



MANHOLE FRAME AND COVER
NEENAH R-1642A, OR EQUAL
FOR WATERTIGHT INSTALLATIONS
NEENAH R-1916-F, OR EQUAL

CEMENT MORTAR

KENT SEAL OR EQUAL BETWEEN
ADJUSTING RINGS

BUTYL RUBBER COATING WITH
PLASTIC WRAP COVER

BUTYL RUBBER COATING WITH
PLASTIC WRAP COVER AT JOINTS

PROVIDE MANHOLE STEPS @ 16"
C/C IF REQUIRED BY UTILITY
ENGINEER

CONCRETE ADJUSTING RINGS
8" MIN., 12" MAX.
FLAT SLAB TOP SHALL BE
USED IN LIEU OF ECCENTRIC
CONES FOR SHALLOW
MANHOLE CONSTRUCTION OR
AS SCHEDULED

SET BARREL JOINTS WITH
RUBBER TYPE GASKET EQUAL
TO ASTM C-443 AND ON
DOUBLE ROW OF 1/2" KENT
SEAL OR SINGLE ROW OF 1"
KENT SEAL

ENTIRE EXTERIOR OF
MANHOLE TO BE SPRAYED
WITH BITUMINOUS COATING

4'-0" DIA. TYPE IS
5'-0" DIA. TYPE IIS

City of Carmel Utilities
STANDARD DETAILS

DATE: December 2011
DRAWING: CS9
SCALE: Not To Scale

TITLE:
**TYPE IS, IIS & IIIS
MANHOLES**

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