



- | NO. | DESCRIPTION   |
|-----|---|
| 1.  | 18" x 18" PRECAST ( OR CAST IN PLACE ) CONCRETE PAD OR 24" DIAMETER PRECAST PAD.  |
| 2.  | NON - SHRINK GROUT - IN ANNULAR SPACE.  |
| 3.  | VALVE BOX COVER.  |
| 4.  | TOP SECTION VALVE BOX.  |
| 5.  | EXTENSION STEM AS REQUIRED. SEE NOTES   |
| 6.  | BOTTOM SECTION VALVE BOX.   |
| 7.  | 6" PVC PIPE ( C900 OR SDR 26 ).   |
| 8.  | PRECAST CONCRETE FOOTING - TYPE II - SEE DETAIL.  |
| 9.  | GATE VALVE ( OR BALL VALVE, AS APPLICABLE ).  |
| 10. | 5" DIA. CAST IRON SOIL PIPE - BELL OF PIPE WILL RECEIVE BOTTOM SECTION OF VALVE BOX.  |
| 11. | AWG #12 GAUGE COPPER TRACER WIRE (THWN) WITH BLUE INSULATION, TERMINATE WITH 24 INCH EXCESS WIRE (COILED) AT METER BOX AND VALVE BOX (TYP.) |
| 12. | 1/4" OR 3/8" ID CONDUIT - SDR 9 PEX TUBING - ASTM F 876.  |
| 13. | CONCRETE ( ROADWAY, DRIVEWAY OR SIDEWALK )  |
| 14. | ASPHALT PAVEMENT.   |
| 15. | COMPACTED AGGREGATE BASE COURSE ( CABC ) OR ASPHALT BASE COURSE.  |
| 16. | COMPACTED SUBGRADE.   |
| 17. | NONWOVEN GEOTEXTILE FABRIC - 18" x 18" - 2 LAYERS - MIRAFI #140N OR CARTHAGE MILLS # FX - 40HS.   |
| 18. | PRECAST CONCRETE FOOTING - TYPE I - SEE DETAIL.   |

- NOTES:**
- A. CONCRETE FOOTING TO BE CENTERED OVER VALVE NUT, AND SHALL NOT BEAR ON VALVE BODY.
  - B. PROVIDE CLEARANCE BETWEEN VALVE FOOTING AND THE VALVE.
  - C. WHEN OPERATING NUT DEPTH EXCEEDS 3'-0" BELOW FINISHED GRADE, PROVIDE EXTENSION STEM WITH STANDARD 2" SQUARE OPERATING NUT IN TOP SECTION OF VALVE BOX. SEE STANDARD DETAIL.
  - D. VALVE BOX ASSEMBLY SHALL CONSIST OF NO MORE THAN 3 VERTICAL SECTIONS - 1 TOP SECTION, 1 - BOTTOM SECTION, AND 1 - PIPE RISER SECTION.
  - E. CONCRETE PADS SHALL NOT BE USED IN PAVEMENT ( CONCRETE OR ASPHALT ), SIDEWALKS OR DRIVEWAYS.

TYPE 1  
USING PVC PIPE

TYPE 2  
USING CAST IRON SOIL PIPE

ALTERNATE B  
CAST IN CONCRETE

NO SCALE

STANDARD NO. \_\_\_\_\_

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VERSION NO. V1.0

VERSION DATE 1.14.2011

VALVE BOX ASSEMBLY INSTALLATION - 12" AND SMALLER VALVES

CHARLOTTE-MECKLENBURG UTILITIES

STANDARD DETAILS

WATER

CHARLOTTE