ENGINEERING CONDITIONS

FOR

GG 9-MILE SUBDIVISION - PHASE 2 REGISTRATION (OWNER - GG 9-MILE LTD.) RESIDENTIAL PLAN OF SUBDIVISION

A proposed residential development – located on the south side of Mapleview Drive East to the east of Madelaine Drive.

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 specifically to Phase 2 Registration. Registration of the remaining development phases will have separate Engineering Conditions specific to those development lands.
- 1.3 The general requirements for roads, municipal services and drainage are shown on GN-1, GN-2, ESC-1 ESC-5, PH2-1 PH2-6, G-1, G-3 G-5, LG-4, LG-5, LG-9 LG13, LG-16, STM-1 STM-6, SAN-1 SAN-6, DS-1, DS-2, WM-1, WM-3 WM-5, PP-1 PP-4, PP-17, PP-19, PP-20, PP-23 PP-27, PP-30, PP-31, PP-37, LID-2, LID-3, CU-1, CU-3 CU-5, PM-1, PM-3 PM-5 and DET-1 DET-12 of project number GOL- 14134 as prepared by The Jones Consulting Group Ltd. The Works are to be installed as per the approved drawings to the satisfaction of the Development Services Department.
- 1.4 The general requirements for street lighting and photometric design are shown on drawing numbers EL1.0, EL1.1, EL1.4, L1.1 L1.5, L2.1, L3.1 -L3.6, P1.01 P1.06 as prepared by Runge & Associates Inc. The Works are to be installed as per the approved drawings to the satisfaction of the Development Services Department.
- 1.5 The general requirements for Tree Preservation and Inventories are shown on drawing numbers TP-1, TP-2, TP-3, TP-4, TP-5 and TP-6 as prepared by JDB Associates Ltd. (*Formerly known as John D. Bell Associates Ltd.*) last revised on February 24, 2018.
- 1.6 The general requirements for Landscape/Streetscape, Storm Water Planting, Trail, Park Drawings and Details are shown L-2.1, L-2.2, L-2.3, L-2.4, L-2.5, L-2.6, L-2.7, L-2.8, L-2.9, L-2.10, L-2.11, L-2.12, L-2.13, revision no.10 dated January 6, 2022, as prepared by JDB Associates Ltd. The Works are to be installed as per the approved drawings to the satisfaction of the Development Services Department.
- 1.7 The owner will be responsible for adhering to all conditions and issues dealing with transportation, servicing, stormwater management (SWM) and other related issues, outlined within the Hewitt's Secondary Plan and associated Master Plans, the Subwatershed Impact Study (SIS) Report (Lover's, Hewitt's & Sandy Cove Creeks), the Multi Modal Active Transportation Master Plan (MMATP) or applicable updates and/or replacement documents, and the Memorandum of Understanding between the City of Barrie and the Hewitt's and Salem Secondary Plan Landowners. The owner will obtain an acknowledgement from the trustee for the Hewitt's Secondary Plan Owners to the municipality that the owner is in good standing with respect to its participation in the cost sharing agreements and its obligations thereto.

1.8 The owner will obtain approval from the Ministry of the Environment, Conservation and Parks (MECP), the Lake Simcoe Region Conservation Authority (LSRCA), and the Ministry of Citizenship, Culture, and Recreation, as they relate to the development of the subject property.

2.0 Roadways

- 2.1 The owner will be responsible to obtain a Right of Way Activity Permit for any works located within an existing municipal road allowance.
- 2.2 The owner will be responsible to supply and install all temporary and permanent pavement markings, stop signs and street name signs as per the approved engineering drawings prepared by the Jones Consulting Group Ltd.
- 2.3 The owner acknowledges that all temporary and permanent pavement markings, signage shall conform with the Ontario Traffic Manuals. All posts and mounting hardware shall conform with current OPSD and standards.
- 2.4 The owner acknowledges that prior to purchase and installation of the approved signage as per the approved engineering drawings prepared by the Jones Consulting Group Ltd., they shall provide the sign purchase order quote which shall include sizing, font, colour, and reflective sheeting and shall be confirmed with Development Services.
- 2.5 The owner will be responsible to implement traffic calming measures including associated pavement markings and signage as per the approved engineering drawings prepared by the Jones Consulting Group Ltd.

3.0 Stormwater

- 3.1 The supporting stormwater management ponds #4A and #4B were constructed as part of the requirements of the Phase 1 Registration. Refer to Phase 1 Registration for conditions related to this pond.
- 3.2 The infiltration gallery located within the Park Block (Block 161) and the dry swale infiltration galleries located within the municipal boulevard of Aquarius Avenue, Gemini Drive, Phoenix Boulevard and Kirkwood Way shall be installed to the satisfaction of the Development Services Department and the LSRCA, as per the approved engineering drawings prepared by the Jones Consulting Group Ltd.
- 3.3 The owner will be responsible for accommodating and conveying all external storm drainage without flooding the adjacent lands.
- 3.4 The owner will be responsible to adhere to all applicable policies and obtain any necessary permits from the LSRCA.

4.0 **Sanitary**

- 4.1 The owner is responsible for providing a local sanitary sewer throughout the development, at a sufficient depth and capacity to accommodate the proposed development and external lands in accordance with the Subwatershed Impact Study (SIS) Report for the Hewitt's Secondary Plan.
- 4.2 The owner is responsible for providing a trunk sanitary sewer along Madelaine Drive at a sufficient depth and capacity to accommodate all externals lands in accordance with the Subwatershed Impact Study (SIS) Report for the Hewitt's Secondary Plan.

5.0 Watermain

5.1 The owner will be required to provide a safe and reliable water system, of sufficient size, to service the development which will be connected to the existing City of Barrie's Zone 2S water distribution

system all in accordance with the Engineering Drawings prepared by the Jones Consulting Group Ltd.

6.0 <u>Lot Grading</u>

6.1 The Institutional Block (Block 160) shall be pre-graded, hydroseeded, and maintained by the owner until such time that a building permit is issued for this block development.

7.0 Parkland Conditions

7.1 Parkland dedication shall be in accordance with the Master Parkland Agreement for the Hewitt's Secondary Planning Area.

8.0 Fencing

- 8.1 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:
 - i. Along the western boundary of Lot 122, across the rear of Lots 122 through Lot 132, along the eastern boundary of Lot 132 from the rear lot line to the front foundation limit.
 - ii. Along the western boundary of Lot 133 from the rear lot line to the front foundation limit and along the western boundary of Block 160.
 - iii. Along the western boundary of Lot 75 from the rear lot line to the front foundation limit, across the rear of Lots 75 to 87, along the rear lot line of Lot 88 where it abuts Block 121 on Registered Plan 51M-1216, and across the rear of Blocks 162 and 163.

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 to the satisfaction of the Director of Development Services.

- 8.2 Prior to the construction of residential units (including foundations), the Owner/Applicant will be responsible for constructing a 1.25 meter (4 foot) high transitional chain link fence as per BSD-1209 from the foundation limit to the front property line on the west side of Lot 75, the east side of Lot 132, and the west side of Lot 133. The chain link fencing is to tie into the 1.5m fence and be inset a minimum of 150 mm from the property line on lands owned by the City of Barrie to the satisfaction of the Director of Development Services.
- 8.3 In the event 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 Director of Development Services.
- The following warning clause shall be included in all Offers of Purchase and Sale/Lease or Lease of Lots 122 through Lot 133 inclusive:

"Purchasers are advised that given the active nature of the abutting neighbourhood park/open space, 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 the use of the park or storm water facility."

"Purchasers are advised that a 1.52 metre (5 foot) high galvanized chain link fence (BSD-1210) will be installed on the Municipality's side of the property line along the perimeter of the Park adjacent to 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 Development Services"

The following warning clause shall be included in all Offers of Purchase and Sale/Lease or Lease of Lots 75 through Lot 88 inclusive and Blocks 162 and 163:

"Purchasers are advised that a trail system will be located within the Storm Water Management facility identified as Block 121 on Registered Plan 51M-1216 and that noise and activity levels may affect the living environment of residents. The City of Barrie will not be held responsible for any complaints or claims arising from the use of the trail system."

"Purchasers are advised that Lots 75 through 88 and Blocks 162 and 163 abut lands designed as a Storm Water Management Facility (SWMF) referred to as Block 121 on Registered Plan 51M-1216. Purchasers are advised that a 1.52 metre (5 foot) high galvanized chain link fence (BSD-1210) will be installed on the Municipality's side of the property line along the perimeter of the SWMF adjacent to residential lots. Any person altering the fence, including the installation of gates or dumping debris including yard waste into the SWMF 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 Development Services"

8.6 The owner shall be required to construct Board on Board Residential to Residential fencing returns/side yard fencing in accordance with BSD-1205 at the side and rear of Blocks 152 through 159 inclusive. Further, that the required side yard fencing returns between each block shall be a minimum of 1.0 m past the rear building foundation to the satisfaction of the Director of Development Services.

9.0 Conveyance in Title and Easements

- 9.1 Upon registration, the owner shall make the necessary arrangements to release the temporary storm sewer and storm drainage easement over the road allowance of Aquarius Avenue, Gemini Drive, Kirkwood Way and Phoenix Boulevard that was conveyed as part of the Phase 1 Subdivision Registration.
- 9.2 Upon completion of Madelaine Drive for use by the public, the owner shall make the necessary arrangements to release the temporary turning circle easement (Madelaine Drive temporary turning circle) that was conveyed as part of the Phase 1 subdivision registration.
- 9.3 Upon registration, the owner shall make the necessary arrangements to release the existing 0.3m reserves that abut the Phase 2 Registration road allowance connections.
- 9.4 Upon registration, the owner will be required to convey to the City of Barrie, 0.3m reserves along all municipal road allowances that abut private lands.
- 9.5 Upon Assumption, the owner shall convey to the City of Barrie, Block 161(Park Block).
- 9.6 Upon registration, the owner shall facilitate the conveyance of a roadway and servicing easement at the easterly terminus of the Madelaine Drive located on lands immediately east of the registration lands that are owned by Rainsong Land Development Inc.

10.0 Contributions

10.1 The owner will contribute, to the City of Barrie, a winter road maintenance fee in an amount of \$12,854.40 deemed necessary to cover future winter road maintenance for the first 3 years of operation (Per Fees By-law 2021-020 – Year 1, \$3,006.00/ln.km – Year 2, \$2,395.00/ln.km – Year 3, \$1,191.00/ln.km / @ 1.95 ln.km). In addition to this contribution, the owner shall provide a cash deposit in the amount of \$4,000.00 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.

10.2 The owner will contribute, to the City of Barrie, a winter sidewalk maintenance fee in an amount of \$10,290.70 deemed necessary to cover future winter sidewalk maintenance for the first 3 years of operation (Per Fees By-law 2021-020 – Year 1, \$2,193.00/km – Year 2, \$789.00/km – Year 3, \$392.00/km / @ 3.05 km). In addition to this contribution, the owner shall provide a cash deposit in the amount of \$2,000.00 to cover future winter sidewalk 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.

- 10.3 The owner will contribute, to the City of Barrie, an amount of \$3,190.00 (twenty-two (22) hydrants @ \$145.00/hydrant), deemed necessary to cover the future cost of high-pressure blasting, priming, and painting of all hydrants. The City of Barrie shall undertake this work upon final acceptance of this development.
- 10.4 A control monument contribution in an amount of \$29,488.00 for eight (8) horizontal and eight (8) vertical control monuments @ \$1,843.00/monument was received as part of the previous Phase 1 Subdivision Registration which includes the control monument contribution for the entire Draft Plan lands. No further contribution is required.
- The owner will contribute, to the City of Barrie, a Parkland Maintenance fee for Block 161 in an amount of \$33,649.00 (\$16,100.00 per ha @ 2.09ha) annually as deemed necessary to cover future maintenance following completion/certification of the park block for the first 3 years of operation (Per Fees By-law 2021-020). In addition to this contribution, the owner shall provide a cash deposit in the amount of \$5,000.00 to cover future maintenance up to assumption. Upon assumption, the owner shall request in writing that Parks Planning of the Development Services Department release them from any further obligation for park maintenance costs, and that the balance of their cash deposit be refunded.

ENGINEERING CONDITIONS

FOR

GG 9-MILE SUBDIVISION - PHASE 2 REGISTRATION (OWNER - GG 9-MILE LTD.) RESIDENTIAL PLAN OF SUBDIVISION

GENERAL CONDITIONS

11.0 General

- 11.1 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.
- 11.2 The City of Barrie reserves the right to order field revisions at the expense of the owner.
- 11.3 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.
- 11.4 Registration of this plan will not be considered until all infrastructure necessary to support the development of this plan is secured with the City of Barrie. Further, occupancy will not be granted until all necessary infrastructure is constructed and operating to municipal standard.
- 11.5 The owner agrees to discharge any, and all, applicable City of Barrie Act Charges or cost sharing obligations associated with the development.
- 11.6 As a requirement of the development, the owner will be responsible for entering into a Subdivision Agreement with the City of Barrie.

12.0 Roadways

- The owner will construct all roads, within the proposed development, to City of Barrie's Subdivision Road 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.
- All roads unless otherwise specified will be a minimum of 8.0 metres in width, consisting of 70 mm HL4 and 40 mm of HL3, depths of asphalt pavement on 450 mm of Granular "B" and 150 mm of Granular "A", and designed with regard to the existing Geotechnical Conditions.
- 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.
- 12.4 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 (if required) and will be subject to a temporary turning circle agreement, in favour of the City of Barrie, until the roadway is extended.

12.5 The owner will provide nursery sod on a minimum of 200 mm topsoil on both sides of all streets within the subdivision. Prior to placement of topsoil, the source stockpile must be lab tested with multiple samples at varying depths and locations to show that the topsoil is suitable for maintaining sod. Any soil amendments resulting from testing results must be made prior to placement on site.

- 12.6 The owner will provide Light-Emitting Diode (LED) streetlights for all streets within this subdivision.
- 12.7 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.
- 12.8 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.
- The owner agrees to prepare and erect temporary street signs prior to the issuance of any Building Permits within the development, all to the satisfaction of the Development Services Department.
- 12.10 The owner will be responsible for the provision of trees (minimum 60 mm calliper) within the boulevard area of the municipal road allowance. The quantity, location, and species of trees to be according to the planting plan 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 is required to have a minimum two (2) year warranty period beginning from the time of inspection and acceptance by staff.
- 12.11 The owner shall be responsible for pavement markings such as centre lining, stop blocks, crosswalks, and tapers in accordance with the approved 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.
- 12.12 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.
- 12.13 The owner shall ensure, at their expense, that all boulevards remain in full compliance with the Boulevard Garden Policy (Motion 05-G-147, By-law 2005-256) until such time as the development is assumed by the City and throughout the 'Guaranteed Maintenance Period' to the satisfaction of the Development Services Department.
- 12.14 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."

- 12.15 A "no dealings" clause will be placed on all lots and blocks on dead-end streets which do not have an appropriate turning circle.
- 12.16 "Corner lot restrictions" will be placed on all corner lots to restrict vehicular access along the sideyard of the lot.

13.0 Stormwater

13.1 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.

- 13.2 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.
- 13.3 The owner will be responsible for carrying out the recommendations 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.
- 13.4 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.
- 13.5 The storm sewer system, within the development, will be located mainly within the road allowances, and in other easements and alignments, as required.
- 13.6 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.
- 13.7 The owner is to provide a safety grate, at the inflow and outflow of all culverts, in the proposed development.
- 13.8 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 LSRCA. 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.

14.0 Sanitary

- 14.1 The owner will be responsible for providing all sanitary sewage facilities to accommodate sanitary sewage flows, within and external, to the subject lands.
- 14.2 The owner will provide a 200 mm minimum diameter polyvinyl-chloride pipe 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.
- 14.3 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.

15.0 Watermains

15.1 The owner acknowledges and agrees that the proposed development must be serviced from the municipal water distribution system.

15.2 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.

- 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 as per BSD-513.
- 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.
- 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.
- 15.6 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.
- 15.7 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.
- 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.
- 15.9 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.
- 15.10 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.

16.0 Parkland Conditions

- 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.
- The owner will have a detailed inventory prepared 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 as applicable to the satisfaction of the Development Services Department.
- 16.3 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 Planning Section of the Development Services Department.
- 16.4 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 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.

16.5 The owner will ensure that a minimum table land of no less than 5.0 metres be provided between the municipally approved limit of preservation and any building envelope in accordance with BSD-1235.

- 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 for the boulevard streetscape and park development prior to registration. The boulevard streetscape drawing package shall include, but not be limited to boulevard street tree planting, root barriers for boulevard trees, fencing, restoration planting, park design, electrical works, buffer planting, plant lists, notes, details, and cost estimates to the satisfaction of the Development Services Department.
- 16.7 The owner is responsible for retaining the services of a qualified Landscape Architect to manage and implement all landscape / streetscape related items including, but not limited to construction / site supervision, reporting, fencing, boulevard planting layout, planting, root barrier installation (sidewalks and driveways), boulevard inspections, pond planting, restoration planting, park construction, resident complaints, 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.
- The owner agrees, prior to assumption, to provide a "digital file" consisting of all constructed / installed subdivision landscape 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).
- 16.9 All vegetation including Park Block and street trees shall be guaranteed for a minimum of two (2) years. Note: Depending on time of installation, the warranty period may have to extend past the end of the Guaranteed Maintenance Period.
- 16.10 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.
- 16.11 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.
- 16.12 As part of the local service, being the Park Works, and in accordance with the Municipality's Local Service Policy, the owner is required to undertake construction of the Park Block 161 within one (1) year following the issuance of the first building permit for the phase in which the park is located.
- 16.13 No topsoil stockpiling, disturbance, or dumping of construction debris is permitted within open space blocks or within defined preservation limits. All open space blocks 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 Director of Development Services for the entire period of the development. If unauthorized activity or works occur within these defined areas, all disturbed lands shall be reinstated to the satisfaction of the Development Services Department.

17.0 Fencing

17.1 The owner is responsible for ensuring that no gates shall be constructed within any City of Barrie required fencing for the development. 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 Development Services Department.

18.0 Notification – ("Community Information Map")

18.1 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 general information concerning various land use components of development. The information map shall include, and not be limited to, proposed and adjacent land uses (Commercial, Institutional, Residential, EP, etc.), lot type, major utilities (i.e., high voltage overhead hydro, hydro sub-stations), major retaining walls, collector, and arterial roadways (identify number of lanes and bicycle lanes), future road extensions, transit routes, and references to Engineering Plans that detail servicing and grading of the development.

19.0 Sidewalks

19.1 As per OPSD requirements, the owner will provide concrete sidewalks throughout the development according to the approved engineering drawings.

20.0 <u>Driveway Locations</u>

20.1 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.

21.0 Street Lighting

- 21.1 The owner will ensure, wherever possible, that a streetlight is located at the end of all walkways where they abut the municipal roadway.
- 21.2 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 InnPower energizes such facilities, and 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.
- 21.3 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.

22.0 Lot Grading

- The owner will prepare a "General Lot Grading Plan", as part of the Engineering drawings, which will be reviewed by the Development Services Department.
- 22.2 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.
- 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.

The owner will be responsible for the incorporation of the following clause(s) in the purchase and sale / lease agreement:

"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."

23.0 Emergency Measures

- 23.1 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.
- 23.2 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 Subdivider's Agreement.

24.0 Private Wells

24.1 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 and the City of Barrie prior to any development works proceeding on the site.

25.0 Environmental

25.1 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.

26.0 Erosion Control

26.1 Before any site alteration within the subject property, the owner or his agents will make application for a Site Alteration Permit as described within By-law 2014-100. Prior to commencement of any works within the site, all requirements, obligations, and control measures as described within By-law 2014-100 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.

27.0 Conveyance in Title and Easements

27.1 The owner shall convey all lands and grant all easements to the City of Barrie, as identified in Schedule "P" of the Subdivider's Agreement. – Schedule P needs to be reviewed as not included.

- 27.2 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.
- 27.3 The owner agrees that all external easements required for this development will be in place before the registration of the Subdivider's Agreement.

28.0 <u>Horizontal Control</u>

- 28.1 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.
- 28.2 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)".
- 28.3 The same monument may be used as both a horizontal and vertical control monument / benchmark.
- 28.4 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:
 - (a) 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.
- d) 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)".
- 28.5 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).

29.0 <u>Professional Consultant Certification</u>

- 29.1 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 approved drawings and specifications, and the City of Barrie's Standards applicable to the works, and in compliance with the Subdivider's Agreement and these Engineering Conditions.
- 29.2 The owner is required to confirm in writing to the Development Services Department, that a Landscape Architectural Consultant has been retained to carry out full-time inspections of the Works contained within the scope of the Park Block, Streetscape, Tree Preservation and Fencing Plan(s). The owner will require the professional Landscape Architectural Consultant to certify that the works were installed in accordance with the approved drawings and specifications, and the City of Barrie's Standards applicable to the works, and in compliance with the Subdivider's Agreement and these engineering conditions.

30.0 Final Assumption

- 30.1 Prior to final assumption, the owner will be required to provide the following (if applicable):
 - a) Letter of Application for final assumption;
 - A pre-assumption inspection with the Development Services Field Coordinator and Parks Planning sections must be completed identifying any and all deficiencies (Letter of Application must reference inspection date and attendance);
 - c) "Subdivision Assumption Departmental Signoff" signed by representatives of the Development Services Department, Environmental Services Department, Corporate Asset Management, Facilities and Transit and the Building and By-law Services Department;
 - d) Acceptance letter from InnPower Corporation;
 - e) List of outstanding work and associated cost estimates;
 - f) Documents that support compliance with the Construction Lien 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;

- g) Letter of Credit reduction request letter and supporting spreadsheet;
- h) Civil Engineers' certification that all works have been completed and are in compliance with the approved plans;
- Landscape Architects' certification that all works have been completed and are in compliance with the approved plans;
- Letter of Acceptance from the Approvals Parks Branch of the Development Services Department (Landscape Architectural Planner);
- k) Acoustical Engineers' certification that all works have been completed and are in compliance with the approved plans;
- Electrical Engineers' certification that all street lighting works have been completed and are in compliance with the approved plans;
- m) "As-Recorded" engineering drawings (See City of Barrie Standards for Engineering Records Submission Form and required documents);
- n) Fulfill requirements of the "Assumption Protocol for Storm Sewers and SWM Ponds" as set out in the City of Barrie's Storm Drainage and Stormwater Management Policies and Design Guidelines:
- o) An assumption plan (letter size) of the development including internal and surrounding street names, lot numbers and block numbers;
- p) 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
- q) Final inspection video of both the storm and sanitary sewer.

Prepared by:

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