



Section 12



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12 SANITARY SEWERS

12.1 General Requirements

All sanitary collection and conveyance shall adhere to the County of Oxford Design Guidelines, Section 4, as well as the following modifications or additions specific to sanitary linear infrastructure installed within the Town of Tillsonburg.

12.2 Cleanouts

Cleanouts for sanitary Private Drain Connections (PDCs) shall be installed at property line, gasketed and shall be swept into soft surfaces wherever possible. The cleanouts shall have the following specifications:

- Soft surfaces – cleanout shall be buried with a metallic lid 150mm below the surface and covered with 150mm screened top soil and sod.
- Hard surfaces (if required) – PDCs shall be installed flush with the hard surface and equipped with a solid metal screw down lid.

12.3 Pipe Deflection – Forcemains

Section 4 Item Section 1.15 c) of the County of Oxford Design Guidelines shall be amended for infrastructure with the Town to the following:

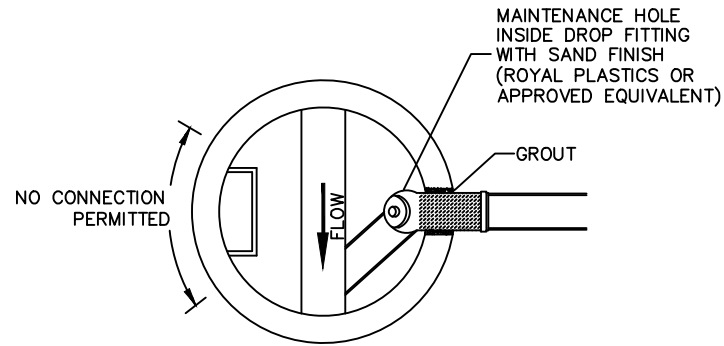
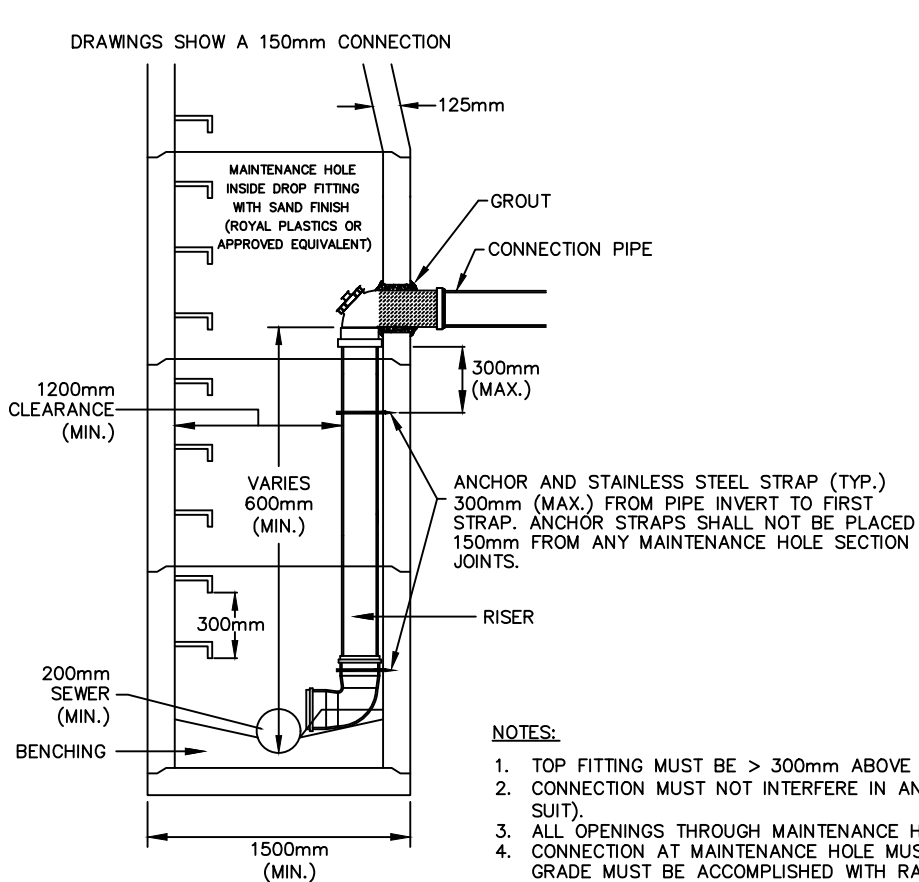
On curves, the main location may deviate slightly from the standard by using half of the maximum allowable deflection in the pipe joints. Refer to manufacture's specifications regarding pipe deflection. A minimum number of special bends should be used.

12.4 Forcemain

All forcemains shall be installed with proper tracer wire and test stations. Test stations should be spaced sufficiently so a signal can be traced for 200-300m.

No forcemain within the Town shall be blue in colour.

AS SPECIFIED FOR CONVENTIONAL SEWER CONNECTIONS, OWNERS ARE RESPONSIBLE FOR MAINTENANCE OF THE CONNECTION FROM THE SEWER TO THE BUILDING. THIS INCLUDES ALL FITTINGS AND PIPE FROM THE MAINTENANCE HOLE BENCHING TO THE BUILDING.



- INTERNAL DROP STRUCTURE SYSTEMS SHALL CONFORM TO APPLICABLE OXFORD COUNTY SPECIFICATIONS AND OPSD 1003.031.
- INTERNAL DROP STRUCTURES SHALL BE USED IN MAINTENANCE HOLES 1500mm AND LARGER WHERE A MINIMUM HEIGHT OF 600mm FROM INLET PIPE INVERT TO THE BOTTOM OF THE CHANNEL EXISTS.
- SERVICE CONNECTIONS ARE TO BE MADE TO SEWERS AS PER TOWN AND COUNTY POLICIES, UNLESS OTHERWISE APPROVED BY THE MANAGER OF ENGINEERING.
- ALL APPLICATIONS FOR INSIDE DROP SERVICE CONNECTIONS TO MAINTENANCE HOLES MUST BE ACCOMPANIED BY A PLAN AND PROFILE DRAWING (TO SCALE) SHOWING THE PROPOSED CONNECTION ALIGNMENT, SEWER MAIN, LADDER, SAFETY GRATES AND ANY OTHER CONNECTIONS TO THE MAINTENANCE HOLE. (PROFILE MUST SHOW ENTIRE MAINTENANCE HOLE INCLUDING FRAME).

NOTES:

- TOP FITTING MUST BE > 300mm ABOVE OR BELOW SAFETY GRATES.
- CONNECTION MUST NOT INTERFERE IN ANY WAY WITH ACCESS, LADDERS NOR SAFETY GRATE USE OR OPERATION (SAFETY GRATE ADJUSTED TO SUIT).
- ALL OPENINGS THROUGH MAINTENANCE HOLE WALLS MUST BE CORE DRILLED.
- CONNECTION AT MAINTENANCE HOLE MUST BE < 4% GRADE, AND WITHIN 30° TO PERPENDICULAR. ANY ADJUSTMENTS TO CONNECTION DIRECTION OR GRADE MUST BE ACCOMPLISHED WITH RADIUS BEND FITTINGS PER OPS.
- ALL VOIDS IN OPENINGS THROUGH MAINTENANCE HOLE WALLS MUST BE GROUTED WITH OPS APPROVED NON-SHRINK MORTAR.
- ALL FITTINGS AND RISER PIPES WILL BE SECURED TO THE MAINTENANCE HOLE WALL WITH STAINLESS STRAPPING AND 1" SCREWS; MINIMUM 1 (ONE) STRAP PER SECTION OF RISER PIPE OR FITTING.
- BENCHING MUST DIRECT FLOW WITH SEWER MAIN FLOW AND BE TO SPRING-LINE OF BOTTOM FITTING.
- DROP PIPES SHALL BE ONE SIZE SMALLER THAN THE INCOMING SEWER WITH A MINIMUM OF 150mm DIAMETER AND A MAXIMUM OF 375mm DIAMETER.



STANDARD DETAIL

PVC INSIDE DROP SEWER SERVICE CONNECTION

APPROVED

..... MANAGER OF ENGINEERING DATE

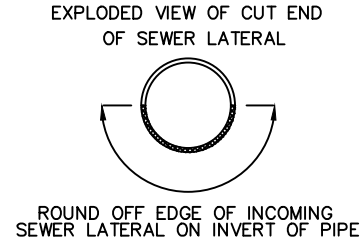
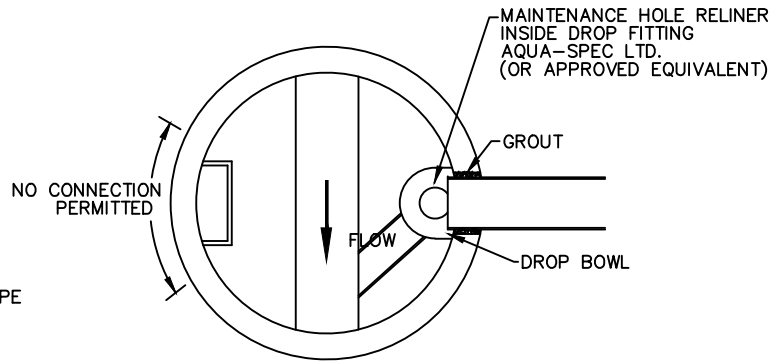
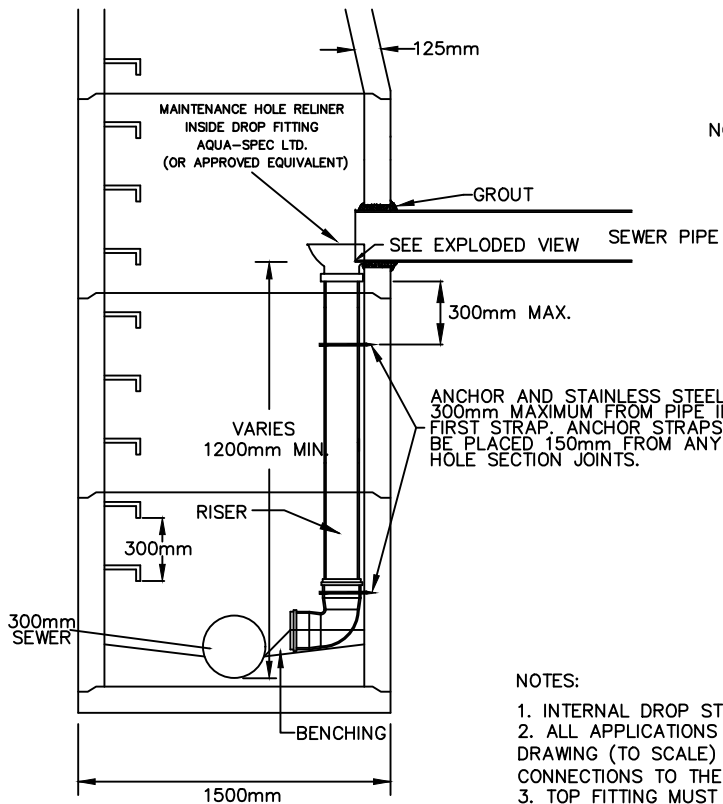
..... DIRECTOR OF OPERATIONS DATE

REVISION No. DATE: DEC 2021

SCALE: N.T.S.

TSD-1200

DRAWINGS SHOW A 250mm SEWER



NOTES:

1. INTERNAL DROP STRUCTURE SYSTEMS SHALL CONFORM TO APPLICABLE OXFORD COUNTY SPECIFICATIONS AND OPSD 1003.031.
2. ALL APPLICATIONS FOR INSIDE DROP SEWER CONNECTIONS TO MAINTENANCE HOLES MUST BE ACCOMPANIED BY A PLAN AND PROFILE DRAWING (TO SCALE) SHOWING THE PROPOSED CONNECTION ALIGNMENT, SEWER MAIN, LADDER, SAFETY GRATES AND ANY OTHER CONNECTIONS TO THE MAINTENANCE HOLE. (PROFILE MUST SHOW ENTIRE MAINTENANCE HOLE INCLUDING FRAME).
3. TOP FITTING MUST BE > 300mm ABOVE OR BELOW SAFETY GRATES.
4. CONNECTION MUST NOT INTERFERE IN ANY WAY WITH ACCESS, LADDERS NOR SAFETY GRATE USE OR OPERATION. (SAFETY GRATE ADJUSTED TO SUIT)
5. ALL OPENINGS THROUGH MAINTENANCE HOLE WALLS MUST BE CORE DRILLED.
6. CONNECTION AT MAINTENANCE HOLE MUST BE < 4% GRADE, AND TO BE PERPENDICULAR TO THE WALL OF THE MAINTENANCE HOLE.
7. ALL VOIDS IN OPENINGS THROUGH MAINTENANCE HOLE WALLS MUST BE GROUTED WITH APPROVED NON-SHRINK MORTAR, PER OPS.
8. ALL FITTINGS AND RISER PIPES WILL BE SECURED TO THE MAINTENANCE HOLE WALL WITH STAINLESS STRAPPING AND 1" SCREWS; MINIMUM 1 (ONE) STRAP PER SECTION OF RISER PIPE OR FITTING.
9. BENCHING MUST DIRECT FLOW WITH SEWER MAIN FLOW AND BE TO SPRING-LINE OF BOTTOM FITTING.
10. DROP PIPE TO BE ONE SIZE SMALLER THAN INCOMING SEWER WITH A MINIMUM OF 150mm DIA. AND MAX. OF 375mm DIA.
11. INTERNAL DROP STRUCTURE TO BE USED ON MAINTENANCE HOLES 1500mm DIA. AND LARGER ONLY.



STANDARD DETAIL

PVC INSIDE DROP SEWER MAINTENANCE HOLE

APPROVED

MANAGER OF ENGINEERING DATE
DIRECTOR OF OPERATIONS DATE

REVISION No. DATE: DEC 2021
SCALE: N.T.S.

TSD-1201