









GENERAL

- NEITHER THE WATER SYSTEM NOR THE SANITARY SYSTEM IS TO BE PLACED INTO SERVICE UNTIL ALL TESTING IS PERFORMED, PASSED AND APPROVED BY THE ENGINEER.
22. THE CONTRACTOR SHALL ADVISE THE ENGINEER AT LEAST TWO DAYS IN ADVANCE OF ANY SERVICE (SANITARY, STORM, OR WATER) INSTALLATION. NO PIPE WORK SHALL BE BURIED UNTIL APPROVAL IS GIVEN BY THE ENGINEER.
23. CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF NATURAL WATERCOURSES FROM DAMAGE DUE TO SILTATION RUNOFF FROM THE CONSTRUCTION SITE. ACCEPTABLE CONSTRUCTION PROCEDURE MAY BE OBTAINED FROM "EROSION AND SEDIMENTATION CONTROL HANDBOOK FOR CONSTRUCTION SITES", CURRENT EDITION BY THE SCOTIA ENVIRONMENT. THE CONTRACTOR SHALL MAKE NECESSARY REPAIRS TO SEDIMENTATION AND EROSION CONTROL DEVICES AS DIRECTED BY DEVELOPERS ON SITE REPRESENTATIVE.
24. CONTRACTOR TO INSPECT SEDIMENT AND EROSION CONTROL STRUCTURES AND MAKE NECESSARY REPAIRS BEFORE AND AFTER EVERY RAINFALL EVENT.
25. CONTRACTOR TO COORDINATE WITH TELEPHONE AND POWER UTILITY REGARDING EXISTING UNDERGROUND CONDUIT LOCATIONS AND REPORT ANY CONFLICTS TO ENGINEER.
26. LOCATION AND INVERTS OF EXISTING SERVICES TO BE VERIFIED IN FIELD PRIOR TO CONSTRUCTION. DISCREPANCIES TO BE REPORTED IMMEDIATELY TO THE ENGINEER.
27. WHERE LATERALS CONNECT TO MANHOLES, PROPER BENCHING TO BE CONSTRUCTED TO DIRECT FLOW INTO OUTLET PIPE.
28. INSULATION TO BE H40 ROAD AND TRAFFIC RATED, 50mm RIGID STYROFOAM, WHERE REQUIRED.
29. 6.0m LONG PVC D1818 SLEEVE c/w LINK SEALS TO BE INSTALLED WHEN 450mm VERTICAL SEPARATION CANNOT BE ACHIEVED AT WATERMAIN CROSSINGS OR WHEN SEWER CROSSES ABOVE WATERMAIN. SLEEVE TO BE CENTERED ON CROSSING.
30. WHERE TRENCH ROCK IS ENCOUNTERED AT THE END OF A PIPE RUN, ROCK IS TO BE OVERBLASTED 10m, AT FULL TRENCH WIDTH, BEYOND END OF PIPE.
31. ALL MANHOLES LOCATED OFF STREET TRAVELLED WAY TO HAVE BOLT DOWN COVERS.
32. CONTRACTOR TO CONTACT PROJECT ENGINEER AND HRM INSPECTOR FOR SITE REVIEW AT THE FOLLOWING STAGES:
  - 32.a. GRUBBING COMPLETED
  - 32.b. SUBGRADE COMPLETED
  - 32.c. TYPE 2 GRAVEL COMPLETED
  - 32.d. TYPE 1 GRAVEL COMPLETEDAPPROVAL FROM PROJECT ENGINEER AT EACH STAGE TO BE RECEIVED IN WRITING PRIOR TO START OF WORK ON NEXT STAGE.
33. DO NOT SUBSTITUTE MATERIALS UNLESS PRIOR WRITTEN APPROVAL IS GIVEN BY THE PROJECT ENGINEER.
34. ALL DISTURBED AREAS NOT STABILIZED BY GRAVEL TO BE HYDROSEED. CONTRACTOR TO RE-HYDROSEED AREAS WHICH DO NOT SHOW SIGNS OF ACTIVE GROWTH IN THE FIRST GROWING SEASON.
35. EXISTING SERVICES TO BE ABANDONED BACK AT MAIN LINE.

STORM

36. CONTRACTOR IS RESPONSIBLE FOR TESTING AND VIDEO INSPECTIONS OF STORM SEWER TO HW STANDARD.
37. ALL STORM PIPE 300mm DIAMETER OR SMALLER TO BE PVC DR35 TO CSA B182.2 AND ASTM D3034 OF THE DIAMETER NOTED ON THE DRAWINGS, COLOR CODED GREEN. ALL STORM PIPE 375mm DIAMETER OR LARGER TO BE CONCRETE TO CSA A257.2 650, DIAMETER AS NOTED, UNLESS OTHERWISE STATED ON THE DRAWINGS.
38. STORM LATERALS TO BE GREEN PVC DR35 125mmØ (UNLESS OTHERWISE NOTED) AT MINIMUM 2.0% GRADE.
39. ALL JOINTS TO BE BELL AND SPIGOT TYPE WITH RUBBER GASKETS TO CSA A 257.3.
40. ALL STORM MANHOLES TO BE PRECAST CONCRETE TO CSA A257.4 AND ASTM C478. MINIMUM DIAMETER OF 1050mm. AS PER HW MUNICIPAL SERVICE SYSTEMS STANDARD DETAIL HWSO 1450.
41. ALL STORM MANHOLES AND CATCH-BASINS TO BE PRECAST WITH A-LOC GASKETS FOR ALL PIPE CONNECTIONS.
42. ALL MAN-HOLE FRAMES AND COVERS TO BE IMP ADJUSTABLE WITH TWO 25mm HOLES, MARKED "STORM SEWER".
43. ALL CATCH-BASIN LEADS TO BE PVC DR35 200mmØ (UNLESS OTHERWISE NOTED) TO CSA B182.2 AND ASTM D3034, COLOR CODED WHITE. WHERE LEADS ARE TO BE CONNECTED TO MAIN LINE, TEE OR KOR-N-TEE APPLICATIONS TO BE USED.
44. ALL CATCH-BASINS TO BE 1050mmØ PRECAST CONCRETE TO CSA A257.4, WITH FRAME AND DEVICES TO BE IMP S401 OR S361, AS INDICATED ON PLANS. INLET CONTROL GRATES (ICGs) TO BE INSTALLED IN OUTLET PIPES AS INDICATED OR AS DIRECTED BY ENGINEER. INLET CONTROLS TO BE CONSTRUCTED OF PVC PLUG C-DRILLED HOLE OF INDICATED SIZE. HOLE TO BE LOCATED OFF-CENTER TO MATCH INVERT. ULT. ELEVATION.

## SANITARY

45. CONTRACTOR IS RESPONSIBLE FOR TESTING AND VIDEO INSPECTIONS OF SANITARY SEWER TO HW STANDARDS.
46. CONTRACTOR IS RESPONSIBLE FOR TESTING OF SANITARY LATERALS TO HW STANDARDS.
47. SANITARY MAIN TO BE PVC DR35 200mmø TO 375mmø (UNLESS OTHERWISE NOTED) AT MINIMUM 1.0% GRADE.
48. SANITARY LATERALS TO BE WHITE PVC DR28 125mmø (UNLESS OTHERWISE NOTED) AT MINIMUM 2.0% GRADE.
49. ALL JOINTS TO BE BELL AND SPIGOT TYPE WITH RUBBER GASKETS TO CSA A 257.3.
50. SANITARY MANHOLES TO BE PRECAST CONCRETE, 1050mmø UNLESS OTHERWISE NOTED, WATERPROOFED WITH TYPEX OR APPROVED EQUIVALENT, FROM FRAME TO BOTTOM OF MANHOLE. COVERS TO BE IMP R10 WITH ONE 20mm HOLE AND NO SIDE NOTCHES. COVER TO BE MARKED "SANITARY SEWER" COVER TO HAVE NEARBY GASKET BETWEEN COVER AND FRAME. AIR TESTING TO TAKE PLACE THROUGH 20mm HOLE WITH COVER ON.

WATER

51. CONTRACTOR IS RESPONSIBLE FOR THE TESTING AND DISINFECTION OF WATERMAINS AND LATERALS TO HW STANDARDS AND SPECIFICATIONS.
52. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR OPERATE EXISTING WATER VALVES OR MAKE CONNECTIONS TO THE EXISTING WATER SYSTEM WITHOUT PRIOR APPROVAL OF THE IHW.
53. ALL WATER PIPE TO BE DUCTILE IRON CLASS 52, MORTAR LINED, ASPHALTIC SEAL COATED, POLY WRAPPED, DIAMETER NOTED ON THE DRAWINGS.
54. ALL DUCTILE IRON PIPE AND FITTINGS ARE TO BE POLY WRAPPED WITH ZINC ANODES (ZN 24-48) CONNECTED TO ALL COPPER SERVICES, GATE VALVES AND HYDRANTS.
55. ALL FITTINGS TO BE OF THE DIAMETER NOTED ON THE DRAWINGS DUCTILE IRON CLASS 52 TO AWWA C153.
56. THRUST BLOCKS TO BE PROVIDED AT ALL TEES, BENDS, CAPS, AND HYDRANT BOWLS. "MEGALUC" MECHANICAL JOINT THRUST RESTRAINTS OR APPROVED EQUIVALENT AS PER HW STANDARDS REQUIRED IN ADDITION TO CONCRETE THRUST BLOCKS TO BE USED ON ALL BENDS.
57. PROVIDE A MINIMUM OF 1.0m OF HORIZONTAL SEPARATION BETWEEN ALL FITTINGS.
58. THRUST BLOCKS SHALL BE CAST-IN-PLACE CONCRETE WITH A COMPRESSIVE STRENGTH OF 32 MPa AT 28 DAYS.
59. PROVISIONS FOR FLUSHING THE LINES PRIOR TO TESTING ETC. MUST BE PROVIDED WITH AT LEAST A 50mmØ OUTLET ON 100mmØ AND LARGER PIPES. COPPER LINES ARE TO HAVE FLUSHING POINTS AT THE END, SAME SIZE AS THE LINE. THE FLUSHING POINT IS TO BE HOSED OR PIPED TO ALLOW THE WATER TO DRAIN OUT TO A PARKING LOT, SODDED AREA OR DITCH. FLUSHING OUTLET TO BE 100mmØ OR, A HYDRANT.
60. ALL VALVES TO CLOSE IN THE CLOCKWISE DIRECTION AS INDICATED ON HW STANDARD DRAWING #1060. GATE VALVES TO BE USED FOR VALVES 300mmØ AND SMALLER, 350mmØ AND LARGER TO BE BUTTERFLY VALVES.
61. ALL WATERMAIN VALVES NOT INSTALLED IN A ROADWAY OR PAVED SURFACE TO HAVE ASPHALT APRONS AS PER HW STANDARD DRAWING NO. 3635. VALVES INSTALLED IN ROADS ONLY CONSTRUCTED TO SUBGRADE TO ALSO HAVE ASPHALT APRONS.
62. WATER LATERAL TO BE TYPE "KX" COPPER (38mmØ) AND BE INSTALLED IN ACCORDANCE WITH HW DETAIL HWSPD-1180.

LIGHT DUTY ASPHALT PAVEMENT

75mm - ASPHALTIC CONCRETE, SURFACE COURSE, NSTIR TYPE C  
150mm - BASE GRAVEL, NSTIR TYPE 1

150mm – SUBBASE GRAVEL, NSTIR TYPE 2

SUBGRADE COMPACTED AS PER GEOTECHNICAL REQUIREMENTS

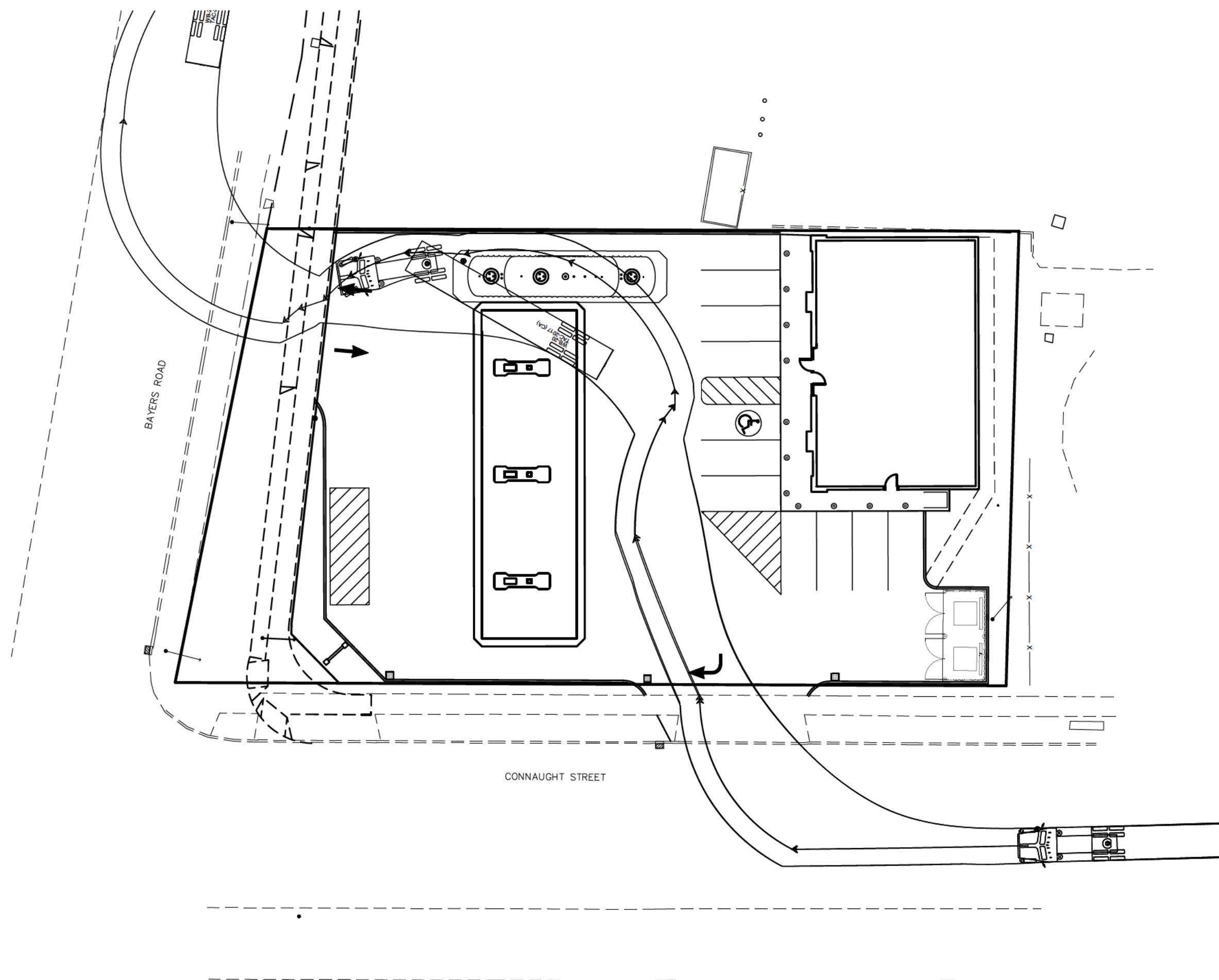
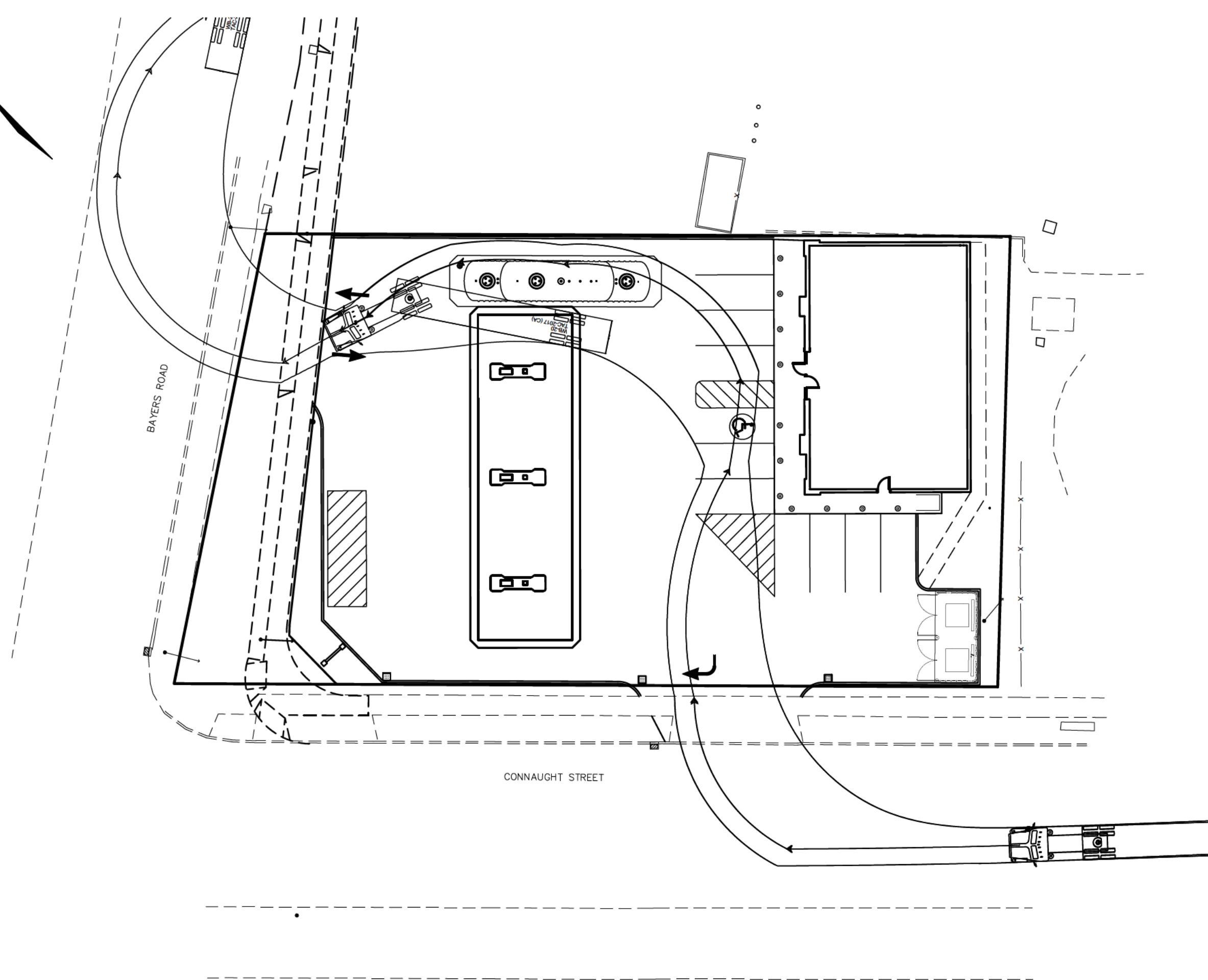
## HEAVY DUTY ASPHALT PAVEMENT

40mm - ASPHALTIC CONCRETE, SURFACE COURSE, NSTIR TYPE C  
60mm - ASPHALTIC CONCRETE, BASE COURSE, NSTIR TYPE B  
150mm - BASE GRAVEL, NSTIR TYPE 1

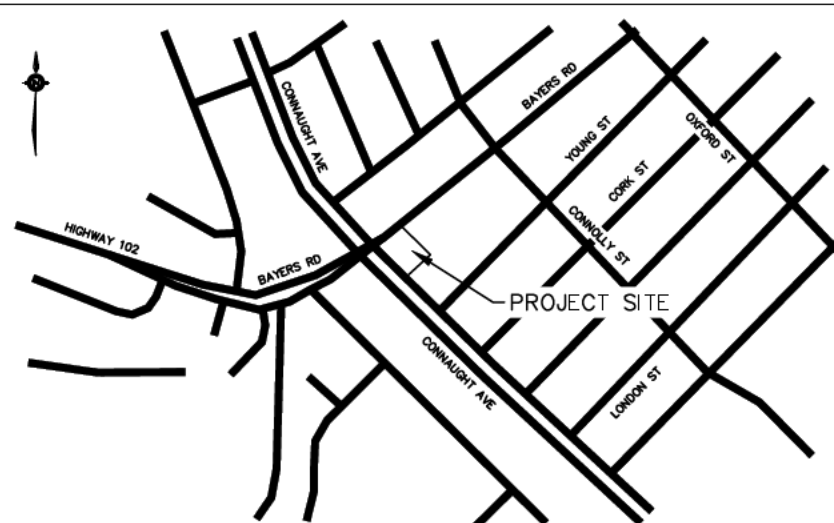
300mm - SUBBASE GRAVEL, NSTIR TYPE 2

SUBGRADE COMPACTED AS PER GEOTECHNICAL REQUIREMENTS

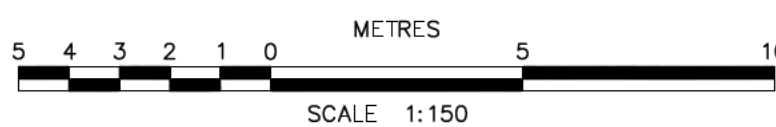
NOTE: THICKNESSES SHOWN ARE MINIMUMS ONLY. GEOTECHNICAL  
REPORT TO GOVERN.



## KEYPLAN



DRAWINGS SUBJECT TO APPROVAL  
PRIOR TO CONSTRUCTION.



3	ISSUED FOR REGULATORY REVIEW		18/11/2022
2	SITE PLAN ISSUED FOR APPROVAL		17/11/2022
1	ISSUED FOR COORDINATION		02/11/2022
0	ISSUED FOR REVIEW		28/10/2022
NO.	DESCRIPTION	CHK'D	DATE

## SEAL



## CLIENT NAME & ADDRESS



Saint John, New Brunswick

## PROJECT NAME &amp; ADDRESS

IRVING OIL  
GAS BAR

Bayers Road, Halifax, Nova Scotia

## SHEET DESCRIPTION

## CONSTRUCTION NOTES AND TRUCK TURNING

SHEET NO.	NUMBER OF SHEETS
C105	5
DRAWN BY: MLP	CHECKED BY: DTH
DATE: 18/11/2022	SCALE: 1:150
	PROJECT NO. H22173