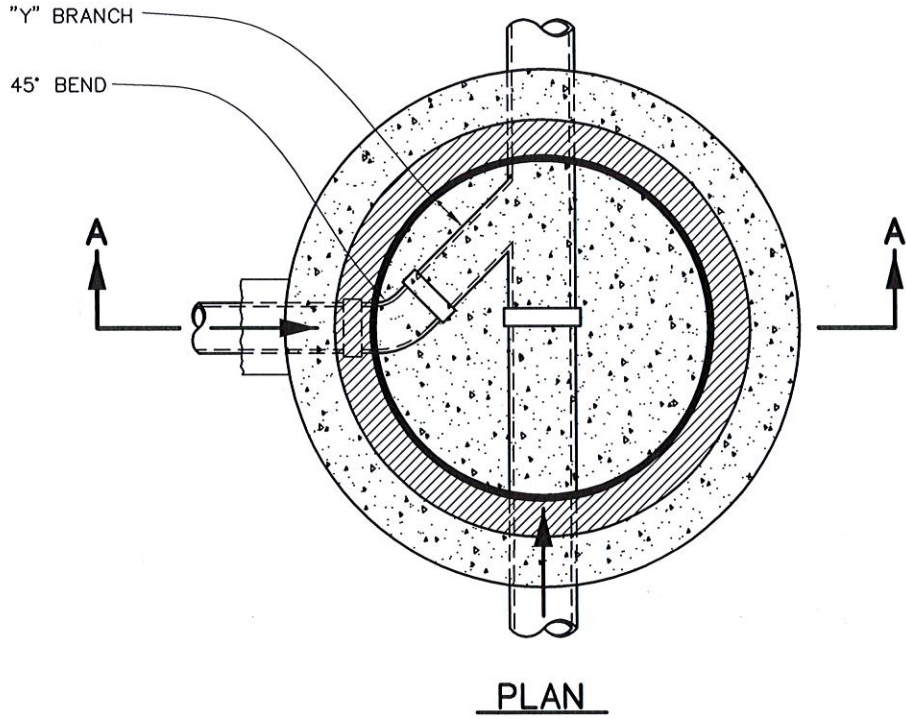
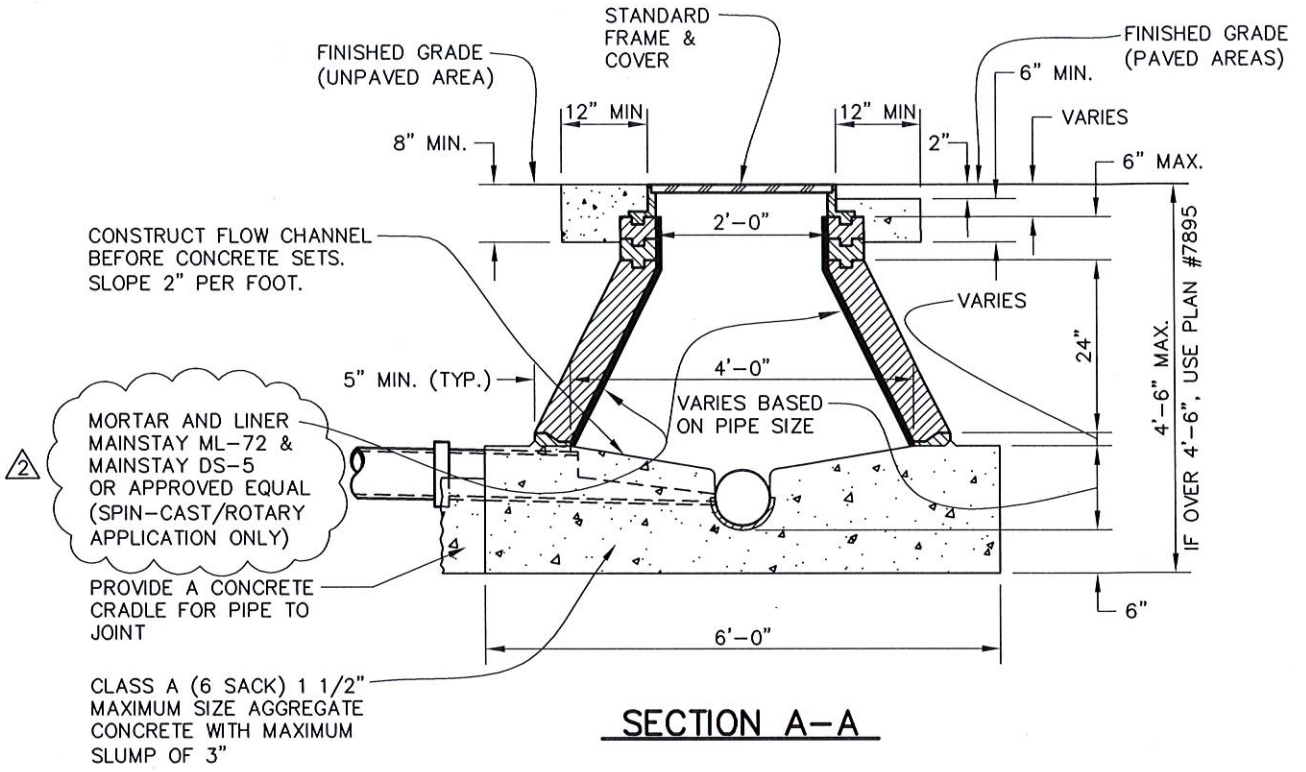


Public Works  
Engineering Division

City of Berkeley  
Standard Details

# Sanitary Sewer



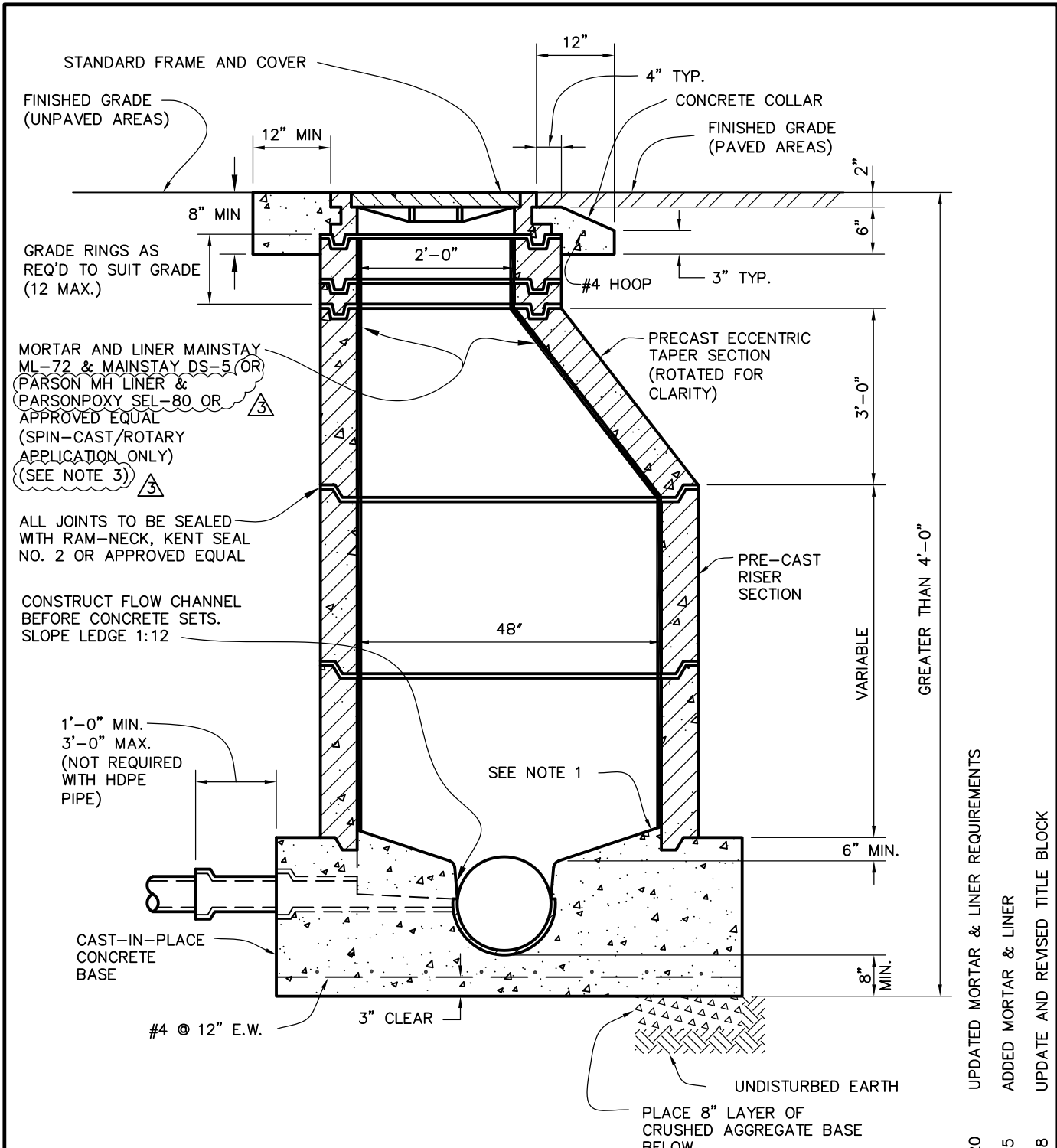
4/20/15 ADDED MORTAR & LINER

10/8/08 UPDATE AND REVISED TITLE BLOCK

2

1

<p>CITY OF BERKELEY DEPARTMENT OF PUBLIC WORKS</p>		<p>STANDARD DETAIL SHALLOW PRECAST CONCRETE MANHOLE</p>		
<p>SUBMITTED: <i>[Signature]</i></p> <p>SUPERVISING CIVIL ENGINEER</p>	<p>DATE: 5/12/15</p> <p>R.C.E. 54937</p> <p>EXP. 6/30/16</p>	<p>DESIGN: JR</p> <p>DRAWN: MS</p> <p>CHECK: _____</p>	<p>DATE: 2/97</p> <p>SCALE: N.T.S.</p> <p>BOOK: _____</p>	<p>PLAN: 6653</p> <p>FILE: 20-B-110</p>
<p>APPROVED: <i>[Signature]</i></p> <p>MANAGER OF ENGINEERING</p>	<p>DATE: 5/12/15</p> <p>R.C.E. 64314</p> <p>EXP. 6/30/15</p>			



MORTAR AND LINER MAINSTAY  
ML-72 & MAINSTAY DS-5 (OR  
PARSON MH LINER &  
PARSONPOXY SEL-80 OR  
APPROVED EQUAL  
(SPIN-CAST/ROTARY  
APPLICATION ONLY)  
(SEE NOTE 3)

ALL JOINTS TO BE SEALED  
WITH RAM-NECK, KENT SEAL  
NO. 2 OR APPROVED EQUAL

CONSTRUCT FLOW CHANNEL  
BEFORE CONCRETE SETS.  
SLOPE LEDGE 1:12

1'-0" MIN.  
3'-0" MAX.  
(NOT REQUIRED  
WITH HDPE  
PIPE)

CAST-IN-PLACE  
CONCRETE  
BASE

#4 @ 12" E.W.

**NOTES**

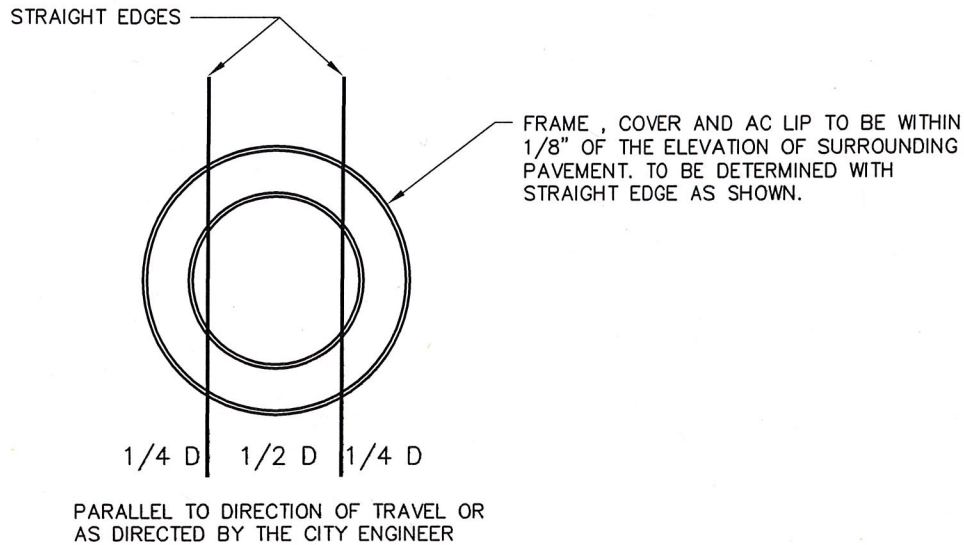
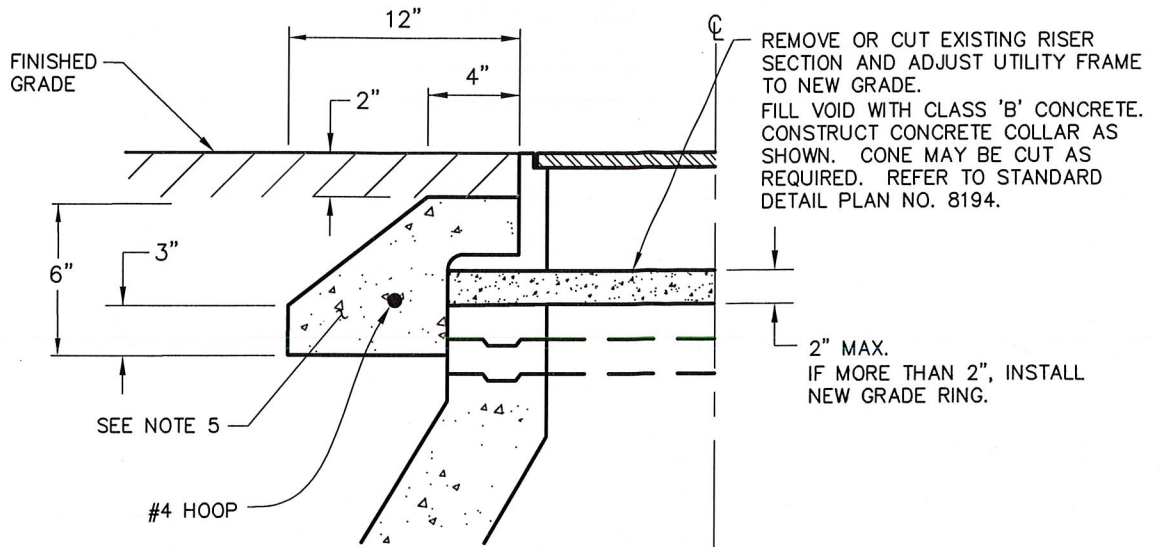
1. SET RISER SECTION IN 1:3 MORTAR MIX AND IN GROOVE FORMED IN BASE, OR POUR MONOLITHICALLY WITH BASE.
2. CAST-IN-PLACE CONCRETE FOR MANHOLE BASES AND CONCRETE COLLARS SHALL CONFORM TO SPEC. SECTION 201-1.1.2 AND BE CLASS 560-B-3250.
3. MH LINER AND COATING ONLY APPLY TO SANITARY SEWER MAINTENANCE HOLE.

8/18/20  
4/21/15  
10/8/08  
UPDATED MORTAR & LINER REQUIREMENTS  
ADDED MORTAR & LINER  
UPDATE AND REVISED TITLE BLOCK

<b>CITY OF BERKELEY</b>	
<b>DEPARTMENT OF PUBLIC WORKS</b>	
SUBMITTED:	DATE:
_____	R.C.E. 37829
SUPERVISING CIVIL ENGINEER	EXP. 3/31/21
APPROVED:	DATE:
_____	R.C.E. 49027
MANAGER OF ENGINEERING	EXP. 9/30/20

<b>STANDARD DETAIL PRECAST MANHOLE ECCENTRIC CONE</b>			
DESIGN: JR	DATE: 1/02	PLAN: 7895	
DRAWN: MS	SCALE: N.T.S.	FILE: 20-B-147	
CHECK: _____	BOOK: _____		

SYMMETRICAL ABOUT  
CENTERLINE



NOTES:

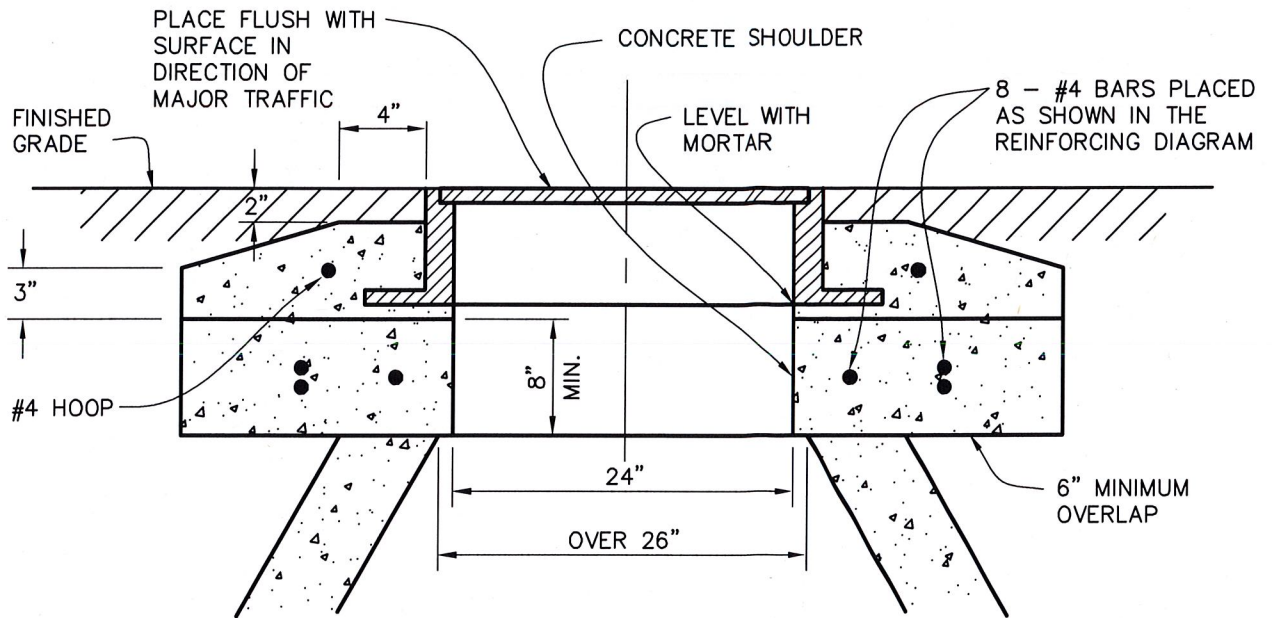
1. ALL SURFACE STRUCTURES EXTENDING 2" ABOVE THE NEW SUBGRADE OR MILLING PLANE SHALL BE LOWERED BY CONTRACTOR OR UTILITY OWNER TO THE NEW SUBGRADE BEFORE PAVING. STRUCTURES PROJECTING LESS THAN 2" ABOVE THE SUBGRADE MAY BE PAVED OVER AND LATER ADJUSTED TO GRADE.
2. ADJUST FRAME AND COVER TO FINISHED GRADE AFTER FINAL LIFT OF PAVING.
3. TRAFFIC CONTROL APPROVAL IS REQUIRED PRIOR TO ANY TRAFFIC LANE OBSTRUCTION.
4. PLACE TEMPORARY AC (CUT BACK) AROUND UTILITY FRAME UNTILL PERMANENT PAVING IS IN PLACED.
5. CAST-IN-PLACE CONCRETE COLLARS SHALL CONFORM TO STANDARD SPECIFICATIONS (GREENBOOK) SECTION 201-1.1.2 AND BE CLASS 560-B-3250.

DESIGN: TP	DATE: 5/23	PLAN: 8193
DRAWN: LG	SCALE: N.T.S.	FILE: 20B-169
CHECK: KE		

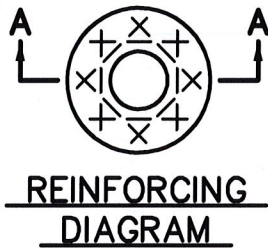
APPROVED: *[Signature]* DATE: 5-23-18  
CITY ENGINEER

CITY OF BERKELEY  
DEPARTMENT OF PUBLIC WORKS  
STANDARD DETAIL

MANHOLE FRAME & COVER  
ADJUSTMENT



SECTION A-A




NOTES:

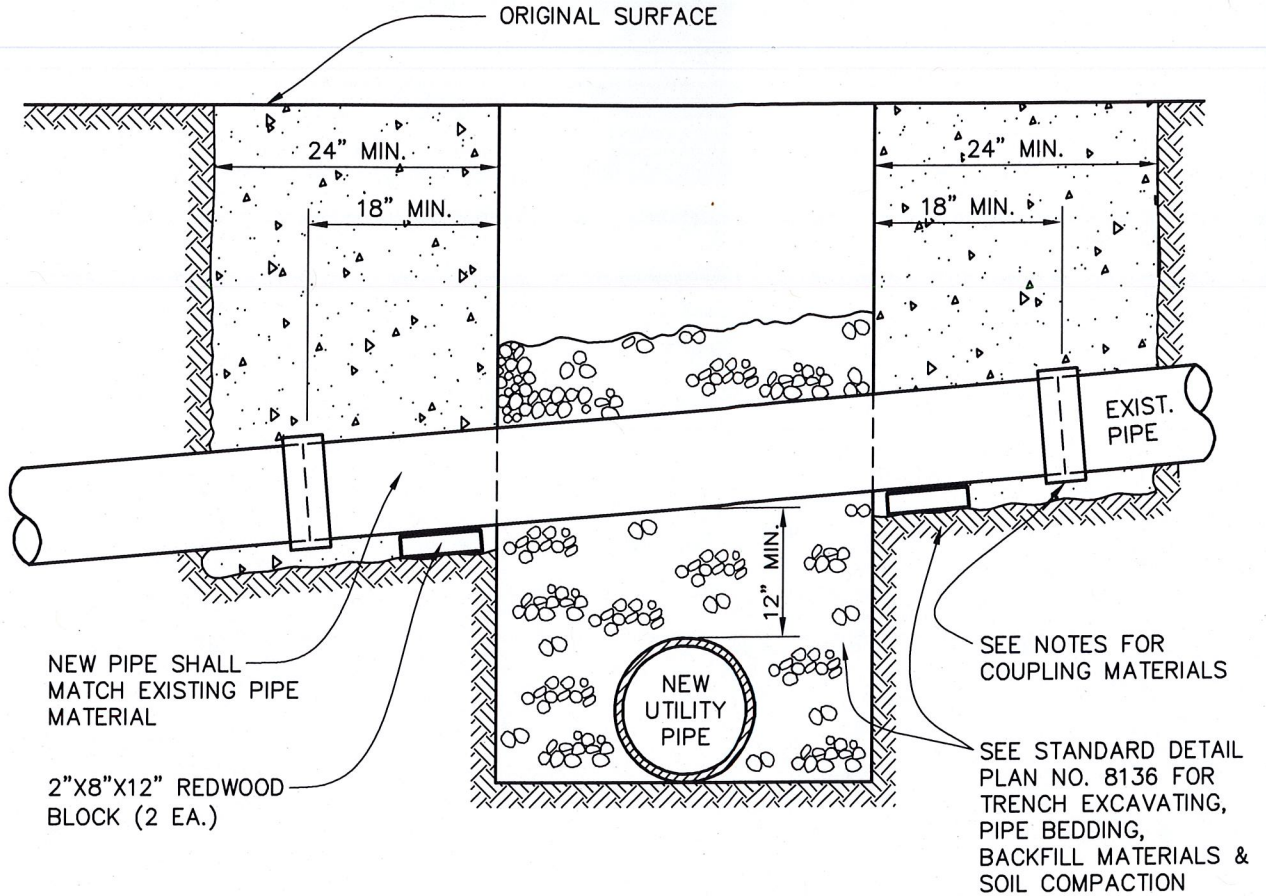
1. WHEN THE MANHOLE HAS TO BE CUT DOWN SO THAT THE TAPERED SECTION AT THE TOP OF THE EXISTING MANHOLE EXCEEDS 26 INCHES, A CONCRETE SHOULDER MUST BE CONSTRUCTED AS SHOWN ABOVE.
2. WHEN DIRECTED BY THE ENGINEER, THE EXISTING FRAME AND COVER SHALL BE SALVAGED AND RETURNED TO THE CITY CORPORATION YARD, 1326 ALLSTON WAY.
3. CAST-IN-PLACE CONCRETE COLLARS SHALL CONFORM TO SPECIFICATIONS (GREENBOOK) SECTION 201-1.1.2 AND BE CLASS 560-B-3250.

DESIGN: <u>TP</u>	DATE: <u>5/18</u>	PLAN: <u>8194</u>
DRAWN: <u>MS</u>	SCALE: <u>N.T.S.</u>	FILE: <u>20B-170</u>
CHECK: <u>KE</u>		

**CITY OF BERKELEY**  
 DEPARTMENT OF PUBLIC WORKS  
 STANDARD DETAIL

APPROVED:  5-23-18  
 CITY ENGINEER DATE:

**MANHOLE FRAME & COVER  
 ADJUSTMENT - LOWERING**



NOTES:

1. FOR HDPE PIPE USE ELECTROFUSION COUPLING.
2. FOR PIPE MATERIALS OTHER THAN HDPE USE FERNCO COUPLING STRONG BACK (RC) 5000 SERIES OR APPROVED EQUAL.
3. SEWER LATERAL SHALL REMAIN IN SERVICE AT ALL TIMES.

DESIGN: TP	DATE: 4/2019	PLAN: 8214
DRAWN: MS	SCALE: N.T.S.	FILE: 20B-174
CHECK: NP		

APPROVED: *[Signature]*  
 CITY ENGINEER

4-29-19  
 DATE:

**CITY OF BERKELEY**  
 DEPARTMENT OF PUBLIC WORKS  
 STANDARD DETAIL

**SEWER LATERAL REPAIR**