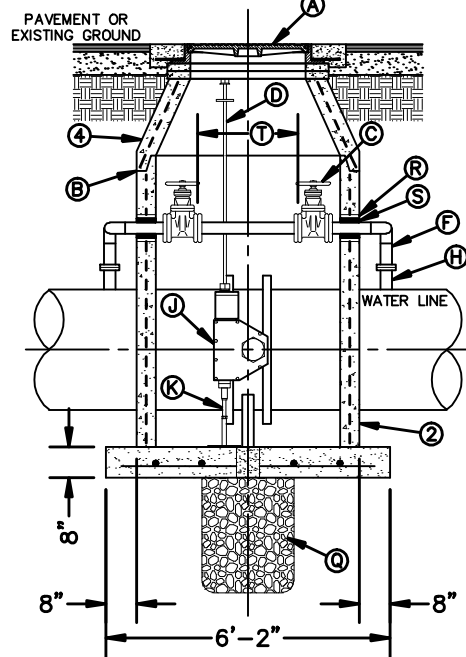
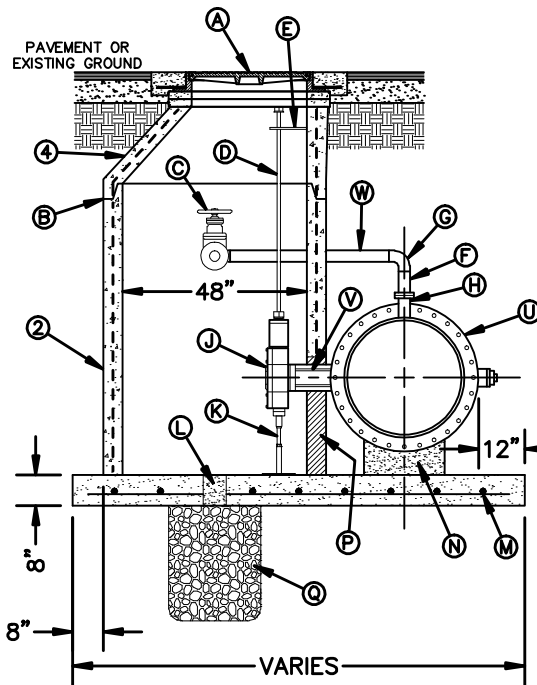


TOP VIEW



SECTION A-A



SECTION B-B

GENERAL NOTES:

1. INSTALLATION APPLICABLE TO S.C.C.P. & STEEL WATER MAINS ONLY. INSTALLATION FOR OTHER PIPE MATERIALS REQUIRE E.P.W.U. APPROVAL.
2. PRE-CAST MANHOLE SECTIONS SHALL BE OF REINFORCED CONCRETE CONFORMING TO ASTM C-478 AND SHALL MEET HS-20 LOADING. PROVIDE REINFORCEMENT WITHIN 3" @ OPENINGS OR KNOCKOUTS, OPENINGS (UP TO 8") MADE IN FIELD SHALL BE CORE DRILLED.
3. MANUFACTURER TO PROVIDE LIFTERS OF ADEQUATE SIZE AS NEEDED.
4. ECCENTRIC CONE SECTION REINFORCEMENT IN ACCORDANCE WITH ASTM C-478.

CONSTRUCTION KEY NOTES:

- A. MANHOLE RING AND COVER (SEE DETAILS 377 & 378). SET FRAME AND COVER FLUSH WITH ROADWAY SURFACE OR FINISHED GRADE (SEE DETAIL 185).
- B. ALL JOINTS TO BE TONGUE, GROOVE AND SEALED WITH RAM-NEK OR APPROVED EQUAL.
- C. 3" FLANGED GATE VALVE (NORMALLY CLOSED) WITH REMOVABLE HAND-WHEEL.
- D. 1/4" DIAMETER SOLID STEEL EXTENSION STEM WITH SQUARE SOCKET ON BOTTOM TO FIT 2" SQUARE VALVE NUT AND 2" SQUARE OPERATOR NUT ON TOP.
- E. ADJUSTABLE EXTENSION STEM GUIDE (AS PER DETAIL 261-3) @ 6' MAX. INTERVALS.
- F. 3" SCH. 40 STEEL PIPE (FLxPE) WRAPPED WITH APPROVED POLYKEN TAPE (MIN. 80 MILS) COATING.
- G. 3"-90° WELDED (PExPE) ELBOW (TYP.).
- H. 3" WELDED FLANGE OUTLET (INSTALLED BY PIPE MANUFACTURER).
- J. BUTTERFLY VALVE OPERATOR.
- K. ADJUSTABLE SUPPORT OR APPROVED EQUAL.
- L. 6" DIAMETER DRAIN HOLE FILLED WITH GRAVEL.
- M. #5 @ 12" O.C.E.W.
- N. CONCRETE SUPPORT.
- P. NOTCH MANHOLE SECTION FOR VALVE OPERATOR. FILL WITH BRICK AND MORTAR AFTER VALVE INSTALLATION.
- Q. 24" DIAMETER BY 2'-6" DEEP GRAVEL SUMP.
- R. CEMENT GROUT.
- S. 1" PREMOULDED ASPHALT EXPANSION JOINT.
- T. INSTALL A 3" DIA. DUCTILE IRON SPOOL PIECE WITH FLANGED ENDS. UNI-FLANGE NOT ACCEPTABLE. ONE SPOOL PIECE TO BE PROVIDED FOR EACH BUTTERFLY VALVE LOCATION. PROVIDE A 1" THREADED OUTLET WITH PLUG ON SPOOL PIECE. ALL SPOOL PIECES TO BE PROVIDED WITH FULL FACE GASKETS.
- U. BUTTERFLY VALVE.
- V. VALVE OPERATOR EXTENSION - 12" LONG.
- W. 3" SCH. 40 STEEL PIPE (PExPE) WRAPPED WITH APPROVED POLYKEN TAPE (MIN. 80 MILS) COATING.



STANDARD
DETAIL

DATE: 3/1994
REV: 7/20/2009

BUTTERFLY VALVE IN MANHOLE INSTALLATION
FOR 24" AND LARGER WATER LINES
N.T.S.



DETAIL No.
261-1