Statement No.

MINISTER FOR THE ENVIRONMENT AND HERITAGE

000584

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

HOPE DOWNS IRON ORE MINE, 75 KM NORTH-WEST OF NEWMAN
PILBARA REGION

Proposal: To establish an iron ore mine in the Hope Downs area, including facilities for limited processing of the ore, and a rail connection from the mine to a rail network for the transport of iron ore product to the coast, as documented in schedule 1 of this statement.

Proponent: Hope Downs Management Services Pty Ltd

Proponent Address: Level 1, 34 Colin Street, WEST PERTH WA 6005

Assessment Number: 1308

Report of the Environmental Protection Authority: Bulletin 1024

The proposal referred to above may be implemented subject to the following conditions and procedures:

Procedural conditions

1 Implementation and Changes

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

1-2 Where the proponent seeks to change any aspect of the proposal as documented in schedule 1 of this statement in any way that the Minister for the Environment and Heritage determines, on advice of the Environmental Protection Authority, is substantial, the proponent shall refer the matter to the Environmental Protection Authority.

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- 1 FEB 2002

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1-3 Where the proponent seeks to change any aspect of the proposal as documented in schedule 1 of this statement in any way that the Minister for the Environment and Heritage determines, on advice of the Environmental Protection Authority, is not substantial, the proponent may implement those changes upon receipt of written advice.

2 Proponent Commitments

2-1 The proponent shall implement the environmental management commitments documented in schedule 2 of this statement.

2-2 The proponent shall implement subsequent environmental management commitments which the proponent makes as part of the fulfilment of the conditions in this statement.

3 Proponent Nomination and Contact Details

3-1 The proponent for the time being nominated by the Minister for the Environment and Heritage under section 38(6) or (7) of the *Environmental Protection Act 1986* is responsible for the implementation of the proposal until such time as the Minister for the Environment and Heritage has exercised the Minister's power under section 38(7) of the Act to revoke the nomination of that proponent and nominate another person as the proponent for the proposal.

3-2 If the proponent wishes to relinquish the nomination, the proponent shall apply for the transfer of proponent and provide a letter with a copy of this statement endorsed by the proposed replacement proponent that the proposal will be carried out in accordance with this statement. Contact details and appropriate documentation on the capability of the proposed replacement proponent to carry out the proposal shall also be provided.

3-3 The nominated proponent shall notify the Department of Environmental Protection of any change of contact name and address within 60 days of such change.

4 Commencement and Time Limit of Approval

4-1 The proponent shall provide evidence to the Minister for the Environment and Heritage within five years of the date of this statement that the proposal has been substantially commenced or the approval granted in this statement shall lapse and be void.

Note: The Minister for the Environment and Heritage will determine any dispute as to whether the proposal has been substantially commenced.

4-2 The proponent shall make application for any extension of approval for the substantial commencement of the proposal beyond five years from the date of this statement to the Minister for the Environment and Heritage prior to the expiration of the five-year period referred to in condition 4-1.

The application shall demonstrate that:

- the environmental factors of the proposal have not changed significantly;
- new, significant, environmental issues have not arisen; and
- all relevant government authorities have been consulted.

Note: The Minister for the Environment and Heritage may consider the grant of an extension of the time limit of approval not exceeding five years for the substantial commencement of the proposal.

Environmental conditions

5 Compliance Audit and Performance Review

5-1 The proponent shall prepare an audit program in consultation with and submit compliance reports to the Department of Environmental Protection which address:

- the implementation of the proposal as defined in schedule 1 of this statement;
- evidence of compliance with the conditions and commitments; and
- the performance of the environmental management plans and programs.

Note: Under sections 48(1) and 47(2) of the *Environmental Protection Act 1986*, the Chief Executive Officer of the Department of Environmental Protection is empowered to audit the compliance of the proponent with the statement and should directly receive the compliance documentation, including environmental management plans, related to the conditions, procedures and commitments contained in this statement. Usually, the Department of Environmental Protection prepares an audit table which can be utilised by the proponent, if required, to prepare an audit program to ensure the proposal is implemented as required. The Chief Executive Officer is responsible for the preparation of written advice to the proponent, which is signed off either by the Minister or, under an endorsed condition clearance process, a delegate within the Environmental Protection Authority or the Department of Environmental Protection that the requirements have been met.

5-2 The proponent shall submit a performance review report every six years after the start of the operations phase to the requirements of the Minister for the Environment and Heritage on advice of the Environmental Protection Authority, which addresses:

- the major environmental issues associated with the project; the targets for those issues; the methodologies used to achieve these; and the key indicators of environmental performance measured against those targets;
- the level of progress in the achievement of sound environmental performance, including industry benchmarking and the use of best available technology where practicable;
- significant improvements gained in environmental management, including the use of external peer reviews;

- stakeholder and community consultation about environmental performance and the outcomes of that consultation, including a report of any on-going concerns being expressed; and
- the proposed environmental targets over the next six years, including improvements in technology and management processes.

6 Subterranean Fauna Sampling Plan

6-1 At least 12 months prior to commencing dewatering operations, the proponent shall develop a Subterranean Fauna Sampling Plan for the respective area, to the requirements of the Minister for the Environment and Heritage on advice of the Environmental Protection Authority and the Department of Conservation and Land Management.

The objective of this Plan is:

- to increase scientific knowledge about subterranean fauna to assist in the conservation of this element of the environment.

This Plan shall address:

1 subterranean fauna surveys of the areas to be affected by dewatering operations to assist in establishing the conservation significance of any species within the affected areas;

2 characterisation of subterranean fauna habitats to be affected by dewatering and identification of similar subterranean fauna habitats outside the affected areas;

3 subterranean fauna surveys of similar habitats outside the areas to be affected by dewatering operations to assist in establishing the conservation significance of fauna within the areas to be affected; and

4 specific measures to record and preserve biological information on any species collected in the project area.

Note: The Subterranean Fauna Sampling Plan should be submitted to the Environmental Audit Section of the Department of Environmental Protection to initiate the compliance audit process.

6-2 The proponent shall implement the Subterranean Fauna Sampling Plan required by condition 6-1.

6-3 The proponent shall make the Subterranean Fauna Sampling Plan required by condition 6-1 publicly available, to the requirements of the Minister for the Environment and Heritage on advice of the Environmental Protection Authority.

6-4 The proponent shall submit the results of the Subterranean Fauna Sampling Plan to the Environmental Protection Authority, the Department of Conservation and Land Management and the Western Australian Museum.

6-5 In the event that the Minister for the Environment and Heritage on advice of the Environmental Protection Authority considers, based on the results of the Subterranean Fauna Sampling Plan, that the Environmental Protection Authority objective for this Plan would be compromised, then the proponent shall develop an action plan to the requirements and timing of the Minister for the Environment and Heritage on advice of the Environmental Protection Authority and the Department of Conservation and Land Management.

Procedures

1 Where a condition states "to the requirements of the Minister for the Environment and Heritage on advice of the Environmental Protection Authority", the Chief Executive Officer of the Department of Environmental Protection will obtain that advice for the preparation of written advice to the proponent.

2 The Environmental Protection Authority may seek advice from other agencies, as required, in order to provide its advice to the Chief Executive Officer of the Department of Environmental Protection.

3 The Minister administering the *Iron Ore (Hope Downs) Agreement Act* will establish a formal review mechanism to ensure that a bond is placed on the proponent at the appropriate time and for the appropriate amount to provide financial assurance that funds will be available to complete required environmental programs.

Notes

1 The Minister for the Environment and Heritage will determine any dispute between the proponent and the Environmental Protection Authority or the Department of Environmental Protection 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.*

Dr Judy Edwards MLA
MINISTER FOR THE ENVIRONMENT AND HERITAGE
- 1 FEB 2002

Schedule 1

The Proposal (Assessment No. 1308)

The proposal is to establish a new iron ore mine in the Hope Downs area (Area A of the *Iron Ore (Hope Downs) Agreement Act 1992*) and a rail connection from the mine to a rail network for the transport of iron ore product to the coast (Figure 1 shows the mine site on a regional map).

The project has the following main components:

- conventional open pit mining of both the Hope North and Hope South orebodies (Figure 2);
- ore processing, stockpiling, and reclaiming facilities at the mine site; and
- a rail connection to either the BHP main line, the Hamersley main line or the proposed West Angelas line (Figure 3).

Both deposits involve mining below the water table and therefore a substantial dewatering operation will be required during mining.

Critical to the prevention of unacceptable impacts on Weeli Wolli Spring as a result of the dewatering operation are the following management strategies:

1. maintenance of spring flow by direct discharge of up to 18 000 kilolitres of water per day to the spring during dewatering; and
2. in the long-term:
   (a) backfilling of the mine pits to above the water table level; and
   (b) a 20 year post-mining phase where approximately 40 000 kilolitres of water per day is pumped into the spring and the dewatered groundwater system, until the natural groundwater system has been re-established (This water will come from outside the catchment of the project area).

Table 1 - Key Proposal Characteristics (Assessment No. 1308)

Characteristics	Hope North and Hope South
Mine and Processing	
Construction period	Approximately 2 years
Project life	Approximately 20 years
Ore reserves	400 Mt
Ore mining rate	up to 25 Mtpa
Average pit depth	240 m (North), 130 m (South)
Mining below the water table	60% (North), minor pods (South)
Maximum overburden movement during life of mine	98 Mm^3 (Hope North), 103 Mm^3 (Hope South)
Maximum overburden at end of mining	49.5 Mm^3 (Hope South)
Low grade stockpiles	7 Mt (maximum)
Average stripping ratio (average ratio of ore to overburden for north and south deposits)	1:1.42
Processing facilities/materials handling	Primary crusher Secondary dry screening and crushing Product stockpiles. Train load out facilities. Rail spur to existing railway (depending on option selected) Conveyors. Stackers and reclaimers.
Infrastructure	
Power	15 MW, diesel
Water	5.8 ML/day (2.1 GLpa)
Airstrip	Existing airstrip at Hope North
Roads	General traffic, ore truck, mine access, and rail and conveyor access.
Railway connection	Connection to existing iron ore railway (up to 75 km)
Buildings	Administration, maintenance workshops, storage and village.
Sewage	Sewage treatment plant (village), septics (other).
Dewatering	
Rate	30 to 110 ML/day
Disposal of excess	To Weeli Wolli Spring To sustain ecological requirements Aquifer storage with recovery post mining
Disturbance Areas	
Area of pits	349 ha (North), 296 ha (South)
Waste dumps	328 ha (North), 368 ha (South)
Other mine infrastructure	235 ha
Total area disturbed (mine)	1,600 ha
Area rehabilitated	1,340 ha
Average width of rail corridor	25 m
Length of rail corridor	Up to 75 km (depending on option selected)
Rail corridor disturbance	Up to 200 ha
Workforce	
Construction	500 peak
Permanent	Up to 300 fly in/fly out

Note:					Note:		
	km	kilometre	ha	hectare		km	kilometre
	Mtpa	million tonnes per annum	ML/day	million litres per day		Mtpa	million tonnes per annum
	MW	megawatts	Mm^3	million cubic metres		MW	megawatts

Figures (attached)

Figure 1 - Location map.
Figure 2 - Site layout.
Figure 3 - Rail connection options.

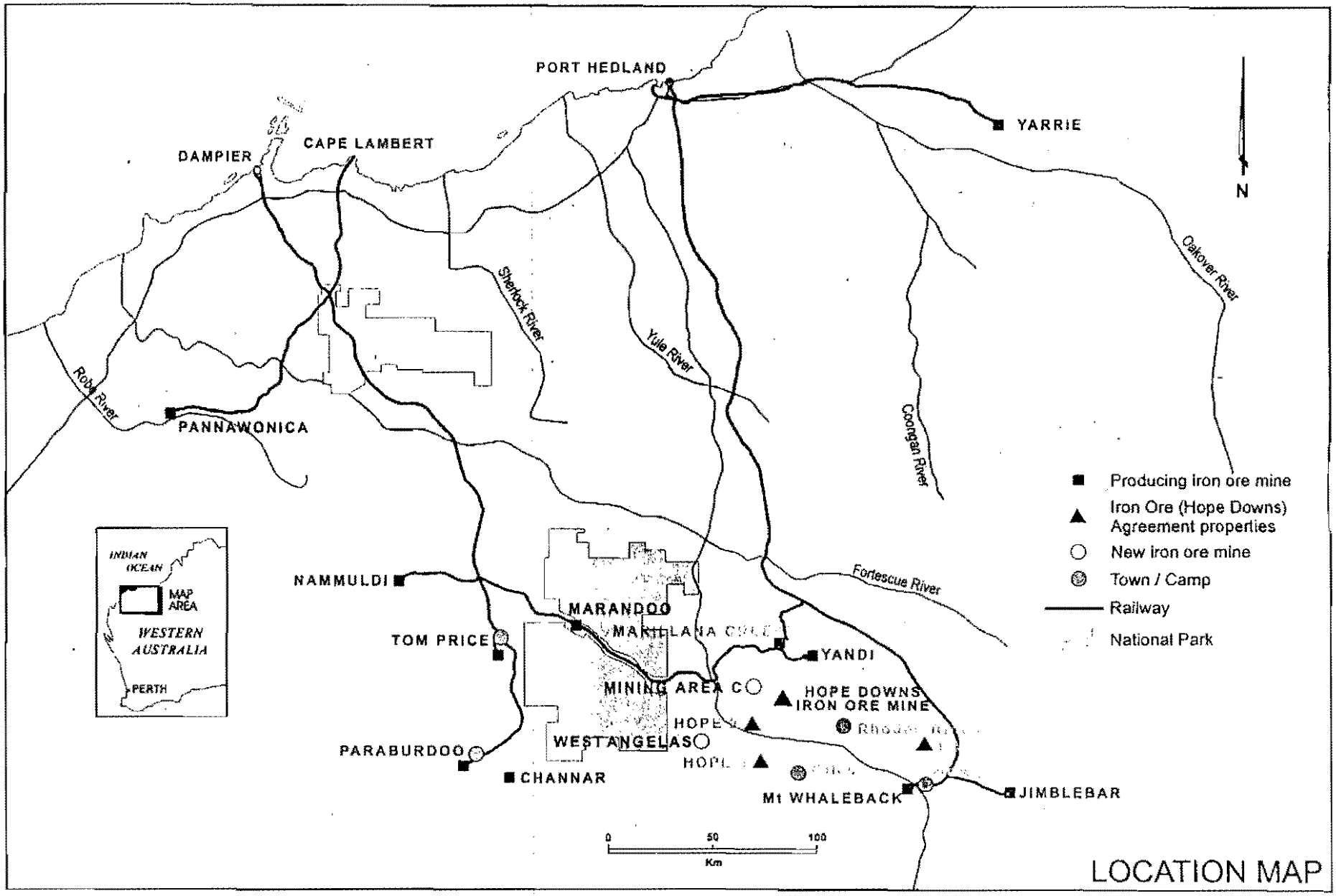


Figure 1. Location map (Source: Hope Downs Management Services, 2000).

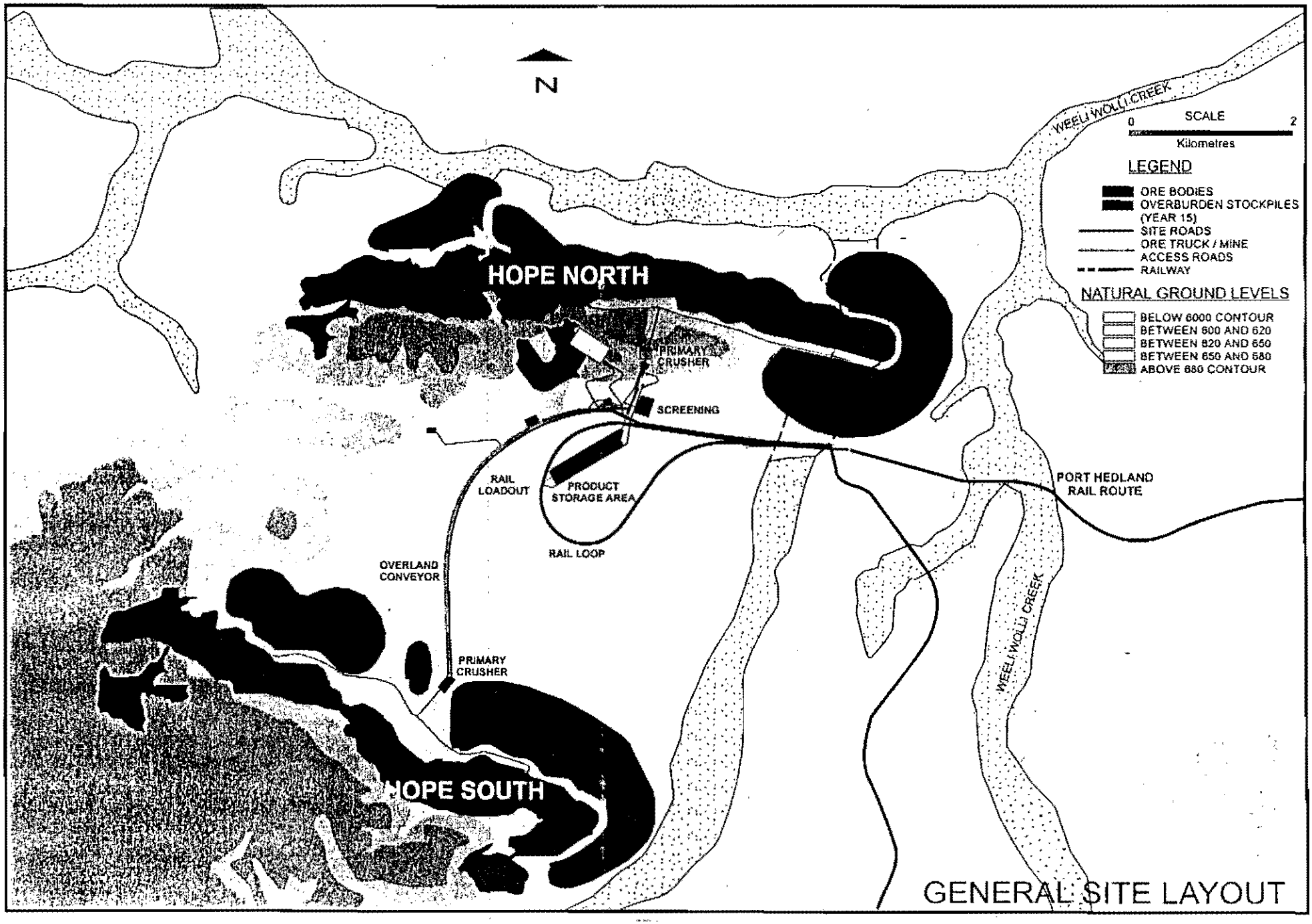


Figure 2. Site layout (Source: Hope Downs Management Services, 2000).

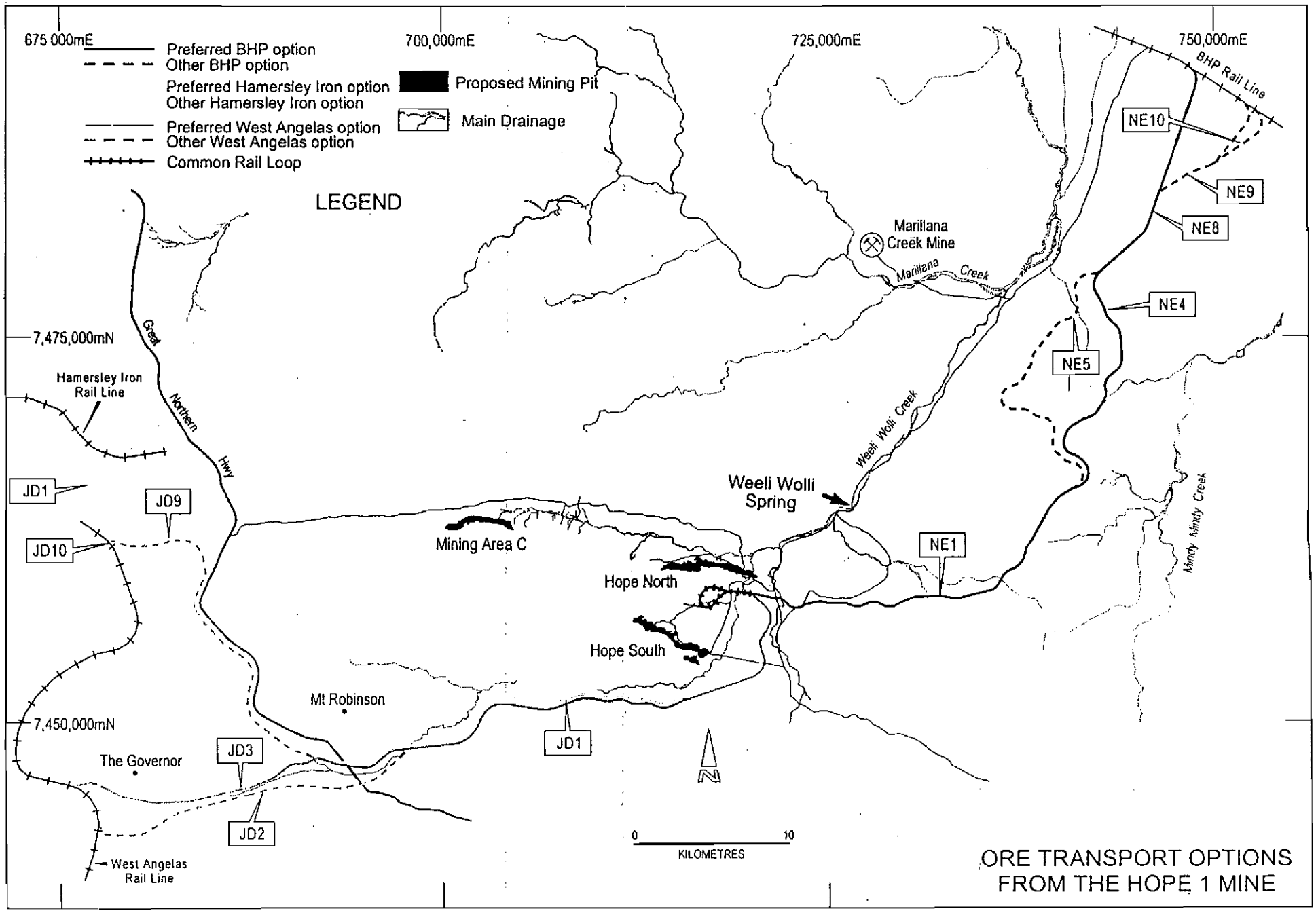


Figure 3. Rail connection options (Source: Hope Downs Management Services, 2000).

Schedule 2

Proponent's Environmental Management Commitments

30 July 2001

Hope Downs Iron Ore Mine, 75 km north-west of Newman, Pilbara Region

(Assessment No. 1308)

Hope Downs Management Services Pty Ltd

Proponent Commitments - Hope Downs Iron Ore Mine (Assessment No. 1308)

No.	Commitment	Objective	Action	Timing	Whose advice	Measurement/ compliance criteria
1	Prepare and implement an Environmental Management System (EMS) for the project	To manage the relevant environmental factors and to fulfill the requirements of the Conditions and procedures in the Ministerial Statement.	The EMS will include: • an environmental policy and corporate commitment to the EMS • planning to meet environmental requirements • specification and implementation of actions to meet environmental requirements • measurement and evaluation of environmental performance • review and improvement of environmental outcomes The Management Plans identified below will form part of the EMS.	A Construction Phase EMS will be completed prior to construction commencing. An Operations Phase EMS will be substantially completed prior to operations commencing.	Accredited assurance service.	Evidence of 1st party audits annually and 3rd party audits after certification to ISO14001 or equivalent where the scope covers the EPA's environmental factors.
2	Prepare, implement and regularly revise a Life of Project Environmental Management Plan. (EMP)	To manage the potential impacts of the construction and operations phases of the project.	The EMP will contain plans, guidelines and procedures to manage environmental issues associated with construction and operation of the project including: • surrounding environment. • vegetation clearing and management • overburden storage • surface water quality and quantity • groundwater quality and quantity • flora and fauna particularly introduced species • Aboriginal heritage • Greenhouse gases • dust and noise • fire • waste and hazardous materials • decommissioning and rehabilitation • contracting • continuous improvement	A Construction Phase EMP will be prepared prior to construction commencing. An Operations Phase EMP will be prepared prior to commissioning.	DME, DRD, CALM, WRC and MRD (depending on the project component).	EMP implemented and regularly revised. Results provided in annual and triennial reports.
3	Prepare and implement a Water Management Plan.	To manage the potential effects of operations on the surface and groundwater regimes and any dependent ecological systems	The Water Management Plan will contain plans, guidelines and procedures to manage environmental issues relating to the potential effects of operations on the surface and groundwater regimes and any dependent ecological systems. The Water Management Plan will incorporate the strategies outlined in Commitments 5 to 9.	Prior to the commencement of mining.	WRC and CALM.	No project induced, major long-term adverse effects on the surface and groundwater regimes and any dependent ecological systems. Results provided in annual and triennial reports.
4	Prepare and implement a Groundwater Monitoring Programme.	To confirm the extent and magnitude of groundwater drawdown.	To manage the effects of the operations on regional groundwater, particularly in areas potentially affected by drawdown, including Weeli Wolli Spring.	Prior to the commence-ment of mining.	WRC and CALM.	Results provided in annual and triennial reports.

No.	Commitment	Objective	Action	Timing	Whose advice	Measurement/ compliance criteria
5	Prepare alternative water management strategies and implement and refine as required.	To ensure that spring flow at Weeli Wolli Spring is not significantly affected by mining.	Alternative water management strategies will be prepared. The strategies will be implemented should monitoring identify a project-induced, statistically significant long-term decrease in water level or mean monthly flow at Weeli Wolli Spring. Reinstatement and ongoing monitoring of Weeli Wolli Spring low flow gauging station (GS 08016).	Prepared prior to the commencement of mining. Implemented and refined as required.	WRC and CALM.	No project induced major long-term impact on spring flow. Results provided in annual and triennial reports.
6	Prepare a Vegetation Monitoring Programme.	To monitor phreatophytic vegetation in Weeli Wolli Creek.	A Vegetation Monitoring Programme will be prepared and implemented to quantify any project-induced effects on phreatophytic vegetation within the project area.	Prepared and implemented prior to the commencement of mining. Monitoring to continue through to decommissioning.	WRC and CALM.	Results provided in annual and triennial reports.
7	Provide water supplementation to phreatophytic vegetation in the main Weeli Wolli Creek system, should vegetation monitoring indicate the need.	To maintain phreatophytic vegetation in Weeli Wolli Creek.	Strategies will be prepared to provide water supplementation to phreatophytic vegetation in areas along Weeli Wolli Creek. Should monitoring indicate that vegetation is being affected by dewatering drawdown these strategies will be implemented.	Prior to the commencement of mining. Water supplementation as required.	WRC and CALM.	No project-induced, major long-term adverse effect on phreatophytic vegetation at the Spring and within the main South branch of the Weeli Wolli Creek. Results provided in annual and triennial reports.
8	Design and implement flood diversion works.	To ensure that the project does not adversely impact on the surface water resources of the area.	Flood diversion works will be designed to maintain existing catchment flow volumes and quality. Existing flow paths will be maintained where possible. Decommissioning strategies may involve enhancing aquifer recovery through artificial recharge of flood flows in some sub-catchments.	Progressive development in relation to the stage of project development.	WRC and CALM.	No major project-induced impact on surface water resources. Results provided in annual and triennial reports.
9	Enhance the recovery of the groundwater system following mine closure.	To sustain phreatophytic vegetation and restore a self-sustaining spring flow at Weeli Wolli Spring within a reasonable period following mine closure (decommissioning period).	The Proponent will prepare and implement strategies to enhance the recovery of regional groundwater levels. This will include an investigation of the practicality of Aquifer Storage and Recovery. Should this prove practicable, any sites considered for ASR will be discussed and agreed with relevant Government agencies and other mining companies, if they are likely to be impacted by such activities.	Prepared prior to the commencement of mining Refined during mining operations (with the addition of monitoring data and further analysis).	WRC and CALM.	Monitoring of recovering groundwater levels and spring flows. Groundwater recovery to support a self-sustaining spring and phreatophytic vegetation. Results provided in annual and triennial reports during decommissioning period.
10	Backfill the Hope North and Hope South pits such that there is no generation of standing water unless a closure strategy can be developed and approved by Government approval that demonstrates that Weeli Wolli Spring flow can be maintained by an alternative means.	To ensure that Weeli Wolli Spring flow is self-sustaining following mine closure and there is no unacceptable deterioration in groundwater quality.	Backfilling of the Hope North pit will ensure that Weeli Wolli Spring flow is self-sustaining in the long term following mine closure. Investigate alternative strategies that will achieve the same objective and may not require 100% backfill to the pre-existing water table. Any alternative strategy will require acceptance and approval by government before being implemented.	Investigations will continue as necessary during the life of the mine. Prior to closure the final strategy will be developed and submitted to the relevant authorities for approval.	WRC. and CALM	Weeli Wolli Spring flow is self-sustaining in the long term.

11	Prepare and implement a Mine Closure Plan.	To ensure that a self-sustaining walk-away solution is implemented as soon as practicable following the completion of mining.	Prepare and implement a Mine Closure Plan to cover: • the removal of redundant infrastructure • rehabilitation • management of the final void • groundwater recovery and • post mining monitoring The plan will include an assessment of the need to import water following the cessation of mining to increase the rate of groundwater recovery.	Pre-construction identification of post-mining land uses. Progressive development in relation to the stage of project development.	WRC, CALM and DME.	Mine Closure Plan meets or exceeds regulatory requirements.
12	Consult with Banyjima, Nyiyaparli and Innawonga Elders in respect of additional Aboriginal site surveys in areas not already surveyed.	To identify any heritage sites.	Undertake additional surveys in areas not already surveyed within the Mining Lease area or Miscellaneous Licence areas that are likely to be disturbed or otherwise affected by mining operations or the construction of associated mining or transportation infrastructure.	Prior to the final design of mine or rail infrastructure or construction.	Banyjima, Nyiyaparli and Innawonga Elders.	Consultation with Elders on location of heritage sites and this information taken into account in route selection.
13	Prepare and implement an Aboriginal Heritage Management Programme.	To ensure that changes to the biological and physical environment do not adversely affect cultural associations with the area, to increase the cultural understanding of the area by implementing an ongoing programme of investigation and cultural management and to manage access to the important sites for purposes of their ongoing preservation.	Discuss and agree on an Aboriginal Heritage Management Programme with the Banyjima, Nyiyaparli and Innawonga people that protects cultural associations with the local area.	Prior to commencement of construction.	Banyjima, Nyiyaparli and Innawonga Elders.	Aboriginal Heritage Management Programme meets the requirements of the regulatory authorities and local people.
14	Consult with appropriate Aboriginal people in respect of heritage sites in the project area before any Section 18 (*Aboriginal Heritage Act* 1972) application is developed.	Consult with the appropriate Aboriginal groups regarding the necessary disturbance of sites.	Conduct consultations.	Prior to construction.	Banyjima, Nyiyaparli and Innawonga Elders as required.	Consultation conducted.
15	Submit the preferred rail option for review including the detailed design of the railway and associated infrastructure.	To ensure that all environmental and heritage issues are identified and addressed.	Undertake additional biological, physical and heritage studies on the preferred rail option. Overburden material will be used for embankment construction where this is practical in the vicinity of the mine area. Elsewhere, in line with normal engineering practice, where practicable cut and fill will be balanced to minimise the need for borrow pits.	Prior to construction.	CALM, WRC and appropriate Aboriginal Elders.	Final rail route selection and design review satisfies regulatory authorities and local people and is to Pilbara best practice.

16	Support and promote the free exchange of scientific information	To assist in a better understanding of biodiversity and regional impact	Provision of scientific data relating to flora and fauna baseline studies, hydrogeology and other studies undertaken as part of environmental reporting in a form that is compatible with and in line with best practice to enable the integration of this information into regional databases.	Contributions have already commenced and will be reviewed regularly	CALM, WRC, DEP	By agreement with CALM, WRC, DEP
17	The Proponent will undertake to assist where possible in the implementation of and supervision of compliance with management guidelines for Section 16 (*Conservation and Land Management Act 1984*) Agreements in respect of areas falling within the boundaries of its mining leases.	To improve management of conservation, recreation, heritage and research for the above areas.	Seek agreement with CALM and pastoral station owners on management guidelines and responsibilities for:- water resources, fencing, stock control, flora, fauna, fire management, rehabilitation, access and infrastructure, including roads, signage, management plans for areas of special significance (such as Weeli Wolli Spring) and future activities.	As soon as required.	CALM and pastoral station owners.	Compliance with management plans and guidelines.

Abbreviations:

ASR Aquifer Storage and Recovery

CALM Department of Conservation and Land Management

DEP Department of Environmental Protection

DME Department of Minerals and Energy

DRD Department of Resources Development

WRC Water and Rivers Commission

MRD Main Roads Department

N.B. The above are liable to change.

Attachment to Statement 584 – Change to Definition of Proposal.

Proposal: Hope Downs Iron Ore Project

Proponent: Hope Downs Management Services

Change: Production Rate Increase 25mtpa to 30mtpa

From:

Element	Quantities/Description
Ore Reserves	400mt
Ore Mining Rate –export tonnage	25mtpa
Stripping ratio	1:1.42
Mine Water Usage	5.8ML/day
Railing	25mtpa (approximately 3 trains/day)

To:

Element	Quantities/Description
Ore Reserves	473mt
Ore Mining Rate –export tonnage	30mtpa
Stripping ratio	1.1.19
Mine Water Usage	6.94Ml/day
Railing	30mtpa (approximately 3.6 trains per day.

Approval Date: - 3 OCT 2005

Attachment to Statement 584 – Change to Definition of Proposal.

Proposal: **Hope Downs Iron Ore Mine, 75km north-west of Newman, Pilbara**

Proponent: **Hamersley HMS Pty Ltd**

Change: to mine infrastructure and disturbance areas.

From:

Element	Quantities/Description
Area of disturbance	235ha
Power	15MW, diesel generator

To:

Element	Quantities/Description
Area of disturbance	Up to 288ha
Power	22km of powerlines linked to existing power network

Approval Date: 19/9/06

Attachment to Statement 584

Change to Description of Proposal

Proposal: Hope Downs Iron Ore Mine, 75 km North-West of Newman, Pilbara Region

Proponent: Hamersley Hope Management Services Pty Ltd

Change: Increase in the area of rail corridor disturbance

Amendment of Schedule 1 – Key Proposal Characteristics

Features of previously approved Proposal:

Element	Quantities/Description
Average width of rail corridor	Up to 25m
Length of rail corridor	Up to 75km (depending on option selected)
Rail corridor disturbance	Up to 200ha

Feature of changed Proposal:

Element	Quantities/Description
Average width of rail corridor	No more than 40m
Length of rail corridor	No more than 57km
Rail corridor disturbance	No more than 1050 ha (of which no more than 331ha will be permanently disturbed)
Rail corridor rehabilitation	All disturbed areas will be rehabilitated other than the above-mentioned 331ha of permanent disturbance

Approval Date: 31/10/06

Attachment 1 to Statement 584

Change to Proposal

Proposal: Hope Downs Iron Ore Mine, 75 km north-west of Newman, Pilbara Region

Proponent: Hamersley Hope Management Services Pty Ltd

Change: Increase in project clearance disturbance area from 1,600 hectares to 1,850 hectares (as shown on Figure 4), and updating of Key Characteristics Table.

Approved Key Characteristics and Amended Key Characteristics

Element	Description of Approved Proposal	Description of Approved Changes to Proposal
Mining and Processing		
Construction period	Approximately 2 years	**Removed – no longer relevant to assessment criteria**
Project life	Approximately 20 years	Approximately 20 years
Ore reserves	473 mt *	**Removed – no longer relevant to assessment criteria**
Ore mining rate – export tonnage	30Mtpa *	30 mega tonnes per annum
Average pit depth	240m (North), 130m (South)	**Removed – no longer relevant to assessment criteria**
Mining below the water table	60% (North), minor pods (South)	**Removed – element relevant to 'Mine Pit Dewatering'**
Maximum overburden movement during life of mine	98 Mm^3 (Hope North), 103 Mm^3 (Hope South)	**Removed – no longer relevant to assessment criteria**
Maximum overburden at end of mining	49.5 Mm^3 (Hope South)	**Removed – no longer relevant to assessment criteria**
Low grade stockpiles	7 Mt (maximum)	**Removed – no longer relevant to assessment criteria**
Average stripping ratio (average ratio of ore to overburden for north and south deposits)	1:1.19 *	**Removed – no longer relevant to assessment criteria**

Element	Description of Approved Proposal	Description of Approved Changes to Proposal
Processing facilities / materials handling	Primary Crusher Secondary dry screening and crushing. Product stockpiles. Train loadout facilities. Rail spur to existing railway (depending on option selected). Conveyors. Stackers and reclaimers.	Primary Crusher. Secondary dry screening and crushing product stockpiles. Train loadout facilities. Rail spur to existing railway. Conveyors. Stackers and reclaimers.
Infrastructure		
Power	22 km of powerline linked to existing power network	22 kilometres of powerline linked to existing power network
Water	6.94 ML/day *	6.94 mega litres per day
Airstrip	Existing airstrip at Hope North	**Removed – no longer relevant to assessment criteria**
Roads	General traffic, ore truck, mine access, and rail and conveyor access.	General traffic, ore truck, mine access, and rail and conveyor access
Railway connection	Connection to existing iron ore railway (up to 75 km)	Connection to existing iron ore railway
Buildings	Administration, maintenance workshops, storage and village.	Administration, maintenance workshops, storage and village
Sewage	Sewage treatment plant (village), septics (other)	Sewage treatment plant (accommodation village), septics (other)
Mine Pit Dewatering		
Rate	30 to 110 ML/day	30 to 110 mega litres per day
Disposal of excess	To Weeli Wolli Spring To sustain ecological requirements Aquifer storage with recovery post mining	• To Weeli Wolli Spring • To sustain ecological requirements • Aquifer storage with recovery post mining
Disturbance Areas		
Area of pits	349 ha (North), 296 ha (South)	**Removed – area included in 'Mining area – total area disturbed'**
Waste dumps	328 ha (North), 368 ha (South)	**Removed – area included in 'Mining area – total area disturbed'**
Other mine infrastructure	Up to 235 ha +	**Removed – area included in 'Mining area – total**

Element	Description of Approved Proposal	Description of Approved Changes to Proposal
		area disturbed'
Total area disturbed (mine)	1600 ha	**Removed – area included in 'Mining area – total area disturbed'**
Mining area – Total area disturbed		Not more than 1850 hectares
Area rehabilitated	1340 ha	1590 hectares
Powerline – Total area disturbed	53 ha	Not more than 53 hectares
Average width of rail corridor	No more than 40m [#]	Not more than 40 metres
Length of rail corridor	No more than 57 km [#]	Not more than 57 kilometres
Rail corridor – Total area disturbed	No more than 1050 ha (of which no more than 331 ha will be permanently disturbed)	Not more than 1,050 hectares (of which no more than 331 hectares will be permanently disturbed)
Rail corridor - rehabilitation	All disturbed areas will be rehabilitated other than the above mentioned 331 ha of permanent disturbance. [#]	All disturbed areas will be rehabilitated other than the above-mentioned 331 hectares of permanent disturbance.
Workforce		
Construction	500 peak	**Removed – no longer relevant to assessment criteria**
Permanent	Up to 300 fly in/fly out	**Removed – no longer relevant to assessment criteria**

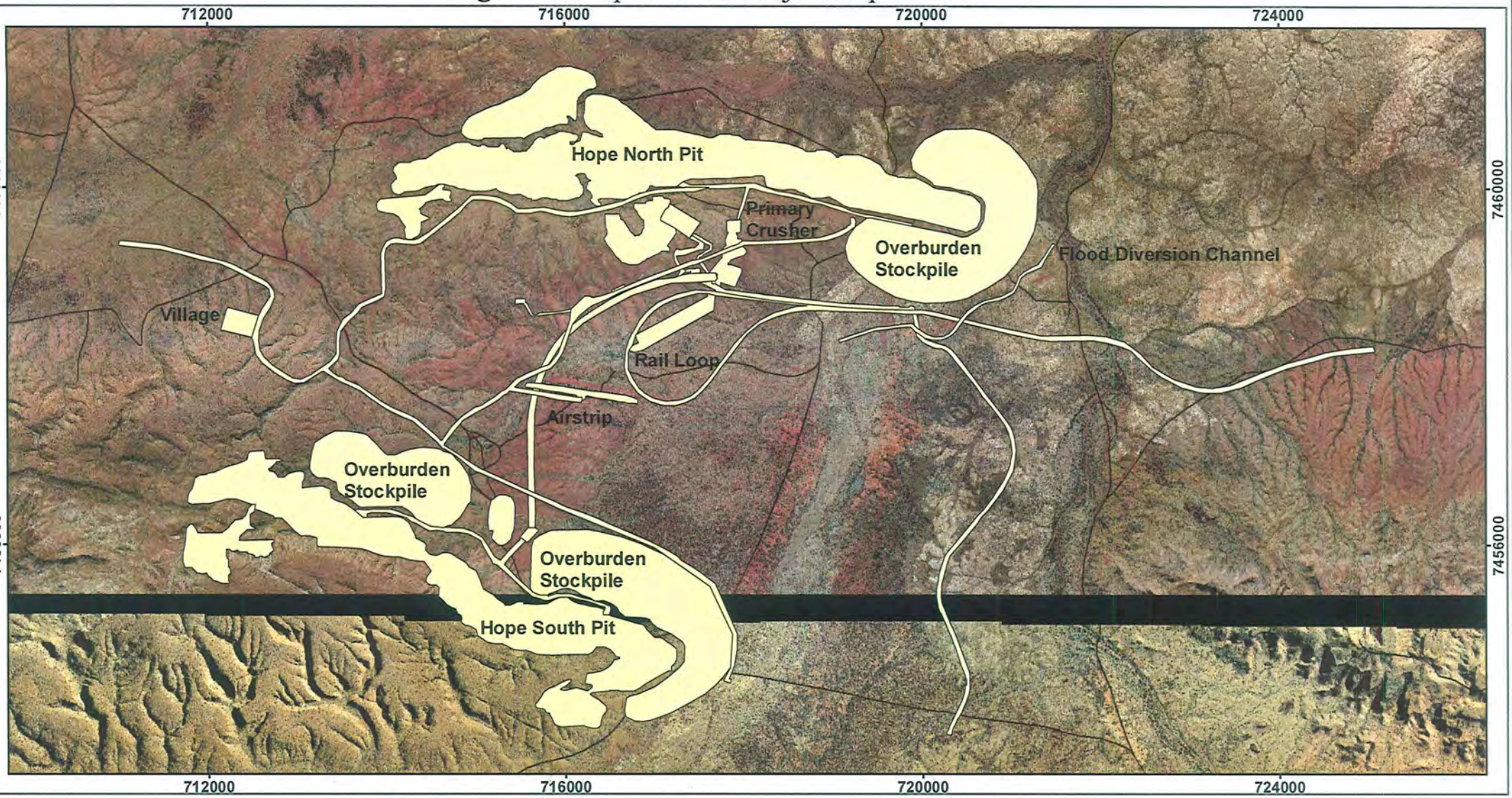
[*] Change approved 3 October 2005
[+] Change approved 19 September 2006
[#] Change approved 31 October 2006

List of Figures:
Figure 4 – Approved proposal layout

Dr Paul Vogel
CHAIRMAN
Environmental Protection Authority
under delegated authority

Approval date: 14.7.09

Figure 4 : Hope Downs Project Impact Area



Legend

- Hope Downs Approved Area
- Roads

0 0.5 1 2 Km

1:60,000

Projection: Geographic Coordinate System
Datum: Geocentric Datum of Australia, 1994
The coordinates are displayed in metres

Data Source

Hope Downs Approved Area, Rio Tinto (2009)
Aerial Photography, Landgate (2004)
Roads, Landgate (2004)

Analysis

none

Presentation

Environmental Protection Authority (2009)

Notes: These polygons were created by the proponent. They were digitised from Figure 1 of Ministerial Statement 584 - All infrastructure and pits from this figure were digitised. Remaining infrastructure was digitised from Figure 4.2 (General Site Layout) in the Public Environmental Review this includes site roads, flood diversion bund and village. Infrastructure layout is indicative.

Attachment 2 to Statement 584

Change to Proposal

Proposal: Hope Downs Iron Ore Mine, 75 km North-West of Newman Pilbara Region

Proponent: Hamersley Hope Management Services Pty Ltd

Change: Increase to approved disturbance area and redefinition of Project Area

Key Characteristics Table:

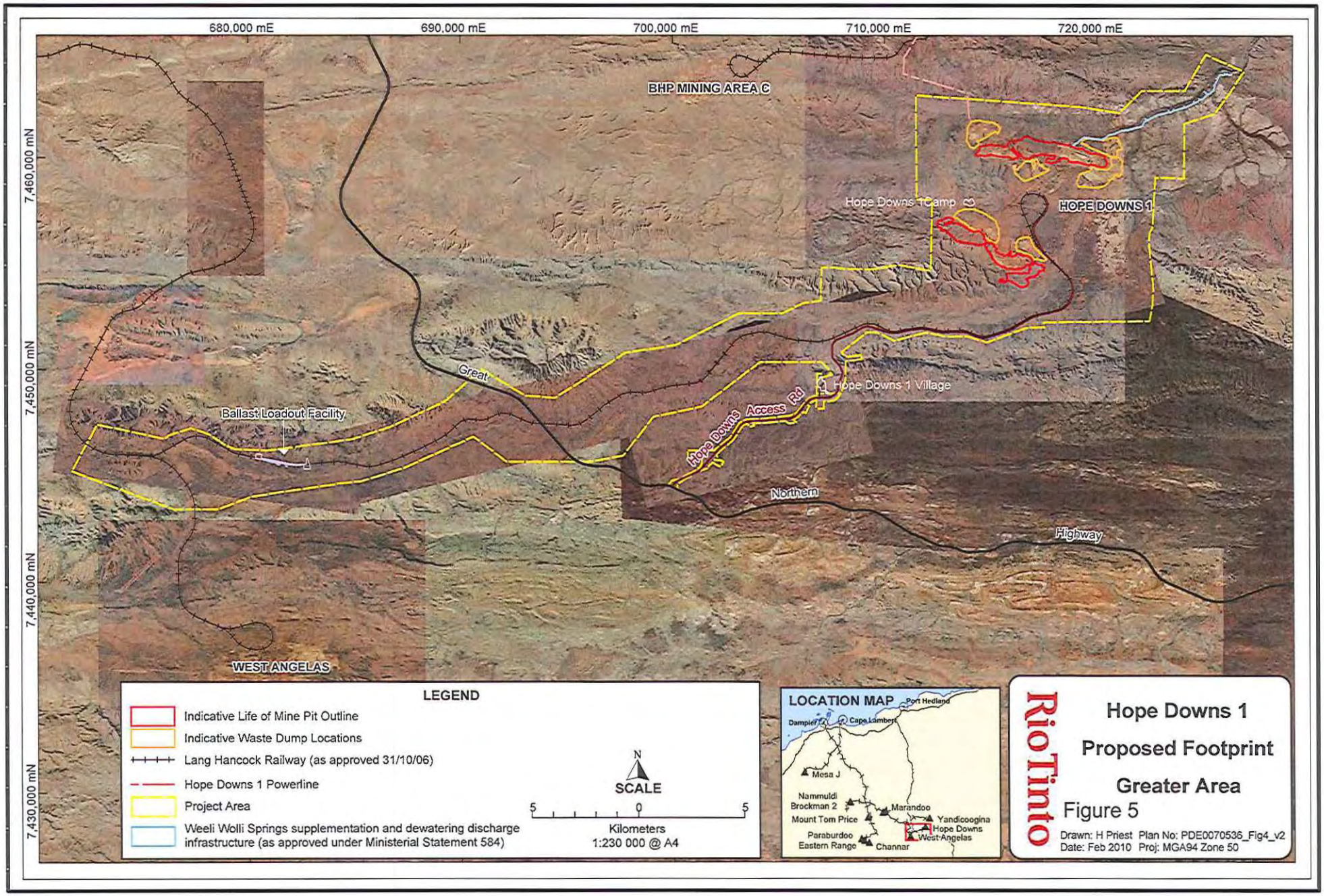
Element	**Description of Approved Proposal**	**Description of Approved Changes to Proposal**
Mining and Processing		
Project life	Approximately 20 years	Approximately 20 years
Ore mining rate – export tonnage	30 mega tonnes per annum *	30 mega tonnes per annum
Processing facilities / materials handling	Primary Crusher. Secondary dry screening and crushing product stockpiles. Train loadout facilities. Rail spur to existing railway. Conveyors. Stackers and reclaimers.	Primary Crusher. Secondary dry screening and crushing product stockpiles. Train loadout facilities. Rail spur to existing railway. Conveyors. Stackers and reclaimers.
Infrastructure		
Power	22 kilometres of powerline linked to existing power network	22 kilometres of powerline linked to existing power network
Water	6.94 mega litres per day *	6.94 mega litres per day
Roads	General traffic, ore truck, mine access, and rail and conveyor access	General traffic, ore truck, mine access, and rail and conveyor access
Railway connection	Connection to existing iron ore railway	Connection to existing iron ore railway
Buildings	Administration, maintenance workshops, storage and village	Administration, maintenance workshops, storage and village
Sewage	Sewage treatment plant (accommodation village), septics (other)	Sewage treatment plant (accommodation village), septics (other)

Element	Description of Approved Proposal	Description of Approved Changes to Proposal
Mine Pit Dewatering		
Rate	30 to 110 mega litres per day	30 to 110 mega litres per day
Disposal of excess	• To Weeli Wolli Spring • To sustain ecological requirements • Aquifer storage with recovery post mining	• To Weeli Wolli Spring • To sustain ecological requirements • Aquifer storage with recovery post mining
Disturbance Areas		
Mining area – Total area disturbed	Not more than 1850 hectares >	Not more than **2250 hectares**
Area rehabilitated	1590 hectares >	**1990 hectares**
Powerline – Total area disturbed	Not more than 53 hectares	Not more than 53 hectares
Average width of rail corridor	Not more than 40 metres #	Not more than 40 metres
Length of rail corridor	Not more than 57 kilometres #	Not more than 57 kilometres
Rail corridor – Total area disturbed	Not more than 1,050 hectares (of which no more than 331 hectares will be permanently disturbed)	Not more than **1,080 hectares** (of which no more than **338 hectares** will be permanently disturbed)
Rail corridor - rehabilitation	All disturbed areas will be rehabilitated other than the above-mentioned 331 hectares of permanent disturbance. #	All disturbed areas will be rehabilitated other than the above-mentioned **338 hectares** of permanent disturbance.

* Change approved 3 October 2005
+ Change approved 19 September 2006
# Change approved 31 October 2006
> Change approved 14 July 2009

List of Figures:
Figure 5: Hope Downs 1 Proposed Footprint Greater Area

Dr Paul Vogel
CHAIRMAN
Environmental Protection Authority
under delegated authority
Approval date: 6 September 2010


680,000 mE
690,000 mE
700,000 mE
710,000 mE
720,000 mE
7,460,000 mN
7,450,000 mN
7,440,000 mN
7,430,000 mN
BHP MINING AREA C
HOPE DOWNS 1
Hope Downs 1 Camp
Hope Downs 1 Village
Great
Northern
Highway
Hope Downs Access Rd
Ballast Loadout Facility
WEST ANGELAS
LEGEND
Indicative Life of Mine Pit Outline
Indicative Waste Dump Locations
Lang Hancock Railway (as approved 31/10/06)
Hope Downs 1 Powerline
Project Area
Weeli Wolli Springs supplementation and dewatering discharge infrastructure (as approved under Ministerial Statement 584)
N
SCALE
5 0 5
Kilometers
1:230 000 @ A4
LOCATION MAP
Port Hedland
Dampier
Cape Lambert
Mesa J
Nammuldi
Brockman 2
Mount Tom Price
Marandoo
Yandicoogina
Hope Downs
West Angelas
Paraburdoo
Eastern Range
Channar
Rio Tinto
Hope Downs 1
Proposed Footprint
Greater Area
Figure 5
Drawn: H Priest Plan No: PDE0070536_Fig4_v2
Date: Feb 2010 Proj: MGA94 Zone 50

Attachment 3 to Ministerial Statement 584

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

Proposal: Hope Downs Iron Ore Mine, 75 Kilometres North-West of Newman Pilbara Region

Proponent: Hamersley Hope Management Services Pty Ltd

Change: Remove Weeli Wolli Spring supplementation limit in Schedule 1

This attachment provides for the following change to Schedule 1 of Statement 584:

Approved content

Critical to the prevention of unacceptable impacts on Weeli Wolli Spring as a result of the dewatering operation are the following management strategies:

1. Maintenance of spring flow by direct discharge of up to 18 000 kilolitres of water per day to the spring during dewatering;

Amended content

Critical to the prevention of unacceptable impacts on Weeli Wolli Spring as a result of the dewatering operation are the following management strategies:

1. Maintenance of spring flow by direct discharge of water to the spring during dewatering;

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Approval date: 20 April 2012

Attachment 4 to Ministerial Statement 584

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

Proposal: Hope Downs Iron Ore Mine, 75 km north-west of Newman, Pilbara Region

Proponent: Hamersley Hope Management Services Pty Ltd

Change: Removal of ore mining rate and expansion of disturbance footprint

Key Characteristics Table: This table replaces the Key Characteristics Table in Attachment 2.

Element	Description of proposal	Description of approved change to proposal
Mining and Processing		
Project life	Approximately 20 years	Approximately 20 years
Ore mining rate – export tonnage	30 mega tonnes per annum	**Removed as not a key environmental factor**
Processing facilities / materials handling	Primary Crusher. Secondary dry screening and crushing product stockpiles. Train loadout facilities. Rail spur to existing railway. Conveyors. Stackers and reclaimers.	Primary Crusher. Secondary dry screening and crushing product stockpiles. Train loadout facilities. Rail spur to existing railway. Conveyors. Stackers and reclaimers.
Infrastructure		
Power	22 kilometres of powerline linked to existing power network	22 kilometres of powerline linked to existing power network
Water	6.94 mega litres per day	6.94 mega litres per day
Roads	General traffic, ore truck, mine access, and rail and conveyor access	General traffic, ore truck, mine access, and rail and conveyor access
Railway connection	Connection to existing iron ore railway	Connection to existing iron ore railway
Buildings	Administration, maintenance workshops, storage and village	Administration, maintenance workshops, storage and village
Sewage	Sewage treatment plant (accommodation village), septics (other)	Sewage treatment plant (accommodation village), septics (other)
Mine Pit Dewatering		

Rate	30 to 110 mega litres per day	30 to 110 mega litres per day
Disposal of excess	• To Weeli Wolli Spring • To sustain ecological requirements • Aquifer storage with recovery post mining	• To Weeli Wolli Spring • To sustain ecological requirements • Aquifer storage with recovery post mining
Disturbance Areas		
Mining area – Total area disturbed	Not more than 2250 hectares	**Not more than 3750 hectares**
Area rehabilitated	1990 hectares	**2990 hectares**
Powerline – Total area disturbed	Not more than 53 hectares	Not more than 53 hectares
Average width of rail corridor	Not more than 40 metres	Not more than 40 metres
Length of rail corridor	Not more than 57 kilometres	Not more than 57 kilometres
Rail corridor – Total area disturbed	Not more than 1,080 hectares (of which no more than 338 hectares will be permanently disturbed)	Not more than 1,080 hectares (of which no more than 338 hectares will be permanently disturbed)
Rail corridor - rehabilitation	All disturbed areas will be rehabilitated other than the above-mentioned 338 hectares of permanent disturbance.	All disturbed areas will be rehabilitated other than the above-mentioned 338 hectares of permanent disturbance.

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

Dr Paul Vogel
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under delegated authority

Approval date: 28 August 2012

Attachment 5 to Ministerial Statement 584

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

Proposal: Hope Downs Iron Ore Mine, 75 km north-west of Newman, Pilbara Region

Proponent: Hamersley HMS Pty Ltd

Change: Annualise Mine Pit Dewatering Rate

Key Characteristics Table: This table replaces the Key Characteristics Table in Attachment 4.

Element	Description of proposal	Description of approved change to proposal
Mining and Processing		
Project life	Approximately 20 years	Approximately 20 years
Processing facilities / materials handling	Primary Crusher. Secondary dry screening and crushing product stockpiles. Train loadout facilities. Rail spur to existing railway. Conveyors. Stackers and reclaimers.	Primary Crusher. Secondary dry screening and crushing product stockpiles. Train loadout facilities. Rail spur to existing railway. Conveyors. Stackers and reclaimers.
Infrastructure		
Power	22 kilometres of powerline linked to existing power network	22 kilometres of powerline linked to existing power network
Water	6.94 mega litres per day	6.94 mega litres per day
Roads	General traffic, ore truck, mine access, and rail and conveyor access	General traffic, ore truck, mine access, and rail and conveyor access
Railway connection	Connection to existing iron ore railway	Connection to existing iron ore railway
Buildings	Administration, maintenance workshops, storage and village	**Removed as not a key environmental factor**
Sewage	Sewage treatment plant (accommodation village), septics (other)	Sewage treatment plant (accommodation village), septics (other)
Mine Pit Dewatering		
Rate	30 to 110 mega litres per day	**Up to 40.15 giga litres per annum**

Disposal of excess	• To Weeli Wolli Spring • To sustain ecological requirements • Aquifer storage with recovery post mining	• To Weeli Wolli Spring • To sustain ecological requirements • Aquifer storage with recovery post mining
Disturbance Areas		
Mining area – Total area disturbed	Not more than 3750 hectares	Not more than 3750 hectares
Area rehabilitated	2990 hectares	2990 hectares
Powerline – Total area disturbed	Not more than 53 hectares	Not more than 53 hectares
Average width of rail corridor	Not more than 40 metres	Not more than 40 metres
Length of rail corridor	Not more than 57 kilometres	Not more than 57 kilometres
Rail corridor – Total area disturbed	Not more than 1,080 hectares (of which no more than 338 hectares will be permanently disturbed)	Not more than 1,080 hectares (of which no more than 338 hectares will be permanently disturbed)
Rail corridor - rehabilitation	All disturbed areas will be rehabilitated other than the above-mentioned 338 hectares of permanent disturbance.	All disturbed areas will be rehabilitated other than the above-mentioned 338 hectares of permanent disturbance.

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

[Signed 7 November 2013

Dr Paul Vogel
CHAIRMAN
Environmental Protection Authority
under delegated authority