Myler Ecological Consulting

7 Olive Crescent, Stoney Creek, ON L8G 2T2 | (289)700-3038 | bmyler@cogeco.ca

15 November, 2023

Jeremia Rudan
Rudanco Hospitality Corporation
4728 Dorchester Road, Unit 11B
Niagara Falls ON L2E 7H9

RE: EIS – 13030 Lundy's Lane – Highway 20 & Thorold Townline Road Subdivision.

INTRODUCTION

Myler Ecological Consulting (Myler) was retained by Rudanco Hospitality Corporation (Rudanco) to prepare an Environmental Impact Statement (EIS) in support of the proposed Highway 20 & Townline Road Subdivision residential development (and redevelopment where existing commercial development occurs) at 13030 Lundy's Lane in the City of Thorold, Ontario (the site).

PRE-CONSULTATION

Pre-consultation with the City of Thorold was held on 01 December 2022.

City of Thorold (City) staff indicated that an EIS is required with the comment "Address with Engineering" as the sole request originated as part of City Engineering staff comments.

Niagara Region (Region) staff comments confirmed "the subject parcel is outside the Region's Core Natural Heritage System". The Region did not request an EIS.

Niagara Peninsula Conservation Authority (NPCA) comments were not included with the pre-consultation notes.

EXISTING INFORMATION REVIEW AND CONSTRAINTS ANALYSIS

To investigate the potential occurrence of natural heritage constraints, Myler conducted a desktop background review that included existing mapping of the City, Region, NPCA, Provincial Natural Heritage Information Centre (NHIC), and Department of Fisheries and Oceans (DFO).

City of Thorold

City Official Plan (OP) Schedule A-3 – The Neighbourhood of Rolling Meadows Secondary Plan – Land Use shows a segment of hedgerow on the site's western boundary as Environmental Protection Two.

City OP Schedule B – Natural Heritage does not map any natural heritage features on or adjacent to the site.

City OP Schedule C – Floodplain & Natural Hazards does not map any floodplain or natural hazards on or adjacent to the site.

Accordingly, the sole candidate natural heritage constraint on Town mapping is the hedgerow segment.

Niagara Region

The Region's online Natural Environment System (NES) mapping shows no natural heritage features on or adjacent to the site.

NPCA

NPCA's online Watershed Explorer mapping shows two small (approximately 60m length) segments of regulated watercourse within the eastern portion of the site and crossing Thorold Townline Road. Those segments are part of the Beaverdams Creek subwatershed.

A third, tiny portion of regulated area is mapped in the site's southwest corner where the uppermost mapped extent of a tributary to the Welland Canal contacts the site's western property boundary.

Review of aerial imagery indicated that the two easterly watercourse segments are minor headwater drainage features (HDFs) that are tilled through on the site and do not appear to possess attributes of aquatic or terrestrial habitat. Similarly, the westerly watercourse appears on aerial imagery as a minor HDF that is tilled through on adjacent lands, possesses no aquatic or terrestrial habitat attributes, and does not appear as a distinct feature on the site.

NHIC

NHIC online natural heritage mapping confirmed no natural heritage features on or adjacent to the site. A portion of non-Provincially Significant Wetland (non-PSW) Beaverdams Creek Locally Significant Wetland occurs off-site, downstream on Beaverdams Creek across Thorold Townline Road. The "locally significant wetland" designation is no longer currently in use and the wetland's current designation is "evaluated non-PSW". The non-PSW is located more than 150 metres east of the site, and therefore does not qualify as an adjacent natural heritage feature.

The NHIC online species at risk (SAR) element occurrence database was also queried for the area at and near the site to screen for potential occurrence of SAR plants and wildlife. NHIC records are however limited to the Northern Bobwhite, an Endangered gamebird that is locally extirpated from (i.e., no longer currently occurs within) the Niagara Region, and Timber Rattlesnake, which has been long extirpated from Ontario.

DFO

DFO online aquatic SAR mapping was reviewed, but there is no mapped occurrence of SAR fish and freshwater mussels or their Critical Habitat at or near the site in the Beaverdams Creek subwatershed or in the Welland Canal tributary.

SITE INVESTIGATION

Myler first visited and observed the site on 02 April 2020 to investigate the westerly hedgerow segment and the NPCA-regulated watercourse segments. In 2023, Myler conducted the following additional site visits to complete this EIS:

- 02 March 2023 – Reconnaissance
- 23 June 2023 – Vegetation community observations and Breeding Bird Survey first visit
- 10 July 2023 – Breeding Bird Survey second visit

NPCA-Regulated HDFs

Myler's April 2020 observations confirmed that:

- The westerly HDF does not extend within the site and is a tiny, tilled-through swale on the neighbouring farm field with no natural vegetation and no aquatic habitat features. It is merely an intermittent conveyance feature.
- The easterly HDFs are likewise tiny, tilled-through swales on the site with no terrestrial or aquatic habitat features. Those two on-site segments are likewise merely intermittent conveyance features.

Myler's 2023 observations during spring and summer confirmed the 2020 observations and further confirmed that the swales are dry before early summer.

Representative photos of the HDFs are provided below as Photos 1, 2 and 3.

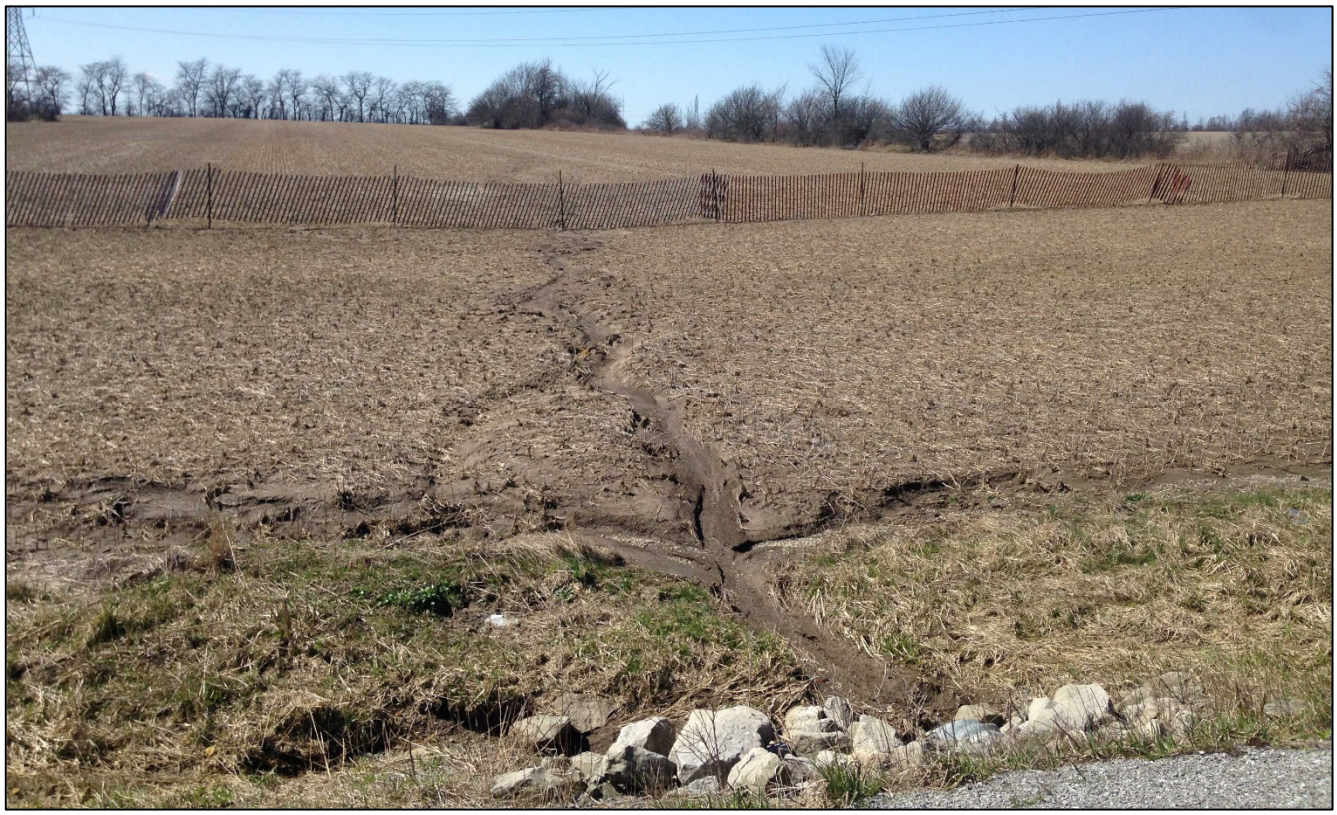

Photo 1: The northerly of the two on-site HDFs that crosses Townline Road towards Beaverdams Creek (April 2020).

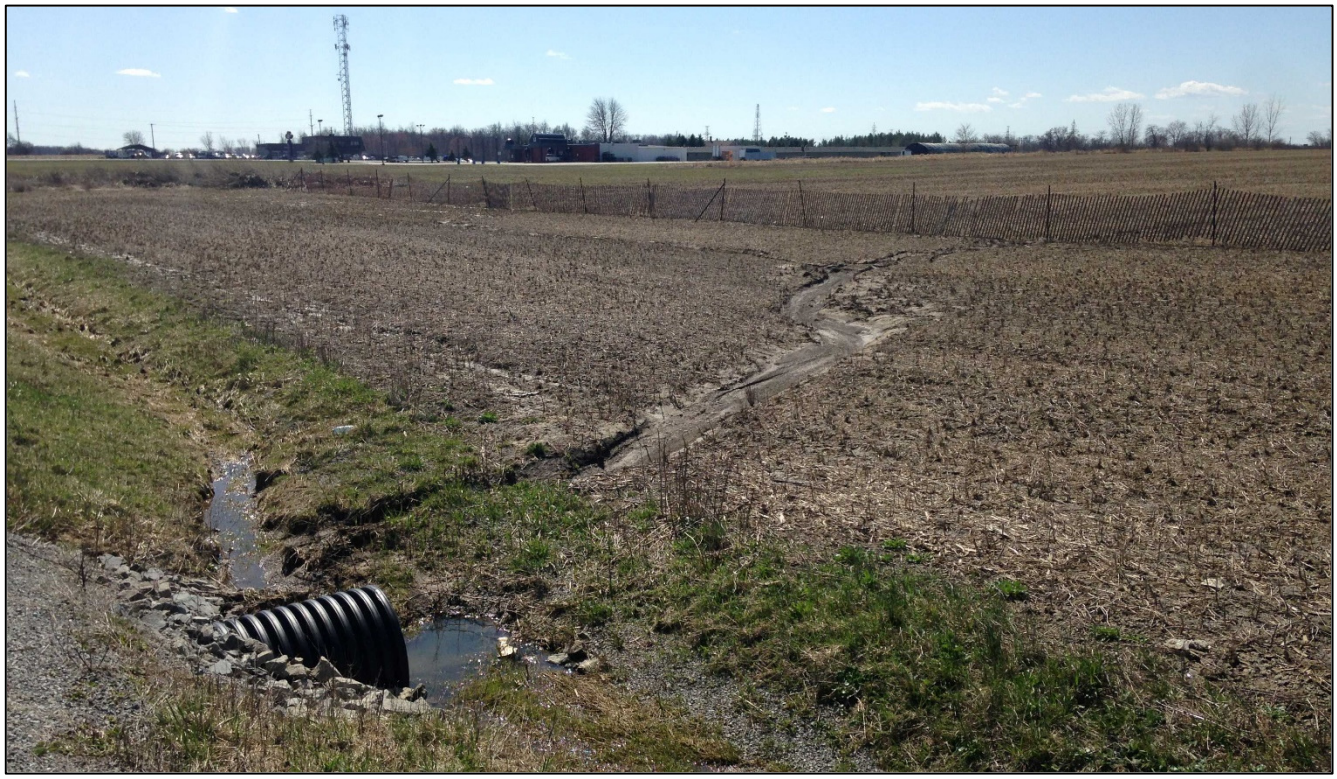

Photo 2: The southerly of the two on-site HDFs that crosses Townline Road towards Beaverdams Creek (April 2020).

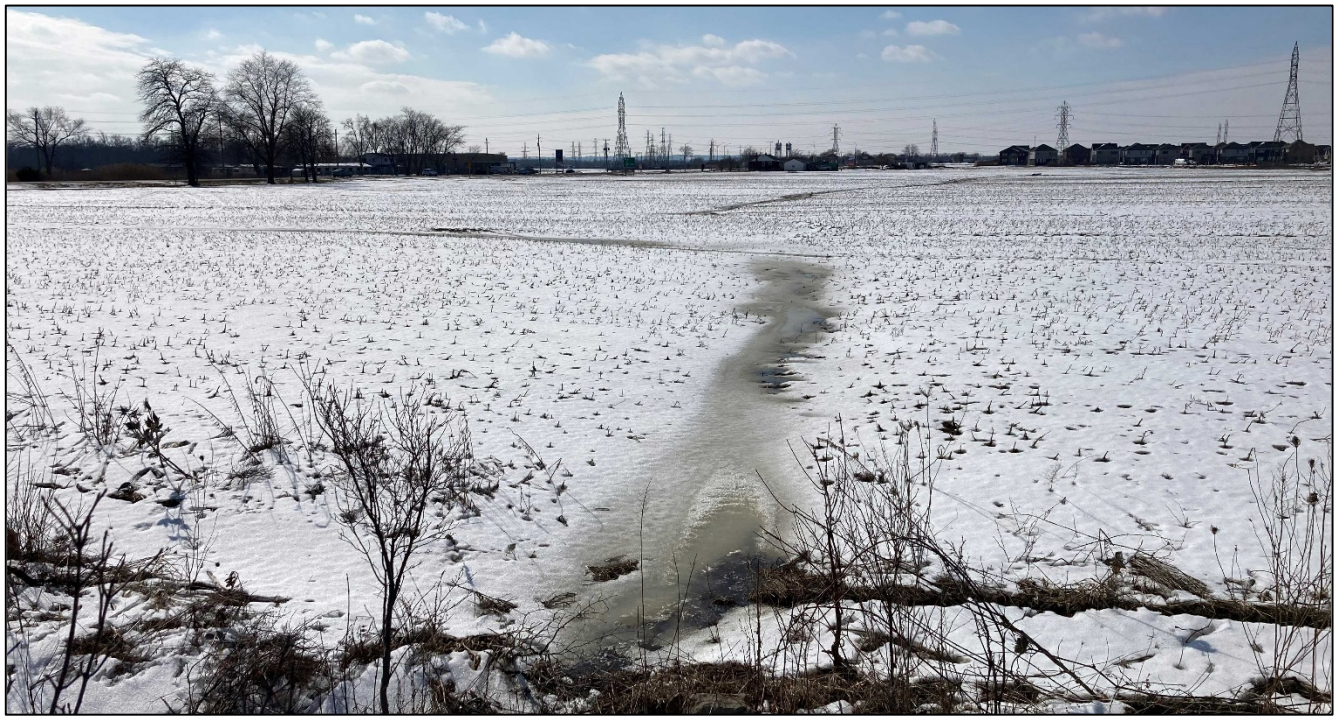

Photo 3: The westerly HDF that occurs off-site on neighbouring lands and ends at the site's western boundary (March 2023).

Accordingly, none of the HDFs is a natural heritage constraint on the site, and according to the current HDF assessment protocol the implementation of appropriate stormwater management (SWM) is the

appropriate and recommended measure to ensure that the current conveyance function is maintained in consideration of downstream receiving watercourses.

Vegetation Community

Myler's April 2020 observations, which included traverse of the entire site at that time, confirmed that there are no natural vegetation communities on the site. The site is mostly tilled farm field. The southernmost extent of the site includes manicured and semi-manicured commercial property, with turfgrass and periodically mowed cultural meadow. Scattered shrubs occurred along the site's northern boundary, too sparsely distributed to be considered a hedgerow. The hedgerow on the site's western boundary was observed to be comprised of a single line of closely planted Honey Locust trees and was therefore an entirely cultural and artificial vegetated feature and not a natural heritage feature deserving of the City's Environmental Protection Two designation (see Photo 4, below).

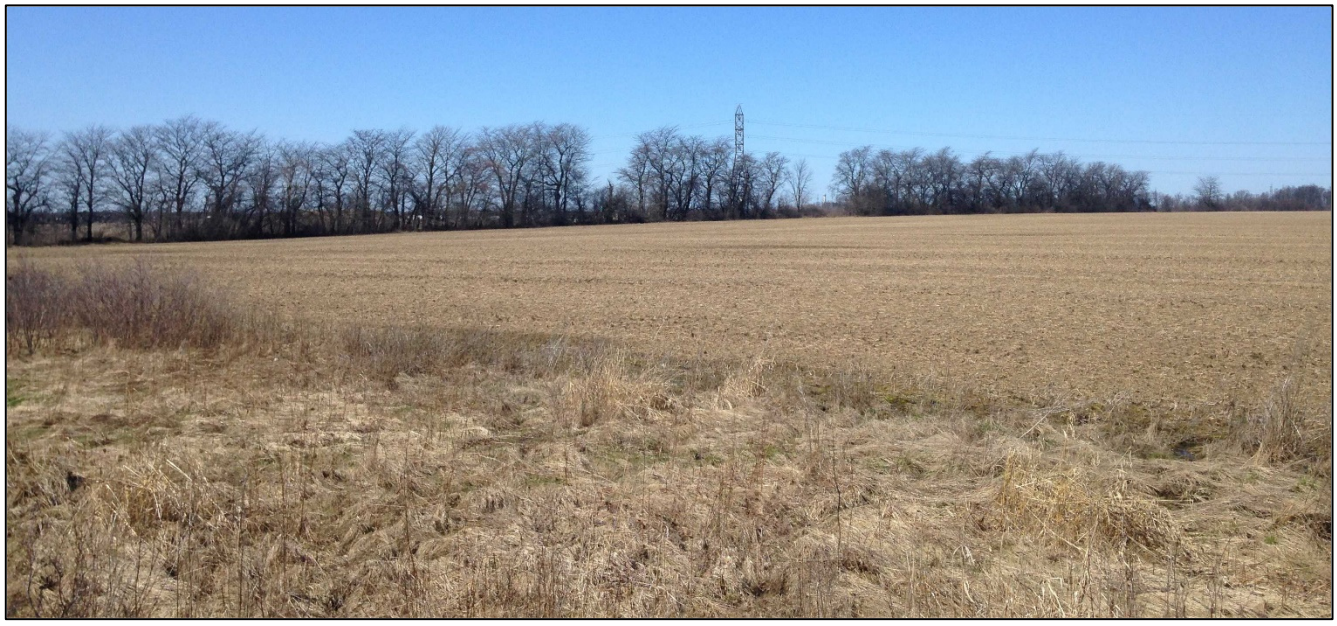

Photo 4: The westerly cultural hedgerow as it appeared in April 2020, a single line of planted Honey Locust trees. Note the periodically mowed cultural meadow in the foreground and the tilled agricultural field beyond.

Myler's 2023 observations confirmed similar conditions at the site, except that the westerly cultural hedgerow had been removed, apparently as a consequence of agricultural management of the westerly neighbouring lands.

As no natural vegetation community was observed at the site, a detailed botanical inventory was not conducted. However, Myler's observations included screening for the potential occurrence of SAR vegetation such as Butternut, of which none were observed.

Accordingly, Myler found no natural heritage constraints associated with vegetation and plant species at the site.

Breeding Bird Survey

Myler conducted breeding bird survey observations under clear, sunny conditions on mornings of 23 June 2023 and 10 July 2023. The breeding bird survey was not intended to investigate the ecological function of

natural habitat, as such was found to be absent from the site but was conducted primarily to support screening for significant species and bird SAR and to inform recommendations to mitigate impacts to nesting birds.

Myler observed Barn Swallow nesting on the closed motel buildings and outbuildings within the southernmost portion of the site. Barn Swallow was formerly listed as Threatened in Ontario but is now listed only as Special Concern and is therefore not a SAR compliance issue or SAR constraint to the proposed development.

Myler further assessed the existing buildings at the site for the occurrence of chimneys that could be used by the Threatened Chimney Swift but found that none of the existing chimneys is of suitable construction or dimensions for that species.

Myler observed the small area of cultural meadow on the site, between the commercial buildings and the farm field, to screen for presence of Threatened Eastern Meadowlark and Bobolink, ground-nesting birds that use open areas during the breeding season. Neither species was observed.

Otherwise, Myler observed only bird species that commonly occur within Niagara Region, none of which is a constraint to the proposed development, subject to recommended mitigation measures, and including the following species:

- Mourning Dove
- Barn Swallow
- Northern Mockingbird
- European Starling
- House Sparrow
- House Finch
- American Goldfinch
- Grasshopper Sparrow
- Song Sparrow
- Red-winged Blackbird

Accordingly, there are no bird species that represent a constraint to the proposed development, subject to the implementation of recommended mitigation measures to avoid impacting nesting birds during the nesting season.

SAR and Significant Wildlife Habitat (SWH) Screening

In consideration of the screening observations for SAR and of the lack of natural vegetation communities on the site, there are no SAR or SWH constraints to the proposed development at the site.

DEVELOPMENT PROPOSAL

The proposed development includes first-time development of the farmed portion of the site and redevelopment of the southernmost portion of the site that contains existing commercial buildings and infrastructure. Accordingly, the redevelopment will include removal of existing buildings and paved areas.

The entire site is proposed to be graded and developed for residential use in a manner that connects with the approved subdivision on the westerly neighbouring property and that respects the existing hydroelectric corridor that passes diagonally through the site as an easement designated by the City as Open Space and Parks.

MTE assessed site drainage and SWM requirements for the site that is reflected on the submitted draft plan of subdivision with specification of a SWM pond near the site's northeast corner. The SWM pond's function will assure maintenance of conveyance function/contribution of the existing intermittent HDFs to the downstream Beaverdams Creek receiver without exacerbating erosion, sedimentation or flooding.

IMPACT ASSESSMENT AND RECOMMENDED MITIGATION MEASURES

As there are no natural heritage features on the site, and therefore no potential impacts to natural heritage features and their ecological functions, potential impacts of the development/redevelopment (and associated recommended mitigation measures) are limited to:

- Erosion/sedimentation to downstream receiving waters. (Implement erosion and sedimentation measures during construction, with permanent site SWM to provide long term protection.)
- Harm to or "incidental take" of nesting migratory birds or their eggs and young during the nesting season. (Remove buildings and cultural vegetation during the September – March period to avoid the April – August bird nesting season.)

Implementation of the recommended mitigation measures will prevent the associated potential impacts.

CONCLUSIONS

Myler's investigation of the site confirmed that natural heritage constraints to development/redevelopment are absent.

The intermittent HDF segments at the site were confirmed to be simple conveyance features which can be replaced with SWM measures in compliance with the current HDF assessment protocol.

No SAR or SWH was observed or confirmed at the site.

Standard mitigation measures of erosion/sedimentation controls and seasonal avoidance of bird nesting season will mitigate potential impacts of the development/redevelopment.

Accordingly, agency approval of the proposed subdivision plan is recommended.

Sincerely,

Barry Myler
Biologist