

SEWAGE SYSTEM MANHOLES.

2. CHIMNEY SEALS, PER THE VILLAGE OF DOLTON, SHALL BE "GNR INFRA-RISER" RUBBER MATERIAL. OTHER DESIGN SOLUTIONS SHALL REQUIRE THE APPROVAL OF THE JURISDICTIONAL GOVERNING ENTITY.

3. (ELASTOMERIC BANDS) CHIMNEY SEALS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.

> ELASTOMERIC **DETAIL**

STANDARD SPECIFICATIONS FOR WATER AND SEWER CONSTRUCTION IN ILLINOIS, LATEST EDITION.

41-2.01 PROTECTION OF WATER MAIN AND WATER SERVICE LINES 41-2.01A GENERAL

Water mains and water service lines shall be protected from sanitary sewers, storm sewers, combined sewers, house sewer service connections

and drains as follows:

41-2.01B HORIZONTAL SEPARATION - WATER MAINS AND SEWERS

- (1.) Water mains shall be located at least ten (10) feet (3.1 m) horizontally from any existing or proposed drain, storm sewer, sanitary sewer, combined sewer or sewer service connection.
- (2.) Water mains may be located closer than ten (10) feet (3.1 m) to a sewer line when:
 - (a) local conditions prevent a lateral separation of ten (10) feet (3.1 m);
 - (b) the water main invert is at least eighteen (18) inches (460 mm) above the crown of the sewer; and
 - (c) the water main is either in a separate trench or in the same trench on an undisturbed earth shelf located to one side of the sewer.
- (3.) When it is impossible to meet (1) or (2) above, both the water main and drain or sewer shall be constructed of slip-on or mechanical joint cast or ductile iron pipe, prestressed concrete pipe, or PVC pipe equivalent to water main standards of construction. The drain or sewer shall be pressure tested to the maximum expected surcharge head before backfilling. See

Standard Drawing No. 18.

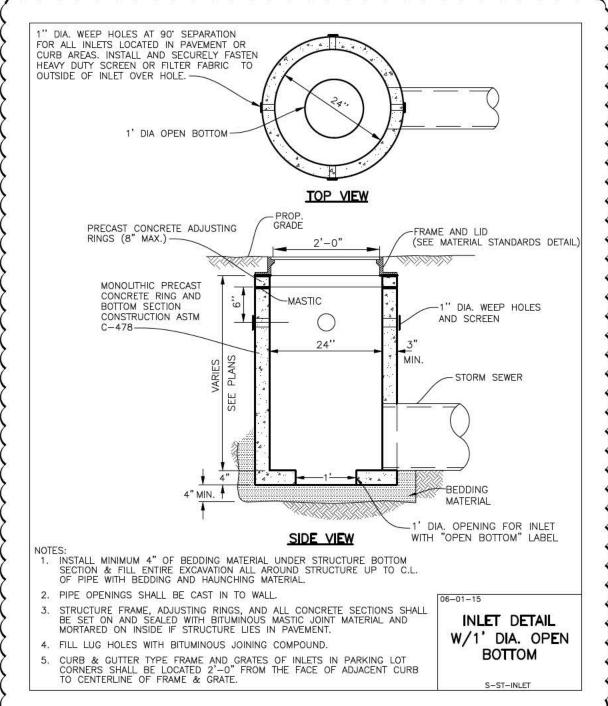
WATER AND SEWER SEPARATION REQUIREMENTS (HORIZONTAL SEPARATION)

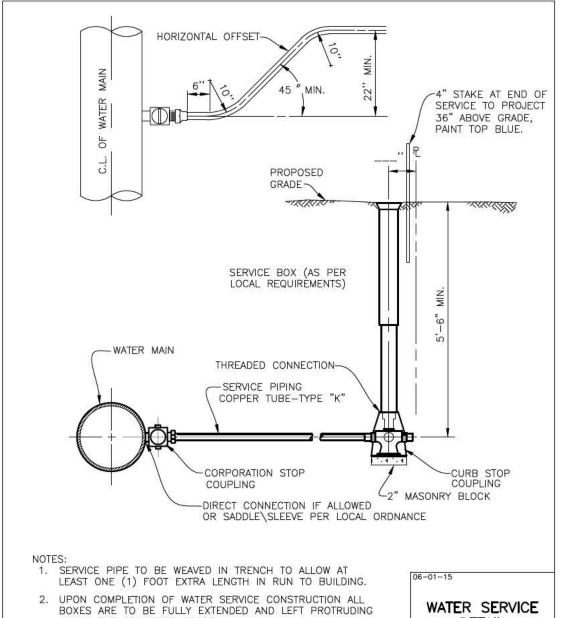
STANDARD SPECIFICATIONS FOR WATER AND SEWER CONSTRUCTION IN ILLINOIS, LATEST EDITION.

41-2.01C VERTICAL SEPARATION - WATER MAINS AND SEWERS

- (1.) A water main shall be separated from a sewer so that its invert is a minimum of eighteen (18) inches (460mm) above the crown of the drain or sewer whenever water mains cross storm sewers, sanitary sewers or sewer service connections. The vertical separation shall be maintained for that portion of the water main located within ten (10) feet (3.1m) horizontally of any sewer or drain crossed. A length of water main pipe shall be centered over the sewer to be crossed with joints equidistant from the sewer or drain.
- (2.) Both the water main and sewer shall be constructed of slip-on or mechanical joint cast or ductile iron pipe, prestressed concrete pipe, or PVC pipe equivalent to water main standards of construction when:
- (a) it is impossible to obtain the proper vertical separation as described in (1) above; or
- (b) the water main passes under a sewer or drain.
- (1) CASING OF EITHER THE WATER MAIN OR SEWER PIPE IS
- ACCEPTABLE IN LIEU OF PLACING THE SEWER IN WATER MAIN EQUIVALENT PIPE.
- (2) THE STORM SEWER CAN BE CONSTRUCTED WITH REINFORCED CONCRETE PIPE USING FLEXIBLE GASKETS JOINTS, (ASTM C361 C443) INSTEAD OF CONSTRUCTING THE STORM SEWER WITH WATER MAIN EQUIVALENT PIPE OR CASING PIPE.
- (3.) A vertical separation of eighteen (18) inches (460 mm) between the invert of the sewer or drain and the crown of the water main shall be maintained where a water main crosses under a sewer. Support the sewer or drain lines to prevent settling and breaking the main, as shown on the Plans or as approved by the ENGINEER.
- (4.) Construction shall extend on each side of the crossing until the perpendicular distance from the water main to the sewer or drain line is at least ten (10) feet (3.1 m) See Standard Drawings No. 19-23.

WATER AND SEWER SEPARATION REQUIREMENTS (VERTICAL SEPARATION)





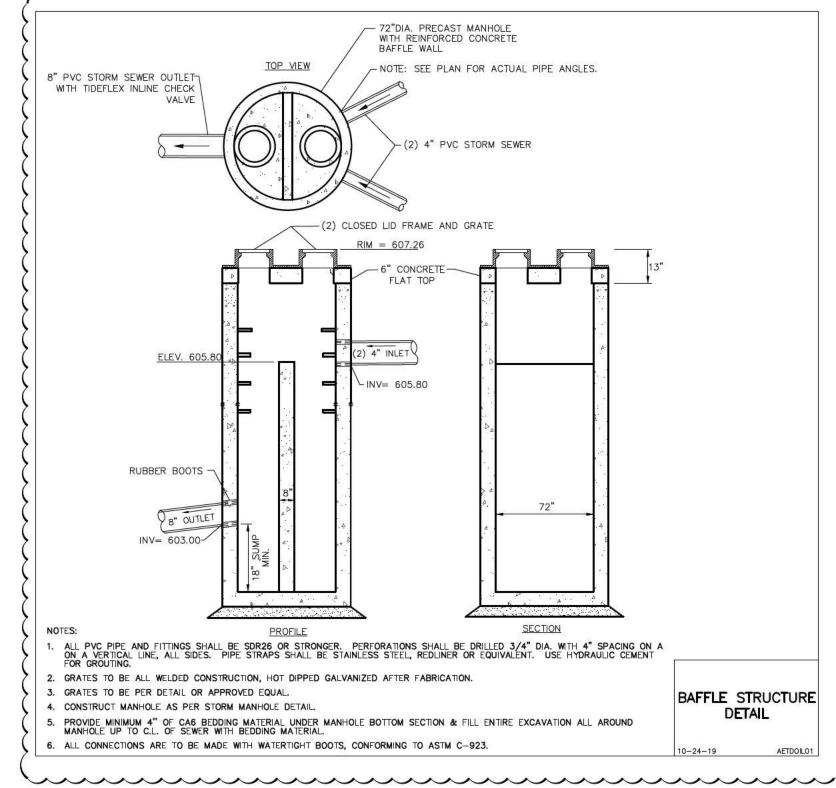
DETAIL

S-WM-SERVICE

ABOVE THE PROPOSED GRADE.

SPECIFIED.

3. GRANULAR BACKFILL TO BE PLACED UNDER PAVEMENT AS



SHOULD A CONFLICT ARISE BETWEEN MANHARD DETAILS AND THE VILLAGE DETAILS, THE VILLAGE DETAILS SHALL TAKE PRECEDENCE.

PROJ. MGR.: TTR PROJ. ASSOC.: JRC SHEET

DEVELOPMENT

RETAIL

PROPOSED

ILLINOIS

OF DOLTON,

VILLAGE

TION

08-05-19 N.T.S. SCALE: AETDOIL01