

Detailed Comment Response Matrix - November 11, 2024

Marsville North Comments Sept 2022		
Comment	Responsability	Response
Dufferin-Peel Catholic District School Board		
1 The Board requests that the following condition be incorporated in the Conditions of Draft approval:		
2 1. That the applicant shall agree in the Servicing and/or Subdivision Agreement to include the following warning clauses in all offers of purchase and sale of residential lots:	Subdivision Agreement	Subdivision agreement to be prepared by Town
3 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."	Subdivision Agreement	Subdivision agreement to be prepared by Town
4 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."	Subdivision Agreement	Subdivision agreement to be prepared by Town
5 Rogers		
6 Prior to registration of the plan of Subdivision, the Developer/Owner will, at its own cost, grant all necessary easements and maintenance agreements required by those CRTC-licensed telephone companies and broadcasting distribution companies intending to serve the Subdivision (collectively, the "Communications Service Providers"). Immediately following registration of the Plan of Subdivision, the Developer/Owner will cause these documents to be registered on title.	Subdivision Agreement	Subdivision agreement to be prepared by Town
7 Prior to registration of the plan of Subdivision, the Developer/Owner will, with consultation with the applicable utilities and Communications Service Providers, prepare an overall utility distribution plan that shows the locations of all utility infrastructure for the Subdivision, as well as the timing and phasing of installation.	Subdivision Agreement	Subdivision agreement to be prepared by Town
8 Dufferin County		
9 We have no additional comments related to the June 20, 2022 resubmission. The following comments provided as part of the previous submission apply.		Noted
10 As the project progresses Dufferin County will continue to review details surrounding paving of the Dufferin County Road 3 and 13th Line intersection.		Noted
11 Confirmation is required from the Municipal Drain Superintendent/Engineer that the proposed works associated with the Thunderbird drain will not negatively impact drainage within the Dufferin County Road 3 corridor. It is our understanding that this municipal drain starts south of the Dufferin County Road 3 right of way and extends through the proposed development site.	Township	
12 The County of Dufferin Public Works Waste Services comments will be circulated as a separate letter.		Noted
13 County Planning		
14 Same planning comments still stand		Noted
15 County Waste		
16 I have no concerns or comments about this site plan. Dufferin Waste will be able to provide collection. Residents must abide by the Waste Collection By-law		Noted
17 Hydro One		
18 No comments or concerns		Noted
19 Burnside		
20 The developer has proposed minimum lot size of 0.5 acres. We note that to ensure reasonable amenity space is provided, the developer is proposing tertiary sewage systems due to the 0.5 acre lot sizes. As noted previously, Council has a general preference for the use of ditches and lot sizes that are at least 0.6 acres to maintain the rural feel. Acceptance of this smaller lot size is subject to Council direction.		Addressed with urban cross section
21 A revised draft plan was not submitted; therefore, the following comments have not been addressed:		
22 a) The corner of Lot 30 should be adjusted to less than a 90 degree turn.		See revised draft plan
23 b) The existing Park/Utility block should be relabeled to Park/Municipal Water System.		See revised draft plan
24 c) The municipal drain block is to be widened to accommodate a 3.5 m flatter area on one side to allow for maintenance.		See revised draft plan

25	The developer's engineer proposed a 3.5 m maintenance easement on Lot 25 to address this comment. The use of a proposed easement on Lot 25 as a maintenance access to the stormwater Block 24 is not appropriate because fencing along the block/lot line will obstruct access to the drainage channel. Block 33 should be wide enough to include the access route which will avoid obstruction by fencing the block.C30	GEI Consultants	See response memo prepared by GEI Consultants
26	The channel side slopes in the stormwater conveyance Block 24 are to be a minimum 3:1 (h:v) which may also affect the width of the block. The FSR states that the proposed channel side slopes in Block 24 are 2:1 which are too steep for safety and maintenance purposes.	GEI Consultants	See response memo prepared by GEI Consultants
27	d) The rear yard swale behind Lots 1 to 5 is over 200 m long and is directed to one rear yard catch basin (RYCB) in close proximity to the SWM Pond. GM BluePlan wishes to defer further review until detail design; however, the proposed grading design can impact the draft plan.	GEI Consultants	See response memo prepared by GEI Consultants
28	The SWM Block lot limits should be expanded to accommodate RYCB.37	GEI Consultants	See response memo prepared by GEI Consultants
29	Another RYCB is required. The location needs to be determined at this stage to confirm if the Township will require a drainage block and/or easement.	GEI Consultants	See response memo prepared by GEI Consultants
30	Topographic information does not extend beyond the limits of the subdivision. It's not clear whether this rear swale will accept drainage from the external subdivision which would further exacerbate the need for an additional inlet.	GEI Consultants	See response memo prepared by GEI Consultants
31	e) It's not clear why a portion of the Brouwer drainage area is being diverted through the subdivision. The drainage should continue to outlet as it does in existing conditions which will likely require additional land area by the 13th Line on Lot 17. The drainage feature should be contained within land owned or to be dedicated to the Township.	GEI Consultants	See response memo prepared by GEI Consultants
32	Further direction from Council is required with respect to the 13th line road connection. Preference would be to service the subdivision off the two existing entrances off of County Road 3.	GEI Consultants	Input from the Township's consulting engineer via email has confirmed the site accesses are appropriate via from Carley Dixon, RJ Burnside, dated April 24, 2024 which is included in the digital submission package
33	There still remains some design concerns and until they are addressed, we cannot confirm that the 30 lots can be developed from an overall grading/groundwater/stormwater management perspective. There also remains the urban cross section question.	GEI Consultants	Addressed as part of updated designs
34	Groundwater:		
35	Burnside noted in the previous review there are significant concerns with respect to the high groundwater and the proposed design. To alleviate the concern, the developer is proposing to eliminate the use of basements and have changed the road to an urban cross section. We remain concerned with the preliminary grading design, even if the Township was prepared to accept an urban cross section (which has not been determined). Additionally, the design parameters for dwellings without basements (and potentially elevated) needs to be addressed.	GEI Consultants	The majority of lots will be slab on grade, with some basements possible on a lot specific basis should conditions permit
36	The slab elevations of numerous lots are at or below the groundwater table contours shown on the Grading Plans. The slab elevations and grading design should be revised to prevent the mining of groundwater through permanent dewatering. Further consultation with the geotechnical and hydrogeological consultant to obtain input with respect to minimum separation from the seasonally high groundwater and other design considerations for high groundwater is required. After the preliminary grading is revised, a revised "Foundation Recommendations" letter should be submitted.	GEI Consultants	See response memo prepared by GEI Consultants
37	The letter prepared by JLP Services Inc. recommends raising the proposed finished grades near the monitoring wells installed on the east side of the municipal drain to avoid permanent under foundation drainage systems. This was not reflected in the preliminary grading design. The site needs to be raised as much as possible to mitigate issues with groundwater to the extent possible.	GEI Consultants	See response memo prepared by GEI Consultants
38	An updated hydrogeology tech memo should be submitted documenting the groundwater hydrographs measured between Feb. 2020 and Dec. 2021. The levels noted in the table included in the JLP Consultants letter dated April 4, 2022 have not been documented and reviewed.	GEI Consultants	See response memo prepared by GEI Consultants

39	Should foundation drain connections (by gravity or by pumping) to the storm sewer become part of a final foundation drainage system after addressing basement slab levels relative to high groundwater elevations, a 100 year storm hydraulic gradeline analysis will be required to show the lowest living space floor is 0.5 m above the 100 year storm HGL.	GEI Consultants	See response memo prepared by GEI Consultants
40	Municipal Drain:		
41	The Developer has proposed significant work on two municipal drainage works but have not completed any analysis downstream with respect to impacts and necessary improvements. Our Drainage team has provided the enclosed letter that recommends steps related to the work proposed. As this is a significant element of the overall design, we would not be able to support draft plan approval until the final reading of the by-law was completed to solidify the completion of the works.		Noted
42	Brouwer Drainage Works:		
43	The revised concept proposes to re-direct external drainage from Brouwer Drainage Works through the subdivision and stormwater management facility ultimately changing the outlet of this water to the Thunderbird Drainage Works. The diversion of this external runoff results in larger storm sewers and a larger SWM facility, not to mention there has been no downstream analysis regarding the impact. This diversion is not supported. The double ditch inlets at the entrance to the 13th Line should be removed and a culvert installed sized to ensure major storms continue to be directed to the Brouwer Drainage Works. The reduced volume of runoff through the SWM pond block may reduce the pond block size and offset for the creation of the drainage block beside 13th Line.		Culvert in road addresses this comment
44	Thunderbird Drainage Works:		
45	As noted in the previous submission, we are generally supportive of the overall concept to divert the drainage around the existing built up area subject to additional review being completed to assess the downstream impacts and improvements required. This work remains outstanding and will need to be completed by the applicant.	GEI Consultants	Noted
46	We had requested clarification regarding the design criteria and noted that the downstream impacts had not been completed which could result in modifications to the criteria. The Functional Servicing Report should be updated to address the following:	GEI Consultants	See response memo prepared by GEI Consultants
47	a) Section 5.1 should clearly state the intended quantity control design criteria for the two SWM ponds (i.e. post development to pre-development peak flows, overcontrol to particular target or pipe capacity, etc.).	GEI Consultants	See response memo prepared by GEI Consultants
48	b)The proposed quality control criteria is to treat the runoff volume only from the Marsville subdivision areas and not from the total tributary area to the pond. b) This is not consistent with the MECP guidelines which state the entire contributing drainage area needs to be considered in order to achieve the level of treatment required. Also note that part of the lots in the existing Thunderbird subdivision will flow overland through the Marsville subdivision and into the SWM pond. The boundary of drainage areas 2300 and 2400 on Figure 17 is to be adjusted and the analysis updated.	GEI Consultants	See response memo prepared by GEI Consultants
49	c) Section 5.1 should state the proposed design criteria for the new storm sewer outfalls and any overland channels from the SWM ponds and through the agricultural lands to the outlet of drainage area 2600.	GEI Consultants	See response memo prepared by GEI Consultants
50	We identified the further need to confirm the proposed 675 mm dia. pipe is a sufficient outlet considering the location will receive additional runoff volume due to the development. This remains an outstanding item that needs to be resolved. The applicant should revise the FSR to address the following:	GEI Consultants	See response memo prepared by GEI Consultants
51	a) The description of locations for flow comparisons in Table 10 are not clear. The numbered key flow point locations used in the MIDUSS model should be included in Table 10 and on Figures 16, 17 and the modeling schematics in Appendix F.	GEI Consultants	See response memo prepared by GEI Consultants
52	b) Additional flow comparisons need to be included in Table 10. These include all the areas modelled downstream of the proposed developments, including the junction of the proposed new south drain from the south SWM pond with the new Thunderbird drain. Also at the confluence of areas 1500 and 2500. Provide a summary for the total watershed modelled flows at the outlet of area 2600.	GEI Consultants	See response memo prepared by GEI Consultants
53	c) As noted in related comments, it is not clear what design criteria has been used to size the new branches of the Thunderbird piped and overland drainage system (i.e. storm sewer segments and overland channels). In one instance, it is noted the proposed 525 mm dia. storm sewer from the Marsville south SWM pond does not have the 100 year storm capacity which raises a question of how the total flow will be conveyed as proposed.	GEI Consultants	See response memo prepared by GEI Consultants
54	d) An additional table summarizing the preliminary design flow, capacity, dimensions, length, slope, material, etc. for each of the proposed drain segments (pipe and overland flow) should be provided to demonstrate servicing feasibility.	GEI Consultants	See response memo prepared by GEI Consultants

55	The applicant should revise the FSR to provide further detail with respect to the function of the 300 mm tile drain from the Thunderbird Subdivision. The points in page 11 (5th and 6th) should be further amended to address the following:	GEI Consultants	See response memo prepared by GEI Consultants
56	a) It should clarify however that the intent is the drain will only service downstream agricultural lands. The FSR is confusing when read with the engineering drawings which show that the 300 mm dia. tile drain will be disconnected from the downstream sections at the SWM pond outlet and connected to the new storm sewer.	GEI Consultants	See response memo prepared by GEI Consultants
57	b) It is not clear what is connected to the existing 300 mm dia. tile drain from the Thunderbird Subdivision (i.e. roadside ditches). Burnside is not aware of direct connections to the drain, however potential backwater or surcharge effects resulting from connecting the drain to the new storm sewer outlet from the SWM pond should be addressed.	GEI Consultants	See response memo prepared by GEI Consultants
58	Proposed Road Cross Section:		
59	The proposed cross section is urban (storm sewer with curb and gutter). This requires further consideration by and direction from Township Council. Street lighting may be completed at detail design stage and may not necessitate the high street lighting wattage specified in the preliminary design.		Cross section has been confirmed and is discussed in the Functional Servicing Report prepared by GM BluePlan (GEI Consultants)
60	A portion of the road is at or below the existing groundwater level. The geotechnical report did not provide discussion or recommendations related to the road design other than pavement structure. Previous comments will likely result on road grade changes however, if areas remain lower than the groundwater, the geotechnical consultant is to provide preliminary recommendations for design.		See updated letter from JLP John Broad
61	Water Supply		
62	A Servicing Options Report was submitted in 2021 and we accept the report as fulfilling the completion of a Servicing Options Report. We noted that a draft plan condition would require a Municipal Class Environmental Assessment to evaluate and select the preferred alternative for a municipal water system expansion including the review of fire protection options for the Community of Marsville. A well drilling testing program and consultation is a vital component in the evaluation process to determine the preferred servicing strategy for Marsville. The Township has received funds from the developers to complete the EA which is underway. We expect well drilling will occur in the near future. Any additional well supply will require the necessary source protection studies to delineate new wellhead protection areas which we will prepare as part of the EA study.	GEI Consultants	Noted
63	Stormwater Management		
64	The proposed design for Marsville North requires the grading work/flow diversion related to Marsville South to be constructed in order that the upstream drainage area by-passes Thunderbird. Comments related to the Marsville South SWM design will be provided under separate cover.	GEI Consultants	Noted
65	The proposed addition of the storm sewer system eliminates the previous roadside ditch issues noted in the first submission, however, the sewer outlet elevation is 0.5 m below the permanent pool elevation of the SWM pond which reduces the system's hydraulic capacity and would cause sediment to accumulate within the sewer system. The storm sewer outlet is to be raised to at least the permanent pool elevation. If the storm sewer system proposal is not acceptable to the Township then the previous roadside ditch issues will have to be re addressed.	GEI Consultants	See response memo prepared by GEI Consultants
66	The post development drainage areas will need to be updated to reflect the drainage areas that will continue to be directed to the East Watershed (Brouwer Drainage Works) as opposed to diversion through the subdivision lands. Also, the adjustment of the drainage boundary between areas 2300 and 2400 on Figure 17 is required based on overland flow contributions from the Thunderbird subdivision. This will necessitate updates in the report and model.	GEI Consultants	See response memo prepared by GEI Consultants
67	The geotechnical assessment identifies the need for an impermeable liner to withstand almost 7 m of hydraulic pressure. The preliminary design should address how the design is intended to accommodate the groundwater and how the pond will be able to be drained and cleaned out due the hydraulic pressure. Additional input from the geotechnical consultant will be required to confirm the preliminary concept is satisfactory.	GEI Consultants	Response needed from John Broad
68	Stormwater Management Analysis		
69	The grading and servicing design shows that the post development flows from a portion of Lot 5 do not enter the SWM facility. Figure 17 was not updated to address the grading design of Lot 5 and related catchment areas.	GEI Consultants	Plan updated

70	Storm Drainage and SWM Ponds - Prelim Design		
71	The overland flow route is subject to further review at the detailed design stage. The response provided to the previous Burnside comment no. 28 mistakenly refers to Block 24 whereas the issue is the major system flow from the roadway into the SWM pond block. The low point on Maple Street is very close to the Block 32/Lot 6 property line and without further details, the 100 year storm overland flow may spread onto Lot 6. The flow route should also avoid following the maintenance road to prevent washouts and increased maintenance. The flow route should be relocated to an appropriate location along the frontage of the SWM pond block and be provided with appropriate erosion protection.	GEI Consultants	See response memo prepared by GEI Consultants
72	We had requested that access ramps at a maximum 8% slope from the maintenance access road to the pond inlet forebay and pond outlet pool locations for inspection and maintenance of the inlet and outlet be provided. This remains outstanding and is needed to confirm the size of the SWM Block.	GEI Consultants	See response memo prepared by GEI Consultants
73	The "CB Control with Orifice Plate" calculation in Appendix G is based on a head of 2.5 m on an orifice. However, this flow value is not used in the Stage-Storage-Discharge Table and there is no sharp edge orifice plate proposed in the manhole to justify use of Cd = 0.60.	GEI Consultants	See response memo prepared by GEI Consultants
74	The basis for the discharge values in the "1800x1800 Major Control" column in the Stage-Storage-Discharge table is not clear compared to the previous "CB Control with Orifice Plate" calculation which uses the orifice equation. Show the equation used for this calculation. The DICB grate inlet capacity should be checked based on the inlet acting as a weir with a 50% blockage factor at the same ponding elevations as those considered for the storm sewer inlet. This is to ensure the grate inlet area is not more restrictive than the outlet pipe.	GEI Consultants	See response memo prepared by GEI Consultants
75	The purpose of the "Storm Control – Hydraulic Gradeline Flowrate" data in Appendix G is not clear as it is not a hydraulic gradeline calculation. If the outlet pipe from the control MH does not have a control device (i.e. orifice plate or orifice tube) with a free flowing condition into the outlet pipe, a standard hydraulic gradeline analysis will be needed from the outlet of the new drain system at catchment 2600 throughout both the west and central drainage area to confirm the system hydraulics and required pipe sizes. The headwater at the south SWM pond may affect the sizing of the drains.	GEI Consultants	See response memo prepared by GEI Consultants
76	Clarify why there is no discharge calculated for the 185 mm dia. knockout orifice at elevations greater than 485.10 m in the Stage-Storage-Discharge table. This orifice would continue to operate at higher stages.	GEI Consultants	See response memo prepared by GEI Consultants
77	Preliminary Engineering Drawings		
78	Most previous comments related to the first submission drawings have been noted by GM BluePlan to be deferred to detail design which for the most part is acceptable. Additional grading information will be needed to verify more detail related to the Thunderbird subdivision for final grading design. The following is to be identified on the preliminary drawings.	GEI Consultants	See updated plans
79	Existing Conditions Plan: Label topsoil/fill berm and note removal along with the pile of debris in the northwestern part of the site prior to site development as recommended by the ESA consultant. This will ensure it won't be missed at the detail design stage.	GEI Consultants	See updated plans
80	Overall Plan: Add note on Lots 17 and 18 regarding 10 m setback from road allowance. This is to ensure it's not missed at detail design stage as it's not an OBC requirement.	GEI Consultants	See updated plans
81	Overall Grading Plan 1: A maintenance hole should be provided at the connection point to the existing 300 mm dia. Thunderbird drain in order to increase cover over the drain.	GEI Consultants	See updated plans
82	Overall Grading Plan 3: As noted, there is a potential drain from the pavilion. Please add it to the general drawing (even if traced). This will ensure it's not forgotten at the detail design stage.	GEI Consultants	See updated plans
83	Storm Sewer Drainage Area Plan: Based on contours accessed off GRCA mapping, it appears that some of the Thunderbird lots would drain into the Marsville lots which has not been considered in the sewer sizing and the Marsville North stormwater management pond sizing.	GEI Consultants	See updated plans
84	Other (No Response Required)		
85	Specific draft plan conditions in addition to typical conditions should include:		
86	(a) The requirement for the Owner to agree in the subdivision agreement to prepare and fencing plan to the satisfaction of the Township. Typically, a fence is required around the perimeter of the development and Park/Municipal Water System Block. Fencing may also be considered around the SWM Pond dependent on design.		
87	(b) There should be a purchasers acknowledgements,		

88	that the existing and/or new park/utility block could be used in the future for other municipal purposes such as expansion of the water system which may include above ground or below ground structures.		
89	for lots are situated in wellhead protection areas, including those that will require on-site sewage systems maintenance inspection programs.		
90	that lots have level IV treatment units which requires homeowners to have maintenance contract with an authorized representative of the manufacturer of the treatment technology		
91	Enbridge		
92	Enbridge does not object to the proposed application		Noted
93	GRCA		
94	It is understood that the proposed outlet for both the Marsville North and South subdivisions will be the Thunderbird Drain. GRCA provided comment for the proposed Marsville South subdivision on September 9, 2022. Any comments pertaining to this drain can be addressed as part of the Marsville South submission and will not be repeated as part of these comments.		
95	Based on our review of the above noted information, the GRCA has no objection to the proposed applications receiving draft approval subject to the following conditions:	Subdivision Agreement	Subdivision agreement to be prepared by Town
96	Prior to any grading or construction on the site and prior to registration of the plan, the owners or their agents submit the following plans and reports to the satisfaction of the Grand River Conservation Authority.	Subdivision Agreement	Subdivision agreement to be prepared by Town
97	a) Final Stormwater Management Report in accordance with the 2003 Ministry of Environment Report entitled, "Stormwater Management Practices Planning and Design Manual" and in keeping with the Functional Servicing Report (May 2022, G.M. BluePlan Engineering).	Subdivision Agreement	Subdivision agreement to be prepared by Town
98	b) Detailed Lot Grading and Drainage Plans showing existing and proposed grades.	Subdivision Agreement	Subdivision agreement to be prepared by Town
99	Advisory Comments to the Municipality:		
100	We acknowledge that as part of the subdivision stormwater management strategy, upgrades to the Thunderbird Drainage Works are proposed. This includes extending a storm sewer from the outlet of the SWM Facility to the open drain portion of the Thunderbird Drainage Works. We presume that overland flow relief is will be provided along this route. A typical section for an overland flow path is recommended.		
101	A table summarizing the hydraulic parameters used in the MIDUSS model is recommended.		
102	GRCA recommends running a 24-hr SCS storm event to confirm that the pond can sufficiently provide volume detention from that storm event.		
103	GRCA charges a fee for its plan review services in accordance with the current approved GRCA Plan Review Fee Schedule. The fee required for the review of draft plans of subdivision is a \$2,295 base fee in addition to a fee of \$1,255 per net hectare (excluding natural areas) to a cap of \$31,520. However, as there are no GRCA regulated features on the subject property and the Thunderbird Drain works will be reviewed as part of the Marsville South subdivision, GRCA will waive the per net hectare fee. A base fee of \$2,295 is required at this time. Note that should there be adjustments to the proposed draft plan configuration, the total required GRCA review fee may change.		Already paid