

Chapter 13

Land Use

Oct-2021

Genex Kidston Connection Project - Ministerial Infrastructure Designation Assessment Report

13.0 Land Use

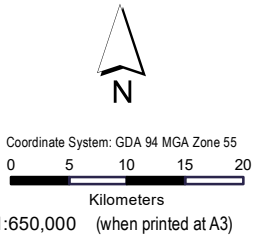
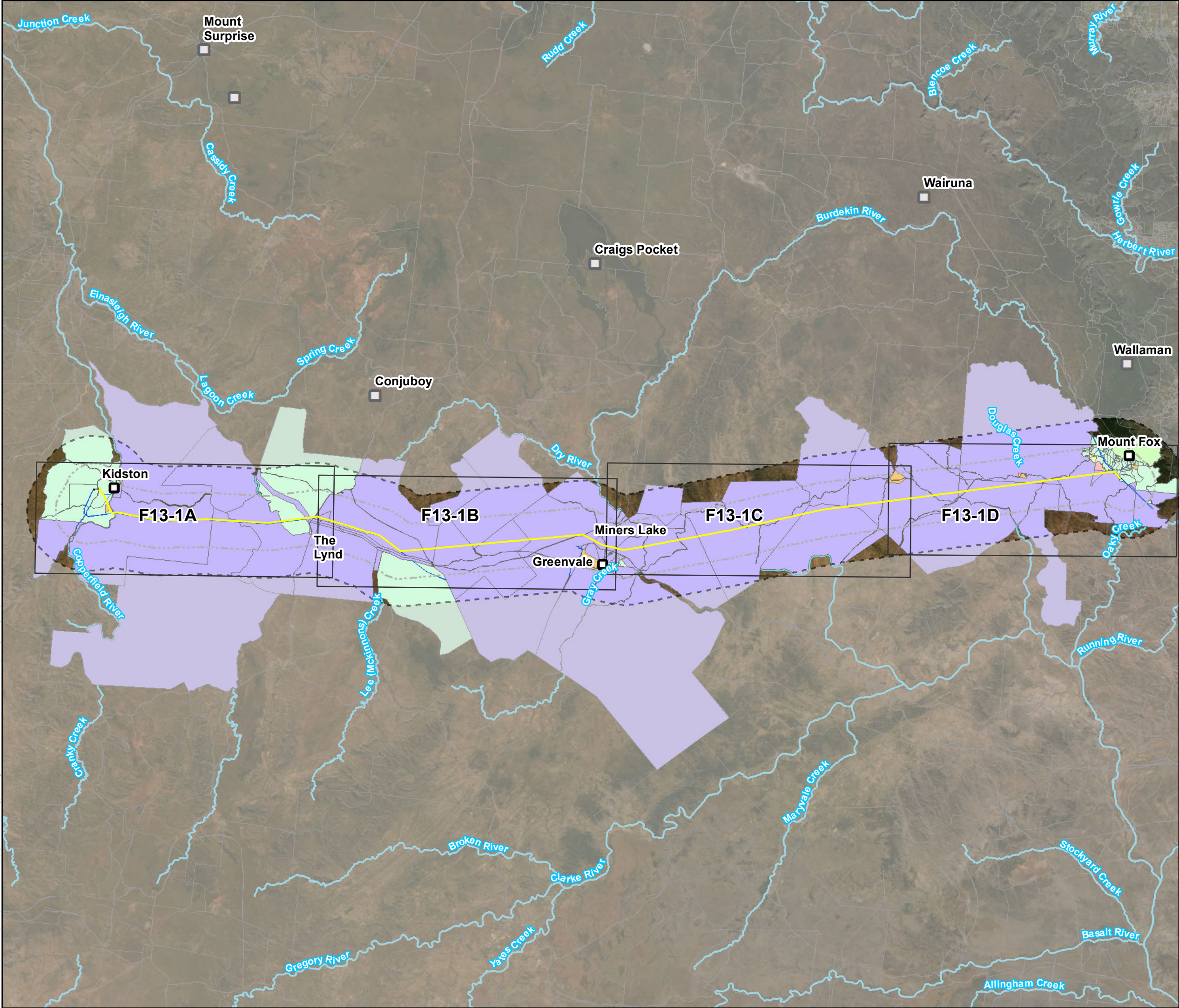
13.1 Existing Environment

13.1.1 Tenure

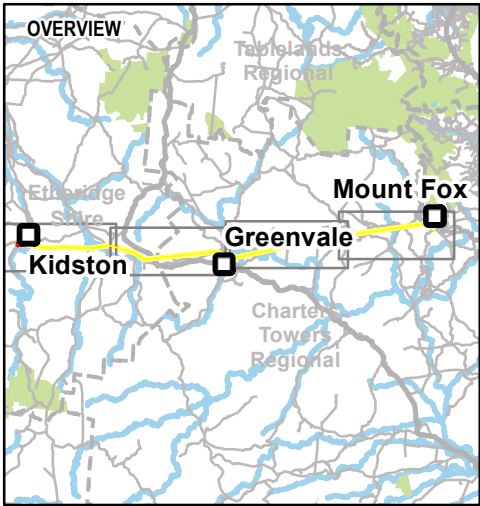
The Preferred Alignment currently traverses 22 land parcels. Land tenure arrangements are mainly leasehold land, with the exception of five parcels being freehold land, and one Unallocated State Land and one Permit to Occupy. Table 13-1 provides a breakdown of the lot on plan, tenure and relevant Local Government Authority (LGA) traversed by the Preferred Alignment. Figure 13-1 identifies the existing tenure arrangements subject to the Preferred Alignment.

Table 13-1 Lot on Plan, Tenure and LGA traversed by Preferred Alignment

Lot	Registered Plan	Tenure	Local Government Area
59	SP237064	Freehold	Hinchinbrook Shire Council
3198	PH2177	Leasehold	Charters Towers Regional Council
3	WU48	Leasehold	Charters Towers Regional Council
6	WU50	Leasehold	Charters Towers Regional Council
1	OC64	Leasehold	Charters Towers Regional Council
5234	SP275834	Leasehold	Charters Towers Regional Council
1	CLK23	Leasehold	Charters Towers Regional Council
5	CLK23	Leasehold	Charters Towers Regional Council
11	CLK26	Leasehold	Charters Towers Regional Council
501	SP232789	Leasehold	Charters Towers Regional Council
547	SP242570	Leasehold	Charters Towers Regional Council
3	CLK34	Leasehold	Charters Towers Regional Council
4	CD35	Leasehold	Etheridge Shire Council
1	CD25	Freehold	Etheridge Shire Council
1	PER6688	Permit to Occupy	Etheridge Shire Council
3	CD12	Leasehold	Etheridge Shire Council
14	LH8	Leasehold	Etheridge Shire Council
182	PH995	Leasehold	Etheridge Shire Council
1	SP304951	Freehold	Etheridge Shire Council
44	USL33	Unallocated State Land	Etheridge Shire Council
2	SP289310	Freehold	Etheridge Shire Council
1	SP289310	Freehold	Etheridge Shire Council



- Legend**
- Places
 - Preferred Alignment
 - Watercourses
 - Project 10 km Buffer
 - Project 5 km Buffer
 - Land Tenure**
 - Easement
 - Freehold
 - Lands Lease
 - National Park
 - Reserve
 - State Forest
 - State Land



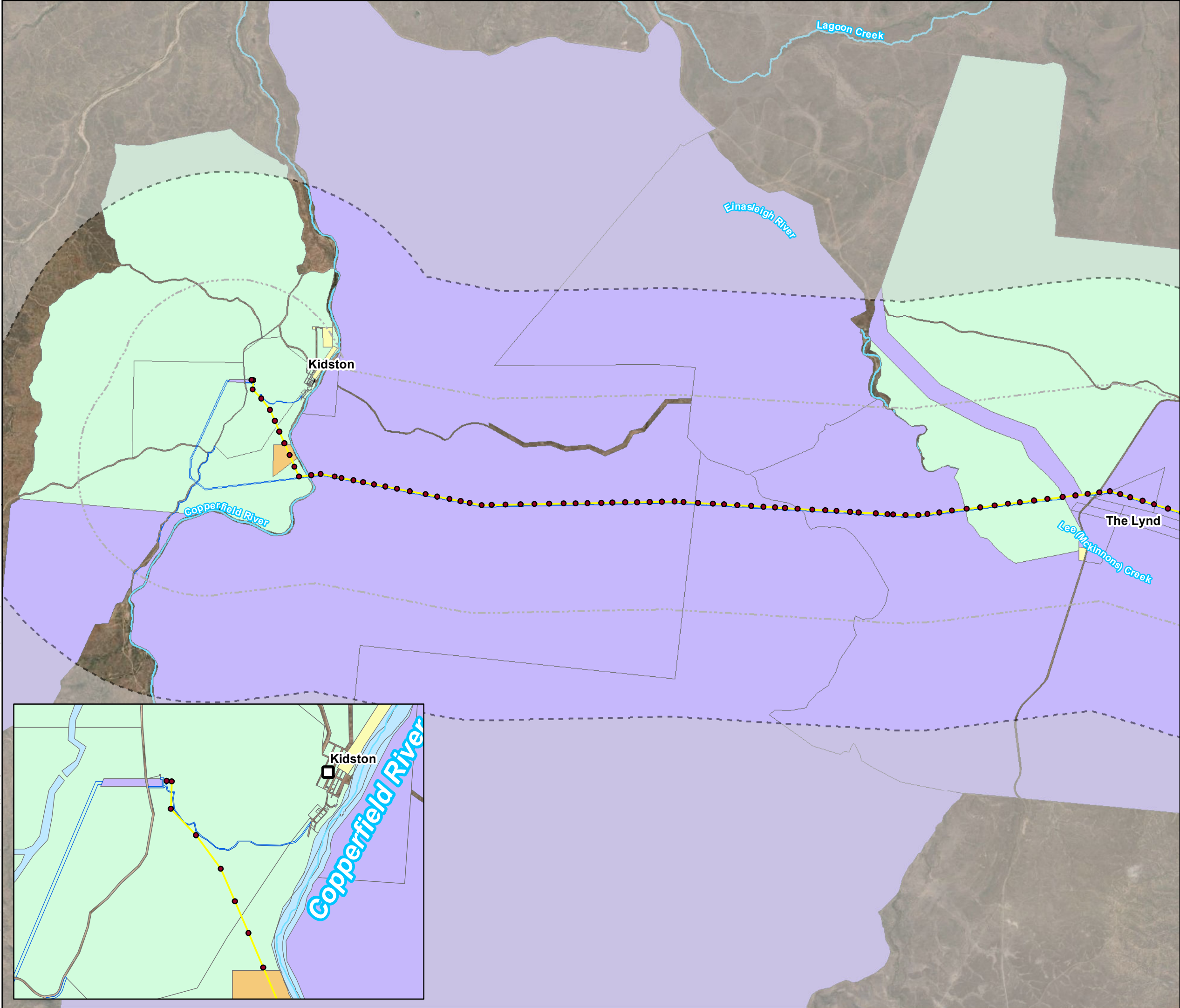
Data sources:
DCDB, Roads, Watercourses - DNRM 2017
Site Features and Layout - AECOM 2018
© SISIP Imagery 2017

Disclaimer:
While every care is taken to ensure the accuracy of the Information Product, the State of Queensland makes no representations or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and disclaims all responsibility and all liability (including without limitation, liability in negligence) for all expenses, losses, damages (including indirect or consequential damage) and costs which you might incur as a result of the product being inaccurate or

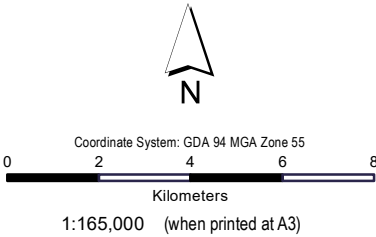
Kidston Connection Project

TENURE		Figure F13-1
PROJECT ID:	60577456	
CREATED BY:	JB	
LAST MODIFIED:	CFS - 15/09/2021	
VERSION:	3	

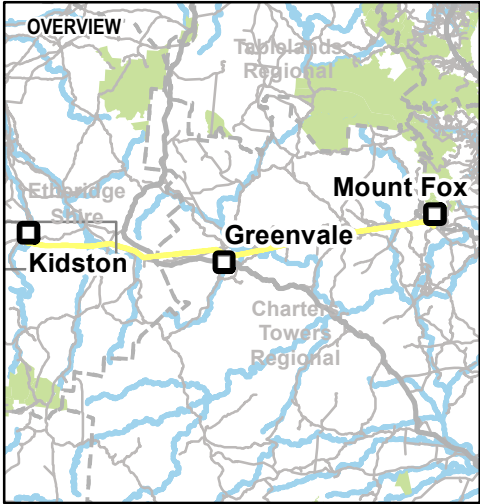
AECOM does not warrant the accuracy or completeness of information displayed in this map and any person using it does so at their own risk. AECOM shall bear no responsibility or liability for any errors, faults, defects, or omissions in the information.



AECOM does not warrant the accuracy or completeness of information displayed in this map and any person using it does so at their own risk. AECOM shall bear no responsibility or liability for any errors, faults, defects, or omissions in the information.



- Legend**
- Places
 - Indicative Structure Locations
 - Preferred Alignment
 - Watercourses
 - Protected Areas
 - Project 10 km Buffer
 - Project 5 km Buffer
 - Land Tenure**
 - Easement
 - Freehold
 - Lands Lease
 - Reserve
 - State Land

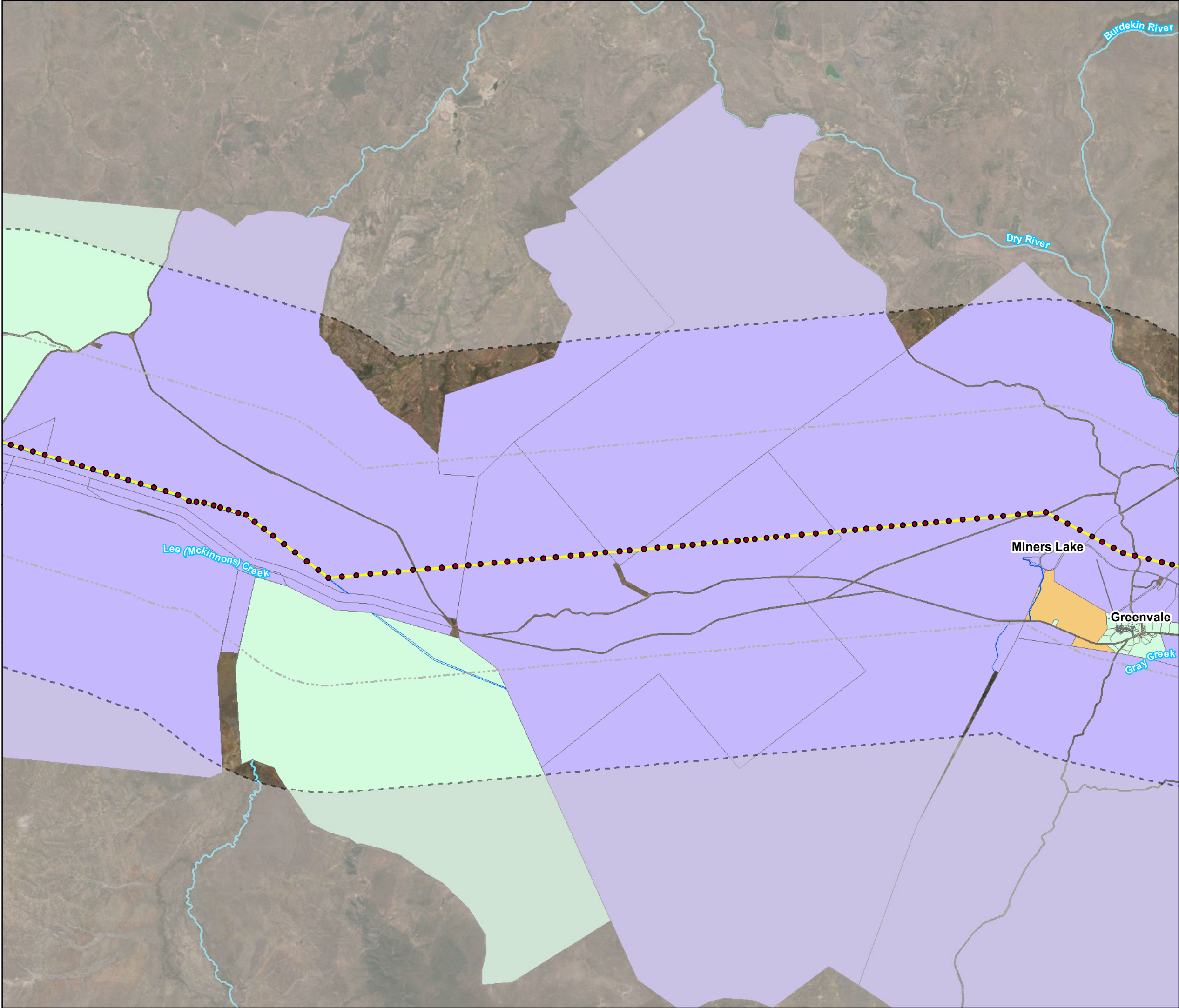


Data sources:
DCDB, Roads, Watercourses - DNRM 2017
Site Features and Layout - AECOM 2018
© SISP Imagery 2017

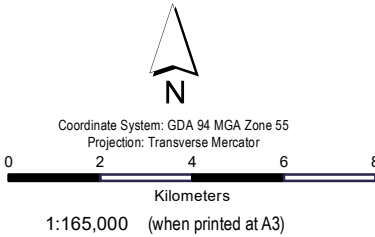
Disclaimer:
While every care is taken to ensure the accuracy of the Information Product, the State of Queensland makes no representations or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and disclaims all responsibility and all liability (including without limitation, liability in negligence) for all expenses, losses, damages (including indirect or consequential damage) and costs which you might incur as a result of the product being inaccurate or

Kidston Connection Project

TENURE		Figure F13-1A
PROJECT ID:	60577456	
CREATED BY:	JB	
LAST MODIFIED:	AJS - 15/09/2021	
VERSION:	3	

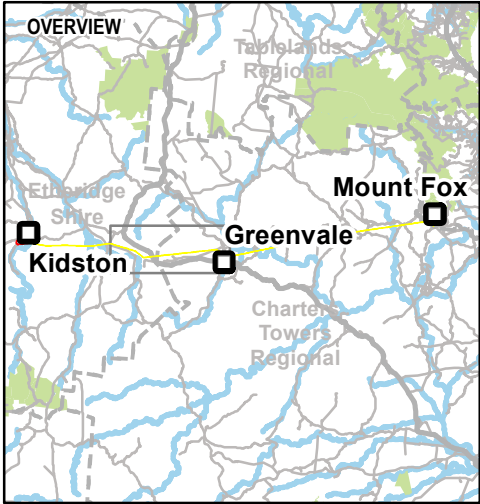


AECOM does not warrant the accuracy or completeness of information displayed in this map and any person using it does so at their own risk. AECOM shall bear no responsibility or liability for any errors, faults, defects, or omissions in the information.



Legend

- Places
- Indicative Structure Locations
- Preferred Alignment
- Watercourses
- Project 10 km Buffer
- Project 5 km Buffer
- Land Tenure**
 - Easement
 - Freehold
 - Lands Lease
 - Reserve
 - State Land

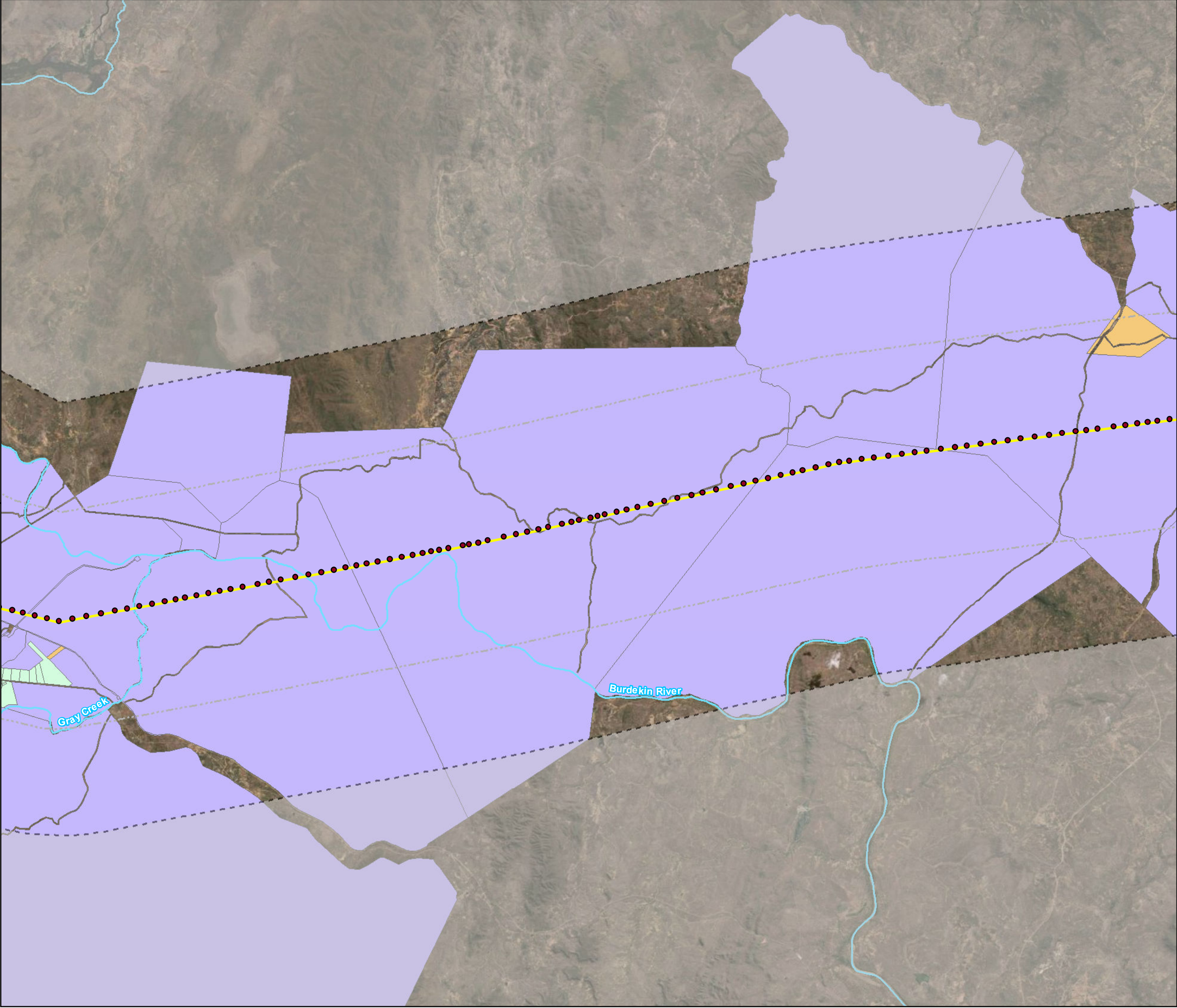


Data sources:
DCDB, Roads, Watercourses - DNRM 2017
Site Features and Layout - AECOM 2018
© SISP Imagery 2017

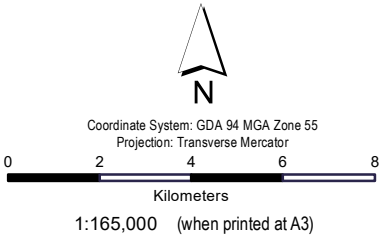
Disclaimer:
While every care is taken to ensure the accuracy of the Information Product, the State of Queensland makes no representations or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and disclaims all responsibility and all liability (including without limitation, liability in negligence) for all expenses, losses, damages (including indirect or consequential damage) and costs which you might incur as a result of the product being inaccurate or

Kidston Connection Project

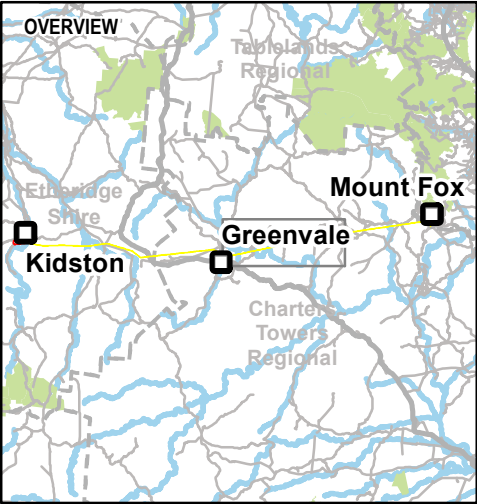
TENURE		Figure F13-1B
PROJECT ID:	60577456	
CREATED BY:	JB	
LAST MODIFIED:	AJS - 15/09/2021	
VERSION:	3	



AECOM does not warrant the accuracy or completeness of information displayed in this map and any person using it does so at their own risk. AECOM shall bear no responsibility or liability for any errors, faults, defects, or omissions in the information.



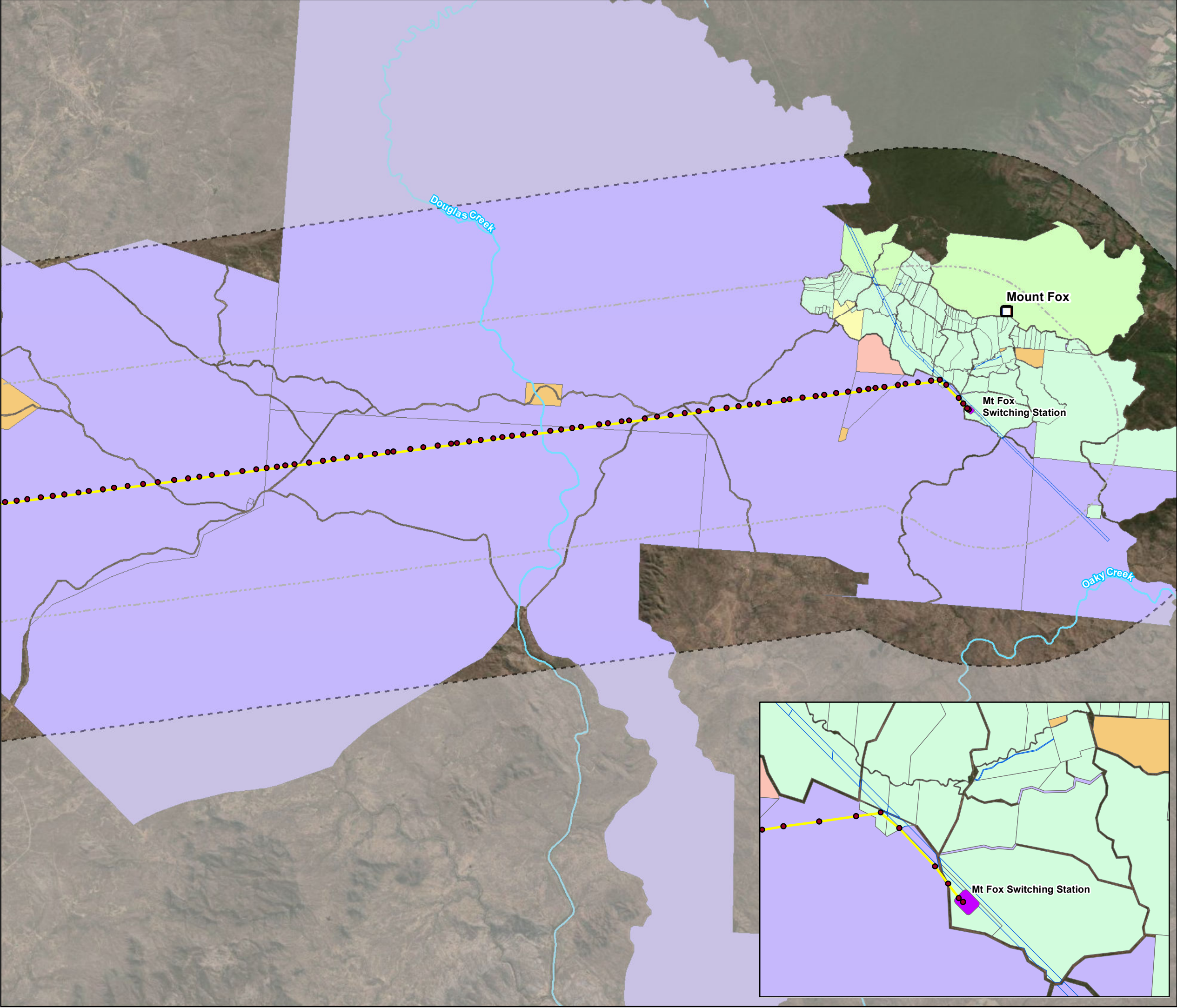
- Legend**
- Indicative Structure Locations
 - Preferred Alignment
 - Watercourses
 - Project 10 km Buffer
 - Project 5 km Buffer
- Land Tenure**
- Freehold
 - Lands Lease
 - Reserve
 - State Land



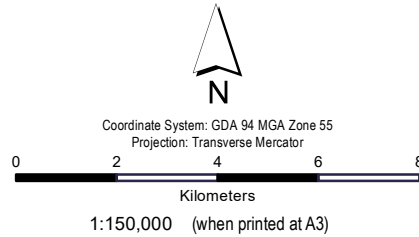
Data sources:
DCDB, Roads, Watercourses - DNRM 2017
Site Features and Layout - AECOM 2018
© SISP Imagery 2017

Disclaimer:
While every care is taken to ensure the accuracy of the Information Product, the State of Queensland makes no representations or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and disclaims all responsibility and all liability (including without limitation, liability in negligence) for all expenses, losses, damages (including indirect or consequential damage) and costs which you might incur as a result of the product being inaccurate or

Kidston Connection Project		TENURE
PROJECT ID:	60577456	Figure F13-1C
CREATED BY:	JB	
LAST MODIFIED:	AJS - 15/09/2021	
VERSION:	3	

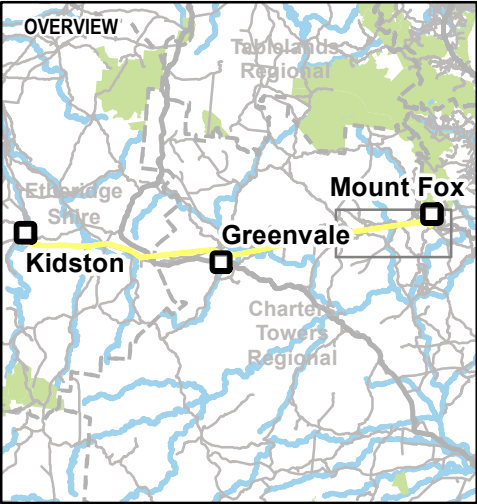


AECOM does not warrant the accuracy or completeness of information displayed in this map and any person using it does so at their own risk. AECOM shall bear no responsibility or liability for any errors, faults, defects, or omissions in the information.



Legend

- Places
- Indicative Structure Locations
- Preferred Alignment
- Watercourses
- Project 10 km Buffer
- Project 5 km Buffer
- Switching Station
- Land Tenure**
 - Easement
 - Freehold
 - Lands Lease
 - National Park
 - Reserve
 - State Forest
 - State Land



Data sources:
DCDB, Roads, Watercourses - DNRM 2017
Site Features and Layout - AECOM 2018
© SISP Imagery 2017

Disclaimer:
While every care is taken to ensure the accuracy of the Information Product, the State of Queensland makes no representations or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and disclaims all responsibility and all liability (including without limitation, liability in negligence) for all expenses, losses, damages (including indirect or consequential damage) and costs which you might incur as a result of the product being inaccurate or

Kidston Connection Project

TENURE		Figure F13-1D
PROJECT ID:	60577456	
CREATED BY:	JB	
LAST MODIFIED:	AJS - 23/09/2021	
VERSION:	3	

The Preferred Alignment also traverses a number of untitled roads and watercourses which are not represented in Table 13-1 above.

A very limited number of easements exist in the immediate vicinity of the Preferred Alignment, being associated with the following built infrastructure:

- Ergon Energy 132 kV transmission line (Ross to Kidston)
- Kidston Gold Mine township electricity supply
- Powerlink Ross to Chalumbin 275kv transmission line.

The Preferred Alignment traverses one location with strata title being Lot 1 PER 6688 located adjacent to the Preferred Alignment crossing of the Kennedy Developmental Road. The footprint of this strata title is directly associated with a mapped stock route (refer Section 13.1.3).

This stock route does not have a designated identification number (unlike others within the vicinity of the Preferred Alignment), and is designated as unused based on desktop information. Although identified as unused, it is possible that the stock route is opportunistically utilised at times. Stock routes are further discussed in Section 13.1.3 below.

13.1.2 Zoning, character and amenity

The Preferred Alignment traverses through three LGAs, being:

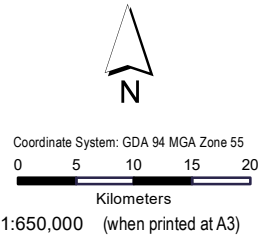
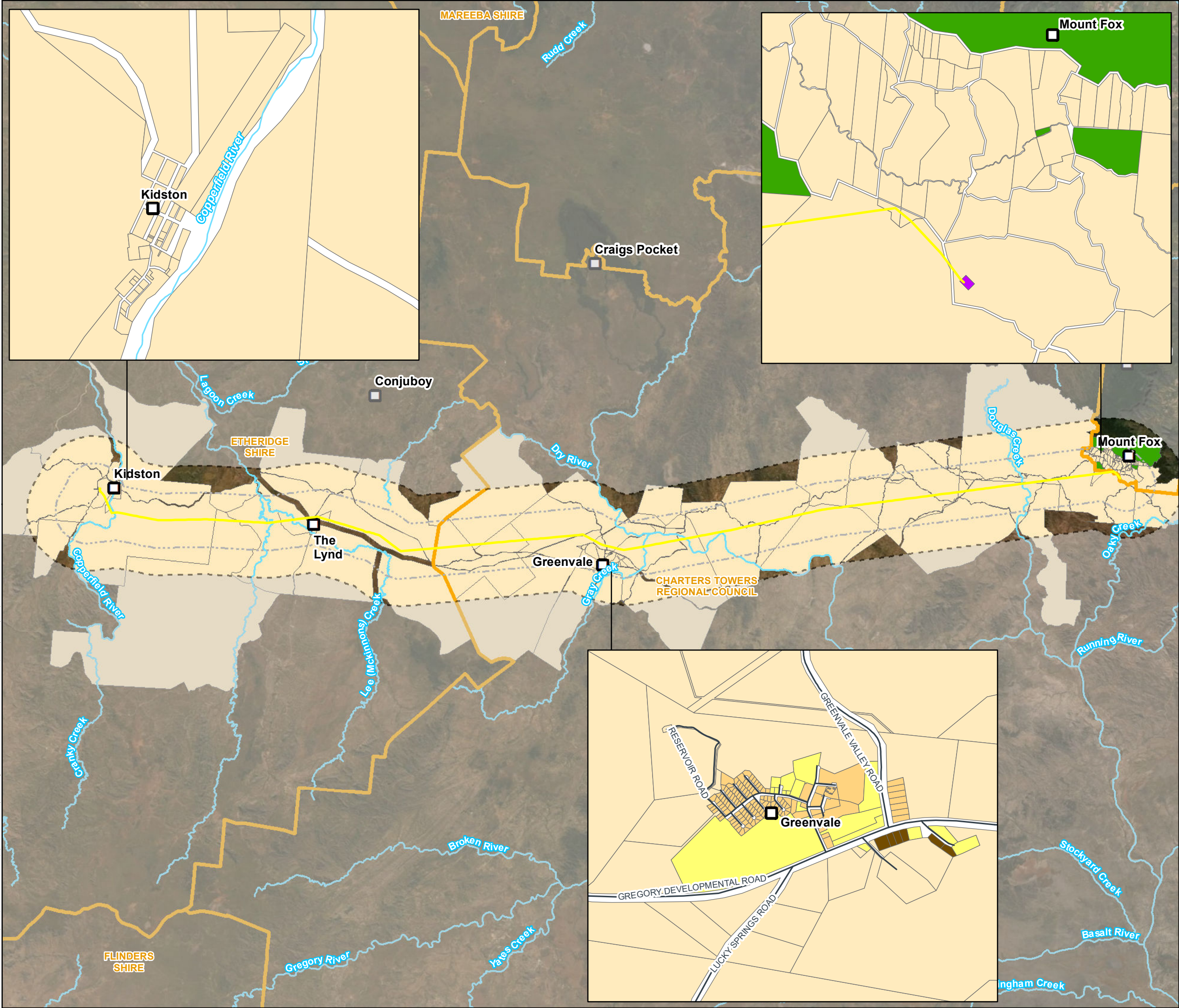
- Hinchinbrook Shire Council
- Charters Towers Regional Council
- Etheridge Shire Council.

Each LGA is subject to individual Local Planning Instruments which identify the strategic intent and desired outcomes for land use planning within the respective regions. The Preferred Alignment and how it relates to the three respective Local Planning Instruments are further discussed in Chapter 28 Planning and Approval Requirements. Across the three Local Planning Instruments, the land subject to the Preferred Alignment is collectively zoned as 'Rural' (Figure 13-2).

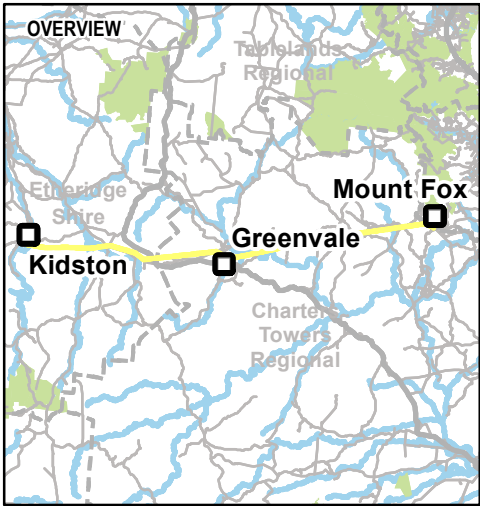
Land use intent for rural areas traversed by the Preferred Alignment is similar across the three LGAs and includes the maintenance of rural character and amenity. The rural character and amenity of the Preferred Alignment may be subject to slight changes and variation depending on the locality.

The existing rural character of the area traversed by the Preferred Alignment is generally characterised by rural properties, with large lot sizes, one or two dwellings with supporting agricultural operational buildings, sheds or structures. Existing built infrastructure includes a number of gravel roads and existing Ergon Energy powerlines including Single Wire Earth Return (SWER), 66 kV and 132 kV. The rural character is also supported by dense vegetated areas, and natural features such as waterways, valleys and ridgelines.

The existing amenity of the area can be defined by considering elements such as noise, air quality and the visual environment. Due to the extensive length of the Preferred Alignment, these elements have been assessed individually in this MID Assessment Report. Overall, with the exceptions of existing construction projects, operation of existing road infrastructure and electricity infrastructure, these elements are considered to be representative of a rural environment.



- Legend**
- Places
 - Watercourses
 - Project 10 km Buffer
 - Project 5 km Buffer
 - Local Government Areas
 - Preferred Alignment
 - Switching Station
 - Planning Scheme Zoning**
 - Community Purposes
 - Environmental Management and Conservation
 - Industry
 - Rural
 - Township



Data sources:
DCDB, Roads, Watercourses - DNRM 2017
Site Features and Layout - AECOM 2018
© SISP Imagery 2017

Disclaimer:
While every care is taken to ensure the accuracy of the Information Product, the State of Queensland makes no representations or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and disclaims all responsibility and all liability (including without limitation, liability in negligence) for all expenses, losses, damages (including indirect or consequential damage) and costs which you might incur as a result of the product being inaccurate or

Kidston Connection Project

ZONING		Figure F13-2
PROJECT ID:	60577456	
CREATED BY:	JB	
LAST MODIFIED:	AJS - 16/09/2021	
VERSION:	3	

13.1.3 Dominant land use

The dominant land use within the Project area is agricultural land, characterised by pastoral or grazing properties for livestock production (predominantly beef cattle). The State Government identifies agricultural land values through the State Planning Policy (SPP) by identifying Important Agricultural Areas (IAA), Agricultural Land Classifications (ALC) and supporting infrastructure such as stock routes.

The following section provides a description of the existing agricultural values subject of the Preferred Alignment based on existing desktop information, aerial imagery and opportunistic information from ecology field surveys and stakeholder consultation.

Important Agricultural Areas

IAs are defined as “land that has all of the requirements for agriculture to be successful and sustainable, is part of a critical mass of land with similar characteristics and, is strategically significant to the region or the state” (DILGP, 2017). IAs are a key aspect of the Agricultural State Interest within the SPP.

The Preferred Alignment does not traverse any IAA. The closest IAA is the ‘Herbert River and Ingham Area’, which lies approximately 10 km to the east of the Mount Fox switching station location, within the agricultural catchment of Ingham. IAs have not been considered further within this assessment report.

Agricultural Land Classification

ALC is based on the suitability of land for specified agricultural uses. It rates the ability of land to maintain a sustainable level of productivity. The factors used to assess agricultural land suitability are the soil, topographic and climatic limitations (State of Queensland, 2013). Classifications range from Class A to Class D, these descriptions are provided in Table 13-2.

Table 13-2 ALC Class Descriptions (State of Queensland, 2013; DAF, n.s)

Class	Description
Class A	Crop land that is suitable for a wide range of current and potential crops with nil to moderate limitations to production.
Class B	Limited crop land that is suitable for a narrow range of current and potential crops. Land that is marginal for current and potential crops due to severe limitations but is highly suitable for pastures. Land may be suitable for cropping with engineering or agronomic improvements.
Class C	Pasture land that is suitable only for improved or native pastures due to limitations which preclude continuous cultivation for crop production. Some areas may tolerate a short period of ground disturbance for pasture establishment.
Class D	Non-agricultural land and land not suitable for agricultural uses due to extreme limitations. This may be undisturbed land with significant conservation or catchment values, land that may be unsuitable because of very steep slopes, shallow soils, rock outcrop, poor drainage, salinity, acidic drainage, or is an urbanised area.

Class A and B land is a key component of the Agricultural State Interests under the SPP. The SPP requires that Class A and Class B land be protected for sustainable agricultural use. Portions of the Preferred Alignment traverse land mapped under the ALC as Class A or B land. Subject lot parcels are provided in Table 13-3. These areas are identified in Figure 13-3.

Table 13-3 Class A and Class B land traversed by Preferred Alignment

Lot on Plan	ALC	Description
1 OC64	B	Limited crop land
5234 SP275834	B	Limited crop land
1 CLK23	B	Limited crop land
547 SP242570	B	Limited crop land
4 CD35	A	Crop land
1 CD25	B	Limited crop land

Lot 1 CLK23 has identifiable signs of cropping landscapes from aerial imagery, however is located outside of the mapped Class B land. The cropping area covers approximately 40 ha of the 14,700 ha lot parcel and is located approximately 2 km south of Preferred Alignment as it traverses the lot. The remainder of the lot is considered grazing land. No other land parcel along the Preferred Alignment has identifiable signs of cropping or horticultural land.

No identifiable signs of intensive animal industries, aquiculture or intensive horticulture are identifiable and are assumed not to be present.

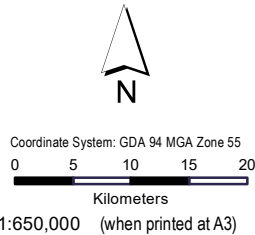
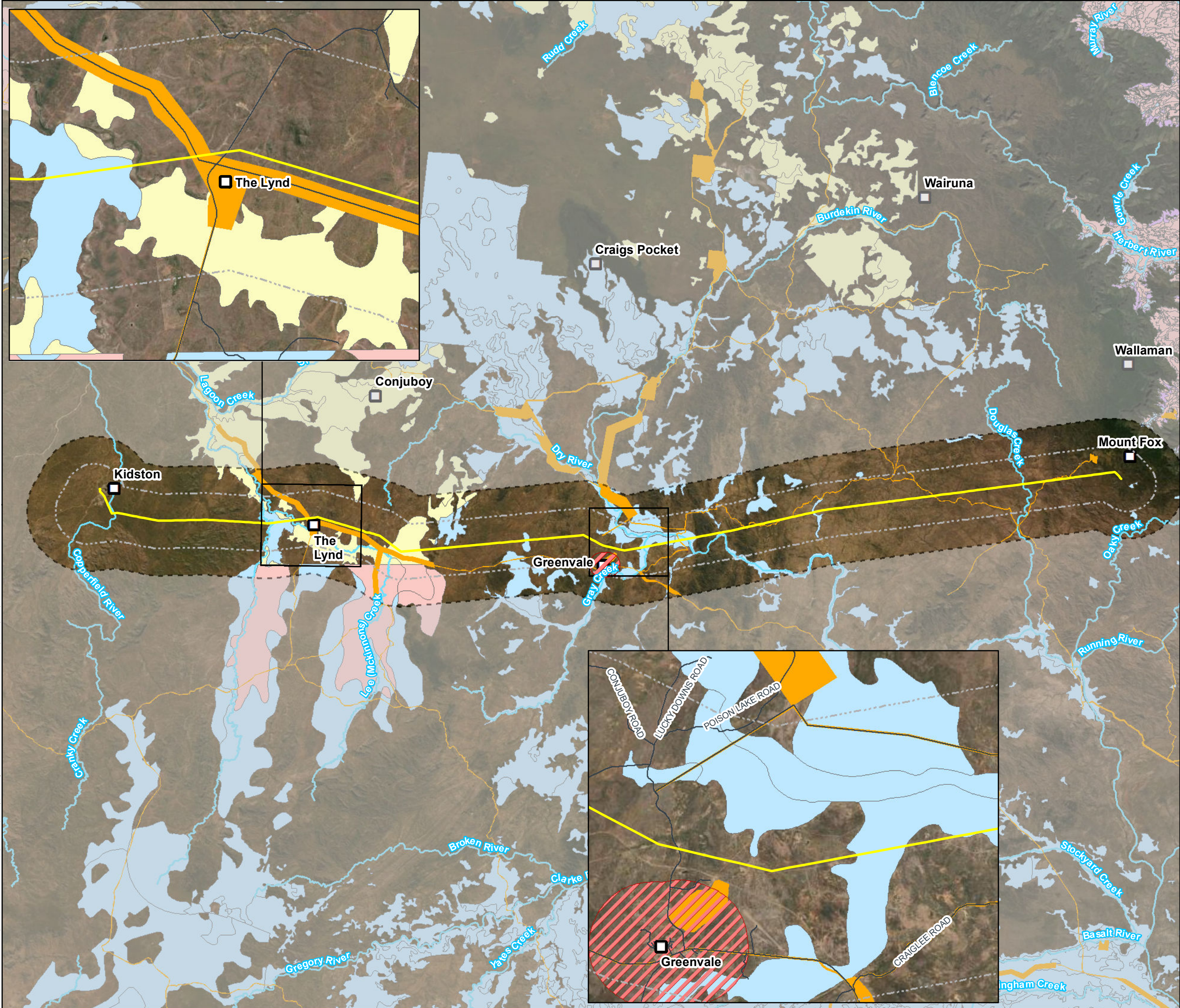
Stock Routes

The *Stock Route Management Act 2002* defines stock routes as 'a road or route ordinarily used for travelling stock or declared under a regulation to be a stock route'. The Queensland stock route network is mainly used for moving stock, pasture for emergency agistment and long-term grazing. The SPP identifies stock routes as a key component of achieving growth in agricultural production and facilitating a strong agricultural industry.

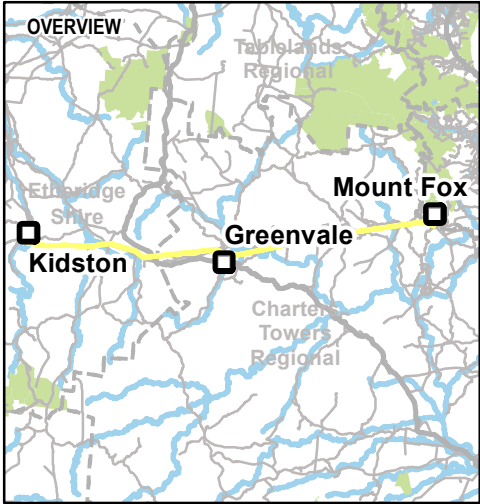
The Preferred Alignment traverses five 'open' stock routes. The stock routes which will be crossed are provided in Table 13-4, along with the status, classification and type. The location of the stock routes crossings are identified on Figure 13-3. All the stock route classifications are identified as minor and unused.

Table 13-4 Stock routes traversed by Preferred Alignment

Stock Route ID	Status	Classification	Type	Location of Crossing
865CHAR	Open	Minor and Unused	Road	Kangaroo Hills Road (adjoined by lot 3198 PH2177)
118CHAR	Open	Minor and Unused	Road	Lava Plains Mount Fox Road (adjoining Lot 6 WU50)
332CHAR	Open	Minor and Unused	Road	Craiglee Road (adjoining Lot 5234 SP275834)
333CHAR	Open	Minor and Unused	Road	Craiglee Road (adjoining Lot 1 CLK23)
Unused	Open	Minor and Unused	Road	Lot 1 CD25



- Legend**
- Places
 - Preferred Alignment
 - Priority Living Area
 - Stock Routes
 - Watercourses
 - Project 10 km Buffer
 - Project 5 km Buffer
 - Agricultural Land Classes- Land Class A and B**
 - A: Crop Land
 - A1: Crop Land - Broadacre and Horticulture
 - A2: Crop Land - Horticulture Only
 - B: Limited Crop Land



Data sources:
DCDB, Roads, Watercourses - DNRM 2017
Site Features and Layout - AECOM 2018
© SISP Imagery 2017

Disclaimer:
While every care is taken to ensure the accuracy of the Information Product, the State of Queensland makes no representations or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and disclaims all responsibility and all liability (including without limitation, liability in negligence) for all expenses, losses, damages (including indirect or consequential damage) and costs which you might incur as a result of the product being inaccurate or

Kidston Connection Project

AGRICULTURAL LAND USES		Figure F13-3
PROJECT ID:	60577456	
CREATED BY:	JB	
LAST MODIFIED:	AJS - 15/09/2021	
VERSION:	3	

13.1.4 Priority Living Area

A Priority Living Area (PLA) is an area of regional interest under the *Regional Planning Interests Act 2014*. PLAs are identified through the regional plan making process under the *Planning Act 2016*. Greenvale is identified as a PLA (Figure 13-3). The PLA includes a two km buffer around the key settlement area of the Greenvale Township.

A PLA is an area that includes the existing settled area of a city, town or other community and other areas necessary or desirable for the future growth of the existing settled area; and as a buffer between the existing or a future settled area and resource activities. The purpose of establishing PLAs as areas of regional interest is to provide greater certainty for investment in the development of a region's towns or urban growth areas.

The key purpose of designating PLAs is to manage land use conflicts with resource activities. The Project does not include a resource activity and therefore no impacts are anticipated to the intent of the PLA. In addition, the Project does not directly traverse this PLA, however is located approximately 4 km to the North of the PLA.

13.1.5 Tourism and recreation

The main tourism opportunities within the Project area include tourism drives and visitation access to National Parks from highways. The 'Great Inland Way' is an 1,863 km tourism drive from Sydney to Cairns. This route passes through Greenvale along the Gregory Developmental Road, west to the Lynd Junction and then north along the Kennedy Developmental Road through Conjuboy. The Preferred Alignment will traverse this route where it crosses the Kennedy Developmental Road.

Tourists may utilise the highways within the proximity of the Preferred Alignment, being the Gregory Developmental Road and the Kennedy Developmental Road to access tourism opportunities and localities within the wider region.

Tourism opportunities exist in association with the Girringun National Park. The eastern section of the Preferred Alignment is in close proximity to the National Park (approximately 350 m south). Mount Fox, which forms part of the National Park includes a dormant volcano cone with the opportunity for tourist to climb to the summit. The Department of National Parks, Sports and Racing states camping is not permitted in the Mount Fox area.

Tourism and recreational accommodation facilities within the Project area exist in two categories, being commercial accommodation facilities (i.e. formal camping grounds, motels), and secondary uses to agricultural uses (i.e. homestays, informal camping opportunities). Identified commercial accommodation facilities and the distance from the Preferred Alignment are identified in Table 13-5.

Table 13-5 Accommodation facilities in relation to the Preferred Alignment

Facility	Distance from Preferred Alignment (approx.)	Comment
Copperfield Dam Camping Area	13 km south	Located at the Copperfield Dam
Oaks Rush Outback Resort	5.5 km north	Old Kidston Mine camp, currently being used as a construction camp for Kidston Renewable Energy Hub
Lynd Oasis Road House	5.5 km north	Located at the Lynd Junction
Greenvale Van Park & Cabins	3.5 km north	Located in the Greenvale township
Three Rivers Hotel	3.5 km north	Located in the Greenvale township
Jervoise Station	30 km north	Located on Jervoise Road, off Conjuboy Road, adjacent to Dry River
Valley of Lagoons Camping Area	30 km north	Based around the Burdekin River

Facility	Distance from Preferred Alignment (approx.)	Comment
Rose Myrtle Springs	6.5 km north	Small facility, sourced from online accommodation providers (AirBnB)

Anecdotal information obtained from one landholder identified the waterways which the Preferred Alignment crosses may be used for water-based recreational uses. No desktop information could be located during this assessment in relation to water-based recreational activities, however it is anticipated that these activities would occur opportunistically when sufficient flow is within waterways, mainly the Copperfield River, Einasleigh River and the Burdekin River. Other opportunities for use may exist in smaller waterways and tributaries within the area when sufficient flow is within the catchment.

The Preferred Alignment crosses land with the primary use of agriculture, however given the nature and size of the properties, informal recreational opportunities are likely to exist. These activities may include camping, fishing and hunting.

13.1.6 Defence land

The Department of Defence have acquired land at Greenvale to establish a new advanced training area for the Australian-Singapore Military Training Institute (DoD, 2021). The location of the acquired land is shown in Figure 13-4, and is located on the southern side of the Greenvale township and the Gregory Highway. The Preferred Alignment is located approximately 3.5 km to the north of the Greenvale Training Area. No further assessment has been undertaken on this land use aspect in this assessment report.

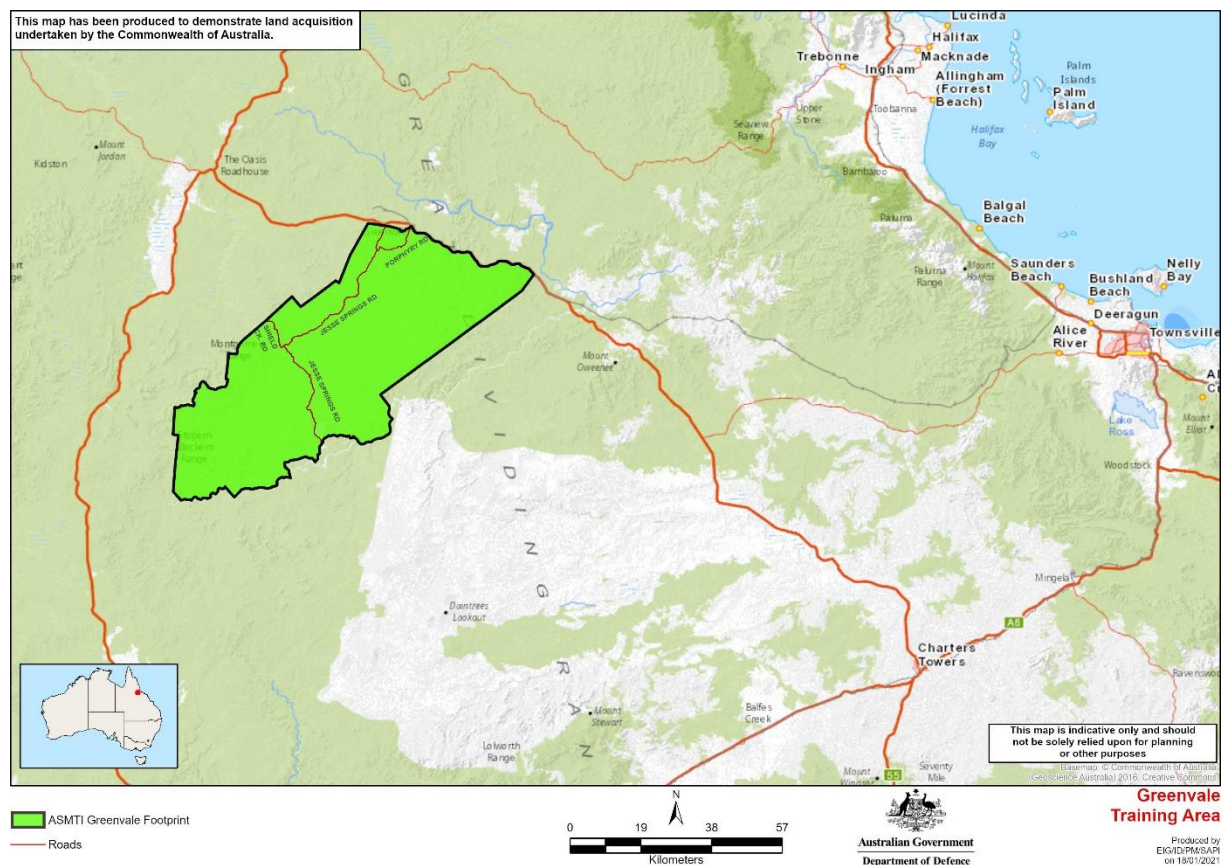


Figure 13-4 Location of Greenvale Training Area (DoD, 2021)

13.1.7 Native title

Native title is defined under the Commonwealth *Native Title Act 1993*. Native title rights and interests are rights and interests in relation to land or waters held by Aboriginal peoples or Torres Strait Islanders under their traditional laws and customs, and recognised by the common law of Australia.

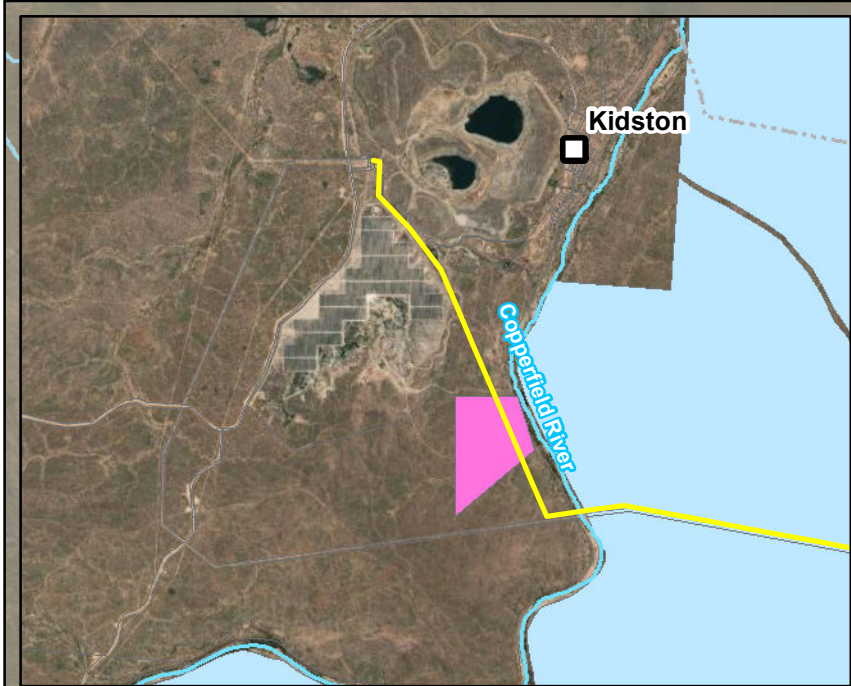
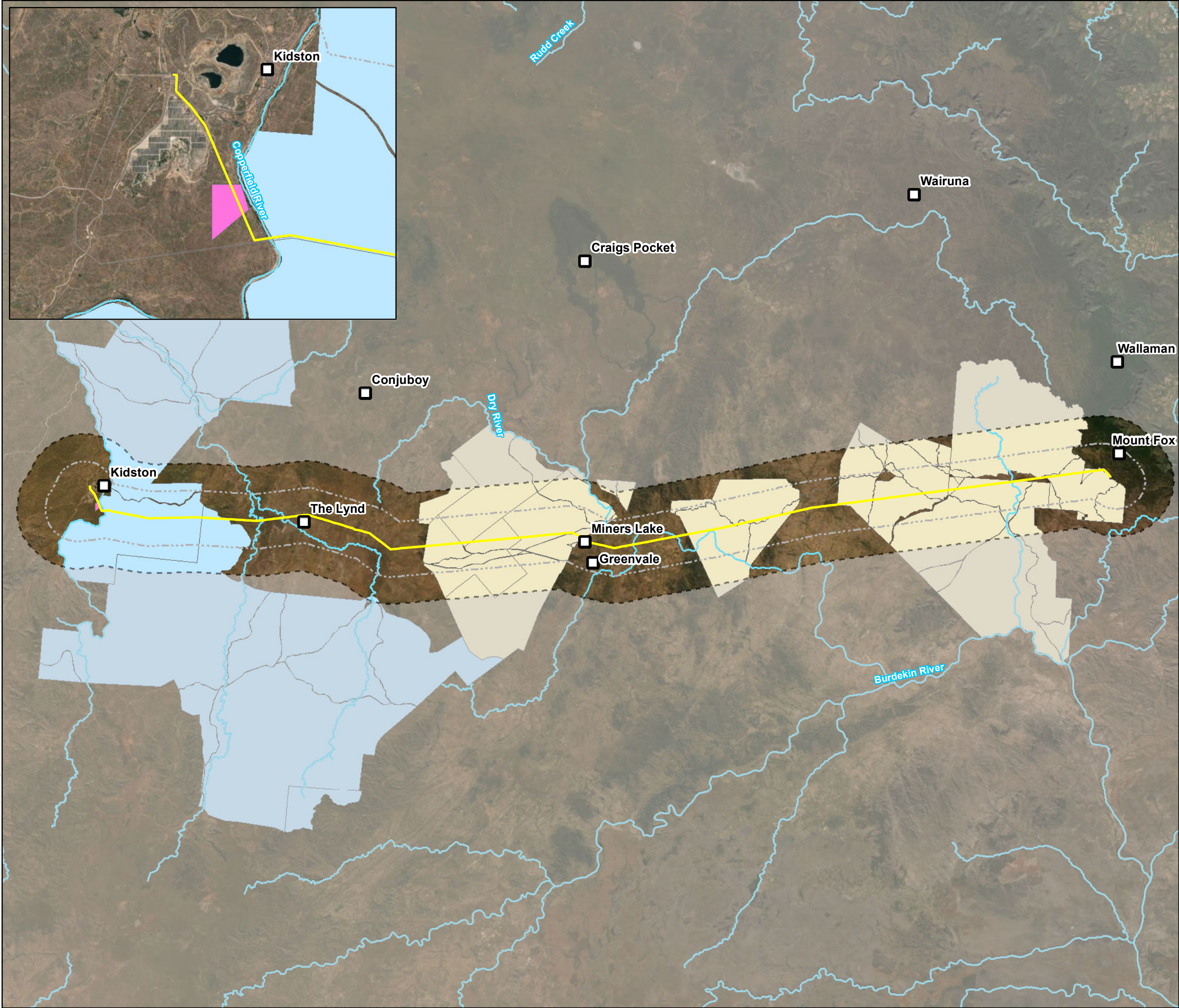
Native title rights may exist regardless of whether there is a native title claim or determination in relation to the relevant land or waters, and may be exclusive or non-exclusive rights. Non-exclusive rights may co-exist with the rights of others, such as a pastoral leaseholder.


Non-exclusive native title rights and interests have been determined to exist in relation to parts of the Preferred Alignment. Table 13-6 details the native title determinations, and Figure 13-4 illustrates the location of these determinations in relation to the Preferred Alignment. There are no current native title claims within proximity of the Preferred Alignment.


Powerlink is conducting tenure searches to identify the extent to which native title may exist in those parts of the Preferred Alignment not subject to a determination of native title.

Table 13-6 Native title determinations subject to the Preferred Alignment

Name	NNTT Ref	Date Determined	Outcome	Rights	Lots covered
Hoolihan on behalf of the Gugu Badhun People #2 v State of Queensland	QCD20 12/002	1 August 2012	Native title exists in the entire determination area	Non-exclusive	Lot 3198 PH2177 Lot 3 WU48 Lot 6 WU50 Lot 5234 SP275834 Lot 501 SP232789 Lot 3 CLK34 Lot 547 SP242570
Ewamian People #2	QCD20 13/006	26 November 2013	Native title exists in the entire determination area	Non-exclusive	Lot 44 USL33
Ewamian People #3	QCD20 13/007	26 November 2013	Native title exists in the entire determination area	Non-exclusive	Lot 14 LH8 Lot 182 PH995




www.aecom.com


N

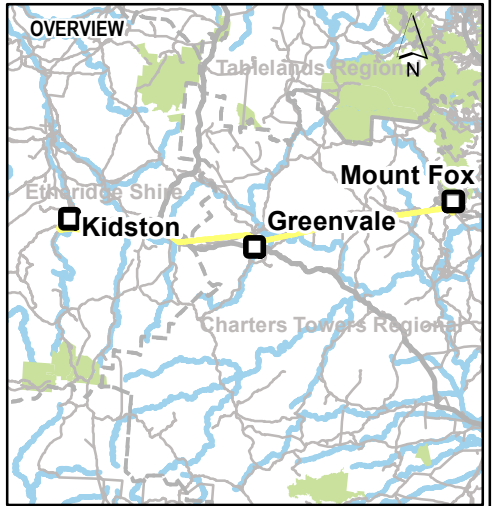
Coordinate System: GDA 1994 MGA Zone 55
Projection: Transverse Mercator

08162432

Kilometers

1:650,000 (when printed at A3)

- Legend**
- Preferred Alignment
 - Watercourses
 - Hoolihan on behalf of the Gugu Badhun People #2 v State of Queensland
 - Ewamian People #2
 - Ewamian People #3
 - Project 5 km Buffer
 - Project 10 km Buffer



Data sources:
DCDB, Roads, Watercourses - DNRM 2017
Site Features and Layout - AECOM 2018
© SISIP Imagery 2017

Disclaimer:
While every care is taken to ensure the accuracy of the Information Product, the State of Queensland makes no representations or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and disclaims all responsibility and all liability (including without limitation, liability in negligence) for all expenses, losses, damages (including indirect or consequential damage) and costs which you might incur as a result of the product being inaccurate or

Kidston Connection Project		
NATIVE TITLE DETERMINATIONS		
PROJECT ID:	60577456	Figure F13-4
CREATED BY:	JB	
LAST MODIFIED:	AJS - 15/09/2021	
VERSION:	3	

13.2 Potential Impacts

Potential impacts on land use from the Project are associated with construction and maintenance activities. Potential impacts may include the following:

- loss or fragmentation of agricultural land subject to the Preferred Alignment
- disturbance to agricultural operations
- disturbance in rural amenity values of the locality
- short term impacts to tourism and recreational opportunities.

These impacts are discussed further in the following sections.

13.2.1 Agricultural land and operations

Directly affected landholders are identified as those properties traversed by the Preferred Alignment. It is anticipated that many of the affected landholders have a historical family based connection to their properties and the community. It should be recognised that landholders operate and manage agricultural activities as businesses on their properties and grazing is the predominant land use in the affected area.

The Preferred Alignment has the potential to create impacts on existing farming operations. The Preferred Alignment will lead to a small loss of mapped Class A and Class B agricultural land associated with the transmission line structures and new access tracks (where required). Grazing can continue within the transmission line easement. Although mapped as Class A and Class B agricultural land, the agricultural land environment is essentially vegetated grazing land. The Preferred Alignment does not directly traverse any identifiable irrigated cropping or horticultural crops.

In most instances where the Preferred Alignment traverses Class A or B agricultural land, the transmission line has been co-located with existing Ergon Energy 66 kV and 132 kV lines. Colocation of infrastructure minimises impacts on existing land use by:

- confining vegetation clearing to one corridor through a property instead of multiple corridors
- using one track to access the infrastructure
- minimising potential for introduction and dispersal of weed and pest species
- minimising the requirement to reconfigure farm infrastructure
- reducing fragmentation.

Between Greenvale and Conjuboy, the Preferred Alignment is not co-located with any Ergon lines and Powerlink has worked closely with affected landholders to determine an alignment which manages property impacts.

During the construction phase, access to work areas will be restricted to ensure personnel and cattle remain safe from injury. There are few, if any, access issues anticipated for the wider community with any traffic impacts expected to be temporary and of a short duration during construction. There is no traffic impacts anticipated during the operation and maintenance phases.

Noise and air quality impacts associated with the Preferred Alignment have been assessed in Chapter 19 Noise and Vibration and Chapter 6 Air Quality respectively. It has been concluded that the separation distance between the Preferred Alignment to the closest sensitive receptors is adequate to ensure no long term adverse impacts are realised.

During consultation with stakeholders, biosecurity was identified as a key concern for the area. The existing biosecurity environment, potential impacts and mitigation measures have been discussed in Chapter 12 Biosecurity.

Where the Preferred Alignment crosses the stock route network, the transmission line has been co-located with the existing electrical infrastructure crossing the stock route network. Structures have been spaced to avoid being within the stock route, with the exception of the 'unused' stock route on Lot 1 CD24 within Etheridge Shire Council. This stock route is within a local government road reserve (undeveloped) and is approximately 850 m in width.

Two structures will be located within the 850 m width of the stock route. Positioning of towers within the stock route will be discussed and agreed between Powerlink and the relevant stock route manager in order to minimise any impacts to the functionality of the stock route network. It is expected that up to two structures may be required within the stock route. Typically, the construction of the transmission line requires a 40 m x 40 m cleared work area at each structure site, and a 4m wide access track.

Given that the stock route is unused, the considerable width of the stock route and the co-location with the existing electrical infrastructure at the crossing location, it is not anticipated that the Project will materially compromise the stock route in this location.

Where the Preferred Alignment crosses minor and unused, but open, stock routes, the transmission line will span the stock route, and therefore there is no obstruction to stock movement. No formal tourism or recreational values associated with the stock routes have been identified. Opportunistic and informal use of the stock routes may occur in these locations, however due to lack of information could not be assessed in this assessment report.

13.2.2 Rural character and amenity

Co-location of the proposed transmission line with existing electrical infrastructure within the region minimises impacts on the character and amenity of the rural area. Impacts to amenity are discussed in individual sections in this assessment report, being:

- Chapter 6 Air Quality
- Chapter 14 Visual Amenity
- Chapter 19 Noise and Vibration.

13.2.3 Tourism and recreation

Impacts to tourism and recreational values have the potential to occur during both construction and operation of the Project. Existing tourism and recreational opportunities in the immediate Project area are considered to be low, however the wider region may provide tourism and recreation opportunities for visitors. The key opportunities identified in this assessment include:

- the Great Inland Way tourist drive
- Girringun National Park Mount Fox Crater
- rural accommodation facilities
- potential for rural and nature based recreational activities.

The Preferred Alignment directly traverses the 'Great Inland Way' between Greenvale and the Lynd Junction. At the location of the crossing, there are no immediate tourism opportunities or experiences that would be directly impacted. A Visual Impact Assessment has been undertaken for the Project and is provided in Chapter 14 Visual Amenity. Tourists travelling by vehicle on the drive were identified as visual receptors in this assessment. Where the Preferred Alignment directly traverses the Gregory Developmental Road between Greenvale and the Lynd Junction, the structures and transmission line will introduce a new element into the view point. However it was concluded that the structures would not change the fundamental visual character of the landscape and will blend with the existing views introducing another simple and repetitive element into this largescale rural landscape.

The Girringun National Park is located approximately 350 m north of the Preferred Alignment. Tourism activities include climbing the Mount Fox crater summit. An assessment of potential impacts on the National Park has been undertaken in Chapter 8 Protected Areas and considered both construction phase and operational phase impacts of the Project. It was concluded that during construction there may be an impact in relation to noise and air quality, however the impact would be short term in nature and have a negligible overall impact on the values of the National Park. Similarly during operation, the impacts would be limited to short term maintenance activities and restricted to temporary noise impacts associated with the use of helicopters.

The summit of Mount Fox within Girringun National Park, is located approximately 1 km to the north of the Preferred Alignment. The visual impact assessment undertaken in Chapter 14 Visual Amenity, identified that, although there will be noticeable change due to the close proximity of this scenic

viewpoint, there will be no change to the fundamental visual character of the landscape and the structures will 'blend' with the existing view to a considerable extent.

A very small number of rural short term accommodation facilities are within the Project area. These facilities are anticipated to be used by tourists passing through the region. The Project will not impact the ongoing use of these facilities. During construction the facilities may be used for construction worker accommodation and is anticipated to provide a positive economic benefit to the region.

13.2.4 Native title

Any acts or dealings in relation to land and waters that affect native title must comply with the *Native Title Act 1993* in order to be validly done. To the extent that native title exists or may exist in the area of the Preferred Alignment, Powerlink will comply with the requirements of the Act for securing an easement for the transmission line and acquiring land for a new switching station. Powerlink typically complies with section 24KA of the *Native Title Act 1993*, which applies to facilities for services to the public, for its transmission line easements. Under s 24KA, native title is not extinguished, but is 'suppressed' while the easement remains in place.

The proposed Mount Fox switching station is located on freehold land. Native title is typically extinguished over freehold land, however this will be confirmed through the land acquisition process.

13.3 Mitigation and Management Measures

Through the landholder and stakeholder engagement and infrastructure design processes, Powerlink has considered the existing land use associated with the Preferred Alignment to reduce and mitigate impacts where possible. Key mitigation includes the following.

- Co-locating the Project with existing electricity infrastructure where possible.
- Where possible, adjusting structure locations to minimise impacts to property operations and stock routes.
- Positioning of towers within stock route will be discussed and agreed between Powerlink and the relevant stock route manager in order to minimise any impacts to the functionality of the stock route network.
- Remediation of disturbed work areas at structure locations in agreement with landholders or stock route managers and in line with the Environmental Management Plan.
- In the event that stock routes need to be utilised in coincidence with planned construction activities, Powerlink will work in with the stock route manager to avoid and minimise any work activities that will impact the mustering and movement of stock.

Powerlink will continue to consult with landholders in relation to the following.

- Designated construction access tracks will be planned and prepared in liaison with landholders.
- Property access protocols will be developed for implementation during the construction phase which will include information on access tracks, fencing, and gates that can be used as well as the need to keep gates closed for stock control.
- Where the Project access may require improvement to existing landholder infrastructure, addition or replacement will be provided for items such as gates, grids, culverts or signage to mitigate impacts on access and infrastructure to the properties.
- Weed management and vegetation clearance on the easement will also be addressed.