## SEWER AND WATER MAIN CROSSINGS

| CONTRACT NO. 64178 | F.A.P. | SECTION | COUNTY | TOTAL | SHEETS | NO. 549 | 116RS-1 | OGLE | 593 | 253 | STA. | TO STA. | FED. ROAD DIST. NO. | ILLINOIS | FED. AID | PROJECT |

EXISTING OR PROPOSED MANHOLE PROPOSED PROPOSED CASING CASING - FLOW EXISTING STORM SEWER EXISTING STORM SEWER OUTLET OR STORM SEWER TO BE OR STORM SEWER TO BE NO JOINT CONNECTION CONSTRUCTED CONSTRUCTED SHALL BE ALLOWED IN THE SANITARY OR THE EXISTING SANITARY SEWER OR SEWER TO CASING INSIDE THE MANHOLE BE CONSTRUCTED

ELEVATION - CONCENTRIC

CASING SHALL BE CAST IRON WITH AN INSIDE DIAMETER 50 (2) LARGER IN DIAMETER THAN ENCASED PIPE OUTSIDE DIAMETER WITH BOTH FNDS OF CASING SPALED

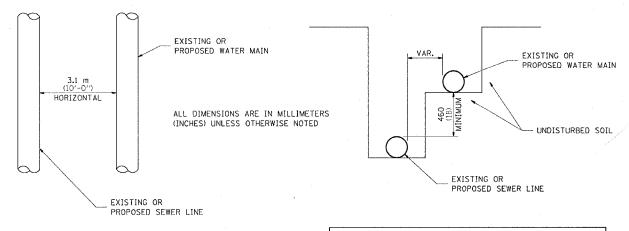
AT GRADE CROSSING OF SANITARY AND STORM SEWER

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED

THIS DETAIL IS FOR UNKNOWN UTILITIES UNLESS QUANTITIES ARE INCLUDED IN THE PLANS THE EXTRA WORK WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04.

WHEN PROPOSED SEWER (OR WATER) IS LOCATED 3.1 m (10'-0") OR MORE FROM EXISTING WATER (OR SEWER) NO SPECIAL CONSTRUCTION REQUIRED.

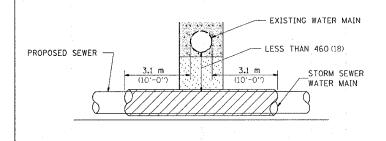
WHEN PROPOSED SEWER (OR WATER) IS LOCATED LESS THAN 3.1 m (10'-0'') FROM EXISTING WATER (OR SEWER) DETAILS BELOW SHALL APPLY.



WATER AND SEWER HORIZONTAL SEPARATION REQUIREMENTS

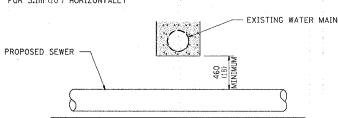
POINT LOADS SHALL NOT BE ALLOWED BETWEEN SEWER OR SEWER CASING AND WATER MAIN

PROVIDE ADEQUATE SUPPORT FOR EXISTING WATER MAIN TO PREVENT DAMAGE DUE TO SETTLEMENT OF SEWER TRENCH



ELEVATION - ECCENTRIC

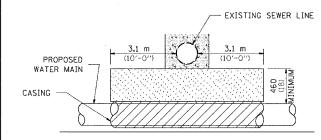
PROVIDE ADEQUATE SUPPORT FOR EXISTING WATER MAIN TO PREVENT DAMAGE DUE TO SETTLEMENT OF SEWER TRENCH MAINTAIN 460 (18) MINIMUM VERTICAL SEPARATION FOR 3.1m (10') HORIZONTALLY



ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED PROPOSED SEWER LINE
BELOW EXISTING WATER MAIN

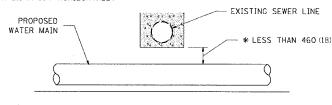
PROVIDE ADEQUATE SUPPORT FOR EXISTING SEWER LINE TO PREVENT DAMAGE DUE TO SETTLEMENT

PLACE TRENCH BACKFILL FOR 3.1 m (10') ON EITHER SIDE OF SEWER LINE



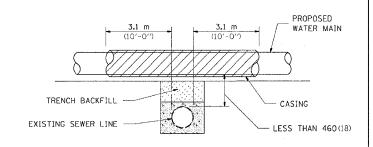
CASING SHALL BE CAST IRON WITH AN INSIDE DIAMETER 50 (2) LARGER IN DIAMETER THAN ENCASED PIPE OUTSIDE DIAMETER WITH BOTH ENDS OF CASING SEALED

PROVIDE ADEQUATE SUPPORT FOR EXISTING WATER MAIN TO PREVENT DAMAGE DUE TO SETTLEMENT OF SEWER TRENCH MAINTAIN 460 (18) MINIMUM VERTICAL SEPARATION FOR 3.1 m (10°) HORIZONTALLY



\* NOT ALLOWED
MUST MAINTAIN 460(18) VERTICAL SEPARATION

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED PROPOSED WATER MAIN BELOW EXISTING SEWER LINE POINT LOADS SHALL NOT BE ALLOWED BETWEEN WATER MAIN OR WATER MAIN CASING AND SEWER



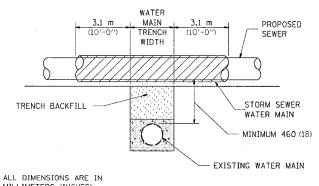
PLAN VIEW

CASING SHALL BE CAST IRON WITH AN INSIDE DIAMETER 50 (2) LARGER IN DIAMETER THAN ENCASED PIPE OUTSIDE DIAMETER WITH BOTH ENDS OF CASING SEALED

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED

PROPOSED WATER MAIN ABOVE EXISTING SEWER LINE

PROVIDE ADEQUATE SUPPORT FOR SEWER TO PREVENT SETTLING AND BREAKING THE WATER MAIN.



MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED

> EXISTING WATER MAIN BELOW PROPOSED SEWER LINE WITH MINIMUM 460(18) VERTICAL SEPARATION