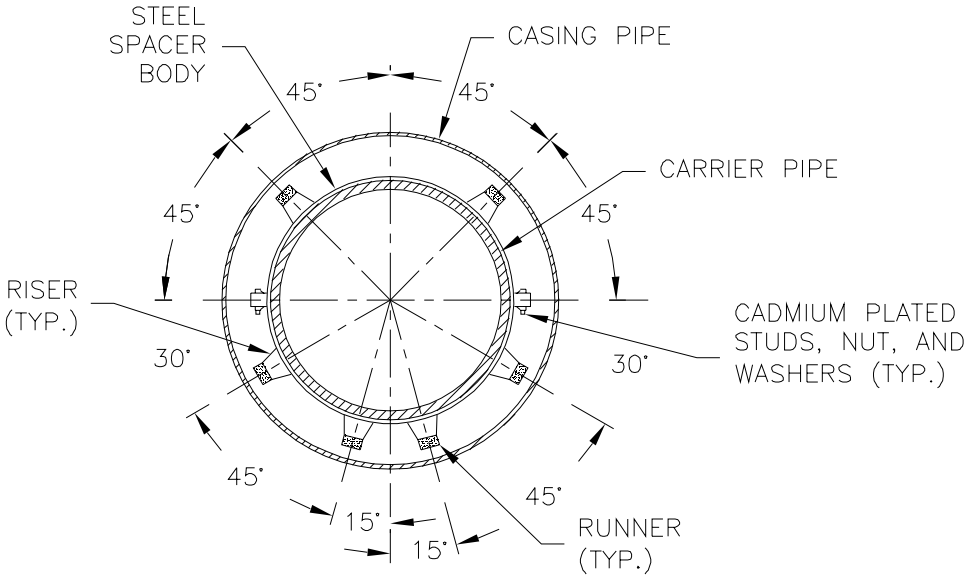
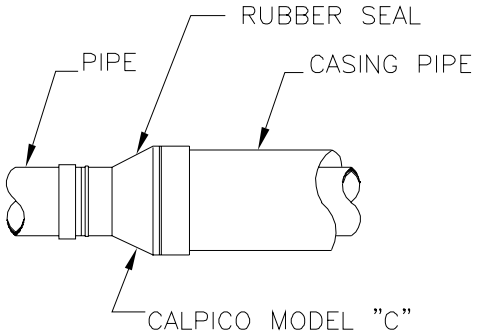
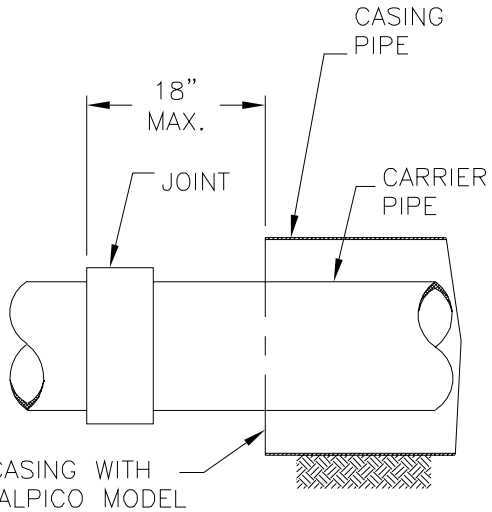




CASING SPACERS



CALPICO MODEL "C" OR APPROVED EQUAL WITH STAINLESS STEEL STRAPS.



SEAL ENDS OF CASING WITH RUBBER SEAL. CALPICO MODEL "C" OR APPROVED EQUAL WITH STAINLESS STEEL STRAPS.

FOR NOTES, SEE DWG. NO. 60A.

REV. NO.	REV. DATE	REV. BY	JACKING DETAILS FOR PIPES	REVISION APPROVED BY CITY ENGINEER
3	6/1/2003	HL/EA		Finbar J. O'Regan
DIGITIZED	1/1/92			DATE: 11/25/03
DWG. BY RC	SCALE		CITY OF STOCKTON	SUPERCEDES DWG. DATED
CK. BY	NONE		DEPARTMENT OF PUBLIC WORKS	01/09/02
				DRAWING NO. 60

(CONT'D FROM DWG. 60)

STEEL CASING SCHEDULE		
PIPE SIZE & TYPE	CASING	THICK
6'' VITRIFIED CLAY	14'' I.D.	$\frac{3}{16}$"
8'' VITRIFIED CLAY	16'' I.D.	$\frac{1}{4}$"
10'' VITRIFIED CLAY	20" I.D.	$\frac{1}{4}$"
12'' VITRIFIED CLAY	22'' I.D.	$\frac{1}{4}$"

NOTES:

1. CASING SHALL BE INSTALLED BY THE JACKING AND BORING METHOD.
2. CASING JOINTS SHALL BE WELDED IN ACCORDANCE WITH AWWA STANDARD C-206 EXCEPT THAT HYDROSTATIC TESTING WILL NOT BE REQUIRED.
3. CASING SPACERS SHALL BE PROVIDED AS PER DETAIL (SEE DRAWING NO. 60).
4. ENDS OF BORE HOLE SHALL BE SEALED TO PREVENT ENTRANCE OF FILL MATERIAL, AS REQUIRED.
5. JOINT SHALL BE INSTALLED AT END OF CASING PIPE. SEE DETAIL (SEE DRAWING NO. 60).
6. CASING OF LARGER SIZE THAN SHOWN IN THE ABOVE CHART OR CASING FOR PIPES LARGER THAN 12" OR OF DIFFERENT TYPE THAN SHOWN SHALL BE APPROVED BY THE CITY ENGINEER PRIOR TO INSTALLATION.

REV. NO.	REV. DATE	REV. BY
3	6/1/2003	HL/EA
DIGITIZED	1/1/92	
DWG. BY	RC	SCALE
CK. BY		NONE

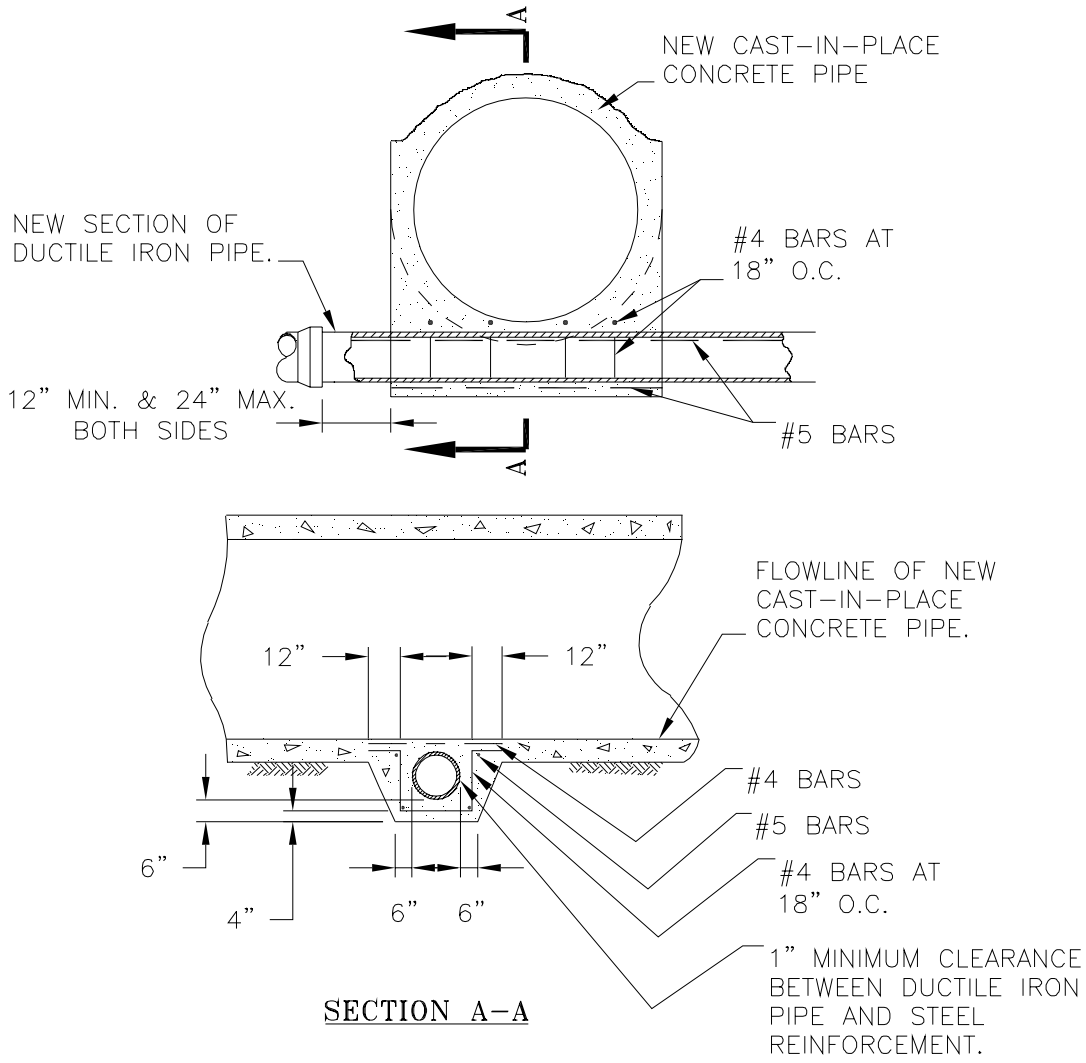
JACKING DETAILS FOR PIPES

CITY OF STOCKTON
DEPARTMENT OF PUBLIC WORKS

REVISION APPROVED BY CITY ENGINEER
Finbar J. O'Regan
DATE: 11/25/03

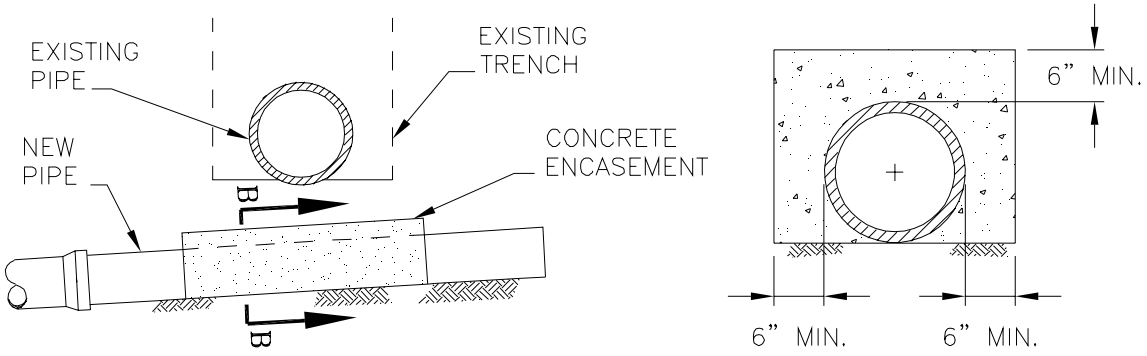
SUPERCEDES DWG. DATED 01/09/02

DRAWING NO. 60A



SECTION A-A

CAST-IN-PLACE STORM DRAIN



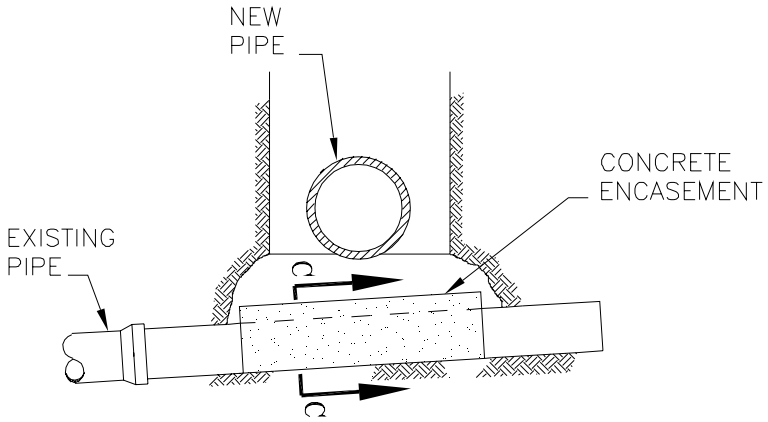
TYPICAL SECTION

SECTION B-B

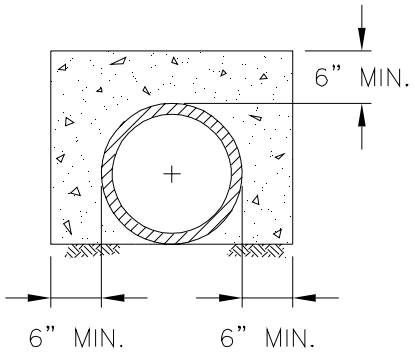
DETAILS OF PROTECTION FOR NEW SEWERS

REV. NO.	REV. DATE	REV. BY	PROTECTION OF STORM DRAINS AND SANITARY SEWER LINES	REVISION APPROVED BY CITY ENGINEER
2	6/1/2000	HLE/RH		Finbar J. O'Regan
DIGITIZED	1/1/92			DATE: 01/09/02
DWG. BY RC	SCALE		CITY OF STOCKTON	SUPERCEDES DWG. DATED
CK. BY	NONE		DEPARTMENT OF PUBLIC WORKS	10/7/93
				DRAWING NO. 61

(CONT'D FROM DWG. 61)



TYPICAL SECTION



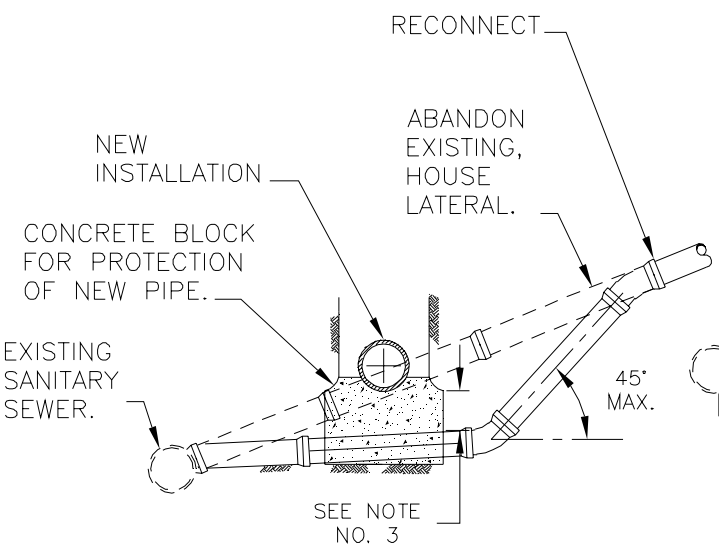
SECTION C–C

DETAILS OF PROTECTION FOR EXISTING SEWERS

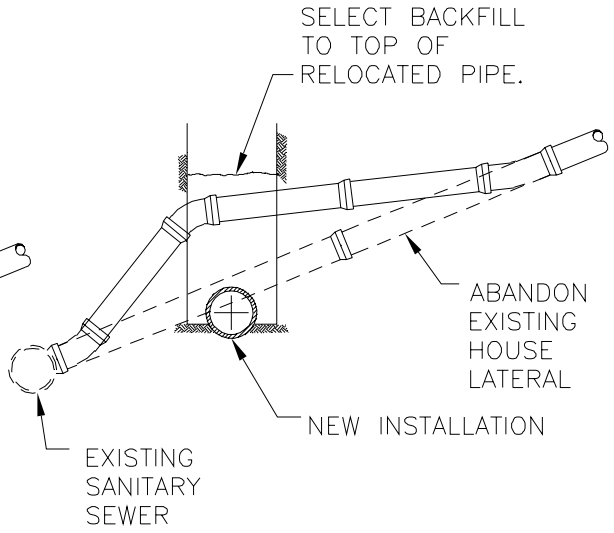
NOTES:

1. CONCRETE FOR ENCASEMENT SHALL BE CLASS "B" CONCRETE POURED AGAINST THE UNDISTURBED EARTH.
2. THE CONCRETE ENCASEMENT SHALL EXTEND ACROSS THE FULL WIDTH OF THE TRENCH PLUS AN ADDITIONAL 12" INTO UNDISTURBED EARTH ON EACH SIDE OF THE TRENCH.
3. WHEN THE CLEARANCE BETWEEN THE BOTTOM OF THE DRAIN AND THE TOP OF THE SEWER IS LESS THAN 18", THE SEWER SHALL BE ENCASED OR BLANKETED AS INDICATED.
4. CAST–IN–PLACE STORM DRAINS
   - (A) WHEN THE CLEARANCE BETWEEN THE BOTTOM OF THE STORM DRAIN AND THE TOP OF THE SANITARY SEWER IS LESS THAN 6". THE SANITARY SEWER SHALL BE ENCASED MONOLITHICALLY WITH THE BASE OF THE DRAIN. IN ADDITION IT SHALL BE CONSTRUCTED OR REPLACED WITH DUCTILE IRON PIPE.
   - (B) WHEN THE BOTTOM SLAB OF THE CAST–IN–PLACE STORM DRAIN INTERSECTS SEWERS UNDER 15" IN DIAMETER, CONSTRUCT PER TYPICAL ENCASEMENT AS SHOWN ABOVE.

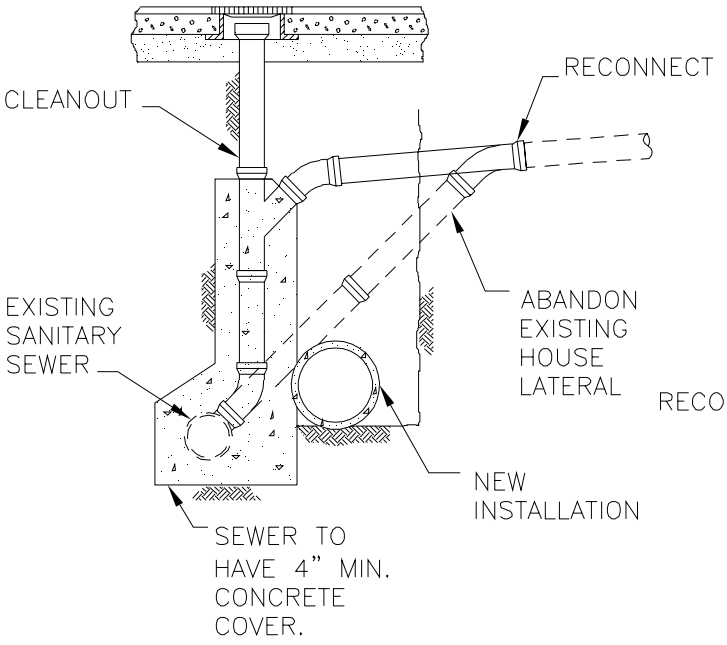
REV. NO.	REV. DATE	REV. BY	PROTECTION OF STORM DRAINS AND SANITARY SEWER LINES	REVISION APPROVED BY CITY ENGINEER
2	6/1/2000	HLE/RH		Finbar J. O'Regan
DIGITIZED	1/1/92			DATE: 01/09/02
DWG. BY RC	SCALE		CITY OF STOCKTON	SUPERCEDES DWG. DATED 10/7/93
CK. BY	NONE		DEPARTMENT OF PUBLIC WORKS	DRAWING NO. 61A



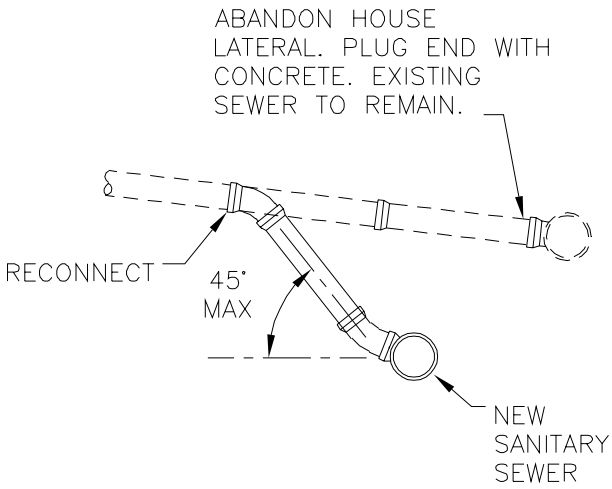
CASE NO. 1



CASE NO. 2



CASE NO.3

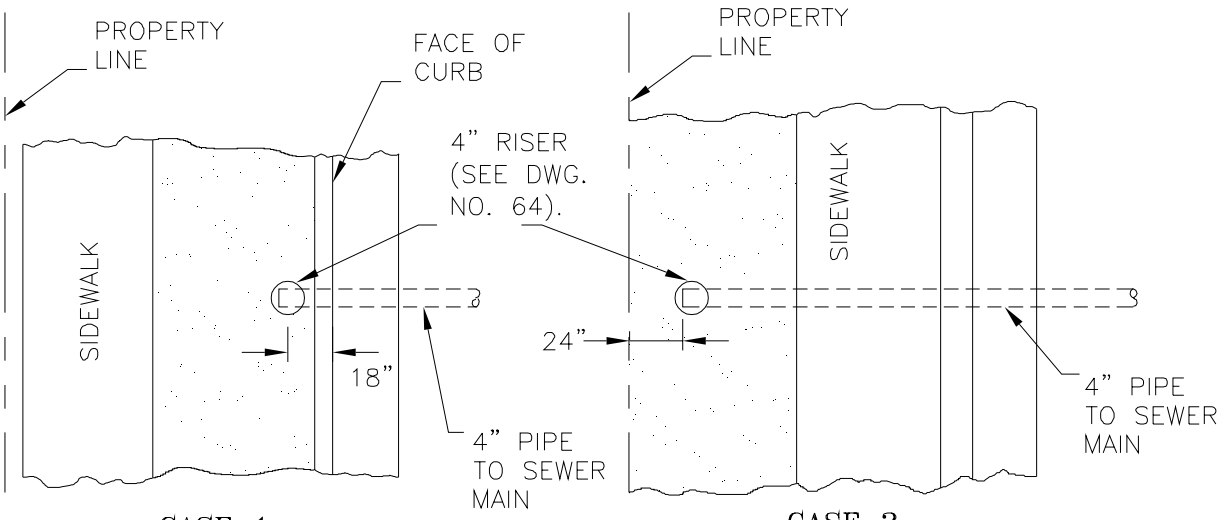


CASE NO. 4

NOTES:

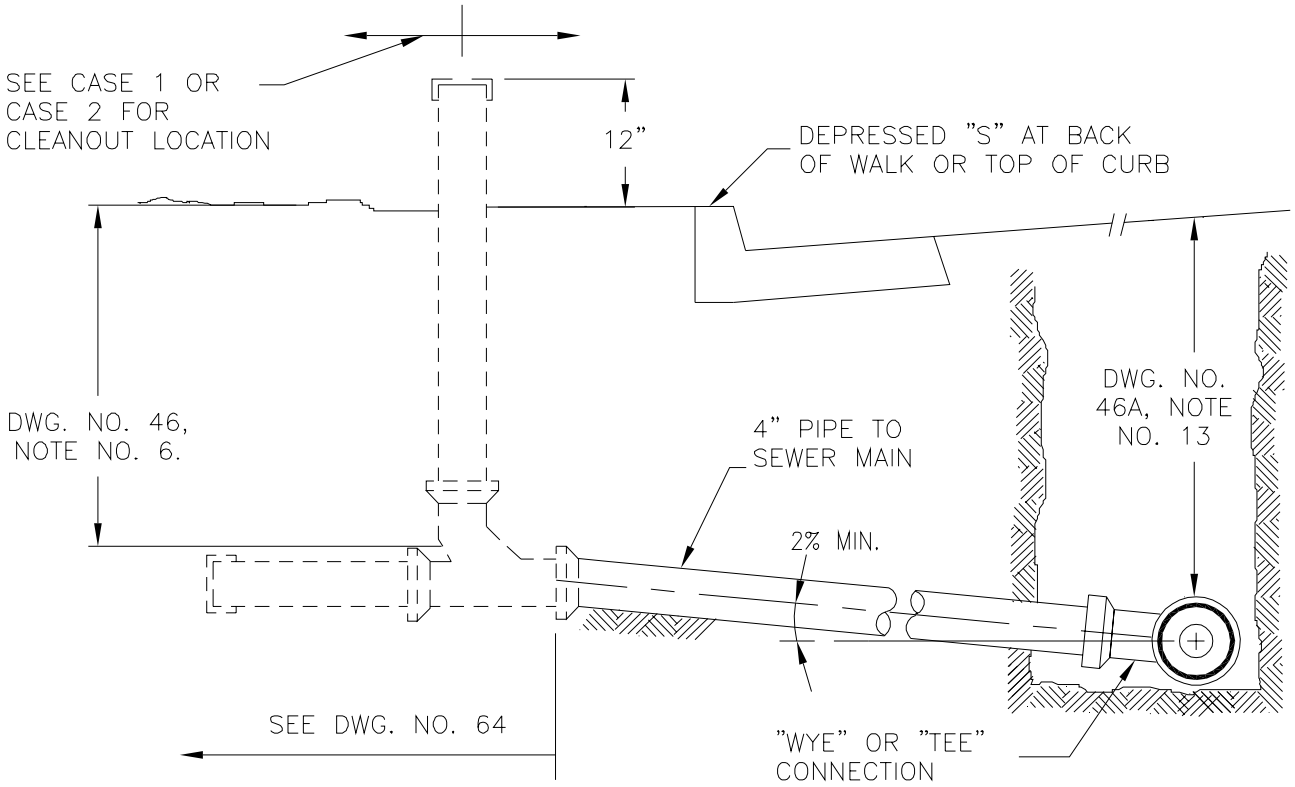
1. THE 6" SADDLE SHALL BE USED WHERE NECESSARY AND SHALL BE CONNECTED TO THE PIPE CONSTITUTING THE EXISTING "WYE" OR "TEE" OR TO THE NEXT LOWER PIPE LENGTH.
2. WYE MAY BE LAID "FLAT" UPON SPECIAL APPROVAL OF THE CITY ENGINEER. CASE NO. 3 SHALL BE USED ONLY WHEN CASE NO. 1 HAS LESS THAN THEN REQUIRED SLOPE.
3. IF 4" OR MORE CLEARANCE, NO CONCRETE IS NECESSARY. IF CONCRETE IS REQUIRED, TAKE IT DOWN TO UNDISTURBED EARTH.

REV. NO.	REV. DATE	REV. BY	EXISTING HOUSE LATERAL RELOCATION	REVISION APPROVED BY CITY ENGINEER
3	6/1/2003	HL/EA		Finbar J. O'Regan
DIGITIZED	1/1/92			DATE: 11/25/03
DWG. BY RC	SCALE		CITY OF STOCKTON	SUPERCEDES DWG. DATED
CK. BY	NONE		DEPARTMENT OF PUBLIC WORKS	01/09/02
				DRAWING NO. 62



CASE 1
(SEE DWG. NO. 64)
CURB, GUTTER, SIDEWALK WITH PARKWAY STRIP.

CASE 2
(SEE DWG. NO. 64)
CURB, GUTTER, SIDEWALK WITH NO PARKWAY STRIP.



NOTES:

1. WHEN MODIFIED CURB, GUTTER, AND SIDEWALK, MEANDERING SIDEWALKS, OR ANY OTHER SPECIAL CASES ARE ENCOUNTERED, CLEANOUTS AND OTHER UTILITY LOCATIONS SHALL BE DETERMINED BY THE ENGINEER AT TIME SUBDIVISION PLANS ARE SUBMITTED FOR APPROVAL AND FINAL APPROVAL SHALL BE BY THE CITY ENGINEER.

REV. NO.	REV. DATE	REV. BY
6	6/1/2003	HL/EA
DIGITIZED	1/1/92	
DWG. BY RC	SCALE	
CK. BY	NONE	

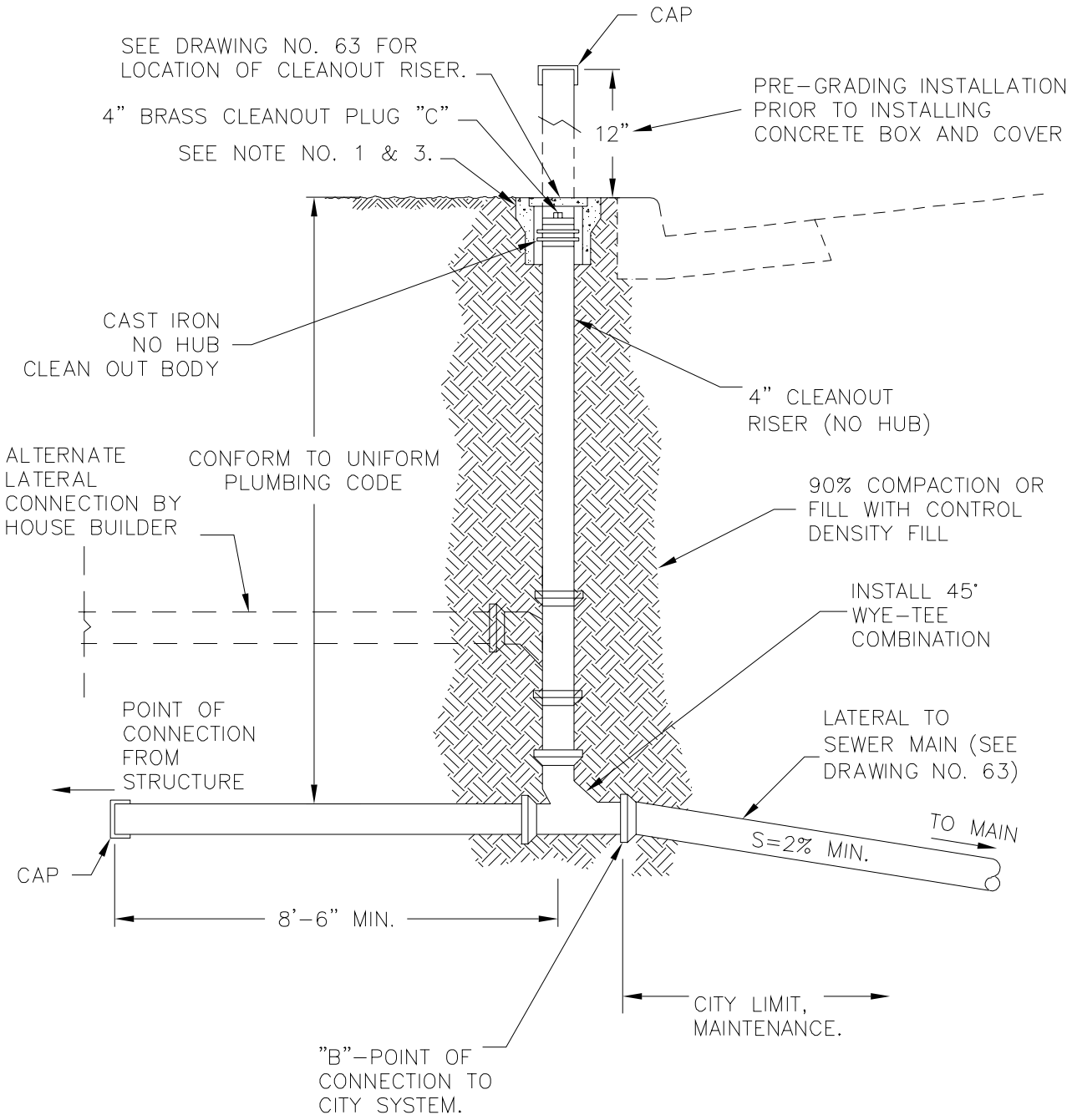
HOUSE LATERAL

CITY OF STOCKTON
DEPARTMENT OF PUBLIC WORKS

REVISION APPROVED BY CITY ENGINEER
Finbar J. O'Regan
DATE: 11/25/03

SUPERCEDES DWG. DATED 01/09/02

DRAWING NO. 63



NOTES:

1. ALL FACILITIES TO BE INSTALLED BY SUBDIVIDER, EXCEPT CLEANOUT, BOX AND COVER WHICH SHALL BE INSTALLED BY PLUMBER. ALL FACILITIES ABOVE POINT "B" TO BE MAINTAINED BY PROPERTY OWNER IN ACCORDANCE WITH THE UNIFORM PLUMBING CODE.
2. ALL FACILITIES BELOW POINT "B" TO BE MAINTAINED BY THE CITY THROUGH PROPERTY OWNER'S CLEANOUT "C".
3. WHEN CLEANOUT FALLS IN DRIVEWAY, INSTALL "CHRISTY" #F-8C OR "BROOKS" #1-SP (OR EQUAL CONCRETE BOX AND COVER) CAST IRON TRAFFIC COVER. "BROOKS" #3-RT MAY ALSO BE USED.

REV. NO.	REV. DATE	REV. BY
6	6/1/2003	HL/EA
DIGITIZED	1/1/92	
DWG. BY RC	SCALE	
CK. BY	NONE	

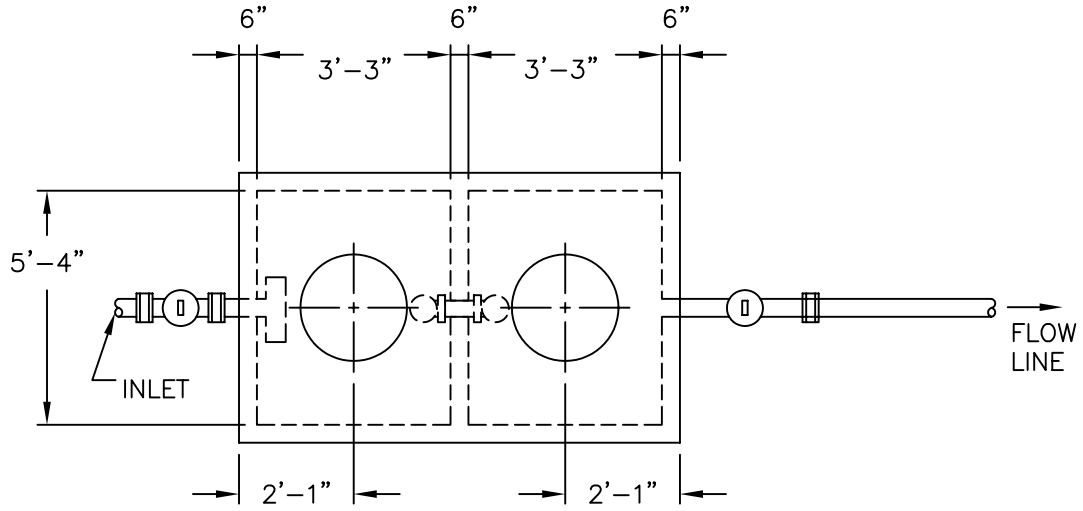
CLEANOUT

CITY OF STOCKTON
DEPARTMENT OF PUBLIC WORKS

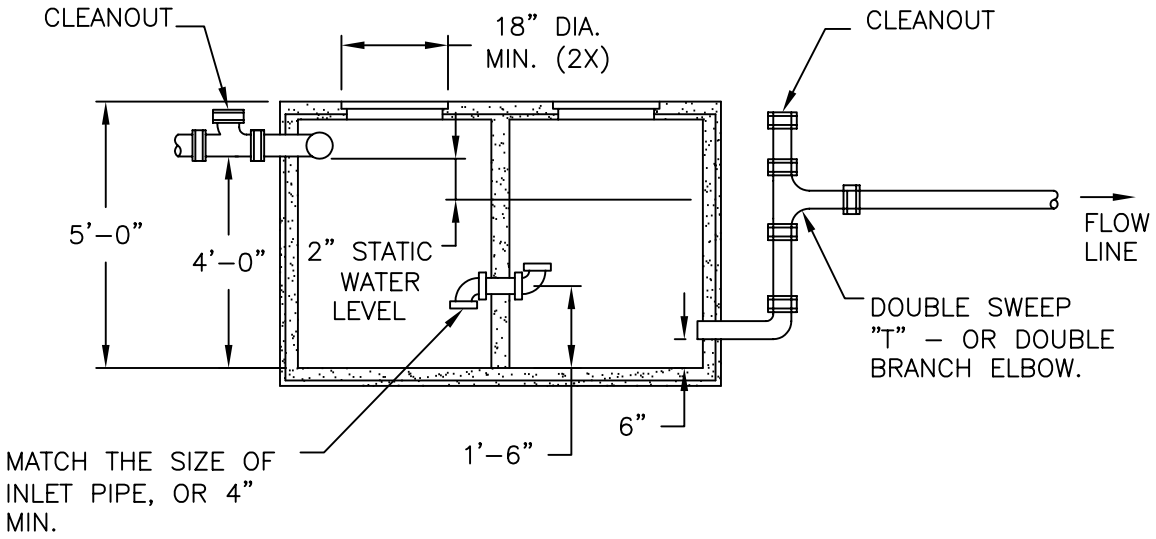
REVISION APPROVED BY CITY ENGINEER
Finbar J. O'Regan
DATE: 11/25/03

SUPERCEDES DWG. DATED 01/09/02

DRAWING NO. 64



PLAN – VIEW



SECTION

NOTES:

1. DIMENSIONS SHOWN ARE FOR MINIMUM SIZE (750 GALLON) TRAP.
2. EACH UNIT SHALL BE DESIGNED BY A REGISTERED CIVIL ENGINEER AND APPROVED BY THE CITY ENGINEER. STREET INSTALLATIONS SHALL BE DESIGNED FOR HS20 44 LOADING.
3. ALL KITCHEN FIXTURES SHALL BE PLUMED TO FLOW THRU TRAP.
4. CONCRETE SHALL BE A MINIMUM OF 3000 PSI AT 28 DAYS.
5. COVERS SHALL BE STEEL AND SHALL BE GAS TIGHT.
6. ALL WASTE SHALL ENTER TRAP THROUGH THE INLET PIPE ONLY.
7. NO WASTE FROM RESTROOMS SHALL FLOW THROUGH TRAP.
8. EFFLUENT PIPE SHALL EXIT TANK 6" FROM BOTTOM.

REV. NO.	REV. DATE	REV. BY	TYPICAL GREASE TRAP (750 TO 1199 GALLON)	REVISION APPROVED BY CITY ENGINEER
7	6/1/2000	HLE/RH		Finbar J. O'Regan
DIGITIZED	7/1/90			DATE: 01/09/02
DWG. BY RC	SCALE		CITY OF STOCKTON	SUPERCEDES DWG. DATED 2/23/95 / DRAWING NO. 65
CK. BY	NONE		DEPARTMENT OF PUBLIC WORKS	

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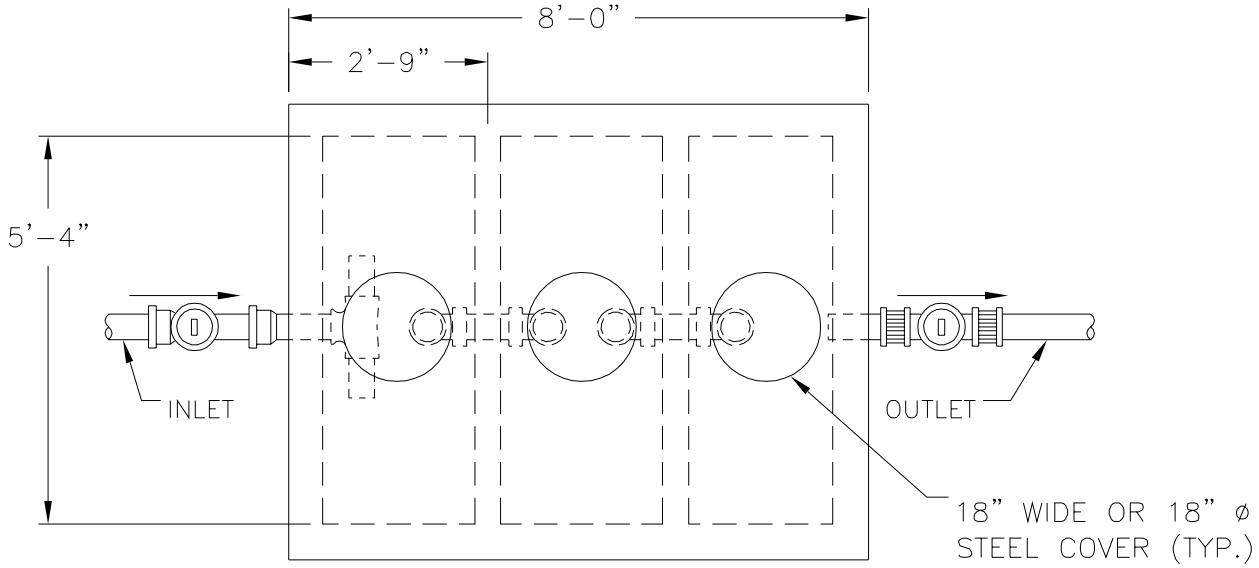
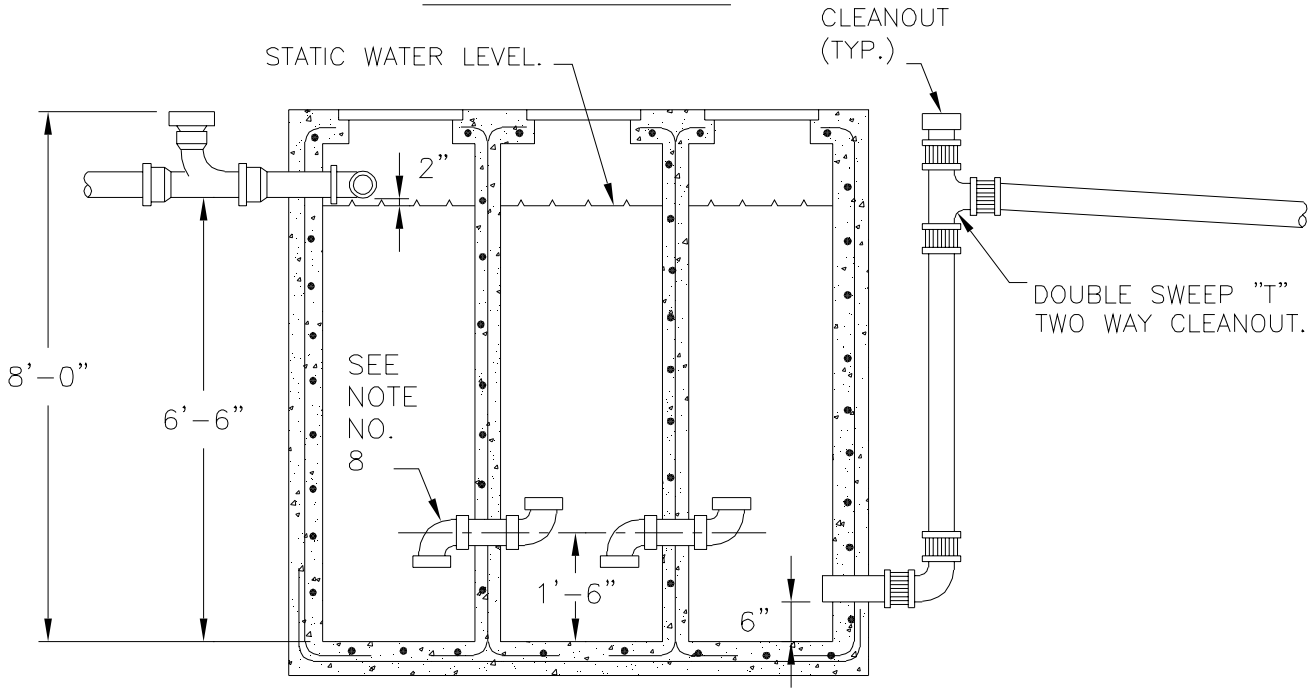


PLAN – VIEW

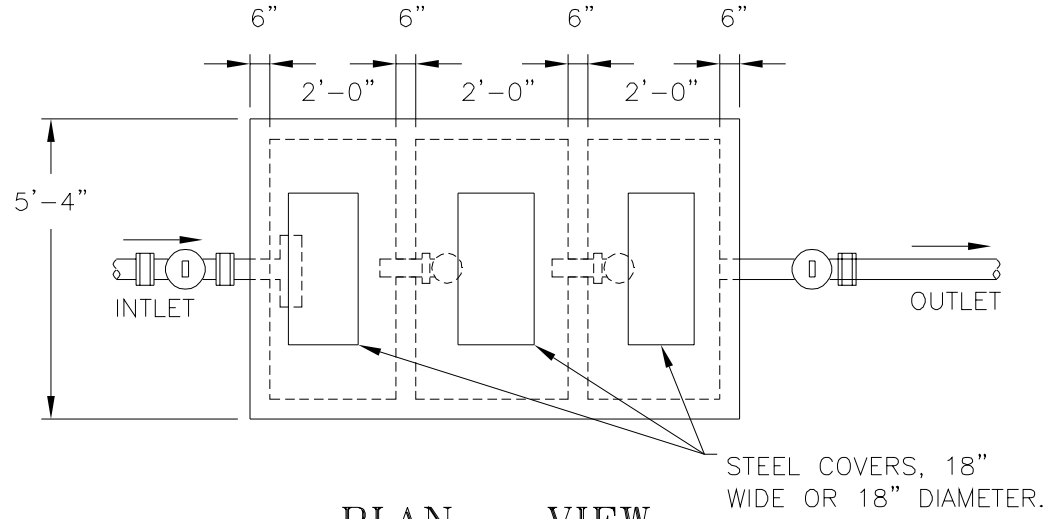


SECTION

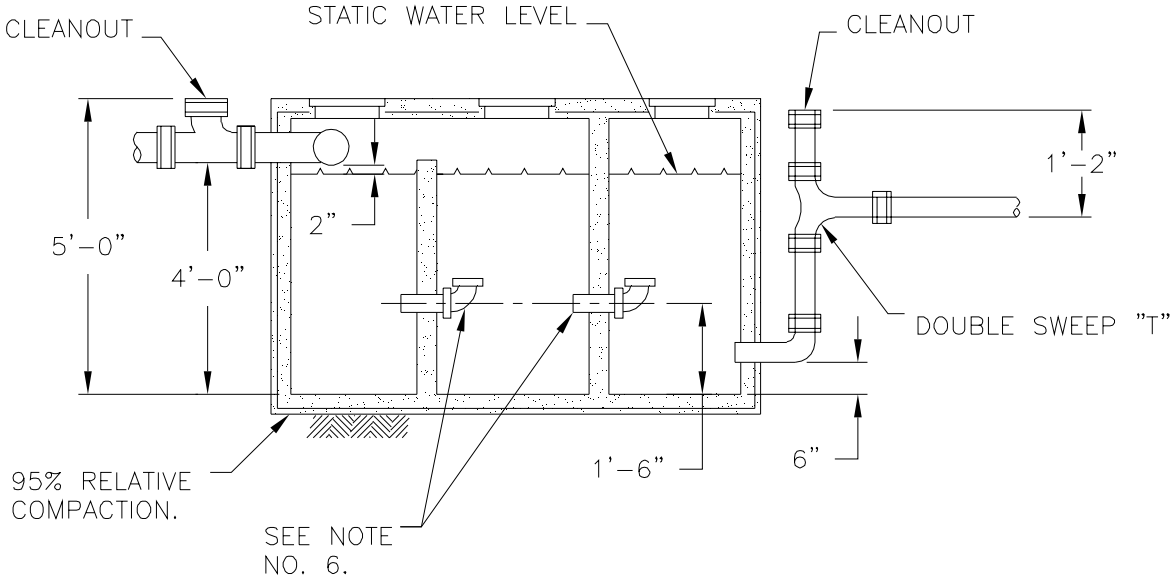
NOTES:

1. EACH UNIT SHALL BE DESIGNED BY A REGISTERED CIVIL ENGINEER AND APPROVED BY THE CITY ENGINEER.
2. COVERS SHALL BE STEEL AND GAS TIGHT. PROVIDE AMPLE ACCESS FOR MAINTENANCE.
3. REINFORCEMENT SHALL BE ADEQUATE FOR TRAFFIC CONDITIONS WHERE TRAP IS LOCATED.
4. ALL KITCHEN FIXTURES TO BE PLUMBED TO FLOW THROUGH TRAP.
5. CONCRETE SHALL BE 3000 PSI MINIMUM AT 28 DAYS.
6. ALL WASTE SHALL ENTER TRAP THROUGH INLET PIPE ONLY.
7. RESTROOM WASTE SHALL NOT FLOW THROUGH TRAP.
8. MATCH THE SIZE OF THE INLET PIPE, OR 4" MINIMUM DIAMETER (MAY INSTALL TWO STEEL BAFFLES INSTEAD OF 4" PIPE AND WALL IN SAME CONFIGURATION–SEE DWG. 65).

REV. NO.	REV. DATE	REV. BY	TYPICAL GREASE TRAP (1200 GALLON OR LARGER)	REVISION APPROVED BY CITY ENGINEER
4	6/1/2000	HLE/RH		Finbar J. O'Regan
DIGITIZED	1/1/92			DATE: 01/09/02
DWG. BY RC	SCALE		CITY OF STOCKTON	SUPERCEDES DWG. DATED 2/23/95
CK. BY	NONE		DEPARTMENT OF PUBLIC WORKS	DRAWING NO. 65A



PLAN - VIEW

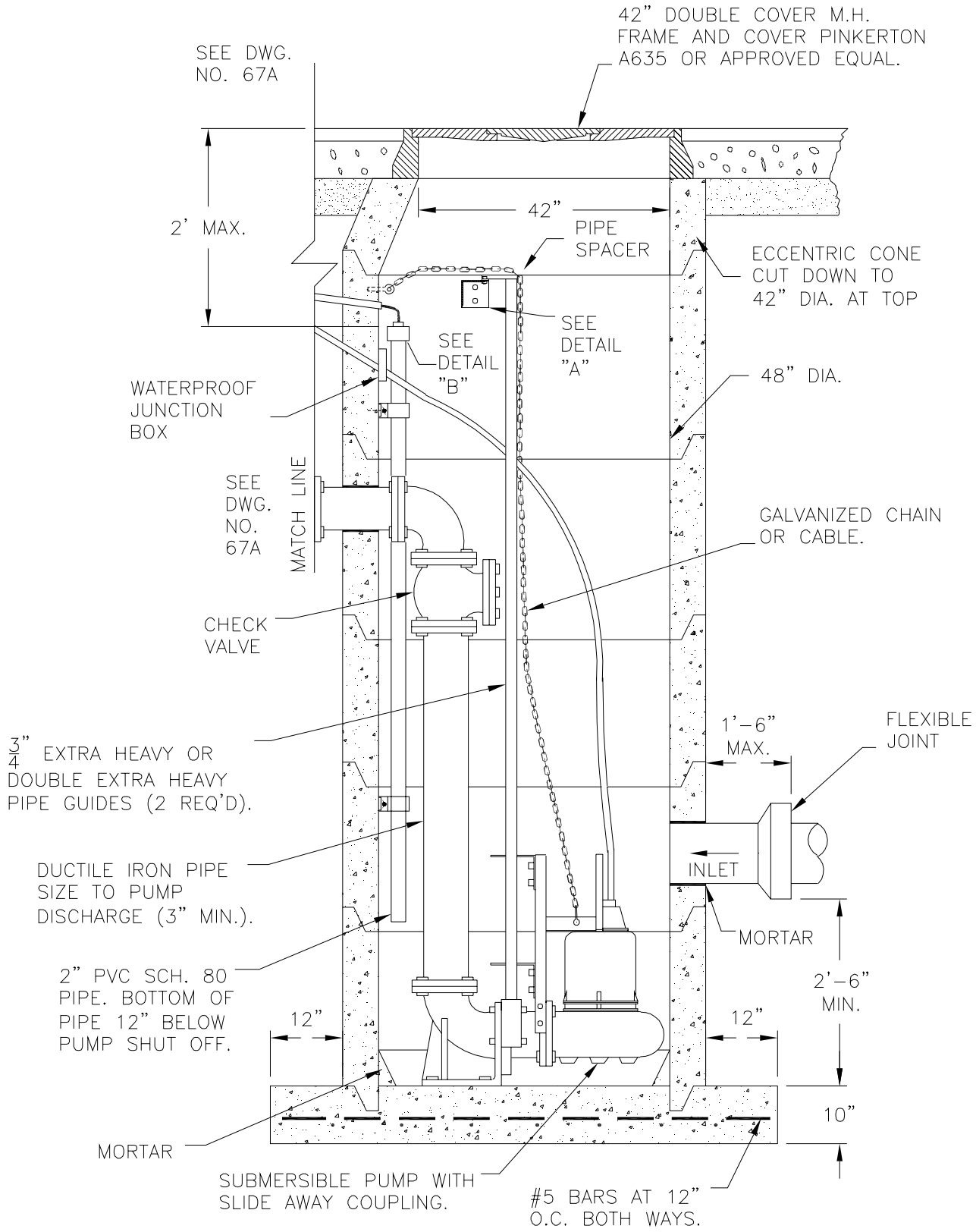


SECTION

NOTES:

1. DIMENSIONS SHOWN ARE FOR MINIMUM SIZE (750 GALLON) TRAP.
2. EACH UNIT SHALL BE DESIGNED BY A REGISTERED CIVIL ENGINEER AND APPROVED BY THE CITY ENGINEER. STREET INSTALLATIONS SHALL BE DESIGNED FOR HS20 44 LOADING.
3. CONCRETE SHALL BE A MINIMUM OF 3,000 PSI AT 28 DAYS.
4. ALL WASTE SHALL ENTER TRAP THROUGH INLET PIPE ONLY.
5. COVERS SHALL BE STEEL AND SHALL BE GAS TIGHT.
6. 4" MINIMUM PIPE WITH 90° ELBOW INSTALL AS SHOWN, OR MATCH INLET PIPE SIZE.

REV. NO.	REV. DATE	REV. BY	TYPICAL SAND & OIL TRAP	REVISION APPROVED BY CITY ENGINEER
6	6/1/2000	HLE/RH		Finbar J. O'Regan
DIGITIZED	1/1/92			DATE: 01/09/02
DWG. BY RC	SCALE		CITY OF STOCKTON	SUPERCEDES DWG. DATED
CK. BY	NONE		DEPARTMENT OF PUBLIC WORKS	2/23/95
				DRAWING NO. 66



REV. NO.	REV. DATE	REV. BY
5	6/1/2003	HL/EA
DIGITIZED	1/1/92	
DWG. BY RC	SCALE	
CK. BY	NONE	

TEMPORARY MAINTENANCE HOLE
S.S. PUMPING STATION

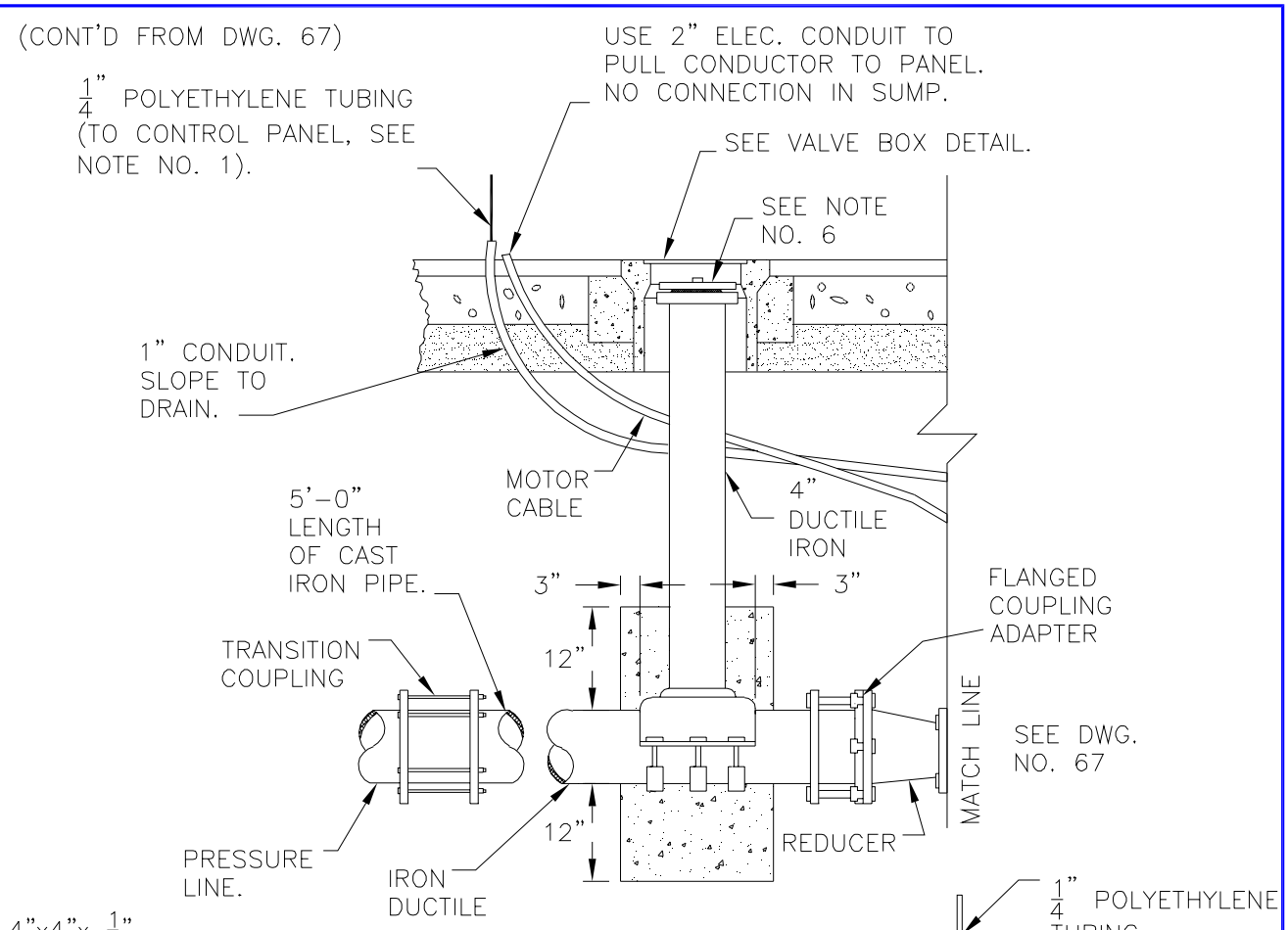
CITY OF STOCKTON
DEPARTMENT OF PUBLIC WORKS

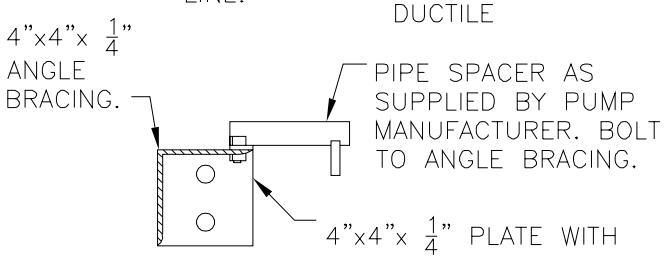
REVISION APPROVED BY CITY ENGINEER
Finbar J. O'Regan
DATE: 11/25/03

SUPERCEDES DWG. DATED 01/09/02

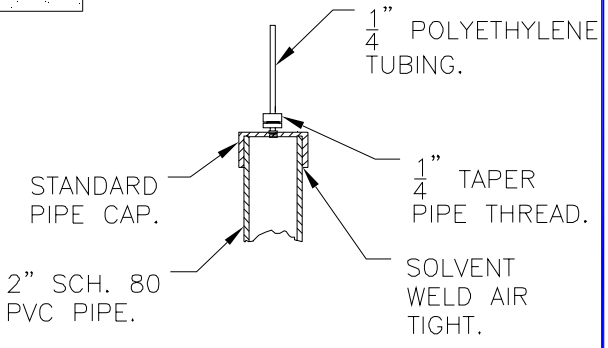
DRAWING NO. 67

(CONT'D FROM DWG. 67)





DETAIL "A"



DETAIL "B"

NOTES:

1. PANEL SHALL HAVE EXTERNAL RESET, EXTERNAL LOCKABLE "ON" OR "OFF", AND KEY TYPE H-O-A IN WEATHERPROOF PANEL.
2. PUMPING STATION TO BE USED FOR TEMPORARY INSTALLATIONS ONLY WHEN APPROVED BY THE CITY ENGINEER.
3. PUMP DATA:
   3ø 220 VOLTS HIGH HEAD SEWAGE PUMP WITH "SLIDE AWAY COUPLING" OR EQUAL.
4. CUT THE ENDS OF THE 4"x4"x 1/4" ANGLE BRACE TO FIT THE CURVATURE OF THE M.H., VERIFY IN FIELD.
5. INTERIOR OF M.H. TO BE COATED IN ACCORDANCE WITH SECTION 71-1.09 OF STANDARD SPECIFICATIONS.
6. SCREW CAP WITH 2 1/2" STANDARD FIRE HYDRANT CONNECTION.

REV. NO.	REV. DATE	REV. BY
5	6/1/2003	HL/EA
DIGITIZED	1/1/92	
DWG. BY	RC	SCALE
CK. BY		NONE

TEMPORARY MAINTENANCE HOLE
S.S. PUMPING STATION

CITY OF STOCKTON
DEPARTMENT OF PUBLIC WORKS

REVISION APPROVED BY CITY ENGINEER
Finbar J. O'Regan
DATE: 11/25/03

SUPERCEDES DWG. DATED 01/09/02

DRAWING NO. 67A