July 26, 2024
Our File: 2402454 (420099-1)

Township of Guelph/Eramosa
8348 Wellington Road 124
PO Box 700
Rockwood, ON
N0B 2K0

Attention: Amanda Roger

Re: 6th Line East, Ariss
Draft Plan of Subdivision

Dear Mrs. Roger:

In response to the comments received for the proposed Draft Plan of Subdivision at 6th Line East, Ariss (dated April 24th, 2024), we offer the following for your review and consideration:

RJ Burnside & Associates

Comment 1: Impacts of Groundwater: The stormwater management strategy will not function as designed based on the groundwater levels presented in the hydrogeological report. There are some questions raised as groundwater is shown higher than surface grade in some locations. As noted subsequently in the report, additional wells should be put in place so that groundwater contours can be confirmed across the site.

Response: *As discussed with the Township, the stormwater management approach for the site has been revised. As detailed in the revised Functional Servicing and Stormwater Management Report all runoff generated from the site is to be directed to Kurtz Municipal Drain to ensure that flows are conveyed through the site and to the downstream lands before the upstream flows reach the development property.*

Comment 2: Stormwater Management Strategy: Notwithstanding the concerns with groundwater, after the Township's experience with Ussher's Creek Subdivision, the Township will not accept a similar design with rear yard infrastructure and will not maintain infrastructure on private property. Surface ponding on private property will not be permitted as a stormwater management strategy. There were issues with flushing and cleaning the pipes, homeowners building sheds, gardens, etc. in the easement. Please review stormwater impacts from a watershed perspective, which has been done in the past, where the minor increase in instantaneous peak from the road is allowed to discharge uncontrolled before the upstream peak arrives. We also observed property owners taking their downspouts and piping it directly to the rear yard swale negating some of the stormwater management intent.

Response: *As discussed with the Township, the stormwater management approach for the site has been revised. As detailed in the revised Functional Servicing and Stormwater Management Report all runoff generated from the site is to be directed to Kurtz Municipal Drain to ensure that flows are conveyed through the site and to the downstream lands before the upstream flows reach the development property.*

Comment 3: Grading Design: There is a significant volume of fill required to develop the subdivision as designed. A preliminary cut/fill plan should be provided including a summary table that provides the volume of fill to be imported. We do understand that the seasonal high groundwater elevations are driving the basement floors up and ultimately the roads as well. However, it is noted that the roadway and proposed grading indicates the proposed development will be raised approximately 2.0 m above existing grade in some locations. Additional justification for this increased grade to be provided.

Response: *As discussed with the Township, the grading of Street A has been revised, which resulted in the site being lowered (i.e., less fill material required). In addition, the depth of the roadside ditches has been revised in some locations.*

Comment 4: Road Location: The location of Street 'A' is generally over a Township right-of-way that is being used by 5760 Sixth Line East as part of their driveway access. An extensive retaining wall is proposed along the south side of Street 'A' within the proposed road allowance. The Township will not accept a retaining wall within its road allowance. Additionally, this driveway has not been considered and the retaining wall is proposed in the location of the existing access to 5760 Sixth Line East from this road allowance. Our recommendation for resolving the majority of these issues would be to relocate all or a portion of Street 'A' to the north side of the property. This would allow for walkout lots, reducing the amount of fill being imported and eliminating the need for a retaining wall along the road allowance. Additional landscape buffering would then be possible here, and maintaining the existing tree line may be possible. This would also reduce the amount of re-grading required at the end of the Ariss Glen Drive cul-de-sac.

As a result of comments above, the draft plan ultimately needs to be modified. Below provides additional detailed comments that should be reviewed by the applicant.

Response: *The revisions to the grading of Street A (see above) has eliminated the retaining wall and maintained site access to 5760 Sixth Line East.*

Comment 5: We understand the Township is in discussions with the Developer regarding parkland dedication which would be at the far west adjacent to the trail including all of Lot 1 and all or part of Lot 2.

Response: *The draft plan has been updated to include a Park Block.*

Comment 6: A 0.3 m reserve should be placed along the side of Lot 16 or the lot that abuts Sixth Line East when the plan is updated.

Response: *A 0.3m reserve has been provided along the side of Lot 16.*

Comment 7: A minimum 7.6 m x 7.6 m daylight should be provided at Sixth Line East. Also, the design for the Sixth Line East access should confirm that sufficient sight distances and daylighting are provided.

Response: *A daylight triangle has been provided at Sixth Line East. Based on the elevation and alignment of Sixth Line East sufficient sight distance has been provided.*

Comment 8: Additional existing elevation and detail overlap onto the neighbouring properties is required. The location of the house, driveway, and other accessory structures for 5760 Sixth Line are to be shown. Actual location and existing elevations for the dwellings on Ariss Glen Drive adjacent to the subject development also to be shown.

Response: *Details of the neighbour property (5760 Sixth Line) and the grading for the properties on Ariss Glen Drive have been shown on the plans.*

Comment 9: The property surrounding the existing turning circle outside of the 20 m road allowance (Block 17 and Block 18) was to be deeded back to the homeowners fronting these respective blocks. As such, a ditch re-alignment would have been anticipated as part of these works. Additional details including plan and profile drawings of the connection from Ariss Glen Drive to Street 'A' to be provided. This is to include the full extent of the road re-grading required to complete this connection.

Response: *Acknowledged. The grading of Street A and the connection to the cul-de-sac bulb have been provided.*

Comment 10: We are concerned that a bridge structure on a bend with an 80 m radius may pose a safety concern. As noted at the onset of the letter, the location of the road needs to be reviewed. This road alignment will not be accepted as shown.

Response: *To address the concerns, the alignment and elevation of Street A has been revised to meet the minimum radius requirements for a road with a posted speed of 50 km/h as per TAC.*

Comment 11: The proposed swale on the neighbouring property to the north of the site notes proposed elevations above existing in several locations. Please provide the full limit of grading on the neighbouring property.

Response: *The grading for the proposed swale has been updated.*

Comment 12: No hydraulic analysis of the Kurtz Municipal Drain was provided. A floodplain analysis relating to the relocated drain is to be provided. Floodplain details around the end of the existing turning circle at the end of Ariss Glen Drive to be updated.

Response: *The hydraulic analysis for the relocated drain has been included in the Functional Servicing and Stormwater Management Report and the floodplain limits are shown on the plans.*

Comment 13: Updated catchment and floodplain mapping will be provided for any municipal drains affected by the proposed development.

Response: *The updated floodplain mapping has been provided for the Kurtz Municipal Drain and demonstrates a negligible increase in water surface elevations.*

Comment 14: Confirmation proposed grading works and municipal drain relocation to the property north of the development is permissible to be provided.

Response: *No additional municipal drain relocation to the north of the site is proposed. All grading works required to the north (i.e. the swale) have been agreed upon by the Owner.*

Comment 15: It is understood the owners of 5760 Sixth Line East are in the process of a Section 78 Drain relocation to shift the diagonal reach of the drain through their property to the south limit. This should be considered as part of the design of the new development.

Response: *As discussed, the timeline for these works under the Drainage Act process is unknown at this time. The design presented is based on the development proceeding ahead of any works associated with 5760 Sixth Line East.*

Comment 16: A portion of Branch 'E' located on the unopened road allowance could also be abandoned as part of the ongoing Section 78 report. Additional drain abandonment, relocation, or work completed privately to be incorporated could also be addressed under this report but would have to be coordinated soon with the Developer's Engineer and those costs would be likely be assessed against the Owner of the Subdivision.

Response: *Acknowledged.*

Comment 17: The applicant is proposing two – 50,000 L tanks for fire protection, like the Ussher's Creek Subdivision. The Fire Department should confirm whether the new tanks are required when existing tanks are present just off Arris Glen Drive in the Park Block. It is also noted the Township Parks and Recreation Department will not allow new fire water tanks to be located in a park.

Response: *As discussed with the Township, the requirement for fire reservoirs will be confirmed at a later date. At this time, we have shown the fire reservoirs until the requirement has been confirmed.*

Comment 18: Report Section 2.2 states, "Runoff generated from the site currently sheet flows overland to Branch 'A', 'C', 'E', and 'F' of the Kurtz Municipal Drain". Please clearly label the Branches including the improved and relocated Branches C and F in the existing and proposed conditions drawing. The Major Overland flow route direction should also be provided.

Response: *The drawings have been updated to label all Branches of the Kurtz Municipal Drain. The major overland flow route direction has also been identified.*

Comment 19: Calculations should be provided for the impervious values used in the post development scenario. Several of the provided impervious values appear to be low for the proposed development. As it is likely the homeowners will construct pools, sheds, patios, walkways and other impervious structures, the impervious value should be minimum 10%.

Response: *As discussed with the Township, 15% imperviousness was used for the lots under post-development conditions. The calculations for imperviousness of each catchment have been included in the Functional Servicing and Stormwater Management Report.*

Comment 20: The proposed perforated superpipe in the rear yards, proposed infiltration gallery, and roadside ditches are all below the groundwater level. This will limit the capacity of these systems. Any facility located below the seasonally high groundwater level would need to be impermeable to provide water quantity attenuation. Please provide the groundwater elevation in the vicinity of these facilities. Any infiltration facilities must be minimum 1.0 m above the groundwater table

Response: *As discussed with the Township, the stormwater management approach for the site has been revised. As detailed in the revised Functional Servicing and Stormwater Management Report all runoff generated from the site is to be directed to Kurtz Municipal Drain to ensure that flows are conveyed through the site and to the downstream lands before the upstream flows reach the development property.*

Comment 21: Surface ponding in the rear yards of the new dwellings will not be permitted as part of the stormwater management strategy for this development.

Response: *As discussed with the Township, the stormwater management approach for the site has been revised. As detailed in the revised Functional Servicing and Stormwater Management Report all runoff generated from the site is to be directed to Kurtz Municipal Drain to ensure that flows are conveyed through the site and to the downstream lands before the upstream flows reach the development property.*

Comment 22: Design calculations of the proposed infiltration facilities to be provided. The soil types and percolation rates to be coordinated with the geotechnical report. Ensure pretreatment for the proposed infiltration facility provided for the roadway discharge. Additionally, confirm the Township will accept infiltration galleries within the municipal right-of-way.

Response: *As discussed with the Township, the stormwater management approach for the site has been revised. As detailed in the revised Functional Servicing and Stormwater Management Report all runoff generated from the site is to be directed to Kurtz Municipal Drain to ensure that flows are conveyed through the site and to the downstream lands before the upstream flows reach the development property.*

Comment 23: Typical roadside ditch grassed swales only provide approximately 50% TSS removal. Consideration for construction of enhanced swales for additional quality controls should be made.

Response: *As per the 2003 MOE Manual, swales provide quality control when there is sufficiently low velocity. The velocity analysis for these roadside ditch grassed swales has been included in the Functional Servicing and Stormwater Management Report.*

Comment 24: The water balance analysis should be revised based on the final calculated imperviousness for the subdivision.

Response: *The revised water balance calculations have been included in the revised Functional Servicing and Stormwater Management Report.*

Comment 25: A label for "Locate ex. 250 mm dia. storm. Ex. 250 mm storm to outlet proposed swale." In the report, discussion on the external drainage to be conveyed via the ex. 250 mm storm to the proposed swale to be provided.

Response: *The label has been included in the revised drawings and the routing of flows around the site via the proposed swale has been discussed in the revised Functional Servicing and Stormwater Management Report.*

Comment 26: The boundary of the external catchment area located at the northeastern side of the site is to be shown and labeled clearly in the drawings. This area appears to currently drain through the site. Discussion and calculation to be provided for how this area will be routed around the site.

Response: *The external catchment area to the northeast has been added to the revised analysis in the Functional Servicing and Stormwater Management Report.*

Comment 27: The total drainage area in the post development is 8.76 ha; however, under existing conditions the total area is 8.788 ha. It appears as though a small drainage area has been excluded in the post development condition, as it has been graded to drain south. All drainage areas must be accounted for in the post development model. Additionally, please note that no drainage areas are to be redirected onto the neighbouring lots to the south.

Response: *The modelling and report have been revised to provide consistent drainage areas under existing and post-development conditions.*

Comment 28: A culvert is proposed over the existing municipal drain. A hydraulic model will need to be provided to confirm the culvert is adequately sized for the anticipated flows.

Response: *Hydraulic modelling for the proposed culvert crossing of Street A and the municipal drain has been included in the revised Functional Servicing and Stormwater Management Report.*

Comment 29: The SWM modelling was based on site area 8.79 ha. Report Section 1 states 7.8 ha site. Please coordinate.

Response: *The modelling and report have been updated.*

Comment 30: For catchment 700, please coordinate % imperviousness used in the modelling (28%) with the drawing.

Response: *The percent imperviousness has been coordinated between modelling and drawings in the revised Functional Servicing and Stormwater Management Report.*

Comment 31: Coordinate numbering for CBMH 2 and 3 in general servicing plan drawing.

Response: *The numbering of the structures has been revised.*

Comment 32: Additional shallow wells are required to confirm water levels and complete groundwater contours throughout the site. It is likely water levels are influenced by the municipal drain. The GM BluePlan report recommends that the basement floor elevations be at least 0.3 m above the interrupted seasonal high groundwater level and when that cannot be achieved the geotechnical consultant should conduct a site inspection to observe the excavation and recommend whether water proofing or foundation drainage will be sufficient. We recommend a 0.5 m separation should be maintained between the seasonally high-water table and the basement floor. Consultation with the Township Building Department should occur with respect to separation requirements.

Response: *Regarding the separation of at least 0.5 m between SHGWL and basement foundations, this point is acknowledged. Revisions have been made in the Hydrogeological Report to reflect a recommended separation distance of at least 0.5 m.*

With respect to additional monitoring wells being required to confirm water levels and groundwater contours: it is our opinion that additional monitoring wells are not necessary as it has been observed that SHGWLs are generally near ground surface. With the shallow overburden soils being characterized as an aquitard (i.e. limiting the percolation of groundwater deeper into ground), the shallow groundwater flow direction is expected to be influenced primarily by the surface topography, which is what the measured ground water levels suggest (i.e. generally flowing towards the Kurtz Drain which is the low point on-site). As such, additional monitoring wells would not provide added value to the project design as it already considers high groundwater table conditions and is recommending the implementation of damp proofing and installation of sump pumps at each house. Also, the existing well layout is considered to provide adequate coverage across the site to confidently identify the trend in the flow direction.

Comment 33: Two hydrogeological cross-sections should be provided. Data from BH1 to BH6 should be plotted along with water levels to assist in understanding the shallow overburden flow system. The elevation and water levels in the Kurtz Drain should be included. A second cross-section should include TW-1, TW-2, OW-1 TW-3, and the domestic wells monitored during the pumping test. These cross sections will be used to verify the conceptual model presented in Section 4 of the report.

Response: *Acknowledged. The requested cross-sections have been added to the Hydrogeological Report (see Figures 9, 9a and 9b).*

Comment 34: Figure 7 provides Seasonal high-water levels along with groundwater contours. Additional details should be provided. The actual water levels should be shown for each location so the interpretation can be confirmed. The date of the water levels should be provided. Elevation information on the Kurtz Drain should be included in the flow direction assessment.

Response: *Acknowledged. Figure 7 has been updated in the Hydrogeological Report to reflect these changes.*

Comment 35: Since the groundwater flow map (Figure 7) suggests that shallow groundwater flows towards the Kurtz Drain, the potential phosphorus impacts from septic effluent on surface water in the Kurtz Drain should be quantified.

Response: *With respect to septic effluent, it is our understanding that when effluent is discharged into the subsurface, phosphorus will be naturally filtered out in the soil matrix via adsorption to soil particles. A substantial amount of phosphorus is also sequestered as it precipitates out of solution due to changes in pH as the effluent percolates through the shallow soils below the leaching bed.*

Since seasonal high groundwater levels are near surface on-site, it has already been recommended that the design of the septic systems consider the use of raised beds up to 1.5 m above ground. This will further enhance these sequestration processes and limit the transport of the phosphorus to surface water features.

Additionally, the native subsurface soils on-site have been characterized as having low hydraulic conductivity. These tighter, less permeable soils allow for increased retention and contact time between soil particles and phosphorus within the effluent, resulting in increased adsorption to soil particles even in saturated soil conditions. The low permeability soils also limit the mobility of the phosphorus to travel long distances in the groundwater and promotes other natural attenuation processes such as microbiological uptake and precipitation into more insoluble compounds.

Based on these factors, we consider that the potential for Kurtz Drain to be negatively impacted due to phosphorus release from the septic systems to be low.

Comment 36: Based on OMAFRA mapping it does not appear that there are drainage tiles beneath the subject site that are connected to the Municipal drain. However, this should be confirmed. If tiles are present, there is a potential that they could "capture" septic effluent. In addition, if there are tile drains and they are damaged during construction there will be an impact on shallow groundwater levels.

Response: *Acknowledged. The Hydrogeological Report has been updated to include a recommendation that any tile drains discovered during construction be removed appropriately and that the area should be backfilled with soil of similar texture as the native soils.*

Comment 37: The applicant completed the MECP Procedure D-5-4 to review the impacts of the on-site sewage systems for the proposed 16 lots. We agree with the assessment which was completed using conventional sewage system. The design proposes tertiary sewage systems (if using a system such as Waterloo Biofilter which is commonly used in the area for tertiary systems) a further reduction in nitrates beyond the minimum requirements are to be expected.

Response: *Acknowledged.*

Comment 38: The applicant completed the MECP Procedure D-5-5 to confirm the suitability of water supply to service the proposed 16 lots. Based on the information provided, we agree with GM BluePlan's assessment that there is an adequate water supply for the proposed subdivision.

Response: *Acknowledged.*

Comment 39: Water quantity testing of wells on the subject site did not indicate the potential for significant well interference with existing domestic wells. However, Burnside agrees that the monitoring program detailed in Section 9 of the GM BluePlan report should be implemented and can be incorporated into the draft plan conditions as a requirement to complete a groundwater monitoring program.

Response: *Acknowledged.*

Comment 40: One sample from TW-02 had total coliform. If this well is to be used to service one of the new homes, it should be chlorinated and retested for microbiological parameters. This can be addressed through the draft plan conditions by incorporating a subdivision agreement requirement.

Response: *Acknowledged.*

Comment 41: The initial water quality sample from TW-03 had iron (340 µg/L) which is above the aesthetic Ontario Drinking Water Quality Standard (ODWQS) of 300 µg/L. The iron concentration in the second sample was < 100 µg/L. Although iron is an aesthetic parameter, future homeowners should be informed so that they can install treatment equipment if desired. All wells had hardness (also an aesthetic parameter) above the ODWQS. Burnside recommends that, following the construction of wells on individual lots, water quality samples be submitted for laboratory analysis of general chemistry and microbiological parameters with results provided to homeowners so they can make decisions on treatment systems. This can be addressed through the draft plan conditions by incorporating a subdivision agreement requirement.

Response: *Acknowledged.*

Comment 42: Based on the EIS report, significant woodlands, provincially significant wetlands, significant valleylands, and significant habitat of endangered and threatened species are absent from the Subject Lands.

Response: *Acknowledged.*

Comment 43: Per Schedule B3 of the Conty of Wellington OP, Core Greenlands are identified within the Subject Lands. The EIS identifies that all development will be occurring beyond the (proposed) top of bank which coincides with the 100 year floodplain; however, removal of the onsite Core Greenland is required to accommodate the proposed grading.

Response: *To be addressed by others under separate cover.*

Comment 44: Although Significant Wildlife Habitat (SWH) was identified as being potentially present within the Subject Property, Burnside agrees with Terrastory that the likelihood of negative impacts to SWH are negligible.

Response: *Acknowledged.*

Comment 45: Burnside agrees with Terrastory's conclusion that the existing drains within the Study Area provide indirect / contributing fish habitat.

Response: *Acknowledged.*

Comment 46: The proposed drain enclosure and proposed crossing on Branch F may require approval from the Department of Fisheries and Oceans Canada.

Response: *Acknowledged.*

Comment 47: Sufficient data has been collected to classify ecological communities to an ecosite level at minimum rather than just providing a community classification. Further refinement of the ELC community classification of onsite features is required when identifying the presence / absence of SWH and rare plant communities.

Response: *Acknowledged.*

Comment 48: Additional fisheries data and a thermal regime (warm) from the MNRF's aquatic resource area database is available for Ditch B (former Branch F), Branch A, Branch C, and Branch E. The proponent should update the EIS to reflect the above information.

Response: *To be addressed by others under separate cover.*

Comment 49: Ontario AgMaps DFO Classification should be provided in reference to fish habitat. The proponent should note that Branch C of the Kurtz Drain is designated as a Class 'E' drain, meaning that spring-spawning sensitive fish species are present.

Response: *To be addressed by others under separate cover.*

Comment 50: Weather data for sampling dates should be provided.

Response: *To be addressed by others under separate cover.*

Comment 51: The EIS states that an aquatic habitat assessment was completed in accordance with a modified Ontario Stream Assessment Protocol (OSAP) Section 4, Module 1. It is not clear how the proponent modified the protocol. Additional information should be provided.

Response: *To be addressed by others under separate cover.*

Comment 52: Sampling transects (number per branch) should be provided.

Response: *To be addressed by others under separate cover.*

Comment 53: Additional details regarding the fisheries sampling should be provided:

a) Extent of sampling stations (i.e. upstream and downstream limits) should be provided.

b) Level of effort should be provided for fisheries sampling (s/m2).

c) Electrofishing settings used should be provided.

Response: *To be addressed by others under separate cover.*

Comment 54: A discussion regarding the quality of fish habitat should be provided, specifically:

a) Additional details regarding habitat features (if any) present within the drain. At present, a description of the quality of fish habitat has not been provided.

b) The proponent should clarify if any barriers to fish passage are present.

c) Section 2.2 states that the following information will be collected: bankfull width*, wetted width, channel structure, evidence of erosion*, instream cover*, substrate type, stability*, and aquatic and riparian vegetation. Parameters marked with an (*) were not provided in the EIS

Response: *To be addressed by others under separate cover.*

Comment 55: A discussion of how the Kurtz Drain functions as a linkage feature has not been provided. Additional consideration is warranted.

Response: *To be addressed by others under separate cover.*

Comment 56: A discussion regarding impacts to fish habitat downstream of the proposed development as a result of increased runoff volume (if any) has not been provided.

Response: *To be addressed by others under separate cover.*

Comment 57: A discussion of impacts resulting from in-water works associated with the proposed watercourse crossing (concrete culvert) have not been provided. Additional details regarding the proposed crossing should be provided within the EIS.

Response: *To be addressed by others under separate cover.*

Comment 58: It is acknowledged that riparian plantings are inadvisable along the Kurtz drain as drainage maintenance activities are regularly required. The seed mix proposed is appropriate.

Response: *To be addressed by others under separate cover.*

Comment 59: The measures outlined within the Clean Equipment Protocol for Industry (Halloran et al., 2016) should be implemented to prevent the spread of invasive species.

Response: *Acknowledged.*

Comment 60: Given the identification of candidate Snapping Turtle habitat within the EIS, further consideration for impacts to reptiles is warranted.

Response: *To be addressed by others under separate cover.*

Comment 61: Turtles are often drawn to open areas with bare mineral soils. The proponent should ensure that ESC fencing is suitable for preventing turtles from accessing the active construction zones.

Response: *To be addressed by others under separate cover.*

Comment 62: In-water works should be completed during period of low flow in isolation of active flows.

Response: *Acknowledged.*

Comment 63: Further clarification of the onsite Core Greenlands is required to identify potential impacts to the feature and conformity with the OP.

a) Per Sections 5.4.2 of the County OP, development is not permitted in Fish habitat except in accordance with provincial and federal requirements (with respect to fish habitat). Commitments to additional consultation with the DFO is required. All correspondence including request for reviews should be provided to the County once available.

b) Per Sections 5.4.3 of the County OP, development and site alteration is not permitted in hazard lands.

c) Justification for the lack of buffers on the Core Greenlands should be provided. Lot lines may need to be revised to account for the buffers.

Response: *To be addressed by others under separate cover.*

Comment 64: The hedgerow along the south property limit appears to be partially shared with the adjacent landowners, and grading and construction will extend offsite to accommodate the new road. Confirmation that the adjacent landowners consent to the tree removal should be provided.

Response: *To be addressed by others under separate cover.*

Comment 65: Update the reference to timing windows for tree removals to match the EIS.

Response: *To be addressed by others under separate cover.*

Comment 66: Consultation with the DFO regarding permitting for the fish habitat alteration should be added.

Response: *To be addressed by others under separate cover.*

Comment 67: Include a discussion of the Schedule B3 of the OP that illustrates Core Greenlands on the site that will be impacted.

Response: *Acknowledged.*

Bell Canada
Juan Corvalan
Senior Manager - Municipal Liaison

Comment 68: The Owner acknowledges and agrees to convey any easement(s) as deemed necessary by Bell Canada to service this new development. The Owner further agrees and acknowledges to convey such easements at no cost to Bell Canada.

Response: *Acknowledged.*

Comment 69: The Owner agrees that should any conflict arise with existing Bell Canada facilities here a current and valid easement exists within the subject area, the Owner shall be responsible for the relocation of any such facilities or easements at their own cost.

Response: *Acknowledged.*

Comment 70: Upon receipt of this comment letter, the Owner is to provide Bell Canada with servicing plans / CUP at their earliest convenience to planninganddevelopment@bell.ca to confirm the provision of communication/telecommunication infrastructure needed to service the development.

Response: *Acknowledged.*

Comment 71: It shall be noted that it is the responsibility of the Owner to provide entrance/service duct(s) from Bell Canada's existing network infrastructure to service this development. In the event that no such network infrastructure exists, in accordance with the Bell Canada Act, the Owner may be required to pay for the extension of such network infrastructure.

Response: *Acknowledged.*

Comment 72: If the Owner elects not to pay for the above noted connection, Bell Canada may decide not to provide service to this development.

Response: *Acknowledged.*

Comment 73: To ensure that we are able to continue to actively participate in the planning process and provide detailed provisioning comments, we note that we would be pleased to receive circulations on all applications received by the Municipality and/or recirculations.

Response: *Acknowledged.*

Union Gas
Kelly Buchanan
Land Analyst

Comment 74: It is Enbridge Gas Inc.'s request that as a condition of final approval that the owner/developer provide to Union the necessary easements and/or agreements required by Union for the provision of gas services for this project, in a form satisfactory to Enbridge

Response: *Acknowledged.*

Canada Post
Neil Mazey
Delivery Services Officer | Delivery Planning
Huron/Rideau Region

Comment 75: The owner/developer will consult with Canada Post to determine suitable permanent locations for the placement of Community Mailboxes and to indicate these locations on appropriate servicing plans.

Response: *Acknowledged.*

Comment 76: The Builder/Owner/Developer will confirm to Canada Post that the final secured permanent locations for the Community Mailboxes will not be in conflict with any other utility; including hydro transformers, bell pedestals, cable pedestals, flush to grade communication vaults, landscaping enhancements (tree planting) and bus pads.

Response: *Acknowledged.*

Comment 77: The owner/developer will install concrete pads at each of the Community Mailbox locations as well as any required walkways across the boulevard and any required curb depressions for wheelchair access as per Canada Post's concrete pad specification drawings.

Response: *Acknowledged.*

Comment 78: The owner/developer will agree to prepare and maintain an area of compacted gravel to Canada Post's specifications to serve as a temporary Community Mailbox location. This location will be in a safe area away from construction activity in order that Community Mailboxes may be installed to service addresses that have occupied prior to the pouring of the permanent mailbox pads. This area will be required to be prepared a minimum of 30 days prior to the date of first occupancy.

Response: *Acknowledged.*

Comment 79: The owner/developer will communicate to Canada Post the excavation date for the first foundation (or first phase) as well as the expected date of first occupancy

Response: *Acknowledged.*

Comment 80: The owner/developer agrees, prior to offering any of the residential units for sale, to place a "Display Map" on the wall of the sales office in a place readily available to the public which indicates the location of all Canada Post Community Mailbox site locations, as approved by Canada Post and Wellington County.

Response: *Acknowledged.*

Comment 81: The owner/developer agrees to include in all offers of purchase and sale a statement, which advises the prospective new home purchaser that mail delivery will be from a designated Community Mailbox, and to include the exact locations (list of lot #s) of each of these Community Mailbox locations; and further, advise any affected homeowners of any established easements granted to Canada Post.

Response: *Acknowledged.*

Comment 82: The owner/developer will be responsible for officially notifying the purchasers of the exact Community Mailbox locations prior to the closing of any home sales with specific clauses in the Purchase offer, on which the homeowners do a sign off.

Response: *Acknowledged.*

Comment 83: The owner/developer of any condominiums will be required to provide signature for a License to Occupy Land agreement and provide winter snow clearance at the Community Mailbox locations

Response: *Acknowledged.*

Comment 84: Enhanced Community Mailbox Sites with roof structures will require additional documentation as per Canada Post Policy

Response: *Acknowledged.*

Comment 85: There will be no more than one mail delivery point to each unique address assigned by the Municipality

Response: *Acknowledged.*

Comment 86: Any existing postal coding may not apply, the owner/developer should contact Canada Post to verify postal codes for the project

Response: *Acknowledged.*

Comment 87: The complete guide to Canada Post's Delivery Standards can be found at: https://www.canadapost.ca/cpo/mc/assets/pdf/business/standardsmanual_en.pdf

Response: *Acknowledged.*

Upper Grand District School Board
Hailey Till
Planning Technician

Comment 88: That Education Development Charges shall be collected prior to the issuance of a building permit(s).

Response: *Acknowledged.*

Comment 89: That the Developer agrees to provide the Upper Grand District School Board with a digital file of the plan in either ARC/INFO export or DWG format containing parcel fabric and street network.

Response: *Acknowledged.*

Comment 90: That adequate sidewalks, lighting and snow removal (on sidewalks and walkways) are provided to allow children to walk safely to school or to a designated bus pickup point.

Response: *Acknowledged.*

Comment 91: That the developer shall supply, erect, and maintain a sign (at its expense and according to the Board's specifications) affixed to the permanent development sign advising prospective residents about schools in the area.

Response: *Acknowledged.*

Comment 92: That the developer shall agree to advise all purchasers of residential units and/or renters of same, by inserting the following clause in all offers of Purchase and Sale/Lease:

> "In order to limit liability, public school buses operated by the Service de transport de Wellington-Dufferin Student Transportation Services (STWDSTS), or its assigns or successors, will not travel on privately owned or maintained right-of-ways to pick up students, and potential busing students will be required to meet the bus at a congregated bus pick-up point."

Response: *Acknowledged.*

Grand River Conservation Authority
Chris Foster-Pengelly, M.Sc
Supervisor of Resource Planning and Regulation Services

Comment 93: Please confirm if proposed alterations to the Kurtz Drainage Works and floodplain have been completed, including the identified 6m wide x 1.5m high precast open bottom culvert crossing for Street A. GRCA / OMAFRA municipal drainage layer identifies a geometry updated 9/12/2022. If this is the case, please provide GRCA staff with the final modelling of the watercourse/drain, all applicable shapefiles, and mapping of the subject property showing the new location of the Kurtz Drain inclusive of floodplain limits.

Response: *The alterations to the Kurtz Drainage Works were completed under the Drainage Act. In speaking with the Drainage Engineer (Sid Vander Veen – RJ Burnside & Associates) who was appointed under the Drainage Act, it is our understanding that he had provided all of the requested information to Chris Lorenz (see attached). This information was previously sent to you via email on April 30, 2024. Would you please confirm that you've received this information? Please note however that the works completed under the Drainage Act do not include the culvert crossing. The requirement for the culvert crossing is associated with the development application and has been included in our submission.*

Comment 94: A geodetic survey, referencing which geodetic datum was used and signed by a certified Ontario Land Surveyor is to be provided.

Response: *With respect to your comment related to a geodetic survey, the site was surveyed by GM BluePlan Engineering in March of 2020. This topographic data was then used by GM BluePlan Engineering and RJ Burnside & Associates to complete design of the alterations to the Kurtz Drainage Works and by GM BluePlan Engineering (now GEI Consultants Canada) to prepare the preliminary grading plans in support of the proposed development. Please advise if this is sufficient, as the topographic survey was not completed by an Ontario Land Surveyor (OLS).*

Comment 95: Please confirm the geodetic datum that was used in the HEC-RAS modelling and floodplain mapping.

Response: *Surveying of the site was completed in CGVD 28 and this information was used in the HEC-RAS analysis.*

Comment 96: Please provide a Design Brief (if different than the Floodplain Analysis Report completed by GM BluePlan Engineering Limited on July 2021), stamped by professional engineer, that explains the HEC-RAS modelling including the proposed culvert design assumptions and comparison between the existing and proposed HEC-RAS model results. The comparison between the existing and proposed cross-sections (the existing and proposed cross-sections should be overlaid for comparison) should be provided in the Design Brief.

Response: *As mentioned in Comment 93 (see above), all of the documentation (i.e. modeling and analysis*

and plans) for the alterations to the Kurtz Drainage Works were previously provided. With respect to the proposed culvert crossing required for the development, this modelling and analysis and plans will be included in our resubmission to document the current conditions (i.e. which represent the completed / constructed alteration to the Kurtz Drainage Works) and the proposed conditions (i.e. the provision of a culvert across the Kurtz Drainage Works).

Comment 97: Please provide all relevant information for the existing floodplain mapping (see screenshot below) such as:

- All HEC-RAS modelling file (existing, proposed, revised, etc.) and reports related to hydraulic modelling.
- All hydrologic modelling files and relevant reports
- Floodplain Mapping – drawing showing floodplain lines (regional and 100-year), contour lines and HEC-RAS cross-sections (with River Station and water surface elevations [regional and 100-year])

Response: *The documentation required to support the proposed conditions (i.e. the provision of a culvert) will be included in the resubmission.*

Comment 98: Please provide the Floodplain Analysis Report (hydraulic and hydraulic analysis) completed by GM BluePlan Engineering Limited on July 2021, including hydraulic and hydrologic modelling files.

Response: *The previously completed Floodplain Analysis Report has been included for your reference.*

Comment 99: Consistent with GRCA's 2023 approved fee schedule, the GRCA applies Plan Review Fees for Planning Act applications located within GRCA areas of interest. The plan review fee for a subdivision application is a base fee plus a specified fee per hectare, of which 70% is owed up front and 30% is owed prior to draft plan approval. As per the proposed Draft Plan, the subject lands comprise a total area of 7.79 hectares the total fee is therefore $12,670.95, of which 70%, or $8,869.67 is required at the time. The applicant will be invoiced the applicable amount for the GRCA's review of this application.

Response: *To be addressed by others under separate cover.*

Enclosed please find the following for your review and approval:

- Engineering Drawings (GM BluePlan Engineering Limited, Revision No. 3, dated 2024/07/24)
- Kurtz Municipal Drain Drawings (GM BluePlan Engineering Limited, Revision No. 3, dated 2024/07/24)
- Hydrogeological Report (GM BluePlan Engineering Limited, dated July 2024)
- Functional Servicing and Stormwater Management Report (GM BluePlan Engineering Limited, dated July 2024)
    - HEC-RAS Modelling Files - updated 2024 Floodplain Analysis for Kurtz Municipal Drain
- Floodplain Analysis Report (GM BluePlan Engineering Limited, dated July 2021)
    - HEC-RAS Modelling Files – 2021 Floodplain Analysis for Kurtz Municipal Drain.
    - MIDUSS Modelling Files – 2021 Hydrologic Analysis for Kurtz Municipal Drain.

We trust this is the information you require at this time. If you have any questions or require additional information, please do not hesitate to call.

Yours truly,

GM BLUEPLAN ENGINEERING LIMITED
Per:

Angela Kroetsch, P.Eng.
AK/pw

cc: Kevin Smith, Will-O-Homes
Brandon Flewelling, GSP Group

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