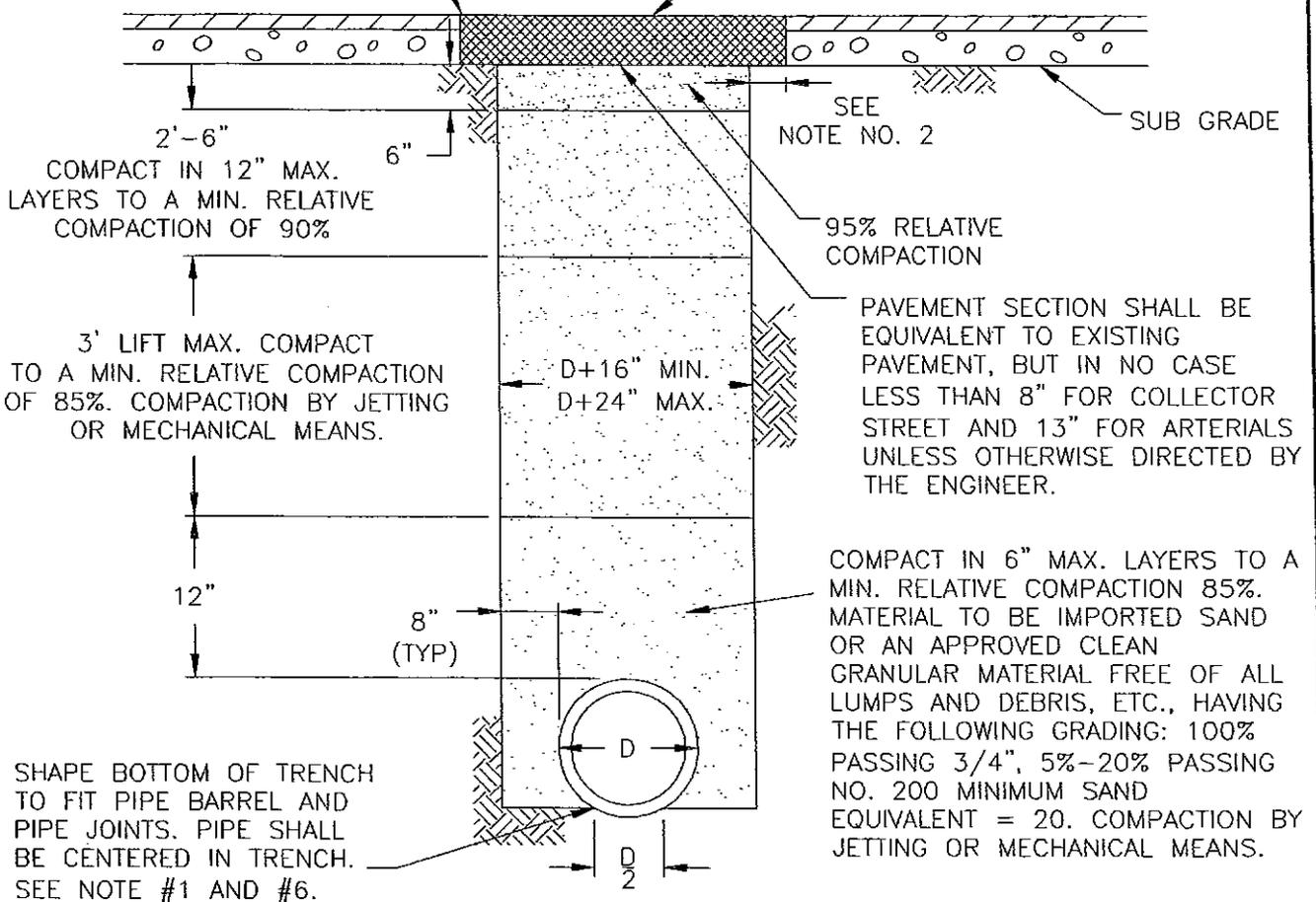


DIAMOND SAW CUTTING, MILLING, OR OTHER APPROVED DEVICE SHALL BE USED. REPAVE TO A CLEAN STRAIGHT EDGE (TYP).

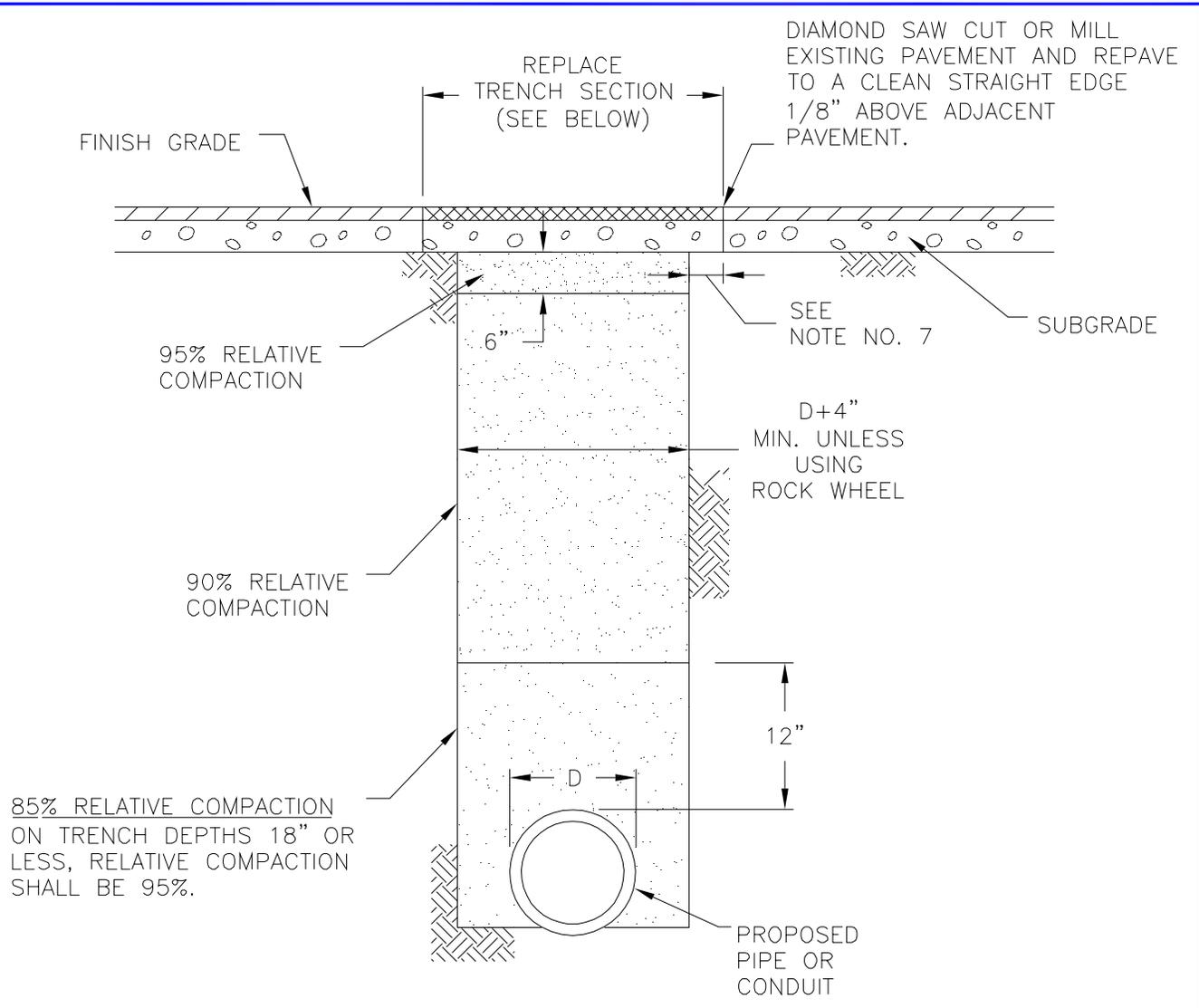
NEW PAVEMENT TO BE 1/8" HIGHER THAN ADJACENT PAVEMENT. APPLY FOG SEAL COAT OF CSS-1 OR SS-1 ASPHALT EMULSION.



NOTES **TYPICAL TRENCH SECTION IN EXISTING IMPROVED STREETS**

1. FOR RIGID PIPE, CONTRACTOR MAY, AT THEIR EXPENSE, EXCAVATE 6" BELOW THE BOTTOM OF THE PIPE AND REPLACE WITH SAND OR AGGREGATE SUBBASE IN LIEU OF SHAPING BOTTOM OF TRENCH TO FIT PIPE BARREL. JOINTS SHALL BE SHAPED IN EITHER CASE. COMPACT TO 85%.
2. WHEN TRENCH AND EXCAVATION IS IN EXISTING PAVED STREETS, REPLACE PAVEMENT 12" ON EACH SIDE OF TRENCH, 6" FOR BORE PITS, BELL HOLES AND POT HOLES LESS THAN 50 SQUARE FEET.
3. DEVIATION FROM ABOVE MAY BE ALLOWED WHEN APPROVED BY THE CITY ENGINEER.
4. TRENCH - WHERE THE TRENCH SECTION PARALLELS THE EXISTING CURB AND GUTTER, THE EDGE OF THE TRENCH SHALL BE A MIN. OF 1'-0" FROM LIP OF THE EXISTING GUTTER. THE PAVEMENT SHALL BE REMOVED AND REPLACED TO THE LIP OF THE GUTTER.
5. CONTROLLED DENSITY FILL (CDF) MAY BE USED IN LIEU OF SPECIFIED BACKFILL METHOD. MINIMUM TRENCH WIDTH MAY BE REDUCED TO 2-1/2" CLEAR OF EACH SIDE OF PIPE.
6. FLEXIBLE PIPE SHALL HAVE A 6" BEDDING OF GRANULAR MATERIAL AS DESCRIBED IN NOTE NO. 1.
7. ALL VERTICAL EDGES OF EXISTING ASPHALT CONCRETE SHALL BE TACK COATED.

REV. NO.	REV. DATE	REV. BY	EXISTING STREET TRENCH SECTION FOR TRENCHES WIDER THAN 8"	REVISION APPROVED BY CITY ENGINEER	
5	6/1/2003	HL/EA		Finbar J. O'Regan DATE: 11/25/03	
DIGITIZED			CITY OF STOCKTON DEPARTMENT OF PUBLIC WORKS	SUPERCEDES DWC. DATED	DRAWING NO.
DWC. BY	RC	SCALE		01/09/02	50
CK. BY		NONE			



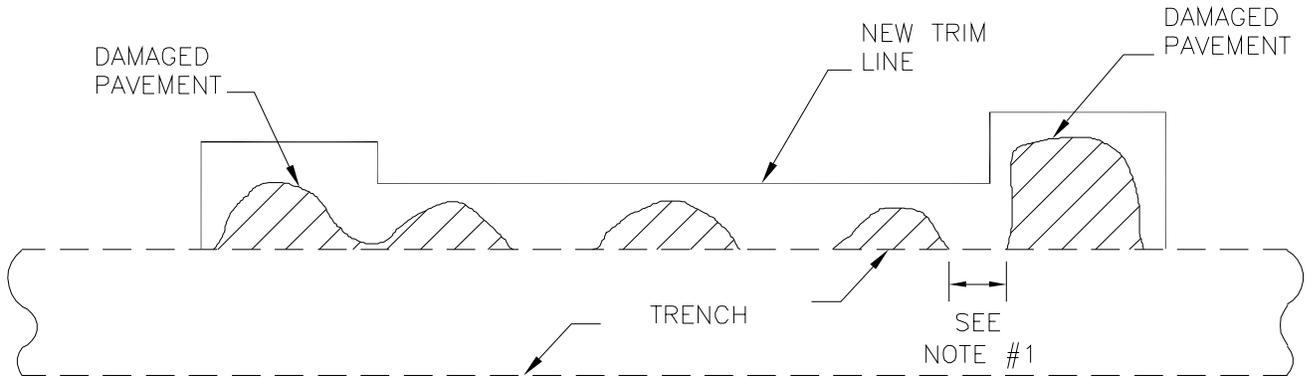
TYPICAL TRENCH SECTION IN EXISTING STREETS

NOTES:

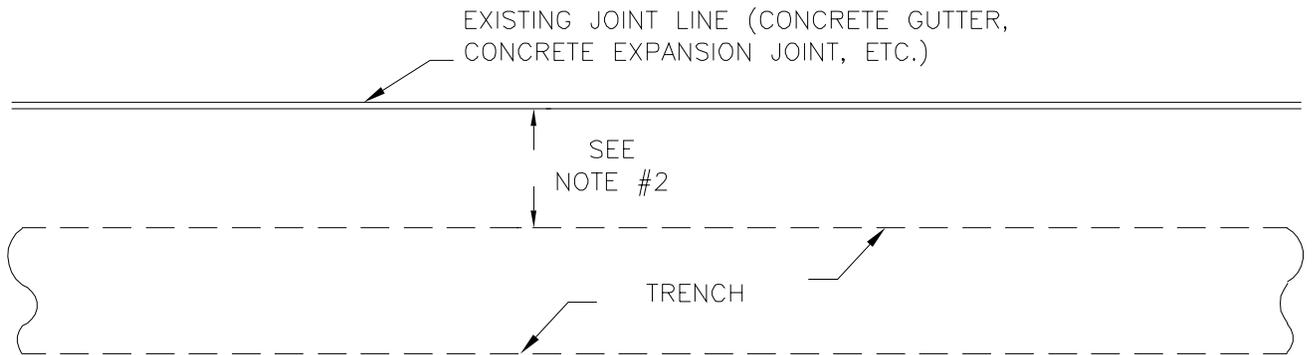
1. **TRENCH** - WHERE THE TRENCH SECTION PARALLELS THE EXISTING CURB AND GUTTER. THE EDGE OF THE TRENCH SHALL BE A MIN. OF 1'-0" FROM THE LIP OF THE EXISTING GUTTER AND THE PAVEMENT SHALL BE REMOVED AND REPLACED TO THE LIP OF THE GUTTER.
2. **BACKFILL** - CONTROLLED DENSITY FILL (CDF) SHALL BE MANDATORY FOR TRENCHES 8" WIDE OR LESS AS PER SECTION 19-3.066 OF THE STANDARD SPECIFICATIONS.
3. **PAVEMENT REPLACEMENT** - 1 1/2" OF A.C. SHALL BE PLACED WHEN TRENCHES ARE BACKFILLED WITH CDF. PAVEMENT SECTION AS SPECIFIED IN AN "ENCROACHMENT PERMIT" SHALL TAKE PRECEDENCE OVER THE PAVEMENT SECTION AS SHOWN.
4. APPLY FOG SEAL COAT OF CSS-1 OR SS-1 ASPHALT EMULSION.
5. PAVING SHALL CONFORM TO SECTION 100-6 OF THESE STANDARDS AND SPECIFICATIONS.
6. ALL VERTICAL EDGES OF EXISTING ASPHALT CONCRETE SHALL BE TACK COATED.
7. GRIND 3" DEEP, 12" EACH SIDE OF TRENCH, AND REPAVE FOR ROCK WHEEL EXCAVATIONS.

<i>REV. NO.</i>	<i>REV. DATE</i>	<i>REV. BY</i>	EXISTING STREET TRENCH SECTION FOR PIPES 4" AND SMALLER	<i>REVISION APPROVED BY CITY ENGINEER</i>	
3	6/1/2000	HLE/RH		Finbar J. O'Regan	
<i>DIGITIZED</i>	7/1/91			DATE: 01/09/02	
<i>DWG. BY</i>	RC	<i>SCALE</i>	CITY OF STOCKTON DEPARTMENT OF PUBLIC WORKS	<i>SUPERCEDES DWG. DATED</i>	<i>DRAWING NO.</i>
<i>CK. BY</i>		NONE		10/7/93	50A

PLAN - CASE 1



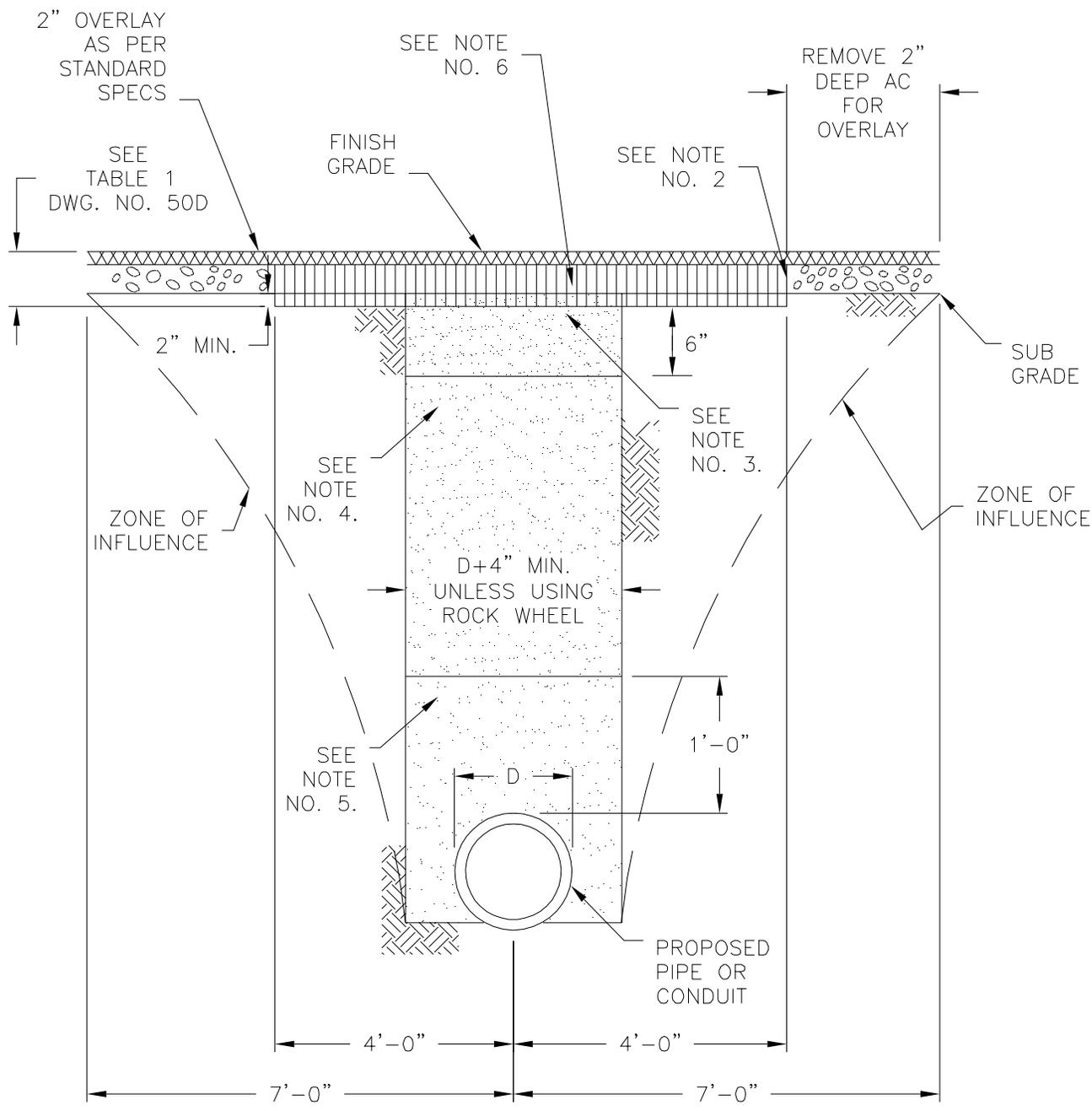
PLAN - CASE 2



NOTES

1. UNDAMAGED PAVEMENT OF 3'-0" OR LESS BETWEEN DAMAGED SECTIONS OF PAVEMENT SHALL BE REMOVED AND REPAVED WITH TRENCH RESTORATION.
2. UNDAMAGED PAVEMENT OF 3'-0" OR LESS BETWEEN EDGE OF TRENCH AND EXISTING JOINT LINE SHALL BE REMOVED AND REPAVED WITH TRENCH RESTORATION.

REV. NO.	REV. DATE	REV. BY	TRENCH SECTION (EXISTING STREET) ADDITIONAL PAVEMENT RESTORATION	REVISION APPROVED BY CITY ENGINEER	
2	6/1/2000	HLE/RH		Finbar J. O'Regan DATE: 01/09/02	
DIGITIZED 7/1/91			CITY OF STOCKTON DEPARTMENT OF PUBLIC WORKS	SUPERCEDES DWG. DATED	DRAWING NO.
DWG. BY	RC	SCALE		10/7/93	50B
CK. BY		NONE			



TYPICAL OVERLAY OVER TRENCH

SEE DWG. NO. 50D FOR TABLE AND NOTES.

REV. NO.	REV. DATE	REV. BY	ALTERNATIVE TRENCH OVERLAY	NEW DRAWING APPROVED BY CITY ENGINEER	
1	6/1/2003	HL/EA		Finbar J. O'Regan DATE: 11/25/03	
DIGITIZED			CITY OF STOCKTON DEPARTMENT OF PUBLIC WORKS	SUPERCEDES DWG. DATED	DRAWING NO.
DWG. BY	HLE	SCALE		01/09/02	50C
CK. BY		NONE			

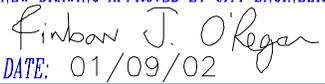
(CONT'D FROM DWG. 50C)

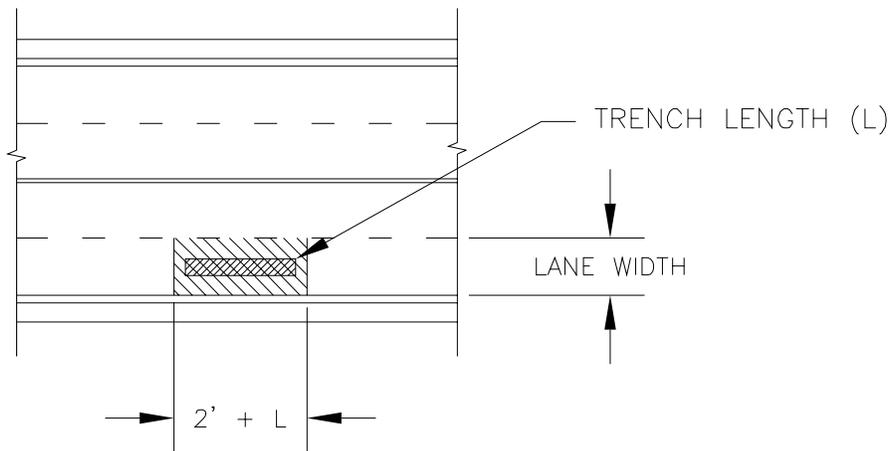
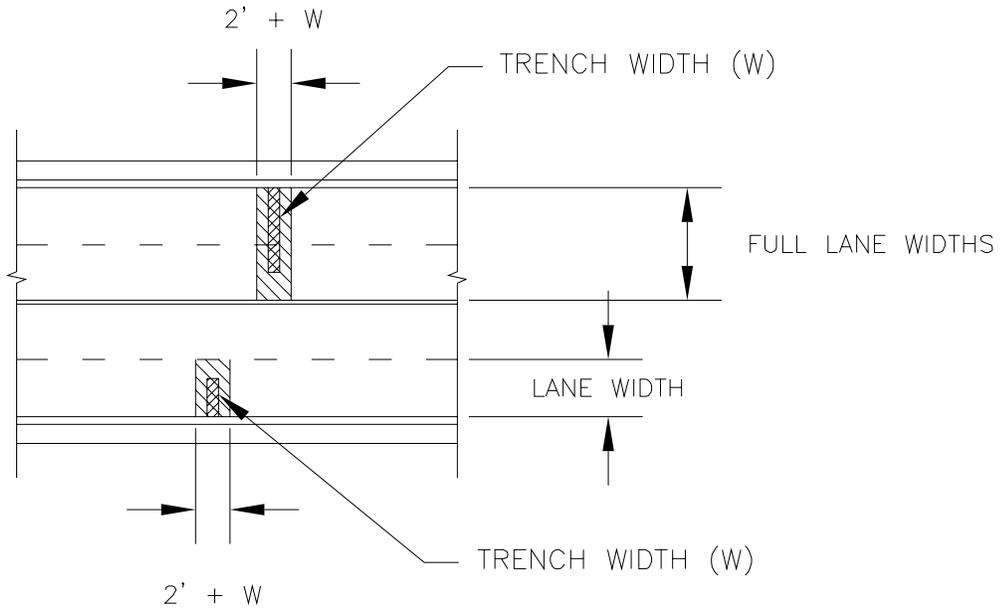
TABLE 1

TI	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0
DEEP LIFT AC (INCHES)	9.50	10.50	11.0	11.0	12.50	13.50	14.50	15.50	16.00	17.00	17.50
R VALUE = 5.0											

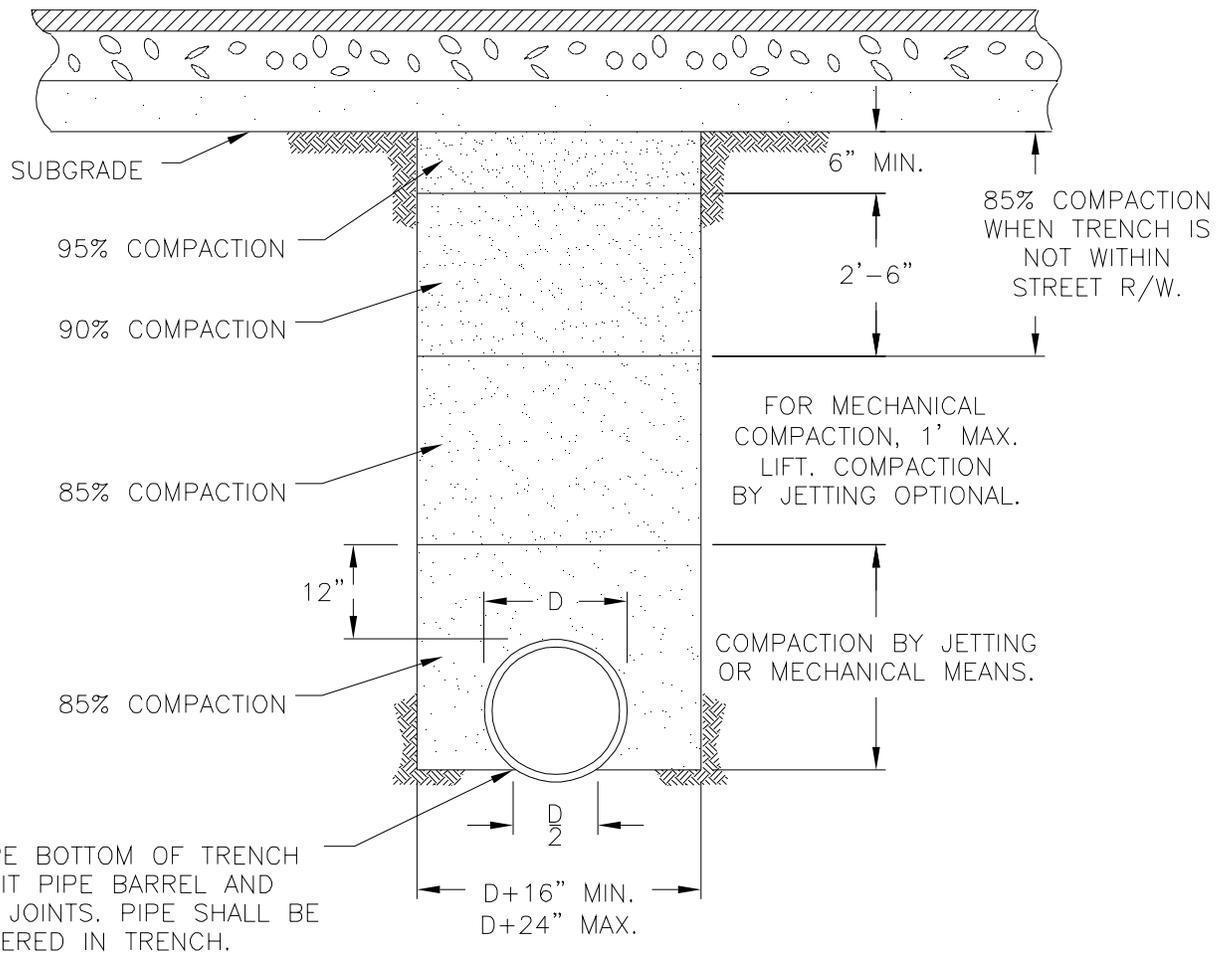
NOTES:

1. IF THE TRENCH IS ADJACENT TO LIP OF GUTTER, ONLY 7'-0" WIDE OVERLAY IS REQUIRED.
2. DIAMOND SAWCUT OR MILL EXISTING PAVEMENT REPAVE TO A CLEAN STRAIGHT EDGE 1/8" ABOVE ADJACENT PAVEMENT.
3. 95% RELATIVE COMPACTION.
4. 90% RELATIVE COMPACTION.
5. 85% RELATIVE COMPACTION. ON TRENCH DEPTHS 18" OR LESS, RELATIVE COMPACTION SHALL BE 95%.
6. CONSTRUCT DEEP LIFT AC PAVEMENT AS PER ABOVE TABLE 1.
7. FOR R VALUES GREATER THAN 5, SUBMIT GEOTECH AND STRUCTURAL DEEP LIFT PAVEMENT CALCULATIONS.
8. CONTACT THE CITY OF STOCKTON, PERMIT CENTER TO ACQUIRE THE LATEST TI VALUE.

REV. NO.	REV. DATE	REV. BY	ALTERNATIVE TRENCH OVERLAY	NEW DRAWING APPROVED BY CITY ENGINEER	
	6/1/2000	HLE/RH		 DATE: 01/09/02	
DIGITIZED			CITY OF STOCKTON DEPARTMENT OF PUBLIC WORKS	SUPERCEDES DWG. DATED	DRAWING NO.
DWG. BY	HLE	SCALE		50D	
CK. BY		NONE			



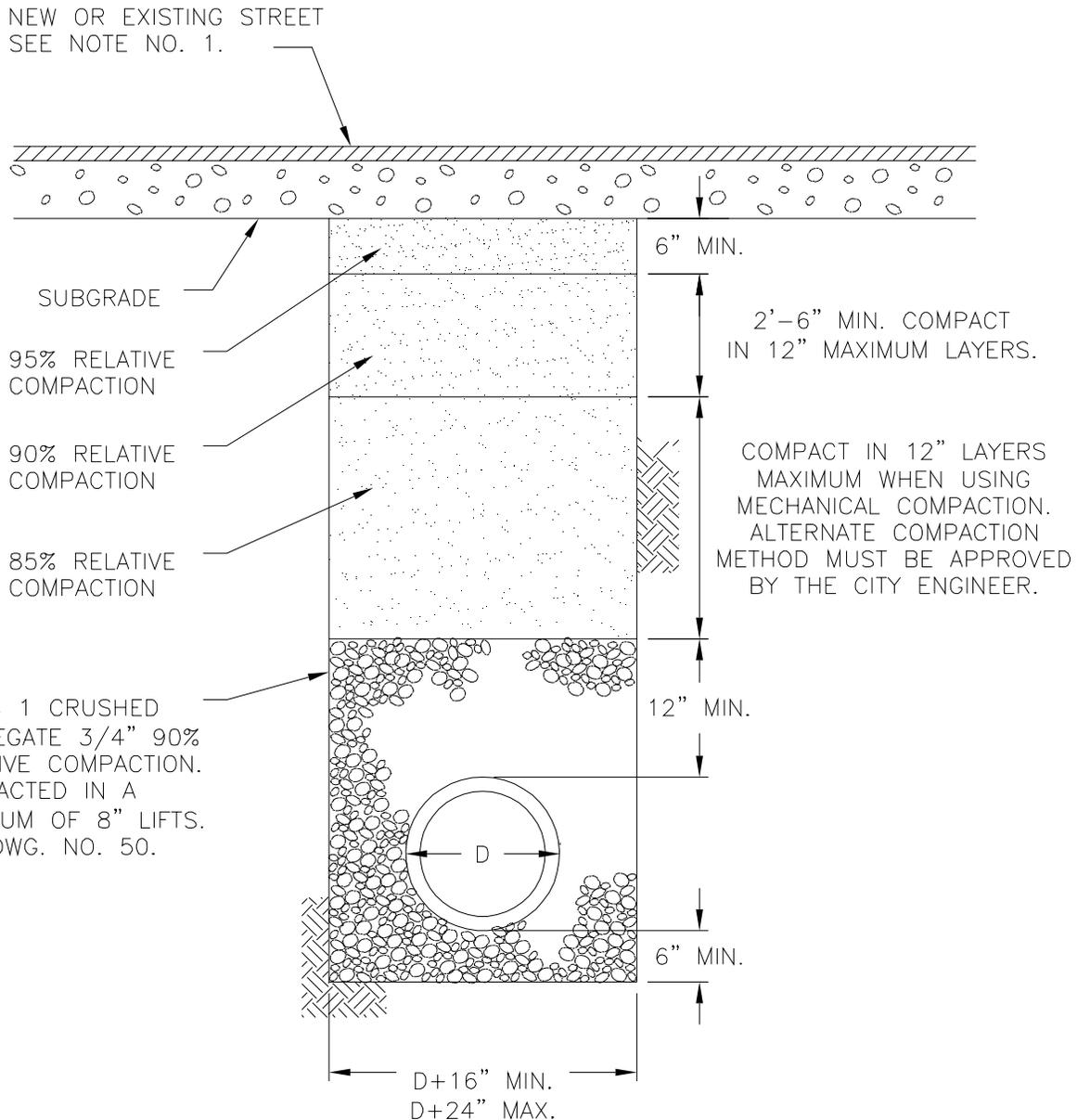
REV. NO.	REV. DATE	REV. BY	MORATORIUM STREET TRENCHES REPAIR LIMITS	REVISION APPROVED BY CITY ENGINEER	
1	6/1/2003	HL/EA		Finbar J. O'Regan DATE: 11/25/03	
DIGITIZED			CITY OF STOCKTON DEPARTMENT OF PUBLIC WORKS	SUPERCEDES DWG. DATED	DRAWING NO.
DWG. BY	WW/RH	SCALE		01/09/02	50E
CK. BY		NONE			



NOTES:

1. THIS PIPE BEDDING DETAIL IS APPLICABLE TO STABLE SOIL CONDITIONS ONLY.
2. BEDDING AROUND PIPE SHALL CONFORM TO C.O.S. STD. DWG. NO. 50.
3. THIS TRENCH SECTION MAY ALSO BE USED FOR NEW STREET RIGHTS OF WAY OR EASEMENT.

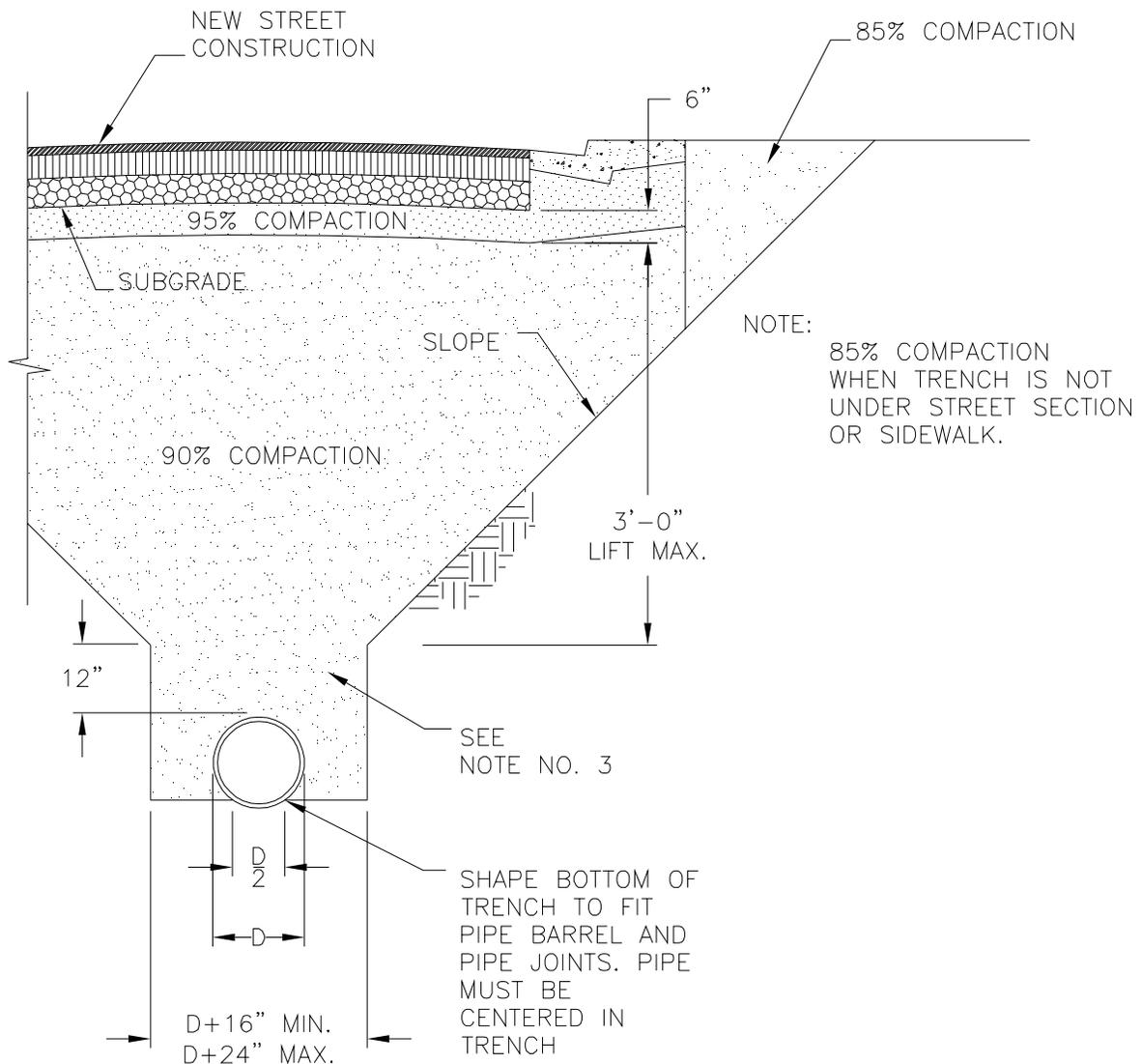
REV. NO.	REV. DATE	REV. BY	TRENCH SECTION NEW STREETS	<i>REVISION APPROVED BY CITY ENGINEER</i>		
4	6/1/2000	HLE/RH		<i>Finbar J. O'Regan</i>		
DIGITIZED		1/1/92	CITY OF STOCKTON DEPARTMENT OF PUBLIC WORKS	DATE: 01/09/02		
DWG. BY	RC	SCALE		<i>SUPERCEDES DWG. DATED 2/23/95</i>	DRAWING NO.	
CK. BY		NONE			51	



NOTES:

1. IF CONSTRUCTED IN AN EXISTING STREET, THE PAVEMENT AND SUBGRADE SHALL BE SUBJECT TO THE CONDITIONS SHOWN ON STANDARD DWG. NO. 50.
2. THIS PIPE BEDDING DETAIL SUITABLE TO STABLE SOIL CONDITIONS ONLY.
3. REFER TO SECTION 71 IN THE STANDARD SPECIFICATIONS.
4. HDPE = HIGH DENSITY POLYETHYLENE PIPE.

REV. NO.	REV. DATE	REV. BY	TRENCH SECTION	<i>REVISION APPROVED BY CITY ENGINEER</i>	
5	6/1/2000	HLE/RH		<i>Finbar J. O'Regan</i>	
DIGITIZED	7/1/91		HDPE PIPE	DATE: 01/09/02	
DWG. BY	RC	SCALE		CITY OF STOCKTON	
CK. BY	91	NONE	DEPARTMENT OF PUBLIC WORKS		SUPERCEDES DWG. DATED 2/23/95
					DRAWING NO. 51A

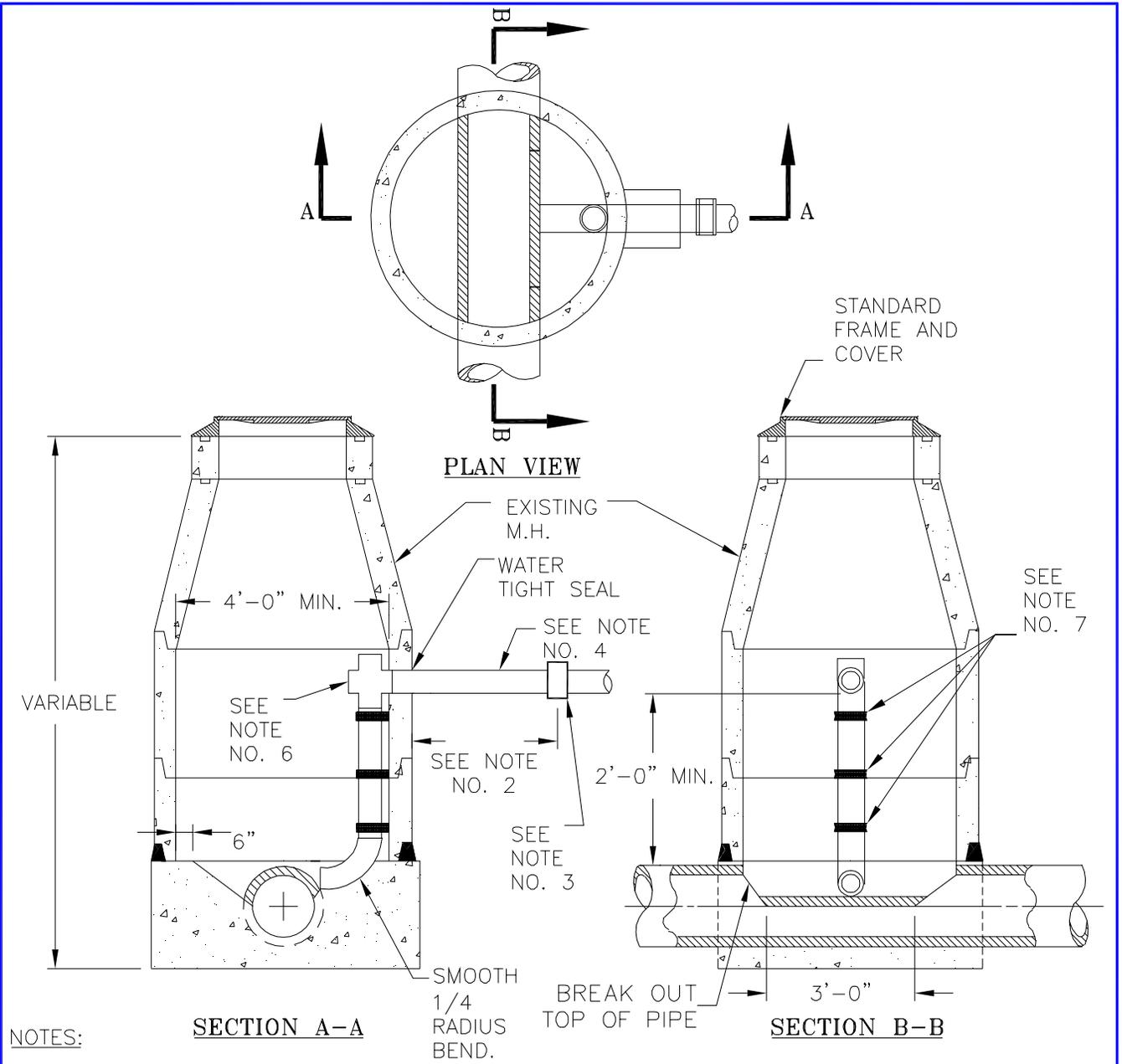


NOTE:
85% COMPACTION
WHEN TRENCH IS NOT
UNDER STREET SECTION
OR SIDEWALK.

NOTES:

1. BEDDING AROUND PIPE SHALL CONFORM TO C.O.S. STD. DWG. NO. 50.
2. THIS TRENCH SECTION MAY BE USED FOR UNIMPROVED STREET RIGHTS OF WAY OR EASEMENTS
3. MATERIAL INDICATED TO BE IMPORTED SAND OR APPROVED CLEAN GRANULAR MATERIAL, FREE OF ALL LUMPS AND DEBRIS. GRADING SHALL BE 100% PASSING A 3/4" SIEVE AND 5%-20% PASSING A #200 SIEVE WITH MINIMUM SAND EQUIVALENT EQUAL TO 20.

REV. NO.	REV. DATE	REV. BY	OPEN CUT TRENCH SECTION NEW STREETS	REVISION APPROVED BY CITY ENGINEER	
4	6/1/2000	HLE/RH		Finbar J. O'Regan DATE: 01/09/02	
DIGITIZED	7/1/90		CITY OF STOCKTON DEPARTMENT OF PUBLIC WORKS	SUPERCEDES DWG. DATED	DRAWING NO.
DWG. BY	RC	SCALE		2/23/95	51B
CK. BY		NONE			



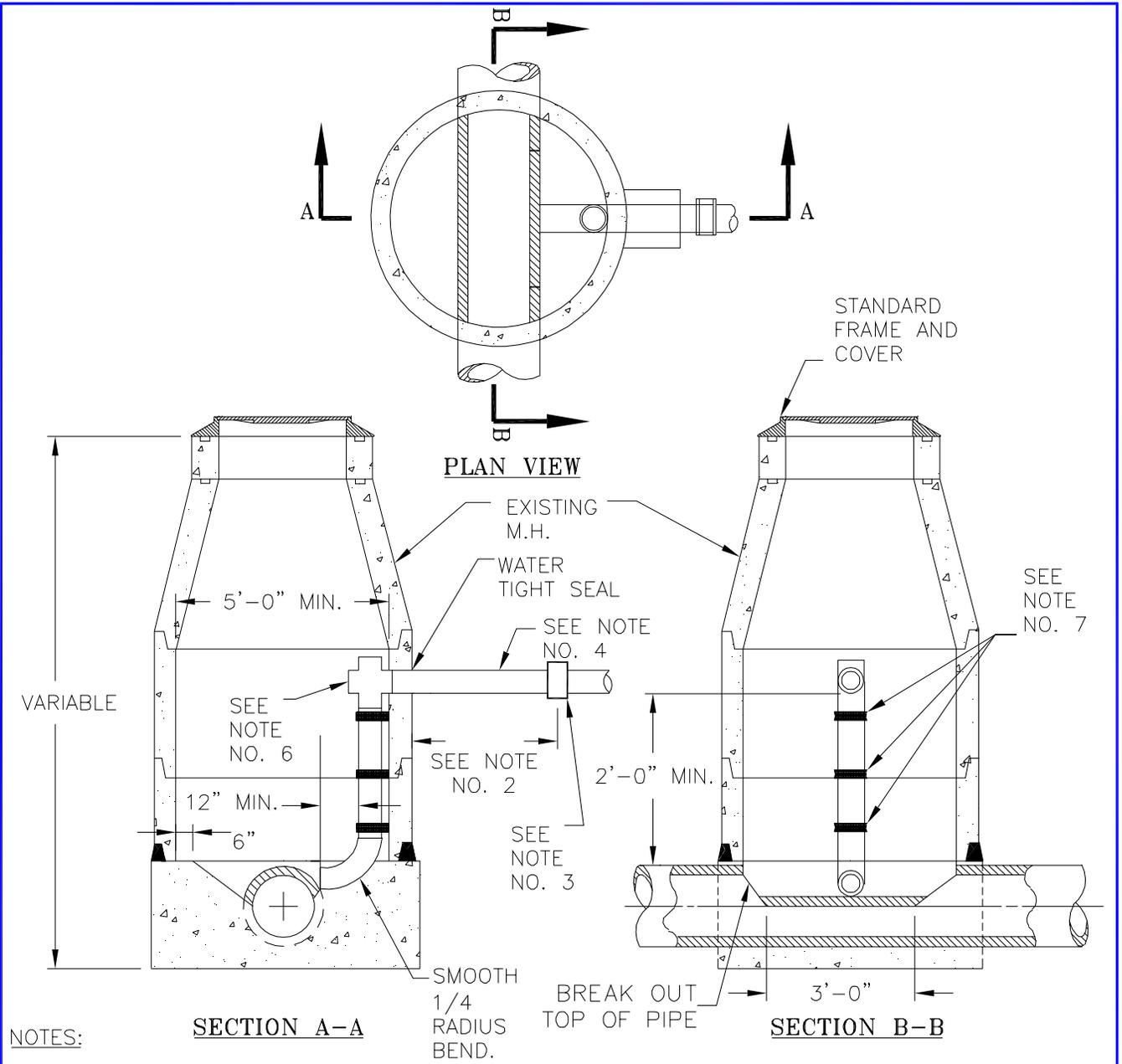
NOTES:

1. THIS INSTALLATION SHALL BE USED ON EXISTING M.H. WHERE THE DIFFERENCE IN ELEVATION BETWEEN THE TOP OF THE OUTLET PIPE AND THE INVERT OF THE FEEDER OR COLLECTOR SEWER EXCEED 24".
2. 24" MAXIMUM.
3. FLEXIBLE JOINT - BELL & SPIGOT OR CAULDER COUPLING. SOLVENT WELDED JOINT NOT PERMITTED.
4. THIS DETAIL SHALL ONLY BE USED FOR NEW SANITARY SEWER PIPES 12" OR LESS. PIPES LARGER THAN 12" SHALL REQUIRE SEPARATE APPROVAL BY THE CITY ENGINEER. P.V.C. OR A.B.S. PIPE MUST BE USED INSIDE M.H.
5. INTERIOR OF M.H. TO BE COATED IN ACCORDANCE WITH SECTION 71-1.09 OF THE STANDARD SPECIFICATIONS.
6. OPEN END AND CROSS FITTING.
7. STAINLESS STEEL BANDS ANCHORED WITH STAINLESS STEEL BOLTS TO WALL 24" O.C. (TWO BANDS MIN.)

REV. NO.	REV. DATE	REV. BY
3	6/1/2000	HLE/RH
DIGITIZED		1/1/92
DWG. BY	RC	SCALE
CK. BY		NONE

**INSIDE SANITARY SEWER DROP
 IN EXISTING MAINTENANCE HOLE**
CITY OF STOCKTON
DEPARTMENT OF PUBLIC WORKS

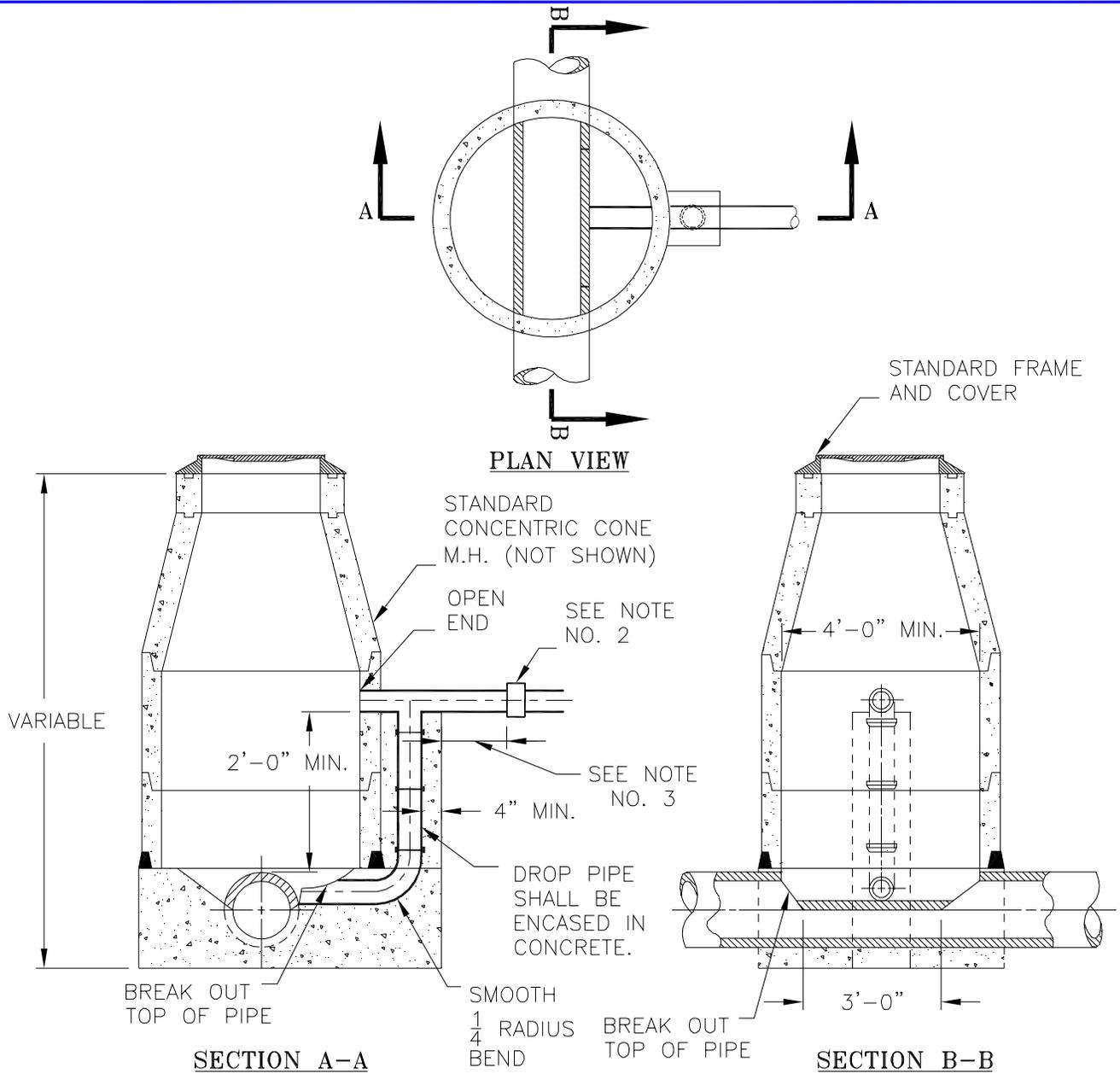
REVISION APPROVED BY CITY ENGINEER	
<i>Finbar J. O'Regan</i>	
DATE: 01/09/02	
SUPERCEDES DWG. DATED	DRAWING NO.
2/23/95	52A



NOTES:

1. THIS INSTALLATION SHALL BE USED ON NEW M.H. WHERE THE DIFFERENCE IN ELEVATION BETWEEN THE TOP OF THE OUTLET PIPE AND THE INVERT OF THE FEEDER OR COLLECTOR SEWER EXCEED 24".
2. 24" MAXIMUM.
3. FLEXIBLE JOINT - BELL & SPIGOT OR CAULDER COUPLING. SOLVENT WELDED JOINT NOT PERMITTED.
4. THIS DETAIL SHALL ONLY BE USED FOR NEW SANITARY SEWER PIPES 12" OR LESS. PIPES LARGER THAN 12" SHALL REQUIRE SEPARATE APPROVAL BY THE CITY ENGINEER. P.V.C. OR A.B.S. PIPE MUST BE USED INSIDE M.H.
5. INTERIOR OF M.H. TO BE COATED IN ACCORDANCE WITH SECTION 71-1.09 OF THE STANDARD SPECIFICATIONS.
6. OPEN END AND CROSS FITTING.
7. STAINLESS STEEL BANDS ANCHORED WITH STAINLESS STEEL BOLTS TO WALL 24" O.C. (TWO BANDS MIN.)

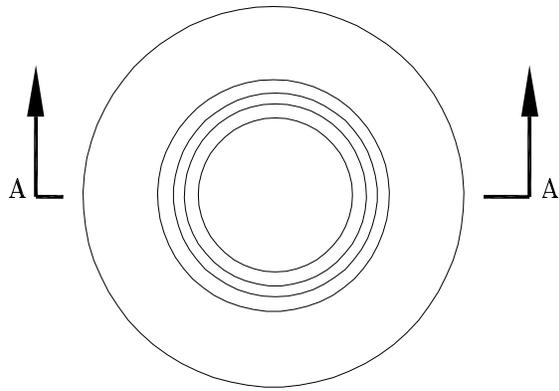
<i>REV. NO.</i>	<i>REV. DATE</i>	<i>REV. BY</i>	INSIDE SANITARY SEWER DROP NEW MAINTENANCE HOLE	<i>REVISION APPROVED BY CITY ENGINEER</i>
3	6/1/2000	HLE/RH		<i>Finbar J. O'Regan</i>
<i>DIGITIZED</i>	1/1/92			DATE: 01/09/02
<i>DWG. BY</i>	RC	<i>SCALE</i>	CITY OF STOCKTON	<i>SUPERCEDES DWG. DATED</i>
<i>CK. BY</i>		NONE	DEPARTMENT OF PUBLIC WORKS	2/23/95
				DRAWING NO. 52B



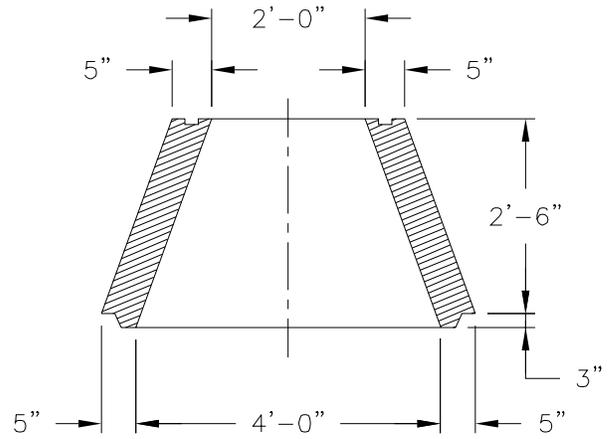
NOTES:

1. THIS INSTALLATION SHALL BE USED ON NEW M.H. WHERE THE DIFFERENCE IN ELEVATION BETWEEN THE TOP OF THE OUTLET PIPE AND THE INVERT OF THE FEEDER OR COLLECTOR SEWER EXCEEDS 24".
2. FLEXIBLE JOINT - BELL AND SPIGOT OR CAULDER COUPLING. SOLVENT WELDED JOINT NOT PERMITTED.
3. 24" MAXIMUM.
4. THIS DETAIL SHALL ONLY BE USED FOR DROP PIPES 12" OR LESS. PIPES LARGER THAN 12" SHALL REQUIRE INDIVIDUAL DESIGN AND APPROVAL BY THE CITY ENGINEER.
5. INTERIOR OF M.H. TO BE COATED IN ACCORDANCE WITH SECTION 71-1.09 OF THE STANDARD SPECIFICATIONS.

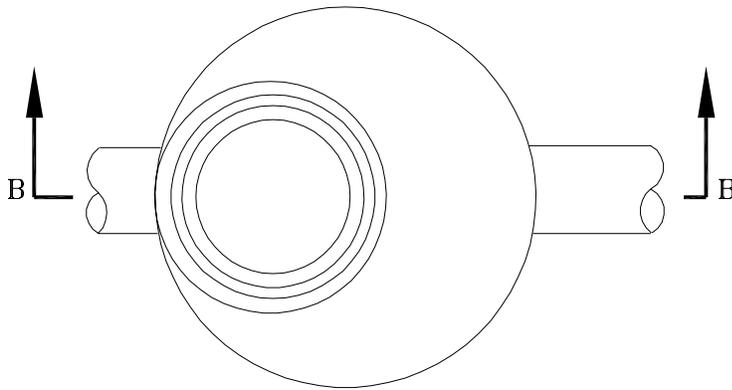
REV. NO.	REV. DATE	REV. BY	OUTSIDE SANITARY SEWER DROP IN NEW MAINTENANCE HOLE	REVISION APPROVED BY CITY ENGINEER <i>Finbar J. O'Regan</i> DATE: 01/09/02	
2	6/1/2000	HLE/RH		SUPERCEDES DWG. DATED 2/23/95	
DIGITIZED 1/1/92			CITY OF STOCKTON DEPARTMENT OF PUBLIC WORKS	DRAWING NO. 52	
DWG. BY	RC	SCALE		NONE	
CK. BY					



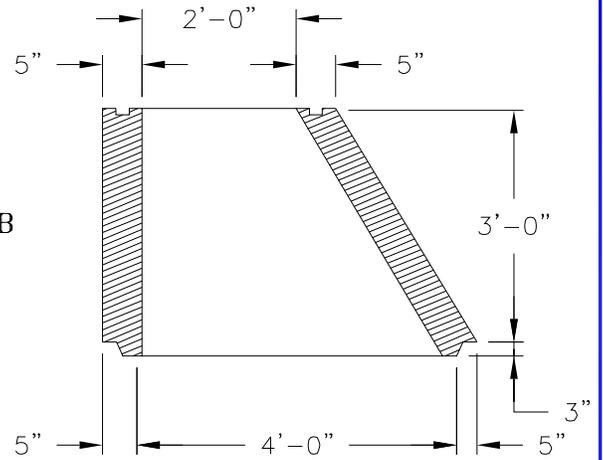
CONCENTRIC CONE
(STANDARD INSTALLATION)



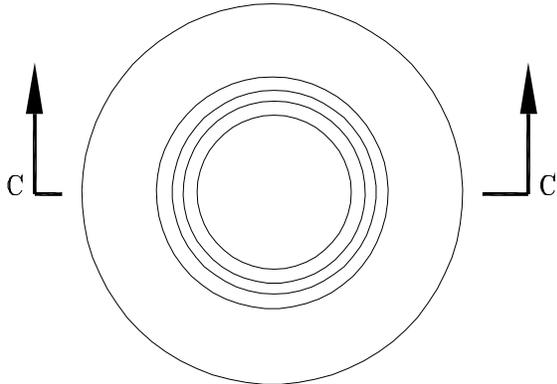
SECTION A-A



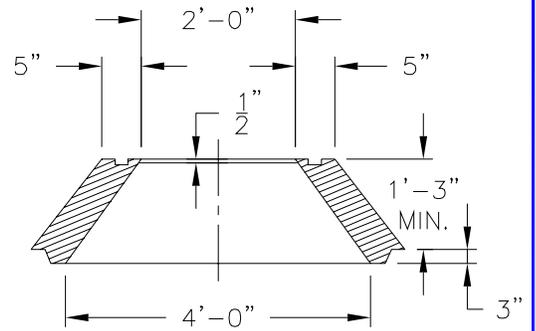
ECCENTRIC CONE
(USE WITH PRIOR APPROVAL)



SECTION B-B



CONCENTRIC SHORT CONE



SECTION C-C

NOTES:

(USE WITH PRIOR APPROVAL)

1. INTERIOR OF CONE TO BE COATED IN ACCORDANCE WITH SECTION 71-1.09A OF THE STANDARD SPECIFICATIONS.
2. ALL HANDLING HOLES SHALL BE PLUGGED WITH CONCRETE MORTAR AFTER CONE INSTALLATION

REV. NO.	REV. DATE	REV. BY	PRE-CAST CONCRETE MAINTENANCE HOLE CONES	REVISION APPROVED BY CITY ENGINEER	
3	4/8/93	SA		Finbar J. O'Regan	
DIGITIZED 1/1/92			CITY OF STOCKTON DEPARTMENT OF PUBLIC WORKS	DATE: 01/09/02	
DWG. BY	RC	SCALE		SUPERCEDES DWG. DATED 11/8/80	DRAWING NO. 53
CK. BY		NONE			

LETTERS SPECIFIED TO BE 2" HIGH LOCATED IN THIS AREA, (i.e., SANITARY SEWER, STORM DRAIN, OR SANITARY, STORM, WATER).

CAST IRON SKID RESISTANT COVER

CAST IRON FRAME

SEE NOTE NO. 1

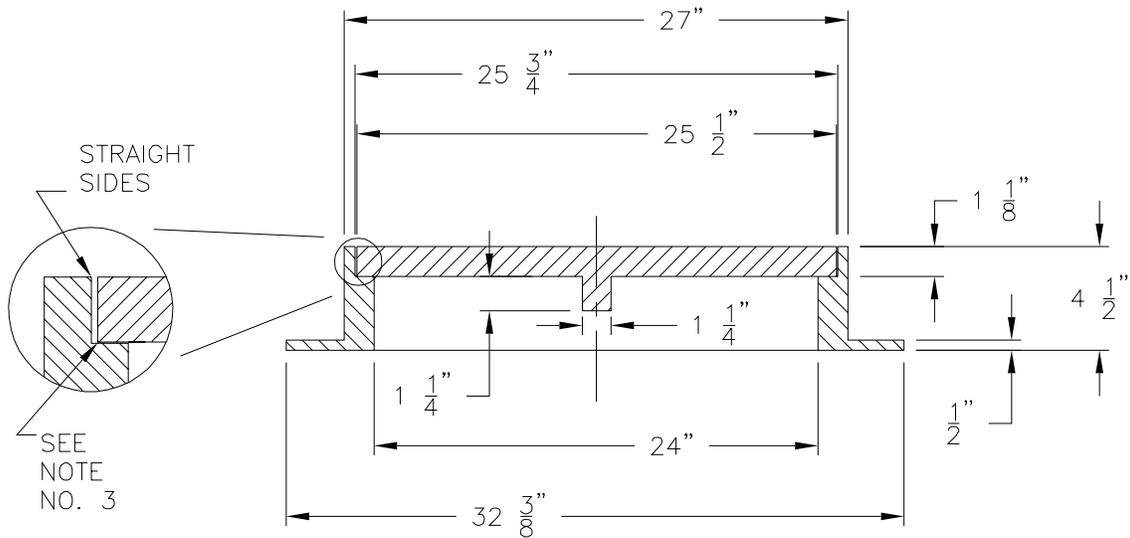
ADDITIONAL PICK HOLE 1" x 1 1/4"

PRY HOLE

1 1/2" DIA. GROUT HOLES. 3 HOLES EQUALLY SPACED.

PLAN

FOUNDRY, COUNTRY OF ORIGIN AND DATE OF MANUFACTURE IN THESE LOCATIONS.

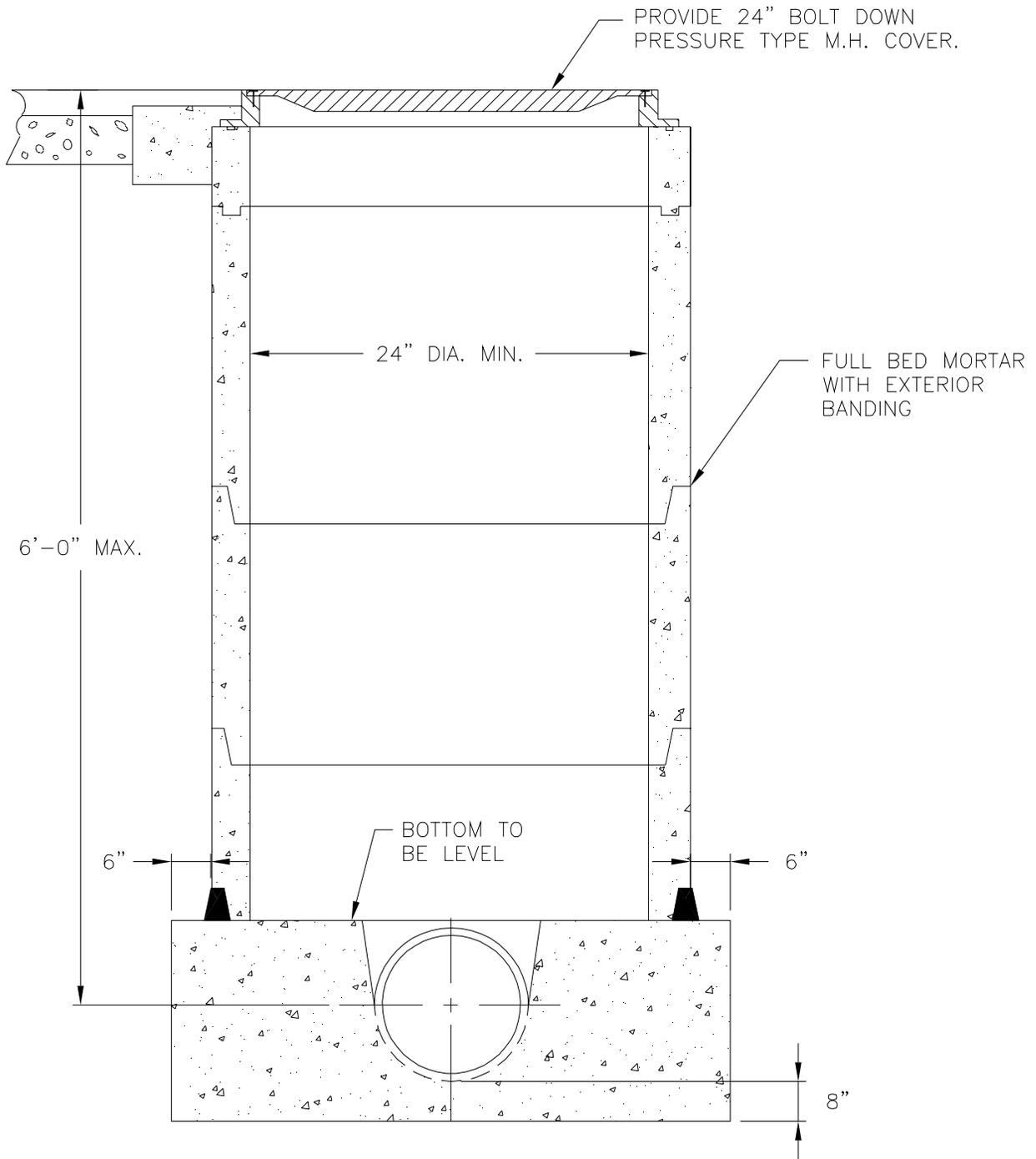


SECTION

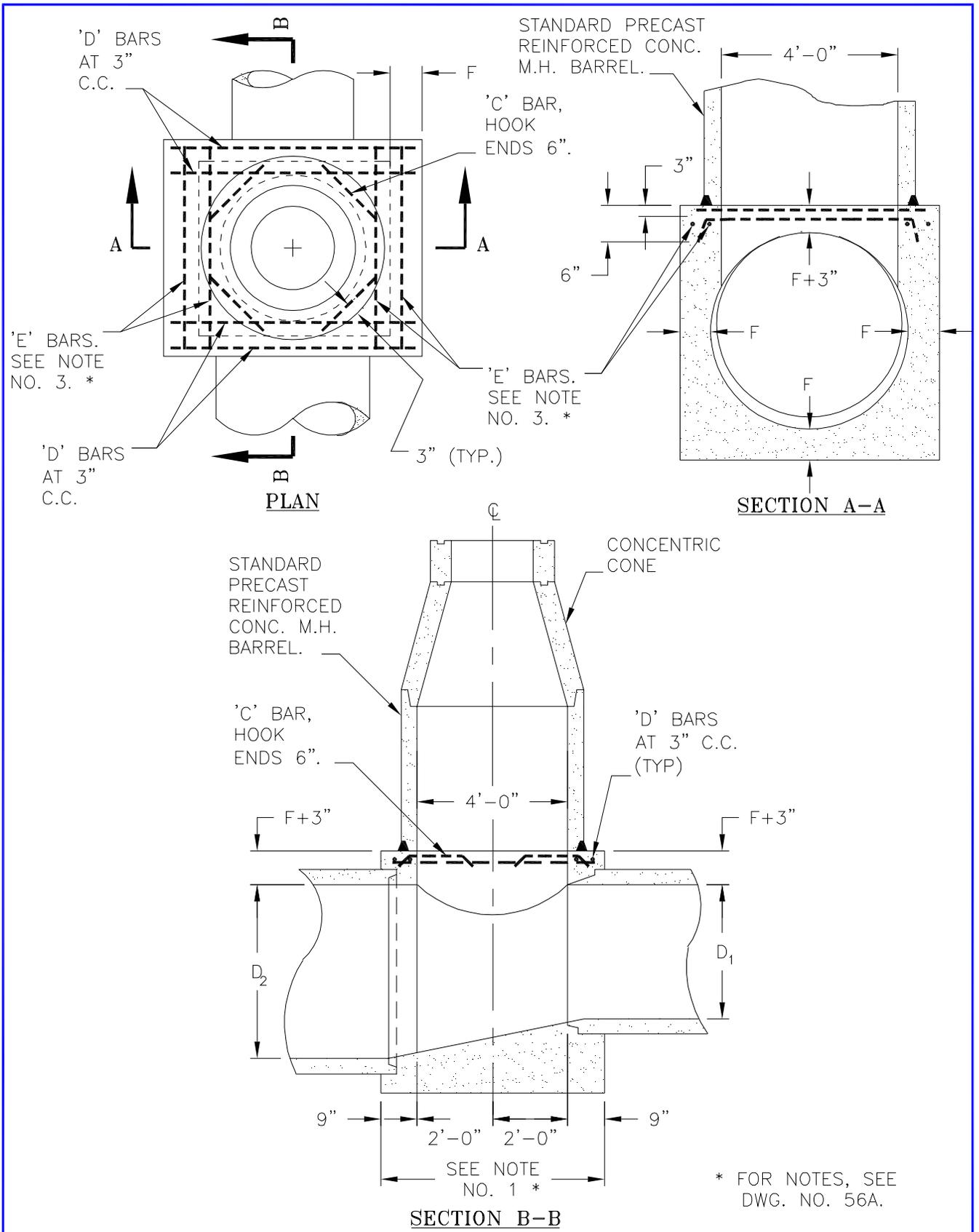
NOTES:

1. M.H. FRAME AND COVER TO BE "PINKERTON TYPE" A-624 OR APPROVED EQUAL. M.H. COVERS FOR STORM DRAIN SHALL HAVE 4 VENT HOLES CORED IN THE COVER.
2. COVER SHALL BE DESIGNED TO WITHSTAND HS-20 HIGHWAY LOADING.
3. FRAME AND COVER SHALL BE FULLY MACHINED TO ASSURE INTERCHANGEABILITY AND A CLOSE, QUIET FIT.
4. SEE SECTION 75-1.02A. OF THE STANDARD SPECIFICATIONS.

REV. NO.	REV. DATE	REV. BY	MAINTENANCE HOLE FRAME AND COVER	REVISION APPROVED BY CITY ENGINEER	
6	6/1/2003	HL/EA		Finbar J. O'Regan DATE: 11/25/03	
DIGITIZED	7/1/90		CITY OF STOCKTON DEPARTMENT OF PUBLIC WORKS	SUPERCEDES DWG. DATED	DRAWING NO.
DWG. BY	RC	SCALE		01/09/02	54
CK. BY		NONE			



REV. NO.	REV. DATE	REV. BY	PRETREATMENT SAMPLING STATION HOLE--ONSITE ONLY	NEW DRAWING APPROVED BY CITY ENGINEER	
3	6/1/2000	HLE/RH		Finbar J. O'Regan DATE: 01/09/02	
DIGITIZED		1/1/92	CITY OF STOCKTON DEPARTMENT OF PUBLIC WORKS	SUPERCEDES DWG. DATED	DRAWING NO.
DWG. BY	RC	SCALE		6/1/94	55A
CK. BY		NONE			



REV. NO.	REV. DATE	REV. BY	TYPE 2 MAINTENANCE HOLE FOR PIPES 36" DIA. AND LARGER	REVISION APPROVED BY CITY ENGINEER		
4	6/1/2000	HLE/RH		Finbow J. O'Regan		
DIGITIZED	1/1/92		CITY OF STOCKTON DEPARTMENT OF PUBLIC WORKS	DATE:	01/09/02	
DWG. BY	HLE	SCALE		SUPERCEDES DWG. DATED	DRAWING NO.	
CK. BY		NONE		2/23/95	56	

(CONT'D FROM DWG. 56)

TABLE VALUES FOR 'F'			
D ₂	'F'	D ₂	'F'
36"	11"	63"	10"
39"	10"	66"	10 $\frac{1}{4}$ "
42"	8 $\frac{3}{4}$ "	69"	10 $\frac{3}{4}$ "
45"	7 $\frac{3}{4}$ "	72"	11"
48"	8"	78"	11 $\frac{3}{4}$ "
51"	8 $\frac{1}{2}$ "	84"	12 $\frac{1}{2}$ "
54"	9"	90"	13 $\frac{1}{4}$ "
57"	9 $\frac{1}{4}$ "	96"	14"
60"	9 $\frac{1}{2}$ "		

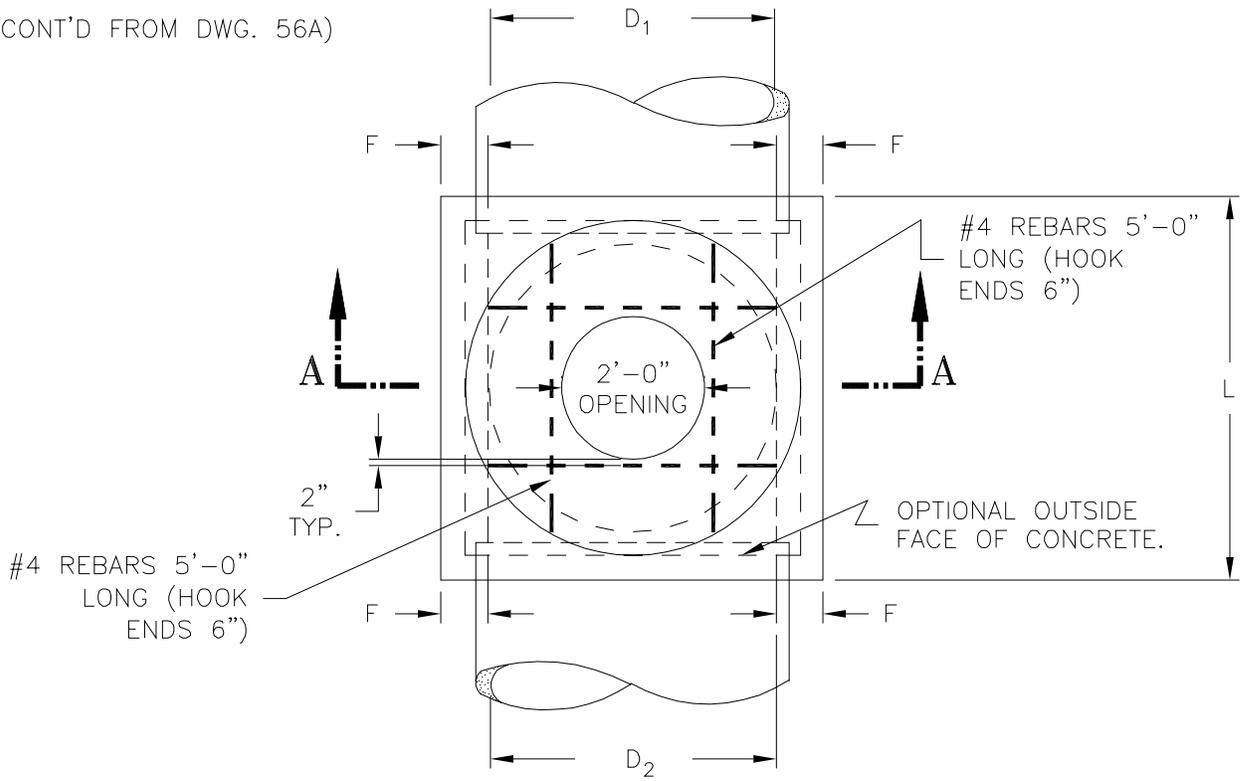
(SEE DRAWING NO. 56B, 56C FOR ADDITIONAL DETAILS)

NOTES:

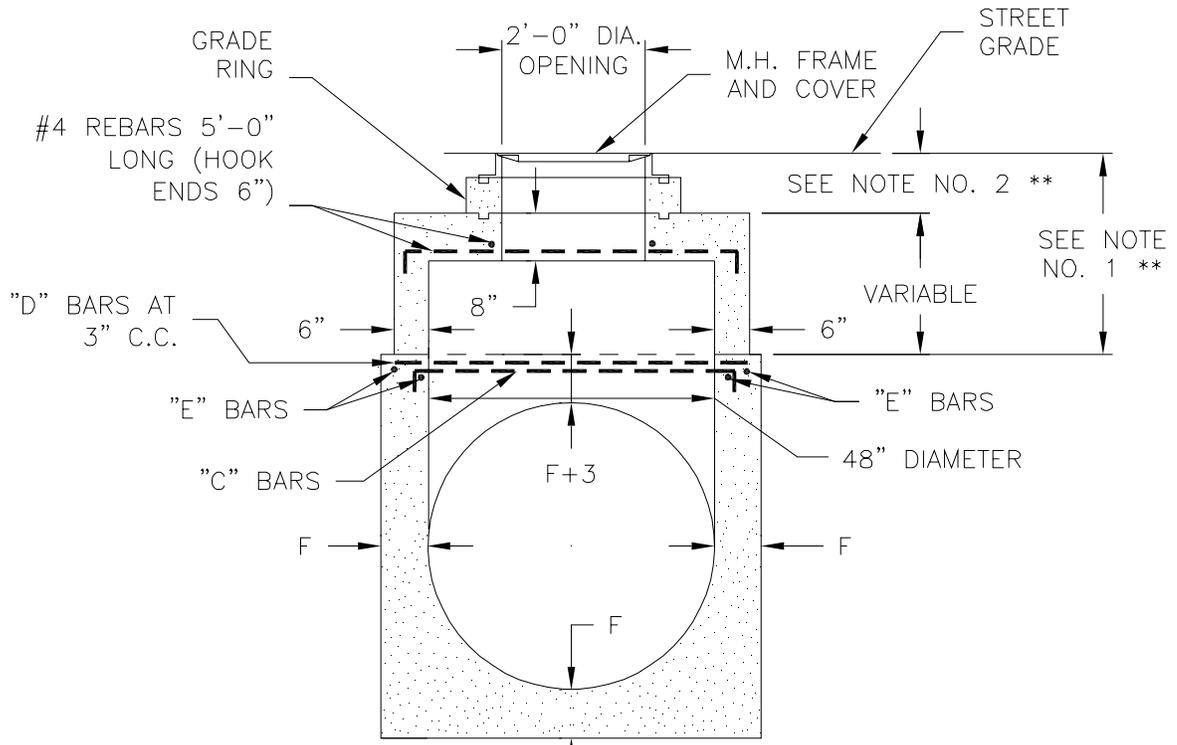
1. LENGTH SHALL BE 5'-6" UNLESS OTHERWISE SHOWN ON THE IMPROVEMENT PLANS.
2. THICKNESS OF DECK SHALL VARY WHEN NECESSARY TO PROVIDE LEVEL SEAT FOR M.H. BARREL.
3. REINFORCING STEEL SHALL BE ROUND, DEFORMED BARS, 2" CLEAR MINIMUM FROM FACE OF CONCRETE. SIZES AND LENGTH ARE SHOWN IN TABLE ON DRAWING 56C.
4. CONCRETE SHALL BE 3000 LBS. PER SQ. INCH MINIMUM AT 28 DAYS.
5. RINGS, REDUCERS, AND M.H. BARRELS FOR ACCESS SHAFT SHALL BE SEATED IN CONCRETE. MORTAR COMPOSED OF ONE PART CEMENT TO 1-1/2" PARTS SAND BY VOLUME AND NEATLY POINTED OR WIPED INSIDE THE SHAFT.
6. FLOOR OF M.H. SHALL BE STEEL TROWELED TO SPRING LINE.
7. BASE OF M.H. SHALL BE POURED IN ONE CONTINUOUS OPERATION, EXCEPT THAT THE CONTRACTOR SHALL HAVE THE OPTION OF PLACING A CONSTRUCTION JOINT AT THE SPRING LINE, WITH A LONGITUDINAL KEYWAY.
8. INTERIOR OF SANITARY SEWER M.H.'S SHALL BE COATED IN ACCORDANCE WITH SECTION 71-1.09 OF THE STANDARD SPECIFICATIONS.
9. M.H. STATIONING ON IMPROVEMENT PLAN SHALL BE TO THE CENTER OF M.H.

REV. NO.	REV. DATE	REV. BY	TYPE 2 MAINTENANCE HOLE FOR PIPES 36" DIA. AND LARGER	REVISION APPROVED BY CITY ENGINEER	
4	6/1/2000	HLE/RH		Finbar J. O'Regan DATE: 01/09/02	
DIGITIZED		1/1/92	CITY OF STOCKTON DEPARTMENT OF PUBLIC WORKS	SUPERCEDES DWG. DATED	DRAWING NO.
DWG. BY	RC	SCALE		2/23/95	56A
CK. BY		NONE			

(CONT'D FROM DWG. 56A)



PLAN



SECTION A-A

** FOR NOTES, SEE DWG. NO. 56C.

REV. NO.	REV. DATE	REV. BY	TYPE 2 MAINTENANCE HOLE FOR PIPES 36" DIA. AND LARGER	REVISION APPROVED BY CITY ENGINEER		
4	6/1/2000	HLE/RH		Finbar J. O'Regan		
DIGITIZED	1/1/92		CITY OF STOCKTON DEPARTMENT OF PUBLIC WORKS	DATE:	01/09/02	
DWG. BY	RC	SCALE		SUPERCEDES DWG. DATED	DRAWING NO.	
CK. BY		NONE		2/23/95	56B	

(CONT'D FROM DWG. 56B)

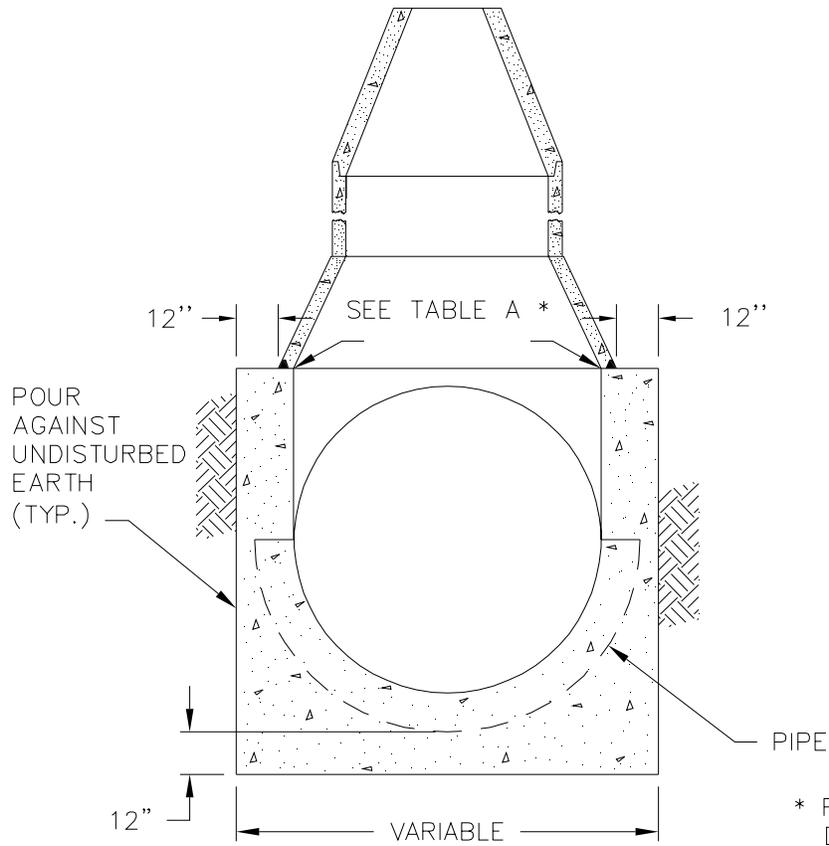
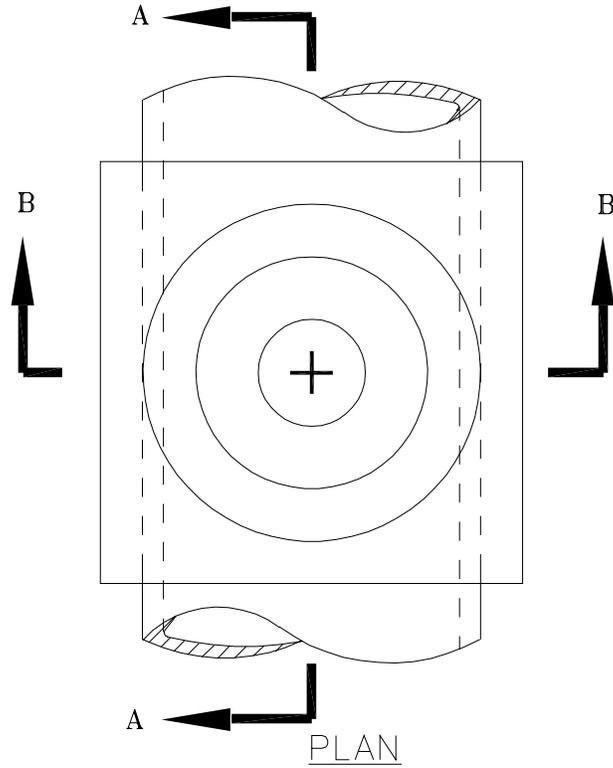
NOTES:

1. WHEN DEPTH OF MAINTENANCE HOLE FROM STREET GRADE TO TOP OF BOX IS LESS THAN 2'-10.5" FOR PAVED STREETS OR 3'-6" FOR UNPAVED STREETS. CONSTRUCT MONOLITHIC SHAFT AS SHOWN. THE CONTRACTOR SHALL HAVE THE OPTION OF CONSTRUCTING SHAFT AS SHOWN FOR ANY DEPTH OF MAINTENANCE HOLE.
2. PER SECTION A-A ABOVE, IN PAVED STREETS THE MAXIMUM HEIGHT SHALL BE 10.5" AND THE MINIMUM HEIGHT 7.5"; IN UNPAVED STREETS THE MAXIMUM HEIGHT SHALL BE 16.5" AND THE MINIMUM HEIGHT 13.5".

REINFORCING STEEL FOR M.H. BOX									
D ₂	'C' BAR  HOOK ENDS 6"			'D' BAR 			'E' BAR 		
DIA.	NO.REQ'D	SIZE	LENGTH	NO.REQ'D	SIZE	LENGTH	NO.REQ'D	SIZE	LENGTH
36"	2	# 4	6'-4"	4	# 4	4'-6"	2	# 4	5'-2"
39"	2	# 4	6'-4"	4	# 4	4'-7"	2	# 4	5'-2"
42"	2	# 4	6'-4"	4	# 5	4'-7 $\frac{1}{2}$ "	2	# 4	5'-2"
45"	2	# 4	6'-4"	4	# 5	4'-8 $\frac{1}{2}$ "	2	# 4	5'-2"
48"	2	# 4	6'-4"	4	# 5	5'-0"	4	# 4	5'-2"
51"	2	# 4	6'-4"	4	# 5	5'-4"	4	# 4	5'-2"
54"	2	# 4	6'-4"	4	# 5	5'-8"	4	# 4	5'-2"
57"	2	# 4	6'-4"	4	# 5	5'-11 $\frac{1}{2}$ "	4	# 4	5'-2"
60"	2	# 4	6'-4"	4	# 5	6'-3"	4	# 4	5'-2"
63"	2	# 4	6'-4"	4	# 5	6'-7"	4	# 4	5'-2"
66"	2	# 4	6'-4"	4	# 5	6'-10 $\frac{1}{2}$ "	4	# 4	5'-2"
69"	2	# 4	6'-4"	4	# 5	7'-2 $\frac{1}{2}$ "	4	# 4	5'-2"
72"	2	# 4	6'-4"	4	# 5	7'-6"	4	# 4	5'-2"
78"	2	# 4	6'-4"	4	# 5	8'-1 $\frac{1}{2}$ "	4	# 4	5'-2"
84"	2	# 4	6'-4"	4	# 5	8'-9"	4	# 4	5'-2"
90"	2	# 4	6'-4"	4	# 6	9'-4 $\frac{1}{2}$ "	4	# 4	5'-2"
96"	2	# 4	6'-4"	4	# 6	10'-0"	4	# 4	5'-2"

3. INTERIOR OF SANITARY SEWER MAINTENANCE HOLE SHALL BE COATED IN ACCORDANCE WITH SECTION 71-1.09 OF THE STANDARD SPECIFICATIONS.

REV. NO.	REV. DATE	REV. BY	TYPE 2 MAINTENANCE HOLE FOR PIPES 36" DIA. AND LARGER	REVISION APPROVED BY CITY ENGINEER	
4	6/1/2000	HLE/RH		Finbar J. O'Regan	
DIGITIZED		1/1/92	CITY OF STOCKTON DEPARTMENT OF PUBLIC WORKS	DATE:	01/09/02
DWG. BY	RC	SCALE		SUPERCEDES DWG. DATED	DRAWING NO.
CK. BY		NONE		2/23/95	56C



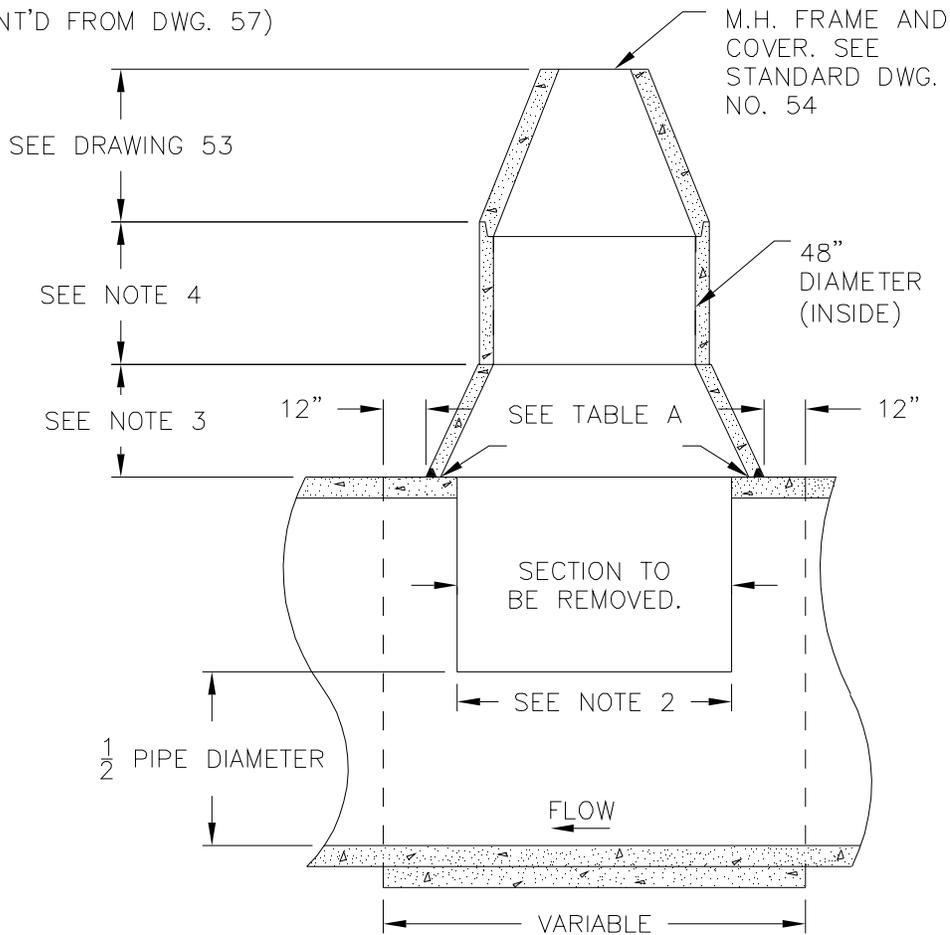
REV. NO.	REV. DATE	REV. BY
2	2/23/95	KB/DE
DIGITIZED		1/1/92
DWG. BY	RC	SCALE
CK. BY		NONE

TYPE 3 MAINTENANCE HOLE FOR
PIPES 36" DIA. AND LARGER

CITY OF STOCKTON
DEPARTMENT OF PUBLIC WORKS

REVISION APPROVED BY CITY ENGINEER	
<i>Finbar J. O'Regan</i>	
DATE: 01/09/02	
SUPERCEDES DWG. DATED	DRAWING NO.
12/31/80	57

(CONT'D FROM DWG. 57)



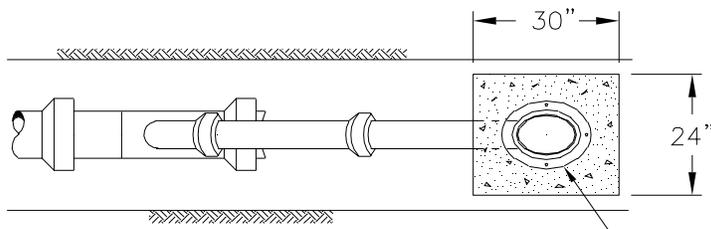
SECTION A-A

	TABLE A		
PIPE DIAMETER	36" THRU 39"	42" THRU 48"	54" THRU 72"
CONE DIAMETER	48"	60"	72"

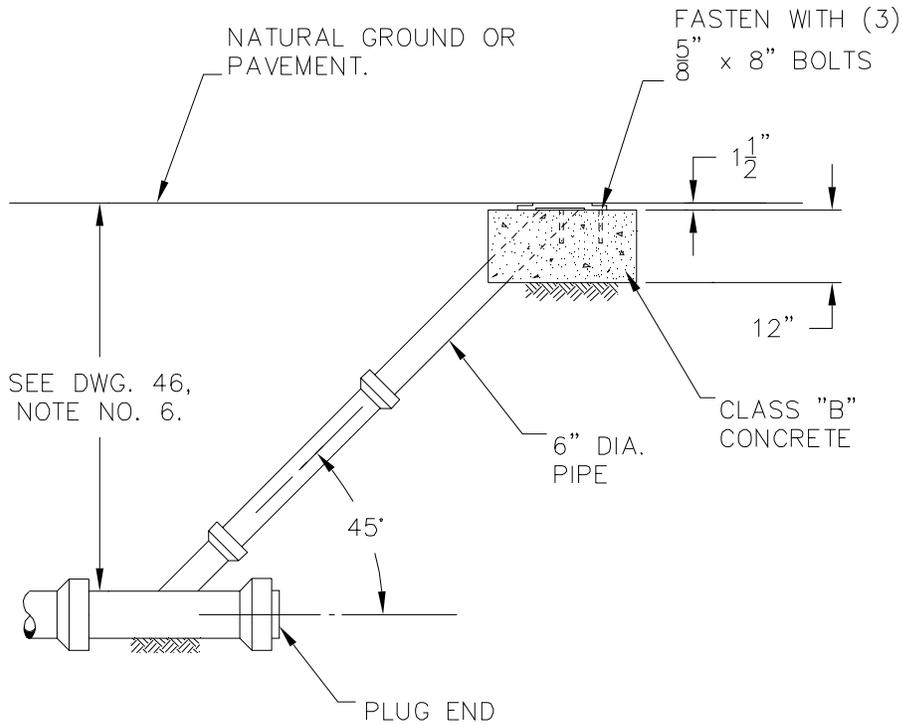
NOTES:

1. ALL CONE SECTIONS TO CONFORM TO A.S.T.M. C-478.
2. MAINTENANCE HOLE TO BE PLACED SUCH THAT EXISTING, OR CAST IN PLACE PIPE, RUNS STRAIGHT THROUGH, BREAK OUT TOP OF PIPE TO A LENGTH EQUAL TO THE PIPE DIAMETER TO PIPE SPRING LINE.
3. INSTALL CONCENTRIC PRE CAST CONCRETE CONE.
4. IF REQUIRED, INSTALL STANDARD 48" PRE CAST CONCRETE VERTICAL SECTIONS TO MEET GRADE.
5. CONSTRUCT FLEXIBLE PIPE JOINTS AT 2'-0" MAX. FROM BASE OF M.H.
6. GROUT ALL M.H. JOINTS WITH 2 : 1 MIX MORTAR.
7. INTERIOR OF SANITARY SEWER M.H. TO BE COATED IN ACCORDANCE WITH SECTION 71-1.09 OF THE STANDARD SPECIFICATIONS.

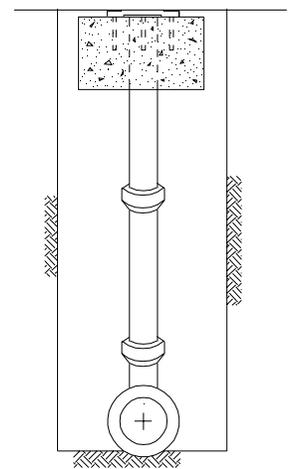
REV. NO.	REV. DATE	REV. BY	TYPE 3 MAINTENANCE HOLE FOR PIPES 36" DIA. AND LARGER	REVISION APPROVED BY CITY ENGINEER	
2	2/23/95	KB/DE		Finbar J. O'Regan DATE: 01/09/02	
DIGITIZED		1/1/92	CITY OF STOCKTON DEPARTMENT OF PUBLIC WORKS	SUPERCEDES DWG. DATED	DRAWING NO.
DWG. BY	RC	SCALE		12/31/80	57A
CK. BY		NONE			



SEE STANDARD DRAWING NO. 59 FOR RING AND COVER.



ELEVATION

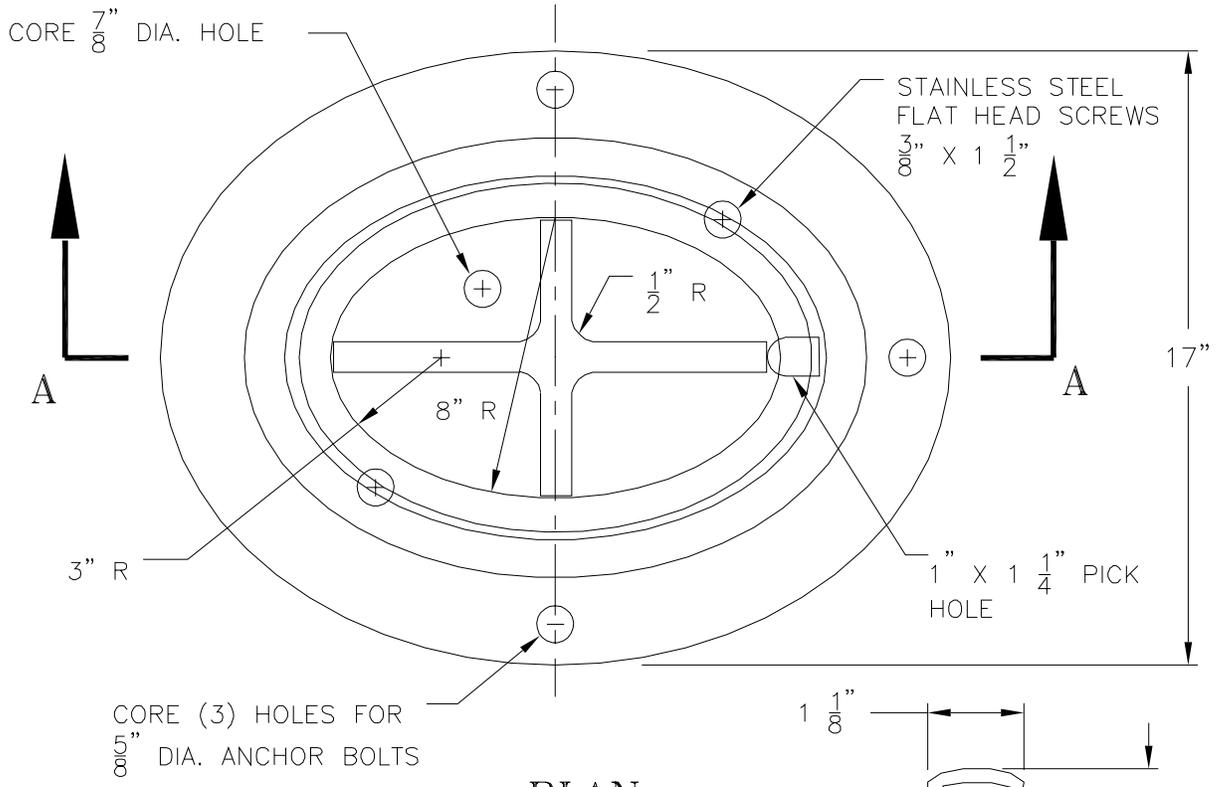


END VIEW

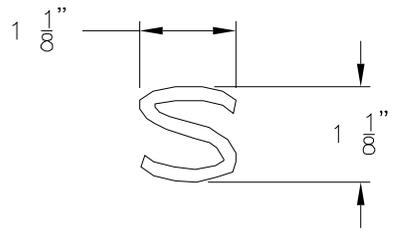
NOTE:

LAMPHOLE MAY BE INSTALLED AT END OF SANITARY SEWER LINES ONLY WITH APPROVAL FROM THE CITY ENGINEER.

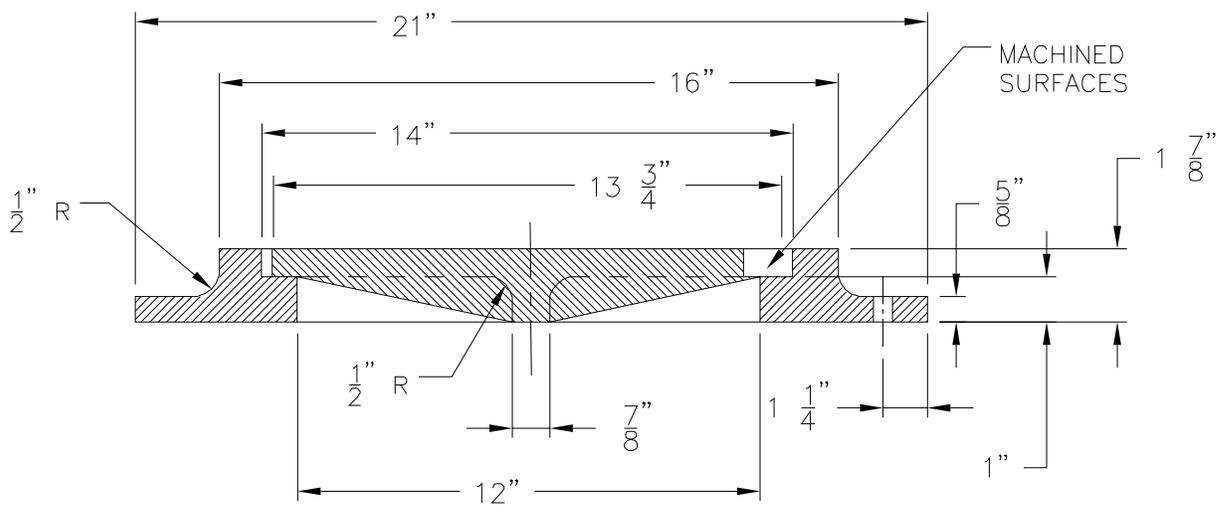
REV. NO.	REV. DATE	REV. BY	LAMPHOLE	REVISION APPROVED BY CITY ENGINEER	
5	6/1/2000	HLE/RH		Finbar J. O'Regan	
DIGITIZED	1/1/92			DATE: 01/09/02	
DWG. BY	RC	SCALE	CITY OF STOCKTON DEPARTMENT OF PUBLIC WORKS	SUPERCEDES DWG. DATED	DRAWING NO.
CK. BY		NONE		2/3/95	58



PLAN



LETTER "S" PLACED AT CENTER OF COVER



SECTION A-A

NOTE:
USE SOUTH BAY FOUNDRY NO. (B26) SBF 142 WITH STAINLESS STEEL BOLT DOWN SCREWS OR EQUAL.

REV. NO.	REV. DATE	REV. BY	LAMP HOLE RING & COVER	REVISION APPROVED BY CITY ENGINEER	
1	6/1/2003	HL/EA		<i>Finbar J. O'Regan</i> DATE: 11/25/03	
DIGITIZED		1/1/92	CITY OF STOCKTON DEPARTMENT OF PUBLIC WORKS	SUPERCEDES DWG. DATED	DRAWING NO.
DWG. BY	RC	SCALE		01/09/02	59
CK. BY		NONE			