



### GENERAL NOTES:

1. HORIZONTAL VALVE INSTALLATION REQUIRE E.P.W. APPROVAL AND IS APPLICABLE TO S.C.C.P. & STEEL WATER MAINS ONLY. INSTALLATION FOR OTHER PIPE MATERIALS REQUIRE E.P.W. APPROVAL.
2. 48" PRE-CAST MANHOLE SECTIONS SHALL BE OF REINFORCED CONCRETE CONFORMING TO ASTM C-478 AND SHALL MEET HS-20 LOADING.
3. MANUFACTURER TO PROVIDE LIFTERS OF ADEQUATE SIZE AS NEEDED.
4. 48" ECCENTRIC CONE SECTION REINFORCEMENT IN ACCORDANCE WITH ASTM C-478.
5. THE SUBGRADE UNDER THE BASE SHALL BE COMPACTED TO 95% DENSITY IN ACCORDANCE WITH ASTM D-1557.
6. INSTALLATION OF VALVE & BONNET BOX/RISER TO BE WITHIN R.O.W. OR E.P.W. EASEMENT LIMITS AND SHALL NOT STRAY/ENCROACH BEYOND.
7. 24" MINIMUM DISTANCE BETWEEN PIPE EDGE & FOOTING EDGE. DISTANCE MAY VARY ON CASE BY CASE BASIS, REQUIRES EPW APPROVAL.

### 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. 4" FLANGED GATE VALVE (NORMALLY CLOSED) WITH REMOVABLE HAND-WHEEL, 4" THREADED COMPANION FLANGE, 4" NOZZLE MALE QUICK CONNECT (COVERED WITH QUICK CONNECT TYPE DUST CAP).
- D. 4" WELDED FLANGE OUTLET (INSTALLED BY PIPE MANUFACTURER).
- E. 24" DIAMETER BY 2'-6" DEEP GRAVEL SUMP.
- F. FLANGED GATE VALVE - HORIZONTAL W/ BEVEL GEAR OPERATOR & 2" SQUARE OPERATOR NUT.
- G. GATE VALVE RISER INSTALLATION - DEPTH VARIES (SEE DETAIL 260).
- H. BONNET BOX AND COVER (SEE DETAILS 268 & 269-2).
- J. 6" DIAMETER DRAIN HOLE FILLED WITH GRAVEL.
- K. 4" SCH. 40 STEEL PIPE (FLxPE) WRAPPED WITH APPROVED POLYKEN TAPE (MIN. 80 MILS) COATING.
- L. 4"-90° WELDED (PExPE) ELBOW (TYP.).
- M. 1" PREMOULDED ASPHALT EXPANSION JOINT & CEMENT GROUT.

STANDARD  
DETAIL

DATE: 7/10/2020  
REV: 10/19/2023

GATE VALVE HORIZONTAL INSTALLATION TYPE "A" FOR  
16" & LARGER WATER LINE

N.T.S.



DETAIL No.  
261-5