



BURNSIDE

**Barrie Collingwood Railway Active
Transportation Trail, Schedule B
MCEA**

Project File Report (PFR)

The County of Simcoe

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**February 8, 2023
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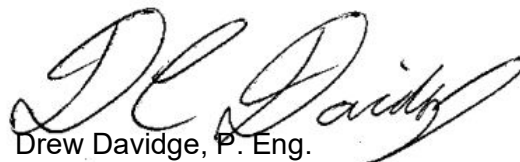
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Executive Summary

R.J. Burnside & Associates Limited (Burnside) has been retained by the County of Simcoe (County) to prepare a Schedule B Municipal Class Environmental Assessment (MCEA) for the conversion of 23 km of the former Barrie Collingwood Railway into an Active Transportation Trail.

The MCEA is being carried out in accordance with the requirements of a Schedule B undertaking as outlined in the Municipal Engineers Association *Municipal Class Environmental Assessment Manual* (October 2000, as amended 2007, 2011 & 2015), which is an approved process under the *Ontario Environmental Assessment Act*.

Six Alternative Solutions were identified to address the conversion of the railway into a trail. The Alternative Solutions were:

Do Nothing: This alternative would involve the railway remaining vacant and unused.

Alternative 1: On Existing Rail Bed (salvage rails and dispose of ties)

Alternative 2: On Existing Rail Bed (salvage rails and bury ties)

Alternative 3: Bench Trail on Side of Existing Rail Bed

Alternative 4: Bench Trail on Side of Existing Rail Bed (salvage rails)

Alternative 5: Off Existing Rail Bed Beside Property Line

Alternative 6: Hybrid – On Existing Rail Bed and Beside the Existing Rail Bed where practical (Salvage Rails and Bury Ties)

The Alternative Solutions were evaluated against the natural, social, cultural, technical, and economic environment.

Through previous reports, it was determined that the existing rail bed was ready to accept a finished trail surfacing material with minimal re-grading and import of new base material. Most “rail to trail” conversions followed this approach. Additionally, the existing rail bed is relatively flat and meets all road and bridge crossings at grade allowing accessibility requirements to be met easily. Implementation of the trail in the centre of the corridor allowed for the maximum setback from adjacent properties and minimizes potential disturbance to the adjacent owners. Vegetation removal is minimal with this option as only vegetation overgrowing the former rail line requires removal. The potential for financial gains by salvaging the railway steel has potential to offset some costs of trail construction and the burial of rail ties eliminates removal and disposal costs. Finally, use of the existing rail corridor allows the existing watercourse crossings to be used and eliminates the need for new trail bridges or culvert extensions.

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Many of these concerns were identified through consultation with interested stakeholders, agencies, Indigenous communities and local residents. Consultation was initiated with the Notice of Commencement and invitation to participate. The Notice was published in the Stayner Sun and Alliston Herald on Thursday January 20, 2022, and Thursday January 27, 2022; also published on the Township of Clearview's website on Friday January 21, 2022. The notice was either mailed or emailed to all included on the Project Contact List including, agencies, utilities, Indigenous communities, local residents who live within the Study Area and the public that may have an interest in the Study. The mailout was delivered to 996 households by mail.

Given the current provincial government order to limit social interactions to reduce community spread of the COVID-19 virus, the County hosted public engagement in a virtual environment. A digital copy of the presentation material with recorded commentary by the Study Team was made available on the County website for the public to view or to download anytime during the comment period.

Upon review of the preliminary evaluation, it was determined that Alternative 6 addresses the majority of public, agency and Indigenous community concerns and is preferred over the other two alternatives. Alternative 6 is preferred because:

- It has minor grading and drainage requirements;
- It allows the existing rail line to meet all road and bridge crossings at grade and has no accessibility issues;
- It provides trail users with maximum visibility as it is located on top of the existing rail line;
- The location of the trail on the middle of the tracks will deter trail users from entering adjacent properties;
- It would only require minimal vegetation removal;
- It avoids impact to wetlands;
- There will be minimal impact to the floodplain;
- It restricts disturbance of areas of potential cultural heritage to the rail corridor;
- Potential revenue from salvaging rails as scrap metal;
- No disposal costs as existing rail ties will be buried; and
- There will be minor maintenance.

Taking into account each of these factors, it was found that Alternative 6: Hybrid – On Existing Rail Bed and Beside Existing Rail Bed where Practical (Salvage Rails and Bury Ties) is the Preferred Solution.

A Notice of Completion will be published in the local newspapers and the County's website and either mailed or emailed to agencies, utilities, Indigenous communities and to local residents and stakeholders who indicated an interest in the Study. As per the requirements of the MCEA, this PFR is available for public review and comment for a period of 30 calendar days following the publication of the Notice of Completion.

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The Notice of Completion will provide the dates, times and locations where the PFR can be reviewed, and names and addresses of people to whom they can send their comments.

Concerns regarding the project should be directed to the contacts listed in the Notice of Completion. If concerns relating to Aboriginal or Treaty Rights arise regarding this project which cannot be resolved in discussion with the County, a person or party may request that the Minister of the Environment make an Order for the project to comply with Section 16 of the *Environmental Assessment Act* (referred to as a Section 16 Order), which addresses individual environmental Assessments. Requests must be received by the Minister within 30 calendar days of the first publication of the Notice of Completion.

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Appendices

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- Appendix B Natural Environmental Preliminary Design Report
- Appendix C Cultural Heritage Report
- Appendix D Hazard Tree Assessment
- Appendix E Stage 1 Arch Assessment
- Appendix F CHER
- Appendix G Evaluation of Alternatives
- Appendix H Preliminary Trail Design
- Appendix I Consultation Record

1.0 Introduction

R.J. Burnside & Associates Limited (Burnside) has been retained by the County of Simcoe (County) to prepare a Schedule B Municipal Class Environmental Assessment (MCEA) for the conversion of 23 km of the former Barrie-Collingwood Railway into a trail, hereafter referred to as the BCRY Active Transportation Trail. The project encompasses the former rail corridor between the communities of Stayner and Angus. Several staging areas (i.e., trail heads) are also considered as part of the project.

The purpose of the MCEA is to review several alternative locations for the trail within the existing rail right-of-way. Options for the former railway ties and rails were also reviewed. An option to do nothing and not construct the trail is also being considered. If a decision is made to proceed, construction may occur in two or more phases between 2023 and 2025.

The existing conditions, proposed alternatives, evaluation of alternatives, impact assessment and public consultation process are presented in this Project File Report (PFR).

2.0 Project Background

2.1 Study Area

The Study Area, shown on Figure 2.1, is the 23 km portion of the former Barrie-Collingwood railway corridor running from the community of Angus to Stayner. The study area includes the former rail corridor and the adjacent 120 m from each side. The northern extent is at Hwy 26 in Stayner, running southward to 5th Line in Angus. Three staging areas (trailheads) are proposed in Stayner, New Lowell and Angus, as shown on Figure 2.1.

Lands within the Study Area include a mix of woodland, plantation, savannah, thicket, forest wetland, shrub, meadow, former agricultural areas, residential areas, agriculture, commercial / institutional and the waters of the Nottawasaga River, Mad River, Pine River, Coates Creek as well as several other small watercourses. Significant natural features include the Minesing Swamp Complex Provincially Significant Wetland and portions of the County's Greenlands / Natural Heritage System lands.

The Study Area is located entirely within the Nottawasaga Valley watershed and includes lands regulated by the Nottawasaga Valley Conservation Authority (NVCA) through O. Reg. 172/06.

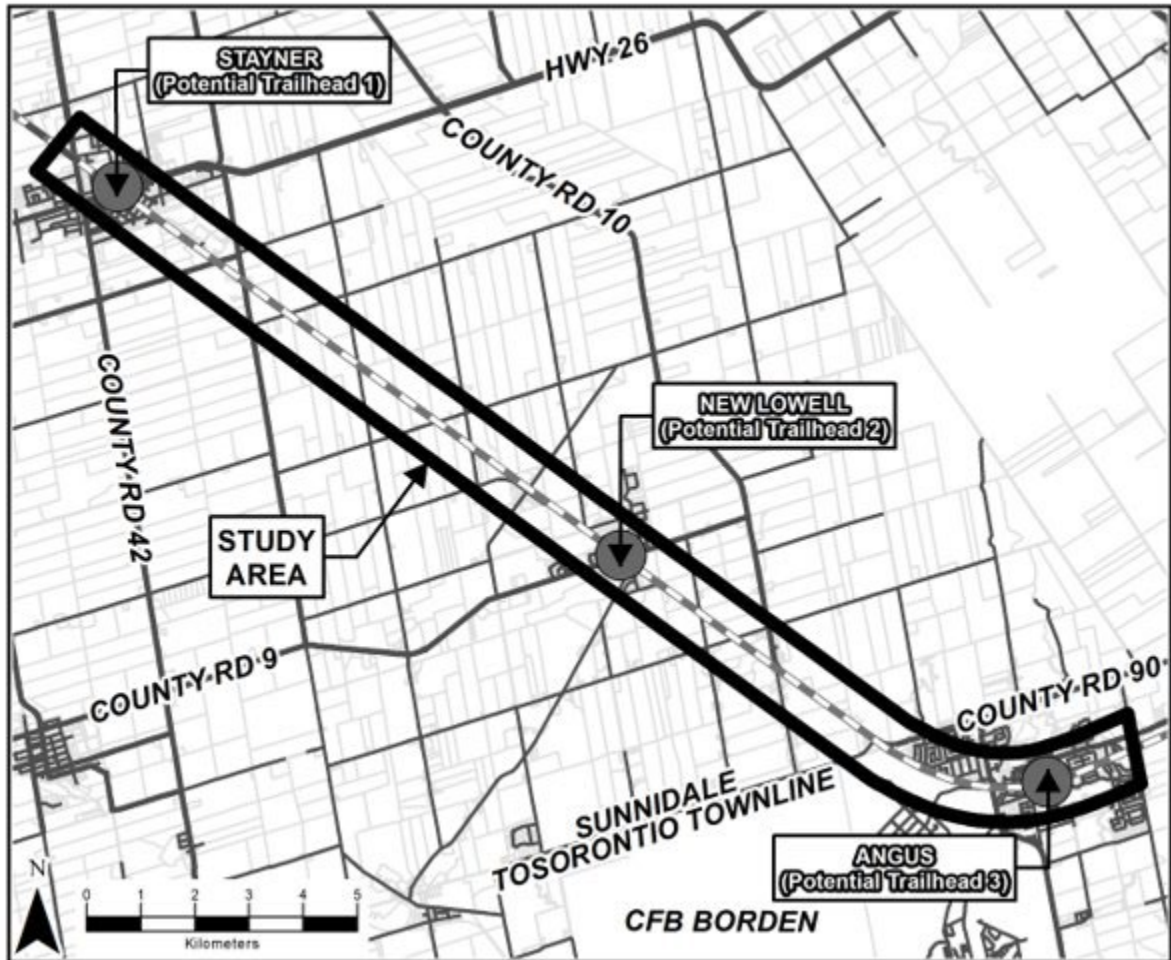


Figure 2.1: Barrie Collingwood Railway Active Transportation Corridor Study Area

2.2 Needs and Justification

Planning for the BCRY Active Transportation Trail has been shaped by County plans and policies which identify a connected multi-use trail system as part of their active transportation network.

Section 4.8.51 of the Official Plan indicates that, “Abandoned rail right-of-ways, utility corridors, and waterways for transportation, recreation and trails purposes should be examined for opportunities that would facilitate active transportation.”

This section of the Official Plan further notes that, “The County shall promote the facilitation of trails as an interim use in abandoned rail corridors and will consider a safe combination of active transportation and rail facilities for the long term in consultation

with applicable guidelines, adjacent and local municipalities, and appropriate rail authority.”

The County’s Transportation Master Plan (2014) also recognizes the potential use of abandoned railways for trail use. Section 9.5 of the Master Plan, recommendation AT2, indicates that, “The County should consider abandoned railways as primary opportunities for the development of off-road active transportation infrastructure. The links should be acquired for use by the County and its location municipalities for future development opportunities.”

However, the Master Plan also notes the potential to reinstate rail use along the Barrie Collingwood line in the future. Section 8.4.1 suggest that, “The Barrie-Collingwood Railway is a primary asset that can contribute to providing efficient transit at the inter-community level.” Furthermore, the Master Plan states that, “The County of Simcoe and City of Barrie should also jointly develop a Long-term Viability and Management Plan for the BCRY, with a focus on investigating the long-term viability of rail operations along the corridor and the feasibility of integrating active transportation uses along the corridor in the short term.”

The Simcoe County Trails Strategy (2014) focuses on passive trails for non-motorized use. The Strategy identifies key gaps in the pre-existing trail networks and highlights the role of trails as heritage corridors that link users to the past. The Barrie Collingwood railway corridor provides an opportunity to showcase the cultural heritage and the industrial heritage of the railway. The proposed rail trail is identified as a short-term trail connection on Figure 5 of the Trails Strategy.

2.2.1 Active Transportation Policies

In addition to the plans and policies identified in Section 2.2, there are several policies at the local, county, and provincial level which promote active transportation and trail construction. The following policies support active transportation and the development of trail networks across the County and boarder region.

Provincial Policy Statement

The Provincial Policy Statement (PPS, 2020) provides provincial direction of land use and community planning.

Section 1.5.1 indicates that:

“Healthy, active communities should be promoted by:

- a) Planning...spaces and facilities to be safe, meet the needs of pedestrians, foster social interaction and facilitate active transportation and community connectivity;*

- b) *Planning and providing for a full range and equitable distribution of publicly accessible built and natural settings for recreation, including... trails and linkages...*

In addition, Section 1.6.8.4 indicates that, “The preservation and reuse of abandoned corridors for purposes that maintain the corridor’s integrity and continuous linear characteristics should be encouraged, wherever feasible.”

The proposed trail is in-line with this direction.

County of Simcoe Official Plan

The County has identified an objective to:

*“...plan for active transportation as a mode of transportation that supports healthy living, economic development, and tourism opportunities.”
(Section 4.8.4)*

Regarding active transportation and abandoned corridors, Section 4.8.51 states that:

“Abandoned rail right-of-ways, utility corridors, and waterways for transportation, recreation and trails purposes should be examined for opportunities that would facilitate active transportation.

The County shall promote the facilitation of trails as an interim use in abandoned rail corridors and will consider safe combination of active transportation and rail facilities for the long term...”

Furthermore, Section 4.8.52 states that:

“The preservation and reuse of abandoned corridors for purposes that maintain the corridor’s integrity and continuous linear characteristics should be encouraged for existing or planned transportation system opportunities and utilities wherever feasible.”

The proposed project represents a positive step towards facilitating active transportation and preserving the linear rail corridor.

Township of Clearview Official Plan

Section 2.2.10 Tourism of the Township’s Official Plan identifies a need for:

“The protection and enhancement of the Township’s natural and historical attractions will be key to a successful tourism strategy, as will optimizing the opportunities associated with the Township’s public and private recreational facilities and resources, including golf courses, regional trail systems, and recreational resorts (Osler Bluffs / Devil’s Glen), open space areas, and rivers and streams.” (Section 2.2.10)

Additionally, one of the Township's transportation goals is to:

"...establish a system of pathways and trails linking the Township's settlements and major development areas and public spaces within those settlements as an alternative to the vehicular network of roads."

With relating objectives to:

"...encourage and promote the provision of adequate and safe pedestrian and cycling linkages between communities, development areas, open space, and community facilities and services."; and

"To establish new and reinforce existing systems of pedestrian (walking / jogging / bicycling / cross-country skiing) and motorized (snowmobile) trails within and between the Township's settlements, and to coordinate regional trail improvements with neighbouring municipalities and the Niagara Escarpment Commission"

This project will provide connectivity between communities and improve the trail system between neighbouring municipalities.

Township of Essa Official Plan

Section 24 of the Township's Official Plan (OP) Section 24.2.1 states that one of the Town's objectives for transportation is:

"To encourage and provide for the safe and efficient transportation of people and goods in the Township."

The project will contribute to the provision of safe transportation options for the residents of the Township.

2.2.2 Previous Review of the Barrie-Collingwood Railway Trail

A study was completed by the County to determine how the former rail corridor could be converted to a trail. This study provided a review of existing conditions and alternative trail designs and was comprised of a Preliminary Design Report and a Natural Environment Report. The information presented in these reports is recent and directly relevant to this EA. As such, information from these documents has been referenced throughout this EA. Each report is summarized below.

Barrie-Collingwood Railway Multi-Use Trail Preliminary Design – Final Report (2019)

The report provides an overview of the project including the policy context and planning and design considerations and background and evaluation of the following design alternatives:

- Alternative 1: On existing rail bed (salvage railway steel, dispose of rails and rail ties)
- Alternative 2: On existing rail bed (salvage railway steel)
- Alternative 3: Bench trail on side of existing rail bed
- Alternative 4: Bench trail on side of existing rail bed (salvage railway steel)
- Alternative 5: Off existing rail bed, beside property line

Each Alternative was reviewed relative to criteria including:

- Constructability
- Comfort and accessibility
- Private property impacts
- Natural environment
- Capital cost
- Maintenance cost

Overall, it was found that Alternative 2, On existing rail bed with a salvage of railway steel was preferred. The report and evaluation process met many of the requirements of the MCEA process. However, several key elements of the MCEA process were not included, such as a review of impacts associated with source water protection and climate change as well as consultation with relevant agencies, Indigenous communities, and the public. This MCEA builds upon the work completed in the preliminary Design Report to fill in the MCEA gaps. The Preliminary Design Report is provided in Appendix A.

Barrie to Collingwood Railway Multi-Use Trail – Natural Environment Preliminary Design Report (2018)

The Natural Environment Preliminary Design Report provides a characterization of the existing features within, and adjacent to, the rail corridor along with the potential impacts of the preferred alternative on natural features and mitigation measures to minimize impacts. The information collected regarding natural features is relatively recent. As such, much of that data has been brought forward into this report. Further information is presented in Section 5.3, Natural Environment. The Natural Environment Preliminary Design Report is provided in Appendix B.

3.0 Problem and Opportunity Statement

Phase 1 of the MCEA process is used to identify the challenge or opportunity that the process is meant to resolve. This statement assists in defining the scope of the project and serves as its central theme and integrating element that sets a benchmark for the final output of the project.

The Problem / Opportunity Statement for the BCRY Active Transportation Trail MCEA is defined as follows:

The purpose of this study is to identify an appropriate means to convert 23km of the former Barrie-Collingwood Railway between Stayner and Angus to an Active Transportation Corridor.

In accordance with the requirements of the MCEA planning process for Schedule B projects, the County initiated this MCEA to identify and evaluate Alternative Solutions to address this Problem / Opportunity Statement.

4.0 Study Methodology

4.1 The Municipal Class EA Process

The planning of public sector projects or activities that have the potential for environmental effect is subject to an MCEA as required by Ontario's *Environmental Assessment Act*, R.S.O. 1990.

The MCEA process was developed by the Municipal Engineers Association (MEA), in consultation with the former Ministry of the Environment (now Ministry of Environment, Conservation and Parks (MECP)), for recurring municipal projects that were similar in nature, usually limited in scale and with a predictable range of environmental impacts, which were responsive to mitigating measures. The MCEA solicits input from regulatory agencies, the municipality, Indigenous communities and the public at the local level. This process leads to an evaluation of the alternatives in view of the significance of the environmental effects, including the technical, natural, social / cultural and economic impact of a project, and the choice of effective mitigation measures.

In October 2015 a number of amendments to the MCEA were approved by the provincial government, which included amendments to, and clarifications regarding, the EA Schedules. Previous editions of the Municipal Class Environmental Assessment did not provide direction regarding multi-purpose pathways. This has now been clarified in "Appendix 1-Cycling Changes to Project Schedules in the March 2015 Proposed Amendments".

Of the amendments to the schedule, the following are relevant to the BCRY:

- Construction or removal of sidewalks or multi-purpose pathways or cycling facilities within existing or protected rights-of-way. These are considered pre-approved Schedule A projects.
- Construction or removal of sidewalks, multi-purpose pathways or cycling facilities including water crossings outside existing rights-of-way identify cost thresholds. Projects valued between \$3.5 and \$9.5M should adhere to Schedule B, and over

\$9.5M should adhere to Schedule C, which maintains the exemption for smaller projects and larger projects are to follow a well-accepted and proven process.

Schedule A and A+ projects are considered pre-approved and do not require a full Class EA to be completed but require formal public notification at the commencement of the project.

The corridor is identified as follows:

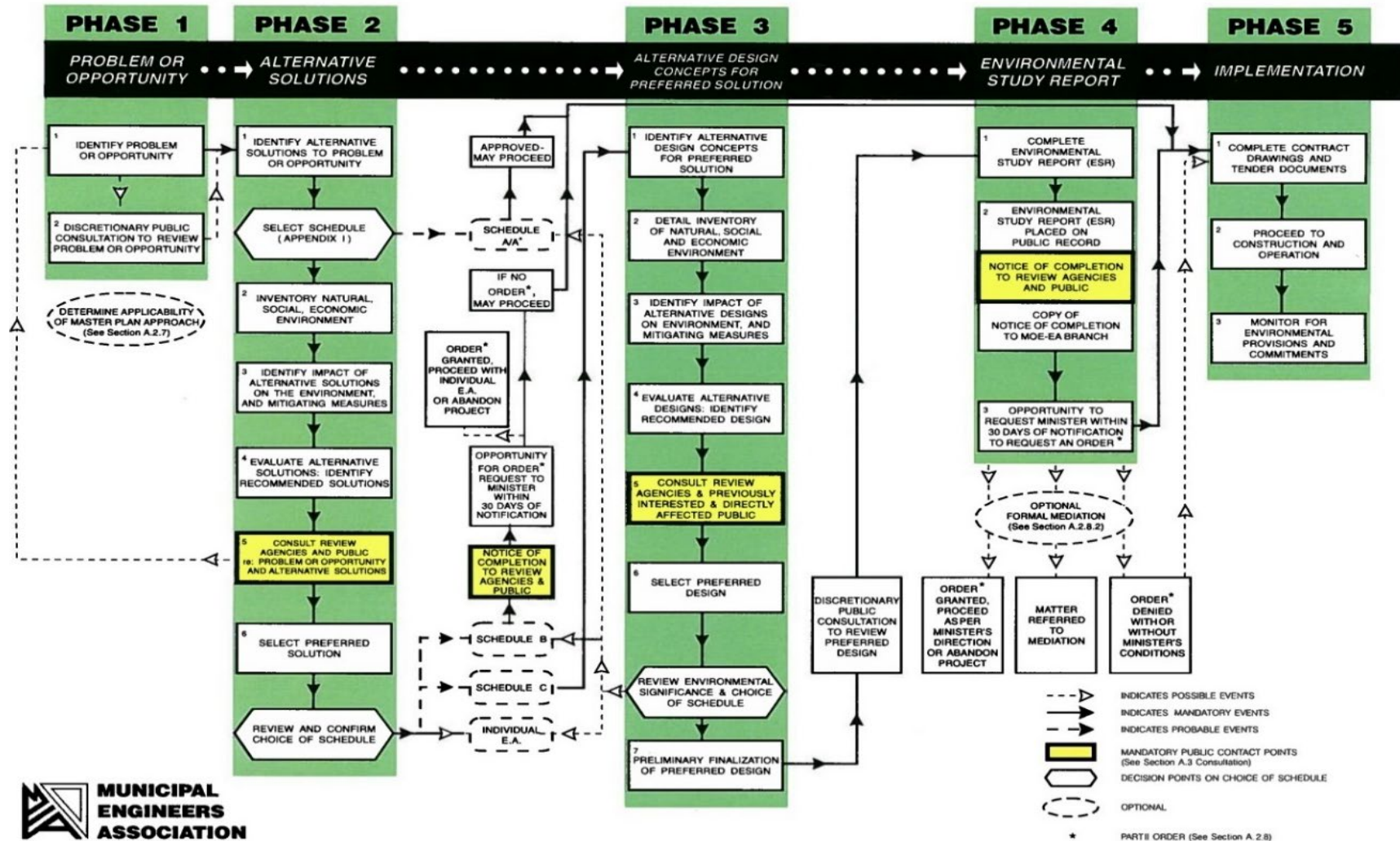
- County Official Plan classifies the BCRY corridor as “Railway”;
- Township of Essa Official Plan schedules classify the corridor as “Transportation and Utility”, and the
- Township of Clearwater Official Plan classifies the corridor as “Railway Lands / Water Transmission Line”.

Therefore, the corridor is considered a “protected right-of-way” and would fall under Schedule A (pre-approved). However, in the Preliminary Design Report (WSP, 2019) the Opinion of Probable Cost to construct the entire length of the trail was estimated at \$5.44 M, including the staging areas plus a 20% contingency. It was WSP’s opinion that the project should be assessed as a Schedule B EA.

As a Schedule B project, project planning proceeds under the planning and documentation procedures of Phases 1 and 2 of the MCEA process only (see Figure 4-1). Through this process, reasonable solutions identified are evaluated with input from agencies, Indigenous communities, and stakeholders toward a recommendation for a Preferred Solution. As a minimum, public consultation is required at two stages under a Schedule B project. At the conclusion of Phase 2, the appropriate MCEA planning Schedule is confirmed and, if there are no outstanding concerns, the proponent may proceed to design and implementation.

Figure 4.1: Municipal Class Environmental Assessment Process Flow Chart

NOTE: This flow chart is to be read in conjunction with Part A of the Municipal Class EA



5.0 Existing Conditions

Existing conditions provide a baseline from which to assess the potential impacts of a project. The existing natural, cultural, social, and built environment within the Study Area were characterized and are described in the following sections.

5.1 Built Environment

The built environment includes human-made structures and alterations to the natural environment, including buildings, roads, infrastructure, and human-influenced topography.

5.1.1 Methodology for Characterizing the Built Environment

The built environment was characterized using a variety of mapping, background data, digital data files, existing reports and field reconnaissance by Burnside staff on November 4, 5, and 8, 2021. Background data included:

- Barrie to Collingwood Railway Multi-use Trail: Natural Environment Preliminary Design Report (WSP, October 26, 2018);
- Barrie – Collingwood Railway Multi-Use Trail Preliminary Design – Final Report (WSP, January 2019);
- County of Simcoe Official Plan;
- Township of Essa Official Plan; and
- Township of Clearview Official Plan.

5.1.2 Existing Structures and Built Features

The first segment of the railway line from Toronto to Allandale was built in 1853 and in 1855 the second portion from Allandale to Collingwood was added to the line. The railway was initially named the Ontario, Simcoe and Huron Union Railway. As the railway grew and changed hands, it was renamed several times. In 1997, after the Collingwood station was demolished the City of Barrie and Town of Collingwood purchased the railway from CN Rail to run a short-line railway between the two centres. The Collingwood-Utopia section of the rail line was abandoned in 2011 due to financial reasons and the former railway was acquired in 2018 by the County of Simcoe. The railway is not currently in use and while there are no current plans for using the railway due to insufficient demand in the area, the corridor is intended to be retained for potential future use (refer to Section 2.2 for a description of local policies to protect the line).

Several structures are present in association with the former railway line, including:

- Three (3) bridges (Mad River Bridge, Pine River Bridge, and Nottawasaga River Bridge); and

- Existing culverts (45).

Within the Study Area, there are sections of the former rail line that remain intact with rails and ties remaining. In other sections, rails and ties have been removed.

A section of trail has been constructed in Stayner from County Rd. 26 southward to Centreline Rd. along Warrington Road. This section of trail is approximately 2 m in width with a gravel and stonedust surface. Along this existing section, there are nine (9) intersections, as follows:

- Highway 26 (Main Street) North Highway 26 (Main Street) South;
- Superior Street;
- 301 Warrington Road Driveway;
- 309 Warrington Road Driveway;
- 321 Warrington Road Driveway;
- Fletcher Street/383 Warrington Road Driveway;
- Sideroad 21 & 22 Nottawasaga; and
- Centre Line Road.

The remainder of the proposed trail route contains multiple additional street and farm crossings.

There is an additional short section of existing trail in New Lowell, through, and north of, the recreation park. Similar to the existing section in Stayner, this trail is within the rail corridor but off of the existing rail bed.

Records indicate that there are a significant number of utilities that cross the corridor such as gas lines, residential Bell / communication lines, and overhead hydro transmission lines. Major utilities in mid-block areas were noted on the preliminary design drawings, prepared by WSP, and require further confirmation through the detailed design.

5.2 Social Environment

5.2.1 Methodology for Characterizing the Social Environment

The social environment includes the conditions that are present which affect the way people live, interact and use the land. The social environment was characterized through a review of existing information, databases, plans and policies, including the following:

- Provincial Policy Statement, 2020;
- County of Simcoe Official Plan;
- Township of Essa Official Plan;
- Township of Clearview;

- Source Water Protection mapping; and
- Correspondence with MECP staff to identify Indigenous interests in the area (refer to Section 9.4 for further information).

5.2.2 Land Use Within the Rail Corridor

The rail corridor has been abandoned thus, currently, there is little formal use of the lands within the corridor. A section of trail has been constructed in Stayner from County Rd. 26 southward to Centreline Rd. along Warrington Road. Portions of this trail are located within the rail right-of-way but off of the rail bed. Remaining portions are located just outside of the right-of-way. This section of trail is currently used by pedestrians, cyclists and snowmobilers, by permit in the winter. The remainder of the corridor is not currently used for any formal purpose.

5.2.3 Land Use Adjacent to the Rail Corridor

Residential Uses

There are multiple residential properties adjacent to the rail corridor. Many of the properties are well setback from the former rail line or are separated from it by hedgerows or other vegetation. However, a small number of residences are located in close proximity to the corridor and have open access to, and views of, the rail line. A small number of properties have landscaping or small structures encroaching into the rail corridor property.

Agricultural Uses

Agricultural properties are common along the former rail line. Many are separated from the former rail line by fences or hedgerows. A number of farm crossings are present which currently allow farm equipment to cross the corridor to access fields. The majority of farms appear to grow cash crops. A small number of livestock operations are also present.

Canadian Forces Base Borden

Adjacent to the railway corridor is Canadian Forces Base (C.F.B.) Borden. This base is the largest training establishment of the Canadian Armed Forces and consists of 21,000 acres of land. As this is an active military base, training occurring on the site includes controlled detonations. Training such as the detonations can be loud, as noted by Angus residents in March 2021.

Conservation Areas and Parks

New Lowell Conservation Area is located adjacent to the Study Area. This Conservation Area is over 200 m from the Study Area and is connected to Coates Creek which crosses the Study Area. New Lowell is a day-use park and also offers season camping.

Across the railway corridor from New Lowell Conservation Area located at 5212 County Road 9 is New Lowell Recreation Park. This day-use park has a pavilion with covered picnic area and kitchen facilities as well as several recreational offerings such as soccer fields, a playground, several baseball diamonds, and washrooms (summer only).

Minesing Wetlands Conservation Area is located near the southeast end of the Study Area and is located directly north of the rail corridor. Minesing Wetlands offers day use for kayaking and canoeing, bird watching, and winter activities such as snowshoeing and cross-country skiing. A portion of the Conservation Area also offers seasonal hunting. The Conservation Area contains the Minesing Swamp Area of Natural and Scientific Interest (ANSI, Provincial) and the Provincially Significant Wetland (PSW). The ANSI is not located within the Study Area and falls within the larger Conservation Area.

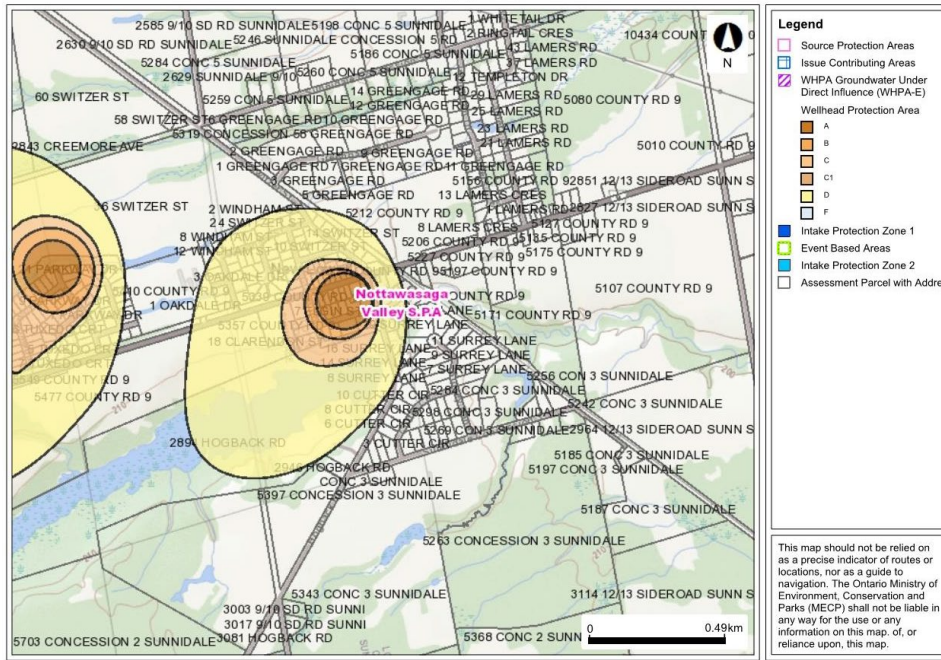
5.2.4 Source Water Protection

The Study Area is located within the Nottawasaga Valley Source Water Protection Area based on the Source Water Protection Information Atlas online mapping¹.

Two wellhead protection areas are located along the rail corridor. One is located in New Lowell (Figure 5.1) and the other is just south of Stayner (Figure 5.2). The proposed trail use is not a threat to drinking water.

¹ <https://ctcswp.ca/protecting-our-water/what-does-this-mean-for-me/#map-search>

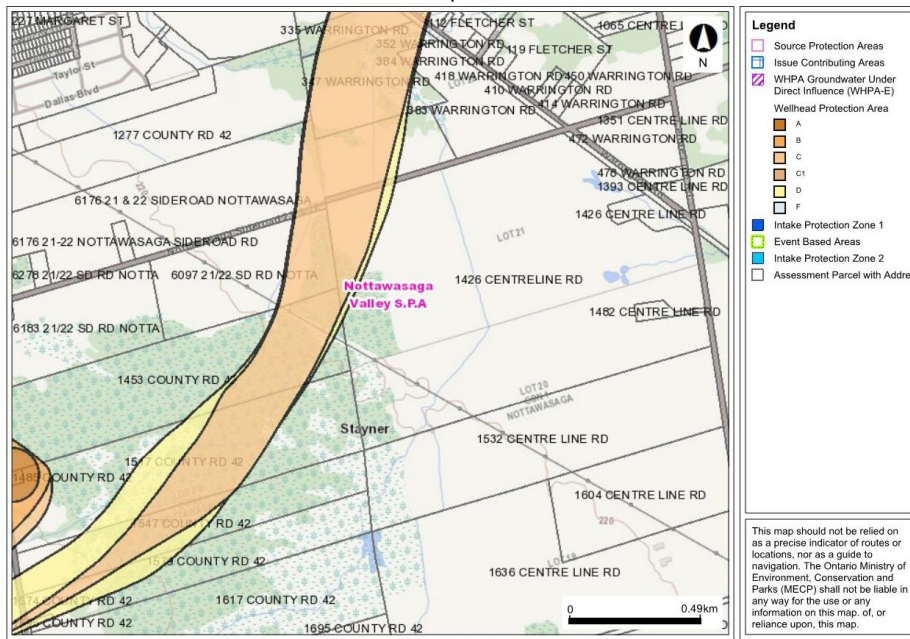
Barrie Collingwood Railway Active Transportation Trail, Schedule B MCEA
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Ontario © King's Printer for Ontario, 2022

Map Created: 11/22/2022
Map Center: 44.35623 N, -79.97199 W

Figure 5.1: Wellhead Protection Area, New Lowell



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Map Created: 11/22/2022
Map Center: 44.40163 N, -80.07396 W

Figure 5.2: Wellhead Protection Area, Stayner

5.2.5 Indigenous Treaties, Rights and Interests

As per the Cultural Heritage Report (Appendix C), the subject property is within the Nottawasaga Purchase (Treaty 18), a provisional agreement sometimes called the Lake Simcoe-Nottawasaga Treaty, signed on October 17, 1818, by representatives of the Government of Upper Canada and the Anishinaabe (Ministry of Indigenous Affairs, 2020; Williams Treaties First Nations, 2021). Treaty 18 encompassed 1,592,000 acres of land between the District of London in the west, Lake Huron in the north, the west limit of the Penetanguishine Purchase (1815) in the east, and the west shore of Lake Simcoe, Cook's Bay, and the Holland River in the northwest. In exchange for the land, the Crown agreed to pay an annual sum of £1200 in goods at the "Montreal price" (Crown-Indigenous Relations and Northern Affairs, 2016; Ministry of Indigenous Affairs, 2020).

The Nottawasaga River and Mad River are the two largest and permanently flowing aquatic features within the Study Area. In addition to these two watercourses, McIntyre Creek, Warrington Creek, and Coates Creek all cross the Study Area. These watercourses, the Nottawasaga and Mad Rivers in particular, would have historically provided sustenance and travel routes to the original inhabitants of the area. At present, the rivers and creeks continue to support Indigenous cultural uses, including fishing and gathering of traditional medicines and crafting materials.

Other natural areas, including Minesing Swamp, provide hunting opportunities and likely hold some importance to Indigenous communities.

Information regarding consultation with Indigenous communities is provided in Section 9.4.

5.3 Natural Environment

The natural environment includes the ecological features, functions and linkages that exist within the Study Area and beyond. The existing natural environment was characterized through a review of the existing secondary source information, previous studies at the site and a variety of field investigations and analyses. The following sections document the methodology used and the findings of the various studies.

5.3.1 Methodology for Characterizing the Natural Environment

The Barrie to Collingwood Railway Multi-Use Trail: Natural Environment Preliminary Design Report (WSP, October 26, 2018) characterized natural features on, and adjacent to, the rail corridor through a review of existing data sources and on-site field investigations. As this work was conducted relatively recently, its findings have been carried forward into this MCEA.

Burnside staff visited the corridor to verify that conditions identified in the Natural Environment Preliminary Design Report have not changed significantly. A review of species at risk designations was also conducted to determine whether the status of any species has changed since the 2018 report.

A Hazard Tree Assessment was also conducted by Burnside to identify trees which may pose a hazard to trail users along the length of the corridor. The Hazard Tree Assessment is provided in Appendix D.

The information contained in the following sections has been sourced from the Natural Environment Preliminary Design Report unless otherwise specified.

5.3.2 Physiography and Topography

The Study Area is within the Simcoe Lowlands physiographic region of southern Ontario which consists of low-lying belts of sand plain.

The Study Area is characterized by soils that are Tioga loamy sand, Tioga fine sandy loam, and Tioga fine sandy loam with good drainage; Alliston sandy loam, Berrien sandy loam, Minesing marly silty clay loam, and Edenvale sandy loam with imperfect drainage; and Parkhill loam with poor drainage.

The Minesing Wetlands have an abundance of fine, low permeability soils which result in many of the wetlands not supporting a groundwater recharge / discharge cycle instead providing stable flows into adjacent watercourses (Nottawasaga Fisheries Habitat Management Plan, 2009).

5.3.3 Aquatic Environment

The Study Area contains a relatively diverse assemblage of aquatic habitat, ranging from relatively small, intermittently flowing drainage features to large riverine habitat. The large watercourses include Nottawasaga River, and its major tributary, Mad River. Other watercourses in the area are Coates Creek, Warrington Creek, and McIntyre Creek.

The fine, low permeability soils in the Minesing Wetlands along with the boulder dominated soils have resulted in two of the rivers in the study area, Nottawasaga River and Mad River supporting warmwater habitat (Nottawasaga Fisheries Habitat Management Plan, 2009).

The Nottawasaga River, Pine River and Mad River are the three largest and permanently flowing aquatic features within the Study Area. In addition to these two watercourses, McIntyre Creek, Warrington Creek, and Coates Creek all cross the Study Area.

A total of 32 watercourse crossings were assessed, some of which were well-defined watercourses, while others were drainage features. Findings were as follows:

- 13 were confirmed to support direct fish habitat within the study corridor.
- 6 were determined to support fish habitat indirectly as there is no direct fish habitat within the study corridor. These watercourses convey roadside and agricultural drainage and have no defined banks or evidence of refuge habitat. These watercourses are classified as indirect fish habitat as they may provide nutrients and allochthonous (e.g., insects and plant debris) material to receiving waterbodies downstream of the study corridor.
- 13 watercourse crossings have fish habitat potential to support fish within the study corridor, however direct fish use could not be confirmed through the background review or visual assessments.

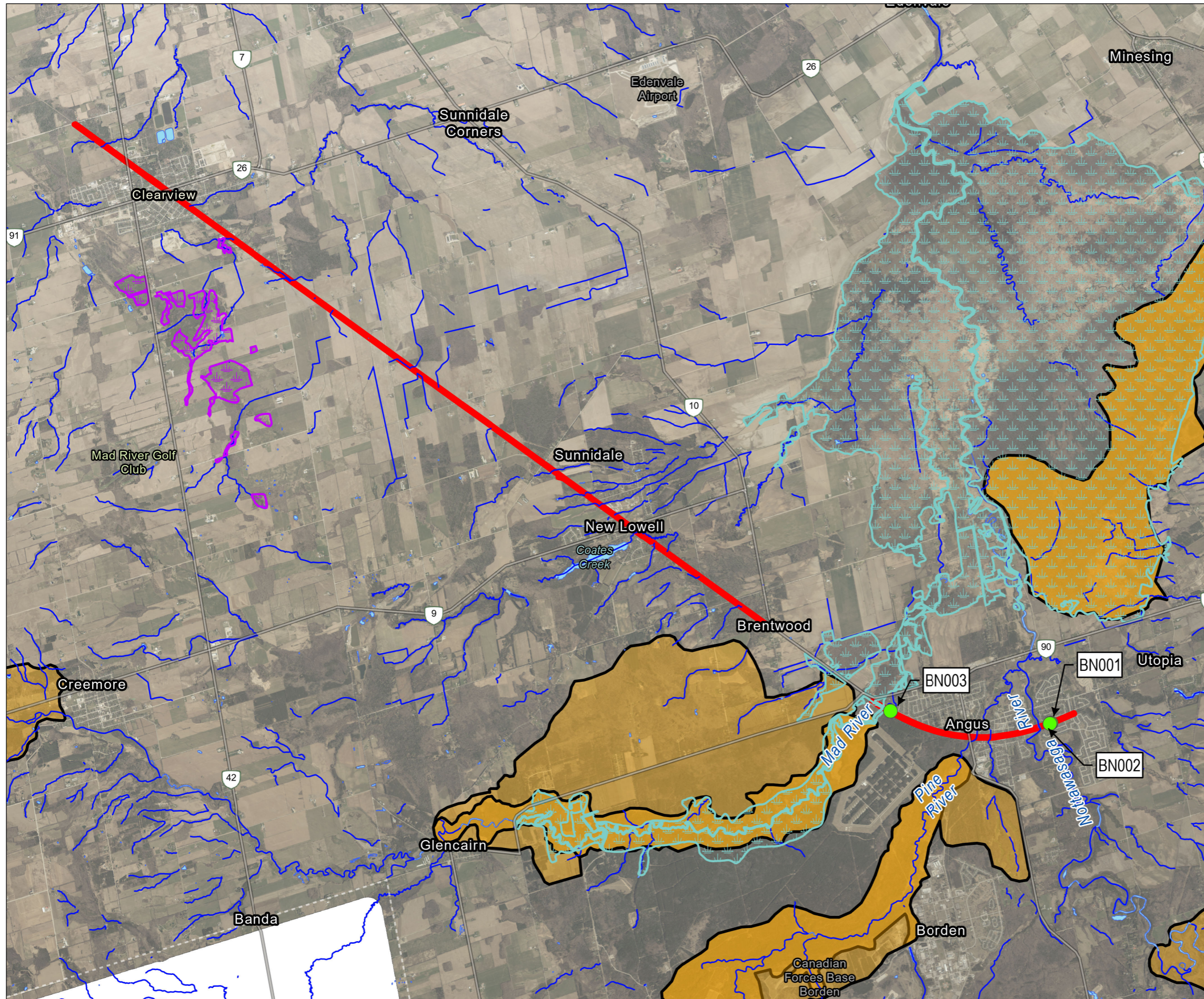
5.3.4 Terrestrial Environment

5.3.4.1 Vegetation Communities, Wetlands and Woodlands

The Study Area includes a mix of commercial, residential, agricultural, meadow, plantation, savannah, thicket, forests, swamps, and marsh ecosites. In total, 33 distinct vegetation communities were identified within the Study Area using the Ontario Ecological Land Classification System. Mapping of vegetation communities is provided in the Natural Environment Preliminary Design Report (WSP, October 26, 2018), provided in Appendix B.

There are a number of wetlands within the Study Area, including the Stayner Provincially Significant Wetland Complex and Minesing Provincially Significant Swamp Complex. These Provincially Significant Wetlands are shown on Figure 5.3: The Minesing wetlands are of particular significance as they have been designated as a Ramsar Wetland of International Importance. The wetland complex encompasses approximately 10,937 ha and is one of the least disturbed wetlands in Ontario.

Much of the Minesing Wetland is tree covered. Large expanses of woodland are present in, and around, the Study Area within the wetland and across Canadian Forces Base (CFB) Borden, as well as lands to the north.



- Butternut Tree
- Watercourse
- Minesing Swamp Complex
- Stayner Wetland Complex
- Deer Wintering Area
- Study Area

Sources:

- Ministry of Natural Resources and Forestry, © King's Printer for Ontario.
- Natural Resources Canada, © His Majesty the King in Right of Canada.

Disclaimer:

R.J. Burnside & Associates Limited and the above mentioned sources and agencies are not responsible for the accuracy of the spatial, temporal, or other aspects of the data represented on this map. It is recommended that users confirm the accuracy of the information represented.

This map is the product of a Geographic Information System (GIS). As such, the data represented on this map may be subject to updates and future reproductions may not be identical.

Datum: NAD 1983 2011		 Grid North
Coord. System: NAD 1983 2011 UTM Zone 17N		
Projector: Transverse Mercator		
Central Meridian: 81°0'0.00"W		
False Easting: 500,000m	False Northing: 0m	
Page Orientation: 0°		 Kilometers



Client

COUNTY OF SIMCOE

Figure Title

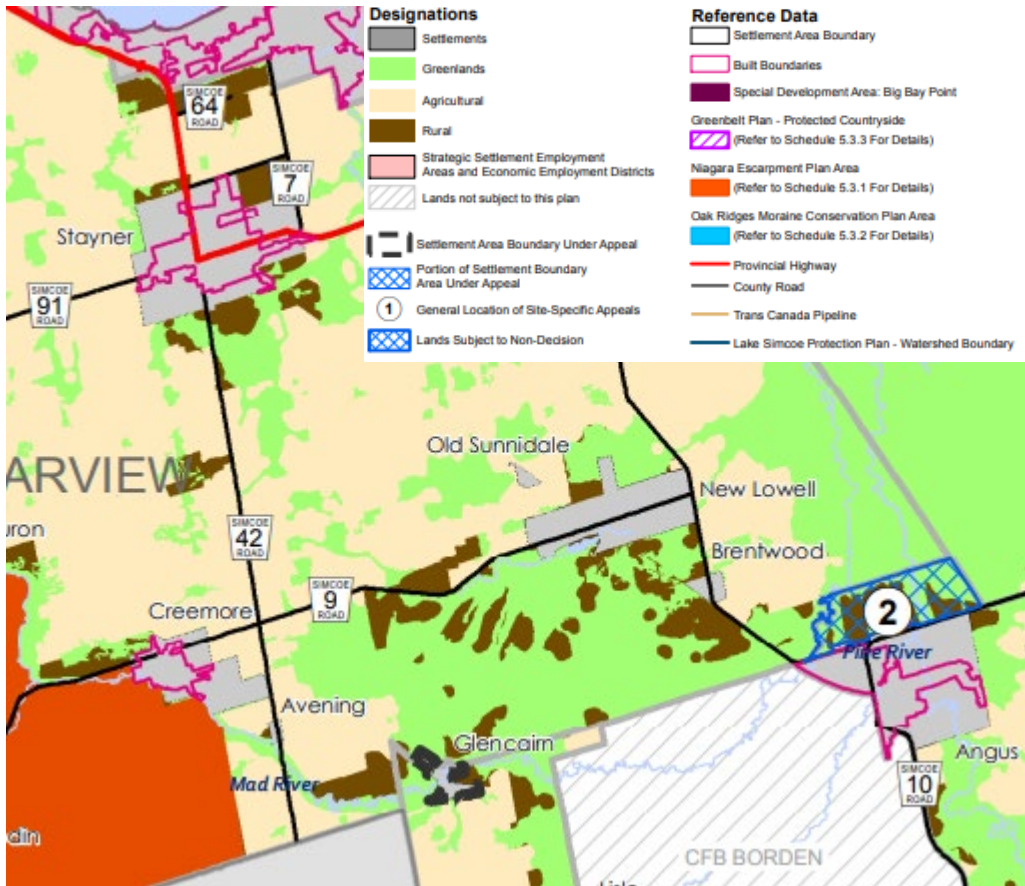
**BARRIE COLLINGWOOD RAILWAY
ACTIVE TRANSPORTATION TRAIL
SCHEDULE B EA
SIGNIFICANT NATURAL FEATURES**

Drawn	Checked	Date	Figure No. 5-3
HN	TR	2022/11/28	
Scale	Project No.		
H 1:80,000			300053939

5.3.4.2 County of Simcoe Greenlands

Portions of the Study Area fall within the County of Simcoe Greenlands designation as outlined in Schedule 5.1 Land Use Designation of the Official Plan. The Greenlands designation is shown in Figure 5.4. The County of Simcoe’s Greenlands designation includes wetlands, woodlands, ANSIs and valleylands.

Figure 5.4: County of Simcoe Official Plan, Schedule 5.1 - Land Use Designation



5.3.4.3 Significant Wildlife Habitat

The Natural Environment Preliminary Design Report (WSP, October 26, 2018) identified a number of Significant Wildlife Habitats within the Study Area. These included:

- Area-Sensitive Breeding Bird Habitat- this type of habitat supports birds which require large tracts of forest, preferring forest interior over forest edges. Several areas-sensitive birds were observed by WSP in 2018, including Broad-winged Hawk (*Buteo platypterus*), Ovenbird, Red-breasted Nuthatch (*Sitta canadensis*), Savannah Sparrow (*Passerculus sandwichensis*), Veery (*Catharus fuscescens*), and Vesper Sparrow (*Poocetes gramineus*). Large woodland areas are present within the

Study Area, primarily in association with the Minesing Swamp and the large woodlands on CFB Borden.

- Deer Winter Congregation Areas- these habitats support deer during cold winter periods and are typically comprised on thick conifer stands, as shown on Figure 5.3: Special Concern and Rare Wildlife Species- these habitats support species which are designated as Special Concern or as rare in the province, with a NatureServe status of S1-S3. The following species of conservation concern have been observed within the Study Area:
 - Monarch (*Danaus plexippus* – Special Concern);
 - Eastern Wood-pewee (*Contopus virens* - Special Concern);
 - Eastern Ribbonsnake (*Thamnophis sauritus septentrionalis* – Special Concern); and
 - Snapping Turtle (*Chelydra serpentina* - Special Concern).

Additional wildlife habitats may be present but have been unconfirmed. These include:

- Bat Maternity Colonies;
- Turtle Wintering Areas;
- Turtle Nesting Areas;
- Woodland Raptor Nesting Habitat;
- Woodland Amphibian Breeding Habitat;
- Wetland Amphibian Breeding Habitat;
- Additional habitats for Species of Conservation Concern (species which may be present but are unconfirmed), including:
 - Canada Warbler (*Cardellina Canadensis* - Special Concern);
 - Grasshopper Sparrow (*Ammodramus savannarum* – Special Concern);
 - Wood Thrush (*Hylocichla mustelina* - Special Concern);
 - Northern Brook Lamprey (*Ichthyomyzon fossor* - Special Concern,
 - Eastern Musk Turtle (*Sternotherus odoratus* - Special Concern); and
 - Map Turtle (*Graptemys geographica* - Special Concern).

The specific location of all of these habitats is provided in the Natural Environment Preliminary Design Report (WSP, October 26, 2018) in Appendix B. Habitats for these species include woodlands, wetlands, watercourses and low intensity farmlands, such as pastures and hayfields. It is also noted that turtles nest in sandy or gravel areas and could potentially use the rail bed for nesting in areas close to wetlands or open water. The rail bed is not considered to be significant wildlife habitat as it is a man-made structure. However, potential impacts to nesting turtles are addressed in Section 8.0. Northern Brook Lamprey is known to be present in Bear Creek, a tributary of the Nottwasaga River that crosses the rail corridor just west of Line 5.

5.3.4.4 Habitat of Endangered and Threatened Species

As a result of background records and field investigations, it was determined that a number of Endangered and Threatened species are, or may be, present in the Study Area.

The following seven SAR species were confirmed within the project area:

- Bobolink (*Dolichonyx oryzivorus* – Threatened);
- Eastern Meadowlark (*Sturnella magna* – Threatened);
- Barn Swallow (*Hirundo rustica* – Threatened); and
- Butternut (*Juglans cinerea* – Endangered).

Bobolink and Eastern Meadowlark nest in hayfields adjacent to the corridor. Barn Swallows forage over open agricultural lands and often are found nesting in old barn structures. These are likely present in the surrounding agricultural landscape but not within the corridor itself. Occasionally Barn Swallows nest on bridge structures. During field studies carried out by WSP in 2018, one Eastern Phoebe nest was observed on the bridge over the Mad River. Although Eastern Phoebe is not a species at risk, it was noted by WSP that all the bridges within the project limits provide suitable nesting habitat for Barn Swallow nesting, although none were directly observed.

Burnside staff surveyed trees within the rail corridor and identified three Butternut trees. Butternut Health Assessments and genetic testing were conducted. All three trees were relatively healthy and “retainable” and confirmed as true Butternut trees. The location of the trees is shown on Figure 5.3: .

Six SAR are moderately to highly likely to occur within or adjacent to the project area but were not the subject of specific searches by WSP or Burnside staff:

- Endangered species:
 - Little Brown Bat (*Myotis lucifugus*)
 - Northern Myotis (*Myotis septentrionalis*)
 - Small-footed Bat (*Myotis leibii*)
 - Tri-coloured Bat (*Perimyotis subflavus*)
 - Spotted Turtle (*Clemmys guttata*)
- Threatened species:
 - Blanding’s Turtle (*Emydoidea blandingii*)

The bats use woodland habitats and trees within forest edges. The bats require tree cavities, peeling bark or dead leaf clusters within which to roost. The turtles are primarily aquatic and could be present in larger watercourses and other areas of open water. As discussed in Section 5.3.4.3, turtles nest in sandy or gravel areas and could potentially use the rail bed for nesting in areas close to wetlands or open water. Potential impacts to nesting turtles and other Endangered and Threatened species are addressed in

Section 8.0. The location of all of these habitats is provided in the Natural Environment Preliminary Design Report (WSP, October 26, 2018) in Appendix B.

5.3.5 Floodplain

Much of the Study Area is within the 100-year floodplain and is regulated by NVCA under O. Reg 172/06. Approval from the NVCA is required for all work within the floodplain and Regulated Area. Lands regulated by the NVCA are shown on Figure 5.5 and Figure 5.6.

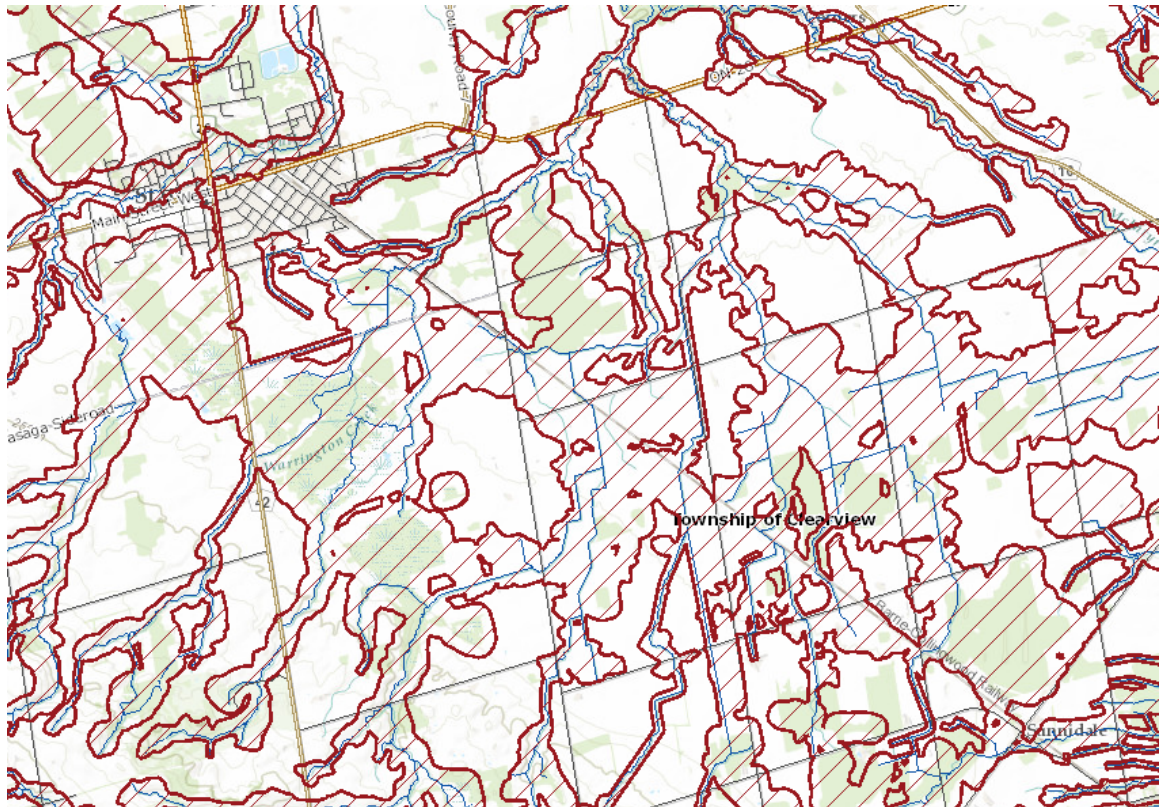


Figure 5.5: NVCA Regulated Area Mapping, Stayner to Sunnidale

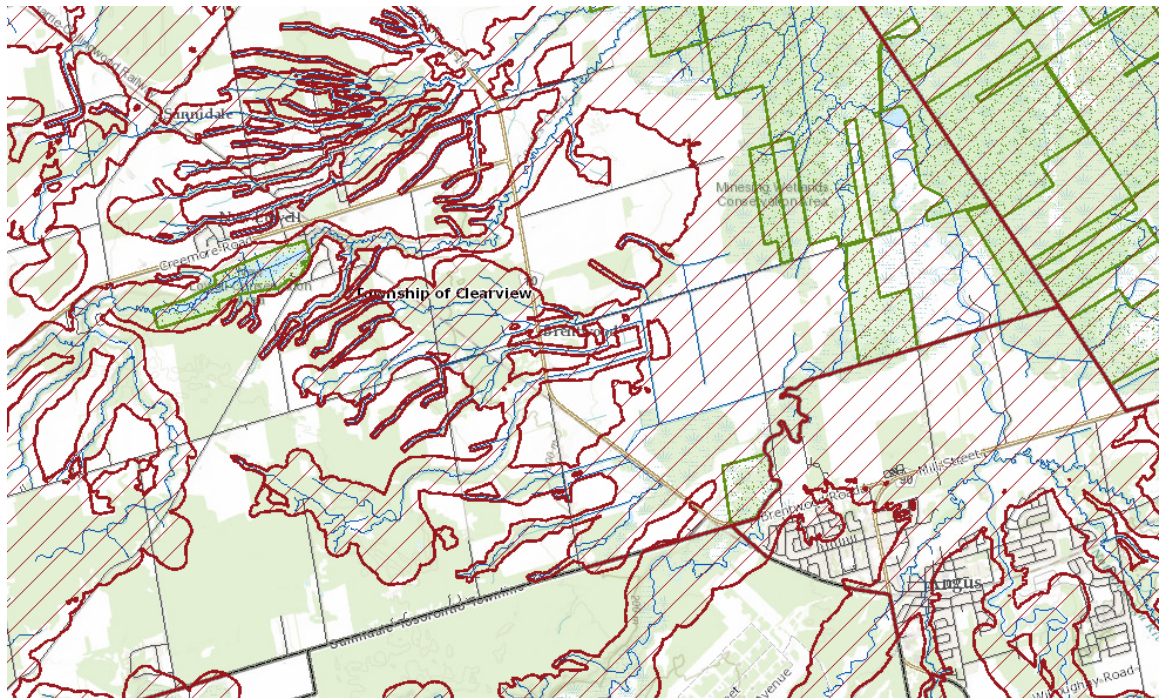


Figure 5.6: NVCA Regulated Area Mapping, Sunnidale to Angus

5.4 Cultural Heritage

5.4.1 Methodology for Characterizing Cultural Heritage

The cultural heritage features in the Study Area include archaeological resources, built heritage resources and cultural heritage landscapes, as defined in the *Ontario Heritage Act*. The following reports were completed by Archaeological Services Inc. (ASI) using standardized methodologies for archaeological and cultural heritage studies:

- Stage 1 Archaeological Assessment;
- Cultural Heritage Report: Existing Conditions (focused on the full Study Area); and
- Cultural Heritage Evaluation Report (focused on the Mad River, Pine River and Nottawasaga River bridges).

The reports can be found in Appendices E, Cand F, respectively.

The work included reviews of databases and historical sources to identify known archaeological and cultural heritage features. In addition, a property inspection was conducted on December 3 and 4 of 2021.

5.4.2 Archaeological Resources

Background data sources identified one archaeological site, located over 50 m from the Study Area, as described in Table 5.1.

The property inspection determined that parts of the Study Area which have previously been disturbed (i.e., the existing rail bed) no longer retain archaeological potential. However, areas away from the rail bed which are not wetlands or steep slopes retain archaeological potential. Further archaeological study is required if any portions of the project will be located in these areas. The lands requiring a Stage 2 Archaeological Assessment are shown in the Stage 1 report provided in Appendix E.

Table 5.1: Registered Sites within One Kilometre of the Study Area

Borden #	Site Name	Cultural Affiliation	Site Type	Researcher
BbGx-4	Centre Street	Pre-Contact Indigenous	Findspot	AMICK Consultants Limited 1997

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The Stage 1 report provided the following recommendations:

1. Parts of the Study Area exhibit archaeological potential. These lands require Stage 2 Archaeological Assessment by test pit survey at five metre intervals. Stage 2 is required prior to any proposed construction activities on these lands;
2. The marine archaeological potential of Mad River, Pine River, and Nottawasaga River are to be evaluated following the Ministry of Heritage, Sport, Tourism and Culture (MHSTCI) *Criteria for Evaluating Marine Archaeological Potential* checklist if impacts to the river or creek beds are proposed;
3. The remainder of the Study Area does not retain archaeological potential on account of deep and extensive land disturbance or low and wet conditions. These lands do not require further archaeological assessment; and
4. Should the proposed work extend beyond the current Study Area, further archaeological assessment should be conducted to determine the archaeological potential of the surrounding lands.

5.4.3 Built Heritage and Cultural Heritage Landscapes

The Cultural Heritage Report (Appendix C) presents an inventory of the known and potential built heritage resources and cultural heritage landscapes through background historical research and a review of secondary source material.

There are 21 previously identified cultural heritage resources within the Study Area – all of which are within the CFB Borden. These resources include one National Historic Site, 11 Recognized Federal Heritage Buildings, seven Classified Federal Heritage Buildings, one Ontario Heritage Trust plaque, and one grave.

In light of these results, the following recommendations were made:

1. Construction activities and staging should be suitably planned and undertaken to avoid unintended negative impacts to identified built heritage resources and cultural heritage landscapes. Avoidance measures may include, but are not limited to: erecting temporary fencing, establishing buffer zones, issuing instructions to construction crews to avoid identified cultural heritage resources, etc.
2. Once a preferred alternative or detailed designs of the proposed work are available, this report will be updated with a confirmation of impacts of the undertaking on the cultural heritage resources identified within the study area and will recommend appropriate mitigation measures. Mitigation measures may include, but are not limited to, completing a property-specific heritage impact assessment or documentation report, or employing suitable measures such as landscaping, buffering or other forms of mitigation, where appropriate. In this regard, provincial

- guidelines should be consulted for advice and further heritage assessment work should be undertaken as necessary.
3. Should future work require an expansion of the study area then a qualified heritage consultant should be contacted in order to confirm the impacts of the proposed work on potential heritage resources.

A Cultural Heritage Evaluation Report was also completed by ASI for the Mad River Bridge, the Pine River Bridge, and the Nottawasaga River Bridge (Appendix F). The report includes an evaluation of the cultural heritage value of each of these three bridges as determined by the criteria set out in *Ontario Regulation 9/06* of the *Ontario Heritage Act*.

Cultural Heritage resources were characterized using information from archival research and site visits. To evaluate the cultural heritage significance of the subject bridge, the Ontario Heritage Bridge Guidelines for Provincially Owned Bridges (OHGB) (Ministry of Culture and Ministry of Transportation 2008) and the Ontario Heritage Bridge Program (Ministry of Culture and Communications 1991) were consulted as points of reference.

In light of these results, the following recommendations were made:

1. A Heritage Impact Assessment (HIA) should be completed for each the Mad River Bridge, the Pine River Bridge, and the Nottawasaga River Bridge as early as possible during the detailed design phase. These HIAs will help identify alternatives as well as mitigation and monitoring commitments to avoid or reduce impacts on the heritage attributes of the bridges, based on the proposed Statements of Cultural Heritage Value. These assessments should be completed by a qualified person who has relevant and recent experience in the conservation of rail bridges (see Section 3.0 of the Standards and Guidelines for Conservation of Provincial Heritage Properties [MHSTCI 2014] as a guide for best practice) and submitted to heritage staff at the County of Simcoe for review and approval and to the Ministry of Heritage, Sport, Tourism and Culture Industries (MHSTCI) for review.

6.0 Evaluation of Alternatives

6.1 Identification of Alternative Solutions

The Barrie-Collingwood Railway Multi-Use Trail Preliminary Design Report (WSP, 2019) identified five alternative ways to construct the trail, including various location on the rail bed, off the rail bed, or benched on the side of the rail bed. Options were also considered to salvage the rail steel, dispose of the ties off-site or bury the ties on site. These five Alternatives were carried forward into this MCEA.

Through the MCEA process, several discussions were held regarding the potential future opportunity to return the corridor to rail use. Several policies described in Section 2.2, recommend maintenance of the rail corridor for potential future rail use but allow interim uses, such as trails. Based on that a “Trail for Now” or “Trail beside Rail” approach was considered to be important to preserve railway for future use. It also became clear that constructing the entire trail beside the existing rail bed would be very costly and could cause extensive harm to natural features and potential archaeological resources. As such, a sixth alternative was identified which would locate portions of the trail on the existing rail bed and portions of the trail beside the rail bed in areas where environmental damage would be minimal and the need for grading was minimal.

Therefore, the MCEA considered the six alternatives described in Table 6.1. An option to do nothing and not construct the trail was also considered. This is a requirement of the MCEA process which serves as a baseline against which to measure the effects of each Alternative.

A cross-section depicting the Alternatives which include a trail on the existing rail bed is provided in Figure 6.1. Alternatives which include a trail to be benched into the edge of the existing rail bed are depicted in Figure 6.2 and Alternatives which include a new trail located off the rail bed but within-the -right of way are depicted in Figure 6.3.

Table 6.1 Alternative Solutions

Alternative	Description
Do Nothing	Mandatory under the EA process. The study area will remain unchanged.
Alternative #1: On Existing Rail Bed (Salvage Rails and Dispose of Ties)	Existing railway steel would be removed and salvaged while the rail ties would be removed and disposed of at an Environmental facility. A new 3.0 m

Alternative	Description
	wide trail would be located on the same alignment as the former railway.
Alternative #2: On Existing Rail Bed (Salvage Rails and Bury Ties)	Existing railway steel would be removed and salvaged while the existing rail ties would be buried with granular material. The new 3.0 m wide trail would be located on top of the buried rail ties.
Alternative #3: Bench Trail on Side of Existing Rail Bed	Existing rails and ties would remain untouched, and the new 3.0 m wide trail would be cut into / benched into the edge of the existing rail bed. This alternative may require the use of retaining walls and will require extra grading along the length of the corridor. New or lengthened culverts would be required. It was assumed that the trail would be routed on the existing rail bed at the approaches to bridges such that existing bridges could be used.
Alternative #4: Bench Trail on Side of Existing Rail Bed (Salvage Rails)	Existing railway steel would be removed and salvaged while the rail ties would remain untouched. The new 3.0 m wide trail would be cut into / benched into the edge of the existing rail bed. This alternative may require the use of retaining walls and will require extra grading along the length of the corridor. New or lengthened culverts would be required. It was assumed that the trail would be routed on the existing rail bed at the approaches to bridges such that existing bridges could be used.
Alternative #5: Off Existing Rail Bed Beside Property Line	Existing rails and ties would remain untouched, and the new 3.0 m wide trail would be located close to/adjacent to the limit of the right-of-way. This alternative may require the use of boardwalks through wet areas and potentially require the removal of many existing trees. New or lengthened bridges and culverts would be required.
Alternative #6: Hybrid - On Existing Rail Bed and	Existing railway steel would be removed and salvaged while the existing rail ties would be buried with granular

Alternative	Description
Beside the Existing Rail Bed where practical (Salvage Rails and Bury Ties)	material. The new 3.0 m wide trail would be located on top of the buried rail ties for the majority of the trail and beside the rail for 2.2 km. The portions beside the rail bed would be located to limit tree removal and avoid the need for new or expanded bridges or lengthened culverts or significant grading. Thus, this will only occur in areas with an existing flat base beside the rail bed.

For all alternatives, the existing trail sections in Stayner and New Lowell will remain in their current position, off of the rail bed. These trail sections, which are currently approximately 2.5 m in width, will be widened to 3.0 m in width. The widening will occur on the side of the trail closest to the rail bed.

Staging areas (i.e., trailheads) will be developed in Stayner, New Lowell and Angus as part of all Alternatives. The trailheads will include parking. Other amenities may be included and will be determined during the detailed design process.

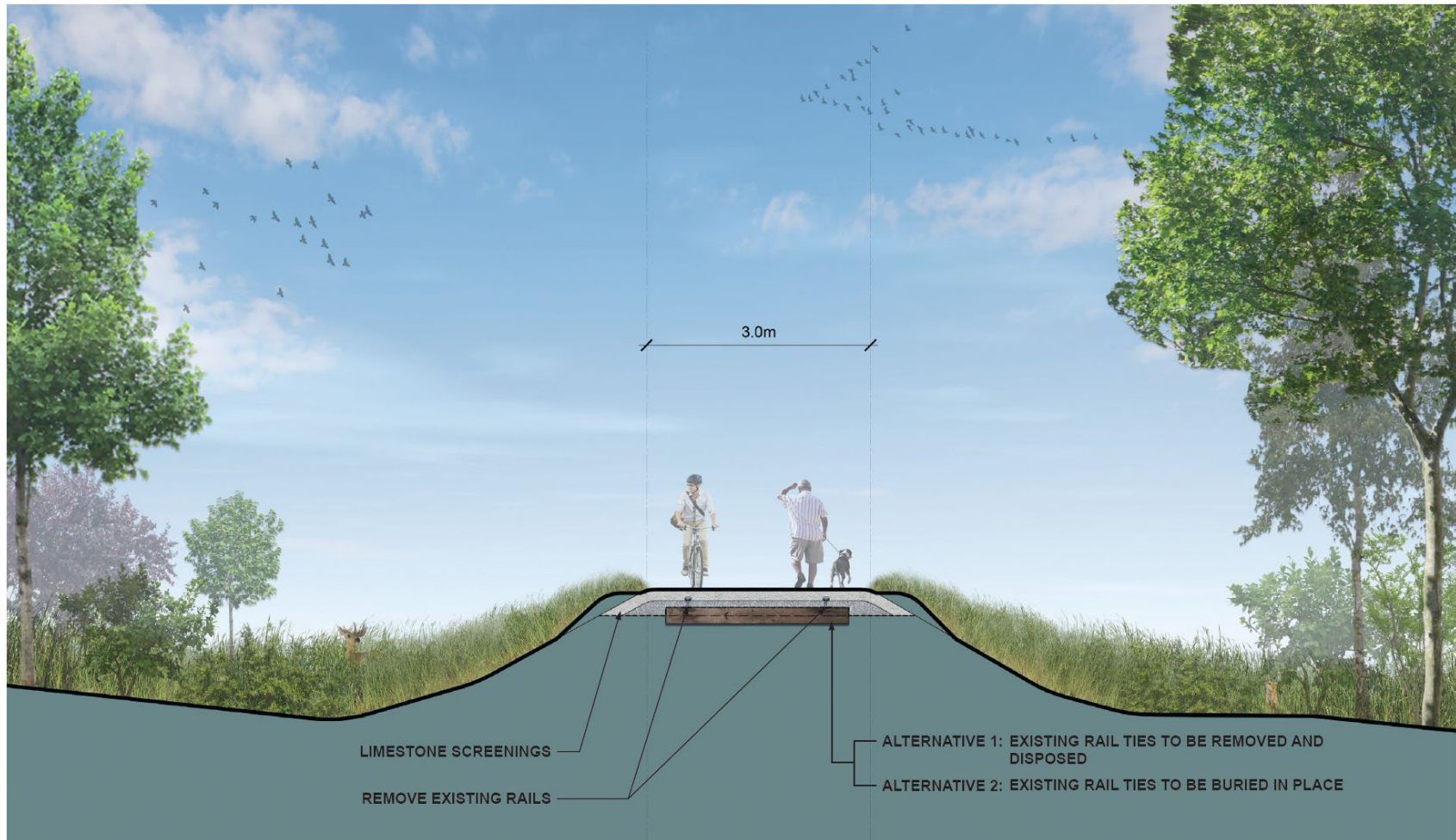


Figure 6.1 Alternatives with a Trail on the Existing Rail Bed (Alternatives 1, 2 and portions of 6)

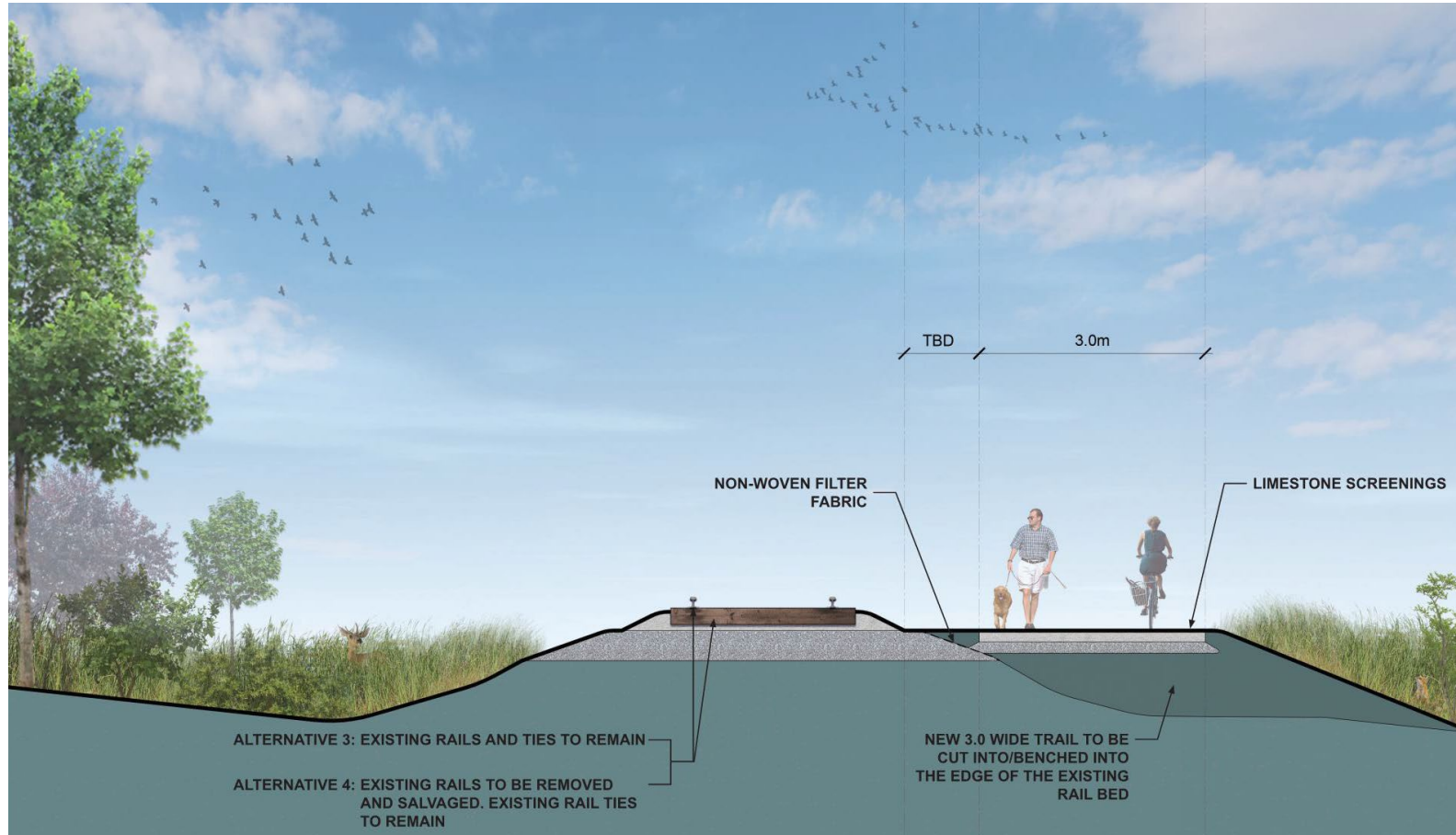


Figure 6.2 Alternatives with a Trail Benched on the Side of the Existing Trail (Alternatives 3 and 4)

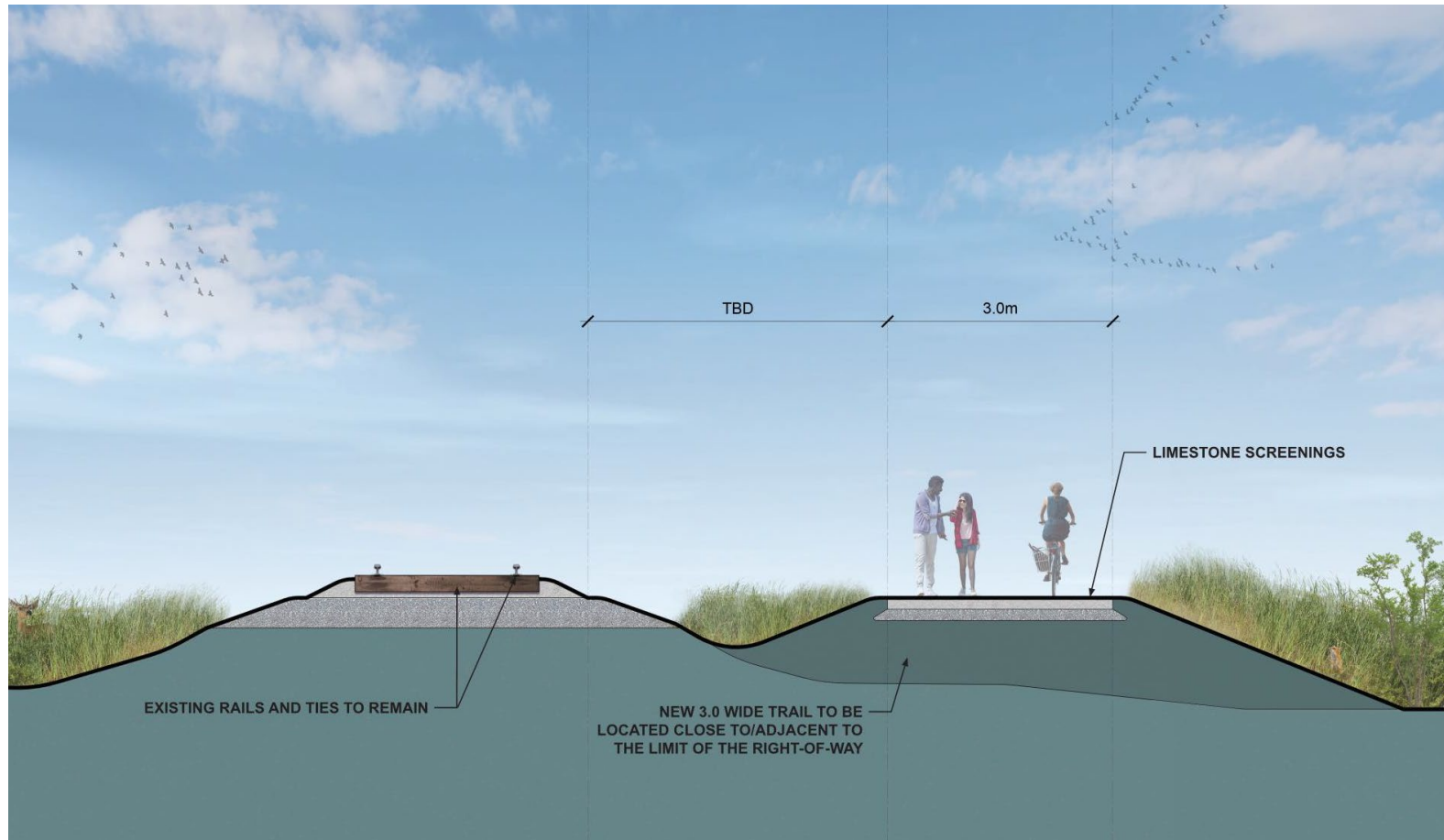


Figure 6.3 Alternatives with a Trail off of the Rail Bed (Alternative 5)

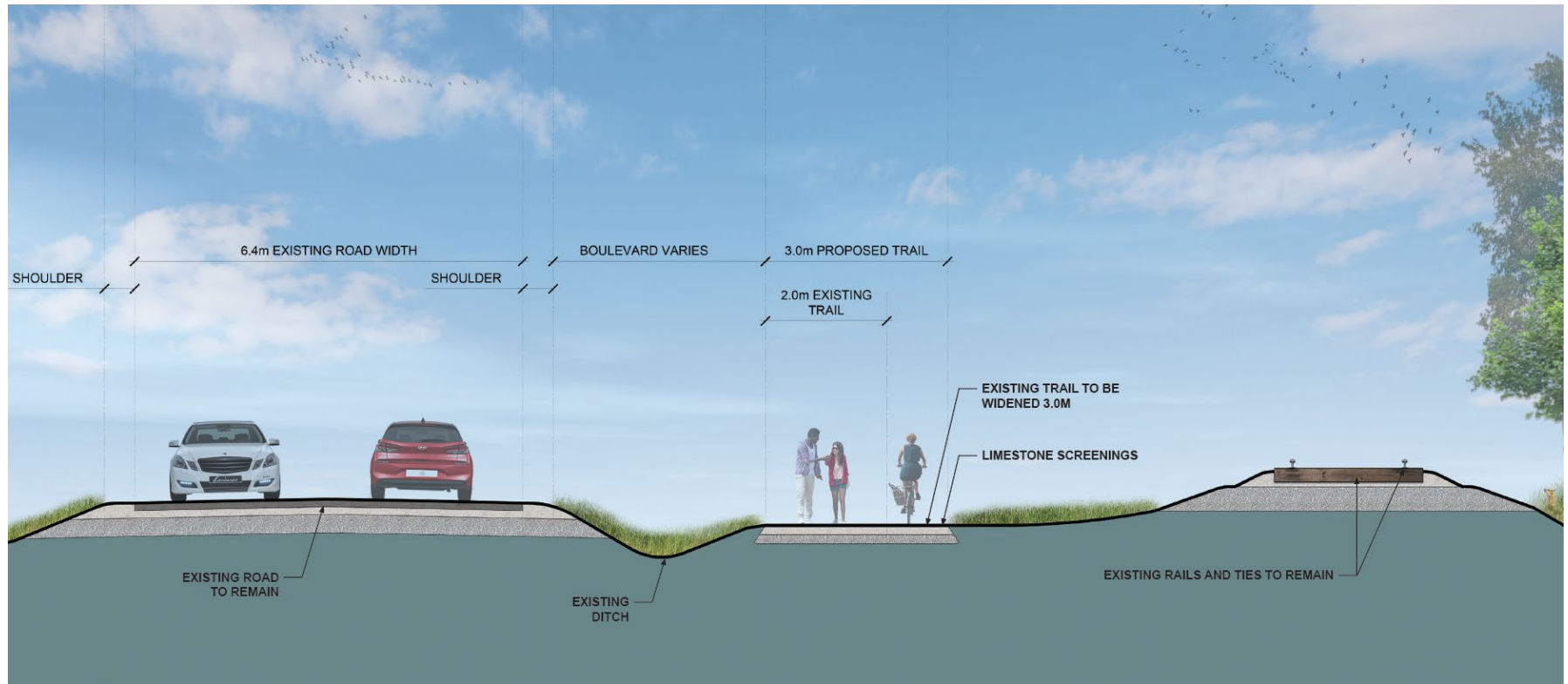


Figure 6.4: Trail Adjacent to Warrington Road

6.2 Evaluation Criteria

The criteria and indicators listed in Table 6.2 were used to evaluate the Alternatives. The data collected from the characterization of existing conditions was used as the baseline against which potential impacts were projected.

Table 6.2: Evaluation Criteria

Environmental Component	Criteria	Indicator
Natural Environment	<ul style="list-style-type: none"> Impacts to Woodlands and Wildlife Habitat 	<ul style="list-style-type: none"> Relative quantity of woodlands and wildlife habitat to be removed
	<ul style="list-style-type: none"> Impacts to Species at Risk and their habitat 	<ul style="list-style-type: none"> Relative quantity of SAR habitat to be removed
	<ul style="list-style-type: none"> Impacts to Wetlands 	<ul style="list-style-type: none"> Relative quantity of wetlands to be affected
	<ul style="list-style-type: none"> Impacts to aquatic habitat 	<ul style="list-style-type: none"> Proximity to, or removal of, key aquatic habitats
Social Environment	<ul style="list-style-type: none"> Impacts to Private Property 	<ul style="list-style-type: none"> Trail proximity to adjacent landowners; impacts to views; potential for trespassing and nuisance effects; proximity of trail to property line
Cultural Environment	<ul style="list-style-type: none"> Impacts to archaeological resources 	<ul style="list-style-type: none"> Area of high or known archaeological potential to be removed or disturbed
	<ul style="list-style-type: none"> Impacts to cultural heritage resources 	<ul style="list-style-type: none"> Feature of heritage value to be removed or disturbed
Financial Factors	<ul style="list-style-type: none"> Capital Costs 	<ul style="list-style-type: none"> Relative costs related to any removal and/or disposal of rail ties Potential revenue from salvaging rails Relative costs of grading and new or upgraded bridges or culverts
	<ul style="list-style-type: none"> Maintenance Costs 	<ul style="list-style-type: none"> Relative cost of maintenance related to trail surfacing
Technical Environment	<ul style="list-style-type: none"> Impacts to Existing Infrastructure and Utilities 	<ul style="list-style-type: none"> Anticipated impacts to utilities due to proposed trail location
	<ul style="list-style-type: none"> Compatibility with Potential Future Light Rail Along the Corridor 	<ul style="list-style-type: none"> Preservation of rail infrastructure and rail corridor for potential future use.
Problem Statement	<ul style="list-style-type: none"> Does the Alternative address the Problem Statement? 	<ul style="list-style-type: none"> Does the Alternative identify an appropriate means to convert 23 km of the former Barrie-Collingwood Railway between Stayner and Angus to an Active Transportation Corridor.

6.3 Evaluation Process

Alternatives were compared using the criteria and indicators listed in Table 6.2:.

Scoring was based on quantitative measures where possible. For many criteria, impacts were based on qualitative assessment and professional experience.

Criteria are categorized into Natural, Social, Cultural, Financial and Technical considerations. Because each of these main headings has a different number of criteria, the rankings were averaged under each main heading and the Preferred Solution was based on the average rankings for Natural, Social, Cultural, Technical and Economic considerations.

A summary of the evaluation is presented in Table 6.3. The detailed evaluation is provided in Appendix G. In the evaluation and as shown in Table 6.3, a full pie indicates that the criterion for that Alternative has the least impact and is therefore the most preferred. An empty pie indicates that the criterion for that Alternative has the greatest negative impact and is therefore the least preferred.

Table 6.3: Summary of Evaluation of Alternative Solutions

Criteria for Evaluating Alternatives	Do Nothing	Alternative 1: On Existing Rail Bed (Salvage Rails and Dispose of Ties)	Alternative 2: On Existing Rail Bed (Salvage Rails and Bury Ties)	Alternative 3: Bench Trail on Side of Existing Rail Bed	Alternative 4: Bench Trail of Side of Existing Rail Bed (Salvage Rails)	Alternative 5: Off Existing Rail Bed Beside Property Line	Alternative 6: Hybrid On Existing Rail Bed and Beside the Existing Rail Bed Where Practical (Salvage Rails and Bury Ties)
Natural Environment							
Social Environment							
Cultural Environment							
Financial Factors							
Technical Factors							
Problem Statement (POS)	Does not meet POS	Meets POS	Meets POS	Meets POS	Meets POS	Meets POS	Meets POS
Overall Summary	Not Carried Forward	Most Preferred	Most Preferred	Somewhat Preferred	Somewhat Preferred	Least Preferred	Most Preferred

Based on this analysis, including the table in Appendix G and the comments received from agencies, utilities, Indigenous communities, local residents and the public, provided in Appendix H, Alternatives 1, 2 and 6 have impacts and benefits that result in a similar overall ranking. Alternatives 3, 4 and 5 are less preferred. While the Do Nothing alternative has no impacts to the natural, cultural or social environments over existing conditions, it does not address the Problem Statement and is not considered to be a feasible solution.

When comparing the differences between Alternatives 1, 2 and 6, Alternative 6 ranks slightly higher than Alternatives 1 and 2 in a number of key criteria, including its compatibility with potential future light rail along the corridor. Alternative 6 protects the rail corridor; future light rail along the corridor would require removal of the trail from the railway for the portion located on the rail bed. Capital cost for Alternative 6 is also slightly less than Alternative 1 but similar to Alternative 2. Alternative 6 does not require disposal costs and creates an opportunity to generate revenue from the sale of rails. These details can be seen in the evaluation table provided in Appendix G. For these reasons, Alternative 6 was selected as the Preferred Solution.

7.0 Description of the Preferred Solution

The Preferred Solution will include the following:

- Removal and salvage of existing railway steel;
- Rail ties will be buried; and
- A new 3.0 m wide trail will be located on the rail bed for portions of the trail. Sections totaling 2.2 km will be built beside the rail bed where practical and no additional fill is required.

The location of the trail on the rail bed and beside the existing rails is shown in the preliminary design drawings provided in Appendix H.

The sections of existing trail in Stayner and New Lowell will remain in their current position, off of the rail bed. These trail sections, which are currently approximately 2.5 m in width, will be widened to 3.0 m in width. The widening will occur on the side of the rail closest to the rail bed.

Staging areas (i.e., trailheads) will be developed in Stayner, New Lowell and Angus in the following locations:

- Stayner: South of Main St. / Highway 26. The location of parking and other amenities will be determined in conjunction with Clearview Townships proposed upgrades to the farmers market and Station Park.
- New Lowell: Existing and / or new parking areas will be used in the New Lowell recreation park. Further details will be developed during the detailed design process.
- Angus: A staging area with parking and other amenities is being considered on the southwest corner of the rail line and Alma St. As an alternative, parking may be provided in the Angus community park and baseball diamond at the northeast corner of Huron St. and King St.

The trailheads will include parking and signage. Other amenities may be included and will be determined during the detailed design process.

Work is ongoing to assess the need for upgrades to culverts and bridges along the trail route. Based on a preliminary review the following upgrades to the three bridge structures are as follows:

Nottawasaga River Structure

This structure is located over the Nottawasaga River, approximately 330 m east of Alma Street in Angus. Recommendations for this structure are to:

- Replace damaged transverse timber beams;
- Install timber wearing surface; and
- Install timber barriers to meet minimum height requirements for pedestrians and bicycles.

Pine River Structure

This structure is located over the Pine River, approximately 140 m east of County Road 90 (Mill Street) in Angus. Recommendations for this structure are to:

- Replace transverse timber beams;
- Install timber wearing surface;
- Install timber barriers to meet minimum height requirements for pedestrians and bicycles;
- Clean debris from bearing seats; and
- Localized steel repairs to the girders.

Mad River Structure

This structure is located over the Mad River, approximately 580 m east of the Sunnidale / Tosorontio Townline.

Recommendations

- Replace transverse timber beams;
- Install timber wearing surface;
- Install timber barriers to meet minimum height requirements for pedestrians and bicycles; and
- Clean bearing seats.

Although the position of the trail was selected to minimize tree removals, some vegetation clearing will be required. A Hazard Tree Assessment (Appendix D) provides an analysis and mapping of high-risk trees within and immediately adjacent to the existing rail corridor that may be a risk to trail users or adjacent lands. Best management practices are provided to reduce impacts to remaining trees and natural heritage features. A total of 529 trees were identified for removal based on their poor biological and structural conditions.

7.1 Climate Change Considerations

Climate change is usually associated with any significant change in long-term weather patterns. Changes in the composition of the atmosphere is resulting in processes that alter global temperature and precipitation and is affecting local weather patterns. These processes can ultimately lead to increased occurrence of extreme weather events such as floods, droughts, ice storms and heat waves.

The project is intended to improve the County's trail network, allowing for improved active transportation options. Creating an environment that supports walking and cycling as a means to reduce reliance on vehicular travel is a means to reduce greenhouse gas emissions. Any anticipated reduction in greenhouse gas emissions is not measurable as part of this MCEA process.

There is potential for the project to be affected by climate change. Precipitation, whether it is rainfall, snowfall, or other forms of frozen / liquid water, is the key climate and weather-related variable of concern with respect to drainage and culvert design. As a result of climate change, storm events are predicted to become more intense, which can result in larger volumes of precipitation at one time. Other climate variables such as temperature are major inputs to evaporation and snowmelt processes. Increases in temperature are likely to impact precipitation and snowmelt runoff volumes discharged to watercourses.

Portions of the Study Area are located within a floodplain. The following measures will be implemented during the design and operation of the trail:

- The trail will be designed in accordance with NVCA Regulations and will be designed to ensure flood and erosion risk are minimized and are within acceptable parameters.
- Measures to address public safety at the site during, or after, large precipitation and flooding events will be developed. This may include installation of signage to warn trail users of potential flood conditions, if required.

8.0 Potential Impacts and Mitigation Associated with the Preferred Solution

The Preferred Solution has the potential to impact various components of the natural, social, and built environment. Measures to mitigate these potential impacts are presented in Table 8.1. These measures will be incorporated into the detailed design and tender documents for the project. The detailed design may include some minor modifications to the concepts provided herein. Any major modifications will be subject to an addendum to this EA.

Table 8.1: Potential Impacts and Mitigation

Feature	Description of Potential Effects	Project Phase	Mitigation Measures	Monitoring Activities
Effects on Ecological Features and Functions				
Nests of migratory birds and roosting habitat for rare bats	Clearing of trees, shrubs and ground vegetation has the potential to disturb or destroy nests of migratory birds and maternity roosting areas for bats.	Construction	<ul style="list-style-type: none"> • Any vegetation clearing will take place outside of the breeding bird and bat roosting timing window; generally, from April 1 to September 30. • If clearing must occur within this window: <ul style="list-style-type: none"> – A qualified Ecologist / Avian Biologist will first search the affected area. Any active nests will be flagged and all clearing within the associated habitat will be avoided until the Ecologist / Avian Biologist confirms that the birds have fledged, and the nest is no longer active; – If a nesting migratory bird (or SAR protected under ESA, 2007) is identified within or adjacent to the construction site, all activities will stop, and the Contractor shall discuss mitigation measures with the proponent. In addition, the proponent will contact the MECP to discuss applicable mitigation options. The Contractor will proceed based on the mitigation measures established through discussions with the MECP; and – Clearance must be provided by MECP in relation to the removal of trees within the bat roosting season. 	<ul style="list-style-type: none"> • No monitoring required.
Adjacent trees to be maintained	Construction has the potential to damage adjacent trees intended to be protected	Construction	<ul style="list-style-type: none"> • A Tree Inventory and Preservation Plan will be completed during detailed design. Tree removals will be minimized. • Tree Protection Zones (TPZs) will be established during detailed design. Tree protection barriers or fencing will be installed in accordance with the Tree Preservation Plan. • No stockpiles, storage or disturbance to grade will occur within the TPZ to minimize soil compaction and root damage. • Where tree roots are encountered during construction, they should be cut cleanly and re-packed with soil as soon as possible. 	<ul style="list-style-type: none"> • Regular inspections will be conducted by the contractor and contract administrator (County's consultant) to ensure that mitigation is implemented.
All Adjacent Natural Features	Sediment and erosion impacts associated with land grading and clearing.	Construction	<ul style="list-style-type: none"> • All work zones should be clearly marked on detailed design drawings and at the work site to indicate that no work should occur outside the work zone. • Implementation of the erosion and sediment control measures will conform to industry best management practices and recognized standard specifications such as Ontario Provincial Standards Specifications (OPSS). • Sediment and erosion control measures will be implemented prior to construction and maintained during the construction phase in accordance with the erosion and sediment control plan developed during detailed design. • All sediment and erosion control measures will be inspected prior to construction and maintained during the construction phase to prevent entry of sediment into natural features. • If the sediment and erosion control measures are not functioning properly, no further work in the affected areas will occur until the sediment and / or erosion problem is addressed. • All disturbed areas of the construction site will be stabilized and re-vegetated as soon as conditions allow. • Sediment and erosion control measures will be left in place until the area of the construction has been stabilized and will then be removed by the Contractor. • Wet weather restrictions shall be applied during site preparation and excavation. Work will be avoided near watercourses during periods of excessive precipitation and/or excessive snow melt. • The Contractor will develop spill prevention and contingency plans and have them in place prior to construction. Personnel will be trained in how to apply the plans and the plans will be reviewed on a regular basis to 	<ul style="list-style-type: none"> • Erosion and sediment control measures will be regularly inspected by the contractor and contract administrator (County's consultant) to ensure they are functioning and are maintained as required. • If erosion and sediment control measures are not functioning properly, alternative measures will be implemented and prioritized above other construction activities.

Feature	Description of Potential Effects	Project Phase	Mitigation Measures	Monitoring Activities
			strengthen their effectiveness and facilitate continuous improvement. Spills or depositions into watercourses will be immediately contained and cleaned up in accordance with provincial regulatory requirements and the contingency plan. Spills will be reported to the Ontario Spills Action Centre at 1-800-268-6060.	
Natural Areas	Introduction of invasive species into natural areas	Construction	<ul style="list-style-type: none"> Construction equipment should be cleaned prior to bringing it to the site to avoid introducing exotic species from other sites. All disturbed areas of the construction site will be re-vegetated as soon as conditions allow. If extensive invasion of non-native species is identified as a result of the Project, contingency measures may need to be developed in consultation with County parks and forestry staff and NVCA. 	<ul style="list-style-type: none"> Regular inspections will be conducted by the contractor and contract administrator (County's consultant) to ensure that mitigation is implemented.
Adjacent Lands	Soil Compaction	Construction	<ul style="list-style-type: none"> Heavy equipment and material stockpiles will be limited to marked construction areas. Temporary construction staging areas which have been compacted will be rehabilitated upon completion of construction. 	<ul style="list-style-type: none"> Regular inspections will be conducted by the contractor and contract administrator (County's consultant) to ensure that equipment and stockpiles do not extend beyond construction areas. The contractor will ensure that soils in construction areas are rehabilitated to restore previous uses.
Wildlife	Mortality of wildlife inadvertently moving through construction zones	Construction	<ul style="list-style-type: none"> Silt fencing will be properly installed and maintained along watercourses and wetlands to keep wildlife out of work areas. An erosion and sediment control plan will be developed during detailed design. If wildlife inadvertently moves into a construction area, the Environmental Inspector will move the species outside of the work area, if possible, using gloves and a bucket or plastic tub, as appropriate. If any species at risk are encountered that are not identified on relevant permits, all work will cease within the immediate work area and the MECP will be contacted. 	<ul style="list-style-type: none"> The contractor and contract administrator (County's consultant) will be required to regularly monitor fenced areas to ensure that fencing is properly keyed/toed into the ground to ensure that wildlife cannot gain access under fenced area.
Wildlife	Dust effects on wildlife habitat	Construction	<ul style="list-style-type: none"> As appropriate, dust from the work areas will be controlled through suppressants (e.g., water). 	<ul style="list-style-type: none"> Dust emissions will be monitored daily during construction to ensure dust control watering frequency and rates are adequate.
Turtles	Disturbance to habitat or individuals during construction (inc. Blanding's Turtle (Threatened), Snapping Turtle (Special Concern), Map Turtle (Special Concern), Eastern Musk	Design / Construction	<ul style="list-style-type: none"> No in-water work should be carried out between September 1 and April 30 (hibernation period) within the Minesing Swamp PSW. Temporary exclusion fencing may also be considered to prevent turtles (and other wildlife) from entering construction zones located adjacent to watercourses and wetlands. It may be feasible to combine exclusion fencing with silt fencing requirements, by modifying the latter to use wire-backed silt fencing and flaring out the ends of the fencing to redirect wildlife away from the construction zones / roads and back towards the habitat 	<ul style="list-style-type: none"> Monitoring, if identified, through <i>Endangered Species Act</i> approvals will be undertaken.

Feature	Description of Potential Effects	Project Phase	Mitigation Measures	Monitoring Activities
	Turtle (Special Concern) and Spotted Turtle (Endangered)		<p>side of the fence. MNRF Best Practices guidelines are available at: http://files.ontario.ca/environment-and-energy/species-at-risk/mnr_sar_tx_rptl_amp_fnc_en.pdf</p> <ul style="list-style-type: none"> • If culvert works are proposed in this area, opportunities for turtle passage within the culverts should be considered along with permanent fencing to deter turtles from nesting on the trail and guide them to the potential crossing point. Potential crossing points should consider size, length, water level in culvert, and light infiltration in terrestrial (dry) culverts. • Consult with MECP during detailed design to confirm any permitting or mitigation requirements. • Consideration should be given to installing permanent exclusion fencing in the area of the Minesing Swamp to prevent turtles from nesting in the trail / former rail bed. 	
Butternut	Three retainable butternut trees located within the rail corridor may be affected by construction	Design/ Construction	<ul style="list-style-type: none"> • The trail will be designed to avoid the trees and their regulated setbacks to the extent possible. • Where avoidance is not possible, trees will be registered and compensation provided, as required, under the <i>Endangered Species Act</i>. 	<ul style="list-style-type: none"> • Monitoring, if identified, through <i>Endangered Species Act</i> approvals will be undertaken.
Barn Swallow	Could potentially nest on bridges along the trail route	Design/ Construction	<ul style="list-style-type: none"> • Confirm that no nests are present on bridges or large culverts prior to construction. • If nests are observed, requirements under the <i>Endangered Species Act</i> will be carried out prior to construction. 	<ul style="list-style-type: none"> • Monitoring, if identified, through <i>Endangered Species Act</i> approvals will be undertaken.
Groundwater / Wetlands	Effects on hydrology due to dewatering	Design/ Construction	<ul style="list-style-type: none"> • Minor dewatering may be required during installation of culverts. • A geotechnical assessment will be completed to determine dewatering needs. • All requirements under the <i>Ontario Water Resources Act</i>, R.S.O. 1990, c. O.40 with respect to the quality of water discharging into natural receivers will be met, including the following mitigation measures and best practices: • Any discharge from dewatering should outlet to a vegetated area at least 30 m from a significant natural feature or watercourse utilizing a sediment filter bag. • In the event of sediment discharge, all operations will stop immediately until the problem can be resolved. • If significant changes in water levels / seepage areas are noted, operations will cease until water levels recover. 	<ul style="list-style-type: none"> • An Environmental Inspector (County's consultant) should be on-site during any dewatering within 120m of natural features. The Inspector should ensure that the filter bag is working appropriately and ensure that no sediment is entering significant natural features or watercourse.
Groundwater / Surface Water/ Natural Areas	There is potential for spills of fuels or other hazardous materials to occur during fueling of construction equipment or other construction activities	Construction	<ul style="list-style-type: none"> • All materials and equipment used for the purpose of site preparation and project construction shall be operated and stored in a manner that prevents any deleterious substances (petroleum products, silt, etc.) from entering natural features. • Any stockpiled materials will be stored away from natural features. • Refueling and maintenance of construction equipment should occur a minimum of 30 m from a natural feature. • Hazardous material transportation and application will occur in designated areas according to operational procedures. Proper spill containment equipment will be used and maintained on site. • The Contractor will enact best practices for spill prevention. Spills or depositions into watercourses or natural features will be immediately contained and cleaned up in accordance with provincial regulatory requirements and the contingency plan. A hydrocarbon spill response kit will be on site at all times during the work. Spills will be reported to the Ontario Spills Action Centre at 1-800-268-6060. 	<ul style="list-style-type: none"> • Erosion and sediment control measures will be regularly inspected by the contractor and contract administrator (County's consultant) to ensure they are functioning and are maintained as required. • Workers will report any instances of spills to their supervisors.

Feature	Description of Potential Effects	Project Phase	Mitigation Measures	Monitoring Activities
Fish Habitat	Culvert Replacement	Design/ Construction	<ul style="list-style-type: none"> Any in-water works for culvert replacements or structure rehabilitations will require approval under the Federal <i>Fisheries Act</i>. Standard mitigation for in-water works including flow by-pass, installation of ESC measures, fish relocation and working in the appropriate timing window will be required. Any culvert replacements will require the submission of a Request for Review to DFO. Some culvert maintenance project may be able to adhere to the <u>Code of Practice (COP) for Culvert Maintenance</u>. Any fish salvages during construction will be required to take place under a License to Collect Fish for a Scientific Purpose (LCFTSP) obtained from Midhurst District Ministry of Northern Development, Mines, Natural Resources and Forestry (NDMNR). Northern Brook Lamprey are known to be present in Bear Creek, a tributary of the Nottawasaga River located east of Line 5 in Angus. If work below the high-water mark is required on this watercourse, additional mitigation may be required to be determined in consultation with DFO and MECP. 	<ul style="list-style-type: none"> Monitoring requirements to be determined through permitting and approval requirements during detailed design.
All-Natural Features	Salt use during the winter can increase salinity of the wetlands and watercourses in the Study Area changing the water chemistry and harming wildlife the inhabit the area. Stockpiling snow also changes habitat conditions for wildlife.	Operation	<ul style="list-style-type: none"> Currently the County is not planning to maintain the trail in the winter If the trail and bridges are to be maintained during winter months, the use of salt should be avoided or minimized to the extent possible. The use of more natural alternatives should be explored. Stockpiling of snow on near watercourses and wetlands should be avoided where possible. 	<ul style="list-style-type: none"> No monitoring required.
Effects on Cultural Heritage and Archaeological Resources				
Cultural Heritage Features	The trail and bridge may affect the cultural heritage features present at the site.	Construction	<ul style="list-style-type: none"> Requirements for Heritage Impact Assessments will be determined for the Nottawasaga, Mad and Pine River bridges during detailed design to predict potential effects and identify any mitigation and monitoring commitments. Any mitigation identified through those assessments will be carried out prior to construction. 	<ul style="list-style-type: none"> No monitoring required.
Archaeological Resources	There is potential that unexpected archaeological resources are found during construction.	Construction	<ul style="list-style-type: none"> A Stage 2 Archaeological Assessment will be completed if required where outlined in the Stage 1 report. Limited to no work is anticipated in the identified areas. Affected Indigenous communities will be contacted by staff prior to any Stage 2 work or additional work beyond Stage 2, if required, and will be offered an opportunity to participate in field studies and/or report review. Any recommendations identified in through the Stage 2 assessment will be carried out prior to construction, including any design specifications to minimize impacts. In the event that previously undocumented archaeological remains are found during construction activities, the proponent or person discovering the archaeological resources will cease alteration of the site immediately, and the consultant archaeologist, approval authority, and the Cultural Programs Unit of the MHSTCI will be immediately notified. In the event that human remains are discovered, the person discovering the human remains will also immediately notify the police or coroner. 	<ul style="list-style-type: none"> No monitoring required.

Feature	Description of Potential Effects	Project Phase	Mitigation Measures	Monitoring Activities
Effects on the Social/Technical Environment				
Private Property	Noise and dust disrupt the normal enjoyment of adjacent residential properties during construction.	Construction	<ul style="list-style-type: none"> As appropriate, dust from the work areas will be controlled through suppressants (e.g., water). Environmental noise will be reduced through the standard operating practices. Work will be completed in accordance with municipal noise bylaws. 	<ul style="list-style-type: none"> The contractor and contract administrator (County's consultant) will perform regular inspection to ensure that mitigation is implemented.
Private Property	There are potential impacts to adjacent private property from trespassing, littering, vandalism and noise.	Operation	<ul style="list-style-type: none"> Key Stakeholders living adjacent to the trail have been consulted to work towards mitigation for their concerns. The Project Team will continue to engage these residents during detailed design to create new tree lines or other barriers, as required. 	<ul style="list-style-type: none"> No monitoring required.
Farm Operations	The movement of farm equipment across the corridor at established crossing may be affected during construction and long-term use of the trail	Construction/ Operation	<ul style="list-style-type: none"> The County will consult with farmers who have established rail corridor crossings to develop plans to allow crossings to continue during construction and operation. 	<ul style="list-style-type: none"> No monitoring required.
Trail and Bridge Infrastructure/ Public Safety	The project has the potential to be affected by flooding and future climate change conditions.	Operation	<ul style="list-style-type: none"> Appropriate warning signage will be in place around the bridges or other low-lying areas of the trail to warn that the site is within a floodplain and that flood conditions may occur. 	<ul style="list-style-type: none"> No monitoring required.
Current Uses of Existing Trail Sections	<p>The existing sections of trail in Stayner and New Lowell are currently used by hikers and cyclists. Snowmobiling is permitted on the section trail section in Stayner. Existing uses may be impacted during construction and operation.</p> <p>Motorized recreational vehicles may be used in areas of the trail where they are not permitted.</p>	Construction/ Operation	<ul style="list-style-type: none"> Notification will be provided for any temporary closures of the existing trail sections, as required during construction. Snowmobiling will continue to be a permitted use on sections where it is currently allowed. On new trail sections, the use of motorized vehicles will be prohibited. Clear signage will be provided to denote areas with motorized vs. non-motorized use. Bylaw enforcement will be used to limit motorized use in areas where it is not permitted. 	<ul style="list-style-type: none"> No monitoring required.

9.0 Consultation

A key component of the study includes consultation with interested stakeholders, agencies, utilities, Indigenous communities, and local residents who live within the Study Area that may have an interest in the study, which are listed on the Project Contact List (Appendix I1). The Schedule B MCEA requirements include two mandatory public points of contact during the MCEA process. This Study included a Notice of Commencement, and opportunity to participate inviting public input on the study, and a Notice of Completion, at the conclusion of the study.

9.1 Public Consultation

9.1.1 Method of Notification

The Notice of Commencement, inviting public input on the project, was published in the Stayner Sun and Alliston Herald on Thursday January 20, 2022 and Thursday January 27, 2022; also published on the Township of Clearview's website on Friday January 21, 2022. The notice was either mailed or emailed to all included on the Project Contact List including, agencies, utilities and Indigenous communities. A copy of the Notice of Commencement was also mailed to residents living near the study corridor. This included delivery to 996 households by mail.

A copy of the Notice of Commencement is provided in Appendix I2.

9.1.2 Public Information Centre and Survey

Given the current provincial government order to limit social interactions to reduce community spread of the COVID-19 virus, a public engagement was hosted in a virtual environment. Information was provided on the County's website (<https://www.simcoe.ca/BCRYTrail>). The Notice of Commencement included information about the website and opportunities for the public to provide comment. The website included a pre-recorded video presentation to allow participants to comment on the project. The presentation and engagement material were posted starting January 24, 2022 and the County encouraged the public to visit the website to view the presentation and provide feedback by February 18, 2022 allowing 28 days to do so.

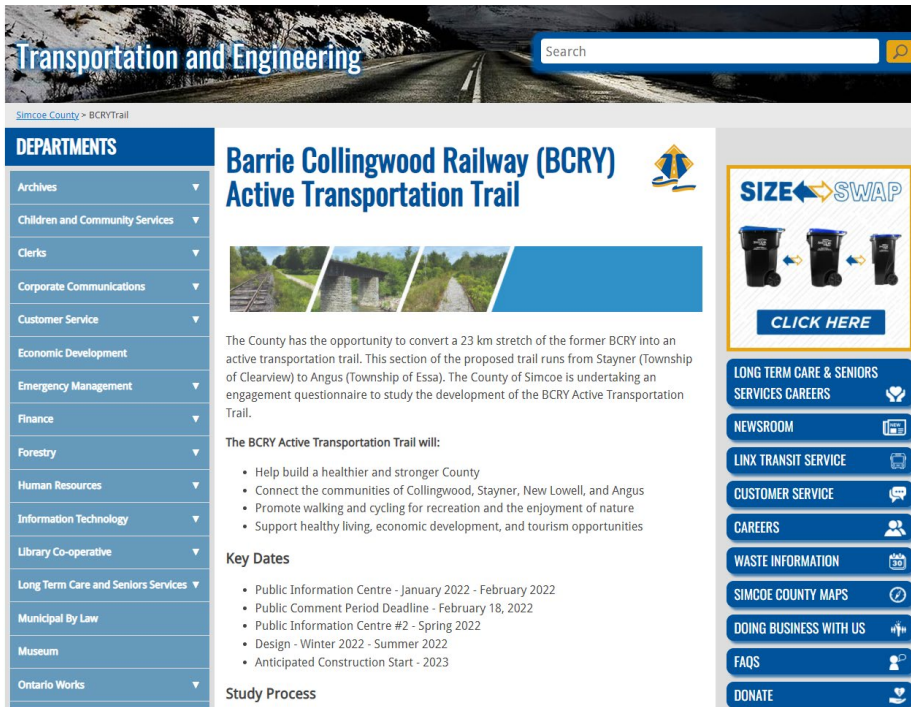


Figure 9.1: Project Website

An online survey engaged local residents and solicited comments on the proposed options for trail routes. In total, 1,178 surveys were completed.

Of the surveys completed 93.6% of people (1103 people) were in support of the proposed Barrie Collingwood Railway Trail. Almost half of respondents (573 respondents) lived outside of the Study Area but within County of Simcoe. The remaining respondents were almost equally split between Angus, Stayner, or New Lowell (279 respondents); Outside of the County of Simcoe (231); and beside or within walking distance of the trail (228 respondents).

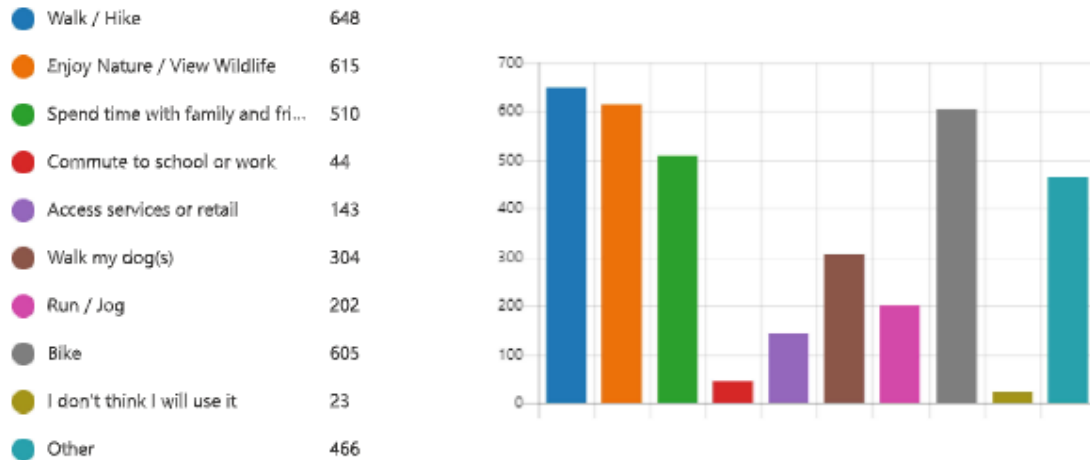
Figure 9.2: Online survey response to Question 5. Please describe where you live.



The four prevailing reasons for using the existing trail system were to take a walk / hike (787 respondents), to enjoy nature and view wildlife (677 respondents), to bike (591 respondents) and to spend time with family and friends (563 respondents). In addition, respondents were asked what reasons they would expect to use the proposed

trail, as summarized in Figure 9.3. Among responses to this question, the category “Other” received significant response with the 23% of these respondents specifying this “Other” desired use to be ATV.

Figure 9.3: Online survey response to Question 13. What are the reasons you expect to use the BCRY Active Transportation Trail? Please check all that apply.



Motorized vehicles were also a key topic of concern in additional comments-most comments were against the use of the trail by ATV’s, dirt bikes, and snowmobiles largely for safety concerns. There was some acceptance of use by e-bikes among these concerns however a few respondents supported ATV’s and snowmobiles with additional questions asking if motorized vehicles would be permitted. Additional concerns included trespassing and property concerns, off-leash dogs on the trail, trail users feeding farm animals, and the need for enforcement. Natural plantings will provide delineation for property lines to help mitigate property concerns.

Some respondents were concerned about protecting the corridor for future rail use or leaving the land as is. The preservation of history was highlighted in comments suggested to provide the County Museum with rails and to recognize the history of the railway.

Copies of the online presentation and survey results are provided in Appendix I - 3.

The survey included a section for general comments and questions. A summary of the comments received, and Project Team response is presented in Table 9.1.

Table 9.1: Summary of Comments

Common Comments	Project Team Response
Support for the Project	
<ul style="list-style-type: none"> • Get it completed as soon as possible!! • Please don't miss this opportunity for active transportation • Long overdue and can't come soon enough! I personally can't wait! • I look forward to being able to safely travel by bike even further on the trail network. • I would just like to reaffirm my support for the trail as it has been proposed, great benefit to many people in Town. • Go for it!! It is needed and a great way to make these communities better in so many ways • Thank you for considering. • Great idea. Let's get it done. • Thank you for considering local, outdoor recreation needs in Simcoe County! • Would be great to have a trail connection down to Angus! • Potential to be a huge tourism draw, could easily be part of a weeklong cycling adventure looping from Barrie through Orillia, Midland, Wasaga Beach, Collingwood and to Barrie. • Great for tourism and local businesses. • Crosswalks would be nice for crossing major roads. • Electric bikes, scooters and mobility vehicles might all use this trail. Ensure that 3 ft is wide enough. 	<p>The County appreciates your support for the Project.</p> <p>Trail width is 3 m which exceeds the AODA minimum requirement of a minimum clear width of 1,000 mm.</p>
Property Concerns	
<ul style="list-style-type: none"> • Live adjacent to the proposed trail and concerned about motorized vehicles such as snowmobiles and dirt bikes, creating a noise nuisance as well as disturb the plethora of small wildlife (birds) that visit my backyard. 	<p>Motorized vehicles are not permitted on the new sections of trail and as such, noise nuisance will be minimal.</p>

Common Comments	Project Team Response
<ul style="list-style-type: none"> • Affects our life EVERY SINGLE DAY! It robs us of any security we have. It opens our property up for anyone and everyone to just walk right through. Our peace and serenity will be lost. • Ensure privacy options available to landowners where the trail travels right behind their home and currently has open sightlines (through natural plantings or fencing, proper restrictive barriers). • Concerns regarding security issue, potentially leading to criminal activity through property damage or theft. • Very concerned with members of the public regularly walking along and potentially feeding livestock along the proposed trail. 	<p>Privacy and trespassing concerns are a priority for the County. Affected landowners will be contacted directly to discuss plantings or other privacy options.</p>
Concerns and Comments regarding Motorized Vehicles	
<ul style="list-style-type: none"> • Concern for potential illegal use by ATV's, snowmobiles, and other vehicles which could be a safety hazard and noise concern. • Concern to have trail overrun with motorized vehicles--especially speeding back and forth late at night. • During non-winter months do not allow motorized vehicles (ATVs, dirt bikes, etc.) on the trails. Petal bikes, strollers, e-bikes should be the thing motorized on the trail. ATVs now have access to all Township roads. ATV's and dirt bikes just rip up the trail especially if you are biking or using a stroller, very annoying. • If this is not meant to be used by dirt bikes, ATVs or snowmobiles then very tight access openings must be constructed. Make sure cars/trucks cannot physically enter the trail. • No ATVs, dirt bikes or snowmobiles. They are constantly in the Simcoe County forests and it is very disturbing. • Make sure that motorized vehicles are not permitted as they ruin trails 	<p>The County acknowledges safety and noise concerns regarding motorized vehicles. Motorized vehicles will not be permitted on the new sections of trail.</p>

Common Comments	Project Team Response
<ul style="list-style-type: none"> • No motorized vehicles with the exception of e-bikes should be allowed to use this trail. • Also, e-bikes should be banned, like many of the trails in Toronto. Many e-bikes are unregulated and are too fast on the trail at 50km/h. Not safe for normal cyclists and pedestrians. • Would not want ATVs on the trail. The tire ruts will require additional maintenance and the straight level profile of the trail will lead to speeding unless counter measures are in place. Snowmobiles are less of a problem as they won't damage the trail base. • Ensure that there are no motorized vehicles on the trail in the summer • Snowmobile use already an issue; snowmobiles should be rerouted somehow onto their own trail. • Don't allow anything motorized all year (snowmobiles, motorcycles, ATV's, cars) • Making sure it's just for walking hiking and biking • Make trail be used for walking, biking, observing nature. 	
Support for Motorized Vehicles	
<ul style="list-style-type: none"> • Would be nice to make it ATV accessible as well like other communities have done, a shared trail. • Allow OFSC use in the winter and OFATV • Trail should be multi use and include motorized (ATV/ dirt bikes /snowmobile). • This questionnaire is very biased as it directly leaves out motorized vehicles as well as horseback riding, the survey from 2019 already showed unanimous support for powersports to be included in the multi-use trail system. This questionnaire has also been made difficult to find or 	<p>We acknowledge that some residents may want to use ATV's, snowmobiles, and dirt bikes, however this will not be a permitted use.</p> <p>Portions of the railway pass through the County's Greenlands designation which was created with the objective to protect and restore the County's natural heritage system and to sustain the natural heritage features and areas and ecological functions of the Greenlands and local natural</p>

Common Comments	Project Team Response
<p>access to general public especially those who do not use electronic devices to keep up to date</p>	<p>heritage systems. With respect to the proposed trail, a key exemption to development restrictions in the Greenlands designation is outdoor passive recreational uses. Motorized vehicles are not permitted within the Greenlands designation. Additionally, damage to the trail by motorized vehicles impacts public safety and enjoyment as well as increases the cost of maintenance and repairs.</p> <p>Due to COVID-19 restrictions, the online PIC did not allow for distribution of paper questionnaires. Contact information was provided on the Notice of Commencement/PIC to allow those without internet access an option to request a paper copy or an alternative means to provide comment.</p>
Environmental Concerns	
<ul style="list-style-type: none"> • Concern that if you replace the trail and tracks in the park the flood plain in Stayner is drastically decreased. • New plantings should be native. • Leave the current land as is period. That's nature at its finest. • Concerned about potential spread of invasive species along new trail vector. Should be signed appropriately with boot brushes and potential other materials should be present at trail heads to limit seeds spreading along the trail and potential compensation to landowners where invasive species have become a problem because of the spread from Simcoe property. 	<p>The floodplain is regulated by Nottawasaga Valley Conservation Authority (NVCA) through O. Reg. 172/06. Floodplain concerns will be addressed before permitting at the detailed design stage.</p> <p>Any lands disturbed during construction will be re-seeded with native species as soon as possible to avoid the spread of invasive species.</p>

Common Comments	Project Team Response
	New plantings are planned as part of the project to provide privacy and will be varieties native to the region. Boot brushes will be considered during the detailed design.
Funding Concerns	
<ul style="list-style-type: none"> • Against any costs to taxpayers for a facility that I would not use. • This is a useless project. Instead of spending money to build what would amount to be an underutilized walking trail, any money should be spent improving transit infrastructure between Collingwood and Angus going to Barrie. This would be more useful to the area and would have greater environmental and economic benefits for the area. • So, wasting tax dollars on this. If the community wants this so badly, they can raise funds to make it happen. • Sell to adjacent property owners with proceeds being utilized for numerous, more important projects within the community. This trail will have huge initial costs, huge ongoing maintenance costs, huge ongoing administrative costs through improper use, trespassing issues, etc. This is a rural area with numerous existing trails, Simcoe County Forests, and natural areas to hike, walk, ride, etc. 	<p>Before proceeding with any project, the County evaluated the costs and benefits of the project. The Barrie Collingwood Railway Active Transportation Trail will connect the communities of Angus and Stayner.</p>
Safety Concerns	
<ul style="list-style-type: none"> • DO NOT PUT A TRAIL HERE THROUGH ANGUS. Lots of vandalism, drug use, assault, rape, and violent crimes have happened exactly where the new one is proposed. Zero available parking other than where there are lots of houses with young children playing outside. • Concern for the safety of the older bridge across the river. • Concern regarding a trail crossing at point J due to the traffic turning onto Sunnidale Tos Townline Road. Several vehicle accidents a year; also, a 	<p>Before proceeding with any project, the County evaluated the costs and benefits of the project. The Barrie Collingwood Railway Active Transportation Trail will mitigate safety concerns better sightlines and maintenance.</p> <p>Parking will be available at trail heads.</p>

Common Comments	Project Team Response
<p>problem with impatient people passing on the shoulder of the road as cars are waiting to turn onto the Townline. Suggest either a speed reduction on CR 10, a left turn lane maybe or moving the pedestrian crossing away from the intersection.</p> <ul style="list-style-type: none"> Do not use 2 (1 1/2") x10 lumber laid in the direction of travel over bridges. The 1 1/2" edges can trip a bike. 	<p>The bridge decking will be designed with cyclists and pedestrians in mind.</p> <p>Safety at trail-road crossings will be investigated through a transportation analysis.</p>
Alternative Solutions	
<ul style="list-style-type: none"> Only options that should be considered are those that would keep the trail on the existing rail bed, they are the least costly, least intrusive, and least environmentally damaging options. Remove track and rail ties and build on the existing rail bed. Remove the used rail lines and ties and place the proposed trail on top of the existing bed, not beside. Remove rails and sell as scrap metal or cut into one-foot lengths and sell as fundraising for trail maintenance; remove railway ties, do not bury toxic waste; use limestone screenings, except at intersections and crossing; not pave or use asphalt; be environmentally friendly. Selling the steel rails and burying the cross ties is the way to go because if you dig out all the cross ties, they will become a piled up environmental hazard elsewhere. 	<p>The Preferred Alternative is on the existing rail bed for most of the trail with the exception of the 2.2 km portion of the trail that is beside the rails. These areas are already flat and previously cleared. Please refer to the Evaluation Matrix for further detail.</p>
Tourism and Business Opportunities	
<ul style="list-style-type: none"> Consider moving some of the rails to the County Museum. This project provided as a great opportunity to expand on the museum's railroad related displays at a low cost. To offset the provincial/municipal costs of maintaining the trail, encourage local businesses to pay a nominal fee that goes towards maintenance of 	<p>Donation of the rails to the County Museum will be discussed at Detailed Design.</p>

Common Comments	Project Team Response
<p>the trail. In return, erect a plaque on a section of the trail that indicates said business has sponsored this part of the trail. Free advertising for the business.</p> <ul style="list-style-type: none"> Any opportunities to make the trails less than 100% dead-straight are always welcome (as it can get boring to see the end from 30km away). Any off-shoot trails to interesting forests or natural features should be included in small loops or any other geological features that can be pointed out (overlooks, ponds, etc.). 	<p>Offshoot trails are not part of the scope of the current project but are noted for future trail expansion.</p> <p>Consideration for working with local businesses will be considered at a later stage such as Detailed Design or after construction is completed.</p>
<p>Use of Corridor by Trains</p>	
<ul style="list-style-type: none"> Concern with removing or building over existing rail is it limits future growth down the road if the GO train can access Don't make the same mistake Barrie did and sell off parts of the Barrie-Orillia line for development for a quick dollar and remove any chance of future rail operations which are key to major industrial growth. Opportunity to use the old tracks for a modern version of a train (transport people and bikes to and from different attractions). Old school bus can run the rails with a little work and imagination; have tours of old rail towns along the line, places for refreshments crafts etc. I believe the corridor should be used for small-scale passenger rail alongside the trail Rail lines are carbon friendly please leave this rail line in place and invite GO Transit to use the rails. GO system could be developed all the way to Collingwood, reducing the need for more roads / highways. Rail track should remain and there be a tourist attraction, like so many other locations, for a train to take tourists to those various destinations, such as a day in Collingwood, Stayner, etc. 	<p>There are currently no plans to use the corridor for rail purposes. Future rail use has been investigated and did not proceed. The rail corridor is to be preserved for future higher order transit use. Should an opportunity for future rail use become feasible, the trail may be reverted to a railway corridor.</p>

Common Comments	Project Team Response
Suggestions of Extension / Completion	
<ul style="list-style-type: none"> • Extend from Barrie to Angus • Complete the trail connecting from Collingwood to Angus, to give another active transport option for our region. • A link from Collingwood to Angus would be fantastic - encourages biking and exercise. I guess the link would be from Meaford to Angus! • I would love to see cooperation between different communities to improve trail connections which would benefit both residents and tourists. • Sections "J" and "K" would be used often much more than the other sections from the perspective of folks from Barrie and Angus. The businesses in Creemore are already familiar with the needs of Cyclists and cater to us. The section mentioned would allow easier access to Creemore. • If possible, the trail should be inclusive to as many groups as it is safe to include. • Trail section B (Warrington Rd in Stayner) needs a separate walking path from the snowmobile trail. 	<p>An extension to Barrie is not within the scope of the current project however, interest is noted. The section of the rail from Angus (5th Line) to Barrie is still active as part of the Barrie Collingwood Railway and owned by the City of Barrie.</p> <p>Through the use of surface treatment, the trail will be inclusive to users of many ages and abilities.</p> <p>As the trail will not be maintained in the winter, a separate trail along Warrington Rd. is not required.</p>
Amenities	
<ul style="list-style-type: none"> • Maps at the trailhead outlining various distances along the trail. Information board about the area. Along the trail it would be nice to have mile markers, wayfinding aids, You Are Here. Areas off the trail for potential Geocaches (if permissible). A self-guided multi-checkpoint scavenger along the way. • This railway helped to open the western United States and Canada open to settlement. There is also an opportunity to recognize First Nations history along the trail. Hope is that both will be incorporated into the development of this trail. • Implement an adopt a trail section program. 	<p>Signage will be provided at trailheads and along the trail. Given the straight, flat corridor and the pathway will be clear to users.</p> <p>During detailed design a plan for information, historical and interpretive signage will be developed and incorporated into the construction.</p>

Common Comments	Project Team Response
<ul style="list-style-type: none"> • Preserve as much history of the Barrie Collingwood Railway as possible. • Plaques indicating local natural features such as wetlands, interesting geographic or geological features (tree and wildlife photos; local fishing regulations near the river). Also, there was at one time an archaeological dig in the area that identified a settlement and artifacts of the Petun's. • Provide naturist options for people exploring, learning about its history, vegetation, and wildlife. • Signage indicating trail is frequented by local wildlife, especially coyotes and sometimes bears. Information of best practices if encounter such wildlife. • Rail trails are amazing for persons with disabilities because of the flat/straight nature of the trail. Any inclusive additions that can be included are always appreciated. • Shaded areas; large staging for truck and trailer parking; NO to garbage cans and washrooms! 	
Maintenance Concerns	
<ul style="list-style-type: none"> • Trail groomed in winter to facilitate all year-round use. • Pave for safety of residents and the family's; asphalt would be preferable • Asphalted or at least very hard compacted to allow road bikes • Gravel or paved trail? • A stone dust trail is very adequate, is does not get hot, it is easily groomed, it packs well for bikes and does not break up or heave like asphalt. See the Georgian Trail, which has been there 30 years with a stone dust surface. • Washroom facilities must be maintained properly. 	<p>The trail will not be maintained over the winter. The rest of the year, the County will be responsible for trail maintenance.</p> <p>The trail will have a stone dust surface.</p>

Common Comments	Project Team Response
General Concerns	
<ul style="list-style-type: none"> • Dogs off leash on trails, and in adjacent yards. • Enforcement (ensure proper signage and enforcement of animal rules would be necessary). • Adding all sorts of amenities is creating an amusement park environment and bringing too many conflicting elements together such as bikes, dogs, cars etc. is a recipe for disaster. • Paved like the Tay shore trail between Midland and Wabashshene. The trail is so well used even by wheelchair because it is paved 	<p>Signage will be posted along the trail and trailheads. Signage will include requirements to keep dogs on a leash.</p> <p>The trail will be a flat surface, so it is available to users of a variety of abilities.</p>

9.1.3 Other Comments Received

Several comments were received through means outside of the online survey. One phone call was received and is summarized in Table 9.2.

Table 9.2: Summary of Phone Calls Received

Date	Topic of Phone Call Received	Response Provided
January 20, 2022	Voicemail requesting to be added to the project contact list.	Burnside spoke to resident and obtained contact information to add to contact list.

Several comments were submitted through email and one letter and are documented in Table 9.3. Copies of emails can be found in Appendix I-4.

Table 9.3: Summary of Email and Letter Correspondence

Email	Comment Received	Project Team Response
January 31, 2022	Email inquiring how close the trail will go to their property.	Responded to email with approximate distance of property from the Barrie Collingwood ROW

Email	Comment Received	Project Team Response
<p>January 24, 2022</p>	<p>Phone call, they are opposed to the trail and motorized vehicle use as it is close to their home. They feel that their security and privacy will be compromised.</p> <p>They could not access the "Rails to trail concerns of adjacent property owners" document link and would like to read it in full.</p> <p>They would like to ensure they bring up their concerns early in the process.</p> <p>They are also concerned with "presence of contaminants in the soil below" under the tracks. They requested a one-on-one meeting to discuss our concerns.</p>	<p>January 26 County emailed response with appreciation for families concerns with our proposed trail construction. While it's too early to discuss the specific details at this point, the County agree that the property in question, as well as some of the neighbouring properties will have similar concerns due to an increase in user traffic of the railway corridor.</p> <p>The County attached the requested document, 'Rail to trail concerns of adjacent property owners. Although the document was prepared by the Ontario Federation of Agriculture (OFA) and mostly related to agricultural purposes, there are contents in this document that may guide the family through this process.</p> <p>Given the property's proximity to the Rail Right of Way and the proposed trail construction an onsite meeting would be beneficial; however, would suggest a spring date be more appropriate, also by this time the team would have reviewed the public comments received from the PIC #1 lending to other certain issues. The County would also like to meet with other property owners in the same situation. County noted if the resident was speaking to any neighbours, to please encourage them to send an email to schedule a time for everyone in the spring. County suggested on-site meetings in late March or early April depending on the weather patterns.</p>

Email	Comment Received	Project Team Response
<p>February 7, 2022</p>	<p>Resident emailed regarding their concerns about privacy, security and noise. Resident requested whether new trail will be for walking and biking only with all motorized vehicles prohibited? How will this be enforced and controlled, and will the trail be patrolled and maintained by the Township on a regular basis?</p> <p>Resident responded to February 8 County email noting that the neighbors are also very concerned about possible motorized vehicles behind houses. A number of neighbors which back onto tracks have discussed this and would like for council to assure residents this will be pedestrian use only.</p>	<p>County responded to email on February 8 explaining that the allowed usage of trail will be determined by County Council based on EA recommendations and will also look into enforcement and maintenance of the trail. The Team expects to have more information in the spring after the first PIC and for PIC #2 which is scheduled for spring this year.</p>
<p>February 16, 2022</p>	<p>Letter referencing a committee recommends that Alternative #1 be selected as preferred. Said committee has had extensive experience using this alternative. The track bed provides a solid and almost indestructible base, and guarantees excellent drainage, with maintenance reduced given the stability. The removal of the railway ties eliminates an environmental issue and ensures that there will be no changes to the trail surface as the railway ties deteriorate over time. Committee suggests that two trails be built (pedestrians and cyclists). Having two trails in these higher traffic areas eliminates potential conflicts between pedestrians and cyclists.</p>	<p>Comment noted. Refer to evaluation matrix for justification of the preferred Alternative.</p>

Email	Comment Received	Project Team Response
<p>February 17, 2022</p>	<p>Email from resident who has volunteered for development of trail in Collingwood for 30 years. They are pleased with County's initiative to develop BCRY corridor into a multi use trail. Resident, notes that the area under consideration is not adequate, sighting that the bridge over Batteaux Creek needs to be included, as there is already a very usable stone dusted trail between the Collingwood and Stayner.</p> <p>Resident recommends that some tie and rail removal should be included to make proper connection to the established trail along with a bridge safety upgrade with railings. Resident does not recommend removing the rails and covering the ties with asphalt, as it would end up with decaying ties and a very washboard bumpy trail. Must remove ties. A stone dust, well packed and groomed surface would be the best trail surface and easy to maintain.</p>	<p>Comment noted. A trail between Stayner and Collingwood is not part of the current project scope but interest in this section is noted.</p> <p>Refer to evaluation matrix for justification of the preferred Alternative.</p>
<p>February 19 2022</p>	<p>Residents acknowledge receipt of notice and has seen in newspaper; also assumes they are on Project Contact List.</p>	<p>Comment noted. Resident added to contact list.</p>

9.2 Adjacent Landowners

The County had discussions with several landowners directly adjacent to the rail corridor who currently have a direct view, no vegetation or fence to distinguish property lines and a house close to the corridor. Discussions centered around opportunities to block views with vegetation and better denote property lines. These discussions will be ongoing throughout detailed design.

9.3 Agency Consultation

On January 20, 2022, agencies listed in the Project Contact List (Appendix I-1) were contacted by email / mail including the joint Notice of Commencement and Public Information Centre and opportunity to participate and input on the study. A response was received from MECP. This email detailed the Ministry's interest relates to the following areas: Planning and Policy, Source Water Protection, Climate Change, Air Quality, Dust and Noise, Ecosystem Protection and Restoration, Species at Risk, Surface Water, Groundwater, Excess Materials Management, Contaminated Sites, Servicing, Utilities and Facilities, Mitigation and Monitoring, Consultation, and the Class EA Process. This response is presented in Appendix I5.

The Notice of Commencement was sent to NVCA. No response was received. Due to the presence of NVCA Regulated Area within the Study Area, NVCA will be contacting as part of the permitting process.

9.4 Consultation with Indigenous Communities

On January 20, 2022, the following Indigenous communities were notified of the project and provided with an opportunity to provide initial comments.

- Alderville First Nation;
- Beausoleil First Nation;
- Chippewas of Georgina Island First Nation;
- Chippewas of Mnjikaning First Nation (Rama);
- Curve Lake First Nation;
- Hiawatha First Nation;
- Huron-Wendat Nation;
- Métis Nation of Ontario;
- Mississaugas of Scugog Island First Nation; and
- Williams Treaties.

Alderville First Nation indicated the Study Area to be outside of the community's territory and therefore, they will not be commenting.

Beausoliel First Nation confirmed receipt of the Notice of Commencement and Public Information Centre.

Hiawatha First Nation indicated they have no interest in the project, however, would like to receive a copy of “environmental impacts”.

Correspondence is provided in Appendix I-6.

Williams Treaty Coordinator, Mississaugas of Scugog Island First Nation, Huron Wendat, Curve Lake First Nation, Chippewas of Mnjikaning First Nation (Rama), Chippewas of Georgina Island were contacted by telephone to follow-up on the Notice of Commencement and Public Information Centre but no response was received.

10.0 Next Steps

10.1 Commitments for Future Studies

The following future studies will be completed early in the detailed design process such that any findings can be incorporated into the design, as required:

- An Aquatic Assessment will be completed prior to completion of the detailed design. The assessment will study potential impacts to fish and fish habitat as a result of work on culverts and bridges along the trail route.
- Detailed bridge and trail designs and grading plans will be prepared and submitted to NVCA for review in accordance with NVCA O. Reg. 172/06. The bridges and trails will be designed in accordance with CVC Regulations and will be designed to ensure flood and erosion risk are minimized and are within acceptable parameters.
- Two culverts within Angus which were not previously included in heritage assessment may require evaluation in a Cultural Heritage Evaluation Report.
- Heritage Impact Assessments may be required for the Nottawasaga, Pine and Mad River bridges. This will be confirmed during detailed design.
- A Stage 2 Archaeological Assessment will be required for portions of the trail located in areas of high archaeological potential, as noted by ASI in the Stage 1 Archaeological Assessment. This includes proposed staging areas. Some of this work may be completed through separate, but related studies (i.e., the Stage 2 Archaeological Assessment for the staging area in Stayner may be completed through the Stayner Downtown Revitalization). Interested Indigenous communities will be notified prior to commencement of Stage 2 work and will be offered an opportunity to participate.

10.2 Commitments for Future Consultation and Notification

The following commitments have been made for future consultation:

- Adjacent landowners will be notified prior to construction.

- Notification will be provided for any temporary closures of intersecting roadways, as required during construction.

10.3 Permits and Approvals

The following permits and approvals will be obtained prior to construction:

- *Fisheries Act* compliance / approval from the Department of Fisheries and Oceans;
- Any culvert replacements will require the submission of a Request for Review to DFO;
- Any fish salvages during construction will be required to take place under a License to Collect Fish for a Scientific Purpose obtained from Midhurst District NDMNRF;
- If any watercourse crossings require work below the high-water mark, a Request for Review will be submitted to DFO to ensure no serious harm to fish and fish habitat will occur;
- Permit approval under NVCA O. Reg. 172/06;
- Removal of any Butternut trees in the corridor (BN001, BN002, BN003 as shown on Figure 5-3) will require registration in consultation with MECP; and
- MECP will be consulted regarding the need for additional permits for other species, including Red-headed Woodpecker and Barn Swallow (if present and actively nesting on bridges).

11.0 Conclusions

As per the requirements of the MCEA, this PFR is available for public review and comment for a period of 30 calendar days following the publication of the Notice of Completion.

Concerns regarding the project should be directed to the contacts listed in the Notice of Completion. If concerns relating to Aboriginal or Treaty Rights arise regarding this project which cannot be resolved in discussion with the County, a person or party may request that the Minister of the Environment make an Order for the project to comply with Section 16 of the *Environmental Assessment Act*, which addresses individual Environmental Assessments. Requests must be received by the Minister within 30 calendar days of the first publication of the Notice of Completion.

If the Minister does not receive a request for a Section 16 Order within the 30 calendar days, then the project will move forward to detailed design, approvals process and subsequent implementation of the Preferred Solution.

Respectfully submitted by:

R.J. Burnside & Associates Limited

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