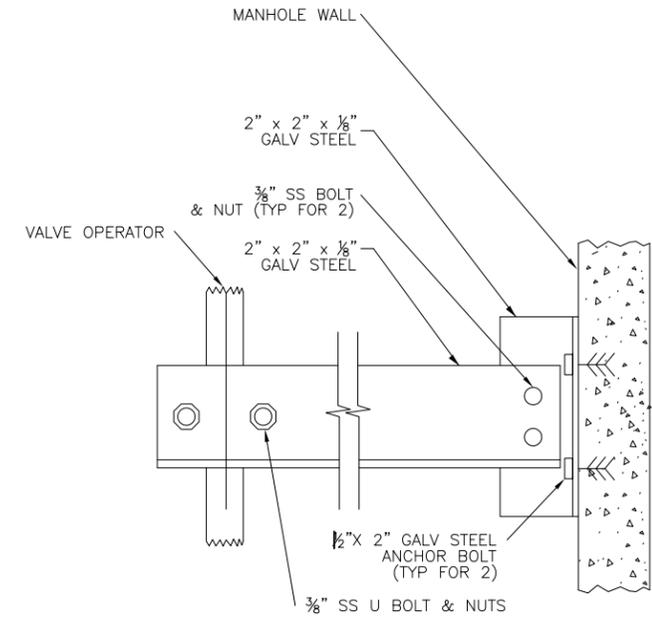
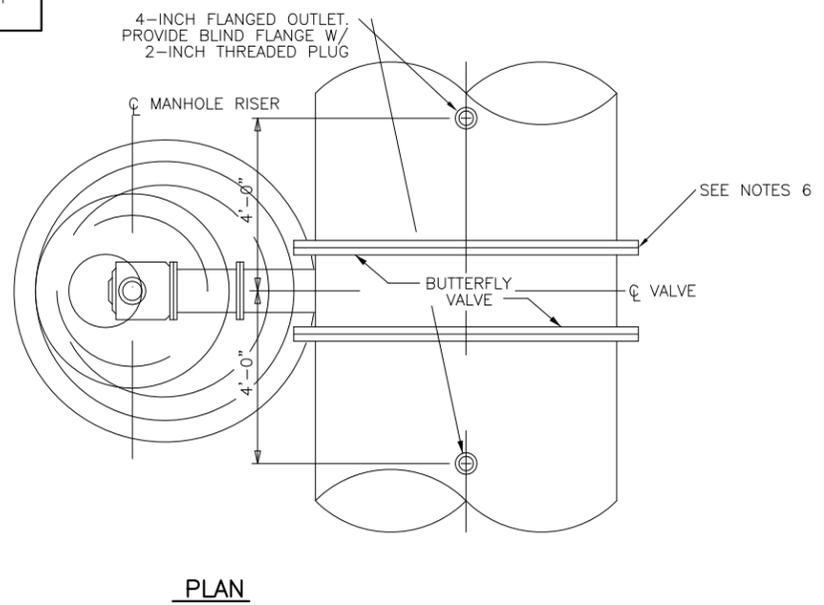
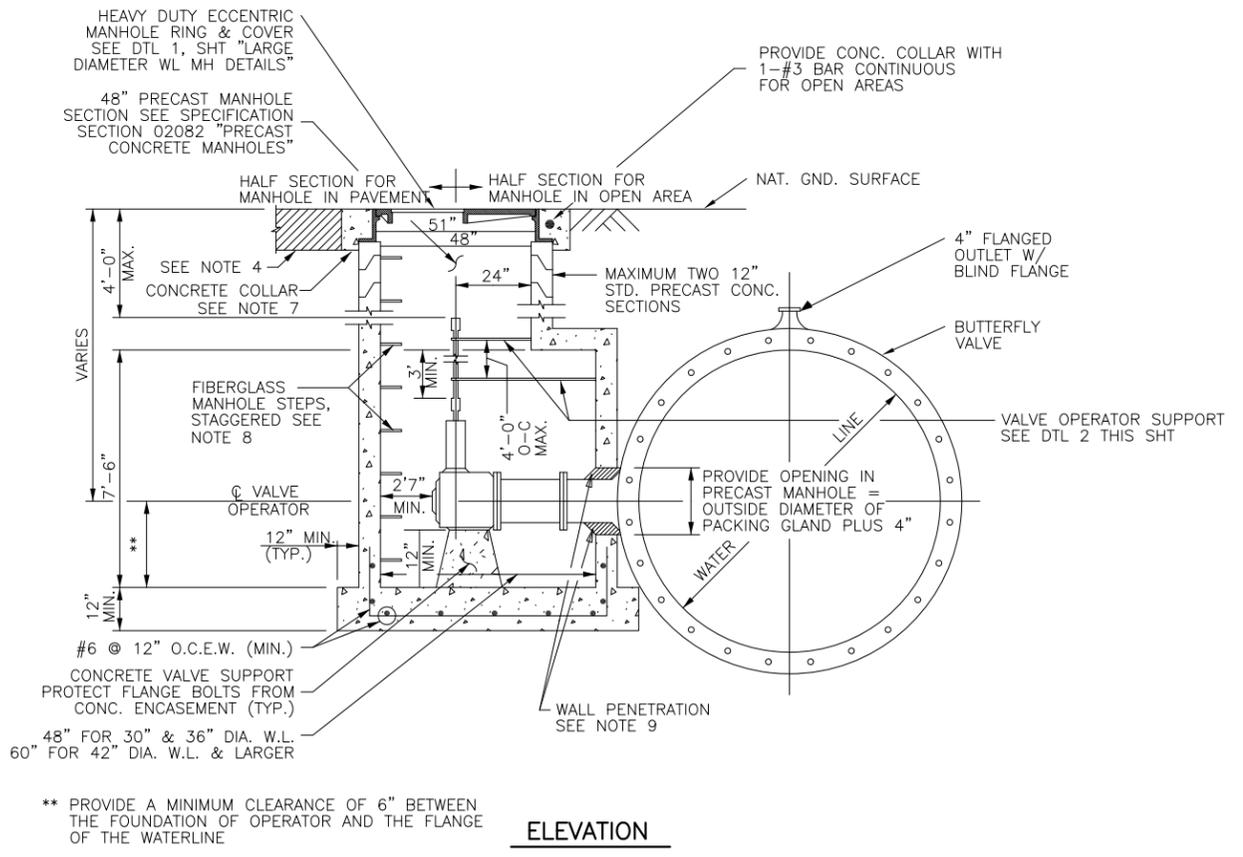


**NOTE:**  
 SHOULD CONTRACTOR DESIRE TO USE VALVES IN A THROTTLED POSITION FOR FILLING OF LINE SEGMENTS, CONTRACTOR IS CAUTIONED TO OBSERVE RECOMMENDATIONS OF VALVE MANUFACTURER IN ORDER TO PRECLUDE DAMAGE ASSOCIATED WITH THIS MODE OF OPERATION.



**2 VALVE OPERATOR SUPPORT**



**1 OPERATOR MANHOLE DETAILS FOR BUTTERFLY VALVES**  
 (FOR WATER LINES 24-INCHES TO 96-INCH IN DIAMETER)

- NOTES:**
1. PROVIDE RAMNEK OR APPROVED EQUAL BETWEEN PRECAST SEGMENTS OF THE MANHOLE.
  2. PLACE MANHOLE ON NEW COMPACTED (95% S. P. D.) BOTTOM IN ACCORDANCE WITH SPECIFICATION 02316.
  3. 2" OPERATING NUT ON LARGE DIAMETER BUTTERFLY VALVES SHALL TURN CLOCKWISE TO OPEN VALVE, ABOVE-GROUND AND PLANT VALVES SHALL OPEN COUNTERCLOCKWISE.
  4. FOR PAVEMENT REPAIR, SEE "EXCAVATION, BEDDING, AND BACKFILL DETAIL".
  5. FOR MANHOLES DEEPER THAN 20 FEET, PROVIDE SAFETY CLIMBING RAIL (SAF-T-CLIMB OR EQUAL)
  6. FOR JOINT BONDING DETAILS AT ISOLATION/BUTTERFLY VALVES SEE CATHODIC PROTECTION DETAILS FOR JOINT BONDING SHEETS.
  7. FOR CONCRETE COLLAR SEE "LARGE DIAMETER WATERLINE MANHOLE DETAILS"
  8. FOR FIBERGLASS MANHOLE STEPS SEE "LARGE DIAMETER WATERLINE MANHOLE DETAILS"
  9. FOR WALL PENETRATION SEE "LARGE DIAMETER WATERLINE MANHOLE DETAILS"
  10. ADJUST MANHOLE AND MANHOLE OPENING TO ALIGN WITH VALVE OPERATOR NUT FOR EASE OF OPERATION

<b>CITY OF HOUSTON</b> DEPARTMENT OF PUBLIC WORKS AND ENGINEERING	
STANDARD LDWL ISOLATION VALVE DETAILS	
(NOT TO SCALE)	
APPROVED BY:	APPROVED BY:
CITY ENGINEER	DIRECTOR OF PUBLIC WORKS AND ENGINEERING
EFF DATE: NOV-10-2016	DWG NO: