



**Westcoast Connector  
Gas Transmission**

## Westcoast Connector Gas Transmission Project

Visual Quality Management Plan  
Condition 28

Detailed Outline – Revision 1

January 2022

Prepared for:

Westcoast Connector Gas Transmission Ltd.

Prepared by:

Jacobs Consultancy Canada Inc.

# Jacobs



## Westcoast Connector Gas Transmission Project

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Client Name: Westcoast Connector Gas Transmission Ltd.  
Project Manager: Ashley Bird  
Authors: Stephanie Rathwell and Julie Greenwood

Jacobs Consultancy Canada Inc.

Unit 300  
160 Quarry Park Boulevard SE  
Calgary, Alberta T2C 3G3  
Canada  
T +1.403.407.8700

[www.jacobs.com](http://www.jacobs.com)

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## Land Acknowledgement

We acknowledge that the Westcoast Connector Gas Transmission project (WCGT Project) area is in the Traditional and Ancestral Territory of many Indigenous Peoples, presently subject to the Nisga'a Treaty, Treaty 8, and vast areas of unceded Indigenous Traditional lands. These Indigenous groups include the Nisga'a Nation, Prophet River First Nation, Blueberry River First Nations, Doig River First Nation, Gitanyow Hereditary Chiefs, Gitxsan Hereditary Wilp, Halfway River First Nation, Kitselas First Nation, Kitsumkalum First Nation, Lake Babine Nation, Lax Kw'alaams First Nation, Wilp Luuxhon, Metlakatla First Nation, Saulteau First Nation, Takla Lake First Nation, Tsay Keh Dene First Nation, West Moberly First Nations, Nak'azdli First Nation, McLeod Lake Band, Gitxaala Nation, and the Métis Nation British Columbia

We acknowledge the many Indigenous Peoples who live on care for these lands and have for generations. We are grateful for the traditional Knowledge Keepers and Elders who are still with us today and those who have gone before us. We make this acknowledgement as an act of reconciliation and gratitude to those whose territory we reside on or are visiting.

## Executive Summary

The British Columbia Environmental Assessment Office (BC EAO) issued an Environmental Assessment Certificate (Certificate) to Westcoast Connector Gas Transmission Ltd. (WCGT Ltd.) for the WCGT Project on November 25, 2014, and later granted a 5-year extension to the Certificate on April 25, 2019. The Certificate expires on November 25, 2024.

The WCGT Project approved in the Certificate includes the potential to build two 48-inch diameter natural gas pipelines within the same right-of-way along with compressor stations that could potentially service multiple liquefied natural gas (LNG) terminal sites starting at Cypress in northeast British Columbia (BC) and ending at Ridley Island on the north coast. The Certificate provided the flexibility to choose one of two routes to the Prince Rupert area—either through the Nass Valley (Nasoga Route) or north towards Kitsault (Kitsault Route).

WCGT Ltd. is actively developing the WCGT Project to build one express, single-purpose natural gas pipeline from a compressor station near Willow Flats in northeast BC to a delivery point at Wil Milit on the north coast to supply natural gas to potential LNG terminal sites (the Project).

The Certificate granted for the WCGT Project is subject to 43 Conditions. The purpose of the Visual Quality Management Plan (VQMP or Plan) is to address the requirements of Certificate Condition 28.

WCGT Ltd. is engaging with Indigenous groups and relevant regulatory authorities (RRAs) in the development of this detailed outline to support the full build out of the Plan. Through engagement, WCGT Ltd. is seeking collaboration in the development of the Plan and any information that can be shared to strengthen the Plan and the commitment to fulfilling Condition 28. WCGT Ltd. acknowledges the inherent connection Indigenous Peoples have with the landscape and how they use the landscape for navigation and that while the Plan will satisfy the regulatory requirement; the Plan is intended to minimize impacts to visual quality by incorporating Indigenous Knowledge and ensuring concerns are addressed during mitigation development.

The scope of the Plan includes:

- Linkages to other plans, purpose and objectives, roles and responsibilities, implementation schedule, and future updates
- Engagement methods that identify Indigenous groups and parties to be engaged and a description of how engagement outcomes help shape the Plan
- Regulatory requirements related to pre-construction, construction, and post-construction (operation phase) activities of the WCGT Project that may affect Visual Quality Objectives (VQO)
- A description of the mitigation measures that may be implemented during pre-construction, construction, and post-construction (operation phase) activities of the WCGT Project
- A description of the monitoring program
- A description of the adaptive management program in relation to visual quality, including how the results of monitoring will inform adaptive management
- A plan for reporting on the implementation of the Plan including the schedule, content, and recipients of reports

## Table of Concordance

Table 0-1 describes how this Visual Quality Management Plan addresses the applicable Certificate Condition.

Table 0-1. Concordance with Certificate Condition 28: Visual Quality Management Plan

| Certificate Condition  | Section                      |
|--|------------------------------|
| <i>Condition 28 – Visual Quality Management Plan</i>   |                              |
| The Holder must develop, in consultation with FLNR and OGC, and implement a Visual Quality Management Plan that takes into consideration FLNR's Visual Landscape Design Training Manual (1994).  | Section 3                    |
| The Plan must provide a description of where the Certified Pipeline Corridor intersects areas with Visual Quality Objectives and the activities that the Holder has undertaken and will undertake to minimize the effects on the existing Visual Quality Objectives. | Subsection 1.2 and Section 5 |
| In order to allow for 60 days review and comment, the Holder must provide the Plan to EAO no less than 90 days prior to the Holder's planned date to commence Construction. Once the Plan is complete, the Holder must also provide the Plan to FLNR and OGC.        | Section 3                    |

Notes:

FLNR updated to BC MFLNRORD = British Columbia Ministry of Forests, Lands, Natural Resource Operations and Rural Development

BC EAO = British Columbia Environmental Assessment Office

BC OGC = British Columbia Oil and Gas Commission

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## Acronyms and Abbreviations

|              |  |
|--------------|--|
| BC           | British Columbia   |
| BC EAO       | British Columbia Environmental Assessment Office   |
| BC ENV       | British Columbia Ministry of Environment and Climate Change Strategy   |
| BC MFLNRORD  | British Columbia Ministry of Forests, Lands, Natural Resource Operations and Rural Development   |
| BC OGC       | British Columbia Oil and Gas Commission  |
| BMP          | Best Management Practice   |
| Certificate  | Environmental Assessment Certificate   |
| CPC          | Certified Pipeline Corridor  |
| KP           | Kilometre Post   |
| LNG          | liquefied natural gas  |
| LRMP         | Land and Resource Management Plan  |
| PCM          | post-construction monitoring   |
| Project      | one express, single-purpose natural gas pipeline from a compressor station near Willow Flats in northeast British Columbia to a delivery point at Wil Milit on the north coast to supply natural gas to potential liquefied natural gas terminal sites |
| RP           | Restoration Plan   |
| RRA          | Relevant Regulatory Authority  |
| SEEMP        | Social and Economic Effects Management Plan  |
| SRMP         | Sustainable Resource Management Plan   |
| TCEMP        | Terrestrial Construction Environmental Management Plan   |
| TSS          | Timber Salvage Strategy  |
| VQMP or Plan | Visual Quality Management Plan   |
| VQO          | Visual Quality Objective   |
| VLI          | Visual Landscape Inventory   |
| VSC          | Visual Sensitivity Class   |
| VSU          | Visual Sensitivity Units   |
| WCGT Ltd.    | Westcoast Connector Gas Transmission Ltd.  |
| WCGT Project | Westcoast Connector Gas Transmission Project   |

## 1. Introduction

The British Columbia Environmental Assessment Office (BC EAO) issued an Environmental Assessment Certificate (Certificate) to Westcoast Connector Gas Transmission Ltd. (WCGT Ltd.) for the WCGT Project on November 25, 2014, and later granted a 5-year extension to the Certificate on April 25, 2019. The Certificate expires on November 25, 2024. The Certificate granted for the WCGT Project is subject to 43 Conditions. The purpose of the Visual Quality Management Plan (VQMP or Plan) is to address the requirements of Certificate Condition 23.

WCGT Ltd. is engaging with Indigenous groups and relevant regulatory authorities (RRAs) in the development of this detailed outline to support the full build out of the Plan. Through engagement, WCGT Ltd. is seeking collaboration in the development of the Plan and any information that can be shared to strengthen the Plan and the commitment to fulfilling Condition 23.

WCGT Ltd. acknowledges the inherent connection Indigenous Peoples have with the landscape and how they use the landscape for navigation and that while the VQMP will satisfy the regulatory requirement, the Plan is intended to minimize impacts to visual quality of viewsheds by incorporating Indigenous Knowledge and ensuring concerns are addressed during mitigation development.

### 1.1 Project Description

The WCGT Project approved in the Certificate includes the potential to build two 48-inch diameter natural gas pipelines within the same right-of-way along with accompanying compressor stations that could potentially service multiple liquefied natural gas (LNG) terminal sites starting at Cypress in northeast British Columbia (BC) and ending at Ridley Island on the north coast. The Certificate provided the flexibility to choose one of two routes to the Prince Rupert area—either through the Nass Valley (Nasoga Route) or north towards Kitsault (Kitsault Route).

WCGT Ltd. is actively developing the WCGT Project to build one express, single-purpose natural gas pipeline from a compressor station near Willow Flats in northeast BC to a delivery point at Wil Milit on the north coast to supply natural gas to potential LNG terminal sites (the Project) (Figure 1).

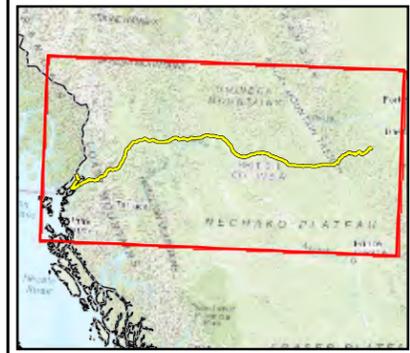
The new compressor station at Willow Flats will have the potential to connect to Enbridge Inc.'s Westcoast Energy Inc. pipeline system near Compressor Station 2 or TC Energy's NGTL system, eliminating the need for the pipeline corridor from Cypress to Willow Flats and the compressor station at Cypress. WCGT Ltd. will apply to the BC EAO to amend its Certificate to:

- 1) remove approximately 100 kilometres of the Certified Pipeline Corridor from Cypress to Willow Flats; and
- 2) change the location of the compressor station from Cypress to Willow Flats.

If WCGT Ltd. proceeds with construction of a second pipeline, it would also start near Willow Flats and would not use the corridor from Cypress to Willow Flats.

The new delivery point for the pipeline will be near Wil Milit. WCGT Ltd. will apply to the BC EAO to amend its Certificate to make routing changes along its approved Nasoga Route to end the first pipeline at Wil Milit. WCGT Ltd. will retain the option to expand the Project to the currently approved delivery point at Ridley Island at a later date.

- 1 WCGT Ltd. is developing condition plans for the Project with Indigenous Groups, RRAs, and stakeholders  
2 for submission to the BC EAO in accordance with its Certificate. The condition plans will address potential  
3 impacts from the Project, which includes the first pipeline from Willow Flats to Wil Milit, one compressor  
4 station at Willow Flats and the necessary meter stations.
- 5 WCGT Ltd. does not have plans to build the second pipeline at this time; however, should it decide to  
6 construct a second pipeline, increase capacity by adding compressor stations, or extend the first pipeline  
7 to Ridley Island, WCGT Ltd. will submit revised or new condition plans to the BC EAO in accordance with  
8 Condition 1 of its Certificate.
- 9



- Town/Village/Service Area
- Kilometre Marker
- WCGT Pipeline Route
- Railway
- Highway
- - - International Border
- Watercourse
- Water Body

**ENBRIDGE**  
Westcoast Connector Gas Transmission

SCALE: 1:1,500,000

0 14,000 28,000 42,000 56,000 m  
(All Locations Approximate)

**FIGURE 1**  
**REGIONAL OVERVIEW**  
**WESTCOAST CONNECTOR GAS TRANSMISSION LTD.**  
**WESTCOAST CONNECTOR GAS TRANSMISSION PROJECT**

**Jacobs**

NAD 1983 BC Environment Albers  
Hillshade Background: TERA Environmental 2008;  
Highways/Roads: NRCAN 2015; Railways: NRCAN 2012; Hydrology: BC FLNRO 2008; Reserves: Government of Canada 2018; Legal Grid: TERA Environmental Consultants 2010; Watercourse Crossings: Jacobs 2021; Project Components: Enbridge 2021.

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Although there is no reason to believe that there are any errors associated with the data used to generate this product or in the product itself, users of these data are advised that errors in the data may be present.

1 1.2 Project Interactions with Visual Quality

2 The Plan is intended to include all Project interactions with visually sensitive areas including potential  
3 direct and indirect impacts. The Project Corridor is the route that is outlined in the CDC from Willow Flats  
4 to Wil Milit. The Project corridor was selected to limit the impacts to visual quality on the landscape. Route  
5 refinements within the Project corridor will further minimize impacts to visually sensitive areas.

6 Following the hierarchy of avoid, minimize, and restore-on-site, Project planning considerations provided  
7 the opportunity to avoid Project interactions where visual quality is affected. In general, the primary  
8 objective is to locate the proposed pipeline contiguous to existing linear disturbances wherever possible.  
9 Where this was not possible, the hierarchy of routing criteria in descending order of preference included  
10 the following: parallel other linear corridors; identify new routing (greenfield) to balance several  
11 engineering, construction, environmental, cultural and socio-economic factors; and, in the case of new  
12 routing, minimize the length away from existing linear corridors.

13 1.2.1 Project Overlap with Visual Quality Objectives

14 The Project crosses several different VQO. The Nasoga Route crosses two Partial Retention VQOs, whereas  
15 the Cypress to Cranberry route crosses 23 Partial Retention VQOs and 22 Modification VQOs. The Kitsault  
16 route does not cross any VQOs. Table 1-1 provides the Preservation, Retention, and Partial Retention  
17 VQOs crossed by the Project. A complete list of all VQOs crossed by the Project will be provided in  
18 Appendix A.

Table 1-1. Visual Quality Objectives Crossed by the Project

| Location                                       |                      | VQO Crossed |
|--|----------------------|-------------|
| KP Range                                       | Route                |             |
| 91.0 to 91.6                                   | Cypress to Cranberry | Retention   |
| 93.1 to 93.6; 93.6 to 94.5                     |                      | Retention   |
| 138.0 to 138.4                                 |                      | Retention   |
| 138.4 to 138.7; 138.9 to 139.2; 140.5 to 141.0 |                      | Retention   |
| 148.6 to 149.3; 149.9 to 157.3                 |                      | Retention   |
| 161.2 to 161.9                                 |                      | Retention   |
| 537.8 to 538.1                                 |                      | Retention   |
| 537.5 to 537.7                                 |                      | Retention   |
| 501.4 to 501.8                                 |                      | Retention   |
| 664.1 to 665.1                                 |                      | Nasoga      |
| 673.7 to 674.2; 674.3 to 677.0                 | Retention            |             |
| 677.1 to 677.1; 678.0 to 679.0                 | Preservation         |             |
| 677.0 to 677.1; 677.1 to 678.0; 679.0 to 684.4 | Retention            |             |

Note:  
KP = Kilometre Post

## 2. Visual Quality Plan Overview

This Plan has been developed to meet the requirements of the BC EAO for Certificate Condition 28. The Plan will be developed in collaboration with Indigenous groups, RRAs, and stakeholders.

The scope of the Plan includes:

- Linkages to other plans, purpose and objectives, roles and responsibilities, implementation schedule, and future updates (subsection 2.3)
- Engagement methods that identify parties to be engaged and a description of how engagement outcomes help shape the Plan (Section 3)
- Regulatory requirements related to pre-construction, construction, and post-construction (operation phase) activities of the Project that may affect VQOs (Section 4)
- A description of the mitigation measures that may be implemented during pre-construction, construction, and post-construction (operation phase) activities of the Project (Section 5)
- A description of the monitoring program (Section 6)
- A description of the adaptive management program in relation to visual quality, including how the results of monitoring will inform adaptive management (Section 7)
- A plan for reporting on the implementation of the Plan including the schedule, content, and recipients of reports (Section 8)
- Professional Authentication of the Plan (Section 9)

### 2.1 Methodology

Visual data collection and analysis was completed for the Willow Flats to Cranberry, Nasoga, and Kitsault routes. Areas where the Project route overlapped with VQOs were identified and mapped. Viewpoints were selected based on information gathered through desktop research and feedback received through initial engagement, considering factors such as aesthetic value, public use, and visibility of the Project. In total, 22 sites were selected for the final visual modelling. Photographs were taken from ground level or from helicopters hovering at low altitude where access was challenging. Simulations were developed to demonstrate potential Project-related effects on the terrain and viewshed.

Detailed methods and results of this analysis are provided in Sections 2 and 3 of the Aesthetic Visual Resources Technical Data Report of the Certificate Application (TERA 2014). This analysis informed the mitigation outlined in this Plan.

### 2.2 Purpose and Objectives

The purpose of this Plan is to satisfy the applicable Certificate Conditions, specifically Condition 28. The overall desired outcomes of the Plan include the following:

- 3) Limit physical alteration of visually sensitive areas
- 4) Manage infringement on VQOs

The Plan identifies goals that can be measured using several performance indicators. The performance indicators and targets that will be monitored and measured to evaluate the effectiveness of visual quality mitigation measures in achieving the goals of the Plan will be described in Section 7.

1 Plans to address occurrences of inadequate mitigation or unanticipated Project effects are discussed in  
2 (Section 8).

3 **2.3 Linkages to Other Condition Plans**

4 Information on other condition plans prepared for the Project have been considered in the Plan (Table 2-1.)

Table 2-1. Linkages to Other Condition Plans

| Plan   | Description of the Plan  | Linkages to this Plan   |
|--|--|---|
| Condition 25 - Restoration Plan (RP)                               | The RP provides recommendations for soil handling, construction clean-up, erosion control measures, revegetation plans, and life of Project vegetation management.   | A key mitigation measure to reduce visual effects of the Project is to follow the RP Framework. The RP includes measures for revegetation and life of Project vegetation management.  |
| Condition 29 – Old Growth Areas                                    | The Old Growth Areas Plan includes the documenting and identifying of incursions of Old Growth Management Areas, thresholds set out in BC Ministry of Forests, Lands, Natural Resource Operations and Rural Development (BC MFLNRORD) policy or process, and proposal for replacement.                           | Minimizing the removal of Old Growth Management Areas and retain forest cover to reduce visual effects.   |
| Condition 30 – Timber Salvage Strategy (TSS)                       | The TSS includes timber volume estimates for the Project footprint, salvage activities, marketing commitments, and reconciliation reporting requirements.  | Managing timber volume estimates for the Project footprint and salvage activities to retain forest cover and reduce visual effects.   |
| Condition 33 - Social and Economic Effects Management Plan (SEEMP) | The SEEMP recommends mitigation measures for effective engagement related to community infrastructure and services, and roads and traffic. It also includes the approach to communicating employment and contracting opportunities, and methods for monitoring and reporting on the effectiveness of mitigation. | The SEEMP includes measures to mitigate effects on community quality of life as well as means for ongoing engagement. Visual effects can affect community quality of life feedback from engagement will inform the adaptive management process. |

Table 2-1. Linkages to Other Condition Plans

| Plan  | Description of the Plan   | Linkages to this Plan   |
|---|---|---|
| Condition 35 – Terrestrial Construction Environmental Management Plan (TCEMP) | <p>The TCEMP describes WCGT Ltd.'s environmental procedures and mitigation measures to field and construction personnel. These environmental procedures and mitigation measures will be implemented during construction of the Project to mitigate, avoid, or reduce potential adverse environmental effects. The TCEMP serves as reference information for construction and inspection personnel to support decision-making and to provide direction to more detailed information (i.e., resource-specific mitigation, management, and contingency plans). The TCEMP also includes mitigation measures to address additional Conditions:</p> <ul style="list-style-type: none"> <li>▪ Condition 23 – integrated pest management</li> <li>▪ Condition 24 – Red- and Blue-listed plants and ecological communities</li> <li>▪ Condition 27 – mitigation for Red- and Blue-listed or culturally important lichen and plant species within the Nisga'a Lava Bed Memorial Park</li> </ul> | The TCEMP includes measures to limit effects on visual quality and provides overall Project roles and responsibilities. |

1    2.4    Implementation Schedule

- 2    The Plan will be submitted to the BC EAO at least 90 days before the commencement of construction.
- 3    Project planning continues prior to the start of clearing and construction as per the latest Project schedule.
- 4    The Plan will be implemented throughout construction as described throughout the TCEMP.
- 5    WCGT Ltd. will monitor mitigation effectiveness during the construction period and in the first, third, and
- 6    fifth years following the first full growing season after completion of final clean-up. Routine operational
- 7    monitoring will occur over the life of the Project (Section 7).

8    2.5    Future Updates to the Visual Quality Management Plan

- 9    Revisions to the Plan could occur as a result of:
- 10    ▪ Engagement programs with Indigenous groups
- 11    ▪ Additional information becoming available
- 12    ▪ Changes to Project planning (e.g., engineering changes)
- 13    ▪ Commitments made during the regulatory review process
- 14    ▪ Regulatory permits and authorization conditions
- 15    ▪ Addressing unforeseen resource-specific conditions that may arise during construction

- 1 WCGT Ltd. will not inform Indigenous groups and RRAs when minor revisions are made to the Plan (i.e.,
- 2 small changes that would not affect the scope and objectives of the Plan).
  
- 3 WCGT Ltd. will engage with Indigenous groups and RRAs if material revisions to the Plan are proposed (i.e.,
- 4 changes to the scope or mitigation and monitoring requirements). Indigenous groups and RRAs will be
- 5 provided an opportunity to review and provide comment on material revisions to the Plan. A Document
- 6 History table listing version, date, and distribution will be provided in this document.

### 1 3. Engagement

2 The Plan is being developed through engagement with Indigenous groups, the BC MFLNRORD, and the BC  
3 Oil and Gas Commission (BC OGC). The Plan will be provided to the BC EAO for review and comment at  
4 least 90 days prior to construction. A copy of the final Plan will be submitted to BC MFLNRORD and BC  
5 OGC.

6 Throughout the development of the detailed outline, WCGT Ltd. is engaging to ensure the plans are  
7 reflective of Indigenous interests and concerns, meet the intent of the Certificate Condition, and align with  
8 regulatory requirements as informed by RRA reviewers.

9 WCGT Ltd. is engaging on the content and approach provided in this early draft. Through this review,  
10 WCGT Ltd. wants to ensure a collaborative approach at this early stage and that the outline captures at a  
11 high level, the intent and expectation of the Certificate Condition, as well as interests and concerns raised  
12 by Indigenous groups and RRAs. The information that WCGT Ltd. receives will inform the drafting of the  
13 full content of the management plan. WCGT Ltd. will document and track all comments and  
14 recommendations received and provide a description on how this information has been considered and  
15 incorporated into the management plan.

## 1 4. Regulatory Framework

2 The legislation, regulatory guidelines, best management practices (BMPs), and policy documents that  
3 were used to develop mitigation measures in the Plan and the TCEMP are summarized in this section.

### 4 4.1 Indigenous Land Use Planning Documents

5 Indigenous Land Use planning documents provide strategic direction for resource management activities.  
6 These plans provide direction for areas with general and specific resource values that are managed to  
7 sustain environmental, social, economic, or cultural values. While there are no Indigenous Land Use  
8 planning documents that include specific VQOs, it is generally understood that visual quality is a part of  
9 the holistic view of the landscape held by Indigenous groups.

### 10 4.2 Regional and Municipal Land Management Plans

11 Land and Resource Management Plans (LRMPs) and Sustainable Resource Management Plans (SRMPs)  
12 provide strategic direction for resource management activities. These documents provide guidance for  
13 areas with general and specific resource values that are managed to sustain environmental, social, or  
14 economic values.

15 Resource management planning documents applicable to the Plan include:

- 16 ▪ Dawson Creek LRMP
- 17 ▪ Dunlevy Creek MP
- 18 ▪ Fort St. John LRMP
- 19 ▪ Fort St. James LRMP
- 20 ▪ Mackenzie LRMP
- 21 ▪ Prince George LRMP
- 22 ▪ Vanderhoof LRMP
- 23 ▪ Babine River Interim Local Resource Use Plan
- 24 ▪ Bulkley LRMP
- 25 ▪ Bulkley SRMP
- 26 ▪ Central Coast LRMP
- 27 ▪ Cranberry SRMP
- 28 ▪ Kalum LRMP
- 29 ▪ Kalum SRMP
- 30 ▪ Kispiox LRMP
- 31 ▪ Kispiox Higher Level Plan Objectives
- 32 ▪ Lakes District LRMP
- 33 ▪ North Lakes LRMP
- 34 ▪ Morice LRMP
- 35 ▪ Nass South Slope SRMP
- 36 ▪ Nisga'a Memorial Lava Bed Park Master Plan

### 37 4.3 Provincial

38 Visual quality effects to Crown forest land in BC are managed by the Resource Practices Branch of the  
39 BC MFLNRORD. The Visual Landscape Inventory (VLI) identifies sensitive landscapes visible from public  
40 use areas such as communities, recreational areas, highways, and waterways.

- 1 Areas that are determined to have high visual sensitivity are delineated into Visual Sensitivity Units (VSUs)
- 2 and given a Visual Sensitivity Class (VSC) rating on a scale of 1 (very high sensitivity) to 5 (very low
- 3 sensitivity) (Province of BC 2021b). Table 4-1 provides VSC rating definitions.

Table 4-1. Visual Sensitivity Class Rating Definitions

| VSC Rating | Definition  |
|------------|---|
| 1          | Very high sensitivity to human-made visual alteration. The area is extremely important to viewers. There is a very high probability that the public would be concerned if the area was visually altered in any way or to any scale. |
| 2          | High sensitivity to human-made visual alteration. The area is very important to viewers. There is a high probability that the public would be concerned if the area was visually altered.   |
| 3          | Moderate sensitivity to human-made visual alteration. The area is important to viewers. There is a probability that the public would be concerned if the area was visually altered.   |
| 4          | Low sensitivity to human-made visual alteration. The area is moderately important to viewers. There is a risk that the public would be concerned if the area was visually altered.  |
| 5          | Very low sensitivity to human-made visual alteration. The area may be somewhat important to viewers. There is a small risk that the public would be concerned if the area was visually altered.                                     |

Source: BC MOF 1997

- 4 Once the VSC ratings have been assigned, VQOs are established to guide management of activities on the
- 5 landscape and describe the level of visual alteration appropriate for each VSU. VQOs are established at the
- 6 local level by the resource district manager based on the *Forest Planning and Practices Regulation* and
- 7 include five classes (Province of BC 2021a). Tale 4-2 provides definitions for each VQO.

Table 4-2. Visual Quality Objective Definitions

| VQO                  | Definition   | Permitted Alteration (%) |
|----------------------|--|--------------------------|
| Preservation         | Alteration is very small in scale, and not easily distinguishable from the pre-harvest landscape   | 0                        |
| Retention            | Alteration is difficult to see, small in scale, and natural in appearance  | 0 - 1.5                  |
| Partial Retention    | Alteration is easy to see, small to medium in scale, and natural and not rectilinear or geometric in shape   | 1.6 – 7                  |
| Modification         | Alteration is very easy to see, and is: <ul style="list-style-type: none"> <li>▪ large in scale and natural in its appearance, or</li> <li>▪ small to medium in scale but with some angular characteristics</li> </ul> | 7.1 – 18                 |
| Maximum Modification | Alteration is very easy to see, and is: <ul style="list-style-type: none"> <li>▪ very large in scale,</li> <li>▪ rectilinear and geometric in shape, or</li> <li>▪ both</li> </ul>                                     | 18.1 – 30                |

Source: BC MFLNRO 2013

- 8 Although the VQO classification is primarily for the forestry sector and does not have a regulatory role in
- 9 pipeline development, it provides a general guide for visual quality management in BC (TERA 2014).

## 1 5. Mitigation Program

2 This section outlines WCGT Ltd.'s approach for identifying and applying visual quality management  
3 measures that can be feasibly and effectively implemented to avoid, minimize, and mitigate potential  
4 adverse effects of the Project on visual quality, following a standard mitigation hierarchy process.

### 5 5.1 Mitigation Hierarchy

6 The mitigation hierarchy outlined in subsection 1.2 forms the basis of the mitigation for effects on visual  
7 quality. Where warranted, WCGT Ltd. will specify the use of barriers or other visual management strategies  
8 to limit the visibility of the right-of-way to observers. WCGT Ltd. will also implement the use of non-  
9 reflective surfaces, landscaping, directed lighting and shielded lighting fixtures to mitigate lighting  
10 concerns at Project facilities, where warranted. Finally, the Project will implement a RP (as part of  
11 Certificate Condition 25) that will include planting prescriptions for visually sensitive areas and areas with  
12 VQOs.

#### 13 5.1.1 Avoid and Minimize

14 This section will describe the actions WCGT Ltd. is taking to prioritize the use of existing linear corridors to  
15 limit alteration of visually sensitive areas where practical.

16 A description of route selection improvements based on feedback received through engagement will be  
17 provided in this section, including a list of specific locations to be avoided. In addition, this section will  
18 provide design strategies from the Visual Landscape Design Training Manual (BC MOF 1994) to be  
19 implemented to reduce visual effects. Finally, this section will provide an explanation for areas that could  
20 not be avoided due to corresponding effects on other biophysical values.

#### 21 5.1.2 Mitigate and Restore-on-Site

22 This section will outline the mitigation that will be applied to minimize effects on VQOs during  
23 construction and operations. Examples of mitigation may include, but are not limited to the following:

- 24 ▪ Follow existing linear features where practical
- 25 ▪ Route refinements within the Project corridor
- 26 ▪ Reduce the construction footprint width in visually sensitive areas where practical
- 27 ▪ Employ visual buffers between compressor stations and public roads where practical
- 28 ▪ Employ visual barriers such as non-reflective surfaces, landscaping, directed lighting, and shielded  
29 lighting fixtures, where warranted
- 30 ▪ Adhere to the RP

## 1 6. Monitoring Program

2 To meet Condition 28 of the Certificate, WCGT Ltd. will design and implement a monitoring program to  
3 test the effectiveness of mitigation being implemented. The monitoring timeframe is described in the  
4 following subsections. Reporting on mitigation effectiveness and compliance is described in subsection  
5 6.2. Should monitoring programs indicate that the measures implemented were not adequate or were  
6 ineffective at avoiding or reducing potential residual effects on visual quality, follow-up measures will be  
7 implemented as described in Section 7.

### 8 6.1 Mitigation Compliance Monitoring

9 Monitoring during the construction period will focus on tracking the implementation of proposed  
10 mitigation measures developed to limit alteration of visually sensitive areas or infringement on VQOs.  
11 These may include the use of visual barriers, non-reflective surfaces, landscaping, directed lighting, and  
12 shielded lighting fixtures.

13 Post-construction monitoring will focus on restoration results, including rollback, retention trees, and line  
14 of sight planting.

15 WCGT Ltd. will verify that applicable environmental commitments and conditions of authorizations are  
16 met, and that work is completed in compliance with applicable environmental regulations and WCGT Ltd.  
17 policies.

18 WCGT Ltd. will track and review mitigation compliance monitoring reports, as well as documentation of  
19 any corrective measures implemented, including rationale and timeframes for implementation.

### 20 6.2 Mitigation Effectiveness Monitoring

21 This section will outline the strategy for monitoring mitigation effectiveness, including the monitoring  
22 timeframe, key performance indicators, sources of data collection, and frequency of reporting. Since  
23 mitigative effectiveness for visual quality is related to restoration and reclamation efforts, linkages to  
24 restoration and reclamation success will be included. The RP (Condition 25) provides details of the  
25 restoration efforts that will be implemented for the Project.

26 Indicators will be designed to be measurable, based on readily available data sources and in time frames  
27 relevant to the Project phase, and reflective of visual effects directly attributable to the Project.

## 1 7. Adaptive Management

2 This section outlines how mitigation measures will be re-evaluated should monitoring programs indicate  
3 that the measures implemented were not adequate or effective at avoiding or reducing potential effects  
4 on visual quality. Monitoring and adaptive management will be coordinated with the RP. Examples of the  
5 types of corrective measures that may be implemented will be provided in subsection 7.2.

### 6 7.1 Adaptive Management Approach

7 In general, adaptive management is a cycle in which the effectiveness of mitigation measures are  
8 evaluated based on monitoring results, and adjusted if needed, to achieve desired outcomes. Adaptive  
9 management will address uncertainty related to the effectiveness of mitigation measures, and the possible  
10 occurrence of unexpected effects.

11 WCGT Ltd. will review pertinent monitoring data on issues that are within the care and control of WCGT  
12 Ltd. and resulting from Project activities. Information will be reviewed with the appropriate Project  
13 personnel and subject matter experts with the goal of developing locally-appropriate and scenario-  
14 specific adaptive management strategies as needed.

15 The results of the monitoring program will inform the need for corrective measures. If monitoring results  
16 identify issues, corrective measures will be implemented as soon as feasible. If response to an issue  
17 requires modification to construction-related plans, the required changes will be communicated to the  
18 Contractor. Where corrective measures are implemented to achieve objectives of this Plan, additional  
19 monitoring will be completed following their implementation until monitoring results indicate the  
20 objectives have been met.

### 21 7.2 Potential Corrective Measures

22 Should it be determined during monitoring that corrective measures are needed, recommended measures  
23 will be identified on a case-by-case basis and will depend on the site-specific conditions (e.g., additional  
24 plantings to reduce line of sight).

25

## 1 8. Reporting Requirements

2 During the PCM Program, WCGT Ltd. will prepare reports following completion of PCM during the growing  
3 season of each PCM year (i.e., first, third, and fifth growing season following final clean-up). Reporting will  
4 include detail on the implementation of site-specific mitigation and habitat restoration measures,  
5 information on the indicators measured and their performance in reaching the monitoring target, the  
6 monitoring methods used, details of corrective actions taken (if any), as well as an updated engagement  
7 record.

8 The environmental monitoring report filed after the fifth PCM year will include information on the  
9 effectiveness of mitigation and corrective actions and will identify any goals that have not been achieved  
10 and the need for any further corrective actions and monitoring. The need for additional reporting will be  
11 determined through engagement with the BC EAO.

Appendix A  
Visual Quality Objectives Crossed by the Project