



**TYPICAL CHANNELING PATTERN**

1	FRAME AND COVER, D & L SUPPLY 1024 MARKED "STORM DRAIN" WITH PICK HOLE.
2	MIN 4,000 PSI CONCRETE COLLAR. SLOPE COLLAR TO DRAIN AS SHOWN ON THE DETAIL.
3	STANDARD TWENTY-FOUR (24) INCH GRADE RINGS, THREE (3) INCHES MIN. THICK. EIGHTEEN (18) INCHES MAX. NECK FROM CONE ANGLE TO TOP OF MANHOLE COVER.
4	STANDARD FORTY EIGHT (48) INCH ECCENTRIC MANHOLE REDUCER CONE. CONE TOP OPENING SHALL BE 90 DEGREES FROM THE THROUGH STORM DRAIN PIPE.
5	STANDARD FORTY EIGHT (48) INCH DIAMETER MANHOLE BARREL SECTION, CONFORMING TO ASTM C478 - LATEST REVISION, WITH FOUR (4) INCH MINIMUM WALL THICKNESS. CONE AND BARREL SECTIONS SHALL BE SEALED BY PRE-FORMED PLASTIC SEALING GASKETS THAT CONFORM TO FEDERAL SPECIFICATIONS SS-S-00210 OR CITY APPROVED EQUAL. ALL JOINTS SHALL BE MORTARED INSIDE AND OUTSIDE THE MANHOLE.
6	MIN 4,000 PSI CONCRETE FOR CAST-IN-PLACE OR PRECAST CONCRETE BASE.
7	SIX (6) INCHES MINIMUM, 3/4 INCH CRUSHED ROCK PER ASTM D448 #67.
8	UNDISTURBED SOIL.
9	MANHOLES DEEPER THAN SEVEN (7) FEET (INVERT TO FINISHED GRADE) SHALL HAVE #4 REBAR TWELVE (12) INCHES ON CENTER, EACH WAY, IN CAST IN PLACE MANHOLE BASE, AND INCREASE THICKNESS OF MANHOLE BASE 12".
10	FOUR (4) INCHES PER FOOT MINIMUM SLOPE.
11	BOLLARD AND CONCRETE FOUNDATION SHALL CONFORM TO CITY STANDARD DETAIL #517. 4"X4" PRESSURE TREATED DOUGLAS FIR OR HEM-FIR POST MAY BE SUBSTITUTED FOR BOLLARD IN TEMPORARY INSTALLATIONS WITH APPROVAL BY THE CITY ENGINEER.
12	ALL PIPES SHALL HAVE AT LEAST ONE JOINT WITHIN 30 INCHES FROM MANHOLE WALL.

**NOTES:**

- A. COUNTRY OF ORIGIN SHALL BE CLEARLY AND PERMANENTLY SHOWN ON TOP SURFACE OF THE FRAME AND COVER IN ACCORDANCE WITH THE TRADE AND TARIFF ACT OF 1984.
- B. DATE OF MANUFACTURE SHALL BE CLEARLY AND PERMANENTLY INDICATED ON THE COVER AND THE TOP OF THE FRAME.
- C. SEATING SURFACE SHALL BE CLOSELY MACHINED TO NOMINAL DIMENSIONS WITH TOLERANCES NOT TO EXCEED ±1/64 INCH.
- D. THE WEIGHT OF THE FRAME SHALL BE 140lbs., ±10lbs.
- E. THE WEIGHT OF THE COVER SHALL BE 130lbs., ±5lbs.
- F. THIS STORM DRAIN MANHOLE SHALL NOT BE USED ON STORM DRAIN CONDUIT GREATER THAN 36 INCHES IN DIAMETER. FOR MANHOLE STORM DRAIN CONDUITS GREATER THAN 36 INCHES IN DIAMETER, SEE STANDARD DETAILS #304 OR #305 OR CONTACT CITY FOR OTHER SPECIFIC REQUIREMENTS.

**THE CITY OF WEST SACRAMENTO - STANDARD DETAIL**



APPROVED: Aug. X, 2025

STANDARD  
DETAIL #  
**307**

TITLE:  
**STORM DRAIN  
MANHOLE OUTSIDE  
PAVED AREA**

