Published on: 20 April 2011 Statement No.: 862

STATEMENT THAT A PROPOSAL MAY BE IMPLEMENTED (PURSUANT TO THE PROVISIONS OF THE *ENVIRONMENTAL PROTECTION ACT 1986)*

SOLOMON IRON ORE PROJECT

Proposal: The proposal is to develop and operate two new mines at a greenfield site approximately 60 kilometres north of Tom Price, and to construct and operate a railway up to 130 kilometres in length from the mine site to the existing FMG railway.

The proposal is further documented in schedule 1 of this statement.

Proponent: Fortescue Metals Group Limited

Proponent Address: Level 2, 87 Adelaide Terrace,
EAST PERTH WA 6004

Assessment Number: 1841

Report of the Environmental Protection Authority: Report 1386

The proposal referred to in the above report of the Environmental Protection Authority may be implemented. The implementation of that proposal is subject to the following conditions and procedures:

1 Proposal Implementation

1-1 The proponent shall implement the proposal as documented and described in schedule 1 of this statement subject to the conditions and procedures of this statement.

2 Proponent Nomination and Contact Details

2-1 The proponent for the time being nominated by the Minister for Environment under sections 38(6) or 38(7) of the *Environmental Protection Act 1986* is responsible for the implementation of the proposal.

2-2 The proponent shall notify the Chief Executive Officer of the Office of the Environmental Protection Authority of any change of the name and address of the proponent for the serving of notices or other correspondence within 30 days of such change.

3 Time Limit of Authorisation

3-1 The authorisation to implement the proposal provided for in this statement shall lapse and be void five years after the date of this statement if the proposal to which this statement relates is not substantially commenced.

3-2 The proponent shall provide the Chief Executive Officer of the Office of the Environmental Protection Authority with written evidence which demonstrates that the proposal has substantially commenced on or before the expiration of five years from the date of this statement.

4 Compliance Reporting

4-1 The proponent shall prepare and maintain a compliance assessment plan to the satisfaction of the Chief Executive Officer of the Office of the Environmental Protection Authority.

4-2 The proponent shall submit to the Chief Executive Officer of the Office of the Environmental Protection Authority the compliance assessment plan required by condition 4-1 at least six months prior to the first compliance report required by condition 4-6, or prior to implementation, whichever is sooner.

The compliance assessment plan shall indicate:

1 the frequency of compliance reporting;

2 the approach and timing of compliance assessments;

3 the retention of compliance assessments;

4 the method of reporting of potential non-compliances and corrective actions taken;

5 the table of contents of compliance assessment reports; and

6 public availability of compliance assessment reports.

4-3 The proponent shall assess compliance with conditions in accordance with the compliance assessment plan required by condition 4-1.

4-4 The proponent shall retain reports of all compliance assessments described in the compliance assessment plan required by condition 4-1 and shall make those reports available when requested by the Chief Executive Officer of the Office of the Environmental Protection Authority.

4-5 The proponent shall advise the Chief Executive Officer of the Office of the Environmental Protection Authority of any potential non-compliance within seven days of that non-compliance being known.

4-6 The proponent shall submit to the Chief Executive Officer of the Office of the Environmental Protection Authority the first compliance assessment report fifteen months from the date of issue of this Statement addressing the twelve month period from the date of issue of this Statement and then annually from the date of submission of the first compliance assessment report.

The compliance assessment report shall:

1 be endorsed by the proponent's Chief Executive Officer or a person delegated to sign on the Chief Executive Officer's behalf;

2 include a statement as to whether the proponent has complied with the conditions;

3 identify all potential non-compliances and describe corrective and preventative actions taken;

4 be made publicly available in accordance with the approved compliance assessment plan; and

5 indicate any proposed changes to the compliance assessment plan required by condition 4-1.

5 Public Availability of Data

5-1 Within three months of the issue of this Statement, and for the remainder of the life of the proposal, the proponent shall make all environmental data (including sampling design and sampling methodology) used in the assessment of this proposal publicly available in a manner approved by the Chief Executive Officer of the Office of the Environmental Protection Authority.

6 Priority Species and Significant Vegetation – Mine Site

6-1 Prior to ground disturbing activities, excluding establishment of access roads or any other preliminary works as approved by the Chief Executive Officer of the Office of the Environmental Protection Authority, and within 12 months of

the commencement of all other ground disturbing activities the proponent shall conduct and submit to the Chief Executive Officer of the Office of the Environmental Protection Authority a survey of the Robe Pisolite vegetation unit and the priority species *Gompholobium karijini* within the project area to the satisfaction of the Chief Executive Officer of the Office of the Environmental Protection Authority on advice from the Department of Environment and Conservation.

6-2 At least three months prior to ground disturbing activities associated with the Zion deposit, the proponent shall demonstrate that mining of the deposit will not result in a significant adverse impact on the conservation of *Gompholobium karijini* (ref. voucher M.E Trudgen & S.M Maley MET 10580 (PERTH 06090508) or any Robe Pisolite vegetation units that may be restricted in distribution to the satisfaction of the Chief Executive Officer of the Office of the Environmental Protection Authority.

6-3 The proponent shall make the results of the survey required by condition 6-1 publicly available in a manner approved by the Chief Executive Officer of the Office of the Environmental Protection Authority.

7 Priority Species – Rail Corridor

7-1 Prior to the commencement of ground disturbing activities associated with the railway, (other than minor and preliminary works previously approved by the Chief Executive Officer of the Office of the Environmental Protection Authority) the proponent shall conduct targeted surveys for Priority Flora species within the rail corridor, including *Aristida jerichoensis* variety *subspinulifera*, *Paspalidium retiglume, and Goodenia nuda* to the satisfaction the Chief Executive Officer of the Office of the Environmental Protection Authority on advice from the Department of Environment and Conservation.

7-2 Prior to commencement of ground disturbing activities associated with the railway, the proponent shall demonstrate that all rail infrastructure including access roads, construction camps and borrow pits will be located to avoid impacts to Priority Flora identified through condition 7-1 as far as practicable to the satisfaction of the Chief Executive Officer of the Office of the Environmental Protection Authority.

7-3 Prior to the commencement of ground disturbing activities associated with the railway, the proponent shall provide a final rail alignment which demonstrates that Wall Creek Waterhole will not be impacted.

7-4 The proponent shall make the results of the surveys required by condition 7-1 publicly available in a manner approved by the Chief Executive Officer of the Office of the Environmental Protection Authority.

8 Weeds

8-1 The proponent shall ensure that:

1. Prior to commencement of ground disturbing activities reference sites on nearby land which will not be impacted during implementation of the proposal are chosen in consultation with the Office of the Environmental Protection Authority, on advice from the Department of Environment and Conservation and a baseline survey undertaken;

2. Prior to commencement of ground disturbing activities, impact sites within the proposal area are chosen in consultation with the Office of the Environmental Protection Authority, on advice from the Department of Environment and Conservation, and a baseline survey undertaken;

3. No new species of weeds (including both declared weeds and environmental weeds) are introduced into the proposal area as a result of the implementation of the proposal;

4. The cover of weeds (including both declared weeds and environmental weeds) within the proposal area does not exceed that existing on reference sites determined in accordance with condition 8-1(1); and

5. The reference sites and impact sites are to be monitored every two years after commencement of ground disturbing activities to determine whether changes in weed cover and type are as a result of project implementation or broader regional changes.

9 Rehabilitation

9-1 The proponent shall undertake progressive rehabilitation, beginning within 12 months of the commencement of ground-disturbing activities and continuing until the following outcomes are achieved to the satisfaction of the CEO:

1. The waste material landforms and tailings storage facility shall be non-polluting and shall be constructed so that their stability, surface drainage, resistance to erosion and ability to support local native vegetation are similar to undisturbed natural analogue landforms as demonstrated by Ecosystem Function Analysis or other methodology acceptable to the Chief Executive Officer of the Office of the Environmental Protection Authority on advice from the Department of Environment and Conservation and the Department of Mines and Petroleum.

2. The waste material landforms, tailings storage facility and other areas disturbed through implementation of the proposal, shall be progressively rehabilitated with vegetation composed of native plant species of local provenance (defined as seed material collected within a suitable maximum distance of the proposal area as agreed by the

Chief Executive Officer of the Office of the Environmental Protection Authority on advice from the Department of Environment).

3. The percentage cover and species diversity of living self sustaining native vegetation in all rehabilitation areas shall be comparable to that of undisturbed natural analogue sites as demonstrated by Ecosystem Function Analysis or other methodology acceptable to the Chief Executive Officer of the Office of the Environmental Protection Authority.

9-2 Rehabilitation activities shall continue until such time as the requirements of condition 9-1 are met, and are shown to be met by inspections and reports, for a minimum of five years following mine completion to the satisfaction of the Chief Executive Officer of the Office of the Environmental Protection Authority, on advice of the Department of Mines and Petroleum.

Note: The methodology for Ecosystem Function Analysis is set out in Tongway DJ and Hindley 2004 *Landscape Function Analysis – Procedures for Monitoring and Assessing Landscapes*, Commonwealth Scientific and Industrial Research Organisation Sustainable Ecosystems, Canberra.

10 Surface Water

10-1 The proponent shall ensure that changes to surface water flows related to the construction of the railway do not adversely affect any significant vegetation community, including Mulga.

10-2 To verify that the requirements of condition 10-1 are met the proponent shall:

1. identify any areas of significant vegetation potentially impacted by changes to surface water flows related to the proposal in consultation with the Department of Environment and Conservation;

2. undertake baseline monitoring of areas of significant vegetation;

3. determine trigger levels for surface water flows, vegetation community health and vegetation cover in consultation with the Department of Environment and Conservation;

4. design and locate environmental culverts and other surface water control features in consultation with the Department of Environment and Conservation;

5. monitor surface water flows, including in the vicinity of significant vegetation; and
6. monitor the health and cover of significant vegetation to be retained in the proposal area and in adjacent areas.

Monitoring is to be carried out according to a method and schedule determined to the satisfaction of the Chief Executive Officer of the Office of the Environmental Protection Authority prior to the commencement of

construction of the railway, and is to be carried out until such time as the Chief Executive Officer of the Office of the Environmental Protection Authority determines on advice from the Department of Environment and Conservation that monitoring actions may cease.

10-3 In the event that monitoring required by condition 10-2 indicates an exceedance of trigger levels determined by condition 10-2 (3) as a result of railway construction:

1. the proponent shall report such findings to the Chief Executive Officer of the Office of the Environmental Protection Authority within 21 days of the exceedance being identified;

2. in the report required by condition 10-3 (1) the proponent shall provide evidence which allows determination of the cause of the exceedance;

3. if determined by the Chief Executive Officer of the Office of the Environmental Protection Authority to be a result of activities undertaken in implementing the proposal, the proponent shall submit actions to be taken to remediate the exceedance within 21 days of the determination being made by the Chief Executive Officer of the Office of the Environmental Protection Authority; and

4. the proponent shall implement actions to remediate the exceedance upon approval of proposed actions by the Chief Executive Officer of the Office of the Environmental Protection Authority and shall continue these actions until such time as the Chief Executive Officer of the Office of the Environmental Protection Authority determines that the remedial actions may cease.

10-4 The proponent shall submit annually the results of monitoring required by condition 10-2 to the Chief Executive Officer of the Office of the Environmental Protection Authority.

10-5 The proponent shall make the monitoring reports required by condition 10-4 publicly available in a manner approved by the Chief Executive Officer of the Office of the Environmental Protection Authority.

11 Groundwater

11-1 The proponent shall ensure that water levels in groundwater fed pools within and adjacent to the project area are maintained consistent with pre-mining levels as defined in the report required by condition 11-2.

11-2 Prior to the commencement of dewatering, the proponent shall submit a report developed in consultation with Department of Environment and Conservation and the Department of Water, to the satisfaction of the Chief Executive Officer of the Office of the Environmental Protection Authority.

The report shall provide details including the timing, methodology, infrastructure design, trigger levels and monitoring strategies of a supplementation program designed to support water levels of groundwater fed pools within the project area.

11-3 In order to verify that the requirements of condition 11-1 are met, the proponent shall:

1. identify all sites and parameters to be monitored to the satisfaction of the Chief Executive Officer of the Office of the Environmental Protection Authority on advice from the Department of Environment and Conservation prior to the commencement of dewatering;

2. provide the results of baseline monitoring of water levels and native vegetation health and abundance at all sites identified by condition 11-3 (1) prior to the commencement of dewatering;

3. implement the supplementation program described in the report required by 11-2, or revisions approved by the Chief Executive Officer of the Office of the Environmental Protection Authority;

4. monitor groundwater and/or surface water levels at each of the agreed sites; and

5. monitor the health and cover of riparian vegetation at each of the agreed sites.

Monitoring is to be carried out to the satisfaction of the Chief Executive Officer of the Office of the Environmental Protection Authority, and is to continue until such time as the Chief Executive Officer of the Office of the Environmental Protection Authority determines that monitoring and management actions may cease.

11-4 The proponent shall submit annually the results of monitoring required by condition 11-3 to the Chief Executive Officer of the Office of the Environmental Protection Authority.

11-5 In the event that monitoring required by condition 11-3 indicates a decline in water levels at any spring, pool or creek, or in the health and condition of the riparian vegetation:

1. the proponent shall report such findings to the Chief Executive Officer of the Office of the Environmental Protection Authority within seven (7) days of the decline being identified;

2. in the report required by condition 11-5 (1) the proponent shall provide evidence which allows determination of the cause of the decline;

3. if determined by the Chief Executive Officer of the Office of the Environmental Protection Authority to be a result of activities

undertaken in implementing the proposal, the proponent shall determine actions to be taken to remediate the decline in consultation with the Department of Environment and Conservation;

4. the proponent shall submit proposed actions to the Chief Executive Officer of the Office of the Environmental Protection Authority within 21 days of the determination being made by the Chief Executive Officer of the Office of the Environmental Protection Authority; and

5. the proponent shall implement the actions determined under condition 11-5 (4) to halt the decline and remediate the impact to riparian and groundwater dependent vegetation upon approval of the Chief Executive Officer of the Office of the Environmental Protection Authority and shall continue until such time the Chief Executive Officer of the Office of the Environmental Protection Authority determines that the remedial actions may cease.

11-6 The proponent shall ensure that water is supplied for supplementation of natural features in preference to water required for mining operations.

11-7 The proponent shall make the monitoring reports required by conditions 11-3 and 11-4 publicly available in a manner approved by the Chief Executive Officer of the Office of the Environmental Protection Authority.

12 Vertebrate Fauna

12-1 Prior to the commencement of blasting activities, and prior to clearing in any areas likely to contain habitat suitable for Northern Quoll, Pilbara Leaf-nosed Bat or Mulgara species, whichever is sooner, the proponent shall develop a Fauna Management Plan to the satisfaction of the Chief Executive Officer of the Office of the Environmental Protection Authority on advice from the Department of Environment and Conservation.

12-2 The Fauna Management Plan shall include, but is not limited to, the following:

- management strategies to minimise impacts to the Pilbara Leaf-nosed Bat;
- management strategies for minimisation of impacts to Northern Quoll and Mulgara, developed in consultation with the Department of Environment and Conservation;
- management strategies for minimisation of impacts to habitat associated with the Northern Quoll;
- measures to protect a range of fauna habitat types, including creek bed and rocky habitats; and
- detailed monitoring procedures to determine the effectiveness of management strategies.

12-3 The proponent shall implement for the life of the project the Fauna Management Plan required by condition 12-1, or any subsequent approved revisions.

12-4 The proponent shall make the Fauna management Plan required by condition 12-1 publicly available in a manner approved by the Chief Executive Officer of the Office of the Environmental Protection Authority

13 Troglofauna

13-1 The proponent shall undertake troglofauna surveys biannually at a minimum in geological formations similar to the project area to validate predictions of habitat connectivity and improve knowledge of troglofauna populations in the region to inform future management of mining and associated operations, until such time as the Chief Executive Officer of the Office of the Environmental Protection Authority determines that sufficient knowledge of troglofauna populations has been acquired.

13-2 The troglofauna surveys shall be undertaken in accordance with the draft Environmental Protection Authority Guidance Statement 54a - *Sampling Methods and Survey Considerations for Subterranean Fauna in Western Australia* (August 2007) or its revisions and to the satisfaction of the Chief Executive Officer of the Office of the Environmental Protection Authority.

13-3 Within 30 months of ground disturbing activities the proponent shall prepare and submit a technical report based on the results of the surveys required by condition 13-1 to the requirements of the Chief Executive Officer of the Office of the Environmental Protection Authority on advice of the Department of Environment and Conservation.

13-4 Three months prior to commencement of ground disturbing activities associated with the Zion deposit, the proponent shall demonstrate that similar and connected troglofauna habitat exists outside of areas that have been or are likely to be impacted by mining to the satisfaction of the Chief Executive Officer of the Office of the Environmental Protection Authority on advice of the Department of Environment and Conservation.

13-5 The proponent shall prepare and submit annually further technical reports based on the results of the surveys required by condition 13-1 to the requirements of the Chief Executive Officer of the Office of the Environmental Protection Authority on advice of the Department of Environment and Conservation.

13-6 The proponent shall make the reports required by conditions 13-3, 13-4 and 13-5 publicly available in a manner approved by the Chief Executive Officer of the Office of the Environmental Protection Authority.

14 Mine Plan and Conceptual Closure Strategy

14-1 Prior to construction of the mine waste rock dumps and the tailings storage facilities for both the Early Ore and Full Production stages respectively, the proponent shall submit a detailed, staged and project-specific Mine Plan and Preliminary Closure Strategy to the requirements of the Chief Executive Officer of the Office of the Environmental Protection Authority on advice of

the Department of Mines and Petroleum and the Department of Environment and Conservation.

Note: The Mine Plan and Preliminary Closure Strategy shall be staged in accordance with the development of the project, including Early Ore and Full Production stages.

14-2 The Mine Plan and Preliminary Closure Strategy shall include detailed results of geochemical and geophysical characterisation of materials, including tailings, in particular the potential for acid drainage, metalliferous drainage, and of the occurrence of dispersive materials and asbestiform minerals. Testing for materials with potential to cause acid and/or metalliferous drainage shall include static and kinetic testing carried out using techniques and timeframes consistent with national and international standards (*Leading Practice Sustainable Development Program for the Mining Industry – Managing Acid and Metalliferous Drainage 2009* – Department of Industry, Tourism and Resources; The Global Acid Rock Drainage Guide 2009 – International Network for Acid Prevention).

14-3 The Mine Plan and Preliminary Closure Strategy shall include detailed technical information on proposed design of tailings storage facilities including tailings characterisation studies, seepage controls and monitoring proposed.

14-4 The Mine Plan and Preliminary Closure Strategy shall provide detailed technical information on proposed management measures to prevent pollution, environmental harm or human health impacts during implementation of the proposal and after mine completion and closure.

14-5 The Mine Plan and Preliminary Closure Strategy shall include maps and diagrams showing the proposed placement, dimensions, design and proposed methods of construction and closure of waste disposal facilities, mine pits and tailings storage facilities.

14-6 The Mine Plan and Preliminary Closure Strategy shall demonstrate that waste disposal facilities will be located, designed and constructed to ensure that they are non-polluting and so that their final shape, height, stability and ability to support native vegetation are comparable to natural landforms in the area.

14-7 The Mine Plan and Closure Strategy shall demonstrate that the amount of backfill material available will be sufficient to allow backfilling to an extent that will preclude the formation of pit lakes after mine completion and closure, and to ensure there is capillary break between the surface and groundwater to maintain groundwater quality.

14-8 The Mine Plan and Preliminary Closure Strategy shall provide information on the placement and design of surface water control features as required by condition 10, and demonstrate that surface water control features will be constructed and rehabilitated to ensure that natural drainage lines are maintained as far as practicable during mine operations and re-established after mine completion and closure.

14-9 The Mine Plan and Preliminary Closure Strategy shall demonstrate that groundwater barriers installed during operation of the mine can be maintained after mine completion and closure.

14-10 The proponent shall implement the Mine Plan referred to in conditions 14-1 to 14-9.

14-11 The proponent shall make the Mine Plan and Preliminary Closure Strategy required by condition 14-1 publicly available in a manner approved by the Chief Executive Officer of the Office of the Environmental Protection.

15 Final Closure and Decommissioning Plan

15-1 At least three (3) years prior to mine completion, the proponent shall prepare and submit a Final Closure and Decommissioning Plan to the requirements of the Chief Executive Officer of the Office of the Environmental Protection, on advice of the Department of Environment and Conservation and Department of Mines and Petroleum.

15-2 The Final Closure and Decommissioning Plan shall be prepared consistent with:

1. ANZMEC/MCA 2000, *Strategic Framework for Mine Closure Planning*;

   and

2. Department of Industry Tourism and Resources 2006 *Mine Closure and Completion* (Leading Practice Sustainable Development Program for the Mining Industry), Commonwealth Government, Canberra;

15-3 The Final Closure and Decommissioning Plan shall provide detailed technical information on the following:

1. Final closure of all areas disturbed through implementation of the proposal so that they are safe, stable and non-polluting.

2. Decommissioning of all plant infrastructure and equipment.

3. Disposal of waste materials;

4. Final rehabilitation of:
   - the minesite including waste material landforms and other areas outside the mine pit;

- the haul roads, processing areas and accommodation facilities; and
- the mine pit area, including details of the final landform, and demonstrating that groundwater quality will not be negatively impacted in the long term.

5. Management and monitoring following mine completion.

6. Inventory of all contaminated sites and proposed management.

15-4 The proponent shall implement the Final Closure and Decommissioning Plan, or subsequent approved revisions.

15-5 The proponent shall make the Final Closure and Decommissioning Plan required by Condition 15-1 publicly available in a manner approved by the Chief Executive Officer of the Office of the Environmental Protection

Notes

1. The Minister for Environment will determine any dispute between the proponent and the Office of the Environmental Protection Authority over the fulfilment of the requirements of the conditions.

2. The proponent is required to apply for a Works Approval and Licence for this project under the provisions of Part V of the *Environmental Protection Act 1986*.

HON BILL MARMION MLA
MINISTER FOR ENVIRONMENT; WATER

Schedule 1

Fortescue Metals Group Limited (Fortescue) proposes to develop new mines within the Solomon Project, a greenfield site approximately 60 kilometres (km) north of Tom Price and adjacent to the North Eastern boundary of the Karijini National Park, and to construct and operate a railway up to 130 kilometres in length from the new mines eastwards to the existing FMG railway.

The deposits would produce a combined total of up to 80 million tonnes of iron ore per annum for a minimum 20 years. The Solomon Iron Ore Project includes three components. These are the Kings Mine, the Firetail Mine, and the Railway development. (Figures 1 and 2)

Mining would be standard open cut methods, with overburden and waste initially stored in external waste dumps and backfilled to the mined out pit. Tailings storage would be in constructed valley pits.

Infrastructure required for the proposal includes ore processing facilities, water and wastewater treatment plants, an airport located to the south of the project area, power station and overhead transmission lines, maintenance workshops, administration and storage areas, and construction and accommodation villages.

The main characteristics of the proposal are summarised in Table 1 below. A detailed description of the proposal is provided in Section 4 of the PER (FMG 2010)

Table 1: Summary of key proposal characteristics

Element	**Description**
General	
Mine Life	Firetail – 20 years Kings – 20 years
Clearing (Total disturbance)	Firetail – up to 1100 hectares Kings – up to 3300 hectares Railway – up to 1100 hectares
Mine pit area	Firetail – up to 880 hectares Kings – up to 2750 hectares
Length of railway	• Up to 130 kilometre Railway extending from Fortescue's existing Port Hedland to Cloudbreak rail line to the Firetail mining area; and • Rail spur from the main Solomon rail to a loading siding south of the Valley of the Kings
Dewatering	Up to 10 gigalitres per annum from the Kings mine.
Waste rock disposal	Firetail – up to 128 million tonnes disposal to external waste dumps, remainder to in-pit backfilling.

Element	Description
	Kings - up to 245 million tonnes disposal to external waste dumps, remainder to in-pit backfilling.
Final Landform	Backfilling to an extent that precludes the formation of pit lakes.
Tailings storage facilities	Tailings disposal in constructed valley pits located near the Kings and Firetail processing facilities.
Dewater disposal	• Processing and operational water supply requirements; and • Managed aquifer recharge.
Infrastructure	
Ore processing	Separate facilities required to process Channel Iron Deposit and Banded Iron Deposit/Detrital Iron Deposit Processing using tertiary and secondary crushing, and gravity concentration of the ore combined with separation of sand and clay waste materials.
Airport	Airport facility including small shelter, maintenance workshop, refueling facilities and ablution block to be used for mining and conservation related purposes.
Power supply	85MW (production capacity) dual fuel power station capable of running on diesel or gas supply.
Wastewater treatment	Wastewater treatment plants
Accommodation	• Temporary construction camps for rail and minesite; and • Permanent accommodation village and supporting infrastructure for a workforce of up to 1800.

Figures

Figure 1 – Location of the Kings and Firetail deposits

Figure 2 – Location of the Rail corridor

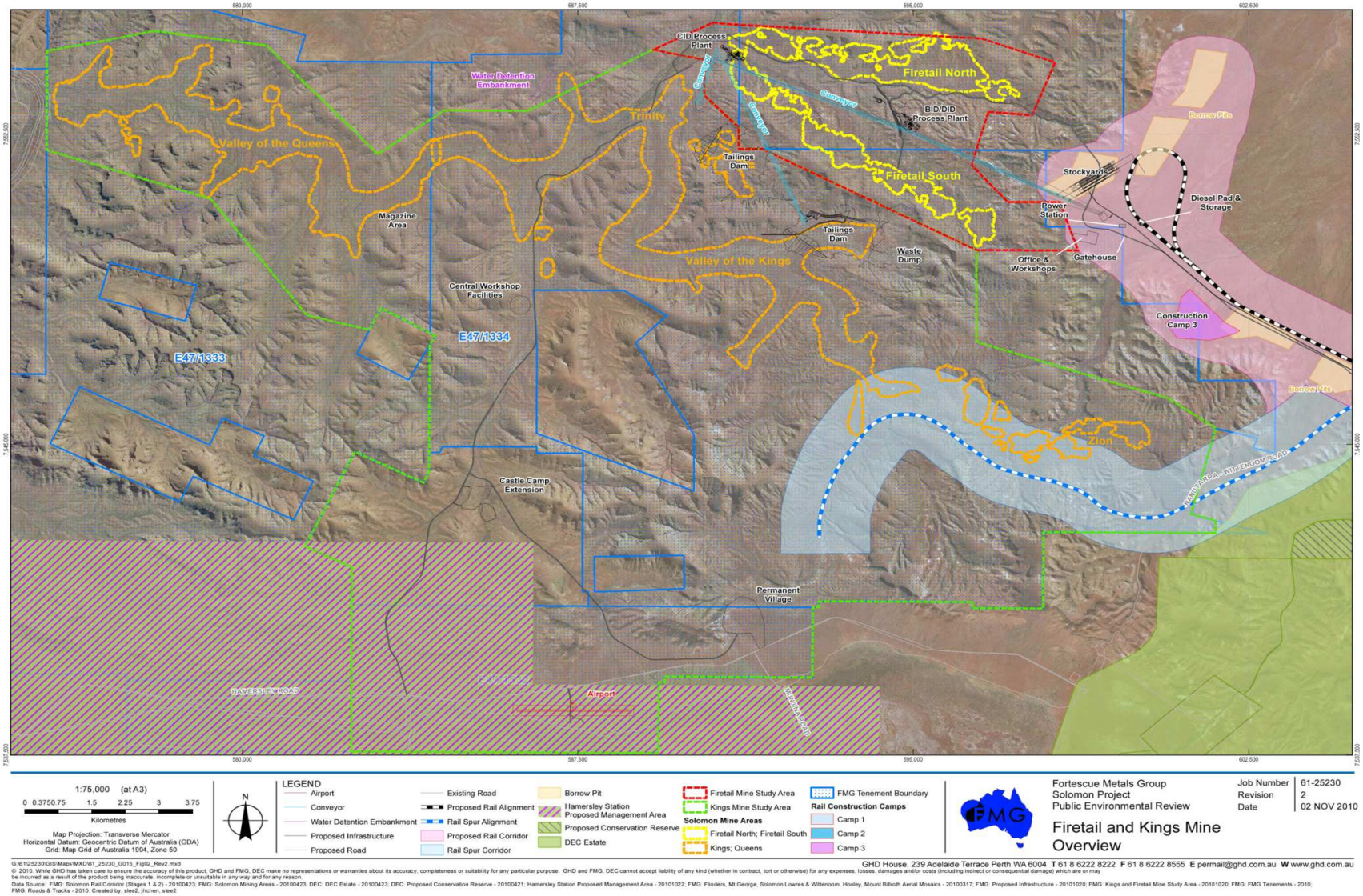

Figure 1 – Location of the Kings and Firetail deposits

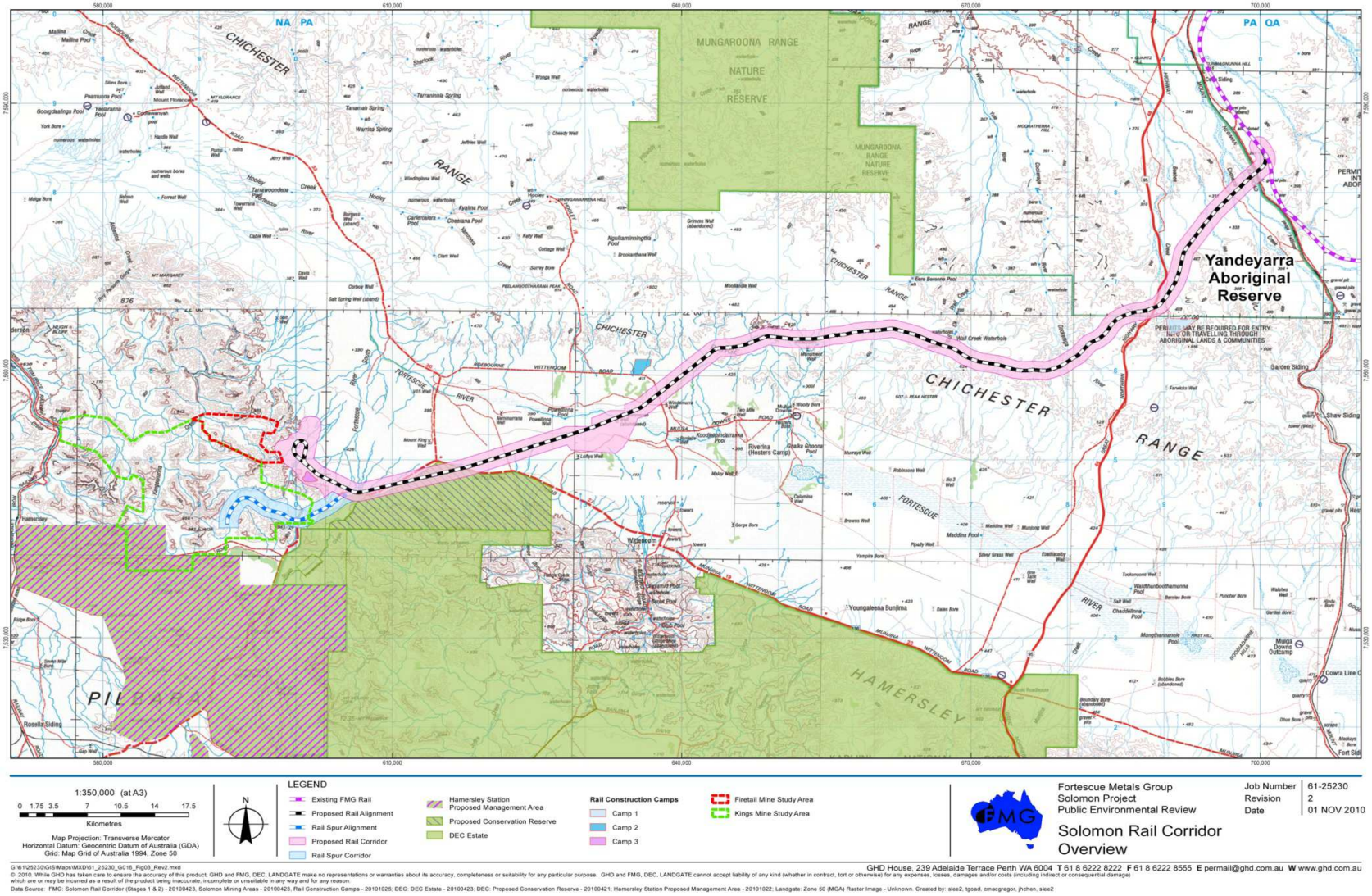

Figure 2 – Location of the Rail corridor

Attachment 1 to Ministerial Statement 862

Change to Proposal

Proposal: Solomon Iron Ore Project

Proponent: Fortescue Metals Group Limited

Change: Change to Schedule 1, Key Proposal Characteristics Table

Key Characteristics Table:

Element	**Description of proposal**	**Description of approved change to proposal**
General		
Mine Life	Firetail – 20 years Kings – 20 years	Firetail – 20 years Kings – 20 years
Clearing (Total disturbance)	Firetail – up to 1100 hectares Kings – up to 3300 hectares Railway – up to 1100 hectares	Firetail – up to 1100 hectares Kings – up to 3300 hectares **Railway – up to 1897 hectares with permanent disturbance of 764 ha and 1,133 ha rehabilitated**
Mine pit area	Firetail – up to 880 hectares Kings – up to 2750 hectares	Firetail – up to 880 hectares Kings – up to 2750 hectare
Length of railway	• Up to 130 kilometre Railway extending from Fortescue's existing Port Hedland to Cloudbreak rail line to the Firetail mining area; and • Rail spur from the main Solomon rail to a loading siding south of the Valley of the Kings	• Up to 130 kilometre Railway extending from Fortescue's existing Port Hedland to Cloudbreak rail line to the Firetail mining area; and • Rail spur from the main Solomon rail to a loading siding south of the Valley of the Kings
Dewatering	Up to 10 gigalitres per annum from the Kings mine.	Up to 10 gigalitres per annum from the Kings mine.
Waste rock disposal	Firetail – up to 128 million tonnes disposal to external waste dumps, remainder to in-pit backfilling. Kings - up to 245 million tonnes disposal to external waste dumps, remainder to in-pit backfilling.	Firetail – up to 128 million tonnes disposal to external waste dumps, remainder to in-pit backfilling. Kings - up to 245 million tonnes disposal to external waste dumps, remainder to in-pit backfilling.

Final Landform	Backfilling to an extent that precludes the formation of pit lakes.	Backfilling to an extent that precludes the formation of pit lakes.
Tailings storage facilities	Tailings disposal in constructed valley pits located near the Kings and Firetail processing facilities.	Tailings disposal in constructed valley pits located near the Kings and Firetail processing facilities.
Dewater disposal	• Processing and operational water supply requirements; and • Managed aquifer recharge.	• Processing and operational water supply requirements; and • Managed aquifer recharge.
Infrastructure		
Ore processing	Separate facilities required to process Channel Iron Deposit and Banded Iron Deposit / Detrital Iron Deposit. Processing using tertiary and secondary crushing, and gravity concentration of the ore combined with separation of sand and clay waste materials.	Separate facilities required to process Channel Iron Deposit and Banded Iron Deposit / Detrital Iron Deposit. Processing using tertiary and secondary crushing, and gravity concentration of the ore combined with separation of sand and clay waste materials.
Airport	Airport facility including small shelter, maintenance workshop, refuelling facilities and ablution block to be used for mining and conservation related purposes.	Airport facility including small shelter, maintenance workshop, refuelling facilities and ablution block to be used for mining and conservation related purposes.
Power Supply	85MW (production capacity) dual fuel power station capable of running on diesel or gas supply.	**Removed as not relevant to this Statement**
Wastewater Treatment	Wastewater treatment plants	**Removed as not relevant to this Statement**
Accommodation	• Temporary construction camps for rail and minesite; and • Permanent accommodation village and supporting infrastructure for a workforce of up to 1800.	• Temporary construction camps for rail and minesite; and • Permanent accommodation village and supporting infrastructure for a workforce of up to 1800.

Note: Text in **bold** in the Key Characteristics Table, indicates change/s to the proposal.

Dr Paul Vogel
CHAIRMAN
Environmental Protection Authority
under delegated authority

Approval date: 13 December 2011

Attachment 2 to Ministerial Statement 862

Change to proposal under s45C of the *Environmental Protection Act 1986*

This Attachment replaces Schedule 1 and Attachment 1 of Ministerial Statement 862

Proposal: Solomon Iron Ore Project

Proponent: Fortescue Metals Group Limited

Changes:

- Up to 5 hectares of disturbance of the Priority Ecological Community 'Brockman Iron Cracking Clay Communities of the Hamersley Range';
- Increase in peak dewatering rate to 25 gigalitres per annum; and
- Changes to Schedule 1 to remove elements not environmentally relevant and to contemporise this Statement.

Table 1: Summary of the Proposal

Proposal Title	Solomon Iron Ore Project
Short Description	The proposal is to develop the Firetail and Kings mines at a greenfield site approximately 60 km north of Tom Price and adjacent to the north-eastern boundary of the Karijini National Park, and to construct and operate a railway between the new mines and an existing railway.

Table 2: Location and authorised extent of physical and operational elements

Element	Location	Previously Authorised Extent	Authorised Extent
Mine life	-	Firetail – 20 years Kings – 20 years	**Removed as not a key element for environmental protection.**
Clearing (Total Disturbance)	-	Firetail – up to 1100 ha Kings – up to 3300 ha Railway – up to 1897 ha with permanent disturbance of 764 and 1133 ha rehabilitated.	**Element replaced with 'Total Disturbance – Mines', and 'Total Disturbance – Railway' elements.**
Total Disturbance - Mines	Figure 1, Figure 3	Firetail – up to 1100 ha Kings – up to 3300 ha	**Up to 4400 ha within the 29818 ha Project Development Area 1, including not more than 5 ha disturbance of the PEC 'Brockman Iron Cracking Clay Communities' within the 153 ha Project Development Area 2.**

Element	Location	Previously Authorised Extent	Authorised Extent
Mine pit area	Figure 1	Firetail - up to 880 ha. Kings – up to 2750 ha.	**Firetail and Kings - not more than 3630 ha within the 29818 ha Project Development Area 1.**
Total Disturbance - Railway	**Figure 2**	**Up to 1897 ha with permanent disturbance of 764 ha and 1133 ha rehabilitated.**	**Not more than 1897 ha total disturbance within the 26945 ha (combined) Railway Corridor and Rail Spur Corridor.** **Of the total disturbance area for the railway, not more than 764 ha is to be permanent disturbance and all other disturbed areas are to be rehabilitated.**
Length of Railway	-	• Up to 130 km Railway extending from Fortescue's existing Port Hedland to Cloudbreak rail line to the Firetail mining area; and • Rail spur from the main Solomon rail to a loading siding south of the Valley of the Kings.	**Removed as addressed by 'Total Disturbance – Railway' element.**
Dewatering	Kings Mine	Up to 10 GL per annum.	**Up to 25 GL per annum.**
Waste rock disposal	-	Firetail – up to 128 million tonnes disposed to external waste dumps, remainder to in-pit backfilling. Kings – up to 245 million tonnes disposed to external waste dumps, remainder to in-pit backfilling.	Firetail – up to 128 million tonnes disposed to external waste dumps, remainder to in-pit backfilling. Kings – up to 245 million tonnes disposed to external waste dumps, remainder to in-pit backfilling..
Backfilling of mine pits	-	Pits backfilled to an extent that precludes the formation of pit lakes.	Pits backfilled to an extent that precludes the formation of pit lakes.
Tailings storage facilities	-	Tailings disposal in constructed valley pits.	Tailings disposal in constructed valley pits.

Element	Location	Previously Authorised Extent	Authorised Extent
Dewater disposal	-	• Processing and operational water supply requirements; and • Managed aquifer recharge.	• Processing and operational water supply requirements; and • Managed aquifer recharge.
Ore processing	-	Separate facilities required to process Channel Iron Deposit and Banded Iron Deposit / Detrital Iron Deposit. Processing using tertiary and secondary crushing, and gravity concentration of the ore combined with separation of sand and clay waste materials.	**Removed as regulated under other legislation.**
Airport	-	Airport facility including small shelter, maintenance workshop, refueling facilities and ablution block to be used for mining and conservation related purposes.	**Removed as not a key element for environmental protection.**
Accommodation	-	• Temporary construction camps for rail and minesite; and • Permanent accommodation village and supporting infrastructure for a workforce of up to 1800.	**Removed as not a key element for environmental protection.**

Note: Text in **bold** in Table 2 indicates a change to the proposal.

Table 3: Abbreviations

Abbreviation	Term
ha	hectare
km	kilometre
GL	gigalitre

Figures (attached)

Figure 1 Solomon Mine Overview;
Figure 2 Solomon Rail Corridor Overview; and
Figure 3 Disturbance within the Priority Ecological Community 'Brockman Iron Cracking Clay Communities of the Hamersley Range'.

[Signed 21 November 2013]

Dr Paul Vogel
CHAIRMAN
Environmental Protection Authority
under delegated authority

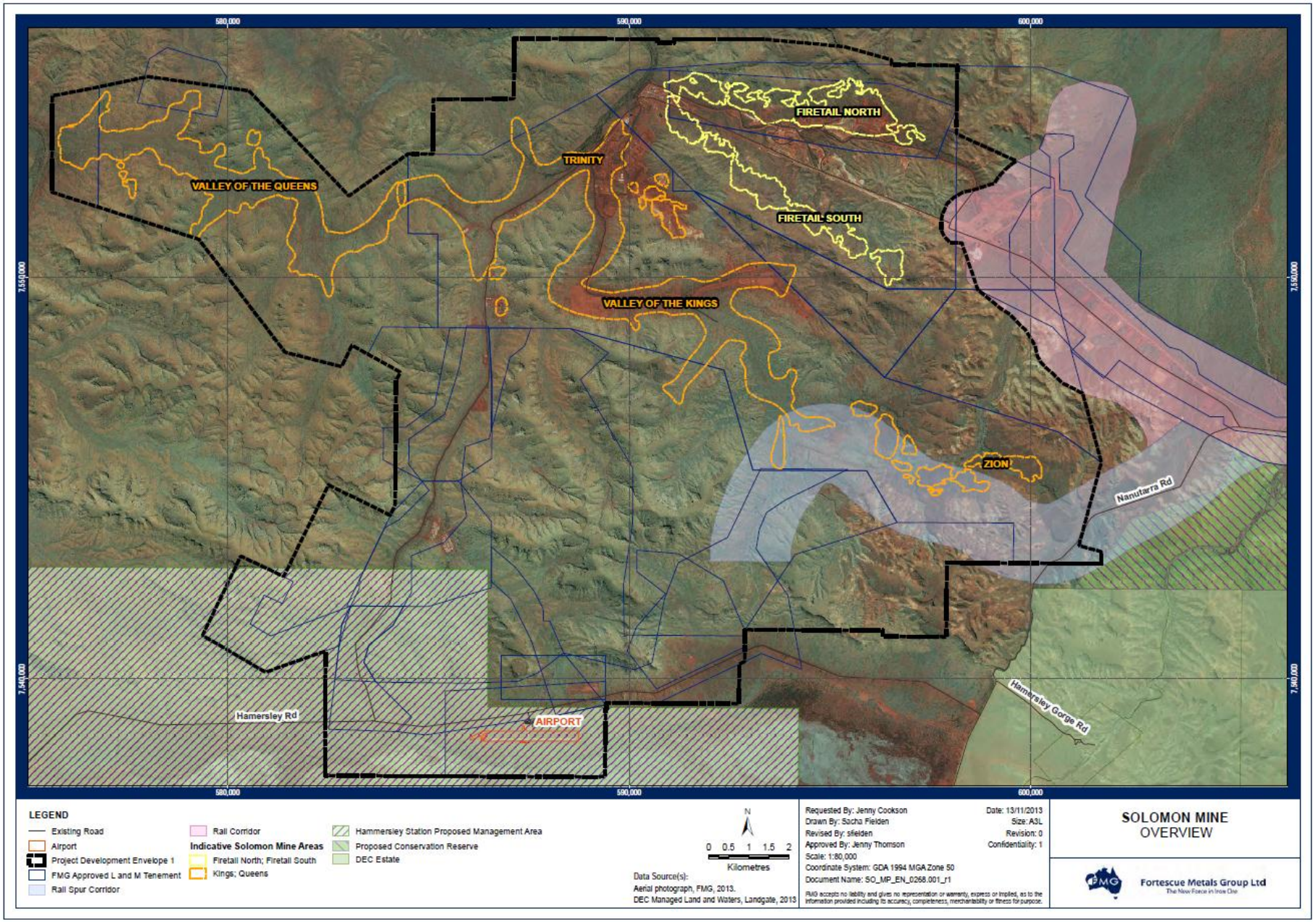

Figure 1. Solomon Mine Overview

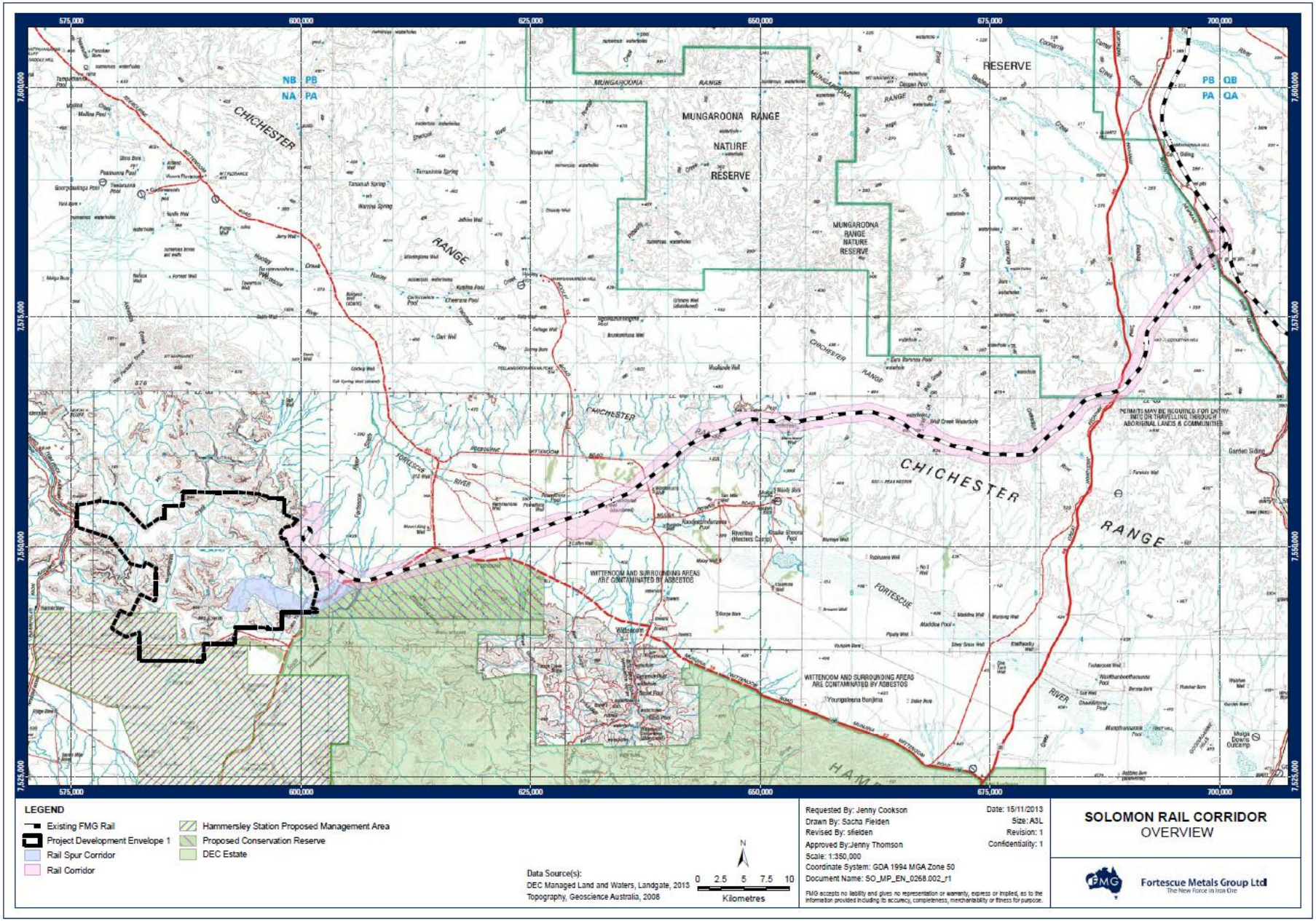

Figure 2. Solomon Rail Corridor Overview

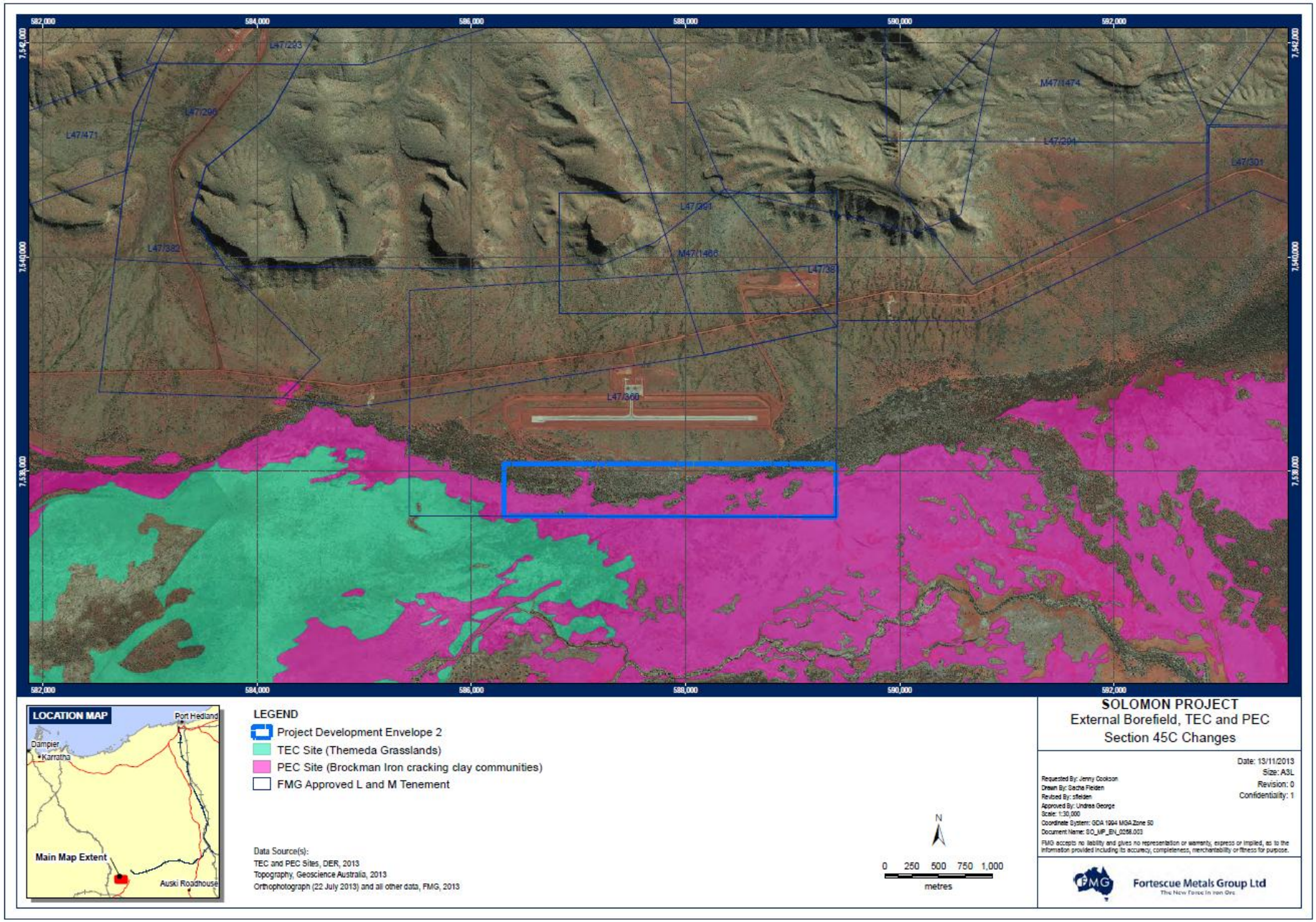

Figure 3. Disturbance within the Priority Ecological Community ‘Brockman Iron Cracking Clay Communities of the Hamersley Range’

Attachment 3 to Ministerial Statement 862

Change to proposal approved under section 45C of the *Environmental Protection Act 1986*

This Attachment replaces Schedule 1, Attachment 1 and Attachment 2 to Ministerial Statement 862

Proposal: Solomon Iron Ore Project

Proponent: Fortescue Metals Group Limited

Changes:

- Increase in Total Disturbance (Mines) of 16 ha;
- 'Project Development Area 1' and 'Project Development Area 2' changed to 'Project Development Envelope 1' and 'Project Development Envelope 2'; and
- Amendments to the Project Development Envelope 1 and Rail Corridor and Rail Spur Corridor boundaries, and corresponding adjustment of area values.

Table 1: Summary of the Proposal

Proposal Title	Solomon Iron Ore Project
Short Description	The proposal is to develop the Firetail and Kings mines at a greenfield site approximately 60 kilometres north of Tom Price and adjacent to the north-eastern boundary of the Karijini National Park, and to construct and operate a railway between the new mines and an existing railway.

Table 2: Location and authorised extent of physical and operational elements

Element	Location	Previously Authorised Extent	Authorised Extent
Total Disturbance – Mines	Figure 1, Figure 3.	Up to 4400 ha within the 29818 ha Project Development Area 1, including not more than 5 ha disturbance of the PEC 'Brockman Iron Cracking Clay Communities' within the 153 ha Project Development Area 2.	**Up to 4416 ha within the 31333 ha Project Development Envelope 1,** including not more than 5 ha disturbance of the PEC 'Brockman Iron Cracking Clay Communities' within the 153 ha Project Development **Envelope** 2.
Mine Pit Area	Figure 1	Firetail and Kings – not more than 3630 ha within the 29818 ha Project Development Area 1.	Firetail and Kings – not more than 3630 ha within the **31333 ha Project Development Envelope 1.**

Element	Location	Previously Authorised Extent	Authorised Extent
Total Disturbance – Railway	Figure 2	Not more than 1897 ha total disturbance within the 26945 ha (combined) Railway Corridor and Rail Spur Corridor. Of the total disturbance area for the railway, not more than 764 ha is to be permanent disturbance and all other disturbed areas are to be rehabilitated.	Not more than 1897 ha total disturbance within the **29257 ha (combined) Railway Corridor and Rail Spur Corridor.** Of the total disturbance area for the railway, not more than 764 ha is to be permanent disturbance and all other disturbed areas are to be rehabilitated.
Dewatering	Kings Mine	Up to 25 GL per annum.	Up to 25 GL per annum.
Waste Rock Disposal	-	Firetail – up to 128 million tonnes disposed to external waste dumps, remainder to in-pit backfilling. Kings – up to 245 million tonnes disposed of to external waste dumps, remainder to in-pit backfilling.	Firetail – up to 128 million tonnes disposed to external waste dumps, remainder to in-pit backfilling. Kings – up to 245 million tonnes disposed of to external waste dumps, remainder to in-pit backfilling.
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Tailings storage facilities	-	Tailings disposal in constructed valley pits.	Tailings disposal in constructed valley pits.
Dewater disposal	-	• Processing and operational water supply requirements; and • Managed aquifer recharge.	• Processing and operational water supply requirements; and • Managed aquifer recharge.

Note: Text in **bold** in Table 2 indicates a change to the proposal.

Table 3: Abbreviations

Abbreviation	Term
ha	hectare
km	kilometre
GL	gigalitre
PEC	Priority Ecological Community

Figures (attached)

Figure 1 Solomon Mine Overview;
Figure 2 Solomon Rail Corridor Overview; and
Figure 3 Disturbance within the Priority Ecological Community 'Brockman Iron Cracking Clay Communities of the Hamersley Range'.

Dr Paul Vogel
CHAIRMAN
Environmental Protection Authority
under delegated authority

Approval date: 15.10.14

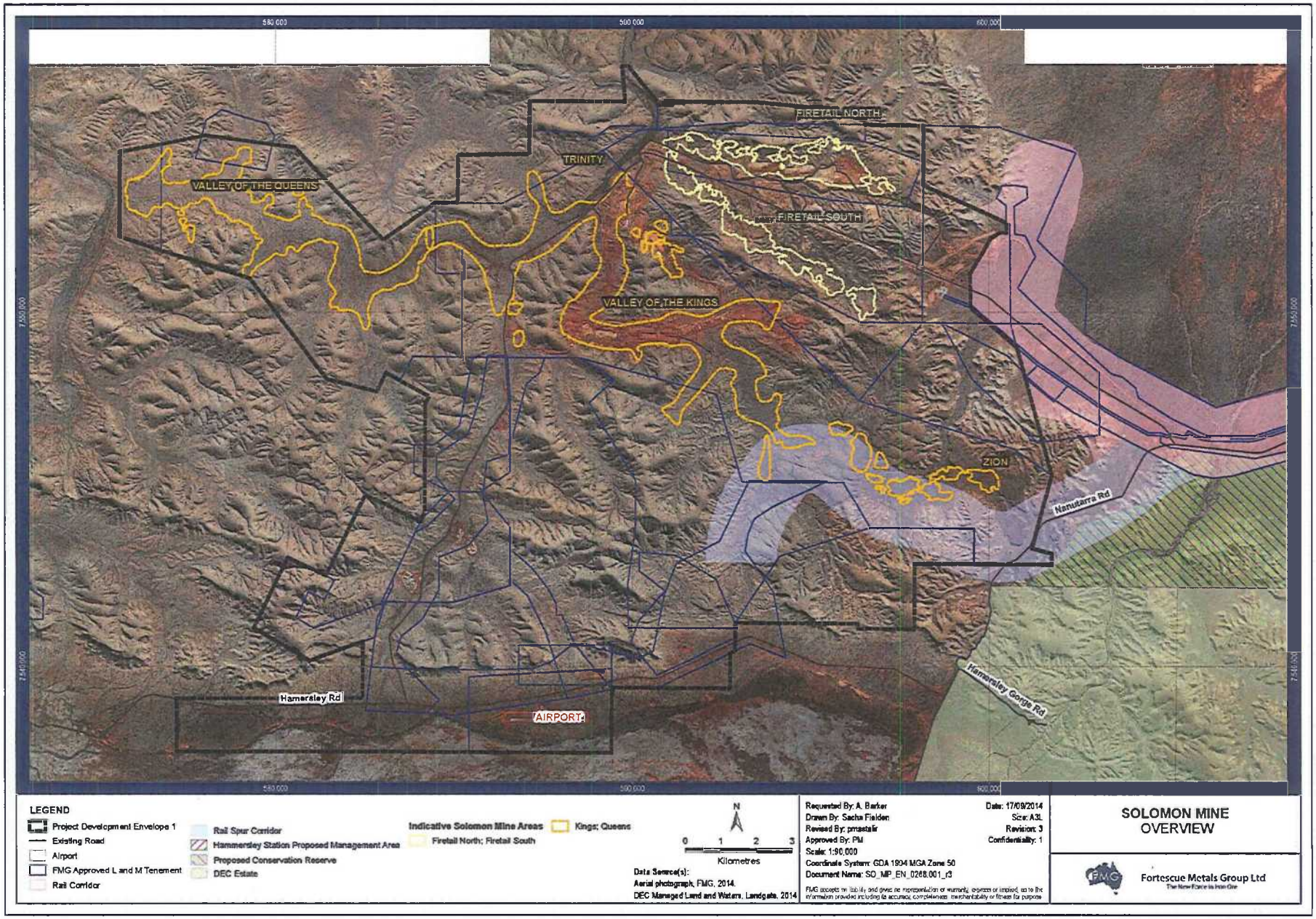

Figure 1. Solomon Mine Overview

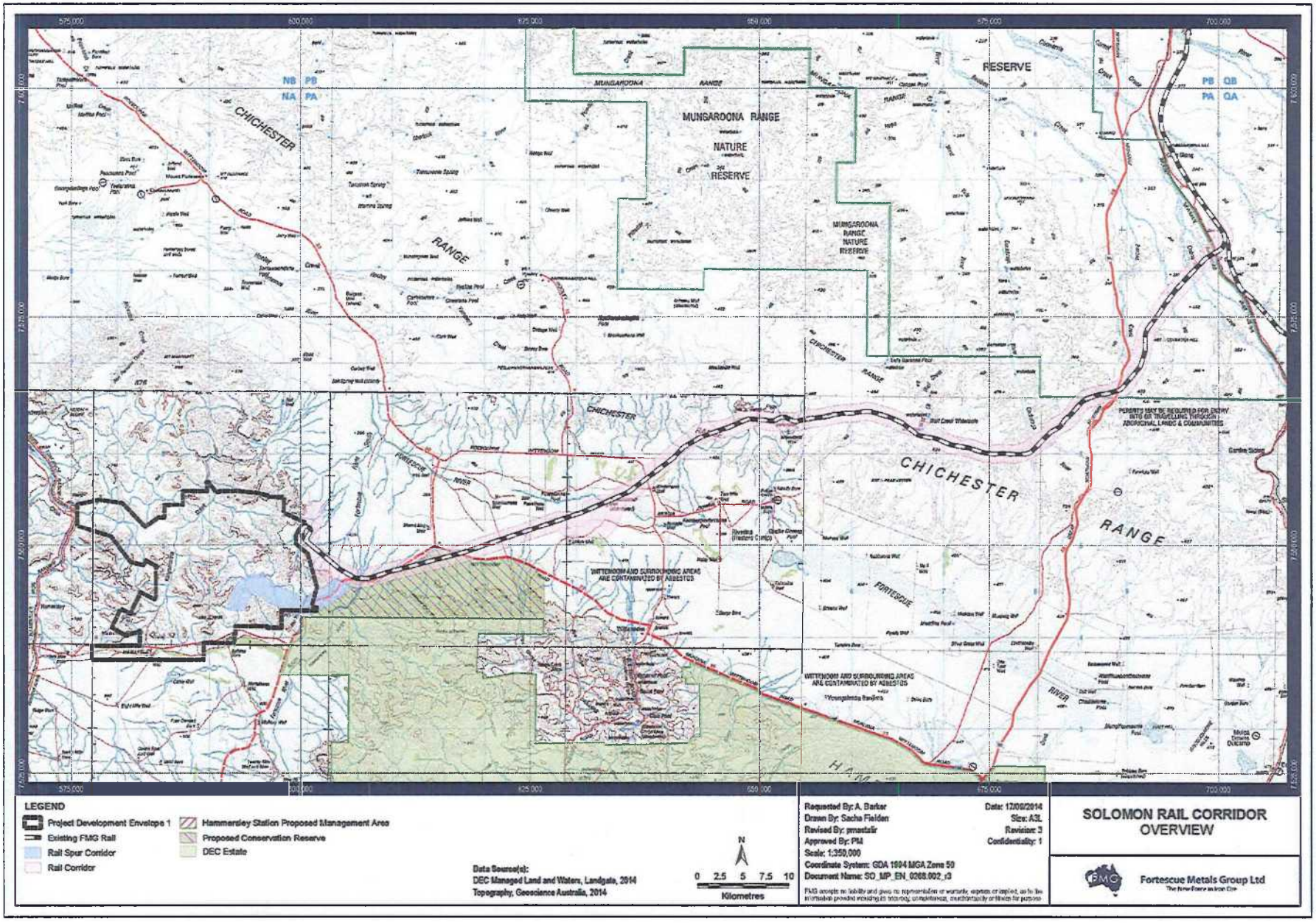

Figure 2. Solomon Rail Corridor Overview

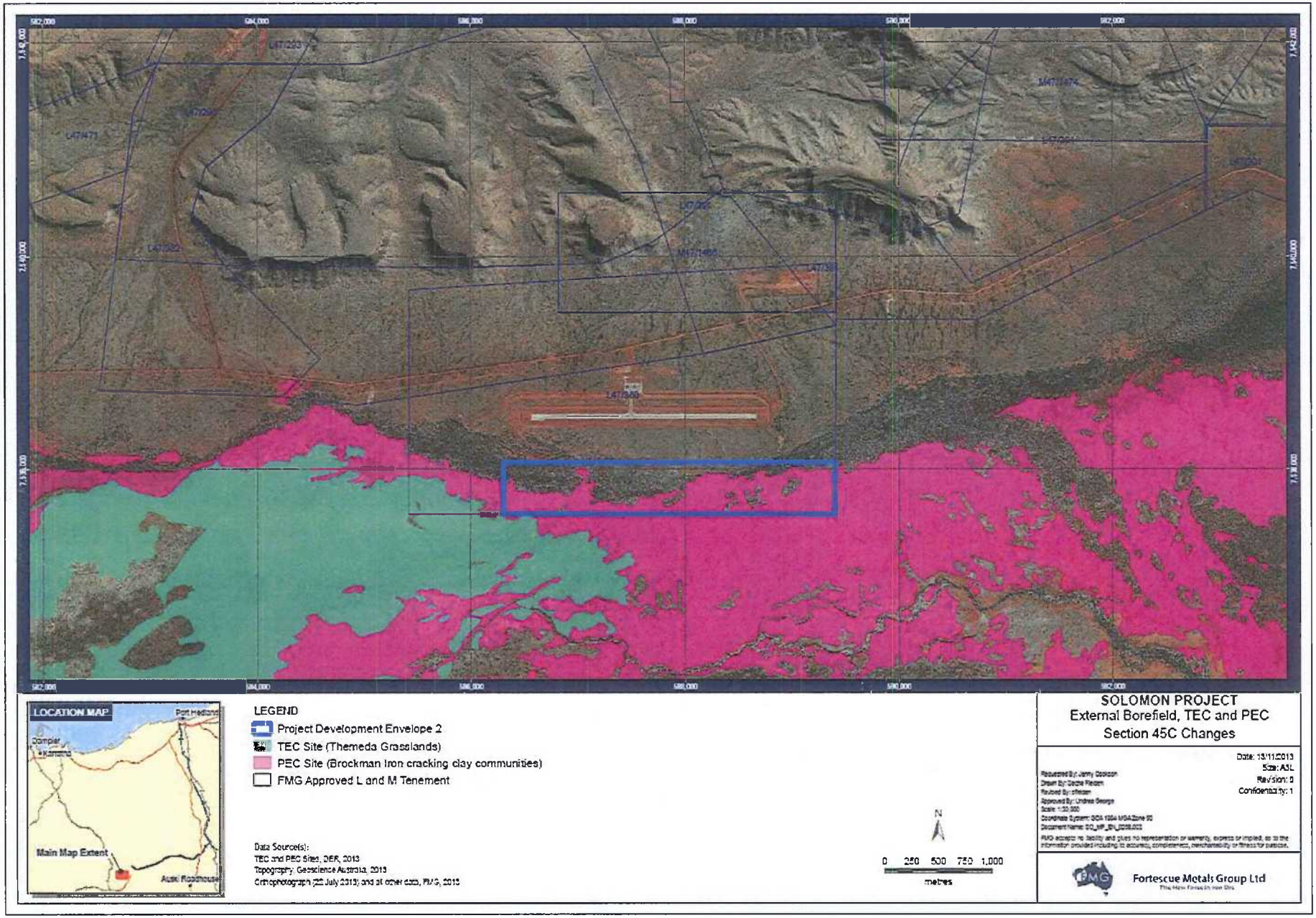

Figure 3. Disturbance within the Priority Ecological Community 'Brockman Iron Cracking Clay Communities of the Hamersley Range'