

## GENERAL NOTES FOR REHABILITATION OF EXISTING MAINTENANCE HOLES:

1. ALL REHABILITATION DRAWINGS IN THIS SECTION ARE TO BE READ IN CONJUNCTION WITH THE GENERAL NOTES AND REFERENCES AND ALL OTHER GENERAL OR NEW CONSTRUCTION SANITARY SEWER DRAWINGS.
2. THE INTENT OF THE REHABILITATION DRAWINGS IS TO SEPARATE WHETHER THE REPAIR INVOLVES A PROJECT WITH NO EXCAVATION REQUIRED AT THE EXISTING MAINTENANCE HOLE, OR IF EXCAVATION OF THE TOP SECTION IS REQUIRED.
3. REHABILITATION DRAWINGS WILL ALSO INDICATE WHICH REPAIR OPTION SHALL APPLY FOR EXISTING MAINTENANCE HOLES LOCATED WITHIN THE R.O.W., OR A FLOODPLAIN OR EASEMENT. SELECTION OF THESE OPTIONS SHALL BE BASED ON PROJECT SPECIFIC REQUIREMENTS AND MAY REQUIRE APPROVAL FROM THE REGION PRIOR TO CONSTRUCTION.
4. ALL REHABILITATION OPTIONS SHALL REQUIRE PROPER SURFACE PREPARATION OF THE VARIOUS EXISTING MAINTENANCE HOLE COMPONENTS PRIOR TO THE INSTALLATION OF SEALING AND/OR LINER/COATING PRODUCTS. ALL SURFACE PREPARATION SHALL COMPLY WITH THE MANUFACTURER'S RECOMMENDATIONS FOR ALL PRODUCTS USED.
5. REPAIR EXISTING RISER JOINTS OR CRACKS WITH AN INJECTED POLYURETHANE GROUT SEALANT TO ELIMINATE ACTIVE INFLOW AND INFILTRATION AS PER MANUFACTURER'S RECOMMENDATIONS. INJECTION GROUT TO BE HYPERFLEX OR SEALGUARD II BY S1E OR APPROVED EQUAL.
6. APPROVED ADJUSTMENT UNITS AND APPROVED FRAME AND COVER SYSTEMS TO BE INSTALLED AS PER PROJECT SPECIFICATIONS (STD. DWGS. SECTION 2-6).
7. NON-PENETRATING FROST STRAPS SHALL BE INSTALLED AT ALL RISER JOINTS ON ALL EXISTING MAINTENANCE HOLES (STD. DWG. 2-5-23). FOR LINER OR COATING REHABILITATION OPTIONS, COORDINATE FROST STRAP INSTALLATION SEQUENCE AND SEAL ANCHOR BOLT HOLES AS PER MANUFACTURER'S RECOMMENDATIONS.
8. NEW OR PARTIAL REPLACEMENT BENCHING TO BE CONSTRUCTED TO THE OBVERT OF THE PIPE CHANNEL WITH 15MPa CONCRETE AND SHALL EXTEND ACROSS TOP SURFACE TO M.H. WALLS (STD DWG. 2-5-20). FOR PARTIAL REPLACEMENT OR REPAIR, REMOVE ANY UNSOUND OR DETERIORATED CONCRETE BENCHING AND INTENTIONALLY ROUGHEN REPAIR SURFACE TO +/-5mm AMPLITUDE. CLEAN ALL CONCRETE SURFACES BY ABRASIVE BLASTING PRIOR TO POURING NEW CONCRETE BENCHING.
9. REMOVE OR REPLACE EXISTING STEPS OR LADDERS WHERE REQUIRED TO ALLOW FOR EXISTING MAINTENANCE HOLE REPAIR. PROVIDE FRP LADDERS WHERE REPLACEMENT OF 25% OR MORE OF EXISTING STEPS IS REQUIRED OR OTHERWISE REQUIRED AS PER PROJECT DESIGN. FRP LADDERS BY ACCESS INDUSTRIAL OF MISSISSAUGA ONTARIO OR APPROVED EQUAL. LADDERS TO BE ANCHORED USING 316 SS HILTI KWIK BOLTS OR ENGINEER APPROVED EQUAL (STD DWGS. SECTION 2-6).
10. REMOVE OR REPLACE SAFETY PLATFORMS WHERE REQUIRED TO ALLOW FOR EXISTING MAINTENANCE HOLE REPAIR. PROVIDE FRP SAFETY GRATES WHERE REPLACEMENT IS REQUIRED. FRP PLATFORMS BY ACCESS INDUSTRIAL OF MISSISSAUGA ONTARIO OR APPROVED EQUAL. PLATFORMS TO BE ANCHORED USING 316 SS HILTI KWIK BOLTS OR ENGINEER APPROVED EQUAL. (STD DWGS. SECTION 2-6).
11. FRP SAFETY PLATFORMS AND LADDERS SHALL BE REQUIRED IN AREAS WITH HIGH LEVELS OF HYDROGEN SULFIDE (H<sub>2</sub>S). REFER TO PROJECT SPECIFIC REQUIREMENTS AND DESIGN CRITERIA PRIOR TO CONSTRUCTION.
12. WATERPROOF MEMBRANE SHALL BE APPLIED EXTERNALLY AROUND ALL RISER, TOP AND BASE SECTION JOINTS AND ADJUSTMENT UNIT JOINTS ON ALL MAINTENANCE HOLES. WATERPROOF MEMBRANE TO BE "MEL-ROL" BY W.R. MEADOWS OF MILTON ONTARIO OR APPROVED EQUAL. EXTEND COMPLETELY AROUND ALL JOINTS WITH A MINIMUM 300mm WIDE STRIP. WATERPROOF ABOVE GRADE SURFACES WITH "CEM-KOTE FLEX ST" BY W.R. MEADOWS OF MILTON ONTARIO OR APPROVED EQUAL (STD. DWG. 2-5-25). IF EXTERNAL EXCAVATION IS NOT POSSIBLE, INTERNAL JOINT SEAL (CRETIX CR OR APPROVED EQUAL) TO BE INSTALLED AFTER ACTIVE INFILTRATION HAS BEEN ELIMINATED AS PER MANUFACTURER'S SPECIFICATIONS (STD. DWG. 2-8-2). APPLY DETAIL STRIP ON ALL INSIDE OR OUTSIDE CORNER JOINTS BENEATH WATERPROOF MEMBRANE, C/W PRIMER AND SURFACE PREPARATION AS PER MANUFACTURER'S SPECIFICATIONS. DETAIL STRIP TO BE "MEL-ROL DETAIL STRIP" BY W.R. MEADOWS OF MILTON ONTARIO OR APPROVED EQUAL (STD. DWG. 2-5-25).
13. ALL REHABILITATED CHAMBERS LOCATED OUTSIDE OF R.O.W. OR WITHIN PARK SETTINGS SHALL HAVE A 1500mm HIGH SANITARY CHAMBER MARKING POST (GREEN IN COLOUR), WITHIN 600mm OF CHAMBER COVER (STD. DWG. 2-5-24).
14. CONTRACTOR SHALL REMOVE AND DISPOSE OF EXISTING FRAME AND COVERS, EXISTING ADJUSTMENT UNITS AND SITE DEBRIS FROM REHABILITATED MAINTENANCE HOLE AS REQUIRED.
15. PRIOR TO REHABILITATION CONSTRUCTION, CONTRACTOR SHALL PROVIDE THE REGION WITH METHOD OF BY-PASSING SEWERS FOR APPROVAL. ALL TEMPORARY PLUGS, TEMPORARY FLOW MONITORING AND BY-PASS EQUIPMENT SHALL BE PROVIDED BY THE CONTRACTOR AND REMOVED ONCE REHABILITATION IS COMPLETED.
16. WATERTIGHT FRAME AND COVERS OR INFLOW DISHES TO BE UTILIZED IN POTENTIAL AREAS OF INCREASED RISK TO INFLOW AS PER PROJECT DESIGN AND WITH APPROVAL FROM PROJECT ENGINEER.

### NOTE

1. GENERAL NOTES TO BE READ IN CONJUNCTION WITH ALL STANDARD REHABILITATION DRAWINGS PERTAINING TO REHABILITATION OF EXISTING MAINTENANCE HOLES.



## PUBLIC WORKS STANDARD DRAWING

REV. DATE: NOVEMBER 2019

REVISION NUMBER: 1 FOR REVISION TRACKING  
REFER TO STD. DWG. 2-0-2

APPROVED BY

DRAWN BY

A.P.

AINLEY GROUP

STD. DWG. NUMBER

SCALE

**2-8-1**

N.T.S.

## REHABILITATION

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