INFRASTRUCTURE ROYALTY CREDIT PROGRAM

GUIDANCE DOCUMENT

REQUEST FOR APPLICATIONS PROCESS

Ministry of Natural Gas Development
Upstream Development Division
Policy and Royalty Branch

February 23, 2016
Version 1.0

Table of Contents

1. Purpose of this Document

This document is intended to provide guidance on the Infrastructure Royalty Credit (IRC) Program and the Request for Applications (RFA) process for oil and gas producer and pipeline companies interested in submitting an application(s) to the RFA.

This document provides a general overview of the IRC Program as well as more detailed information relevant to potential applicants, including:

- An overview of the IRC Program and how to apply for infrastructure Royalty deductions , what constitutes an eligible project; how the credits for approved projects are released and deducted from oil and gas royalty payments due to the Province of British Columbia (the Province);
- Tips on determining if the project is suitable for the IRC Program; if the maximum 50% Royalty deduction is needed and other important tips to help applicants to be successful in the competitive RFA process;
- An example of a completed infrastructure RFA Template and an example of a completed Drilling, Production and Royalty Estimates Table to assist applicants in completing the application package.

2. General Overview of the IRC Program

Annual allocation of infrastructure royalty credits

- The Province is enhancing the IRCP with a commitment to a three year allocation of $120 million per year in royalty deductions for road and/or pipeline projects to support expanded development of BC upstream natural gas resources. The IRCP program will be offered annually from 2016 – 2018.
- The 2016 instalment of the Program has been allocated $120 million in royalty credits to be competed through a Request for Application (RFA).

Application for infrastructure royalty credits

- The RFA process is very competitive. The amount of Royalty deductions requested by companies for project applications in each of the fourteen previous instalments of the Program has far exceeded the annual allocation of royalty credits.
- An applicant (an oil and gas producer company) may request a level of royalty credits required to make the proposed road or pipeline project economic, which in many cases may be less than 50% of the project costs, this percentage being the maximum Royalty deduction permitted to be granted to any eligible road or pipeline project.

Allocation of infrastructure Royalty deductions to an approved project

- Each project approved under the IRC Program is assigned a maximum amount of Royalty deductions based on the construction cost estimate provided in the road or pipeline project application. This credit can be as much as 50% of the project's estimated cost or final as built cost, whatever is lesser.
- The Royalty deductions are assigned to the approved project, not to a company.
- An approval of a project as a result of the RFA application does not result in Royalty deductions being automatically applied to the producer company's royalty payable account; the release process is described below.

Request for the release of Royalty deductions for approved project

- A producer company must send a written request to the Ministry of Natural Gas Development (Ministry) requesting the release of the Royalty deduction for an eligible project once the project has completed construction, and all associated eligible costs

have actually been paid. Schedule B of the Project Agreement lists the required documents that must be completed and submitted as part of the credit release request.

- The release of a royalty deduction is also determined by the actual royalty revenues payable attributable to the infrastructure project's natural gas and/or oil wells **(amount A), which is then compared to** the eligible amount of Royalty deductions to the completed project (or the eligible amount of Royalty deductions to the completed step of the project plus any credits released for a previous step of the project in the same fiscal year**) (amount B**).

  If **amount A** is greater than or equal to **amount B,** the Royalty Administrator will, subject to the Project Agreement and the *Petroleum and Natural Gas Royalty and Freehold Production Tax Regulation*, allow the royalty deduction.

  If **amount A** is less than **amount B**, then the Royalty Administrator has sole discretion to allow a royalty deduction in an amount less than **amount B** or not allow a royalty deduction in that fiscal year**.**

- Producer companies are advised to keep a MASTER WELL LIST for all of the wells that are attributed to each approved project to ensure unique wells are tagged to a specific approved project. This will enable easy updates for well reporting obligations for completed IRC projects.
- If the Ministry of Natural Gas Development determines that the Royalty deduction is eligible and earned under the Project Agreement, the producer company will be notified, in writing, of the credit release. The Ministry of Finance is also notified by the Ministry that the eligible amount of credit can be deducted from oil and gas royalty payments due to the Province.
- Once a royalty deduction has been approved for release, it is applied to the company's royalty payable to the Province.
- The Royalty deduction is not transferable between related or unrelated companies, persons or other entities.
- A BC-15 Remittance Advice entry form and a BC-22 Application for PCOS form must be completed and submitted to the Ministry of Finance in order to claim all or some portion of the Royalty deduction amount. Depending on the amount of the company's monthly oil and gas royalty payable and market prices for oil, natural gas and natural gas liquids, it may take several months or over a year until the Royalty deduction has been exhausted.

AUDIT REVIEWS

- The Ministry has the discretion to access any IRC Program approved project site to carry out inspections, monitor progress and conduct audit reviews with reasonable notice.
- The audit review may be carried out on any completed Project, or completed Step of a Project under the IRC Program. This is an audit review of the costs paid for the Project, and is normally carried out by an outside accounting firm contracted by the Ministry.
- The Ministry reserves the right to reassess and adjust the Royalty deduction entitlement if it is found that any of the claimed project costs are ineligible, or where unclaimed eligible costs are identified.

3. How to Decide if the Program is Suitable for Your Project

- Please refer to the RFA document Section C for definitions of eligible road, eligible pipeline project, eligible and ineligible costs.
- The IRC Program is designed to:
  - enhance BC's competitiveness for upstream investment.
- The Program is NOT intended to share costs of building infrastructure that has already been built or is under construction.
- Look at your internal proposed project economics – particularly your "hurdle rate": if your project is "on the bubble" (close to making it to receive internal approval, but not quite), then the Program might be a good option for you.
- Run your internal economics with and without the infrastructure credit to help decide if you should apply.

The following cases (Case 1 and Case 2) provide scenarios for determining the internal economics in helping determine whether you might consider applying to the Program.

CASE 1 - Project makes hurdle rate without Program

	Road Application
TOTAL PROJECT	
Eligible construction costs	$3,000,000
Credit requested	$1,500,000
Revenues Expected in first 5 years	**$7,000, 000**
Benefit/Cost Ratio	**3.7**
Company "Hurdle Rate" (IRR)	15%
IRR of project BEFORE Credit	**16%**
IRR of project AFTER Credit	21%

In this case, your proposed project does NOT require an infrastructure royalty credit to be economic.

Does not need Program

	Road: 3.0 million Drilling: 5.0 million			
	BEFORE CREDIT		AFTER CREDIT	
	Expenditures	Revenues	Expenditures	Revenues
Y1	- 8,000,000	200,000	- 6,500,000	200,000
Y2		500,000		500,000
Y3		1,000,000		1,000,000
Y4		2,000,000		2,000,000
Y5		2,800,000		2,800,000
Y6		3,500,000		3,500,000
Y7		3,000,000		3,000,000
Y8		2,900,000		2,900,000
Y9		1,800,000		1,800,000
Y10		1,400,000		1,400,000
Y11		1,000,000		1,000,000
Y12		800,000		800,000
IRR	16%		21%	

Case 2 – Determining Internal Economics

CASE 2 - Project does not make hurdle rate without Program

	Road Application
TOTAL PROJECT	
Eligible construction costs	$3,000,000
Credit requested	$1,500,000
Net Royalty Revenues Expected in first 5 years	**$7,000,000**
Benefit/Cost Ratio	**3.7**
Company "Hurdle Rate" (IRR)	15%
IRR of project BEFORE Credit	**14%**
IRR of project AFTER Credit	18%

In this case, your project is close to being economic without the credit, but doesn't quite make it. The royalty credit makes the difference!

Needs Program

	Road: 3.0 million Drilling: 6.0 million			
	BEFORE CREDIT		AFTER CREDIT	
	Expenditures	Revenues	Expenditures	Revenues
Y1	- 9,000,000	200,000	- 7,500,000	200,000
Y2		500,000		500,000
Y3		1,000,000		1,000,000
Y4		2,000,000		2,000,000
Y5		2,800,000		2,800,000
Y6		3,500,000		3,500,000
Y7		3,000,000		3,000,000
Y8		2,900,000		2,900,000
Y9		1,800,000		1,800,000
Y10		1,400,000		1,400,000
Y11		1,000,000		1,000,000
Y12		800,000		800,000
IRR	14%		18%	

4. How to Decide if the Maximum 50% Royalty Deduction is Needed

- Oil and gas producer companies can apply under the competitive RFA process for a deduction to the royalties they would otherwise pay to the province in exchange for their investment in new road or pipeline infrastructure.
- This deduction can be as much as 50% of the estimated project cost or the final as built cost, whatever is less.
- Producers can request less than 50% if their project becomes internally economic with less than the maximum credit.
- Why would you do that? Because a lower credit improves your chances of getting your project approved!

The following cases (Case 3 and Case 4) illustrate an example of where you likely would request less than the maximum 50% Royalty deduction in your project application.

Case 3 – Deciding on the Amount of Credit to Request

CASE 1 - Apply for 50%

	Road Application
TOTAL PROJECT	
Eligible construction costs	$3,000,000
Credit requested	$1,500,000
Net Royalty Revenues Expected in first 5 years	**$7,000,000**
Benefit/Cost Ratio	**3.7**
Company "Hurdle Rate" (IRR)	15%
IRR of project BEFORE Credit	14%
IRR of project AFTER Credit	18%

Why take the risk? Project makes hurdle rate with a lower credit as well. And asking for 50% makes project return only 3.7:1.0 to the Province, which means less chance of being approved

Project is economic in both cases AFTER the credit

Road: 3.0 million

Drilling: 6.0 million

	BEFORE CREDIT		AFTER CREDIT	
	Expend	Revenues	Expend	Revenues
Y1	- 9,000,000	200,000	- 7,500,000	200,000
Y2		500,000		500,000
Y3		1,000,000		1,000,000
Y4		2,000,000		2,000,000
Y5		2,800,000		2,800,000
Y6		3,500,000		3,500,000
Y7		3,000,000		3,000,000
Y8		2,900,000		2,900,000
Y9		1,800,000		1,800,000
Y10		1,400,000		1,400,000
Y11		1,000,000		1,000,000
Y12		800,000		800,000
IRR	14%		18%	

CASE 2 - Apply for 25%	
	Road Application
TOTAL PROJECT	
Eligible construction costs	$3,000,000
Credit requested	$750,000
Revenues Expected in first 5 years	**$7,000, 000**
Benefit/Cost Ratio	**8.3**
Company "Hurdle Rate" (IRR)	15%
IRR of project BEFORE Credit	14%
IRR of project AFTER Credit	16%

With a 25% royalty credit, project makes the hurdle rate, and increases benefit to the Crown considerably - more chances to get approved

But will rank much better overall if only asking for 25% of the cost

	Road: 3.0 million Drilling: 6.0 million			
	BEFORE CREDIT		AFTER CREDIT	
	Expend	Revenues	Expend	Revenues
Y1	- 9,000,000	200,000	- 8,250,000	200,000
Y2		500,000		500,000
Y3		1,000,000		1,000,000
Y4		2,000,000		2,000,000
Y5		2,800,000		2,800,000
Y6		3,500,000		3,500,000
Y7		3,000,000		3,000,000
Y8		2,900,000		2,900,000
Y9		1,800,000		1,800,000
Y10		1,400,000		1,400,000
Y11		1,000,000		1,000,000
Y12		800,000		800,000
IRR	14%		16%	

5. Tips for Completing the RFA Application Package for the IRC Program

The Ministry has issued an RFA for fifteen separate instalments of the Infrastructure Royalty Credit Program from 2004 to 2016. The Ministry has reviewed a large number of applications submitted by the oil and gas industry, and has collected these tips to assist you when completing the package.

The table below highlights some common issues found in previous applications, with suggested solutions. **Companies are encouraged to carefully review the 2016 RFA package prior to submission to ensure it is completed fully and correctly.**

DOCUMENT	ISSUE
RFA Cover Page **(Word document)**	• Missing from submission; • Not fully completed with information about the company or project; • Not signed.
Cover Letter(s) about the Project	• Missing; • Lack of information about the project provided; • In a partnership application, only one letter from one partner received; • Not on company letterhead;
Supporting Letter(s) (if a partner application)	• Missing; • No royalty percentage split for Producer partners assigned; • No Letter of Agreement included.
Infrastructure RFA Template **(Word document)**	• Legal company name not provided; • Partner company name not provided; • Vague description of project; • Number of years not specified for project acceleration; • Pipeline applications only includes facilities, not pipeline construction; • Questions unanswered; • Provided in PDF format (must be in Word).

DOCUMENT	ISSUE
Proposed Construction Schedule **(Excel spreadsheet)**	• Missing from submission; • Not fully completed; • Format of spreadsheet changed (format must remain unchanged and in Excel)
Drilling, Production and Royalty Estimates Table **(excel spreadsheet)**	• Missing well information i.e. MDTP, MDCP, TVD, IP Date, East/West; • Volumes not submitted in proper units (e^3m^3; m^3 etc.); • One type well submitted for multiple wells (each well must be entered as a separate row); • Deductions for Royalty deductions not subtracted – infrastructure or deep credits, etc.; • Well currently producing (producing wells are not accepted); • Wells counted twice (well was assigned to previously approved infrastructure project); • If a road and pipeline project is being submitted, then there is an option to submit together or separately, but care should be taken to ensure that there are no duplication of wells; • Days on production higher than 365 days (Initial production is on an annual basis); • No risk information provided; • Format of spreadsheet changed (format must remain unchanged and in Excel)
Mapping Requirements	• No polyline provided in shapefiles; • Shapefile format incorrect (see Section E-8 of the RFA document for details) • PDF of map missing; • Printed Map missing;
Flash Drive	• Not provided • Blank

Appendix A. Example of a Completed Infrastructure RFA Template

INFRASTRUCTURE RFA TEMPLATE 2016

PROJECT AND APPLICANT INFORMATION			
Project Name	**Example Road**		
Legal Company Name(s)	**ABC COMPANY LIMITED**		
Royalty payor code	002		
Contact Name	Jo Smith	Contact Phone	250-555-5555
Contact e-mail	j.smith@ABC.com		
PARTNER APPLICANT(S) – PARTNER #1			
Legal Company Name(s)			
Royalty payor code			
Contact Name		Contact Phone	
Contact e-mail			
PARTNER APPLICANT(S) - PARTNER #2			
Legal Company Name(s)			
Royalty payor code			
Contact Name		Contact Phone	
Contact e-mail			

Survey Questions					
How did you find out about the Infrastructure RFA 2016? Please check all that apply:					
Daily Oil Bulletin	☐		Past Applicant	☐	
Ministry's Email Notification	☐		Ministry News Release	☐	
Media	☒		Webinar:	☐	
Word of Mouth	☐		Other (specify):	_____	

Please review the Infrastructure RFA 2016 in Section D - Application Instructions for details in completing the RFA Template and submitting an application.

All questions in the Infrastructure RFA Template should be answered fully for evaluation purposes. If any questions are not addressed in the Template, the application will not be scored for full marks and may not receive the minimum required percentage for advancement to the next stage of evaluation.

FOR EVALUATION CRITERIA - PLEASE COMPLETE THIS TEMPLATE FOR THE RFA SUBMISSION

1. Project Details (double click on box to tick)

ROAD: Type:	OGC Permit Road	Oil and Gas Road	☒	Forest Services Road or Mining Access Road	☐
Total amount of Kilometers of Project	19	DO NOT use this space			
Road Construction	Upgrade ☐	New ☒		New and Upgrade ☐	
OGC Permit Application Applied:	Yes / No _____	OGC File # _____		(if applicable)	

PIPELINE: Type:	OGC Authorized ☐	NEB Authorized ☐			
Total amount of Kilometers of Project	_____	Pipeline diameter(s):	_____		
OGC Application Applied:	Yes / No _____	OGC File #	_____	(if applicable)	
NEB Application Applied:	Yes / No _____	NEB File #	_____	(if applicable)	
Fluid Type: Sour ☐	H_2S content _____	Sweet ☐	Water ☐	Oil ☐	

2. Description of project

*2.1 Please provide a **detailed** explanation of the project and a description of the scope of the project, including describing the route and location the project will encompass. Please include any construction phases (i.e. timelines encompassing several years or phases in construction). Advise on construction of any segments of pipelines or roads (i.e. indicate if there are separations between roads or pipelines, network of roads, pipeline diameter changes). Also explain the reasons the Applicant intends to build the project (may use information submitted in Cover Letter). [Space is not limited in any response].*

Example answers below – please provide more detail than provided here.

ABC Company Limited is proposing to build a 19 km all season road in the Fort St. John area. The road will exit from km 20 of the Right Road directly west to the z-83-Q/97-J-10 well site. The road construction will begin at y-85-Q/97-J-10 and end at the z-83-Q/97-J-10 well pad site. This new road will enable ABC Company to produce 5 wells from the well pad site.

The project will start construction in July 2016 and is expect to be completed in Oct 2017. Construction will be completed in two phases with the first 10 km being built by October 2016 and the remaining 9 km being completed by October 2017.

ABC Company's intentions for building the Example Road is to ……..

2.2 Please provide details of the drilling and production performance expected (production rates and reservoir plays) for the project in terms of the location area, formation/zone, and or seismic information available. Also include the expected number of wells to be produced over the next five years.

Example answers below – please provide more detail than provided here.

Development of this project application includes one new horizontal well proposed to be drilled in October 2017 and four additional new wells proposed to be drilled in July 2018

Each well will be drilled to a total length of up to 5,000 metres and completing in the Halfway zone. Completion design for the new wells includes individually perforating and fracing 20-26 intervals per wellbore.

2.3 Please provide details on your plans to ensure access to market for oil and gas produced by this project (pipelines, plants, capacity availability, etc.).

Example answers below – please provide more detail than provided here.

Production will flow down the YYY pipeline onto the ZZZ Gas Plant for processing. The processed gas will then flow into XXX Transmission system.

No issues should be anticipated in accessing upstream market.

2.4: Complete the Summary of Project Work and Step(s) on the following page. Select either road or pipeline project as applicable.

PLEASE NOTE: This document will be used to create the Agreement Schedule information for an approved project.

Please describe the project in detail and include the following: kilometers of project, land descriptions (well locations), construction components/segments (phases), construction standards, Royalty deduction request, etc.

Start and Completion Dates: Please provide dates for project start and completion, and construction start and completion.

Note: Project start and completion dates will comprise the timeframe where eligible costs will be incurred for the project. If any costs are incurred before or after these dates they may be deemed an ineligible cost, unless these costs are captured on the new **Schedule D – Special Equipment, Inventory or Services** contained in the Project Agreement..

Please refer to the Infrastructure RFA Tutorial Documents: Example of a completed Infrastructure RFA Template, to review how to fully complete the Summary of Project Work and Step(s).

The construction estimated costs are based on Section 3. Estimate Project Cost.

Please review this section to determine the eligible cost for construction.

Use of Steps: Steps are to be used for projects which are completed in construction phases which complete over several years. The Ministry suggests the use of Steps be limited.

Summary of Project Work and Step(s) Table

ROAD PROJECT

DESCRIPTION OF PROJECT: Please describe the project – Must Include: length of kilometers of project, area description, construction components/segments (phases), construction standards, etc. and location, timing and number of new wells to be drilled and produced as a result of the project.

ABC Company is proposing to build 19 km of an all season, all weather road from km 20 of the Right Road directly west to the z-83-Q/97-J-10 well site. The road construction will start at y-85-Q/97-J-10 and end at the z-83-Q/97-J-10 well pad site.

The project will start construction in July 2016 and is expect to be completed in Oct 2016. Construction will be completed in two phases with the first 10 km being built by October 2016 and the remaining 9 km being completed by October 2017.

This new road will enable ABC Company to produce the 5 wells from this well pad site, including one new horizontal well proposed to be drilled in October 2016 and four additional new wells proposed to be drilled in July 2017.

Project Start date (whole project) (mm/dd/yyyy)	01/01/2016	**Project Completion Date** (whole project) (mm/dd/yyyy)	10/01/2017
Construction Start date (whole project) (mm/dd/yyyy)	07/01/2016	**Construction Completion Date** (whole project)(mm/dd/yyyy)	10/01/2017

Construction Start date for Step 1 (mm/dd/yyyy)	07/01/2016	**Construction Completion Date for Step 1** (mm/dd/yyyy)	10/01/2016

Project Step 1: *Components*	**Expected Completion Date** (mm/dd/yyyy)	**Estimated Completion Cost**	**Maximum Royalty Deduction**
Planning (surveying, applications and design)	02/01/2016	$ 300,000	DO NOT use this space
Construction (clearing of right of way , installing culverts, road and/or bridge construction)	07/01/2016	$ 1,500,000	
G*raveling* (sub-grade and running surface)	09/01/2016	$ 1,000,000	
Clean Up	10/01/2016	$ 50,000	
TOTAL	DO NOT use this space	**$ 2,850,000**	**$ 1,425,000**

Construction Start date for Step 2 (mm/dd/yyyy)	07/01/2017	**Construction Completion Date for Step 2** (mm/dd/yyyy)	10/01/2017

Project Step 2: *Components*	**Expected Completion Date** (mm/dd/yyyy)	**Estimated Completion Cost**	**Maximum Royalty Deduction**
Planning (surveying, applications and design)	02/01/2017	$ 300,000	DO NOT use this space
Construction (clearing of right of way , installing culverts, road and/or bridge construction)	07/01/2017	$ 1,000,000	
G*raveling* (sub-grade and running surface)	09/01/2017	$ 800,000	
Clean Up	10/01/2017	$ 40,000	
TOTAL	DO NOT use this space	**$ 2,140,000**	**$ 1,070,000**
GRAND TOTAL FOR ALL STEPS	DO NOT use this space	**$ 4,990,000**	**$ 2,495,000**

Summary of Project Work and Step(s) Table

PIPELINE PROJECT

OVERALL DESCRIPTION OF PROJECT: Please describe the project – Must Include: length of kilometers of project, area description, pipeline start and end locations, construction components/segments (phases), and location, timing and number of new wells to be drilled and produced as a result of the project.

Project Start date *(whole project) (mm/dd/yyyy)*		***Project Completion Date*** *(whole project) (mm/dd/yyyy)*	
Construction Start date *(whole project) (mm/dd/yyyy)*		***Construction Completion Date*** *(whole project)(mm/dd/yyyy)*	

PROJECT STEP 1: - Description of Project Step 1:

Pipeline Standards for Project Step 1:

Construction Start date for Step 1 (mm/dd/yyyy)		**Construction Completion Date for Step 1** (mm/dd/yyyy)	

Project-Step 1: *Components and Segments*	**Expected Completion Date** (mm/dd/yyyy)	**ESTIMATED COMPLETION Costs**	**Maximum Royalty Deduction**
Design (planning, applications and surveying)		$	DO NOT use this space
Construction (clearing, ditching, stringing and welding, etc.) (**OGC/NEB** documentation, e.g. Notice of Construction Start)			
Segment #1 – Description of location			
Segment #2 – Description of location		$	
Construction (compressor station, gas dehydrator, or facility)			
Testing (hydro or pneumatic) **Pipeline Commissioning** (OGC/NEB documentation / Notice of Leave to Open)		$	
Clean up		$	
TOTAL	DO NOT use this space	**$**	**$**

Use the following if the project is constructed over several years.

PROJECT STEP 2: Description of Project Step 2:			
Pipeline Standards for Project Step 2:			
Construction Start date for Step 2 (mm/dd/yyyy)		**Construction Completion Date for Step 2** (mm/dd/yyyy)	

Project Step 2: *Components and Segments*	**Expected Completion Date** (mm/dd/yyyy)	**ESTIMATED COMPLETION Costs**	**Maximum Royalty Deduction**
Design (planning, applications and surveying)		$	DO NOT use this space
Construction (clearing, ditching, stringing and welding, etc.) (**OGC/NEB** documentation, e.g. Notice of Construction Start)			
Segment #1 – Description of location			
Segment #2 – Description of location		$	
Construction (compressor station, gas dehydrator, or facility)			
Testing (hydro or pneumatic) **Pipeline Commissioning** (OGC/NEB documentation / Notice of Leave to Open)		$	
Clean up		$	
TOTAL	DO NOT use this space	**$**	**$**
GRAND TOTAL FOR ALL STEPS	DO NOT use this space	**$**	**$**

2.4 Road Projects:

Please complete the ROAD LAYOUT AND DESIGN TABLE below.

This information will be used for the Project Agreement Documentation.

Road Layout and Design Table			
Project Name:	Example Road	Company Name:	ABC COMPANY

		Design Information
1.	Road Type: (Oil and Gas Road, Forest Services Road or Mining Access Road)	Oil and Gas Road
2.	ROAD Length (Km)	19
3.	Road Location – Start (NTS / TWP)	y-85-Q/97-J-10
4.	Road Location – Finish (NTS / TWP)	z-83-Q/97-J-10
5.	Road Width: (M)	8
6.	Road Base Depth: (M)	2.0
7.	Depth Of Gravel: (mm)	100
8.	Right Of Way Width: (M)	30
9.	Road Subgrade Width: (M)	5
10.	Number Of Pullouts:	23
11.	Distance Between Pullouts: (M)	2000
12.	Minimum Fill Depth: (M)	2.0
13.	Maximum Grade: (%)	5%
14.	Minimum Side Slope: (Ratio)	3.1
15.	Number Of Bridges: (if applicable)	2
16.	Bridge Design Load: (T)	8000
17.	Minimum Cross-Drain Culvert Size: (mm)	800

2.5 Pipeline Projects:

Provide Oil and Gas Commission - "Notice to Construction Start Application" (if available at time of RFA)

OR

National Energy Board - Pipeline Application (if available at time of RFA)

These applications will be inserted into the Agreement Documentation.

3. Estimated Project Cost and Royalty Deduction Allocation

Please include an itemized cost estimate breakdown for the proposed project, including all design, construction, engineering, financing, approvals, materials and installation, and any other applicable costs; examples of the level of detail required for road or pipeline projects are provided on the following pages.

The Ministry does not accept contingency, applicable federal taxes, administration and overhead costs as part of the cost estimates. Please refer to the Infrastructure RFA– 2016 **document, Section C "Additional Definitions – 6. Eligible Project Costs" for further clarification of construction costs.**

PLEASE NOTE: the Amount of Royalty Deduction Requested below will be used to determine the amount of royalty deduction the Ministry will use in evaluating the project, and if successful, that amount would be allocated to the project. You must indicate in the application the amount of royalty deduction requested.

3.1	Estimated Cost Amount to Build Project	$ 4,990,000
3.2	**Amount of Royalty Deduction Requested:**	$ 2,495,000
3.3	Provide the Percentage of Royalty Deduction Requested if less than 50%	%
3.4.1	Producer Company #1 - % split of Royalty Deduction Requested:	%
3.4.2	Producer Company #2 - % split of Royalty Deduction Requested:	%
3.5	Provide a **Cost Estimate Breakdown Table** (road or pipeline) with as much detail as possible. (see examples on the following pages). **Please provide this in a separate excel spreadsheet – see examples on pages 10-11 for more information.**	

Step 1

COST ESTIMATE BREAKDOWN (EXAMPLE FOR ROAD PROJECT)			
DESCRIPTION	**AMOUNT**	**UNIT PRICE**	**TOTAL**
Trucking Construction Equipment	100 Hrs	$ / Hr	$100,000
Road Construction -Pre-build	280 meters	$ m	$300,000
Road Construction Upgrade	320 meters	$ / M	$
Road Construction New	800 meters	$	$450,000
Blasting required - m of access	80 M^3	$ / M^3	$
Gravel access (supply, deliver, and spread)	34 M^3	$ / M^3	$1,000,000
Miscellaneous Materials	1	$	$50,000
Geo-Fabric	40 Rolls	$ Roll	$100,000
Silt Fence	20	$	$50,000
Signs	40 Unit	$ / Unit	$5,000
Culverts- 1200 mm	10 m	$ m	$50,000
Culverts- 600 mm	500 m	$ m	$10,000
Culvert Delivery	3	$	$50,000
Culvert Markers	100	$	$10,000
Rip Rap	40 culverts	$ culvert	$40,000
Medic	100 days	$ day	$10,000
Supervision	100 days	$ day	$50,000
Camp Site Construction	1	$	$100,000
Camp Set up	1	$	$100,000
Camp	100 days	$ day	$375,000
		Total	$2,850,000

Bridge Construction Segment

Bridge Purchase & Install- 60 '	2 Unit	$ / Unit	$
			$
		Total	$

Step 2

COST ESTIMATE BREAKDOWN (EXAMPLE FOR ROAD PROJECT)				
DESCRIPTION	**AMOUNT**		**UNIT PRICE**	**TOTAL**
Trucking Construction Equipment	100	Hrs	$ / Hr	$75,000
Road Construction -Pre-build	280	meters	$ m	$300,000
Road Construction Upgrade	320	meters	$ / M	$
Road Construction New	800	meters	$	$315,000
Blasting required - m of access	80	M^3	$ / M^3	$
Gravel access (supply, deliver, and spread)	34	M^3	$ / M^3	$800,000
Miscellaneous Materials	1		$	$25,000
Geo-Fabric	40	Rolls	$ Roll	$50,000
Silt Fence	20		$	$30,000
Signs	40	Unit	$ / Unit	$5,000
Culverts- 1200 mm	10	m	$ m	$30,000
Culverts- 600 mm	500	m	$ m	$5,000
Culvert Delivery	3		$	$30,000
Culvert Markers	100		$	$5,000
Rip Rap	40	culverts	$ culvert	$25,000
Medic	100	days	$ day	$5,000
Supervision	100	days	$ day	$40,000
Camp Site Construction	1		$	$50,000
Camp Set up	1		$	$50,000
Camp	100	days	$ day	$300,000
			Total	$2,140,000

Bridge Construction Segment

Bridge Purchase & Install- 60 '	2	Unit	$ / Unit	$
				$
			Total	$

COST ESTIMATE BREAKDOWN (EXAMPLE FOR PIPELINE PROJECT)

Pipeline Cost Estimate				
	Expenditure Description	**Quantity**	**Unit Price**	**Total**
Materials	Pipe Description			
	External coating			
	Pig Launcher			
	Pig Receiver			
	Pig Launcher/Receiver			
	Weights			
	Risers			
			Sub-total Materials	
Construction	ROW Acquisition			
	ROW Clearing/Salvage			
	ROW Preparation			
	Ditch, Backfill, Cleanup			
	Camp Costs (person days)			
	Hydrostatic Testing			
	P/L Installation			
	Weight Installation			
	Inspection Pigging			
	Creek Crossing - bored			
	Road Crossing - bored			
	Road Crossing - open			
	Cable Crossing			
	Railroad Crossing - bored			
	Pipeline Crossing - bored			
	Directional Drilling (related to bore)			
	Corrosion Evaluation			
			Construction	
Miscellaneous	Equipment Rentals			
	Fuel			
	Trucking			
	Cortron RU-196 Inhibitor			
	Diesel for batch inhibitor			
	Safety			
	number of hydrovacs			
	days of ambulance			
	Labour			
	Communications			
	Radiography			
	Survey			
	Construction Inspection			
	Regulatory			
	BC Ministry of Forest ha Cut			
	Engineering			
	Pre-fabricated assemblies			
	Supervision			
	Environmental			
			Miscellaneous	
			Total	

4. Project Business Case – Please answer the following questions:

4.1 Will the project "open up" areas of British Columbia to petroleum exploration and development through the construction of new/upgraded roads providing all season access or pipeline and related facilities infrastructure, which enables new or expanded oil and gas production from new or oil and gas drilling? Please explain:

Example answers below – please provide more detail than provided here.

The Example Road will open up an area without current all season access. This road will provide access to other oil and gas producers and the forestry industry.

5. Benefits Attributable to the Province

5.1: Explain if, and by how much, the royalty credit would accelerate the construction of the project.

Example answers below – please provide more detail than provided here.

The award of the Infrastructure royalty credit would accelerate the construction of the project by several years.

Please provide the number of years the royalty credit would accelerate the project: ___2___ **number of year(s)**

6. Risks and Significant Issues

6.1: Please identify the project risks and steps that will be taken to control and mitigate them. (e.g., insurance, poor drilling outcomes, changes in corporate focus and capital budgets, scope revision, construction cost increases):

Example answers below – please provide more detail than provided here.

ABC Company Limited has mitigated several risks factors which could account for poor drilling outcomes or increased construction costs. These types of risks are factored into the economics of the project.

6.2: Please Identify any significant issues and how they will be resolved; (e.g., permit requirement, rights-of-way, access rights, First Nations consultations, Trapper issues, etc.):

Example answers below – please provide more detail than provided here.

ABC Company Limited has preliminary reviews of the proposed project with the Oil and Gas Commission (OGC) and will work with them through the application and construction process. We expect to be receiving permits and licenses from the OGC.

Discussions have begun with First Nations and we will provide them with any information to ensure consultations are ongoing.

Appendix B. Example of Completed Drilling, Production and Royalty Estimates Table

Production and Royalty Estimates Table

Note: Government Fiscal Year is April 1 - March 31

Fiscal Yr:	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
Oil Price $C/ m³	$443.42	$ 480.85	$ 512.52	$ 554.88	$ 592.61	$ 627.88	$ 658.66	$ 685.96	$ 700.53	$ 713.60	$ 727.05	$ 741.60	$ 756.43	$ 771.56	$ 786.99
Gas Price $C/ e³m³	$ 42.34	$ 54.36	$ 65.25	$ 74.48	$ 81.10	$ 86.92	$ 92.49	$ 98.00	$ 102.74	$ 106.29	$ 110.37	$ 124.94	$ 127.44	$ 129.99	$ 132.59
Pentanes $C/m³	$384.87	$ 444.94	$ 489.03	$ 532.28	$ 563.17	$ 591.74	$ 617.08	$ 637.19	$ 651.93	$ 663.06	$ 674.47	$ 687.96	$ 701.72	$ 715.76	$ 730.07
LPG $C/m³	$118.09	$ 153.04	$ 185.75	$ 209.55	$ 223.57	$ 233.95	$ 244.45	$ 252.00	$ 256.67	$ 260.99	$ 265.77	$ 271.09	$ 276.51	$ 282.04	$ 287.68
Risked Oil Production m³ from all wells from Project															
Risked Gas Production e³m³ from all wells from Project		300000	285000	20000	150000	120000	100000	85000	75000	65000	60000	55000	50000	45000	40000
Risked Pentanes/Condensate Production m³ from all		12000	12000	9000	7000	5000	4500	3000	2500	2200	2000	1800	1600	1400	1200
Risked LPG Production m³ from all wells		3500	3500	2700	2000	1500	1300	900	800	750	700	600	550	500	450
Gross Royalty:		$7,000,000	$8,500,000	$7,500,000	$6,000,000	$5,000,000	$4,500,000	$3,500,000	$3,000,000	$2,500,000	$2,000,000	$1,800,000	$1,500,000	$1,250,000	$100,000
Royalty Credits:															
- Deep Well Royalty Credits		$15,000,000													
- Infrastructure Royalty Credit		$2,500,000													
Net Royalty	$ -	-$10,500,000	$8,500,000	$7,500,000	$6,000,000	$5,000,000	$4,500,000	$3,500,000	$3,000,000	$2,500,000	$2,000,000	$1,800,000	$1,500,000	$1,250,000	$100,000
Cumulative Net Royalty		-$10,500,000	-$2,000,000	$5,500,000	$11,500,000	$16,500,000	$21,000,000	$24,500,000	$27,500,000	$30,000,000	$32,000,000	$33,800,000	$35,300,000	$36,550,000	$36,650,000

Instructions for the Annual Production and Annual Royalty Estimate Worksheet

* In cells E15:S15 please enter the annual oil production in m³ for all wells attributable to this project (if applicable)
* In cells E17:S17 please enter the annual gas production in e³m³ for all wells attributable to this project (if applicable)
* In cells E19:S19 please enter the annual Pentanes+ and condensate production in m³ for all wells attributable to this project (if applicable)
* In cells E21:S21 please enter the annual LPG production in m³ for all wells attributable to this project (if applicable)
* In cells E23:S23 please enter the estimated annual royalty for all wells attributable to this project using the Provincial Oil and Gas Price provided in rows 6 and 7 for Oil, 8 and 9 for Gas, 10 and 11 for condensate/pentanes + and 12 and 13 for LPG's