



Fortescue
The New Force in Iron Ore

Supporting Documentation

Native Vegetation Clearing Permit Supporting Documentation

Hamersley Road Upgrade

May 2020

100-AE-EN-002

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Appendix 1: Letter of Authority – Shire of Ashburton

1. INTRODUCTION

Fortescue Metals Group Limited (Fortescue) proposes to clear up to 0.9 ha of native vegetation to upgrade Hamersley Road located approximately 50 km north of Tom Price in the Pilbara region of Western Australia (Figure 1).

Hamersley Road is an existing road maintained by the Shire of Ashburton. However, there is no gazetted road reserve. The road occurs on Unallocated Crown Land and it is not certain when the road was constructed. It is understood that the Shire manage and maintain the road.

This report and its appendices provide all of the relevant information required under Part V, Section 51E of the EP Act, to assess the proposed clearing. This includes baseline environmental data, survey reports, a digital project envelope (shapefile) and assessment against the 10 Clearing Principles.

1.1 Summary of Proposal

The key details of the proposed clearing are represented in Table 1.

Table 1: Key Details of the Proposed Clearing

| Site Details | | |
|---------------------------|--|-------------|
| Project Name | Northern Access Project | |
| Description of Operation | Upgrading a small section of Hamersley Road to allow for large vehicles and plant. | |
| Total Clearing Proposed | Up to 0.9 ha of native vegetation (within purpose permit envelope of 0.9 ha) | |
| Project Commencement Date | July 2020 | |
| Clearing Details | | |
| Clearing Method | Clearing will be undertaken by mechanical means. | |
| Purpose of Clearing | Upgrading a small section of Hamersley Road to allow for large vehicles and plant. | |
| Proponent Details | | |
| Company Name | Fortescue Metals Group Ltd | |
| ACN | 57 002 594 872 | |
| Postal Address | PO Box 6915 EAST PERTH WA 6985 | |
| Key Contact | <div></div> | <div></div> |
| | <div></div> | <div></div> |
| | <div></div> | <div></div> |
| | <div></div> | <div></div> |

Site Details

1.2 Proposed Clearing Activities

Fortescue is applying to clear 0.9 ha of native vegetation within a purpose permit envelope of 0.9 ha (Figure 2). Clearing is exclusively to upgrade a small portion of Hamersley Road to allow for the safe passage of very large vehicles and plant. In this area, the road narrows and the corners are too sharp to allow very large plant and equipment to drive through.

1.3 Mitigation Hierarchy

Fortescue is applying for the minimum area possible to create safe passage on Hamersley Road. Note, upon completion the road will be safer for all vehicular traffic, including local use.

1.4 Relevant Approvals and Background

Key legislation that may affect the environmental management of the project and a list of all relevant environmental approvals that have been sought or are required before the proposal may be implemented is provided in Table 2.

Table 2: Relevant Approvals for Road Works

| Activity | Legislation | Approval Required |
|---------------|------------------|--|
| Land Clearing | EP Act (Part V) | A Native Vegetation Clearing Permit is required for land clearing activities to be undertaken in Schedule 1 Areas. |
| Land Access | Local Government | The Shire of Ashburton, as the managing entity for the road, has provided a letter of authority to allow Fortescue to access the road and make the necessary upgrades (Appendix 1) |

1.4.1 Part IV, Environmental Protection Act 1986 (EP Act)

This proposal does not form part of a referred proposal. These minor road works do not require formal assessment under Part IV of the EP Act.

1.4.2 Environment Protection and Biodiversity Conservation Act 1999

The proposed clearing does not require referral under the EPBC Act.

1.5 Social Surroundings

1.5.1 Heritage and Native Title

The permit envelope occurs within the Eastern Guruma Native Title Determination areas. Fortescue signed a Land Access Agreement with the Eastern Guruma People on 15 December 2009, as varied 4 December 2019 (LAA). The LAA is predicated on what is commonly termed the 'avoidance' principle in relation to the management of Aboriginal cultural heritage. That is, Fortescue will work with Eastern Guruma people to conduct heritage archaeological and ethnographic heritage surveys to identify heritage places and then seek to avoid impacting Aboriginal cultural heritage in the design of the Proposal and otherwise minimise and mitigate impacts.

Across the Eastern Guruma Native Title Determination area, Fortescue has commissioned, funded and facilitated ethnographic and archaeological heritage surveys which have been completed by Eastern Guruma people and avoids culturally significant sites where possible.

Another important aspect of the LAA is the operation of the Eastern Guruma FMG Working Groups and Heritage Sub Committees. These formal structures have been established to ensure that senior FMG and Eastern Guruma representatives meet to discuss the operation of the LAA and the management of cultural heritage. Outside of these formal structures FMG and Eastern Guruma representatives speak and meet regularly to discuss cultural heritage management amongst other matters. Fortescue will continue to consult with Eastern Guruma people and is always available to answer any questions that Eastern Guruma may have.

Where heritage sites cannot be avoided, Fortescue will apply for Section 18 consent under the *Aboriginal Heritage Act 1972 (WA)* in consultation with Eastern Guruma as prescribed under the LAA.

1.5.2 Pastoral and Other Lands

Fortescue has protocols and notification arrangements with pastoralists that may be affected by the works associated with this proposal. The Proposal occurs on Hamersley Road and is overlaid by Hamersley pastoral station. As the road is an existing road, it is unlikely to result in impacts to the operations at the Hamersley pastoral station.

2. BASELINE ENVIRONMENTAL DATA

This section outlines the environmental data relevant to this clearing permit application. The data has been used to define the environmental risks and potential impacts that have been used to inform the impact assessment and management measures.

2.1 Climate

The application area experiences a dry desert climate, with hot dry summers and mild winters (van Vreeswyk, Payne, Leighton, & Hennig, 2004).

The monthly rainfall and temperature averages for the Tom Price (BoM, 2017a) and Paraburdoo (BoM, 2017b) Bureau of Meteorology (BoM) stations, located 50 km and 103 km south of the Proposal area, respectively are shown in Figure 3.

Monthly maximum temperatures range from an average of 23°C in July to 41°C in January, whereas minimum temperatures range between 7°C in July and 26°C in January (BoM 2017a; 2017b).

Annual rainfall in the Pilbara has a substantial yearly variation. Tropical cyclones, many of which originate in the Timor Sea, along with local thunderstorms, produce much of the summer and early autumn rainfall. The driest months are in spring (September to October), and the wettest in summer (January to March) (BoM 2017a; 2017b).

2.2 Landscape

The permit envelope lies in the Pilbara biogeographic region of the Interim Biogeographic Regionalisation for Australia (IBRA). The Pilbara biogeographic region incorporates 17,928,700 ha and includes four subregions: Chichester, Roebourne, Hamersley, and Fortescue Plains. The application area is located entirely within the Hamersley sub-bioregion of the Pilbara bioregion.

The Hamersley sub-bioregion, described by Kendrick (2002), consists of a mountainous area of Proterozoic sedimentary ranges and plateaus dissected by gorges. Surface drainage flows into either the Fortescue River to the north, the Ashburton River to the south or the Robe River to the west. Environmental features of conservation value in the sub-bioregion include the gorges of the Hamersley Range (particularly in Karijini National Park), Palm Springs and Duck Creek, the Themeda grasslands of the Pilbara, and isolated areas of Mulga on Red Hill Station. Land use in the region is dominated by pastoral grazing and mining. The areal extent of the Hamersley sub-bioregion is 6,215,092 ha.

2.2.1 Geology

The Project occurs within the Hamersley Province which covers an approximate area of 80,000 km². The Hamersley Province contains late Archaean to Lower Proterozoic age sediments of the Mount Bruce Supergroup (SoilWater, 2017). This Supergroup contains the Fortescue, Hamersley and Turee Creek Groups, which are overlain by remnants of the Wyloo Group. The Fortescue Group is a sequence of basalts, inter-bedded clastic sediment, minor chemical sediment and doleritic intrusions. This Group contains the following Formations: the Mount Roe Basalt, the Hardley Formation, the Kylene, Boongal, Tumbiana and Maddina Formations, and the Jeerinah Formation.

The Hamersley Group overlies the Fortescue Group, and is approximately 2,500 m thick containing a sequence of banded iron formations (BIF), dolomites, pyroclastic/hemipelagic shale, and acid volcanics. The Hamersley Group contain the two dominant iron ore bearing formations of the region; these being the Brockman Iron Formation and the Marra Mamba Iron Formation. The Turee Creek Group is the youngest geologic unit of the Mount Bruce Supergroup, and is not considered to contain significant quantities of iron ore (SoilWater, 2017).

2.2.2 (Ecologia Environment, 2014a) Land Systems

Two land systems, as described by van Vreeswyk et al. (2004), occur within the application area (Figure 4). The extent is described in Table 3.

Table 3: Land Systems within the permit envelope

| Land Systems | Description | WA Soil Group | Ha in of Envelope |
|--------------|--|--|-------------------|
| Calcrete | Low calcrete platforms and plains supporting shrubby hard spinifex grasslands. | Calcareous shallow loams (521) Minor Calcareous loamy earths (542) Red Shallow Loams (522) | 0.8 |
| Newman | Rugged jaspilite plateaux, ridges and mountains supporting hard spinifex grasslands. | Stony soils (203) Red shallow loam soils (522) | 0.1 |

2.3 Materials Classification

Materials classification has been undertaken by conducting an initial desktop review of the literature of the site and then through subsequent field assessments. The field assessments were focused on:

- soil classification to verify the literature and provide site specific soil detail; and

- geotechnical and geochemical analysis for construction.

2.3.1 Regional Soil Assessment

Soils in Western Australia have been classified into 60 broad categories in the technical guide, 'Soil Groups of Western Australia', published by the Department of Agriculture and Food, Western Australia. These broad soil groups are a useful guide to the relationship between the project area and the regional landscape. Four soil groups, as classified by the Western Australia Soil Groups, have the potential to occur within the application area and are discussed below.

Stony soils (203)

Stony soils (203) are often shallow (<0.25 – 0.5 m) and skeletal or poorly developed, with basalt as the dominant parent material. Stony soils have lighter textures ranging from loamy coarse sand to sandy loam, and are mostly dark red to red/brown, with a stony mantle protecting the soil surface. The topsoil is prone to slaking and dispersion, and the soil profile is non saline. Soil pH is typically in the acidic to weakly acidic range (pH 6 – 7). Soil water storage is low due to sandy/gravelly texture, and permeability varies from moderate to rapid. Most soils are not water repellent, and soil fertility varies from low to moderate.

Calcareous shallow loam soils (521)

Calcareous shallow loam soils (521) are calcareous throughout, usually over limestone or calcrete with an alkaline pH. They are loamy throughout, although may grade to clay above the hard layer. They have moderate permeability with moderately low water storage. Water repellence is nil and fertility is high.

Red shallow loam (522)

Red shallow loam (522) exhibit uniform texture throughout the soil profile, and are often underlain by weathered basalt. These soils are found on hillslopes, lower foot slope and on the stony plains, and can have a stony mantle on the soil surface. These red/brown loam soils can exhibit slaking and dispersion, and are often very shallow (<0.25 m) to shallow (0.25 – 0.5 m) in depth. These soils are of moderate fertility with slightly acid topsoil overlying a mostly neutral to alkaline subsoil. Plant rooting depth can be moderate (≈0.5 m) but soil water storage is low to moderately low. Soil organic carbon levels are low, and the soil does not display water repellence.

Calcareous loamy earths (542)

This group is comprised of grey calcareous loamy earths Grey calcareous loamy earths have topsoils of thin to medium (10-30 cm) silty loams or clay loams overlying thick (30-80 cm) subsoils of silty clay loam to light and medium clay. Soil colour is dark grey to black or reddish

grey overlying light grey subsoils. These soils often have saline subsoils and are calcareous throughout with strongly alkaline soil reaction trends. Soil surfaces are hard setting with common to abundant (10->50%) cryptogam crusts

The following general comments can be made about the soils found in the Pilbara:

- Other studies undertaken for Fortescue operations have shown that nutrient levels are dependent on Organic Carbon content of the soil. It is suspected to be the same for the soils of the access road corridors.
- Gilgai soils were required to be removed from other infrastructure corridors due to the soils' instability.
- Most soils could be considered to be apedal or massive.
- Most soils can be considered to be at risk of hard setting and dispersive, common in the Pilbara, which suggests most topsoils could be erodible depending the landscape setting they are used in.

2.4 Flora and Vegetation

Fortescue has conducted Flora and Vegetation surveys over the Solomon Mine and surrounds (Ecologia Environment, 2014a).

2.4.1 Regional Vegetation Units

Vegetation units have been described on a regional scale by Beard (1975) and updated by DAFWA (2012). These vegetation units are broad scale descriptors and attempt to depict the native vegetation as it was presumed to be at the time of European settlement. Just one Beard vegetation unit occurs within the application area and is listed in Table 4 with their total estimated Pre-European extent (DAFWA 2012) and represented on Figure 5.

Table 4: Beard vegetation units present within permit envelope

| Vegetation Associations | Pre-European Extent (ha) | Current State-wide Remaining (ha) | Current State-wide % Remaining | Extent in Conservation Estate (ha) | Ha in Clearing Envelope |
|--|--------------------------|-----------------------------------|--------------------------------|------------------------------------|-------------------------|
| 82 - <i>Eucalyptus</i> open woodland/ <i>Senna</i> mixed sparse shrubland/ <i>Triodia</i> open hummock grassland | 2,177,574 | 2,165,235 | 99.4 | 262,654 | 0.9 |

2.4.2 Flora and Vegetation Studies

The application area and surrounds has been subject to extensive flora and vegetation survey effort. The most relevant previous surveys relating to flora and vegetation is Ecologia's 2014 Solomon Hub Flora and Vegetation Assessment. This survey has been used to assess the flora and vegetation of the permit envelope for this clearing permit.

2.4.3 Vegetation Communities

Ecologia Environment (2014) identified 71 vegetation communities of which 5 occur within the permit envelope (Table 5 and Figure 6). Ecologia (2014) noted that as a result of its flora and vegetation assessment 671 species from 229 genera have been identified within the survey area, which includes the permit envelope.

Table 5: Ecologia 2014 vegetation communities present within permit envelope

| Vegetation Community | Description | Ha in Clearing Envelope |
|----------------------|---|-------------------------|
| AalmTe | <i>Acacia aneura</i> and <i>Acacia pruinocarpa</i> tall shrubland, over <i>Acacia ancistrocarpa</i> and <i>Eremophila longifolia</i> mid sparse shrubland, over <i>Indigofera monophylla</i> and <i>Sida</i> sp. verrucose glands (F.H. Mollemans 2423) low sparse shrubland, over <i>Cenchrus ciliaris</i> tussock grassland. | 0.03 |
| EIIAbTw2 | <i>Eucalyptus leucophloia</i> subsp. <i>leucophloia</i> low open woodland, over <i>Acacia bivenosa</i> , <i>Senna glutinosa</i> subsp. <i>glutinosa</i> and <i>Senna artemisioides</i> subsp. <i>oligophylla</i> mid sparse shrubland, over <i>Triodia wiseana</i> open hummock grassland. | 0.3 |
| EIIAiTw | <i>Eucalyptus leucophloia</i> subsp. <i>leucophloia</i> and <i>Corymbia hamersleyana</i> low sparse woodland over <i>Acacia inaequilatera</i> tall sparse shrubland over <i>Acacia bivenosa</i> and <i>Senna glutinosa</i> subsp. <i>glutinosa</i> mid sparse shrubland over <i>Ptilotus calostachyus</i> low sparse over <i>Triodia wiseana</i> open hummock grassland | 0.12 |
| EvVfCc | <i>Eucalyptus victrix</i> mid open woodland, over <i>Vachellia farnesiana</i> and <i>Acacia pyrifolia</i> mid sparse shrubland, over <i>Cyperus vaginatus</i> and <i>Typha domingensis</i> mid sparse sedgeland, over <i>Themeda triandra</i> and <i>Cenchrus setiger</i> open tussock grassland. | 0.13 |
| ExApTw | <i>Eucalyptus xerothermica</i> low open woodland over <i>Acacia pruinocarpa</i> tall sparse shrubland over <i>Senna artemisioides</i> subsp. <i>oligophylla</i> low sparse shrubland <i>Triodia wiseana</i> hummock grassland and <i>Chrysopogon fallax</i> tussock grassland. | 0.3 |

2.4.4 Vegetation Condition

The vegetation condition of the permit area adjoins an existing road and is likely to be highly disturbed for windrows and by dust impacts. Vegetation condition in the permit envelope is

expected to be 'Poor' using the adapted Keighery (1994) Vegetation Condition Scale for the Eremaean and Northern Botanical Provinces.

2.4.5 Conservation Significant Vegetation Communities

Vegetation communities in Western Australia are described as Threatened Ecological Communities (TEC) if they have been endorsed by the Western Australian Minister for Environment following recommendations made by the Threatened Species Scientific Committee. TECs that are listed to be of State conservation significance in Western Australia are considered to be Environmentally Sensitive Areas (ESA) under Part V of the EP Act.

Possible threatened ecological communities that do not meet survey criteria are added to the Priority Ecological Community (PEC) list under Priority 1, 2 or 3. Ecological communities that are adequately known, are rare but not threatened, or meet criteria for "Near Threatened", or that have been recently removed from the threatened list, are placed in Priority 4. Conservation dependent ecological communities are placed in Priority 5.

There are no TECs or PEC's within the permit envelope.

2.4.6 Flora of Conservation Significance

No flora species of conservation significance occur within the permit envelope. Given the very small area of clearing, it is not expected that any conservation significant flora species would occur in the area, and if they did, the proposed clearing would not have a significant impact on their conservation.

2.4.7 Weeds

Based on known records within the vicinity of the permit envelope a total of 6 species of introduced flora have the potential to occur within the permit envelope (Figure 7).

- *Bidens bipinnata* (Beggartick)
- *Cenchrus ciliaris* (Buffle Grass)
- *Conyza bonariensis* (Flaxleaf Fleabane)
- *Flaveria trinervia* (Speedy Weed)
- *Lactuca serriola* (Prickly Lettuce)
- *Lysimachia arvensis* (Pimpernel)

- *Malvastrum americanum* (Spiked Malvastrum)
- *Setaria verticillata* (Whorled Pigeon Grass)
- *Vachellia farnesiana* (Mimosa Bush)

No weeds of National Significance (WONS) or Declared Plants under the *Biosecurity and Agriculture Management Act 2007* have been identified in the Project area or surrounds.

2.5 Vertebrate Fauna

Fortescue engaged Ecologia Environment to conduct a consolidated Level 2 terrestrial fauna assessment of the Solomon Project area and surrounds (Ecologia Environment, 2014b).

The results of the Ecologia (2014b) report have been used to provide the baseline data for the clearing permit application.

2.5.1 Fauna Habitat

The permit envelope intersects three broad fauna habitat types, as mapped by Ecologia (2014b). These habitat types are listed in Table 6 and shown in Figure 8. Given the proximity to the existing road and the small area of clearing, the habitat is unlikely to support any conservation significant fauna.

Table 6: Fauna Habitats within the permit envelope

| Habitat Type | Description |
|-----------------------------------|--|
| Plain (Stony Calcrete) | Adjacent to major drainage lines. Vegetation of the stony calcrete plains was described as <i>Eucalyptus victrix</i> and/or <i>Corymbia hamersleyana</i> isolated low trees over <i>Acacia wanyu</i> , <i>A. synchronicia</i> , <i>Hakea lorea</i> and <i>Melaleuca</i> sp. scattered shrubs to high open* |
| Plain (Stony/Gibber) | Very open to open shrubland of <i>Acacia aptaneura</i> , <i>A. pruinocarpa</i> , <i>A. binevosa</i> and <i>Senna glutinosa</i> over <i>Triodia wiseana</i> hummock grassland on a continuous layer of bedrock and scattered pebbles and stones |
| Drainage Line/River/Creek (Major) | Mature <i>Eucalyptus victrix</i> trees with patches of dense mixed <i>Acacia</i> spp. shrubs and tussock grasses such as <i>Themeda triandra</i> , <i>Chrysopogon fallax</i> and/or <i>Cenchrus ciliaris</i> lining the banks. |

2.6 Hydrology

2.6.1 Surface Water Flow

The majority of the application area occurs within the Lower Fortescue sub catchment (Figure 9), a tributary of the Lower Fortescue River. Weelumurra Creek intersects with the permit envelope and in this area, there will be some road upgrade required (Figure 9). In fact, Hamersley Road narrows significantly at this point and this is one reason for the proposed upgrade.

Surface water flows are most likely to occur in the summer months during localised storm events or from cyclonic activity. Surface water flow where the road crosses the creek is episodic, with the creek flowing for short periods following local rainfall. Clearing for tracks across drainage lines will be at grade and therefore, there will not be any impact on surface water flow.

2.6.2 Surface Water Quality

The streamflow in the ephemeral creeks in Lower Fortescue catchment (and wider Pilbara) are typically fresh, but highly turbid due to the rapid rise of creek levels in response to rainfall, when flooding occurs. The highly variable nature of rainfall and flooding across the Pilbara also results in significant variation in the physical parameters across samples within the same basin. To illustrate this variation, water samples from the Lower Fortescue River basin from the DoW's *Water Information Reporting* database have been analysed and compared against available Pilbara wide surface water quality data. Available water quality data from the DoW dataset has been presented in Table 7 and includes the range across all Pilbara watercourses as well as the range within the Ashburton River basins.

Clearing within minor drainage lines will not significantly impact on surface water quality.

Table 7: Surface Water Quality Data

| | Pilbara Wide (DoW) | | Lower Fortescue | |
|---------------------|--------------------|---------|-----------------|---------|
| | Minimum | Maximum | Minimum | Maximum |
| pH | 5.2 | 9.4 | 6 | 9.2 |
| EC (µS/cm) | 3 | 6,090 | 3 | 4600 |
| Turbidity (NTU) | 0.1 | 3,200 | 0.1 | 1460 |
| Alkalinity (mg/L) | 3.6 | 420 | 6.5 | 358 |
| TDS (mg/L) | 22 | 3,932 | 22 | 3350 |
| Nitrate as N (mg/L) | 0.05 | 32 | 1 | 4 |

| | Pilbara Wide (DoW) | | Lower Fortescue | |
|-------------------------|--------------------|-------|-----------------|------|
| Hardness (mg/L) | 3.6 | 1,538 | 6.8 | 1050 |
| Dissolved Silica (mg/L) | 1 | 68 | 1 | 51 |

2.6.3 Groundwater

Groundwater within the application area is likely to occur in calcrete aquifers below the Weelumurra Plains to the south of the application area. Groundwater is likely to be close to the surface at Weelumurra Creek and at increasing depth the further away from the creek.

2.7 Social Surroundings

The main contemporary uses of the land surrounding the permit envelope area are mineral exploration, mining and pastoral activities and the permit envelope includes existing, well used roads. The permit envelope area is within the Eastern Guruma Native Title Determination area.

Fortescue will undertake all works in accordance with statutory and contractual requirements, in accordance with the appropriate approvals and Fortescue's Land Use Certification system.

Fortescue has protocols and notification arrangements with pastoralists that may be affected by the works associated with this proposal. The Proposal intersects the Hamersley pastoral station and Unallocated Crown Land. Due to the low impact nature of the proposed activities, there will be no impact to the operations at the pastoral station.

3. ENVIRONMENTAL IMPACTS AND MANAGEMENT

The environmental impacts of the proposed vegetation clearing have been considered in the following section.

3.1 Potential Impacts to Flora and Vegetation

Potential impacts to flora and vegetation resulting from the implementation of this proposal include:

- Direct loss of vegetation at a local level
- Direct loss of Flora of Conservation Significance
- Degradation of vegetation due to indirect impacts such as:
 - Fragmentation, leading to edge effects
 - Dust deposition
 - Chemical and hydrocarbon spills and leaks
 - Changes to surface hydrology

3.1.1 Direct Loss of Vegetation

Geotechnical investigations will result in the disturbance of approximately 0.9 ha of native vegetation. The loss of 0.9 ha of vegetation, next to an existing road will have no impact on the biodiversity values of the vegetation within the permit envelope or the wider area.

3.1.2 Direct Loss of Flora of Conservation Significance

No Threatened Flora listed under the *Environment Protection and Biodiversity Conservation Act 1999* or the *Biodiversity Conservation Act 2016* has been mapped within 200 km of the application area. No Priority Flora species occur within the permit envelope.

3.1.3 Degradation of vegetation

Degradation of vegetation may occur as a result of:

- uncontrolled vehicle access leading to physical damage of vegetation and/or the introduction or spread of weeds

- dust deposition on vegetation resulting from land clearing and construction activities
- introduction or spread of weed species
- leaks of containment structures, pipes, vehicles or equipment leading to contamination of soils, surface water or groundwater
- spills of chemicals or hydrocarbons leading to contamination of soils, surface water or groundwater
- inappropriate disposal of domestic waste or waste hydrocarbons and chemicals, leading to contamination of soils, surface water or groundwater.

Dust Deposition

Dust deposition on foliage can impact on a plants ability to photosynthesise, or control water loss through transpiration. One published study indicates that vegetation health is not impacted by dust deposition until relatively high levels of dust are experienced, that is, greater than 7g/m²/month (Doley, 2006). Dust deposition can occur through movement of vehicles and earth moving. The impact from dust deposition from this proposal is negligible.

Weeds

Increase in vehicle traffic including construction machinery increases the likelihood of introducing new ore spreading existing weeds. Weeds can outcompete native species leading to a decrease in vegetation health and diversity. Fortescue consider the risk of impacts to vegetation from the introduction or spread of weeds to be negligible.

Chemical Spills, Leaks and Leachate

Contamination of soil by chemical and hydrocarbon spills can impede plant growth or kill vegetation. Drainage from infrastructure may contain higher levels of chemical or hydrocarbons which may cause a decline in vegetation health. Fortescue consider the risk of impacts to vegetation from contamination and pollution to be negligible.

3.1.4 Management Measures for Flora and Vegetation

The proposed clearing has been reduced to what is deemed necessary for the upgrade of the road. Mitigation measures to manage potential impacts are captured in Table 8.

Fortescue manages clearing of native vegetation through a Land Use Certificate System (LUC). A LUC identifies the area to be disturbed and considers multiple factors, such as environmental

(significant values and approvals), heritage, pastoral leases and water, before disturbance is permitted. Each LUC application is reviewed for each factor by technical leads with Fortescue before approval. Conditions are placed on each LUC with regards to the identified factors to ensure clearing is undertaken in accordance with legal obligations and with regards to environmental or heritage values. The LUC process allows applicants to modify their application to avoid significant or sensitive values in consultation with the technical leads prior to approval of the LUC.

Conditions of the LUC may include ground inspections for conservation significant flora or fauna depending on the receiving environment and the conditions of any environmental approval applicable to the area. No LUC would be approved without the area having been subject to heritage survey.

Table 8: Management Measures for Flora and Vegetation

| Impact | Management Actions |
|-------------------------------------|---|
| Direct Loss of Vegetation and Flora | <ul style="list-style-type: none"> Review the proposed project design against the vegetation survey data to avoid/minimise clearing of significant flora and vegetation. All Threatened and Priority Flora are to be identified on the ground by appropriate flagging prior to clearing. Minimise clearing and vegetation disturbance to ensure significant flora and vegetation are protected. Conduct vegetation clearing in accordance with a permit issued under the <i>Land Use Certificate Procedure 100-PR-TA-0001</i> Ensure staff and contractors are aware of the location of significant flora and vegetation on site and their responsibility to ensure they are protected. |
| Weeds | <ul style="list-style-type: none"> Weed hygiene requirements are implemented for plant and equipment in identified weed risk areas and/or in areas where weed populations have been identified and high risk activities are proposed to be undertaken in accordance with the <i>Weed Management Plan 100-PL-EN-1017</i>. |
| Altered fire regimes | <ul style="list-style-type: none"> Site induction will inform about fire risk and potential sources. A Hot Works Permit system will be implemented. |
| Dust | <ul style="list-style-type: none"> Vehicle speeds restricted according to Traffic Management Plan 100-PR-SA-0049 Appropriate cover placed on open areas if required to minimise dust lift off post-closure. |
| Chemical and Hydrocarbon Spills | <ul style="list-style-type: none"> Ensure relevant personnel and contractors involved in chemical and hydrocarbon handling and storage activities are provided with the appropriate training and equipment as outlined in the <i>Chemical and Hydrocarbon Spills Procedures 100-PR-EN-0014</i> and the <i>Hazardous Materials Management Procedure 100-PR-SA-1059</i>. |

| Impact | Management Actions |
|--------|--|
| | <ul style="list-style-type: none"> Chemicals and hydrocarbons should be stored in accordance with AS 1940, AS 3833 or AS 3780 to minimise the potential for environmental harm. Storage should only be in designated areas. Where a chemical or hydrocarbon spill has occurred, manage the spill including any contaminated material, in accordance with the <i>Chemical and Hydrocarbon Spills Procedure 100-PR-EN-0014</i> and investigate and report the incident in accordance with the <i>Incident Event Management Procedure 100-PR-SA-0011</i>. Remediate any area declared contaminated as defined under the <i>Contaminated Sites Act 2003</i> in accordance with the DER's Contaminated Sites Management Series – Assessment Levels for Soil, Sediment and Water (2011) |

3.1.5 Conclusion – Impacts to Flora

Taking into account the existing environment, proposed activities and management strategies, Fortescue believes the impacts to flora and vegetation of the proposed clearing are not significant.

3.2 Potential Impacts to Fauna

Potential impacts to terrestrial fauna, including the conservation significant fauna and SRE invertebrates include:

- Habitat loss from direct clearing of fauna habitat, including habitat for SRE invertebrates;
- Habitat fragmentation, resulting in:
 - Restriction or removal of access to breeding habitat, foraging habitat or water sources through placement of infrastructure
 - Increased feral animal species
 - Increased weed species
- Increased vehicle strike;

These impacts are discussed further below.

3.2.1 Fragmentation of Habitat

Fragmentation occurs when a large expanse of habitat is transformed into a number of smaller patches of smaller total area due to clearing, isolating these smaller fragments from each other

by cleared areas (Wilcove, McLellan, & Dobson, 1986). Where the landscape surrounding the fragments is inhospitable to species of the original habitat and when dispersal is low, remnant patches can be considered true habitat islands and local communities will be isolates. Small habitat fragments are likely to be low in heterogeneity, that is, the habitat may not present the range of habitat variety required by some species (e.g. both foraging and breeding habitat) (Wilcove, McLellan, & Dobson, 1986).

The proposed clearing will not result in fragmentation of habitat.

3.2.2 Increased Vehicle Strike

The implementation of the proposed works will result in an increase in the number of vehicles in the local area. Vehicles may strike fauna species on roads, particularly slow-moving animals or species that are easily startled. Vehicles travelling at night are more likely to strike native fauna when visibility is reduced and more animals are on the move. Species such as birds of prey are also likely to feed off dead carcasses on roads and may also become victim to vehicle strike.

Fortescue keeps a record of all vehicle related fauna incidents. The species with the highest number of vehicle strikes at Fortescue's operating sites is the kangaroo, usually at dawn and dusk.

3.2.3 Increased Weed Species

Clearing for development and increased movement of vehicles, including earth moving machinery may result in the establishment of new populations of weed species. Increased numbers of weeds can significantly increase the risk of fire, which can impact on fauna habitat value (see further discussion later in this section). Areas of dense weed infestation can also reduce the ability of fauna to move through their habitat and impact on their ability to forage. Weed species palatable to feral herbivores may attract these animals to the area causing potential land degradation and further spreading weed species either by movement of soil or in the animal's dung. However, the very small area of clearing next to an existing road will not result in a significant increase in weed presence in the local area.

3.2.4 Management Measures for Fauna

Fortescue has applied the mitigation hierarchy to the Project in relation to terrestrial fauna. Mitigation measures to address potential impacts are detailed in Table 9.

Table 9: Management Measures for Fauna

| Impact | Management Actions |
|--------------------------|---|
| Loss of habitat | <ul style="list-style-type: none"> Record conservation significant fauna and habitat identified during a targeted fauna survey in the Corporate GIS and PIMS in accordance with the <i>Environmental Datasets – Data Governance Guidelines 100-GU-EN-0020</i>. Conduct a risk assessment to identify high risk areas, including areas where conservation significant fauna species and habitat have been identified and potential impacts are likely. Land use certification (LUC) procedure. Must be adhered to before any: ground disturbance, rehabilitation or land access. This ensures all proposed disturbance is checked for: purpose; cultural heritage; and environmental significance. No ground disturbance can take place without a valid land use certificate. Ensure infrastructure location, design, construction and operation reflects risk assessment outcomes in minimising impacts on conservation significant fauna and associated habitat. Ensure staff and contractors are provided with appropriate training to ensure conservation significant fauna and associated habitat are protected. Prior to conducting ground disturbance activities, ensure known locations of environmentally sensitive areas to be retained and protected from disturbance are identified on the ground by appropriate signage, fencing or flagging. |
| Fragmentation of habitat | <ul style="list-style-type: none"> Land use certification (LUC) procedure must be adhered to before any: ground disturbance, rehabilitation or land access. This ensures all proposed disturbance is checked for: purpose; cultural heritage; and environmental significance. No ground disturbance can take place without a valid land use certificate. |
| Increased Feral Animals | <ul style="list-style-type: none"> Domestic waste stored in appropriate bins inaccessible to animals. All domestic waste will be transported off site No domestic animals permitted on site |
| Vehicle Strike | <ul style="list-style-type: none"> To minimise the potential for fauna injuries or deaths on haul and access roads, implement appropriate mitigation measures such as speed limit restrictions, right of way for fauna and the prohibition of off-road driving. |
| Weeds | <ul style="list-style-type: none"> Weed hygiene requirements are implemented for plant and equipment in identified weed risk areas and/or in areas where weed populations have been identified and high risk activities are proposed to be undertaken in accordance with the <i>Weed Management Plan 100-PL-EN-1017</i>. |
| Changes to surface water | <ul style="list-style-type: none"> Protect natural drainage lines from construction impacts where possible to minimise impacts to water quality. |

3.2.5 Conclusion – Impacts to Fauna

Taking into account the existing environment, proposed activities and management strategies, Fortescue believes the impacts to fauna and fauna habitat of the proposed clearing are not significant.

3.3 Potential Impacts to Surface water

Potential impacts to surface water include:

- Increase turbidity through erosion of cleared areas
- Windrows, topsoil stockpiles and linear infrastructure blocking creek lines or sheet flow

These impacts are discussed further below.

3.3.1 Increase turbidity

Surface water flows over cleared areas may contain higher levels of sediments which may cause an increase in the turbidity of surface water. However, Pilbara creeks have natural high sediment loads. Fortescue consider the risk of impacts to surface water from erosion of cleared areas to be low, particularly given the area is already disturbed for existing roads.

3.3.2 Infrastructure blocking surface water flows

Roads (including windrows) may block surface water flows if not properly placed and constructed. Surface water in the Clearing Permit area occurs as creek flow in Weelumurra Creek, which may be impacted if the surface water flows are not maintained.

Altered Surface Hydrology

Pilbara creeks are typically ephemeral and with the exception of pools and groundwater-fed springs, are dry for the majority of the year. Pilbara soils typically have high initial infiltration rates where the moisture content of catchment soils is low. Significant streamflow usually occurs where moisture content of catchment soils is high, which is caused by significant rainfall in the days or weeks preceding a storm event. There are typically two different types of climatic events which cause flood response in the Pilbara, namely cyclonic activity/tropical low-pressure systems and localised diurnal thunderstorms.

The road upgrade areas are located in close proximity to Weelumurra Creek. However, Fortescue commits to maintaining surface water flow across Hamersley Road where it intercepts Weelumurra Creek.

3.3.3 Management Measures for Surface water

Fortescue has applied the mitigation hierarchy to the Project in relation to surface water. Mitigation measures to address potential impacts are detailed in Table 10.

Table 10: Management Measures for Surface Water

| Impact | Management Actions |
|--------------------------|---|
| Increase Turbidity | <ul style="list-style-type: none"> Land use certification (LUC) procedure must be adhered to before any: ground disturbance, rehabilitation or land access. This ensures all proposed disturbance is checked for: purpose; cultural heritage; and environmental significance. No ground disturbance can take place without a valid land use certificate. |
| Changes to surface water | <ul style="list-style-type: none"> Protect natural drainage lines from construction impacts where possible to minimise impacts to water quality. |

3.3.4 Conclusion – Impacts to Surface Water

Taking into account the existing environment, proposed activities and management strategies, Fortescue believes the impacts to surface water within the permit envelope are negligible.

3.4 Assessment Against the 10 Clearing Principles

The *Environmental Protection Act 1986* includes 10 principles that provide decision makers with a guide on whether native vegetation should be cleared. The principles, outlined in 'Schedule 5 – Principles for Clearing Native Vegetation', are used as a comparative tool by DWER and DMIRS in determining whether clearing activities are environmentally acceptable and capable of being appropriately managed. Table 11 assesses the proposed clearing against these Principles.

Table 11: 10 Clearing Principles

| Proponent Assessment of the Clearing Principles |
|---|
| <p>(a) Native Vegetation should not be cleared if it comprises a high level of biological diversity</p> <p>Proposed clearing is not at variance to this Principle</p> <p>Fortescue has conducted Flora surveys across a wide area encompassing the permit envelope. The Solomon Hub study area found 671 flora taxa from 229 genera (Ecologia, 2014a). The upgrade to small sections of Hamersley Road will not impact on the biological diversity identified by Ecologia (2014a).</p> <p>Only 0.9 ha of vegetation clearing is required. This will have no material impact to the extent of the vegetation communities within the clearing disturbance footprint.</p> <p>The consolidated survey area results indicates a higher level of species richness for the survey area when compared to other study areas in the local area. These higher than expected species richness values are considered to be a result of the broad extent of the study area (spanning 160 km), which encompasses a wide range of habitats and vegetation units.</p> <p>The vegetation condition of the application area has been assessed using the adapted Keighery (1994) Vegetation Condition Scale for the Eremaean and Northern Botanical Provinces. The permit envelope is considered in 'poor' condition based on its proximity to the existing road.</p> <p>Common weed species of the Pilbara region may occur within the permit envelope, particularly Buffel Grass.</p> <p>Areas that have significant environmental values have been avoided as much as possible. The application area is composed of vegetation and fauna habitat that are typical in the landscape.</p> <p>Based on the above, the proposed clearing is not at variance to this Principle.</p> |
| <p>(b) Native vegetation should not be cleared if it comprises the whole or part of, or is necessary for the maintenance of, a significant habitat for fauna indigenous to Western Australia.</p> <p>Proposed clearing is not at variance to this Principle</p> <p>Fauna habitat mapping was conducted by Ecologia (2014b).</p> <p>Only 0.3 ha of Drainage Line/River/Creek (Major) habitat will be disturbed by this proposal. This habitat type is foraging habitat for Northern Quoll, Pilbara Olive Python, Pilbara Leaf-nosed Bat and Ghost Bat.</p> <p>Based on the above, the proposed clearing is not at variance to this Principle.</p> |

Proponent Assessment of the Clearing Principles

(c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, rare flora.

Proposed clearing is not at variance to this Principle

According to available databases and flora surveys there are no threatened flora, or habitat considered significant within the permit envelope. Given the small area of clearing, there is unlikely to be any conservation significant flora within the envelope.

Based on the above, the proposed clearing is not at variance to this Principle.

(d) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of a threatened ecological community.

Proposed clearing is not at variance to this Principle.

There is no TEC or PEC within the permit envelope.

Based on the above, the proposed clearing is not at variance to this Principle.

(e) Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.

Proposed clearing is not at variance to this Principle

The application area occurs within the Hamersley subregion of the Pilbara Interim Biogeographic Regionalisation of Australia. The Hamersley subregion has not been extensively cleared and there are no vegetation communities within the application area that would be considered a remnant.

Six Beard (1975) vegetation communities within the application area comprise:

- 82; Snappy Gum (*Eucalyptus leucophloia*) low woodland over *Triodia wiseana* hummock grassland

This vegetation community is considered widespread across the Pilbara, with over 99 percent of its pre-European extent remaining.

The removal of 0.9 ha will have no impact to the extent of any vegetation community.

Based on the above, the proposed clearing is not at variance to this Principle.

(f) Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.

Proposed clearing is not likely to be at variance to this Principle

Weelumurra Creek intersects with the permit envelope. Approximately 0.3 ha of clearing will occur within riparian vegetation associated with Weelumurra Creek. This will not impact on surface water flows through Weelumurra Creek, which only flows following heavy local rainfall. The clearing in this area is merely the widening of the existing road. Surface water flows in the Creek will be maintained.

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

(g) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.

Proposed clearing is not likely to be at variance to this Principle

Proponent Assessment of the Clearing Principles

The following soils are may occur in the permit area:

- Stony Soils (203);
- Calcareous shallow loam soils (521);
- Red shallow loam (522);
- Calcareous loamy earths (542)

The management measures detailed in previous sections will assist in reducing the likelihood of land degradation occurring as a result of clearing for the Project. These management measures include surface water and weed management measures and progressive rehabilitation to reduce the amount of cleared land potentially at risk of erosion. In addition, all of the proposed clearing is for the placement of infrastructure which will be maintained and used to ensure erosion does not take place in any significance.

Based on the above, the proposed clearing is not at variance to this Principle.

(h) Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area.

Proposed clearing is not at variance to this Principle

There are nearest by conservation areas (Karijini National park) is located 24 km east of the proposed disturbance, thus the proposed disturbance will not have an impact on its conservation values.

Based on the above, the proposed clearing is not at variance to this Principle.

(i) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water.

Proposed clearing is not at variance to this Principle

Groundwater in the area is likely to be close to the surface at Weelumurra Creek, then at increasing depth further away from the creek. Only 0.3 ha will be cleared in the vicinity of Weelumurra Creek.

There are no permanent surface water features within the application area. Surface water is only present following significant rainfall events. The proposed clearing is unlikely to have a significant impact on surface water quality during these sporadic events. Appropriate vegetation clearing and materials handling management measures will be put in place to minimise the potential impact on water quality.

Based on the above, the proposed clearing is not at variance to this Principle.

(j) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.

Proposed clearing is not at variance to this Principle

The permit envelope is located within the Lower Fortescue catchment, a tributary of the Lower Fortescue River. A small portion of the permit envelope is located within the Weelemurra Creek, a tributary of the Lower Fortescue River.

Proponent Assessment of the Clearing Principles

Weelumurra Creek is an ephemeral water course that flows only after heavy rainfall. In total only 0.9 ha of clearing will occur within the catchment adjacent to an existing road. This small mount of clearing will not increase flood heights or velocity.

Based on the above, the proposed clearing is not at variance to this Principle.

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Figure 1: Proposal Location

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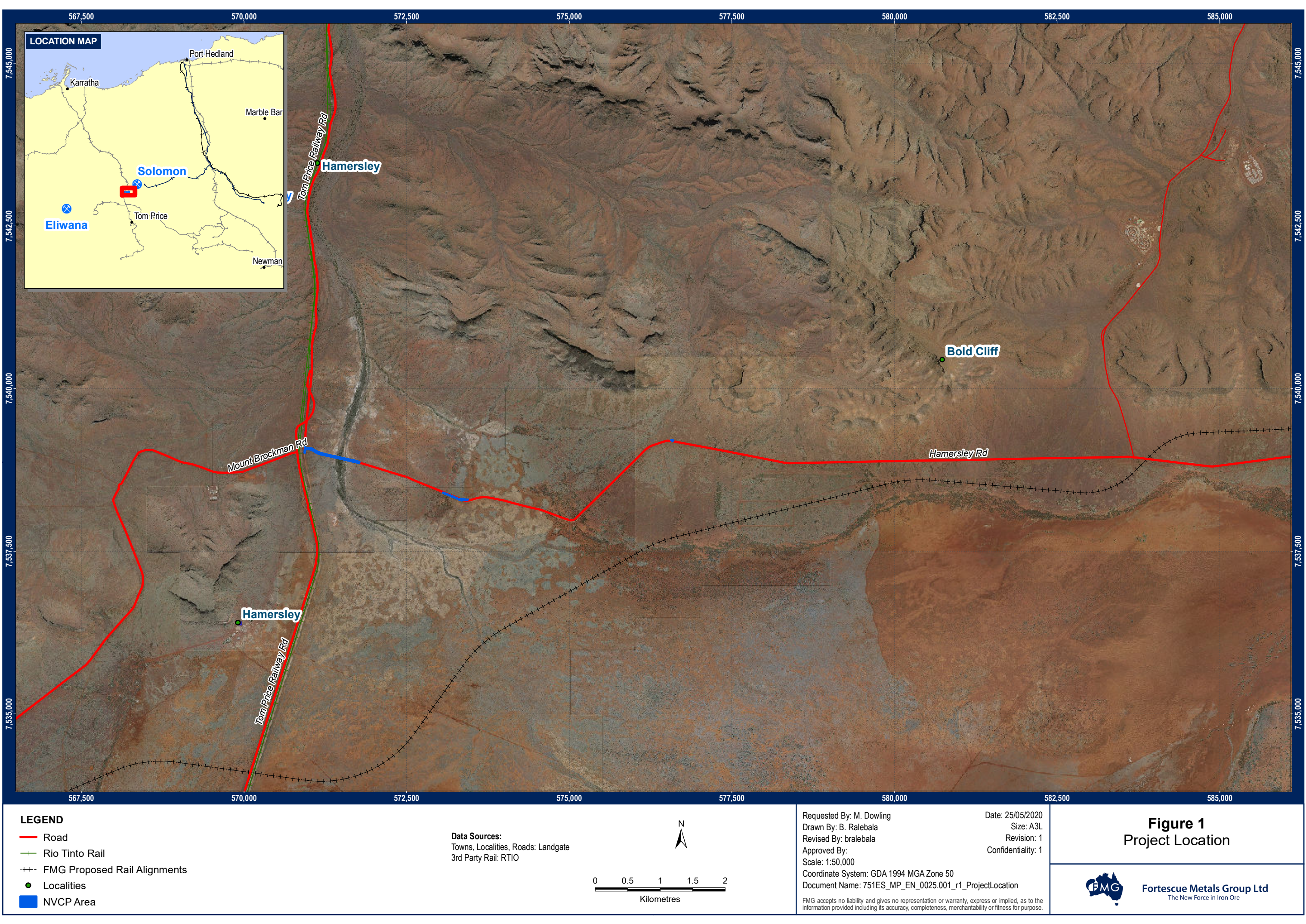
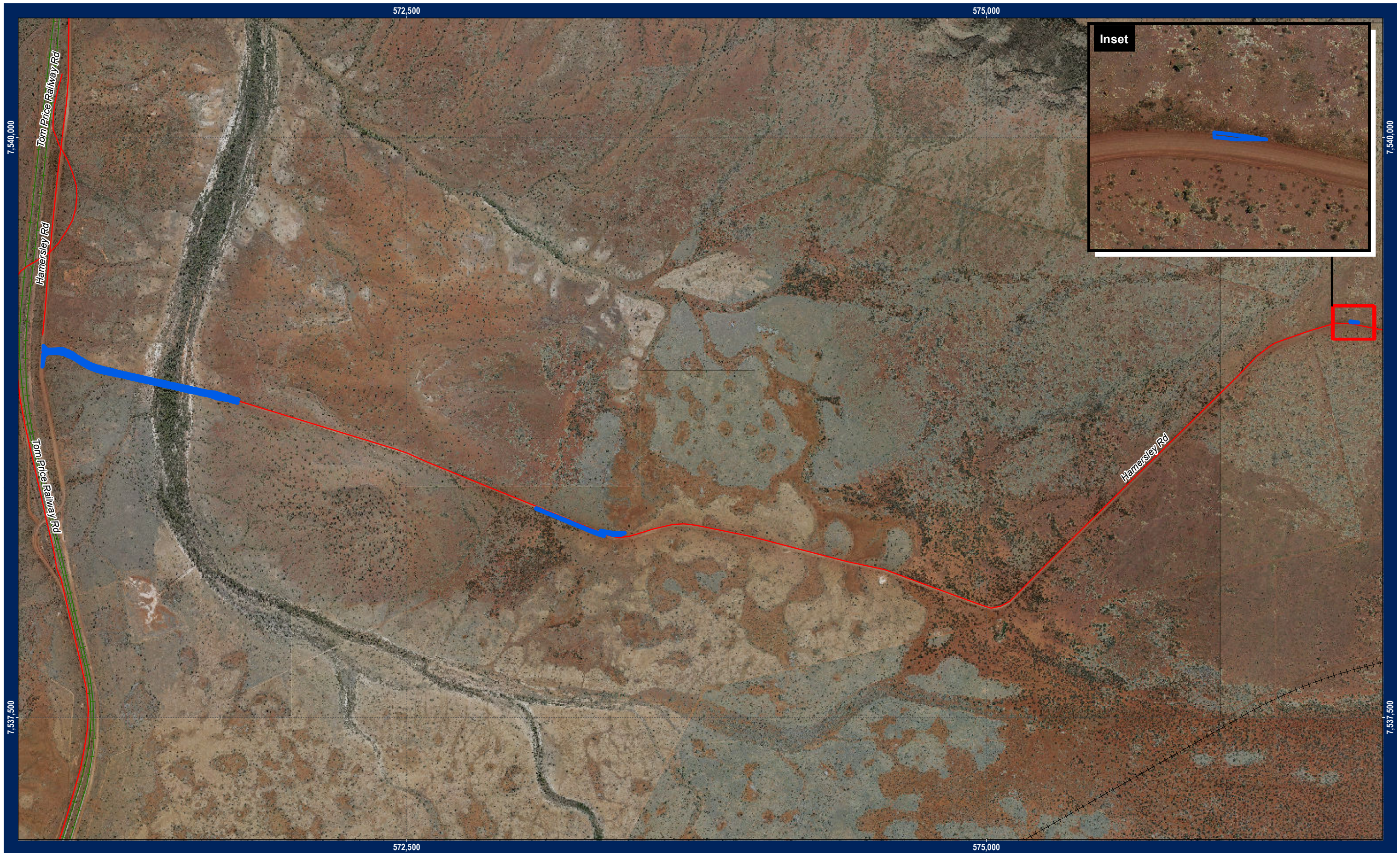


Figure 2: Permit Envelope

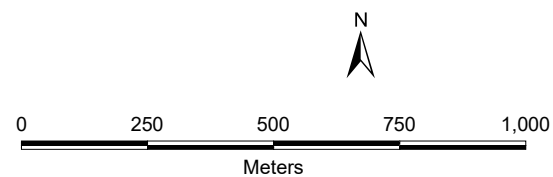
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LEGEND

- Road
- Rio Tinto Rail
- - - FMG Proposed Rail Alignments
- NVCP Area

Data Sources:
Roads: Landgate
3rd Party Rail: RTIO



Requested By: M. Dowling
Drawn By: B. Ralebala
Revised By: bralebala
Approved By:
Scale: 1:15,000
Coordinate System: GDA 1994 MGA Zone 50
Document Name: 751ES_MP_EN_0025.002_r1_Permit_Envelope

Date: 25/05/2020
Size: A3L
Revision: 1
Confidentiality: 1

Figure 2
Permit Envelope



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Figure 3: Climate Averages

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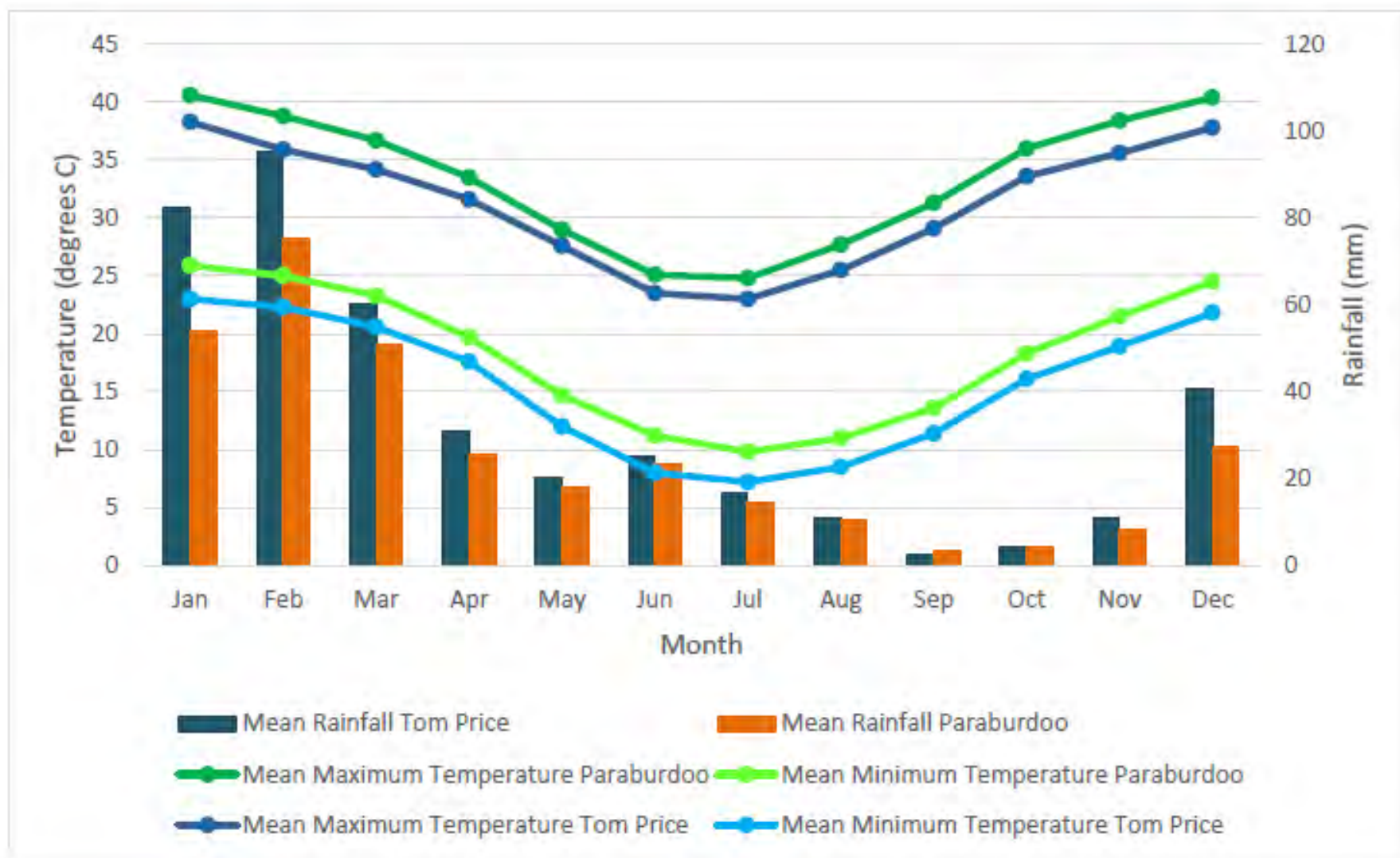
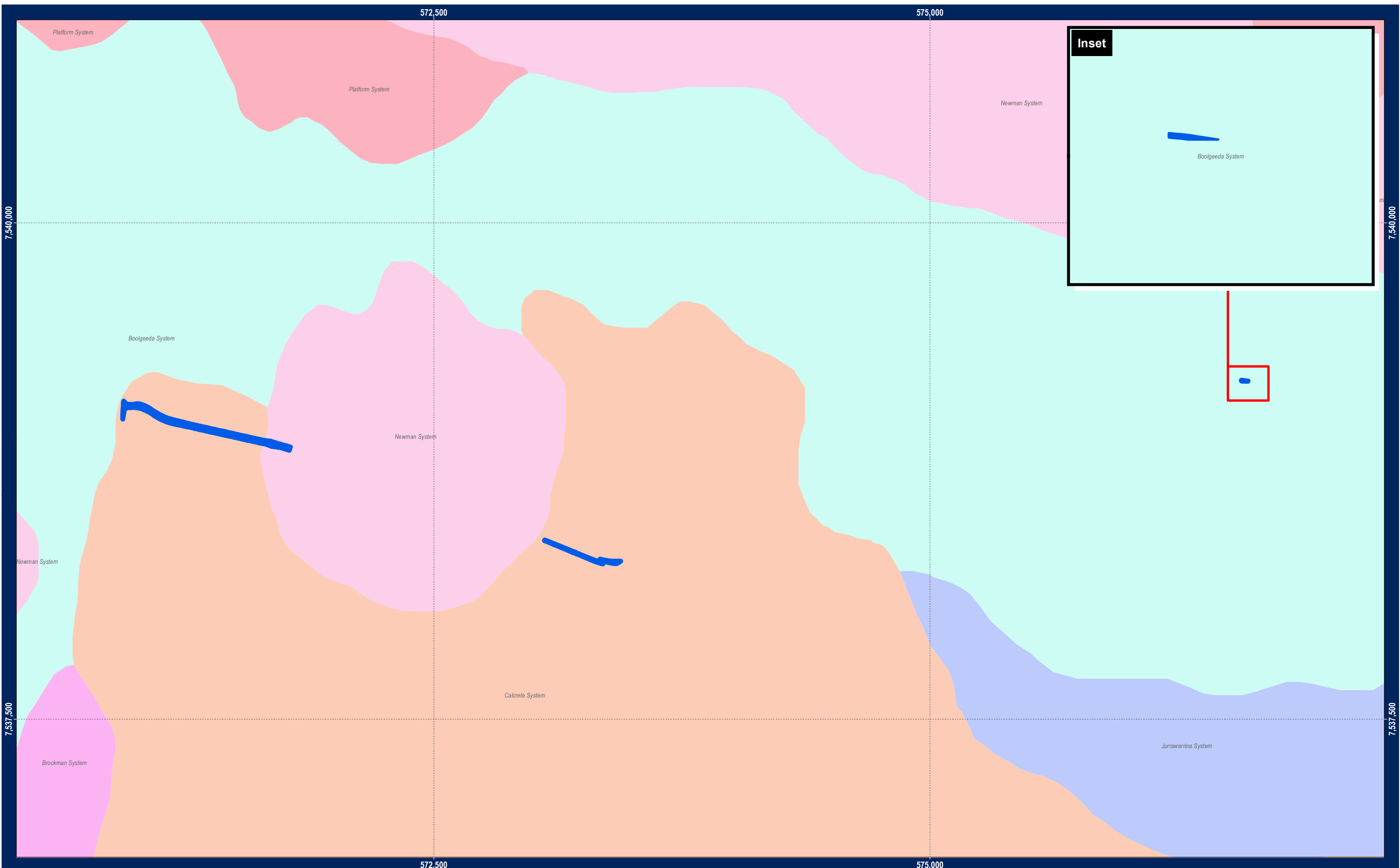


Figure 4: Land Systems

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LEGEND

NVCP Area

WA Land Systems

Boolgeeda System

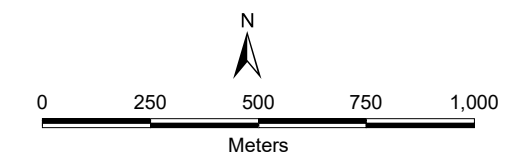
Brockman System

Calcrete System

Newman System

Platform System

Jurrawarrina System



Requested By: M. Dowling
Drawn By: B. Ralebala
Revised By: bralebala
Approved By:
Scale: 1:17,500
Coordinate System: GDA 1994 MGA Zone 50
Document Name: 751ES_MP_EN_0025.004_r1_LandSystems

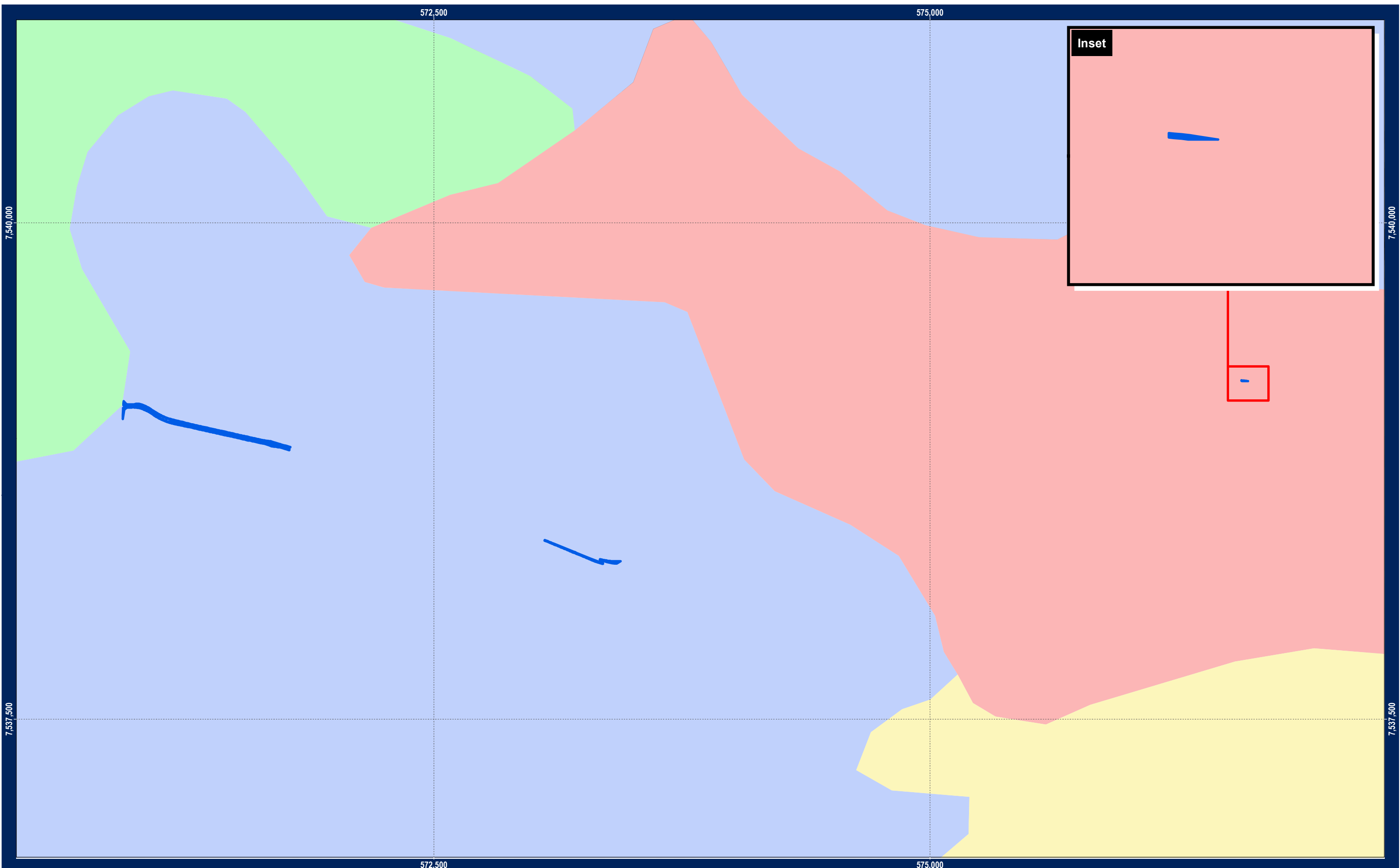
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Figure 4
Land Systems

Figure 5: Beard Vegetation

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LEGEND

NVCP Area

Pre European Vegetation

- HAMMERSLEY_175
- HAMMERSLEY_18
- HAMMERSLEY_565
- HAMMERSLEY_82

Data Sources:
Pre European Veg.: DoA, 2003

0 250 500 750 1,000
Meters

Requested By: B. Sinclair
Drawn By: B. Ralebala
Revised By: bralebala
Approved By:
Scale: 1:17,500
Coordinate System: GDA 1994 MGA Zone 50
Document Name: 751ES_MP_EN_0025.005_r1_Beard Pre European Vegetation

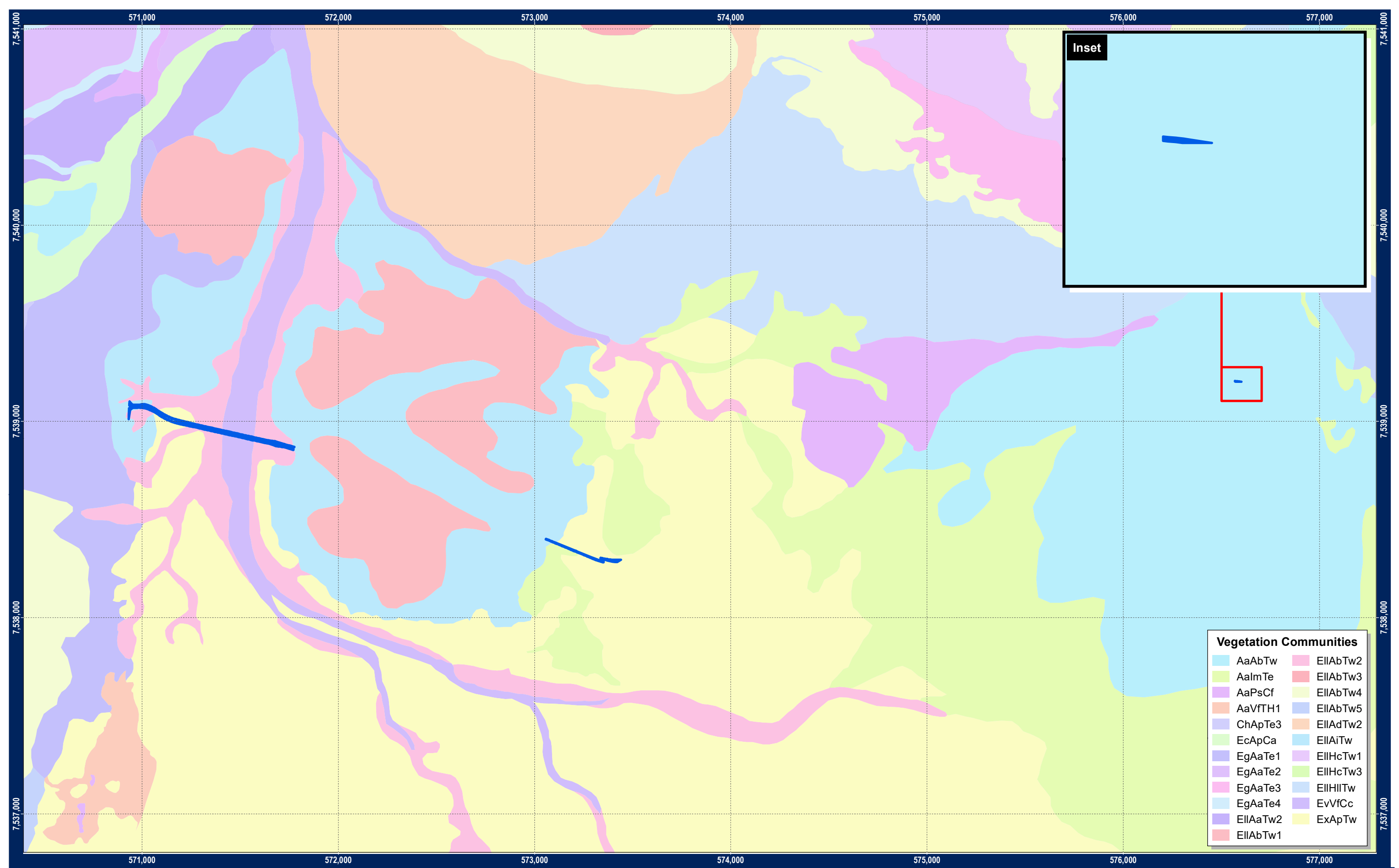
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Figure 5
Beard Pre European Vegetation

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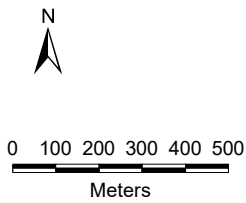
Figure 6: Ecologia 2014 vegetation communities

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| Vegetation Communities | |
|------------------------|----------|
| AaAbTw | EIIAbTw2 |
| AaImTe | EIIAbTw3 |
| AaPsCf | EIIAbTw4 |
| AaVfTH1 | EIIAbTw5 |
| ChApTe3 | EIIAdTw2 |
| EcApCa | EIIAiTw |
| EgAaTe1 | EIIHcTw1 |
| EgAaTe2 | EIIHcTw3 |
| EgAaTe3 | EIIHITw |
| EgAaTe4 | EvVfCc |
| EIIAaTw2 | ExApTw |
| EIIAbTw1 | |

LEGEND
 NVCP Area



Data Sources:
Homestead: Landgate

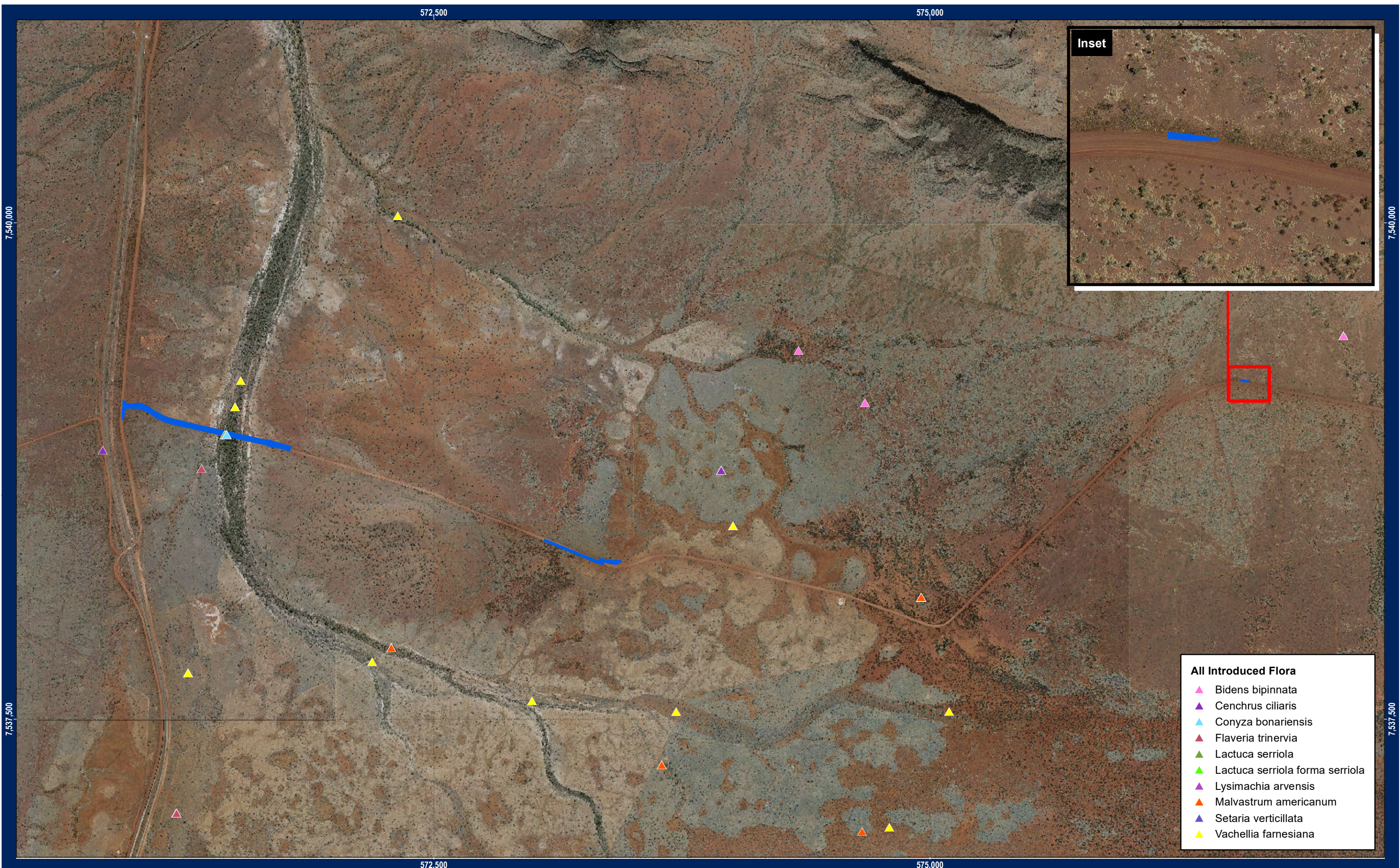
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| Requested By: B. Sinclair | Date: 25/05/2020 |
| Drawn By: B. Ralebala | Size: A3L |
| Revised By: bralebala | Revision: 1 |
| Approved By: | Confidentiality: 1 |
| Scale: 1:17,500 | |
| Coordinate System: GDA 1994 MGA Zone 50 | |
| Document Name: 751ES_MP_EN_0025.006_r1_Vegetation_Communities | |

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Figure 6
Vegetation Communities

Figure 7: Weed Species

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LEGEND

■ NVCP Area

N

0 250 500 750 1,000

Meters

Requested By: M. Dowling
Drawn By: B. Ralebala
Revised By: bralebala
Approved By:
Scale: 1:17,500
Coordinate System: GDA 1994 MGA Zone 50
Document Name: 751ES_MP_EN_0025.007_r2_Weed_Species

Date: 25/05/2020
Size: A3L
Revision: 2
Confidentiality: 1

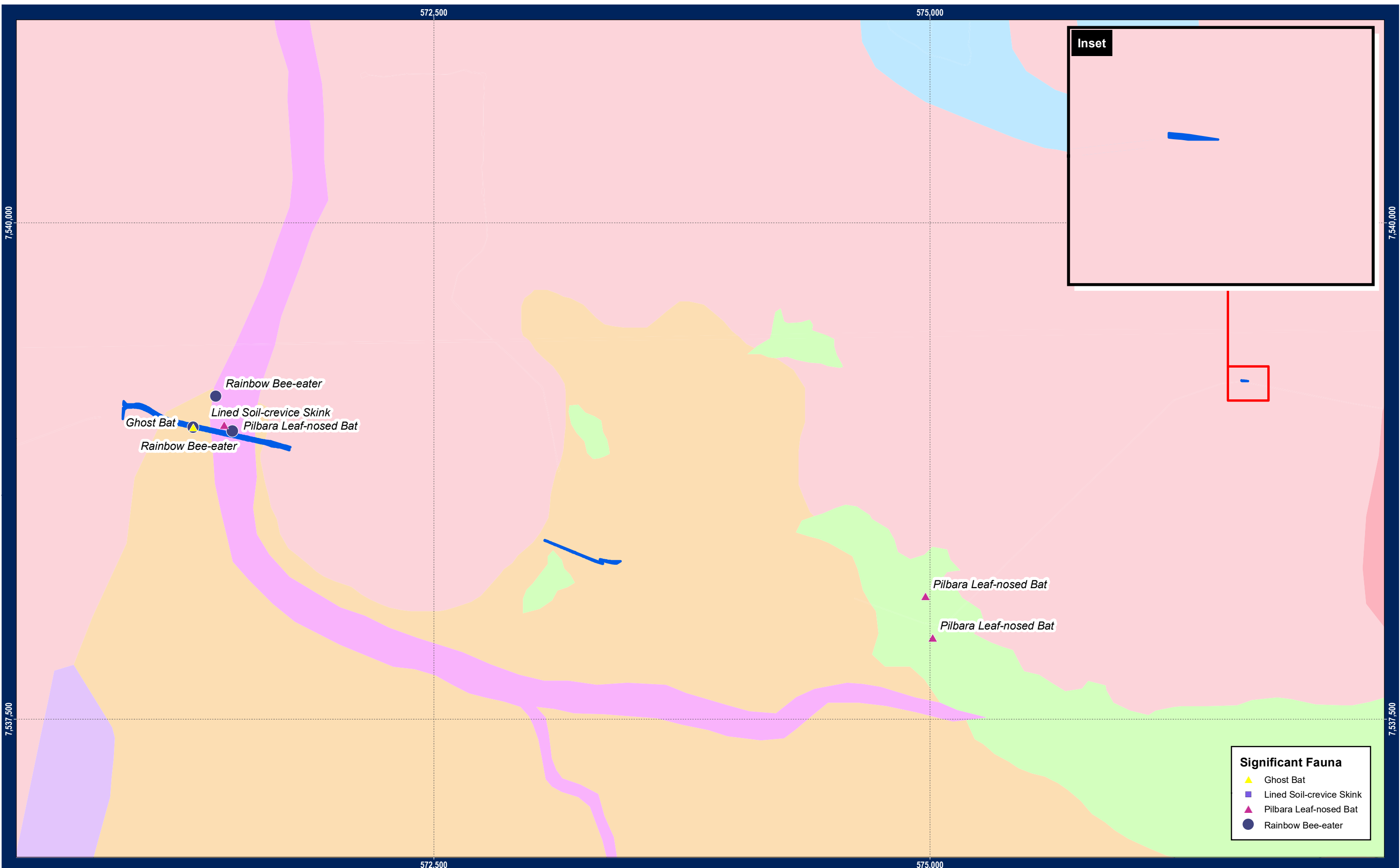
Figure 7
Weed Species

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- All Introduced Flora**
- ▲ Bidens bipinnata
 - ▲ Cenchrus ciliaris
 - ▲ Conyza bonariensis
 - ▲ Flaveria trinervia
 - ▲ Lactuca serriola
 - ▲ Lactuca serriola forma serriola
 - ▲ Lysimachia arvensis
 - ▲ Malvastrum americanum
 - ▲ Setaria verticillata
 - ▲ Vachellia farnesiana

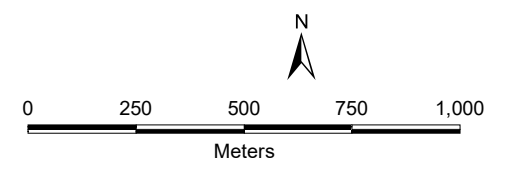
Figure 8: Fauna Habitat

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LEGEND

- | | | |
|-----------------------------------|----------------------|------------------------|
| NVCP Area | Fauna Mapping | Plain (cracking clay) |
| Drainage line/River/Creek (Major) | | Plain (stony calcrete) |
| Hilltops/ridges/plateaux | | Plain (stony gibber) |
| Plain (alluvial) | | Shrubland (open) |



Requested By: J. Humphrey
Drawn By: B. Ralebala
Revised By: bralebala
Approved By:
Scale: 1:17,500
Coordinate System: GDA 1994 MGA Zone 50
Document Name: 751ES_MP_EN_0025.008_r1_FaunaHabitat

Date: 25/05/2020
Size: A3L
Revision: 2
Confidentiality: 1

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Figure 8
Fauna Habitat and
Significant Fauna



Figure 9: Weelumurra Creek

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LEGEND

- Drainage
- ▭ NVCP Area


0 25 50 75 100
Meters

Data Sources:
Drainage: DWER, 2014
Homesteads: Landgate

Requested By: B. Sinclair
Drawn By: B. Ralebala
Revised By: bralebala
Approved By:
Scale: 1:2,000
Coordinate System: GDA 1994 MGA Zone 50
Document Name: 751ES_MP_EN_0025.009_r1_Weelumura Creek

Date: 21/05/2020
Size: A3L
Revision: 1
Confidentiality: 1

Figure 9
Weelumura Creek



Fortescue Metals Group Ltd
The New Force in Iron Ore

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Appendix 1. Letter of Authority – Shire of Ashburton

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Enquiries: Janelle Fell
Telephone: 08 9188 4440
Our Ref: ED77 | 2055083



Tuesday, 26 May 2020

Department of Water and Environmental Regulation
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Joondalup DC WA 6919

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ABN 45 503 070 070

Dear Sir/Madam

Letter of Authority – Application for Clearing Permit

The Shire of Ashburton (Shire) consents to Fortescue Metals Group Ltd (FMG) submitting an Application for Clearing Permit for works associated with Hamersley Road.

Hamersley Road is not dedicated as a public road however, is included on the Shire's Road Register as the Shire has historically maintained the road as a form of public road to access Mt Sheila. The Shire's legal counsel advised as the public has a right of access, because the road leads from one dedicated road to a public place, Hamersley Road is a road, which under the *Land Administration Act 1997*, the Shire is obliged to maintain.

Council endorsed a Deed for FMG to undertake the Construction, Maintenance and Works of Hamersley Road. Resultant, the Shire now authorises FMG to apply to DWER for a Clearing Permit to undertake required works.

Please contact Janelle Fell at Janelle.Fell@ashburton.wa.gov.au or 9188 4440 should you have any questions.

Yours sincerely

John Bingham
Acting Chief Executive Officer