

Comments on Marten Falls Community Access Road Project (Project) revised Climate Adaptation and Resiliency Study Plan – December 16, 2021

It is essential that the Impact Statement for the Marten Falls Community Access Road Project (the Project) address all requirements outlined in the Tailored Impact Statement Guidelines (the Guidelines), and that the study plans outline a clear approach to achieving these requirements. The Impact Assessment Agency of Canada (the Agency) has highlighted sections of the Guidelines where requirements for the Impact Statement may not be met, based on content of the study plan submitted to the Agency. Note that this table does not provide an exhaustive list of the requirements described in the Guidelines. The Guidelines should be reviewed in their entirety, including the sections identified below.

General Comments from the Impact Assessment Agency of Canada on the Marten Falls Community Access Road Draft Study Plans – July 2, 2020					
#	Guidelines Section¹	Required Action for Proponent	Proponent Response	Final Study Plan Section Reference	Agency comments
GC-01	Section 5 - Public Participation and views (including 5.1, 5.2)	<p>Provide a clear description in the study plans of how public engagement opportunities have been and/or will be integrated into the impact statement phase. This must include detail on how the public will have opportunities to provide input to contribute to the development of the Impact Statement, as required in Section 5 of the Guidelines.</p> <p>Describe what engagement with the members of the public listed in the Public Participation Plan has been done in the development of the study plans, and/or any planned engagement with members of the public on the proposed study plans.</p>	<p>Section 4: describes how the Proponent will provide Project notices and opportunities with members of the public listed in the Public Partnership Plan. This will also 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.</p> <p>The study plans have recognized public and agency input received on the Project to date.</p>	Section 4.1 “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.”	<p>Section 4.1 of the study plan mentions that “a variety of activities will be offered”, however, no details on the likely engagement activities are provided.</p> <p>As required by Section 5 of the Guidelines, the Impact Statement must provide a record of engagement that describes all efforts taken to seek the views of local communities and other stakeholders with respect to the Project, including on the study plans. This record of engagement is to include all engagement activities undertaken prior to the submission of the Impact Statement, including prior to and during the planning phase, and in the preparation of the Impact Statement.</p> <p>Provide details on the timeline for public engagement relative to the project workplan, including engagement relative to the schedule for baseline work, and in consideration of the project team’s timeline for the development of the Impact Statement.</p> <p>Demonstrate in the Impact Statement that comments provided by members of the public on Climate Adaptation and Resiliency were taken into consideration. Comments provided to the Agency are available on the Canadian Impact Assessment Registry Internet site at: https://iaac-aeic.gc.ca/050/evaluations/proj/80184/contributions</p>
GC-02	Section 6 - Description of Engagement with Indigenous Groups (including 6.1, 6.2, 6.3)	<p>Provide a clear description in the study plans of how all Indigenous groups listed in the Indigenous Engagement and Partnership Plan will have opportunities to provide Indigenous knowledge, including the validation of how information they provided was applied. The study plan should include a description of the proposed methods for data collection, management of confidentiality, and information storage. This should also include a methodology for tracking information that has been approved by the group, to demonstrate that the guidance outlined in Section 6.2 of the Guidelines has been incorporated into the study plans.</p> <p>Describe what engagement with all the Indigenous groups listed in the Indigenous Engagement and Partnership Plan has been done in the development of the study plans, and/or any planned engagement with Indigenous groups on</p>	<p>In Section 4.2 it is noted that the Proponent will provide Project notices and opportunities for consultation and engagement with Indigenous communities identified in the Indigenous Partnership and Engagement Plan. 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 provide their input.</p> <p>Section 2.1.1 outlines the approach to handling confidential information, by means of permission from Indigenous communities to include Indigenous Knowledge in the IS / EA Report, regardless of the source of the Indigenous Knowledge.</p> <p>The study plans have recognized Indigenous community input received on the Project to date.</p>	<p>Section 4.2 “...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 provide their input...”</p> <p>“...Indigenous communities will have the opportunity to comment on components of the study plans throughout the IS / EA Report consultation and engagement process...”</p>	<p>Section 4.2 of the study plan states that “a variety of activities will be offered”, however, no details on the planned engagement activities are provided.</p> <p>Section 4.2 of the study plan also states that “Indigenous communities will have the opportunity to comment on components of the study plans throughout the IS / EA Report consultation and engagement process”, however, it is unclear on which components of the study plans the project team plans to engage.</p> <p>Provide details on the timeline for Indigenous engagement on the Climate Adaptation and Resiliency study plan, including engagement for the collection of Indigenous knowledge, and in consideration of the project team’s timeline for the development of the Impact Statement.</p> <p>Demonstrate in the Impact Statement that comments provided by Indigenous groups on Climate Adaptation and Resiliency were taken into consideration. Comments provided to the Agency are available on the Canadian Impact Assessment Registry Internet site at: https://iaac-aeic.gc.ca/050/evaluations/proj/80184/contributions</p>

¹ Refer to complete sections of the Guidelines for more context.

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		the proposed study plans, particularly in relation to collection of Indigenous knowledge (i.e. develop the work plan in collaboration with those Indigenous groups that would need to provide knowledge).			
GC-03	Section 6.2 - Analysis and response to questions, comments, and issues raised	Revise the study plans to include an approach to handling confidential information that demonstrates adherence to the guidance provided in Section 6.2 of the Guidelines.	<p>Section 2.1.1: Section has been updated to include information regarding both confidentiality and permission information on all collected Indigenous Knowledge, regardless of the source.</p> <p>This section also includes how information regarding the Indigenous Knowledge Sharing Agreements will be established by the Proponent and Indigenous community participating in the Program.</p>	Section 2.1.1 “...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)...”	<p>As required in Section 6 of the Guidelines, describe the confidential information provided by each Indigenous group. Present the content in sufficient detail to support understanding of the potential effects and impacts on rights, while also protecting confidential/sensitive specifics and respecting stipulations in the confidentiality agreements (e.g, use buffer areas instead of specific locations, etc.).</p> <p>Provide to the Agency, in the form of a letter from the Indigenous group that shared confidential information, a letter confirming that:</p> <ul style="list-style-type: none"> the Indigenous group that provided confidential information is satisfied with the way the Impact Statement was informed; the Indigenous group that provided confidential information is satisfied with the way the issue was solved or addressed.
GC-06		Provide further details in the study plans on how GBA+ has been integrated into all aspects of data collection methodology, as per Section 7.1 of the Guidelines, and into the assessment of effects and impacts, as mentioned in Sections 13, 20, 21, and others, related to effects assessments of the Guidelines	Section 4.3 has been updated to include the consideration of Identity and Gender-Based Analysis Plus (GBA+) including both Indigenous communities and their relevant subpopulations and non-Indigenous communities and their subpopulations. During consultation and engagement activities these groups (and any others defined during consultation) will be engaged with on targeted input.	Section 4.3	<p>Describe how GBA+ has been or will be applied to the consideration of engagement activities. Identify specific methods targeted to specific subgroups.</p> <p>Provide detail on how GBA+ has been integrated into all aspects of data collection methodology, as per Section 7.1 of the Guidelines, and into the assessment of effects and impacts, as mentioned in Sections 13, 20, 21, and others, related to effects assessments of the Guidelines.</p> <p>It is not sufficient to mention that Gender-Based Analysis Plus will be applied to the assessment. Clear descriptions of how GBA+ was integrated (including to which variables, method, and how it influenced results' interpretation) are needed in the Impact Statement.</p>
GC-07	Section 13 - Effects Assessment (including 13.1, 13.2)	Provide details to demonstrate how the Project's potential effects will be considered, as per the requirements in Sections 13 to 19 of the Guidelines. Ensure that the effects assessment considers the effects of each of the project components and physical activities, in all phases, and that it is	<p>Project environmental interaction are separated into Project phases, and Project activities for each environmental discipline in their VC-specific study plan listed as Table 9-1.</p> <p>Information collected through the various activities (e.g., field studies and programs, effects assessments) of each discipline area (e.g., wildlife, vegetation, cultural heritage) will be shared with the Indigenous Knowledge Program leads. This will</p>	Throughout the study plan, Section 9	<p>As required in Sections 7 and 13 of the Guidelines, ensure that the effects assessment considers the effects of each of the project components (including but not limited to all alternative routes brought forward in the Impact Statement, all aggregates sources, access roads, etc.) and physical activities, in all phases, and that the assessment is based on a comparison to the data and information gathered during the proposed baseline work.</p> <p>Clarify the level of information that will be shared with, and explained to, the Indigenous Knowledge Program leads and whether study plans will be made</p>

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		based on a comparison to the proposed baseline work. Provide detail on how engagement with all Indigenous groups listed in the Indigenous Engagement and Partnership Plan and the public will inform the effects assessment and the selection of mitigation measures and follow-up program measures.	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.		available to all Indigenous groups listed in the Indigenous Engagement and Partnership Plan.
GC-08	Section 13.1	Provide clear descriptions of the rationale behind the assumptions, including but not limited to the assumed average daily traffic and vehicles composition during the construction and operation phases that will be considered for the effects assessment and the cumulative effects assessment.	Section 10: Current assumptions to be used in the effects assessment have been identified. Any additional assumptions will be identified and rationale will be provided in the IS / EA Report.	Section 10 “Operations and Maintenance Phase of the CAR project begins once construction activities are complete and lasts for the life of the Project. The operations and maintenance phase of this project is assumed to be 75 years, based on the expected timeline for when major refurbishment of road components is anticipated.”	
GC-09	Section 19.2 - Impacts on the Exercise of Aboriginal and Treaty Rights	Describe an approach for identifying the potentially impacted rights of Indigenous peoples of Canada that are recognized and affirmed by section 35 of the <i>Constitution Act, 1982</i> , and for integrating the potential impacts on those rights into the collection of baseline information and the effects assessment.	All study plans reference how potential effects on Indigenous rights will be assessed in the Aboriginal and Treaty Rights and Interests Study Plan. Impacts on Rights considerations are explained in the rationale for defining a Local Study Area and Regional Study Area for Aboriginal and Treaty Rights and Interests VCs. Further information for this is listed in Section 6.2.2 in the Aboriginal and Treaty Rights and Interests Study Plan.	Section 5, and Section 6.2.2 in the Aboriginal and Treaty Rights and Interests Study Plan	Feedback will be provided in the Federal Review Team’s comments package on the Aboriginal and Treaty Rights and Interests Study Plan.
GC-10	Section 20 - Mitigation and enhancement measures	Provide detail on the approach to meeting the requirements of Section 20 of the Guidelines regarding the identification of mitigation and enhancement measures.	Section 9: Approach to mitigation and enhancement measures, specifically noting that 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.	Section 9.3	Section 9.3 of the study plan is listing the requirements outlined in Section 20 of the Guidelines. Ensure that the Impact Statement provides a description of the method or approach followed to meet the requirements of Section 20 of the Guidelines.
GC-11	Section 25 – Description of the Project’s contribution to sustainability	Provide detail on the approach to meeting the requirements of Section 25 of the Guidelines regarding the description of the Project’s contribution to sustainability.	Section 9: the sustainability assessment for the Project will be undertaken on the preferred alternative and will characterize the Project’s contribution to sustainability incorporating the requirements set out in Section 25 of the TISG.	Section 9.7	Section 9.7 of the study plan is listing the requirements outlined in Section 25 of the Guidelines. Ensure that the Impact Statement provides a description of the method or approach followed to meet the requirements of Section 25 of the Guidelines.

Federal Review Team comments on the Marten Falls Community Access Road Project Draft Climate Change Study Plan submitted in 2020

#	Study Plan (2020) Reference	Guidelines Section ²	Required Action for Proponent	Proponent Response	Study Plan (2021) Reference	Agency Response
CC-02	<p>Section 3: Spatial Boundaries “The LSA and RSA boundaries for climate change are detailed in Error! Reference source not found. and the LSA is shown in Error! Reference source not found.”</p> <p>Section 6.1: Indicators and Expression of Change “The indicators and rationale for selection and measurement of potential effects proposed to assess and evaluate the selected preferred route option in the IA/EA are provided in Error! Reference source not found.”</p>	Editorial Comment	Revise the study plan to eliminate any error messages and provide the correct reference.	Changes Made.		This comment has been addressed.
CC-03	<p>Section 6.2: Methods for Predicting Future Conditions “With respect to quantitative models and predictions, the EA/IA will detail the model assumptions, parameters, the quality of the data and the degree of certainty of the predictions obtained. Climate change projections of temperature and precipitation for this project will be derived from an ensemble of 40 GCMs from the most recent IPCC 5th assessment report (AR5), published in 2013. These values will be calculated from the AR5 datasets using the Dillon CADE tools. Within the CADE system, projected values are generated using the “Delta Method” (IPCC-TGICA, 2007), which consists of applying the average projected difference (the “delta”) for a given climate parameter to the historical average or baseline value. Projections will be developed for two 30-year periods (time horizons), centered on the 2050s (2041–2070) and the 2080s (2071–2100). Four future global GHG concentration scenarios have been established by the IPCC. Each of these scenarios is defined by different Representative Concentration Pathways (RCPs). The RCPs are: 1. RCP 8.5: considered the global “Business As Usual” (BAU) GHG global emissions regime. This is the current global trajectory based on current global GHG emissions;</p>	<p>Section 23.2 “...The Impact Statement must: ... - Identify the Project’s sensitivities/vulnerabilities to change in climate (both in mean conditions and extremes such as short-duration heavy precipitation events), describe climate resilience of the Project and how climate change effects have been incorporated into the Project design (e.g., water crossings) and planning over the lifetime of the Project and describe the climate data, projections used, and related information used to evaluate these sensitivities (i.e., risks) over the full project lifetime;...”</p>	<p>Provide details to demonstrate the rationale for the selected climate indicators.</p> <p>Describe more robust alternative approaches to assessing future climate projections that are being considered and how they inform the project design, as per the guidance provided in the context column.</p>	<p>Climate Indicators: Climate indicators were selected on the basis of design code considerations applicable to climate conditions, supplemented by anticipated climate impact interactions for road and supporting infrastructure components in their operating environment for the Project.</p> <p>Alternative Approaches to Assessing Future Climate Projections: Not all projected climate variables have the same certainty or reliability. One of the largest ‘low confidence’ variables is extreme precipitation which is both spatially and temporally challenging even for the highest resolution regional climate models (RCMs). Some suggestions for addressing this issue are described in the following response statement on IDF. For other variables (e.g., temperature and temperature based), there is sufficient certainty directly from modelled output, provided sufficient bias-removal processes are included. The delta approach employed using a large ensemble of model projections effectively removes any such individual model bias and provides a pure climate change signal. This signal, when applied to a reliable baseline period climate is a proven efficient and straightforward technique which requires no advanced statistical manipulation of the model output data. The key to this technique is the use of a large ensemble of model outcomes which can provide information on model sensitivities and ranges of possible projection outcomes that a single or few higher resolution models cannot. Although higher resolution RCMs are available, they are much fewer in number limiting any possible ensemble, and would carry forward any inherent bias from their driving GCM. The MFFN CAR Project Consultants acknowledges the restrictions of future climate projections dependent upon the variable being considered.</p> <p>On IDF considerations, we acknowledge that confidence in projections for different parameters is not uniform, with greater veracity in temperature than precipitation. As a result different approaches may be required depending upon the parameter in question. For example, a regional large scale approach can be adequate for a climate change ‘signal’, whereas for short-duration,</p>		This comment has been addressed.

² Refer to complete sections of the Guidelines for more context

	<p>2. RCP 6.0: GHG emissions double by 2060 and then decrease dramatically but remain above current GHG levels;</p> <p>3. RCP 4.5: a medium GHG scenario derived from assumptions that global GHG emission reduction efforts result in approximately half of the emissions observed under RCP 8.5; and,</p> <p>4. RCP 2.6: a scenario that aligns with global GHG emission reductions that maintain global warming below 2oC above pre-industrial global temperatures.</p> <p>The IPCC's Special Report on Global Warming (2018) confirms that global GHG emissions continue to track along the RCP 8.5 pathway. This assessment will accordingly apply the RCP 8.5 scenario for the projections used to anticipate future conditions.</p>			<p>high intensity rainfall point measurements from representative locations can be more appropriate. In fact, the future projection of extremes of rainfall is an active research area with previous demonstrations of very disparate results depending upon the selection of models and methodologies. Current practice should involve the consideration of historical trends, projected 'extreme indicators' such as changes in 99th percentile precipitation, the 'Clausius-Clapeyron' temperature correlation which has been applied successfully, and the possible development of extreme precipitation station combinations into 'superstations'. ECCC has demonstrated in their own analyses that there are no clear trends in historical IDF station amounts even within close proximity due to the nature of these extreme events (infrequent and falling between measurement locations, short station record lengths). The MFFN CAR Project Consultants acknowledge the limitations of extreme precipitation projections in such an actively changing research field and staff have participated in writing CSA guidance on this issue. Multiple approaches for the identification of extreme precipitation and their careful interpretation versus the acceptance of a single methodology is required.</p>		
<p>CC-04</p>	<p>Section 7: Conformance with Federal and Provincial Guidance</p> <p>"Indigenous knowledge collected through engagement with traditional territories in the vicinity of the Project will be considered alongside background data collected and used to inform the effects assessment where applicable."</p>	<p>Section 6</p> <p>"The proponent must engage with all Indigenous groups that may be impacted by the Project...</p> <p>In addition to the requirements set out in section 6.1, 6.2 and 6.3, the proponent must provide Indigenous groups with an opportunity to:</p> <ul style="list-style-type: none"> - provide Indigenous knowledge during baseline data collection; - comment on the list of valued components and indicators;..." 	<p>Update the study plan to include the list of all Indigenous groups that will be engaged, at a minimum the Indigenous groups listed in the Indigenous Engagement and Partnership Plan, as part of the baseline data collection, defining the list of criteria and indicators, and effects assessment analysis. The list should be consistent throughout the study plan.</p>	<p>Table 4-1 of the Study Plan, which is inclusive of all indigenous communities identified in Indigenous Partnership and Engagement Plan for the Marten Falls Community Access Road Project Impact Assessment (IAAC 2020a), indicates all indigenous communities that received outreach seeking participation for consultation. Study Plan Section 4 elaborates on how the MFFN CAR Project Team will be working with Indigenous communities to identify Climate Impacts.</p>		<p>This comment has been addressed.</p>