

| KEY | PI | AN |
|-----|----|-----|
| NEI | | NIN |

| | LEGEND | |
|---------------------------------------|------------------------------------|-------------------------------------|
| EXISTING | | PROPOSED |
| 25.0 | CONTOUR LINE | 25.0 |
| ⊗/⊗BF | CURB STOP/GATE/BUTTERFLY VALVE | ⊗/⊗BF |
| © | FIRE HYDRANT | • |
| | CONCRETE THRUST BLOCK | 1 |
| ≺ | SIAMESE CONNECTION | ≺ |
| / / / | CATCH BASIN/PIT | / / |
| - (| CULVERT |) - |
| & / RD | ROCK LINING/DAM | & / RD |
| CDCO / ■ RW ■ | ROCK WALL/RETAINING WALL | CDCD / ■ RW ■ |
| ——∳/⊙ | POWER POLE & ANCHOR/LIGHT STANDARD | >> |
| @ /① | TREE | @ /① |
| ▼/� | STREET SIGN/PARKING METER | ▼/• |
| × 131.82 | ELEVATION/GRADE | 125.00 × / + 125.00 |
| 8 | TEST PIT | |
| ~ / ~s → | DRAINAGE/SWALE FLOW DIRECTION | ~-/-s-> |
| | WATER MAIN/SERVICE | ——— w ——⊗- |
| SAN — | SANITARY MANHOLE & PIPE | SAN — |
| STM | STORM MANHOLE & PIPE | STM |
| SAN/STM | COMBINED SEWER | SAN/STM |
| FM | FORCE MAIN | FM |
| GAS ——— | GAS LINE | ——— GAS ——— |
| —— FL ——— | 100YR. FLOOD LIMIT | ——— FL ——— |
| | GUARD RAIL | |
| c | UNDERGROUND COMMUNICATIONS | c |
| P ——— | UNDERGROUND POWER | P |
| | OVERHEAD WIRES | |
| | PROPERTY LINE/BOUNDARY | |
| -oo | FENCE | |
| | BUILDING | , , , , , , , |
| | TOP OF SLOPE | |
| | TOE OF SLOPE | |
| ~~~~ | TREELINE | |
| | LIMITS OF DISTURBANCE | |

<u>NOTES</u>

- EXISTING WATER, STORM & SANITARY SEWER, U/G CONDUIT AND GAS UNDERGROUND PIPING BASED ON HRM GIS SEWER DATA AND HERITAGE GAS INFORMATION. CONTRACTOR TO VERIFY EXACT LOCATIONS AND ELEVATIONS IN THE FIELD.
- 2. PROPERTY BOUNDARIES HAVE BEEN COMPILED FROM VARIOUS SOURCES AND ARE SUBJECT TO SURVEY.
 3. ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH NOVA SCOTIA REGULATIONS AND HRM BY—LAWS, HALIFAX WATER
- DESIGN AND CONSTRUCTION SPECIFICATIONS (LATEST EDITION) AND HRM MUNICIPAL SERVICE SYSTEM GUIDELINES "RED
- BOOK" (LATEST EDITION).

 4. CONTRACTOR TO DISCONNECT, PLUG AND ABANDON EXISTING WATER SERVICE LATERALS FOR CIVIC NO 247 MAIN STREET AT THE MAIN. CONTRACTOR TO REMOVE VALVE BOXES AND VALVES/SHUT OFFS AFTER THE LATERALS HAVE BEEN
- DISCONNECTED FROM MAIN.

 5. CONTRACTOR TO CAP AND ABANDON ALL EXISTING SEWER LATERALS FOR CIVIC NO. 247 MAIN STREET AT THE MAIN

 6. ROOF FLOW CONTROL DRAINS WILL CONTROL POST DEVELOPMENT STORM FLOWS TO PRE—DEVELOPMENT LEVELS.

| 2 | 23/04/27 | REISSUED FOR DEVELOPMENT AGREEMENT | |
|-----|----------|------------------------------------|--------|
| 1 | 22/12/13 | ISSUED FOR DEVELOPMENT AGREEMENT | |
| 0 | 22/05/16 | ISSUED FOR REVIEW | |
| No. | YY/MM/DD | Revision Description | Appr'd |

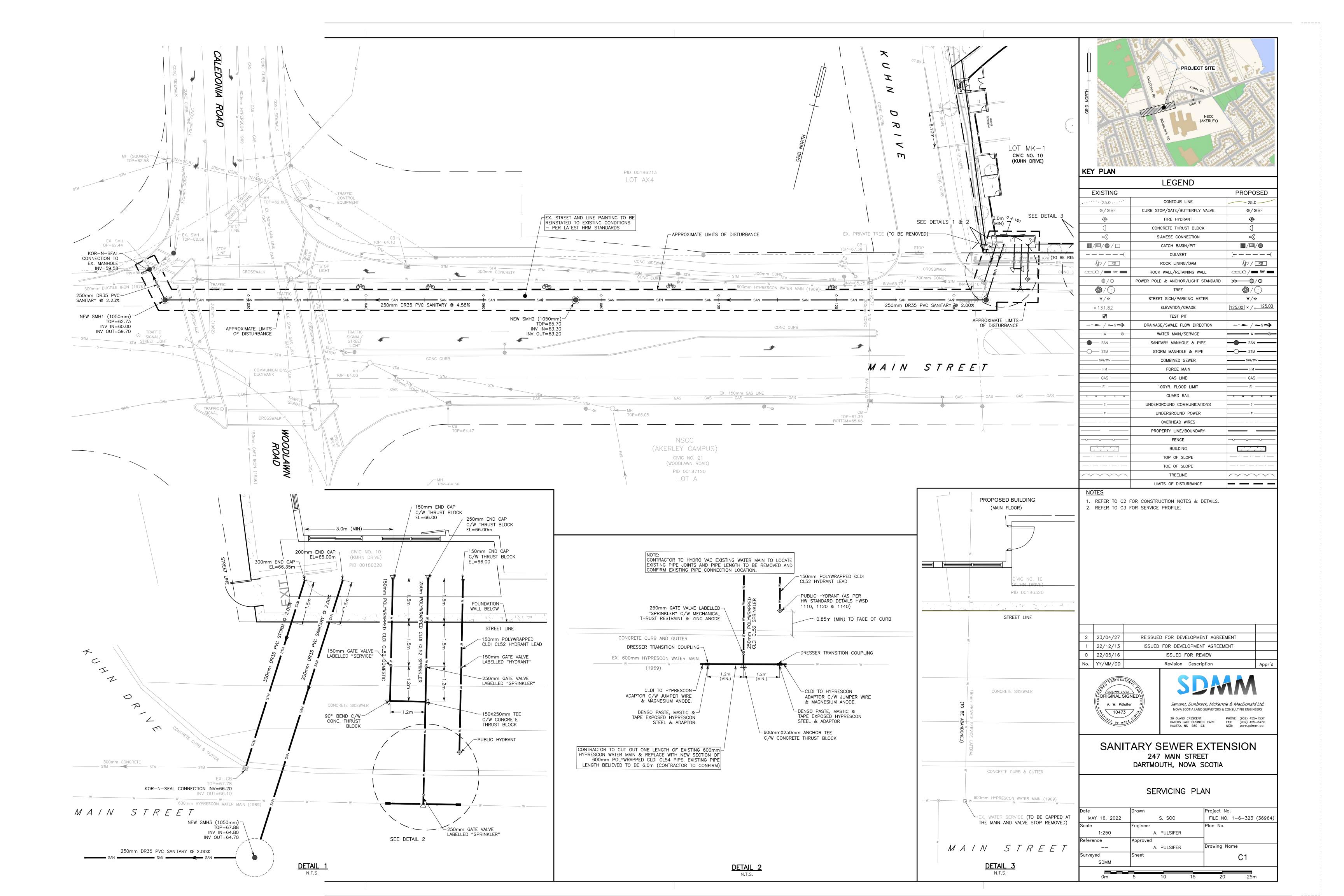




SANITARY SEWER EXTENSION 247 MAIN STREET DARTMOUTH, NOVA SCOTIA

BUILDING SERVICING SCHEMATIC

| Date | Drawn | Project No. |
|-------------------|-------------|--------------------------|
| DECEMBER 13, 2022 | S. S00 | FILE NO. 1-6-323 (36964) |
| Scale | Engineer | Plan No. |
| 1:250 | A. PULSIFER | |
| Reference | Approved | |
| | A. PULSIFER | Drawing Name |
| Surveyed | Sheet |] co |
| SDMM | | |
| | | |
| 0m | 5 10 15 | 20 25m |



HALIFAX REGIONAL MUNICIPALITY STANDARD DETAILS HRM No.

- PAVEMENT STRUCTURE SUBURBAN (ARTERIAL)
- URBAN TRAFFIC SIGN POST
- URBAN SIDEWALK
- CONCRETE SIDEWALK REINFORCING PEDESTRIAN RAMP ALIGNMENT
- CONCRETE TRAFFIC ISLAND CONCRETE CURB AND GUTTER
- CURB RENEWAL/PAYMENT DETAILS
- SHALLOW TRENCH REINSTATEMENT DEEP TRENCH REINSTATEMENT
- TRENCH BACKFILL & REINSTATEMENT-TESTING UNDERGROUND CONDUIT
- STANDARD INTERSECTION PAVEMENT MARKING LAYOUT
- LONGITUDINAL AND TRANSVERSE PAVEMENT MARKINGS
- PAVEMENT ARROWS
- BICYCLE SYMBOL AND SHARED USE LANE SYMBOL PEDESTRIAN & TRAIL CROSSING PAVEMENT MARKING LAYOUT
- 189 BICYCLE PAVEMENT MARKINGS 190 BICYCLE LANE CONFLICT MARKINGS

HALIFAX WATER STANDARD DETAILS

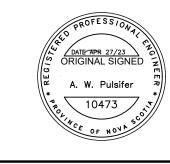
- 1000 TYPICAL TRENCH PAYMENT WIDTH (WATER, WASTEWATER & STORMWATER SYSTEMS) 1010 TYPICAL TRENCH DETAIL WATER SYSTEM INSTALLATION (WATER ONLY)
- POLYETHYLENE ENCASEMENT ON DUCTILE IRON WATER MAINS
- 1040 ZINC ANODE FOR VALVES AND COPPER SERVICE CONNECTIONS
- 1070 THRUST BLOCK REQUIREMENTS CONCRETE THRUST BLOCK
- 1110 HYDRANT INSTALLATION DETAIL
- HYDRANT LOCATION IN RELATION TO DRIVEWAYS & OTHER UTILITY STRUCTURES 1140 HYDRANT PAINTING
- TYPICAL DOMESTIC & SPRINKLER CONNECTIONS AS SEPARATE SERVICE CONNECTION
- 1250 REQ. MIN. CLEARANCES BTW U/G CONDUITS AND WATER SYSTEM
- 1400 NATURAL GAS INSTALLATION SEPARATIONS (POLYETHYLENE MAIN) 1440 TRENCH AND BACKFILL CROSS SECTION
- 1450 PRECAST MANHOLE
- 1460 MANHOLE FRAME AND COVER

- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ARCHITECTURAL, STRUCTURAL, MECHANICAL AND ELECTRICAL DRAWINGS. ANY DISCREPANCIES MUST BE BROUGHT TO THE ENGINEER'S ATTENTION IMMEDIATELY.
- 2. CONTRACTOR SHALL NOTIFY SDMM 48 HOURS PRIOR TO THE START OF CONSTRUCTION TO SCHEDULE A PRECONSTRUCTION MEETING AND ARRANGE SUBSEQUENT SITE INSPECTIONS FOR DATA COLLECTION REQUIRED TO PREPARE RECORDS OF NEW WATER, STORMWATER AND

WASTEWATER SERVICES AS PER HALIFAX WATER (HW) SPECIFICATIONS.

- 3. CONTRACTOR TO OBTAIN AND PAY FOR HALIFAX REGIONAL MUNICIPALITY (HRM) STREET & SERVICES PERMITS PRIOR TO CONSTRUCTION AND NOTIFY HRM AND HW OF SCHEDULED STREET WORK AT LEAST 48 HOURS PRIOR TO COMMENCING CONSTRUCTION. CONTRACTOR TO PAY FOR ALL HW INSPECTION FEES PRIOR TO WATER METER APPLICATION. CONTRACTOR MUST PAY FOR ALL SDMM FEES ASSOCIATED WITH ANY REPEAT SITE INSPECTIONS RESULTING FROM FAILED TESTS.
- 4. EXISTING WATER, STORMWATER AND WASTEWATER UNDERGROUND PIPING IS BASED ON INFORMATION OBTAINED FROM HW; SDMM DOES NOT TAKE RESPONSIBILITY FOR THE INFORMATION RECEIVED FROM OTHERS. CONTRACTOR TO VERIFY EXACT LOCATION AND ELEVATION IN THE FIELD AND NOTIFY THE ENGINEER IF SITE CONDITIONS DIFFER FROM THOSE SHOWN ON THE APPROVED DESIGN DRAWINGS.
- 5. CONTRACTOR TO CONTACT ALL UTILITY COMPANIES (HALIFAX WATER, BELL ALIANT, EASTLINK, NS POWER INC., HERITAGE GAS, ETC.) TO CONFIRM IF ANY UNDERGROUND SERVICES EXIST IN THE VICINITY OF PROPOSED WORK PRIOR TO EXCAVATION.
- 6. EXISTING SITE TOPOGRAPHIC INFORMATION SURVEYED BY SDMM. ELEVATIONS REPRESENT EXISTING SITE GRADES PRIOR TO CONSTRUCTION - CONTACT SDMM FOR LOCAL SURVEY CONTROL.
- 7. PROPERTY BOUNDARIES HAVE BEEN COMPILED AND ARE APPROXIMATE ONLY; BOUNDARIES HAVE NOT BEEN CONFIRMED BY SURVEY.
- 8. CONTRACTOR MUST PREVENT EROSION OR SILTATION OF SURFACE RUNOFF FROM LEAVING THE CONSTRUCTION SITE THROUGH THE USE OF EROSION AND SEDIMENTATION CONTROLS (SEE NSE EROSION AND SEDIMENTATION CONTROL HANDBOOK FOR CONSTRUCTION SITES). CONSTRUCTION OR EXCAVATION DEWATERING TO MUNICIPAL SEWER SYSTEMS MUST ADHERE TO HALIFAX WATER REGULATIONS.
- 9. ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH NOVA SCOTIA REGULATIONS AND HRM BY-LAWS, HW DESIGN AND CONSTRUCTION SPECIFICATIONS (LATEST EDITION) AND HRM MUNICIPAL SERVICE SYSTEM GUIDELINES "RED BOOK" (LATEST EDITION), AND HALIFAX WATER REGULATIONS.
- 10. ALL CONSTRUCTION ACTIVITIES MUST BE SCHEDULED TO MINIMIZE SERVICE/PUBLIC ACCESS INTERRUPTION.
- 11. THE PROPOSED WASTEWATER & STORMWATER SEWER, MANHOLES AND CATCH BASINS SHALL BE INSTALLED AS PER THE HW DESIGN AND CONSTRUCTION SPECIFICATIONS (LATEST EDITION). SEWER MANHOLES SHALL BE PRECAST 1050mm DIAMETER (MIN.) C/W BENCHING AND IMP R10 FRAME AND COVERS UNLESS OTHERWISE REQUIRED. PUBLIC MANHOLES INSTALLED OFF ASPHALT SHALL HAVE R-12 FRAMES AND COVERS. WASTEWATER MANHOLES SHALL BE WRAPPED IN BLUESKIN COMPLETE WITH CONCRETE ADJUSTMENT AS PER HW SPECIFICATIONS. CATCH BASINS TO BE 1050mm (MIN.) DIAMETER COMPLETE WITH FRAME AND GRATE; IMP S441 (AREA), IMP S361 (CURB), PYRAMID (IN LANDSCAPED AREAS) OR APPROVED EQUAL.
- 12. PROPOSED CONCRETE STORMWATER AND WASTEWATER SEWERS SHALL CONFORM TO A.S.T.M C-76 (CLASS III). PROPOSED DR35 PVC STORMWATER AND WASTEWATER SEWERS SHALL CONFORM TO CSA 182.1.
- 13. WASTEWATER SERVICE LATERAL TO HAVE MINIMUM OF 2% SLOPE OR AS
- 14. WASTEWATER AND STORMWATER SERVICE LATERALS, FROM BUILDING TO MAIN, SHALL BE VIDEO INSPECTED BY CONTRACTOR. CONTRACTOR TO PROVIDE DIGITAL COPIES OF VIDEO INSPECTION COMPLETE WITH REPORT IN ACCORDANCE WITH HW SPECIFICATIONS TO THE ENGINEER, PRIOR TO THE WATER METER APPLICATION, FOR VERIFICATION.
- 15. WASTEWATER SERVICE LATERAL (PIPE AND MANHOLES), FROM BUILDING TO MAIN, SHALL BE LEAKAGE TESTED (LOW PRESSURE AIR) AS PER HW STANDARD SPECIFICATIONS.
- 16. ALL WATER SERVICE FITTINGS AND BENDS SHALL HAVE THRUST RESTRAINTS AS PER HW STANDARDS. SPRINKLER & WATER SERVICES SHALL BE CEMENT LINED DUCTILE IRON (CLDI) CLASS 52 COMPLETE WITH POLYETHYLENE ENCASEMENT UNLESS NOTED OTHERWISE. DOMESTIC SERVICES, LESS THAN 100mm DIA, SHALL BE TYPE K COPPER COMPLETE WITH PIPE WRAP INSULATION FROM CORPORATION STOP TO BUILDING. ALL NEW WATER SERVICES & FITTINGS TO BE INSTALLED WITH A MINIMUM OF 1.6m OF GROUND COVER. CONTRACTOR TO FOLLOW THE HW DESIGN AND CONSTRUCTION SPECIFICATIONS (LATEST EDITION) FOR INSTALLATION
- 17. WHEN CROSSING SEWERS WITH A WATER SERVICE, CONTRACTOR SHALL PROVIDE A MINIMUM 450mm VERTICAL SEPARATION BETWEEN BOTTOM OF WATER SERVICE AND TOP OF SEWER. CONTRACTOR TO MAINTAIN A MINIMUM, 300mm VERTICAL AND 300mm HORIZONTAL, SEPARATION BETWEEN WATER AND SEWER SERVICES WHEN RUNNING SERVICE LATERALS PARALLEL IN THE SAME TRENCH. IF VERTICAL SEPARATIONS CANNOT BE MET AT CROSSINGS, CONTRACTOR SHALL PROVIDE CARRIER PIPE TO ISOLATE PIPES AND MAINTAIN A MINIMUM OF 150mm OF VERTICAL SEPARATION. CONTRACTOR TO PROVIDE HI-40 RIGID INSULATION BETWEEN WATER SERVICES AND MANHOLES WHEN WITHIN 1.2m; 500mm MINIMUM SEPARATION BETWEEN WATER SERVICES AND MANHOLES SHALL BE MAINTAINED AS PER HW SPECIFICATIONS.
- 18. WHEN INSTALLING WATER AND SEWER SERVICES NEAR GAS LINES. UNDERGROUND ELECTRICAL CONDUIT, STEAM OR HOT WATER PIPING, TRANSFORMER PADS, UTILITY POLES OR OTHER UTILITIES; SEWER SERVICES SHALL MAINTAIN 1.5m HORIZONTAL SEPARATION; WHEREAS WATER SERVICES SHALL MAINTAIN 2.0m HORIZONTAL SEPARATION UNLESS THE WATER SERVICE IS 50MM OR SMALLER, IN WHICH CASE 1.5m HORIZONTAL SEPARATION IS REQUIRED.
- 19. FINAL GRADING SHALL BE CONSTRUCTED TO ENSURE POSITIVE DRAINAGE OF STORMWATER AWAY FROM BUILDINGS. UNLESS OTHERWISE STATED, CONSTRUCTED GRADES SHALL BE A MINIMUM OF 2% TO A MAXIMUM OF 3H:1V (EXCEPT FOR ROCK FACES/RETAINING WALLS). ALL DISTURBED AREAS SHALL BE FINISHED WITH EITHER CONCRETE OR ASPHALT, TOPSOIL AND SEED OR SOD.
- 20. ELEVATIONS AND SITE GRADING SHALL BE CONFIRMED BY CONTRACTOR WITH ENGINEER PRIOR TO CONSTRUCTION.
- 21. CONTRACTOR TO SAW CUT EXISTING ASPHALT AND REINSTATE ADJACENT TO NEW DRIVEWAY ENTRANCE AND/OR CURB AS PER HRM DETAIL HRM54 AND THE ASPHALT REINSTATEMENT DETAILS HRM59, 60 & 61. CONTRACTOR SHALL COORDINATE AND PROVIDE REQUIRED GEOTECHNICAL CERTIFICATION TO HRM. REGARDLESS OF ASPHALT THICKNESS, CONTRACTOR TO REINSTATE ASPHALT WITH A MINIMUM 100mm NEW ASPHALT THICKNESS FOR LOCAL ROADS AND STREETS; FOR HIGHER CLASSIFICATIONS OF ROADS AND STREETS FOLLOW HRM STANDARD ASPHALT THICKNESS.

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| No. | YY/MM/DD | Revision Description | Appr'd |





SANITARY SEWER EXTENSION 247 MAIN STREET DARTMOUTH, NOVA SCOTIA

CONSTRUCTION NOTES AND DETAILS

| Date | Drawn | Project No. |
|--------------|-------------|--------------------------|
| MAY 16, 2022 | S. S00 | FILE NO. 1-6-323 (36964) |
| Scale | Engineer | Plan No. |
| N.T.S | A. PULSIFER | |
| Reference | Approved | |
| | A. PULSIFER | Drawing Name |
| Surveyed | Sheet | C2 |
| SDMM | | 02 |

