

Part of Lot 9, Concession 5, WHS, Hamlet of Belfountain

File Numbers: 21T-91015C & NEC 2017/2018-450



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TOWN OF CALEDON PLANNING RECEIVED Jul 12, 2021

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Niagara Escarpment Commission (NEC)
Comments

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Niagar	a Escarpment Commission	Nancy Mott, Ser	nior Strategic Advisor	
March 2, 2021 Letter		Office: (905)-877-8363 nancy.mott@ontario.ca		
No.	Comment:	Response by:	Responses:	
1	Provincial Policy Statement 2020: Rural Areas in		Rules of Interpretation	
1.1	Municipalities Policy 1.1.4 encourages development that leverages rural assets and protects the environment; development in rural areas is to build on rural character, accommodate a range and mix of housing, conserve biodiversity and consider the ecological benefits of nature while focusing development in rural settlement areas.		All Provincial Plans, including the NEP, as well as the Town and Region OP and the PPS clearly state that each must be read in its entirety and not word per word. Refer to the NEP, "the plan is to be read in its entirety and the RELEVANT policies are to be applied to each situation".	
	Although there are other estate subdivisions in the area, the predominant form of development in the village is small dwellings and commercial activities on small lots. The proposed subdivision represents a significant contrast to the character of parts of the village. The type of dwelling proposed for each lot will be the subject of future development permit applications but it is important to finalize the visual impact assessment and measures to mitigate the impact of the proposed dwelling envelopes at this stage to determine if the subdivision can be made to fit more harmoniously into the Escarpment environment, given the topography of the site and its rural setting in proximity to the village. The subdivision as proposed in the architectural documents does not show a range and	MDTR	Refer to the Town OP 6.6.3, "and this plan shall be read in its entirety and not interpreted and applied in isolation". Refer to the Region OP 7.2.2.6, "when interpreting the application of a policy, the OP shall be read in its entirety". Refer to The Growth Plan, section 1.2.3, "Read The Entire Plan, The plan is to be read in its entirety and the relevant policies are to be applied to each situation". Refer to part three of the PPS, "READ THE ENTIRE PROVINCIAL POLICY STATEMENT. The PPS is more than a set of individual polices; "it is to be read in its entirety and the relevant policies are to be applied to each situation."	

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mix of housing and so this policy is not met in this	
application.	Ontario is a vast province and what may be good planning in Ottawa r not be good planning in Windsor or Belfountain.
	Local context is all important in determining good planning.
	What is the local context of Belfountain?
	Refer to section 4.1.8.1 of Caledon OP, The Town of Caledon is a "Community of communities". "The Town is planned as a whole to fun as a complete community, providing the necessary living accommodate employment and services to its residents."
	Section 1.1 of the Peel OP states that one of the purposes of the Peel to recognize the duality between the urban nature of Brampton and Mississauga and the rural nature of Caledon.
	Section 5.4 of the Peel OP describes that "The rural system is a common of communities and should be viewed holistically as a planning entity
	Section 4.1.8.1 Caledon OP notes that "The Town of Caledon, as a larger rural area, contains settlements of various sizes and functions".
	Range and Mix of Housing

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Belfountain is one of the communities within the larger Caledon Community and this local context is relevant and must be kept in mind.

The mix and range of housing type shall be accounted for within the larger community of the Town of Caledon .

Further, PPS policy 1.4.1, states that the mix of housings expected to meet residents' needs is measured within the "regional market area". This mix is to take place within the wider context of the Town of Caledon or the Region of Peel, NOT within the limits of a single development.

This development does however add to the variety of housing forms and lifestyle options available to the residents of the Region.

Peel OP section 5.4.1.4 encourages this type of development "To maintain and enhance the quality of the Rural System while allowing choices in alternative rural lifestyle". A current or future resident of Caledon desiring an executive life style should have other options aside the estate lots available primarily in Palgrave.

What is the character of the existing community?

The word "community" is defined in the Peel OP Glossary as "a group of people with a common characteristic or interest living together within a larger society".

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Community is not simply the houses on Bush Street and Mississauga Road.

Caledon Mountain Estates subdivision on the opposite side of Mississauga Road (metres away from this proposal) should be included in the definition of community along with other estate type residential homes scattered within the immediate area and all along Shaws Creek Road.

The proposed development is an enclave, a "community" within a community.

The physical separation to Bush Street is in the order of 500 metres.

What is on Bush Street remains on Bush Street untouched by this proposal.

This proposal, however, is consistent with and compatible with the larger community.

Can this growth be absorbed?

The type of development proposed will take a few years to complete. It will not all happen tomorrow.

Road improvements are to take place on Mississauga Road and the Town DC bylaw is collecting for future improvements to be made on Shaws Creek Road.

The local public school is under enrollment; the town hall is underutilized.

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New residents will boost the small commercial and allow for possible sharing of services such as hi-speed internet and open the possibility of an Enbridge gas connection, enabling residents to stop burning wood in winter.

CVC will be constructing a major conservation centre, on the opposite side of Mississauga Road, not just for use by tourist, but services will be made available year round to existing and new residents.

What is compatible?

Refer to the definition of "community" above.

A wider context should be adopted that would include Caledon Mountain Estates, and the palatial homes already constructed and existing in the immediate area.

The homes on Bush Street and Mississauga Road are but a small component of the Belfountain community.

This development is a separate enclave, a community within a community physically separated by a distance of 500 metres from Bush Street.

As set out in Section 1.1.4.1 of the PPS, "healthy, integrated and viable rural areas shall be supported by BUILDING upon rural character and leveraging rural amenities and assets".

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The character of the village of Belfountain shall remain; the development is not fronting on Bush Street or Mississauga Road.

However, the year is 2021. To meet the environmental policies required by the applicable OPs, the NEP and provincial policies, flexibility is needed in planning communities that allow for solar roofs or hot water or geothermal etc.

The Urban Design Guidelines have been revised to emphasize even more a "village look" in the home design by paying more attention to massing, colour and material selection.

While respectful of the past, we can truly state that this development is BUILDING upon the rural character and leveraging rural amenities and assets.

Supporting Studies

The Visual Impact Assessment is being revised to reflect the current lot layout and its recommendations will be followed to insure that this development will be in harmony with the escarpment.

The Urban Design Guidelines by Weston Planning Consultants speaks to how the past and historic will be incorporated in the design of the development (through appropriate massing, wise material and colour selection) while at same time recognizing the present and the demands of living today. The Design guidelines were peer reviewed. The comments received are acceptable and will be incorporated in the final document.

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1.2	Policy 1.6.6.4 contemplates development on private
	services, as proposed in this application, only if
	municipal services or communal services are not
	available. The policy further states that in settlement
	areas individual services may be used for "infilling and
	minor rounding out of existing development".

The Region of Peel has confirmed that municipal servicing is not available to the subject lands and that they do not support communal servicing.

The policy question remains as to whether the development of 72 lots within the Minor Urban Centre (MUC) of Belfountain from the existing the edge of current development to the southern boundary of the MUC constitutes infilling or minor rounding out of existing development. It is the position of NEC staff that 72 new lots do not represent minor rounding out and is only infilling to the extent that development would "fill in" the remainder of the undeveloped area of the MUC.

Private Servicing in Hamlets and Land Use

Under section 5.10.6.1, the Town OP acknowledges that private water and sewage services predominate in Hamlets.

The Region OP section 6.4.2.4 states "for existing and COMMITTED development as designated in the area municipal official plan", private services where appropriate are allowed.

The Region OP section 2.2.10.4.34 permits infilling and intensification within the approved boundaries of hamlets subject to appropriate water and sewage services.

MDTR

The Region has specifically indicated its support for private services for this development.

There are no municipal services available in Belfountain. None are "planned or feasible" as indicated in the PPS 1.6.6.4.

Interpretation of Infilling and Minor Rounding Out

This development is within the settlement boundary.

This development is within a Minor Urban Centre.

All the foregoing must be kept in mind when interpreting the word "INFILL".

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The PPS does not define INFILL.

The Town of Caledon OP does define INFILL to mean "housing development in existing residential neighborhoods within settlements on vacant or underutilized land".

Section 1.6.6.4 has progressed through a number of changes with each revision of the PPS. In PPS (2005), private on-site servicing was only permitted "for a new development of five or less lots". In PPS (2014), individual on-site services shall "only be used for infilling and minor rounding out of existing development". In PPS (2020), the word "only" was eliminated. The elimination of quantitative restrictions and exclusionary terms supports the conclusion that the current policy is more accommodating towards private servicing.

If the Legislature intended a restrictive interpretation, the word MINOR would simply be added and it would read as "Minor infill and minor rounding out"

It is noteworthy to point out that NEP section 1.6.8.8 states that "LIMITED INFILLING may be permitted in the built-up portions of Minor Urban Centres that do not have an approved official plan and/or secondary plan".

NEP section 1.6.8.8 does not apply to the Manors development, since Belfountain is designated under the Town of Caledon OP.



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			LIMITED INFILLING is much more restrictive than INFILLING, as described in PPS section 1.6.6.4. 75 lots in the context described constitute "INFILL" and private services are an appropriate servicing option.
1.3	Policy 1.6.6.4 also states it must be demonstrated that the site conditions are suitable for the long-term provision of individual services with no negative impacts on the environmental health and desired character of rural settlement areas. In this regard, the staff of the MECP indicated that they were generally satisfied with the latest technical submission, but they requested an updated assessment of potential private water supply interference. Further, staff of the Region of Peel remain of the opinion that a private well survey of existing wells in the community and a pumping test should be undertaken to determine a potential zone of influence for the drawdown on existing private wells prior to development approval. The sufficiency of the work done to date to satisfy the commenting agencies and determine if the development can proceed on the scale proposed on individual services should be the subject of further discussion in order to determine if the PPS Infrastructure policy requirement has been met.	MDTR	Are Site Conditions Suitable? There is a long list of studies going back to 1988 - Terraprobe (1988, 1990, 1992, 2000), Burnside (1997, 1998, 1999), Proctor & Redfern (1997), Beatty and Wood (2002, 2012), Coffey (2014), Cole Engineering/IBI Group (2018, 2020), all of them concluding that the dolostone aquifer, one of the most prolific in Ontario, found beneath the site is a reliable source of water that will replenish itself with regular site infiltration from rainfall. The Hydrogeological Investigation Report by Cole Engineering updated in 2020 incorporated the comments from Terra-Dynamics Consulting, the consultant retained by the Town of Caledon to act as peer reviewer. The terms of reference of the peer review were circulated to the relevant agencies and approved by them. The Peer reviewer has also commented on Cole's 2020 updated report (refer to letter from Terra-Dynamics Consulting dated November 5, 2020 under Appendix C) and is generally supportive of Cole's recommendations, and so is MECP in their letter dated September 18, 2020 (refer to Appendix B) in response to our 2nd submission.

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The Peer reviewer and MECP agreed with Cole that a phased development approach will allow monitoring of impacts and the timely
implementation of mitigation and remediation if required. Refer to details in the responses prepared in this matrix by Cole Engineering (now IBI Group).
We point out that the work done to date satisfies:
(i) the Town peer reviewer, Terra-Dynamics Consulting;
(ii) MECP D-5-5 Guidelines
(iii) MECP as stated in their letter dated September 18, 2020 (refer to Appendix B)
Our Response to Opposing Discourse
The Hydrogeological Investigation Report by Cole Engineering (2020) does not satisfy the critic retained by BCO but the work plan proposed by him is not required and it is based on assumptions and interpretations that would hardly bring clarity even if pursued.
The base line surveys required by the Region of Peel are standard conditions of draft approval to which the applicant has no objection.
The consolidated pumping test which the Region would prefer is a usual requirement for a commercial development (such as a golf course) or for a municipal well; it is not required for individual residential wells; however, as

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2 2.1	Greenbelt Plan (GP) While NEC staff is supportive of the creation of parkland for recreation purposes and open space to protect the Escarpment Natural and Protection Areas and endangered species habitat, consistent with the policies of the GP, we are of the opinion that detailed plans for the creation of the active Town park should be the subject of subsequent Development Permit applications. In that way, measures can be put into place to protect natural heritage and minimize the impact of active recreational uses in sensitive areas of the Escarpment and ensure good stewardship practices and "clear demarcation of where public access is permitted". ¹	MDTR	part of the phased development approach, the applicant will undertake a consolidated pumping test once enough wells are in operation. An Environmental Management Plan has been developed for the Site to address and mitigate risks throughout construction and post construction period. The Hydrogeological Investigation Report by Cole Engineering (2020) confirms that the nitrate levels at the property line are below the threshold and have been found to be acceptable by CVC, as confirmed at a meeting dated April 9, 2021. Based on the foregoing, we are concluding that "site conditions are suitable for the long-term provisions of such services without negative impacts" and private services are an appropriate servicing option. Park Town of Caledon, through their approval process, requires submission of a Park Facility Fit Plan when the lot fabric is finalized. If it is in fact determined that a separate permit is needed, the applicant and/or the Town will undertake to apply. The Town will investigate and implement appropriate guidelines about overuse. The applicant is responsible for grading of the park block but the actual construction and management of the park is undertaken by the Town. Open Space and Buffer Block
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2.2	The development itself and the attraction of the Belfountain community in general, could lead to overuse of the park, open space and trail and will need to be carefully managed. If the trail remains part of the current application, additional information will be required to determine if it is compatible with the Escarpment environment.	MDTR	Block 77-78 in the Escarpment Natural Area and Escarpment Protection Area will be conveyed to CVC. Any future permit warranted for recreational development shall be planned and submitted by CVC. Block 84 preserves the bobolink habitat on site and will be conveyed to the Town of Caledon. Future management of this block will be undertaken by the Town. Note that the trail has been removed from the draft plan (Appendix G) and it is no longer part of the application. Block 77-78 will be conveyed to CVC and they will manage the future use. At that time, CVC will investigate and implement appropriate guidelines about overuse. Block 84 preserves the bobolink habitat on site and will be conveyed to the Town of Caledon. Future management of this block will be undertaken by the Town.
			The applicant is responsible for grading of the park block but the actual construction and management of the park is undertaken by the Town. The Town will investigate and implement appropriate guidelines about overuse.
3	A Place to Grow – Growth Plan for the Greater Golden		
	Horseshoe 2020		1. All plans and the PPS must be read in their totality and one must
3.1	Part 2.2.1b of the Growth Plan states that growth will		apply only the part of a plan or policy that is relevant
	be limited in settlement areas that "are not serviced by	MDTR	
	existing or planned municipal water and wastewater		2. Not all policies are relevant to a particular context.
	systems". The Region of Peel in its comments on the		2. This growth is Dlanned Crowth and it has been COMMITTED for over
	Development Permit application has made it clear that municipal services are neither planned nor available to		3. This growth is Planned Growth and it has been COMMITTED for over 30 years.

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the subject lands and therefore whether this	
application would achieve this policy in terms of	
whether it represents "limited growth" should be the	•
subject of further discussion.	
subject of further discussion.	

- 4. The NEP, section 1.6.7 states that land use control within a Minor Urban Center and growth is to be in accordance with the Town OP
- 5. The NEP, section 1.6.5, states that the range of permitted uses shall be those set out in the Town OP.
- 6. The NEP, section 2.4.1 acknowledges that lot creation shall be in conformity with Official plans.
- 7. The NEP, section 2.4(4) states that the size and configuration of new lots shall be subjected to the requirements of OP.
- 8. Town OP section 5.10.3.4 states that "development of settlements will take place in accordance with population allocation and policies of chapter four".
 - The Caledon OP Policy 4.2.7.1/Table 4.5 lists the historically established population within the hamlet of Belfountain to be 520 people. The full build-out of the proposed development will bring a population increase of approximately 236 people. The total Belfountain population at build out is expected to be 445 people. The increase is still well-contained within Belfountain's allocated population capacity.
- 9. Minor Urban Centers are "concentration points for development and growth" under the NEP Policy 1.6.1.1

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			 10. Moreover, the Town of Caledon OP Policy 4.2.1.3.1 "encourage(s) intensification within undelineated built-up areas" and recognizes that given its primarily rural nature, it has limited potential for intensification and that intensification strategies will differ. The subject site was proposed as an undelineated built-up area under the Growth Plan, thus proposed development aligns with the Town's principles for growth. 11. Section 2.2.9.6 of the Growth Plan states in Rural areas, new multiple lots or units for residential development will be directed to Settlement Areas. 12. The proposed growth is planned, committed, complies with the policies of the applicable plans and it is limited to what is allowed by the said Plans. Nothing more, nothing new.
3.2	The policies for managing growth in this section of the Growth Plan further support housing development within complete communities with a range of land uses, access to stores and services and a range of housing options. Although some local services exist in Belfountain such as the school, limited shopping and dining and access to parks and trails, the subject lands are considerably removed from employment opportunities, health services or transit and only one type of housing option, large estate homes, is proposed. Low impact development is proposed to be achieved through the design of the storm water management system, but other climate change objectives such as	MDTR	Please refer to the reply we provided to NEC item 1.1 (March 2021 letter) in this matrix about the Town/Region wide accounting for mixing of housing types. PPS section 1.4.1 states that the mix of housings expected to meet residents' needs is measured within the "regional market area". Expected Uses Under Planning Legislation As outlined under Caledon OP Policy 5.10.6.2.3, "Residential uses shall be the predominant land use within these Settlements [hamlets]. Limited Village Commercial uses may be permitted in accordance with the policies contained in Section 5.4 of the Plan. Institutional uses, including schools, places of worship,

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low-carbon communities would not be achieved by a
development which would rely entirely on the use of
personal vehicles for daily activities.

small scale government offices, fraternal association halls, parks, as well as home occupations may be permitted."

Section 7 of the Growth plan (Definitions, p. 68) states that complete communities "may take different shapes and forms appropriate to their contexts".

Section 2.1 of the Growth Plan makes it clear that communities grow and intensify at a different pace that reflects their local context. There is no one size fit all when it comes to planning.

Section 5.4 of the Peel OP states that "The rural system is a community of communities and should be viewed holistically as a planning entity".

The proposed development should be viewed within the wider context of the policies of the Growth Plan, with considerations for its rural characteristics.

The facilities surrounding this development are in line with the permitted land uses under the Town OP.

There is no expectation to allocate employment, health or transit services within the rural hamlet. Furthermore, the proposed house design are sensitive to the historical village while reflecting present needs and future expectations.

Contribution to the Mix of Housing Types

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The estate type lots contribute towards the mix of housing types within Caledon and the regional market. They add variety amongst the common single-detached houses, townhouses and condominiums to be found elsewhere in The Region.

The Manors community will provide variety and lifestyle alternatives to executives seeking choices in the Region.

Sustainability and Net Zero Principles

There is no existing public transportation infrastructure available in Belfountain.

However, this development has been designed to factor in principles that support climate change objectives described under Growth Plan Policy 4.2.10.1.

The proposed storm water management is designed to infiltrate on site all rainfall and control back to back two hundred year storms.

The sewage septic system (Waterloo Biofilter or similar) will reduce nitrates to levels lower than current guidelines.

Sidewalk and sharrows have been provided to encourage pedestrian activity and active transportation and the design scores high on Peel Region's Healthy Development Assessment.

The trend to working from home will reduce vehicle use and more vehicles

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will be electrical going forward.

The Urban Design Guidelines by Weston Planning Consultants will provide appropriate design criteria for the community to achieve Net Zero.

MDTR Group is proposing to install grey water recycling systems in each home, which can achieve more than 25% in water savings. Cisterns may also be used for lots with low water yield. Drought resistant grasses and ground cover will be encouraged instead of lawns.

Restrictions on title will prevent water taking to fill pools in the summer. These measures help to increase efficiency of water use and enhance sustainability in the long term. The Control Architect, through the provisions of the Urban Design Guidelines, at the time of site plan approval will ensure that these measures, including Net Zero, will be implemented in the design and construction of each home before a building permit is issued.

Bringing Growth to the Community

New residents will boost the existing small commercial and re-energize the school enrollment. The Community hall will have more users and the CVC proposed Community Center at the opposite side of Mississauga Road is a walk away and its facilities will provide year-round services to enhance the lifestyle of present and future residents.

Road improvements are to take place on Mississauga Road and the Town DC bylaw is collecting for future improvements to be made on Shaws Creek Road.



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			New residents will boost the small commercial and allow for possible sharing of such services as hi-speed internet and open the possibility of an Enbridge gas connection, enabling residents to stop burning wood in winter.
4 4.1	Niagara Escarpment Plan 2017, Part 1 – Permitted Uses Escarpment Natural Area – permitted uses include single dwellings, infrastructure non-motorized trail activities, forest, wildlife and fisheries management, the Bruce Trail corridor and uses permitted under a Parks and Open Space Master Plan. NEC staff understands that it is intended that Block 78 (labelled Open Space) would be conveyed to CVC if the development is approved. NEC staff support the proposed conveyance of Blocks 77, 78 and 84 to CVC for future open space purposes. If the subject lands were added to the Niagara Escarpment Parks and Open Space System (NEPOSS), then the use could be permitted in this designation. This commitment to add the lands to NEPOSS could possibly be achieved by way of conditions of approval of a Development Permit and a Development Permit agreement in addition to the future approval of a park master plan in accordance with Part 3 of the NEP.	MDTR	Block 77, 78 in the Escarpment Natural Area and Escarpment Protection Area will be conveyed to CVC. Any future permit warranted for park/recreational development shall be planned and submitted by CVC. Block 84 preserves the bobolink habitat on site and will be conveyed to the Town of Caledon. Future management of this block will be undertaken by the Town. Please refer to our response to NEC Item 2.1 and 2.2 (March 2021 letter) in this matrix regarding the proposed treatment and submission of the park, open space and trail.
4.2	Escarpment Protection Area – permitted uses include single dwellings, non-motorized trail activities, infrastructure and the Bruce Trail. However, the NEP goes on to state in Part 1.6.5 (Minor Urban Centre policies) that permitted uses and lot creation will be subject to the policies in an approved official plan not in	MDTR	The boundaries of Lot 50-55 have been altered and are now kept out of the Escarpment Protection Area. This will conform to NEP Section 1.4.4 for Escarpment Protection Area Lot Creation policies and Policy 1.6.8.3. Please refer to the latest draft plan in Appendix G which reflects the revisions.

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conflict with the NEP. Further, "development and growth should avoid Escarpment Protection Areas and be directed to Escarpment Rural Areas...".

As noted on the draft plan, the rear yards of Lots 51-54 extend into the Escarpment Protection Area. It is not clear if both the proposed building envelopes and septic fields on these lots would be outside the Escarpment Protection Area. Notwithstanding the "appropriate restrictions" proposed to be registered on title by the applicant for these lots, NEC staff is of the opinion that the lot boundaries for Lots 51-54 should not extend into the Escarpment Protection Area as doing so would not protect or enhance the function of the land in this designation which is to protect the natural heritage system and the Escarpment Natural Area. Without an obvious firm boundary on the lot to keep development out of the Escarpment Protection Area, there is potential over time for the encroachment non-native or invasive plant species and development as the property owner or owners, over time, lose their understanding of what the area is being protected for. It is recommended that these lots be re-configured to take the boundary of the lots outside the Escarpment Protection Area and provide a more enhanced buffer to lands containing Species at Risk habitat.

The creation of multiple lots within the Escarpment Protection Area is also not permitted by Part 1.4.4 (Lot

MECP has confirmed that the draft plan incorporates an appropriate and acceptable treatment of SAR habitat. The email confirmation from April 13, 2021 is included in this matrix (Appendix A).

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	Creation) which provides only limited opportunities for new lots. Multiple partial lots in a plan of subdivision is not included as an exception. However, the subject lands are within the Minor Urban Centre which does permit the creation of new lots, but Part 1.6.8.3 encourages the avoidance of development and growth in Escarpment Protection Areas.		
4.3	Escarpment Rural Area – permitted uses include single dwellings, infrastructure, the Bruce Trail and recreational uses but as set out below, the range of uses in an MUC are those in the local Official Plan. As proposed on the revised draft plan, uses proposed within the Escarpment Rural Area include residential lots, a park, roads and open space/storm water management blocks.	MDTR	Acknowledged.
4.4	Minor Urban Centre – Belfountain is listed as a Minor Urban Centre (MUC) in Part 1.6.2 of the NEP. This MUC is within the Area of Development Control. Permitted uses and lot creation within an MUC defer to the local Official Plan but are subject to the Development Criteria in Part 2 of the NEP. Part 1.6.4 of the NEP states that MUC's "may accommodate growth and development within their boundaries, so long as it does not conflict with the community character and can be achieved in an environmentally sustainable manner." The term community character is not defined but it is the opinion of NEC staff that the proposed rural estate plan of	MDTR	 Acknowledged. Please refer to our response to NEC Item 1.1 (March 2021 letter) in this matrix for a comprehensive discussion on compatibility. The Manors is a separate enclave with a separation, in the order of 500 metres, from Bush Street. Caledon Mountain Estates, a similar estate development is in proximity to the proposed development. Lots from the Caledon Mountain Estates are substantially larger than the Manors estate lots. Many other large estate lots with palatial homes are scattered throughout the area.

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subdivision on large lots is not consistent with the small lot fabric in the hamlet and the type of dwellings proposed, based on the architectural brief, is quite dissimilar from the size of many of the dwellings in the hamlet. The development may benefit from design guidelines which set out more clearly the scale and style of home that might be more compatible with a rural area in the Escarpment environment.

- 4. Estate lots are an existing part of the community character.
- 5. Community is not defined by the looks and vintage of homes in the area.
- 6. What is a community? The definition in the Peel OP Glossary refers to community as "a group of people with a common characteristic or interest living together within a larger society".
- 7. The common characteristic is not the look of their houses they live in but the desire to live in an area where they are able to enjoy rural amenities.
- 8. This development is a separate enclave with a significant separation from Bush Street; there is no conflict with "the village homes"; what is on Bush Street remains on Bush Street. The development is definitely compatible with the larger context of estate homes numerous in the immediate area.
- 9. Our Design Guidelines were peer reviewed; the comments received are acceptable and will be incorporated in the final document.
- 10. As set out in Section 1.1.4.1 of the PPS, "healthy ,integrated and viable rural areas shall be supported by BUILDING upon rural character and leveraging rural amenities and assets".
- 11. The Manors is BUILDING upon the rural character and leveraging the rural amenities and assets of the area.

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4.5	Niagara Escarpment Plan 2017, Part 2 – Development Criteria General – Part 2.2 It is important to note that Permitted Uses in the NEP are not approved uses unless they meet the development criteria in Part 2 of the Plan.	MDTR	Acknowledged.
4.6	The objective is "to permit reasonable enjoyment by the owners of all lots that can sustain development". This applies to the proposed lots and future landowners as well as to existing residents of Belfountain and the need to consider the compatibility of the proposed development on the community and the Escarpment environment.	MDTR	Acknowledged. The design of The Manors of Belfountain residential development has been carefully planned with sensitivity to local community character while maintaining the open landscape character of the Belfountain area and the Niagara Escarpment by preserving the area's natural scenery. The new development is compatible with the surrounding natural environment and preserves the predominant natural features of the site, being the rolling open landform, the rural hedgerows and the surrounding woodlots and naturalized areas. Please also refer to our response to the NEC Item 1.1 (March 2021 letter) in this matrix for a full discussion on the compatibility of the development.
4.7	With respect to the proposed development, NEC staff acknowledge that effort has been made to design a subdivision that incorporates a community park, an open space block with no development in the Escarpment Natural Area, and vehicle and pedestrian connections to the existing road network. However, we are also aware that members of the community have expressed concern about the impact of the proposed subdivision on Belfountain and its residents.	MDTR	Concerns from the Belfountain Community Organization have been addressed in detail in the June 2020 Comments Response Matrix, Section 11. New comments from Ken Howard (representing the Belfountain Community Organization) concerning the SWM and hydrogeology of the subject site are being addressed below by IBI Group.
4.8	Part 2.2.5 states that development shall take place on the portion of a lot in the least restrictive designation. Proposed Lots 51 to 55 are partly Escarpment Rural and	MDTR	The boundaries of Lot 50-55 have been altered and are now kept out of the Escarpment Protection Area under the NEP. This will conform to Section



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	partly Escarpment Protection Area. Although lot development (house and septic bed) seem to be proposed outside the Escarpment Protection Area, how development could be confined to those locations using available planning tools requires further discussion.		1.4.4 for Escarpment Protection Area Lot Creation policies and Policy 1.6.8.3.
4.9	Part 2.2.6 encourages development that addresses energy efficiency and greenhouse gas reduction, lowand net-zero communities. It is not evident to NEC staff at this stage what level of consideration was given to this policy in designing the subdivision or the future dwellings and so no conclusion can be reached as to conformity with the NEP policy.	MDTR	This development has been designed to factor in principles that support climate change objectives described under Growth Plan Policy 4.2.10.1. Refer to our reply in item 3.2 of this section for fuller details. Sidewalk and sharrows have been provided to encourage pedestrian activity and active transportation and the design scores high on Peel Region's Healthy Development Assessment. MDTR Group is proposing to install grey water recycling systems in each home, which can achieve more than 25% in water savings. Cisterns may also be used for lots with low water yield. These measures help to increase efficiency of water use and enhance sustainability in the long term. The Urban Design Guidelines incorporate provisions requiring each home to achieve NET ZERO before the Control Architect can approve a site plan. The Guidelines will also incorporate requirements for homes to have water recycling systems or cisterns, if required, before the Control Architect can approve the site plan. Please refer to the Sustainability and NET ZERO response earlier in NEC Item 3.2 (March 2021 letter) in this Matrix.



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4.10	Part 2.2.8 encourages development which provides for or protects access to the Bruce Trail. The Trail is located north of the subject lands. Providing for a future trail through the Open Space block could enable future connections to the Bruce Trail.	MDTR	Buffer Block 77 and Open Space Block 78 will be conveyed to CVC. Hence, the future connection to the Bruce Trail on the Open Space Block will be planned by CVC by a separate permit in the future. Block 84 preserves the bobolink habitat on site and will be conveyed to the Town of Caledon. Future management of this block will be undertaken by the Town. For now, the farm lane/trail has been taken out of the draft plan (Appendix G) and is not part of the current application.
4.11	Part 2.2.11 contains policies with respect to secondary dwelling units for single dwellings in the Escarpment Rural Area. At the next stage of development, if the subdivision is approved, the proposed single dwellings could include secondary dwelling units if allowed by the Town's Official Plan policy and subject to adequate servicing capacity (NEP Part 2.2.11).	MDTR	Acknowledged. There are no plans to construct secondary dwelling units at this time.
4.12	Development Affecting Steep Slopes – Part 2.5 The objective of this policy is to ensure that development affecting steep slopes and ravines is compatible with the Escarpment environment and does not result in unsafe conditions. The revised draft plan (dated April 24, 2020) proposes a storm water management pond (Block 84) in an existing depression on the site which addresses to some degree previous concerns about the proposed development of houses on lots with sloping topography. NEC staff note however that the recent comments from the CVC and the Town continue to express concern about the	MDTR IBI	Acknowledged. As per discussion with the Town and CVC on March 24, 2021, they are satisfied with our current approach. Related comments from the Town and CVC are addressed in sections below. Regarding the installation of septic system on slope, IBI is of the opinion that the presence of sloped land does not prohibit placement of a septic tile field. The steepest slopes on the development area are no greater than 4:1 (or 25%). While the tile field itself will still be constructed relatively flat, however the ground above it can be sloped or undulating. Mounding overtop the septic tile field will also occur by re-grading areas of the lot to accommodate septic field placement. Each septic system on each lot will



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	development of certain lots with significant slopes and whether there is a suitable envelope for the proposed dwelling and its septic system. Further discussion is required in this regard to demonstrate the suitability of certain lots and whether they need to be combined with other lots to ensure a suitable and stable building envelope.		require a future detailed design that will be completed in conjunction with the product supplier, Waterloo Biofilter and the detailed lot grading. Note that slopes of concern were tested by EXP and the development is not within areas of concern. The Slope policy requirements of the NEP are being met and if lots of concern remain, please identify the lot numbers.
4.13	Development Affecting Water Resources – Part 2.6 The key issues with respect to the impact of the proposed development on private wells, informed by the comments from the Region, the Ministry of Environment, Conservation and Parks and the consultant to the Belfountain Community Organization, continue to be:	N/A	
4.13 (a)	Has it been sufficiently demonstrated that there is a sufficient quantity of water in the aquifer to supply water to 75 lots with large estate homes over the long term in the face of a changing climate?		There is a long list of studies going back to 1988 – Terraprobe (1988, 1990, 1992, 2000), Burnside (1997, 1998, 1999), Proctor & Redfern (1997), Beatty and Wood (2002, 2012), Coffey (2014), Cole Engineering/IBI Group (2018, 2020), all of them concluding that the dolostone aquifer, one of the most prolific in Ontario, found beneath the site is a reliable source of water that will replenish itself with regular site infiltration from rainfall.
		MDTR	Several yield and water quantity analyses have been completed that demonstrate sufficient water quantity, meeting MECP D-5-5 water testing guidelines. In accordance with the recommendations of the Town HydroG peer reviewer, Terra-Dynamics Consulting (Appendix C) and in accordance with the recommendations of MECP in their letter dated September 18, 2020



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			(Appendix B), the applicant will adopt a phased development approach, whereby the western portion of the Site will be developed first and any subsequent phase will progress if the monitoring program demonstrates that no water quantity (and quality) impacts are occurring or will result from further development and if there should be such impacts, once appropriate measures are taken to mitigate or obviate them.
4.13 (b)	Has it been sufficiently demonstrated that the subdivision will not have a negative impact on the private wells in the Belfountain community (quality and quantity) or the overall water budget for the watershed?	IBI	Historical private well surveys have been completed in the area near the Site, which generally found that shallow and dug wells had poor baseline water quality and quantity conditions. Geological mapping from the Ontario Geological Survey and a review of the MECP water well record database indicates that domestic wells within the community are predominantly competed in lower, poorer quality aquifer than exists at the Site and not the Amabel Formation dolostone aquifer. A participation letter was sent to nearby residents, inviting them to participate in a door-to-door well survey. Very few responses were received. An updated private well survey will be completed for properties within the zone of influence or outside it, subject to participation from neighbors. A water balance analysis has been completed for this development, which demonstrates that, due to large lot sizes and the proposed SWM measures, pre-development infiltration levels will be maintained and thus the overall water budget for the watershed is being maintained.
4.13 (c)	Has it been sufficiently demonstrated that there will be no negative impact on the water features on or adjacent to the subject lands or on the habitat of species that rely on those water features?	MDTR Beacon	Please refer to our reply to CVC EIS Addendum comment 1 in this matrix, which addresses the significance and treatment of RB1 fish habitat. EIS Addendum by Beacon (p. 6-7) discusses the impacts and mitigation of wetlands and fish habitat.



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			MDTR Group has filed a permit to DFO, proposing to eliminate RB1 (see Scoped EIS by Savanta, Figure 5). The permit has been approved, please refer to Appendix D for the Request for Review clearance from DFO, dated May 5, 2021. As mentioned in the approval, "we (DFO) have found that the proposed works are not in fish habitat and will not likely affect fish or fish habitat. No further review pursuant to the <i>Fisheries Act</i> , the <i>Aquatic Invasive Species Regulations</i> or the <i>Species at Risk Act</i> , as listed above, is required". The proposed SWM facility will eliminate HDF RB1 but will not impact the upstream watercourse (referred to as watercourse reaches RB1-B and RB1). The proposed SWM facility on Block 81, which will be surrounded by a berm, will preclude fish from entering the farm field where flows quickly infiltrate into sandy soils, and encourages fish to remain in the upstream, off-site
4.13 (d)	Has it been sufficiently demonstrated that there will be no negative impact on the well water quality for the future subdivision residents or residents of Belfountain?	IBI	portion of the drainage feature that exhibits a longer annual hydroperiod. Chloride and nitrate loading assessments do not indicate impacts to the water quality due to the proposed development. With a conversion from agricultural to residential land use, there should be a reduction of nitrate loadings over time. Refer to our replies to item 4.13 (a), (b), (c) in this section above. This will be further monitored through the implementation of the
			Environmental Management Plan.
4.13	How will groundwater levels be monitored to		An Environmental Management Plan (EMP) is proposed to be incorporated
(e)	determine if there has been a negative impact arising	IBI	into the phase development approach, described above. During the EMP, groundwater levels and water quality will be monitored at selected



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	from the development given that no recent baseline private well survey was undertaken?		monitoring wells on a regular basis. In the phased development approach, a subset of the overall development at the west end of the Site will be developed first. Please see Appendix H for the phasing plan. Refer to our replies in the subparagraphs (a), (b), and (c) in this Section 4 in relation to baseline surveys usually done before site disturbance and after draft approval.
4.13 (f)	Has sufficient analysis been undertaken to identify the source of coliform in 5 of the 12 on-site groundwater samples? If coliform is identified in a newly drilled domestic well on a lot in the proposed subdivision, what is the recourse for the landowner or the municipality?	IBI	The detections are for total coliforms., which were noted in five of the 12 test wells. As these were samples collected from older test wells that had been part of frequent monitoring and sampling programs over the years, total coliforms detections may be present in some wells. According to the New Jersey Department of Environmental Protection as cited in the Hydrogeological Investigation Report by Cole (p. 34), repeated testing increases the likelihood of coliform occurrence. It can be easily found near sedimentary rock. Though total coliform was detected in these well tests, the wells were not disinfected after the pumping equipment was installed and we attribute the presence of total coliform to the pump and discharge pipe.
4.13 (g)	If negative impacts are detected, who will be responsible for mitigating them after all the lots have been sold and what are the mitigation alternatives (e.g. phasing of development, fewer lots, cisterns, trucked-in water, water saving devices and water treatment systems in houses) and could those be required/implemented through planning approvals or other agreement mechanisms?	MDTR	A phasing plan will be implemented. This has been reflected on the updated draft plan (Appendix H). Phase 1 shall be implemented to the satisfaction of the Town, before Phase 2 can begin construction. The Town, through conditions of approval, will require the posting of securities to rectify any required remediation. MDTR will adhere to the conditions of approval. The Region of Peel also imposes conditions relating to monitoring of wells in the area during construction; The region also requires the posting of securities in said regard. MDTR will adhere to the Region's conditions.



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4.13 (h)	It is proposed that storm water management facilities would be inspected for two years and that inspection		Please refer to the Environmental Management Plan by IBI, which discusses our proposed Integrated Monitoring Plan (section 2.2) and Contingency and Monitoring Plan (section 2.3). Please refer to Functional Servicing Report by Cole Engineering (Table 5.4/p. 36), it is stated that MDTR Group will conduct inspections "4 times per year
	reports would be kept on file, presumably by the applicant or their consultants. Who would be responsible for conducting the inspections after the initial two years proposed?	MDTR	for 2 years, then inspect annually". The Town of Caledon, through conditions of approval, will require the posting of securities. MDTR will adhere to conditions of approval and post the required securities for SWM facilities operations and maintenance.
4.14	At page 29 of the Hydrogeological Investigation Report (HIR) there is a commitment to confirm the location of 3 dug wells down gradient from the subject lands. Further there is a commitment to undertake door to door surveys of properties in the village to get "a representative assessment of current domestic well conditions in the community". Is this survey still intended to be undertaken?	MDTR	In 2018 and 2019 MDTR reached out to residents within and outside the 500 metres MECP zone of influence, inviting them to participate in a door-to-door well survey. Very few responses were received. An updated private well survey within the MECP stipulated 500 m radius zone of influence and outside of it will be completed subject to willing participants. The potential locations of the dug wells was based on a query of the Provincial Water Well Record database. IBI Group will confirm the presence of these dug wells pending landowner permission.
4.15	The site water balance conducted in the HIR relies on climate data from 2010 to 2015. Can any reliable conclusions be drawn from this data now that it is almost 6 years out of date?	IBI	Water balance analysis was previously completed using the 30-year climate normal, however a previous comment round requested that "more recent" data be used instead. Thus, the revised hydrogeology report (May, 2020) was updated to the most recent available data for this climate station, 2010 to 2015. Both data sets yield similar results. Note that more recent data is not available from Environment Canada.
4.16	Concerns were expressed in agency comments about long term sedimentation issues that may arise with the storm water management approach proposed. These	MDTR IBI	As justified by Beacon under NEC item 4.18 below, the development is located over 200 m away from key hydrologic features. Therefore, the proposed development does not formally require a hydrologic evaluation under NEP Part 2.6.3b.



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	concerns must be addressed to satisfy NEP policy in		
	Part 2.6.3 b.		Regarding the issue of long term sedimentation, pre-treatment devices including roadside ditches and OGS units are currently proposed. The use of additional pre-treatment measures that could be employed at the detailed design stage, such as utilizing a series of Oil/Grit Separators installed in a row, use of Filtration units, incorporate rock lined sumps at the SWM Pond inlets or other water quality pre-treatment measures, which could all be considered at the discretion of the Town. Long term maintenance requirements will be provided to the Town in the form of an Operations and Maintenance Manual at the detailed design stage.
			Robust erosion and sediment control designs will be prepared at the detailed design stage and will include lot level ESC measures on a lot-by-lot basis. At the detailed design stage, MDTR Group will submit a monitoring plan for the stormwater network, in addition to an operations and maintenance manual and cost estimate. This approach, set out in Town's letter dated February 8, 2021, was discussed and agreed upon at a meeting with CVC/Town on March 24, 2021.
4.17	Lots 51-57 and Lot 75 are impacted by high nitrates. Although your consultants predict that the nitrates will reduce over time, NEC question whether those lots are suitable for development or if they should be held in a later phase, subject to a holding provision and only be	IBI	It is proposed that these lots will be developed in the second (last) phase of the phased development. The Environmental Monitoring Plan (EMP) will need to demonstrate that no additional nitrate load is being added in these locations, due to the development.
	released if long term monitoring confirms the reduction in nitrates to standards in the Provincial Drinking Water Quality Objectives.		Though the nitrate levels are elevated, these lots are still below the ODWS for nitrate and therefore are not considered impacted above the applicable regulatory standards.



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		MDTR	Water filtration systems are a fixture in most rural homes and they effectively treat nitrates and other organic and inorganic impurities. The Urban Design Guidelines will provide for appropriate water filtration systems to be installed in each home and The Control Architect will insure that the site plan complies with this requirement before a building permit will issue. A permanent maintenance contract renewable automatically year after year will be assumed by each home owner at the time of purchase.
4.18	The Beacon Environmental EIS Addendum contains an analysis regarding wetlands. NEP policy in Part 2.6 indicates that all wetlands are key hydrologic features, not just provincially significant wetlands. The Beacon report identifies the NEP policy in Part 2.7 but does not provide any conclusion as to whether the proposed measures to ensure the protection of the wetlands are met by the development and address the applicable policies in Part 2.6.3 and Part 2.7.	Beacon	The project team acknowledges that all wetlands are Key Hydrologic Features under the NEP. The discussion re: wetland status was related to the process for wetland evaluation under OWES and Savanta's use of the term 'Significant Wetland' to describe a wetland that had not yet been evaluated, and is not related to NEC policies which do not distinguish between a wetland's provincial status. Per Sections 7.2.1 and 7.2.2 of the Hydrogeological Investigation Report (Cole Engineering, May 2020), negative hydrologic impacts to on-site and off-site wetlands are not anticipated. Refer to Cole's report for detailed information. Furthermore,
			 Wetlands on and adjacent to the north east portion of the subject property are over 200 m away from the limits of development (note that NEC policies 2.6.3 and 2.7 refer to a minimum proximal distance of 120 m) and are surrounded by extensive woodlands to which a minimum 10 m vegetation protection zone has been applied; Per Cole Engineering Hydrogeology Report (May 2020, Section 7.2.1), the wetlands are not interpreted to receive groundwater inputs;

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4.19	With respect to fish habitat, the recommendation of the Beacon report is to apply for a permit from the Department of Fisheries and Oceans (DFO) "prior to site disturbance". It is the opinion of NEC staff that this would be too late in the process. We would want to know prior to a decision on the Development Permit application that a permit could be obtained from the DFO and whether any change to the design of the development would be needed in order to obtain that	MDTR Beacon	 connectivity between wetlands has been maintained through protection of wetland and woodlands, and enhanced through retention of hedgerows which provide opportunities for plant and wildlife movement; and The pre-existing hydrologic conditions are proposed to be maintained post-development. It is not anticipated that the proposed development will result in any negative impacts to the form or function of wetlands on and off the subject property, as development is located over 200 m away from wetlands and the connectivity and hydrology of the features will be maintained post-development. While NEC policies refer to key natural features within 120 m of development and the wetlands in question are over 200 m from development, the intent of the policies are nevertheless met. A request for review was submitted to DFO and the proposed work has been authorized. There is no changes to the design needed. Please refer to Appendix D for the Request for Review clearance from DFO, dated May 5, 2021.
4.20	permit. Comments from the MNRF in July 2018 expressed		Subsequent information provided by the Town (via an April 13, 2021 email)
29	concern about chloride contamination in shallow groundwater and potential impact on local watercourses containing brook trout. They recommended that the EIS document how salt free	Beacon	indicates that the Town primarily uses Thawrox (calcium/magnesium chloride) treated rock salt generally on all hardtop roads and streets, opposed to traditional road salt (sodium chloride) or sand.



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	water softeners could be mandated for the development. This comment is not addressed in the EIS update.		A chloride assessment has been provided by IBI Group as part of the submission to account for additional salt loading. Groundwater at the Site is expected to see a small increase in chloride concentration from residential water softeners; however, the resultant chloride concentrations in groundwater were calculated to be much less than the applicable drinking water criteria or criteria for the protection of aquatic life.
4.21	Development Affecting Natural Heritage – Part 2.7 The Beacon EIS Addendum concludes that the "hedgerow feature" adjacent to Shaws Creek Road is not a significant woodland. CVC comments from February 2021 indicated that "Significant Woodlands are located in the southwest portion of the site along Shaw's Creek Road". Their comments indicate that with the proposed widening of Shaws Creek Road that the wooded area may no longer quality as a significant woodland and suggest an "offsetting plan" (i.e. compensation) for Lots 9-11. The objective of the NEP for Natural Heritage is to maintain and where possible enhance natural heritage features and functions rather than compensate for the loss of natural heritage. The Region does also indicate in its January 2021 comments that the subject lands are Core Woodland in the Region's Official Plan, but they defer to the CVC. It would be beneficial to have further discussion in this regard.	Beacon	The proponent respectfully disagrees with CVC's opinion that the treed area adjacent to Shaw's Creek Road is a significant woodland. As outlined in the Savanta EIS, comment responses and Beacon's addendum, the small narrow feature does not qualify as a significant woodland in accordance with applicable policies and is thus not part of the natural heritage system. Nevertheless, MDTR Group has explored options for tree retention and in accordance with NEC policy 2.7.4 has adjusted the development so that the feature is incorporated into the design of the subdivision; there is effectively a 11 m buffer between proposed houses and the feature, with driveways cited to minimize impacts to trees. Furthermore, it is worth noting that MDTR Group will not compensate for tree losses resulting from the Town's planned widening of Shaw's Creek Road.



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4.22	The Beacon report states that "environmental protection areas" (actually Escarpment Protection Areas) on Lots 50 – 55 "will be subject to a restrictive covenant placed on title limiting uses and prohibiting structures with the portion of the lots zoned as EPA". Restrictive covenants are used infrequently in the NEP Area and there has been no discussion regarding the use of this tool to control land use on the subject property. As there is no zoning for the lands in the Minor Urban Centre, there should be additional discussion regarding land use planning or other measures to control the use of these lots.	MDTR Beacon	The boundaries of Lot 50-55 have been altered and are now kept out of the Escarpment Protection Area. This will conform to NEP Section 1.4.4 for Escarpment Protection Area Lot Creation policies and Policy 1.6.8.3. Please refer to the latest draft plan attached in this matrix (Appendix G) which reflects the revisions.
4.23	In comments from the MNRF in 2018, it was recommended that the buffer to the significant woodland be increased to 30 metres but in the Beacon response from March 2020, a rationale was provided for the minimum 10-metre buffer. It was suggested that educational materials could be provided to homeowners to make them aware of the importance of protecting the significant woodland. This might be a helpful approach for the first landowner, but successive owners would not receive that information. Other mechanisms to inhibit encroachment into the significant woodland should be discussed.	MDTR	Other methods to inhibit encroachment includes fencing the feature at the interface of the development, and provision of educational signage on said fencing. Conditions of draft approval may require that appropriate warning clauses be inserted in the initial agreement of purchase and sale. Ultimately, said conditions will be incorporated in the subdivision agreement which will be registered on title to the lands. Registration is deemed to be legal NOTICE to any future owner.
4.24	SAR birds are deemed to be protected by virtue of Block 84 which is proposed to be conveyed to CVC. The Beacon report recommended that the feature be fenced to limit access, but this might limit the connectivity of the site for other wildlife.	MDTR Beacon	Block 84 preserves the bobolink habitat on site and will be conveyed to the Town of Caledon. Future management of this block will be undertaken by the Town.



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			In the opinion of Beacon, fencing to protect species at risk birds from disturbance by dogs and people over the short and long term will be a benefit to Bobolink and Eastern Meadowlark and is of higher priority than providing connectivity for common species for which habitat exists elsewhere on and adjacent to the subject property. We note that the MECP is supportive of fencing.
4.25	Cultural Heritage – Part 2.10 The Cultural Heritage Impact Statement, April 2019 incorrectly states that the impetus for the NEP was the UNESCO designation and that the first NEP was in 2010. The first NEP was 1985 and the UNESCO World Biosphere designation was given on the basis of the environmental protections in the NEP. Section 1.3.2 of the report should be corrected.	ASI	ASI has simplified this to remove the preamble and to only address the policies that are relevant to the HIA.
4.26	The study concludes that the remnant farm buildings on the property have physical, historical and contextual value. The buildings are on the part of the property proposed as Open Space to be transferred to CVC. Until such time as the land is conveyed, the property owner should ensure that the remnant buildings are protected from further damage through protective fencing or other means consistent with NEP policy in Part 2.10.2.	MDTR ASI	ASI has added this recommendation to the report under the Executive Summary and Conclusion. Acknowledged.
4.27	The study also acknowledges the presence of "remnant stone mounds" along the tree lines/hedgerows on the property. To some degree, the revised draft plan has a lot pattern which aligns with the hedgerows and stone mounds but where these features exist within proposed lots, there is concern that the future property owner may not preserve these features unless there is some	MDTR ASI	ASI has added a recommendation that the Town of Caledon implement heritage easement agreements on these properties to ensure that these features are protected. This can be found under the Executive Summary and Conclusion.

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	planning mechanism in place that prohibits their alteration or removal. The Town's Woodland Conservation by-law does not appear to protect fence		
	rows.		
4.28	Page 31 of the report indicates that "no significant views have been identified within the subject property". Views of the subject lands were identified in the initial visual impact assessment. Until the VIA is complete and accepted by NEC staff, it has not been determined if there are significant views of the subject lands or its heritage resources and how they might be impacted by the proposed development. This will be the subject of further discussion at a meeting scheduled in the near term.	ASI	ASI has clarified that BTI is currently working on the VIA.
4.29	Recreation – Part 2.11 Part 2.11 of the NEP supports recreational uses that are compatible with the Escarpment environment. Trail activities in Escarpment Natural and Protection Areas shall require minimal structures and minimal modification of the existing landscape and avoid site alteration. A public walkway is shown on the draft plan connecting the subdivision to Old Main Street. A footpath could be	MDTR	Block 77, 78 are to be conveyed to CVC, the conservation authority will be responsible for its control, maintenance and the future use. CVC will investigate and implement appropriate guidelines about overuse. The public walkway is no longer shown on the draft plan (Appendix G) and is not part of the application.
	a permitted use. The details of and location for the footpath could be addressed in the current application or in a subsequent Development Permit application by CVC to ensure that it would be compatible with the Objectives for Escarpment Natural Areas which is to		

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	recognize, protect and where possible, enhance natural heritage and hydrological systems and protect wetlands. Given the popularity of the village by non-resident visitors, there is potential for a significant volume of foot traffic along the trail in addition to any use by current and future residents. Ensuring that pedestrians stay on the path and away from wildlife habitat, especially the habitat of species at risk, is paramount notwithstanding the comments that it is important to connect the proposed development with the village.		
4.30	An active recreation park is proposed for Block 76. As noted earlier in this letter, development of the park would need to be the subject of a subsequent Development Permit application to confirm that any proposed infrastructure, play equipment, parking and lighting meet the NEP Development Criteria.	MDTR	Acknowledged. The applicant is responsible for grading of the park block but the actual construction and management of the park is undertaken by the Town. If it is in fact determined that a separate permit is needed, the applicant and/or the Town will undertake to apply.
4.31	Block 83 is identified as both a trail and a stormwater channel. NEC staff is not aware of the details of the trail (e.g. is it to be paved, will it have lighting, ownership). If the trail's development is to be part of the current application, more information about its design is required as it is also proposed to be an "emergency overland spill route".	MDTR	Block 83 will function primarily as a stormwater channel and is no longer designated as a trail on the draft plan (Appendix G).
4.32	Infrastructure – Part 2.12 The objective of these policies is to ensure the least possible impact on the Escarpment environment. Green infrastructure and low impact development are encouraged where appropriate. NEC staff note that the	MDTR IBI	Robust erosion and sediment control designs will be prepared at the detailed design stage to address CVC's concerns about dry wells being susceptible to clogging and/or failure during active construction.



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	design of the proposed development is based on the use of storm water management ponds with dry wells which can be considered green infrastructure. NEC staff note that there are still issues that need to be addressed, as identified in CVC comments, with respect to the functioning of the system as a groundwater recharge feature. Their comments also seek additional information regarding the separation of infrastructure within and between the proposed lots.		As per discussion with Town/CVC dated March 24 2021, MDTR Group is of opinion that all concerns have been addressed. Private septic systems are shown on the Grading Plan to be spaced according to the required distances noted in Section 7.1 of the FSR/SWM Report. Private wells are shown on the Grading Plan to be spaced according to the required distances as noted in Section 8.1 of the FSR/SWM Report.
4.33	The Functional Servicing Report indicates that erosion and sediment control matters are proposed to be addressed prior to site alteration. This requirement would to be a requirement if the development is approved. It is noted that "Erosion and Sediment Control Guidelines for Urban Construction" are proposed to be used. Please explain why an urban standard is proposed for a rural subdivision.	IBI	The control guideline was intended to apply within all conservation authorities/member municipalities encompassed within the Greater Golden Horseshoe Area watersheds. The principles and guidelines serve as a guide for CVC to assess the proposed development. MDTR Group will adhere to the "Erosion and Sediment Control Guidelines for Urban Construction" as best practice, since it is more rigid than other guidelines. Other agencies have not noted any issues with using the control guidelines in question.
4.34	The details of the infrastructure works (e.g. the stormwater management areas) need to satisfy the concerns of the commenting agencies, with respect to demonstrated effectiveness and appropriate monitoring. CVC staff in their letter raised concern that there may not be adequate separation between the proposed septic beds and the areas proposed for infiltration.	MDTR IBI	It has been clarified that the only infiltration measures proposed throughout the site are two centralized infiltration basins that are used for stormwater quantity control. Rear yard catch basin is not used as an infiltration measure. Private septic systems are shown on the Grading Plan to be spaced according to the required distances noted in Section 7.1 of the FSR/SWM Report. Private wells are shown on the Grading Plan to be spaced according to the required distances as noted in Section 8.1 of the FSR/SWM Report.
4.35	We note that the Region in its comments proposes that sidewalks be provided on both sides of the proposed streets. NEC staff are of the opinion that such	MDTR	Noted.



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	infrastructure is not consistent with NEP policy which supports low impact development.		A reference to this policy will be made in response to Region's Healthy Development Assessment Committee comment.
4.36	The visual impact from the development of infrastructure in the proposed subdivision are to be minimized in accordance with NEP policy in Part 2.12.2e). NEC staff will discuss this as part of the further consultation on the VIA.	ВТІ	A visual impact study of this development is currently underway. Recommendations for mitigating the visual impact will be included in this study.
4.37	Scenic Resources and Landform Conservation – Part 2.13 NEC staff has previously provided comments with respect to the impact of the development on the scenic resources of the Escarpment and the initial visual impact assessment (VIA) for the application. The NEC Visual Assessment Guidelines have recently been updated and are available from the NEC website. Prior to completing an updated VIA once the final subdivision layout is known, the new Guidelines should be consulted and an updated terms of reference for the VIA should be prepared in consultation with the NEC landscape architect, Karen Bannister. Your consultant has contacted the NEC and we understand that the process of completing the updated VIA is now underway.	ВТІ	A visual impact study of this development is currently underway following the current NEC VIA guidelines. We are working closely with Karen Bannister to ensure all NEC requirements are satisfied.
4.38	We note in the PJR at page 28 that a planting buffer is proposed along Shaws Creek Road at the site plan stage of development. The buffer will need to be assessed as part of the VIA relating to the Development Permit application in order to determine if the proposed buffer would mitigate visual impact.	ВТІ	This buffer will be considered during the VIA of the development.



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4.39	Further discussions regarding the policy issues raised in this section of our letter will assist NEC staff in reaching conclusions as to whether the proposed development is in conflict with the NEP.	MDTR	Acknowledged.
5	Region of Peel Official Plan – In comments dated January 11, 2021, Regional Planning staff has raised issues with respect to aspects of the development in Core Areas of the Greenlands System in Peel and recommends further examination of the proposed subdivision. In addition, Regional staff raise concerns with respect to hydrogeology which will require further discussion between your consultants and the agencies.	MDTR	Acknowledged. Refer to our response to the Region's comments below.
6	Town of Caledon Official Plan – Updated comments regarding the Development Permit application were recently received. With respect to Official Plan policy, the Town has commented on permitted uses, population allocation to hamlets, community character, environmentally sustainable development, minimum lot sizes, protection of the Environmental Policy Area through Development Control, cultural heritage, private servicing, stormwater management, road pattern among other matters. The Town indicates that some material will need to be re-submitted.	MDTR	Acknowledged. Refer to our response to the Town's comments below.
7	Outstanding Issues As previously discussed, the Visual Impact Assessment will need to be updated to reflect the final proposed version of the draft plan containing proposed building envelopes to determine the visual impact of the proposed dwelling locations and how that impact might	ВТІ	Acknowledged. The Visual Impact Assessment will be updated to comply with agency requirements. A matrix to address Redlined Term of References for Stage 1 VIA Work is included below.



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8	be mitigated. This analysis is required in order for NEC staff to determine whether NEP policy in Part 2.13, Scenic Resources and Landform Conservation have been met. Until we have received comments from the MECP with respect to Species at Risk, NEC staff is not able to confirm whether the policies of Part 2.7.8 with respect to development in the habitat of endangered and threatened species are met. We participated in a recent meeting held with CVC, your consultant and MECP staff and understand that their comments will be forthcoming.	MDTR Beacon	Acknowledged. MECP has confirmed that the draft plan (Appendix G) incorporates an appropriate and acceptable treatment of SAR habitat. The email confirmation from April 13, 2021 is included in this matrix (Appendix A).
9	The sequence of planning decisions between the NEC and Town needs to be discussed again. According to the NEPDA, a Development Permit must be issued prior to the approval of the draft plan. In many of the consultant reports there are statements that indicate that final building envelopes and detailed lot grading would occur at detailed or final design stage as part of the subdivision approval. At the stage of the decision on the Development Permit, NEC staff would need to have the building envelopes and preliminary lot grading identified as the subdivision plans cannot conflict with the Development Permit approval.	MDTR	Acknowledged. Building envelopes and preliminary lot grading are being provided at the Development Permit approval stage.
10	Development approval is based on various implementation tools that have been proposed in the applications and supporting reports such as: - Subdivision agreement (<i>Planning Act</i>) which could enforce design guidelines or restrictions	MDTR	Acknowledged.



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	including requirements for in-home water treatment systems, cisterns, tertiary septic treatment systems and use of drought-resistant grass - Site plan approval (<i>Planning Act</i>) - Warnings on title to future landowners or homeowner education manual regarding water conservation and use of low impact landscaping - Restrictive covenants - Maintenance easements for infrastructure.		
11	Other planning and environmental tools may be available and necessary to regulate the proposed development if it were approved such as: - Development Permit conditions and agreement (NEPDA) - Conservation easement - Monitoring and mitigation plan - Phasing - Zoning/Holding zones (Planning Act) - CVC permit for Regulated Areas - Park Master Plan - Permit under the Endangered Species Act - DFO fisheries permit (Fisheries Act) - Tree cutting by-law - By-laws to restrict filling of swimming pools and lawn watering from using domestic wells as a water supply.	MDTR	Acknowledged.
12	Next Steps	MDTR	Acknowledged.



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NEC staff recommend further joint meetings with you, your consultants, the municipalities and the conservation authority to discuss policy, technical and implementation issues related to the Town and NEC applications. It may be beneficial to divide this into a series of virtual meetings by topic/discipline involving the commenting agencies. A meeting with the Belfountain Community Organization may also be beneficial in light of their continued interest in and concerns regarding the proposed development.

We trust that these comments are of assistance. If there are any questions, I can be reached at nancy.mott@ontario.ca or 289-839-0106.

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Niagara Escarpment Commission/Town of Caledon March 24, 2021 Letter		Karen Bannister, Landscape Architect		
No.	Comment:	Comment by:	Response by:	Responses:
	Redlined Terms of Reference for Stage 1 Work of Visual Ir	npact Assessmen	t (VIA) Study	
1	Please see NEC comments on the TOR herein. Subject to agreement with this Redlined TOR, proposed terms for Stage 1 Work are acceptable and may proceed as directed below. Please acknowledge receipt of the comments, noting your agreement, and include the Redlined TOR in the VIA submission.	NEC	ВТІ	We have received the comments and will be conducting the leaf-on study June 28, 21. We have been given approval by Karen Bannister to complete this stage of the field work.
2	NEC comments (August 10/18) on the previous VIA submission apply. Please ensure that they are addressed in the updated VIA submission. Please submit the Stage 1 VIA to both NEC and Town of Caledon for review and comment.	NEC	ВТІ	Understood. Next submission will be made to the NEC and Town of Caledon for review and comment.
3 (a)	(p. 3) "where the buildings are assumed to be centred on their subdivision lots" For building locations, refer to the Grading Plan (May 2020) as the base assumption and note that final building placement may vary based on required setbacks.	NEC	ВТІ	Understood. We will refer to the grading plan as the base assumption for final building placement in our VIA.
3(b)	b) Building locations are indeed important due to the various undulating topography of the site that is greatest in height to the north of the property. (ToC)	Town of Caledon	BTI	Understood.
4	The NEC DVM also takes into account proposed on-site tree removal as per the Tree Inventory & Preservation Plan by Bti (May 2020) and estimated building	NEC	ВТІ	Understood. We will capture all wooded areas and hedgerows as part of our VIA to illustrate their visual impact on this development.

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	locations and rooftop elevations derived from the Grading Plan by Cole Engineering (May 2020). The NEC DVM is intended as a guide but any/all visibility or visual shadow mapped must be investigated and confirmed in the field. Unmapped trees or smaller hedgerows may provide screening and other mapped wooded areas and hedgerows may provide less screening than shown on the DVM due to composition or damage.			
5 (a)	(p. 4) "The NEC DVM will be based on the proposed Subdivision Plan which depicts key information" Please provide details on which Subdivision Plan that will be referenced. (ToC)	NEC	ВТІ	Understood. The last plan of subdivision has been provided to Karen Bannister
5(b)	(p. 4) "[Contour elevations for the Property and the adjacent lands] The NEC DVM will be based on the proposed Subdivision Plan which depicts key information" Will the contour data be overlaid between the surveyor information at 5m intervals against the DVM contour information at 10m intervals to endure accuracy of elevation height?	Town of Caledon	ВТІ	It is my understanding that the grading information of the DVM and the surveyor plan has been overlaid by NEC when the DVM was created. When we conduct our field work, we will be taking accurate GPS and elevation readings of all viewpoints and target objects (6 buildings).
6	(p. 4) "Bti will determine which of the green Viewpoint locations on the NEC DVM are actually located on public roads, lands and trails, by examining this map" In examing the NEC DVM, note that the NEC DVM does not show 'green' on Shaws Creek Road due to the scale of the map. This area requires field investigation, nonetheless.	NEC	ВТІ	21 viewpoints were determined to require further study. These viewpoints have been approved by Karen and the NEC. A few viewpoints are along Shaws Creek Road as requested.



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7	(p. 5) "This information obtained from Google Earth Pro will be used to locate approximately the Viewpoint locations in the field" Field adjustments to the viewpoint location may be required. Photos taken behind a bush will not be accepted where there is an open view within the vicinity	NEC	BTI	Understood. We will locate the camera is a location that is ideal to illustrate the visual impact of the development.
8	Will there be any cross reference with the surveyors contour data, the DVM and Google Earth Pro elevation data?	Town of Caledon	BTI	We will be taking GPS and elevation readings in the field. These will be considered to be more accurate than the readings taken from Google Earth Pro and the DVM.
9	(p. 5) Bearings in degrees, minutes, seconds will be obtained by using an App called CoordCalc App (Version 2.4 by Justin Time) Is this app considered to be an industry standard for view shed mapping based on bearing points?	Town of Caledon	BTI	CoordCalc was an app I found that would take accurate readings of GPS and elevations. I'm not sure if it's an industry standard or not but we were successful with a previous VIA for the NEC in 2019 using this app and proposed method.
10	(p. 6) "NEC recommends as a guide that the distance away from a structure to be viewshed mapped should be a minimum of 5 kilometres." Replace "minimum" with "maximum"	NEC	BTI	Revised.
11	(p. 6) "As well, a reconnaissance of areas of significance to the Belfountain community will undertaken and noted." As previously discussed, please include Belfountain Public School/public library grounds (Shaws Creek Road) and Belfountain Tennis Club (593 Bush St) as public viewpoints	NEC	BTI	A viewpoint from the School/Library grounds has been proposed and with be field studied.
12	(p. 8) "A general description of NEC visual ranking" Scenic ranking is the correct terminology	NEC	ВТІ	Understood.



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13	(p. 9) "Referring to the Subdivision Plan and a Google Earth Pro aerial image, to locate the GPS coordinates and elevation information for the Target Object locations" The Subdivision Plan does not show proposed building locations. Refer to Grading Plan for base assumption of Target Object locations, noting that these building sites may change. In addition to proposed buildings, Target Objects may also include other proposed physical changes such as hedgerow removal, new road intersections, storm ponds, etc.	NEC	ВТІ	Understood. We will refer to the grading plan to accurately locate our 6 target object locations.
14	This table [Table of Assumptions Manors of Belfountain DVM] is obsolete. Provide the most current Table of Assumptions by NEC in the VIA.	NEC	ВТІ	Current Table of Assumptions will be provided within our next submission.

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_	Niagara Escarpment Commission		Nancy Mott, Senior Strategic Advisor	
April 6	, 2021 Letter	Office: (905)-87	7-8363 n49ancy.mott@ontario.ca	
No.	Comment:	Response by:	Responses:	
	Provincial Policy Statement			
1	As stated in the earlier letter, key issues of conformity in relation to the policies of the PPS 2020 that are not addressed in your application include:			
1.1	Accommodating a range and mix of housing (i.e. only one type of housing proposed in the subdivision);		Please refer to NEC item 1.1 (March 2021 letter) in this matrix for a detailed response.	
			Range and Mix of Housing Belfountain is one of the communities within the larger Caledon Community and this local context is relevant and must be kept in mind The mix and range of housing type shall be accounted for within the larger	
		MDTR	Further, PPS policy 1.4.1, states that the mix of housings expected to meet residents' needs is measured within the "regional market area". This mix is to take place within the wider context of the Town of Caledon or the Region of Peel, NOT within the limits of a single development. This development does however add to the variety of housing forms and lifestyle options available to the residents of the Region.	



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			Peel OP section 5.4.1.4 encourages this type of development "to maintain and enhance the quality of the Rural System while allowing choices in alternative rural lifestyle". A current or future resident of Caledon desiring an executive life style should have other options aside the estate lots available primarily in Palgrave.
1.2	Infill and private services; acknowledging that there is no PPS definition of infill and that varied opinions were provided from the Ministry of Municipal Affairs and Housing staff as to whether the proposed development could be considered infill, is it in conformity with the intent of the PPS that a development of this scale be permitted on private wells and septic systems?	MDTR	Please refer to NEC item 1.2 (March 2021 letter) in this matrix for a detailed response. Interpretation of Infilling and Minor Rounding Out This development is within the settlement boundary. This development is within a Minor Urban Centre. All the foregoing must be kept in mind when interpreting the word "INFILL". The PPS does not define INFILL. The Town of Caledon OP does define INFILL to mean "housing development in existing residential neighborhoods within settlements on vacant or underutilized land". Section 1.6.6.4 has progressed through a number of changes with each revision of the PPS. In PPS (2005), private on-site servicing was only permitted "for a new development of five or less lots". In PPS (2014), individual on-site services shall "only be used for infilling and minor rounding out of existing development". In PPS (2020), the word "only" was eliminated. The elimination



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			of quantitative restrictions and exclusionary terms supports the conclusion
			that the current policy is more accommodating towards private servicing.
			If the Legislature intended a restrictive interpretation, the word MINOR would
			simply be added and it would read as "Minor infill and minor rounding out"
			The Distinction Between Infilling and Limited Infilling
			It is noteworthy to point out that NEP section 1.6.8.8 states that "LIMITED
			INFILLING may be permitted in the built-up portions of Minor Urban Centres
			that do not have an approved official plan and/or secondary plan".
			NEP section 1.6.8.8 does not apply to the Manors development, since
			Belfountain is designated under the Town of Caledon OP.
			LIMITED INFILLING is much more restrictive than INFILLING, as described in
			PPS section 1.6.6.4.
			75 lots in the context described constitute "INFILL" and private services are
			an appropriate servicing option.
1.3	Has it been demonstrated that site conditions are		Please refer to NEC item 1.3 (March 2021 letter) in this matrix for a detailed
	suitable for the long-term provision of individual		response.
	services with no negative impacts on the environmental		
	health and desired character of rural settlement areas?	IBI	Are Site Conditions Suitable?
	Several agencies have indicated in their comments that	וטו	
	they have additional questions and requirements		There is a long list of studies going back to 1988 – Terraprobe (1988, 1990,
	before reaching this conclusion in order to demonstrate		1992, 2000), Burnside (1997, 1998, 1999), Proctor & Redfern (1997), Beatty
	conformity with the PPS.		and Wood (2002, 2012), Coffey (2014), Cole Engineering/IBI Group (2018,

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2020), all of them concluding that the dolostone aquifer, one of the most prolific in Ontario, found below the site is a reliable source of water that will replenish itself with regular site infiltration from rainfall.

The Hydrogeological Investigation Report by Cole Engineering updated in 2020 incorporated the comments from Terra-Dynamics, the consultant retained by the Town of Caledon to act as peer reviewer. The terms of reference of the peer review were circulated to the relevant agencies and approved by them.

The Peer reviewer has also commented on Cole's 2020 updated report (refer to letter from Terra-Dynamics Consulting dated November 5, 2020 under Appendix C) and is generally supportive of Cole's recommendations, and so is MECP in their letter dated September 18, 2020 in response to our 2nd submission.

The Peer reviewer and MECP agreed with Cole that a phased development approach will allow monitoring of impacts and the timely implementation of mitigation and remediation if required. Refer to details in the responses prepared in this matrix by Cole (now IBI Group).

Our Response to Opposing Discourse

The Hydrogeological Investigation Report by Cole Engineering (2020) does not satisfy the critic retained by BCO but the work plan proposed by him is not required and it is based on assumptions and interpretations that would hardly bring clarity even if pursued.



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			The base line surveys required by the Region of Peel are standard conditions of draft approval to which the applicant has no objection. The consolidated pumping test which the Region would prefer is a usual requirement for a commercial development (such as a golf course) or for a municipal well; it is not required for individual residential wells; however, as part of the phased development approach, the applicant will undertake a
			An Environmental Management Plan has been developed for the Site to address and mitigate risks throughout construction and post construction period.
			The Hydrogeological Investigation Report by Cole (2020) confirms that the nitrate levels at the property line are below the threshold and have been found to be acceptable by CVC, as confirmed at a meeting dated April 9, 2021. Based on the foregoing, we are concluding that "site conditions are suitable for the long-term provisions of such services without negative impacts" and private conditions is an appropriate condition.
	Growth Plan		private servicing is an appropriate servicing option.
2	The two key issues of conformity with the Growth Plan as set out in our previous letter are:		
2.1	Growth should be limited in areas that are not municipally serviced; does a 75-lot plan of subdivision amount to "limited growth", particularly if it will take up most of the remaining hamlet population allocation for the Town of Caledon;	MDTR	Please refer to NEC item 3.1 (March 2021 letter) in this matrix for a detailed response. Provision for Development Under Town OP

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This growth is Planned Growth and it has been committed for over 30 years.

Town OP section 5.10.3.4 states that "development of settlements will take place in accordance with population allocation and policies of chapter four".

The Caledon OP Policy 4.2.7.1/Table 4.5 lists the historically established population within the hamlet of Belfountain to be 520 people.

The full build-out of the proposed development will bring a population increase of 236 people approximately. The total population at build out is expected to be 445 people.

The increase is still well contained within Belfountain's allocated population capacity.

Interpretation of Land Use Policies

Minor Urban Centers are "concentration points for development and growth" under the NEP Policy 1.6.1.1.

Moreover, the Town of Caledon OP Policy 4.2.1.3.1 "encourage(s) intensification within... undelineated built-up areas" and recognizes that given its primarily rural nature, it has limited potential for intensification and that intensification strategies will differ. The subject site was proposed as an undelineated built-up area under the Growth Plan, thus proposed development aligns with the Town's principles for growth.

Section 2.2.9.6 of the Growth Plan states in Rural areas, new multiple lots or units for residential development will be directed to Settlement Areas.



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			The proposed growth is planned, committed, complies with the policies of the applicable plans and it is limited to what is allowed by the said Plans. Nothing more, nothing new.
2.2	Housing development is to take place as part of a complete community; our letter indicated that given the limited range of amenities in the hamlet, the site cannot be demonstrated to be a complete community.	MDTR	Expected Uses Under Planning Legislation As outlined under Caledon OP Policy 5.10.6.2.3, Residential uses shall be the predominant land use within these Settlements [hamlets]. Limited Village Commercial uses may be permitted in accordance with the policies contained in Section 5.4 of the Plan. Institutional uses, including schools, places of worship, small scale government offices, fraternal association halls, parks, as well as home occupations may be permitted. Section 7 of the Growth plan (Definitions, p. 68) states that complete communities "may take different shapes and forms appropriate to their contexts". Section 2.1 of the Plan makes it clear that communities grow and intensify at a different pace that reflects their local context. There is no one size fit all when it comes to planning. Section 5.4 of the Peel OP describes that "The rural system is a community of communities and should be viewed holistically as a planning entity". The proposed development should be viewed within the wider context of the policies of the Growth Plan, with considerations for its rural characteristics.



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		The facilities surrounding this development are in line with the permitted land uses under the Town OP.
		There is no expectation to allocate employment, health or transit services within the rural hamlet. Furthermore, the proposed house design are sensitive to the historical village while reflecting present needs and future expectations.
		Complete Community
		The estate type lots contribute towards the mix of housing types within Caledon and the regional market. They add variety amongst the common single-detached houses, townhouses and condominiums to be found elsewhere in The Region.
		The Manors community will provide variety and lifestyle alternatives to executives seeking choices in the Region.
		Sidewalk and sharrows have been provided to encourage pedestrian activity and active transportation and the design scores high on Peel Region's Healthy Development Assessment.
		The Urban Design Guidelines by Weston Planning Consultants will provide appropriate design criteria for the community and will take into consideration its local context.
	Niagara Escarpment Plan	
3	The main issues of conformity with the NEP as set out in our previous letter are:	



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3.1	Permitted uses:		
3.1 (a)	The proposed park would only be a permitted use in the Escarpment Natural Area if it becomes part of the NEPOSS; confirmation that this will take place should be provided by CVC;	MDTR	Acknowledged. The applicant is responsible for grading of the park block but the actual construction and management of the park is undertaken by the Town.
3.1 (b)	Development should be directed out of Escarpment Protection Areas even if in a Minor Urban Centre; some of the proposed lots extend into the Escarpment Protection Area; use of restrictive covenants may not be the appropriate tool to achieve policy conformity; avoidance of these areas is preferred	MDTR	The boundaries of Lot 50-55 have been altered and are now kept out of the Escarpment Protection Area. This will conform to NEP Section 1.4.4 for Escarpment Protection Area Lot Creation policies and Policy 1.6.8.3. Please refer to the latest draft plan attached in this matrix (Appendix G) which reflects the revisions.
3.1 (c)	Development must not conflict with community character and must be environmentally sustainable; the estate lot subdivision does not reflect the character of the village; measures to demonstrate or confirm environmental sustainability over the long term have not been finalized.	MDTR	Compatibility with Community Character Please refer to NEC item 1.1 (March 2021 letter) in this matrix for a detailed response. The Manors is a separate enclave with significant separation, in the order of 500 metres, from Bush Street. There is no conflict with the "village look"; the visual separation acts as a barrier to any perceived impact. The wider community, however, consists of estate homes many on lots significant larger than this development.

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For example, Caledon Mountain Estates, is in proximity to the proposed development. Lots from the Caledon Mountain Estates are sized around 3 acres, substantially larger than the lots being proposed.

Numerous other estate homes are in the immediate vicinity.

The reality is that estate lots are an existing part of the community character.

The Urban Design Guidelines by Weston Planning Consultants speak to how the past and historic will be incorporated in the design of the development (through appropriate massing, wise material and colour selection) while at same time recognizing the present and the demands of living today. The Design guidelines were peer reviewed and Weston Planning Consultants will incorporate the comments received.

The character of Belfountain shall remain; what is on Bush Street or Mississauga Road shall remain untouched; no conflict created .

At the same time, this development is in keeping with the wider Belfountain community which encompasses more than just the houses fronting on Bush Street and or Mississauga Road.

Long-Term Environmental Sustainability

This development has been designed to factor in principles that support climate change objectives described under Growth Plan Policy 4.2.10.1.



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			Please refer to our reply to NEC March 2021 letter in section 3.2 of this matrix. Treat the comments as being applicable also to item 3.1(c) of this Section. Sidewalk and sharrows have been provided to encourage pedestrian activity and active transportation and the design scores high on Peel Region's Healthy Development Assessment.
			MDTR Group is proposing to install grey water recycling systems in each home, which can achieve more than 25% in water savings. Cisterns may also be used for lots with low water yield. These measures help to increase efficiency of water use and enhance sustainability in the long term. The Control Architect, through the provisions of the Urban Design Guidelines, at the time of site plan approval will ensure that these measures, and NET ZERO, will be implemented in the design and construction of each home before a building permit is issued.
3.2	Steep Slopes: additional information is required to demonstrate that lots with sloping topography have a stable and suitable building envelope; this information is required now not at a later stage in the planning approval process;	MDTR IBI	As per discussion with the Town and CVC on March 24, 2021, they are satisfied with our current design. Related comments from the Town and CVC are addressed in sections below. Regarding the installation of septic system on slope, IBI is of the opinion that the presence of sloped land does not prohibit placement of a septic tile field. The steepest slopes on the development area are no greater than 4:1 (or 25%). While the tile field itself will still be constructed relatively flat, however the ground above it can be sloped or undulating. Mounding overtop the

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3.3	Water Resources: significant issues remain in the comments received from peer reviewers and other agencies; these must be addressed in order to demonstrate that the NEP policies with respect to new development affecting water resources in Part 2.6.3, 2.6.9 and 2.6.10 particularly have been or can be met using available planning tools or agreements;	Beacon IBI	septic tile field will also occur by re-grading areas of the lot to accommodate septic field placement. Each septic system on each lot will require a future detailed design that will be completed in conjunction with the product supplier, Waterloo Biofilter and the detailed lot grading. Note that slopes of concern were tested by EXP and the development is not within areas of concern. The Slope policy requirements of the NEP are being met and if lots of concern remain, please identify the lot numbers The issues under NEP Part 2.6.3, 2.6.9 and 2.6.10 are addressed by our technical consultant IBI Group and Beacon Environmental. Please refer to our response to NEC Item 4.13-4.20 (March 2021 letter) in this matrix for details. NEP Part 2.6.3 As mentioned by Beacon under NEC item 4.18, "It is not anticipated that the proposed development will result in any negative impacts to the form or function of wetlands on and off the subject property, as development is located over 200 m away from wetlands and the connectivity and hydrology of the features will be maintained post-development. While NEC policies (NEP Part 2.6.3) refer to key natural features within 120 m of development and the wetlands in question are over 200 m from development, the intent of the policies are nevertheless met." NEP Part 2.6.9
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There is a long list of studies going back to 1988 – Terraprobe (1988, 1990, 1992, 2000), Burnside (1997, 1998, 1999), Proctor & Redfern (1997), Beatty and Wood (2002, 2012), Coffey (2014), Cole Engineering/IBI Group (2018, 2020), all of them concluding that the dolostone aquifer, one of the most prolific in Ontario, found beneath the site is a reliable source of water that will replenish itself with regular site infiltration from rainfall.

Several yield and water quantity analyses have been completed that demonstrate sufficient water quantity, meeting MECP D-5-5 water testing guidelines.

Chloride and nitrate loading assessments do not indicate impacts to the water quality due to the proposed development. With a conversion from agricultural to residential land use, IBI is of the opinion that there should be a reduction of nitrate loadings over time.

As these were samples collected from older test wells that had been part of frequent monitoring and sampling programs over the years, total coliforms detections may be present in some wells. According to the New Jersey Department of Environmental Protection as cited in the Hydrogeological Investigation Report by Cole (p. 34), repeated testing increases the likelihood of coliform occurrence. It can be easily found near sedimentary rock. Though total coliform was detected in these well tests, the wells were not disinfected after the pumping equipment was installed and we attribute the presence of total coliform to the pump and discharge pipe.

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If any of these older wells is to provide water to a subdivision lot, appropriate disinfection steps will be taken as part of the required MECP requirements before the well can be used for domestic water consumption.

None of the groundwater samples historically analyzed from the Site had detections of E. Coli, which is a more reliable indicator of fecal contamination.

All lots within the proposed development will be equipped with nitrate removal devices by Waterloo Biofilter. The Waterloo Biofilter was tested in NSF Buzzard's Bay Facility in Massachusetts and can remove 50-65% of total nitrogen.

In accordance with the recommendations of the Town HydroG peer reviewer, Terra-Dynamics (Appendix C) and in accordance with the recommendations of MECP in their letter dated September 18, 2020 (Appendix B), the applicant will adopt a phased development approach, whereby the upgradient portion of the Site will be developed first and any subsequent phase will progress if the monitoring program demonstrates that no water quantity (and quality) impacts are occurring or will result from further development and if there should be such impacts, once appropriate measures are taken to mitigate or obviate them.

An Environmental Management Plan has been developed for the Site to address and mitigate risks throughout construction and post construction period.

NEP Part 2.6.10

Most of the natural topography and site natural drainage pattern has been preserved. The proposed stormwater management servicing strategy was



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			designed to avoid changes to the natural drainage, therefore the drainage divides, overland flow paths, external area overland flow paths, site discharge points were generally maintained as per existing conditions. For details, please refer to drawing GP-1 Functional Grading Plan and ST-2, Functional Grading Plan under the Functional Servicing Report by IBI (2020).
3.4	Natural Heritage: how does the loss of the woodland adjacent to Shaw Creek Road demonstrate maintaining and enhancing natural heritage features and functions; need to demonstrate that DFO requirements are met by the application at this stage; protection for the habitat of SAR on site has not been fully finalized; (will the bird habitat be fenced, how will the JESA pond be protected in the interim until the lands are conveyed to CVC?); final comments from MECP should be received;	Beacon	Regarding the loss of woodland, please refer to our response to NEC comments 4.21 (March 2021 letter) in this matrix. A request for review was submitted by Beacon and the proposed work has been authorized by DFO. Please refer to Appendix D for the Request for Review clearance from DFO, dated May 5, 2021. MECP has confirmed that the draft plan (Appendix G) incorporates an appropriate and acceptable treatment of SAR habitat. The email confirmation from April 13, 2021 is included in this matrix (Appendix A).
3.5	Cultural heritage: how will the remnant buildings on the property, stone walls and hedgerows be conserved in accordance with Part 2.10.2, particularly if on private property;	ASI	ASI has added a recommendation to preserve the remnant farm building. Please note that Block 78, where the remnant farm building is on, will be conveyed to CVC. Therefore, the remnant farm building will not be owned by MDTR. ASI has added a recommendation that the Town of Caledon implement heritage easement agreements on lots with remnant stone mounds and hedgerows to ensure that these features are protected.
3.6	Recreation: if trails are not to be part of the current application, they should not be shown on the draft plan and would be part of a subsequent application by others; if the proposed trails are part of the subject	MDTR	The draft plan has been updated and included in this matrix under Appendix G. The trail is no longer shown and is not part of the application.



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	application, additional detail will be required to determine if they meet NEP policy;		
3.7	Infrastructure: there has been additional discussion since our previous letter with respect to stormwater management on the property which may result in changes to the draft plan; a response to the issues detailed in our letter may address the policy issues raised, or the draft plan should be revised to reflect the new information;	IBI	No draft plan change has been made with respect to stormwater management and none is required; if the proposed phasing plan requires a revisiting, revisions will be made as may be required. Please refer to Appendix G for the draft plan and Appendix H for the phasing plan. It has been clarified that the only infiltration measures proposed throughout the site are two centralized infiltration basins that are used for stormwater quantity control. Rear yard catch basin is not used as an infiltration measure. Private septic systems are shown on the Grading Plan to be spaced according to the required distances noted in Section 7.1 of the FSR/SWM Report. Private wells are shown on the Grading Plan to be spaced according to the required distances noted in Section 8.1 of the FSR/SWM Report. Robust erosion and sediment control designs will be prepared at the detailed design stage and will include lot level ESC measures on a lot-by-lot basis. At the detailed design stage, MDTR Group will provide a monitoring plan for the stormwater network, in addition to an operations and maintenance manual and cost estimate. These approaches have been discussed and agreed upon as per Town's letter dated February 8, 2021 and meeting with CVC/Town on March 24, 2021. The Town of Caledon, through conditions of approval, will require the posting of securities. MDTR will adhere to conditions and maintenance.
3.8	Scenic resources: your consultant is undertaking further work as part of the visual impact assessment process; the outcome of that work will determine if the	MDTR	Acknowledged.



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proposed development can satisfy the policies in Part	
2.13.4 and if changes to the plan are needed.	

TOWN OF CALEDON PLANNING RECEIVED Jul 12, 2021

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Town of Caledon (Town) Comments

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Town of Caledon		Rob Hughes, Manager of Development West			
February 8, 2021 Letter		Office: (905)-584-2272 x4246 Email: <u>rob.hughes@caledon.ca</u>			
No.	Comment:	Comment by:	Response by:	Responses:	
1	A. Planning Department (Rob Hughes), February 8, 2021				
A3	Phasing Plans Technical servicing and environmental comments as provided note that lot restrictions and phasing of development may be required on the lands, to ensure systems and other matters are proven to function in acceptable ways. It is recommended that a satisfactory phasing plan be developed and filed which addresses relevant servicing and other criteria considerations	Planning	MDTR	A phasing plan has been proposed and shown on the updated draft plan (Appendix H), whereby the upgradient portion of the Site will be developed first and any subsequent phase will progress if the monitoring program demonstrates that no water quantity (and quality) impacts are occurring or will result from further development and if there should be such impacts, once appropriate measures are taken to mitigate or obviate them.	
A4	Technical Environmental, Servicing/Road & Landscape Comments Town, Region and CVC comments request additional information and provide for a series of recommended changes which need to be addressed and implemented in advance of moving forward. Changes may result in lot pattern and unit counts for the lands, see relevant comments for details. Contingency, monitoring and mitigation measures as noted in the comments need to be addressed and accommodated, in addition to consideration of implementation measures during detailed design, construction and occupancy.	Planning	MDTR IBI	Discussions have taken placed with the Town and CVC and no changes in lot count or configuration is presently required With regards to stormwater management, preparation of the Erosion & Sediment Control Plans will be completed and submitted for approval at the detailed design stage, including lot level sediment control measures. The monitoring program will be completed and submitted for approval at the detailed design stage. There will be frequent monitoring to ensure the stormwater network functions to operating standards. Other measures and our response to the Town's SWM concern have been addressed under Section B – Engineering below. An Environmental Management Plan has been developed by IBI	



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				mitigate risks throughout the proposed Phase 1 and Phase 2 of the development.
A5	Given the rolling topography, proposed private water and wastewater servicing, and cultural and natural heritage features on each lot, Town staff have an interest in establishing structural envelopes for each lot. Envelopes would identify an optimal area of the lot for structures and provide ample space for estate residential and accessory uses including all associated necessary lot grading; the proposed house and driveway locations; protection of heritage fencing "hedgerow features"; and soil absorption area for sewage disposal. To achieve the above, staff suggest a process whereby mechanisms are established and in place upfront to control development on each lot, implementable in such a way that enforceability applies as part of the release of a Building Permit. Options to consider include some level of zoning control, site plan approval, agreements, and/or an expanded development permit control process.	Planning	MDTR Weston	Acknowledged. Building envelopes and preliminary lot grading have been provided. Site plans for each lot will be provided at the time of building permit and will incorporate all the requirements of the conditions of draft plan approval as discussed with the Town and CVC on March 24 2021.

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terms of scale ar NEP and other a the broader Belf should be given	the lands will need to be appropriate in and massing, consistent with all relevant pplicable policies and provisions, and ountain community. Consideration to confirming if the 600 m2 cap is a from this perspective, beyond	Planning	MDTR Weston	 As per Section 4.1.8.1 of Caledon OP, The Town of Caledon is a "Community of communities". As such, scale and massing supply a variety of built forms which contribute to the formation of a complete community of the whole area, not only the Town, providing new rural living options. Further to this, the proposed building sizes support the character of Caledon as "a large rural area, contains settlements of various sizes and functions" [Section 4.1.8.1 Caledon OP], supporting a maximum dwelling size of 4,700 square feet (437 square meter). NEP section 1.6.8.8: does not apply to proposed Manors Development as the OP policy supersedes NEP for Belfountain, therefore, scale has been proposed in accordance with the OP, and the scale of development permitted for the Manors is larger than development constrained under NEP section 1.6.8.8. Development setbacks satisfy and complement the existing settlement pattern. These have also been guided by the need to "ensure functionally suitable sizing and placement of buildings within lots." Scale proposed is sufficient given existing character and infill nature of development, while incorporating energy efficient solutions based on appropriate building siting.



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В.	B. Engineering (Drew Haines), February 8, 2021					
B1	Grading There are several locations where emergency overland flows from the road will go across private property before it outlets to a municipally owned block. Any overland flow route for municipal drainage is to be dedicated to the Town as a block.	Engineering	IBI	Please see PR-1 Road Profiles (p. 47) for details. ST-3 Storm Drainage Plan – External (p. 50) shows the low point elevation on Shaws Creek Road and emergency overland flow direction.		
	Street F between station 0+460 and 0+480 – emergency overland flow is onto private property.	Engineering	IBI	The intent of creating interim Low Points in the road was to mimic existing topography. To avoid the use of Public Blocks		
B1 (b)	Street F at station 0+080 - emergency overland flow is onto private property.	Engineering	IBI	for emergency overland flow at these four locations, the road grade can simply be revised at all four locations with minor		
B1(c)	Street A at Station 0+160 - emergency overland flow is onto private property.	Engineering	IBI	change to the centerline of road profile.		
B1 (d)	Street D at Station 0+440 - emergency overland flow is onto private property.	Engineering	IBI	For one location, at Street 'A' (Sta 0+160), we envision the use of road 'sawtoothing' to flatten the road grade leading up to the low point to ensure continuous overland flow along the ditches can be achieved, in both normal flow and emergency flow conditions.		





B2	Grading Confirm rear yards of all lots meet Town standard 1.12.3 whereas a minimum of 7.5 meters is to be sufficiently level (2% - 5%).	Engineering	IBI	The ability of each lot to achieve the Town standard for usable amenity area will be analyzed and achieved at the detailed design stage. This level of detail is not presented in the current Functional Grading Plan. However, given the generous size of the estate lots, it is reasonably foreseeable that each lot will manage to provide the required Town Std.
В3	Grading Confirm all driveways meet Town and Fire standards whereas the maximum slope is 6%.	Engineering	IBI	Although this level of detail is not presented in the current Functional Grading Plan, it is recognized that private driveways leading to houses will be designed with a maximum slope of 6% at the detailed design stage.
B4	Stormwater Management The proposed stormwater management facilities rely entirely on infiltration as there is no legal outlet for the site. The applicant is to confirm that the design will meet the Ministry's Design Criteria for Sanitary Sewers, Storm Sewers and Forcemains, November 2019; Design Guidelines for Sewage Works, 2008; and has been planned and designed to be consistent with the Stormwater Management, Planning and Design Guidance Manual, 2003.	Engineering	IBI	The MECP document that would apply to the design of the proposed stormwater management facilities is the MECP SWM Planning and Design Guidance Manual, 2003. We have not engaged with MECP at this stage of design and we recognize the MECP Guidance Manual suggests that infiltration for large drainage areas is generally not recommended. However, for this development, the large drainage area is an external area consisting of undeveloped, vegetated lands that relies on overland flow for stormwater to reach the subject site. We believe the eventual MECP ECA approval for the proposed stormwater management facilities will be attainable at the detailed design stage.
B5	Stormwater Management Since the ditches are designed to provide storage of runoff, the consultant is to demonstrate that the system	Engineering	IBI	The roadside ditches are designed to provide stormwater storage for the purpose of promoting quality control, not quantity control. 100% of the required quantity control for

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	as a whole will still function during the worst case scenario should the 0.3 m storage depth in the ditch be filled in by silt.			stormwater is being provided within the two stormwater management ponds and quantity control requirements will not be affected if the ditches are filled with silt. If the ditches are filled with silt, water quality treatment will still be provided by the proposed Oil/Grit Separators, which are located just upstream of each proposed storm sewer inlet into the SWM ponds. Please refer to section 5.5.2 Major System Drainage & Road-Side Ditches for details (p. 21).
В6	Stormwater Management The report indicates that the pond has been sized for half of the flow from Shaws Creek Road, however the applicant is to confirm if Credit Valley Conservation Authority requires treatment for all runoff from Shaws Creek Road. If they do then the Town will require that all flows from the road be directed to the stormpond in Block 82.	Engineering	IBI	As per discussion with Town and CVC on March 24, 2021, CVC does not require all runoff from Shaws Creek Road to be treated.
В7	Stormwater Management For Block 82, the Town requires a sediment forebay and a drying area be provided for quality control for Shaws Creek Road	Engineering	IBI	We understand the Town has requested the use of a sediment forebay within SWM Pond Block 82 since Shaws Creek Road is presently a gravel road and has a higher potential for sediment runoff from the road into the pond. We would advise against the use of sediment forebays in this project as these are typically constructed with impermeable side and bottom liners which would be counter intuitive to the premise of promoting infiltration practice for the stormwater management strategy. In addition, sediment forebays are designed to retain a certain depth of water and the MECP guidelines suggest a minimum drainage area of 5 hectares to sustain the permanent pool. The

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				available drainage area for the east half of Shaws Creek Road is only 1.3 hectares. Water quality treatment for Shaws Creek Road is presently recommended through the use of an Oil/Grit Separator, which operate very effectively for settling out gravel particles. Please refer to section 5.6.6 Quality Control (p. 28).
B8	Stormwater Management The emergency overland flow from Block 82 is designed to overtop Shaws Creek Road. A condition of draft approval will be included that through detailed design it is to be determined if a cross culvert can be installed to prevent emergency flows crossing the travel lanes of Shaws Creek Road.	Engineering	IBI	Acknowledged
В9	Stormwater Management Since the stormwater management facility in Block 82 is entirely reliant on infiltration as the outlet, there is the possibility that the pond may not function as designed and may need to be increased in size to provide additional surface area/storage capacity, therefore the Town is requesting restrictions on development of Lot 13, and Lot 14 or Lot 4 (depending on topography) should modifications be required. The restriction will be lifted once Shaws Creek Road has been reconstructed, 80% of the homes that contribute runoff to the pond have been constructed and stabilized and it can be	MDTR Engineering	IBI	Lot 4, 13, 14 are now proposed to be developed once 80% of houses that contribute run off to the pond have been constructed.

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	demonstrated to the Town that the pond is functioning			
	as designed.			
B10	Stormwater Management			
	Since the stormwater management facility in Block 81 is			
	entirely reliant on infiltration as the outlet, there is the			
	possibility that the pond may not function as designed			
	and may need to be increased in size to provide	MDTR		1.1.42 1.44
	additional surface area/storage capacity, therefore the		IBI	Lot 43 and 44 are now proposed to be developed once 80% of houses that contribute run off to the pond have been
	Town is requesting restrictions on development of Lot	Engineering	IDI	constructed.
	43 and Lot 44 should modifications be required. The			constructed.
	restriction will be lifted once 80% of the homes that			
	contribute runoff to the pond have been constructed			
	and stabilized and it can be demonstrated to the Town			
	that the pond is functioning as designed.			
B11	Stormwater Management			
	Stormwater management for the development is			
	entirely reliant on infiltration which can be significantly			
	impacted by sediment, therefore robust erosion			Preparation of the Erosion & Sediment Control Plans will be
	sediment control (ESC) plans will need to be provided to			completed and submitted for approval at the detailed design
	show how the ditching network, stormwater	Engineering	IBI	stage, including lot level sediment control measures.
	management ponds and dry wells will be protected		161	
	during house construction. Development Engineering's			The lot grading/ESC deposit is acknowledged.
	understanding is that development permits from the			
	NEC will be required for each house construction so the			
	Town will be seeking these plans to show all lot level ESC			
	measures. A lot grading/ESC deposit will be applied to			





	each lot to ensure that grading and ESC measures are			
	being completed as per the approved plans.			
B12	Stormwater Management A monitoring program will be required for the stormwater network to demonstrate that it is functioning as designed.	Engineering	IBI	The monitoring program will be completed and submitted for approval at the detailed design stage. There will be frequent monitoring to ensure the stormwater network functions to operating standards.
B13	Stormwater Management			
	Table 5.4 in the FSR provides an operational and maintenance checklist. As the stormwater management method proposed for this site falls outside Town standards, Cole is to provide an estimated maintenance cost of the proposed stormwater facilities to determine if there are extra cost associated with this proposal. Should it be determined that the cost of this proposal exceeds the cost of standard stormwater control methods then the Town may request additional funds from the developer. The estimated maintenance cost proposal may be peer reviewed at the developer's expense.	Engineering	IBI	Preparation of the operations and maintenance cost estimate will be completed and submitted at the detailed design stage. The maintenance of the SWM facility will not amount to significant costs for the Town. MDTR Group will be primarily responsible for the monitoring.
B14	Stormwater Management A draft condition will be included that an operation and maintenance manual for the stormwater management system is to be provided to the Town. The manual is to contain cleaning procedure for the ditch system which will include all ESC measures and a rehabilitation plan in order to protect the ponds. These cost for these should	Engineering	MDTR IBI	Preparation of an operations and maintenance manual will be completed and submitted for approval at the detailed design stage.

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	also be included in the estimate maintenance cost provided to the Town.			
B15	Road Network Grading drawings indicate the K values for the roadway, however the radii on each horizontal curve was not provided. These are to be included to determine if Town standards are met.	Engineering	MDTR	The horizontal curve radii has been labelled on the Draft Plan of Subdivision (Appendix G) on the cul-de-sacs on Street A and F.
B16	Road Network The road cross sections indicate a 3:1 slope for the ditch. The Town standard is 4:1 slope within the municipal right of way, especially since the ditches require regular lawn cutting to function appropriately.	Engineering	IBI	The use of 4:1 slopes in the ditches can be accommodated by creating v-bottom ditches (rather than flat-bottom) and reducing the width of shoulder. There is no special lawn cutting frequency required for the ditches in this project compared to any other typical ditch. Normal maintenance will be fine. In fact, longer grass provides increased water filtering ability compared to short grass.
B17	Road Network Indicate how road drainage will transverse the sidewalk.	Engineering	IBI	Road drainage will flow along the concrete gutter. At interim locations, catchbasins can be installed to collect drainage and direct it either to the storm sewer, or to the roadside ditch via a shallow lead, if a storm sewer is not available nearby. Please refer to Figure 3-2 showing the 20m ROW Rural Cross Section Roadway – With Sidewalk (p. 6).
B18	Road Network A 0.3 m reserve will be required along Shaws Creek Road and the day light triangles along Lots 22, 1, 9 and 15.	Engineering	MDTR	Acknowledged, the 0.3m reserve (Block 86) and day light triangles are reflected in the updated draft plan under Appendix G.
B19	Road Network	Engineering	IBI	Acknowledged.

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	Shaws Creek Road is to be reconstructed as determined by the Town's Finance and Infrastructure Department. A draft condition will be added that will require the preparation of all reports and engineering drawings as required by the Town for the reconstruction of Shaws Creek Road.			
B20	Hydrogeological Investigation Report Hydrogeological report is to stamped and signed.	Engineering	IBI	A signed and stamped report (May 2020) has been delivered to the Town.
B21	Hydrogeological Investigation Report The report states that road salt will not be used in the development as the roads are considered class 5; however, in an email sent to John Spina on June 10, 2020, it was stated that road salt would be used to meet minimum maintenance standards and to assume worst case scenario. The report should reflect this and speak to any impact this may have.	Engineering	IBI	Subsequent information provided by the Town (via an April 13, 2021 email) indicates that the Town uses Thawrox (calcium/magnesium chloride) treated rock salt on all hardtop roads and streets, opposed to traditional road salt (sodium chloride) or sand. The use of Thawrox permits for the effective de-icing down to -17° C. The application rates for Thawrox can range from 72kg/2 lane KM to 130kg/2 Lane KM. A median value of 101kg/2 lane KM was used in the mass balance calculation described below. There are 10.5 days with >5cm snow using the MECP Orangeville Climate station data. A mass balance was completed to estimated annual inputs of chloride. Inputs to the mass balance: Using 20 events / year Recharge rate of 300mm/year Median MgCl2 application rate of 101kg/km 2.82km of proposed road Chloride / Thawrox ratio of 0.74

JuThe Manors of Belfountain Corp. – Third Submission

Part of Lot 9, Concession 5, WHS, Hamlet of Belfountain

File Numbers: 21T-91015C & NEC 2017/2018-450



		The results of the mass balance indicated that the annual
		chloride loading will be 27mg/L, which is significantly less than
		the Ontario aesthetic objective of 250mg/L from the Site. Note
		that these loadings should not be cumulative as chloride inputs
		will flow via advection with groundwater.





C	C. Urban Design, July 13, 2020					
C1	See attached comments from John G. Williams Limited	Urban Design	N/A	Acknowledged.		
C	D. Heritage (Sally Drummond), February 8, 2021					
D1	Cultural Heritage Resources Seems to satisfactorily address earlier Town and Min of Culture comments, however, needs revision to include: Latest Site Plan, as this may affect general conclusions	Heritage	ASI			
	and specific recommendations about stone mounds / field dividers / retention of culturally significant vegetation	j				
D2	Figure 7 map of cultural heritage resources needs to illustrate stone mounds/fence dividers on west half of subdivision and clear identification that they have Cultural Heritage Value (area is currently shown as having no CHV)	Heritage	ASI	This has been added.		
D3	We need to ensure implementation of some of its recommendations about stone fence and tree preservation and/or mitigation as conditions of approval	Heritage	MDTR ASI	Acknowledged.		
D4	Cultural Heritage Impact Assessment (April 2019) 1. Document could not be opened	Heritage	MDTR	MDTR Group has coordinated with Sally Drummond, the Cultural Heritage Impact Assessment document can be opened now and is under review.		
D5	2. This report is intended to satisfy a Min of Culture request and one of ASI's own recommendations; it might also contain the mitigation/stabilization recommendations that I know CVC is looking for.	Heritage	MDTR	Acknowledged.		

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E	E. Accessibility (Patrick Trafford), February 8, 2021					
E1	Staff have no further comments at this time	Accessibility	MDTR	Acknowledged.		
F	F. Finance (Glendon Turner), February 8, 2021					
F1	0 Mississauga Road (Roll # 030.008.29210.0000) is					
	currently assessed as mostly Farmland (\$2.5 million					
	CVA). The Town's share of annual taxes levied, based on					
	current value assessment is approximately \$4,500. The	Finance	MDTR	Acknowledged.		
	property tax account as at August 4, 2020 is determined					
	to be current, with the owner listed as THE MANORS OF					
	BELFOUNTAIN CORPORATION.					
F2	If the proposed developments (include 75 estate					
	residential lots) were to proceed as planned, the taxable	Finance	MDTR	Acknowledged.		
	assessment value of the property may change, to reflect			/icknowledged.		
	the developments that would have taken place.					
F3	Development Charges would apply to the proposed					
	changes as follows:					
	3.1. Town of Caledon: \$31,315.35 per single/semi/duplex					
	unit.					
	3.2. Region of Peel: \$53,083.06 per single/semi/duplex					
	unit. (Effective February 1, 2016, the Region of Peel	Finance	MDTR	Acknowledged.		
	began collecting directly for hard service development	rmanee	WIDTK	Newtowicagea.		
	charges (i.e. water, wastewater and roads) for residential					
	developments, except apartments, at the time of					
	subdivision agreement execution.					
	3.3. School Boards: \$4,572 per any residential unit.					
	3.4. Go-transit: \$581.30 per single/semi/duplex unit					



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F4	The Development Charges comments and estimates above are as at August 4, 2020 and are based upon information provided to the Town by the applicant, current By-laws in effect and current rates, which are indexed twice a year. Development Charges are calculated and payable at the time of building permit issuance. Any estimates provided will be updated based on the Development Charges By-law and rates in effect at the time of building permit, and actual information related to the construction as provided in the building	Finance	MDTR	Acknowledged.
	permit application.			
	G. Fire & Emergency Services (Dave Pelayo), February 8, 202	21		
G1	Fire & Emergency Services has no further comment.	Fire &		
		Emergency	MDTR	Acknowledged.
		Services		





H.	H. Landscape (Nick Pirzas), February 8, 2021			
H1	Tree Inventory Report by Baker Turner Inc., dated April 14, 2020. Refer to marked up Tree Inventory Report for technical comments (Bluebeam).	Landscape	ВТІ	Tree inventory and arborist report has been updated.
H1.1	Under Tree Removal & Preservation Recommendations (p. 7), after "Install snow fence tree protection hoarding", add "(Town Std. 606)"	Landscape	ВТІ	Addressed
H1.2	At the end of the same section, add bullet point: "See Town Std. 710 & 711 for further requirements"	Landscape	BTI	Addressed
H1.3	After " the consulting arborist along with appropriate Town staff shall inspect the entire site", add "on a yearly basis."	Landscape	BTI	Addressed
H1.4	After the next sentence, "Any noted hazardous trees must be identified and removed prior to assumption.", add "or earlier if deemed hazardous at the sole cost of the applicant. Any records of maintenance or removals are to be submitted to the Town."	Landscape	ВТІ	Addressed
H1.5	Add bullet point "The limit of tree protection hoarding shall be confirmed in the field by the consulting arborist, Town staff and conservation authority (if applicable). The Owner/Applicant shall be responsible for ongoing	Landscape	ВТІ	Addressed





				,
	maintenance and repairs to tree protection fencing to			
	the satisfaction of the Town, until final approval by the			
	Town and conservation authority (if applicable). The			
	Owner/Applicant shall not remove and not cause or			
	permit any tree preservation fencing to be removed			
	without the approval of the Town and conservation			
	authority (if applicable)."			
H1.6	Under Compensation Planting (p.8), delete			
	"Where these trees are planted along road right of ways			
	the trees should be a minimum of 60mm caliper at			
	breast height. Where the trees are not to be planted	Landscape	BTI	Addressed
	along road right of ways it is more suitable to plant tall	Lanuscape	БП	Audressed
	whips of a minimum 200cm ht. These small trees are			
	younger and therefore more			
	adaptable and have a more balanced branch structure"			
H1.7	Under Compensation Planting (p.9), delete	Landscape	ВТІ	Addressed
	"and will conform to CVC approved tree species list"	Lanascape		Nucleosed
H2	Refer to marked up Tree Preservation Plan for technical	Landscape	BTI	Tree Preservation Plan has been updated.
	comments (Bluebeam)	Landscape	DII	Tree rreservation rian has been apaated.
H2.1	Switch "STANDARD No. 707" to updated "Standard No.	Landscape	BTI	Addressed
	606"	Lanuscape	ווט	Audiesseu
H2.2	Add Standard No. 710 & 711 in drawing package	Landscape	BTI	Addressed
Н3	The park block size and location is acceptable. A park			
	facility fit plan is to be submitted with the next	Landscape	MDTR	To be provided in Detailed Design.
	submission.			
Н4	Refer to marked up Urban Design and Architectural	Landana	Markan	
	Design Guidelines for technical comments (Bluebeam).	Landscape	Weston	



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H4.1	Under 1.2 Development Objective and Design Principles (p. 9), delete "Tree lined" and "with planted swales"	Landscape	Weston	Updated.
H4.2	Under 1.2 Development Objective and Design Principles (p. 11), delete "The pedestrian network will be furnished with street trees for shading"	Landscape	Weston	Updated.
H4.3	Under 4.1 The Open Space System – Including Environmental Areas and Parks (p. 35), delete "Tree lined", "planted swales". Change to "Development of a 'community' park;"	Landscape	Weston	Updated.
H4.4	Under 4.2.1 Existing Vegetation (p. 37), add "interim" before "Tree Preservation Plan"	Landscape	Weston	Updated.
H4.5	Under 4.3 Landscape and Streetscape Design (p. 39), make text edits	Landscape	Weston	Updated.
H4.6	Make changes to Figure 27: Proposed site design, typical	Landscape	BTI Weston	Updated.
H4.7	Under 4.3 Landscape and Streetscape Design (p. 41), delete "Will contain cattails, riparian grasses, and in some instances flowering daylilies" "All species will be selected from the CVC approved species list"	Landscape	Weston	Updated.
H4.8	Make changes to Figure 31: Hedgerow Style Street Tree Planting	Landscape	BTI Weston	Updated.
H4.9	Make changes to Figure 32: Typical Rural Swale Section on 18m ROW	Landscape	BTI Weston	Updated.
H4.10	Make changes to Figure 33: Typical Rural Swale Section on 20m ROW	Landscape	BTI Weston	Updated.
H4.11	Remove p. 42-44	Landscape	Weston	Removed and updated.



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H4.12	Make changes to Figure 43: Concept illustration of		BTI	Updated.
	staggered estate manors creating variety along	Landscape	Weston	
	streetscapes			
H4.13	Under 4.3.4 Fencing (p. 48), make text edits	Landscape	Weston	Updated.
H4.14	Remove p. 48 (Figure 49 & 50), 49, 49a	Landscape	Weston	Removed and updated.
H4.15	Make changes to Figure 54: Plan view of gateway entry		BTI	Updated.
	feature and Figure 55: 3D model of gateway entry	Landscape	Weston	
	feature			
H4.16	Make changes to Figure 55: 3D model of gateway entry	Landssana	BTI	Updated.
	feature in accordance with notes for Figure 54	Landscape	Weston	
H5	Please note that items 4) and 5) shall be addressed prior			
	to draft plan approval. Items 1) to 3) are not necessary		MADED	
	for draft plan approval, but must be finalized prior to	Landscape	MDTR	Acknowledged.
	executing the Tree Removal or Grading Agreement,		BTI	
	whichever comes first.			





1.	Transportation Engineering (Arash Olia), February 8, 2021			
I1	No further concerns.	Transport-		
		ation	MDTR	Acknowledged.
		Engineering		
J	. Zoning (Cindy Pillsworth), February 8, 2021			
J1	The subject site is wholly within the Niagara Escarpment Plan Development Control Area, and therefore staff have no zoning comments at this time.	Zoning	MDTR	Acknowledged.
K	C. External Agency Comments			
K1	Comments from Peel District School Board and Dufferin-Peel Catholic District School Board are attached.	Peel District School Board & Dufferin-Peel Catholic District School Board	MDTR	Acknowledged, comments from Peel District School Board and Dufferin-Peel Catholic District School Board are addressed below.
К2	No additional comments were received from Bell Canada, Canada Post, Enbridge Gas, Ontario Provincial Police or Rogers Communication	As Described	MDTR	Acknowledged.

TOWN OF CALEDON PLANNING RECEIVED Jul 12, 2021

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Hydrogeology Peer Review
(Terra-Dynamics Consulting) Comments

File Numbers: 21T-91015C & NEC 2017/2018-450



Terra-Dynamics Consulting Inc.		Jayme Campbell, P. Eng.
Novem	nber 5, 2020 Letter	905-646-7931 jcampbell@terra-dynamics.com
No.	Comment:	Responses by IBI Group (COLE Engineering):
	2.1 Confirmation the Study was Prepared by a Qualified Expert	
	The Study was prepared by qualified experts by virtue of Mr. Davies',	A stamped copy of May 2020 Hydrogeology Report has been provided to the Town.
	and Dr. Husain's role's in preparation of the report. However, it would	The report was stamped by a Professional Engineer (Aron Zhao).
	have been more appropriate if the report had been stamped by Mr.	
	Davies and/or Dr. Husain. This comment was previously provided	
	(Terra-Dynamics, 2019).	
	2.2 Confirmation the study followed standard acceptable industry pra	ctice
2.2.1	Terra-Dynamics previously recommended post construction water	An Environmental Management Plan has been developed, which will include a
	level and water quality monitoring (2019). This was not commented	monitoring program. Please refer to Table 7-5 of the Environmental Management
	on in the Revised Hydrogeological Investigation Report.	Plan for a Summary of the Proposed Monitoring Frequency.
2.2.2	Cole Engineering (2020) stated the chemical water quality of new	Procedures for implementing and reviewing testing of new private wells has been
	private wells would be tested. However, no procedure for	incorporated in the Environmental Management Plan by IBI. The methodology is
	implementing and reviewing such testing was provided;	summarized under Table 2.1.
2.2.3	Cole Engineering (2020) did not respond to the recommendation for	A phased development approach is proposed, beginning with the western portion of
	phased development and confirmatory monitoring as recommended	the Site. This has been reflected on the updated phasing plan under Appendix H.
	in Terra-Dynamics (2019); and	Phase 1 shall be implemented to the satisfaction of the Town, until Phase 2 can
	, , ,	begin construction.
2.2.4	Cole Engineering (2020) reported a 10-year operation and	[MDTR] The Applicant, as a condition of draft approval, will enter into a
	maintenance agreement would be executed for the sewage	Maintenance Service Agreement with the sewage treatment system provider. The
	treatment systems. No explanation was provided for what occurs at	Agreement will provide for automatic year to year renewal and will be registered
	year 11.	against the title of individual lots. Default by any Owner will be reported to the
		Town Chief Building Official (BCO) in accordance with the provisions of the Ontario

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		necessary. This has been done in many other residential subdivisions.
	2.3 Review of Study Compliance with the MECP and Other Relevan	nt Agency Criteria, Tests, Guidelines, Policies and Procedures
2.3.1	Cole Engineering did not update their water quality impact	
	assessment using Class IV system loading (effluent nitrate-nitrogen	MECP accepts using a 20 mg/L value and enforcing tertiary treatment through a
	concentration of 40 mg/L) as requested by the MECP and affirmed by	subdivision agreement. Please refer to MECP item 5 in this matrix.
	Terra-Dynamics (2019).	
3	3.0 Adequacy of Water Supply	
	3.1 MECP comment letter dated October 16, 2018 If Proposed Mi	tigation Measures for any Potential Impacts are Acceptable.
	Cole Engineering provided inconsistent comments on the future use of cisterns (underlining by Terra-Dynamics):	The use of cisterns will be conditional. The trigger factors to be considered will be the individual lot well yield. Low-yield lots will require that a cistern be installed that can adequately supply a 4-person household's water needs (2,250 L/day) and can be
	 "shall be enforced" (Executive Summary, Cole Engineering, 2020); "cisterns can be installed at each house to offset the summer demand pumping as a precautiondrought resistant grasses with 	filled solely during off-peak hours. Please refer to the Environmental Management Plan for additional details.
	clover can also be considered." (Section 6.3.2, Cole Engineering, 2020); and	[MDTR] In addition, drought resistant grasses and ground cover are being proposed under the Urban Design Guidelines and shall be required by the Control Architect before a building permit can issue.
	3. "the use of cisterns and drought resistant grasses could be reviewed" (Section 8, Cole Engineering, 2020) and "Cisterns could be installed" (Section 9, Cole Engineering, 2020).	
3.2	Cole Engineering also provided inconsistent comments on the future	Subsequent information provided by the Town (via an April 13, 2021 email) indicates
	use of road salt (underlining by Terra-Dynamics):	that the Town uses Thawrox (calcium/magnesium chloride) treated rock salt on all hardtop roads and streets, opposed to traditional road salt (sodium chloride) or
	1. "will not be applied" (Executive Summary, Cole Engineering, 2020),	sand. The use of Thawrox permits for the effective de-icing down to -17° C. The

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	2. "Salt may be applied as part of Town maintenance service if the temperature is -12° Celsius and rising; however, increased chloride contaminant load due to road salt application is expected to be negligible" (Section 6.2.2., Cole Engineering, 2020).	application rates for Thawrox can range from 72kg/2 lane KM to 130kg/2 Lane KM. Traditional rock salt is only effective to -8° C. As such, It is understood that Thawrox may be used by the Town at the Site. Please refer to our reply in item 4.7(b) of this Section.
3.2 (b)	3. Cole Engineering did not provide a process for implementation of their recommendation of restricting groundwater for use in swimming pools and irrigation during the summer.	Additional restrictions on water use (e.g., irrigation or pools) will be implemented in order not to exceed the drawdown threshold, as outlined in the Environmental Management Plan. These restrictions will be registered on title of each lot. In addition, there will be appropriate warning clauses in the subdivision agreement and the agreement of purchase and sale, allowing the developer or the Town to enforce them against the first or subsequent homeowners. Lots that demonstrate low yield will be supplemented with cisterns that can adequately supply a 4-person household's water needs (2,250 L/day) and can be filled solely during off-peak hours. For additional details, refer to the Environmental Management Plan.
	4.0 Adequacy of the Hydrogeological Study	,
	Cole Engineering's Revised Hydrogeological Investigation Report (May 2020) generally followed standard industry practice. However, there are a number of areas recommended for Cole Engineering to address, they include:	
4.1	Professional Geoscientist stamping of Cole Engineering reports;	The May 2020 Hydrogeology Report has been stamped by a Professional Engineer and a copy has been submitted to the Town.

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4.2	Elevated total dissolved solids concentrations at TW3 and TW12 in	The elevated TDS in both TW3 and TW12 are a result of drawing from the underlying
	2020;	Clinton-Cataract Group aquifer. All domestic wells will be screened within the
		dolostone aquifer.
4.3	Explanation of how implementation will be completed of:	
4.3(a)	Chemical water quality testing of new water supply wells; and	An Environmental Management Plan has been developed, which includes chemical
		water quality testing of all new and identified existing water supply wells.
		For additional details, refer to the Environmental Management Plan
4.3 (b)	Restriction of summer groundwater use.	Lots that demonstrate low yield will be conditionally supplemented with cisterns that can adequately supply a 4-person household's water needs (2,250L/day) and can be filled during off-peak hours.
		Additional restrictions on water use (e.g., irrigation or pools) may be implemented in order not to exceed the drawdown threshold, as outlined in the Environmental Management Plan. These restrictions will be registered on title of each lot. In addition, there will be appropriate warning clauses in the subdivision agreement and the agreement of purchase and sale allowing the developer or the Town to enforce them against the first or subsequent homeowners. Please refer to our reply in item 3.2 of this Section.
		For additional details, refer to the Environmental Management Plan. Our calculations indicate that the aquifer should be able to sustain peak withdraw rates during summer and these restrictions would only be a precautionary buffer.
4.4	Identification of wells for post-construction monitoring, including for a phased development approach south to north; i) Wells for datalogging pressure transducers to monitor water	An Environmental Management Plan has been developed, which includes a monitoring program for both water quality and quantity.
	level recharge conditions and	For additional details, refer to the Environmental Management Plan.



	ii) 3 year interval nitrogen species and sewage effluent impact water quality monitoring;	
4.5	Sewage disposal system operation and maintenance agreements after 10-years;	A permanent Maintenance Service Agreement will be established between the Owner and the maintenance provider, registered to individual lot title. Please refer to our reply in item 2.2.4 of this Section.
4.6	Water quality impact assessment including results if completed using Class IV system loading (effluent nitrate-nitrogen concentration of 40 mg/L); and	MECP accepts using a 20 mg/L value and enforcing tertiary treatment through a subdivision agreement. Please refer to MECP item 5 in this matrix.
4.7	Inconsistent comments on the future use at the Site of:	
4.7(a)	a) cisterns and drought resistant grasses	A greywater recycling system will be installed in each home. The system will use "grey water" (i.e., water from showers, taps etc.) for toilet flushing, which should result in an approximate 25% reduction in water demand. The use of cisterns will be conditional. The trigger factors to be considered for the use of cisterns will be the individual lot well yield. Low-yield lots will require that a cistern be installed that can adequately supply a 4-person household's water needs (2,250 L/day) and can be filled solely during off-peak hours. Please refer also to our reply in item 3.1 of this Section. For additional details, refer to the Environmental Management Plan.
4.7	b) road salt use	Subsequent information provided by the Town (via an April 13, 2021 email) indicates
(b)		that the Town uses Thawrox (calcium/magnesium chloride) treated rock salt on all hardtop roads and streets, opposed to traditional road salt (sodium chloride) or sand. The use of Thawrox permits for the effective de-icing down to -17° C. The

JuThe Manors of Belfountain Corp. – Third Submission

Part of Lot 9, Concession 5, WHS, Hamlet of Belfountain

File Numbers: 21T-91015C & NEC 2017/2018-450



	application rates for Thawrox can range from 72kg/2 lane KM to 130kg/2 Lane KM. Traditional rock salt is only effective to -8° C.
	A chloride mass balance assessment has been completed to estimate annual chloride loadings from road salt use. The results indicated that the annual chloride loading will be 27mg/L. This is significantly less than the Ontario aesthetic objective of 250mg/L.

TOWN OF CALEDON PLANNING RECEIVED Jul 12, 2021

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Urban Design Peer Review (John G. Williams)
Comments

File Numbers: 21T-91015C & NEC 2017/2018-450



John (G. Willams Ltd.	David Stewart, I	MCID RDD	
			Office: (905) 780-0500 Email: <u>dstewart@williamsarch.com</u>	
No.	Comment:	Response by:	Responses:	
	Review of Urban Design & Architectural Design Guidelines			
1.1	Throughout the document there are several typos where the	MDTR	Reviewed and amended accordingly.	
	text runs together without spacing. The applicant should	Weston		
	review and rectify accordingly.			
	Section 2- Site and Surrounding Context			
2.1	In Section 2.4 Views and Vistas, new information has been		Location Map (Fig 17.) has been updated along with additional photos of	
	added regarding cultural heritage resources on the subject	BTI	these heritage resources.	
	lands. These features should be identified on the Location	Weston		
	Map (Fig. 17) and photos provided.			
2.2	Figure 17 should be revised to ensure images relate to	ВТІ	Revised as requested.	
	identification numbers on the Location Map (i.e. photos 16 &	Weston		
	17).	VVCStOII		
	Section 3 – Policies and Guidelines			
3.1	The applicant has stipulated that Lots 9-12 require special		Please refer to NEC comment 4.21 in this matrix, in response to the	
	design provisions to minimize disturbance to the existing		March 2021 letter for our environmental consultant Beacon's opinion	
	hedgerows. Likewise, special provisions will be applicable to		with respects to woodland on Lots 9-12.	
	Lots 18, 50-55 to delineate limits of development to minimize			
	impact on woodlots and valleylands.		For Lot 18, appropriate restrictions will be registered on title to protect	
		MDTR	the woodland portion of the lot.	
			The boundaries of Lot 50-55 have been altered and are now kept out of	
			the Escarpment Protection Area. This will conform to NEP Section 1.4.4	
			for Escarpment Protection Area Lot Creation policies and Policy 1.6.8.3.	
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			Please refer to the latest draft plan attached in this matrix (Appendix G) which reflects the revisions.
	Section 4.1 and 4.2 – Open Space System/Street and Lot Fabric		Willett reflects the revisions.
4.2.1		Weston	There is no sidewalk proposed to the school along Shaws Creek Road, text has been updated to clarify this in the Urban Design Guidelines, including narrative concerning the Bruce Trail connection at the southern limit for a potential future trail in negotiation with the CVC.
4.2.2	There is no discussion on whether trails will be provided through the new open space / SWM blocks. For example, Block 83 is identified as "Trail and Stormwater Channel", however, it does not appear to contain a trail.	Weston	There is no trail proposed through the Open Space and SWM block areas. The Urban Design Guidelines text and figure are updated to clarify this.
4.2.3	The traffic report mentions the use of 'sharrows' (shared bike / vehicular lanes) on all roads, however, there is no mention of this in the UD/ADG. Since active transportation strongly encouraged, this information should be provided.	Weston	Urban Design Guidelines Section 4.1 is updated to include references to the revised Traffic Report May 2020. Note that the placement of sharrows is indicated in the revised Traffic Impact Study Addendum Figures 9-1 dated May 2020.
	Section 4.3 - Landscape and Streetscape Design Guidelines		
4.3.1	Although the design criteria is generally adequate and appropriate, we have the following minor comments/concerns:		
4.3.1 (a)	Photos 27-29 depict driveway options. However, the homes shown in these photos do not support the intended architectural character. In order to not mislead users of the UD/ADG, it would be helpful to either crop the buildings out of the photos or use examples with context-appropriate dwellings.	Weston	 Urban Design Guidelines Section 4.3 updated: 2x Figures changed to reflect accurate characteristics of proposed dwellings. Figure 28 amended to reflect tar and chip and textured concrete driveways to support the intended architectural character.

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4.3.1 (b)	Photo 28 is stated in the text portion as "Tar and Chip"; the photo shows "textured concrete"	Weston	 Photo 29 amended to show appropriate textured concrete example.
4.3.1 (c)	Photo 29 is stated in the text portion as "patterned / textured concrete" the photo shows "granular". The use of granular driveways should generally be avoided unless required for infiltration purposes.	Weston	
4.3.2	Section 4.3.3 (Model Repetition / Façade Variety) states that 4 manor models are available for this development. Suggesting the use of only 4 models is not appropriate for a site this size. This section needs to be revised to broaden the variety and place more stringent requirements for the allowable repetition of facades within the streetscape in order to support the desired development vision.	Weston	Urban Design Guidelines Section 4.3.3 updated to reflect guidance contained in Section 13.4 of the TWDG.
4.3.2 (a)	At least 8-10 different model types with 2 alternate façade treatments shall be made available in order to create visual interest and avoid monotonous streetscapes.	Weston	 At least 8-10 different model types with 2 alternative façade treatments made available Minimum of 3 different models between facades for a maximum
4.3.2 (b)	There shall be a minimum of 3 different models between identical facades (currently shows 2 unit separation); The TWDG (Sec. 13.4 – Estate Housing) stipulates a maximum of 20% of the streetscape comprised of the same façade;	Weston	 of 40% of the streetscape composes of the same facade type Identical facades and identical models shall not be placed beside one another Architectural style, building orientation, massing, articulation, materials and site conditions in order to remain in-keeping with
4.3.2 (c)	Identical facades shall not be permitted directly opposite one another;	Weston	the community character and scale
4.3.2 (d)	Identical models shall not be placed adjacent to one another.	Weston	
4.3.2 (e)	Each home shall be carefully designed and sited to appropriately respond to its location within the community	Weston	

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	through attention to architectural style, building orientation,		
	massing, articulation, materials and site conditions.		
	Section 4.4 - Architectural Design Criteria		
4.4.1	In Section 4.4.7 Exterior Material Colours, in the 4th bullet remove the last sentence "Furthermore, identical colour schemes will be separated by minimum of 2 dwellings", or change it to read "3 dwellings". Refer to the last bullet on page 62 which states 3 unit separation between identical wall cladding.	Weston	Updated, last sentence removed in 4 th bullet point, changed to read '3 dwellings'.
4.4.2	Section 4.4.11 Garages: 4 bullet points from the previous version of the UD/ADG have been deleted and should be reinstated:	Weston	
4.4.2 (a)	"The maximum setback of a second storey habitable room located above the garage is 2.5m for at least 60% of the width of the garage.	Weston	
4.4.2 (b)	Dwelling designs with the second storey wall face flush with the garage wall face below are discouraged unless an appropriate design treatment is provided to create a visual break (i.e. a boxed-bay window; an intermediate roof; or other elements appropriate to the architectural style).	Weston	Text reinstated as described.
4.4.2 (c)	The streetscape should include a combination of garage door styles to avoid repetition and dominance by a single door type.	Weston	
4.4.2 (d)	The use of upgraded garage door styles characteristic of the architectural style of the dwelling will be encouraged."	Weston	

> JuThe Manors of Belfountain Corp. – Third Submission Part of Lot 9, Concession 5, WHS, Hamlet of Belfountain

File Numbers: 21T-91015C & NEC 2017/2018-450



	Comment on Functional Grading Plan (p. 46 of FSR – Cole Engineering)			
5	In reviewing the conceptual building footprints shown on the Functional Grading Plan, it is evident that Lots 17 & 18 do not indicate adequate building setbacks from Street 'C'. We understand this drawing only implies potential house/septic field locations and that individual site plans will be refined to comply with zoning and all other applicable regulations. However, the applicant should demonstrate that these lots are suitably sized / configured and do not have any constraints that would preclude the appropriate siting of dwellings.	Weston	Note added in Section 4.3.3 of the Urban Design Guidelines: "The Functional Grading Plan includes a conceptual footprint for a house, private well and private septic system. Private septic systems are shown on the Grading Plan to be spaced according to the required distances established in Section 7.1 of the FSR/SWM Report. Individual site plans have been refined to ensure functionally suitable sizing and placement of buildings within lots."	

TOWN OF CALEDON PLANNING RECEIVED Jul 12, 2021

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Belfountain Community Organization
Groundwater Consultant (Ken Howard)
Comments

M D T R

Grou	Groundwater Consultant and University Professor		
Repr	resenting Belfountain Community Organization (BCO)		
Janu	ary 20, 2021 Letter		
No.	Comment:	Response by:	Responses:
	Key Issue 1) Hydrogeological Investigation		
1.1	The proponents plan to support the development with water from 75 wells drilled into the Guelph-Amabel dolostone aquifer, each supplying 2.25 m3/day of potable water for a period of no less than 50 years. However, just 6 values of aquifer transmissivity have been obtained for the site (all from short, and somewhat unconvincing, six-hour pumping tests) and no reliable values of aquifer storage have been obtained. Without reliable values of transmissivity and storage (storativity and/or specific yield) it is impossible to make reliable estimates of the water available for pumping i.e. the aquifer's "safe yield" and predict the likely long-term behaviour of the 75 wells. In fact, the hydrogeological investigation is seriously lacking in many respects. In addition to my concern regarding the very limited availability of hydraulic property data for the aquifer, I raise the following issues:	IBI	The hydrogeological investigation has been completed in accordance with MECP D-5-5 guidelines, including the completion of 6-hour pumping tests at the required minimum frequency of 5 test wells for a 40-hectare development plus 1 for every additional 20 hectares. Additional pumping tests completed include: Three (3) 26-hour pumping tests Two (2) 24-hour pumping tests One (1) 42-hour pumping test
1.2	The Port Stanley Till is described by COLE as "a stoney sandy silt till with low plasticity" that "results in lower infiltration rates and may act as a confining unit". Its presence, particularly on the southwestern half of the site, is clearly confirmed by the well logs, pumping test data, hydrochemistry and geologic sections provided. However, no studies have been conducted to determine the hydrogeologic	IBI	Comments related to the Port Stanley Till were provided in the previous 2020 comment response matrix. As noted, of the more than 20 boreholes that intersected bedrock, the wells with a possible deeper till were interpreted to be PW1 and OW2, TW12 and OW4 locations. At those locations, the till was noted with gravel and sand.



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	function this till performs. This is a serious omission. Soil zone infiltration may be high across the site, but only a small proportion of this recharge may be reaching the Guelph-Amabel dolostone aquifer due to the confining or semiconfining effect of the till.		Recent work by the OGS (e.g., Burt 2017) suggest that the Port Stanley is more prevalent north of the site. As described the till is a silty / sandy till and is not as impermeable as other tills below the escarpment (e.g., Halton, Newmarket Till). Therefore, infiltration through this layer, where present, will not be negligible.
			The abundance of domestic water wells (including some high-capacity wells) in areas of mapped Port Stanley Till demonstrates that water can infiltrate through this unit. As a result, the Port Stanley Till, if and where present at the Site, would not stop recharge reaching the underlying bedrock aquifer.
			Further, the presence of nitrate in the sampled test wells (bedrock wells) also indicates that this till layer, if present, is not acting as a comprehensive seal across the development site.
1.3	Similarly, water released from the proposed septic systems (or runoff recharged via rapid-infiltration dry wells, enhanced-infiltration ditches, swales and stormwater management ponds) may not reach the source bedrock aquifer if the vertical permeability of the till is, as suggested by the data and information, relatively low.	IBI	See above. In addition, septic systems are common in many areas with surficial till across the Province including significant areas with Wentworth Till mapped at surface just south of the Site in areas of the Paris Moraine.
1.4	In its most recent 2020 report, COLE suggests that the Port Stanley Till "is not acting as a significant confining layer underlying the Site and that infiltration will reach the bedrock aquifer", but this statement is not supported by any hydraulic property data and runs contrary to the available evidence, especially the hydrochemistry. If the Port Stanley Till	IBI	The varying nitrate concentrations in wells across the Site are interpreted to be a result of the well's location relatively to the both the source area for nitrate application and the groundwater flow direction. Wells with higher nitrate concentrations are located on the western half of the Site where there is a larger nitrate contributing agricultural area upgradient of the wells.





	freely transmits water vertically as COLE suggests, nitrate-N levels in the aquifer towards the southwest, where the Port Stanley Till is widely present, would not be ~ 1 mg/L as observed, but much closer to the values of 7 or 8 mg/L seen in the northeast.		
1.5	Until the hydrogeologic function of the Port Stanley Till is fully established with reliable field data and this function is adequately tested in an aquifer management model (see below), it becomes virtually impossible to predict the long-term viability of the 75 production wells, both in terms of		The abundance of domestic wells (and septic) in the area where Port Stanley Till has been mapped in the subsurface by the OGS should help demonstrate the viability of wells / septic systems on-Site. A map illustrating this is appended.
	their water levels and water quality, with any degree of confidence.	IBI	Further, the phased approach to development includes, in Phase 1 lands, areas where the Port Stanley Till may exist, and areas where it doesn't based on the available data. Domestic well drilling data and groundwater monitoring data collected during development should help further delineate areas with Port Stanley Till and confirm the viability of the domestic wells in Phase 1 before Phase 2 is approved.
1.6	I find it inconceivable that COLE proposes to proceed with a major groundwater resource development project involving 75 pumping wells without an appropriately conceived and fully calibrated groundwater flow model that will enable the long-term behaviour of the aquifer to be predicted under pumping conditions. A model - Visual OTTHYMO (VO) has been used to support stormwater management decisions for the site, and this is appropriate.	IBI	It is noted that the peer reviewer did not bring up the issue of numerical groundwater flow modelling in their 2018 review. Regardless, numerical groundwater flow modelling using (e.g., MODLOW, FEFLOW) is commonly used for regional-scale investigations but is not standard practice for hydrogeological investigations in support of development applications for rural subdivisions. Development of a properly constructed and calibrated numerical groundwater flow model is considered unnecessary at a local site such as this. The Region of Halton hydrogeological guidelines, which the Town's Peer
	(e.g. FEFLOW or Visual MODFLOW) to investigate well interactions, predict water level changes, investigate		Reviewer references, do not stipulate the use of numerical groundwater flow models.



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	groundwater flux changes and establish the long-term sustainability of the aquifer resource. Such a model would also have allowed some estimate to be made of the extent to which aquifer pumping (interception of the natural groundwater flow) will impact the downstream hydrogeological functions of the aquifer e.g., watercourses, wetlands, and similar groundwater dependent ecosystems.		A preliminary review of available reports within the YPDT ORMGP report database indicates that most hydrogeological reports completed in support of similar development applications did not use a numerical model, rather the analytical approach followed by the consulting team was used. IBI Group is not aware of a similar hydrogeology study where a numerical model was used. Further, construction of a numerical model is a significant and costly effort and may not result in a better understanding of local hydrogeological setting since all modeling efforts require simplifications, assumptions and extrapolations. As such, a numerical groundwater flow model may not be able to simulate the groundwater system with the required degree of confidence.
1.7	Over the past 20 years or so, the use of groundwater flow and transport models has become routine in all but the simplest groundwater investigation studies. Their adoption is normally automatic for sophisticated groundwater management issues involving multiple wells and the long-term development of aquifers.	IBI	We disagree. The use of groundwater flow and transport models is not routine for these sort of development applications. As noted, the creation of a properly constructed numerical model that is sufficiently calibrated to provide simulations of the groundwater flow system to the precision that would be required for a local-scale study such as this would require a significant amount of on-site and off-site data. As noted above, we are not aware of any similar hydrogeological studies in support of rural development applications completed in approximately the past 20 years in the GTA and surrounding areas that have used numerical models. If such studies do exist, they do not represent the norm.
	Key Issue 2) Resource Sustainability (Quantity)		- Countries are consequently are reconsequently and reconsequently are
2.1	The proposed development now consists of 75 individually serviced lots each with an area of approximately 0.4 ha (4000 m2). The water requirement will be 2,250 L/household per	IBI	The pumping tests and analysis have been completed in accordance with MECP D-5-5 guidelines and the Region of Halton guidelines for private servicing, in terms of both the duration and quantity of tests completed. Three (3) additional 26-hour pumping tests were also completed. The





	day for a daily total of 168,750 Liters. This is a substantial amount of water and there can be no guarantee based on the limited amount of data currently available (just 6 short term pumping tests!) that each of the 75 wells constructed will be able supply the necessary water.		analysis completed has demonstrated the viability of the water supply. We note that the Caledon Mountain Estate subdivision is located just east of Mississauga Road, in a similar hydrogeological setting. That subdivision has approximately 60 lots with domestic wells and we are not aware of any groundwater supply issues from that subdivision. The water demand will also be reduced by approximately 25% using a greywater system that will use greywater for flushing toilets. A yield test will be conducted on all newly installed permit before a building permit is issued. If a well is deemed to have an insufficient yield to meet the peak demand rates specified by D-5-5, a cistern will be installed. The trigger factor to be considered will be the individual lot well yield. Low-yield lots will require that a cistern be installed that can adequately supply a 4-person household's water needs (2,250 L/day) and can be filled solely during off-peak hours. Lastly, the proposed phasing approach to development is intended to demonstrate the sustainability of the water supply per lot during the first phase before the second phase is approved. For additional details, refer to the Environmental Management Plan.
2.2	Transmissivity values for the Guelph-Amabel dolostone aquifer at the site range from just 9 m2/d to 403 m2/d with a geometric mean of about 46 m2/d. Recognizing that the value of 403 m2/d is an outlier and likely very localized (the value lies well outside the range of the other values), I believe a value of 29 m2/d (the geometric mean of the remaining 5 values) to be a more representative value for the aquifer.	IBI	The transmissivity of the Amabel Formation has been documented to be high across southern Ontario. Five municipal wells installed within the aquifer are documented to have transmissivities ranging from 150 m²/d to 1400 m²/d (Hydrogeology of Southern Ontario, MECP, 2003, page 48) There is nothing to suggest that the 403 m²/d transmissivity value is a localized outlier that is not present elsewhere on the site. It is possible that





	Based on this value, and given that the hydraulic gradient at the site (around 1 km wide) is approximately 1.3%, a Darcy's Law throughput calculation shows that the volume of water passing beneath the site is around 395,000 L/d. This means that the proposed development will intercept close to 40% of the water passing through the aquifer - a substantial percentage that is well beyond the value of 10% many would consider as "safe" in terms of long-term aquifer yield. In all likelihood, even the best-designed well field may find it difficult to intercept 40% of groundwater flow. However, should this percentage be attainable:		the lower transmissivity values are more likely to be the outlier values, when compared to the entirety of the Amabel Formation. Note that many of these wells with lower transmissivity values are partially screened within the underlying, less transmissive shale aquifer. Flow in the bedrock aquifer will be strongly influenced by zones of higher permeability. Using a geometric mean of all measured K values yields a value of approximately 450,000 L/day passing through the Site from upgradient sources. Using an arithmetic mean results in a flow rate of approximately 1,300,000 L/day. Consideration of both techniques is considered reasonable. On-site recharge contributes approximately 575,000 L/day. When using the geomean value for T, the total water takings at the Site represent approximately 16% of the total water entering the Site, whereas when using the arithmetic mean, the total takings represent approximately 7% of the total water entering the Site. Please note that this does not account for a 25% demand reduction from the use of the Greywater system, or the return of treated effluent to the groundwater system.
2.3	There will be a 40% reduction in the volume of water that enters downstream watercourses, wetlands and similar groundwater dependent ecosystems. The resulting impacts are likely to be significant but have not been evaluated by the proponent.	IBI	We disagree that there will be a 40% reduction in the volume of water, as outlined above. As noted, there will be also be a 25% demand reduction from the use of the Greywater system, and much of groundwater taking will ultimately returned to the subsurface as treated effluent via septic systems.
2.4	Due to the withdrawals, the potentiometric surface will establish a new equilibrium such that the hydraulic gradient across the site will reduce by 40% to around 0.8 %. The resulting water table decline (likely amounting to 4m, perhaps	IBI	The analysis completed to-date following approved methods have demonstrated the wells to have sufficient yields.



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2.5	more, for parts of the site) has not been considered in any of the analysis. Also not considered are well losses and additional drawdowns due to local reductions in the saturated thickness of the		As above, we disagree that there will be a 40% reduction in the volume of water. The actual taking will be much less than the local recharge and it should be noted that much of groundwater taking will ultimately returned to the subsurface as treated effluent via septic systems. At average pumping rates, drawdown after 50 years is considered negligible in comparison to the available drawdown at each well. This
	aquifer. The combination of regional water table decline, pumping drawdown, well losses and additional drawdown due to local reductions in the saturated thickness of the aquifer, threatens to cause serious problems in wells, especially under peak pumping conditions. The regional decline in the potentiometric surface will also affect offsite wells.	IBI	should allow for well loss; however well loses can be mitigated through periodic well maintenance, which is true for all domestic well owners As demonstrated in the report, there should be sufficient available yield per well for the proposed takings.
2.6	COLE's analysis considers only the drawdown due to pumping and bases its analysis on the six wells test-pumped by Burnside. It fails to consider that a significant number of the 75 wells required for the development will likely exhibit transmissivity values below 9 m ₂ /day (the lowest of the six values of transmissivity thus far obtained). COLE also underestimates its drawdown values by close to 100% by using a storativity (S) (aka storage coefficient) value of 500% in its calculations. Typically, storativity would be closer to 0.05%. 500% is physically impossible.	IBI	As noted above, we disagree that a significant number of wells will likely exhibit transmissivity values below 9 m²/day (the lowest of the six values of transmissivity thus far obtained). As outlined in the 2020 Hydrogeology Report, the lowest T value was obtained from TW1, which was drilled into shale. Lot-level yield tests will be completed on all newly installed wells and a yield capable of meeting the peak rates outlined in D-5-5 must be demonstrated before each building permit is issued. Wells with a lower yield will trigger the need for a cistern, as outlined previously.
2.7	COLE does perform safe yield analyses, but these are also highly questionable. In the first of these analyses, they perform a throughput calculation, almost identical to the one I describe above but they fail to recognise that the calculation	IBI	For details, refer to the Environmental Management Plan. An overview of this calculation is provided in the response to Comment #2.2 above. It is possible to calculate for groundwater entering the Site from upgradient considering wells at the upgradient property boundary (TW1, TW2, TW9, TW7) and by taking a cross-sectional profile of the Site at





2.8	(using on-site data) provides a measure of the water passing beneath the site that includes much of the on-site recharge plus any water entering the site from upgradient. The calculation does not, as they suggest, represent groundwater entering the site from upgradient. There are no reliable offsite water level data available upgradient, so it is impossible to estimate this component in isolation. They (COLE) also over-estimate the groundwater flow (aquifer throughput) by more than 100%, through the use of an arithmetic mean to calculate hydraulic conductivity. The geometric mean should have been used.	IBI	the southern boundary and using a representative transmissivity value of the dolostone aquifer. Additional upgradient water level data is available from the Provincial Water Well Information System (which comprise much of the data input into regional numerical groundwater flow models). Based on these, we can obtain off-site lateral hydraulic gradients for inputs into the calculation. Consideration of both techniques is considered reasonable for fractured bedrock environments. For comparison, the geomean value was used in the response to Comment #2.2 above and will be included in any subsequent revisions to the hydrogeological report.
2.9	In another attempt to assess aquifer safe yield, COLE use the Q20 method developed by Farvolden (1959). Decades ago, the Farvolden Q20 concept proved useful for providing an objective and quantitative estimate of a well's maximum yield. Importantly, the calculation says nothing about the safe yield of the aquifer.	IBI	As noted above, the expected daily takings represent a small portion of the total water entering the Site. We agree that the Farvolden Q20 concept was provided an estimate of sustainable well yield. The calculation was provided as an additional analysis to demonstrate the sustainability of wells within the Amabel Formation aquifer locally. The results provided in Table 6.8 of the 2020 Hydrogeology Report are for the calculated safe yield for each well, not the aquifer. The first sentence of that section should have been written more clearly to reference well yield and not aquifer yield. A monitoring program will be included in the Environmental Management Plan that is to be implemented as part of the Phase 1 development. As above, monitoring results should demonstrate and confirm that no unacceptable water quantity impacts are occurring because of the takings.

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	Key Issue 3) Water Quality			
3.1	If water quantity concerns are not deemed serious enough, water quality concerns certainly are. Groundwater quality has been monitored at twelve (12) on-site wells and the results indicate severe, persistent water quality issues. Elevated nitrate is probably the greatest concern. In the 2018 report, values ≥ 3.43 mg/L NO3-N were found at 6 of the 12 sites; at one site (TW6) NO3-N was determined to be 8.52 mg/L which is within 15% of the Ontario health-related drinking water quality standard of 10 mg/L. In May, 2018, the concentration of NO3-N in TW6 reached 9.08 mg/L (within 10% of the standard). The standard is set due to the risk of methemoglobinemia in infants, also known as blue-baby syndrome.	IBI	As noted, no test results were above the ODWS for nitrate. As noted in our report, on-Site nitrate concentrations are attributed to on-site and nearby agricultural activities. As part of the proposed phased development approach, the lots with elevated nitrates will be included in the portion of the Site to developed last and only if the monitoring program demonstrates that no increase in nitrate concentrations is occurring because of the development.	
3.2	I commend and support COLE's recommendation that concern over the nitrate issue can be reduced by avoiding any placement of wells close to the affected zone (i.e., where NO3-N exceeds 7 mg/L). However, the proposed 7m setback is clearly insufficient, even to a casual observer. The value of 7m was calculated correctly with the exception that an average pumping rate was used. This is inappropriate since the task is to avoid drawing water from the high nitrate zone under all pumping scenarios, and not simply the "average" rate.	IBI	The setback is a conservative buffer that has been applied and was based on the wells with higher nitrate concentrations. The 7 m buffer was added as a measure of conservatism. The peak pumping rate is considered to occur for 120 minutes/day (per D-5-5) and not for continual pumping over many days, which would be necessary to change the zone of contribution. Regardless, an analysis using peak pumping rates was completed in the hydrogeology report that demonstrated similar results in all but the most extreme scenario. Nitrate levels will be included in the monitoring program and the lots where higher nitrates were observed will be developed in Phase 2. The monitoring program outlined in the EMP will need to demonstrate that nitrate levels are not increasing as a result of the development in Phase 1 before Phase 2 can proceed.	





3.3	Recalculation of the required setback using a more appropriate "peak pumping rate" provides a value of 83m. Moreover, the hydraulic gradient can be expected to decrease over time by as much as 40% due to the interception of the regional groundwater flow by the development's wells. When this is taken into consideration, the setback needs to be increased a further 55m to around 140m. Establishing a setback of this magnitude would minimise the risk of drawing high nitrate water into site wells but, as a result, effectively excludes the northeastern part of the site from development, thereby eliminating a significant number of lots. This is necessary and appropriate.	IBI	For details, refer to the Environmental Management Plan. As above, using the peak pumping rate for this analysis is not realistic. As outlined in the hydrogeology report, the 83 m result is for the worse-case scenario (peak pumping rates, lowest transmissivity, lowest gradient). The setback proposed is a conservative buffer. See comment 3.2 above for consideration of nitrate levels in the EMP.
3.4	I should note, that contrary to suggestions made, there is no evidence to support the notion that the magnitude of the nitrate problem will decline when the site becomes urbanised. COLE conducted a nitrate loading analysis in compliance with MOECC Procedure D-5-4 in order to evaluate the potential impact of the individual on-site septic systems. Their results indicated that a nitrate-concentration of approximately 2.52 mg/L can be expected at the Site boundary, a concentration that is marginally lower than the Canadian Council of Ministers of the Environment (CCME) guideline for NO3-N of 3 mg/L for the protection of sensitive surface water habitat. This guideline has also been adopted by CVC (Credit Valley	IBI	The nitrate assessment has been completed in accordance with MECP D-5-4 and demonstrates that nitrate levels are acceptable at the site boundary. It should be also noted that the CVC have reviewed the report and have not expressed a concern about the NO3-N value of 2.52 mg/L, or impacts related to nitrate. It should be noted that the proposed Phase 1 is at the west side of the Site where existing nitrate concentrations are the lowest based on the existing data. Phase 1 lands are more that approximately 300 m from the closed headwater drainage feature and wetland feature. The monitoring program outlined in the EMP will need to demonstrate that nitrate levels are not increasing as a result of the development in Phase 1 before Phase 2 can





3.5	Conservation). While a NO3-N value of 2.52 mg/L may appear to be acceptable, the value is seriously underestimated. MOECC Procedure D-5-4 requires that the calculations be performed a) with a minimum value of 40 mg/L NO3-N in the discharge, and b) with a maximum sewage effluent volume of 1000 L/day/lot where this water is used to provide dilution in the mass balance calculations. Instead of selecting reasonable and appropriate values for parameters indicated in a) and b), erring on the side of caution, COLE manages to achieve the value of 2.52 mg/L by adopting the minimum value of NO3-N (40 mg/L) allowed in the discharge, and the maximum value (1000 L/day/lot) allowed for dilution. Moreover, it uses predevelopment estimates of site infiltration as an additional source of dilution when, in fact, the natural infiltration at the site following development will be lower by over 16%. Any additional infiltration that may take place via the two stormwater basins will not be able to provide the necessary dilution on a sitewide basis.	IBI	proceed. Phase 2 lands are generally closer to the exiting drainage features and wetland features north of the Site. The nitrate assessment has been completed in accordance with MECP D-5-4 and demonstrates that nitrate levels are acceptable at the site boundary. Please note that a value of 20 mg/L NO ₃ -N in the discharge was used in our analysis since tertiary (Level IV) treatment systems will be implemented across the Site. There is nothing to suggest that the lots will generate anything other than the minimum required value, which has several conservative assumptions already built into it. Pre-development infiltration values are used because site water balance will be maintained at site-level, as detailed in COLE's FSR.
3.6	Contrary to the assertion made by COLE that the Waterloo Biofilter "successfully reduces total nitrogen concentrations in effluent by 50-65%", the manufacturers do not guarantee this rate. They simply state in their literature that removal rates are "up to" 50-65%, an "up to" range that can only be achieved by recirculation of the effluent. A single pass will remove, under ideal conditions, closer to 20-40%.	IBI	We are not aware of studies that indicate a single pass will remove closer to 20-40%. It is understood that verification testing of the Waterloo Biofilter System was conducted by the US EPA at a site in Massachusetts where a nitrogen reduction of over 50% was demonstrated. It is also understood that a number of advanced treatment technologies are available for consideration also. We have already applied the conservative low-end of the manufacturer's specifications in the calculations (50% vs 65%).





			A similar subdivision development in Caledon, the Cheltenham Subdivision, was approved with the Waterloo Biofilter System using a nitrogen removal value of 55% to demonstrate compliance at site boundaries.
			Lot-level effluent testing has been incorporated into the EMP. The testing will need to demonstrate that a effluent nitrate concentration of 20 mg/L can be achieved in Phase 1. If concentration(s) remain >20mg/L at any one lot, the individual septic system will be retrofit with a Nitrex [™] filter at the developer's expense.
			For details, refer to the Environmental Management Plan.
3.7	The analysis wholly ignores what may ultimately be the greatest loading of nitrate at the site – fertilizer used by house owners to maintain healthy vegetation on their lots, especially their lawns. It is a myth that conversion of agricultural land to urban uses necessarily reduces nitrogen inputs. Recommended application rates for nitrogen to lawns are around 1lb per 1000 square feet per month (over a period of 4 months). Assuming a 50% uptake of nitrogen by the vegetation, nitrogen fertilizer for the 75 lots (each 75% vegetated) would add ~10 mg of NO3-N to each litre of water	IBI	IBI Group is of the opinion that it is reasonable to assume that overall nitrate levels will reduce in a post-development scenario due to conversion from agricultural land. The rates of fertilizer application quoted (43 lbs/acre) is far less than typical agricultural application of nitrates can be considered as 130 lbs/acre to 220 lbs/acre (3 lbs/1000 square ft - 5 lbs/1000 square ft.). Based on this, it is reasonable to assume that overall nitrate levels will reduce in a post-development scenario.
	infiltrating the site. Only 0.48 mg of NO3-N (i.e., just 5% of this value) would be required to push the 2.52 mg/L concentration calculated by COLE using sewage effluent alone, over the		In addition, the Urban Design Guidelines will require drought resistant grasses and ground cover instead of lawns.
	CCME/CVC value of 3 mg/L required for the protection of sensitive surface water habitat.		A monitoring program will be included in the Environmental Management Plan that is to be implemented as part of the Phase 1 development. As



3.8	Another serious water quality problem relates to sulphate which approaches 1000 mg/L at TW12, located in the centre of the southwestern half of the site. The Ontario Drinking Water Standard (ODWS) for sulphate is set at 500 mg/L for		above, monitoring results should demonstrate and confirm that no unacceptable water quality impacts are occurring as a result of the takings. [MDTR] In addition, the Urban Design Guidelines will require drought resistant grasses and ground cover instead of lawns. The elevated sulphate levels are interpreted to be due to the screening of this test well in the underlying shale aquifer. All domestic wells will be designed to be screened within the Amabel
	"aesthetic purposes", notably adverse taste. Because of the possibility of adverse physiological effects at higher concentrations, the Ontario guidelines recommend that health authorities be notified of sources of drinking water that contain sulphate concentrations in excess of 500 mg/L. The guidelines note that water containing magnesium sulphate at levels above 1000 mg/L acts as a purgative in adults and that lower concentrations may affect bottle-fed infants and adults who have just been introduced to the water. Sulphate can also interfere with disinfection efficiency by scavenging residual chlorine in the distribution system.	IBI	Formation (dolostone).
3.9	The proponents have not identified the source of the sulphate; neither do they offer any solution to the sulphate issue. Presumably, the establishment of a setback from the affected area would eliminate many of the lots proposed for the southwestern side of the site. The presence of sulphate in groundwater is normally associated with gypsum deposits common in the Upper Silurian Salina Formation.	IBI	The elevated sulphate levels are interpreted to be due to the screening of this test well in the underlying shale aquifer. All domestic wells will be designed to be screened within the Amabel dolostone Formation.
3. 10	Stratigraphically, the Salina Formation lies immediately above, the Guelph-Amabel dolostone, and the elevated sulphate	IBI	Based on the borehole log at this location, the test well was drilled into a shale unit underlying the dolostone. The Salina Formation has been

TOWN OF CALEDON **PLANNING**

> Jul The Manors of Belfountain Corp. – Third Submission Part of Lot 9, Concession 5, WHS, Hamlet of Belfountain

File Numbers: 21T-91015C & NEC 2017/2018-450



Comments Response Matrix July 2021

could indicate that a remnant outlier of the Salina Formation is present on the site. Other possibilities include i) that evaporite material from the Salina Formation is present in the Port Stanley Till, or ii) that gypsum prevails as a blade-shaped evaporite cement in the Guelph-Amabel dolomite - an established indication of crystallization under hypersaline seawater in a restricted environment or in semi-arid conditions (Dekeyser, 2006). Whatever its source, the sulphate issue needs to be addressed.

mapped over 4 km west of the Site and is not known to occur locally as an outlier. Shale aguifers in southern Ontario tend to produce poorer water quality.

All domestic wells will be designed to be screened within the Amabel Formation dolostone aquifer and water quality testing will have to confirm potability with reference to the ODWS.

It should be noted that a significant number of domestic wells in the area obtain drinking water from the Amabel Formation. It is widely acknowledged as one of the best aguifers in Ontario.

http://www.greelycommunity.org/documents/Well%20Water%20Sustaina bility%20Jan%2006.pdf

TOWN OF CALEDON PLANNING RECEIVED Jul 12, 2021

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Region of Peel (Region)

Comments

JuThe Manors of Belfountain Corp. – Third Submission

Part of Lot 9, Concession 5, WHS, Hamlet of Belfountain

File Numbers: 21T-91015C & NEC 2017/2018-450



Regio	n of Peel		
Janua	ry 11, 2021 Letter		
No.	Comment:	Response by:	Responses:
	Planning and Development		
A1	The applicant has proposed an open space on the east side of the property along Mississauga Road is encompassed by Open Space Block 78 and buffer Block 77. Block 81 is also proposed to preserve the area as Storm Water Management Pond. The southwest border of the property is designated as Woodlot Protected Area; however, a portion of it is dedicated to Lot 18.	Beacon	Open Space Block 78 and Buffer Block 77 will be conveyed to CVC. For Lot 18, appropriate restrictions will be registered on title to protect the woodland portion of the lot.
A2	The site contains additional environmental features that may be deemed significant features or habitat requiring protection. Areas such as the grassland habitat and existing hedgerow/woodlot crossing proposed Lots 9, 10, and 11 must be further examined. The Region relies on the environmental expertise of the Credit Valley Conservation staff for the review of development applications located within the Greenlands Systems in Peel and their potential impacts on the natural environment.	Beacon	During a recent discussion with the MECP, there were no concerns over the proposed treatments of the meadow or hedgerow features. The email from MECP, dated April 13, 2021, indicated that the development will likely not contravene section 9 (species protection) and/or section 10 (habitat protection) of the Endangered Species Act, 2007. Please refer to Appendix A for reference. Please refer to CVC EIS Addendum comment 2 in this matrix for our environmental consultant Beacon's opinion on the hedgerow along Shaws Creek Road.
А3	Please be advised that the Region encourages Low Impact Developments on the site.	MDTR	Acknowledged. The proposed development has adopted LID measures. There are two centralized infiltration basins (Block 81, 82), to be used for stormwater quantity control.
	Legal Comments		
B1	The 0.3m reserve behind the property line along Mississauga Road is not shown as a block or part on the plan;	MDTR	The 0.3 reserve along Mississauga Road is added as "Block 85 0.3m Reserve".



B2	Land use schedule should be amended to show the reserve.	MDTR	"Block 85 0.3m Reserve on Mississauga Road" is added to the land use schedule.
В3	Pins for lands should be shown on plan	MDTR	Land pins are added to the updated draft plan under Appendix G.
	Servicing Comments		
C1 (a)	Sanitary Sewer Facilities Municipal sanitary sewers are not available. Individual septic wells will be required.	IBI	Acknowledged. Each lot will be serviced on individual, private septic system, meeting Ontario Building Code (OBC) requirements.
C1 (b)	A Functional Servicing Report (FSR) showing proposed sanitary sewer servicing plans for the development and provision for the adjacent land, if any, will be required for review and approval by the Region prior to the engineering submission	IBI	Acknowledged
C2 (a)	Water Facilities Municipal water facilities are not available. Individual water wells will be required.	IBI	Acknowledged. Each lot will be serviced by an individual private well, meeting Ontario Building Code (OBC) requirements.
C2 (b)	A Functional Servicing Report FSR) showing proposed water servicing plans for the development and provision for the adjacent land, if any, will be required for review and approval by the Region prior to the engineering submission.	IBI	Acknowledged
C3 (a)	Regional Roads Region of Peel will not permit any changes to grading within the Mississauga Road right-of-way along the frontage of proposed development.	IBI	There are no grading changes within the Mississauga Road right-of-way.
C3 (b)	No lots or blocks shall have direct access to Mississauga Road. Any future access shall be in accordance with the Region's Access Control By-law.	IBI	No lots have direct access to Mississauga Road. Block 78 (Open Space) runs along Mississauga Road within the site boundaries.
C3 (c)	Storm water flow shall be looked at in a holistic manner for all developments along Regional roadways.	IBI	Drainage pattern along Mississauga Road will be the same as pre- development conditions.



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	The relocation of storm systems across Regional roadways shall be done symmetrically, so that the distance between the inlet and outlet of the system onto the Regional roadway are the same or less as compared to the pre-development condition. Under no circumstance should the flow of storm water be diverted along the Regional right-of-way (by pipe or channel), in order to accomplish the relocation of a drainage feature with-in or adjacent to the Regional right of way, without the prior written consent of the Region		Where the minor drainage diversion area drains northerly towards Mississauga Road, the surface runoff water balance is identical for predevelopment and post-development conditions. Refer to Section 5.4.4 Minor Drainage Diversion (p. 21) for details.
C4	Capital Project The Developer is advised that the Region has undertaken design for road improvements along Mississauga Road under project #14-4065. It is recommended the applicant contact the Region to clarify specific road improvement requirements prior to preparation of detailed engineering plans and/or reports. The capital project is currently at the 90% Detailed Design stage. The current proposed construction timeline for utility relocation 2023 with construction to take place 2024-2025.	MDTR	Acknowledged.
C5	Please be advised that the current design does not include Hydro One Network's potential property requirement.	MDTR	Acknowledged.
	Hydrogeology		
D1	A review of the well water records database dated 2017 is provided; however, there is no updated door-to-door survey within the 500-metre area of influence.	IBI	Historical private well surveys have been completed at the Site, which generally found that shallow and dug wells had poor baseline water quality and quantity conditions. These shallow wells were not installed in the Amabel Formation dolostone aquifer. A participation letter was sent to nearby residents; however very few response was received, and the survey was not conducted.



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			An updated private well survey will be completed if there are sufficient participants.
D2	A private well survey has not been done using real calculations based on local impacts using mainspring wells and private supply wells for this project which is proposing more than 70 lots with individual wells.	IBI	Historical private well surveys have been completed at the Site, which generally found that shallow dug wells had poor baseline water quality and quantity conditions. These wells are completed in a different (lower) aquifer than exists at the Site. A participation letter was sent to nearby residents, however, very few response was received, and the survey was not conducted.
			An updated private well survey will be completed if there are sufficient participants.
D3	A Pumping test is recommended to determine potential impacts to local sources of water.		Pumping tests have been completed that meet the minimum MECP D-5-5 requirements. These include:
			Six (6) 6-hour pumping tests
			Three (3) 26-hour pumping tests
			Two (2) 24-hour pumping tests
		IBI	One (1) 42-hour pumping test
			The proposed phasing plan (Appendix H) is designed such that groundwater monitoring conducted during and after development of the western portion of the Site can be considered as a long-term pumping test, based on the actual well usage. This should corroborate the results of the completed pumping tests and demonstrate the lack of water quantity impacts before the second proposed phase is developed. The second phase is located closer to the Belfountain village domestic wells. Further, a Yield Test will be completed on each domestic well installed at the Site



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D4	A well design is recommended based on the conditions of		following the requirements of O.Reg.903 before a Building Permit is issued. Supplemental water supply measures may be implemented for lower yield wells. Please refer to the Environmental Management Plan for additional details. Wells should be installed in the Amabel Formation (dolostone) aquifer and
	the well where the pumping test was done.	IBI	not in the underlying Clinton Cataract Group aquifer, where poorer water quality and yields were observed. Depths of the Amabel Formation will vary across the subdivision, based on local topography; however, the contractor will be provided with a maximum depth on a per lot basis.
D5	The pumping tests did not include impact analysis to private wells within the 500 meters surrounding area and/or impacts on the natural features due to cumulative pumping within the same area.	IBI	An impact assessment was completed in Section 7 of the hydrogeology report. The closest off-site private well is outside of the calculated zone of influence. Groundwater level monitoring data collected during the proposed Phase 1 of the development will be used to corroborate these results.
D6	72 hours pumping test to the maximum pumping rate for all lots and door to door survey, requested earlier must be provided in order to properly determine cumulative impacts.	IBI	Pumping tests have been completed that meet the requirements of MECP D-5-5. Groundwater level monitoring data collected during the proposed Phase 1 of the development will be used to corroborate these results. Further, a Yield Test will be completed on each domestic well installed at the Site following the requirements of O.Reg.903 before a Building Permit is issued. Supplemental water supply measures may be implemented for lower yield wells. Please refer to the Environmental Management Plan for additional details.
D7	The report does not provide any contingency or mitigation plan for impacts from the septic systems, storm water system or water supply to private well within the 500 meters surrounding area or natural features. A Contingency and mitigation plan must be provided prior to any approval	IBI	Effluent testing of the installed septic system has been incorporated into the Environmental Management Plan, which was developed for the Site to address and mitigate risks throughout the proposed Phase 1 and Phase 2 of the development. For details, refer to the Environmental Management Plan.
D8	The report must be reviewed and adjusted to the most up to date information.	IBI	The hydrogeology report will be updated, if necessary, based on the most up to date information and designs.



	Waste Management Comments		
E1	The Region of Peel will provide curbside collection of garbage, recyclable materials, household organics and yard waste subject to the following conditions being met	MDTR	Acknowledged
E2	All roads shall be designed to have a minimum width of 6 metres.	MDTR	Road width as shown on the draft plan remains the same. The proposed pavement width is 6.5 metres.
E3	Each dwelling unit within a development must have its own identifiable collection point. See Appendix 9 (Waste Collection Design Standards Manual) for an example of a collection point.	MDTR	Acknowledged.
E3(a)	The collection point must be located along the curb, adjacent to the driveway, and must be directly accessible to the waste collection vehicle and free of obstructions such as parked cars.	MDTR	Acknowledged.
E3 (b)	Each dwelling units' collection point along the curb must be at least 3 square metres, or 32 square feet in order to provide sufficient space for the placement of carts: maximum (1) large garbage cart or recycling cart (360 liters or 79 imperial gallons) and one (1) source separated organics carts (100 liters or 21 imperial gallons), overflow waste (i.e. additional bags), yard waste and bulky items.	MDTR	Acknowledged.
E3(c)	For more information, please consult the Waste Collection Design Standards Manual available at: https://www.peelregion.ca/pw/standards/design/waste- collectiondesign-manual-2016.pdf	MDTR	Acknowledged.
	Healthy Development Assessment Committee		
F1 (a)	We recommend opportunities for pedestrian linkages to the parks and open space to promote walkability and physical activity. Please indicate if this will take form through a	MDTR	There are sidewalks connecting the dwelling units to Park Block 76. It has now been highlighted in blue on the draft plan (Appendix G) for better visibility.



JuThe Manors of Belfountain Corp. – Third Submission

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	pedestrian walkway block from the dwelling units and street to the open space.		Block 77, 78 are to be conveyed to CVC, the conservation authority will be responsible for its control, maintenance and the future use. Hence, the future connection to the Bruce Trail on the Open Space Block will be planned by CVC by a separate permit in the future. For now, the farm lane/trail has been taken out of the draft plan and is not part of the current application.
F1 (b)	Please also confirm if it will be possible to have a pedestrian connection from 'Street E' through the SWM Pond leading to Shaws Creek Road, as it would help to increase connectivity throughout the site.	MDTR	There is no plan to implement a pedestrian connection through Block 82 SWM pond. Pedestrian can access Shaws Creek Road from 'Street E' and walking along 'Street'B' and 'Street A'.
F1(c)	As indicated in the completed tool, there will be 1.5m sidewalks on all streets. Please confirm that they will be located on both sides of the street.		According to the Caledon Official Plan 7.14.15.8.1 provision on Sidewalks, "Local Streets: Sidewalks shall be provided on one side of the street". Sidewalk on one side of the street is appropriate to match the rural characteristics of the Belfountain hamlet, where there is limited traffic and pedestrian activity expected.
		MDTR	Note that NEC indicated support for sidewalks on one side of the street since it is more consistent with the principles of low impact development (see our response under NEC item 4.35 from the March 2021 letter in this matrix). Continuous, 1.5m wide sidewalk/sharrows from Street A to F has been
			added, please refer to Traffic Impact Study Addendum by Nextrans, Figure 9.1 Pedestrian Circulation Plan (p. 24).





F1	We support the inclusion of bicycle parking within the park		
(d)	block as mentioned within the tool. Please submit the facility	MDTR	There are no plans to include bicycle parking within park block currently.
	fit plan for regional review once completed.		
	Draft Plan Conditions – Development Charges		
G1	Prior to execution of the Subdivision Agreement by the Region, the Developer shall:		
G1	Obtain and submit to the Region a Residential Development		Acknowledged.
(a)	Charges Payment Form completed to the best of the		
	Developer's knowledge at the time of the submission and to	MDTR	
	the satisfaction of the Region in accordance with the		
	engineering drawings and final draft M-plan; and		
G1	(b) Pay to the Region the appropriate hard service		Acknowledged.
(b)	residential development charges (road service component),		
	pursuant to the Region's Development Charges By-law, as	MDTR	
	amended from time to time, calculated based on the	WIDTK	
	information provided in the Residential Development		
	Charges Payment Form		
G2	Provision shall be made in the Subdivision Agreement with respect to:	MDTR	
G2	Payment to the Region of appropriate soft service		Acknowledged.
(a)	development charges and any outstanding hard service	MDTR	
	development charges; and		
G2	Collection of development charges for future residential		Acknowledged.
(b)	development blocks (non-freehold townhouses or	MDTR	
	apartment blocks);		
	Draft Plan Conditions		
H4	Prior to the registration of this Plan or any phase thereof,		
	the Developer shall gratuitously dedicate, free and clear of		
	all encumbrances and to the satisfaction of the Region:		





H4(a)	A road widening pursuant to the Region's Official Plan along	MDTR	Acknowledged. The road widening Block 79 has been added to the draft
	Mississauga Road (Regional Road #1). The Region's Official		plan and land use schedule under Appendix G. The ROW guidelines are
	Plan road widening requirement for mid-block along		also included.
	Mississauga Road is 30 metres right-of-way (15.0 metres		
	from the centerline). Additional 5.5 metres of property as		
	per the Official Plan requirements will be required within		
	245 metres of intersections as a result of design necessities		
	to protect for the provision of but not limited to; utilities,		
	sidewalks, multiuse pathways and transit bay/shelters: 35.5		
	metres for a single left turn lane intersection configuration		
	(17.75 metres from the centerline of Mississauga Road).		
H4(b)	A 0.3 metre reserve along the frontage of Mississauga Road	MDTR	The 0.3 reserve along Mississauga Road is added as "Block 85 0.3m
	behind the property line.		Reserve" on the draft plan and land use schedule under Appendix G.
Н5	The Developer shall gratuitously transfer to the Region free	MDTR	Acknowledged.
(a)	and clear of all encumbrances and to the satisfaction of the		
	Region:		
	(i) All temporary and permanent easements required in		
	support of the Mississauga Road's road improvement project (Region's Capital Project #14-4065).		
	(ii) All necessary easements for proposed and existing		
	Regional infrastructures as required by the Region to service		
	the proposed plan and external lands.		
H5	a) All costs associated with land transfers and easements	MDTR	Acknowledged.
(b)	shall be 100% the responsibility of the Developer.		





Н6	Clauses shall be included in the Subdivision Agreement		
	stating that:		
H6(a)	The Developer shall remove any existing driveway/accesses		
	along the frontage of Mississauga Road that do not conform	MDTR	Acknowledged.
	to the approved plans at its sole cost.		
Н6	(b) No lots or blocks shall have direct Access to Mississauga	MDTR	Acknowledged. No lots have direct access to Mississauga Road. Open
(b)	Road.	MDIK	Space Block 78 runs along Mississauga Road.
H7	Clause shall be included in the Subdivision Agreement stating	MDTR	
	that:	IVIDIK	
H7(a)	The location, design and implementation of the construction		
	access for the subdivision work must be acceptable to the		
	Region and interim road works may be required to that	MDTR	Acknowledged.
	effect. All costs associated with the construction access works		
	to facilitate the development shall be 100% borne by the		
	Developer. A Letter of Credit for 100% of the estimated cost		
	of construction access works shall be required by the Region		
	prior to any approvals.		
Н8	Clauses shall be included in the Subdivision Agreement	MDTR	
	stating that:	IVIDIK	
H8(a)	The Developer acknowledges and agrees that signs, fences,		
	gateway features, and any other encroachments shall not be	MDTR	Acknowledged.
	permitted within the Region's easements and right-of-way;		
Н8	The Developer acknowledges and agrees that the Region's		
(b)	storm sewers are designed to convey run-offs from the right-		
	of-way of Regional roads only. Under no circumstance shall	MDTR	Acknowledged.
	the flow of storm water from Block 78 be diverted to or along		
	the Mississauga Road's right of way (by pipe or channel); and		





H8(c)	The Region shall not permit any alteration to grading within Mississauga Road right-of-way along the frontage of the Lands.	MDTR	Acknowledged. There are no grading changes within the Mississauga Road right-of-way.
Н9	Prior to servicing, the Developer's engineer shall submit all engineering drawings in the digital format to the latest Region's Digital Format Guidelines.	MDTR	Acknowledged.
H10	A clause shall be included in the Subdivision Agreement that within (60) days of preliminary acceptance of the underground services, the Developer's engineer shall submit "As-Constructed" drawings in digital format, pursuant to the latest Region's Digital Format Guidelines. The Developer's engineer shall also provide ties to all main line valves, ties to individual water service boxes, linear ties to sanitary sewer services and GPS coordinates of all watermain and sanitary sewer appurtenances in accordance with the latest requirements of the Region "Development Procedure Manual".	MDTR	Acknowledged.
H11	Prior to registration of the subdivision, the Developer shall execute a Subdivision Agreement with the local municipality and Region for the construction of sanitary sewer and water services, and regional roads associated with the lands. The Developer shall construct and design these services in accordance with the latest Region standards and requirements.	MDTR	Acknowledged.
H12	Prior to a satisfactory engineering submission, the Developer shall submit to the Region for review and approval:		
H12 (a)	Functional Servicing Report showing the proposed sanitary sewer, storm sewer and water servicing plans for the development; and	MDTR	Acknowledged.



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H12	(b) Storm Drainage Study Report to determine and		Acknowledged.
(b)	demonstrate, to the satisfaction of the Region, that there is		Ü
	no adverse effect of the proposal on the existing structures	MDTR	
	and drainage along Mississauga Road.		
H13	Prior to servicing, the Developer shall submit a satisfactory	MOTO	Acknowledged.
	engineering submission to the Region to review and approval.	MDTR	
H14	A clause shall be included in the Subdivision Agreement that		Acknowledged.
	the Developer shall indemnify and hold the Region harmless		
	from and against any and all actions, suites, claims, demands,		
	and damages which may arise either directly or indirectly by		
	reason of the development of the subject lands and/or	MDTR	
	construction of works, save and except for any actions,		
	causes of action, claims, demands and damages arising out of		
	the negligence of the Region or those for whom it is in law		
	responsible.		
H15	Prior to registration of the plan of subdivision, the Developer		Acknowledged.
	shall submit draft reference plan(s) for the Region's review		
	and approval prior to such plans being deposited. All costs	MDTR	
	associated with preparation and depositing of the plans and	IVIDIN	
	transfer of lands shall be at the sole expense of the		
	Developer.		

TOWN OF CALEDON PLANNING RECEIVED Jul 12, 2021

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Ministry of Environment, Conservation & Parks (MECP) Comments



	try of Environment, Conservation and Parks ember 18, 2020 Letter		Trevor Bell, Environmental Resource Planner & Regional EA Coordinator Office: (416)-326-3577 Email: trevor.bell@ontario.ca
No.	Comment:	Response:	
1	It is recommended that monitoring of groundwater nitrate levels at the site be implemented as a component of the phased development progression approach as recommended by Terra Dynamics Consulting (2020).	IBI	Agreed, nitrate levels will be included in the monitoring program and the lots where higher nitrates were observed will be developed last, as designated through the phasing plan (Appendix H). The monitoring program will confirm that nitrate levels are not increasing because of the development.
2	Completion of water well survey and updated assessment (using monitoring wells) of potential private water supply interference with off-site users including water quality concerns.	IBI	Historical private well surveys have been completed at the Site, which generally found that shallow and dug wells had poor baseline water quality and quantity conditions. These wells were not installed in the Amabel Formation dolostone bedrock unit. A participation letter was sent to nearby residents inviting them to participate in a door-to-door well survey. Very few responses were received. An updated private well survey will be completed if there are sufficient participants.
3	Implementation of the phased development approach based on the results of groundwater level and water quality monitoring contingent on compliance with the predicted level of protection of the aquifer, as recommended by Terra Dynamics Consulting (2020).	IBI	A phased development approach is proposed during which the development will proceed in two phases. In this approach, the western upgradient portion of the Site will be developed first and any subsequent phase will only progress if the monitoring program demonstrates that no water quantity (and quality) impacts are occurring or will result from further development.
4	Implementation of proposed appropriate restrictions on limiting groundwater use (restrictions on title), as recommended by COLE 2020 Report.	IBI	Appropriate restrictions on title will be part of the Subdivision Agreement and registered on title.





5	Enforcement measures for treatment target of 20 mg/L for tertiary (Level IV) treatment system through subdivision agreement.	IBI	Enforcement will be through Subdivision Agreement and registered on title. The maintenance agreement for the Waterloo Biofilter system shall also be enforced through Subdivision Agreement and the provisions of the Ontario Building Code
			The Maintenance agreement will insure that licensed personnel will annually inspect each system and deliver a report to the Chief Building Official of the Town.

TOWN OF CALEDON PLANNING RECEIVED Jul 12, 2021

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Peel District School Board (PDSD) & Dufferin-Peel Catholic District School Board (DPCDSB) Comments

Part of Lot 9, Concession 5, WHS, Hamlet of Belfountain

File Numbers: 21T-91015C & NEC 2017/2018-450

M D T R

	Peel District School Board (PDSD) July 30, 2020 Letter					Nicole N. Hanson Planning Officer – Development, Planning and Accomodation Dept Office: (905)-890-1010 x 2217 Email: Nicole.hanson@peelsb.com
No.	Comment:	t:			Response by:	Response:
1			MDTR	Acknowledged.		
		Enrolment	Capacity	# of Portables		
	Belfountain P.S.	195	199	0		
	Caledon 340 521 0 Central P.S.					
	Mayfield S.S	1.895	1,734	4		
2					MDTR	

TOWN OF CALEDON PLANNING RECEIVED

Jul he Manors of Belfountain Corp. – Third Submission (Full)

Part of Lot 9, Concession 5, WHS, Hamlet of Belfountain

File Numbers: 21T-91015C & NEC 2017/2018-450

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2.1	Prior to final approval, the Town of Caledon shall be advised by the School Board(s) that satisfactory arrangements regarding the provision and distribution of educational facilities have been made between the developer/applicant and the School Board(s) for this plan.	MDTR	
2.1 (a)	The Peel District School Board requires the following clause be placed in any agreement of purchase and sale entered into with respect to any units on this plan, within a period of five years from the date of registration of the development agreement:	MDTR	Acknowledged.
2.1 (b)	"The purchaser agrees that for the purposes of transportation to school the residents of the development shall agree that the children will meet the school bus on roads presently in existence or at another designated place convenient to the Peel District School Board."	MDTR	Acknowledged.
3	The developer shall agree to erect and maintain signs at the entrances to the development which shall advise prospective purchases that due to present school facilities, some of the children from the development may have to be accommodated in temporary facilities or bused to schools, according to the Peel District School Board's Transportation Policy.	MDTR	Acknowledged.

Part of Lot 9, Concession 5, WHS, Hamlet of Belfountain

File Numbers: 21T-91015C & NEC 2017/2018-450

M D T R

July 9, 2020 Letter							Planner – Planning Department Office: (905)-890-0708 Email: krystina.koops@dpcdsb.org
No. Comment:						Response by:	Response:
1		proposed the cipated to yie or Kindergart de 9 to Grade developmentent areas when the cipated to	on based on its and provides the developmen eld: ten to Grade 8 to 12 students to is located winich currently	s School e following t of 75 deta Students; a thin the folloperate und	ched units and owing	MDTR	Acknowledged.
Catchment Area		School	Enrolment	Capacity	# of Portable s		
	Elementary School	St. Cornelius	655	741	3		
	Secondary School				0		
2	School Hall SS				ditions be	MDTR	

TOWN OF CALEDON PLANNING RECEIVED

Jul he Manors of Belfountain Corp. – Third Submission (Full)

Part of Lot 9, Concession 5, WHS, Hamlet of Belfountain

File Numbers: 21T-91015C & NEC 2017/2018-450

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2(a)	"Whereas, despite the best efforts of the Dufferin-Peel		Acknowledged.
	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	MDTR	
	temporary facilities and/or bussed to a school outside of the		
	neighbourhood, and further, that students may later be		
	transferred to the neighbourhood school."		
2(b)	"That the purchasers agree that for the purpose of		Acknowledged.
	transportation to school, the residents of the subdivision shall	MDTR	
	agree that children will meet the bus on roads presently in	IVIDIN	
	existence or at another place designated by the Board."		
3	The Board will be reviewing the accommodation conditions in		Acknowledged.
	each elementary and secondary planning area on a regular	MDTR	
	basis and will provide updated comments if necessary.		

TOWN OF CALEDON PLANNING RECEIVED Jul 12, 2021

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Credit Valley Conservation (CVC)
Comments



Part of Lot 9, Concession 5, WHS, Hamlet of Belfountain File Numbers: 21T-91015C & NEC 2017/2018-450

M D T R

Credit Valley Conservation		Lisa Hosale, Planner	
February 8, 2021 Letter		Office: (905)-670-1615 x268 Email: <u>lisa.hosale@cvc.ca</u>	
No.	Comment:	Response by:	Responses:
Gene	ral Comment		
A1	As LID's form a large part of the SWM proposal, CVC staff have committed to work with the applicant on Low Impact Development (LID) design and implementation, including lot greening designs for LID measures or other permeable surfaces and natural landscaping. We have also offered to help the applicant explore the possible benefits of the Drainage Act as it relates to LID measures located on private lots, to assist with a storm outlet, and create a unified stormwater system protected under a by-law. This tool would allow for coordination of future maintenance and cost sharing between the private landowners and the municipality.	IBI	CVC is correct that Low Impact Development measures do form a large part of the SWM proposal, but not in the typical sense of distributed lot-level LID measures. The LID proposal for this site consists of two large centralized infiltration basins, to be used for stormwater quantity control. Considering the centralized infiltration basins are designed to accommodate back-to-back 100-year storm events, the site has met the water balance standard of meeting pre-development infiltration. There is no proposal in the FSR/SWM Report to utilize lot-level LID measures in addition to the two centralized infiltration basins.
	Revised Hydrogeological Investigation		
B1 (a)	Groundwater Quality Address groundwater quality impacts over the medium and long term. As surface runoff from roadways will form a significant portion of flow to be infiltrated though drywells/SWM ponds (and proposed measures aimed at scrubbing/cleaning stormwater do not completely eliminate sodium and chloride), these contaminants are expected to accumulate in groundwater over time - both within the site and offsite.	IBI	A chloride mass balance assessment has been completed to estimate annual chloride loadings from road salt use. The results indicated that the annual chloride loading will be 27mg/L, which is significantly less than the Ontario of 250mg/L from the Site. This is significantly less than the Ontario aesthetic objective of 250mg/L.



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B1 (b)	In addition to this, SWM ponds are typically designed to retain and settle out contaminants before water re-enters the natural system, however, the proposal would inject stormwater directly into the ground through dry wells placed in the bottom of SWM ponds. Groundwater quality (in relation to the downstream cold-water system, including fish and amphibian habitat, wetlands, and watercourse) is of special concern for this proposal given the novel approach.	IBI	Details of the treatment to be achieved by the SWM ponds are found in the Functional Servicing and Stormwater Management Report, under separate cover However, travel time through the unsaturated zone using the UZAT methodology is estimated to be 4 to 10 years. Based on information provided in the hydrogeology report, the average linear velocity is estimated to be approximately 120m/year, which suggests the following travel times, once water infiltrating though the dry wells reaches the water table: • SWM Pond 1 – Bush Street area – 4.1 years • SWM Pond 1 – West Credit River – 7.3 years • SWM Pond 2 – Regulated area in Block 78 – 3.9 years The travel times presented above are approximate but demonstrate long travel times through both the unsaturated zone and between the dry wells and downgradient receptors, which will allow sufficient time for natural attenuation processes to occur.
B1 (c)	Please quantify groundwater quality impacts, and outline mitigations, engineering approaches, and/or long term monitoring plans including targets, assessments, and links to remedial actions as necessary to support the proposal.	IBI	No groundwater quality impacts are anticipated at the site or at downgradient receptors. However, water quality monitoring and mitigation measures are presented in the EMP. Further, the Environmental Management Plan details a monitoring and mitigation plan to ensure unacceptable groundwater interference is not occurring because of the development.
2	Site Level Water Balance		
2(a)	Provide a third table (labeled: post-development water balance with mitigation) that details post-development water	IBI	A post-development water balance with mitigation table is included in the submission.



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2(b)	balance with mitigation components, demonstrating how the proposed mitigation can be implemented to preserve the pre-development infiltration condition; Include calculations and supporting evidence that the recharge proposal will work	IBI	Details of the SWM facilities are included in the Functional Servicing and Stormwater Management report, prepared under separate cover. The post development water balance table provided demonstrates that the recharge proposal will work at the site scale. As noted, with mitigation measures, a 10% increase in recharge is projected.
2(c)	As the proposal will redirect water that currently infiltrates across the site to consolidated facilities, include calculations and supporting evidence that the proposal will effectively contribute to recharge in the required zone (i.e. supply wells/parcel lots), given the location of facilities and the predominant groundwater flow direction;	IBI	As above, details of the two (2) SWM facilities are included in the Functional Servicing and Stormwater Management report, prepared under separate cover. Please note that the SWM ponds will capture road runoff as well as runoff from lands to the south. As noted in the Water Balance Summary table is included in this submission, there is a 16% projected reduction in recharge in the post development scenario without mitigation. This suggests that there will still be 84% of the existing recharge distributed evenly across the Site. With mitigation, there will be a projected 10% increase in recharge, some of which was derived from runoff from lands south of the site. The additional recharge will be focused in the areas of the two SWM ponds located in the east and central areas of the Site; however, the focused input at the SWM ponds in expected to result in a groundwater mound at each location that will flow radially in all directions. As such, inputs to the groundwater table at various areas across the Site are expected to remain relatively unchanged.
2(d)	Provide calculations demonstrating that the intended infiltration of two back to back 100-year storm events can occur within the SWM facilities without flooding, given the soils/surficial material and drywell technical specifications.	IBI	This is provided in the updated FSR.



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3	To corroborate the background characterization and discussion of site geology provided in the report, provide any available OGS borehole logs and mapping that speak to the occurrence of karst regionally and/or in the vicinity of the subject site.	IBI	The area of the Site has been mapped as an area of 'potential karst', although, as discussed, potential karst has generally been mapped everywhere the Amabel and Guelph formations occur, due to the nature of the carbonate bedrock. No areas of known significant karst have been identified under the Site. A karst map from the OGS is included in this submission.
C1	RB1/Groundwater Recharge Feature		Note that feature RB1, a headwater drainage feature that provides seasonal
	While the function of RB1 has been assessed as seasonal fish habitat, the function of RB1 has not been assessed as a groundwater recharge feature. The proposal will inject stormwater directly into the ground through dry wells placed in the bottom of a SWM pond located over RB1 (introducing settled particles, sodium, chloride, etc. into the recharge feature). Also, the proposal will redirect water that currently infiltrates across the site to the area of RB1, surcharging the recharge feature as compared to existing drainage/ infiltration patterns:	Beacon	fish habitat as part of a losing reach, is proposed to be eliminated post-development and, in its place, a large stormwater management (SWM) pond is proposed. A request for review was submitted by Beacon and the proposed work has been authorized by DFO. For details, please refer to Appendix D for the Request for Review clearance from DFO, dated May 5, 2021.
C1 (a)	Address the hydrogeological connection of RB1 to the downstream cold-water system, including fish and amphibian habitat, wetlands, and watercourse, and the potential impacts of the proposal in terms of contaminants and increased flows directed to the recharge feature;	Beacon	No surface or subsurface hydrological connection between RB1 and the downstream cold-water systems to the north. This is outlined in the FSR (Cole Engineering). Stormwater directed to the large SWM pond will first pass through an OGS, which will remove contaminants to the extent feasible. Per Sections 7.2.1 and 7.2.2 of the Hydrogeological Investigation Report (Cole Engineering, May 2020), negative hydrologic impacts to on-site and off-site wetlands are not anticipated.



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C1 (b)	Address the surficial and hydrogeological connection of RB1 to the external catchment area (approx. 253ha) and potential impacts of the proposal, ensuring that the area of RB1 can continue to receive flows from the external catchment (at pre-development levels);	Beacon	We have received a clearance from DFO for our request for review, indiciating that there is no expected impacts to species. "We (DFO) have found that the proposed works are not in fish habitat and will not likely affect fish or fish habitat. No further review pursuant to the <i>Fisheries Act</i> , the <i>Aquatic Invasive Species Regulations</i> or the <i>Species at Risk Act</i> , as listed above, is required." For details, please refer to Appendix D for the Request for Review clearance from DFO, dated May 5, 2021. As outlined in Section 5.2.1 of the FSR, there is an east-west drainage divide on the subject property. RB1 is part of the southern drainage area, which primarily consists of lands south of the subject property. The large SWM pond proposed in place of feature RB1 will directly receive major system drainage (100-yr storm events +), most of which will be from lands to the south, while minor events will be captured by rear-lot catchbasins and roadside ditches which, if overtopped, will discharge to the large SWM pond prior to flowing through an Oil and Grit Separator (OGS). Notably, it is at the location of RB1/the large SWM pond that overland flow from adjacent lands to the south enters the subject property in the predevelopment condition (per Cole FSR Section 5.6.2) and infiltrates into the ground.
C1 (c)	Ensure that the monitoring plan proposed in the EIS addresses the points above, laying out all elements necessary for successful groundwater monitoring over the long term including targets, assessments, links to mitigations/remedial actions (including adaptive management and/or staged development, etc.) as necessary.	Beacon	Noted. An Environmental Management Plan (including a long-term groundwater monitoring plan under Section 2.2.1) has been developed by IBI Group and is included in this submission.
C2	Significant Woodlands The Significant Woodlands that extend onto the site along	MDTR	Beacon remains of the opinion that the treed area adjacent to Shaw's Creek
	The Significant Woodianus that exterio onto the site diong	Beacon	Road is not a significant woodland. As was outlined in the Savanta EIS,

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	Shaw's Creek Road are connected to (not functionally fragmented from) the rest of the feature. An approach for retention similar to Lot 18 (where the feature is contained within the boundaries of one lot, with 10 meter buffer applied) is appropriate. Otherwise, if planned widening of Shaw's Creek road would alter the Significant Woodland such that it is functionally fragmented from the rest of the feature, an offsetting plan for		comment responses and in Beacon's addendum, the small narrow treed feature does not qualify as a significant woodland in accordance with applicable policies and is thus not part of the natural heritage system. MDTR Group has explored options to maximize retention of trees associated with the feature in accordance with NEC policy 2.7.4. The subdivision plan incorporates this feature and provides for 11 m of separation between the features and proposed building envelopes. Driveways have also been sited to minimize impacts to trees.
	Lots 9-11 may be appropriate per CVC Guidelines https://cvc.ca/wpcontent/uploads/2020/06/rpt_CVCEcoOffse t_FINAL_20200313.pdf		Under section 2.7.6, a buffer is required for key natural heritage features, which includes significant woodland. In this case, since the treed area along Shaws Creek Road is not classified as significant woodland, a formal vegetation buffer is not established. Furthermore, MDTR Group will not be responsible for offsetting impacts of
			road widening activities undertaken by a municipality.
	FSR – Septic Impact Assessment		
D1	Infrastructure Separation Demonstrate adequate separation for proper functioning of all proposed infrastructure (well/septic/infiltration) both within single lots and between lots holistically across the site.	IBI	The only infiltration measures proposed throughout the site are two centralized infiltration basins that are used for stormwater quantity control. There are no additional infiltration measures proposed throughout the site. The rear yard catch basins are not intended infiltration measures nor are the roadside ditches. The Functional Grading Plan includes a conceptual footprint for a house, private well and private septic system.
			Private septic systems are shown on the Grading Plan to be spaced according to the required distances noted in Section 7.1 (p. 33) of the FSR/SWM Report. Private wells are shown on the Grading Plan to be spaced



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			according to the required distances noted in Section 8.1 (p. 34) of the FSR/SWM Report.
D2	Tile Field Placement/Slopes Tile fields are proposed in areas with changing elevation and significant slopes. It is unclear how proposed file fields will function given grading/slope/fill considerations in these areas. This approach would require specific design considerations and approval by the Town Chief building inspector.	IBI	The intent of showing the placement of proposed tile fields on the Functional Grading Plan was to demonstrate that proposed lots are sufficiently sized to accommodate the house and private sewage and well facilities. We recognize that placement of proposed septic tile fields is generally preferred on flatter areas of land, however the presence of sloped land does not prohibit placement of a septic tile field. The steepest slopes on the development area are no greater than 4:1 (or 25%). While the tile field itself will still be constructed relatively flat, however the ground above it can be sloped or undulating. Mounding overtop the septic tile field will also occur by re-grading areas of the lot to accommodate septic field placement. Each septic system on each lot will require a future detailed design that will be completed in conjunction with the product supplier, Waterloo Biofilter and the detailed lot grading.
D3	O&M/Subdivision Agreement The FSR states that a ten-year operation and maintenance agreement of the proposed treatment systems will be enforced through the subdivision agreement. This approach would require concurrence from the Town and clear mechanism for enforcement.	IBI	We defer to the Town to comment on enforcement mechanisms. However, the system manufacturer offers maintenance agreements through licensed contractors who are legally bound to notify the Chief Building official if required repairs are not undertaken.
	FSR – Stormwater Mangement		
E1	Grading/Groundwater Flows Demonstrate that the proposed central infiltration facilities do not cause offsite impacts (from increased groundwater flows)	IBI	A groundwater monitoring assessment can be completed as part of an update to the Hydrogeological Report to investigate the saturation of the groundwater table underneath the two central infiltration facilities. We note, although we have designed these large central infiltration facilities for



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	to surrounding private properties (i.e. to the proposed lots surrounding the facilities).		the purpose of major system stormwater quantity control, the remaining pervious landscape areas across the development area will continue to provide excellent infiltration capacity, as it does under pre-development conditions. Please refer to Section 2.4 Existing Soils and Groundwater Conditions (p. 3).
E2 (a)	Grading/Hydraulic Conductivity The proposed development involves significant grading associated with the proposed subdivision. Please confirm whether the proposed grading would impact the hydraulic conductivity of the existing soils.	IBI	Hydraulic conductivity of the existing soils would occur in areas where compaction of engineering fill occurs, primarily under building envelopes and roads that require compaction of 98% SPD. However, for the wider area of the subdivision, there is no need for wide scale compaction, therefore the hydraulic conductivity for majority of the site soils will remain unchanged.
E2 (b)	Hydraulic conductivity is to be maintained for proper functioning of proposed LID's, as well as proper functioning of proposed rear yard catch basins in existing depressions.	IBI	There are no lot-level LID or infiltration measures designed proposed for this development, over and above the two central infiltration facilities. The natural, insitu soils already provide excellent infiltration ability. In the areas of proposed rear yard catch basins, there will be no need to compact the insitu soils and we expect that hydraulic conductivity will be maintained in the rear yards to allow infiltration to continue through the in-situ soils.
E3 (a)	Shaw's Creek Road/Emergency Overland Flow Route Clearly compare existing/proposed drainage patterns along Shaw's Creek Road in the area of the proposed emergency overland flow route (i.e. at the low point along Shaw's Creek Rd, adjacent to SWM Block 82).	IBI	The proposed drainage pattern in the post-development condition along Shaw's Creek Road will remain the same as existing pattern.
E3 (b)	Determine whether flows exit the site and spill over Shaw's Creek Road in this area under existing conditions.	IBI	Under pre-development conditions and during a heavy enough rainfall, stormwater would collect at the lowest point in the site, which is at the location of Block 82 and would overtop Shaws Creek Road if the site filled up with enough stormwater. The storm event that would cause such an occurrence under pre-development conditions has not been analyzed in the FSR/SWM Report.

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E4 (a)	Shaw's Creek Road/Emergency Overland Flow Route Determine where overland flow will drain to once it exits the site via the proposed emergency overland flow route along Shaw's Creek Road.	IBI	Emergency spillage of stormwater flows from the SWM Pond in Block 82 would overtop Shaws Creek Road and flow overland in a northwesterly direction through the neighboring property, as per existing topography. The existing topography and overland flow arrows are visible on the large size drawings included in the FSR/SWM Report (see St-3 Storm Drainage Plan – External, p. 50).
E4 (b)	Clearly compere existing/ proposed drainage patterns with respect to proposed emergency overland flow route. There does not appear to be an existing formal drainage ditch within the Shaw's Creek right-of-way.	IBI	The stormwater management strategy for the site has been designed to mimic existing stormwater flow conditions and drainage patterns. Shaws Creek Road currently does not include a roadside drainage ditch. Emergency stormwater spillage from the site will match existing conditions, specifically, if the SWM Ponds within the site fill up with water as a result of an extreme storm event or SWM Pond malfunction or blockage, the emergency outlet is overtopping Shaws Creek Road. This potential for stormwater flooding within the site and overtopping Shaws Creek Road exists today, under predevelopment conditions.
E5	Infiltration Facility Design/Pre-treatment Based on the details provided within the FSR, the proposed infiltration measures have limited pre-treatment controls and may be susceptible to failure/clogging and reduced performance over the life of the facilities. Proposed pretreatment is limited to vegetation within the roadside detention swales and OGS units at the proposed infiltration facility outfalls. Given this limited pre-treatment, infiltration measures will require a higher frequency of maintenance. Address long term maintenance requirements to ensure that all facilities function as designed.	IBI	The proposed SWM strategy does not utilize lot-level infiltration measures, aside from natural infiltration from existing insitu soil within the lots. The FSR/SWM Report provides a functional level example of water quality pre-treatment including roadside ditches and OGS Units, however this does not preclude the use of additional pre-treatment measures that could be employed at the detailed design stage, such as utilizing a series of Oil/Grit Separators installed in a row, use of Filtration units, incorporate rock lined sumps at the SWM Pond inlets or other water quality pre-treatment measures, which could all be considered at the discretion of the Town. Long term maintenance requirements will be provided to the Town in the form of an Operations and Maintenance Manual at the detailed design stage.



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E6	Infiltration Facility Design/General. Please address the following general recommendations on the design of the proposed infiltration facilities:	IBI	
E6(a)	It is recommended that drawdown calculations be completed in support of the proposed infiltration gallery design	IBI	The drawdown calculations for the two centralized infiltration facilities are inter-related with the Stage-Storage-Discharge Calculations found in Appendix A of the FSR/SWM Report.
E6 (b)	It is recommended that the factor of safety be in accordance with CVC's SWM Guideline. Refer to CVC's SWM Guideline, Appendix B, Table B3 for safety correction factors when calculating design infiltration rates;	IBI	We acknowledge that CVC's SWM Guidelines Manual indicates a minimum Safety Correction Factor of 2.5 for the design of infiltration facilities. The designer of the facilities chose a safety factor of 1.5 understanding that soil conditions across the site are quite uniform at depth and there is low risk of infiltration uncertainty. Infiltration will be directed to the two centralized infiltration basins, which will be maintained. The designed safety factor and justifications were discussed and agreed
E6 (c)	The FSR does note that Shaw's Creek Road is proposed to act as the emergency spillway for pond blocks 81 and 82. If feasible, it is recommended that a formal outlet be established;	IBI	upon at a meeting with CVC/Town on March 24, 2021. The establishment of a formal outlet, through the Drainage Act, is outside the scope of the Functional Servicing Report.
E6 (d)	SWM Block 81 appears to have grid lines at the bottom of the gallery. Please confirm whether walkway/paths are proposed to be integrated into the gallery at detailed design.	IBI	The grid lines at the bottom of Block 81 are meant to demonstrate maintenance access paths for Town vehicles to access the dry wells along the pond bottom. The grid lines are not meant for public walking paths.
E7	Construction Staging/LID Given the extent of grading in support of the proposed subdivision and the nature of the proposed SWM facility design (exclusively infiltration of outflows), it is strongly recommended that the FSR be updated with additional discussion related to during-construction staging and	IBI	A two-phase development approach has been envisioned by the Developer, whereby the first phase would consist of the construction of the two SWM Ponds, plus all roads and lots west of Block 81. Phase 2 would consist of the remaining lands to the east of Block 81. Table 5.4 SWM Facility operations & Maintenance Checklist (p. 30) details a list of preliminary monitoring activities for the dry ponds (LID).



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	sequencing, and during-construction LID performance		
	monitoring that will be expanded on during the detailed		
	design stage.		
E8	Construction Staging/LID	IBI	
	The proposed SWM strategy exclusively uses infiltration		
	measures to provide water quantity control onsite. There is a		
	concern that the proposed infiltration measures may be		
	compromised during active house construction. The following		
	items should be addressed during the detailed design stage:		
E8	The estimated duration of construction is unknown. There is a	IBI	Robust erosion and sediment control designs will be prepared at the
(a)	concern that the infiltration swales and dry wells being		detailed design stage and will include lot level ESC measures on a lot-by-lot
	proposed onsite may be more susceptible to clogging and/or		basis.
	failure during active construction. Additional construction		
	staging and erosion and sediment control measures will be		
	required at detailed design;		
E8	To prevent clogging of the central SWM infiltration facilities	IBI	We understand that 'interim facilities' refers to temporary sediment control
(b)	being proposed, interim facilities may be required. This should		ponds or traps, which are typical measures and we expect they shall be
	be noted within the FSR and addressed during the detailed		utilized in combination with a robust ESC design at the detailed design stage.
	design stage;		
E8(c)	Detailed design ESC Plans should include construction staging	IBI	Acknowledged. Staging details of the two infiltration facilities can be
	details relating to the infiltration galleries being proposed		incorporated into the construction plans at the detailed design stage.
	onsite;		
E8	The ESC plan should clearly demonstrate how the infiltration	IBI	Acknowledged. The robust ESC Plans will demonstrate construction staging
(d)	areas will be isolated during active construction to avoid		and isolation at the detailed design stage.
	sediment accumulation and compaction with these features;		
E8	To ensure that the proposed infiltration systems maintain	IBI	A performance monitoring plan has also been requested by the Town and
(e)	their function throughout the duration of the subdivision		can be incorporated into the detailed design reporting.
	construction, CVC staff strongly recommend performance		



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	monitor being completed by the owner to ensure the LID measures are not compromised. During construction and post construction performance monitoring should be implemented onsite.		
9	Erosion and Sediment Controls/LID The proponent should stage the construction of the development to minimize the extent of erosion and sediment control issues during active construction and/or retain a third party ESC monitoring inspector(s) during construction. Furthermore, as per the ESC Guidelines for Urban Construction, any disturbed areas left exposed for 30 days or greater are to be vegetated.	IBI	Acknowledged. The robust ESC Plans will demonstrate construction staging and isolation at the detailed design stage.
10	Performance Monitoring/LID LID performance monitoring should be completed directly following the completion of the development to ensure that infiltration galleries are operating as designed. Further, it is strongly recommended that a site specific operations and maintenance manual (OMM) be completed for the development to ensure that onsite LID features are maintained in the long term. Please consider the following items within the OMM specific to the onsite LID features:	IBI	Acknowledged Both reports have also been requested by the Town and can be completed at the detailed design stage. Table 5.4 SWM Facility operations & Maintenance Checklist (p. 30) details a list of preliminary monitoring activities for the dry ponds (LID).
	(a) The first year of inspections should be used to refine the inspection and maintenance frequency;	IBI	
	(b) Contingent on the above, the infiltration galleries should be inspected (scoped using a CCTV camera) every 7-10 years (or more frequently pending on construction activities);	IBI	
	(c) A hobo level logger suspended in a piezometric well can be installed for approximately \$800. Having such a setup within a	IBI	



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facility will allow for the verification of gallery drawdown		
times, and to assess for potential clogging within		
the practice. Free guidance is available via CVC's LID		
Monitoring guide, located here: https://cvc.ca/wp-		
<pre>content/uploads/2016/06/Monitoring Guide Final.pdf ;</pre>		
(d) For more information, please see the LID Inspection and		
Maintenance Guide:		
https://sustainabletechnologies.ca/app/uploads/2018/04/SW		
MFG2016 Guide April-2018.pdf;		
(e) It is recommended that LID performance monitoring	IBI	
criteria be established during the FSR stage and expanded on		
during detailed design.		



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Appendix A – MECP Clearance for SAR Species and Habitat



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Comments Response Matrix July 2021

Good afternoon John,

Thank you for the additional information and updated mapping product.

Based on a review of the above information, MECP has determined that the activities associated with the project, as currently proposed, will likely not contravene section 9 (species protection) and/or section 10 (habitat protection) of the Endangered Species Act, 2007 (ESA 2007).

Should any of the project parameters change, please notify the SARB immediately to obtain guidance on whether additional actions will need to be taken to remain in compliance with the ESA 2007. Also, if any SAR species and/or habitats are observed in the project area, please contact the SARB as soon as possible.

More information on SAR species and habitat can be found at https://www.ontario.ca/page/species-risk.

It is important to note that changes may occur in both species and habitat protection which could affect whether proposed projects may have adverse effects on SAR. The ESA 2007 applies to endangered and threatened species listed on the Species at Risk in Ontario (SARO) List (http://www.ontario.ca/environment-and-energy/species-risk-ontario-list). The Committee on the Status of Species at Risk in Ontario (COSSARO) meets regularly to evaluate new species for listing and/or re-evaluate species already on the SARO List. As a result, species designations may change, which could in turn change the level of protection they receive under the ESA 2007. Also, habitat protection provisions for a species may change if a species-specific habitat regulation comes into effect. If a significant amount of time passes before development can begin the proposed development may have to be reassessed for it's potential impacts to SAR.

Please be advised that it is proponent's responsibility to be aware of and comply with all other relevant provincial or federal legislation, municipal by-laws or required approvals from other agencies.

Regards,

Aide Zarkovich

A/Management Biologist - Permissions & Compliance
Species at Risk Branch
Land & Water Division

Ministry of the Environment, Conservation & Parks
aide.zarkovich@ontario.ca

T: 705-492-7452

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Appendix B – MECP Groundwater Comments
In Response to 2nd Submission

Ministry of the Environment, Conservation and Parks

Environmental Assessment Branch

1st Floor 135 St. Clair Avenue W Toronto ON M4V 1P5 Tel.: 416 314-8001 Fax.: 416 314-8452 Ministère de l'Environnement, de la Protection de la nature et des Parcs

Direction des évaluations environnementales

Rez-de-chaussée 135, avenue St. Clair Ouest Toronto ON M4V 1P5 Tél.: 416 314-8001 Téléc.: 416 314-8452



September 18, 2020

MEMORANDUM

TO: Nancy Mott, Senior Strategic Advisor, NEC

FROM: Trevor Bell, Environmental Resource Planner and EA

Coordinator, Environmental Approvals Branch, MECP

RE: Manors of Belfountain subdivision, Town of Caledon

Niagara Escarpment Commission Development Permit Application

Review

Staff at MECP's Central Region Technical Support Section reviewed the following documents:

- "Revised Hydrogeological Investigation Report, Manors of Belfountain, Caledon, ON"; prepared by Cole Engineering, dated May 2020.
- "Functional Servicing Report, Manors of Belfountain, Caledon, ON"; prepared by Cole Engineering, Revised June 2020.
- "The Manors of Belfountain, Second Submission (Full), Agency Comments Response Matrix" prepared by MDTR, dated June 2020.

The revised reports and responses to comments provided within the documents propose mitigation measures, that if properly implemented, will significantly minimize project impacts on groundwater resources and groundwater related features in the area. The revised reports have evaluated groundwater-related issues in a manner that is appropriate at this stage of the project and that is adequately foresees the need for additional investigations.

MECP has previously provided groundwater related comments/recommendations in October 2018. Most comments/recommendations have been addressed in the documents listed above.

The following additional recommendations are offered for your consideration:

- It is recommended that monitoring of groundwater nitrate levels at the site be implemented as a component of the phased development progression approach as recommended by Terra Dynamics Consulting (2020).
- Completion of water well survey and updated assessment (using monitoring wells) of potential private water supply interference with off-site users including water quality concerns.
- Implementation of the phased development approach based on the results of groundwater level and water quality monitoring contingent on compliance with the predicted level of protection of the aquifer, as recommended by Terra Dynamics Consulting (2020).
- Implementation of proposed appropriate restrictions on limiting groundwater use (restrictions on title), as recommended by COLE 2020 Report.
- Enforcement measures for treatment target of 20 mg/L for tertiary (Level IV) treatment system through subdivision agreement.

Closure

The purpose of the preceding review is to provide advice to the Niagara Escarpment Commission regarding groundwater related issues based on the information provided in the above referenced document. The conclusions, opinions and recommendations of the reviewer are based on the information provided by others, except where otherwise specifically noted. The Ministry of the Environment, Conservation and Parks cannot guarantee that the information that has been provided by others is accurate or complete. A lack of specific comment by the reviewer is not to be construed as endorsing the content or views expressed in the reviewed material.

If you have any questions regarding the above comments and recommendations, do not hesitate to contact the undersigned at (437) 770-3731 or by e-mail at trevor.bell@ontario.ca.

Sincerely,

Trevor Bell

Environmental Planner/EA Coordinator

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Appendix C - Hydrogeology Peer Reviewer (Terra-Dynamics Consulting) Letter



Terra-Dynamics Consulting Inc.

404 Queenston Street, St. Catharines, ON L2P 2Y2

November 5, 2020

Mr. Drew Haines Senior Development Engineering Coordinator Town of Caledon, Planning and Development 6311 Old Church Road Caledon, Ontario L7C 1J6

Re: Revised Hydrogeological Assessment Peer Review, The Manors of Belfountain Corp, Part Lot 9, Concession 5, WHS, Draft Plan of Subdivision 21T-91015C

Dear Mr. Haines,

1.0 Introduction, Background Information and Purpose

Terra-Dynamics Consulting Inc. respectfully submits this hydrogeological assessment peer review of Cole Engineering Limited's Revised Hydrogeological Investigation Report (Revised Report), dated May, 2020, prepared for The Manors of Belfountain Corp, Part Lot 9, Concession 5, WHS, Draft Plan of Subdivision 21T-91015C (Site). Terra-Dynamics (2019) previously reviewed Cole Engineering Group Ltd.'s (Cole Engineering) Hydrogeological Investigation Report dated February, 2018.

Cole Engineering's Revised Report generally addressed our recommended areas for further study and documentation (Terra-Dynamics, 2019), however there were some exceptions and these are noted below using the headings our of previous report as designed to respond to the Town of Caledon Request for Ouotation.

It should also be noted that the number of lots proposed has increased from 67 to 75, with the average lot size decreasing from 0.63 ha (1.6 acres) to 0.4 ha (1.0 acre). The increase in the expected downgradient nitrate groundwater concentration calculated changed from 2.2 (Cole Engineering, 2018a) to 2.5 mg/L (Cole Engineering, 2020) however the net impact increase is minimal and not a concern.

2.0 Adequacy of the Cole Engineering Revised Hydrogeological Assessment

2.1 Confirmation the Study was Prepared by a Qualified Expert

Cole Engineering's Revised Study was:

- i. prepared by Aron Zhao, Environmental Specialist;
- ii. checked by Mr. Steve Davies, M.Sc., P.Geo., Senior Hydrogeologist; and
- iii. authorized for issue by Dr. Muin Husain, Ph.D., P.Geo.

Mr. Davies and Dr. Husain have been practising members of the Association of Professional Geoscientists of Ontario since 2002.

Fax: 905-935-0397

TOWN OF CALEDON **PLANNING RECEIVED**

Jul 12, 2021 Mr. Drew Haines November 5, 2020 Page 2

> The Study was prepared by qualified experts by virtue of Mr. Davies', and Dr. Husain's role's in preparation of the report. However, it would have been more appropriate if the report had been stamped by Mr. Davies and/or Dr. Husain. This comment was previously provided (Terra-Dynamics, 2019).

2.2 Confirmation the Study Followed Standard Acceptable Industry Practice

Terra-Dynamics previously recommended post construction water level and water quality monitoring (2019). This was not commented on in the Revised Hydrogeological Investigation Report.

Cole Engineering (2020):

- 1. Stated the chemical water quality of new private wells would be tested. However, no procedure for implementing and reviewing such testing was provided;
- 2. Did not respond to the recommendation for phased development and confirmatory monitoring as recommended in Terra-Dynamics (2019); and
- 3. Reported a 10-year operation and maintenance agreement would be executed for the sewage treatment systems. No explanation was provided for what occurs at year 11.

2.3 Review of Study Compliance with the MECP and Other Relevant Agency Criteria, Tests, **Guidelines, Policies and Procedures**

Cole Engineering did not update their water quality impact assessment using Class IV system loading (effluent nitrate-nitrogen concentration of 40 mg/L) as requested by the MECP and affirmed by Terra-Dynamics (2019).

3.0 Adequacy of Water Supply

3.1 If Proposed Mitigation Measures for any Potential Impacts are Acceptable.

Cole Engineering provided inconsistent comments on the future use of cisterns (underlining by Terra-Dynamics):

- 1. "shall be enforced" (Executive Summary, Cole Engineering, 2020);
- "cisterns can be installed at each house to offset the summer demand pumping as a precaution. ...drought resistant grasses with clover can also be considered." (Section 6.3.2, Cole Engineering, 2020); and
- 3. "...the use of cisterns and drought resistant grasses could be reviewed" (Section 8, Cole Engineering, 2020) and "Cisterns could be installed...." (Section 9, Cole Engineering, 2020).

Cole Engineering also provided inconsistent comments on the future use of road salt (underlining by Terra-Dynamics):

- 1. "will not be applied" (Executive Summary, Cole Engineering, 2020),
- 2. "Salt may be applied as part of Town maintenance service if the temperature is -12° Celsius and rising; however, increased chloride contaminant load due to road salt application is expected to be negligible" (Section 6.2.2., Cole Engineering, 2020).

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Cole Engineering (2020) did not provide a process for implementation of their recommendation of restricting groundwater for use in swimming pools and irrigation during the summer.

4.0 Adequacy of the Hydrogeological Study

Cole Engineering's Revised Hydrogeological Investigation Report (May 2020) generally followed standard industry practice. However, there are a number of areas recommended for Cole Engineering to address, they include:

- 1. Professional Geoscientist stamping of Cole Engineering reports;
- 2. Elevated total dissolved solids concentrations at TW3 and TW12 in 2020;.
- 3. Explanation of how implementation will be completed of:
 - a. Chemical water quality testing of new water supply wells; and
 - b. Restriction of summer groundwater use.
- 4. Identification of wells for post-construction monitoring, including for a phased development approach south to north; (i) wells for datalogging pressure transducers to monitor water level recharge conditions and (ii) 3 year interval nitrogen species and sewage effluent impact water quality monitoring;
- 5. Sewage disposal system operation and maintenance agreements after 10-years;
- 6. Water quality impact assessment including results if completed using Class IV system loading (effluent nitrate-nitrogen concentration of 40 mg/L); and
- 7. Inconsistent comments on the future use at the Site of:
 - a. cisterns and drought resistant grasses;
 - b. road salt use.

We would like to thank the Town of Caledon for retaining Terra-Dynamics Consulting Inc. to assist you in this project. We trust this information is sufficient for your present needs. Please do not hesitate to contact us if you have any questions.

Yours truly,

TERRA-DYNAMICS CONSULTING INC.

Høyre D. Cayall

Jayme D. Campbell, P.Eng. Senior Water Resource Engineer David D. Slaine, M.Sc., P.Geo. Principal Hydrogeologist



TOWN OF CALEDON **PLANNING RECEIVED**

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5.0 References

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> Sharaf, A., 2013. On-Site Sewage Systems, contains: building code act, 1992 and relevant portions of O.Reg. 332/12. Code Reference Series.

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Town of Caledon, 2018. 1st Submission of Rural Estate Residential Plan of Subdivision and Niagara Escarpment Development Permit Application, Supplementary Town and Agency Comments. Glen Schnarr & Associates on behalf of the Manors of Belfountain Corp., Part of Lot 9, Concession 5, WHS (CAL), Hamlet of Belfountain.

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Appendix D - DFO Clearance for Fish Habitat



Jul the Manors of Belfountain Corp. – Third Submission (Full)

Part of Lot 9, Concession 5, WHS, Hamlet of Belfountain

File Numbers: 21T-91015C & NEC 2017/2018-450

M D T R

Comments Response Matrix July 2021

Dear Ash Baron:

Subject: Proposed works or undertakings are not in fish habitat.

The Fish and Fish Habitat Protection Program (the Program) of Fisheries and Oceans Canada (DFO) received your proposal on March 18, 2021. We understand that you propose to:

- · Construct a storm water management facility at the end of an existing ephemeral drainage feature;
- . Construct a berm around the storm water management facility to prevent fish from ending up in the intermittent section of the watercourse and keep them in the upstream portion of the watercourse.

Our review considered the following information:

Request for Review form dated March 18, 2021 and supporting documents.

Your proposal has been reviewed to determine whether it is likely to result in:

- the death of fish by means other than fishing and the harmful alteration, disruption or destruction of fish habitat which are prohibited under subsections 34.4(1) and 35(1) of the Fisheries Act; and
- effects to listed aquatic species at risk, any part of their critical habitat or the residences of their individuals in a manner which is prohibited under sections 32, 33 and subsection 58(1) of the Species at Risk Act.

The aforementioned impacts are prohibited unless authorized under their respective legislation and regulations.

Based on the information provided, we have found that the proposed works are not in fish habitat and will not likely affect fish or fish habitat. No further review pursuant to the Fisheries Act, the Aquatic Invasive Species Regulations or the Species at Risk Act, as listed above, is required. If your project is near fish habitat, additional information on measures to protect fish and fish habitat such as sediment and erosion control can be found at http://www.dfo-mpo.gc.ca/pnw-ppe/measures-eng.html.

Should your plans change or if you have omitted some information in your proposal, further review by the Program may be required. Consult our website (http://www.dfo-mpo.gc.ca/pnw-ppe/index-eng.html) or consult with a qualified environmental consultant to determine if further review may be necessary. It remains your responsibility to remain in compliance with the Fisheries Act, the Species at Risk Act and the Aquatic Invasive Species Regulations.

It is also your *Duty to Notify* DFO if you have caused, or are about to cause, the death of fish by means other than fishing and/or the harmful alteration, disruption or destruction of fish habitat. Such notifications should be directed to (http://www.dfo-mpo.gc.ca/pnw-ppe/CONTACT-eng.html).



Jul he Manors of Belfountain Corp. – Third Submission (Full)

Part of Lot 9, Concession 5, WHS, Hamlet of Belfountain

File Numbers: 21T-91015C & NEC 2017/2018-450

M D T R

Comments Response Matrix July 2021

It remains your responsibility to meet all other federal, territorial, provincial and municipal requirements that apply to your proposal.

If you have any questions with the content of this email, please contact Kate Crawford at Kate.Crawford@dfo-mpo.gc.ca.

Yours sincerely,

Kate Crawford

Biologist | Biologiste

Fisheries and Oceans Canada | Pêches et Océans Canada

Fish and Fish Habitat Protection Program | Programme de protection du poisson et de son habitat

Ontario and Prairie Region | région de l'Ontario et des Prairies

Fisheries and Oceans Canada | 867 Lakeshore Road, Burlington ON L7S 1A1

Pêches et Océans Canada | 867, ch. Lakeshore, Burlington ON L7S 1A1

Government of Canada | Gouvernement du Canada

Kate.Crawford@dfo-mpo.gc.ca

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Appendix E - Ministry of Heritage, Sport,
Tourism and Culture Industries Clearance

Ministry of Heritage, Sport, Tourism and Culture Industries

Programs and Services Branch 401 Bay Street, Suite 1700 Toronto, ON M7A 0A7 Tel: 416.768.7553 Ministère des Industries du Patrimoine, du Sport, du Tourisme et de la Culture

Direction des programmes et des services 401, rue Bay, Bureau 1700 Toronto, ON M7A 0A7 Tél: 416.768.7553



February 18, 2021

EMAIL ONLY

Nancy Mott Senior Strategic Advisor Niagara Escarpment Commission 232 Guelph Street Georgetown, ON P7G 4B1 E: Nancy.mott@ontario.ca

MHSTCI File : 0009427

NEC File : P/R/2017-2018/450

Applicant : Manors of Belfountain Corp.

Project : Part Lot 8 & 9, Concession 5 WHS

Mississauga Road

Location : Town of Caledon, Ontario

Dear Ms. Mott:

Thank you for the opportunity to review the second/third submission materials related to the above-noted file. We have reviewed the following documents:

- The Cultural Heritage Resource Assessment: Built Heritage Resources and Cultural Heritage Landscapes dated December 2017 (Revised January and July 2018 and April 2019), prepared by ASI; and
- The Cultural Heritage Impact Statement for 0 Mississauga Road dated April 2019, prepared by ASI.

These revised and new reports address our concerns with respect to built heritage resources and cultural heritage landscapes as expressed in our letter dated August 31, 2018, based on our review of the July 2018 version of the *Cultural Heritage Resource Assessment*. We have no further concerns at this time so long as the recommendations of both reports are followed in the development process.

Thank you for consulting MHSTCI on this project. If you have any questions or require clarification, do not hesitate to contact me.

Sincerely,

Dan Minkin Heritage Planner dan.minkin@ontario.ca

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Appendix F – Peel Region Clearance Under the Clean Water Act



NOTICE

Clean Water Act, 2006

Notice File No.: 3461797

To/Attention:

MDTR Group c/o John Spina

Site/Location:

Part of Lot 9, Concession 5, WHS, (Hamlet of Belfountain), Caledon, ON

Property Owner: The Manors of Belfountain Corp.

Date:

July 29, 2020

Public Works

10 Peel Centre Dr. Suite A Brampton, ON L6T 4B9 tel: 905-791-7800

peelregion.ca

BACKGROUND INFORMATION:

On July 10, 2020, the Region of Peel's Risk Management Office received an application resubmission for a Draft Plan of Subdivision (File No.: 21T-91-015C). The proposed development is for 75 estate residential lots, as well as a 2.38 ha park block along with other open space areas. The residential lots are proposed to be serviced by individual private wells and septic systems.

The above referenced application was reviewed because the subject property has been identified as being wholly or partially within the Wellhead Protection Area (WHPA) - E for Inglewood Well 2.

APPLICATION DATE: July 10, 2020

REASON FOR NOTICE:

This Notice is being issued under subsection 59(2)(a) of the Clean Water Act. Based on a review of the information submitted, it has been determined that there is no apparent significant drinking water threat activity associated with the Application and as such, Section 57 (Prohibition) and Section 58 (Risk Management Plan) of the Clean Water Act do not apply.

The Applicant is advised that this Notice relates strictly to the Clean Water Act and the policies contained in the applicable Source Protection Plan and does not address any other water resources considerations or approvals of interest to the Region of Peel.

This Notice relates to the proposed development as described above and in the Application. This Notice is not valid for any subsequent approvals which the proposal may require under the Planning Act, or for any building permits that may be required under the Building Code Act, and in such cases, a further Section 59 Notice will be required.

ACTION REQUIRED:

No action is required under the policies contained within the Approved Credit Valley-Toronto and Region-Central Lake Ontario (CTC) Source Protection Plan.

REPORT/OR SEND INFORMATION TO:

Office of the Risk Management Official

Region of Peel

Water and Wastewater Divisions,

Public Works

10 Peel Centre Drive, Suite A,

Brampton ON, L6T 4B9

Issued By:

Therese Estephan

Title:

Risk Management Official

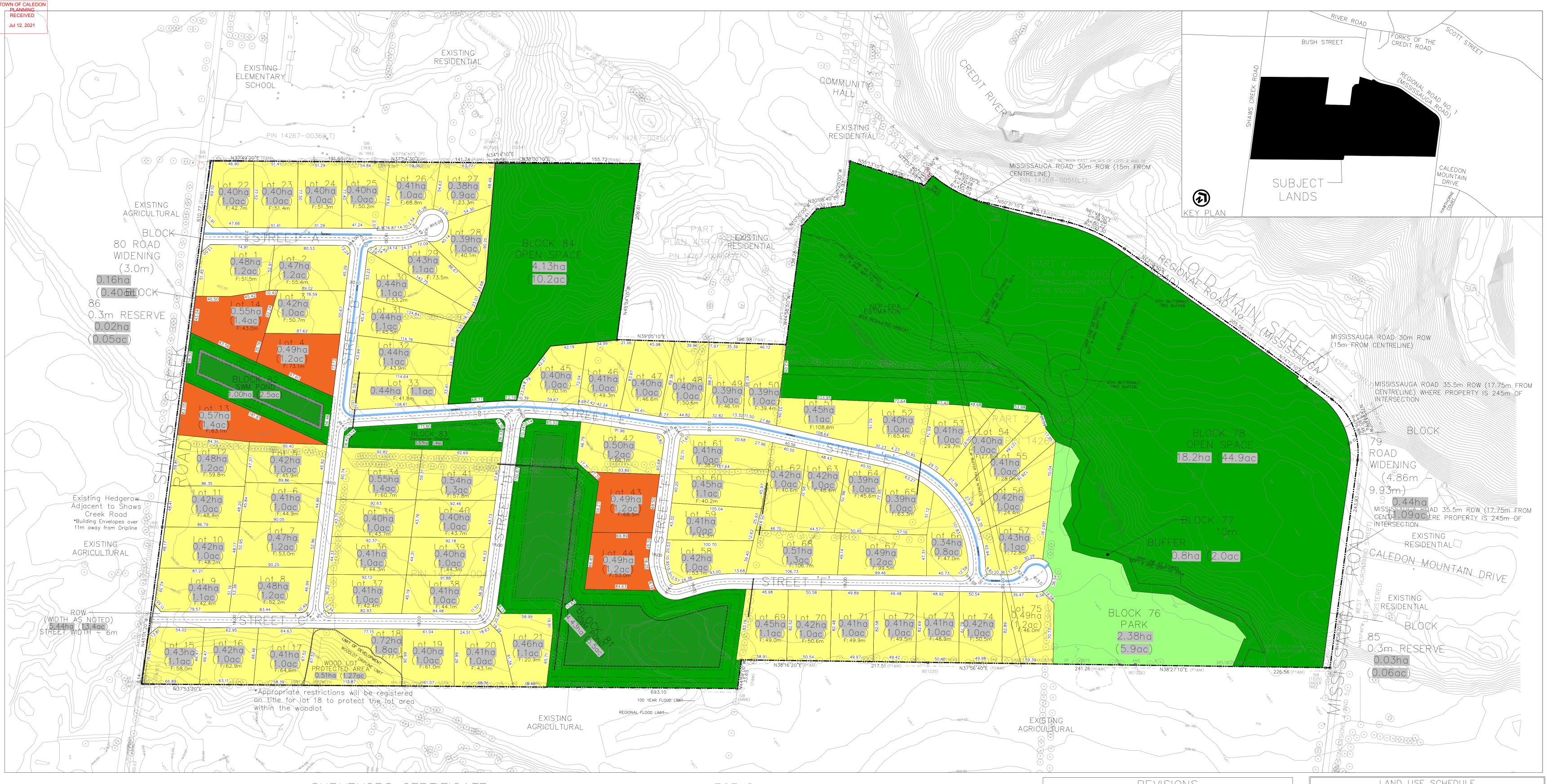
Date:

Signature:

TOWN OF CALEDON PLANNING RECEIVED

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Appendix G – Draft Plan of Subdivision



DRAFT PLAN OF SUBDIVISION MANORS OF BELFOUNTAIN CORPORECTLY AND ACCURATELY SHOWN.

SURVEYORS CERTIFICATE

I HEREBY CERTIFY THAT THE BOUNDARIES OF THE LANDS TO BE SUBDIVIDED AS SHOWN ON THIS PLAN AND THEIR RELATIONSHIP TO ADJACENT LANDS ARE

FILE # 21T-91015C

PART OF EAST HALF AND WEST HALF LOT 9 CONCESSION 5, W.H.S.

> (HAMLET OF BELFOUNTAIN) TOWN OF CALEDON, REGIONAL MUNICIPALITY OF PEEL

DAVID B. SEARLES SURVEYING LTD. 4255 SHERWOODTOWNE BLVD. SUITE 206 MISSISSAUGA, ON, L4Z 1Y5 PHONE: 905-273-6840 EMAIL: info@dbsearles.ca

ALISTER SANKEY, OLS

OWNER'S AUTHORIZATION I AUTHORIZE MDTR GROUP TO PREPARE AND SUBMIT THIS PLAN FOR DRAFT APPROVAL.

JOHN SPINA, ASO THE MANORS OF BELFOUNTAIN CORP. 7681 HWY 27 UNIT 16, WOODBRIDGE, ONTARIO L4L 4M5

LEGEND

SIDEWALK PIN 14267-0047(LE)N PIN 14267-0114(LT)

ADDITIONAL INFORMATION

(UNDER SECTION 51(17) OF THE PLANNING ACT) INFORMATION REQUIRED BY CLAUSES A,B,C,D,E,F,G, & J ARE SHOWN ON THE DRAFT AND KEY PLANS.

- H) INDIVIDUAL WELLS TO BE PROVIDED
- I) SANDY LOAM AND CLAY LOAM K) INDIVIDUAL SEPTIC TO BE PROVIDED; MUNICIPAL STORM SEWERS TO BE PROVIDED

L) NIL NOTES

- -PAVEMENT ILLUSTRATION IS DIAGRAMMATIC ONLY
- -LOCAL TO LOCAL RADII APPROX. 14M
- -STREETS 'A' & 'C' TO SHAWS CREEK RD. DAYLIGHT TRIANGLES 9.0m X 9.0m -TOP OF SLOPE AS STAKED IN 1994, REVIEWED SEPTEMBER 4 & 12, 2014 -DRIPLINE STAKED SEPTEMER 4 & 12, 2014

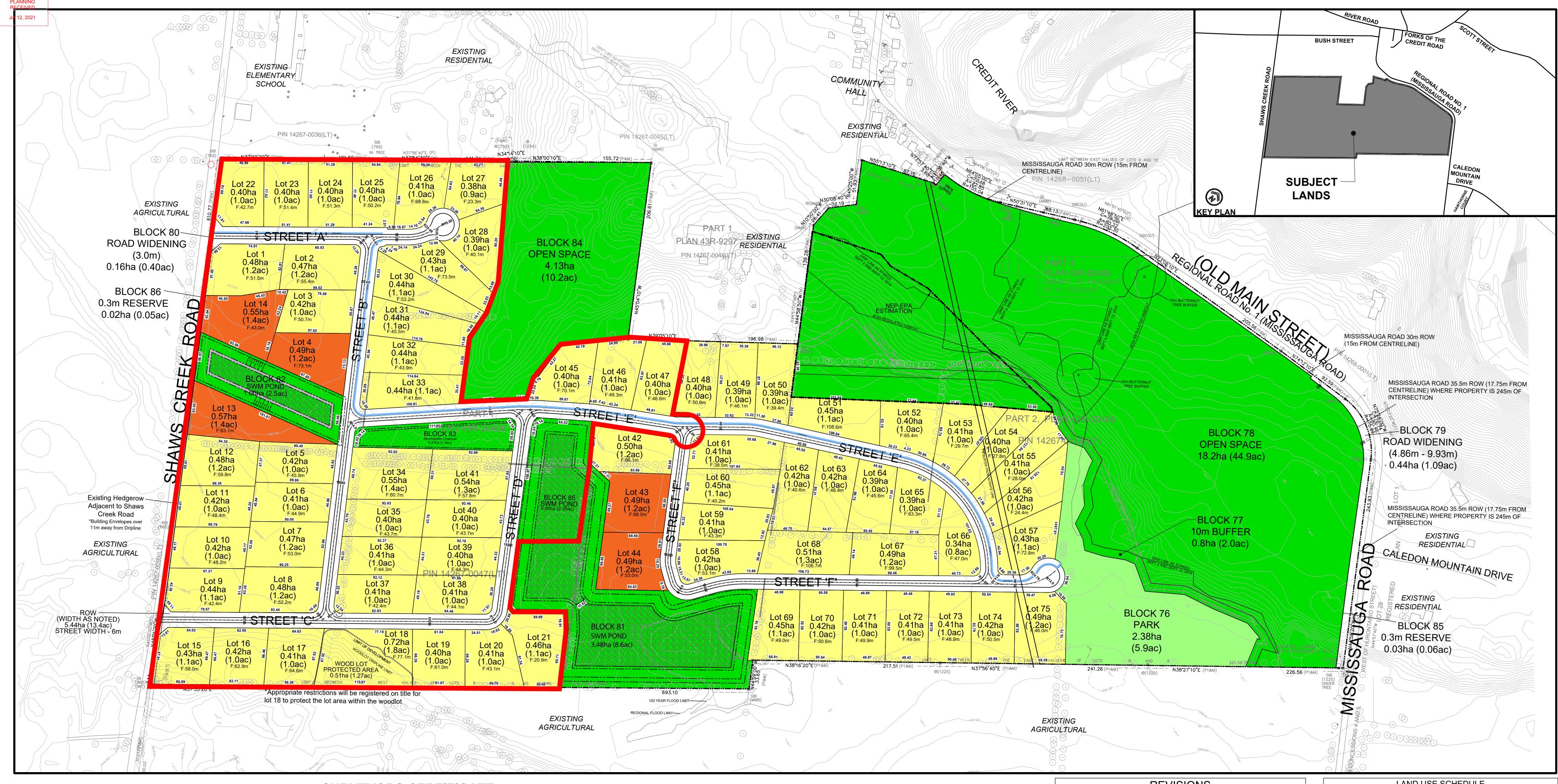
	REVISIONS		
#	Description	Date (YYYY-MM-D	Ву
1	ISSUED FOR MEETING WITH AGENCIES	2018-12- 21	N.Y.
2	REVISION	2020-02 -21	N.Y.
3	REVISION	2020-01- 17	N.Y.
4	REVISION	2020-02 -21	N.Y.
5	REVISION	2020-01-	N.Y.
6	ISSUED FOR RESUBMISSION	2020-03 -02	N.Y.
7	REVISION	2020-03	N.Y.
8	REVISION	2020-04	N.Y.
9	REVISION	2020-04	N.Y.
10	REVISION FOR SUBMISSION GUIDELINES	2020-05 -25	N.Y.
11	REVISION FOR RESUBMISSION	2021-06-	L.C.

June 24, 2021

LAND USE S	SCHEDUL	<u>.</u> E		
ND USE	LOTS/ BLOCKS 1-3,	AREA (HA)	AREA (AC)	UNITS
TATE RESIDENTIAL	5-12, 15-42, 45-75	30.13	74.5	70
TATE RESIDENTIAL O BE DEVELOPED ONCE 80% OF DUSES HAVE BEEN DNSTRUCTED)	4, 13, 14, 43, 44	2.59	6.4	5
PEN SPACE	78,84	22.34	55.2	
ARK	76	2.38	5.9	
m BUFFER	77	0.80	2.0	
ORMWATER PONDS	81,82	5.41	13.4	
ORMWATER CHANNEL	83	0.57	1.4	
)AD WIDENING	79, 80	0.57	1.4	
3m RESERVE ON MISSISSAUGA DAD	85	0.03	0.1	
3m RESERVE ON SHAWNS CREEK DAD	86	0.02	0.1	
.0m/20.0m ROW(2,840m PROX. LENGTH)		5.44	13.4	
TOTAL	86	70.28	173.7	75

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Appendix H – Phasing Plan



DRAFT PLAN OF SUBDIVISION MANORS OF BELFOUNTAIN CORP

FILE # 21T-91015C

PART OF EAST HALF AND WEST HALF LOT 9
CONCESSION 5, W.H.S.
(HAMLET OF BELFOUNTAIN)
TOWN OF CALEDON,
REGIONAL MUNICIPALITY OF PEEL

SURVEYORS CERTIFICATE

I HEREBY CERTIFY THAT THE BOUNDARIES OF THE LANDS TO BE SUBDIVIDED AS SHOWN ON THIS PLAN AND THEIR RELATIONSHIP TO ADJACENT LANDS ARE CORRECTLY AND ACCURATELY SHOWN.

DATE:

ALISTER SANKEY, OLS
DAVID B. SEARLES SURVEYING LTD.
4255 SHERWOODTOWNE BLVD. SUITE 206
MISSISSAUGA, ON, L4Z 1Y5
PHONE: 905-273-6840
EMAIL: info@dbsearles.ca

OWNER'S AUTHORIZATION

I AUTHORIZE MDTR GROUP TO PREPARE AND SUBMIT THIS PLAN FOR DRAFT APPROVAL.

SIGNED

JOHN SPINA, ASO
THE MANORS OF BELFOUNTAIN CORP.
7681 HWY 27 UNIT 16,
WOODBRIDGE, ONTARIO
L4L 4M5

LEGEND

SIDEWALK
PIN 14267-0047(LT)

PHASING LINE

ADDITIONAL INFORMATION

(UNDER SECTION 51(17) OF THE PLANNING ACT) INFORMATION REQUIRED BY CLAUSES A,B,C,D,E,F,G, & J ARE SHOWN ON THE DRAFT AND KEY PLANS.
H) INDIVIDUAL WELLS TO BE PROVIDED
I) SANDY LOAM AND CLAY LOAM

K) INDIVIDUAL SEPTIC TO BE PROVIDED; MUNICIPAL STORM SEWERS TO BE PROVIDED L) NIL

NOTES

-PAVEMENT ILLUSTRATION IS DIAGRAMMATIC ONLY

-LOCAL TO LOCAL RADII - APPROX. 14M

-STREETS 'A' & 'C' TO SHAWS CREEK RD. DAYLIGHT TRIANGLES - 9.0m X 9.0m -TOP OF SLOPE AS STAKED IN 1994, REVIEWED SEPTEMBER 4 & 12, 2014 -DRIPLINE STAKED SEPTEMER 4 & 12, 2014

	REVISIONS						
#	Description	Date (YYYY-MM-DD)	Ву				
1	ISSUED FOR MEETING WITH AGENCIES	2018-12-21	N.Y.				
2	REVISION	2020-02-21	N.Y.				
3	REVISION	2020-01-17	N.Y.				
4	REVISION	2020-02-21	N.Y.				
5	REVISION	2020-01-17	N.Y.				
6	ISSUED FOR RESUBMISSION	2020-03-02	N.Y.				
7	REVISION	2020-03-31	N.Y.				
8	REVISION	2020-04-21	N.Y.				
9	REVISION	2020-04-24	N.Y.				
10	REVISION FOR SUBMISSION GUIDELINES	2020-05-25	N.Y.				
11	REVISION FOR RESUBMISSION	2021-06-24	L.C.				

LAND USE S	CHEDULE	=		
LAND USE	LOTS/ BLOCKS	AREA (HA)	AREA (AC)	UNITS
ESTATE RESIDENTIAL	1-3, 5-12, 15-42, 45-75	30.13	74.5	70
ESTATE RESIDENTIAL (TO BE DEVELOPED ONCE 80% OF HOUSES HAVE BEEN CONSTRUCTED)	4, 13, 14, 43, 44	2.59	6.4	5
OPEN SPACE	78,84	22.34	55.2	
PARK	76	2.38	5.9	
10m BUFFER	77	0.80	2.0	
STORMWATER PONDS	81,82	5.41	13.4	
STORMWATER CHANNEL	83	0.57	1.4	
ROAD WIDENING	79, 80	0.57	1.4	
0.3m RESERVE ON MISSISSAUGA ROAD	85	0.03	0.1]
0.3m RESERVE ON SHAWNS CREEK ROAD	86	0.02	0.1	I
18.0m/20.0m ROW(2,840m APPROX. LENGTH)		5.44	13.4	,
TOTAL	. 86	70.28	173.7	75

	Scale: 1=2	2000
V	June 24, 2	2021