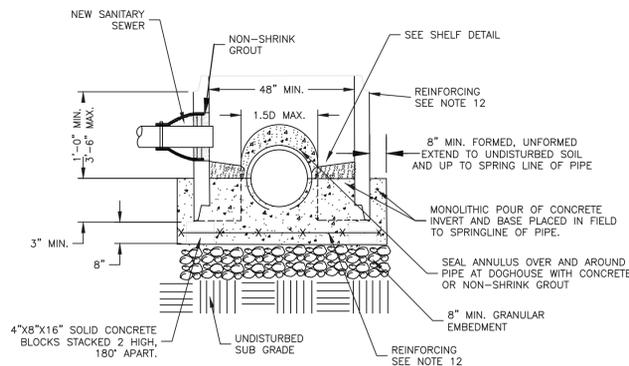
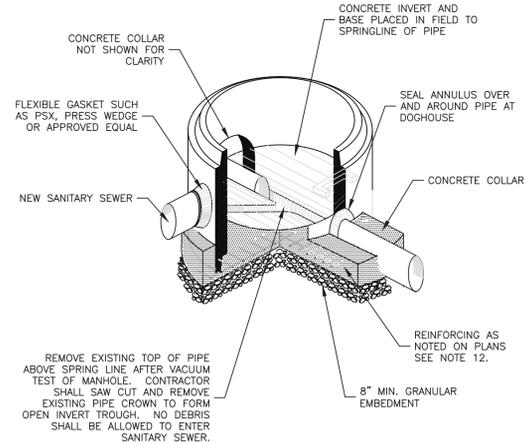
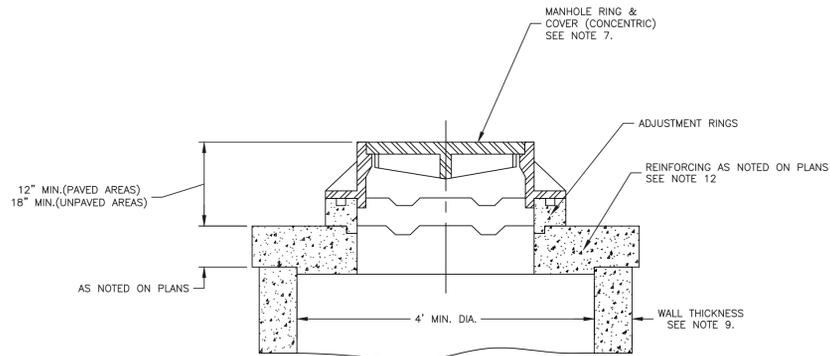


PLAN VIEW

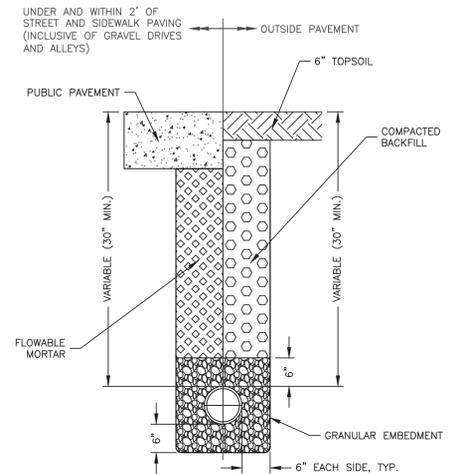


SECTION B-B

STANDARD DOGHOUSE MANHOLE
N.T.S.



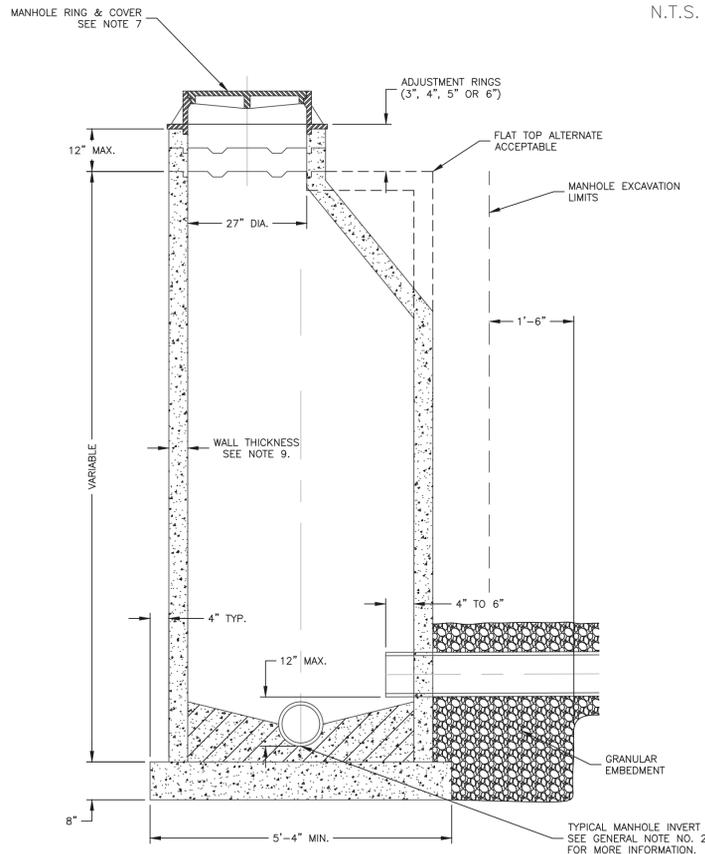
STANDARD PRECAST MANHOLE
(SHALLOW TYPE)
N.T.S.



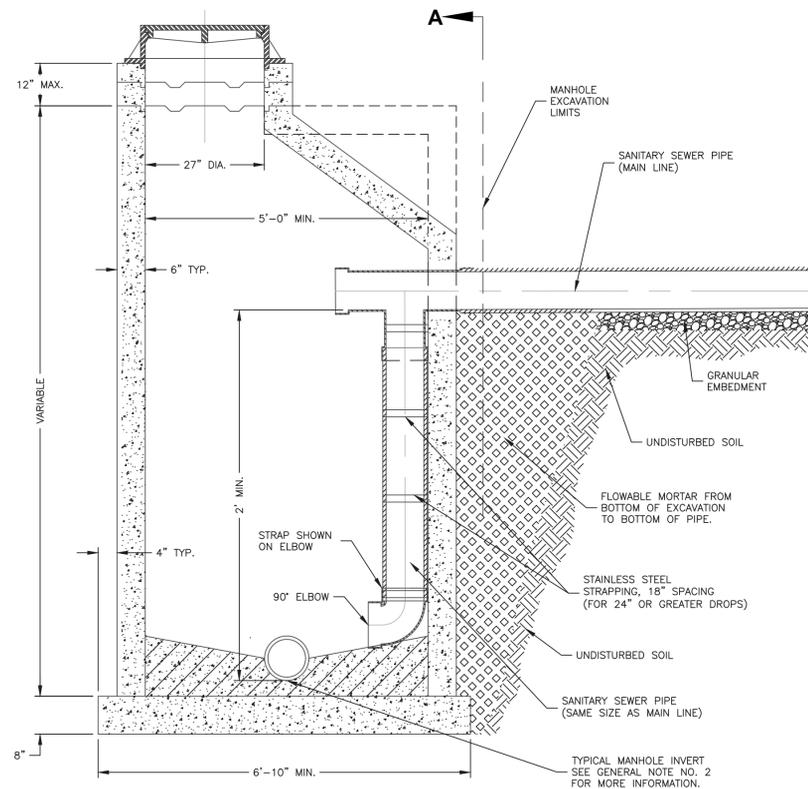
NOTES

1. FLOWABLE MORTAR MATERIALS AND PLACEMENT LIMITS SHALL CONFORM TO SECTION 1102E AND 1107B OF THE CITY OF LAWRENCE CONSTRUCTION AND MATERIAL SPECIFICATIONS SECTION 1100-GRADING RESPECTIVELY.
2. COMPACTED BACKFILL SHALL CONFORM TO SECTION 1107B AND 1108 OF THE CITY OF LAWRENCE CONSTRUCTION AND MATERIAL SPECIFICATIONS SECTION 1100-GRADING.
3. DETAIL SHOWN SHALL GOVERN IN NEW CONSTRUCTION. THE CITY OF LAWRENCE STANDARD DETAILS FOR STREET REPAIR-PAVEMENT REMOVAL AND REPLACEMENT DETAILS FOR TRENCHING WITHIN EXISTING ROADWAYS SHALL GOVERN WITHIN EXISTING PAVEMENT.

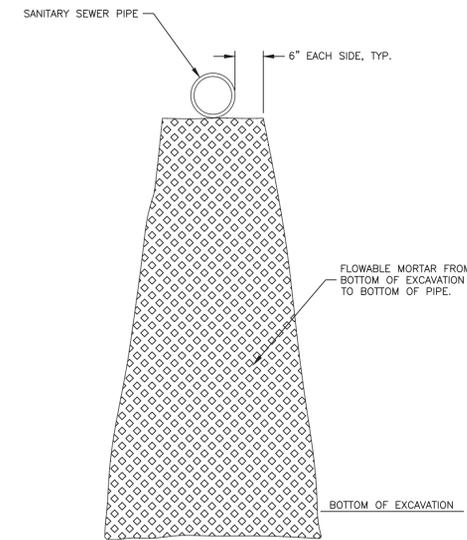
SANITARY SEWER TRENCH DETAILS
N.T.S.



STANDARD PRECAST MANHOLE
(ECCENTRIC CONE)
N.T.S.



STANDARD DROP MANHOLE SECTION
(FOR 8\"/>



SECTION A-A

NOTES

1. PRECAST MANHOLES SHALL CONFORM TO ASTM C-478 AND THE KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT MINIMUM STANDARDS OF DESIGN.
2. PIPE(S) SHALL BE TEMPORARILY PLUGGED PRIOR TO FORMING INVERTS. INVERTS SHALL BE FORMED WITH KCMMB 4K CONCRETE OR GROUT PER SPECIFICATIONS.
3. STANDARD DEPTH MANHOLE IS 6'-0\"/>

2026 EDITION SHEET ____ OF ____

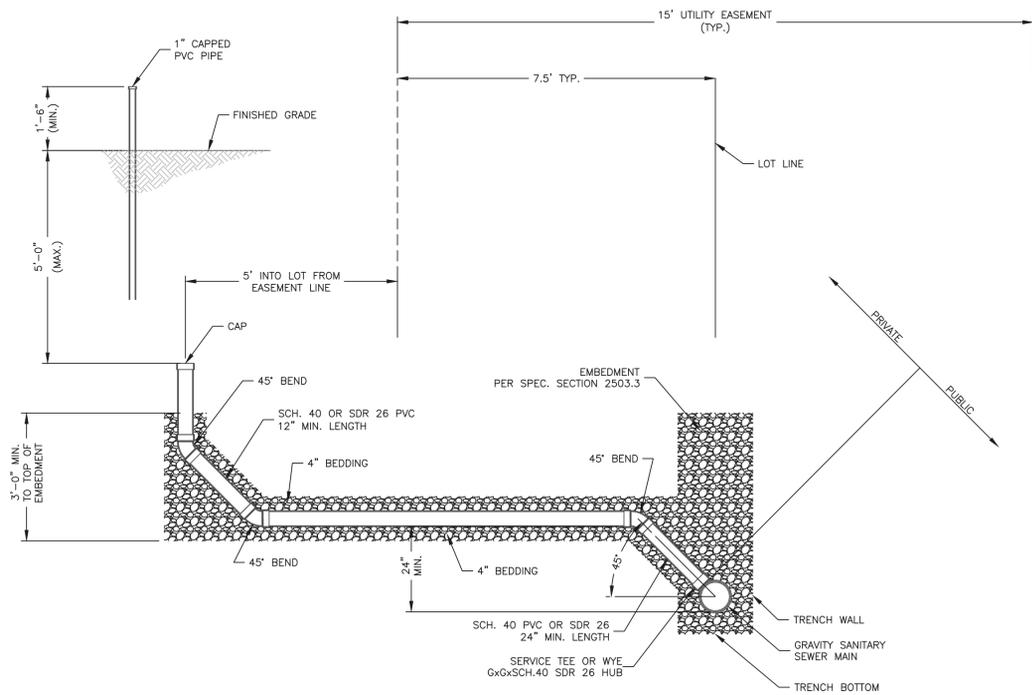
DATE	BY	REVISION
04-01-26	LJM	REPLACES ALL PREVIOUS VERSIONS OF SANITARY SEWER DETAILS
04-01-25	LJM	REPLACES ALL PREVIOUS VERSIONS OF SANITARY SEWER DETAILS



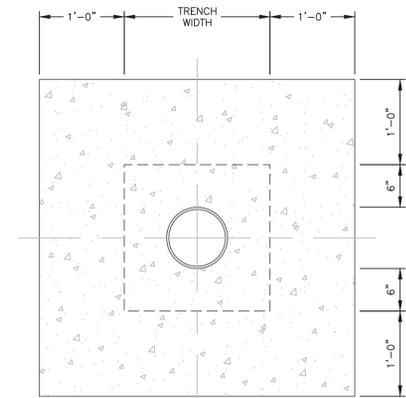
STANDARD DETAILS FOR
SANITARY SEWER-GRAVITY

ANDREW P. ENSZ PROGRAM MANAGER CRAIG S. OWENS CITY MANAGER

- GENERAL NOTES:**
- SERVICE TEE OR WYE SHALL BE INSTALLED SO THAT SERVICE CONNECTION IS A MINIMUM OF 45° FROM HORIZONTAL.
 - SOLVENT WELDED CONNECTIONS ARE REQUIRED FOR THE ENTIRE SERVICE CONNECTION FROM THE TEE TO THE CAP, IF SCHEDULE 40.
 - MINIMUM GRADE FOR SERVICE LATERALS ARE 1.00% FOR SIX (6) INCH AND 2.00% FOR FOUR (4) INCH SERVICE LINES.
 - LOCATION OF TEE OR WYE CONNECTION BY STATION AND HORIZONTAL LENGTH OF STUB OUT TO BE NOTED ON CONSTRUCTION DRAWINGS OF SANITARY SEWER MAIN CONSTRUCTION.

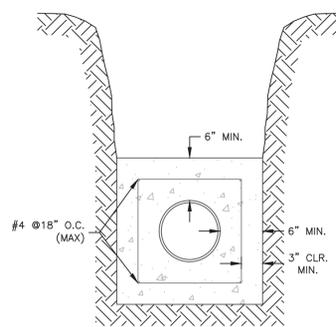
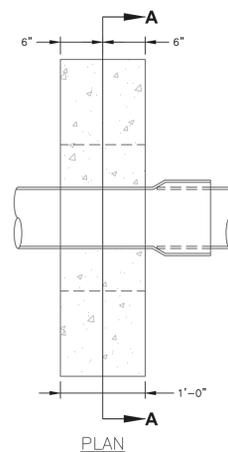


SANITARY SEWER SERVICE CONNECTION STUB OUT DETAIL
N.T.S.

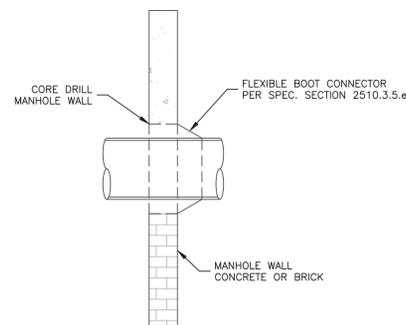


SECTION A-A

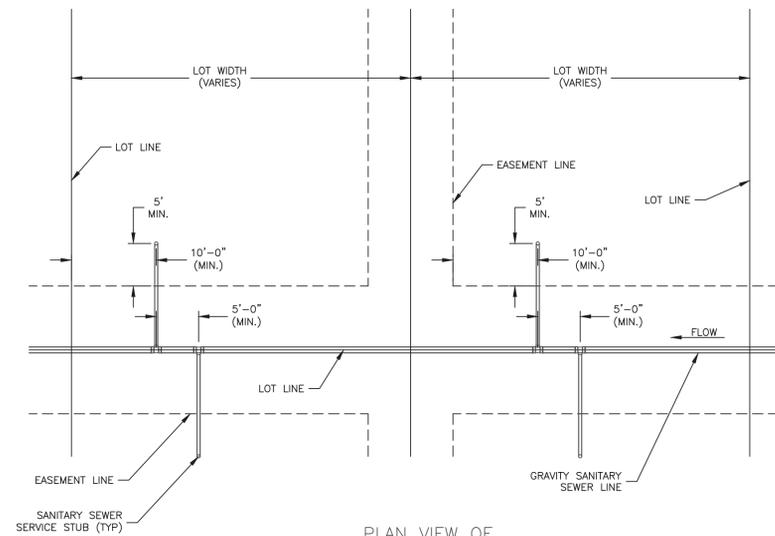
CONCRETE PIPE ANCHOR DETAIL
N.T.S.



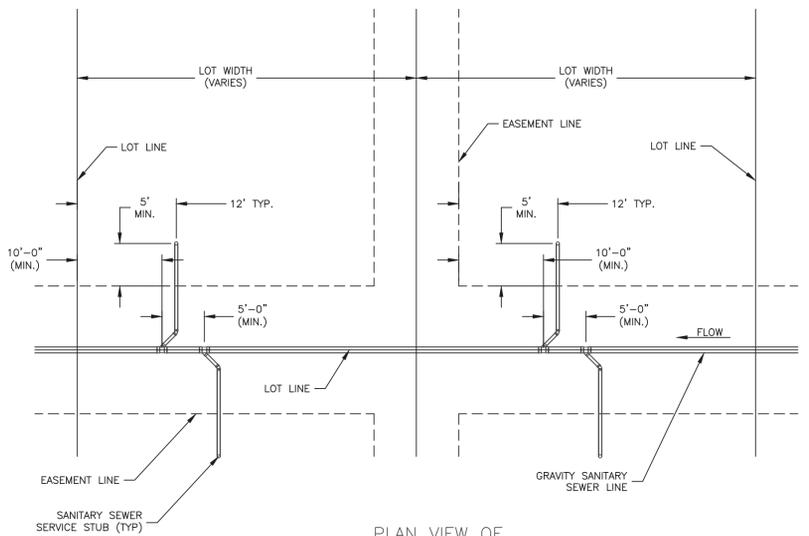
CONCRETE ENCASEMENT DETAIL
N.T.S.



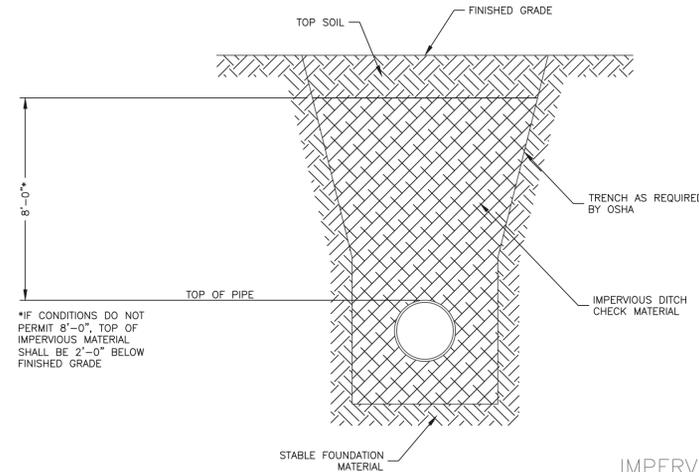
CONNECTION TO EXISTING MANHOLE
N.T.S.



PLAN VIEW OF SANITARY SEWER SERVICE TEE CONNECTION STUB OUT LOCATIONS
BACK LOT LINE EXAMPLE SHOWN



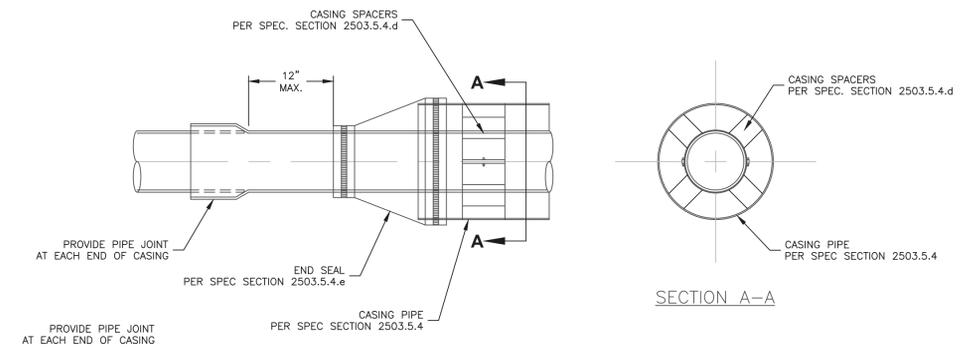
PLAN VIEW OF SANITARY SEWER SERVICE WYE CONNECTION STUB OUT LOCATIONS
BACK LOT LINE EXAMPLE SHOWN



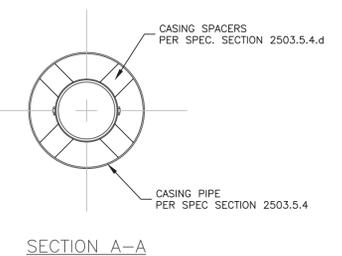
*IF CONDITIONS DO NOT PERMIT 8'-0", TOP OF IMPERVIOUS MATERIAL SHALL BE 2'-0" BELOW FINISHED GRADE

IMPERVIOUS DITCH CHECKS SHALL BE PLACED WHERE SHOWN ON THE PLANS. LENGTHS SHALL BE A MINIMUM OF 10 L.F. FLOWABLE FILL IS REQUIRED FOR PVC PIPE. FOR OTHER PIPE TYPES, CLAY MATERIAL OR FLOWABLE FILL MAY BE USED AT THE CONTRACTOR'S OPTION. FLOWABLE FILL MATERIAL TO COMPLY WITH CITY OF LAWRENCE CONSTRUCTION AND MATERIALS SPECIFICATION SECTION 1100, CURRENT EDITION. CLAY MATERIAL SHALL BE FREE OF CLODS, CLUMPS, DEBRIS, ORGANIC MATERIAL, AND STONES, COMPACTED SO AS TO OBTAIN 95% OF STANDARD PROCTOR MAXIMUM DENSITY AS DETERMINED BY ASTM D698.

IMPERVIOUS DITCH CHECK
N.T.S.



CASING PIPE DETAIL
N.T.S.



DIP, VCP OR TRUSS PIPE CONNECTION (REPAIRS ONLY)
N.T.S.

- GENERAL NOTE:**
- CATHODIC AND CORROSION PROTECTION SHALL BE PROVIDED FOR ALL CASING CONDUITS. ONE 32 LB SACRIFICIAL ANODE PACKAGE PER 100 FEET OF CASING PIPE SHALL BE PROVIDED AT EACH END OF THE CASING. SACRIFICIAL MAGNESIUM ANODES SHALL BE ATTACHED TO THE CASING PIPE BY A #12 A.W.G. GROUNDING WIRE AT EACH END OF THE CASING.



2026 EDITION SHEET ____ OF ____

DATE	BY	REVISION
04-01-26	LJM	REPLACES ALL PREVIOUS VERSIONS OF SANITARY SEWER DETAILS
04-01-25	LJM	REPLACES ALL PREVIOUS VERSIONS OF SANITARY SEWER DETAILS



STANDARD DETAILS FOR
SANITARY SEWER-GRAVITY

2 OF 2

ANDREW P. ENSZ PROGRAM MANAGER CRAIG S. OWENS CITY MANAGER