

GENERAL

- a. All site layout information, including building dimensions, setbacks, curbs, depressed curb locations, sidewalks, parking and landscape features must be referenced from the Architect's plans.
b. Prior to the start of construction, the contractor must verify all dimensions and layout information. Any discrepancies must be reported to the Consultant before resuming construction operations.
c. All services shall be installed to the current Town of Caledon Standards, Region of Peel (Peel Std.), Ontario Provincial Standard Drawings (OPSD), Ontario Provincial Standard Specifications (OPSS), and Ontario Building Code (OBC) unless otherwise specified, to the satisfaction of the City and the Consultant.
d. The position of existing pole lines, conduits, watermains, sewers and other underground and aboveground utilities, structures and appurtenances is not necessarily shown on the drawing, and where shown, the accuracy of the position of such utilities and structures is not guaranteed. Prior to construction, the Contractor shall satisfy himself of the exact location of all such utilities and structures, and shall assume all liability for damage to them during the course of construction. This may require excavation to expose utilities as required by Contractor.
e. All trenching to be in accordance with the latest revisions of the Occupational Health and Safety Act and Regulations for Construction Projects.
f. All trenches shall be backfilled to the Town of Caledon Standards and in accordance with the geotechnical report or as otherwise noted on the drawings.
g. All disturbed areas outside proposed grading limits to be restored to original elevations and conditions unless otherwise specified. All restoration shall be completed with the geotechnical requirements for backfill, compaction and approved engineering drawings.

1. WATERMANS

- a. All watermain, appurtenances and construction methods shall conform to current Region of Peel standards.
b. Watermain and/or water service materials 100mm(4") and larger up to and including 300mm (12") must be PVC Class 150 DR18 meeting AWWA specification C-900. Size 50mm(2") and smaller to be copper.
c. All watermain to be installed with continuous 12 gauge solid copper light-colored tracer wire along the top of pipe and brought to the surface at every valve box and fire hydrant.
d. Fittings to be Cast Iron or Ductile Iron cement-lined in conformance with AWWA C110 and ANSI A21.10, or PVC in conformance with AWWA C900 Class 150.
e. Where watermains cross over other utilities, a minimum 0.30m clearance shall be maintained; where watermains cross under other utilities, a minimum 0.50 m clearance shall be maintained, while still maintaining a minimum depth of cover at all times, unless otherwise noted on the drawings.
f. Watermains shall be installed with a min. 1.7m cover and a min. 2.5m horizontal clearance from all other utilities.
g. Watermain bedding shall conform to Peel Std.1-5-1. Watermain support shall conform to Peel Std. 1-5-2. Bedding material to be OPSS Granular 'A'.
h. Concrete thrust blocks are to be installed at all tees, bends, hydrants, ends of mains and connections 100 mm and larger in accordance with Peel Std. 1-5-3, 4, 5, 6 and 7.
i. Watermain shall be restrained where bedding consists of disturbed native material or fill, and as shown on the drawings. Mechanical restraint shall be obtained by using Uni-Flange bell clamps and retaining glands with threaded rod, or approved equal in conformance with UNI-B-13-92.
j. Provisions for flushing water line prior to testing, etc. must be provided with at least a 50mm(2") outlet on 100mm(4") and larger lines. Copper lines are to have flushing points at the end, the same size as the line. They must also be holed or piped to allow the water to drain onto a parking lot or down a drain. On fire lines, flushing outlet to be 100mm(4") diameter minimum on a hydrant.
k. All proposed water piping to be isolated from existing lines in order to allow independent pressure testing and chlorinating from existing systems.
l. Hydrant and valve set to Region standard 1-6-1 and to have pumper nozzle.
m. Hydrant flange elevations shall be set at a grade that will give a flange elevation of 50 mm to 100 mm above the final grade.
n. Hydrants shall be located a minimum of 1.2 metre from the edge of driveways, roadways, utilities, light-poles or other above-ground obstacles.
o. 150 mm to 300 mm diameter gate valves shall be resilient seat gate valves installed in round cast iron valve box with inside screw non-rising spindle, complete with mechanical joint ends, to Peel Std. 1-3-8, and 1-3-3A.
p. All direct buried valves and fittings to have large size Protecto Caps in accordance with ASTM 418.1, to be installed on alternating bolts. Provide sufficient bolt length to accommodate Protecto Caps.
q. All curb stops to be 1.5m off the face of the building unless otherwise noted.
r. Watermains to be installed to grades as shown on approved site plan. Copy of grade sheet must be supplied to inspector prior to commencement of work, where requested by inspector.
s. All live tapping and operation of Region water valves shall be arranged through the Regional Inspector assigned or by contacting the Operations and Maintenance Division.

2. NEW ROADWORK AND PAVEMENT AREAS

- a. Native subgrade shall be approved by the Geotechnical Consultant prior to any roadworks.
b. The top 600mm of the sub-grade shall be compacted to a minimum 98% Standard Proctor Density at optimum moisture content and proof-rolled. All fill within roads and parking areas to be compacted to a min. 95% Standard Proctor Density and confirmed by a soils consultant, and reports submitted to the City prior to the installation of any road base material.
c. The Pavement structures shall be installed per the following:
Heavy Duty (Trucks, Fire Route)
-50mm OPSS HL3 Top Asphalt
-60mm OPSS HL8 Base Asphalt
-150mm OPSS Granular 'A'
-450mm OPSS Granular 'B'
Light Duty (Parking areas)
-40mm OPSS HL3 Top Asphalt
-50mm OPSS HL8 Base Asphalt
-150mm OPSS Granular 'A'
-350mm OPSS Granular 'B'
d. At interface with existing asphalt areas, grind a 0.30 m wide strip to 40mm depth and resurface with OPSS HL-3 to provide lap-joint upon completion of pavement works. Cracks or joints to be filled with rubberized asphalt sealant as per OPSD 508.01.
e. Concrete sidewalk shall comply with OPSD 310.010 and 310.030. Thickness of concrete shall be 150mm. Where concrete is located within vehicular areas, minimum thickness shall be 200mm.

- f. Concrete pads shall comply with OPSS 350. Thickness of concrete shall be 200mm. Subgrade to be 150mm OPSS 20mm crusher run limestone.
g. Concrete barrier curb shall be as per OPSD 600.11, and depressed at all intersections with walkways, and as shown on architect's drawings. Provide concrete ledge behind curb where curb is adjacent to sidewalk.
h. 300mm high concrete barrier curb shall be as per OPSD 3120.100, 150mm OPSS 50mm Crusher Run Limestone to extend under and 300mm minimum behind all curbs.
i. Provide pavement marking lines(white) to identify parking spaces. Any required painted curbs and islands to be yellow. Point handicap logos to Municipal requirements. Apply traffic paint evenly at a rate of 147 sf per imp. Gal. (3.5m./L)

3. STORM SEWERS AND MANHOLES

- a. All storm sewers 450mm and larger shall be concrete conforming to CSA -A257.2, CL-650, complete with rubber gaskets per CSA-A257.3.
b. All storm sewers smaller than 450mm shall be PVC SDR-35 with rubber gasket joints conforming to CSA-B182.2,3,4 and A.S.T.M. D-3034.
c. Sewer bedding material to be OPSS Granular 'A' installed in accordance with City Standards, Class 'B' or as specified by the Geotechnical Consultant. In all cases, the minimum depth of bedding shall be 150 mm and shall extend up to the pipe springline. All sewer bedding and cover material shall conform to City Stds. Backfill with select native material unless otherwise directed. The backfill is to be placed in maximum 200mm lifts and compacted to a minimum of 95% Standard Proctor Density with moisture content within 2% of optimum. The top 1000mm of the subgrade is to be compacted to a minimum of 98% Standard Proctor Density with moisture content 2-3% drier than optimum.
d. Where trench widths are over-excavated, Contractor to increase structural capacity of sewer bedding as directed by the Consultant in accordance with the requirements of the Geotechnical Consultant.
e. All structures within paved surfaces shall have 4:1 frost tapers from frost line to subgrade.
f. Storm manholes per OPSD 701.010 (1200mm diameter), 701.011 (1500 mm) 701.012 (1800mm diameter), 701.013 (2400mm diameter), 701.014 (3000mm diameter), and 701.015 (3600mm diameter). Manhole components in accordance with OPSD701.030, 701.040, 701.050, 701.060 and 701.070. Manholes deeper than 5.0m shall be constructed with a safety platform(s) in accordance with OPSD 404.020.
g. Benching per OPSD 1004.01, unless otherwise specified.
h. Top of manhole cover to be set to base course asphalt grade and then adjusted to final grade with Modulo rings when top lift of asphalt is placed.
i. Drop structure shall be according to OPSD 1003.020

4. CATCHBASINS

- a. Single catchbasins per OPSD 705.02 Type 'A', frame and grate per OPSD 400.02. Double catchbasins per OPSD 705.01.
b. Catchbasin connection to main line sewer in accordance with OPSD 708.03.
c. All single catchbasin leads to be 250# PVC SDR-35, all double catch basin leads to be 300# PVC SDR-35, unless otherwise noted on drawings.
d. Catchbasin to have 100mm subdrain attached just below granular subbase level as shown on drawings.
e. All storm sewers and catchbasin leads with less than 1.2m cover shall be insulated.

5. SANITARY SEWERS AND MANHOLES

- a. All sanitary sewer and sanitary sewer appurtenances shall conform to the current Region of Peel standards.
b. Sanitary sewer to be PVC SDR-35 for 250# and greater, SDR-28 for 200# and smaller with rubber gasket type joints in conformance with CSA B-182.2,3,4.
c. Sewer bedding material to be OPSS Granular 'A' installed in accordance with Peel Std. 2-3-1 Class 'B' and Bedding Detail provided on this drawing. Backfill with select native material unless otherwise directed. The backfill is to be placed in maximum 200mm lifts and compacted to a minimum of 95% Standard Proctor Density with moisture content within 2% of optimum. The top 1000mm of the subgrade is to be compacted to a minimum of 98% Standard Proctor Density with moisture content 2-3% drier than optimum.
d. All manholes to be 1200 mm minimum diameter unless specified otherwise. Precast manholes shall be in accordance with Peel Std. 2-5-3. Frame and cover shall be in accordance with Peel Std. 2-6-1.
e. Precast manholes greater than 5.0 m deep shall be constructed with a safety platform(s) in accordance with Peel Std. 2-6-14.
f. Benching per Peel Std. 2-5-20, unless otherwise specified.
g. Top of manhole cover to be set to base course asphalt grade and then adjusted to final grade with Modulo rings when top lift of asphalt is placed.
h. Drop structure shall be according to Region of Peel Sta. Dwg. 2-5-26.

6. FIRE DEPARTMENT

- a. Fire routes shall be designated prior to occupancy of the building.
b. All fire access routes shall be constructed of hard surface materials such as asphalt, concrete or limestone, and designed to support a load of not less than 11,363 kg per axle and have a change in gradient of not more than 1 in 12.5 (8%) over a minimum distance of 15m.

7. PLANNING AND BUILDING DEPARTMENT, DESIGN DIVISION

- a. Any retaining wall over 0.60m to be designed and certified by a Structural Engineer, and shown on all grading and servicing drawings.
b. Grades at the property line are to be met with a maximum 3:1 (33%) slope within the site, with the exception of grading into the Natural Heritage Buffer which is to have a maximum 2:1 (50%) slope.
c. Continuous 150mm high (min) concrete barrier type curbs to be provided between all asphalt and landscaped areas throughout the site, with depressed curbs at the ends of all pedestrian walkways.

8. REGION OF PEEL NOTES

- a. All materials and construction methods must correspond to the current Peel Public Works standards and specifications.
b. Watermain and/or water service materials 100mm and larger must be PVC DR-18 per AWWA C-900-16. Size 50mm and smaller must be soft copper type 'K' per ASTM B88-49
c. Watermains and/or water services are to have a minimum cover of 1.7m with a minimum horizontal spacing of 1.2m from themselves and all other services.
d. Provisions for flushing water line prior to testing, etc. must be provided with at least a 50mm outlet on 100mm and larger lines. Copper lines are to have flushing points at the end, the same size as the line. They must also be holed or piped to allow the water to drain onto a parking lot or down a drain. On fire lines, flushing outlet to be 100mm diameter minimum on a hydrant.
e. All curb stops to be 3.0m off the face of the building unless otherwise noted.
f. Hydrant and valve set to Region standard 1-6-1 Dimension 'A' (0.7m) & 'B' (0.9m) and to have pumper nozzle.
g. Watermains to be installed to grades shown on approved site plan. Copy of grade sheet must be supplied to inspector prior to commencement of work, where requested by inspector.
h. Watermains must have a vertical clearance of 0.30m over and 0.5m(20") under sewers and all other utilities when crossing.
i. All proposed water piping must be isolated from existing lines in order to allow independent pressure testing and chlorinating from existing systems.
j. All live tapping and operation of Region water valves shall be arranged through the Regional Inspector assigned or by contacting the Operations and Maintenance Division.
k. Location of all existing utilities in the field to be established by the contractor.
l. The contractor(s) shall be solely responsible for locating, exposing, supporting and protecting of all underground/overhead utilities and structures existing at the time of construction in the area of their work. Whether shown on the plans or not, and for all repairs and consequences resulting from damage to same.
m. The contractor(s) shall be solely responsible to give 72 hrs written notice to utilities prior to crossing such utilities, for the purpose of inspection by the concerned utility. This inspection will be for the duration of the construction, with the contractor responsible for all costs arising from such inspection.
n. All proposed water piping must be isolated through a temporary connection that shall include an appropriate cross-connection control device, consistent with the degree of hazard, for backflow prevention of the active distribution system, conforming to region of Peel Standards 1-7-7 or 1-7-8.

9. TOWN OF CALEDON NOTES

- a. Construction for this project to comply with the most current version of the Development Standards, Policies and Guidelines, prepared by the Town of Caledon Infrastructure Department and the Ontario Provincial Standards and Specifications.
b. All proposed construction shall be carried out in accordance with the requirements of the Occupational Health and Safety Act and Regulations for construction projects.
c. A minimum of forty-eight (48) hours prior to commencing construction within the municipal right of way the Contractor must contact the following:
The Town of Caledon Public Works and Engineering Department - 905-584-2272
The Region of Peel Hydro One
Rogers Cable
Enbridge Consumers Gas
Bell Canada
Fire and Emergency Services
d. All drainage to be self-contained and discharge to a location approved by the Public Works and Engineering Department and Conservation Authority prior to the issuance of a building permit.
e. Sediment control devices are to be installed prior to any construction on the site and shall be maintained throughout the construction period to the satisfaction of the Town and the applicable conservation authority.
f. A minimum of 1.2m clearance is to be provided from the limits of all sidewalks and driveways to existing utility structures within the municipal right of way. If this clearance is not maintained they shall be relocated at the applicant's expense.
g. Street curbs are to be continuous through the proposed entrance.
h. Municipal sidewalks shall be continuous through all entrances the site and the curb shall be tapered back 600mm. Sidewalks shall be completely removed and replace with a 180mm minimum concrete thickness, 30MPa and 5 to 7% air entrainment at all proposed industrial, commercial and institutional entrances.
i. Any changes to grades or servicing from the original approved site plan must be submitted by the Engineer to the Town for approval prior to construction.
j. Structural design of the fire route is required to support an 18 ton vehicle.
k. All boulevards to be restored with 150mm of topsoil and sod to the satisfaction of the Town of Caledon Public Works and Engineering Department.
l. The minimum pavement design for the asphalt driveway apron within the municipal road allowance shall be as follows:
40mm HL3 Asphalt
80mm HL8 Asphalt
150mm Granular 'A'
300mm Granular 'B'
m. Service Connection Backfill to be discussed with the Town.

CONCRETE PAVING THICKNESSES TO BE AS FOLLOWS:
180mm CONCRETE
150mm GRANULAR 'A'
300mm GRANULAR 'B'

ALL EXCESS OR UNSUITABLE MATERIAL (TOPSOIL OR OTHERWISE) TO BE REMOVED AND DISPOSED OFF-SITE. IF NECESSARY TO MEET GRADING OR LANDSCAPE REQUIREMENTS, FILL MATERIAL OR TOPSOIL TO BE IMPORTED FROM A SOURCE APPROVED BY THE GEOTECHNICAL CONSULTANT.

CONTRACTOR TO REFER TO THE LANDSCAPING DRAWINGS AND SPECIFICATIONS FOR TOPSOIL REQUIREMENTS INCLUDING SUITABILITY OF THE EXISTING ON-SITE TOPSOIL.

CONTRACTOR TO PROVIDE SHOP DRAWINGS FOR PROPOSED RETAINING WALLS CERTIFIED BY A STRUCTURAL ENGINEER TO CONSULTANT AND TOWN FOR APPROVAL.

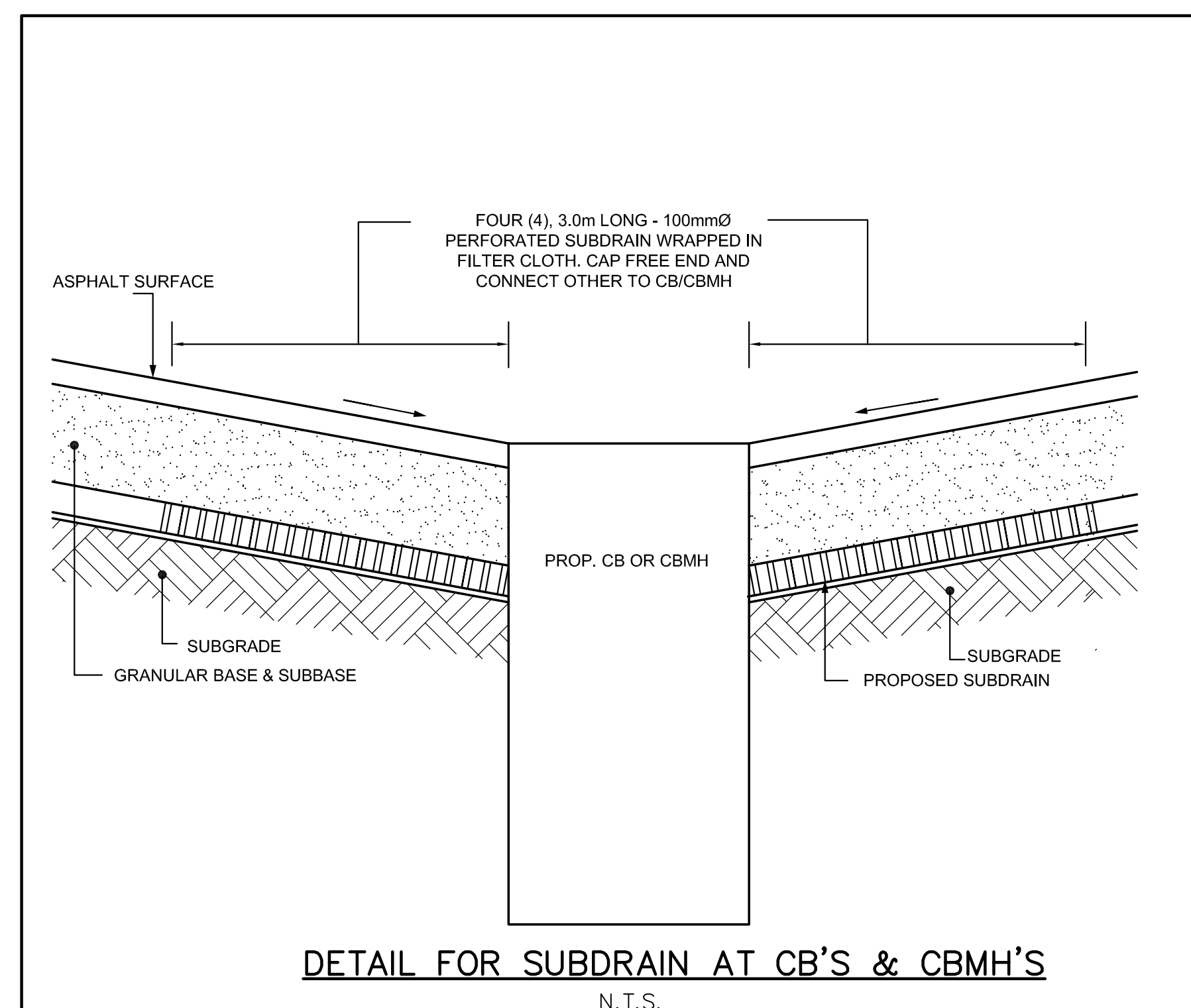
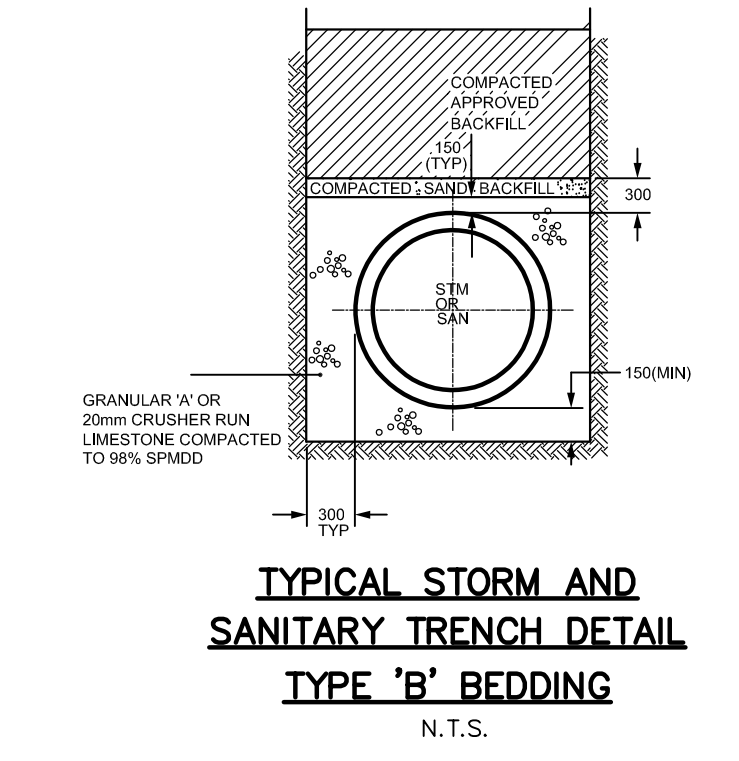
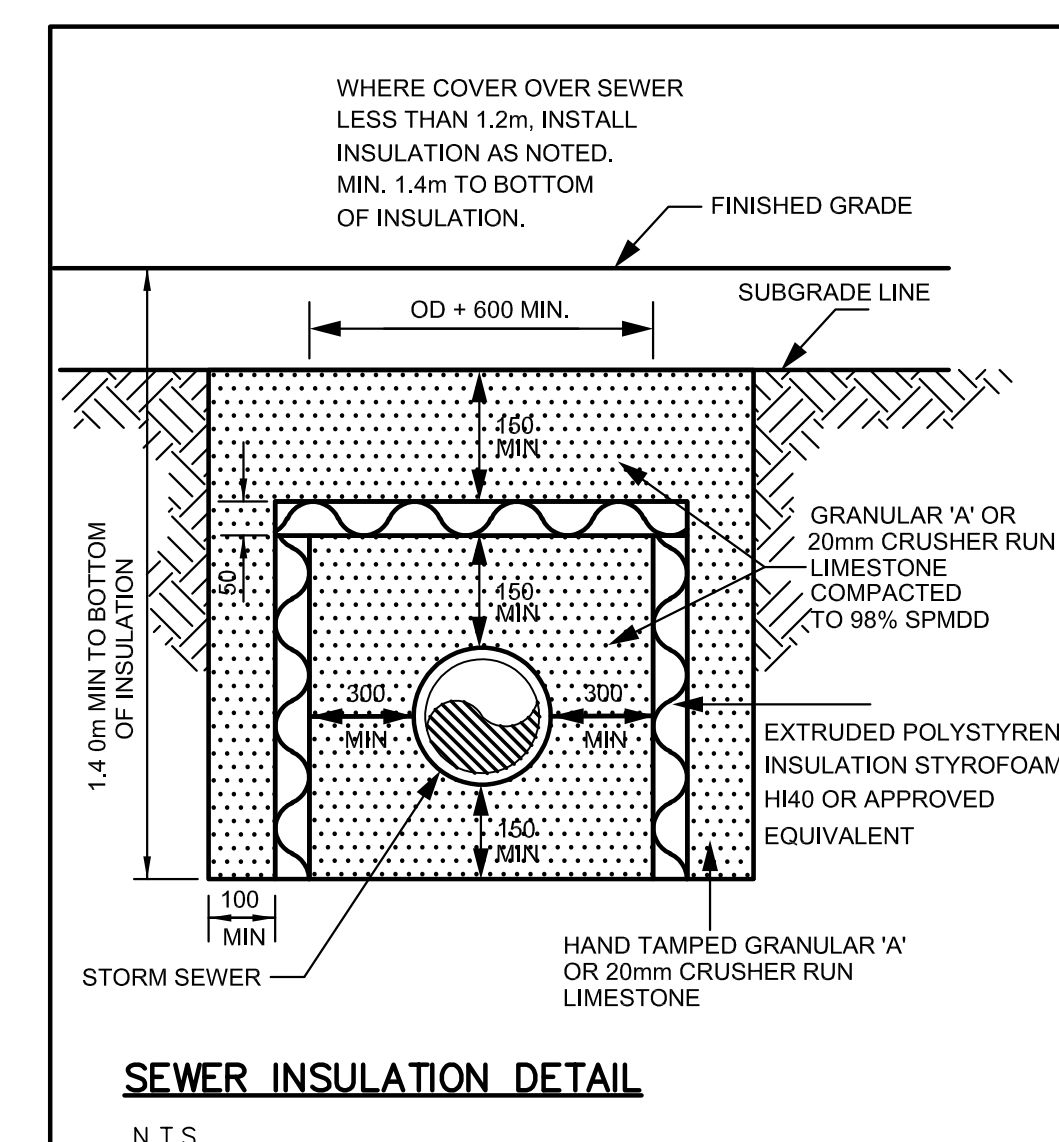
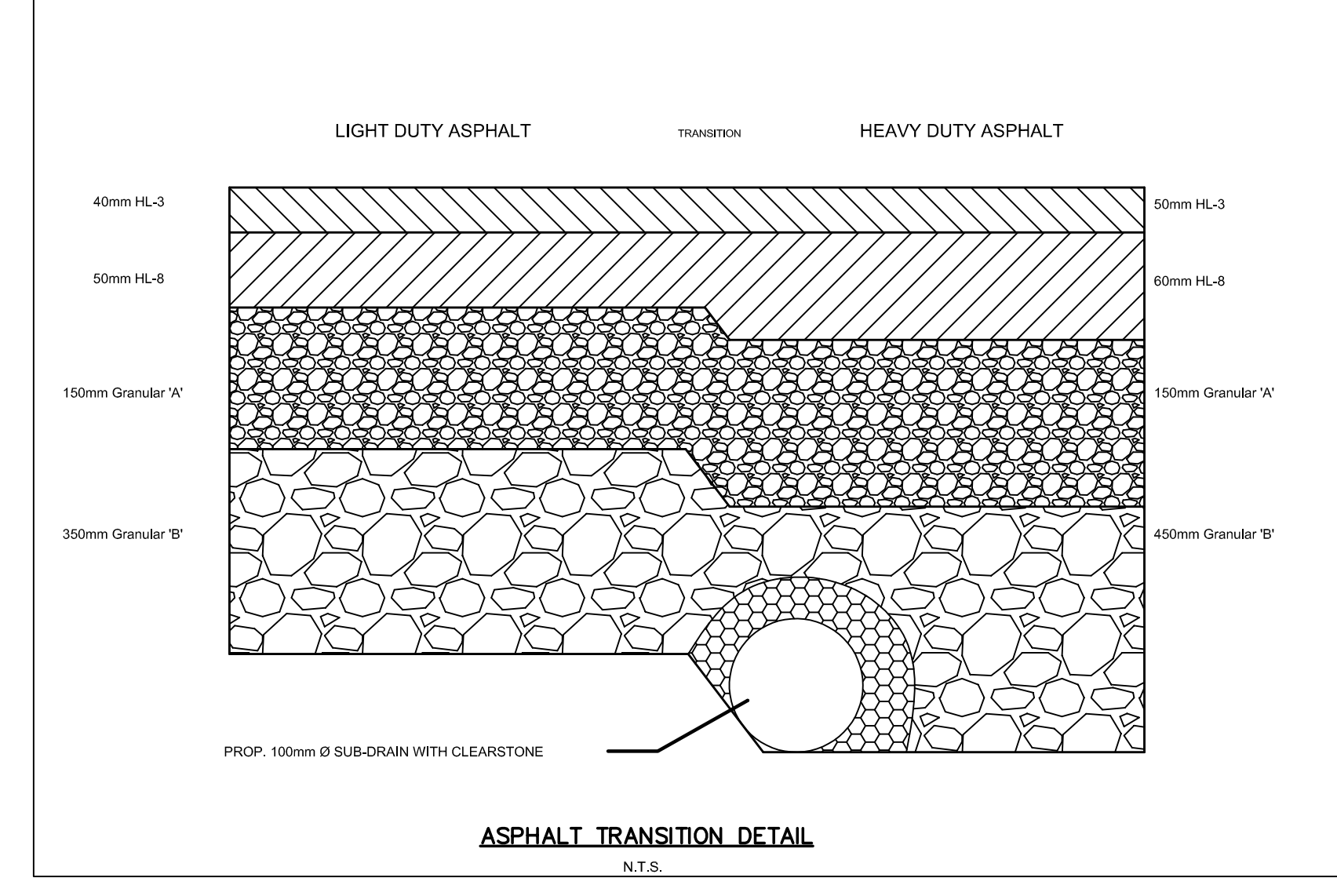
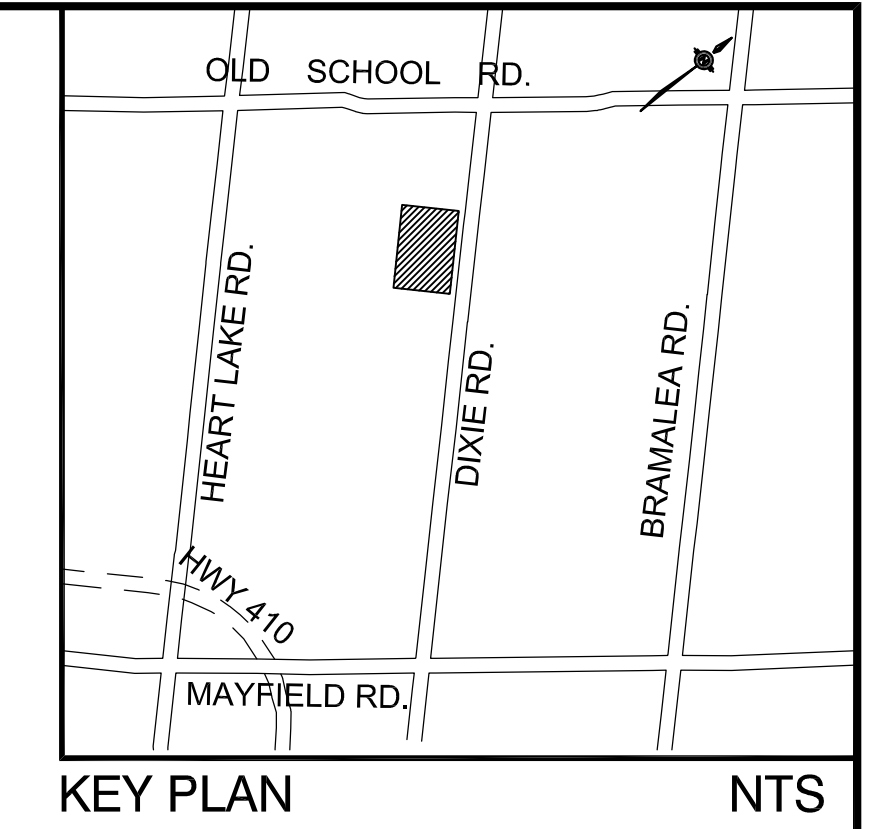


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CLIENT: TRIBAL PARTNERS CANADA INC. MUNICIPALITY: TOWN OF CALEDON PROJECT TITLE: 12892 DIXIE ROAD SHEET TITLE: GENERAL NOTES AND DETAILS CONSULTANT: WSP

Table with columns: DESIGNED, DRAWN, CHECKED, SCALE, DATE, PROJECT NUMBER, DWG. NUMBER. Values include J.G., 10/12 CAD, A.W., 1:500, FEBRUARY 2021, 201-11545, NT1.