
Chapter 2: Project Description

May 2016

2 PROJECT DESCRIPTION

2.1 Project Overview

The Gruyere Gold Project (referred to the EPA on 3 March 2016) is a gold deposit in the Yamarna Greenstone Belt of Western Australia which Gold Road wish to develop into an open pit mine with associated processing facilities and support infrastructure. As part of the support infrastructure, a 40 MW gas power plant has been incorporated into the design of the project. The GGPP (also referred to as the White Cliffs road option in supporting documents), covered in this referral, will be the pipeline which supplies fuel to this power plant.

The GGPP also involves the construction of associated infrastructure including a permanent access track that runs the full 220 km length of the pipeline, the delivery / meter station, a gas off take and treatment station, a main line valve (from the EGP) and temporary construction camp for works personnel. Where possible the existing White Cliffs road will be uses as an access track.

2.2 Key Proposal Characteristics

Key proposal characteristics for the project are shown in Table 2-1. The total development envelope for Option A is 2,010 ha whilst that for Option B is 1,940 ha.

Table 2-1: Key Proposal Characteristics

Summary		
Proposal Title	Gruyere Gas Pipeline Project	
Proponent Name	Gold Road Resources Limited	
Short Description	<p>This proposal is for the construction of a 220 km high pressure gas pipeline (the Gruyere Gas Pipeline Project - GGPP), 170 kms (75%) of which falls within existing road reserves, from Gold Road's proposed Gruyere Gold Project to the existing Eastern Goldfields Pipeline (EGP). Currently two connection points are being investigated and thus two routes, Option A and B (making up a total of 25% of the overall pipeline) are included in this referral. Only one option will be implemented.</p> <p>The project will result in the construction of a permanent access track (to be utilised for operational maintenance associated with the operation of the pipeline), delivery / meter station, gas offtake and treatment station and upstream compressor stations.</p> <p>The proposal also includes construction of associated temporary pipeline infrastructure needed during the construction of the pipeline. This temporary infrastructure will be progressively decommissioned and disturbed areas rehabilitated as construction of the pipeline is completed.</p>	
Physical Elements – Option A		
Element	Location	Proposed Extent Authorised
Gas Transfer Pipeline	Figure 2-1, Figure 2-2, Figure 2-3, Figure 2-4 and Figure 2-5.	Clearing no more than 585 ha within the 1,940 ha Development Envelope, 438 ha of which is located in existing road reserves.
Physical Elements – Option B		
Element	Location	Proposed Extent Authorised
Gas Transfer Pipeline	Figure 2-1, Figure 2-2, Figure 2-3, Figure 2-4 and Figure 2-5.	Clearing no more than 605 ha within the 2,010 ha Development Envelope 453 ha of which is located in existing road reserves.
Operational Elements – Option A		
Element	Location	Proposed Extent Authorised
Gas transfer Pipeline with associated infrastructure	Figure 2-1, Figure 2-2, Figure 2-3, Figure 2-4 and Figure 2-5.	Clearing no more than 585 ha within the 1,940 ha Development Envelope, 438 ha of which is located in existing road reserves. A total of 133 ha will remain unrehabilitated as permanent infrastructure.
Operational Elements – Option B		
Element	Location	Proposed Extent Authorised
Gas transfer Pipeline with associated infrastructure	Figure 2-1, Figure 2-2, Figure 2-3, Figure 2-4 and Figure 2-5.	Clearing no more than 605 ha within the 2,010 ha Development Envelope 453 ha of which is located in existing road reserves. A total of 133 ha will remain unrehabilitated as permanent infrastructure.

2.3 Proposed Land Disturbance

Land disturbance required for construction and operation of the GGPP will be confined within the Construction Pipeline Licence Area and the associated underlying miscellaneous licence L38/245. The pipeline corridor refers to the 100 m corridor; 50 m either side of the centre line alignment whereas the construction Right-Of-Way (ROW) refers to the area to be disturbed (30 m wide). The location of the construction camp, vehicle turnaround bays, temporary storage and laydown areas are yet to be finalised, however, they will be placed so as to utilise existing cleared or degraded areas and to avoid any sensitive environmental areas, as far as practicable.

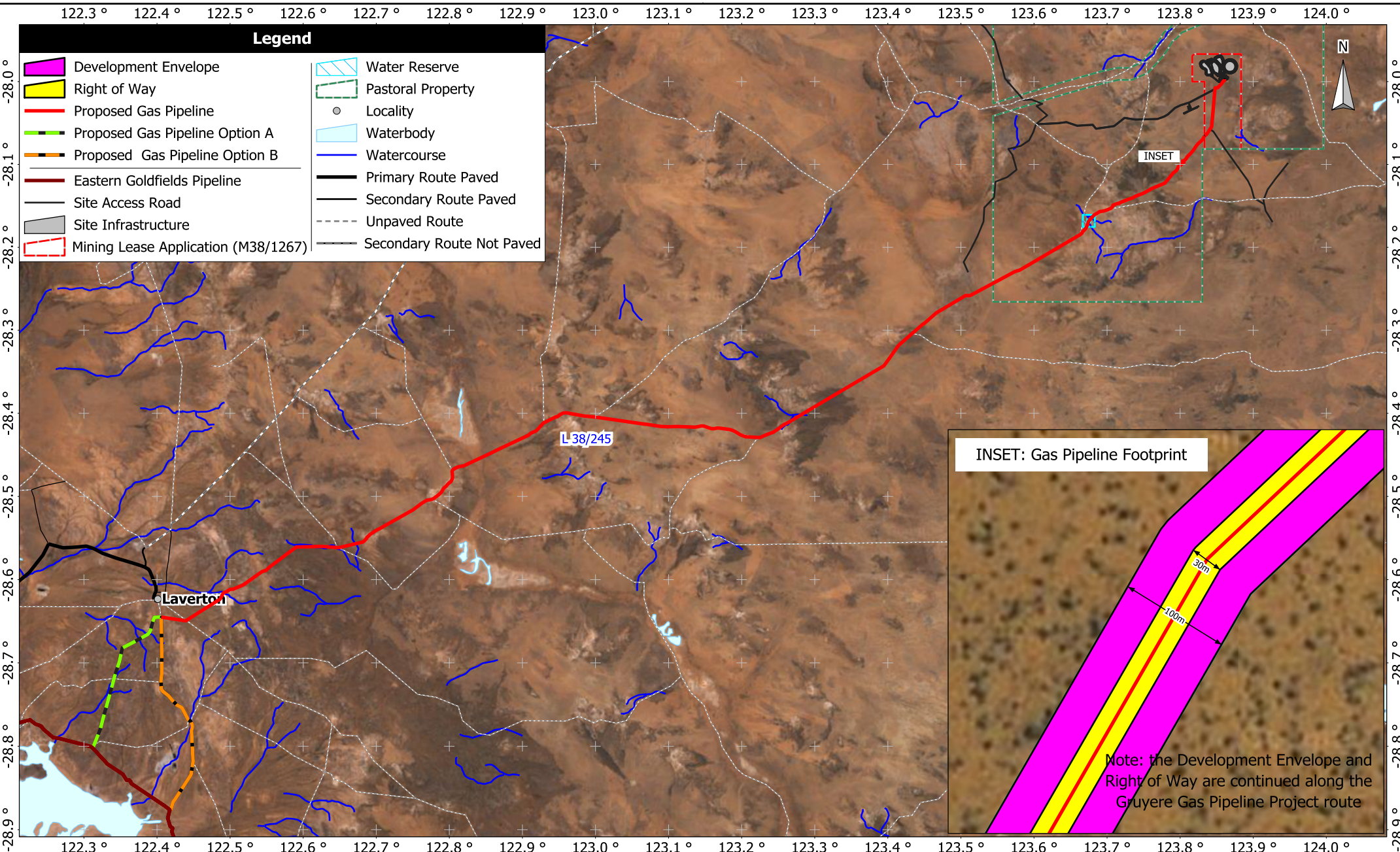
Estimated total land disturbance is not anticipated to exceed 660 ha for the GGPP (Table 2-2). The majority of the disturbance will be temporary with progressive rehabilitation occurring as construction is completed. The permanent disturbance of 133 ha is associated with an access track along the entire pipeline route for operational maintenance (approximately 6 m wide for 220 km totalling 132 ha) and approximately 1 ha for above ground facilities. Where possible the existing White Cliffs road will be used as an access track.

Table 2-2: Disturbance footprint for the GGPP

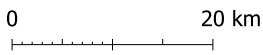
Component	Disturbance (ha)	
	Option A	Option B
Area to be disturbed (30 m width for approximately 220 km)	585	605
Potential midpoint construction camp (including laydown area)	11	11
Above ground facilities (2x MLVs, 1x delivery/metering etc.)	1	1
Temporary access tracks	4	4
Turnaround points	4	4
Turkey nest dams	3	3
Borrow pits	10	10
<i>TOTAL TEMPORARY DISTURBANCE</i>	<i>618</i>	<i>638</i>
Rehabilitation post-construction	485	505
TOTAL PERMANENT DISTURBANCE	133	133

2.4 Pipeline Corridor Alignment

Gold Road completed a prefeasibility study of the Gruyere Gold Project during 2015. Part of this study was to undertake a gas pipeline route selection assessment which examined four separate routes to the project from several different off-take points from the EGP (KD.1, 2015). The assessment took into consideration the regulatory requirements, existing infrastructure and easements, land access, Native Title, cultural heritage, environment, safety, technical, construction and operational issues and constraints. The purpose of this study was to identify the optimal pipeline route that was technically feasible, commercially economic and presented the simplest and shortest timeframe for land access, tenure and other approvals at the same time as avoiding or minimising environment impacts to sensitive receptors. The White Cliffs Road alignment presented the best option in relation to these criteria.



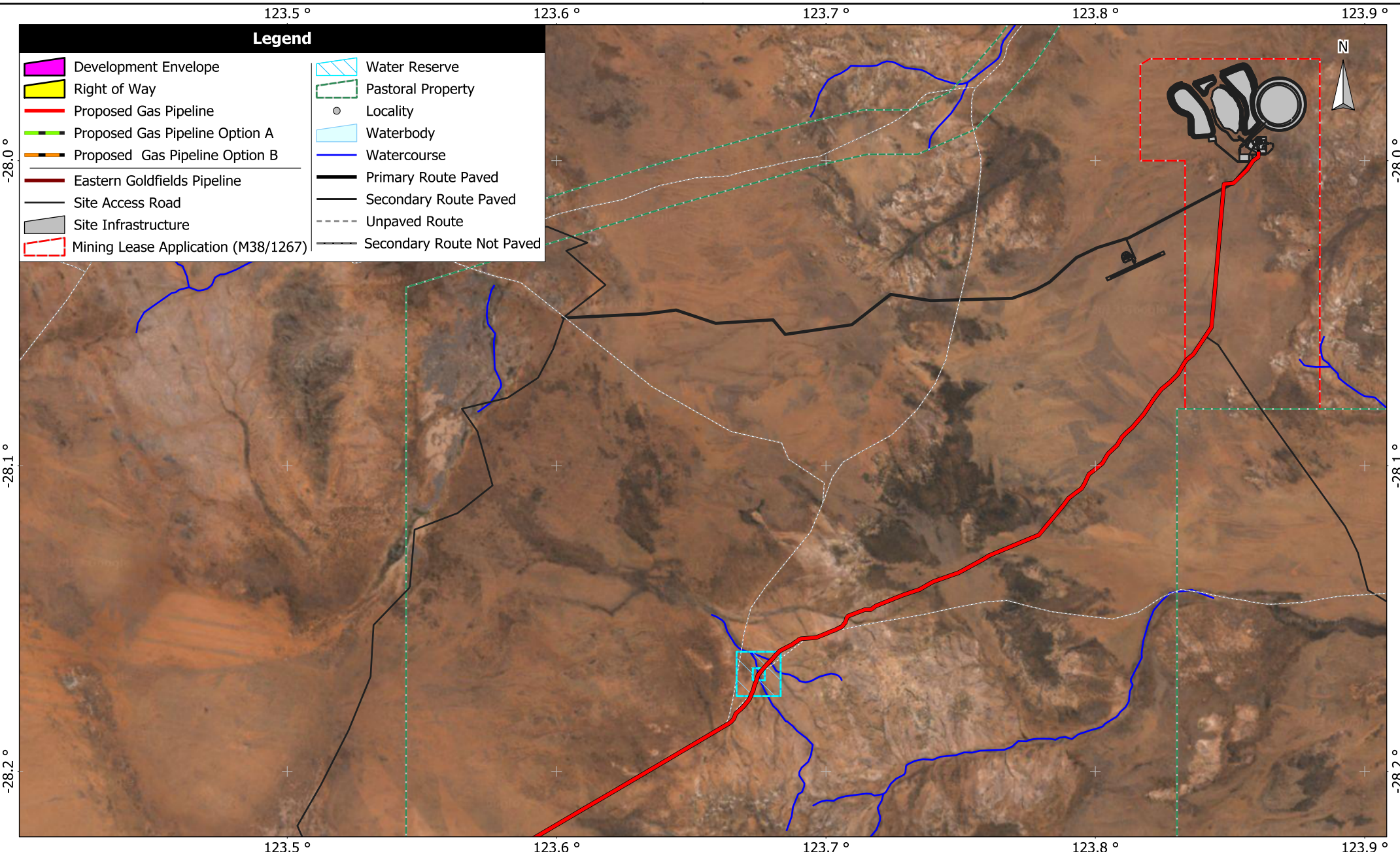
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Gold Road Resources Limited
Gruyere Gas Pipeline Project
EPA Referral

Figure 2.1
Conceptual
Gruyere Gas Pipeline Project Layout Overview

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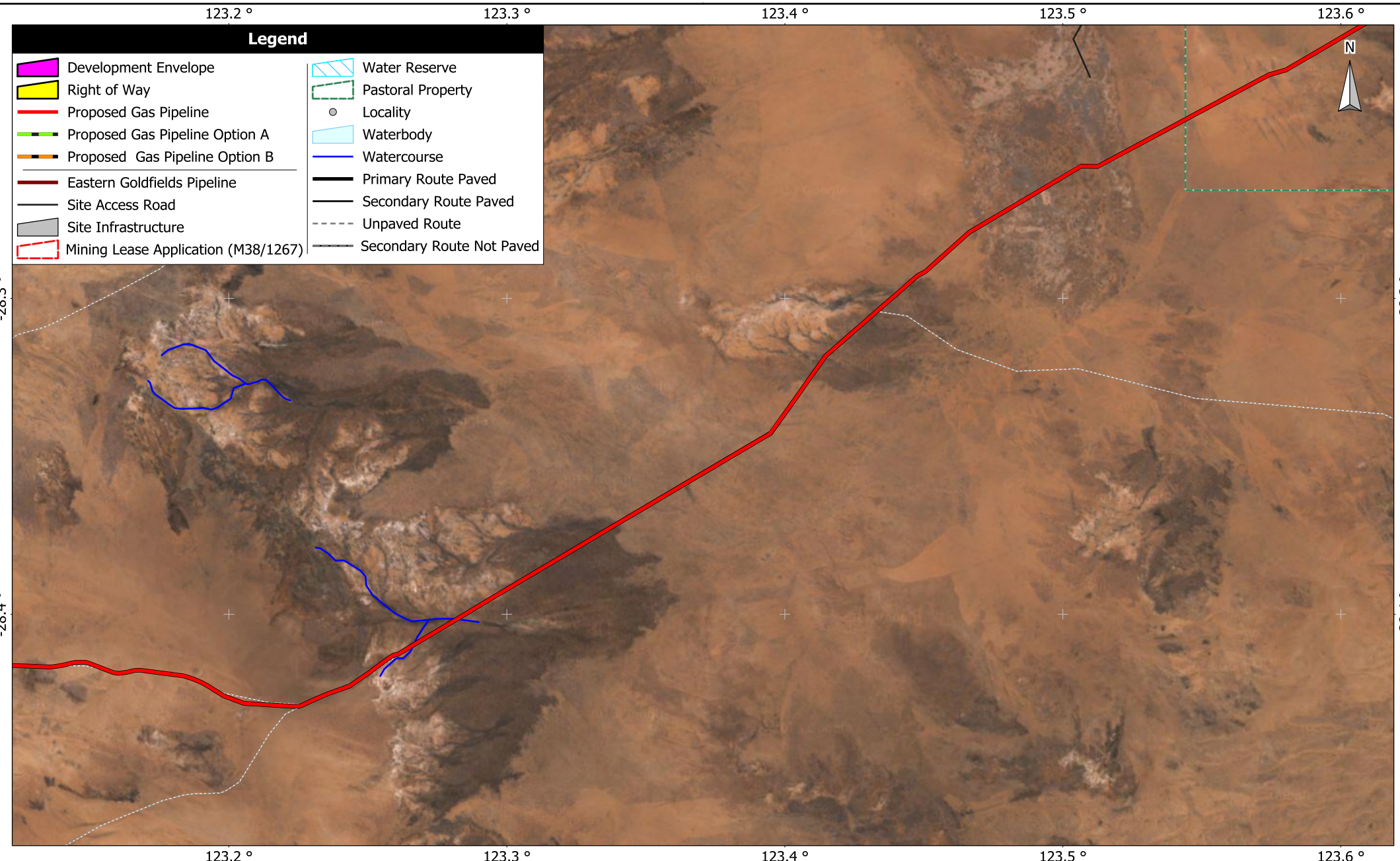
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Gold Road Resources Limited
Gruyere Gas Pipeline Project
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Figure 2.2
Conceptual Gruyere Gas Pipeline
Project Layout – Gruyere Area

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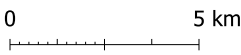
MBS
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Legend

- Development Envelope
- Right of Way
- Proposed Gas Pipeline
- Proposed Gas Pipeline Option A
- Proposed Gas Pipeline Option B
- Eastern Goldfields Pipeline
- Site Access Road
- Site Infrastructure
- Mining Lease Application (M38/1267)
- Water Reserve
- Pastoral Property
- Locality
- Waterbody
- Watercourse
- Primary Route Paved
- Secondary Route Paved
- Unpaved Route
- Secondary Route Not Paved

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 Google Earth Image
 Grid: Latitude/Longitude



Gold Road Resources Limited
Gruyere Gas Pipeline Project
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Figure 2.3
Conceptual Gruyere Gas Pipeline
Project Layout – Middle Area

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