



B.C. Highway Reinstatement Program Pre-RFP Meeting for initial Hwy 5 Projects

Infrastructure BC and Ministry of Transportation and Infrastructure

February 25, 2022

Agenda

- Program Objectives
- Projects
- Collaborative Contract Overview
- Development Phase
- Procurement Process
- Questions



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Program Objectives

- Deliver the work expediently
- Recognize and respect the Indigenous territories the work is being conducted on
- Create and support opportunities for Indigenous Peoples, Indigenous Businesses, underrepresented groups, trainees and apprentices
- Ensure safety for workers and the public during construction
- Design and innovate for climate change resiliency
- Effective traffic management
- Provide value for public money

Projects

- We anticipate two initial projects on the Highway 5 corridor:
 - Category B: Bottle Top, Juliet and Jessica Bridges
 - Category A: Othello Washout
- Design Service Areas required:
 - Geotechnical
 - Bridges (Category B only)
 - Roads
 - Hydrological
- These projects will be delivered using a collaborative contract approach

Process to Select Proponents

RFQ Criteria (Construction Areas of Expertise)	Category B	Category A
i. Project Management	Yes	Yes
ii. Structures	Yes	No
iii. Roadworks	No	Yes
iv. Blasting	No	No
v. Working in steep, mountainous terrain with challenging geotechnical conditions including potentially unstable ground conditions	Yes	Yes
vi. Traffic Management	Yes	No
vii. Maintenance during construction	Yes	No

Expected Proponents

Category A	Category B
EAC - CLPL	ECV Group
Peter Kiewit Sons ULC	KEA5
Pomerleau Inc	Ledcor CMI

Project Details



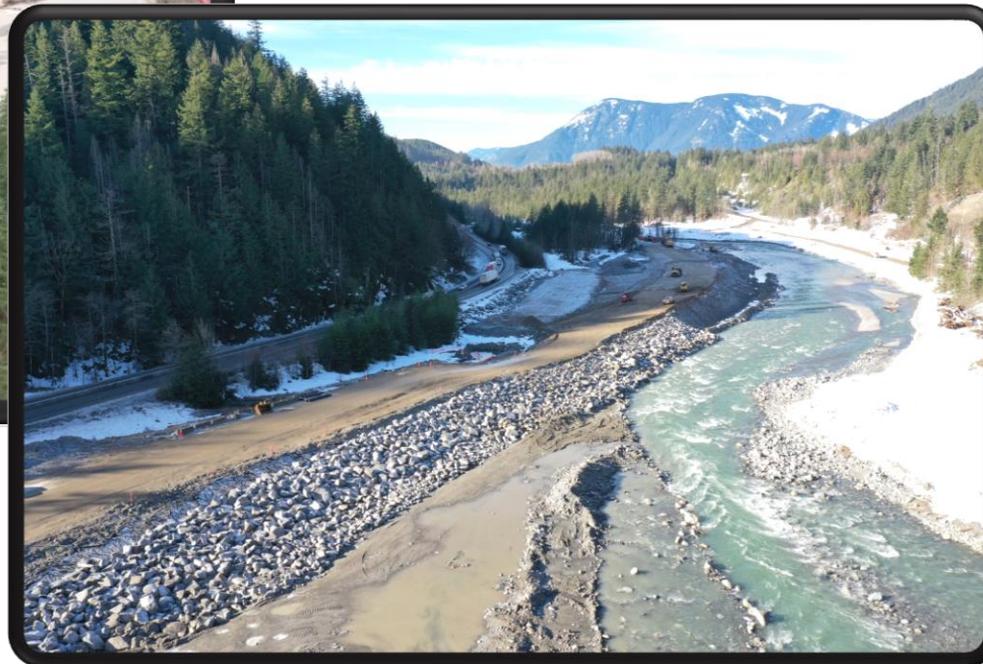
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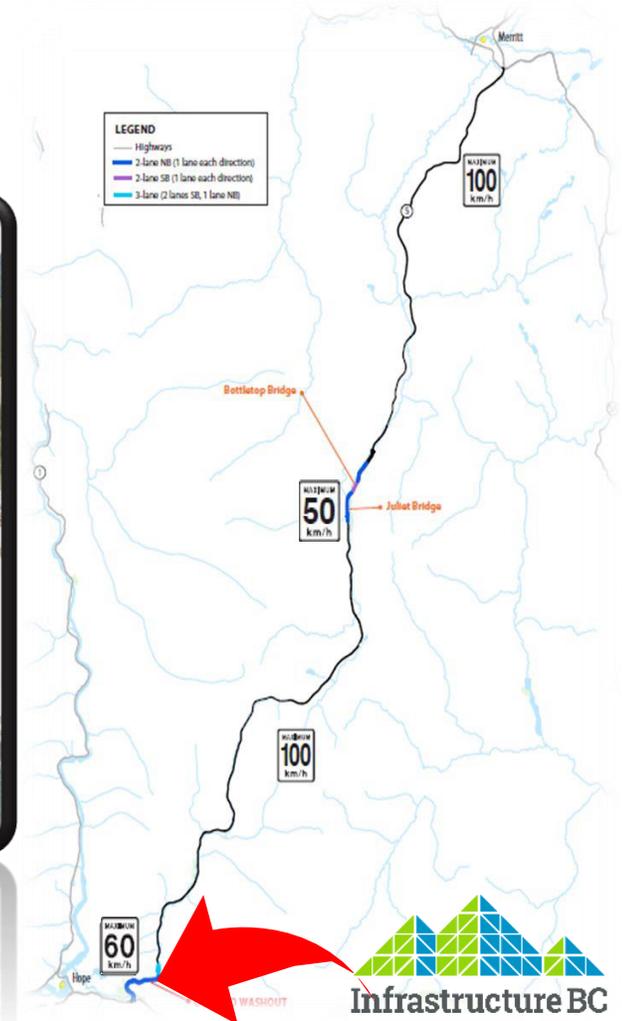
Category A: Othello Washout



Nov 15



Jan 27



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Category A: Othello Washout

Damage:

- Southbound lanes completely washed out
- Northbound lanes partially eroded
- Enbridge pipeline below highway exposed

Work required:

- Construction of southbound lanes including embankment, gravels, and paving
- Embankment armouring

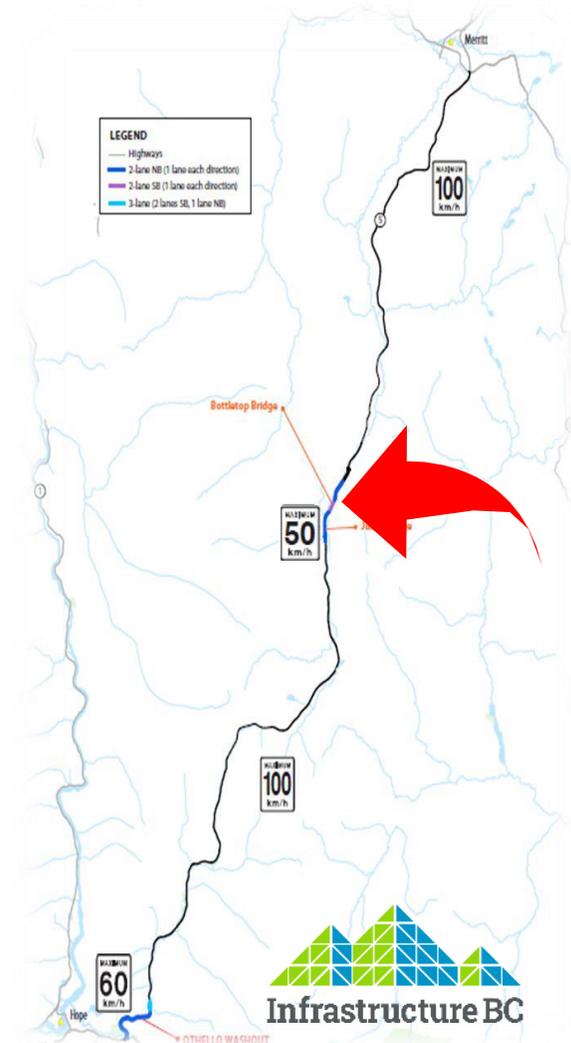
Category B: Bottle Top Bridge



Nov 16



Dec 14



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Category B: Bottle Top Bridge

Damage:

- North and south spans on northbound bridge collapsed
- North span on southbound bridge collapsed

Work required:

- Demolish temporary MSE wall and temporary concrete span
- Design and construction of new jump spans to restore four lane traffic
- Embankment armouring
- Paving of approaches

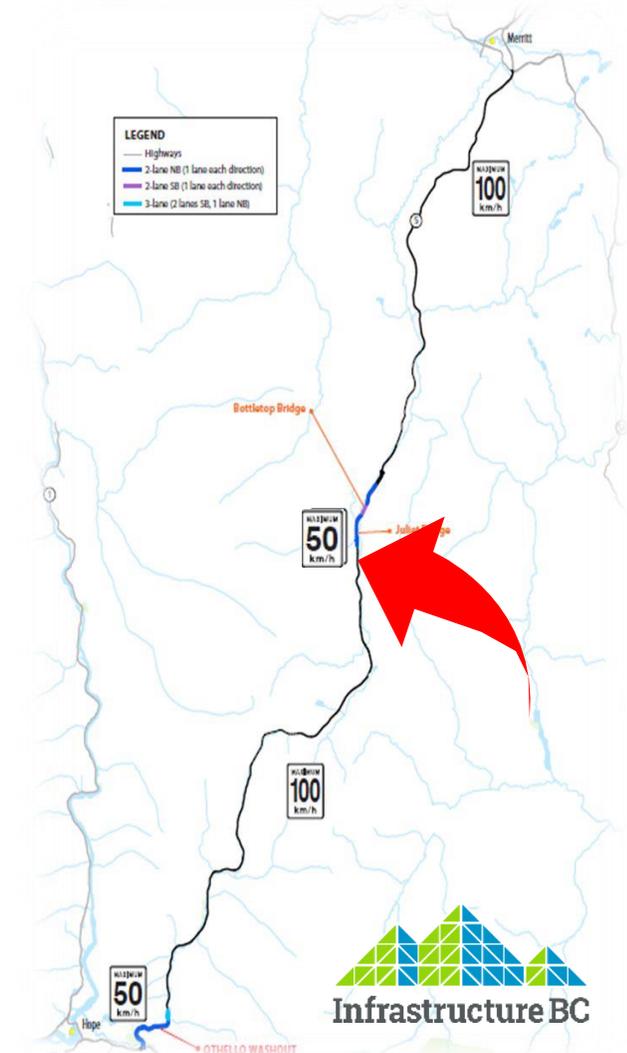
Category B: Juliet Bridge



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Category B: Juliet Bridge

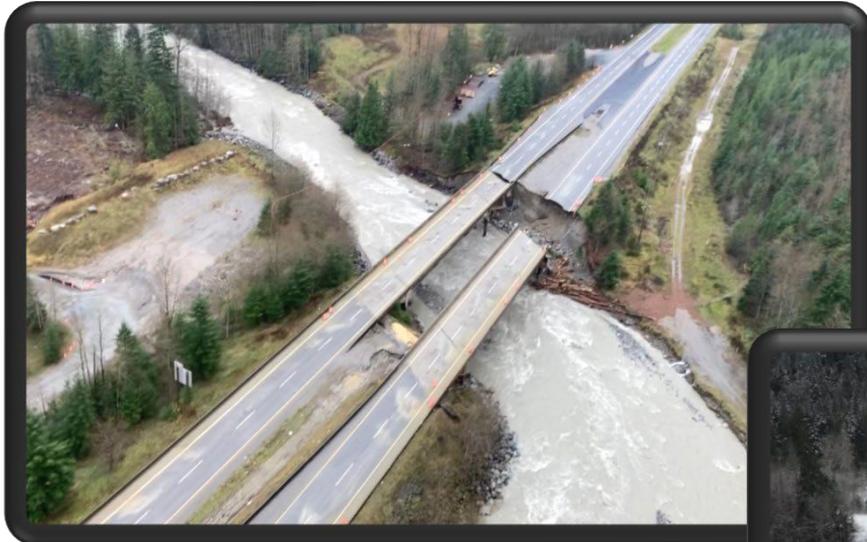
Damage:

- North span on southbound bridge collapsed
- North span on northbound bridge compromised

Work required:

- Design and construction of new jump spans to restore four lane traffic
- Embankment armouring
- Final pave of approaches

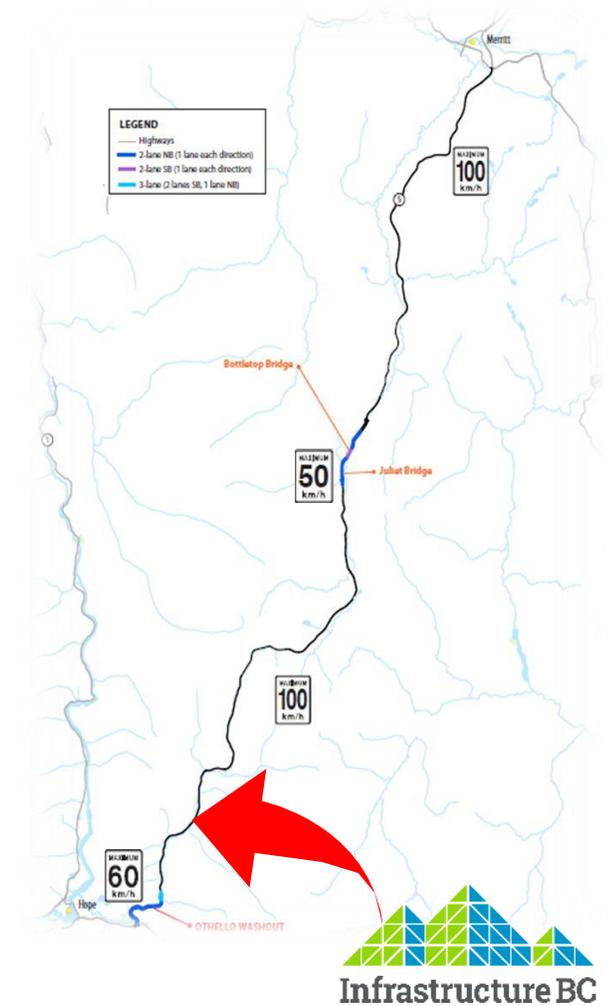
Category B: Jessica Bridge



Nov 16



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Category B: Jessica Bridge

Damage:

- South spans on both bridges collapsed

Work required:

- Demolish temporary MSE wall and temporary concrete spans
- Design and construction of new jump spans
- Embankment armouring
- Final pave of approaches

Collaborative Contract



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Collaborative Contract Overview

Joint Management Structure (for project development and delivery) composed of the Owner and of Non-Owner Participants (NOP)

- Best person for the role
- Collective use of expertise and experience
- Joint decision making

Equitable Approach

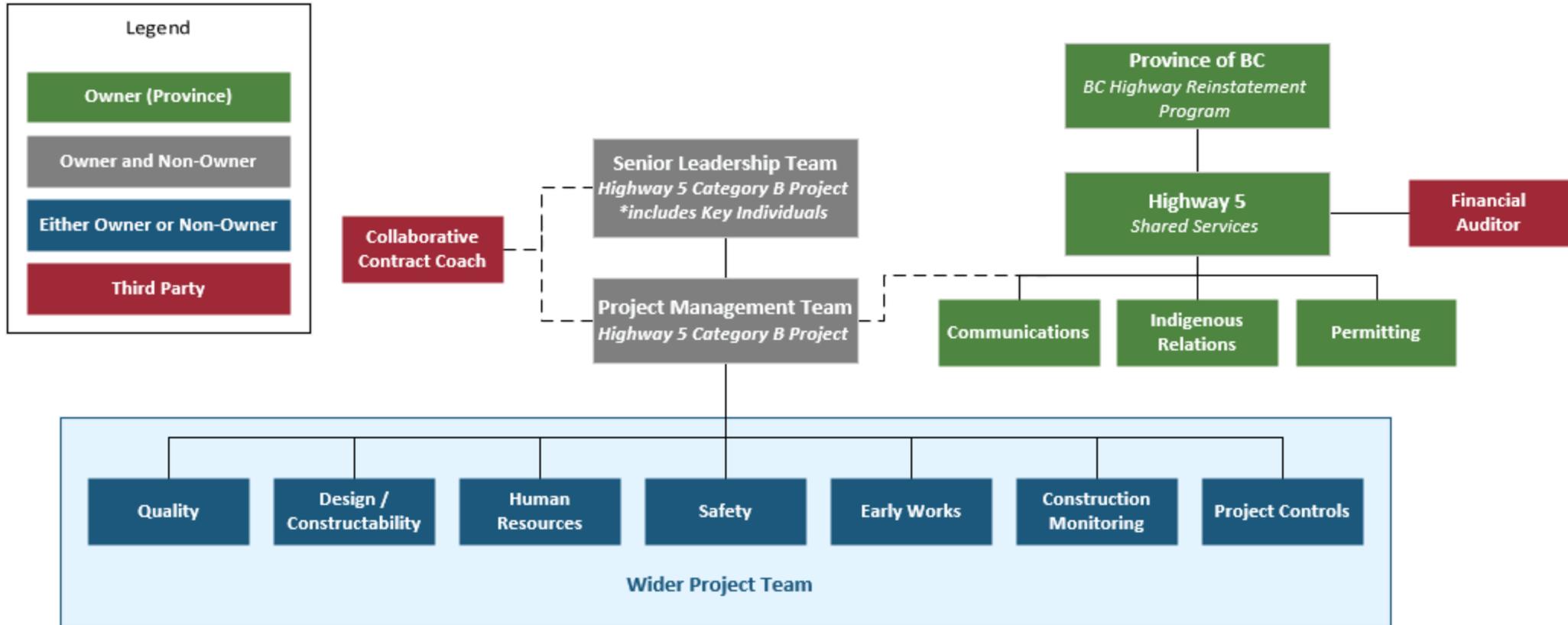
- Good faith and integrity
- Transparency
- No fault, no blame

Pain-Share/Gain-Share

- Risks and responsibilities are shared equitably and managed collectively, rather than allocated to individual participants
- Financial upside and downside shared equitably among Owner and Non-Owner Participants



Collaborative Contract – Org Chart



Collaborative Contract Governance

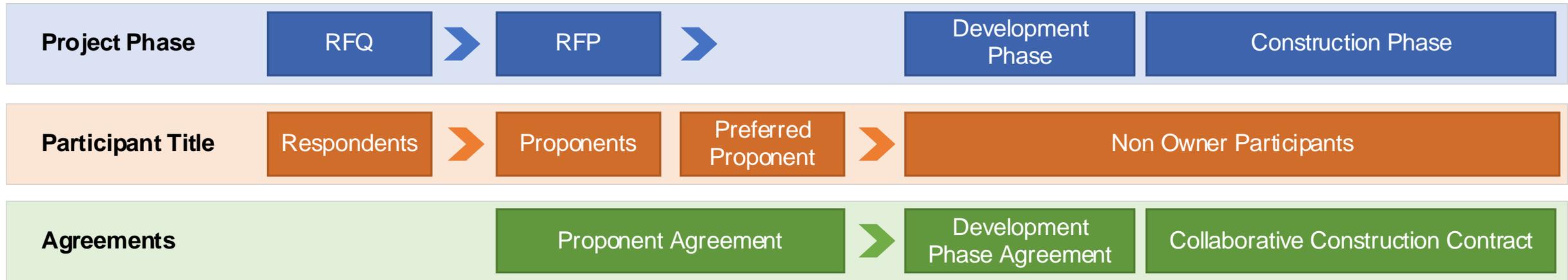
- The Senior Leadership Team (SLT) is the final decision-making group
- One representative for the Owner, each NOP and IBC
- Decisions are made by consensus
- There is no third party dispute resolution (i.e. arbitration or mediation)
- A independent technical advisory panel and a high performance coach will assist with issue resolution, but they are non binding.

Collaborative Contract Governance

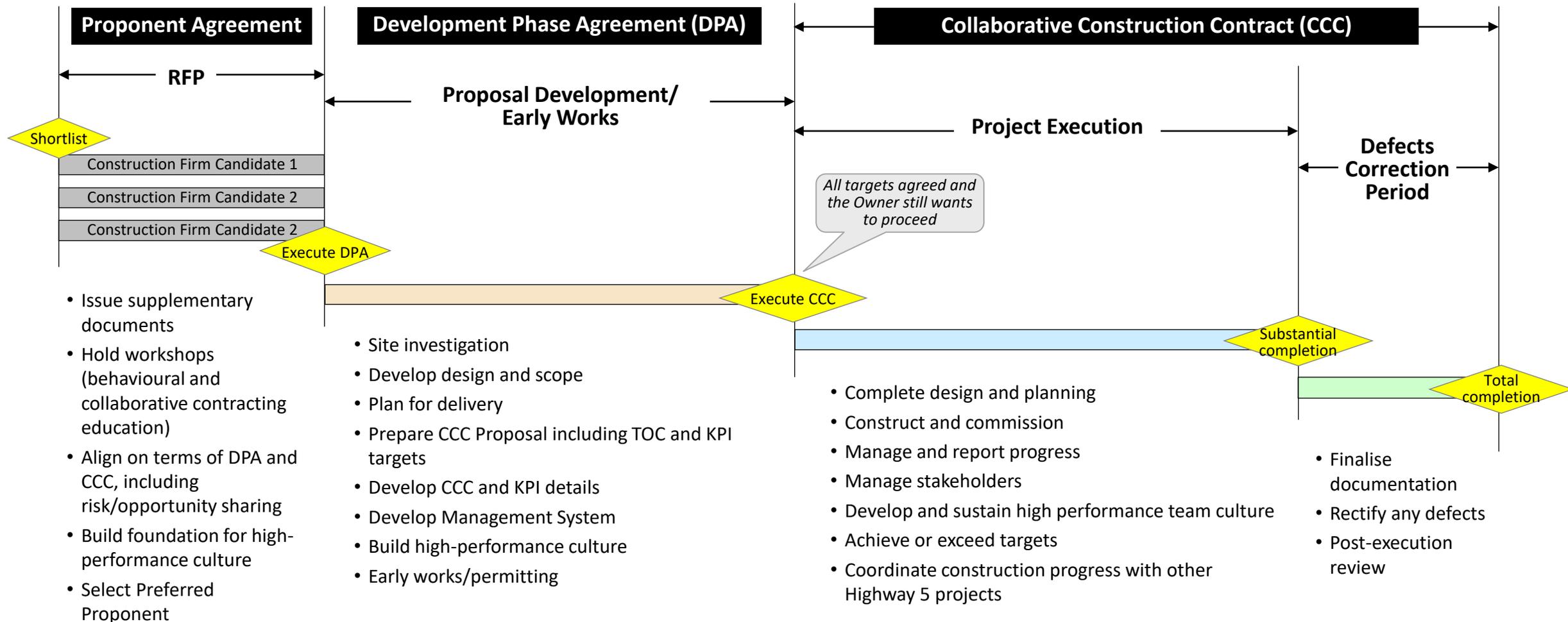
Role of the SLT:

- Create an inspirational vision for the project
- Establish and 'model' the collaborative contract principles and set challenging objectives
- Endorse policies and delegations, and review / approve the collaborative contract management system comprising policies, plans and procedures to effectively control all critical aspects of project operations
- Appoint the structure and appointments in the Project Management Team (PMT)
- Provide high level support to the PMT
- Identify and source best resources from their respective organizations;
- Monitor actual and forecast project performance and take corrective action when appropriate;
- Confine and resolve inter-participant conflict within the SLT.

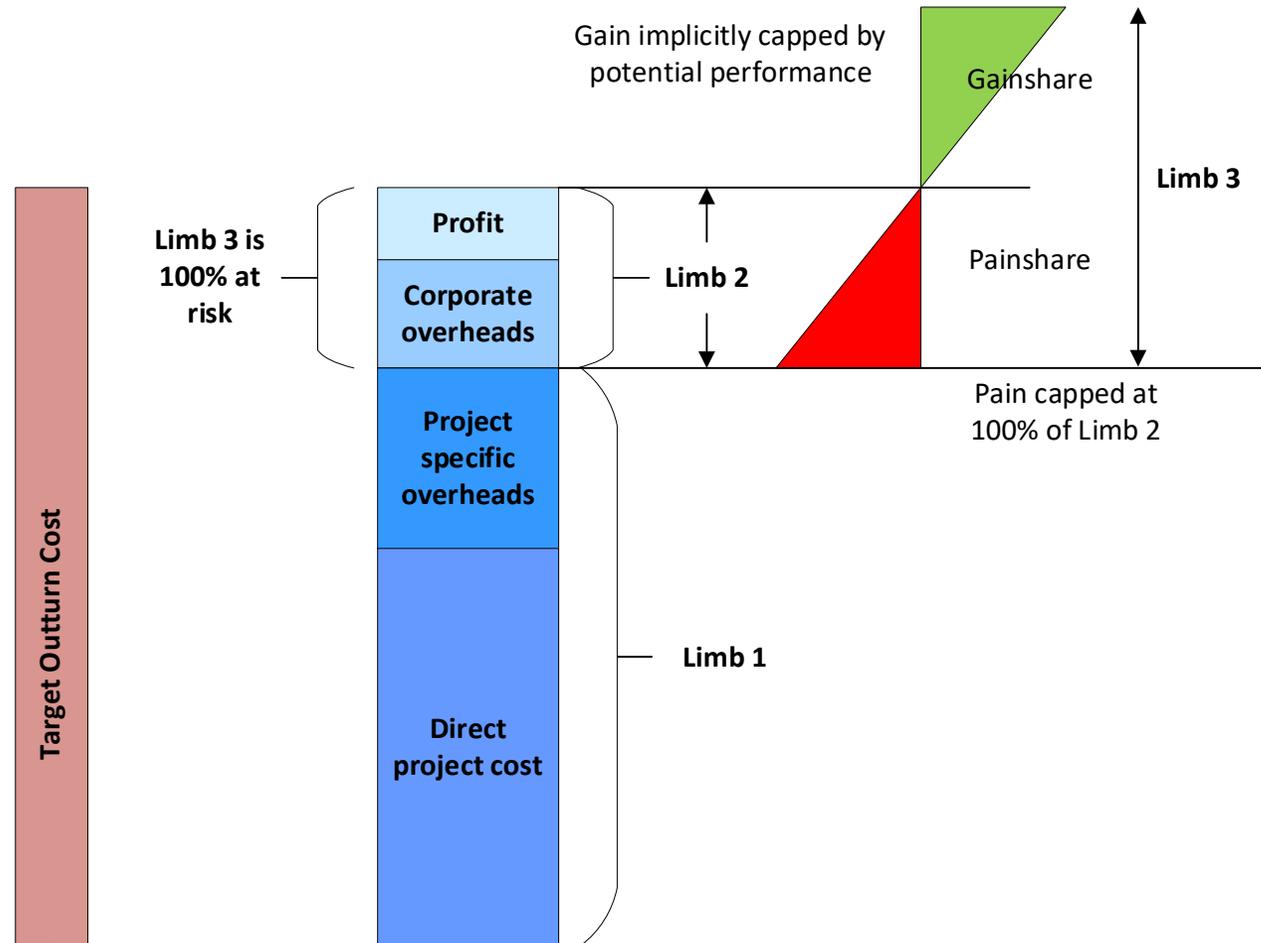
Project Phases



Phases of the Collaborative Contract



Construction Phase - Payment



Construction Phase - Payment

Component	Description
Limb 1 Reimbursable Costs	Reimbursement of actual direct costs and Project-specific overheads incurred in performing the Project Works (including mistakes, rework and wasted effort)
Limb 2 The Fee	A fee to cover profit and a contribution towards NOPs' non-Project-specific overheads
Limb 3 Gainshare/Painshare	Payment of Gainshare by the Owner to the NOPs, or payment of Painshare by the NOPs to the Owner as the case may be, depending on how actual outcomes compare with pre-agreed targets in cost and non-cost performance areas

Potential KPIs

KPI	Objective
Schedule	<ul style="list-style-type: none">• Improve upon baseline schedule
Labour Objective	<ul style="list-style-type: none">• Facilitate and optimize the supply of a diverse, skilled and safe workforce.• Creation of career development opportunities to grow a diverse and local trade and professional workforce.• Growing job opportunities for apprentices and trainees.
Business opportunities for identified Indigenous Groups	<ul style="list-style-type: none">• Increase subcontracting opportunities for identified Indigenous Groups beyond minimums
Traffic disruptions	<ul style="list-style-type: none">• Minimize traffic disruptions (e.g. road closures)

Target Outturn Cost (TOC)

- TOC is one number from the total cost estimate (TCE) – the P50
- TCE:
 - Includes both Owner costs and NOP costs
 - Developed based on range of inputs (for cost, schedule, risk and non cost KPIs) (probabilistic approach)
 - Fully open book
- Owner will employ third party estimator to review

Development Phase



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Development Phase

- Governed by a Development Phase Agreement
- Owner and NOPs sign the same agreement. There must be a minimum of two NOPs. One NOP will be the Proponent and one NOP must be a qualified engineering and design firm.
- Owner and NOPs work together to develop a Proposal for the owner which defines:
 - Scope
 - Schedule
 - How parties will work together (org chart)
 - Target Outturn Cost (TOC) (including owner and NOP resources)
 - May include site investigations and early construction works

Development Phase

Additional activities during the Development Phase:

- Finalize the Collaborative Construction Contract including:
 - Approach to insurance
 - Develop targets for KPIs and measurement methodology
 - Limb 1 audit by Financial Auditor
- Cost and schedule review / validation workshops with owner appointed third-party estimator
- Develop the framework for the Management System (MS) covering key systems and procedures (e.g. environmental management, construction management, financial management, reporting plan, quality management, design management, records)

Development Phase

Additional activities during the Development Phase:

- Develop relationships among and between Project Management Team and Senior Leadership Team
- Build a high performing collaborative project delivery culture whereby the whole (virtual) project organization operates at the peak of its potential

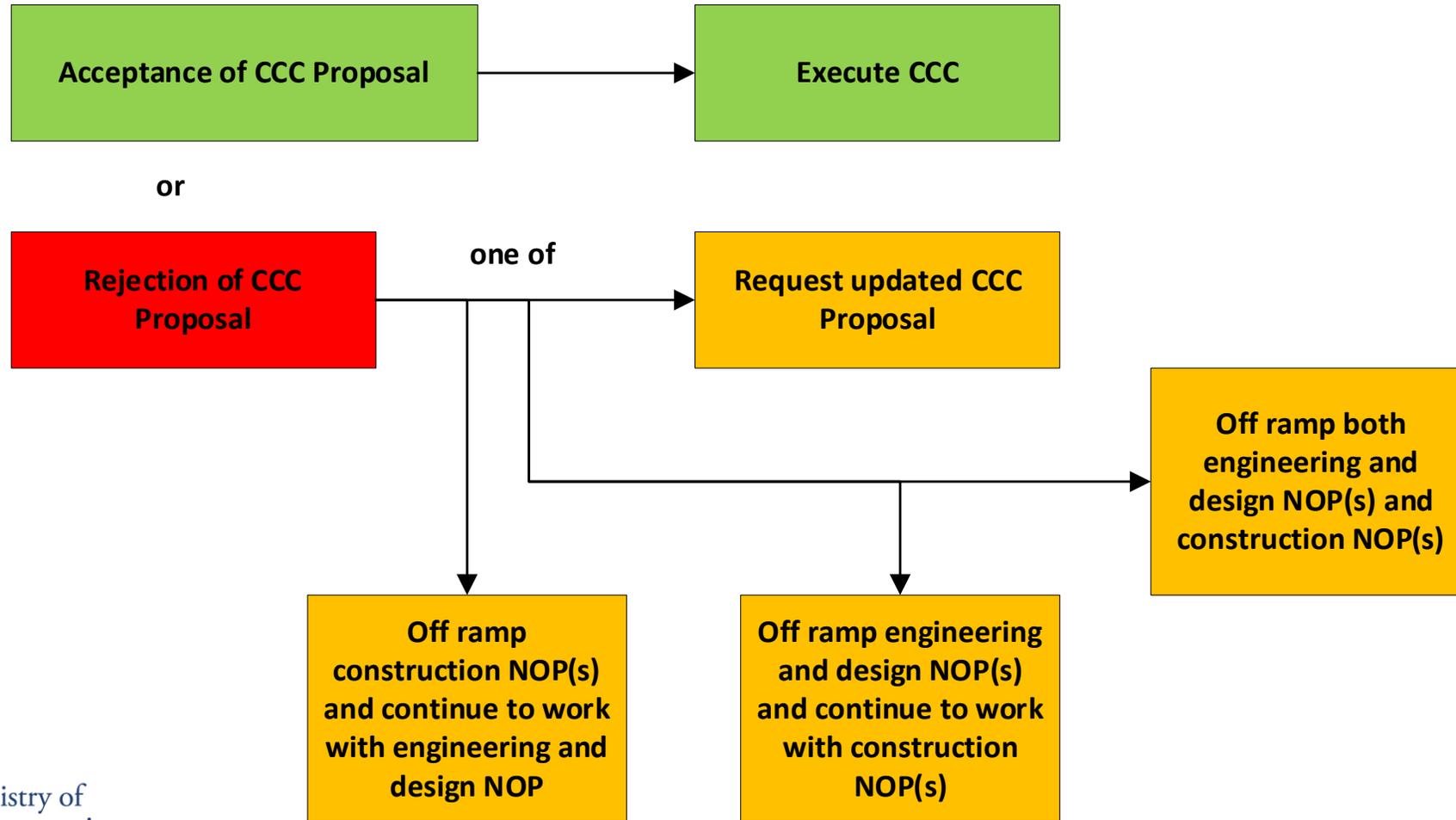
Development Phase - Payment

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50% of Limb 2 will be paid monthly and 50% will be held back and paid upon start of the Construction Phase.

There is no risk sharing during the Development Phase

Development Phase Conclusion



Procurement Process



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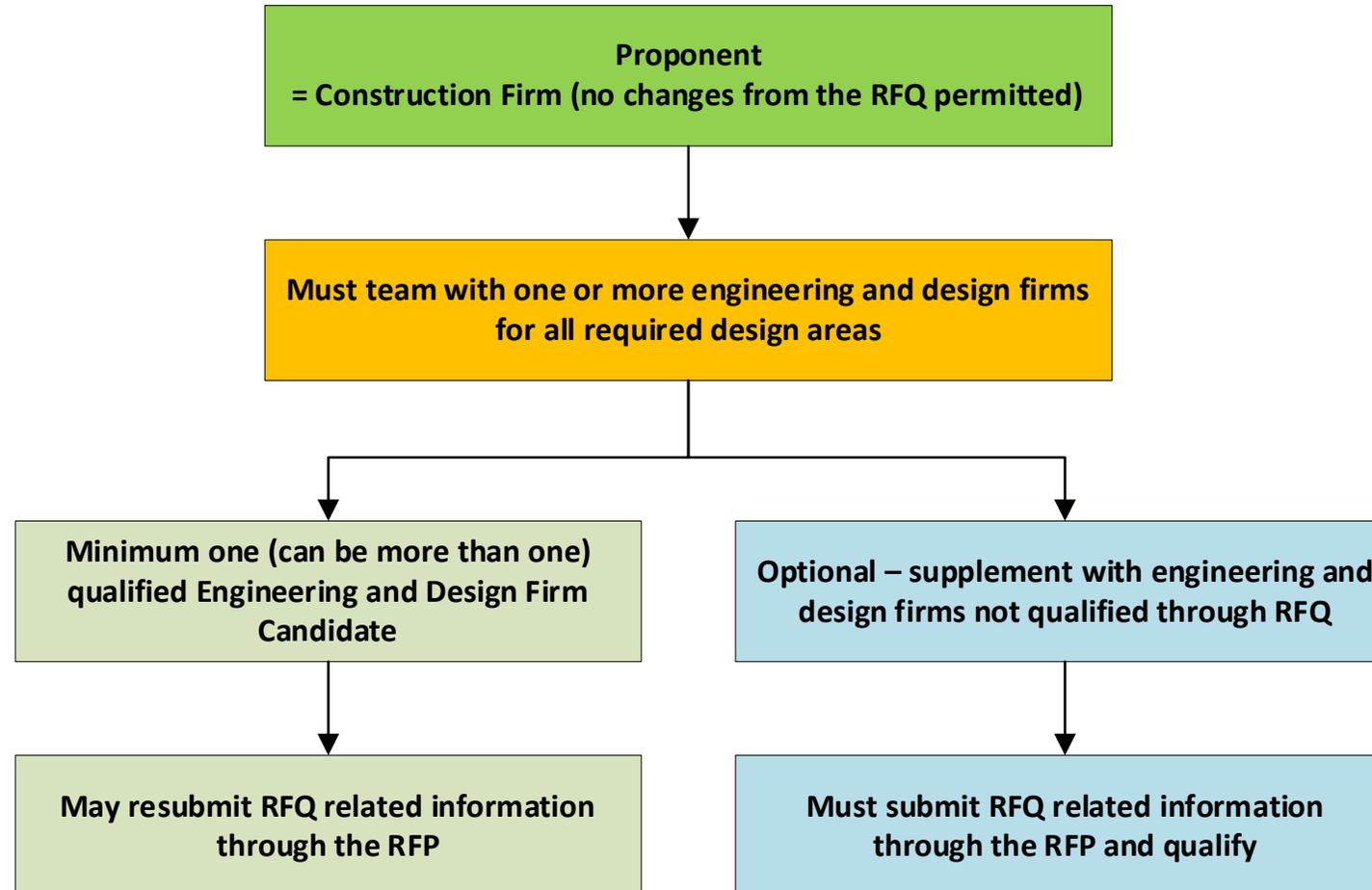
Procurement Timeline

Activity	Timeline
RFP issue	Day 0
Commercial alignment Workshop – Draft DPA (<i>plenary</i>)	Day 12
Commercial alignment Workshop - CCC Heads of Terms (<i>plenary</i>)	Day 12
Commercial alignment Workshop – Payment Mechanism (<i>individual</i>)	Day 13
Commercial alignment Workshop – Adjustment Events (<i>plenary for Category A, individual for Category B</i>)	Day 14
RFP Submission Time	Day 21
Foundation Workshops (<i>individual</i>)	Day 28 - 30
Preferred Proponent Announcement	Day 35

RFP Evaluation Approach

Criterion	Weighting
1. Construction Firm Candidate RFQ scores relevant to Project characteristics	10%
2. Engineering and Design Firm Candidate RFQ scores relevant to Project characteristics and / or evaluation of Engineering and Design Firms that are not Candidates	15%
3. Key Individuals	30%
4. Workshops including approach to target price contracts	15%
5. Value Proposition <ul style="list-style-type: none">• Limb 2 mark-up for Non Owner Participants (NOPs)• Limb 2 alignment• Approach to innovation and value	30%

Criteria 1 and 2 - Teaming



Criteria 1 and 2 - Teaming

- Proponents (Construction Firm Candidates can subcontract with any party, but are not permitted to JV or team with other construction firms, whether they are on the qualified list or not)
- Proponents which are JVs may specify which firms will be NOPs.
- An engineering and design firm, whether a qualified Candidate or not, can only team up with one Proponent for a specific project.
- An engineering and design firm can team with different Proponents on different projects.
- One of the engineering and design firms must become a NOP

Criterion 3 Key Individuals

- Project Manager
- Design Manager
- Construction Manager
- Construction Firm Senior Leadership Team Member (one per NOP)
- Design and Engineering Firm Senior Leadership Team Member (one per NOP)

Criterion 4 Workshops

- The Owner will be looking to assess Key Individuals during the workshops. This will include assessing:
 - Key Individuals behaviours, attitudes, capabilities
 - Practicalities/credibility of the proposed approaches to project delivery,
 - Collective ability to work together and with the owner efficiently and effectively to deliver shared outcomes.

Criterion 5 Value Proposition

- Limb 2 is a percentage of Limb 1.
 - If a Proponent has multiple Construction NOPs, a single Limb 2 must be proposed
 - If a Proponent has multiple Engineering and Design NOPs, a single Limb 2 must be proposed
 - The Construction NOPs and Engineering and Design NOPs may have separate Limb 2 proposals
 - No material increases in Limb 2 permitted after RFP Submission Time
 - If an organization is qualified as both a Construction Firm and as a Engineering and Design Firm, each department can (but is not required to) provide a different Limb 2
- Alignment of Limb 2
- Approach to Innovation and Value
- There will be workshops to work through the Limb 1 and Limb 2 concepts in some detail before the RFP Submission Time

Questions?



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