CONSTRUCTION NOTES:

A. CONCRETE PIPE SUPPORTS SHALL EXTEND OUTSIDE OF MANHOLE TO THE BELL OF FIRST JOINT AND SHALL CRADLE PIPE TO SPRINGLINE.

B. PIPE PENETRATION INTO MANHOLE SHALL BE FLUSH TO 2" MAXIMUM, MEASURED AT SPRINGLINE OF PIPE.

C. ADJUSTMENT RINGS MAY BE USED TO PROVIDE A MAXIMUM 12" ADJUSTMENT.

D. BASE TO BE POURED IN PLACE USING NUMBER 4 BARS AT 6" ON CENTER EACH WAY FOR MANHOLE DEPTH OF 16' OR GREATER. NUMBER 4 BARS AT 12" ON CENTER EACH WAY FOR MANHOLE LESS THAN 16" DEEP.

E. INVERT ELEVATION OF STUB OR LATERAL AS SHOWN ON PLANS.

F. 6" GROUT FILLET ON UPPER HALF OF PIPE AND AROUND BASE.

G. USE 18" ROUND COLLAR CONCRETE PAD IN ALL AREAS.

H. MANHOLE FRAME AND COVER, SEE DWG. S-02.

I. CONCRETE FILL SHALL HAVE A COMPRESSIVE STRENGTH OF 3,000 POUNDS PER SQUARE INCH AT 28 DAYS.

J. SLOPE 1" PER FOOT FROM PIPE CROWN.

K. SHELF SHALL HAVE MINIMUM WIDTH OF 9".

L. ALL WATERSTOP MATERIALS SHALL BE SUITABLE FOR THE TYPE OF PIPE USED.

M. IN UNPAVED AREAS, SET FRAME TO GRADE AND SLOPE TOP OF PAD.

GENERAL NOTES:

1. INSTALL NEOPRENE O-RING ON POLYVINYL CHLORIDE PIPE AND FILL ANNULAR SPACE WITH MORTAR TO PROVIDE A WATERTIGHT SEAL.
2. FOR PRESSURE TYPE MANHOLE COVER USE SAME AS SHOWN WITH EIGHT (8) 1/2" X 2" 316 STAINLESS STEEL HEXAGONAL HEAD BOLTS WITH A NEOPRENE GASKET. BOLT HOLES SHALL BE PREDRILLED IN COVER AND TAPPED IN FRAME. SEE DWG. S-02.
3. SANITARY SEWER SERVICES SHALL NOT BE ALLOWED IN MANHOLES.
4. IF THE SEWER MAIN AT A MANHOLE IS TO BE CONTINUED TO A FUTURE STREET, A 20' STUBOUT TO BE INSTALLED WITH CAP AND WITH 1% MINIMUM SLOPE.
5. IN UNIMPROVED AND UNPAVED ROADS, MANHOLE RIMS AND CONCRETE COLLARS ARE TO BE INSTALLED AT EXISTING ROAD GRADE.
6. IN NATURAL AREAS, ELEVATIONS OF MANHOLE RIMS AND CONCRETE SHALL BE INSTALLED 6" ABOVE NATURAL GROUND.
7. USE OF ADJUSTMENT RINGS ON MANHOLES IS LIMITED TO A MAXIMUM OF 12".
8. USE NON-SHRINK MORTAR INSIDE AND OUTSIDE OF MANHOLE JOINTS. USE NON-SHRINK GROUT FOR JOINTS, FILLETS, AND PIPE PENETRATIONS.
9. ALL MANHOLE BARREL JOINTS SHALL BE SEALED USING A PRODUCT SPECIFIED BY THE MANHOLE MANUFACTURER.
10. TYPE "E" MANHOLES SHALL NOT TO BE USED FOR DEPTHS LESS THAN 6', FOR DEPTHS LESS THAN 6' USE TYPE "C" MANHOLES. MEASURED FROM INVERT TO RIM.
11. MANHOLES GREATER THAN 18' IN DEPTH SHALL BE OF PRECAST CONCRETE SECTIONS ONLY.
12. DESIGN APPLIES TO 4' AND 6' INSIDE DIAMETER MANHOLES.
13. COMPACT ALL BACKFILL AROUND MANHOLES TO 95% AMERICAN SOCIETY FOR TESTING AND MATERIALS STANDARD D1157.
14. POSITION MANHOLES OPENING OVER THE UPSTREAM SIDE OF MAIN LINE.
15. MANHOLES SHALL BE CAST-IN-PLACE OR PRECAST. BRICK MANHOLES ARE PROHIBITED.
16. STAMP MANHOLE COLLAR TO INDICATE DIRECTION OF FLOW WHILE CONCRETE IS GREEN.
17. STORM DRAIN MANHOLES SHALL HAVE STEPS.
18. THE INTERIOR OF ALL SEWER MANHOLES SHALL BE COATED WITH AN EPOXY-RESIN TYPE MATERIAL CAPABLE OF PROTECTING THE CONCRETE FROM DETERIORATION DUE TO A GASEOUS SANITARY SEWER ENVIRONMENT. APPLICATION OF COATING SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S PUBLISHED RECOMMENDATIONS.

DATE MODIFIED:
SEPTEMBER 2016

City of Rio Rancho
Department of Public Works

STANDARD CONCRETE MANHOLE
TYPE "C" & "E"

DWG. NO. S-03-02

APRIL 22, 2016