



**Engineering  
and Parks  
Standards  
Manual**

**Part 2**

**2024 - September**

# **Subdivisions and Infrastructure**

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## 2.1 Design Considerations

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In addition to the design considerations in this section, the following sections from Part 7 may be applicable to a private development project:

- 7.1.7 SPG7 - Permits and Approvals
- 7.7.8 SPG8 - Garbage Collection
- 7.1.12 SPG12 - Mud Control
- 7.1.19 SPG19 - Removal of Abandoned Utilities
- 7.1.27 SPG27 - Migratory Birds Convention Act
- 7.1.28 SPG28 - Environmental Considerations
- 7.1.29 SPG29 - Erosion & Sediment Control
- 7.1.31 SPG31 - Topsoil
- 7.1.33 SPG33 - Work Adjacent to or Crossing an Enbridge Gas Main
- 7.1.34 SPG34 - Work Adjacent to or Within a Hydro One Corridor
- 7.1.39 SPG39 - Clean Equipment Protocol
  
- 7.2.1 SP1 - Hot Mix Asphalt
- 7.2.3 SP3 - In-Depth Preservative Asphalt Sealant
- 7.2.4 SP4 - Impressed Coloured Concrete Apron
  
- 7.3 Management and Disposal of Materials
  
- 7.4 New Traffic Signal Construction

### 2.1.1 Entrance Features

#### 2.1.1.1 Criteria

Entrance features are not a requirement of the Town. The owner may submit for approval a design proposal for entrance features, which may consist of walls, gates, fences, trees, shrubs, flowers and other related components. The Owner will be required to enter into an agreement with the Town for the construction and maintenance of entrance features within the Subdivision Agreement.

The Owner shall maintain the entrance feature indemnifying the Town for all claims until the subdivision has been assumed and all lots within the development have been sold or as otherwise specified in the agreement.

The Owner shall provide a payment for perpetual maintenance fees in accordance with Section 2.7.1 (Perpetual Maintenance Fees) and securities in accordance with Section 2.6 (Security Requirements).

The Town reserves the right to remove any/all element(s) of the entrance feature at its discretion. At the time of Assumption, the Owner may be required to remove the elements which are not a Town service level standard, such as irrigation systems and all

appurtenances, servicing and any unapproved plant material, if any, and restore the site, at the Owner's expense.

A Building Permit is required for entrance features (or ground signs) exceeding 1.2 m in exposed height. Design drawings submitted to the Town for review and approval must be stamped and signed by a P.Eng, registered in the Province of Ontario.

### **2.1.1.2 Design**

Entrance features may be located within the public road allowance in centre median islands only or on a separate block adjacent to daylighting triangles. Entrance features shall be designed to maintain proper sight distances and turning movements at driveway accesses and intersections. The design of an entrance feature, including plant materials, construction materials, and wording, must be approved by the Town. Lighting, if any, must be compatible with the illumination requirements for public roadways.

Irrigation is not a Town service level standard. The costs associated with installing irrigation systems will be the sole cost of the Owner. Proposed irrigation systems to be installed on a metered usage system with all costs borne by the Owner. Any irrigation system installed by the Owner is to be fully decommissioned prior to assumption of the subdivision. The Owner is required to demonstrate that the decommissioning is to the Region's standards.

## **2.1.2 Fire Department Requirements**

### **2.1.2.1 Firebreak Lots**

Two copies of the General Above Ground Plan, clearly identifying lots designated as firebreak lots must be submitted to the Fire Chief for review and approval. A maximum of eight consecutively adjacent dwelling units may be erected with a minimum of 15.24 m provided as a break.

As this is a condition of Schedule 'L' of the subdivision agreement, no building permits will be issued without approval.

### **2.1.2.1 Standard Fire Hydrants**

To ensure that all fire hydrants are standard throughout the Town, the following is required:

- a. Fire hydrant caps must be colour coded to indicate water flow and water system as per the National Fire Protection Association (NFPA).
- b. A 100 mm Storz quick connect coupling cap is to be placed on the steamer port of all hydrants.



- c. Fire hydrants (private and municipal) are to be flow tested. Flow test results are to be submitted to the Fire Chief prior to occupancy.
- d. Fire hydrants must have a minimum of 3.0 m clearance in line with the steamer ports and a minimum of 1.0 m clearance in all other directions from any above ground obstructions.

### **2.1.3 Canada Post Facilities**

The number and location of units for mail delivery must be approved by Canada Post and the Town. Layout is to be done as per Canada Post standards for postal facilities. Refer to Canada Post drawings.

On roads with sidewalk on one side only, Town preference is to have Community Mailboxes installed on the sidewalk side of the road. Community Mailboxes should be installed on 18.0 m or larger ROWs.

The temporary and permanent locations shall be clearly shown on the approved engineering drawings and land use signs must be posted on-site prior to the issuance of building permits.

Warning clauses are required in the Agreement of Purchase and Sale for lots adjacent to any Canada Post facilities.

Temporary and permanent Canada Post facilities shall not be placed in front of parks or open space blocks, including, but not limited to, SWM blocks, buffer blocks, and channels. Under extenuating circumstances, the Town may, at its sole discretion, waive this requirement allowing mailboxes to be integrated into the park or open space frontage.

Where postal facilities abut a municipal sidewalk, a 1.2 m wide concrete sidewalk (OPSD 310.010) is required between the curb and municipal sidewalk immediately adjacent to the postal pad.

Temporary facilities, in location(s) approved by Canada Post and the Town are to be installed once occupancy has begun. The location(s) must be kept clear of all construction materials.

### **2.1.4 Utility Equipment Sheds/Structures (UES)**

All utility infrastructure, and any associated land requirements, must be incorporated into the subdivision design, to the satisfaction of the Town and all applicable utilities.

### **2.1.4.1 Criteria**

Utility Equipment Sheds (UES) house a Utility's above ground equipment. Detailed design drawings complete with all underground and above ground works must be submitted with the engineering drawings for review and approval by the Town. The UES must conform to the subdivision Architectural Control Guidelines. An Agreement must be entered into by the Utility prior to installation.

Prior to placement and/or construction the Utility must apply to the Town for a Building Permit, as applicable

A warning clause must be included in the Agreement of Purchase and Sale of residential lots adjacent to the above locations, indicating that an above ground UES may be located adjacent to the property.

### **2.1.4.2 Design**

UES locations will be addressed on a site-by-site basis. The utility is required to obtain a separate block from the Owner.

Final location is subject to review and approval by the Town. UES shall be setback a minimum of 2.5 m from street line and, ideally, 8.0 m from any residential property line. Installations closer to residential property lines may be accepted, with Town approval, should site constraints warrant.

The location of each UES must be identified on the signed Composite Utility Plan. When the Subdivision Agreement is submitted for execution, the Composite Utility Plan must also be submitted for approval by the Town.

Landscaping and plantings are required to soften the impact that UES's have on their surroundings. A landscape/planting plan must be submitted to the Town for approval to the satisfaction of the Town.

### **2.1.5 Benchmarks**

The Town requires the installation of geodetic benchmarks within each subdivision or phase of subdivision. Benchmark locations are determined by the Town.

Benchmark information is to be sent to the MNRF for use on COSINE. Confirmation of upload must be provided to the Town prior to Assumption.

The MNRF's requirements and specifications for COSINE benchmarks can be found at: <https://www.ontario.ca/page/geodesy#section-1>

## 2.1.6 Acoustic Barriers

### 2.1.6.1 Criteria

In order to ensure an attractive streetscape appearance, the Town discourages development layouts that require noise barriers. However, where required noise attenuation is identified in an Acoustical Report submitted in support of a development application for a Plan of Subdivision, the height of any walls shall be minimized through the use of fence/berm combinations.

All aspects of installation must conform to Town policy and MECP guidelines. Wood acoustic fence is the Town's standard. (Refer to TMSD 10-03.02.) Precast concrete panels may be used, provided the Town is in agreement and the below design criteria is met.

### 2.1.6.2 Design

- a. Design shall be in conformance with the MECP's Environmental Noise Guideline.
- b. Continuity of appearance shall be achieved within neighbourhoods. Acoustic barrier walls shall be constructed of wood or concrete panels and may incorporate decorative masonry or pre-cast columns to provide design relief.
- c. The minimum acoustical characteristics of the barrier wall shall be such that the wall has a surface density of at least 20 kg/m<sup>2</sup>. The walls shall be designed for a reference wind pressure of 380 kPa.
- d. The maximum barrier height shall be 2.4 m, although greater heights can be obtained using a combination of berm and wall. Maximum height adjacent to rail lines shall be 3.0 m.
- e. Acoustic fence shall be installed 100 mm on Town lands with a 1.0 m wide easement on private lands (or as determined by the Town).
- f. Where an acoustic fence is to be installed in combination with a berm, the Town will require an appropriately sized block or easement. Acoustic fence is to be located within the block as directed by the Town. Berms may be partially located on private lands.
- g. The maximum grade for berms in turf areas that are to be mowed regularly shall be 4:1, with naturalized areas at a maximum 3:1. Slopes of 2:1 may be allowed on low maintenance naturalized slopes. This will be assessed on a site-specific basis. Seed mixes for berms are to be selected from the recommended seed mixes, and may require approval from outside authorities. Interim seeding may be required for quick cover, erosion control, and/or dust control. Refer to Sections 5.14.7, 5.17.1, 5.17.2, 5.17.4, and 5.17.5.

- h. Grading and berm construction associated with barrier installation shall be completed to within 5 mm below the bottom of the barrier prior to constructing the barrier footings.
- i. There shall be no visible gaps between any barrier panels or beneath the bottom panels after completion of the barrier unless approved by the acoustical engineer.
- j. Where footings are installed on or within 1.0 m from a downward slope of 3:1 or steeper, the embedment depth shall be increased a minimum of 500 mm greater than the requirements of the Ontario Bridge Code. The design of the footings shall ignore the top 1.0 m of material in front of the footing. Footing depths may be altered based on the written recommendations of a Soils Consulting Engineer.
- k. Concrete for drilled footings shall be cast against undisturbed soil except for the top 600 mm which shall be formed by sonotube.
- l. If dug footings are used, the footings shall be formed for a minimum height of 1.2 m and the excavation shall be subsequently backfilled with granular material compacted to 98% SPDD.
- m. Where required, mass concrete (15 MPa) shall be used to raise the base of the footing to the required level. The tops of all footings shall be sloped away from the post, to avoid ponding of water, except for the bearing area of the wall panels which shall be constructed as designed and shown on the approved drawing(s).
- n. The footing elevations of the foundations shall be verified by the Geotechnical Engineer based on an inspection of the site conditions before concrete is placed and shall in all cases provide frost protection to the approved finished grade in conformity with the Ontario Building Code. A written report shall be provided by the Geotechnical Engineer confirming the acceptability of the foundation bearing conditions.
- o. Concrete used in the foundation shall be tested by an independent testing company engaged by the Consulting Engineer or the Town for compliance with the specifications. A copy of the test report(s) shall be provided to the Town.
- p. If the test results fail to meet the requirements of the specification, the work represented by the failed test(s) shall be deemed rejected unless the results of additional testing prove to be satisfactory as determined by the Town.
- q. The concrete in the footings shall be allowed to cure for a minimum of seven days before the wall panels are installed. Acceptability of a 7-day concrete test shall be obtained before wall panel erection commences.

- r. Materials and production of concrete for foundation/footings shall comply with CSA A23.1. Specific requirements for this specification shall follow:

Class of Concrete:	32 MPa at 28 days (minimum)
Water Cement Ratio:	0.5 (maximum)
Air Entrainment:	5% to 8%

- s. Structural Design of acoustic walls shall comply with CSA Standards as applicable. The design of the foundations shall comply with the Ontario Building Code.

### 2.1.6.3 Design Criteria for Precast Concrete Panels

- a. Concrete for precast panels and posts shall comply with CSA Standards A23.1 and A23.4 specific requirements shall be as follows:

Class of concrete:	35 MPa at 28 days (minimum)
Course aggregate:	20 mm nominal maximum size (crushed stone)
Water Cement Ratio:	0.4 (maximum)
Air Entrainment:	5% to 8%
Resistance to Salt Scaling:	Loss of mass not to exceed 0.8 kg/m <sup>2</sup> from the surface after 50 cycles of freezing and thawing in accordance with OPSS 1352
Water Absorption:	5% (in accordance with CSA A23.2)

- b. Reinforcing steel shall conform to the requirements of CSA Standard G30.12 for Grades 350W and 400W and to CSA standard G30.16 for Grade 400W. Reinforcing steel shall be epoxy coated for precast concrete panels, conforming to OPSS 1442. Epoxy coated reinforcing steel shall be supplied from an approved source listed in Ontario Ministry of Transportation Designated Sources Manual List # 9.65.70.
- c. Structural Steel materials shall conform to CAN/USA standard G40.21-92 Grade 300W and CAN/CSA-S16.1. All parts shall be hot dipped galvanized conforming to CAN/CSA-G164.
- d. Precast concrete components shall conform to CSA A23.4. Concrete cover to reinforcing steel shall be 50 mm (tolerance of  $\pm 5$  mm) in other locations. Cover may be reduced to 30 mm (tolerance of  $\pm 5$  mm) on the non-road side provided the sides of the precast concrete components are appropriately marked as that the correct placement can be easily verified on site. The method of demarcation shall be agreed upon with the Town before manufacturing is commenced.

### 2.1.6.4 Approval of Non-Standard Products

Should the Owner wish to use a product that is not specified in the Town's standards, the product must be reviewed and approved by the Town.

## 2.1.7 Fencing

### 2.1.7.1 Criteria

Fencing shall be installed where there are varying land uses on adjacent properties.

Fencing shall be installed along all public parks, open spaces, woodlots, channel blocks, school properties, utility corridors, along flankages and/or rear yards abutting collector or arterial roads, and higher density development as deemed appropriate by the Town.

Fencing is not required where noise barrier walls are to be installed. All fencing must conform to Town and/or OPSS/OPSD standards.

Coordination with affected stakeholders (i.e., Conservation authority, school board, utility provider, etc.) is required.

Permanent fencing adjacent to woodlot blocks is required prior to Building Permit issuance whereas all other permanent fencing is to be installed prior to Occupancy.

Temporary fencing and construction fencing shall be required as directed by the Town.

Gates are not permitted to Town owned lands from individual residential properties or development blocks.

Fencing conveyed to the Town through plan of subdivision, site plan, severance, or other means will require certification from an Ontario Land Surveyor to verify that the fencing is located as per approved drawings and standards.

### 2.1.7.2 Design

#### a. Tree Protection Fencing:

- 1.2 m high page wire fencing with caution signs shall be installed 1.0 m beyond at the drip line of the trees to be protected. (Refer to TMSD 10-01.02.)
- In some situations, the Town may require tree protection hoarding due to sensitive nature of the existing vegetation to be protected during construction. (Refer to TMSD 10-01.03.)

#### b. Erosion and Sediment Control Fencing:

- Installed prior to and maintained during construction (OPSD 219.110).

#### c. Chain-Link Fencing (Black Vinyl):

- Chain-link fencing shall be per TMSD 10-02.01 with gates per TMSD 10-02.02.

- Rear and side yards adjacent to public open space, including walkways, parkland, watercourse/channel blocks, and woodlots require 1.5 m high chain-link fencing, located 100 mm on Town property.
  - Rear and side yards adjacent to utility corridors require 1.5 m high chain-link fencing, located on property line. Owner to consult with utility company prior to installation.
  - Pond inlet and outlet structures require 1.2 m high chain-link fencing to be installed on the headwall and the wing walls.
  - Entrances and/or natural features abutting a right-of-way may be require chain-link fencing.
  - Chain-link fencing shall be installed as per TMSD and/or OPSS/OPSD.
- d. Chain-Link Fencing (Galvanized):
- Required for and only permitted on sports field applications and installed as per TMSD and/or OPSS/OPSD.
- e. Wood Privacy Fencing:
- Residential flankages and rear yards abutting collector and/or arterial roads require a 1.8 m high wood board-on-board privacy fence installed on property line. (Refer to TMSD 10-03.01.)
  - Residential flankages and rear yards abutting institutional parking lots require, at a minimum, a 1.8 m high wood board-on-board privacy fence installed on property line. The Town, at it's sole discretion, may require an increased fence height in some cases.
  - Residential flankages and rear yards abutting commercial and industrial properties require a wood board-on-board privacy fence installed on property line. Fence parameters will be on a case-by-case basis, at the Town's sole discretion, and fencing may be a high as 3.0 m.
  - For any instances not covered above, minimum fencing requirements shall be a 1.8 m high wood board-on-board privacy fence installed on property line.
  - Privacy fencing is not required where acoustic barriers are to be installed.
  - Fence returns with gates are required.
- f. Page Wire Fencing:
- 150 mm diameter wood post with wire farm fencing. (OPSD 971.101)
  - May be required as temporary and/or protective fencing for, woodlots, open space, future development blocks, or corridors at the Town's discretion.
- g. Post and cable:
- Required at road crossings and window streets adjacent to utility corridors, to the satisfaction of the utility company and the Town. (Refer to TMSD 10-04.01.) The

Town may require installation at other locations. Refer to Section 1.1.4 (Window Streets).

h. Pedestrian Barricade:

- If required must be consistent with OPSD 980.101.

Regardless of the above requirements, all situations will be reviewed individually at the Town's discretion.

### **2.1.7.3 Industrial Developments**

Industrial developments may install fencing above and beyond the Town's standard requirements. When this is the case a Fencing Plan will be required for review and acceptance by the Town.

If, at any point in time, the Owner wishes to remove the industrial fencing, above and beyond the Town's standard requirements, the Owner must install fencing to the Town's current standard at all necessary locations.

Gates allowing access to adjacent Town property will not be permitted.



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## 2.2 Drawing Requirements

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### 2.2.1 General Drawing Requirements

Engineering Drawings are to be sealed, signed, and dated by a qualified Professional Engineer, registered and in good standing with PEO.

Landscape Drawings are to be sealed, signed, and dated by a Landscape Architect, who is a full member of OALA, where appropriate.

Drawings shall be 559 mm x 864 mm (ANSI D) or 24" x 36" (Arch D) in size.

For all civil engineering drawings, Halton Region's CADD standards are to be implemented. Halton Region's CADD standards can be found on the Halton Region website.

All elevations are to relate to an acceptable geodetic datum. The benchmark shall be described on the drawings.

All plans must be submitted using 'real world' co-ordinates. The Town's standard projection is Universal Transverse Mercator (UTM), Zone 17 North, North American Datum 1983 (NAD83). All mapping supplied to the Town must snap to the adjacent property boundaries.

The revision block on all drawings is to be updated with each formal submission and include a unique revision number and date.

An complete and independent drawing set must be submitted for each subdivision phase (with a unique 20M number) in order to facilitate the independent Review, Acceptance, and Assumption of separate phase.

A complete set of Engineering drawings shall include:

- Cover Sheet
- General Notes
- Pavement and Storm Charts
- General Above Ground Plan/ Underground Services Plan
- Phasing Plan
- Storm Drainage Plans (Internal and External)
- Storm Sewer Design Sheets
- Subdivision Grading Plans
- Erosion and Sedimentation Control Plan
- Plan and Profile Drawings
- Active Transportation Plan
- Traffic Control Plan

- AutoTURN Swept Path Analysis Drawings
- Composite Utility Plan
- Detail Sheets
- Standard Drawings (Town/Region/Province)
- Stormwater Management Pond/Channel Plans
- Signal Wiring Plan and Signalized Intersection Plan
- Street Light Design/Photometric Plan

A complete set of Landscaping drawings shall include:

- Landscape Plans
- Park/Open Space Base Condition Plan based on approved Park/Open Space Concept Plan and Park/Open Space Interim (Base Condition) Grading Plan
- Tree Inventory and Preservation Plan
- Street Tree Planting Plan
- Community Trail Plan
- Off-Site Works Restoration Plan

## 2.2.2 General Notes Sheet

General Notes Sheets shall include:

- General design criteria that apply to all sheets (e.g., lot servicing, pipe sizes, curb type, CB grate type, etc.).
- Special warnings from utility companies and government agencies (i.e., existing structures and buried services).
- General Town policies and by-laws which apply to the construction activity (e.g., hours of work, mud tracking, construction access, etc.).
- A summary table of all underground municipal services, lane kilometres, and streetlights following the format of Table 2.1 through Table 2.4 below.

**Table 2.1 Example Summary Table for Storm Structures**

Structure ID No.	Structure Size (mm)	Standard No.
MH 101	1200 Ø	OPSD 701.010
MH 102	1500 Ø	OPSD 701.011
MH 103	1800 Ø	OPSD 701.012
MH 104	3800 x 2400	See Structural for Details
HW 105	-	OPSD 804.040

**Table 2.2 Example Summary Table for Storm Sewers**

From Structure	To Structure	Pipe Size (mm)	Length (m)	Pipe Material	
MH 101	MH 102	300 Ø	25.5	PVC	SDR-35
MH 102	MH 103	450 Ø	60.2	PVC	SDR-35
MH 103	MH 104	975 Ø	38.7	Conc.	65-D
MH 104	HW 105	2400 x 1200	45.0	Conc.	65-D

**Table 2.3 Example Summary Table for Total Lane Kilometres of Roadway**

Road Category	ROW Width (m)	Centreline Road Length (km)	Number of Lanes	Lane Kilometres
Laneway	11	-	x 2	-
Local	16 to 20	-	x 2	-
Collector	24 to 26	-	x 3	-
Arterial	30 to 35	-	x 4	-

**Table 2.4 Example Summary Table for Streetlights**

Street Name	Pole Material	Number of 43 W Coach Style LED	Number of 100 W Coach Style LED
This Street	Conc.	5	-
That Street	Conc.	7	1
This Road	Conc.	3	9
That Road	Conc.	1	8
Total:		16	18

### 2.2.3 Landscape Maintenance Notes

These notes shall include:

1. Maintenance for vegetation shall include all necessary watering (which includes a thorough watering immediately after planting), cultivation, weeding, pruning, fertilizing, disease and insect control, protective spraying, replacement of unacceptable or dead material, straightening trees which lean or sag, adjustment of cable supports and stakes, adjustment of trees which settle or are planted too low, and any other procedure consistent with good horticultural practice and necessary to ensure normal vigorous healthy growth of the vegetation planted.

2. Maintenance of sodded areas shall include all necessary watering required to ensure and maintain continuous healthy growth, regular grass cutting, fertilizing with 2:1:1 ratio fertilizer one month after sodding, and replacement of dead and bare areas prior to municipal acceptance.
3. Maintenance of seeded areas shall include all necessary watering required to ensure germination and continuous healthy growth, regular grass cutting, fertilizing with 2:1:1 ratio fertilizer after first grass cutting, weed control and reseeding dead or bare areas prior to municipal acceptance.
4. The Owner acknowledges that plant material, sodded, and seeded areas replaced within the two year guarantee period shall be guaranteed for an additional two year commencing date of replacement, to the satisfaction of the Town.

## **2.2.4 Planting Notes**

Refer to Section 5.17.10 (Standard General Planting Notes) for a complete list of planting notes to be included in landscape submissions.

## **2.2.5 General Above Ground/Underground Plans**

General Plans shall be drawn to a scale of 1:1000 or larger (i.e., 1:500) and shall show land uses, road layout, street names, lot numbers, and legal description of adjoining lands and lands to be dedicated to the Town or the Region.

## **2.2.6 Composite Utility Plans**

In lieu of Municipal Consents and/or PUC applications for individual utilities, the applicant is required to submit Composite Utility Plans which are plan drawings at a scale of 1:500 showing road layout, all underground services/utilities, all above ground appurtenances to the services, all street furniture including sidewalks, all street trees, driveways, etc. The plans must include all utility structures/buildings.

A Municipal Consent will still be required for any works that fall outside of the limits of the subdivision.

The plans must be sealed, signed, and dated by a qualified Professional Engineer and signed and dated by all utilities prior to submission to the Town for review and approval.

## **2.2.7 Traffic Control Plans**

The Owner shall submit Traffic Control Plans at a scale of 1:500. The plans shall show all roadways, property lines (including designation of schools and parks), driveways, fire hydrants, sidewalks, bike paths, street lighting, traffic signage (including all regulatory, warning, and information signs), street trees, tactile plates, and pavement markings.

On street parking shall be shown. The Town requires the amount of on street parking to be equal to 0.5 parking spaces per residential property.

The following notes shall be included on Traffic Control Plans to reduce conflicts:

1. All traffic signage to be installed as per the Ontario Traffic Manual.
2. Traffic signage to be installed on streetlight posts where possible.
3. Parking prohibitions may be required in the areas of intersections, curbs, park pathways, and vehicular park entrance locations, on a site-by site-basis. Areas to be confirmed by Town Engineering staff prior to installation of signage.
4. The Owner is responsible for installing the approved line painting prior to assumption of the subdivision.
5. All 'No Parking' and 'No Stopping' signs are to be placed on the approach side of street trees in the boulevard. Signs placed in locations where they are blocked by trees will be relocated at the contractor's expense.
6. Street tree plantings to be limbed up and/or regulatory sign locations to be adjusted as directed by the Town, prior to commencement of the Maintenance Period.

## 2.2.8 Traffic Signal Drawings

Where traffic signal control is required, the Owner shall submit the following drawings and information:

- a. **Base Intersection Drawing:** Showing the locations of pavement, sidewalks, street lighting, pavement markings, property lines, driveways, and fences/hedge rows, at a scale of 1:500.
- b. **PH-M-125 (For Construction):** Showing the layout of poles, arms, heads, conduit, controller, Opticom, handwells, vehicle detection, power supply, hydro metre, signage, and all pavement markings at a scale of 1:250.
- c. **Wiring diagram** for the intersection.
- d. **Table of Quantities or Bid Form:** Showing all equipment, including appropriate specification references, descriptions, and quantities of each.

Within 30 days of the activation of the traffic signal, the Owner shall submit the following drawings:

- a. **PH-M-125 (As-Constructed):** Showing the layout of poles, arms, heads, conduit, controller, Opticom, handwells, vehicle detection, power supply, hydro metre, signage, and all pavement markings at a scale of 1:250.

- b. **Wiring diagram** for the intersection.

## 2.2.9 Phasing Plans

If a plan of subdivision is to be developed in stages, a Phasing Plan showing current and future phases is to be prepared at a scale of 1:1000 or larger. The Town may request various scales in order to create composite plans with other developments.

If this information can be clearly shown on the General Plan/Underground Services Plan, the two drawings may be combined.

The Phasing Plan's functionality must be substantiated with interim SWM and Traffic Reports as well as any other reports that may be required by the Town.

## 2.2.10 Storm Drainage Plans

Storm Drainage Plans are to be drawn to a scale of 1:1000 or larger (i.e., 1:500). If large external drainage areas are to be detailed, a separate External Storm Drainage Area Plan is to be produced. A scale of 1:5000 is acceptable for an External Drainage Plan and is to indicate the total area to be drained by the proposed storm sewers. The Storm Drainage Plan is to be compatible with the Grading Plan and must include the following:

- a. Existing contours (0.5 m intervals).
- b. Drainage patterns of adjacent lands and a breakdown of contributing external areas.
- c. Run-off coefficients and area of tributary areas internal and external to the development for each section of the storm sewer.
- d. Direction of run-off (overland flow).
- e. Street names.
- f. Manhole and catch basin numbers.
- g. Sewer sizes.
- h. Directions of flow in the sewers.
- i. Catch basins or swales on lots or blocks, required to accept storm run-off.
- j. Complete major and minor storm systems.

## 2.2.11 Erosion and Sedimentation Control Plans

Provide a phasing and construction schedule that shows the works required to mitigate sediment contamination of affected natural areas, adjacent lands, and storm sewer systems and how they are to be staged.

Plans must indicate all information required by the Site Alteration By-Law 094-2022 (as amended from time to time). It is the intent of the Erosion and Sediment Control (ESC) Plan to outline how controls will be put in place during the following phases of construction:

- Earthworks
- Servicing
- Building Construction

## 2.2.12 Park/Open Space Base Condition Plan

The Park/Open Space Base Condition Plan is a composite drawing based on the approved Park/Open Space Concept Plan and Park/Open Space Interim (Base Condition) Grading Plan. It clearly identifies all required base condition works to be undertaken by the Owner to obtain Town acceptance.

A Plan is required for each parcel or block proposed for conveyance to the Town.

Each submission of this plan is to be accompanied by a cost estimate specific to the base condition works.

Once approved by the Town, the information on this plan is to be depicted on all other relevant drawings (e.g., individual lot sitings, utility, planting, and servicing drawings).

Refer to Section 5.4.2 (Base Condition - Design).

### 2.2.12.1 Required Submissions

The following submissions are required to finalize the Park/Open Space Base Condition Plan:

#### a. Park/Open Space Concept Plan

The Park/Open Space Concept Plan demonstrates that the proposed programme (facilities, amenities and features) can be developed within a proposed park or open space block as configured for dedication to the Town. The park or open space programme will be provided to the Owner by Community Services staff. The Plan will consider Town standards, including all required setbacks and buffers associated with constructing the site and its features. It is to be submitted in conjunction with a



development application and be coordinated with all reports submitted in support of the application.

b. **Park/Open Space Interim (Base Condition) Grading Plan**

An Interim (Base Condition) Grading Plan is to be submitted for each park and open space area. The plan is to demonstrate the proposed drainage design for each approved Park/Open Space Concept Plan.

The above plans are to be prepared at a scale of 1:500. Refer to Section 5.4 (Base Condition) for more detail regarding base condition works.

## **2.2.13 Subdivision Grading Plans**

Grading Plans for all lots and blocks are to be drawn to a scale of 1:500 showing existing contours (0.5 m intervals), established from elevations taken in the field.

The plans are to include existing and proposed elevations and other information.

### **2.2.13.1 Existing Elevations**

Grading Plans are to include the following:

- a. Existing grade at the corners of each lot and block.
- b. External grades extending a minimum of 30 m beyond the development.
- c. Flow direction for external drainage.
- d. The base of all large trees 10 cm or more in DBH plus their dripline, and the composite dripline of all contiguous vegetated areas such as woodlots, hedgerows, etc.
- e. Existing grades at regular intervals within any woodlot or other natural blocks where deemed necessary to determine the effect of grade change on tree preservation.

### **2.2.13.2 Proposed Elevations**

Grading Plans are to include the following:

- a. Proposed grades at 20 m (maximum) intervals along the centre line of all proposed roads and at all low/high points; the slope of each road section is to be noted.
- b. Gutter grades on cul-de-sac bulbs and the outside curb on road elbows, where the minimum grade is 0.75%. (Refer to Section 1.1.8.2.)

- c. All lot grading high points (split drainage, rear and side yards, top and bottom of slopes).
- d. Proposed grades at the corners of each lot and block.
- e. Proposed grades at 15.0 m (maximum) intervals along cut-off swales and ditches.
- f. The exterior grade at the front and rear of each structure.
- g. Any other point grades necessary to illustrate the proposed drainage scheme including tops of catch basins, bottom of swales, and grade breaks.
- h. Proposed grade at critical transition points adjacent to walkways or existing lots. A cross-section or inset is to be provided where insufficient space is available on the plan to clearly illustrate the required grading information.
- i. Top of grate and invert elevations for rear yard catch basins.

### **2.2.13.3 Other Required Information**

Additionally, Grading Plans are to include the following:

- a. Street furniture including road structures (catch basins and manholes, fire hydrants, cable pedestals, mail boxes, hydro transformers, and streetlights, etc.).
- b. Direction of gutter flow at catch basins.
- c. Direction of overland flow routes including points of outlet and ponding limits for the 100-year storm event.
- d. Drainage type for all lots with reference to a detail on the detail drawings. (For drainage types, refer to Lot Grading TMSDs 06-03.01 through 06-03.03.)
- e. Existing trees and proposed tree protection limits, as well as provisions for the preservation of any existing trees where identified for retention.
- f. Retaining wall details and structures where required, including top of wall and bottom of wall elevations.
- g. Fencing, easements, and noise attenuation structures.
- h. Regulatory flood limits of watercourses.
- i. Percent grade where swales are at a minimum slope or are otherwise critical.
- j. Run:Rise ratio where slopes are  $\geq 10\%$  (maximum slope is 3:1).

- k. Building footing elevations (to be a minimum of 0.3 m above the 100-year hydraulic grade line, or as an alternative, specify the use of sump pumps).
- l. Road stationing at 20 m intervals.

## 2.2.14 Plan and Profile Drawings

### 2.2.14.1 General Requirements

- a. Plan and profile drawings are to be drawn to a horizontal scale of 1:500 and a vertical scale of 1:50.
- b. Where two or more sheets are required for one street, match lines to be used. There should be no overlap or duplication of information.
- c. The pavement design for the subject street is to be indicated on each plan and profile drawing.

### 2.2.14.2 Plan View

Plan views shall show and adhere to the following:

- a. Key plan, legend, street names, block/lot numbers and frontage dimensions, block/lot types (single, semi, multiple) and sidewalks. (A hatched area to represent segment of road shown on the plan shall be included in the key plan.)
- b. Servicing locations for storm, wastewater and water, all existing and proposed sewers and watermains, manholes, catch basins, valve chambers and other underground structures, and fire hydrants.
- c. Centreline chainage, reading from left to right, labeled every 20 m (i.e., 0+120) and marked every 10 m with a dash.
- d. North arrow pointing generally toward the top of page, where possible. North arrows pointing towards the bottom of the page are not desirable and are to be avoided whenever possible. (North arrow requirements govern over the requirements for chainage direction.)
- e. All storm sewers  $\geq 1050$  mm  $\varnothing$  shall be shown to scale with double lines.
- f. Road allowance and pavement dimensions, curb radii, easements, and reserves, as well as road sections where clarification is required.
- g. Light standard and transformer locations.
- h. Sewer type and size are required to be indicated on plan view.

- i. Borehole locations with identification numbers.

### **2.2.14.3 Profile View**

Profile views shall show and adhere to the following:

- a. The type of public service (existing and proposed wastewater or stormwater), the diameter, length, slope, material and class of pipe are to be shown on the profile portion of the drawings only.
- b. Where the possibility of a conflict with other services (e.g., watermain) exists, connections are to be plotted on the profile.
- c. Indicate both the existing and proposed road profiles. (Where there is no existing road profile, existing grade along the new centerline of road is to be shown.) Any engineered fill areas are to be hatched in.
- d. Provide centreline chainage and elevations. Indicate the elevation at grade changes and provide the slope and length of each section.
- e. Provide all vertical curve data on the top of the profile view.
- f. Provide existing and proposed manhole details including size, OPSD, pipe inverts at entry and exit, and drop structure details.
- g. Plot the 100-year HGL.
- h. Provide detailed information for all outfalls external to development.
- i. Borehole logs to be plotted on the profile, complete with a brief description of soils and the groundwater level.

### **2.2.15 Active Transportation Plan**

An Active Transportation Plan is to be prepared for each subdivision phase or development application as required by the Town, at a scale of 1:500. As a composite plan, it will be based on the studies for traffic, transportation, parks, and other publicly accessible spaces as approved by the Town, and identify an integrated system of on-road and off-road active transportation connections.

The plan shall conform to the Town's Transportation Master Plan, as revised, and shall clearly show pedestrian routes, sidewalks, trails, walkways, linkages, trails in SWM or woodlot buffer blocks, cycling routes (on and off road), signage, pavement markings, and other markings and/or signage.

The plan shall conform to the latest editions of Books 15 and 18 of the Ontario Traffic Manual, the Ontario Bikeways Planning & Design Manual (MTO), and the Bikeway

Traffic Control Guidelines Manual (TAC). The plan shall be prepared by a qualified transportation/traffic engineer and shall reference the Transportation Impact Study for the subject area. Once approved by the Town, this plan will be detailed in the drawing submissions required for the development.

## **2.2.16 Street Lighting Illuminance/Photometric Plans**

Street lighting illuminance / photometric plans must be prepared for each subdivision phase or development application as required by the Town, at a scale of 1:500. The plans must meet RP8 standards.

## **2.2.17 As-Constructed Drawings**

As-constructed drawings constitute the 'Final Acceptance' versions of the engineering and landscape drawings which have been revised to include 'as-constructed' conditions.

As-constructed drawings shall be submitted to the Town for the Town's permanent records upon completion of construction and prior to any request for the Town to commence the Maintenance Period.

The as-constructed revisions shall be based on as-constructed surveys conducted by the Owner's surveyor, as well as any survey datum gathered during construction, for all subdivision services and works.

The following drawings shall be omitted from the As-Constructed Drawing Set:

- Phasing Plan
- Erosion & Sediment Control Plan
- Site Alteration Drawing
- Interim Conditions Drawing
- Pedestrian Routing Plan
- Active Transportation Plan

The following drawings shall be included in the As-Constructed Drawing Set, but do not require any as-constructed revisions and shall remain in their 'Final Acceptance' state:

- General Notes Sheet
- Aboveground Servicing Plan
- Underground Servicing Plan
- Pre-Development Storm Drainage Areas Plan
- Post-Development Storm Drainage Areas Plan
- External Storm Drainage Areas Plan
- Traffic Control Plans
- Composite Utility Plans
- Typical/Standard Detail Sheets (Excluding SWM Pond Details)

### 2.2.17.1 Engineering As-Constructed Drawing Requirements

Digital copies (in .pdf format) of the engineering drawings are required to be submitted. Mylar copies of certain drawings may be requested, to the Town's discretion.

Engineering As-Constructed Drawings shall show and adhere to the following (as applicable):

a. General Requirements:

- Update to revision block to indicate "As-Constructed" submission date. All previous revision lines are to remain.
- The Town's 'Final Acceptance' Block is to remain unchanged.
- The following block shall be added to all As-Constructed Drawings.

<p>ORIGINAL DESIGN</p> <p>The original design information used as background for this As-Constructed Drawing was sealed and signed by</p> <p>[Name, P.Eng] on [Date]</p>
--

- Revise all 'instructional' notes. (e.g., The note "Break into existing Storm MH. Brick, parge, and bench as required." should be replaced with the note "Connection to existing Storm MH.")
- Remove all 'temporary' notes and features. (e.g., The note "Install temporary road block." should be removed along with the linework for the road block.)
- Sealed, signed, and dated by a P.Eng.
- All as-constructed datum (e.g., elevations, distances, slopes, etc.) are to be shown in red beside the struck out design elevations (with styles being reflected in the drawing legend for clarity).
- All Lot numbers, Block numbers, and Street Names must conform to Registered Plan.
- The Registered Plan number must be included in the title block on all plans.
- Drawings shall be numbered in the top right hand corner of the sheet, to the satisfaction of the Town.

b. Cover Sheet:

- Add the words “As-Constructed” prominently on the sheet and include the submission date.
- Add the Town File (24T-), 20M-Plan, and R-Plan numbers.
- Update the Drawing List by striking out (or showing in greyscale) any omitted drawings.

c. Asset Summary Sheet:

- Updated to reflect as-constructed conditions.

d. Storm Sewer Design Sheet:

- Updated to reflect as-constructed conditions.

e. Grading Plans:

- As-constructed centreline of road elevations at 20 m intervals and at grade changes.
- Property line grades where private property abuts public lands including public right-of-way or future development lands.

f. Plan and Profile Drawings:

- As-constructed storm sewer materials, diameters, slopes, lengths, inverts, and top of grate elevations (including RYCBs).
- As-constructed road grades.
- Service lateral locations, including inverts at property line, for water, sanitary, and storm connections.

Note: Where the vertical difference between design and as-constructed condition is more than 150 mm, the linework on the profile view is to be adjusted, and where the horizontal difference between the design and as-constructed condition is more than 1.5 m, the linework on the plan and profile views are to be adjusted.

g. Stormwater Management Pond Drawings:

- As-constructed grades along mutual property line between the Pond Block and any adjacent lands.
- As-constructed storm sewer materials, diameters, slopes, lengths, inverts, and top of grate elevations (including orifice plate Ø and invert).

h. Channel Drawings:

- As-constructed grades at block limits, top of bank, bottom of bank, edge of low flow channel, and stream bottom, every 20 m, and immediately upstream and downstream of road crossings.

### 2.2.17.2 Landscape As-Constructed Drawing Requirements

Digital copies (in both .pdf and .dwg formats) of the landscape drawings are required to be submitted.

Landscape As-Constructed Drawings shall show and adhere to the following:

- a. Update to revision block with the as-constructed submission date. All previous revision lines are to remain.
- b. Street names must be in conformity with the Registered Plan.
- c. Lot and Block numbers must conform to Registered Plan.
- d. The Registered Plan number must be indicated on all plans.
- e. Street trees, SWM ponds, channels, entry features, buffer block plantings, and restoration and enhancement areas, including revisions to species, quantity, and condition.
- f. Record of planting, including date of replacement, if applicable.
- g. Tree staking completed prior to assumption to be shown.

### 2.2.17.3 Operations Maintenance Maps

Prior to the commencement of the Maintenance Period for public services, the Owner must provide the Town's Operations Division with the Operations Maintenance Maps. (Refer to Figures 2.1 and 2.2.)





Figure 2.2 Example Park Operations and Maintenance Map



**Table 2.5 Example Operations and Maintenance Table**

Operations and Maintenance Table			
Developer:	Developer Name		
Subdivision:	Subdivision Name (20M-xxxx) (24T-xxxxx/M)		
Phase:	Phase #		
Description:	Description of Subdivision		
Maintenance Item	Item Quantity	Unit of Measure	Additional Info
CB		ea.	
CBMH		ea.	
Storm Main		m	
CB Leads		m	
Storm Services		m	
CSP Culvert		m	∅
Concrete Culvert		m	∅
Servicing Block/Easement		ea.	Part #, 20R-xxxxx
Acoustic Block/Easement		ea.	Part #, 20R-xxxxx
Access Block/Easement		ea.	Part #, 20R-xxxxx
Streetlight		ea.	
'Stop' Sign		ea.	
'No-Parking' Sign		ea.	
'Bicycle Route' Sign		ea.	
SWM Facility Safety Sign		ea.	
Other Traffic/Parking Signs		ea.	
Pad Mount Transformers		ea.	
Lawn Maintenance		m <sup>2</sup>	
Buffer Planting Maintenance		m <sup>2</sup>	
Entry Feature Planting Beds		m <sup>2</sup>	
Naturalized Area		m <sup>2</sup>	
Deciduous Street Trees		ea.	
Coniferous Buffer Trees		ea.	
etc.			

### **2.2.17.4 Park/Open Space As-Constructed Drawing Requirements**

For parks and open space lands conveyed to the Town, As-Constructed Drawings of Base Condition and/or Park Development Works are required when the Owner's works are accepted by the Town. This may be at a time earlier than the Maintenance Period of the subdivision, and as specified in an Agreement with the Town.

A legal and topographic survey of each block should contain the following information, in addition to the requirements outlined in Section 2.2.17.1 (Engineering As-Constructed Drawing Requirements):

Digital copies (in both .pdf and .dwg formats) of the drawings are required to be submitted.

Park/Open Space As-Constructed Drawings shall show and adhere to the following:

- a. Spot elevations taken on a 5.0 m grid including at property lines and back of sidewalk/curb for all park blocks unless otherwise specified.
- b. Storm, sanitary, water, electrical, and any other servicing locations and connections, including all invert and top of grate elevations, pipe sizes, and gradients.
- c. Complete topographic information of all features (including paved areas, trails, and parking lots), vegetation, landforms within the block.

In addition to the above drawing requirements, for parks constructed by the Owner on behalf of the Town, submit a Park Operations Maintenance Map. Refer to Section 2.9.2 (Requirements for Commencement of Maintenance Period). This drawing is required upon Maintenance Acceptance of the park and prior to receipt of park reimbursement payment.

### **2.2.17.5 Acceptance of As-Constructed Drawings**

The Town will review submitted drawings. Drawings must be revised if discrepancies are found or insufficient details are provided. Updates to the revision block are not required for resubmissions of As-Constructed Drawings. (i.e., The final As-Constructed Drawings should have a single as-constructed revision line accompanying the revision lines from the design review submissions.)

## **2.3 Engineering and Landscape Submission Requirements**

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### **2.3.1 General**

Once Draft Plan Approval has been granted, a detailed combined Engineering and Landscape Submission can be made to Development Engineering. Submissions will be reviewed once a complete submission is made, including both the engineering and landscape drawings and associated studies. Specific requirements of any other Agencies or Departments are the responsibility of the Owner and/or their Agents.

Prior to proceeding with the detailed design and preparation of the drawings, the Owner's Consulting Engineer and Landscape Architect should first submit a copy of the Ontario Land Surveyor's calculated plan, preliminary road profiles and preliminary grading plans. After satisfactory review of this preliminary submission by the Town, the Consultant(s) will be in a position to proceed with detailed design.

A Pre-Servicing Agreement may be considered, per the Town's policies and procedures. The associated engineering drawings must be to the Town's satisfaction for works to be completed under the Pre-Servicing Agreement.

### **2.3.2 Special Consideration of Pre Draft Plan Approval Engineering Submissions**

The Town may consider, at its discretion, an engineering submission being made prior to Draft Plan Approval, if the noted criterion below is satisfied. The consideration of Pre Draft Plan Approval submissions will be at the sole discretion of the Director, Development Engineering and their decision will be final.

The Owner shall supply and acknowledge the following to the satisfaction of the Director, Development Engineering prior to the Town accepting the drawings for review:

- a. A request made in writing from the Owner.
- b. A letter agreeing that the submission of drawings prior to Draft Plan Approval is at the sole risk of the Owner, and further that the Town will not be held responsible for any costs associated with changes required to the submission as a result of changes to the Draft Plan or as may be required by the Director, Development Engineering.
- c. Written clearance from the Commissioner, Development Services that they are satisfied that the plan has advanced through the approval process to the point where potential changes would be minor in nature.

- d. Engineering submissions for Draft Plan Approved developments shall be given priority over engineering submissions for non Draft Plan Approved developments.
- e. The Owner shall pay to the Town an amount, as set out in the Town's annual User Fee Report and By-Law, for the review of the drawings. It should be noted that a second review of the drawings shall not be undertaken by the Town until such time a Draft Plan Approval has been granted for the development. At that point the normal review and approval process would commence.
- f. Engineering submissions shall be in conformance with this manual.
- g. The engineering drawings will not be given Final Acceptance, nor will a Pre-Servicing or Subdivision Agreement be entered into prior to Draft Plan Approval.
- h. The engineering drawings will not influence the Draft Plan Approval requirements.
- i. The review of the engineering drawings must be coordinated with Halton Region.
- j. All reports in support of the Draft Plan of Subdivision must be reviewed and approved by the pertinent authorities.

### **2.3.3 First Submission of Engineering and Landscape Design**

By default, submissions are to be made digitally, however, the Town reserves the right to request full size hard copies of submission materials. Submissions will not be reviewed until a complete package is received.

The following materials are required as part of a First Engineering and Landscape Submission:

- a. A complete set of drawings as listed in Section 2.2.1, and in conformance with Section 2.2 (Drawing Requirements). Streetlighting/Photometric Plans, Composite Utility Plans, and Streetscape Drawings may be deferred to Second Submission at the Town's discretion.
- b. Letter of Retention to the Town from the Owner indicating which Consultants they have engaged for the design and complete general construction supervision of all municipal services.
- c. Letter of Retention from the Owner indicating which Geotechnical Consultant they have retained to supervise in total, all filling operations and the installation of bedding and backfill in all trenches within road allowances and easements, and that the Geotechnical Consultant will carry out sufficient tests to certify to the Owner and the Town that the installation and compaction of bedding, backfill, and engineered fill is in compliance with the Town's specifications.

- d. Letter of Retention from the Owner indicating which Landscape Architect they have engaged for the design and complete general construction supervision of all landscape works.
- e. Engineering Reports including, but not limited to, the following:
  - Environmental Site Assessment
  - Erosion and Sediment Control Report (when deemed necessary by the Town)
  - Functional Servicing Report (when not approved through Draft Plan review)
  - Geotechnical Investigation
  - Hydrogeological Study
  - Noise Impact Study
  - Parking/Pedestrian Routing Study
  - Slope Stability Assessment
  - Stormwater Management Report
  - Structural Integrity (Roads & Culverts)
  - Transportation Impact Study
  - Tree Inventory and Preservation Plan
  - Woodlot Edge Assessment

Subject to other requirements, as deemed necessary by the Town.

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

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

ECA applications will not be accepted as part of the first submission package.

A letter summarizing the Town's comments, usually accompanied by redlined drawings, shall be provided to the Consultant. A meeting can be arranged if required to discuss the provided comments and redlines.

### **2.3.4 Additional Submissions**

The Consultant shall submit a Response Letter complete with a Comments Matrix accompanying the drawings and reports indicating the extent of the changes and which drawings and reports have been changed. The letter must also certify that no other changes have been made to the drawings. Any additional changes are to be listed in the Comments Matrix. The letter must be sealed, signed, and dated by a Professional Engineer or Landscape Architect.

Each additional engineering and landscape submission after the second submission shall be accompanied by a form of payment as set out in the Town's User Fee Report and By-Law, payable to the Town of Milton.

The following materials should be submitted as part of any Additional Engineering and Landscape Submission and must be provided prior to Final Acceptance:

- a. All previously submitted drawings complete with any revisions.
- b. Any hard copy red-lined drawings provided as part of the Town comments on the previous submission.
- c. Any detailed Cost Estimates for municipal services and landscape works that have not previously been submitted or that have been updated since their last submission. (Any Park/Open Space base condition works required for conveyance of land to the Town shall be itemized separately.)
- d. Draft M-Plans and any applicable Reference Plans (R-Plans).
- e. Composite Utility Plan(s), signed by all utilities.
- f. Copies of Applications for Approval to all ministries, authorities, agencies, etc.
- g. Written confirmation, and associated documentation, that illustrates any requirements of applicable Municipal Class Environmental Assessment processes have been fulfilled as they relate to any transportation infrastructure have been met.
- h. Contract documents including tender forms and specifications.

At a minimum, the following engineering and landscape submission materials will be required to proceed with Subdivision Agreement and Registration:

- a. Engineering Drawings, progressed to the satisfaction of Development Engineering.
- b. Landscape Drawings, progressed to the satisfaction of Community Services.
- c. All required Reports and Studies. (Required reports and studies will vary.)
- d. Cost Estimates.
- e. Draft M-Plan and R-Plans.

## **2.3.5 ECA Submissions**

ECA application submissions will be accepted after the second engineering submission for a development application has been received, at the discretion of the Town.

### **2.3.5.1 Publicly Owned Infrastructure**

Applications for **publicly owned** infrastructure will be processed through the Town's Consolidated Linear Infrastructure Environmental Compliance Approval (CLI-ECA) program.



The following is required to be submitted as part of a CLI-ECA permit package:

- a. SW1-3 application forms (as required), signed and dated by applicant and design engineer, including reference to the subdivision application number (24T) and Phase, SPA Number, or other appropriate identifier along with the common development name.
- b. Stormwater Management Report, sealed, signed, and dated by a P.Eng.
- c. Storm Sewer Design Sheets (if applicable), sealed, signed, and dated by a P.Eng.
- d. Stormwater Management Pond Design Brief, sealed, signed, and dated by a P.Eng (if application includes a pond).
- e. Summary of SWM Infrastructure and Road Data, including street names and diameter, length, and material of pipe (if application includes storm sewers).
- f. Applicable Engineering Drawings (sealed, signed, and dated by the design engineer). Typical drawings include but are not limited to:
  - General Site Plan
  - Grading Plan
  - Storm Drainage Plan
  - General SWM Pond
  - SWM Pond Inlet
  - SWM Pond Outlet
  - SWM Pond Sections
  - SWM Pond Details
- g. Applicable Operation and Maintenance Report or documentation, including Operating Authority Contact Information, to the satisfaction of the Town.
- h. Applicable Town of Milton Zoning By-Law and associated Schedules.
- i. Source Water Protection - ECA Application Screening Form (obtained from Halton Region: [sourcewater@halton.ca](mailto:sourcewater@halton.ca)).
- j. Conservation Halton or Niagara Escarpment Commission permit or clearance letter (if required).

It is important to note that no works shall be constructed prior to receiving written approval from the Town of Milton. Any person who constructs prior to receiving written approval may be in violation of the Town of Milton's By-Law #095-2022 and could face a penalty or fine. By-Law #095-2022 can be found on the Town of Milton's website:

[https://www.milton.ca/en/town-hall/resources/Accessible\\_Bylaws/095-2022-Stormwater-Infrastructure-Bylaw.pdf](https://www.milton.ca/en/town-hall/resources/Accessible_Bylaws/095-2022-Stormwater-Infrastructure-Bylaw.pdf)

CLI-ECA fees have been approved through the Town's user fee By-Law #008-2022, (Schedule 'J') which can be found on the Town of Milton's website:

[https://www.milton.ca/en/town-hall/resources/Accessible\\_Bylaws/082-2022-User-Fee-By-Law-Consolidated.pdf](https://www.milton.ca/en/town-hall/resources/Accessible_Bylaws/082-2022-User-Fee-By-Law-Consolidated.pdf)

Digital submissions can be sent to [engineering@milton.ca](mailto:engineering@milton.ca) and fees can be paid by cash, cheque, or debit to the Town of Milton's Cashiers desk making note of project name.

### 2.3.5.2 Privately Owned Infrastructure

Applications for **privately owned** infrastructure may be eligible to be processed through the Town's Transfer of Review program, at the discretion of the Town and the MECP.

The following documents are required in support of an ECA submission through the Transfer of Review Program:

- a. ECA Application for Environmental Compliance Approval, signed and dated by the Applicant and the Engineer.
- b. Stormwater Management Report, sealed, signed, and dated by P.Eng (including Storm Sewer Design Sheets).
- c. Stormwater Management Pond Design Brief, sealed, signed, and dated by P.Eng (if application includes a pond).
- d. MECP Pipe Data Form (if application includes storm sewers).
- e. Summary of SWM Infrastructure and Road Data, including street names and diameter, length, and material of pipe (if application includes storm sewers).
- f. Applicable Engineering Drawings (sealed, signed, and dated by the Engineer). Typical drawings include but are not limited to:
  - General Site Plan
  - Grading Plan
  - Storm Drainage Plan
  - General SWM Pond
  - SWM Pond Inlet
  - SWM Pond Outlet
  - SWM Pond Sections
  - SWM Pond Details
- g. Articles of Incorporation.

- h. Operating Authority Contact Information.
- i. Applicable Town of Milton By-Law and associated Schedules.
- j. Source Water Protection - ECA Application Screening Form (obtained from Halton Region [sourcewater@halton.ca](mailto:sourcewater@halton.ca)).
- k. Conservation Halton permit or clearance letter (required for pond outlet if application includes a pond).

### 2.3.6 Final Acceptance of Drawings

Once all comments and concerns have been addressed to the Town's satisfaction, Final Acceptance Letters signed by the Director, Development Engineering and the Commissioner, Community Services will be provided to the Consultant with instruction to include a signature block on the both the engineering and landscape drawings indicating that they have been granted Final Acceptance.

These drawings, with the completed signature block, will act as the Final Acceptance Drawings.

#### Figure 2.3 Final Drawing Acceptance Signature Block

<b>TOWN OF MILTON - [DEPARTMENT NAME]</b>			
<b>FINAL ACCEPTANCE</b>			
Accepted by	_____	on	_____ via Signed Letter.
	<i>[Title], [Department/Division]</i>		<i>Date</i>

### 2.3.7 As-Constructed Submissions

For As-Constructed Drawing requirements, refer to Section 2.2.17 (As-Constructed Drawings).

In addition to the As-Constructed Drawings, where as-constructed conditions do not meet the Town's minimum design standards (e.g., gutter and sewer slopes) a certification letter, stating that there are no anticipated functionality or longevity concerns, sealed, signed, and dated by a P.Eng, will be required. The certification letter is to include a table of all sub-standard locations (i.e., road stationing for gutter slopes and manhole IDs for sewer slopes).

### **2.3.8 Revisions to Engineering and Landscape Drawings after Final Acceptance**

Should revisions be required to drawings that have been granted Final Acceptance, the Consultant shall submit the revised drawings with the revision block updated to reflect the change(s). The Town will issue a new/updated Final Drawing Acceptance Letter. The Town's signature block is to be updated with the new acceptance date.

The Consultant shall submit a letter accompanying the drawings indicating the extent of the changes and which drawing(s) have been changed. The letter must also certify that no other changes have been made to the drawings. The letter must be stamped, dated and signed by a Professional Engineer or Landscape Architect, as reflected in the changes to the drawings.

### **2.3.9 Revisions to Approved Composite Utility Drawings**

Should revisions be required to the approved Composite Utility Drawings, the Consultant shall re-circulate to the Utilities for approval. Following the Utilities' approval, the Consultant shall follow direction provided in Section 2.3.8.

## 2.4 Lot Siting Plans for Building Permits

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Lot Siting Plans are required to ensure that proposed works do not adversely affect neighbouring properties. A detailed Lot Siting Plan must accompany all building permit applications. A Building Permit will not be issued until the Town has approved and stamped the Lot Siting Plan.

### 2.4.1 Information Required on Lot Siting Plans

- a. The individual grading plans must be in conformance with the overall Subdivision Grading Plan.
- b. For detached and semi-detached homes, Lot Sitings shall be prepared on 216 mm x 356 mm (8.5" x 14") legal size sheets showing one lot per sheet at a scale of 1:250.
- c. For townhouse blocks, Lot Sitings shall be prepared on 279 mm x 432 mm (11" x 17") tabloid size sheets showing one block per sheet at a scale of 1:250.
- d. A key plan and north arrow are required in the upper right corner of the sheet.
- e. Title blocks are to include the following:
  - Name of builder/owner/subdivision/registered plan number
  - Name of architect/design company
  - Lot number
  - Municipal address (if available)
  - Scale of drawing
  - Date of preparation/submission
- f. The plan is to show the following:
  - Location and elevation of storm, sanitary, and water service connections
  - Elevation and location of culverts, drainage ditches, and catchbasins
  - Elevation of existing roads sidewalks, and easements
  - Location of sump pump and its discharge point
  - Existing elevations as per topographic survey indicating existing buildings, drainage patterns, and finished first floor elevations for all buildings on adjacent lands
  - Surface runoff for all adjacent and proposed lots using arrows to show the direction of flow
  - House type and elevations of the finished first floor, top of foundation wall, basement slab, and underside of the footings
  - Proposed elevations at lot corners, landings, garage slab, and all entrances (indicating the number of risers)

- Location, length, width, and slope of proposed driveways
- Type and details of proposed retaining walls, including top and bottom of wall elevations
- Length and proposed grade of all drainage swales
- Downspout locations for the subject property and abutting lots
- Certification of noise controls, as required
- All easements, with dimensions to property line(s)
- Registered Plan number and corresponding Lot/Block number

Refer to the Lot Grading TMSDs.

Notes:

1. Elevations to be referred to a geodetic benchmark.
2. Lots submitted within unassumed subdivisions must be approved by the Owner's Engineer for conformance to the overall subdivision design. The individual Lot Siting Plans must be stamped with the following wording prior to being reviewed by the Town:

"We certify that the proposed grades at the lot corners match the approved subdivision grading plans, and that the grading of the subject lot is consistent with Town standards."

The certification must be dated and signed by the Engineer, prior to review by the Town.

## 2.5 Public Services Cost Estimate

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Cost Estimates shall be based on estimated unit prices for construction items.

a. The estimate included with Engineering Submissions is to include:

- A summary sheet
- Detailed costs based on unit prices and quantities on a street-by-street basis
- A 15% engineering component
- A 13% HST component on the overall estimate, including the engineering component

b. The estimate included with the Landscape Submission to include:

- A summary sheet
- Detailed costs based on unit prices and quantities on a block-by-block basis for each block type subject to landscape works (e.g., stormwater management blocks, buffer blocks, open space, etc.). Block numbers are to be in accordance with the relevant 20M-Plan.
- Where approved by Community Services, in accordance with the Park Construction and Methods Policy, detailed costs based on unit prices and quantities on a block-by-block basis for all works undertaken by the Owner on behalf of the Town.
- Separate Owner and Town costs associated with conveyance requirements
- Detailed costs based on unit prices and quantities for all landscaping within the ROW. Items which are subject to perpetual maintenance are to be itemized separately.
- A 15% landscape component
- A 13% HST component on the overall estimate, including the landscape component

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## 2.6 Security Requirements

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### 2.6.1 Road Damage

As per Town of Milton User Fee By-Law, staff are authorized to request road damage deposits at the approved rate per kilometre of roadway travelled to access the project site.

### 2.6.2 Site Alteration

Securities and fees are outlined in the Site Alteration By-Law 094-2022.

### 2.6.3 Pre-Servicing

Under circumstances where a Pre-Servicing Agreement authorized, the Owner is required to deposit financial securities to cover the following costs, at the discretion of the Town:

- 10% of the value of all on-site works up to base course asphalt, plus;
- 100% of the value of all off-site works

No work may commence on the site until the financial securities are in place with the Town. A cost estimate must be prepared and submitted to Development Engineering for review. Securities may be required for the preservation of existing vegetation.

No reductions will be authorized for Pre-Servicing Agreements. When the Owner enters into a Subdivision Agreement with the Town, adjustments to the Financial Securities required shall be made at that time.

Prior to pre-servicing, the Town of Milton requires:

- a. That all the public services under the pre-servicing agreement are to be designed in accordance with the current Engineering and Parks Standards Manual.
- b. The Owner to enter into a Pre-Servicing Agreement with the Town, acknowledging their recognition of the risks and obligations.
- c. Certificates of Insurance that specifically mention the Town and its agents as additionally insured by the policy, with a minimum coverage of \$ 5 000 000.

## **2.6.4 Subdivision**

The public services cost estimate (Section 2.5) shall be included as a Schedule in the Subdivision Agreement, and shall be used as the basis for securities posted by the Owner.

The Owner must provide the Town with financial securities to cover 100% of the cost of construction (including the cost of all public services, landscape, engineering and contingency fees, off-site services, and HST where applicable). No servicing work shall commence until an appropriate agreement has been entered into with the Town.

Periodic reductions in the financial securities may be authorized upon the completion of various stages of the subdivision, as detailed in Section 2.8.11 (Security Reductions).

## **2.7 Cash Payments**

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### **2.7.1 Perpetual Maintenance Fees**

When design elements/features that are above and beyond Town's standard items are installed on Town owned lands within a development (e.g., enhanced stormwater management features, fencing, landscaping and/or streetscape structures, etc), perpetual maintenance fees will be collected. These fees provide financial assistance to the Town for the ongoing maintenance of these elements.

The fees will be in accordance with the User Fee By-Law and determined prior to execution of the Development Agreement. The fees will be collected as cash or certified cheque, and will be non-refundable. Any element subject to Perpetual Maintenance Fees must be itemized separately within the landscape cost estimate(s).

The Town, at its sole discretion, reserves the right to remove, in part or in full, any design element/feature after assumption of the subdivision. The Town requires warning clauses to be included in Purchase and Sale Agreements to ensure that both present and future landowners are aware of this.

### **2.7.2 Base Condition Cash Outs for Park/Open Space Blocks**

In some instances, the Owner and the Town's Community Services Department may mutually agree that some base condition works will be funded by the Owner but undertaken by the Town. A cash out amount will be negotiated for these works and will result in a cash item being identified within the financial schedules of an agreement with the Town.

Consideration of cash out amounts is at the discretion of the Town on a case-by-case basis. Cash out request(s) proposed by the Town would typically be as a result of the base condition works and/or the subdivision works having a similar timeline to the Town's construction schedule for the park. It may also be considered when the park programme or park development plan is not fully realized at the time of subdivision registration.

Commonly, cash out items include, but not limited to, fine or rough grading, seeding, sodding, etc. These works are considered when the subdivision and park block construction schedules are closely aligned. Cash out items may also include other base condition works if the park development plan is not as advanced as the subdivision design. In this situation, items such as pad mount transformers, engineering appurtenances within the park/open space block (not including engineering items within the ROW), water, and/or other service utilities may be considered. These base condition items can then be constructed in an optimal location within the context of a detailed park design.

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## **2.8 Subdivision Construction**

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### **2.8.1 Town Authority**

The Town has the authority and responsibility of reviewing and approving subdivision engineering designs, monitoring construction, preparing and administering the Subdivision Agreement, approving security reductions, authorizing the Commencement of the Maintenance Period, and authorizing final release for Assumption.

As outlined in the Subdivision Agreement, the Consultant is responsible for obtaining any and all necessary permits and approvals from the Town and other applicable agencies, providing full-time field inspection, contract administration, and supervision of construction activities, obtain all records of construction of public services for the preparation of as-constructed drawings, and act as the Owner's representative in all matters pertaining to the construction of public services. The Town will conduct audit inspections only and will not provide full-time resident inspection on development sites.

Should the Town determine that works are not being constructed in accordance with the approved plans, using proper construction methods, or are contrary to any applicable legislation, a Stop Work Order will be issued. No work will be allowed to continue/commence until such time that the works in contravention have been corrected to the satisfaction of the Town.

All revisions to the approved design during construction shall be submitted for review and approval by the Town in accordance with Section 2.3.8 (Revisions to Engineering and Landscape Drawings after Final Acceptance). It is the Consultant's responsibility to obtain this approval in writing from the Town.

All construction activities shall conform to the latest edition of the Occupational Health and Safety Act and current Town of Milton health and safety policies and requirements.

### **2.8.2 Other Authorities**

A number of other authorities may have jurisdiction over different aspects of a development (e.g., Conservation Authorities, MECP, MTO, DFO, Halton Region, Ministry of Labour, etc.). It is the Owner's responsibility to consult with and obtain permits from these authorities, if required, prior to approval from the Town to construct.

### **2.8.3 Requirements Prior to Construction**

Prior to construction, any applicable agreements or permits must be in place and accompanied by all required documentation (e.g., drawings, insurance, securities, clearances, etc.).

If the Owner chooses to begin construction under a separate agreement or permit prior to subdivision registration, it will be at their own risk, as plans are subject to revision prior to receiving Final Acceptance from the Town.

### **2.8.3.1 Site Alteration Permit**

All terms and requirements noted within the Site Alteration By-Law 094-2022 must be adhered to prior to issuance of the permit.

### **2.8.3.2 Entrance & Curb Cut and Road Occupancy Permits**

Prior to any work commencing, an Entrance & Curb Cut and/or Road Occupancy Permit may be required and can be obtained by the Owner from Development Services.

The Owner shall provide proof of Region Permit or Agreement where the access/connection is on a Regional Road.

### **2.8.3.3 Asphalt Mix Designs**

Prior to the placement of asphalt, the mix design must be submitted and approved by the Town.

Asphalt mix design to be provided to the Town no less than two weeks prior to paving.

### **2.8.3.4 Mud and Debris Tracking**

In accordance with the Road Fouling By-Law, as amended, the Owner shall be responsible for cleaning all mud and debris that is tracked onto the roadways by vehicles entering or leaving a construction site. The Owner shall, at their expense and upon verbal and/or written request by the Town, immediately proceed with clean-up operations. Should the Owner fail to clean as directed, the Town will have the cleaning carried out, draw on the Owner's securities for costs, and/or lay charges under the above by-law.

### **2.8.3.5 Servicing Prior to Registration (Pre-Servicing)**

Pre-servicing of a project prior to registration of the Plan of Subdivision is permitted at the Owner's risk.

Prior to pre-servicing, the Town requires the Owner to enter into a Pre-Servicing Agreement, which includes, but is not limited to, the following:

- a. An engineering submission and cost estimate, to the satisfaction of the Town, for services to be installed.

- b. A Construction Traffic Control Plan, that illustrates all required traffic control signage, barricades, detours, phasing, etc.
- c. Certificates of Insurance in the name of the Owner that specifically mention the Town and its agents as additionally insured by the policy, with a minimum coverage of \$ 5 000 000.
- d. A Letter of Credit in the amount of 10% of the cost of the on-site works, plus 100% of the cost of the off-site works.
- e. All necessary approvals and permits from external agencies.
- f. All necessary Environmental Compliance Approvals.
- g. Written clearance from Halton Region to proceed with pre-servicing for plans that require water/wastewater servicing.
- h. Written clearance and/or any required permit(s) from the Conservation Authority.

### **2.8.3.6 Pre-Construction Meeting**

The Engineering Consultant shall arrange a Pre-Construction Meeting prior to beginning construction. The meeting shall be hosted at a location agreed to by the Town. At a minimum, representatives from the following departments and agencies will be required to attend:

- Town of Milton
- Regional Municipality of Halton
- The Conservation Authority
- Owner
- General Contractor (and main sub-contractors)
- Utilities Consultant
- Geotechnical Consultant
- Engineering Consultant

### **2.8.4 Construction Start-Up**

A site trailer, with hydro and climate control, is to be suitably located within the subdivision site and accessible by all parties. An adequate parking area, graded with granular material, is to be provided adjacent to the trailer for all necessary staff/visitors for meetings, etc. Parking on existing adjacent Town roadways for the purpose of accessing the trailer is not acceptable.

The trailer is to be equipped with the following:

- Desk for both Town and Region construction inspection staff

- Table and chairs sufficient for all site meetings
- Clean drinking water and toilet facilities as per the Occupational Health and Safety Act

Hours of work shall be in accordance with the Town's Noise By-Law.

#### **2.8.4.1 Impacts on Existing Parking**

A **Construction Notice/Request for Parking Enforcement Exemption** form is required to be filled out when construction activities may impact resident parking. The consultant shall contact Legal and Legislative Services ([parking@milton.ca](mailto:parking@milton.ca)) to receive the form. The form must be submitted back to Legal and Legislative Services a minimum of 15 days prior to beginning of construction.

#### **2.8.4.2 Road Closures**

Where construction activities will require the temporary closure of any right-of-way, it is the responsibility of the Owner to obtain the appropriate permits and provide adequate notice to the Town Fire Department, Halton Regional Police Service, and Halton Region Paramedic Services, as well as both the Halton District School Board and the Halton Catholic District School Board, and any affected residents.

### **2.8.5 Site Meetings**

At the discretion of the Town/Consultant, site meetings shall be scheduled at frequent intervals, depending on construction progress and are to include all applicable parties. However, during normal construction periods, a bi-weekly meeting schedule is appropriate. The Town shall be notified of each meeting.

### **2.8.6 Erosion and Sediment Control During Construction**

#### **2.8.6.1 Criteria**

New urban developments generally produce increased sediment loading onto the surrounding streams, particularly during construction. In order to avoid the inherent detrimental side effects from development (i.e., harmful impacts to aquatic organisms and their habitat, poor water quality and aesthetics, restricted channel conveyance, etc.), it is required that sediment control measures be instituted.

Some typical erosion and sediment control measures include, sediment traps (temporary or permanent), vegetation screens, catch basin filter bags, and phased stripping of developable lands. In all cases, it is recommended that sediment loading be controlled as per guidelines published by the Conservation Authorities, (ref. Keeping Soils on Construction Sites, HRCA, 1994) and (Erosion and Sediment Control Guidelines for Urban Construction, TRCA, 2019) as revised.



### **2.8.6.2 Design**

At a minimum all Erosion and Sediment Control Plans should incorporate recommendations and protection measures pertaining to:

- Construction Staging
- Minimizing soil exposure and re-establishment of vegetative cover
- On-site erosion and sediment control techniques
- Site Supervision
- Monitoring and Maintenance
- Site Restoration
- Special Considerations (e.g., in-stream construction/crossings and fisheries timing constraints)

### **2.8.7 Quality Control**

It is the Owner's responsibility to provide for quality control testing for all phases of construction. The Owner is required to engage a Geotechnical Consultant for backfill compaction as well as granular, asphalt, and concrete testing. Geotechnical testing reports are to be made available on site for periodic review by Town/Region staff.

The Consultant shall reference the subdivision application (24T) number and registered plan number on all construction correspondence.

The Town may, at its discretion and for its sole use, arrange for independent quality control testing at the Owner's cost. This particular testing is provided such that the Town may compare results with the Geotechnical Consultant.

The results of all quality control testing shall be copied to the Town on a monthly basis. Daily results are to be forwarded immediately to the Consultant and the Town must be notified of any faulty results, with recommended remediation measures.

Quality control of all materials for testing shall be in accordance with OPS and CSA specifications.

#### **2.8.7.1 Video Inspections**

The owner is responsible for providing two video inspections of all storm sewer pipes including manholes, street catchbasin leads, and rear yard catchbasin leads. The first video inspection shall be completed prior to Building Permit issuance and the second prior to the installation of top course asphalt.

Storm sewer video inspections shall include a written report by the Consultant, including their recommendations based on their review and assessment of the storm sewer video and contractor's report. Any required repairs shall be completed and re-videoed to the

Town's satisfaction. The Town reserves the right to request additional videos prior to assumption.

### **2.8.7.2 Asphalt**

The material specification for Performance Graded Asphalt Cement shall be per OPSS.MUNI 1101. The use of asphalt cement that has been modified with vacuum tower asphalt extenders (VTAE) shall not be used in surface and binder course hot mix asphalt; virgin asphalt cement (AC) is to be used. The contractor, as part of their asphalt mix design submission, will be required to submit a formal letter from the AC supplier that certifies the AC provided for the project has not been modified with VTAE's.

The first asphalt sample must be taken from the first load delivered to the site on the first day of paving. Test results for this sample to be ready within 24 hours.

### **2.8.7.3 Topsoil**

Refer to Section 5.17.5.7 (Planting Materials) for topsoil specifications within parks and open space blocks.

Refer to Section 4.5.1.1 (Lot/Surface Grading Criteria) for topsoil specifications within the public road allowance.

## **2.8.8 Paving**

A shuttle buggy Asphalt Material Transfer Vehicle (AMTV) is required for all paving operations, including operations using only one paver.

Paving in echelon is mandatory for the placement of both binder and surface course asphalt. The pavers shall be operated at the same time and maintain a distance of not more than 50 m from each other so that a hot joint is obtained between the lanes of mixtures being placed. The contractor shall supply sufficient personnel to adequately control both spreading operations simultaneously.

Where the entire width of the proposed pavement platform cannot be paved in echelon with two pavers, one longitudinal construction joint is permitted. Each half of the road shall be paved in echelon resulting in only one longitudinal joint in the binder and surface courses located at the centerline of the road. The joint shall be located to ensure it does not align with the wheel path of traffic.

Any paving activities not consistent with this approach must be approved at the discretion of Town Staff.

## 2.8.9 Cut-Off Dates

Subdivision construction may proceed during all seasons subject to the following general conditions:

**Table 2.6 Inspection Dates**

Town Department	Dates
Development Services	March 21 through October 31
Community Services	May 1 through October 31

Notes for Table 2.5:

- i. Inspections may occur outside the above noted timeframes, at the Town's sole discretion. Requests to complete inspections outside of the specified timeframes must be made in writing.
- ii. Refer to Section 2.10 (Assumption) for assumption inspections.

**Table 2.7 Construction Dates**

Town Department	Dates
Base Stage Concrete Curb	March 21 through December 23
Base Asphalt Works	March 21 through December 23
Concrete Sidewalk and Walkways	April 15 through October 31
Top Stage Concrete Curb	April 15 through October 31
CCTV for Top Asphalt	No later than September 30
Structures Raised for Top Asphalt	No later than October 15
Placement of Top Asphalt	June 1 through October 31
Tree Planting	May 1 through October 31
Granular Works	March 21 through December 23
Underground Servicing	March 21 through December 23
Spring Maintenance	Completed by May 1
Winter Maintenance Preparation	Completed by November 1

Notes for Table 2.6:

- i. Work may occur outside the timeframes noted only with Town permission, and provided that OPSS requirements, including but not limited to, temperature control for asphalt and concrete can be met. Requests to complete work outside of the

specified timeframes must be made in writing.

## 2.8.10 Clearance of Conditions for Issuance of Building Permits

The following standard conditions must be met prior to the issuance of Building Permits:

a. Development Engineering:

- Base servicing has been completed with certification by the Consultant.
- All underground services, base course asphalt, and curbs have been installed.
- All Plan & Profile Drawings (with underground as-constructed information) have been provided to the satisfaction of the Town.
- All SWMFs are operating at 100%.
- All sediment and erosion controls are in place and functioning with confirmation.
- All walkways identified in the Subdivision Agreement are installed.
- All noise attenuation structures are in place. (This is a provisional item and may be waived where justified, either in part or in full, by the Director, Development Engineering.)
- All storm sewer pipes including street catchbasin leads and rear yard catchbasin leads have been videoed and visually inspected with any required repairs completed complete with re-video to the Town's satisfaction. Storm sewer video inspections shall include a written report by the Consultant, and will include their recommendation(s), based on their review and assessment of the storm sewer video and contractor's report. Videos to be performed no more than 90 days prior to submission. Video quality must be to the satisfaction of the Town.
- Final Composite Utility Plan has been approved by the Town.
- Site is clean of debris/garbage and all roads clean and safe.
- All traffic signage has been installed as per the approved Traffic Control Plan(s), including street name signs, pavement markings, and 'No Parking' signage.
- Permanent fencing along all woodlot edges and natural areas has been installed.

Note: Schedule 'L' of the Subdivision Agreement must be referenced for additional conditions.

b. Parks & Facilities Planning, Design, and Construction:

- Base condition works must be completed and certified, as applicable, for all Park/Open Space assets that are to be conveyed to the Town from the Owner in accordance with the completion date as agreed to by the Owner and Community Services. For Town capital construction refer to Section 5.4 (Base Condition).

c. Development Review:

- Registration of the Plan of Subdivision and the Subdivision Agreement.
- Site posting of land use signs (identifies land uses and facilities such as mail boxes).
- Submission of each builder's purchase/sale agreement to confirm warning clauses.
- An acknowledgement from the Owner that no building permit will be issued for a building/structure that is not consistent with the approved Urban Design Guidelines.
- Submission of a Site Plan, clearly identifying the location of model homes, prior to their use as model homes and in accordance with the Town's Model Homes Policy, to the Commissioner, Development Services for review and approval, with acknowledgement from the Owner that no other Lots will be used for model homes unless approved by the Commissioner, Development Services.

d. Building:

- A letter from Halton Region shall be provided to confirm the approval of Regional services.
- A Fire Break Plan is to be submitted and approved by Town Fire Department.
- Individual Lot Siting Plans must be submitted and approved.

Note: Complete information on building permit requirements is available on the Town's website, under 'Building Permits'. A complete permit fee schedule can be found in the Building By-Law 081-2022, which is also available on the Town's website.

## 2.8.11 Security Reductions

Security reductions may be requested throughout the construction of the subdivision.

Each reduction request must be made in writing, via Request Letter, to the Town, and shall include the following:

- A Statutory Declaration of payment of accounts signed by the Owner
- A Statement/Spreadsheet of Works Completed, sealed, signed, and dated by a P.Eng. or Landscape Architect

Security reductions will be authorized following the inspection of the public services and completed repairs to the satisfaction of the Town. Security reductions will be based on the construction values in the Subdivision Agreement and reduced according to Section 5.4 of that Agreement.

## **2.8.12 Owner's Responsibilities**

The Owner shall be responsible for the maintenance of all public services and lands, including new owner-built parks and open spaces, SWMFs, channels, utility lands, landscape buffers, rail berms, window streets, walkway blocks, etc., from the commencement of construction to the date of assumption by the Town.

This includes but is not limited to:

- Maintaining lane marking, traffic signage, and street lighting.
- Conducting spring street sweeping (to be performed during the month of April) and catchbasin cleanout.
- Keeping all roads within occupied subdivisions in a condition that is safe and ready to receive winter maintenance prior to the cut-off date specified in Section 2.8.9.
- Covering the cost of fulfilling any locate requests (to be completed by the Town) within the limits of the unassumed subdivision.
- Removing residents' objects within the Town's road allowance. (e.g., retaining walls, curbs, unauthorised landscaping, etc.)
- Cleaning-up of building materials, garbage, dead animals, debris, and mud on all public lands.
- Grass cutting, weed removal, and weed suppression.
- Re-mulching of planting beds, planting buffers, and street tree saucers.
- Watering of landscaping.
- Pruning of plant material.
- Maintaining Owner-built parks until they are accepted for start of Town maintenance.
- Operating and maintaining Owner-built SWM infrastructure until they are accepted for start of Town maintenance.

### **2.8.12.1 Snow Clearing**

The Town will provide snow clearing services and it is the responsibility of the Owner to ensure that all signage is in conformance with current by-laws and Town requirements.

### 2.8.12.2 Spring Maintenance

All developers and builders within unassumed subdivisions that have occupancies, must carry out the following on all roads prior to the cut-off date specified in Section 2.8.9:

Cleanup:

- All ditches, gutters, and catchbasin sumps must be functional and cleaned of debris.
- Existing construction materials and any additional materials delivered to the site must be kept back 1.5 m from edge of asphalt.
- All mud tracking to be cleaned per By-Law 035-2020.
- All roads to be swept.

Restoration:

- All utility cuts/crossings must be paved with hot mix asphalt.
- All major road settlements must be padded with hot mix asphalt.
- All catchbasins, manholes, and valves must be flush with the asphalt.
- All signage must be correct and installed at approved location.

All paving works shall be as per Town standards/specifications and OPSD/OPSS.

Developers are to provide written confirmation that the above items have been completed/addressed.

### 2.8.12.3 Winter Maintenance

All developers and builders within unassumed subdivisions that have occupancies, must carry out the following on all roads prior to the cut-off date specified in Section 2.8.9:

Cleanup:

- All ditches, gutters, and catchbasin sumps must be functional and cleaned of debris.
- Existing construction materials and any additional materials delivered to the site must be kept back 1.5 m from edge of asphalt to allow for snow clearing.
- All mud tracking to be cleaned per By-Law 035-2020.

Restoration:

- All utility cuts/crossings must be paved with hot mix asphalt.
- All major road settlements must be padded with hot mix asphalt.
- All catchbasins, manholes, and valves must be flush with the asphalt.

All paving works shall be as per Town standards/specifications and OPSD/OPSS.

The Town will not provide snow-clearing services unless the paved areas and boulevards are kept clear of construction materials, and in good repair.

Developers are to provide written confirmation that the subject development is clean, safe, and ready to receive snow clearing by the Town.



## **2.9 Maintenance Period**

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### **2.9.1 Process for Maintenance Period**

Following the satisfactory completion of all public services and lands, including Owner-built parks, open space lands, and trails, per the Subdivision Agreement, the subdivision will be eligible to commence its Maintenance Period.

The Maintenance Period is typically a minimum of 1-year, however, the Town reserves the right to impose a longer Maintenance Period.

A written request for Commencement of Maintenance Period must be submitted to Development Engineering. A certification from the Consulting Engineer and Landscape Architect will be required. A letter of general conformance will not be accepted.

Maintenance will not be granted after December 15 of any given calendar year.

### **2.9.2 Requirements for Commencement of Maintenance Period**

#### **2.9.2.1 Development Engineering**

Prior to the commencement of the Maintenance Period for public services, the Owner shall provide Development Engineering with the following:

- a. Video and visual inspections of all storm sewer pipes (including catch basin leads and rear lot catch basins). Any required repairs shall be completed and re-videoed to the Town's satisfaction. Storm sewer video inspections shall include a written report by the Consultant, and must include their recommendation(s), based on their review and assessment of the storm sewer video and Contractor's report. Videos shall be performed no more than 90 days prior to submission. After all deficiencies are rectified, the Town will establish a date for the commencement of the Maintenance Period.
- b. Lot Grading Certifications for all lots, completed by a qualified P.Eng.
- c. Certification by a registered Ontario Land Surveyor that all control SIBs, easement IBs, and all Town and Region dedicated land IBs have been confirmed or re-established.
- d. Certification by a registered Ontario Land Surveyor that all public fences are installed as per approved plans and Town standards.
- e. Certification by an Acoustical Engineer that all noise attenuation features have been constructed/installed as per the approved Acoustical Report.

- f. As-Constructed Drawings. Refer to Section 2.2.17 (As-Constructed Drawings).
- g. As-Constructed Certification. Refer to Section 2.3.7 (As-Constructed Submissions).
- h. External clearances from Conservation Halton, Halton Region, Milton Hydro, and others as may be applicable.
- i. Internal clearances from Parks & Facilities Planning, Forestry & Horticulture, Traffic, and others as applicable.

### **2.9.2.2 Traffic**

Prior to the commencement of the Maintenance Period for public services, the Owner shall provide the Town's Traffic Division with the following:

- a. Street Lighting Certification

### **2.9.2.3 Forestry & Horticulture**

Prior to the commencement of the Maintenance Period for public services, the Owner shall provide Forestry & Horticulture with the following:

- a. Certification of Completion Letter, sealed, signed, and dated by a certified Landscape Architect.
- b. As-Constructed Landscape Drawings. (Refer to Section 2.2.17.2.)

### **2.9.2.4 Parks & Facilities Planning**

Prior to the commencement of the Maintenance Period for public services, the Owner shall provide Parks & Facilities Planning with the following:

- a. An as-constructed package for Park/Open Space Base Condition and/or Parkland Development for Owner-built parks, comprised of all drawings and documents in accordance with the Town's Park Construction and Methods Policy, including certification for compliance with approved drawings, specifications, and permits.

### **2.9.2.5 GIS**

Prior to the commencement of the Maintenance Period, a complete set of digital files are required to be provided, in conformance with the following:

- a. All documents and drawings shall be prepared using software compatible with the Town of Milton's standard software applications. It is the consultant's responsibility to ensure all documents can be successfully transferred to and accessed by the Town.

- b. The Town's standard CAD program is AutoCAD 2022.
- c. The Town's standard GIS program is ArcGIS (v 10.7.1) and ArcGIS Pro (v 3.0.3).
- d. The standard CAD and GIS program versions may be updated throughout the partnership between the Consultant and the Town. Any updates will be communicated to the Consultant by the Town.
- e. The Town's standard projection for digital submissions is Universal Transverse Mercator (UTM), Zone 17 North, North American Datum 1983 (NAD83). Data not conforming to this standard will be sent back to the Consultant at the Consultant's expense.
- f. Drawings are required to be professionally prepared and, where applicable, sealed by Professional Engineers, Ontario Land Surveyors, and/or Licenced Architects.
- g. External references are not to be used in AutoCAD drawings. The Town will not accept any drawings that have any reference maps attached. These drawings will be sent back to the Consultant at the Consultant's expense.
- h. AutoCAD drawings must include appropriate layer naming and attribute information to describe features relevant to the Town's GIS requirements (i.e., install year, ownership, material, type, dimensions, etc.). Abbreviations or acronyms, outside of those listed in Section 0.6 (Acronyms), are not to be used. The Town will not accept any drawings that have any indecipherable annotations or naming conventions. These drawings will be sent back to the Consultant at the Consultant's expense. It is recommended that the Consultant reach out to the Town's GIS group for the appropriate attribute requirements for each asset class.
- i. Layer names for features applicable to the Town's GIS must adhere to the following convention and must be consistent throughout drawings so that relevant features can be easily filtered:  
  
"GIS\_Layer\_Name"
- j. Features depicted in the AutoCAD drawing must be provided in the appropriate geometry (e.g., point, line, polygon).
- k. Consultants providing AutoCAD submissions should not use special fonts, reference files, or colour tables. Consultants should avoid duplication of line colours.
- l. All drawings should include clear labels adjacent to the features represented/drawn.
- m. Digital information supplied to the Consultant by the Town is not to be altered, distributed, manipulated, or misrepresented in any form. Data provided to consultants must be provided under the Town's standard digital license agreement.

n. Some additional files may be requested to be provided as images in one of the following file formats:

- .jpeg
- .gif
- .tif
- .pdf
- .dwg.

The Town's GIS group can be contacted via email at [MB-Corp-GIS@milton.ca](mailto:MB-Corp-GIS@milton.ca) for clarification on any of the above items and requirements.

### **2.9.2.6 Asset Management**

Prior to the commencement of the Maintenance Period for public services, the Owner shall provide Asset Management with the following:

- a. Completed Asset Summary Table.
- b. All required asset attribute data in appropriate format for use in GIS.

Contact Development Engineering for the latest Asset Summary Table template, and asset attribute data requirements.

### **2.9.2.7 Operations**

Prior to the commencement of the Maintenance Period for public services, the Owner shall provide Operations with the following:

- a. Subdivision Operations and Maintenance Map.
- b. Park Operations and Maintenance Map(s).
- c. Operations and Maintenance Table.

Refer to Section 2.2.17.3 for example Operations and Maintenance Maps and Table.

## **2.9.3 During the Maintenance Period**

The Owner is responsible for the on-going maintenance of all public services in accordance with the Subdivision Agreement.

As the end of the Maintenance Period approaches, the Consultant(s) shall arrange for an inspection of the works. Any deficiencies noted are to be rectified to the satisfaction of the Town. When the Consultant(s) is(are) satisfied that the works are complete and

acceptable, the Town shall be advised, and a final inspection with the Town shall be arranged.

If, in the opinion of the Town, it is necessary to make emergency repairs immediately to remediate damage or hardship to persons or property, the Town may enter the development site and make any repairs deemed necessary. The cost of any emergency repairs, including any administrative costs, shall be borne by the Owner as invoiced by the Town in accordance with the Subdivision Agreement. Unpaid invoices will be deducted from the Owner's Letter of Credit.

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## 2.10 Assumption

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### 2.10.1 Process for Assumption

Prior to Assumption, the Consultant(s) shall request a final inspection of all public services by the Town, and shall correct all deficiencies to the satisfaction of the Town.

Engineering and Community Services works shall adhere to the Cut-Off Dates listed in Section 2.8.9 (Cut-Off Dates).

Following completion of the construction of all public services, the Owner may request Assumption of the subdivision in writing to Development Engineering.

A circulation for clearance will be internally distributed to Departments within the Town.

Assumption will not be granted after December 15 of any given calendar year.

### 2.10.2 Requirements for Assumption

When all work is completed to the Town's satisfaction, a report will be forwarded to Council recommending Assumption of the works.

Letter of Credit reductions will apply in accordance with Section 2.8.11 (Security Reductions).

#### 2.10.2.1 Development Services (Development Engineering)

Prior to the assumption of public services, the Consultant is to provide Development Engineering with the following as separate items in a single submission:

- a. Assumption Request Letter.
- b. Certification by a qualified P.Eng that all subdivision works have been constructed in accordance with the accepted/approved plans, reports, and specifications.
- c. Certification that all oil/grit separator (OGS) units have been cleaned and are installed and operational as per the accepted/approved design.
- d. A Statutory Declaration signed by the Owner verifying the payment of all accounts pertaining to the construction of the subdivision.
- e. All SWMF items listed in Section 4.5.8.4 (Stormwater Management Facilities - Assumption).
- f. All LID items listed in Section 4.5.9.3 (Low Impact Development - Assumption).

- g. Confirmation that all required benchmarks have been uploaded to COSINE.
- h. Confirmation of acceptance of all works under the jurisdiction of other agencies such as Conservation Authorities, Halton Region, Milton Hydro, and Ministry of Transportation Ontario.
- i. Confirmation from the Town's Traffic Division that all signage, including street name signs and parking signs, are installed to their satisfaction.
- j. Confirmation from the Town's Traffic Division that street lights have been cleaned and re-lamped no more than 90 days prior to submission of assumption package, including a night-time inspection and written certification from the Consultant.
- k. Written communication that identifies any 0.3 m reserves to be lifted upon assumption of the subdivision. (Some reserves may not be part of the subject plan of subdivision.)
- l. Letter from a Landscape Architect, Certified Arborist, or Professional Forester stating that all hazards along the Woodlot edge have been mitigated (e.g., invasive plants, dead trees, dead branches (hangers), etc.).
- m. Confirmation that all planting and landscape works have been completed per the accepted/approved plans, to Conservation Halton's satisfaction, when required.

Additionally, the Consultant shall arrange for an inspection by the Town of all public services. Prior to the inspection, all catchbasins must be cleaned, all roads must be swept, all sewers must be flushed, all traffic signage must be installed, and line markings must be repainted as required.

A representative from the Town, the Consultant and the Contractor shall be present for the inspection. Inspections of public services shall be effective only for the calendar year in which they were performed. In the event that the subdivision is not assumed by the December 15 cut-off date, the services will need to be inspected again the following spring, prior to assumption being granted.

### **2.10.2.2 Community Services**

Prior to assumption, documentation is to be provided to Community Services to demonstrate compliance with the requirements for:

- a. Parkland dedication, or cash-in-lieu, if applicable.
- b. Park/Open Space Base Condition and/or Parkland Development, in accordance with Section 2.9 (Maintenance Period).



- c. Provision of Base Condition Cash-Outs - Parks and Open Space Blocks, where applicable. Refer to Section 2.7.2 (Base Condition Cash Outs for Park/Open Space Blocks).

### **2.10.2.3 Corporate Services**

Prior to assumption, the Landowner must be in good standing with the Town and the following must be true:

- a. The Town solicitor has confirmed that the Owner's solicitor has submitted all records of the transference of easements, reserves, and municipal lands.
- b. The Landowner has no outstanding accounts receivable.
- c. The Landowner has no outstanding municipal taxes from minutes of settlement.
- d. The Town is in receipt of the schedule of final costs and date of substantial completion of all assets to be assumed by the Town.
- e. The Town is in receipt of the final payment certificate or invoice for all infrastructure constructed on behalf of the Town, as well as physical characteristics.
- f. The Town is in receipt of the final payment certificate for all infrastructure constructed on external lands (if applicable).

Note: Items d., e., and f. will be accepted with materials supporting the commencement of Maintenance Period.

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## **2.11 Public Property Naming and Descriptions**

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These names and descriptions are intended for use in Agreements, on Plans, and in Reports.

### **2.11.1 Lands to be Conveyed**

a. Stormwater Management Block:

A block dedicated for the purpose of stormwater quantity and quality control. The block is sized to accommodate the required infrastructure.

b. Stormwater Management Buffer Block:

A block dedicated to provide a setback that allows for the full use of the properties adjacent to the pond block.

c. Servicing Block:

A block dedicated for the installation of utilities and/or overland stormwater flows. A servicing block may also have a secondary use which may include a walkway.

d. Park Block (insert park type):

A block conveyed as Parkland in accordance with applicable policies, agreements and/or by-laws for park or other public recreational purposes.

e. Walkway Block:

A block dedicated for the sole purpose of a public walkway joining a road to a road or a municipal property to another property.

f. Trail Block:

A block dedicated for the primary purpose of a public trailway. Blocks that are created for other purposes that sometimes contain a trail are to keep their primary use nomenclature. These blocks are not included as Parkland conveyance.

g. Woodlot Block:

A block dedicated consisting of vegetated lands and/or terrestrial features as identified in accordance with approved studies, applicable policies or agreements.

h. Woodlot Buffer Block:

A block dedicated around the edge of a woodlot block as identified in accordance with approved studies, applicable policies or agreements.

i. Creek Block:

A block dedicated through land development which includes stable top of bank, slopes, meander belt, and low flow channel, for a natural and/or constructed watercourse, in accordance with the approved studies.

j. Natural Heritage System (NHS) Block:

A block dedicated that contains key features and areas such as wetlands, regulated hazard lands, and/or restoration and enhancement areas. These blocks are not included as Parkland conveyance.

k. Environmental Buffer Block

A block dedicated adjacent to an environmental feature including but not limited to Creek Blocks.

l. Environmental Linkage Block:

A block dedicated for the purpose of an environmental and/or terrestrial linkage, which may be enhanced in accordance with the approved studies. These blocks are not included as Parkland conveyance.

m. Open Space Block:

A block dedicated for a variety of purposes, typically including grading transitions or enhanced landscaping/streetscaping, and can abut natural, environmental, or developed areas. These blocks are not included as Parkland conveyance.

n. Reserve Block:

A block that cannot be developed within the current plan of subdivision.

o. 0.3 m Reserve:

A block dedicated, usually at the limits of a development or the end of stub roads to be extended sometime in the future. The block is not dedicated as right-of-way, but as municipal property. Reserves serve to control access.

p. **Railway Buffer Block:**

A block dedicated for the purpose of separating rail lands from development which may include acoustic berms and fencing.

q. **Acoustic Block:**

A block for the installation of acoustic fencing and/or berms.

r. **Entry Feature Block:**

A block dedicated for the installation of entry features and enhanced landscaping.

s. **Road Widening:**

A block dedicated for use as a right-of-way or daylighting additions to the right-of-way at intersections.

t. **Cemetery Block:**

Land set aside to be used for the interment of human remains and may include as an accessory use, a mausoleum, columbarium, crematorium, or other structure intended for the interment of human remains.

## **2.11.2 Easements to be Conveyed**

a. **Storm Sewer Easement:**

Easement for storm sewer and storm sewer appurtenances. Typically for rear lot catchbasins and the connecting sewer pipe.

b. **Acoustic Barrier Easement:**

Easement required for noise fencing and berming in excess or instead of an acoustic buffer block. Typically for returns to a house for acoustic fencing or larger berms.

c. **Access Easement:**

Easement required to allow Town forces to access infrastructure/assets for the purposes of inspection and maintenance work.

d. **Trail Easement:**

Easement required for Town trails.

e. External Easement:

Easement beyond the limits of the proposed subdivision for any type of servicing.

## 2.12 Standard Certification Letters

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### 2.12.1 Final Lot Grading Certification

[Company Letterhead]

[Date]

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

**Attention:** [Name], Development Engineering Inspector

**Subject:** Final Lot Grading Certification  
[Developer Name] - [Subdivision Name] (24T-[xxxxx]/M)  
[List of Lot/Block Numbers to be certified]  
20M-[xxxx] - Milton, ON

We hereby certify that the above subject Lot(s)/Block(s) have inspected on [date], and we confirm that, the lot grading is in general conformance with the Final Acceptance grading design, Approved Lot Sitings, and Town of Milton standards, and that there are no adverse grading or drainage impacts on any adjacent properties.

The lots have been finished with topsoil and sod per Town of Milton standards and no drainage issues are evident. Any settlements within the Lot(s)/Block(s) that may occur prior to Assumption will be rectified by the Builder, to the satisfaction of the Town.

Sincerely,

[Signature of Engineer]

[PEO stamp, dated, and signed]

## 2.12.2 Stormwater Management Pond Certification

[Company Letterhead]

[Date]

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

**Attention:** [Name], Water Resources Engineer

**Subject:** Certification of Stormwater Management Pond [No.]  
[Developer Name] - [Subdivision Name] (24T-[xxxxx]/M)  
Block [No.], 20M-[xxxx] - Milton, ON

We hereby certify that Stormwater Management Pond [No.] has been dredged in [Month, Year] such that it provides sufficient storage volume to meet the stormwater management targets. An as-constructed survey was completed in [Month, Year] by [Survey Company] which confirmed that the pond outlet structure elevations and opening sizes were consistent with the Final Acceptance design.

We have reviewed the as-constructed survey of the stormwater management facility, compared the Final Acceptance design, and have determined that the volume of sediment accumulated prior to the dredging has been removed, and that the available permanent pool volume meets the design requirements.

- Required permanent pool volume = [xxxx m<sup>3</sup>]
- Designed permanent pool volume = [xxxx m<sup>3</sup>]
- Silt volume ([date] survey) = [xxxx m<sup>3</sup>]
- Silt removed (comparison of [date] survey and [date] survey) = [xxxx m<sup>3</sup>]
- As-Constructed permanent pool volume = [xxxx m<sup>3</sup>]

The Town's required Operations and Maintenance Manual has been submitted and accepted, staff gauge(s) have been installed and accepted by the Town, and all regulatory and safety signage has been installed to the Town's satisfaction. It is our opinion that Stormwater Management Pond [No.] has been constructed in general conformance with the Final Acceptance design, is functioning as intended, and can be fully assumed by the Town of Milton.

Sincerely,

[Signature of Engineer]

[PEO stamp, dated, and signed]



## 2.12.3 Street Lighting Certification

[Company Letterhead]

[Date]

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

**Attention:** [Name], Transportation Planning Technologist

**Subject:** **Street Lighting Certification**  
[Developer Name] - [Subdivision Name] (24T-[xxxxx]/M)  
20M-[xxxx] - Milton, ON

We have performed both a 'day-time' inspection on [date], and a 'night-time' inspection on [date], and found that all lights are installed, in good condition, and working properly.

We hereby certify that all facilities for a complete and operational street lighting system in the above subject development have been installed by [Electrical Contractor] in accordance with the Final Acceptance design drawings and specifications.

Sincerely,

[Signature of Engineer]

[PEO stamp, dated, and signed]

## 2.12.4 Acoustical Certification

[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:** **Acoustical Certification**  
[Developer Name] - [Subdivision Name] (24T-[xxxxx]/M)  
20M-[xxxx] - Milton, ON

As indicated in the [Noise Report] completed by [Consultant Name], dated [date], noise levels in the subject development were not anticipated to exceed any noise criteria, and thus, no acoustic fencing/walls were required as part of the development. The only requirement to be met is the inclusion of Noise Warning Clauses in the Purchase and Sale Agreement for outdoor living areas of [list lot/block numbers], and we confirm that the Noise Warning Clauses were included as required.

*- OR -*

As indicated in the [Noise Report] completed by [Consultant Name], dated [date], noise levels in the subject development were anticipated to exceed the MECP's criteria for outdoor living areas and the inclusion of acoustic fence was required for the subject development.

We hereby certify that the acoustic fence(s) have been installed and inspected, and are in conformance with the above mentioned report as follows:

- Block [No.] - [Material] Acoustic Fence of height [x.x] m
- Block [No.] - [Material] Acoustic Fence of height [x.x] m
- [etc.]

A drawing/map has been attached for reference.

Sincerely,

[Signature of Engineer]

[PEO stamp, dated, and signed]

## 2.12.5 Certification of Subdivision Works & Request for Maintenance

[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:** **Certification of Subdivision Works & Request for Maintenance**  
[Developer Name] - [Subdivision Name] (24T-[xxxxx]/M)  
20M-[xxxx] - Milton, ON

We hereby certify that construction of all public works, including underground services and roads up to and including top asphalt, curbs, sidewalks, and boulevard finishing associated with the above subject development has been completed and maintained in accordance with the Final Acceptance design, Town of Milton standards and specifications, and the Subdivision Agreement.

On behalf of [Developer Name], we hereby formally request the Commencement of Maintenance Period.

Sincerely,

[Signature of Engineer]

[PEO stamp, dated, and signed]

## 2.12.6 Final Certification of Subdivision Works & Request for Assumption

[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:** Final Certification of Subdivision Works & Request for Assumption  
[Developer Name] - [Subdivision Name] (24T-[xxxxx]/M)  
20M-[xxxx] - Milton, ON

We hereby certify that, since the Commencement of Maintenance Period, there have been no significant damages, settlements, and/or other occurrences that may compromise the ongoing integrity of any public works, including underground services and roads up to and including top asphalt, curbs, sidewalks, and boulevard finishing associated with the above subject development. Refer to our Certification of Subdivision Works & Request for Maintenance dated [date].

**- OR -**

We hereby certify that, all damages, settlements, and/or other occurrences that may have compromised the ongoing integrity of any public works, including underground services and roads up to and including top asphalt, curbs, sidewalks, and boulevard finishing associated with the above subject development have been identified and rectified in accordance with the Final Acceptance design, Town of Milton standards and specifications, and the Subdivision Agreement as applicable.

**- AND -**

On behalf of [Developer Name], we hereby formally request the Assumption of the above subject development.

Sincerely,

[Signature of Engineer]

[PEO stamp, dated, and signed]

## 2.13 Standard Developer Clearance Letters

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### 2.13.1 Developer’s Clearance Letter for Pool Enclosure Permits

[Company Letterhead]

[Date]

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

**Attention:** [Name], Building Permit Administrator

**Subject:** Clearance for Pool Enclosure Permit  
[Name of Applicant]  
Building Permit [No.]  
[Municipal Address, if known], Lot [No.], 20M-[xxxx] - Milton, ON  
[Subdivision Name] (24T-[xxxxx]/M)

[Developer Name], the developer of Registered Plan 20M-[xxxx], have no objections to the installation of a swimming pool on Lot [No.], known municipally as [Municipal Address], subject to the following:

- No Conditions
- Conditions as follows:

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Sincerely,

[Signature of Developer’s Signing Officer]

[Name of Developer’s Signing Officer]

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## 2.14 Statutory Declaration Template

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### STATUTORY DECLARATION

CANADA ) IN THE MATTER OF A SUBDIVISION  
 ) AGREEMENT BETWEEN \_\_\_\_\_  
 PROVINCE OF ONTARIO ) AND THE TOWN OF MILTON  
 ) DRAFT PLAN #: XXX  
 ) DEVELOPMENT NAME AND PHASE: XXX  
 ) REGISTERED PLAN #: XXX  
 ) Town of Milton, in the Regional Municipality of Halton

I, \_\_\_\_\_, of the [City/Town] of \_\_\_\_\_, and Province of \_\_\_\_\_,  
 DO HEREBY SOLEMNLY DECLARE THAT:

1. I am an Authorized Signing Officer of \_\_\_\_\_ and as such have personal knowledge of the matters and facts hereinafter deposed to.
2. All works installed and completed to [insert date] and described in the attached Schedule A in relation to Security Reduction No. XX, pursuant to the above noted agreement, have been fully paid for, including Statutory Holdbacks as required under law, and no one is entitled to a claim or lien in respect of labour, subcontracts, products, construction machinery, and equipment supplied in respect of such work.
3. There are no judgments or executions filed against \_\_\_\_\_.
4. All monies, assessments and withholdings required pursuant to the provisions of the Income Tax Act of Canada, the Employment Insurance Act of Canada and the Workplace Safety and Insurance Act of Ontario or any other applicable statutes, or any other regulations thereunder, have been properly deducted and remitted as required by law.
5. \_\_\_\_\_ has not made any assignment for the benefit of creditors, nor has any receiving order been made against it under The Bankruptcy Act, nor has any petition or such an order been serviced upon \_\_\_\_\_.

AND I MAKE THIS SOLEMN DECLARATION conscientiously believing it to be true and knowing that it is of the same force and effect as if made under oath.

DECLARED before me at the )  
 [City/Town] of \_\_\_\_\_, )  
 Province of Ontario, this \_\_\_\_ )  
 day of \_\_\_\_\_ 202X. )

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A Commissioner of Oath, Notary Public, Justice of the Peace







