Grassy Mountain Project

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Contents

1. Detailed Introduction

Northback Holdings Corporation (**Northback**) owns, and is pursuing regulatory approval for, its proposed revised Grassy Mountain Project (**GMP**).

1.1. History

A development application for the former Grassy Mountain Project was originally submitted to the Alberta Energy Regulator (**AER**) in 2016 and underwent a joint federal and provincial review process, (the **Joint Review Process** or **JRP**). In 2021 the original project failed to win approval as it was deemed to not be in the public interest.

1.2. Proposed Revised Grassy Mountain Project

Following a thorough review and consideration of the JRP decision, the proposed Grassy Mountain Project was extensively revised. The revised GMP plans to produce an average of 2.5million tonnes of clean coal per year. The life of the mine is expected to be 26 years. It is projected the mine would take approximately 24 months to construct.

The revised GMP would take place on a brownfield legacy coal mine site, which has been extensively disturbed through a combination of surface and underground mining and other industrial activities including logging. Legacy mining operations were not rehabilitated, and the site remains un-reclaimed to this day.

1.3. Company Information

Northback's head office is in Calgary, Alberta, and its Crowsnest Pass office is in Blairmore, Alberta. More information on Northback can be found on its website found through the following link: Northback.ca

2. Regional and Local Setting

A map describing the proposed project boundary can be found in Figure 1.

The revised GMP and associated infrastructure will be situated in both the Municipality of Crowsnest Pass (**MCP**) and the Municipal District of Ranchland No. 66 (**MDR**). The mine pits, waste rock dumps, coal handling, and processing plant will be located within the MDR. The conveyor transporting clean coal from the processing plant to the rail loadout will traverse both municipalities; while the rail loadout will be within the MCP, adjacent to Alberta Highway 3 (also known as the Crowsnest Highway). A description of the project infrastructure and mining processes can be found under the Project Details section of this document.

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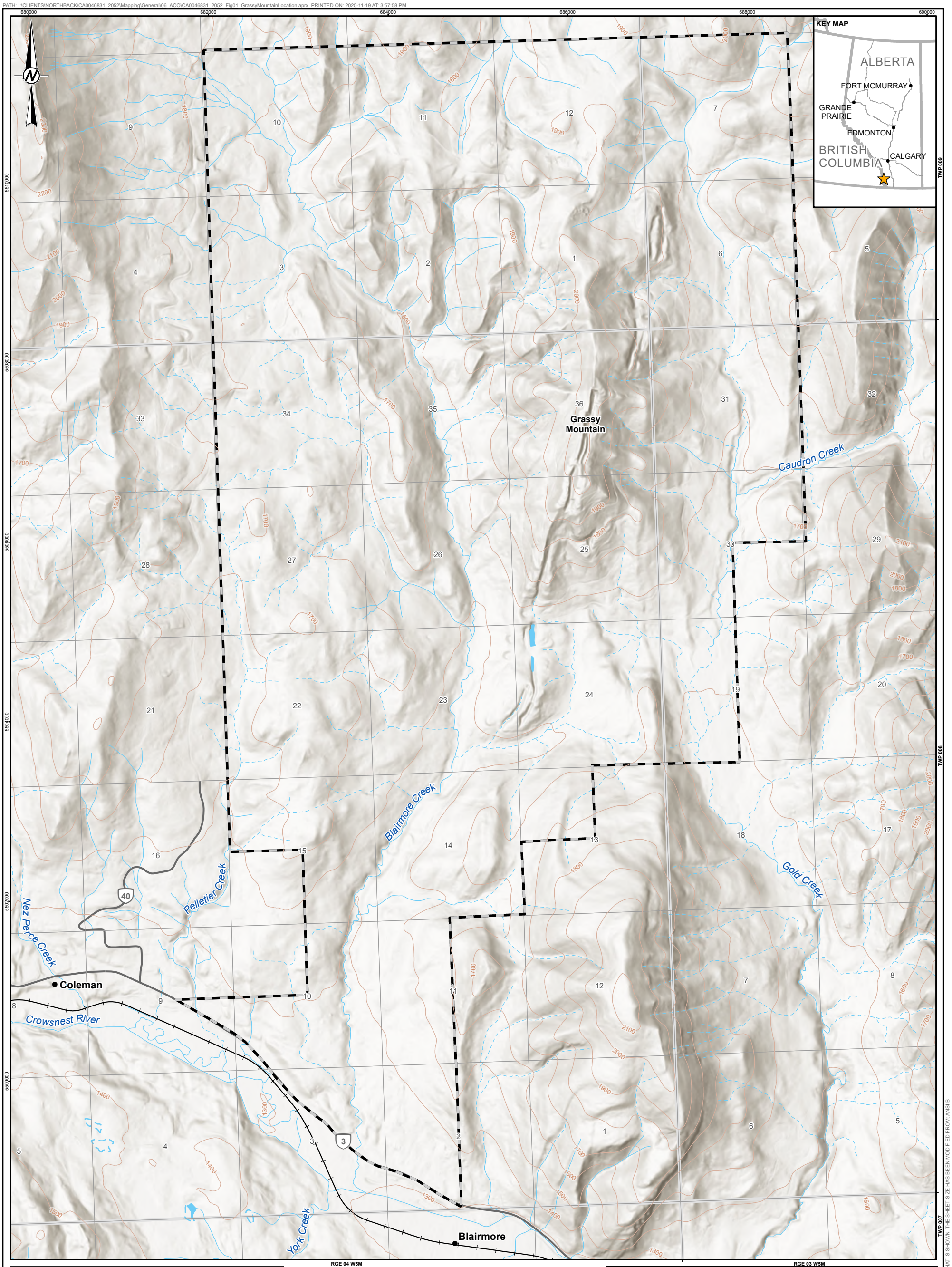

LEGEND

- POPULATED PLACE
- ELEVATION CONTOUR (100 M INTERVAL)
- PRIMARY HIGHWAY
- RAILROAD
- WATERCOURSE
- WATERCOURSE - INDEFINITE
- WATERBODY
- WATERBODY - INTERMITTENT
- PROPOSED MINE PERMIT BOUNDARY

0 1 2

1:40,000 KILOMETRES

REFERENCE(S)

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CLIENT
NORTHBACK

PROJECT
GRASSY MOUNTAIN PROJECT

TITLE
GRASSY MOUNTAIN LOCATION

CONSULTANT
wsp

YYYY-MM-DD	2025-11-19
DESIGNED	KT
PREPARED	TR
REVIEWED	DMV
APPROVED	CD

PROJECT NO.	REV.	FIGURE
CA0046831.2052	1	1

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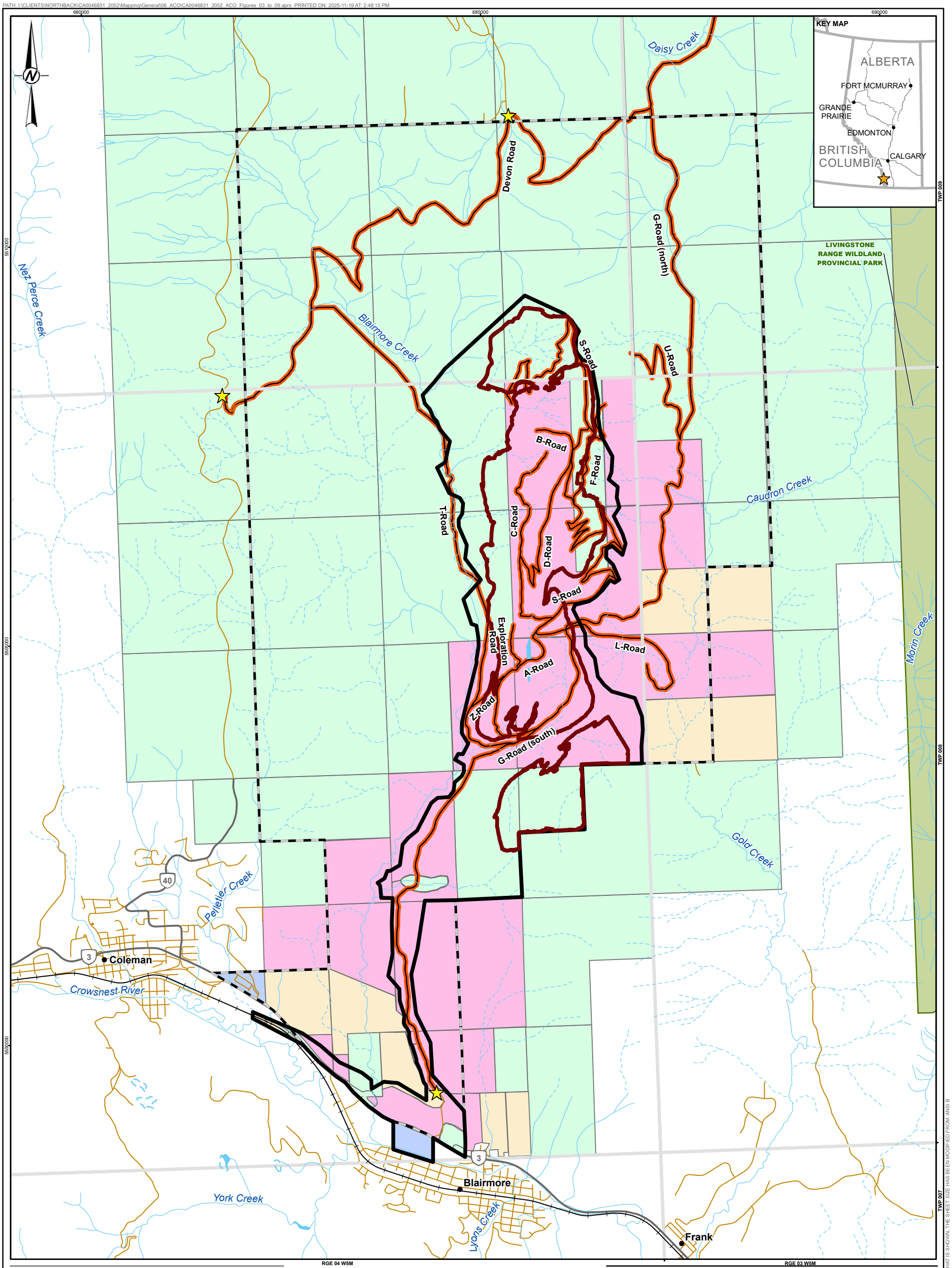
Mining will take place approximately 6 km north of the community of Blairmore, on a brownfield legacy coal mine site. The Crowsnest Pass area is in a valley running east-west through Crowsnest Ridge and is the southernmost rail and highway route through the Canadian Rockies. Immediate access to the GMP area is by a Northback privately owned road from Blairmore. The location of the project and road access is shown in Figure 2.

The nearest community to the site is the community of Blairmore, one of the five communities that make up the MCP. The GMP is located entirely within the boundaries of Treaty 7.

The GMP is bordered by two creeks: Blairmore Creek and Gold Creek. Both creeks flow south into the Crowsnest River, which is part of the Crowsnest watershed sub-basin. The Crowsnest River eventually flows into the Oldman River Reservoir.

The GMP project site is a heavily disturbed site which, in the past has been clear cut logged, is cris-crossed with many existing access trails and roads, and a significant portion of the proposed mining area has previously been mined and not reclaimed. A network of underground mine workings exists between Highway 3 to the base of Grassy Mountain. There is also significant existing un-reclaimed open pit mining and underground mine workings, and waste rock dumps across the proposed GMP site. See Figure 3 for the locations of existing and un-reclaimed surface and underground mining disturbance areas within the proposed Project.

The revised GMP will occur on a mix of private and provincial Crown land, including legacy mining disturbance of approximately 600 ha plus additional proposed land disturbance on Crown land resulting from mining and waste rock dumps of approximately 250 ha. Legacy and new mining disturbance in relation to private and provincial Crown land and Northback's proposed development plans can be seen in Figure 3.



LEGEND

- GATE LOCATION
- POPULATED PLACE
- LOCAL ROAD
- PRIMARY HIGHWAY
- NO PUBLIC ACCESS
- RAILROAD
- WATERCOURSE
- WATERCOURSE - INDEFINITE
- PARK / PROTECTED AREA
- WATERBODY
- WATERBODY - INTERMITTENT
- CONCEPTUAL PIT AND DUMP OUTLINE
- PROJECT DEVELOPMENT ENVELOPE
- PROPOSED MINE PERMIT BOUNDARY

LAND OWNERSHIP

- CROWN LAND
- MIXED LAND – CROWN AND PRIVATE
- NORTHBACK LAND - PRIVATE
- OTHER LANDOWNER - PRIVATE

0 1 2
1:45,000 KILOMETRES

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PROJECTED COORDINATE SYSTEM: NAD 1983 UTM ZONE 11N

CLIENT
NORTHBACK

PROJECT
GRASSY MOUNTAIN PROJECT

TITLE
LAND OWNERSHIP AND ROADS

CONSULTANT
wsp

YYYY-MM-DD	2025-11-19
DESIGNED	KT
PREPARED	LB
REVIEWED	DMV
APPROVED	CD

PROJECT NO. CA0046831.2052 | REV. 1 | FIGURE 2

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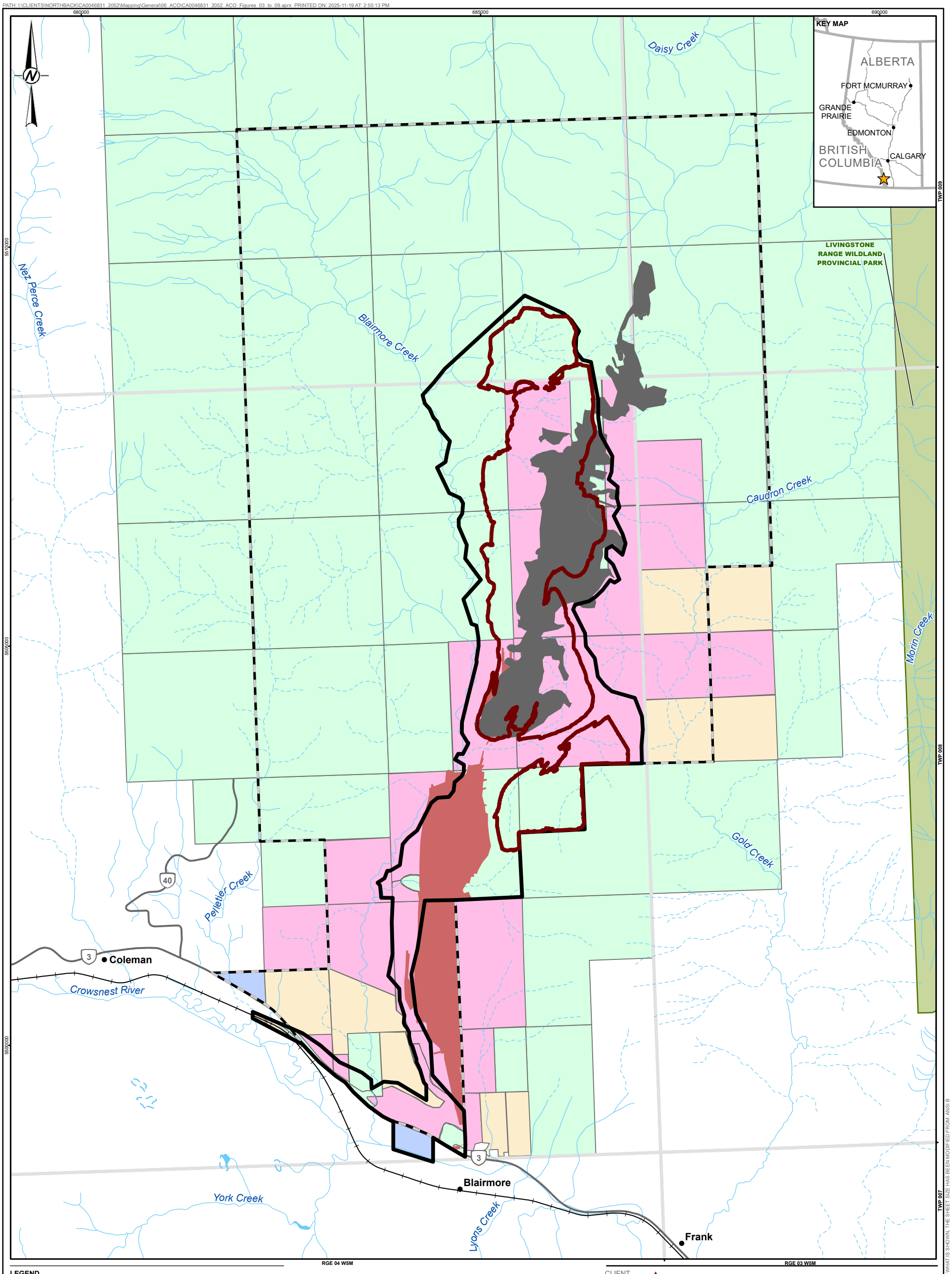

LEGEND

- POPULATED PLACE
- PRIMARY HIGHWAY
- RAILROAD
- WATERCOURSE
- WATERCOURSE - INDEFINITE
- PARK / PROTECTED AREA
- WATERBODY
- WATERBODY - INTERMITTENT
- CONCEPTUAL PIT AND DUMP OUTLINE
- PROJECT DEVELOPMENT ENVELOPE
- PROPOSED MINE PERMIT BOUNDARY

LEGACY DISTURBANCE

- LEGACY DISTURBANCE - SURFACE - 352 ha
- LEGACY DISTURBANCE - UNDERGROUND - 235 ha

LAND OWNERSHIP

- CROWN LAND
- MIXED LAND – CROWN AND PRIVATE
- NORTHBACK LAND - PRIVATE
- OTHER LANDOWNER - PRIVATE

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NOTE(S)

AREAS (HECTARES) ARE WITHIN THE PROPOSED MINE PERMIT BOUNDARY.

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PROJECTED COORDINATE SYSTEM: NAD 1983 UTM ZONE 11N

CLIENT
NORTHBACK

PROJECT
GRASSY MOUNTAIN PROJECT

TITLE
LEGACY MINING DISTURBANCE

CONSULTANT
wsp

YYYY-MM-DD	2025-11-19
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APPROVED	CD

PROJECT NO.	REV.	FIGURE
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3. Project Details

3.1. Infrastructure

The GMP requires a range of modern infrastructure to support its construction, operation, and reclamation phases. This includes essential mining and processing facilities such as pit areas, waste rock dumps areas, and a coal processing plant. Additionally, the project necessitates transportation infrastructure, including: an access road, haul roads within the pits, a conveyor to transport clean coal to the rail loadout then onto rail cars, a rail loop, as well as internal access and service roads. Figure 4 details the infrastructure needed across public and private lands.

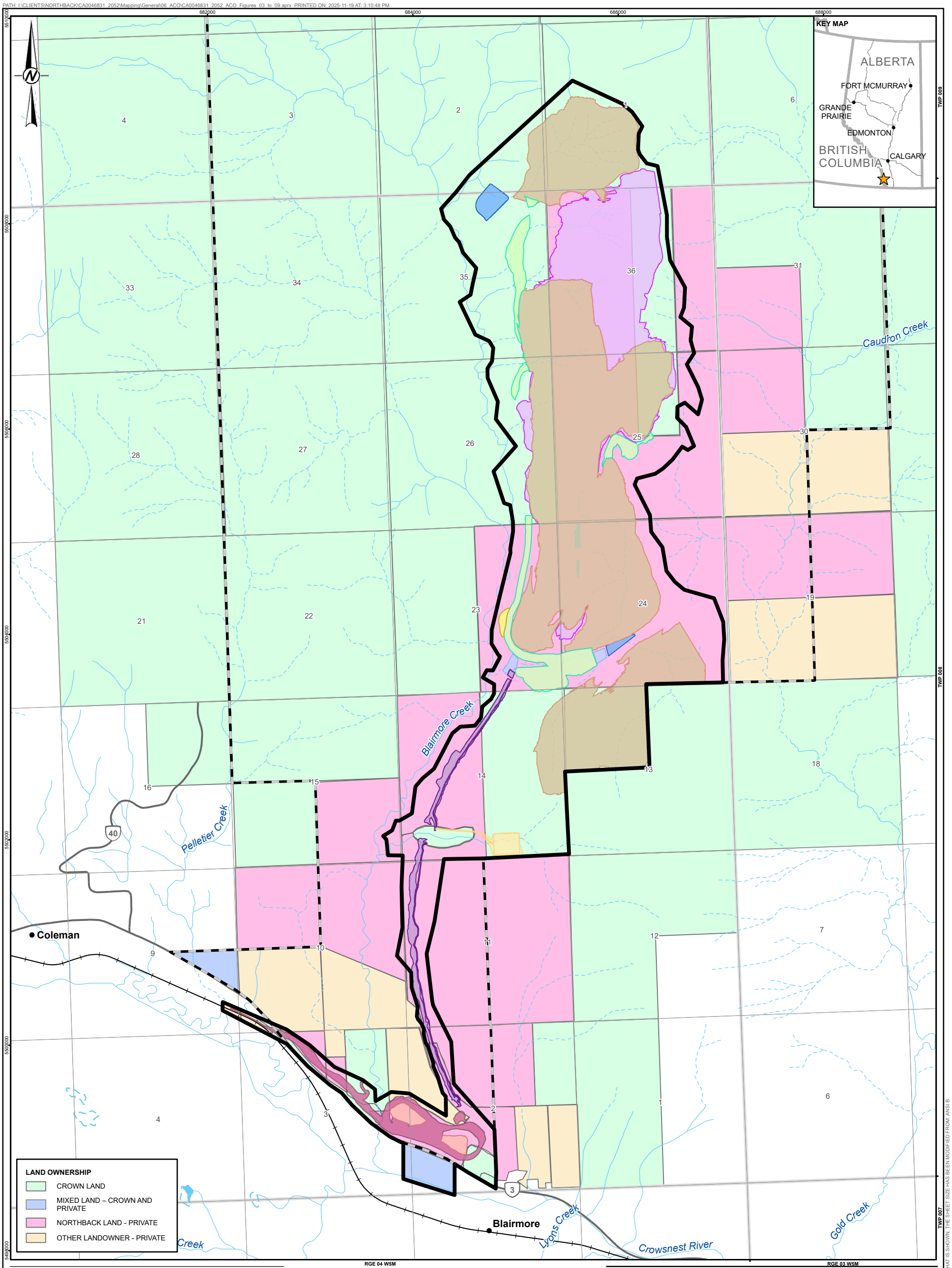
Storage and stockpiles are also crucial, with provisions for raw and clean coal stockpiles and reclamation material stockpiles.

Effective water management is a key driver and vital for the project's success. The water management system includes water diversion and collection infrastructure, storage ponds, settling ponds, groundwater wells, water treatment infrastructure including an active water treatment plant, and the ancillary equipment and power generation to move the water around.

Natural surface water runoff from rain and snowpack which flows over lands undisturbed by active mining will normally follow existing watercourses. Where existing watercourses intersect mining activities, that water may be diverted around those mining areas and back into existing watercourses to prevent contact with the active mine workings and storage piles.

Mine contact water is defined as surface water that comes into contact with active mine workings and storage piles, as well as any water collected from groundwater bores as a result of ground water management.

A series of ditches and settling ponds including surge ponds will collect and slow runoff of mine contact water, allowing it to be tested and if necessary, treated in the water treatment plant (WTP) such that the discharge meets all criteria and limits specified in, the Environmental Protection and Enhancement Act (EPEA) approval. The treated water will then be released into either Blairmore Creek or the larger Crowsnest River.



LEGEND

- POPULATED PLACE
- PRIMARY HIGHWAY
- RAILROAD
- WATERCOURSE
- WATERCOURSE - INDEFINITE
- WATERBODY
- WATERBODY - INTERMITTENT
- PROJECT DEVELOPMENT ENVELOPE
- PROPOSED MINE PERMIT BOUNDARY

PROJECT FOOTPRINT

- CAMP
- DUMP
- HAUL ROAD AND SITE FACILITIES
- LAYDOWN AREA
- MINE ACCESS ROAD
- PIT
- POND
- RAIL INFRASTRUCTURE
- RAIL INFRASTRUCTURE - STOCKPILE
- WATER TREATMENT PLANT

0 0.75 1.5
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REFERENCE(S)

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PROJECTED COORDINATE SYSTEM: NAD 1983 UTM ZONE 11N

CLIENT
NORTHBACK

PROJECT
GRASSY MOUNTAIN PROJECT

TITLE
SURFACE INFRASTRUCTURE

CONSULTANT
wsp

YYYY-MM-DD	2025-11-19
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PROJECT NO. CA0046831.2052 | REV. 1 | FIGURE 4

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3.2. Mining Process

Coal will be mined from three main coal seams and are identified as seams 1, 2 and 4. Seam 1 is the most shallow, followed by Seam 2 then Seam 4. These seams are part of the Mist Mountain geological formation.

The deposit will be mined using a conventional truck and shovel mining approach, where benches, or flat working areas, are created via drill and blast operations. Nominally, the benches will be approximately 15 m high. Working benches will progress until the maximum proposed mining depth for uncovering and extracting coal has been reached. Haul roads are created from one bench to the next to allow for equipment to travel in and out of pits to extract and haul waste to the storage areas, and coal to the Coal Handling and Processing Plant (**CHPP**). Boreholes will be drilled into the ground using track mounted rotary drills to create the benches, and waste rock will be broken up to allow for removal and to uncover and access the coal. As benches are created, coal is uncovered and then transported from the mining areas to the CHPP and ultimately transported on a conveyor system to rail cars.

Haul trucks will transport coal from mining areas to the CHPP on mine haul roads that will be relocated over the course of mine life. Locations of mine haul roads will depend on where mining is taking place, pits being backfilled, and the stage of waste rock dumps.

Mining will generally commence from the south portion of the mine project area and progress to the north (see Figure 4). Mining is planned to occur on a 24 hours a day, 7 days a week, 365 days a year schedule. As benches are created and raw coal is uncovered, front shovels will load large diesel rigid frame haul trucks with the raw coal to be transported to the CHPP area, which includes a run of mine (**ROM**) coal stockpile area. ROM coal is defined as in situ coal mixed with rock that cannot be avoided by the shovel when loading haul trucks.

ROM coal will be delivered into the CHPP where it will be separated into product coal (clean coal) and coarse and fine rejects.

During processing in the CHPP, both clean and reject products from the CHPP are appropriately dewatered. Water recovered through the process of dewatering will be recycled back into a closed water supply system for the CHPP to be reused in the CHPP.

Coarse and fine rejects will be combined and transported from the CHPP using a conveyor to a disposal bin. This material will be trucked from this bin to waste rock dump areas.

3.3. Nearest Watercourses

- Blairmore Creek, which is immediately adjacent to the west of Grassy Mountain.
- Gold Creek, which is immediately adjacent to the east side of the project site (no water being released into Gold Creek).
- Crowsnest River, which is roughly 6 km south of the water treatment facility.

3.4. Effluent Releases

All mine contact water will be captured in ponds and subsequently transferred to a water treatment plant, where it will be treated before being safely discharged to either Blairmore Creek or Crowsnest River. Discharge will comply with criteria specified in the *Environmental Protection and Enhancement Act* (**EPEA**) approval. Specific water quality criteria for the water Northback will be releasing into either Blairmore Creek or Crowsnest River will comply with our ultimate EPEA approval conditions. Water will be released to minimize effects to water courses and the environment. There are various factors that will be considered when determining which water courses to release water into, which will include:

- Volume of water – Since Blairmore Creek is smaller than the Crowsnest River, less volumes can be released in order to maintain creek health, such as creek bank stability; and,
- Time of year – at certain points of the year it may be beneficial to discharge more water to Blairmore Creek.

Where selenium occurs in waste rock, it will be proactively managed using multiple lines of defence approach. The initial steps involve strategic mine design and source control, including the construction of engineered waste rock dumps designed with horizontal layers of fine materials and filter systems to limit oxygen penetration, thereby reducing selenium oxidation and mobilization. Water coming into contact with selenium-bearing waste rock is captured and diverted for treatment before being discharged. Having both active and passive water treatment systems will ensure regulatory compliance for selenium and other constituents of interest from site runoff.

3.5. Current Land Use

The GMP project disturbance area is a mix of private/freehold land owned by Northback and Crown land. The project is at the site of a previously disturbed brownfield open pit and underground coal mine, previous logging activities, and being used for cattle grazing under agreements with local ranchers.

The project site is accessed by a Northback-owned private road north of the community of Blairmore. The site's road access is controlled by Northback using gates and security personnel. The private road and all private lands are shown in Figure 2.

3.6. Future Land Use

Reclamation plans are part of the EPEA approval. Reclamation is progressive from commencement of mine production and into active closure. As such, reclamation will be ongoing throughout the life of the mine and beyond, as with one section mined and then reclaimed while operations move to the next section where the process will be repeated.

3.7. Economic Benefits

The revised GMP will have many economic benefits. Construction is estimated to last approximately 24 months and employ a peak workforce of ~540 people. Once construction is completed, mining operations are expected to last for 26 years and employ approximately 350-450 full-time workers. As

is typical with mining operations, Northback expects many additional workers to be employed by companies supplying goods and services to its operations.

Based on market forecasts, and estimated construction costs, the economic benefits with the sum of royalties, property taxes, income tax, and other taxes generated over the life of the project could amount to more than one billion dollars.

4. Environmental Assessment, Regulatory Review Requirements and Process

4.1. Northback Values

Northback's Vision and Mission Statements are: "Creating a better future through responsible and innovative resource development" and:

"Building an integrated resource company that operates a world-class steel-making coal mine that is safe, profitable and supports our families and communities. We respect the environment, and will responsibly build a better, lasting legacy."

4.2. Assessments and Work History

Northback's employees live, work, and play in the Crowsnest Pass and local region, and are committed to furthering to our understanding of the environmental effects associated with the revised development plan for the GMP.

Since 2021, Northback has continued to undertake the following initiatives:

- Reclamation/revegetation trials of plant species of importance to Albertans and Indigenous peoples. For example, Northback has been conducting rough rescue revegetation trials at the GMP site.
- Strengthening baseline data collection which includes water sampling, air quality monitoring, and wildlife and fish monitoring.
- Selenium behaviour in overburden at the GMP site is being characterized to inform and optimize treatment and water management strategies.

4.3. Regulatory Approvals Required for the Project

In Alberta, the AER is responsible for energy projects such as coal mines. The revised GMP falls under the *Environmental Assessment (Mandatory and Exempt Activities) Regulation* as being a mandatory activity requiring Northback to prepare an Environmental Impact Assessment (**EIA**) pursuant to section 44(1)(a) of the *Environmental Protection and Enhancement Act* (EPEA).

Northback has prepared and submitted a proposed Terms of Reference based on a standardized document from the AER's website. The notice for the proposed Terms of Reference was posted publicly on November 26, 2025, and was open for a 51-day period to allow stakeholders and the general public the opportunity to provide comments. The comments were considered by the AER

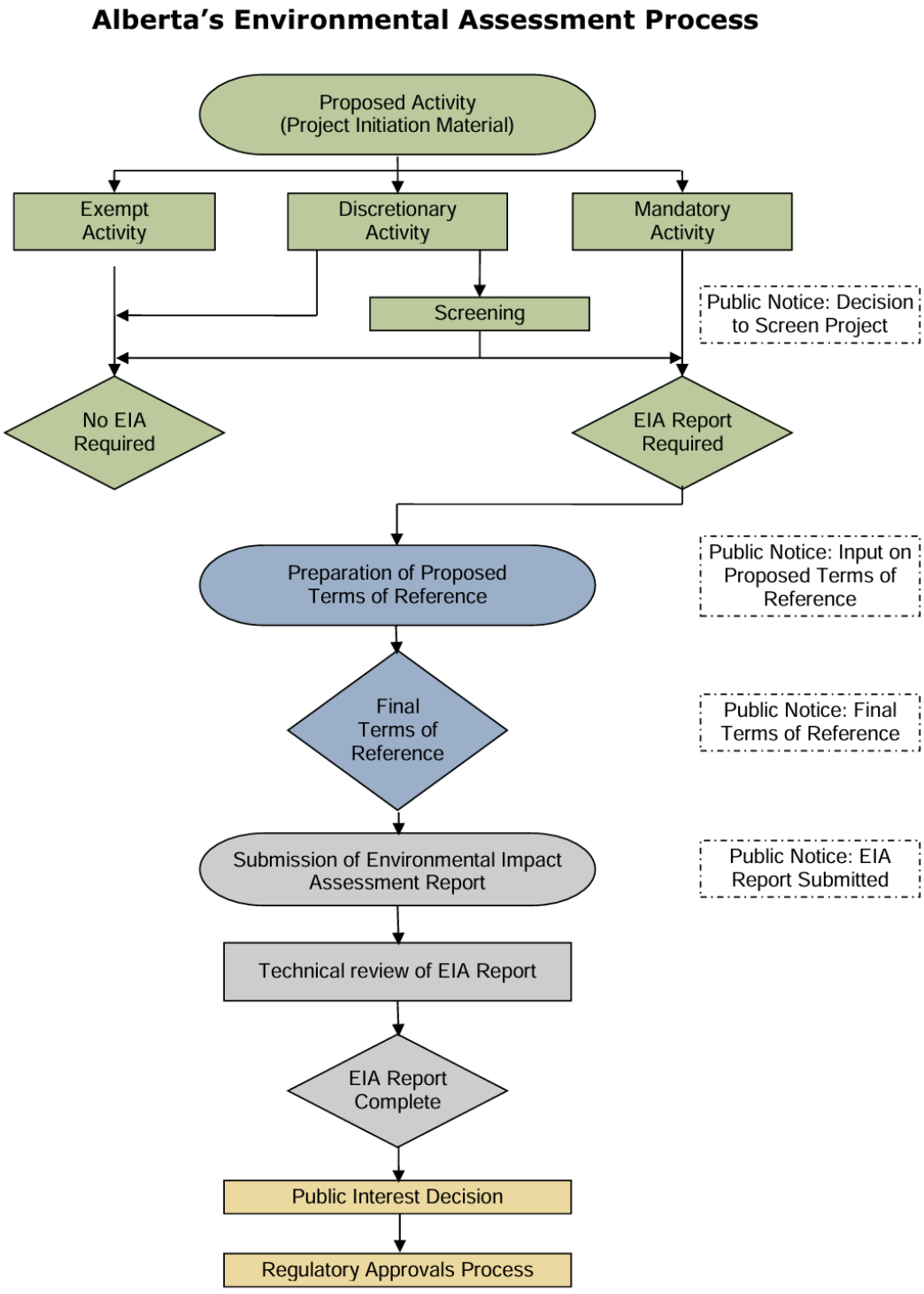
before issuing the final Terms of Reference, which establishes the scope for the EIA report. Table 1 provides a list of the major regulatory approvals and submissions required for this project.

Table 1: Major regulatory submissions and approvals

Regulatory Body	Legislation	Application/ Submission
Alberta Energy Regulator	Environmental Protection and Enhancement Act	Environmental Impact Assessment Report
Alberta Energy Regulator	Coal Conservation Act	Mine Permit and infrastructure
Alberta Energy Regulator	Environmental Protection and Enhancement Act	Construction, Operation, and Reclamation Approval
Alberta Energy Regulator	Coal Conservation Act	Licence to develop mine pits and dumps
Alberta Energy Regulator	Water Act	Approval to construct water management features and conduct pit dewatering
Alberta Energy Regulator	Public Lands Act	Surface dispositions
Arts, Culture and Status of Women	Historical Resources Act	Historical Resources Act approval

Figure 5 outlines the Provincial Environmental Assessment Process, which is managed by the AER. Northback will seek input and feedback from stakeholders during the various stages of the Environmental Assessment Process shown in Figure 5.

Figure 4: Assessment process (https://www.alberta.ca/environmental-assessment-process).



4.4. Project Development Timeline Estimates

Upon the submission of the EIA to the AER, it is estimated that the regulatory process may take approximately two years to complete.

Upon the start of construction of the Project, Northback estimates that construction will take approximately two years to complete.

Operations will start shortly after construction has completed, with the first shipment of product coal taking place approximately 1 month after the commissioning of the CHPP.

5. Stakeholder Consultation Workplan and Activities to Date

Northback has been involved in stakeholder engagement activities with respect to the Project since 2023, which included an application for a coal exploration program designed to collect additional information to inform the design of the Project.

The following section describes the stakeholder involvement activities that have been completed since 2023 and Northback's plans for continuing stakeholder involvement and engagement activities while the Project proceeds through the regulatory process.

5.1. Consultation and Engagement Activities since 2023

Table 2 provides a high-level summary of the consultation and engagement activities Northback has undertaken since 2023.

Table 2: Consultation and engagement history

Activity Type	Location	Description
Public site tours	Blairmore, Project site	Northback has facilitated 465 people to visit the Project site and learn more about the Project
Open houses	Crowsnest Pass, Pincher Creek, Fort Macleod, Claresholm	Northback held open houses in communities that may be affected by the project or where there is a perception of potential effects.
Extended office hours	Crowsnest Pass	Northback provided an opportunity for the public to engage with Northback staff.
Information sessions & public markets	Crowsnest Pass	Northback engaged with the public at various locations and events in the Crowsnest Pass to inform them of the project and provide an update.
Delegations to municipal councils	Municipality of Crowsnest Pass, MD of Pincher Creek, Town of Pincher Creek, Town of Fort Macleod, City of Lethbridge, MD of Ranchland, MD of Willow Creek MD of Taber, Town of High River.	Northback directly engaged with the elected officials of regional municipalities to provide project updates, technical information, or other information as requested by those municipalities.
Trade shows	Pincher Creek, Lethbridge, Medicine Hat	Northback attended trade show events to ensure they are available to the public, so they stay informed about the Project and to ask Northback questions
Presentations to various organizations	Crowsnest Pass, Fort Macleod, Lethbridge	Northback reached out to various businesses, Chambers of Commerce and other organizations to provide them with information on the Project
Online engagement	Social media Website	Providing updates to project progress, notifications of upcoming engagement events

5.2. Consultation and Engagement Plans Throughout Regulatory Process

Northback plans to undertake a robust consultation and engagement plan during the regulatory assessment of the Project. This process is designed to engage with interested and potentially impacted stakeholders to understand their concerns, solicit feedback, and work with stakeholders to find ways and means to address their feedback and concerns as early as possible.

Table 3: Consultation and engagement plans

Activity Type	Location	Description
Public site tours	Blairmore, Project site	Northback conduct public site tours throughout the regulatory assessment of the Project.
Open houses	Various communities across southern Alberta	Northback will organize open houses in communities that may be affected by the Project or where these is a perception of potential effects.
Delegations to municipal councils	Municipal District of Ranchland, Municipality of Crowsnest Pass. Municipal District of Pincher Creek, Town of Pincher Creek, Town of Fort Macleod, City of Lethbridge, Municipal District of Willow Creek, and Municipal District of Taber; and others as requested	Northback will directly engage with the elected officials of potentially affected municipalities to provide project updates, technical information, or other information as requested by municipalities
Trade shows	Various communities across southern Alberta	Northback will attend trade show events in order for the public to stay informed about the Project.
Presentations to organizations	Ad hoc	Northback will liaise with interested groups and organizations to provide them with information on the Project
Online engagement	Social media Website	Northback will provide Project and regulatory process updates on its website and social media as they become available

6. Contact Information

Any groups, organizations, or individuals wishing to learn more about the Project can contact Northback by phone or email.

Telephone: 403-753-5160

Email: inquiries@northback.ca