



DEVELOPMENT SERVICES MEMORANDUM

FILE: D12-393

TO: MAYOR J. LEHMAN AND MEMBERS OF COUNCIL

FROM: B. PERREAULT, C.E.T., MANAGER OF DEVELOPMENT SERVICES

PREPARED BY: G. MATTHIE, P.ENG. SENIOR DEVELOPMENT SERVICES TECHNOLOGIST

NOTED: A. MILLER, GENERAL MANAGER OF INFRASTRUCTURE & GROWTH
MANAGEMENT

M. PROWSE, CHIEF ADMINISTRATIVE OFFICER

RE: 700 MAPLEVIEW DRIVE EAST SUBDIVISION – APPROVAL OF ENGINEERING
CONDITIONS AND DRAWINGS
(WARD 10)

DATE: MAY 14, 2020

We are pleased to inform you that in compliance with General Committee Motion 09-G-391 (Appendix "A") the Engineering Conditions and Drawings associated with the 700 Maplevue Drive East subdivision are substantially finalized. The 700 Maplevue subdivision is located on the north side of Maplevue Drive East, east of Yonge Street and the Metrolinx Railway - See Appendix "B".

Approval of the Engineering Conditions and Drawings will clear the way for registration of the Plan of Subdivision (subject to certain financial and legal conditions) and for the initiation of full construction, anticipated to start in 2020.

The applicant had previously entered into a Pre-Servicing Agreement with the City (complete with financial and legal conditions) allowing for the installation of municipal sewer and water infrastructure and a stormwater management pond in advance of the registration of the Subdivision Agreement.

A copy of the Engineering Conditions has been uploaded accompanying this memo for your review. Please forward any questions or comments to B. Perreault, Manager of Development Services at Barb.Perreault@barrie.ca by May 28, 2020.



**DEVELOPMENT SERVICES
MEMORANDUM**

APPENDIX "A"



***City Clerk's Office*
COUNCIL DIRECTION MEMORANDUM**

TO: Director of Engineering
City Clerk

FROM: Dawn McAlpine, City Clerk

DATE APPROVED
BY COUNCIL: September 28, 2009

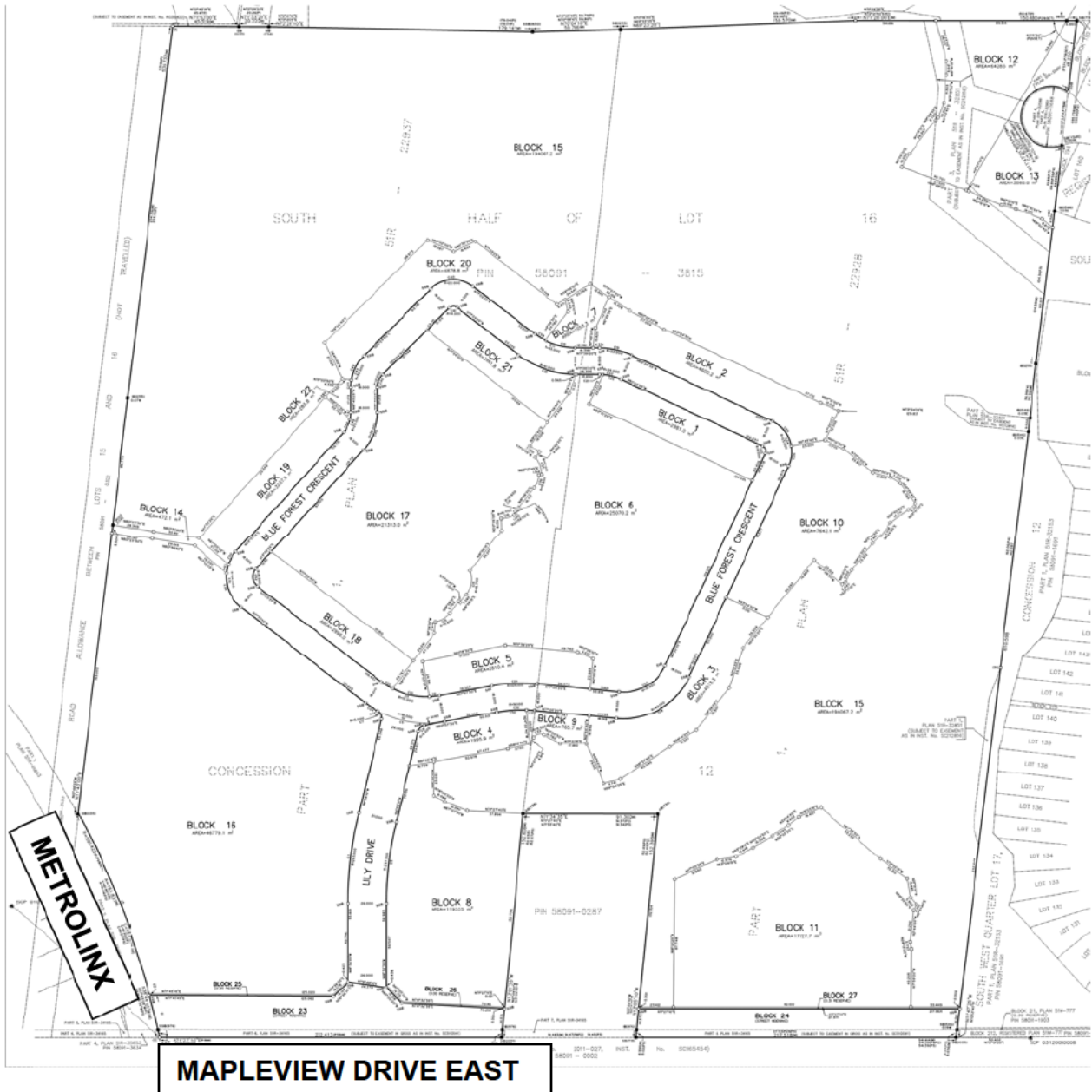
**09-G-391 REVISION TO CURRENT PRACTICE REGARDING COUNCIL APPROVAL OF
ENGINEERING CONDITIONS AND DRAWINGS FOR PLANS OF SUBDIVISION**

1. That the Director of Engineering be authorized to approve Engineering Conditions and associated Engineering Drawings for proposed plans of subdivision prior to registration of the plan.
2. That prior to final technical approval of Engineering Conditions and Drawings, members of Council be provided an opportunity to review and provide comments regarding the proposed Engineering Conditions and Drawings.
3. That at the request of any Member of Council the proposed Engineering Conditions and Drawings could be "bumped up" to General Committee for further consideration. (ENG052-09) (File: D12-GE)

Direction:

Director of Engineering - note
City Clerk - note

APPENDIX "B"



ENGINEERING CONDITIONS
FOR
700 Maplevue Dr. E. - Residential Subdivision
(Maplevue Developments Ltd.)
RESIDENTIAL PLAN OF SUBDIVISION

A proposed residential development – located on the north side of Maplevue Drive East, to the east of and adjacent to the Metrolinx Railway east of Yonge Street.

SPECIAL CONDITIONS

These special conditions, along with the general conditions, constitute the overall conditions for this development.

1.0 General

- 1.1 These Engineering Conditions, as described herein, may be revised at the discretion of the City of Barrie after one (1) year from the date of approval, unless the plan is registered within this time frame.
- 1.2 These Conditions relate to the registration of the M-Plan in its entirety, encompassing Blocks 1 – 27, Lily Drive and Blue Forest Crescent. Blocks 1 – 6, 8, 11, 13, 16 – 21 are intended for residential development and will be subject to these Conditions and the Subdivision Agreement. Blocks 1 – 6, 8, 11 and 16 – 21 are also subject Site Plan Control to the satisfaction of the Development Services Department. Lily Drive, Blue Forest Crescent, and Blocks 7, 9, 10, 12, 14, 15, and 22 – 27 are to be conveyed to the City for municipal roads and infrastructure, stormwater management and environmental protection lands.
- 1.3 The general requirements for municipal roads, services and drainage are shown on the applicable drawings as accepted and listed on Schedule “C” of the Subdivision Agreement GN-1, GP-1 – GP-3, STM-TA-1 – STM-TA-5, SAN-TA-1 – SAN-TA-3, GR-1 – GR-5, PP-1 – PP-7, SEC-1 – SEC-3, STM-DS-1, STM-DS-2, SAN-DS-1, TC-1, TC-2, SC-1 – SC-9, SWM-1 - SWM-6, WM-1 – WM-3, RW-1, RW-2, D-1 – D-6, UT-1 – UT-5, as prepared by Schaeffers Consulting Engineers. The scope and criteria for these requirements will be as directed by the Development Services Department who will determine the extent and suitability of the facilities required to support the development of the subject lands.
- 1.4 The general requirements and Storm Water Management Pond Design Details are shown on accepted drawings listed on Schedule “C” of the Subdivision Agreement SW-1 to SW-6 as prepared by Schaeffers Consulting Engineers. The scope and criteria for these requirements will be as directed by the Development Services Department who will determine the extent and suitability of the facilities required to support the development of the subject lands.
- 1.5 The general requirements for electrical supply layout, street lighting, signalized intersection design and photometric design are shown on drawings as accepted and listed on Schedule “C” of the Subdivision Agreement, as prepared by Runge & Associates Inc. The scope and criteria for these requirements will be as directed by the Traffic Services of the Roads, Parks & Fleet Department who will determine the extent and suitability of the works required to support the development of the subject lands.
- 1.6 The general requirements for Streetscape/Landscape Drawings and Details are shown on drawings as accepted and listed on Schedule “C” of the Subdivision Agreement L000, L100, L101, L103, L104, L105, L300, L301 and L302 as prepared by Strybos Barron King. The scope and criteria for these requirements will be as directed by the Development Services Department who will determine the extent and suitability of the facilities required to support the development of the subject lands.

- 1.7 The general requirements for Tree Inventory and Preservation Plan, Tree Inventory and Details are shown on drawings as accepted and listed on Schedule "C" of the Subdivision Agreement TP100, TP101, TP102 and TP103 as prepared by Strybos Barron King. The scope and criteria for these requirements will be as directed by the Development Services Department who will determine the extent and suitability of the facilities required to support the development of the subject lands.
- 1.8 The general requirements for Storm Water Management Pond Planting Drawings, Block 15 Restoration/Habitat Restoration and Details are shown on drawings as accepted and listed on Schedule "C" of the Subdivision Agreement L200, L202, L300, L301, L302, TH100 and TH200 as prepared by Strybos Barron King. The scope and criteria for these requirements will be as directed by the Development Services Department who will determine the extent and suitability of the facilities required to support the development of the subject lands.
- 1.9 The owner will obtain clearance/approval from Metrolinx regarding all applicable development requirements associated with the proposed development as they relate to the proximity of the Metrolinx Railway Tracks. Including but not limited to; the recommendations of any noise/vibration studies, safety requirements, and warning clause(s) to be included in the Subdivision Agreement and any other development agreements and sales agreements etc.
- 1.10 The owner will obtain approval from the Ministry of the Environment, Conservation and Parks, the Lake Simcoe Region Conservation Authority, and the Ministry of Citizenship, Culture, and Recreation, as they relate to the development of the subject property.
- 1.11 The owner shall provide confirmation of Good Standing with regard to any cost sharing obligations associated with the development, including but not limited to the Innishore Land Owners Group.

2.0 Roadways

- 2.1 The owner will be responsible to obtain a Right-of-Way Activity Permit(s) for works such as the watermain installation, sanitary and water servicing and road construction on Maplevue Drive East as shown on the accepted drawings by Schaeffers Consulting Engineers.
- 2.2 The owner/developer shall acknowledge and agree to obtain an access easement from the owner of 750 Maplevue Drive East for purposes of a secondary means of access to Maplevue Drive for the subdivision in the event the future grade separated railway crossing requires the temporary closing of Lily Drive and Maplevue Drive East. The general form of this easement would allow for subdivision access via the roads and sidewalks of Block 8 if they are developed at that time. This is to be detailed in the corresponding Site Plan and Subdivision Agreements.

The owner/developer shall agree in the Subdivision Agreement to include the following warning clause in all development agreements and Purchase and Sale or Lease Agreements.

"Warning: Proposed road improvements to Maplevue Drive East and possible future improvements to the Metrolinx rail line may require the temporary closure of the approved subdivision main entrance and the use of a temporary alternate subdivision entrance location until the Maplevue Drive/Metrolinx works are completed at the approved subdivision entrance location."

3.0 Sanitary & Water Servicing

- 3.1 The owner/applicant acknowledges and agrees to provide adequate looping for the subject lands. A safe and potable water system to service the entire development will be connected to the existing City of Barrie's Zone 2S water distribution system, to the satisfaction of the Development Services Department.

4.0 Stormwater

- 4.1 Prior to any grading or construction on the site, the owner is responsible for obtaining any applicable necessary permits from the Lake Simcoe Region Conservation Authority.
- 4.2 The lands utilized for stormwater management, Blocks 7, 9, 10 and 22, shall be conveyed to the City at the time of subdivision assumption.
- 4.3 The Stormwater Management Pond (Block 10) and environmentally protected lands (Block 15) associated with this subdivision will incorporate and accommodate a pedestrian pathways/trail system. All pathway/trail detailed design and construction will be the responsibility of the owner, all to the satisfaction of the Development Services Department.
- 4.4 Blocks 7, 9 and 22 shall not provide public access to the environmentally protected lands identified as Block 15. Each individual block shall be fenced on both the side and frontage of the respective blocks and are to include maintenance access, 'No Public Access' signage and a lockable gate(s) to the satisfaction of the Development Services Department.
- 4.5 Any proposed rear lot catch basins and/or servicing drainage easements in favour of the City of Barrie are to be registered with the subdivision agreement and registered on title as necessary for individual lot sales agreements.

5.0 Parkland Conditions

- 5.1 The Ontario Municipal Board decision from October 9, 2015 regarding the subsection lands states that the owner/developer shall agree to provide cash in lieu of parkland in accordance with the provisions of the Planning Act at 1 hectare per 300 residential units at the time of registration of the site plan(s).

6.0 Contributions

- 6.1 As per Schedule N of the Fees By-law, the owner will contribute to the City of Barrie an amount of \$1,595.00, deemed necessary to cover the future cost of high pressure blasting, priming, and painting, of the eleven (11) proposed hydrants within the development. The City of Barrie shall undertake this work upon final acceptance of this development.

$$\text{Hydrants} \qquad \qquad \qquad 11 @ \$145.00 \quad = \quad \$1,595.00$$

- 6.2 As per Schedule E of the Fees By-law, the owner will contribute, to the City of Barrie, a winter road maintenance fee in an amount of \$16,480.00 deemed necessary to cover future winter road maintenance for the first 3 years of operation (per Fees By-law 2020 – Year 1, \$3,006.00/lane.km – Year 2, \$2,395.00/lane.km – Year 3, \$1,191.00/lane.km / @ 2.5 lane.km). In addition to this contribution, the owner shall provide a cash deposit in the amount of \$6,000.00 to cover future winter road maintenance for year 4 and up to assumption. Upon assumption, the owner shall request in writing that the Development Services Department release them from any further obligation for winter road maintenance costs, and that the balance of their cash deposit be refunded.
- 6.3 As per Schedule E of the Fees By-law, the owner will contribute, to the City of Barrie, a winter sidewalk maintenance fee in an amount of \$4,960.00 deemed necessary to cover future winter sidewalk maintenance for the first 3 years of operation (per Fees By-law 2020 – Year 1, \$2,193.00/km – Year 2, \$789.00/km – Year 3, \$392.50/km / @ 1.47 km). In addition to this contribution, the owner shall provide a cash deposit in the amount of \$1,000.00 to cover future winter road maintenance for year 4 and up to assumption. Upon assumption, the owner shall request in writing that the Development Services Department release them from any further obligation for winter road maintenance costs, and that the balance of their cash deposit be refunded.

- 6.4 As per Section 27 of these Conditions and Schedule E of the Fees By-law, the owner will either install Control Monuments or contribute the required fee (\$7,372.00) to have them installed.

7.0 **Fencing**

- 7.1 Prior to the construction of residential units (including foundations), the owner/applicant will be responsible for constructing a 1.5 meter (5 foot) high chain link fence as per BSD-1210 in the following locations as noted to the satisfaction of the Development Services Department:

- a) **Block 2** - Along the western, northern and eastern side block limits abutting Blocks 7, 10 and 15
- b) **Block 3** - Along the eastern, northern and southern block limits abutting Blocks 9, 10 and 15
- c) **Block 4** – Along the eastern and southern block boundary abutting Blocks 9 and 15
- d) **Blocks 7, 9 and 22** - Notwithstanding the fencing requirements for the adjacent townhouse blocks, the frontage of these blocks is to be fenced and gated.
- e) **Block 10** – Along the northern, eastern and southern block limits abutting blocks 2, 3 and 10. Please note that fencing for the stormwater facility is not required on the internal road frontage.
- f) **Block 14** - Adjacent to block 15
- g) **Block 19** – Along the southern, western and northern block limits abutting block 14, 15 and 22.
- h) **Block 20** - Along the southern, northern, western and eastern block limits abutting Blocks 7, 15 and 22
- i) The chain link fencing is to be inset a minimum of 150 mm from the property line on lands owned by the City of Barrie.

- 7.2 In the event that chain link fencing is not installed prior to the construction of residential units the City of Barrie reserves the right to utilize the Letter of Credit securities to immediately initiate and/or complete the installation of the chain link fencing and shall include a standard administration surcharge in accordance with the current Fees By-law. The fencing shall be shown on all applicable landscape drawings to the satisfaction of the Development Services Department.

- 7.3 The following warning clause shall be included in all Offers of Purchase and Sale/Lease or Lease for Blocks 2, 3, 16 and 19 which abut or are adjacent to lands designated open space identified as Blocks 14, 10 and 15 which will accommodate a publicly accessible trail/pathway:

“Purchasers are advised that given the active nature of the abutting trail/pathway that noise levels may affect the living environment of the residents. The City of Barrie will not be held responsible for any complaints or claims arising from the use of the trail/pathway.”

- 7.4 The following warning clause shall be included in all Offers of Purchase and Sale/Lease or Lease for Blocks 2, 3, 4, 19 and 20 which abut lands designated open space (SWMF), environmentally protected (EP) or walkway block identified as Blocks 7, 9, 10, 15 and 22:

“Purchasers are advised that these lots abut Municipally owned lands designated as a walkway, SWM facility or environmentally protected lands. Purchasers are advised that a 1.52 metre (5 foot) high galvanized chain link fence (BSD1210) will be installed on the Municipality’s side of the property line abutting residential lots. Any person altering the fence, including the installation of gates or dumping

debris including yard waste into the open space/environmental protection areas is subject to prosecution. In addition to any fine that may be imposed, the Owner/Applicant will be required to reinstate the fence and/or clean up debris to the satisfaction of the Director of the Development Services Department."

- 7.5 The owner is required at their cost and as a condition of the subdivision agreement to construct board on board residential to residential fencing and returns in accordance with BSD-1205 and BSD-1207 at the rear and side yard of any street townhouse as per approved plans to the satisfaction of the Development Services Department. *Notwithstanding, the board on board fencing is not required where lands abut open space, walkway or environmentally protected lands where galvanized chain link fencing is being provided on Municipally owned lands.*
- 7.6 The owner/applicant is required at their cost and as a condition of the subdivision agreement, and/or site plan agreement, to construct an acoustic fence along the side of Block 16 adjacent to the Metrolinx corridor. All acoustic fencing is to be constructed as per the approved drawings and subsequent shop drawings as an approved equivalent as the fencing requirements exceed municipal standard all to the satisfaction of the Development Services Depart.
- 7.7 The following warning clause shall be included in all Offers of Purchase and Sale/Lease or Lease for Block 16 which abuts or is adjacent to the Metrolinx corridor:

"Purchasers are advised that given the active nature of the abutting Metrolinx corridor, noise and lighting levels may affect the living environment of the residents. The City of Barrie will not be held responsible for any complaints or claims arising from operations of the Metrolinx corridor."

- 7.8 The owner/applicant is responsible for constructing all walkway fencing and vehicular controls for Blocks 10, 14 and 15, according to the City of Barrie Standard (BSD-1215) including barrier/vehicle controls as noted on the Landscape Plan(s) to the satisfaction of the Development Services Department.

8.0 Lot Grading

- 8.1 Prior to registration, the owner is required to obtain written approval from adjacent landowners (outside of the plan) if the proposed grading affects the adjacent property.
- 8.2 The owner will be responsible for the incorporation of the following warning clause in the Purchase and Sale/Lease Agreement:

"Purchaser/Tenants of any part of the lands shall not alter, interfere with or remove the rear lot catch basins that may be located along the rear side lot line at the adjacent lot. The purchaser/tenant is responsible to maintain and to keep in a good state of repair any surface drainage path directed to the rear lot catch basin."

9.0 Conveyance in Title and Easements

- 9.1 The stormwater management Blocks, 7,9,10 and 22 will be conveyed at Assumption.
- 9.2 Existing Easements identified on plan 51R-32851 are to remain in effect.
- 9.3 Environmental Protection and open space Blocks 15 and 12, respectively, will be conveyed at registration.
- 9.4 The road widening and reserve Blocks will be conveyed at registration.
- Road widening – Blocks 23 and 24
 - 0.3 m Reserve/Mapleview Road access control – Blocks 25, 26 and 27

GENERAL CONDITIONS

10.0 General

- 10.1 The Ontario Provincial Standard Specifications and Drawings (OPSS & OPSD), in addition to the City of Barrie Standards, will form part of these "General Conditions" and will include supplemental specifications that are issued from time to time which modify or further define these standards and specifications.
- 10.2 The City of Barrie reserves the right to order field revisions at the expense of the owner.
- 10.3 Please be advised that for any undeveloped lots which have an overall grading of 15% or greater, the owner will be required to prepare a special lot grading plan which will identify areas of significant grades and excessive potential tree loss, but maintain an overall drainage scheme. In that regard, these plans should be in accordance with the current City of Barrie Lot Grading Policies and Guidelines.
- 10.4 The owner agrees to discharge any, and all, applicable City of Barrie Act Charges or cost sharing obligations associated with the development.
- 10.5 As a requirement of the development, the owner will be responsible for entering into a Subdivision Agreement with the City of Barrie.
- 10.6 Prior to the release of Building Permits the owner shall carryout the required testing procedures associated with installed infrastructure (sewer videos, and continuity tests) and provide the necessary as constructed drawings as per the digital submission standards all to the satisfaction of the City of Barrie.

11.0 Roadways

- 11.1 The owner will construct all roads, within the proposed development, to City of Barrie's Standards, including but not limited to, curb and gutter, hot mix asphaltic concrete, granulars, storm sewers, sub-drains where applicable, and appurtenances, sidewalks, streetlights, driveway approaches, and sodded boulevards to the satisfaction of the Development Services Department.
- 11.2 Any dead-ends, open sides, or reverse frontages on road allowances, created by this Plan of Subdivision, will be terminated in a 0.3 metre reserve, to be conveyed to the City of Barrie.
- 11.3 If temporary turning circles are required, the pavement structure will be constructed such that a minimum radius of 13 metres is provided. The property required to construct the temporary turning circle will be shown as a part or parts on a reference plan and will be subject to a temporary turning circle agreement, in favour of the City of Barrie, until the roadway is extended.
- 11.4 The owner will provide nursery sod on a minimum of 200mm topsoil, meeting the municipal quality standard, on both sides of all streets within the subdivision.
- 11.5 The owner will provide streetlights for all streets within and adjacent to this subdivision as per current City standards.
- 11.6 The City of Barrie will require that the owner install and maintain erosion protection and sediment control measures during construction, within this development, such that erosion and sedimentation are controlled within the Plan of Subdivision.
- 11.7 The owner agrees to prepare and post signs to the satisfaction of the Development Services Department, which indicate that this subdivision is under development control, and that the streets and services are not assumed by the City of Barrie. These signs will be erected at each vehicular access to the development and maintained by the owner until the streets and services are assumed by the City of Barrie at which time the owner will have the signs removed.

- 11.8 The owner agrees to prepare and erect temporary street signs prior to the issuance of any building permits within the development, unless all permanent street signs have already been installed, all to the satisfaction of the Development Services Department. These signs will be as per the approved subdivision drawings and shall include but not be limited to stop signs, street name signs, no parking signs, speed limit signs, etc.
- 11.9 The owner will be responsible for the provision of trees (minimum 60 mm caliper) within the boulevard area of the municipal road allowance. The quantity, location, and species of trees to be according to the Landscape/Streetscape plan(s) and specifications submitted by the owner and approved by the Development Services Department. All planting will be according to City of Barrie Specifications, and maintained throughout the guaranteed maintenance period. All vegetation including street trees, SWM planting, naturalization planting, seeding and buffer planting is required to have a minimum (2) two-year warranty period beginning from the time of inspection and acceptance by Staff.
- 11.10 The owner shall be responsible for pavement markings such as centre lining, stop blocks, crosswalks, and tapers in accordance with the accepted engineering drawings. The required markings will be placed upon completion of the base course and top course asphalt layers or as directed by the City of Barrie.
- 11.11 The owner will be responsible for obtaining a Right of Way Activity Permit for construction access and all works within the assumed municipal road allowance.
- 11.12 The owner shall ensure, at their expense, that all boulevards remain in full compliance with the Boulevard Garden Policy (Motion 05-G-147, Bylaw 2005-256) until such time as the development is assumed by the City of Barrie and throughout the guaranteed maintenance period to the satisfaction of the Development Services Department.
- 11.13 The owner will be responsible for the incorporation of the following clause in the Purchase and Sale/Lease Agreement:
- “Purchaser/Tenants are advised that they shall be responsible for ensuring that the Municipal Boulevard remains in full compliance with the City of Barrie’s Boulevard Garden Policy. Any infractions or works undertaken by the Purchaser/Tenants which do not conform to the Boulevard Garden Policy shall be removed and/or corrected to the satisfaction of the Development Services Department, upon receipt of written notice within ten (10) business days. All costs incurred and/or required works shall be the responsibility of the Purchaser/Tenants.”*
- 11.14 A “no dealings” clause will be placed on all lots and blocks on dead-end streets which do not have an appropriate turning circle.

12.0 Stormwater

- 12.1 The owner will accommodate all existing drainage, within and external to, the subject plan, according to the City of Barrie's current Stormwater Management Policies. Where improvements and or adjustments to the existing systems are necessary to facilitate this development, it will be the owner's responsibility to provide the necessary works, including outlet improvements, as required.
- 12.2 The owner will be responsible for carrying out the works recommended in the previous section without limiting the general or specific requirements of the above referenced Stormwater Management Report. The owner will provide appropriate erosion and sediment control, within the development areas, to protect applicable watercourses from the impact of runoff from the development. The owner will maintain the erosion and sediment control facility in an acceptable fashion complete with safety devices, if required.

- 12.3 The owner will be responsible for the preparation of a stormwater management study that will recommend the means by which the stormwater, within and external to the site, should be accommodated.
- 12.4 The owner will provide storm sewers, suitably designed and of sufficient depth, to provide for the proper drainage of the lands, within and external to the subdivision, and discharged to drainage outlets as directed.
- 12.5 The storm sewer system, within the development, will be located mainly within the road allowances, and in other easements and alignments, as required.
- 12.6 The owner shall provide bollards on the inside (pond side) of the access/trail to delineate/mark the access route for service vehicles.
- 12.7 The owner shall provide maintenance holes at the extremities of all sewers. In addition, connections to the storm sewer are to be made preferably at maintenance holes, to the satisfaction of the Development Services Department.
- 12.8 The owner is to provide a safety grate, at the inflow and outflow of all culverts, in the proposed development.
- 12.9 Before final approval and registration of the plan, the owner or his agents will submit an Erosion and Sediment Control Plan, prepared to the satisfaction of the City of Barrie and the Lake Simcoe Region Conservation Authority. This plan will detail the means by which erosion and sediment, and their effects, will be reduced during and after the construction period. The installation of appropriate sediment and erosion control measures must be in place before commencing any works on the site.

13.0 Sanitary

- 13.1 The owner will be responsible for providing all sanitary sewage facilities to accommodate sanitary sewage flows, within and external, to the subject lands.
- 13.2 The owner will provide a 200 or 250 mm minimum diameter polyvinyl-chloride pipe (as dictated by land-use as per the City of Barrie sanitary design guidelines) or acceptable alternative, with maintenance holes provided along and at the extremities, to be placed mainly along the centre lines of all road allowances of sufficient depth and suitable slope to serve every lot within the subdivision, and accommodate land tributary to the areas as determined by the Development Services Department, and designed to discharge to a sufficient outlet.
- 13.3 The owner will provide one (1) sanitary sewer service lateral of 100 mm minimum diameter to approximately the centreline of each lot or dwelling unit, to a point 2.0 metres beyond the limit of the road allowance.

14.0 Watermains

- 14.1 The owner acknowledges and agrees that the proposed development must be serviced from the municipal water distribution system.
- 14.2 The owner agrees that in order to provide proper and reliable water distribution systems within the development, reasonable looping of these systems shall be provided to the satisfaction of the Development Services Department.
- 14.3 The owner will provide 150 mm minimum diameter watermains of Class CL52 Ductile Iron or PVC Class 150 (DR18) with properly spaced hydrants and valves, to be placed mainly within the boulevards of all road allowances of sufficient depth and size to serve every lot within this subdivision. However, cul-de-sacs, unless otherwise directed, shall be serviced from a 50 mm diameter Type "K", third party (W.H.), soft copper waterline (alternative is polyethylene (P.E.)) as per BSD-55.

- 14.4 The owner acknowledges and agrees that the minimum diameter pipe size for the water distribution system, to be installed to the subject Plan of Subdivision, shall meet or exceed the pipe sizes recommended in the Master Servicing Plan. Also, these watermains shall be of sufficient size to provide the maximum day usage plus maintain the minimum fire flows, as stated in the City of Barrie's most recent Water Distribution Specifications.
- 14.5 The owner will provide one (1) water service lateral of 25 mm minimum diameter to the limit of the road allowance of each lot or dwelling unit, to a separation of 2.5 metres from the sanitary sewer service lateral and located as to avoid driveway entranceways. The only exception are lots with less than 8.0 metres of frontage, where separation shall be 1.2 metres providing a minimum vertical separation of 0.5 metres.
- 14.6 The owner acknowledges and agrees that no connection to the municipal water systems will be permitted prior to registration of the City of Barrie's Subdivider's Agreement.
- 14.7 The owner acknowledges and agrees that written approval from the Development Services Department, for materials required, shall be obtained prior to commencing with the installation of the water distribution systems.
- 14.8 The owner agrees to relocate, support, or modify, at his own expense, any existing utility service facilities as may be necessary, by reason of the work as required by the Plan of Subdivision.
- 14.9 A minimum residual pressure of 275 Kpa (40 psi) shall be provided in all sections of the water distribution system under conditions of peak hour demand when no fire flow allowance is made.
- 14.10 The owner will be responsible for the preparation of a water distribution analysis report that will recommend the means by which the water distribution system, within and external to the site, should be facilitated.

15.0 Parkland Conditions

- 15.1 The owner shall provide to the City of Barrie, a cost estimate and work schedule for the completion of the departmental requirements with a 100% Letter of Credit for such works.
- 15.2 The owner will prepare a detailed inventory of all existing trees, an individual list of dead/diseased or dying trees, an assessment of significant trees that will be preserved, and the proposed methods of tree preservation. The owner will submit status reports on a bi-monthly basis to the City of Barrie during active construction regarding the condition of vegetation and preservation fencing to the Parks Approvals section of the Development Services Department.
- 15.3 The owner will not remove, damage, or cause harm to any trees which have been identified to be preserved without the prior written approval by the Parks Approvals section and to the satisfaction of the Development Services Department.
- 15.4 The owner will implement a maintenance schedule for all trees identified as hazardous, diseased, dead, or dying, prior to the construction of homes within the limit of the development. The owner will prune, cut down, and remove from the lands in the plan, all hazardous, diseased, and dead trees, upon receipt of written notice from the Parks Approvals section of the Development Services Department. The maintenance requirements for all trees within the limit of the development identified shall remain in effect until the final acceptance of works and the end of the guaranteed maintenance period.
- 15.5 The owner is responsible for engaging the service of a qualified Landscape Architect to prepare a complete set of working drawings, details, specifications and cost estimates prior to registration and to the satisfaction of the Development Services Department which includes but is not limited to:
 - a) **Stormwater Management Facilities** - fencing, seeding, signage, vehicular controls, trail/pathway and planting.

- b) **Boulevard Landscape/Streetscape** - planting and layout.
 - c) **Walkway Block 14** - walkway, fencing, signage, vehicular controls, sodding, planting (restoration if required) and trail connection layout, specs and details to tie into the adjacent SWMF internal circulation.
 - d) **Fencing Plan(s)** – EP Fencing, walkway fencing, SWMF fencing, vehicular controls and townhouse block fencing. Please note that Acoustic fencing for Metrolinx will be undertaken as part of the site plan block development/
 - e) **EP Pedestrian Connection and Bridge for Hewitt's Creek** – trail layout, grading, vehicular controls, naturalization/planting, trail signage, seeding, bridge construction and specifications.
 - f) Turtle habitat and Tree Preservation Plans have been previously reviewed and submitted and are to be included to form part of the complete submission package.
- 15.6 The owner agrees, prior to assumption, to provide a “digital file” consisting of all constructed/installed subdivision landscape, stormwater, trail, bridge and streetscape elements. The digital data must be compatible with the City of Barrie Standards, and must be consistent with the Site Servicing and Lot Grading Plans prepared by the owner's consultant(s).
- 15.7 The owner is responsible for retaining the services of a qualified Landscape Architect to manage and implement all landscape/streetscape, stormwater facility planting and trail/pathway development related items including, but not limited to construction/site supervision, reporting, fencing layout, boulevard planting layout, planting, root barrier installation (sidewalks and driveways), boulevard inspections, LID planting, restoration planting, resident complaints/inquiries, liaison with the City of Barrie, preservation inspections, assumption inspections, letter of credit release, inspections for acceptance and inspections for the end of the guaranteed maintenance period. The Landscape Architect is required to maintain inspection logs of all field/site visits and inspections through to the end of general maintenance.
- 15.8 All vegetation including pond planting, seeding, naturalization and street trees shall be guaranteed for a minimum of two (2) years following assumption of the development. Note: Depending on time of installation, the warranty period may have to extend past the end of the guaranteed maintenance period at the discretion of staff.
- 15.9 For the purpose of inspections for the release of securities, endorsement of assumption or the end of the general maintenance period the owner agrees that for the purpose of vegetation health assessment; inspections must be completed between the period of spring leaf flush and September 15th of any given year. Staff will commit to ensuring that the required follow up inspections are completed by October 1st of any given year for this purpose. Inspections that are completed outside of this defined window will not be accepted or considered valid. In addition, vegetation health assessments are only valid for the year in which they were performed, reviewed and accepted by staff to the satisfaction of the Development Services Department.
- 15.10 The owner agrees that the Engineering Consultant and the Landscape Architectural Consultant will work jointly to ensure that lot servicing is designed to accommodate the placement of boulevard trees wherever possible. This includes but is not limited to the strategic placement of water and sanitary services, grouping of elements such as streetlights and transformers within the boulevard, placement of utility services and Canada Post boxes to the satisfaction of the Development Services Department.
- 15.11 No topsoil stockpiling, disturbance, or dumping of construction debris is permitted within open space blocks, within defined preservation limits or environmentally protected/zoned (EP) lands. All open space blocks and EP lands are to be fenced with protective fencing to the satisfaction of the Development Services Department. The owner will install the protective fencing prior to commencing any works on the site. The owner will maintain the protective fencing in a fashion to the satisfaction of the Development Services Department for the entire period of the development. In the event that unauthorized activity or works occur within these defined areas,

all disturbed lands shall be reinstated to the satisfaction of the Development Services Department.

16.0 Fencing

- 16.1 The owner is responsible for ensuring that no gates shall be constructed within any City of Barrie required fencing for the development as per approved plans. In the event that gates are installed by any individual, the Developer shall be required to restore the fencing to City of Barrie Standards effective until the end of the guaranteed maintenance period to the satisfaction of the Director of the Development Services Department.

17.0 Notification – (“Community Information Map”)

- 17.1 The owner agrees and understands that no works will occur on the site until the owner has prepared an information map to the satisfaction of the City of Barrie. This information map is to be provided by the owner to prospective home purchasers and shall include the requirements associated with providing specific information concerning all components of servicing and other facilities related to the proposed subdivision. The information map shall include, and not be limited to, the location and description of various road and servicing items within, and associated with the subdivision plan such as public and private services (i.e. above and below ground facilities, and Bell structure locations, sewers, etc.), road classification and number of lanes, lot grading, drawings, parks, walkways, institutional property, open spaces/environmental lands, fencing, and commercial property.

18.0 Sidewalks

- 18.1 As per OPSD requirements, the owner will provide a 1.5-metre-wide concrete sidewalk throughout the development according to the accepted engineering drawings.
- 18.2 As per the Integrated Accessibility Standards Regulation, sidewalks at intersections are to incorporate ramps with tactile walking service indicators as per OPSD 310.039 and other associated standards.

19.0 Driveway Locations

- 19.1 The owner will be responsible for including on all “Lot Development Plans”, the locations of utility apparatus (water service box, electrical vaults, streetlights, and pedestals) to avoid conflicts with the proposed driveway entrances. In that regard, the owner is to ensure that they generally site the driveway entrances on the opposite side of all utility apparatus.

20.0 Street Lighting

- 20.1 The owner will ensure, wherever possible, that a streetlight is located at the end of all walkways abutting the municipal roadway.
- 20.2 As per Schedule E of the Fees By-law, the owner shall place with the City of Barrie Finance Department a \$6,025.00 cash deposit to cover the cost of electric power to supply all streetlights within this development, or each phase of development, from the date Alectra energizes such facilities, until sixty percent (60%) of the lots or units are occupied. Upon meeting this condition, the owner shall request in writing that the Development Services Department release them from any further obligation for electrical costs, and that the balance of their cash deposit for electric power be refunded.
- 20.3 Should the electrical costs be greater than the sum deposited, the owner shall be invoiced for the difference. Any outstanding invoices must be paid prior to acceptance of the development and subsequent Letter of Credit reductions.

21.0 Lot Grading

- 21.1 The owner will prepare a General Lot Grading Plan as part of the Engineering drawings, which will be reviewed by the Development Services Department.
- 21.2 The owner will prepare Lot Development Plans as outlined in the Lot Grading and Drainage Control Procedures, to the satisfaction of the Building Services Department.
- 21.3 Prior to registration, the owner is required to obtain written approval from adjacent landowners (outside of the plan) if the proposed grading affects the adjacent property.
- 21.4 The owner will be responsible for the incorporation of the following clause(s) in the Purchase and Sale/Lease Agreement:

“No purchaser of any lot shall alter or interfere with the grading and drainage levels and patterns as approved by the municipality with respect to the said lots and, without limiting the generality of the foregoing, no purchaser of any part of any lot shall after, fill, fence, stop up or allow to become clogged or fall into a state of disrepair, any rear or side yard drainage depression or swale, catch basin or other drainage channel, facility or installation, as such alteration or other action as stated above may cause a failure of the drainage system in the area.

Notwithstanding this prohibition the purchaser of any lot agrees to indemnify and save the municipality completely harmless from all actions, causes of action, suits, claims and demands whatsoever which may arise directly or indirectly, by reason of such alteration or other action as stated above.

No purchaser shall be entitled to connect roof leaders to the foundation drain collector or to the weeping tile or the sanitary or storm sewer. Roof leaders shall be required to discharge in accordance with the drainage facilities shown in the municipally accepted final lot grading plan for the subdivision.”

“Owners are advised that approved lot grading plans may specify the location and species of trees which shall be required to be maintained on the lot.”

“Purchasers are advised that no fences, trees and other landscaping features may be installed on the lot, other than those approved by the municipality, until a final lot grading certificate has been received by and approved by the municipality in accordance with the requirements of the Subdivision Agreement.”

“Purchasers are advised that the municipality has reserved the right to amend the provisions and details of the lot grading plans filed with the agreement and that such amendments may result in alterations to features in said plans or the additions of other features, including, but not limited to, retaining walls. Owners are advised to consult with the municipality to ascertain the particulars of any amended grading for any individual lot or lots and are cautioned not to rely solely upon the provisions and details contained in the lot grading plans filed with the Agreement.”

22.0 Emergency Measures

- 22.1 Whenever the construction site is unattended by a representative of the owner's consulting engineer, the name, address, and telephone number, of a representative of the owner, will be given to the Development Services Department. This representative will be available on a continuous basis, and will have the necessary authority to mobilize workers and machinery, and to take any action as directed by the Development Services Department, in case of emergency or requirement for maintenance that was caused by the owner's negligence, act of God, or any cause whatsoever.

- 22.2 Should the owner be unable to carry out the immediate remedial measures required, the City of Barrie will carry out the necessary remedial measures, the costs of which will be charged to the owner, in accordance with the provisions of the Subdividers Agreement.

23.0 Private Wells

- 23.1 The owner shall be responsible for the identification and abandonment of all existing wells on site, as per the Ontario Water Resources Act Reg. 903, s.21. Copies of the Water Well Record, detailing the procedures of the well abandonment and well location, must be submitted to the Ministry of the Environment, Conservation and Parks, and the City of Barrie prior to any development works proceeding on the site.

24.0 Environmental

- 24.1 If a study encompassing the development lands has not already been performed, the owner will retain the services of a professional Hydrogeological Engineer who must be approved in writing, by the Development Services Department. The owner must complete a hydrogeological study by the said professional Hydrogeological Engineer, to the satisfaction of the Development Services Department. Without limiting the generality of the foregoing, the study will include a survey of all water supply systems within three hundred metres (300 metres) of the subject property, and or the zone of influence and report of the possible impact the development of the plan will have on the existing water supply systems. Should the Development Services Department determine that the existing water supply systems will be altered, or eliminated, based on the study and any other available supporting data, the owner will be responsible for providing the interim and permanent restoration of the water supply systems, to the satisfaction of the Development Services Department. This report should be conclusive with provisions and recommendations on servicing within the noted recharge area.

25.0 Erosion Control

- 25.1 Before any site alteration within the subject property, the owner or his agents will make application for a Site Alteration Permit as described within the current Site Alteration By-law. Prior to commencement of any works within the site, all requirements, obligations, and control measures as described within the By-law will be undertaken and in place to the satisfaction of the Development Services Department and to the appropriate conservation authority in those areas which are under their jurisdictions. Further, it will be the owner's responsibility, through their professional consultant, to maintain said works for the duration of this subject development.

26.0 Conveyance in Title and Easements

- 26.1 The owner shall convey all lands and grant all easements to the City of Barrie, as identified in Schedule "P" of the Subdividers Agreement.
- 26.2 The owner will, upon the request of the City of Barrie and until the formal acceptance of City of Barrie services, convey easements at the rear of any lots and any other locations where required for the installation and maintenance of services, all at the expense of the owner, including all costs of acquisition. Where any lot has been subsequently conveyed and the owner is unable to obtain such conveyance of easements, the City of Barrie will expropriate such easements as may be necessary, in its sole and unfettered discretion, and the owner will bear the cost of such expropriation, in total, and will enter into a further agreement with the City of Barrie to secure such costs.
- 26.3 The owner agrees that all external easements required for this development will be in place before the registration of the Subdividers Agreement.

27.0 Horizontal Control

- 27.1 All property surveys required through Plans of Subdivisions must be tied into the Ontario Horizontal Control Survey Network (Cosine) in accordance with Ontario Specifications and

Guidelines, and Regulations under The Surveys Act (OS 79). In that regard, the owner agrees that an Ontario Land Surveyor will provide, to the City of Barrie, the Registered Plan of Subdivision, and all other associated plans in digital form referred to Horizontal Control Survey UTM (Zone 17) NAD83. Prior to final acceptance of the registered plan, the owner's surveyor shall submit to the Development Services Department a report containing a summary of the field traverse, adjustment method, closure report, and a summary of the rationale used to derive the boundary coordinates. The owner's surveyor shall provide to the City of Barrie a signed certificate that this submission to the City of Barrie complies with the specification set out. The required report will be digitally filed on a CD/DVD and shall also be included within the report and must meet the current City of Barrie Integrated Control Survey Specifications.

- 27.2 Prior to the assumption of the subdivision, the owner's surveyor shall establish a network of second order horizontal control monuments, as set out in "Ontario Specifications for Horizontal Control Surveys (OS 79)", as well as a network of vertical control benchmarks, as set out in "Ontario Specifications for Vertical Control Surveys (OS 79)".
- 27.3 The same monument may be used as both a horizontal and vertical control monument/benchmark.
- 27.4 The horizontal control monuments, and the vertical control benchmarks, shall be established at approved locations to the satisfaction of the Development Services Department, using the following criteria:
- a) Two (2) horizontal control monuments and two (2) vertical control benchmarks for the first ten hectares (10 ha) (or less) subdivided by the plan, and one (1) additional horizontal control monument and vertical control benchmark for every additional ten hectares (10 ha) (or less) subdivided by the plan;
 - b) In addition, every existing horizontal control monument and vertical control benchmark destroyed during subdivision or site plan construction must be replaced.
 - c) The new horizontal control monuments and vertical control benchmarks (including replacements) shall be installed by one of the following methods:
 - i. As per Schedule E of the Fees By-law make a cash contribution to City of Barrie's Finance Department at a rate of \$1,843.00 per horizontal control monument or vertical control benchmark, a rate of \$3,686.00 per combined horizontal/vertical control monument and the City of Barrie will install the monuments and ensure acceptance by the Ministry of Natural Resources into their Cosine Database.
- OR**
- ii. A certificate by an Ontario Land Surveyor be provided stating that the horizontal control monuments and vertical control benchmarks were installed as set out by the Ontario Specifications for Horizontal Control Surveys (OS 79) and the Ontario Specifications for Vertical Control Surveys (OS 79) respectively, and confirmation from the Ministry of Natural Resources that the horizontal control monuments and vertical control benchmarks have been accepted into their Cosine Database.
- j) The horizontal control monument shall be a round iron bar (0.025 m x 1.22 m) with brass cap or any monument approved by the Ontario Specifications for Horizontal Control Surveys (OS 79).
- 27.5 The owner agrees to provide a digital file of the subdivision services, to the satisfaction of the Development Services Department, consisting of all as-constructed works, including pavement widths and grades, curb types, sidewalks, location of all municipal services, utilities, etc. The digital data must be compatible with the City of Barrie's standards, and must be tied to the horizontal and vertical control network (Cosine).

28.0 Professional Consultant Certification

- 28.1 The owner is required to confirm in writing to the Development Services Department, that a professional consultant has been retained to carry out full-time resident inspection of the works. The owner will require the professional consultant to certify that the works were installed in accordance with the accepted drawings and specifications, and the City of Barrie's Standards applicable to the works, and in compliance with the Subdividers Agreement and these engineering conditions.

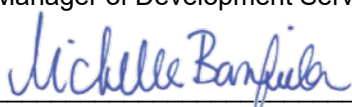
29.0 Final Assumption

- 29.1 Prior to final assumption, the owner will be required to provide the following:

- a) Letter of Application for final assumption.
- b) A pre-assumption inspection with the Development Services Field Coordinator and Parks Approvals sections must be completed identifying any and all deficiencies (Letter of Application must reference inspection date and attendance).
- c) Acceptance letter from Alectra.
- d) Acceptance letter/e-mail from the Development Services Field Coordinator.
- e) Acceptance letter/e-mail from the Parks Approvals section (Landscape Architectural Planner).
- f) Acceptance letter/e-mail from the Building Services Department with respect to lot grading certification.
- g) Acceptance letter/e-mail from the Water Operations (water system and continuity testing).
- h) List of outstanding work and associated cost estimates.
- i) Documents that support compliance with the Construction Act which would include publication certificates from the Daily Commercial News, clearance certificates from the Workplace Safety Insurance Board and statutory declarations from the owner and general contractor advising that all amounts owing to the contractor/subcontractor have been paid;
- j) Letter of Credit reduction request letter and supporting spreadsheet.
- k) Engineers' certification that all works have been completed and are in compliance with the accepted plans.
- l) As-Constructed engineering drawings (See City of Barrie Standards for Engineering Records Submission Form and required documents).
- m) An assumption plan (letter size) of the development including internal and surrounding street names, lot numbers and block numbers.
- n) Certification Letter from an Ontario Land Surveyor (complete with drawing) confirming that all standard iron bars have been replaced, reset, found and or verified; and,
- o) Final inspection video of both the storm and sanitary sewer.

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GM/