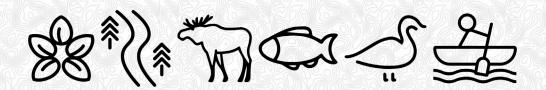




FINAL

Visual Aesthetics Study Plan

May 2021





Visual Aesthetics Study Plan

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Revision History

Rev # Date		Date	Revision Description
Draft June 2020 Submitted "Visual Environment Study Plan" to the Agency		Submitted "Visual Environment Study Plan" to the Agency	
Final May 2021 Revised to address federal and provincial agency comments			



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Visual Aesthetics Study Plan

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Appendices

Appendix A. Preliminary List of Data Sources

Appendix B. Agency Comments on the Draft Study Plan

Acronyms and Abbreviations

Agency, the ... Impact Assessment Agency of Canada

CAR Community Access Road CanVec Canadian Vector Data

EA..... Environmental Assessment

Esri..... Environmental Systems Research Institute

GBA+..... Gender Based Analysis Plus

IA Impact Assessment

IAA..... Impact Assessment Act

IS Impact Statement

km..... Kilometre

LiDAR Light Detection and Ranging

LSA Local Study Area

MECP Ontario Ministry of the Environment, Conservation and Parks

MFFN...... Marten Falls First Nation

MNRF Ministry of Natural Resources and Forestry

PDA Project Development Area

PDEM Provincial Digital Elevation Model

PDA Project Development Area

QA / QC Quality Assurance / Quality Control

RSA Regional Study Area

SAR Species at Risk

TISG Tailored Impact Statement Guidelines

ToR Terms of Reference VC...... Valued Component

VNS Visual Nature Studio



Visual Aesthetics Study Plan

1. Introduction

The Proponent of the Community Access Road (CAR or the Project) is Marten Falls First Nation (MFFN), a remote First Nation community in northern Ontario located at the junction of the Albany and Ogoki rivers, approximately 430 kilometres (km) from Thunder Bay, Ontario. The MFFN community is proposing an all-season Community Access Road that will connect the MFFN community to Ontario's provincial highway network (Highway 643) to the south via the existing Painter Lake Road. MFFN, as the Proponent of the Project, has formed a MFFN CAR Project Team that includes MFFN CAR Community Member Advisors and MFFN CAR Project Consultants who act with input, guidance and direction from the MFFN Chief and Council.

This document outlines the Study Plan for the Visual Environment to support a coordinated Impact Assessment (IA) required for Project review by the Impact Assessment Agency of Canada (the Agency) under the federal *Impact Assessment Act* (IAA) and Environmental Assessment (EA) required for Project review by the Ontario Ministry of the Environment, Conservation and Parks (MECP) under the Ontario *Environmental Assessment Act*.

1.1 Federal and Provincial Terminology

The study plans have been prepared using federal terminology, however, the respective provincial terminology has been provided in **Table 1-1** for reference. The terms can be used interchangeably.

Table 1-1: Equivalent Federal and Provincial Terms

Provincial Term	Federal Term
Criteria	Valued Component
Impact Management Measure	Mitigation Measure
Net Effects	Residual Effects
Record of Consultation	Record of Engagement





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1.2 Project Study Plans

This Study Plan is one of a group of study plans created for the Project. **Table 1-2** includes the study plans for each environmental discipline currently planned for the Project and the valued components (VCs) covered by the study plans where applicable.

Table 1-2: Project Study Plans and Valued Components

Environmental Discipline	Study Plan Name	Valued Component(s)
Aboriginal and Treaty Rights and Interests	Aboriginal and Treaty Rights and Interests Study Plan	 Indigenous Current Use of Lands and Resources for Traditional Purposes Cultural Continuity (ability to practice and transmit cultural traditions)
Atmospheric Environment	Atmospheric Environment and Greenhouse Gases Study Plan	■ Air Quality ■ Greenhouse Gas Emissions
Climate Change	Climate Adaptation and Resiliency Study Plan	■ Climate Change
Acoustic and Vibration Environment	Acoustic and Vibration Environment Study Plan	NoiseVibration
Physiography, Geology, Terrain and Soils	Physiography, Terrain and Soils Study Plan	■ Physiography, Terrain and Soils
Surface Water	■ Surface Water Study Plan	■ Surface Water
Groundwater and Geochemistry	■ Groundwater and Geochemistry Study Plan	■ Groundwater
Vegetation	■ Vegetation Study Plan	 Wetland and Riparian Ecosystems Upland Ecosystems Designated Areas (Areas of Natural and Scientific Interest, Environmentally Significant Areas, Significant Woodlands, Critical Landform / Vegetation Associations) Traditional Use Plants and SAR Plant Populations (including species with special conservation status or rarity in the province)
	■ Peatlands Study Plan	■ Peatland Ecosystems (bogs and fens)

^{1.} The use of the term environment in this document is inclusive of the components of the environment that are included in the Ontario Environmental Assessment Act definition, which includes a general description of the Social, cultural, built and natural environments.





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Environmental Discipline	Study Plan Name	Valued Component(s)
Wildlife	■ Wildlife Study Plan	 Bats (including SAR-bats such as: Little Brown Myotis [Myotis lucifugus], Northern Myotis [Myotis septentrionalis] and Tricolored bat [Perimyotis subflavus]) Fur Bearers (proxy VC² American Marten [Martes americana], Beaver [Castor canadensis] and Wolverine [Gulo gulo]) Amphibians and Reptiles Pollinating Insects
	Ungulates (Moose and Caribou) Study Plan	Moose (Alces alces)Caribou, boreal population (Rangifer tarandus)
	■ Bird Study Plan	 Forest Birds (proxy VC of Red-eyed Vireo [Vireo olivaceus] for deciduous forest, Ovenbird [Seirus aurocapilla] for mixedwood forest, Dark-eyed Junco [Junco hyemalis] for coniferous forest and disturbed forest Raptors (proxy VC of Osprey [Pandion haliaetus] for diurnal raptors and Boreal Owl [Aegolius funereus] for nocturnal raptors Shorebirds (proxy VC of Wilson's Snipe [Gallingo delicata]) Waterfowl (proxy VC of Mallard [Anas platyrhynchos]) Bog / Fen Birds and Other Wetland Birds (proxy VC of Palm Warbler [Setophaga palmarum] for bogs, Common Yellowthroat [Geothlypis trichas] for fens; and Northern Waterthrush [Parkesia noveboracensis] for swamps. SAR birds: Canada Warbler (Cardellina canadensis), Chimney Swift (Chaetura pelagica), Common Nighthawk (Chordeiles minor), Eastern Whip-poor-will (Antrostomus vociferous), Eastern Wood-Pewee (Contopus virens), Evening Grosbeak (Coccothraustes vespertinus), Olivesided Flycatcher (Contopus cooperi), Bald Eagle (Haliaeetus leucocephalus), Peregrine Falcon (Falco peregrinus), Short-eared Owl (Asio flammeus), Bank Swallow (Riparia riparia), Banr Swallow (Hirundo rustica), Black Tern (Childonias niger), Rusty Blackbird (Euphagus carolinus), Yellow Rail (Coturnicops noveboracensis)
Fish and Fish Habitat	■ Fish and Fish Habitat Study Plan	 Lake Sturgeon (Acipenser fulvescens) Walleye (Sander vitreus) Brook Trout (Salvelinus fontinalis) Northern Pike (Esox lucius) Lake Whitefish (Coregonus clupeaformis) Chain Pickerel (Esox niger) Yellow Perch (Perca flavescens)

² A proxy VC is used when looking at the effects of one species that represents many others.





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Environmental Discipline	Study Plan Name	Valued Component(s)
		 Cisco (Coregonus artedii) Burbot (Lota lota) Longnose Sucker (Catostomus catostomus) White Sucker (Catostomus commersonii) Forage / Prey Species (including species such as Lake Chub [Couesius plumbeus]) Lower Trophic Organisms (e.g., benthic invertebrates)
Social	■ Social Study Plan	 Housing and Accommodation Community Service and Infrastructure Transportation Community Well-being Populations and Demographics
Economy	■ Economic Study Plan	Regional EconomyLabour Force and EmploymentGovernment Finances
Land and Resource Use	■ Land and Resource Use Study Plan	 Land Use Compatibility Parks and Protected Areas Extractive Industry Forestry Industry Energy and Linear Infrastructure Recreation and Tourism
Human Health and Community Safety	Human Health and Community Safety Study Plan	 Public Safety Public Health Diet Environmental Factors Influencing Health
Visual Aesthetics	■ Visual Aesthetics Study Plan	 Visual Contrast / Character Visibility Visual Sensitivity
Archaeological and Cultural Heritage	■ Cultural Heritage Study Plan	 Archaeological Sites and Resources Built Heritage Resources and Cultural Heritage Landscapes

It should be noted that while there is not a consultation study plan, the Project has developed the *Consultation and Engagement Plan to Support the Environmental Assessment / Impact Statement* (AECOM 2020) (referred to as the Impact Statement [IS] / EA Consultation Plan).





Visual Aesthetics Study Plan

2. Purpose and Objectives

The key objectives of conducting an IA / EA are to describe the existing environment, gather sufficient information to predict Project-related effects (positive and negative, direct and indirect) of the Project and alternatives on the environment, determine measures needed to avoid or minimize adverse Project effects, and enhance beneficial Project effects where feasible, and to undertake consultation and engagement throughout. The purpose of this Study Plan is to explain:

- A baseline³ study methodology that will result in a comprehensive description of the existing environment potentially impacted by the Project;
- How efficient and transparent data management and analysis will be undertaken;
- Effects assessment scoping inputs specific to the Visual Environment that will allow for potential effects of the Project on the existing environment to be appropriately assessed in the IS / EA Report; and
- How the Study Plan aligns with federal and provincial requirements and guidance, including the Agency's Tailored Impact Statement Guidelines (TISG), dated February 24, 2020 (the Agency 2020c), for this Project and applicable provincial agency comments on the Draft Terms of Reference (ToR)⁴.

As required by the IAA and referenced in TISG Section 7.3, work plans will also be developed for disciplines as required. It is anticipated the work plans will include further details on how to action the study plans; for example they would contain a schedule for the key work tasks.

For the purposes of establishing appropriate context, the Study Plan begins with background and relevant information on:

- Study Plan related discussions with the Agency, the MECP and applicable agencies to date (Section 3);
- The approach to Project consultation and engagement (Section 4);
- How Indigenous Knowledge will be collected and used in the IA / EA (Section 5); and
- The spatial and temporal boundaries that will be used for the IA / EA (Section 6).

^{4.} If necessary, the Study Plan will be updated to reflect the approved ToR if approval is obtained.



^{3.} Baseline refers to the current conditions of the environment potentially impacted by the Project. Baseline conditions serve as a reference against which changes due the Project are measured.



Visual Aesthetics Study Plan

2.1 Approach to Handling Confidential Information

2.1.1 Indigenous Knowledge

Permission from the Indigenous community will be sought before including Indigenous Knowledge in the IS / EA Report, regardless of the source of the Indigenous Knowledge. Sensitive and / or confidential information will be specifically collected through the Indigenous Knowledge Program to inform the IS / EA Report, and its use and publication will be governed by Indigenous community-specific Indigenous Knowledge Sharing Agreements. Sensitive and / or confidential information collected through Indigenous Knowledge Sharing Agreements will be protected from public or third-party disclosure and will be established between the Proponent and Indigenous communities participating in the Indigenous Knowledge Program prior to the sharing and use of any sensitive information. Instances where Indigenous Knowledge sharing has taken place during consultation activities (e.g., meetings) will be recorded in the Record of Consultation and Engagement, including where Indigenous Knowledge was incorporated into Project decisions and into the IS / EA Report (i.e., specifics will not be included in the Record of Consultation and Engagement given the potential sensitivity and / or confidentiality of the information shared).



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3. Study Plan Technical Discussions

To facilitate the development of satisfactory study plans and eventually a satisfactory IS / EA Report, MFFN previously submitted draft study plans in an effort to hold technical discussions with the Agency, the MECP and applicable agencies. A summary of technical discussions and correspondence held to date on this Study Plan has been provided in **Table 3-1**.

Table 3-1: Summary of Study Plan Technical Discussions

Attendees / Responsible Party	Correspondence	Discussion Point	Solution
■ The Agency	■ Comments received following submission and review of draft Study Plan.	■ 05-September-2020: Comments and clarification questions received, including additional information requirements, assessment criteria, and concordance with federal requirements.	 Additional details and clarification provided within this Study Plan, and responses to these comments are in Appendix B.
 MECP Ministry of Heritage, Sport, Tourism and Culture Industries 	 Comments received following submission and review of draft Study Plan. 	■ 10-August-2020: Comments and clarification questions received, including editorial comments and additional information requirements.	 Additional details and clarification provided within this Study Plan, and responses to these comments are in Appendix B.



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4. IS / EA Report Consultation and Engagement Process

4.1 Interested Persons and Government Agencies

The Proponent will provide Project notices and advise of opportunities for consultation and engagement with interested persons⁵ which includes, at a minimum, members of the public outlined in the *Public Participation Plan for the Marten Falls Community Access Road Project Impact Assessment* (the Agency 2020) (referred to as the Public Participation Plan). This will include the opportunity to provide input on the existing environment, VCs, effects assessment methods, effects assessment results, and mitigation and follow-up program measures as applicable. A variety of activities will be offered so that members of the public are informed of the IS / EA Report as it progresses and are aware of the opportunities and means to provide their input. The study plans have recognized public and agency input received on the Project to date. Government agencies and interested persons will have the opportunity to comment on components of the study plans throughout the IS / EA Report consultation and engagement process. The Project's approach to handling confidential and sensitive information is outlined in **Section 2.1**.

4.2 Indigenous Communities

The Proponent will provide Project notices and opportunities for consultation and engagement with Indigenous communities identified in **Table 4-1**, which is inclusive of all Indigenous communities identified in the *Indigenous Partnership and Engagement Plan for the Marten Falls Community Access Road Project Impact Assessment* (the Agency 2020a) (referred to as the Indigenous Engagement and Partnership Plan).

Indigenous communities will be provided the opportunity to be involved at critical decision-making points throughout the IS / EA Report so that the Proponent can consider and incorporate, where appropriate Indigenous Knowledge and Indigenous land and resource use information into the Project as it pertains to the existing environment, VCs, effects assessment methods, effects assessment results, and mitigation and follow-up program measures. A variety of activities will be offered so that Indigenous communities are informed of the IS / EA Report as it progresses and are aware of the opportunities, means and timelines to

^{5.} Interested persons, as defined in the IS / EA Consultation Plan, are individuals and groups (e.g., associations, non-governmental organizations, industry and academia) who could have an interest in the Project, including but not limited to communities in the region, those with commercial interests (e.g., forestry, trappers, outfitters, other mineral tenure holders in the area) and recreational users or those with recreational interest (e.g., campers, hunters and environmental groups).





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provide their input. The study plans have recognized Indigenous community input received on the Project to date. Indigenous communities will have the opportunity to comment on components of the study plans throughout the IS / EA Report consultation and engagement process.

Table 4-1: Identified Neighbouring Indigenous Communities, including their Provincial Territorial Organizations and / or Tribal Council Affiliations

Tribal Council Affiliation	Indigenous Community or Organization
Matawa First Nations Management	■ Marten Falls First Nation (Proponent and potentially
(Nishnawbe Aski Nation)	affected Indigenous community)
	■ Aroland First Nation
	■ Constance Lake First Nation
	■ Eabametoong First Nation
	■ Ginoogaming First Nation
	■ Neskantaga First Nation
	■ Nibinamik First Nation
	■ Webequie First Nation
Matawa First Nations Management and the Union	■ Long Lake #58 First Nation**
of Ontario Indians / Nishnawbe Aski Nation	
Mushkegowuk Council	■ Attawapiskat First Nation
(Nishnawbe Aski Nation)	■ Fort Albany First Nation
	■ Kashechewan First Nation
Shibogama First Nations Council	■ Kasabonika Lake First Nation
(Nishnawbe Aski Nation)	■ Kingfisher Lake First Nation
	■ Wapekeka First Nation
	■ Wawakapewin First Nation
	■ Wunnumin Lake First Nation
Independent First Nations Alliance	■ Kitchenuhmaykoosib Inninuwug First Nation
(Nishnawbe Aski Nation)	
Independent First Nations	■ Mishkeegogamang First Nation
(Nishnawbe Aski Nation)	■ Weenusk First Nation
Nokiiwin Tribal Council	■ Animbiigoo Zaagi'igan Anishinaabek First Nation*
Métis Nation of Ontario	■ Métis Nation of Ontario; Region 2*
Independent Métis Nation	■ Red Sky Independent Métis Nation*

Notes: * Indigenous communities or organizations identified by the MECP who should be consulted on the basis that they may be interested in the Community Access Road.



^{**} The MECP indicated in a letter to MFFN that Long Lake #58 First Nation was moved from interest-based to rights-based.

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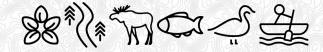
4.3 Consideration of Identity and Gender-Based Analysis Plus in Engagement

To fulfill requirements of the IAA, the Consultation and Engagement Program will consider a diverse range of perspectives from interested persons and interested Indigenous communities and their members identified in the Agency's Indigenous Engagement and Partnership Plan and the Public Participation Plan. This will include at a minimum providing ongoing opportunities for engagement to:

- Neighbouring Indigenous communities, including relevant subpopulations:
 - Women;
 - Youth; and
 - Elders.
- Non-Indigenous communities including:
 - Women;
 - Youth; and
 - Activity-based subgroups (e.g., recreationalists, snowmobilers, tourism establishment operators).

The Proponent will also consult and engage with other subpopulations identified by communities during consultation and engagement. The information from these activities and any additional identity groups identified by communities through consultation and engagement will be considered by applicable environmental disciplines for the purposes of data collection and considering disproportionate effects.

During consultation and engagement, these aforementioned groups will be consulted and engaged with on targeted input. Specialized knowledge will be gathered through disciplines such as Social, Economic, Land and Resource Use and Aboriginal and Treaty Rights and Interests. The social data collection program is expected to include targeted interviews, focus groups, questionnaires and other niche tools to gather information from diverse populations to resolve gaps in socio-economic secondary data. These diverse populations include the aforementioned identity groups, which are also referenced in the IS / EA Consultation Plan, and those identified by communities during consultation and engagement. Subject to interest, community-led primary data collection and secondary data sharing for Indigenous Knowledge and Indigenous land and resource use will be completed through the Indigenous Knowledge Program. See Section 5 for more information on the Indigenous Knowledge Program and associated materials.





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When feedback is received from interested persons and Indigenous communities, issues, comments and questions will be tracked, which is consistent with the process described in the IS / EA Consultation Plan. Specific to Gender-Based Analysis Plus (GBA+) objectives, this will include efforts to engage with diverse populations. It is expected this will include activities specific to subgroups and tabulation of consultation and engagement participation with respect to identity factors. This will provide summary statistics to demonstrate the diversity achieved in consultation and engagement.

4.4 Consultation on Visual Aesthetic Concerns and Impacts

As part of the IS / EA Consultation Plan and Indigenous Knowledge Program, Indigenous communities identified in **Table 4-1** will be contacted to determine their level of interest in the Project and their concerns related to the potential Visual impacts. For the Indigenous communities that express specific Visual concerns, targeted engagement for the purposes of Visual data collection will be implemented through the Visual primary data collection program consistent with the likelihood of effect anticipated to the community as determined by the MFFN CAR Project Team during the Visual Environment Assessment for the IS / EA Report.

In addition, interested persons identified through the general engagement program and inclusive of those listed in the Public Participation Plan will also be engaged on potential Visual Aesthetic concerns and for data collection purposes.





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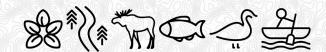
5. Consideration of Indigenous Knowledge in the IS / EA Report

The following provides a general description of how Indigenous Knowledge will be considered in the IA / EA process. The extent to which Indigenous Knowledge is considered by each specific VC will vary depending on the nature of the VC, the potential for Project effects on the VC and whether Indigenous Knowledge that relates to a VC is provided / obtained. As such, not all aspects of the general approach described below may apply to all VCs / study plans.

There are two concurrent and complementary avenues for Indigenous communities and groups to be engaged with and provide input on the Project: the Indigenous Knowledge Program and the Consultation and Engagement Program. Both programs serve to support the collection of Indigenous perspectives, values, and input on the Project, including Aboriginal and Treaty Rights and how they may be impacted by the Project, to be integrated throughout the IA / EA process. However, the Indigenous Knowledge Program specifically aims to solicit and incorporate information that is considered sensitive and may have confidentiality requirements, including Indigenous Knowledge and information on Indigenous land and resource use. Indigenous Knowledge Sharing Agreements will be established between the Proponent and Indigenous communities participating in the Indigenous Knowledge Program prior to the sharing and use of any sensitive information.

All Indigenous communities and groups identified by the MECP and the Agency through the Indigenous Engagement and Partnership Plan have the opportunity to participate in the Indigenous Knowledge Program. The Indigenous Knowledge Program provides interested Indigenous communities an opportunity to: share existing Indigenous Knowledge and information on Indigenous land and resource use and cultural values that may be relevant to the Project, and / or complete Project-specific studies to collect and share Indigenous Knowledge and information on Indigenous land and resource use and cultural values. The Indigenous Knowledge Program includes opportunities for Indigenous communities and groups to meet with the Proponent to discuss the program, ask questions, and share concerns and interests. In support of this, the Proponent has created an Indigenous Knowledge Program Guidance Document (the Guidance Document) that provides:

 An overview of the Indigenous Knowledge Program and information on how Indigenous Knowledge, Indigenous land and resource use and cultural values and practices can be collected and / or shared;





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- Information on how Indigenous Knowledge and information on Indigenous land and resource use and cultural values and practices may be used in the planning and design processes; and
- A suite of guidance materials that were developed based on the information requirements of both the federal and provincial assessment processes, including: question guides to support the collection of information on historical and current community context; Indigenous Knowledge that may be relevant to the various technical disciplines; information on Indigenous land and resource use, cultural values and practices and associated spatial data, and perspective on potential Project-related effects and associated mitigation and / or enhancement measures.

The Guidance Document will also support participating Indigenous communities in providing Project-specific information in a manner that facilitates meaningful incorporation into the IS / EA Report.

The IS / EA Consultation Plan outlines the process for obtaining information and feedback about the Project from Indigenous communities (i.e., the Consultation and Engagement Program). All Indigenous communities identified by the MECP and the Agency have the opportunity to participate in the Consultation and Engagement Program through community-specific meetings, Public Information Centres, web conferences, and other formats. All Indigenous communities identified by the MECP and the Agency will be provided information related to the Project and invited to participate at various points throughout the IA / EA process.

There are also opportunities for technical teams to engage with Indigenous communities to solicit perspectives and information relevant to the Project, including information related to collection of existing information and the development of the IS / EA Report. The Proponent also invites feedback and inputs throughout the Project via the Project website and ongoing communications with the Proponent.

The Indigenous Knowledge and Consultation and Engagement programs are designed to be complementary and provide multiple opportunities for communities to offer feedback and information, including perspectives on Aboriginal and Treaty Rights and interests and how these may be impacted by the proposed Project. Relevant information collected through both the Indigenous Knowledge and Consultation and Engagement programs, including potential effect pathways on Aboriginal and Treaty Rights and interests, will be shared with each of the relevant disciplines throughout the IA / EA to: guide and inform VCs; support characterization of the existing environment; identify the potential effects of the Project on VCs; help identify mitigation measures and potential monitoring programs; and ultimately guide Project planning. The nature of how the Indigenous Knowledge becomes integrated into the IS / EA Report will be dictated by the specific information provided by each Indigenous community and the parameters set out in





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the Indigenous Knowledge Sharing Agreements. A description of how Indigenous Knowledge was considered in the IA / EA and in each of the technical discipline areas will be included in the IS / EA Report.

It is also important to note that information collected through the various activities (e.g., field studies and programs, effects assessments) of each discipline area (e.g., wildlife, vegetation, cultural heritage resources) will be shared with the Indigenous Knowledge Program leads. This will support the establishment of the existing environment and the effects assessment for the Aboriginal and Treaty Rights and Interests environmental discipline, as well as the identification of potential mitigation measures and monitoring programs, given the interrelated nature of Indigenous peoples and other environmental disciplines.

The Proponent will strive to respectfully collaborate with Indigenous communities on how Indigenous Knowledge and information on Indigenous land and resource use and cultural values will become part of the IS / EA Report, and how potential effects to Aboriginal and Treaty Rights and interests will be assessed. It is expected that measures to support this may include but are not limited to: engaging Indigenous communities to solicit information on Indigenous Knowledge and Indigenous land and resource use and cultural values to inform baseline conditions, providing Indigenous communities with draft sections of the IS / EA Report to illustrate how Indigenous Knowledge and information on Indigenous land and resource use and cultural values has been integrated and to confirm it has been presented appropriately, and completing collaborative working sessions with Indigenous communities for the effects assessment on Aboriginal and Treaty Rights and Interests. Further information on how potential effects on Indigenous rights will be assessed is provided in the Aboriginal and Treaty Rights and Interests Study Plan.



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6. Assessment Boundaries

6.1 Temporal Boundaries: Project Phases

Project phases, which are temporal boundaries, are developed to establish the timeframes within which potential effects of the Project will be considered in the IS / EA Report. The Project is planned to occur in two phases, which are briefly described below and shown in **Figure 6-1**.

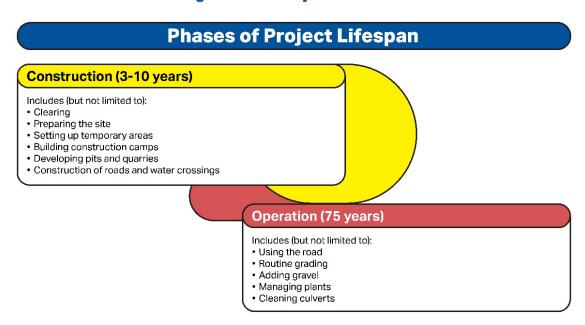
Construction Phase:

The time from start of construction, including site preparation activities, to the start of operations and maintenance of the CAR. Decommissioning of construction works is included in the construction phase. The construction phase is anticipated to take approximately 3 to 10 years to complete.

Operations and Maintenance Phase:

The operations and maintenance phase starts once construction activities are complete and lasts for the life of the Project. The operations and maintenance phase of the Project is considered to be 75 years based on the expected timeline for when major refurbishment of road components (e.g., bridges), is anticipated.

Figure 6-1: Project Schedule







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There are currently no plans to decommission the CAR as there is no expected / known end date for its need. Therefore, future suspension, decommissioning and eventual abandonment of the CAR will not be considered in the IS / EA Report. It will be considered if and when a decommissioning or abandonment application is made for the road.

In determining the temporal boundaries, in particular the long operations and maintenance phase, consideration was given to the long-term effects on the well-being of present and future generations (Sustainability Principle #2⁶). The final temporal boundaries to be used in the IS / EA Report will be based on regulatory agency guidance, professional judgement and input received through the Project consultation process.

6.2 Spatial Boundaries: Study Areas

6.2.1 General Information

Study areas identify the geographic extents within which potential effects of the Project are likely to occur and will be considered in the IS / EA Report. The existing conditions and potential effects are documented for three study areas selected for the Project:

- Project Development Area (PDA): area of direct disturbance;
- Local Study Area (LSA): the area where most of the direct effects of the Project are likely to occur; and
- Regional Study Area (RSA): the area where indirect effects of the Project are likely to occur.

The PDA encompasses the 100 metre wide CAR right-of-way (ROW), temporary construction access roads, work areas, worker camps, and pits, quarries and associated access roads. The preliminary LSA currently being considered within the scope of the ongoing provincial regulatory review process generally includes the area within 2.5 km of the centreline of Alternative 1 and Alternative 4. The preliminary study area generally allows for the documentation of existing conditions and prediction of potential environmental effects for the Project. A 5 km wide study area also allows for route refinements during development of Project design (e.g., adjustment of the alignment to avoid sensitive features).

^{6.} Sustainability Principles #2 is one of four sustainability principles included in Section 25 of the Project's TISG as further elaborated on Section 9.7.





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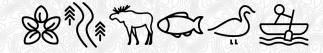
The specific location of Project components, including the roadway, quarries, pits and temporary infrastructure, are not yet known and will be included in the IS / EA Report. While most of the Project components are expected to be located within the preliminary 5 km wide study area, benefits (e.g., reduced environmental disturbance, avoidance of sensitive features, technical considerations, concerns received through consultation) for locating Project components on lands outside of the 5 km wide study area may become known during the IA / EA process. If the need to locate Project components outside the 5 km wide study area is determined to be required or of benefit to the Project, the study area would be adjusted.

The study area for each environmental discipline may vary from the above-described general study area based on the potential for the Project to directly or indirectly affect each environmental discipline; therefore, discipline-specific LSAs and RSAs have been defined for the Project. In defining the final LSAs and RSAs, each environmental discipline will consider:

- Location and other characteristics of the environmental discipline relative to the Project;
- The anticipated extent of the potential Project effects;
- Federal, provincial, regional, and local government administrative boundaries;
- Indigenous groups listed in Table 4-1;
- Community knowledge and Indigenous Knowledge;
- Current or traditional land and resource use by Indigenous communities;
- Exercise of Aboriginal and Treaty Rights of Indigenous peoples, including cultural and spiritual practices; and
- Physical, ecological, technical, social, health, economic and cultural considerations.

The study areas included in this document are preliminary, covering the extent to which readily available information suggests the Project may have noticeable effects on the environment. The size, nature and location of past, present and reasonably foreseeable projects will be taken into consideration in the development of the cumulative effects assessment study area(s). The appropriate study area(s) to assess cumulative effects are dependent on the VCs predicted to have direct residual adverse effects as a result of the Project, and therefore, cannot be defined until the IS / EA Report has sufficiently advanced.

As further detailed in **Section 4**, the Proponent will continue to provide opportunities for neighbouring Indigenous communities and interested persons to provide input and inform the effects assessment, including the LSAs and RSAs.



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6.2.2 Visual Aesthetic Study Areas

The proposed LSA and RSA boundaries for Visual are detailed in Table 6-1 and shown on Figure 6-2.

Table 6-1: Visual Aesthetic Study Areas

Study Area	Geographic Extent	Rationale
Local Study Area	■ 2.5 km from the PDA	■ Provides for a localized Visual Environment Assessment, given the remote wilderness setting of the Project. Viewers potentially observe a distinguishable level of detail and contrast.
Regional Study Area	■ Up to 8 km from the PDA	■ Visibility beyond 8 km dissipates and is significantly reduced due to flat topography and forested landscape for sections of the route. Viewers potentially observe minimal distinguishable level of detail and contrast

The Visual Environment study areas will be defined based on the visibility of the Project and the assessment for changes to Visual Environment that are most impactful. The Visual Environment study areas are expected to consider the visual detail that can be perceived for route Alternative 1 and route Alternative 4 including appropriate consideration of foreground, middle-ground and background viewing (BC MoF 1997). The Visual Environment Assessment will identify the immediate baseline environment within the foreground (PDA) and the mid-ground (LSA) where viewers potentially observe a distinguishable level of detail and contrast and background (RSA).

The Visual Environment will be assessed at the regional scale at a distance of up to 8 km depending on the receptor locations and its sensitivity parameters. Impacts on Indigenous communities, commercial tourism, parks and protected areas, and river crossings, will be the determining factors for the Visual Environment RSA.

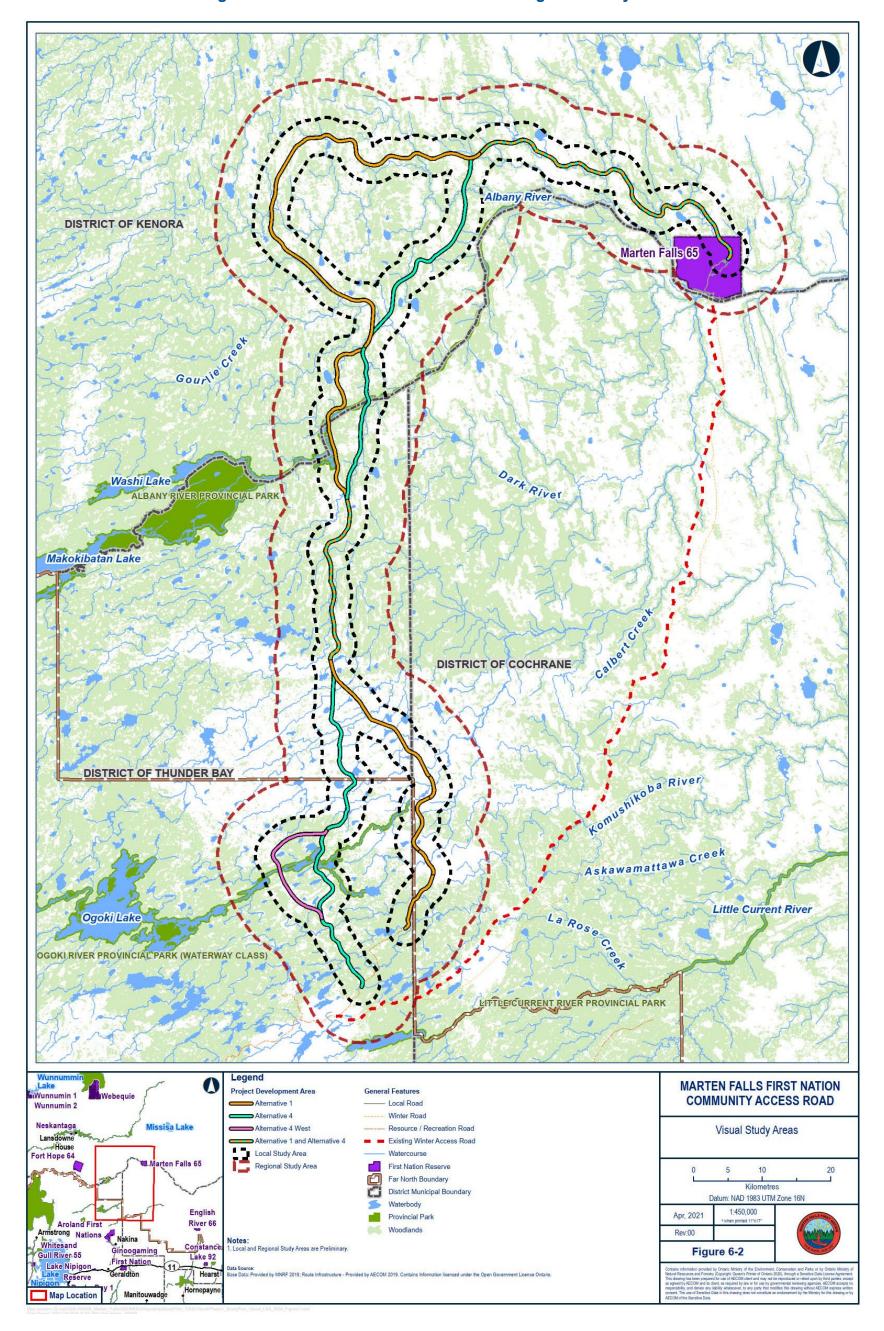
The study areas will be used to scope data collection on the Visual Environment, including primary and secondary data collection. Primary data are defined as project and provincial / federal vector base mapping (e.g., Light Detection and Ranging (LiDAR), Digital Elevation Model, Imagery, Ministry of Natural Resources and Forestry (MNRF) – Land Information Ontario, Canadian Vector Data (CanVec)), Indigenous Knowledge, and sensitive receptor identification through field work. Secondary data are defined as study reports and background material related to current land use, community planning, resource extraction activities, significant natural and scenic features, cultural features and recreation amenities.

Indigenous communities and interested persons will be consulted on their interests, concerns and perceptions regarding the potential for Visual impacts to their community.





Figure 6-2: Visual Aesthetics Local and Regional Study Areas





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7. Baseline Study Design

7.1 Desktop Assessment

A desktop review of existing information sources will be completed to identify information gaps that will need to be addressed through further study. A preliminary list of applicable information sources has been included in **Appendix A** and reflects federal and provincial guidance received to date. This Study Plan focuses on the additional studies that are anticipated to be required to gather information beyond what is currently available through existing information sources, including those as described in Section 7.2 'Sources of baseline information' in the Agency's TISG for this Project.

7.2 Study Methods

The remote wilderness aesthetics are important components of the Visual Environment in the area of the Project. The Visual Aesthetics of the area are largely influenced by natural processes such as wildfires, and human influences such as the MFFN community and local roads. Visual issues that may occur due to the Project include impacts on commercial tourism operations, parks and protected areas and perceptions of harm. Sections of the route in the vicinity of the Ogoki River Provincial Park and the Albany River Provincial Park may be of particular concern. Key issues identified with the two proposed river crossings include potential Visual impacts to significant vistas, landscapes or places of ceremony. Additionally, parks and protected areas in Ontario are regulated for their natural, cultural and recreational values, which includes the viewscape (PPCRA 2006). Commercial tourism in the region relies on a wilderness aesthetic to attract customers. As a result, disturbances to current natural conditions may not be well received by operators. Finally, changes to the Visual Environment may generate perceptions of environmental harm by Indigenous communities related to sensitive cultural features and recreationalists who value the pristine quality of the landscape. Therefore, visible disturbances and perceptions may impact the areas for those users.

Informed by the potential Visual issues, data collection for the Visual Environment will be defined spatially based on the potential visibility of the Project. The Visual Environment Assessment will consider:

- Visibility this includes the viewer's ability to discern the introduced object from the surrounding landscape.
- Visual Sensitivity the concept that certain landscapes are more susceptible to change and more sensitive due to the angle, distance of viewer, as well as the cultural significance to viewers.
- Contrast the introduction of a new CAR into the landscape





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7.2.1 Assemble Background Geographic Information System (GIS) Data

To define the existing Visual Environment, a detailed mapping dataset will be prepared for the purpose of the Visual Environment Assessment, from existing project LiDAR and MNRF Provincial Digital Elevation Model (PDEM), and potential additional imagery and topography, provincial vector base mapping, provincial reports and plans, community-based land use plans, natural features (waterways), natural heritage communities, park and nature reserve boundaries, known cultural heritage sites, First Nation and Métis community land, Indigenous Knowledge, sensitive locations identified by other study disciplines (e.g., Land and Resource Use, Social Environment, Economy) and from previous studies.

7.2.2 Consultation Inputs

Consultation and engagement are an important part of the IA / EA process and for the Visual Environment Assessment. Input will be sought to select sensitive receptor locations through discussions with Indigenous communities, including the consideration of collected Indigenous Knowledge, and with stakeholders such as government agencies (e.g., Ministry of Energy, Northern Development and Mines, MNRF), municipalities, tourism operators, and other associations. Specific landmarks that include heights of land (hills) that have been identified as having special significance for the Indigenous communities will be evaluated to determine the degree of visibility and potential impact. As well, the Visual Environment Assessment will consider background documents such as previous provincial / federal environmental impact assessments and environmental impact statements (see for example Noront 2013). Inputs gathered will be used to create a list of sensitive receptor locations and locally unique and valued areas such as the MFFN community, tourism destinations and camps, and the Ogoki River Provincial Park and the Albany River Provincial Park including trails, waterways and local roads.

7.2.3 Establish Baseline Visual Landscape Units

The detailed mapping datasets will be supported by a description of the landscape units within the PDA identifying landscape settings and features of importance. The focus will be on valued viewpoints by Indigenous community members and the public and those identified by other disciplines as contributing to the aesthetic character of an area (e.g., Indigenous Knowledge, Environmentally Significant / Sensitive Areas, rivers, scenic park features). This may also include locations of cultural heritage importance as defined through the Cultural Heritage Assessment.





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7.2.4 Mapping Landscape Units

The mapping of landscape units will be undertaken using a combination of desktop research and computer-based GIS mapping and considers methodologies from similar studies undertaken provincially, nationally and internationally. The GIS map format allows for the organization, analysis and visualisation of mapped geographically referenced data, such as forest cover and cultural heritage resources. This evaluation will rely on secondary data from other studies related to the IA / EA. This will include the review of relevant reports and background material related to current land use, community planning, resource extraction activities, significant natural and scenic features, cultural features and recreation amenities. The mapping will identify the landscape typology, including sensitivity and scenic quality rating.

7.2.5 Preparation of Visibility Mapping to Establish Viewpoints

Visibility mapping will identify the RSA (up to 8 km from the PDA) and determine whether there will be views from sensitive receptor locations of route Alternative 1 and Alternative 4 for the CAR. Visibility mapping will use advanced tools, such as Visual Nature Studio (VNS), Esri (Environmental Systems Research Institute) ArcGIS Desktop / Pro and Spatial Analyst rule-based software, to build objective and data driven mapping that describes where the PDA will be visible from. The visibility mapping will be an essential tool for assisting the Indigenous communities, stakeholders, and decision makers in understanding potential impacts on the Visual quality of the area.

7.2.6 Field Work to Verify Locations

Primary data will also be collected through field work. Sensitive receptor locations will be inventoried through field reconnaissance using a high-accuracy professional GPS receiver paired with ruggedized tablets running Esri Collector field mapping software and photographed with a Single Lens Reflex Camera with a 55 mm focal length. Each location will be recorded to accuracies required by the Project and then immediately classified, evaluated and ranked (View Subject, Vantage Point, and Visual Corridor) in the field using a custom-built Collector mapping application.





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8. Data Management and Analysis

Data management including quality assurance / quality control (QA / QC) will be employed to minimize potential for data entry and analysis errors, prepare data sets for analysis and limit sensitive data distribution in accordance to established agreements.

Visual modelling procedures are closely monitored to deliver accurate results. The best available and cost-effective spatial data will be chosen to model the Visual Environment of the landscape. Viewshed modelling and 3D landscape modelling accuracies are highly dependent on the input of quality spatial data from trusted data providers and other components. A Geographic Information System (GIS) approach will be used to analyze the regional viewsheds and potential line of sight views, using VNS, Esri ArcGIS Desktop / Pro and Spatial Analyst. The GIS based 3D landscape modelling tool VNS will be used to create the Visual simulation modelling and images that will be combined with digital field photographs to determine the visual impact of the CAR from selected sensitive viewpoints / receptor locations. VNS has a number of technical qualities to re-enforce QA / QC such as integration with georeferenced GIS datasets, specific camera settings for 3D modelling outputs that coincide with field camera photos specifications, and accurate representation of the viewscape as perceived by the human view (Field of View).

Where baseline data are available in GIS format, this information will be provided to the Agency as electronic geospatial data file(s), compliant with the ISO 19115 standard.



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9. Effects Assessment

The following sections provide discipline-specific input and considerations as they pertain to the methodology for effects assessment. The Project is in the early stage of the IS / EA Report preparation and it is expected that the effects assessment methodology will be refined iteratively based on regulatory agency guidance, professional judgment and input received through the Project consultation and engagement process.

9.1 Project-Environment Interactions

The Project activities that may result in changes to the environment are described within the identified temporal and spatial boundaries. This includes identification of both direct and indirect changes by comparing the existing setting to the conditions anticipated to occur as a result of the Project. For each environmental discipline, the likely Project-environment interactions will be identified based on professional judgment, activities listed in TISG Section 3.2 as well as projects of similar magnitude and / or location.

A preliminary analysis of Project-environment interactions for the Visual Environment is provided in **Table 9-1** and will be confirmed during the IA / EA process to identify the Project-environment interactions that are likely to have a potential effect, and to identify measures to avoid or minimize potential negative effects and enhance benefits.

Table 9-1: Project – Environment Interactions

Project Phases	Project Activities	Visual		
Construction Phase	struction Phase Mobilization of Equipment and Supplies			
	Temporary Construction Staging Areas ¹			
	Temporary Access Roads and Trails ¹	Х		
	Temporary Construction Camps ¹	Х		
	ROW Clearing and Grubbing	Х		
	Brush and Timber Disposal			
	Pits and Quarries ¹	Х		
	Drilling / Blasting / Aggregate Production	Х		
	Road Construction (stripping, subgrade excavation, embankment fill placement, grading, ditching)	Х		
	Bridge and Culvert Installation (approach embankments, foundations, substructures, superstructures, traffic protection, erosion controls)	Х		
	Construction Site Restoration	X		





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Project Phases	Project Activities	Visual
Construction Phase:	Pits and Quarries	
Decommissioning	Temporary Camps, Roads / Trails and Staging Areas	Х
Onerations Dhase	Road Presence	Х
Operations Phase	Maintenance ²	

Notes: 1. Includes construction and use of

9.2 Valued Components and Indicators

VCs are the environmental, health, social, economic or additional elements or conditions of the natural and human environment that may be impacted by a proposed project and are of concern or value to the public, Indigenous peoples, federal authorities and interested parties (the Agency 2020b). Indicators represent the resource, feature, or issue related to the VC that, if changed, may demonstrate an effect on the environment. The indicators and rationale for selection and measurement of potential effects, to be used to assess and evaluate the alternative routes and assess the overall effects of the Project in the IS / EA Report are provided in **Table 9-2**. The table includes both quantitative and qualitative indicators. The final list of VCs and indicators to be used in the IS / EA Report will be based on regulatory agency guidance, professional judgement and input received through the Project consultation and engagement activities with Indigenous communities and interested persons.

Indicators for the Visual Environment have been determined through consideration of the following factors listed in the TISG⁷:

- VC presence in the study area;
- the extent to which the VC is linked to the interests or exercise of Aboriginal and Treaty Rights of Indigenous peoples, and whether an Indigenous group has requested the VC;
- the extent to which the effects (real or perceived) of the Project and related activities have the potential to interact with the VC;
- the extent to which the VC may be under cumulative stress from other past, existing or future undertakings in combination with other human activities and natural processes;

^{7.} The TISG also states that information from ongoing and completed regional assessments in the proposed area of the Project should be used to inform VCs for the Project. In February 2020 a regional assessment of the Ring of Fire region commenced; however, it is not sufficiently advanced at this time to inform the Project VCs. The VCs will be consulted and engaged on early in the IA/ EA process and finalized taking into consideration the input received. Therefore, only information relevant to the Project that arises from the regional assessment of the Ring of Fire within an appropriate timeline will inform the VCs for the Project.



^{2.} Includes General Maintenance (e.g., grading, erosion control, quarrying, borrow pits), Seasonal Maintenance (e.g., snow clearing, bridge and culvert maintenance), and Special Maintenance (e.g., slope failures, road settlement / break-up.).



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- the extent to which the VC is linked to federal, provincial, territorial or municipal government priorities (e.g., legislation, programs, policies);
- the possibility that adverse or positive effects on the VC would be of particular concern to Indigenous groups, the public, or federal, provincial, territorial, municipal or Indigenous governments;
- whether the potential effects of the Project on the VC can be measured and / or monitored or would be better ascertained through the analysis of a proxy VC;
- Engagement with Indigenous communities and consideration of Indigenous Knowledge;
- Consultation with regulatory agencies and industrial stakeholders;
- Social or economic importance;
- Traditional, cultural and / or heritage importance;
- Natural heritage importance;
- Community-based land use plans; and,
- Other relevant and credible sources, such as scientific or academic publications or input from the public.

Inputs received to date from Indigenous communities, agencies and interested persons through the Consultation and Engagement Program, including inputs received on the Draft ToR, have also been used to inform the selection of the indicators for the VC.

Table 9-2: Visual Environment Indicators

Valued Component	Indicator	Rationale for Selection	Data Sources
Visual	 Visibility Visual Sensitivity Visual Contrast / Character 	■ The Project has the potential to result in changes to the Visual landscape and result in impacts to specific locations that are identified to be of importance by Indigenous community members and the public/users of the surrounding lands.	 Primary Field collection data Non-Sensitive and Sensitive Spatial Data MNRF Land Information Ontario - Ontario Geohub https://geohub.lio.gov.on.ca/ Government of Canada - CanVec https://open.canada.ca/en Government of Canada - Indigenous Services Canada Zoetica Indigenous Knowledge High Resolution Orthophotos (20 cm), ESRI World Imagery





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Valued Component	Indicator	Rationale for Selection	Data Sources
			■ LiDAR 1 m Bare Earth Digital Elevation Model, MNRF 30 m PDEM
			■ Provincial / federal reports
			■ Previous Study Reports
			■ Community-based land use planning
			■ Cultural Heritage Report

9.3 Potential Effects

A direct effect occurs through the direct interaction of an activity with an environmental discipline. The Project-environment interactions currently anticipated, based upon preliminary analysis, to result in direct effects to the Visual Environment discipline have been identified in **Table 9-1**. The potential direct effects resulting from the Project-environment interactions will be confirmed during the IA / EA process and will be based on input received through the Indigenous Knowledge Program and Consultation and Engagement Program, regulatory agency guidance, and professional judgement.

An indirect effect occurs when a change to one environmental discipline resulting from a Project activity causes a change to another environmental discipline (e.g., changes in vegetation could indirectly affect wildlife).

The predicted change to the physical environment (e.g., landforms and vegetation) will be considered in the assessment of Visual impacts. It is anticipated that the results of the Visual Environment Assessment will be considered in the assessment to effects to Indigenous peoples and impact on the exercise of Aboriginal and Treaty Rights. The results of the Visual Environment Assessment will also be considered in the impact assessment for the Social, Economic, Human Health and Community Safety, and Land and Resource Use Study Plans.

9.4 Methods for Predicting Future Conditions

The Visual Environment Assessment will evaluate Project effects using similar methodologies and frameworks as the other disciplines. The quantitative models and predictions will include descriptions of model assumptions, parameters, the quality of the data and the degree of certainty of the predictions obtained.





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The Visual Environment Assessment will map landscape units using a combination of desktop research and computer-GIS analysis based on methodologies from similar studies. This includes a Visibility analysis, of the potential effects the CAR will have on the immediate surrounding area, and identification of sensitive receptor locations that are potentially impacted by the proposed CAR.

9.4.1 Input to Route Evaluation Matrix

The output of the visibility mapping will be included as input to the route evaluation process and IS / EA Report for the Project. Each of the two CAR route alternatives will be assessed for impact to sensitive receptor locations, which will likely be identified by Indigenous communities and as recreation areas and natural feature locations. This assessment will address the proximity of the CAR alternatives to the sensitive receptor locations identified through consultation and field evaluation.

9.4.2 Prepare Simulations / Impact Assessment

Five impacted sensitive receptor locations will then be selected based on consultation input for Visual simulation modelling and will take into account leaf-off conditions. Five simulations will be prepared for each of the two CAR route alternatives including before and after Project development scenarios to support the IS / EA Report. The GIS based 3D landscape modelling tool VNS will be used to create the visual simulation modelling and images that will be combined with digital field photographs.

The landscape sensitivity is characterized by the magnitude of the impact on culturally significant locations, the degree of visibility and the ability of the landscape to absorb the disturbance. There are several factors that can influence the Visual Absorption Capacity of a landscape. These include:

- Visibility;
- Visual Sensitivity;
- Contrast.

9.4.3 Identify Mitigation

Mitigation will be recommended to address, if practical, the Visual Absorption Capacity and the sensitivity of the landscape to absorb the perceived visual changes in the CAR.



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9.4.4 Visual Environment Documentation

The IS / EA Report will summarize the assessment process completed, consultation input received, and identified visual impacts including appropriate mitigation if necessary.

9.5 Mitigation and Enhancement Measures

Once potential effects have been identified, the effects assessment will explore technically and economically feasible mitigation measures to avoid or minimize the identified negative effects and enhancement measures to increase positive effects beyond those that are already inherent to the design. These measures will consist of industry-standard practices, federal and provincial standard specifications, regulator-mandated measures, best management practices, Indigenous and community recommendations and recommendations from industry and environmental professionals based on expertise, scientific publications, experience and judgement.

It is important that mitigation and enhancement measures are achievable, measurable and verifiable and monitored for compliance and effectiveness during all temporal phases as part of the Project follow-up monitoring plan. Required environmental monitoring will verify the potential environmental effects predicted in the IS / EA Report, evaluate the effectiveness of mitigation and enhancement measures, and identify the process the Proponent will follow if mitigation and enhancement measures are not effective.

The following provides a response to the fulfillment of TISG Section 20 requirements.

Table 9-3: TISG Section 20 Requirements

Item #	TISG Section 20 Requirement	Response
1	■ Describe mitigation measures that are specific to each environmental, health, Social or economic effect identified. Mitigation measures are to be written as specific commitments that clearly describe when and how the proponent intends to implement them, what decision-making criteria will be used, and the outcome these mitigation measure are designed to address;	■ The Visual Environment Assessment will include a description of applicable mitigation measures deemed to be required subject to the results of the impact assessment.
2	Describe mitigation measures that are specific to identified effects to Indigenous peoples;	■ The Visual Environment Assessment will include a description of applicable mitigation measures deemed to be required subject to the results of the impact assessment, including measures that may be specific to Indigenous people.





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Item #	TISG Section 20 Requirement	Response
3	Describe mitigation measures proposed by Indigenous peoples and the consideration of those in the Project;	■ The Visual Environment Assessment will include a description of applicable mitigation measures deemed to be required subject to the results of the impact assessment, including measures that may be specific to Indigenous people including measures that may have been suggested by Indigenous people.
4	■ Propose differentiated mitigation measures for all potential adverse effects identified, if applicable, so that adverse effects do not fall disproportionately on vulnerable populations, certain Indigenous groups, or certain communities, and they are not disadvantaged in sharing any development benefits and opportunities resulting from the Project. These mitigation measures should be developed in collaboration with those who are vulnerable and/or disadvantaged;	■ The development of applicable mitigation measures will take into account identified potential impacts on vulnerable populations and developed with the input of interested persons from those vulnerable populations.
5	 Describe how disproportionate effects that were identified in the GBA+ results were used to inform mitigation and enhancement measures. 	■ The Visual Environment Assessment will describe any identified disproportionate effects to subpopulations.

9.6 Residual Effects

Residual effects are the effects remaining after the application of mitigation measures. The IS / EA Report will describe in detail the potential adverse and positive residual effects in relation to each temporal phase of the Project (e.g., construction, operation). Residual effects will be described using criteria to quantify or qualify adverse and positive effects, taking into account any important contextual factors. The residual effects will therefore be described in terms of the direction, magnitude, geographic extent, duration, frequency, likelihood, and whether effects are reversible or irreversible. Ecological and socio-economic context may also be relevant when describing a residual effect. Context relates to the existing setting, its level of disturbance and resilience to adverse effects. Context can also relate to timing as it applies to assessing the worst-case scenario (e.g., effect during migratory or calving season for wildlife). Where appropriate, information regarding residual effects will be disaggregated by sex, gender, age and other community relevant identifying factors to identify disproportionate residual effects for diverse subgroups.

For magnitude, Visual Environment-specific definitions are required and are proposed below in **Table 9-4**.

^{8.} TISG Section 13.1 identifies additional effects characteristics for certain disciplines (e.g., wetlands, birds, terrestrial wildlife, species at risk). These additional effects characteristics are described in the respective discipline-specific study plans.



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Table 9-4: Visual Environment Magnitude Definition

Magnitude Level	Definition	Rationale
Negligible	Very minor loss of or alteration to one or more key elements / features / characteristics of the baseline.	
Low	Minor loss of or alteration to one or more key elements / features / characteristics of the baseline.	Introduction of elements that may not be uncharacteristic when set within the attributes of the receiving landscape.
Medium	■ Partial loss of or alteration to one or more key elements / features / characteristics of the baseline.	Introduction of elements that may be prominent but may not necessarily be considered to be substantially uncharacteristic when set within the attributes of the receiving landscapes.
High	■ Total loss of or major alteration to key elements / features / characteristics of the baseline.	Introduction of elements considered to be totally uncharacteristic when set within the attributes of the receiving landscape.

9.7 Consideration of Sustainability Principles

The following provides a generic description of how sustainability principles will be considered in the effects assessment. The extent to which sustainability principles apply to a specific VC will vary depending on the nature of the VC and the potential for Project effects on the VC.

The effects assessment approach for the Project has included the consideration of the sustainability principles outlined in the Project TISG and the Agency's guidance on sustainability. The sustainability principles that have been considered include:

- 1. Consider the interconnectedness and interdependence of human-ecological systems;
- 2. Consider the well-being of present and future generations;
- 3. Consider positive effects and reduce adverse effects of the Project; and
- 4. Apply the precautionary principle by considering uncertainty and risk of irreversible harm.

The interconnectedness and interdependence of human-ecological systems will be considered through the assessment of potential indirect effects of each alternative. An indirect effect occurs when a change to one environmental discipline resulting from a Project activity causes a change to another environmental discipline (e.g., changes in vegetation could indirectly affect wildlife). A preliminary assessment of indirect effects has been included in **Section 9.3**.





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The well-being of present and future generations will be considered in the effects assessment through the application of the long-term operations phase temporal boundary of 75 years (**Section 6.1**) and through the effects characteristics description of duration and reversibility for each residual effect predicted.

The consideration of positive effects and reducing adverse effects of the Project is fundamental to the effects assessment methodology through the identification of mitigation measures to reduce potential adverse effects and the identification of the preferred alternative through the evaluation of advantages (e.g., positive effects) and disadvantages (e.g., adverse effects).

The effects assessment will apply the precautionary principle by clearly describing and documenting all uncertainties and assumptions underpinning the analysis and identifying information sources. The effects assessment will consider risk of irreversible harm through the effects characteristics description of reversibility for each residual effect predicted and will describe any uncertainty associated with the assessment of residual effects.

The scope of the sustainability assessment will be defined by issues of importance identified by Indigenous communities and interested persons through consultation and engagement activities, while also ensuring to be inclusive of the diversity of views expressed. The selection of VCs that will be the focus of the sustainability assessment will be aligned with the issues of importance identified by Indigenous communities and interested persons, as well as residual effects identified through the effects assessment process. The sustainability assessment will describe how the planning and design of the Project, in all phases including follow-up monitoring, considered the sustainability principles.

9.8 Consideration of Identity and Gender-Based Analysis Plus in Effects Assessment

The Proponent recognizes that communities and sub-populations within those communities may be impacted differently by the Project with respect to VCs and indicators. As such, the Project aims to collect baseline information for the purpose of assessing differential effects and establishing relevant mitigation measures, as further elaborated on in **Section 4.3**. GBA+ will not be limited to community feedback, when offered or discussed in secondary texts, additional sub-population information as is applicable to the relevant assessment will be incorporated.

GBA+ will be integrated in the Visual Environment Assessment to help to ensure that sub-populations are identified and engaged with for the purpose of seeking input on areas of importance / sensitivity to visual impact. As with the Social Environment Assessment, the analytical approach to GBA+ will be largely qualitative.





Visual Aesthetics Study Plan

9.9 Follow-up Programs

A follow-up program verifies the accuracy of the effects assessment and evaluates the effectiveness of mitigation measures. Section 26 of the TISG does not specifically outline required Visual related monitoring activities that are to be included. The identification of Visual follow-up programs for the Project are not described in this Study Plan as the information needed to determine the need for and form of impact monitoring is dependent on the outcome of the effects assessment and on the results of consultation and engagement with Indigenous communities, agencies and interested persons.





Visual Aesthetics Study Plan

10. Assumptions

The MFFN CAR Project Team is not aware at this time of key assumptions that will be recognized in the Visual Environment Assessment. These will be determined during the development of the IS / EA Report. Key assumptions made and used in the assessment of Visual impacts will be documented in the IS / EA Report.





Visual Aesthetics Study Plan

11. Concordance with Federal and Provincial Guidance

This section provides the best information currently available on how federal and provincial requirements identified for the Project to date will be addressed. **Table 11-1** outlines how the Visual Environment Assessment will conform with the TISG. Presented in **Table 11-2** are the comments received on the draft Provincial Terms of Reference that relate to the Visual Environment Assessment. **Table 11-3** outlines proposed deviations from the TISG requirements.

The final concordance with federal and provincial requirements will be included in the IS / EA Report, and will be based on regulatory agency guidance, professional judgement and input received through the Project consultation and engagement process.





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Table 11-1: Study Plan Federal Concordance – Conformance with Requirements

ID#	Federal TISG Reference ⁹	Requirement / Comment / Concern	Response	Study Plan Reference
1	TISG Section 12.2	■ The experience of the practice (e.g., connection to the landscape without visual landscape)	Connection with the landscape will be considered as part of the Land and Resource Use Assessment.	See Land and Resource Use Study Plan
2	TISG Section 12.4	■ The experience associated with the exercise of rights (e.g., visual landscape)	■ This will be considered in the Aboriginal and Treaty Rights and Interests Assessment.	See Aboriginal and Treaty Rights and Interests Study Plan
3	TISG Section 14.1	 Describe consultation with regulators, stakeholders, community groups, landowners and Indigenous groups about potential effects to thevisual environment; 	Consultation with Indigenous communities and interested persons is described in Section 4 of the Study Plan. Consultation and engagement activities will include inputs with respect to the selection of visual impact receptor points and the potential for visual impact.	■ Section 4
4	TISG Section 16.2	Identify predicted visual or other aesthetic effects of the Project on existing land use in the study area;		■ Section 9
5	TISG Section 17.2	The Impact Statement must: describe effects to community well-being due to changes to viewscapes and soundscapes resulting from the Project.	Assessment of effects to community well-being are to be covered in the Social Environment Assessment and Human Health and Community Safety Assessment. These assessments will take into account any potential impacts on the visual landscape as applicable.	■ See Social Study Plan and Human Health and Community Safety Study Plan

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^{9.} Federal TISG Reference should be the Section or subsection, page etc. that clearly identifies where comment/issue we are addressing can be found (ex. Section 8.1 of TISG)

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Table 11-2: Study Plan Provincial Draft ToR Concordance - Conformance with Requirements

ID#	Commenter	Requirement / Comment / Concern	Response Related to Draft Provincial ToR	Study Plan Reference
1	 Draft ToR Comment from the Ministry of Heritage, Sport, Tourism and Culture Industries (ID #301) 	 Table 7-4: Preliminary Identification of Potential Environmental Effects, Page 48 Potential Effects on Cultural Heritage Resources Damage to, or loss of, archaeological or other sites. MHSTCI recommends that the description of potential effects be expanded as follow: Disturbance or destruction of, archaeological resources. Displacement of built heritage resources and/or cultural heritage landscape by removal and/or demolition and/or disruption by isolation Impacts to registered and unregistered cemeteries which have been identified and documented Effects on cultural heritage landscapes Disruption of cultural heritage resources by the introduction of physical, visual, audible or atmospheric elements that are not in keeping with the character and setting of cultural heritage resources 	■ Table 8-2 of the ToR has been revised to include all suggested potential effects.	■ Section 9.2
2	■ Draft ToR Comment from Fort Albany First Nation (FAFN) (ID #659)	 Section 7.1.4.12 Socio-Economic and Built Environment – Visual Aesthetics p. 43 The ToR provides limited information about visual aesthetics in the area of the project. Please provide information about any planned field programs to collect visual data at key locations and plans to consult with Indigenous nations in the collection of such data. The visual environment comprises a meaningful component of the environment for Indigenous peoples, informing traditional knowledge and use. The project has the potential to adversely affect the visual landscape. 	■ Field activities will be undertaken to support the visual assessment. Indigenous communities will be consulted on the visual assessment and associate field program. If FAFN has specific interest in understanding how the visual assessment will be completed, the MFFN Project Team is available for further discussion.	■ Section 7.2
3	■ Draft ToR Comment from Fort Albany First Nation (ID #680)	 Appendix A Draft Criteria & Indicators for Alternatives Evaluation p. 5 The ToR provides "Visibility of the Project from sensitive locations" as indicator for Visual Character. Please provide an indicator and methodology that captures changes in visual quality. For a project such as this, the use of Indigenous Visual Quality Objectives, and mock up visual perspectives from different viewpoints before and after project development, through engagement with Indigenous peoples, is standard practice. "Visibility" is an insufficient indicator to capture visual quality. 	■ The visual assessment will include a Visual Sensitivity indicator. This recognizes that certain landscapes are more susceptible to change and more sensitive due to the angle, distance of viewer, as well as the cultural significance to viewers.	■ Section 9.3



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Table 11-3: Study Plan Federal and Provincial Concordance – Requirement Deviations

ID #	Federal TISG Reference ¹⁰	Requirement / Comment / Concern	Response (Rationale for not meeting requirement)	Justification (for not complying with requirement including for example scientific research, precedence)	Proposed TISG Amendment
1	TISG Section 8.1 (pg. 39)	■ "The Impact Statement mustdescribe existing ambient nighttime light levels at the project site and at any other areas where project activities could have an effect on light levels. The Impact Statement will describe night-time illumination levels during different weather conditions and seasons"	■ The road is not expected to require any long term permanent lighting.	■ Due to the fact that there are no anticipated long-term permanent lighting structures required for the Project, there will be no potential lighting impacts to assess.	Remove this requirement
2	TISG Section 14.1 (pg. 86)	"Identify and justify the approach to determine the extent to which sound effects resulting from the Project are adverse and describe any changes in night-time light levels as a result of the Project"		■ Due to the fact that there are no anticipated long-term permanent lighting structures required for the Project, there will be no potential lighting impacts to assess.	Remove this requirement
3	TISG Section 17.2 (pg. 107)	 "The impact statement must: describe predicted effects to recreation (e.g., hunting, fishing, hiking, wildlife viewing, aesthetic enjoyment) by the community and Indigenous groups, and youth within these communities, including effects to: Access to the resources Quantity and quality of the resources; and Overall experience when undertaking recreation activities, including noise, odours/air quality, and effects on visual landscapes" 	Assessment of effects to recreation activities are covered in the Land Use Assessment. This assessment will take into account any potential impacts on the visual landscape as applicable	Land Use Assessment. This assessment will take into account	See Land and Resource Use Study Plan
4	TISG Section 19.1 (pg. 116)	■ "The potential effectsnot limited toVisual aesthetics over the life of the Project and post-Project abandonment or decommissioning."	Impacts to visual aesthetics will be addressed in the Visual Environment Assessment for the construction and operation periods of the Project (see Section 9 of the Study Plan).	■ There are currently no plans to decommission the CAR as there is no expected / known end date for its need. Therefore, future suspension, decommissioning and eventual abandonment of the CAR will not be considered in the IS / EA Report. It will be considered if and when a decommissioning or abandonment application is made for the road.	■ Reword the requirement to remove "post-Project abandonment or decommissioning"

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^{10.} Federal TISG Reference should be the Section or subsection, page etc. that clearly identifies where comment/issue we are addressing can be found (ex. Section 8.1 of TISG)



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12. References

AECOM Canada Ltd., 2020:

Marten Falls First Nation Proposed Terms of Reference Marten Falls Community Access Road – Environmental Assessment, Appendix B: Consultation & Engagement Plan to Support the Environmental Assessment / Impact Statement.

BC MoF (Province of British Columbia Ministry of Forests). May 1997.

Visual Landscape Inventory: Procedures and Standards Manual. Forest Practices Branch. Available: https://www2.gov.bc.ca/gov/content/industry/forestry/managing-our-forest-resources/visual-resource-management/visual-landscape-inventory

Impact Assessment Agency of Canada, 2019:

Impact Assessment Act. https://laws-lois.justice.gc.ca/eng/acts/I-2.75/

Impact Assessment Agency of Canada, 2020:

Public Participation Plan for the Marten Falls Community Access Road Project Impact Assessment. https://iaac-aeic.gc.ca/050/documents/p80184/133934E.pdf

Impact Assessment Agency of Canada, 2020a:

Indigenous Partnership and Engagement Plan for the Marten Falls Community Access Road Project Impact Assessment. https://iaac-aeic.gc.ca/050/documents/p80184/133936E.pdf

Impact Assessment Agency of Canada, 2020b:

Glossary of Terms for the impact assessment of designated projects under the IAA. https://www.canada.ca/en/impact-assessment-agency/services/policy-guidance/glossary-of-terms.html

Impact Assessment Agency of Canada, 2020c:

Tailored Impact Statement Guidelines for the Marten Falls Community Access Road Project. https://iaac-aeic.gc.ca/050/documents/p80184/133937E.pdf

Noront. December 2013.

Eagle's Nest Project – A Federal/Provincial Environment Impact Statement/Environmental Assessment Report. Available: http://norontresources.com/projects/permitting-technical-documents/





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Ontario Government, 1990a:

Environmental Assessment Act. https://www.ontario.ca/laws/statute/90e18

PPCRA (Provincial Parks and Conservation Reserves Act). 2006:

Provincial Parks and Conservation Reserves Act, 2006, S.O. 2006, c. 12. Available: https://www.ontario.ca/laws/statute/06p12

Province of Ontario:

Ontario Heritage Act and Standards and Guidelines for Conservation of Provincial Heritage Properties.

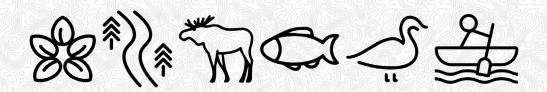




Visual Aesthetics Study Plan

Appendix A

Preliminary List of Data Sources





Visual Aesthetics Study Plan

Environment Canada, Parks Canada:

Source used to identify the list of sensitive receptors and locally unique and valued areas such as public recreation areas and trails, significant natural, cultural and recreational values and scenic features

Indigenous Business & Finance Today, August 2016:

KWG and China Railway First Survey & Design Institute Group Co., Ltd. (FSDI) Ink Strategic Cooperation Agreement-FSDI to Complete Conditional Bankable Feasibility Study. Available: http://www.ibftoday.ca/kwg-and-china-railway-fsdi-ink-strategic-co-operation-agreement-fsdi-to-complete-conditional-bankable-feasibility-study/

Indigenous Services Canada (ISC):

Source used to obtain First Nation and Metis Community-based land use plans, building locations and list sensitive receptors

KWG Resources Inc., 2019:

<u>Ring of Fire Railway.</u> Available: http://kwgresources.com/rail-corridor/; http://kwgresources.com/ring-of-fire-railway-kwg-engages-canarail/

- LI (The Landscape Institute and the Institute of Environmental Management & Assessment), 2002: Guidelines for Landscape and Visual Impact Assessment 2nd Edition. Available: https://epdf.pub/guidelines-for-landscape-amp-visual-impact-assessment.html
- LI (The Landscape Institute and the Institute of Environmental Management & Assessment), 2013: Guidelines for Landscape and Visual Impact Assessment 3rd Edition.

Natural Resource Canada (NRCAN):

Federal vector and raster base mapping. Source used to identify the list of sensitive receptors and locally unique and valued areas, such as residences, tourism destination and camps, public recreation areas and trails, waterways (lakes and rivers used for recreation) and roads; environmental, land use, social or economic importance

NEC (Niagara Escarpment Commission), August 2019:

Niagara Escarpment Commission Visual Impact Assessment Technical Criteria. Available: https://www.escarpment.org/LandPlanning/NepPoliciesGuideline/ProposedGuidanceTechCriteria/VIA





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Ontario Ministry of Agriculture Food and Rural Affairs (OMAFRA):

Source used to identify the physical environment including landform and vegetative cover

Ontario Ministry of Energy, Northern Development and Mines (OENDM):

Source used to identify the physical environment including landform and resource extraction activities

Ontario Ministry of the Environment, Conservation and Parks (OMECP):

Source used to identify the list of sensitive receptors and locally unique and valued areas such as public recreation areas and trails, significant natural, cultural and recreational values and scenic features

Ontario Ministry of Heritage, Sport, Tourism and Culture Industries (OMHSTCI):

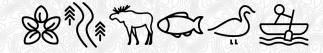
Source used to identify the list of sensitive receptors and locally unique and valued areas; cultural and/or heritage importance;

Ontario Ministry of Natural Resources and Forestry (OMNRF):

Provincial vector and raster base mapping. Source used to identify the list of sensitive receptors and locally unique and valued areas, such as residences, tourism destination and camps, public recreation areas and trails, parks and protected areas, waterways (lakes and rivers used for recreation) and roads; environmental, land use, social or economic importance

Consultation and Engagement: Communities and Indigenous Knowledge; traditional, cultural and/or heritage importance; Aboriginal Traditional Knowledge (ATK)

Will also be examining the results of other study assessments related to: Indigenous Knowledge and land use, other land use, community planning, resource extraction activities, significant natural and scenic features, cultural features and recreation areas and features.





Visual Aesthetics Study Plan

Appendix B

Agency Comments on the Draft Study Plan





Visual Aesthetics Study Plan

Draft Study Plan Comments – Federal





Visual Aesthetics Study Plan

Comment # / Ref #	Study Plan Section	TISG Section	Comment / Context	Action Item	Final Response	Study Plan Reference
General Comment	■ General Comment	■ Sections 5, 6, 7, 13, 19.2, and 25	The Agency has provided these other red sections of the Guidelines where required submitted to the Agency. These additional updated study plans.	n are detailed in a separate table titled comments on MFCAR Draft Study Plans". quired actions to highlight common ments were not met in the draft study plans al actions must be addressed in the	■ We have reviewed the relevant comments and incorporated where appropriate. Please refer to the General Comments Table Response submitted separately to the Agency for specific responses.	
VE-01	 "Visual issues that may occur due to the Project include impacts on commercial tourism operations, parks and protected areas and perceptions of harm." Section 6.2: Methods for Predicting Changes in the Physical Environment "This includes a visibility analysis, of 	 Section 8.1 "The Impact Statement must: describe existing ambient nighttime light levels at the project site and at any other areas where project activities could have an effect on light levels. The Impact Statement will describe night-time illumination levels during different weather conditions and seasons; and" Section 14.1 "The Impact Statement must: identify and justify the approach to determine the extent to which sound effects resulting from the Project are adverse and describe any changes in night-time light levels as a result of the Project; and" 	light levels and predicted changes in light levels as a result of the Project will be described to meet requirements in Sections 8.1 and 14.1 of the Guidelines.	■ Update the study plan to provide details to demonstrate how the existing ambient nighttime light levels and predicted changes in light levels at relevant locations will be described, as per the requirements in Sections 8.1 and 14.1 of the Guidelines.	■ No significant permanent lighting is proposed for the CAR. As such a lighting assessment is not warranted.	■ Not Applicable to Visual Environment
VE-02	■ Section 4.2: Study Methods - "changes to the visual environment may generate perceptions of environmental harm by Indigenous communities related to sensitive cultural features and recreationalists who value the pristine quality of the landscape. Therefore, visible disturbances and perceptions may impact the areas for those users."	■ Section 6	■ It is unclear, based on the information provided in Section 4.2 of the study plan, if all Indigenous groups listed in the Indigenous Engagement and Partnership Plan will be engaged at a level that will meet the requirements in Section 6 of the Guidelines.	■ Provide details to demonstrate that all Indigenous groups listed in the Indigenous Engagement and Partnership Plan will be engaged with and provided opportunities to: - provide Indigenous knowledge during baseline data collection; - comment on the list of valued components and indicators; - inform the effects assessment and review its conclusions; and - inform the development of mitigation measures and follow-up programs.	■ The Study Plan includes commitments to engage with Indigenous communities including the consideration of Indigenous Knowledge and input on VCs, effects assessment and any recommended mitigation measures.	■ Section 2.1 ■ Section 4.3 ■ Section 5
VE-03	■ Section 6.2: Methods for Predicting Changes in the Physical Environment - "It is anticipated that the results of the visual assessment will be considered in the assessment to effects to Indigenous peoples and impact on the exercise of Aboriginal and Treaty Rights."	■ Section 19.2	■ The study plan should demonstrate an approach for integrating impacts on rights considerations (changes to resource, access, and experience) into collection of baseline information and the effects assessment, including the identification of mitigation measures proposed to address impacts.	■ Describe the approach for identifying the potentially impacted rights of Indigenous peoples of Canada that are recognized and affirmed by section 35 of the Constitution Act, 1982, and for integrating the potential impacts on those rights into the collection of baseline information and the effects assessment. Include details to	■ For information on how impacts on the rights of Indigenous peoples will be assessed, please see the Aboriginal and Treaty Rights and Interests Study Plan. Information relevant to the Visual Environment Assessment received through the Aboriginal	■ Section 4.2



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Comment # / Ref #	Study Plan Section	TISG Section	Comment / Context	Action Item	Final Response	Study Plan Reference
VE-04	■ Section 3: Spatial Boundaries: Study Areas - "The team will define the visual study area based on the visibility of the Project and the assessment for changes to visual environment that is most impactful. The visual study areas are expected to consider the visual detail that can be perceived for route Alternative 1 and route Alternative 4 including appropriate consideration of foreground, middle-ground and background viewing (BC MoF, 1997). The Visual Environment Study will identify the immediate baseline environment within the foreground (100 m from PSA) and the mid-ground (2.5 km from PSA) where viewers potentially observe a distinguishable level of detail and contrast and background (up to 8 km from the PSA)."	■ Section 7.4.1 - "Spatial boundaries are defined taking into account the appropriate scale and spatial extent of potential effects and impacts of the Project; community knowledge and Indigenous knowledge; current or traditional land and resource use by Indigenous groups; exercise of Aboriginal and Treaty rights of Indigenous peoples, including cultural and spiritual practices; and physical, ecological, technical, social, health, economic and cultural considerations"	 It is unclear if Indigenous groups and the public were engaged with and provided an opportunity to provide input on the spatial boundaries defined in Section 3 of the study plan. If this engagement has not yet occurred, more detail is necessary to demonstrate how this opportunity will be provided to Indigenous groups and the public, and how the information they provide will be taken into account in the definition of the spatial boundaries, as per the requirement in Section 7.4.1 of the Guidelines. 	defining the spatial boundaries for the Project. Provide details on the timeline for engagement relative to the Project work plan, including engagement relative to the schedule for baseline work, and in consideration of the project team's	and Treaty Rights and Interests Study Plan will be considered. The timeline for the Visual Environment Assessment is to be confirmed. It is expected that the work will commence in 2021 Q2-Q3 subject to COVID-19 restrictions. As noted in Section 6.2.2, the Visual study area will be defined based on the visibility of the Project and the assessment of changes to the Visual Environment that are the most impactful. Interested Indigenous communities will be engaged regarding the assessment of Visual impacts including the identification of locations that are considered to be visually sensitive.	■ Section 6.2.2
VE-05	■ Section 6.2: Methods for Predicting Changes in the Physical Environment - "This includes a visibility analysis, of the potential effects the CAR will have on the immediate surrounding area, and identification of sensitive receptor locations that are potentially impacted by the proposed CAR."	 Section 14.1 "The Impact Statement must: describe the locations and characteristics of the most sensitive receptors including species at risk and differential effects for sensitive receptors;" 	■ It is unclear if the requirement in Section 14.1 of the Guidelines will be met. More detail is needed related to the locations and characteristics of the most sensitive receptors, including human receptors, species at risk and differential effects for sensitive receptors.	Provide detail to demonstrate that the locations and characteristics of the most sensitive receptors including species at risk and differential effects for sensitive receptors will be described, as required by Section 14.1 of the Guidelines.	■ Species at Risk are not a receptor for the Visual Environment Assessment. The process for determining sensitive human Visual receptor locations is described in Section 9.2 of the Study Plan.	■ Section 9.2



Visual Aesthetics Study Plan

Comment # / Ref #	Study Plan Section	TISG Section	Comment / Context	Action Item	Final Response	Study Plan Reference
VE-06	■ Section 6.2: Methods for Predicting Changes in the Physical Environment - "The results of the visual assessment will also be submitted to the social, economic, human health and community safety, and land and resource use assessment teams for consideration in their impact assessments." ■ Section 7 Concordance with Federal and Provincial Guidance - "Will be addressed in Health, Social, Economic and Land Use Conditions"	 Section 12.2 "In general, the Impact Statement should consider: the experience of the practice (e.g., connection to the landscape without artificial noise and sensory disturbances, air quality, visual landscape, perceived or real contamination, etc.); and" Section 12.4 "The Impact Statement should document the nature and extent of the exercise of rights of Indigenous peoples, potentially impacted by the Project, as identified by the Indigenous group(s). Indigenous groups may also provide their perspective through consultations with the Agency. This information related to rights may include, but is not limited to: the experience associated with the exercise of rights (e.g., noise and sensory disturbances, air quality, visual landscape);" Section 13.2 the Impact Statement must consider and describe the interactions between the environmental, health, social and economic effects as well as the interaction and interconnectedness of selected valued components taking into account values of local communities, including municipalities and Indigenous groups Section 14.1 "The Impact Statement must: describe consultation with regulators, stakeholders, community groups, landowners and Indigenous groups about potential effects to the atmospheric, acoustic, and visual environment:" 	detail on the data described in other study plans (such as the human health and community safety; social; economic and land and resource use study plans) that will be collected and analyzed to meet the visual environment baseline data collection and effects assessment requirements described in Sections 12.2, 12.4 and 14.1 of the Guidelines.	■ Update the study plan to provide further detail on the specific visual environment criteria and indicators that will be collected and assessed through other study plans. At a minimum, provide a cross reference as to where the specific visual environment criteria and indicators can be found in the other plans.	See Section 9.2 of the Visual Study Plan for a description of the visual indicators to be considered in the assessment. The results from the Visual Environment Assessment will be incorporated into the assessment of other VCs, such as Land and Resource Use, Social Environment, and Aboriginal and Treaty Rights and Interests.	Resource Use Study Plan Social Environment Study Plan



Visual Aesthetics Study Plan

Draft Study Plan Comments – Provincial





Visual Aesthetics Study Plan

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Comment # / Ref #	Study Plan Section	Agency/Regulatory Body Comments Received From	Comment / Context	Action Item	Final Response	Study Plan Reference
1	■ N/A	■ MECP, Environmental Assessment Branch	■ Please review EAB comments on the Wildlife, Ungulates, Vegetation, Groundwater and Climate Change work plans that may apply to this work plan.	■ Please review EAB comments on the Wildlife, Ungulates, Vegetation, Groundwater and Climate Change work plans that may apply to this work plan.	Review has been undertaken. Not applicable to the Visual Environment Assessment.	Not applicable to Visual Environment.
2	■ Page 9, s. 6.2	■ MECP, Environmental Assessment Branch	 A route evaluation matrix is referenced in section 6.2, and the work plan states that the output of visibility mapping of the two route alternatives will be included in the route evaluation process and impact assessment of the project. Other work plans do not mention a route evaluation matrix. As noted in comments on other work plans, the methodology for how each environmental component will factor into the alternatives assessment should be clear. As well, the alternatives assessment will need to include all project components for which alternatives are being considered. The work plan only speaks to the two route alternatives. 	 Please ensure that the draft EA clearly explains the alternatives assessment methodologies for all alternatives being considered (routes, supporting infrastructure), unless sufficient rationale for their exclusion can be provided. Ensure the EA is clear in terms of how each environmental component is factored into selection of preferred alternatives, whether using a route evaluation matrix or otherwise. 	■ The visual impact assessment will consider all relevant Project components that have potential for visual impact. See Section 9.1 for Project-environment interactions to be considered.	■ Section 9.1
1	■ 4.1 Desktop Assessment Appendix A	■ MHSTCI (Heritage Planners Comments)	A cultural heritage report: existing conditions and preliminary impact assessment needs to feed into the visual environment assessment. Ensure that new construction, visual intrusions, or other interventions do not adversely affect the heritage attributes of a known or potential provincial heritage property. Retain and maintain the visual settings and other physical relationships that contribute to the cultural heritage value of a property. (Provision D.3 of Standards and Conservation of Conservation of Provincial Heritage Properties).	■ Include the cultural heritage report in Appendix A.	See Cultural Heritage Study Plan for more information on the Cultural Heritage Report. The identification of sensitive visual receptors will consider input from the Cultural Heritage assessment. This is outlined in Section 7.2 of the Study Plan.	Section 7.2
2	■ Throughout the work plan	■ MHSTCI (Heritage Planners Comments)	■ Terminology should be consistent with the provincial cultural heritage legislative and regulatory framework (e.g., Ontario Heritage Act, Provincial Policy Statement 2020). The term "cultural heritage resources" includes archaeological resources, built heritage resources and cultural heritage landscapes.	Please replace terms such as "cultural heritage sites" and "cultural heritage features" with "cultural heritage resources".	■ Term "cultural heritage resources" has been used throughout the Study Plan in place of "Cultural Heritage Sites" and "Cultural Heritage Features".	■ Table 9-2
3	■ 9.0 References	■ MHSTCI (Heritage Planners Comments)	As the project area may include lands owned and/or managed by the provincial Crown, the Standards and Guidelines for Conservation of Provincial Heritage Properties (issued under section 25.2 of the Ontario Heritage Act) apply.	■ Include reference to the Ontario Heritage Act and the Standards and Guidelines for Conservation of Provincial Heritage Properties.	■ This reference has been added to References	Section 12



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