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Date: December 12 2024

C/O: Tracey Atkinson, CAO, Planner
Municipal File No.: SUB2-2021, Armstrong Estates

Subject Lands: 937045 Airport Road
Town of Mulmur

IPS File No.: 20-1019

RE: Comment Response Matrix – December 2024 Re-Submission

#	Comment	Responsibility	Response
Dufferin County Comments			
April 4, 2024			
Building Services			
1	The Building Division would like to note that we have no concerns with the Re-Zoning of the property of the Draft Plan of Subdivision. It should be noted that the applicant is required to apply for a building permit at our office with respect to the above property before any type of construction begins.	IPS	Noted
Public Waste – Waste Services (<i>Chris Fast</i>)			
1	Dufferin Waste requires clarification. Please review and confirm that the below requirements are met. a. These are the basic requirements for waste collection: No backing up within the site by waste collection vehicles. A turn around must be in place (hammerhead, or otherwise). b. Turning radii of 5 meters c. Minimum road width of 6m d. Access to collect on both sides of the road e. For corner radii and turnaround dimensions, we default to that of the standards for Fire Services vehicles.	JD Engineering	Confirmed that the below requirements are met by the proposed design. Further details to be confirmed at the detailed design stage and subject to further review/approval by the County.
2	Does Street A enter onto Airport Road?	IPS	Yes, as shown on revised Draft Plan and as per discussion with County staff.
Corporate Services			
1	We request that all streets in the proposed subdivision be given unique names that do not duplicate or conflict with existing road names within Dufferin County, unless it is the continuation of an existing road. This includes names with similar spelling or pronunciation (ex. "Rogers" and "Rodgers", "Forrestview" and "Forestvue").	IPS	Noted, to be addressed at detailed design stage.
2	Road names cannot contain any punctuation or special characters such as apostrophes (') or ampersands (&), etc. Personal names should be highly discouraged for road names, including people of historical significance and current or former military personnel. In addition, parseable names with commonly used road name prefixes, suffixes or directions should not be used (ex. Courtney , Eastwood , Broadview)	IPS	Noted, to be addressed at detailed design stage.
3	All addressing should be compliant with Bell Canada's 9-1-1 system and Next Generation (NG9-1-1) standards. In accordance with Bell Canada's 9-1-1 system, all addresses assigned to these streets should increase consecutively in the same direction and consist of addressing parity of even numbers (i.e. 2,4,6,8...) on one side of the road and off numbers (i.e. 1,3,5,7...) on the other side of the road.	IPS	Noted, to be addressed at detailed design stage.
4	Both the proposed and final subdivision/site plans should be provided to Dufferin County. Proposed/approved road names should be clearly labeled on roadways and proposed/approved address should be clearly labeled on each lot on the plans which should be of sufficient quality and resolutions.	IPS	Noted, to be addressed at detailed design stage.



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5	During construction, address numbers should be posted as soon as possible on each lot for emergency response purposes and to aid in the building inspection process during construction. <i>Planning Division (Liam Morgan, Development Planner)</i>	IPS	Noted, to be addressed at detailed design stage.
1	The applicant must submit an entrance permit to allow access points onto County Road 17 and County Road 18.	IPS	Noted, to be addressed at detailed design stage.
2	Township staff are satisfied that the proposed development addresses all servicing requirements set out under the PPS, County Official Plan, and Township Official Plan.	IPS	Acknowledged
3	Township staff have confirmed that the Mineral Resource Aggregate Area (Sand and Gravel) the subject lands are in is not significant.	IPS	Acknowledged
Enbridge Gas Inc. Willie Cornelio, Senior Analyst Municipal Planning April 7, 2024			
1	Enbridge Gas does not object to the proposed application(s) however, we reserve the right to amend or remove development conditions. This response does not signify an approval for the site/development.	IPS	Acknowledged
2	Please always call before you dig, see web link for additional details: https://www.enbridgegas.com/safety/digging-safety-for-contactors	IPS	Acknowledged
3	Enbridge Gas does not currently have gas piping within the immediate area. To arrange for natural gas servicing to this development please contact Enbridge Gas at the following link: https://enbridge.outsystemsenterprise.com/GetConnectedApp_UI/NewGasServiceInquiry	IPS	Acknowledged
Canada Post Anna Burdz, Delivery Services Officer February 20, 2024			
	Canada Post requests that the developer be notified of the following:	IPS	The below information is acknowledged and will be addressed at detailed design and through potential conditions of approval.
1	Canada Post has reviewed the proposal for the above noted Development Application and has determined that the completed project will be serviced by centralized mail delivery provided through Canada Post Community Mail Boxes.	IPS	See above
2	In order to provide mail service to this development, Canada Post requests that the owner/developer comply with the following conditions:	IPS	See above
2.1	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.	IPS	See above
2.2	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.	IPS	See above
2.3	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.	IPS	See above
2.4	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.	IPS	See above
2.5	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.	IPS	See above
2.6	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 the Town of Oakville.	IPS	See above



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2.7	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.	IPS	See above
2.8	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.	IPS	See above
3	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.	IPS	See above
4	Enhanced Community Mailbox Sites with roof structures will require additional documentation as per Canada Post Policy.	IPS	See above
5	There will be no more than one mail delivery point to each unique address assigned by the Municipality.	IPS	See above
6	Any existing postal coding may not apply, the owner/developer should contact Canada Post to verify postal codes for the project.	IPS	See above
7	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	IPS	See above
Dufferin-Peel Catholic School Board Joanne Rogers, Senior Planner February 5, 2024			
	The Board requests that the following condition be incorporated in the conditions of draft approval:	IPS	Noted
1	That the applicant shall agree in the Servicing and/or Subdivision Agreement to include the following warning clause in all offers of purchase and sale of residential lots. a. "Whereas, despite the best efforts of the Dufferin-Peel Catholic District School Board, sufficient accommodation may not be available for all anticipated students from the area, you are hereby notified that students may be accommodated in temporary facilities and/or bussed to a school outside of the neighbourhood, and further, that students may later be transferred to the neighbourhood school." b. "That the purchasers agree that for the purpose of transportation to school, the residents of the subdivision shall agree that children will meet the bus on roads presently in existence or at another place designated by the Board."	IPS	Noted, to be addressed through detailed design and subdivision agreement.
2	The Board will be reviewing the accommodation conditions in each Education Service Area on a regular basis and will provide updated comments if necessary.	IPS	Noted.
Nottawasaga Valley Conservation Authority Emma Perry, Planning Ecologist January 18, 2024			
Ontario Regulation 172/06			
1	The property falls partially within an area affected by Ontario Regulation 172/06 (the Authority's Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation) where a permit is required from the NVCA under the <i>Conservation Authorities Act</i> prior to any development or site alteration. The area is affected by the regulation due to the Pine River, its valley system, floodplain and slope erosion hazard areas.	IPS	Acknowledged.
Natural Heritage and Ecology Comments			
Review Comments – Regulatory			
2	Addressed. A revised proposed lot fabric and updated Proposed Development & Constraints map illustrating the 6m TOB setback. An updated mitigation and compensation strategy for proposed works within 30m of wetlands	IPS/Azimuth	Acknowledged.



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	on the property has been provided. The applicant intends to revise the draft zoning bylaw, including Schedule A to ensure the lands are appropriately zoned. The revised zoning bylaw should be provided prior to draft plan approval or though a condition of approval.		
3	Addressed. Setbacks to features are addressed through the revised constraints map and the proposed offsetting strategy detailed in the response memo.	IPS/Azimuth	Acknowledged.
4	Addressed. An updated constraints map has been provided. <ul style="list-style-type: none"> a. Extent of proposed removal of the MAMM3-1 wetland feature has been calculated at 0.046ha and shown in the revised constraint mapping. Payment in the amount of \$11,040.00 to offset removal of wetland features is proposed and the proponent acknowledges this payment is required to clear this comment and cannot be deferred as a condition of draft plan approval. b. The watercourse 6m setback is noted on the revised mapping. c. No action required. d. A mitigation and compensation strategy has been proposed to address the reduced setback to the MAMM3-1 wetland. 	IPS/Azimuth	Acknowledged.
5	No action required.	IPS/Azimuth	Acknowledged.
6	Addressed. The applicant has acknowledged that temporary crossings to facilitate earthworks or preliminary servicing will not be authorized by the NVCA, that the final design of the crossing must be installed at the time of permit issuance.	IPS/Azimuth	Acknowledged.
7	Addressed. The response acknowledges that detailed Restoration and Naturalization Planting Plans will be prepared during detailed design through the conditions of draft plan approval. The applicant has provided conceptual planting strategies for existing agricultural lands between the rear pf lots #7, 8, 40, 41, 42 and the riparian corridor.	IPS/Azimuth	Acknowledged.
8	Addressed. The proponent has committed to incorporating the following design elements into the new Street "C" culvert crossing: Openness Ratio appropriate for small to mid-sized animals including mammals, reptiles (e.g. turtles) and amphibians (>0.1); Dry ledges for wildlife conveyance to permit passage of terrestrial wildlife; and, Open bottom culvert to minimize impact on the aquatic substrate.	IPS/Azimuth	Acknowledged.
9	Addressed. NVCA staff confirm that reduction of the width of the watercourse crossing has been duly contemplated with Township staff, and that the proposed width of the crossing is necessary to achieve the engineering design.	IPS/Azimuth	Acknowledged.
10	<i>Omitted by NVCA in previous communication.</i>	IPS/Azimuth	Acknowledged.
11	Addressed. The revised constraints mapping shows that all proposed lots have demonstrated a best efforts approach to maintaining and restoring the minimum 30m wetland buffer area in accordance with NVCA Guidelines Section 3.0. <ul style="list-style-type: none"> a. Lots #7, 8, 40 have been removed entirely from the 30m wetland buffer. b. Lots #41 and 42 remain partially within the wetland buffer, though it has been demonstrated that these encroachments are to facilitate minor regularization of the lot fabric and are offset appropriately in accordance with NVCA Guidelines. c. In addition to offsetting, mitigation measures are proposed to address encroachment concerns on lots #7, 8, 38, 39, 40, 41, 42: <ul style="list-style-type: none"> i. Installation of permanent exclusion fencing along the rear lot lines to be addressed through draft plan conditions; ii. Implementation of the Restoration and Naturalization Planting Plan for all agricultural lands beyond the rear lot line to the outer edge of the naturalized lands associated with the adjacent riparian corridor. iii. The grading plans have been conceptualized to include consideration for site preparation of the agricultural areas abutting the corridor in order to facilitate re-naturalization of these areas. d. Wetland offsetting is addressed as follows: 	IPS/Azimuth	Acknowledged. Draft Plan has been revised and final calculations to be addressed through detailed design and prior to obtaining a clearance letter from NVCA.



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	<ul style="list-style-type: none"> i. Direct wetland removal: 0.046ha at 1:2 offset ratio = 0.092ha cash-in-lieu in the amount of \$11,040.00. ii. Wetland buffer encroachment: 0.291ha at a 1:1 offset ratio in the amount of \$34,920.00, comprised of: 0.104ha cash-in-lieu for Lots #41 and 42 and 0.187ha for Street "C". iii. On-site compensation for SWM block encroachment will be achieved via naturalization where possible 		
12	No action required.	IPS/Azimuth	Acknowledged.
13	Addressed.	IPS/Azimuth	Acknowledged.
14	Addressed. Agricultural lands will be restored in accordance with the Restoration and Naturalization Plans.	IPS/Azimuth	Acknowledged.
15	Addressed. The depth of lots 7, 8, 40, 41 and 42 have been revised to incorporate more appropriate setbacks from natural features. Block 55 remains within the wetland buffer (but outside the ToB setback) which is proposed to be naturalized through the Restoration and Naturalization Plans.	IPS/Azimuth	Acknowledged.
16	To be addressed through a revised zoning schedule which incorporates the wetland setbacks in the proposed EP zone, based on the revised constraints map and responses provided to date	IPS/Azimuth	The revised draft bylaw captures the setbacks within EP blocks and zoning as submitted with this re-submission
Review Comments – Advisory			
17	All previous comments have been addressed.	IPS	Acknowledged
18	Additional discussion related to land dedication of the EP lands should occur through the detailed design review. NVCA staff recommend that the EP lands be conveyed into public ownership to ensure their protection in perpetuity.	IPS	Acknowledged
Note	Outstanding ecology items can be addressed through detailed design as conditions of draft plan approval, which NVCA staff will provide upon completion of the review. NVCA engineering review comments remain outstanding at this time and will be provided under separate cover through due process.	IPS	Acknowledged
1	We note that these comments are related to this submission and the information provided within this submission. NVCA requires additional information in order to complete our review and additional comments may be provided in the future.	IPS	Acknowledged
Nottawasaga Valley Conservation Authority Devin Metheral, Planner June 24, 2024			
Ontario Regulation 41/24			
1	The property falls partially within an area affected by Ontario Regulation 41/24 the Authority's Prohibited Activities, Exemptions and Permits Regulation where a permit is required from the NVCA under the Conservation Authorities Act prior to any development or site alteration. The area is affected by the regulation due to the Pine River, its valley system, floodplain and slope erosion hazard areas.	IPS	Noted
Natural Hazard – Regulatory Comments			
Natural Hazard Limits – Development Constraints			
2	<p>Please reference an overall existing conditions constraints map which present the applicable regulated natural hazard limits and any separate allowances in support of the development limits used for this Site.</p> <p>Applicant Response (February 2024): A PDF of the requested drawing is included in the re-submission package, prepared by GEI Consultants which shows the existing regulated area limit.</p> <p>NVCA Response (June 2024): Site plans identify the Regional Floodplain Hazard Limits based on the hydraulic assessment. The flood hazard limit will be approved once the flood study has been signed-off on by NVCA, and may need to be revised accordingly. The site plans do not clearly identify the full erosion hazard limit; rather, the "Top of Bank" and "6.0 m Setback from Top of Bank" are identified.</p> <p>Please add linework to identify the full erosion hazard limit extents. The erosion hazard limit should include the following; 1) applicable toe erosion component, 2) stable slope allowance, and 3) 6 m access allowance. The most recent site plans identify a "Top-of-Bank" and 6.0 m setback from Top of Bank; a top of</p>	IPS/Waters Edge/GEI	Correspondence from GEI provided under separate cover illustrating/identifying the requested hazard limit extents. Please note that the Draft Plan drawing only shows the outermost feature being the 6m access allowance.



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	bank demarcation is not sufficient to define the erosion hazard limit, which should be informed by the erosion hazard assessment		
	Draft Plan of Subdivision		
3	Please clarify that the slope erosion hazard limit shown on the Draft Plan includes the top of slope plus a 6 m access allowance. Please update the drawing as applicable. Applicant Response (February 2024): The slope erosion hazard limit includes the top of slope plus a 6.0 meter (m) setback from top of bank. Please see revised Draft Plan included in this submission. NVCA Response (June 2024): See comment #2 response.	IPS/Waters Edge/GEI	See response to above # 2– draft plan illustrates the outermost feature being the 6m access allowance. Correspondence from GEI illustrates all other hazard limit extents for clarity.
	Geotechnical/Hydrogeological Investigation – Peto MacCallum Ltd.		
4	Please provide an existing conditions erosion hazard limit drawing that is signed and sealed by the qualified professional. Please include with a legend that clearly identifies the separate components of the slope erosion hazard limit assessment, including a clearly defined long-term stable top of slope limit line from the assessment, plus a separate 6 m access allowance limit line. This separate information is not clear in several locations on the proposed conditions Draft Plan, considering the text provided with the line types. Applicant Response (February 2024): A PDF of the requested drawing is included in the re-submission package, prepared by GEI Consultants which shows the existing regulated area limit. NVCA Response (June 2024): See comment #2 response	IPS/Waters Edge/GEI	This material is provided in the correspondence from GEI.
5	Please confirm that the report references the preliminary design of the SWM measures including enhanced roadside swales and dry ponds has been reviewed and determined to be suitable considering soils and groundwater. Applicant Response (February 2024): See letter included within this resubmission, prepared by GEI Consultants. NVCA Response (June 2024): NVCA understands that no detailed SWM plans were available for review by the geotechnical consultant at this time. NVCA staff request that confirmation of geotechnical review of the final detailed design for the SWM ponds is provided prior to permit issuance. Please ensure that discussion is included regarding potentially high seasonal groundwater within the SWM blocks.	IPS/GEI	Noted, this can be included as a draft plan condition.
	Fluvial Geomorphological and Hazard Assessment – Water’s Edge Ltd.		
6	Section 3.2.2, Results, page 7 of 9: Please confirm if a sensitivity analysis such as 50% blockage scenarios were considered in the culvert sizing assessment, as referenced in Section 3.2.6 of the NVCA Natural Hazards Technical Guide, 2013. Applicant Response (February 2024): The 50% blockage scenario was modelled. Results provided in paragraph in 3.2.2 of Water’s Edge report. The culvert is sized large enough such that 50% blockage plus 10% embedment still allows flows to pass through the culvert. NVCA Response (June 2024): Acknowledged. HEC-RAS model was not accessible (file did not open) to provide additional details on proposed culvert configuration. Please provide additional details on the hydraulic parameters used to model the proposed culvert and submit a new version of the digital model files.	Waters Edge	Water’s Edge provided updated report directly to NVCA on September 18, 2024 after discussions with staff. Comment understood to be addressed
7	HEC-HMS Results page 17 of 21: Please also provide a schematic layout or figure which also identifies key hydrologic features referenced in the output table. Applicant Response (February 2024): See Figure 4 in Water’s Edge report, or attached HEC-HMS model. NVCA Response (June 2024): Acknowledged. Based on a review of the hydrologic model (HEC-HMS), it appears that some of the catchments have Initial Abstraction (IA) values that are higher than typically expected. NVCA staff request additional discussion on the methods used to compute rainfall losses, as well as a sensitivity analysis to determine the impacts of changing model input parameters and initial conditions on simulated flows. NVCA staff understand that a sensitivity analysis was completed for the 50% culvert blockage scenario. However, additional analyses are requested to ensure that the proposed crossing geometry is conservative, as informed by these model scenarios. In addition, please provide calculation sheets for the hydrologic parameters used in the model (CN values, initial abstraction, Time of Concentration).	Waters Edge	Water’s Edge provided updated report directly to NVCA on September 18, 2024 after discussions with staff. Comment understood to be addressed



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8	<p>General: Please provide a digital copy of the HEC-HMS hydrologic model and HEC-RAS hydraulic model in support of the floodplain study results.</p> <p>Applicant Response (February 2024): Models are provided with this submission, including data outputs for HEC-RAS (before & after).</p> <p>NVCA Response (June 2024): As noted in the response to Comment 13, the HEC-HMS model appears to have possible errors for the basin loss parameters. Please update accordingly. HEC-RAS model files were not accessible. Please provide a new copy of the digital model files in the next submission.</p>	Waters Edge	Water's Edge provided updated report directly to NVCA on September 18, 2024 after discussions with staff. Comment understood to be addressed
9	<p>General: Please document and support with calculations the key input parameters used to generate the hydrologic model.</p> <p>Applicant Response (February 2024): See HEC-HMS model, see HEC-RAS models. Tc equation added to report.</p> <p>NVCA Response (June 2024): As noted above, please provide detailed calculation sheets for each key hydrologic parameter, notably composite CN and Initial Abstraction values.</p>	Waters Edge	Water's Edge provided updated report directly to NVCA on September 18, 2024 after discussions with staff. Comment understood to be addressed
Functional Servicing Report and Construction Mitigation Report – Pinestone Engineering Ltd.			
21	<p>Section 6.1, Design Criteria, page 7 of 20: Please include the erosion control criteria for the Site area infiltration of 5 mm using infiltration measures such as LIDs. Please document and support that the criteria for LIDs can be met with the Site design.</p> <p>Applicant Response (February 2024): Technical Comment – To be addressed at the detailed design stage.</p> <p>NVCA Response (June 2024): NVCA staff note that Section 7.3 of the FSR speaks to erosion control for the proposed site plan. It is important to address erosion protection measures at this phase of the planning process to ensure adequate space is allocated to infiltration and stormwater management measures. Please see Comment #41 below for more information.</p>	PEL	Based on NVCA response, this comment has been addressed. Erosion control criteria has been addressed in section 7.3 of the FSR. A deficit has been roughly calculated with mitigation measures outlined (plunge pools in SWM ponds). Adequate space is provided based on conceptual pond layouts show on the conceptual plans. At the detailed design stage, these measures will be shown on the engineering drawings with further details outlined in the SWM Report.
22	<p>Section 7.1, Quantity Control, page 11 of 20: Please confirm that proposed grades are sufficient for the conveyance of runoff from catchment 201 to reach the Block 55 SWM dry facility as only one inlet was noted receiving overland flow from the south-west.</p> <p>Applicant Response (February 2024): Technical Comment – To be addressed at the detailed design stage.</p> <p>NVCA Response (June 2024): Additional details are required at the draft plan of subdivision stage to ensure sufficient space and grades are available to support the proposed SWM design. Please provide preliminary design details for the SWM facility and drainage plan for the property.</p>	PEL	The conceptual grading plan shows two major overland flow routes for catchment 201 into SWM Pond 'A'. The conceptual grading plan illustrates the size of the SWM facilities to service the site based on preliminary hydrological modelling. The conceptual grading plan also demonstrates that drainage conveyance to the ponds is feasible and will be refined at the detailed design stage. Preliminary hydrological modelling and stage-storage-discharge details for the ponds are provided in the appendices of the FSR and summarized in the report. Pre-development and post-development catchment plans have been provided.
23	<p>Section 7.2, Quality Control, page 15 of 20: Please document and support the in-Situ testing by a qualified professional referenced for the infiltration measures, as this information was not noted in the submission.</p> <p>Applicant Response (February 2024): Technical Comment – To be addressed at the detailed design stage.</p> <p>NVCA Response (June 2024): Infiltration capacity is required at this time to demonstrate that adequate space is being allocated for SWM/LID facilities. NVCA staff note that the provided PML report speaks to preliminary infiltration assessment. If in-situ testing is not available at this time, please demonstrate that preliminary understanding of the infiltration capacity on site and proposed SWM blocks are able to provide the required infiltration to meet stormwater management objectives.</p>	PEL	Based on PML's geotechnical/hydrogeological report, the native soils onsite are predominantly sand/sandy silt/silty sand with a field hydraulic conductivity of about $3.1 \times 10^{-6} \text{m/s}$ (borehole slug testing). This converts to an approximate infiltration rate of 58mm/hr which is well above 15mm/hr (limit where underdrains are recommended). Therefore infiltration-based LID and SWM facilities are feasible on this site. This is outlined in the revised FSR.
24	<p>Section 7.2, Quality Control, page 15 of 20: Please discuss the mitigation measures for outlet flow dispersion for both SWM facility outlets considering the outlets are located within an area subject to slope erosion.</p> <p>Applicant Response (February 2024): Technical Comment – To be addressed at the detailed design stage.</p> <p>NVCA Response (June 2024): This is acceptable. Final outlet configuration and design will be required for review prior to final NVCA approval.</p>	PEL/IPS	Noted – NVCA condition.
25	<p>Appendix D, page 163 of 406, SWM Facility A, SWM Facility B: Please reference a profile section to support the stage/storage rating tables noted. Please provide supporting calculation for the draw down time mentioned in the report text for both facilities. Please include section detail information for the control orifice, overflow orifice and emergency overflow weir.</p>	PEL	Profile sections of the SWM ponds will be provided at the detailed design stage once the configuration of the outlet control structure is refined. At this time, we have provided the preliminary configuration of the outlet control structures in the stage-storage-discharge sheets and write up provided in



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	<p>Applicant Response (February 2024): Technical Comment – To be addressed at the detailed design stage.</p> <p>NVCA Response (June 2024): Additional details are required prior to acceptance of draft plan of subdivision to ensure sufficient space and grades are available to support the proposed SWM design. Please provide preliminary design details for the SWM facility and drainage plan for the property.</p>		<p>section 7.1 of the FSR. Additional notes have been added to drawing SERV-1. Drawdown calculations for both ponds are summarized in the revised FSR and provided in Appendix D. The provided hydrological modelling confirms that the proposed SWM ponds illustrated on the conceptual grading plan are sufficiently sized for the development (subject to minor adjustments at the detailed design stage as the grading and servicing strategy is refined). The conceptual grading plan also confirms that there is adequate space for the SWM ponds.</p>
26	<p>Appendix D, page 154 of 406: Please document and support the design elements for the dry SWM facilities to meet the MOE 2003 SWM Planning and Design Manual. It is noted that the design does not yet reference forebay or energy dissipation measures at the inlet into each dry SWM facility.</p> <p>Applicant Response (February 2024): Technical Comment – To be addressed at the detailed design stage.</p> <p>NVCA Response (June 2024): Additional details are required prior to acceptance of draft plan of subdivision to ensure sufficient space and grades are available to support the proposed SWM design. Please provide preliminary design details for the SWM facility and drainage plan for the property.</p>	PEL	<p>The provided conceptual drawings and supporting FSR confirms that there is sufficient space and grading for the SWM facilities. The proposed dry-type SWM ponds are designed without sediment forebays. Pre-treatment will be provided by hydrodynamic separators upstream as outlined in the FSR and illustrated on the conceptual drawings.</p> <p>Energy dissipation measures will be designed at the detailed design stage. This is reasonable as the NVCA agreed to push the design of the outlet configuration to the technical approvals stage per comment 4 above.</p>
27	<p>Appendix D, page 154 of 406: Please document and support that a water budget which assesses the proposed conditions considering the impact of the proposed LID measures has been completed following the Thornthwaite methodology.</p> <p>Applicant Response (February 2024): Technical Comment – To be addressed at the detailed design stage.</p> <p>NVCA Response (June 2024): NVCA staff understand that a preliminary water balance has been completed by Peto MacCallum for the site, as part of the Geotechnical/Hydrogeological Investigation Report (2021). Please add a summary of the anticipated pre- and post-development water balance to the FSR. It is important to address the potential impacts to the water balance at this review stage to ensure that adequate space is allocated to LID facilities in order to mitigate against an infiltration deficit.</p>	PEL	<p>A water balance section outlining PML's findings and possible mitigation measures has been added to the revised FSR.</p>
28	<p>Appendix D, page 154 of 406: Please confirm that in the event of blockage in the conveyance system, that there is sufficient emergency overland flow capacity to safely convey the greater of the uncontrolled 100-year and Regional flow through the site. Please confirm that there is no more than 0.3 m depth of flooding expected along the roadway and that overland flow can still be conveyed to the SWM facility in the event of storm sewer blockage.</p> <p>Applicant Response (February 2024): Technical Comment – To be addressed at the detailed design stage.</p> <p>NVCA Response (June 2024): Safe access during the Regulatory storm event has not yet been demonstrated for the proposed site plan. Please demonstrate that safe conveyance of the Regulatory event, assuming all catchbasins and culverts are blocked, has been addressed in the proposed design.</p>	PEL	<p>In the event of blockage or severe storm event, runoff will overflow the catch basins and the proposed streets will convey flows to the proposed SWM ponds. Pond overflow weirs will convey flows to the existing watercourse. Capacity and depth of flow checks will be conducted on the road cross section and pond outlet weirs/spillways at the detailed design stage. We typically use Bentley Openflows Flowmaster or similar software for this.</p>
29	<p>Drawing POST-1: It appears that there are design components not clearly identified on the provided drawings such as inlet for Block 54 SWM dry facility or the location of emergency overflow weirs. Please update drawings as applicable in support of the design information provided in Appendix D.</p> <p>Applicant Response (February 2024): Technical Comment – To be addressed at the detailed design stage.</p> <p>NVCA Response (June 2024): Please include these details in the next submission.</p>	PEL	<p>Locations of the dry pond inlets and overflow weirs have been added to the revised conceptual drawings.</p>
NVCA Planning – Advisory Comments			
30	<p>Due to legislative changes which have changed our mandate, previous comments related to quality control are no longer applicable. All quality control review is now deferred to the Township of Mulmur.</p>	IPS	Noted
Ecology Comments – Regulatory			
31	<p>As noted in the Natural Heritage and Ecology Comments issued by Emma Perry on January 18, 2024 all previous comments have been addressed. Outstanding ecology items can be addressed through detailed design as conditions of draft plan approval, which NVCA staff will provide upon completion of the review.</p>	IPS	Noted



Triton Engineering Services Limited
Taylor Kramp, P.Eng
Peer Review of Traffic Impact Study prepared by JD Northcote Engineering dated February 2, 2024
May 15, 2024

	In general, the TIS has been prepared in accordance with accepted Traffic Engineering principles. The following comments are to provide clarification, or identify where there are concerns with the assumptions or conclusions. These are referenced to the titles in the report where applicable. The Peer Review focuses on the impact to the County Road system. The internal road system is subject to review by the local municipality	JD Engineering	Acknowledged.
1.4 Horizon Year and Analysis Period			
1	The report assumes a full build out year of 2026 and a horizon year of 2031. 2026 would appear to be an optimistic estimate for full build -out. The study should analyze a 10-year horizon period as well, to cover any delays in implementation.	JD Engineering	The report has been updated to include a 10-year horizon period to account for any potential delays in implementation. The revised report now assumes that the full build-out will occur by the year 2027, with horizon years set for 2032 and 2037.
2.1 Street and Intersection Characteristics			
2	The descriptions are generally accurate, but it should be identified that the curb and gutter on County Road 17 terminates approximately 60 metres west of Adrian Avenue, with the remainder of roadway being rural with gravel shoulders.	JD Engineering	The updated report addresses this concern and identifies the issue.
2.4 Other Developments within the Study Area			
3	The report assumes that all traffic generated by the Mansfield Gas Station West will be new traffic. In lieu of having access to the traffic study completed for the Mansfield Gas Station West, the report calculates the existing traffic for this site based on the ITE Trip Generation Manual for a gas station and coffee/donut shop with drive through window and applies the trips to the road network based on existing traffic patterns. The ITE codes for these types of land uses allow for a reduction in total trips generated to account for by-pass trips that would have already been travelling on adjacent roadways. The report applies the reduction in total trips appropriately in order to add the primary trips to the existing traffic count, which was completed prior to completion of the Mansfield Gas Station West development. We consider this approach acceptable and will provide conservative results.	JD Engineering	Acknowledged
2.5 Background Growth Rate			
4	The report assumes a background growth rate of 4.7% for Couty Road 18 and 4.4% for County Road 17. These values are conservative and acceptable.	JD Engineering	Acknowledged.
2.6.1 Calculation of Existing (2024) Traffic Volumes			
5.1	Existing traffic counts were undertaken at the intersection of County Road 17 and County Road 18 in July 2021. These are potentially affected by Covid 19 restrictions and the report apples an adjustment by applying the growth rate noted above to the 2017 traffic count on DR18 and 2019 traffic count on DR17 and comparing to the intersection traffic count undertaken by JD Northcote. The comparison resulted in the intersection traffic count volumes being increased by 58% on CR18 and 14% on CR17. We consider this approach acceptable and will provide conservative results, but should include a comparison to recent 2023 traffic counts undertaken on DR18 by the County. The 2023 counts may be requested from the County.	JD Engineering	New traffic counts at the intersection of County Road 17 and County Road 18, completed on Tuesday, June 19, 2024, were used to update the traffic analysis.
5.2	In lieu of undertaking a traffic count at the intersection of CR17 and Thomson Trail, the report applies the eastbound and westbound traffic based on the traffic count volumes from the intersection of CR18 and CR17, adjusted for Covid 19 restrictions. It also applies the ingress and egress traffic volumes on Thomson Trail based on trips generated calculated from the ITE Trip Generation Manual for single family detaching housing and the 2016 Transportation Tomorrow Survey data. This approach is acceptable, but a traffic count at this existing intersection is a usual expectation for a study of this scope.	JD Engineering	Noted – it is acknowledged that no further action is required on this.
5.3	The report combines the 2021 traffic volumes, adjusted for Covid 19 restrictions and the growth rate, in addition	JD Engineering	Acknowledged.



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	to the Mansfield Gas Station West trips generated to produce existing 2024 traffic volumes. This approach is acceptable.		
5.4	Given the known tourist commuting nature of DR18, the study should undertake a summer Friday or Sunday traffic count and analyze the impacts during this weekend period.	JD Engineering	The updated report includes traffic analysis for peak hours on Friday and Sunday, as well as weekday AM and PM peak hours.
4.1 Traffic Generation			
6	The report applies the ITE Land Use Code 210 from the 10 th Edition for all proposed units in the development. A Land Use Code for single family attached dwellings was added in the 11 th Edition of the ITE Trip Generation Manuals, but using the LUC 210 from the 10 th Edition will provide a conservative analysis and is considered acceptable.	JD Engineering	The updated report is based on the Land Use Code 210 for single-family attached dwellings, which was added in the 11th Edition of the ITE Trip Generation Manual.
4.2 Traffic Assignment			
7	The report distributes the proposed development trip generation based on the 2016 Transportation Tomorrow Survey data. The data used for this trip distribution is different than the distribution used for the Thomson Trail development as discussed in section 2.6.1.2. The report should clarify why this data is different.	JD Engineering	The updated report addresses this concern by using the 2016 Transportation Tomorrow Survey data for trip generation for both the Thomson Trail development and the proposed site.
5.2 Total (2031) Intersection Operations			
8	The report summarizes that left turn lanes at the signalized intersection of DR18 and DR17, right turn lanes at the unsignalized study intersections, and traffic signals at the unsignalized study intersections are not warranted. We agree with these conclusions.	JD Engineering	Acknowledged
5.3 Sight Distance Review			
9.1	The sight distance at the proposed access on CR17 meets the minimum requirements as per the County's Entrance Policy. We agree with this conclusion	JD Engineering	Acknowledged
9.2	The report notes that the proposed vertical curve improvements on DR18 have been designed to meet the minimum TAC requirements for a posted speed limit of 50km/h. The proposed curve at station 2+96.08 has a k value of 12.26. This should be adjusted to meet the minimum requirements for a design speed of 20km/h above the 50km/h posted.	JD Engineering	A revised design has been included in Appendix H, with a minimum k value of 43.47.
9.3	The proposed design for the vertical curve improvements on DR18 show curve at station 2+96.08 extending into the 70km/h posted speed limit zone. This curve should be adjusted to meet the requirements of a 70km/h posted speed limit if the County has no plans to adjust the location of the 50km/h zone.	JD Engineering	Based on our correspondence with the County, we understand that a minor adjustment of the 50km/h zone is possible and can be confirmed as part of the detailed engineering design.
9.4	The proposed profile appears to reduce the existing sight distance along DR18, which is of concern particularly in proximity to the signals at CR17. Any profile changes should not reduce any existing sight distances.	JD Engineering	Noted and Acknowledged.
9.5	Lowering the road to accommodate this vertical curve improvement will result in the backslope on the east side of DR18 being extended into the proposed development property. The report should confirm that the proposed road widening (Block 65) is sufficient to accommodate the vertical curve improvements.	JD Engineering	Grading within the subject site can be adjusted to ensure the grading on Airport Road meets the typical design threshold. The final grading design will be completed as part of the detailed engineering design.
9.6	The analysis should confirm that all entrances within the sight distance of the proposed vertical re-alignment do not have reduced sightlines due to the proposed work.	JD Engineering	The revised plan and profile drawing in Appendix H illustrates the sight distance for all driveways impacted by the proposed vertical re-alignment
9.7	Proposed cross sections should be included in the report to review any impacts to the properties along the west side of DR18 and demonstrate that there aren't any negative impacts. The improvements are not to impact properties on the west side, or increase the grade of existing driveways beyond acceptable values.	JD Engineering	A detailed grading design will be provided as part of the detailed engineering submission. All the existing residential driveway, south of Street 'A' slope away from County Road 18. The change in road elevation is less than 0.5m for all residential driveways, consequently driveway grades will fall within typical design threshold.



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9.8	The proposed vertical re-alignment of CR18 would be costly and result in significant disturbance. As noted above, the net changes may have other negative effects. No analysis has been provided as to why the entrance is necessary, as it would appear that there would be sufficient excess capacity at the proposed access on DR17 at Thompson Trail. Confirmation should be provided if this access is essential.	JD Engineering	The option to remove the Street 'A' access was discussed with the Township and County. It was determined that access onto County Road 18 was preferred for traffic distribution and emergency access redundancy.
Active Transportation			
10	Active Transportation was not addressed in the report. Sufficient linkages are required between the proposed residential development and the existing commercial establishments in Mansfield. This should include a discussion of the suitability of the existing asphalt kill strip and its use by pedestrians. The existing rural section with gravel shoulders on CR17 in the vicinity of the proposed access at Thompson Trail is not suitable for pedestrians.	JD Engineering	It is understood this will be further addressed at detailed design.
Site Plan Comments			
11	The proposed 10x10 metre daylight triangles do not meet the requirements of the County Entrance Policy. The site plan includes future connections through Blocks 57 and 58. The report should acknowledge these future connections and perform a sensitivity analysis assuming some traffic will use the proposed accesses on DR18 and DR17	JD Engineering	Revised daylight triangles are shown on the revised draft plan as required. The development of the land north of Block 56 (now block 58) is not part of this application. The specifics for the development of this property are not known. A traffic analysis will be required for this property when the development specifics are known.
Dufferin County Shophan Daniel, CET & Mike Hooper CET April 30, 2024			
General Comments - Engineering			
1	Please note that the County will be holding 100% securities for all works proposed within the County's Right of Way (ROW).	IPS/PEL	Acknowledged
2	With the subsequent submission please provide a cost estimate for all proposed works within the County's Right of Way.	PEL	Cost estimates will be provided at the detailed design stage.
3	Please note that the Owner will be required to enter into a development agreement with the County of Dufferin. As part of the agreement the Owner is responsible for all County Road improvement costs resulting from the proposed development.	IPS/Developer	Acknowledged
4	Please note that a Dufferin County issued Road Occupancy Permit must be obtained prior to completing any work within the County's Right of Way.	Developer	Noted
5	Please note that a Dufferin County issued Entrance Permit will be required for any modification to an existing entrance, or for the construction of a new entrance. This includes the proposed intersections on Dufferin County Road 17 and Dufferin County Road 18 (Airport Road).	Developer	Noted
6	The proposed site entrances must meet the minimum sightline requirements outlined within Dufferin County's Entrance Policy 5-3-17, and the sightline requirements outlined within the Transportation Association of Canada (TAC) Geometric Design Guide for Canadian Roads.	JD Engineering	To be fully addressed and designed at detailed design.
7	All drawings that require review from the County shall be stamped and endorsed by a Professional Engineer licensed in Ontario (P. Eng).	JD Engineering/PEL	Acknowledged
8	Consideration should be given to shift Street 'A' to provide the required southern intersection site triangle. Township separation/setback requirements must be confirmed from the Street 'A' right of way to the existing residential property.	JD Engineering/IPS	Draft plan has been revised per discussions with County
9	Daylight triangle dimensions must meet the minimum requirements outlined in Dufferin County's Entrance Policy 5-3-17.	JD Engineering	
10	The County requires a 0.3 metre reserve along the entire length of the subject property fronting Dufferin Airport Rd and Dufferin County Road 17 except the proposed driveways.	IPS	Draft Plan includes this request.



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11	Update the profile on DWG. PP-2 to include both existing and proposed centreline elevations. Also include proposed ditch inverts, culverts etc.	PEL	PP-2 has been updated to reflect the comment and additional comments we have received from the County through recent correspondence.
12	Dufferin County Entrance Detail DC-01 is not applicable and can be deleted from DWG. DET-1.	PEL	Acknowledged. This detail has been removed from the drawings.
13	Reconstruction of Dufferin County Road 18 will be administered through a public tender process directed by the County. The Owner will be responsible for preparing all issued for construction specifications and plans to the satisfaction of the County.	Developer	Acknowledged.
Grading Comments			
14	Update the grading plans to include existing and proposed elevations at the following locations on County roads: <ul style="list-style-type: none"> • Edge of pavement • Edge of shoulder • Invert of ditch • Elevations at all existing features within the right of way • Property, block, and lot lines, 10 m into the property, as well as appropriate intervals throughout the site 	PEL	The preliminary PP drawing for Airport Road have been revised to show this information and have been previously submitted to the County for review. We understand that the County has accepted the design in principle and additional detail will be required at the detailed design stage.
15	It is unclear how the external drainage area is being accommodated. Please update the applicable plans to illustrate the existing external drainage area contributing to the site, along with major overland flow arrows.	PEL	Conceptual drawing POST-1 has been revised to indicate locations of external drainage area being accommodated in the SWM plan for the site.
16	At detailed design, engineering drawings will be required to illustrate any modifications or enhancements to Dufferin County Roads 17 and 18. Please include cross-sections at 20.0 metre intervals along Dufferin County Roads, extending from the south and west right of way limits, 30 metres into the development. Additionally, please provide cross-sections at each intersecting street.	PEL	Preliminary sections have been previously provided to the County for review. We understand detailed sections will be required at the detailed design stage.
17	A typical road cross-section will be required as part of the detailed design of Dufferin County Road 18. Please include the following as part of subsequent submissions. <ul style="list-style-type: none"> • Pavement and subgrade design <ol style="list-style-type: none"> 50mm HL3 Asphalt 110mm HL8 Asphalt 150mm Granular 'A' 600mm Granular 'B' Type III • Typical Road Cross-Section <ol style="list-style-type: none"> 9.0-metre-wide paved platform with 2.5-metre-wide paved shoulders 0.9-metre-deep ditches Restoration complete with 100 millimetre thick topsoil and seed or sod <p>Alternatively, the County may consider specific pedestrian considerations and cross-section modifications as required by the Township.</p>	PEL	To be addressed at detailed design.
18	One lane of traffic must be maintained during construction. Traffic staging plans demonstrating this requirement will be required as part of future submissions.	PEL	Noted. To be addressed at detailed design.
Servicing Comments			
19	Please note that all future maintenance of septic shall be completed from within the local road, not the County Roads.	Developer	Noted
20	Relocate the Street 'A' low point and double catch basin within the limits of the development property.	IPS	Street A has been relocated
21	As part of this application the County will require the Township to enter into an easement agreement with the County for the existing and proposed watermain. Please note that County will be contacting the Township for further discussion.	IPS	Noted
22	Consideration should be given to extending the proposed watermain on Dufferin County Roads 18 and 17 to the edge of the property limits.	PEL	Acknowledged.
23	Locate the proposed fire hydrant(s) on Dufferin County Road 18, 0.3 metres from the ultimate right of way limit.	PEL	The conceptual drawings have been revised.
24	Please include fire hydrant access details if applicable.	PEL	Noted, to be addressed at the detailed design stage.



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25	The minimum entrance/intersection culvert size permitted under Dufferin County's Entrance Policy is culverts is 450mm diameter. Please update Street 'C' and include calculations demonstrating that a 450mm pipe is adequate.	PEL	The conceptual drawings have been revised to show 450mm dia. entrance culverts. Culvert calculations will be provided at detailed design stage.
26	Please clarify why a culvert has not been provided beneath Street 'A'. Is the intention to direct drainage from Dufferin County Road 18 into the development? Our preference is to maintain separation between two areas.	PEL	The conceptual drawings have been revised to show 450mm dia. entrance culverts.
27	Curb proposed within the County right of way shall be in accordance with OPSD 600.030	PEL	Acknowledged.
Functional Servicing Report/Stormwater Management comments			
28	As noted with the County's first submission comments an investigation of the Dufferin County Road 17 ditch is required to demonstrate that this is a suitable outlet for the proposed stormwater management facility. This investigation must confirm that no ponding will occur within the County ditch and that positive flow will continue to a suitable location. <i>(Not Addressed from last submission)</i> .	PEL	The flood plain modelling shows that there is no increase in flow or water surface elevation at the private driveway culvert immediately downstream of the subject site. Since there is no increase at this location, there will be no change from the existing situation within the ditch along the County Road 17 either.
29	In tables 4 and 5 two flow rates are shown, please clarify which storm event was used to calculate the volume for the ponds.	PEL	The ponding volumes during each modelled design storm event are provided in Table 7 and Table 8 of the revised FSR.
30	Please clarify what is the draw down time for both the ponds, in the event if there are two back-to-back 5-year storms events which occur now due to climate change. would the pond be able to accommodate the volumes?	PEL	Both dry ponds have been designed to maximize the drawdown times during the 25mm storm event to address the NVCA's erosion control criteria. During a 25mm storm event, the drawdown time for Pond 'A' is 41 hours and the drawdown time for Pond 'B' is 6 hours. The pond drawdown times for two back-to-back 5-year storm events would exceed these times. Since the 5-year ponding volume for Pond 'A' is 2,079m ³ and the maximum storage volume in the pond (below the weir) is 4,186m ³ , it can accommodate the two back-to-back 5-year storm events volume of 4,158m ³ . Since the 5-year ponding volume for Pond 'B' is 329m ³ and the maximum storage volume in the pond (below the weir) is 980m ³ , it can accommodate the two back-to-back 5-year storm events volume of 658m ³ . These are conservative volume estimates as the second 5-year storm event would drawdown faster as a result of changing pond hydraulics due to the secondary control orifices.
31	Assessing, preventing and mitigating thermal impacts on the receiving Stormwater system shall be considered as an integral part of stormwater management. The seasonal tributary may support cold water habitat please confirm with the conservation authority if thermal impact measures are required.	PEL	Acknowledged. We note that thermal impact measures are not required by the conservation authority for this water course. Therefore, we consider this comment addressed.
32	It is unclear how the weight run-off coefficient is being selected, with the subsequent submission please provide a breakdown of how the weighted C is being calculated.	PEL	Catchment parameter design sheets are provided in Appendix D of the revised FSR. These design sheets include a breakdown of the land use areas for each catchment used to derive composite runoff coefficients.
33	We presume that a 10min time of concentration (Tc) is being used in the post-development scenario. If that is incorrect, please provide the actual Tc for the proposed development.	PEL	Time of concentration for the catchment areas is calculated using the Airport/Bransby-Williams formulas. These calculations are provided in the catchment parameter design sheets included in Appendix D of the revised FSR.
34	The drainage area shown in the Oil Grit Separator (OGS) sizing calculation does not match the drainage area shown in the post development drainage plan. Please revise or provide justification why a small area was used for the calculations.	PEL	Smaller catchment areas are chosen for the OGS sizing calculations because the OGS units do not accept drainage from the SWM Pond blocks nor from a portion of drainage area in Lots 24-27. This has been outlined in the revised FSR.
Traffic Comments / Active Transportation			
35	Please note that County Road access points shall be designed to the satisfaction of the County and be in locations that will not create a hazard due to impaired line of sight, or any other safety, transportation, or land use planning consideration.	JD Engineering	Noted. The TIS demonstrates that the County Road access points will not create a hazard due to impaired line of sight, or any other safety or transportation consideration.



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36	The provided sight-line analysis drawing must be stamped by a P.Eng. Also, please include a similar analysis for the proposed Street 'C' intersection.	JD Engineering	The final engineering plan for Airport Road will be stamped by a P.Eng. The existing functional design is in the appendix of a report which is stamped by a P.Eng. A sight distance review was completed in 5.4 of the TIS. The sight distance east and west of Street 'C' is greater than the minimum visibility requirements identified in the County Entrance Policy.
37	The County supports walkable communities where continuity and connection of pedestrian infrastructure is provided. Pedestrian infrastructure that terminates at a County Road resulting in pedestrian traffic being directed to an arterial road shoulder is not sufficient. Consultation with the Township is required to understand pedestrian infrastructure requirements.	JD Engineering	Noted – this is understood to be addressed with the Township through detailed design.
38	Considering the comment above, please clarify the need for the sidewalk on Street 'A' between Street 'B' and Dufferin County Road 18.	JD Engineering	Noted - to be discussed with the Township to their satisfaction.
39	Additional pedestrian infrastructure may be required on Dufferin Road 17 if Walkway Block 53 is required by the Township.	JD Engineering	Noted – to be discussed with the Township to their satisfaction.
40	The Traffic Study (TIS) and the sightline analysis is being reviewed by the County's peer reviewer. comments on the TIS will be provided under a separate cover letter shortly. Please note all costs associated with peer review will be borne by the Owner.	JD Engineering	Noted – peer review comments have been addressed herein.
41	Road widening blocks have been illustrated along the property frontage on Dufferin County Road 18 and Dufferin County Road 17. Please provide additional dimensions further clarifying the width of the blocks. The County requires a 5.0 meter widening at these locations. <i>(Not addressed from last submission)</i> .	JD Engineering	Road widening blocks are dimensioned (5.0m) in the revised Site Plan.
*	In the subsequent submission please provide the County with a comment matrix showing each comment is addressed.	IPS	This matrix is intended to address comments.
Public Meeting Comments			
	Has there been any consideration to including commercial uses/mixed use on the site	IPS	Commercial uses have been considered but not proposed for this site. The lands are currently designated by the Township Official Plan for Residential uses and the core commercial area of Mansfield is located at the intersection of Airport Road and County Rd 17. Commercial uses on the site would have the potential of expanding the commercial area of the Town which is not contemplated by the Official Plan. Further, there are additional challenges with servicing commercial/mixed uses on the site, and residential uses are proposed as the logical and most appropriate use of the lands.
	Can the semi detached units be developed without a condo (to assist with affordability)	IPS	The semi detached concept is intended to offer a housing type that is not otherwise available in Mansfield; the inclusion of a condominium corporation(s) provides the opportunity to consolidate infrastructure (in particular sewage) which results in a more efficient use of the lands. A higher yield of units is achievable, and desirable, as it not only provides more housing options, but also reduces the overall land costs. For example, the condominium structure COULD be eliminated, however as would the proposed private roads and communal sewage services, resulting in more space needed per unit, reducing the number of units and increasing the cost of each unit. The condominium structure proposed does generate condo fees, however the purchase price of the units are reduced as there is a higher yield vs no condominium and lower yields.
	Will there be sidewalks within the development	IPS	Sidewalks have been requested by the Township through the development and to be confirmed through further discussion.



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Is there enough water?	IPS	Township staff have confirmed there is sufficient capacity for the required water supply to this development.
Traffic concerns and will lights be installed on 17/Thompson?	IPS	A traffic study has been completed and applicant is coordinating with the Township and County to obtain approval. Lights are not contemplated or expected to be required to accommodate the development.
Wetland on site used to be flowing, has this been evaluated	IPS	A fulsome submission package has been prepared, including consideration of natural heritage features and functions. Through consultation with the NVCA, they are satisfied that all ecological concerns have been addressed or can be addressed through draft plan conditions and have no objection to the approval of the applications.
Is propane proposed or is natural gas viable Will this development result in an increase in taxes due to higher servicing costs Will residents pay more for water due to development Will there be fencing along the eastern property line to prevent trespassing/walking	IPS	The site is anticipated to be serviced with individual propane supply, as natural gas is not available in the area. Tax rates are not expected to be impacted by the proposed development as all servicing costs will be borne by the developer. It is also noted that should the applications be approved, the development will increase the tax base which will be used, in part, to offset future maintenance costs. Further to that, no increases to costs for water are anticipated as a result of the development. Fencing can be implemented, where required to address concerns with trespassing onto private property – this can be included as a draft plan condition as appropriate.
Who will be responsible for sidewalk maintenance Will there be on street parking Rules should be implemented regulating on street parking.	IPS	Township has confirmed the municipality is responsible for sidewalk maintenance. On street parking will be determined by the municipality along with any potential restrictions.
Comments from Council at Public Meeting		
Would like to see a range of housing prices for both built forms	Developer	Price points or housing costs are constantly fluctuating based on a number of external considerations including financing rates/considerations, market conditions, labour and construction costs, development charges etc. The proposed dwellings are anticipated to be comparable to housing costs with a similar built form within the settlement area and other similar developments within the county, while the proposed semi detached dwellings are expected to be offered at a lower price point than the proposed single detached dwellings.
How do we mitigate against increased housing/unit sizes	IPS	Zoning, and development agreements (subdivision agreement, condominium documents) will mitigate any potential increased unit/housing sizes, along with building code/permit processes.
May not be enough parking Will there be on street parking on Street C, it is a tight thoroughway.	IPS	A minimum of 1 driveway parking space per unit is provided, in addition to private garages and additional visitor parking areas. On street parking is at the discretion of the Municipality, however it is our opinion that sufficient off street parking has been provided to serve the development in accordance with the Zoning bylaw. .
Can we get enbridge to service the Settlement Area	IPS	Any agreement with enbridge and the municipality would be between both parties and not the developer. It is understood that enbridge has advised there is insufficient users to justify the cost of expanding into Mansfield, currently. Should more development be approved, it is possible that enbridge can support expansion.



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	<p>What can be done to ensure units are “visitable” and accessible, and GREEN/energy efficient. Suggest plans include bedrooms on main floor (for semis)</p>	IPS	<p>At this stage, the applicant is committed to providing options for end users to accommodate various design objectives, however that would be dealt with on a case by case basis by individual homeowners, with more details to be identified through the detailed design process if the applications are approved (ie lot grading plans). Every effort will be made to accommodate accessibility needs within the semis in particular as these units are intended to accommodate an aging/downsizing demographic. Conceptual plans propose the 2 bedrooms and bathrooms on the main floor to support this.</p>
	<p>Options to eliminate/minimize steps into house</p>	IPS	<p>This will be further explored at the detailed design stage as lot grading is further evolved with the intention of minimizing grading constraints and supporting accessibility.</p>
	<p>Geothermal an option? Will units be fitted for EV charging.</p>	IPS	<p>Geothermal energy can be offered to individual purchasers on a case by case basis. Through detailed design, the potential to offer EV Charging will be explored and accommodated as able.</p>
	<p><i>Traffic Two way stop sign only across from Thompson is a concern Are there turning lanes required</i></p>	IPS	<p>A traffic study has been completed and proposes stop signs for traffic controlling. This study is under technical review and it is anticipated that stop signs will be used as traffic lights are not warranted based on traffic volumes/site lines and other provincial considerations.</p>
	<p><i>How many builders for development?</i></p>	IPS	<p>It is anticipated that should the development be approved that all lots/units would be sold to a single homebuilder.</p>