ECCENTRIC INSTALLATION -**OPTIONAL ORENING** 2' TALL CONICAL SECTION **OPENING** 72" · 7" MIN. 72" DIA. 4', 3', 2' OR SECTIONS AS REQUIRED MONOLITHIC BASE 12" SECTION

GENERAL NOTES:

- MANHOLE TYPE "B" SHALL BE USED FOR LINES 24" AND LARGER OR WHEN SEWER MONITORING EQUIPMENT IS REQUIRED.
- 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. CEMENT SHALL BE TYPE I—II, PER ASTM C—150, AND MUST CONTAIN A MINIMUM OF 4% FLY ASH OF THE TOTAL MANHOLE WEIGHT.
- THE BASE & RISER SHALL BE INTEGRALLY CAST. CONCRETE SHALL BE MIN. 28 DAY COMPRESSIVE STRENGTH 4000psi.
- 5. MANUFACTURER TO PROVIDE LIFTERS OF ADEQUATE SIZE AS NEEDED.
- THE SUBGRADE UNDER THE BASE SHALL BE COMPACTED TO 95% DENSITY IN ACCORDANCE WITH ASTM D-1557.
- MANHOLES BELOW GROUNDWATER TO BE EXTERNALLY AND INTERNALLY COATED WITH BITUMINOUS COATING.
- 8. CONE SECTION REINFORCEMENT IN ACCORDANCE WITH ASTM C-478 (ECCENTRIC CONE APPLICATION SHOWN DASHED).
- OTHER UTILITIES SHALL NOT BE INSTALLED ADJACENT TO THE CONE SECTION AND DIRECTLY ABOVE THE MANHOLE.

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. PIPE OPENINGS/KNOCKOUTS AS REQUIRED TO FIT PIPE SIZE AND SHALL HAVE FLEXIBLE PIPE TO MANHOLE CONNECTORS (COMPRESSION TYPE ASTM-923), "KOR-N-SEAL" OR APPROVED EQUAL.
- D. GROUT AS REQUIRED.
- E. ECCENTRIC/CONCENTRIC LID (CONCENTRIC SHOWN BOLD) WITH KEYED TOP, 8" THICK (SEE DETAIL 379-2).
- F. MINIMUM 24" DISTANCE FROM BOTTOM OF LID TO TOP OF PIPE FOR DROP CONNECTION.

STANDARD DETAIL DATE: 11/1992 REV: 9/1/2009

MANHOLE TYPE "B"

