



**Engineering
and Parks
Standards
Manual**

Part 3

2026 - July

Site Plans

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3.0 Table of Contents

3.1	INTRODUCTION	5
3.1.1	PROVINCIAL AUTHORITY	5
3.1.2	TOWN OF MILTON POLICIES	5
3.1.3	APPROVAL GUIDELINES	5
3.1.4	PRE-CONSULTATION MEETING	5
3.2	SUBMISSION MATERIALS	6
3.2.1	DRAWINGS	7
3.2.2	REPORTS	8
3.3	DRAWING REQUIREMENTS	9
3.3.1	GENERAL	9
3.3.2	DIMENSIONS, LABELS, AND SCALES	9
3.3.3	REMOVALS AND DEMOLITIONS	10
3.3.4	EROSION AND SEDIMENT CONTROL	10
3.3.5	SITE SERVICING	11
3.3.6	GRADING, DRAINAGE, AND STORMWATER MANAGEMENT	12
3.3.7	CURBS, WALKWAYS, AND PAVEMENT	13
3.3.8	LANDSCAPING	13
3.3.9	TREE INVENTORY AND PRESERVATION PLANS	14
3.3.10	SIGNAGE AND PAVEMENT MARKING	15
3.4	STANDARD CONSTRUCTION NOTES	16
3.4.1	GENERAL	17
3.4.2	EROSION AND SEDIMENT CONTROL	17
3.4.3	SPILL CONTROL	18
3.4.4	TREE PROTECTION	19
3.4.5	SERVICING & GRADING	19
3.4.6	RESTORATION	19
3.5	DESIGN STANDARDS	20
3.5.1	EROSION AND SEDIMENT CONTROLS	21
3.5.2	SITE SERVICING	21
3.5.3	GRADING, DRAINAGE, AND STORMWATER MANAGEMENT	21
3.5.3.1	GENERAL	21

3.5.3.2	STORMWATER MANAGEMENT	22
3.5.3.3	STORMWATER RETENTION	23
3.5.4	CURBS, WALKWAYS, AND PAVEMENT	24
3.5.5	LANDSCAPING	24
3.5.6	SNOW STORAGE	25
3.5.7	FENCING	25
3.5.8	TRANSPORTATION	25
3.5.9	PARKING STRUCTURES	26
3.5.10	UTILITIES AND LIGHTING	27
<u>3.6</u>	<u>TYPICAL PERMITS AND AGREEMENTS</u>	29
3.6.1	SITE ALTERATION PERMIT	29
3.6.2	PILING AND SHORING LICENCE AGREEMENT	29
3.6.3	CURB CUT AND ENTRANCE PERMIT	29
3.6.4	ROAD OCCUPANCY PERMIT	29
3.6.5	SERVICING AGREEMENT	29
3.6.6	CLI-ECA PERMIT	29
<u>3.7</u>	<u>STANDARD CERTIFICATION LETTERS</u>	30
3.7.1	STORMWATER MANAGEMENT & GRADING CERTIFICATION LETTER	30
3.7.2	ACOUSTIC CERTIFICATION LETTER	31
3.7.3	LANDSCAPING CERTIFICATION LETTER	32

3.1 Introduction

3.1.1 Provincial Authority

Section 41 of the Planning Act, as amended, establishes the general provisions for Site Plan Approval that apply to all development in Ontario including specific exemptions.

3.1.2 Town of Milton Policies

The Town of Milton Official Plan contains policies that address Site Plan Approval and the Town of Milton has passed a Site Plan Control By-Law, as amended, that applies to all lands situated within the Town of Milton (Site Plan Control Area).

No person shall undertake any development in the Site Plan Control Area without the approval of the required plans and drawings in accordance with the requirements of Section 41 of the Planning Act, as amended.

3.1.3 Approval Guidelines

The Site Plan approval process is outlined in the Town of Milton Site Plan Approval Guidelines, as amended.

Development proponents should also review the Site Plan Approval Guidelines, as amended, for specific direction on the preparation of the following drawings:

- Site Plan and Details
- Architectural Drawings
- Landscape Plan and Details
- Tree Inventory and Preservation Plans
- Photometric Plan and Fixture Details

3.1.4 Pre-Consultation Meeting

A voluntary Site Plan Pre-consultation meeting is encouraged for all proposals for Site Plan Approval to outline the required drawings and reports.

Contact the Coordinator, Development Administration, Development Services Department, by email at Planning@milton.ca or by phone at 905-878-2272 ext. 2215 to make arrangements for the meeting.

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3.2 Submission Materials

The Pre-Consultation meeting with the Town will confirm the specific drawings and reports to be submitted for the Site Plan application. Refer to the Town of Milton Site Plan Approval Guidelines, as amended, for further direction.

3.2.1 Drawings

The following drawing list is representative of a typical Site Plan Application, and lists items that are related to engineering. Some applications may require more, or fewer drawings, and other Town Divisions may have additional submission requirements. Less complex projects may allow for some of the below plans to be combined or omitted, provided that the clarity, intent, or requirements of the drawings are not compromised.

- Site Plan and Details
- Topographic and Real Property Surveys
- Reference Plan (for Land Dedications, Easements, and 0.3 m Reserves)
- Construction and Project Notes
- Removals and Demolitions Plan
- Erosion and Sediment Control Plan
- Servicing Plan
- Grading Plan
- Pre-Development Storm Drainage Plan
- Post-Development Storm Drainage Plan
- Pavement and Curb Design Plan
- Landscape Plan and Details
- Photometric Plan
- Truck Turning Plan
- Signage and Pavement Marking Plan
- External Works Plan
- Details and Cross-Sections
- Shoring Plan and Details
- Crane Swing Plan

Note: Engineering drawings are to be sealed and signed by a qualified Professional Engineer (P.Eng.), registered and in good standing with PEO.

Refer to the Town of Milton Official Plan for the requirements of a Complete Application.

3.2.2 Reports

The following list of reports is representative of a typical Site Plan Application and lists items that are related to engineering. Some applications may require more, or fewer depending on the scope of the development and other Town Divisions may have additional submission requirements.

- Construction Management Plan
- Environmental Impact Study
- Environmental Site Assessment
- Erosion Hazard Assessment
- Functional Servicing Report
- Geotechnical Investigation
- Hydrogeological Report
- Noise and Vibration Study
- Parking Justification Study
- Record of Site Condition
- Railway Crash Wall Assessment
- Slope Stability Assessment
- Soils Management Plan
- Stormwater Management Study
- Traffic Impact Study
- Tree Inventory and Preservation Report

Terms of Reference can be found on the Town's website:

<https://www.milton.ca/en/business-and-development/development-applications.aspx>

Refer to the Town of Milton Official Plan for the requirements of a Complete Application.

3.3 Drawing Requirements

3.3.1 General

Drawings should be prepared on ANSI D (559 mm x 864 mm) or Arch D (610 mm x 914 mm) sheets.

The following items are required on all drawings:

- Key Plan (Scaled appropriately to show a nearby major intersection) ⁽ⁱ⁾
- North Arrow (Drawings should be oriented such that north is generally page top) ⁽ⁱⁱ⁾
- Legend (Specific to each drawing)
- Consultant Name and Contact Information
- Professional Seal and Signature
- Unique Revision Number with Date and Description for every submission
- Project Name
- Municipal Address of Subject Lands
- Drawing Scale
- Site Plan Application Number (Town will provide with first submission comments)
- Benchmark Information

Notes:

- i. A Key Plan is not required on drawings containing only notes, details, and/or cross-sections.
- ii. When utilizing a “Construction” or “Project” north on a drawing set, Main Street shall be considered as running east/west and Bronte Street shall be considered as running north/south. A North Arrow is not required on drawings containing only notes, details, and/or cross-sections.

3.3.2 Dimensions, Labels, and Scales

Throat widths of all site entrances shall be dimensioned.

All curb radii equal to or greater than 1.0 m shall be labelled.

Sewer Lengths should be labelled to the nearest **decimetre** as measured from the centre of one structure to the centre of the next structure (i.e., 12.3 m).

Elevations, including benchmarks and inverts, should be labelled to the nearest **centimetre** (i.e., 123.45 m).

Pipe Diameters should be labelled to the nearest **millimetre** (nominal) (i.e., 125 mm).

Pipe and Surface Slopes should be labelled to the nearest **100th of a %** (at most) (i.e., 1.23%).

Text should be oriented such that it is legible from either page bottom or page right, with a preferred text height (printed) of 2.0 mm.

All plans are to show all legal and regulatory linework and labels including, but not limited to, the following:

- Property Lines (including bearings, distances, iron bars, etc.)
- Easements (including instrument numbers) and 0.3 m Reserves
- Adjacent Land Uses
- Adjacent Property Addresses
- Street Names
- Hazard Lines (e.g., floodlines, Natural Heritage Systems, Stable Top of Bank, etc.)
- Conservation Halton Regulation Limits
- Buffers and Setbacks

Appropriate scales for use on Sections and Details: 1:20, 1:25, 1:50, 1:75, and 1:100

Appropriate scales for use on Plans: 1:200, 1:250, 1:300, 1:400, and 1:500

3.3.3 Removals and Demolitions

All existing above ground and below ground items/features being removed, demolished, relocated, etc. shall be illustrated and labelled as such on a Removals Plan.

All other plans shall omit removal and demolition items, and any items being relocated shall be illustrated/noted in their proposed locations on subsequent plans.

3.3.4 Erosion and Sediment Control

In addition to the items listed in Section 3.3.1, the following items shall be shown on Erosion and Sediment Control Plans:

- Construction sequencing/phasing notes that describe the order in which of all erosion and sediment control measures will be installed and removed.
- All erosion and sediment control measures including, but not limited to, siltation control fence, tree hoarding, mud mats, catchbasin silt-sacks, rock check dams, etc.
- All notes and details pertaining to any erosion and sediment control measures utilized

3.3.5 Site Servicing

In addition to the items listed in Section 3.3.1, the following features (both existing and proposed) shall be shown on site servicing drawings:

- **Storm sewers**, catchbasins, maintenance holes, and laterals (including pipe sizes, pipe slopes, pipe materials, pipe inverts at all structures, lateral inverts at mains, unique structure identification numbers, and top of grate elevations)
- **Stormwater management devices** (i.e., OGS units, orifice tubes, wiers, etc. including make, model, size, or other relevant information)
- **Sanitary sewers**, maintenance holes, laterals, and cleanouts (including pipe sizes, pipe slopes, pipe materials, pipe inverts at all structures, lateral inverts at mains, unique structure identification numbers, and top of grate elevations)
- **Watermains**, water services, valves, bends, tees, fire hydrants, and other appurtenances (including inverts at valves, bends, tees, and building connections)
- Number of proposed **roof drains**, overflow weirs, and connections to the storm sewer system.
- Significant **above ground features**, such as buildings, curbs, walkways, trees, light standards, electrical transformers, retaining walls, culverts, signage, etc.

Note: Above ground features should be shown with thinner or lighter linework on below ground drawings for reference. Grading information (e.g., contours) should not be shown on servicing drawings.

Where proposed services are shown to cross each other, crossing information, either at the crossing location, or in a table elsewhere on the Servicing Drawing, shall be provided. (i.e., If a storm sewer will be crossing over a sanitary sewer, the invert of the storm sewer and the obvert of the sanitary sewer shall be provided for the crossing location.) Where appropriate, and at the Town's discretion, a Plan & Profile drawing can be provided to fulfil this requirement.

Cross-sections should be provided for all servicing connections showing the following:

- Existing and proposed surfaces (including curbs, sidewalks, etc.)
- Storm, sanitary, and water servicing (including all appurtenances)
- All utilities being crossed within the municipal right-of-way

Note: Service connections located in close proximity to each other may be shown on the same cross-section, provided that the legibility of the cross-section is not compromised.

3.3.6 Grading, Drainage, and Stormwater Management

Proposed grades shall be provided at regular intervals whenever possible for ease of accurate review and construction. Proposed grades are required at the following locations, as well as any additional locations required in order to provide a constructible and accurate depiction of the proposed grading and drainage patterns:

- Edges of parking and drive aisles
- All local high and low points
- Top and bottom of curbs
- Entrances to underground parking structures
- Edges of sidewalks
- Top and bottom of pedestrian ramps
- Ditch, swale, and culvert inverts
- Building corners and entrances
- Maintenance holes and catchbasin grates
- Top and bottom of retaining walls and slopes
- Where proposed grading will match into existing
- Along property lines at regular intervals (20 m maximum)
- Property corners

Minor flow arrows with slope percentages shall be provided between proposed grades as required to indicate direction of surface run-off throughout the site.

Major flow arrows should be provided as to illustrate the emergency overland flow route.

Cross-sections or drawing insets may be provided, at a larger scale, as necessary or as requested to clarify proposed grading. These are typically needed at property lines, retaining walls, embankments, or in areas where the drawing scale does not allow for adequate grading information to be shown. Cross-sections and drawing insets shall be drawn to scale.

Existing topographic information (including, but not limited to, contours, survey grades, and above ground features) should be shown to 15 m beyond the subject property limits or as required to indicate the grading/drainage patterns of adjacent lands. Contours at appropriate intervals should be provided to indicate existing drainage patterns.

Snow storage areas are to be shown to ensure that snow storage does not impede the site drainage.

Maximum ponding limits shall be shown on Grading Plans and should be labelled with the following information:

- Ponding Volume (m³)
- Maximum Ponding Depth
- High Water Elevation

Pre-Development and Post-Development Drainage Plans should be provided as required to illustrate, justify, or otherwise address any increases in impervious areas, in combination with any stormwater management (SWM) reports or briefs supporting the application.

3.3.7 Curbs, Walkways, and Pavement

In addition to the items listed in Section 3.3.1, the following items shall be shown on Pavement and Curb Design Plans:

- Above ground features, such as buildings, trees, light standards, electrical transformers, fire hydrants, bollards, retaining walls, etc.
- All curbs, with dimensions, notes, or hatching to illustrate the extent of different curb types
- All paved areas, uniquely hatched to denote different pavement types and structures
- All pavement structure details, such as, light duty, heavy duty, concrete, paving stone, etc.

3.3.8 Landscaping

In addition to the items listed in Section 3.3.1, the following items should be shown on Landscape Plans:

- Identification of proposed surface materials
- Identification of proposed plant material (using symbols, keys, and text)
- Plant List/Schedule (Refer to Table 5.7 - Example Plant List Table)
- Layout of planting beds (shrubs to be indicated in continuous mulched beds)
- Extent of seeding/sodding (for seeding, indicate seed mix and application rate)
- Existing and proposed street trees within the municipal right-of-way (Refer to Section 1.1.18 - Street Trees)
- Plant material and/or fencing used to screen loading areas, garbage enclosures, and above-grade utilities
- Existing and proposed fencing and gates (with fence type, height, and material) and detail(s) for proposed fencing
- Site furnishings (i.e., benches, trash receptacles, etc.)

- Bicycle parking and detail(s) of bicycle parking fixture(s)
- Outdoor amenity spaces and/or playground areas
- Underground services (such as maintenance holes and catchbasins, swales, at-grade utilities (including overhead hydro lines), and signage, to ensure no spacing conflicts with proposed plant material
- Proposed entrance signs including dimensions, materials, and lighting
- Snow storage areas, ensuring locations do not conflict with proposed plant material

Planting Details must identify all plant types (i.e., deciduous trees, coniferous trees, shrubs, perennials, etc.). Refer to TMSDs for any planting on Town property.

Separate details for trees should also be included for those that are to be planted within landscape islands/urban conditions. Soil volume (i.e., root habitat) must be a minimum of 15 m³. Specific details for roof top planting and planting on underground parking garages are to be provided by the Landscape Architect (OALA).

3.3.9 Tree Inventory and Preservation Plans

A Tree Inventory and Preservation Plan may be provided on a separate plan or included on the Landscape Plan and must identify the following items:

- Location of existing trees within the municipal right-of-way. Any proposed removals are to be identified on the plan(s) for the Town's consideration.
- Location of existing trees greater than 150 mm in calliper, within the limits of the subject property, to be preserved.
- Location of existing neighbouring/shared trees where the dripline extends over the subject property. Note: A signed letter from the abutting property owner(s) may be required to acknowledge potential impacts to the existing tree(s) resulting from the proposed site works, and to release the Town of any liability with respect to future civil matters related to the preceding.
- The botanical name, DBH, canopy size, and conditions of all existing trees.
- Tree protection fencing and/or hoarding for all trees to be preserved. (Refer to TMSDs for material within the municipal right-of-way.)

3.3.10 Signage and Pavement Marking

In addition to the items listed in Section 3.3.1, the following items shall be shown on Signage and Pavement Marking Plans:

- **Access Points:** Clearly indicate the entry/exiting points, including driveways, emergency accesses, ramps, and intersections with public roads (where applicable).
- **Internal Roadways:** Show the layout and design of the internal roads within the site, including width, direction, and any other relevant characteristics. Label main/secondary/private roads, and any one-way or two-way traffic flow.
- **Parking Areas:** Identify designated parking areas/spaces. Include relevant information, including dimensions and all line painting and signage, pertaining to the parking lot layout, parking aisles, accessible parking spaces, etc.
- **Loading Areas:** Call out all areas designated for loading including any associated signage and line painting.
- **Pedestrian Network:** Show sidewalks, footpaths, pedestrian-friendly areas etc. Also include crosswalks, ramps, and any designated pedestrian areas.
- **Cycling Network:** Indicate dedicated bike lanes or paths, bike parking areas, and any other amenity areas catering to cyclists.
- **Landscape and Streetscape:** Identify appurtenances (such as light standards, fire hydrants, transformer boxes, etc.). Trees or any other proposed vegetation (that may impact visibility) must also be shown.
- **Public Transportation Facilities:** Any transit stops along the frontage of the site are to be included on the plan(s). Where a transit stop is located beyond the coverage of the plan(s), a call-out indicating the distance to the stop should be included. (i.e., "Nearest transit stop located 25 m beyond extents of drawing.")

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3.4 Standard Construction Notes

The following Standard Construction Notes are to be included in all Engineering Drawing Sets being submitted for Site Plan Approval:

3.4.1 General

1. The approval of this or any other drawing does not exempt the Owner from paying for and obtaining any permits that may be required to complete works.
2. The site is to be appropriately secured, with access being restricted at all times, to authorized personnel only.
3. All Town of Milton and Halton Region standard drawings and OPSDs (including regional amendments for sanitary sewers and watermain) shall constitute part of the engineering design and construction contract.
4. The Owner is to notify the Development Engineering no less than 48 hours prior to the commencement of works.
5. All construction vehicles are to access the site via the approved construction access location.

3.4.2 Erosion and Sediment Control

1. The erosion and sediment control strategies described and illustrated are not static, and may need to be amended as site conditions change, in order to ensure their effectiveness.
2. All erosion and sediment control measures are to be in place prior to stripping and rough grading (commencement of site works), and are to be maintained for the duration of construction, until the site has been stabilized, or to the satisfaction of the Town of Milton.
3. The Contractor shall endeavour to prevent mud tracking onto adjacent lands and existing roads, and shall provide for clean-up, at their own expense as, directed by the Town and/or the Engineer. The Contractor shall also be responsible to control dust on the project and they shall provide, at their own expense, dust controlling measures as directed.
4. All stockpile side slopes are to be a maximum of 3:1, and any stockpiles left undisturbed for more than 30 days are to be seeded with native grass. Maximum stockpile height shall be 3.5 m.
5. The Contractor is responsible for ensuring that the erosion and sediment controls are maintained and operating as intended, including making any field adjustments as may

be necessary, to the satisfaction of the Town of Milton and [Conservation Authority Name], to ensure adequate erosion and sediment protection.

6. A qualified professional shall inspect all sediment control measures a minimum of once every other week, and after every rainfall event of at least 10 mm. Any required repairs are to be made as soon as possible.
7. The Contractor shall immediately repair any erosion or siltation damages to adjoining surfaces and drainage-ways resulting from the construction or development activities.
8. Any materials required for the repair and maintenance of the erosion and sediment controls must be kept readily available for use on site.
9. No construction activity, equipment, or machinery shall intrude beyond the silt fence for any purpose, other than for the installation, maintenance, alteration, etc. of the erosion and sediment control features, as may be required.
10. The Contractor is responsible for maintaining the cleanliness of roads adjacent to the construction site, and shall immediately address any dirt, dust, mud, debris, etc. being tracked from the construction site, to the satisfaction of the Town of Milton.
11. Sediment accumulation in or adjacent to sediment control features must be measured, at a minimum, every 6 months. Accumulated sediment must be removed once the accumulation reached 50% of the design capacity.
12. Any accumulated sediment adjacent to silt fencing or other sediment control features must be removed prior to the decommissioning of the sediment control feature.
13. The Owner must allow Town employees to enter the site for the purposes of inspecting for compliance with the Erosion and Sediment Control Plan or for performing any work necessary to bring the site into compliance with the Erosion and Sediment Control Plan.

3.4.3 Spill Control

1. The Contractor must have available spill response kits on site at all times.
2. All construction equipment shall be refuelled, maintained, and stored no less than 30 m from any watercourses, woodlots, environmentally sensitive areas, etc., or as otherwise specified.
3. The Contractor must implement all necessary measures in order to prevent leaks, discharges, and spills of pollutants, deleterious materials, or any other materials or substances which would/could cause any adverse impacts.

4. In case of an incident, the Contractor shall:
 - i. Immediately notify the appropriate Federal, Provincial, Regional, and/or Local Government Ministries, Departments, Agencies, and/or Authorities, in accordance with all current Laws, Legislation, Acts, By-Laws, Permits, Approvals, etc.
 - ii. Take immediate action to contain the material(s) or substance(s), and implement measures as deemed appropriate to mitigate against any adverse impacts.
 - iii. The Contractor shall restore the affected area(s) to original condition, or better, to the satisfaction of the authorities having jurisdiction.

3.4.4 Tree Protection

1. Any trees identified for preservation are to be protected in accordance with the approved Arborist Report (or equivalent), and as per Town of Milton, Halton Region, and/or [Conservation Authority Name] standards, as applicable.

3.4.5 Servicing & Grading

1. The Contractor shall be responsible for ensuring that all locates are completed prior to commencing any underground works.
2. All fill shall be compacted and tested per the recommendations of the Geotechnical Engineer and any applicable legislation.
3. Prior to the commencement of any works within a municipal road allowance, the Owner is responsible for obtaining all necessary permits.
4. All catchbasins being installed in landscaped areas are to be sumpless.

3.4.6 Restoration

1. All restoration works on Town lands (including right-of-ways) shall be completed as per Section 1.2 (Restoration and Reconstruction Work) of the Town of Milton's Engineering & Parks Standards Manual.
2. Where curb depressions for driveways need to be extended, the existing curb and gutter are to be fully removed and replaced. Saw-cutting is not permitted.

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3.5 Design Standards

3.5.1 Erosion and Sediment Controls

For erosion and sediment control design criteria, refer to Section 2.8.6 (Erosion and Sediment Control During Construction).

3.5.2 Site Servicing

Storm sewers, drains, and appurtenances shall be designed and constructed in accordance with the most recent requirements of the Ontario Building Code, and applicable Town by-laws.

For storm sewer design, refer to Section 3.5.3.2 (Stormwater Management).

Catchbasins installed in grassed/landscaped areas shall be sumpless.

Catchbasin maintenance holes installed in grassed/landscaped areas shall be benched.

Catchbasin maintenance holes installed in impervious areas should not be benched. (Maximum sump depth should be 300 mm.)

Property line maintenance holes shall be installed per TMSD 05-04.01.

Minimum cover on storm sewers should be 1.2 m, however, insulating storm sewers as a means to mitigate insufficient frost cover is acceptable on private property.

Minimum cover on sanitary sewers and watermains shall be per Ontario Building Code requirements.

Upon completion of all site servicing, building construction, and landscaping works, the storm sewer system, including catchbasins and leads, shall be cleaned and flushed to the satisfaction of the Town. A letter to certify that the storm sewer system has been cleaned shall be provided prior to the release of financial securities.

3.5.3 Grading, Drainage, and Stormwater Management

3.5.3.1 General

The proposed drainage of a site shall not adversely affect adjacent lands.

Proposed grades are to match to existing grades at property line. When a design calls for grading beyond property limits, written consent from the adjacent land owner is required.

All paved areas (asphalt, concrete, paving stone, etc.) should provide positive drainage with a minimum slope of 0.5% and a maximum slope of 5.0%.

All grassed/landscaped areas shall provide positive drainage with a minimum slope of 2.0% and a maximum slope of 33.3% (3:1).

Grassed swales should adhere to the following design criteria:

- Minimum longitudinal slope of 2.0%
- Maximum longitudinal slope of 7.0%
- Minimum depth of 150 mm
- Maximum side slopes of 33.3% (3:1)
- Maximum length of 50 m

Sheet flow drainage should not be directed over a retaining wall. For retaining wall design requirements, refer to Section 4.5.1.4 (Retaining Walls).

An emergency overland flow route shall be shown on the Grading Plan. The overland flow route shall be designed such that, should the below ground storm sewer (minor system) not fully convey a storm event (whether by design or not), the following remain true:

- Water does not pond on site, to a depth greater than 300 mm
- Edge of any ponding water is not within 0.3 m of a building face
- Overland flow does not find relief by means of adjacent **private lands**.

Note: Where overland flows find relief by means of adjacent private lands under existing conditions, no additional flows shall be sent under post-development conditions.

Loading docks (ramped down below the finished floor elevation) are not subject to the above ponding criteria.

3.5.3.2 Stormwater Management

Post-development flows (100-year return) are required to be controlled to match pre-development flows (5-year return) or as otherwise directed by a higher-level Stormwater and Environmental Management Studies (refer to Section 4.3) or the Town's Stormwater Master Plan, as applicable.

Refer to the following:

- Table 4.2 - Intensity, Duration, and Frequency Values
- Table 4.3 - Rainfall Intensity Equation Coefficients
- Table 4.5 - Runoff Coefficients for Site Plan Design

Where external storm sewer connections are available, internal storm sewers shall be provided and designed to convey the minor storm (5-year return). Storm sewer design sheets (5-year return) shall be provided for the Town's review and approval. The design flow through any length of pipe should not exceed 85% of its full flow capacity.

The use of orifice control plates is not permitted. Stormwater flows are to be controlled via

an orifice tube. The minimum diameter of an orifice tube shall be 75 mm.

For stormwater quality management, refer to Sections 4.4.5 (Quality Management) and 4.5.10 (Water Quality Treatment Devices). Enhanced protection (Level 1 Quality) will be required for all Site Plan Applications.

Refer to Sections 4.5.4 (Storm Sewers) and 4.5.6 (Maintenance holes) for additional information and criteria.

3.5.3.3 Stormwater Retention

a. Rooftop:

Flat roofs may be used for stormwater retention, subject to review and approval on a case-by-case basis.

Per the SWMPD Manual (MOE, 2003), rooftops can typically retain 50 - 80 mm of runoff, subject to the roof design. Detention time is typically 12 to 24 hours.

Where rooftop storage is being proposed, supporting calculations and design drawings/details must be provided to indicate the following:

- Type of control device(s) proposed (i.e., product and manufacturer)
- Product specifications for control device(s) (i.e., designed release rates)
- Maximum ponding depth, storage volume, and drawdown time for rooftop storage during the 2-year through 100-year design storms

Note: The number of rooftop control devices being utilized, and the release rate from the rooftop are to be shown on all Servicing, Grading, and Post-Development Drainage Plans.

Additional requirements may also apply for sites within the jurisdiction of Conservation Halton or the Ministry of Transportation of Ontario. The more stringent of any applicable requirement shall be adhered to.

b. Surface:

Surface storage shall have a maximum ponding depth of 300 mm.

Effort is to be made to avoid placing sanitary maintenance holes within ponding limits. All sanitary maintenance holes within ponding limits are to be installed complete with watertight lids. (OPSD 401.030 or OPSD 401.050)

c. Sub-Surface:

Subject to review and approval on a case-by-case basis.

3.5.4 Curbs, Walkways, and Pavement

Walkways along the fronts of parking stalls where vehicles may overhang shall be a minimum of 2.2 m wide. Walkways adjacent to a building wall with doors shall a minimum of 1.8 m wide. All other walkways shall be a minimum of 1.5 m wide.

Any curbs adjacent to a walkway should have a consistent height of 150 mm with exceptions made only for barrier free access, which shall be designed in compliance with the Accessibility for Ontarians with Disabilities Act (AODA).

For the construction of a new curb depression, the existing curb is to be fully removed and replaced. Saw-cutting a depression out of an existing barrier curb is not accepted.

Refer to Section 1.1.9 (Sidewalks and Concrete Strips) for additional design requirements including the installation of tactile warning plates.

Suggested minimum pavement structure for private roadways and parking lots:

- | | |
|-----------------------|----------------|
| • 40 mm HL-3 | Surface Course |
| • 50 mm HL-8 | Binder Course |
| • 150 mm Granular 'A' | Base |
| • 300 mm Granular 'B' | Sub-Base |

Suggested minimum pavement structure for driveways to single, semi, or townhouse units:

- 75 mm HL3A (Placed in two lifts)
- 200 mm Granular 'A'

Note: The pavement structures provided above are suggested minimum designs only. The Applicant should engage the services of a qualified Geotechnical Consultant to confirm the minimum design based on local soil tests.

3.5.5 Landscaping

Landscaping designs should strive to:

- Improve the Town's aesthetic image, as an attractive, clean, and prosperous urban environment.
- Help conserve energy, assist in snow removal, and offset air pollution.
- Define public and private spaces and give form and enclosure to a site.
- Reduce negative visual and environmental impacts associated with parking lots by providing hard and soft landscape elements to screen parking lots (i.e. walls, columns, decorative fencing, plant material, etc.).
- Ensure compatibility with adjacent landscaping or buffer the site from adjacent conflicting land uses.
- Ensure that tall plant material is not adjacent to pedestrian network, accessible routes, parking areas, and building entrances.

- Protect landscape areas from vehicular damage by providing concrete curbs or precast concrete car bumpers. • Provide adequate mixture of both deciduous and coniferous plant material.
- Provide a maximum of 25% of any one tree species.
- Exclude invasive/restricted species. (Refer to Section 5.17.12 - Invasive Plant Species.)

The following minimum plant sizes should be used:

- Deciduous trees - 60 mm caliper
- Ornamental trees - 50 mm caliper
- Coniferous trees - 1500 mm height
- Coniferous shrubs (upright) - 1200 mm height
- Multi-stem shrubs - 1200 mm height
- Deciduous shrubs - 600 mm height
- Coniferous shrubs (prostrate) - 600 mm spread
- Perennials, vines, ornamental grasses - 2 year growth

3.5.6 Snow Storage

Adequate snow storage space shall be provided which does not cause sight obstructions or damage to landscaping. Snow storage areas are not to encompass any Low Impact Development (LID) features or storm drainage features (e.g., catchbasins, area drains, swales, ditches, etc.).

While not preferred, the Town may consider allowing for snow to be removed from the site by the Owner at their expense. Where snow removal is permitted, the Site Plan Agreement will include conditions that speak to snow removal and the responsibilities of the Owner.

3.5.7 Fencing

For fencing requirements, refer to Section 2.1.7 (Fencing).

3.5.8 Transportation

Design pertaining to site specific transportation networks should strive to meet best engineering practices, encompassing a range of principles and techniques aimed at maintaining/improving the efficiency, safety, and sustainability of the surrounding transportation systems.

The Town identifies certain key practices that can play an integral role in order to facilitate the above, including traffic calming, site access management, and site access/intersection design.

Through the design process, site plans should also consider the following:

- Site circulation
- Parking design
- Pedestrian and cycling facilities
- Wayfinding and signage
- Accessibility
- Emergency vehicle access
- Sustainable transportation
- Collaboration with neighbouring traffic authorities

The Town refers to OTM and TAC for applicable standards and regulations. The Transportation Planning Division can be contacted directly for any additional information.

For requirements pertaining to site entrances, refer to Section 1.1.15 - Site Entrances.

3.5.9 Parking Structures

The Town prefers parking structure ramps with slopes of 12.0% or less. Designs that utilize slopes greater than 12.0% must include the following, with the maximum permitted ramp slope being 15.0%:

- Slope transitions that are $\frac{1}{2}$ of the ramp grade (to a maximum of 6.0%) for a minimum distance of 3.66 m.
- A Justification Letter (sealed and signed by a qualified professional) that includes an analysis of vertical clearances.

A 30 cm increase in parking stall width is required for each side of a parking stall when adjacent to a column or wall.

The following widths shall be adhered to:

- A minimum drive aisle width of 6.0 m
- A minimum two-way straight ramp width of 6.1 m
- A minimum two-way curved ramp width of 9.1 m

Structural columns shall be set back a minimum of 0.5 m from any drive aisle to provide a minimum clear width of 7.0 m.

Convex mirrors shall be applied at ramps where motorists cannot readily view opposing traffic.

3.5.10 Utilities and Lighting

Telecommunications, Hydro, Gas, etc., should be constructed below ground and in accordance with applicable utility provider requirements. The Applicant is responsible for all design coordination with utility providers and must receive and provide acceptance/approval from each utility provider.

Municipal Consent Approval must be obtained by utility providers prior to completing installations within a municipal right-of-way.

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3.6 Typical Permits and Agreements

3.6.1 Site Alteration Permit

Required to carry out any preliminary grading or earthworks operations, in advance of receiving Site Plan Approval.

Refer to the Site Alteration By-Law 094-2022 (as amended).

Prior to the commencement of site alteration works, a Site Alteration Sign is to be installed at major site entrances. Refer to TMSD 16-02.02.

3.6.2 Piling and Shoring Licence Agreement

Required for Site Plan Developments where the temporary installation of a tie-back system that encroaches into a municipal right-of-way is needed. This Agreement does not, on its own, permit the work. A Shoring Permit must also be obtained from Building Services.

3.6.3 Curb Cut and Entrance Permit

Required for the installation of a vehicular site entrance from a municipal right-of-way.

Refer to the Town of Milton Road Cut By-Law 35-2020.

3.6.4 Road Occupancy Permit

Required for the completion of any works within municipal right-of-ways, including but not limited to the installation of servicing connections.

Refer to the Town of Milton Road Cut By-Law 35-2020.

3.6.5 Servicing Agreement

Required for the design and construction of off-site municipal assets.

3.6.6 CLI-ECA Permit

Required for alterations to or extensions of municipal sewers. Refer to the Town of Milton Stormwater Management (SWM) By-Law 095-2022.

3.7 Standard Certification Letters

3.7.1 Stormwater Management & Grading Certification Letter

[Company Letterhead]

[Date]

The Corporation of the Town of Milton
Development Engineering
150 Mary Street
Milton ON L9T 6Z5

Attention: [Name], Development Engineering Technologist

Subject: **Stormwater Management & Grading Certification**
[Developer Name] - [Development Name] (SP-yy/xx)
[Street Address] Milton, ON
[P0S T4L]

We hereby certify that the above subject development has been inspected, and we confirm that all stormwater management infrastructure, including but not limited to, sewers, structures, detention facilities, and LIDs, as well as all grading have been installed/constructed/completed in general conformance with the Approved Drawings, and Town of Milton standards, and that there are no adverse grading or drainage impacts on any adjacent properties.

The site has been stabilized with final landscaping works and no drainage issues are evident.

Sincerely,

[Signature of Engineer]

[PEO stamp, dated, and signed]

3.7.2 Acoustic Certification Letter

[Company Letterhead]

[Date]

The Corporation of the Town of Milton
Development Engineering
150 Mary Street
Milton ON L9T 6Z5

Attention: [Name], Development Engineering Technologist

Subject: **Acoustic Certification**
[Developer Name] - [Development Name] (SP-yy/xx)
[Street Address] Milton, ON
[P0S T4L]

This letter is to certify that the proposed acoustic attenuation features within the above subject development is in conformance with the following approved documentation:

- [Report Title] prepared for [Client Name], by [Author Name/Company], dated [Date, Rev.#] and engineering / site plan drawings (name and date of approval by Town).
- Final Engineering Drawings by [Engineering Firm] dated [Date, Rev.#] and approved by the Town of Milton on [Date of Town Approval].
- Final Site Plan Drawings by [Engineering Firm] dated [Date, Rev.#] and approved by the Town of Milton on [Date of Town Approval].

We hereby certify that, the acoustic attenuation features within the subject development have been designed, constructed, and inspected in accordance with the above listed report(s) and drawings.

Sincerely,

[Signature of Engineer]

[PEO stamp, dated, and signed]

3.7.3 Landscaping Certification Letter

[Company Letterhead]

[Date]

The Corporation of the Town of Milton
Development Review
150 Mary Street
Milton ON L9T 6Z5

Attention: [Name], Planner, Site Plans

Subject: Landscaping Certification
[Developer Name] - [Development Name] (SP-yy/xx)
[Street Address] Milton, ON
[P0S T4L]

I have performed onsite inspections of the landscaping. I am qualified and am in good standing and recognized by the OALA to certify landscape works and hereby certify the following:

- a) The landscaping adjacent to the channel has been installed in conformance with the approved landscape plans (layout, grading, and materials) and no plant material or seed substitutions have been made.

- OR -

If changes were made from the approved plans in terms of layout, grading or materials. Itemize the changes as follows:

The landscaping adjacent to the channel has been installed in general conformity with the approved landscape plans; however, the following changes were made:

- The following layout changes have been made: Itemize;
- The following plant material substitutions have been made: species, size - Itemize;
- The following seed substitutions have been made: Itemize;
- Identify landscape works that have not yet been completed;
- Identify landscape works that are deficient.

- b) The landscaping in all areas other than the channel has been installed in conformance with the approved landscape plans (layout, grading, and materials) and no plant material substitutions have been made.

- OR -

If changes were made from the approved plans in terms of layout, grading or materials. Itemize the changes as follows:

The landscaping in all areas other than the channel has been installed in general conformity with the approved landscape plans; however, the following changes were made:

- The following layout changes have been made: Itemize;
 - The following plant material substitutions have been made: species, size - Itemize;
 - The following seed substitutions have been made: Itemize;
 - Identify landscape works that have not yet been completed;
 - Identify landscape works that are deficient.
- c) The transformers have been screened in accordance with the site plan agreement. The screening of the transformers consists of the following: Itemize;
- d) The fencing has been installed in accordance with the approved drawings.
- e) Sodding has been installed as per the approved drawings.

Sincerely,

[Signature of OALA]

[OALA stamp, dated, and signed]

[illegible]

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.