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

HOPE DOWNS 4 IRON ORE MINE
SHIRE OF EAST PILBARA

**Proposal:** The proposal is to construct and operate an iron ore mining area and associated infrastructure at the Hope Downs 4 Iron Ore Mine located approximately 30 kilometres north west of Newman within the Shire of East Pilbara The proposal consists of a designated mining area, two infrastructure corridor options, excess water discharge infrastructure and an accommodation area and the realignment of a 2.5 kilometre section of Coondiner Creek.

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

**Proponent:** Hamersley HMS Pty Limited

**Proponent Address:** 152-158 St George's Terrace,
PERTH WA 6000

**Assessment Number:** 1738

**Report of the Environmental Protection Authority:** Report 1374

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 (CEO) 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 CEO 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 CEO of the Office of the Environmental Protection Authority.

4-2 The proponent shall submit to the CEO 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 CEO of the Office of the Environmental Protection Authority.

4-5 The proponent shall advise the CEO 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 CEO 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 Managing Director or a person delegated to sign on the Managing Director'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 Groundwater Drawdown

5-1 The proponent shall ensure that the dewatering of groundwater as a result of abstraction and excavation of aquifers required to implement the proposal does not adversely affect the C4 vegetation community located to the south of the mining area as indicated in Schedule 1, Figure 5; Coondiner Creek; the calcrete and alluvial aquifers; or any of the pools in the surrounding area (namely Eagle Rock Pool, Eagle Rock Falls, Stuarts Pool, Kalgan Pool, Mindy Mindy Creek Pool(s), Three Pools, Bella Pool, Cliff Pool and/or Steer Pool), or their associated vegetation.

5-2 To verify that the requirements of condition 5-1 are met the proponent shall:

1. identify all sites and parameters to be monitored and the monitoring methodologies, including methods which will determine whether a decline in condition and cover of riparian vegetation and pool levels is attributable to the implementation of the proposal or to other causes in the event that trigger levels under condition 5-2 3 are exceeded, to the satisfaction of the CEO of the Office of the Environmental Protection Authority on advice from the Department of Water, prior to the commencement of dewatering;

2. submit baseline monitoring of groundwater levels, permanent pool water levels and native vegetation condition and cover at all sites identified under condition 5-2 1 prior to the commencement of dewatering;

3. provide trigger levels for water levels in permanent pools and condition and cover of riparian vegetation at all sites identified under condition 5-2 1 for the approval of the CEO of the Office of the Environmental Protection Authority, prior to the commencement of dewatering;

4. provide contingency actions to remediate any potential impacts resulting from groundwater abstraction and lateral leakage from the Coondiner Creek alluvial aquifer into mine pit(s) prior to the commencement of dewatering for the approval of the CEO of the Office of the Environmental Protection Authority on advice of the Department of Water;

5. from the commencement of dewatering, monitor groundwater levels (mAHD), and the extent of surface water expression and depth for permanent pools at the agreed sites identified in condition 5-2 1;

6. from the commencement of dewatering, monitor the condition and cover of riparian vegetation at each of the agreed sites; and

7. undertake monitoring required in conditions 5-2 1, 5-2 5 and 5-2 6 to the satisfaction of the CEO of the Office of the Environmental Protection Authority in consultation with the Department of Water.

5-3 The proponent shall submit annually the results of monitoring required by condition 5-2 to the CEO of the Office of the Environmental Protection Authority as part of the compliance assessment report required by condition 4-6.

5-4 In the event that the monitoring required by conditions 5-2 5 and 5-2 6 indicate an exceedance of trigger levels for surface water expression and water depth for permanent pools and /or condition and cover of riparian vegetation respectively, as determined under condition 5-2 3:

1. the proponent shall report to the CEO of the Office of the Environmental Protection Authority within 7 days of the exceedance being identified;

2. provide evidence which allows determination of the cause of the exceedance;

3. if determined by the CEO of the Office of the Environmental Protection Authority that any exceedance is 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 to the CEO of the Office of the Environmental Protection Authority; and

4. the proponent shall implement contingency actions required under condition 5-4 3 upon approval to implement those actions from the CEO of the Office of the Environmental Protection Authority until such time as the CEO of the Office of the Environmental Protection Authority determines that the remedial actions may cease.

5-5 The proponent shall make the monitoring reports required by condition 5-3 publicly available in a manner approved by the CEO of the Office of the Environmental Protection Authority.

## 6 Dewater Discharge

6-1 The proponent shall ensure that any dewater discharged to the environment does not exceed ANZECC/ARMCANZ* default trigger values for the protection of marine and freshwater ecosystems.

Where the proponent can demonstrate through adequate baseline monitoring that natural background levels of the receiving environment exceed ANZECC/ARMCANZ* default trigger values, revised trigger values can be implemented on approval of the CEO of the Office of the Environmental Protection Authority.

6-2 The proponent shall manage excess water through discharge to Kalgan Creek until such time as dewatering at the Hope Downs 1 iron ore mine ceases. At this time the proponent shall then cease discharge to Kalgan Creek and transfer water to Hope Downs 1 for aquifer reinjection unless it can be demonstrated to the satisfaction of the CEO of the Office of the Environmental Protection Authority that discharge to Kalgan Creek can continue.

6-3 The proponent shall ensure that, as a result of the discharge of excess water to Kalgan Creek, permanent surface water flow does not extend closer than 30 kilometres to the boundary of Fortescue Marsh (defined by coordinates 802197.30E and 7498223.30N (MGA zone 50)).

6-4 To verify that the requirements of condition 6-3 are met the proponent shall undertake monitoring to the satisfaction of the CEO of the Office of the Environmental Protection Authority in consultation with the Department of the Environment and Conservation and submit the results annually as part of the compliance assessment report required by condition 4-6.

6-5 Should monitoring demonstrate that the permanent surface water flow extends closer than 30 kilometres to the boundary of the Fortescue Marsh then the proponent will report this to the CEO of the Office of the Environmental Protection Authority within seven days of identification in accordance with condition 4-5.

6-6 The proponent shall ensure that excess water discharge required to implement the proposal does not adversely affect Kalgan Creek or its surrounding riparian vegetation, as defined in Table 10 of the “Hope Downs

4 Iron Ore Project-Public Environmental Review, Issue Date: January 2010" and Schedule 1, Figure 4.

6-7 To verify that the requirements of condition 6-6 are met the proponent shall:

1. identify all sites and parameters to be monitored and the monitoring methodologies to the satisfaction of the CEO of the Office of the Environmental Protection Authority on advice from Department of the Environment and Conservation and the Department of Water, prior to the commencement of excess water discharge;

2. submit baseline monitoring of water levels and native vegetation health and abundance at all sites identified under condition 6-7 1 prior to the commencement of excess water discharge;

3. provide trigger levels for condition and cover of riparian vegetation associated with Kalgan Creek as defined in Table 10-1 of the "Hope Downs 4 Iron Ore Project-Public Environmental Review, Issue Date: January 2010" and Schedule 1, Figure 4, for the approval of the CEO of the Office of the Environmental Protection Authority on advice of the Department of the Environment and Conservation, prior to the commencement of excess water discharge;

4. provide contingency actions to remediate any potential impacts resulting from excess water discharge prior to the commencement of discharge for the approval of the CEO of the Office of the Environmental Protection Authority on advice of the Department of Environment and Conservation and the Department of Water. These contingency actions shall not include discharge of excess water to Coondiner Creek or any other creek;

5. from the commencement of discharge of excess water, monitor surface water quality as defined under ANZECC/ARMCANZ*, levels and flow at each of the agreed sites;

6. from the commencement of discharge of excess water, monitor the condition and cover of riparian vegetation at each of the agreed sites; and

7. monitoring required in conditions 6-7 5 and 6-7 6 should be carried out to the satisfaction of the CEO of the Office of the Environmental Protection Authority in consultation with the Department of the Environment and Conservation and the Department of Water and include methods which will allow determination of whether an impact is attributable to the implementation of the proposal or to other causes, in the event that trigger levels under condition 6-7 3 are reached.

6-8 The proponent shall submit annually the results of monitoring required by conditions 6-4 and 6-7 to the CEO of the Office of the Environmental Protection Authority as part of the compliance assessment report required by condition 4-6.

6-9 In the event that the monitoring required by conditions 6-7 5 and 6-7 6 indicate an exceedance of trigger levels for condition and cover of vegetation determined under condition 6-7 3:

1. the proponent shall report to the CEO of the Office of the Environmental Protection Authority within 7 days of the exceedance being identified;

2. provide evidence which describes the decline of condition and/or cover and allows determination of the cause of the exceedance;

3. if the exceedance is determined by the CEO 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 to the CEO of the Office of the Environmental Protection Authority; and

4. the proponent shall implement contingency actions required under condition 6-9 3 upon approval to implement those actions from the CEO of the Office of the Environmental Protection Authority until such time as the CEO of the Office of the Environmental Protection Authority determines that the remedial actions may cease.

6-10 The proponent shall make the monitoring reports required by conditions 6-4 and 6-7 publicly available in a manner approved by the CEO of the Office of the Environmental Protection Authority.

* Australian and New Zealand Environment and Conservation Council and Agriculture and Resource Management Council of Australia and New Zealand 2000, Australian Water Quality Guidelines for Fresh and Marine Waters and its updates.

## 7 Water Quality

7-1 The proponent shall ensure that run-off and/or seepage from the tailings storage facility and waste material landforms does not lead to the quality of surface water or groundwater within or adjacent to the proposal area exceeding the trigger values for a slightly to moderately disturbed ecosystem provided for in Table 3.4.2 of Chapter 3 of the "Australian and New Zealand Environment and Conservation Council and Agriculture and Resource Management Council of Australia and New Zealand 2000, *Australian Water Quality Guidelines for Fresh and Marine Waters"* and its updates, taking into consideration natural background water quality of the receiving environment.

7-2 The proponent shall monitor the quality of surface water and groundwater upstream and downstream of the tailings storage facility and waste material landforms to ensure that the requirements of condition 7-1 are met. This monitoring is to be carried out using methods consistent with "Australian and New Zealand Environment and Conservation Council and Agriculture and Resource Management Council of Australia and New Zealand 2000, *Australian Guidelines for Water Quality Monitoring and Reporting"* (and its

updates) and to the satisfaction of the CEO of the Office of the Environmental Protection Authority.

7-3 The proponent shall commence the water quality monitoring required by condition 7-2 before ground disturbing activities in order to collect baseline data.

7-4 The proponent shall submit annually the results of monitoring required by condition 7-2 to the CEO of the Office of the Environmental Protection Authority as part of the compliance assessment report required by condition 4-6.

7-5 In the event that monitoring required by condition 7-2 indicates that the requirements of condition 7-1 are not being met, the proponent shall:

1. report such findings to the CEO of the Office of the Environmental Protection Authority within 7 days of the decline in water quality being identified;

2. provide evidence which describes the decline of water quality and allows determination of the cause of the decline; and

3. if the decline in water quality is determined by the CEO of the Office of the Environmental Protection Authority to be a result of activities undertaken in implementing the proposal, the proponent shall submit the actions to be taken to remediate the decline within 21 days of the determination being made to the CEO of the Office of the Environmental Protection Authority; and

4. the proponent shall implement the actions identified in condition 7-5 3 upon approval to implement those actions from the CEO of the Office of the Environmental Protection Authority until such a time as the CEO of the Office of the Environmental Protection Authority determines that the remedial actions may cease.

7-6 The proponent shall make the monitoring reports required by condition 7-4 publicly available in consultation with the CEO of the Office of the Environmental Protection Authority.

## 8 Flora and Vegetation

8-1 The proponent shall ensure that the loss of the Declared Rare Flora species *Lepidium catapycnon* shall not exceed one population consisting of no more than 20 plants due to the construction and operation of infrastructure corridor option 1 as identified in Schedule 1, Figure 6.

8-2 In the event that infrastructure corridor option 6 is implemented under condition 9-2 then the proponent shall ensure that the loss of the Declared Rare Flora species *Lepidium catapycnon* shall not exceed 3 populations consisting of no more than 20 plants each due to the construction and operation of infrastructure corridor option 6 as identified in Schedule 1, Figures 6 and 7.

8-3 Prior to ground disturbance activities, the Proponent shall submit to the CEO of the Office of the Environmental Protection Authority, a report detailing how the design of the project has reduced impacts within the 5,470 hectares of allowed clearing and infrastructure construction on the following conservation values:

- Declared Rare Flora;
- Priority flora; and
- local conservation significant vegetation communities B1, C1, C2, C3, C4, S1, S2, S3, S4, M1, M2, M3, M4, X2, X4 and X5, as defined in Table 10 of the "Hope Downs 4 Iron Ore Project-Public Environmental Review, Issue Date: January 2010" and of Schedule 1, Figures 4, 5, 6 and 7.

This report shall incorporate the advice of the Department of Environment and Conservation with regard to the final alignment and design of the infrastructure to minimise impacts to the abovementioned local conservation significant vegetation communities.

8-4 The proponent shall undertake weed management to ensure that:

1. No new species of weeds (including both declared weeds and environmental weeds) shall be introduced into the proposal area as a result of the implementation of the proposal.
2. The cover of weeds (including both declared weeds and environmental weeds) within the proposal area does not exceed that existing on comparable, nearby land, determined by condition 8-4 3 which has not been disturbed during implementation of the proposal.
3. Three reference sites on nearby land are chosen in consultation with the Office of the Environmental Protection Authority and established within the proposal area and outside the impact area. The reference sites are to be monitored every 2 years to determine whether changes in weed cover and type are as a result of project implementation or broader regional changes.

## 9 Infrastructure Corridor

9-1 The proponent shall implement the proposal using infrastructure corridor option 1 located on tenement AML70/244, as identified in schedule 1.

9-2 In the event that written evidence is provided to CEO of the Office of the Environmental Protection Authority demonstrating that access rights to tenement AML70/244 have been declined then condition 9-1 does not apply and the proposal can be implemented using infrastructure corridor option 6.

## 10 Fauna

10-1 The proponent shall implement the proposal in accordance with the "Hope Downs 4 Environmental Management Plan; Fauna Management Plan Section 4.6, Author: Strategen, Date: October 2010", or subsequent revisions approved by the CEO of the Office of the Environmental Protection Authority on the advice of the Department of Environment and Conservation. The objectives of this plan are to protect significant habitats, minimise impact to individual fauna and minimise the effect of feral animals on native fauna.

10-2 In the event that infrastructure corridor option 6 is implemented under condition 9-2 then the proponent shall submit a revised Fauna Management Plan to the CEO of the Office of the Environmental Protection Authority for approval. This management plan will include measures to minimise and manage the indirect impacts of:

- noise;
- reduction in feeding areas; and
- interception of pathways onto lower slopes and flats,

on the conservation significant species *Petrogale lateralis, Rhinonicteris aurantia* and *Falco peregrinus* resulting from the construction and operation of infrastructure corridor option 6. This revised report shall be prepared with advice of the Department of Environment and Conservation with regards appropriate management measures.

10-3 The proponent shall ensure that open trenches associated with construction of the excess water pipeline are cleared of trapped fauna by fauna-rescue personnel at least twice daily. Details of all fauna recovered shall be recorded, consistent with condition 10-7. The first daily clearing shall take place no later than three hours after sunrise and shall be repeated between the hours of 3:00 pm and 6:00 pm. The open trenches shall also be cleared, and fauna details recorded, by fauna-rescue personnel no more than one hour prior to backfilling of trenches.

Note: "fauna-rescue personnel" means employees of the proponent whose responsibility it is to walk the open trench to recover and record fauna found within the trench.

10-4 The fauna-rescue personnel shall obtain the appropriate licences as required for fauna rescue under the *Wildlife Conservation Act 1950*.

10-5 Open trench lengths shall not exceed a length capable of being inspected and cleared by the fauna-clearing personnel within the required times as set out in condition 10-3.

10-6 Ramps providing egress points and/or fauna refuges providing suitable shelter from the sun and predators for trapped fauna are to be placed in the trench at intervals not exceeding 50 metres.

10-7 The proponent shall produce a report on fauna management within the excess water discharge pipeline trench at the completion of pipeline construction. The report shall include the following:

1. details of all fauna inspections;
2. the number and type of fauna cleared from trenches;
3. fauna mortalities; and
4. all actions taken.

The report shall be provided to the CEO of the Office of the Environmental Protection Authority and the Department of Environment and Conservation no later than 21 days after the completion of pipeline installation, and shall be made publicly available in a manner approved by the CEO of the Office of the Environmental Protection Authority.

## 11 Acid or Metalliferous Drainage

11-1 Prior to ground-disturbing activities the proponent shall provide a report with a detailed risk assessment, using national and international standards, for any potential Acid or Metalliferous Drainage (as defined in section 2.1 of the "Managing Acid and Metalliferous Drainage, February 2007" developed by the Australian Government) within the area of the maximum disturbance boundary defined in Figure 2, to the satisfaction of the CEO of the Office of the Environmental Protection Authority to identify:

1. the extent of the acidity and metal contamination hazard associated from related mining activities at the area of the proposal; and
2. the potential environmental receptors that could be impacted on exposure to this hazard.

11-2 Prior to the mining of any material with the potential to generate Acid or Metalliferous Drainage, the proponent shall have in place long-term prevention, monitoring, contingency and remediation strategies for the management of any potential Acid or Metalliferous Drainage to the satisfaction of the CEO of the Office of the Environmental Protection Authority on advice of the Department of Environment and Conservation and the Department of Mines and Petroleum.

11-3 The proponent shall undertake static and kinetic geochemical testing for potential Acid or Metalliferous Drainage as part of the long-term monitoring strategies required by condition 11-2 using national and international standards to the satisfaction of the CEO of the Office of the Environmental Protection Authority.

11-4 The proponent shall report the results and assessment of efficacy of the long-term prevention, monitoring, contingency and remediation strategies required by condition 11-2 as part of the compliance assessment report

required by condition 4-6 to the CEO of the Office of the Environmental Protection Authority.

Note: The national and international standards are the *Managing Acid and Metalliferous Drainage*, February 2007 developed by the Australian Government, Department of Industry Tourism and Resources, and the *Global Acid and Metalliferous Drainage (GARD) Guide*, December 2008, developed by the International Network for Acid Prevention (INAP).

## 12 Rehabilitation

12-1 The proponent shall undertake rehabilitation to achieve the following outcomes:

1. Waste dumps and tailings storage facilities shall be designed in consultation with the Department of Mines and Petroleum. These structures and other areas disturbed through implementation of the proposal including the Coondiner Creek realignment shall be non-polluting and shall be constructed so that their stability, surface drainage, resistance to erosion and ability to support local native vegetation comparable to natural analogue landforms(i) as shown by a methodology acceptable to the CEO of the Office of the Environmental Protection Authority on advice of the Department of Environment and Conservation and the Department of Mines and Petroleum.

2. Areas disturbed through implementation of the proposal, shall be progressively rehabilitated with vegetation composed of native plant species of local provenance (defined as seed or plant material collected within 100 kilometres of the proposal).

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 a methodology acceptable to the CEO of the Office of the Environmental Protection Authority on advice of the Department of Environment and Conservation.

4. Weed management for the rehabilitation areas shall be carried out as per condition 8-4.

Note:

(i) The natural analogue sites referred to in condition 12-1 shall be selected prior to ground disturbing activities to the requirements of the CEO of the Office of the Environmental Protection Authority on advice of the Department of Mines and Petroleum and the Department of Environment and Conservation.

12-2 The proponent shall provide rehabilitation completion criteria for the approval of the CEO of the Office of the Environmental Protection Authority on advice of the Department of Environment and Conservation and Department of Mines and Petroleum within five years of implementation of the proposal.

12-3 Rehabilitation activities shall continue until such time as the requirements of conditions 12-1 and 12-2 are demonstrated by inspections and reports to be met, for a minimum of five years following mine completion to the satisfaction of the CEO of the Office of the Environmental Protection Authority, on advice of the Department of Mines and Petroleum.

## 13 Final Closure and Decommissioning Plan

13-1 At least five years prior to mine completion, the proponent shall prepare and submit a Final Closure and Decommissioning Plan to the requirement of the CEO of the Office of the Environmental Protection Authority on advice of the Department of Environment and Conservation and Department of Mines and Petroleum.

13-2 The Final Closure and Decommissioning Plan shall be prepared consistent with:

- ANZMEC/MCA 2000, *Strategic Framework for Mine Closure Planning*; and
- Department of Industry Tourism and Resources 2006 *Mine Closure and Completion* (Leading Practice Sustainable Development Program for the Mining Industry), Commonwealth Government, Canberra;

and shall provide detailed technical information on the following:

- Final closure of all areas disturbed through implementation of the proposal so that they are safe, stable and non-polluting;
- Decommissioning of all plant and equipment;
- Disposal of waste materials;
- Final Rehabilitation of waste dumps; tailings storage facilities and other areas (outside the mine pit(s));
- Management and monitoring following mine completion; and
- Inventory of all contaminated sites and proposed management.

13-3 The proponent shall ensure that the formation of pit lakes as a result of decommissioning and closure of mine voids does not adversely impact fauna or cause impacts to regional groundwater.

13-4 To verify the requirements of condition 13-3 are met the proponent shall:

1. develop trigger levels for pit lake water chemistry in accordance with trigger values for highly disturbed ecosystems provided for in Table 3.4.2 of Chapter 3 of "the Australian and New Zealand Environment and Conservation Council and Agriculture and Resource Management Council of Australia and New Zealand 2000, *Australian Water Quality Guidelines for Fresh and Marine Waters"* and its updates, taking into

consideration natural background water quality, for approval by the CEO of the Office of the Environmental Protection Authority on advice of the Department of Environment and Conservation, Department of Water and Department of Mines and Petroleum.

2. monitor the quality of water in the Hope Downs 4 Iron Ore Mine pit voids to the requirements of the CEO of the Office of the Environmental Protection Authority on advice of the Department of Environment and Conservation, Department of Water and Department Mines and Petroleum.

3. continue monitoring until such time as it can be demonstrated to the satisfaction of the CEO of the Office of the Environmental Protection Authority that there are no ongoing acid and or metalliferous impacts to water quality.

13-5 In the event that the monitoring required by condition 13-4 1 indicates an exceedance of trigger levels for water quality as determined by condition 13-4 2:

1. the proponent shall report to the CEO of the Office of the Environmental Protection Authority within 7 days of the exceedance being identified;

2. provide a report to the CEO of the Office of the Environmental Protection Authority within 21 days of the exceedance being identified that:

   - describes the water quality;
   - provides information which allows determination of the likely cause of the exceedance of trigger levels; and
   - states the actions and associated timelines proposed to remediate water quality in the pit lake/s.

13-6 The proponent shall, on approval of the CEO of the Office of the Environmental Protection Authority, and on advice of the Department of Environment and Conservation implement the actions identified in condition 13-5 2 and continue to implement such actions until the CEO of the Office of the Environmental Protection Authority determines that the remedial actions may cease.

13-7 The proponent shall make the results of the monitoring program referred to in condition 13-4 1, the trigger levels referred to in condition 13-4 2, and the report referred to in condition 13-5 publicly available in a manner acceptable to the CEO of the Office of the Environmental Protection Authority.

13-8 The proponent shall implement the Final Closure and Decommissioning Plan required by conditions 13-1 and 13-2 from the commencement of decommissioning* until the CEO of the Office of the Environmental Protection Authority on advice from the Department of Environment and

Conservation and the Department of Mines and Petroleum determines implementation of the Final Closure and Decommissioning Plan may cease.

* Decommissioning is defined as the process that begins near, or at, the cessation of mineral production and ends with removal of all unwanted infrastructure and services (ANZMEC/MCA 2000 *Strategic Framework for Mine Closure Planning*).

13-9 The proponent shall make the Final Closure and Decommissioning Plan required by conditions 13-1 and 13-2 publicly available in a manner acceptable to the CEO of the Office of the Environmental Protection Authority.

**Notes**

1. The Office of the Environmental Protection Authority may seek advice from other agencies or organisations, as required.

2. 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.

3. 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

**The Proposal (Assessment No. 1738)**

The proposal is to develop and operate four open pit iron ore mining zones and associated infrastructure at the Hope Downs 4 Iron Ore Project (HD4) located approximately 30 km north west of Newman within the Shire of East Pilbara.

The location of the various project components is shown in Figures 2 and 3.

The main characteristics of the proposal are summarised in Table 1 below. A detailed description of the proposal is provided in Sections 2, 7 and 8 of the project referral document, *Hope Downs* 4 Iron Ore Project: Public Environmental Review, prepared by Strategen, Leederville, Western Australia (January 2010).

**Table 1: Summary of Key Proposal Characteristics**

| Element | Description |
|---|---|
| **General** | |
| Project life | 25-30 years (approximately) |
| Location | See Figure 2 |
| Project area | 20,135 ha comprising:<br>o mining area – 5,805 ha<br>o infrastructure corridor – 9,760 ha<br>o excess water discharge infrastructure – 2,520 ha<br>o accommodation area – 1,850 ha |
| **Disturbance Area** | |
| Vegetation clearing | Clearing up to 5,470 ha comprising:<br>o mining area – 4,000 ha<br>o infrastructure corridor – 1,100 ha<br>o excess water discharge infrastructure – 180 ha<br>o accommodation area – 190 ha |
| **Mining Operation** | |
| Mining method | Open cut |
| Dewatering rate | Up to 20 GL/a<br>Up to 140 m of drawdown to approximately 500 m relative to sea level (RSL) |
| Discharge of excess water to Kalgan Creek | Discharge location:<br>• Approximately 16 km east of the mining area, downstream of Kalgan Pool<br>The maximum footprint of creekbed saturation shall not:<br>• exceed 29 km from point of discharge; and<br>• extend closer than 30 km from the Fortescue Marsh boundary.<br>Length of water pipeline:<br>• approximately 16 km |
| Discharge of excess water to Hope Downs 1 | Length of water pipeline:<br>• up to 52 km for option 1 or 65 km for option 6 |
| Infrastructure corridor | Length:<br>• up to 52 km for option 1or up to 65 km for option 6 |

**Abbreviations**

| | | | |
|---|---|---|---|
| ha | hectares | m | metres |
| GL/a | Gigalitres per annum | km | kilometres |

**Figures**

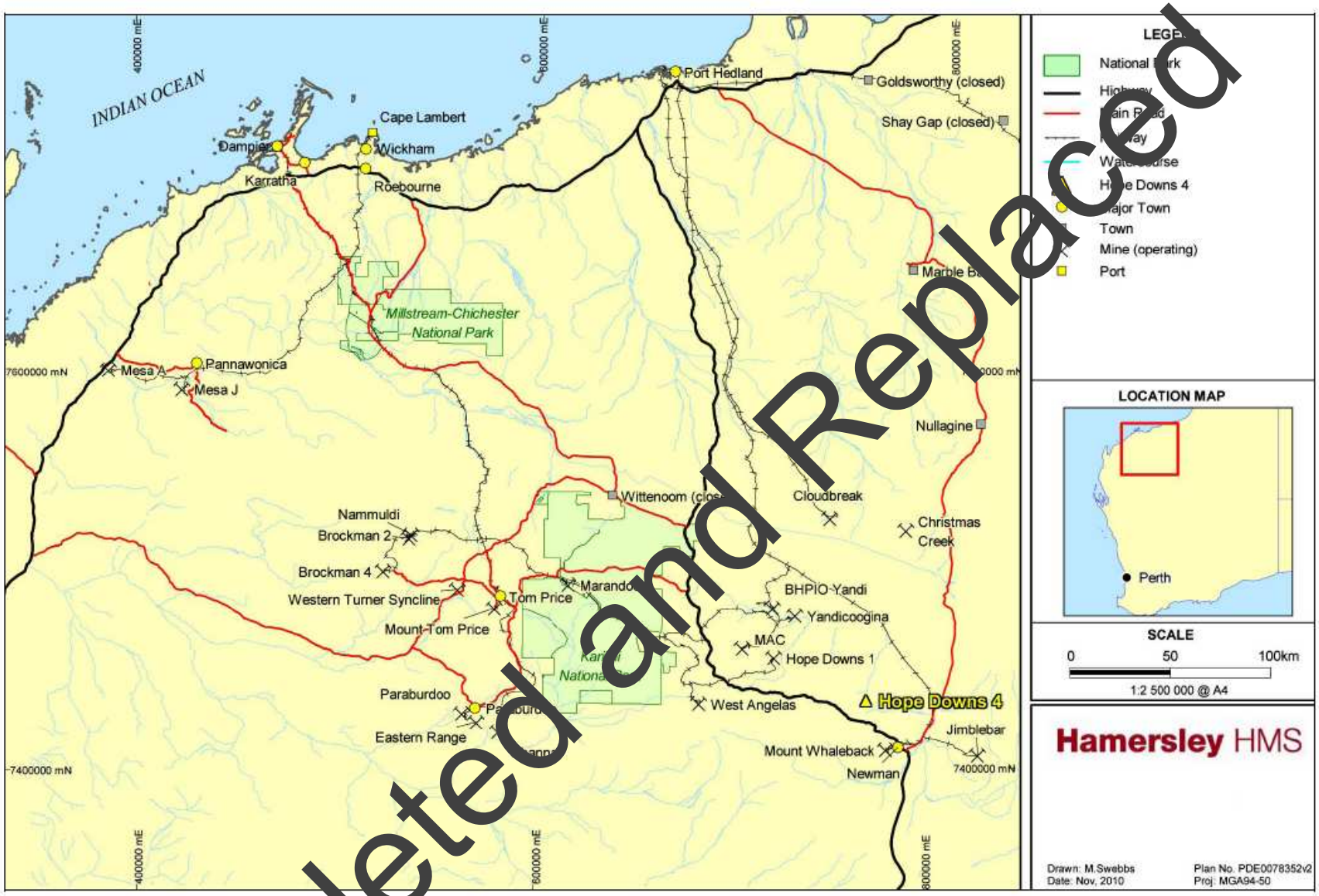



***Figure 1: Regional Location of Hope Downs 4 Iron Ore Mine***.

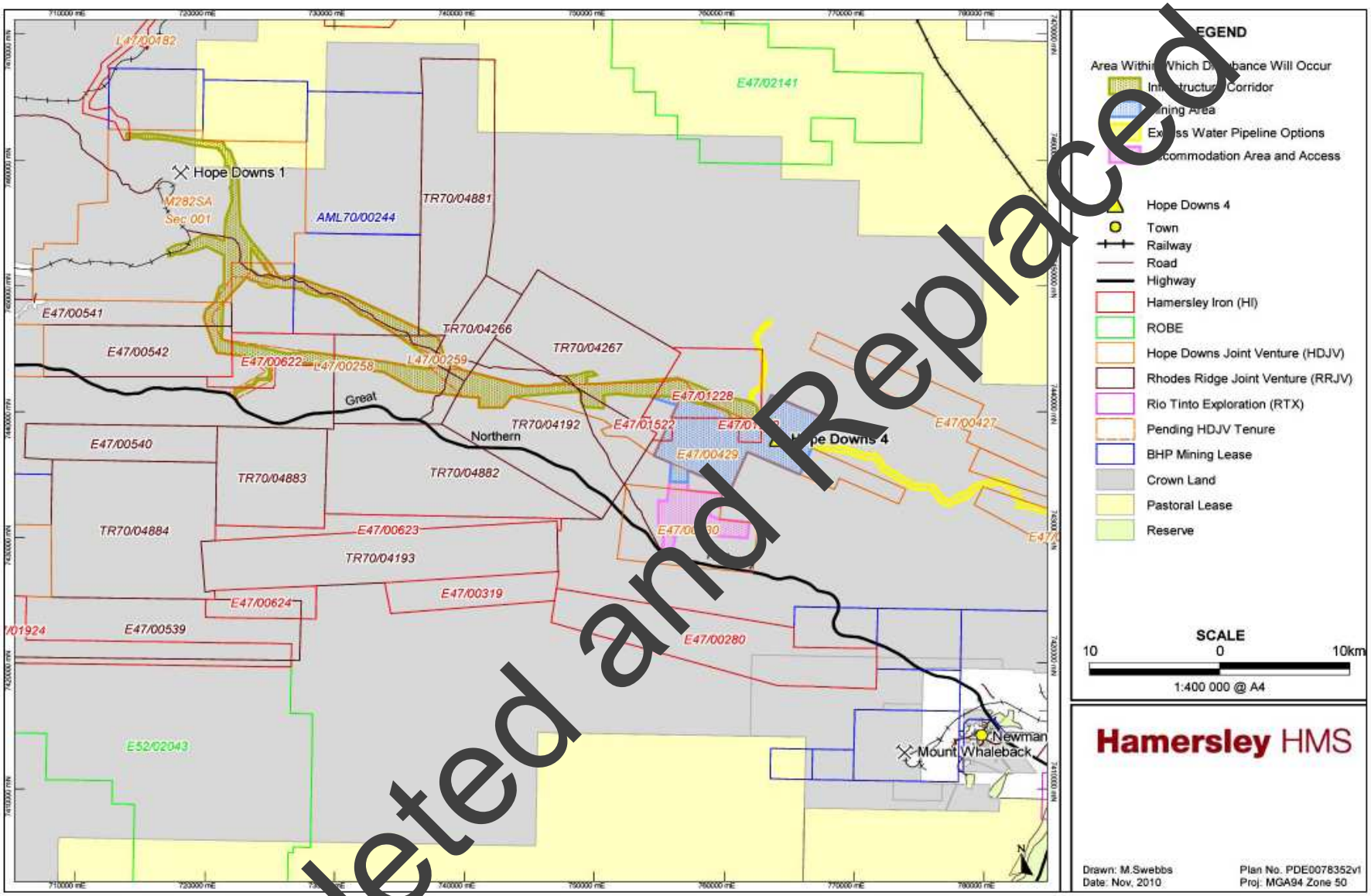



***Figure 2: Hope Downs 4 Project Area***

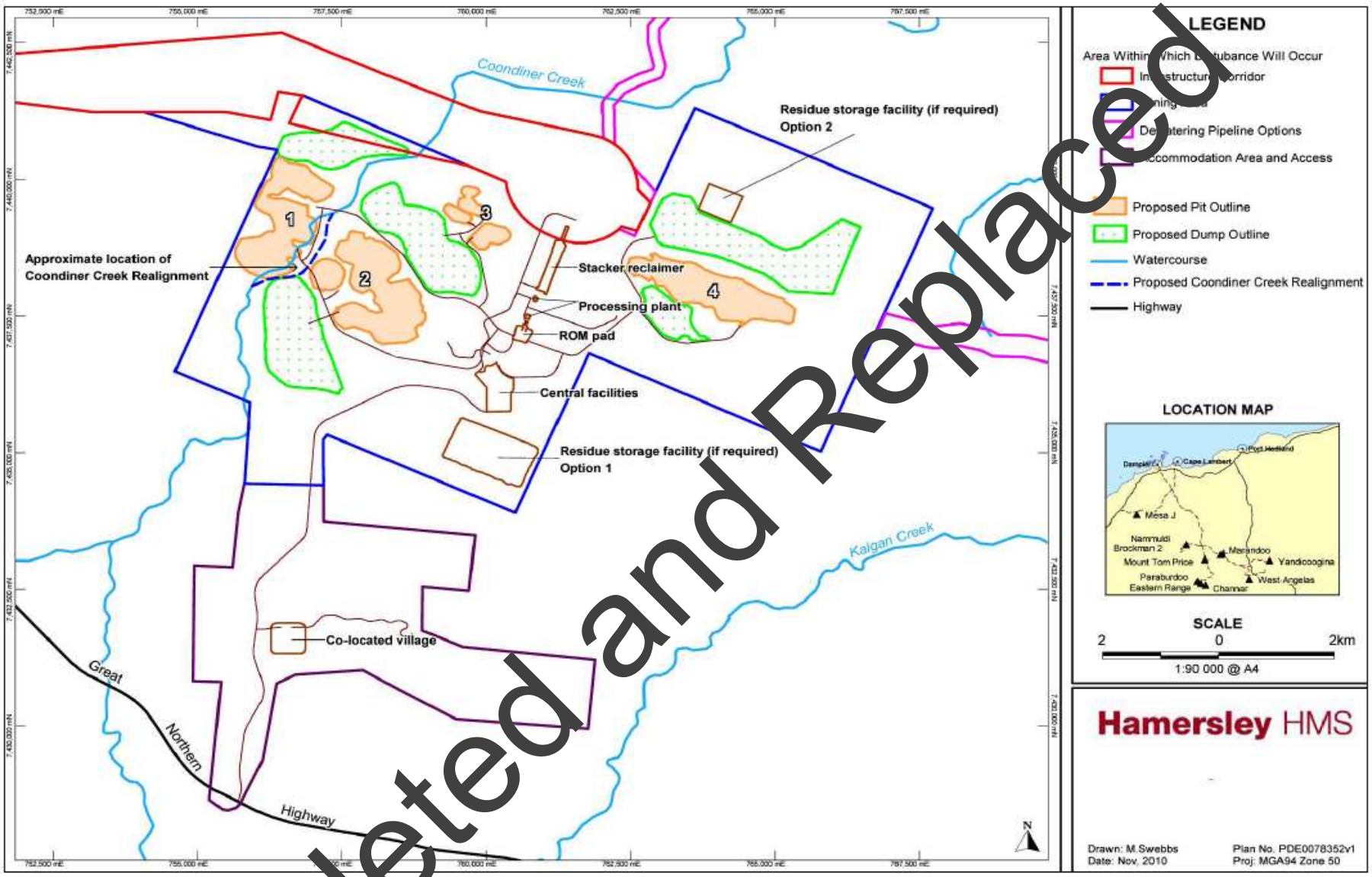



***Figure 3: Conceptual Mine layout and Associated Infrastructure***.

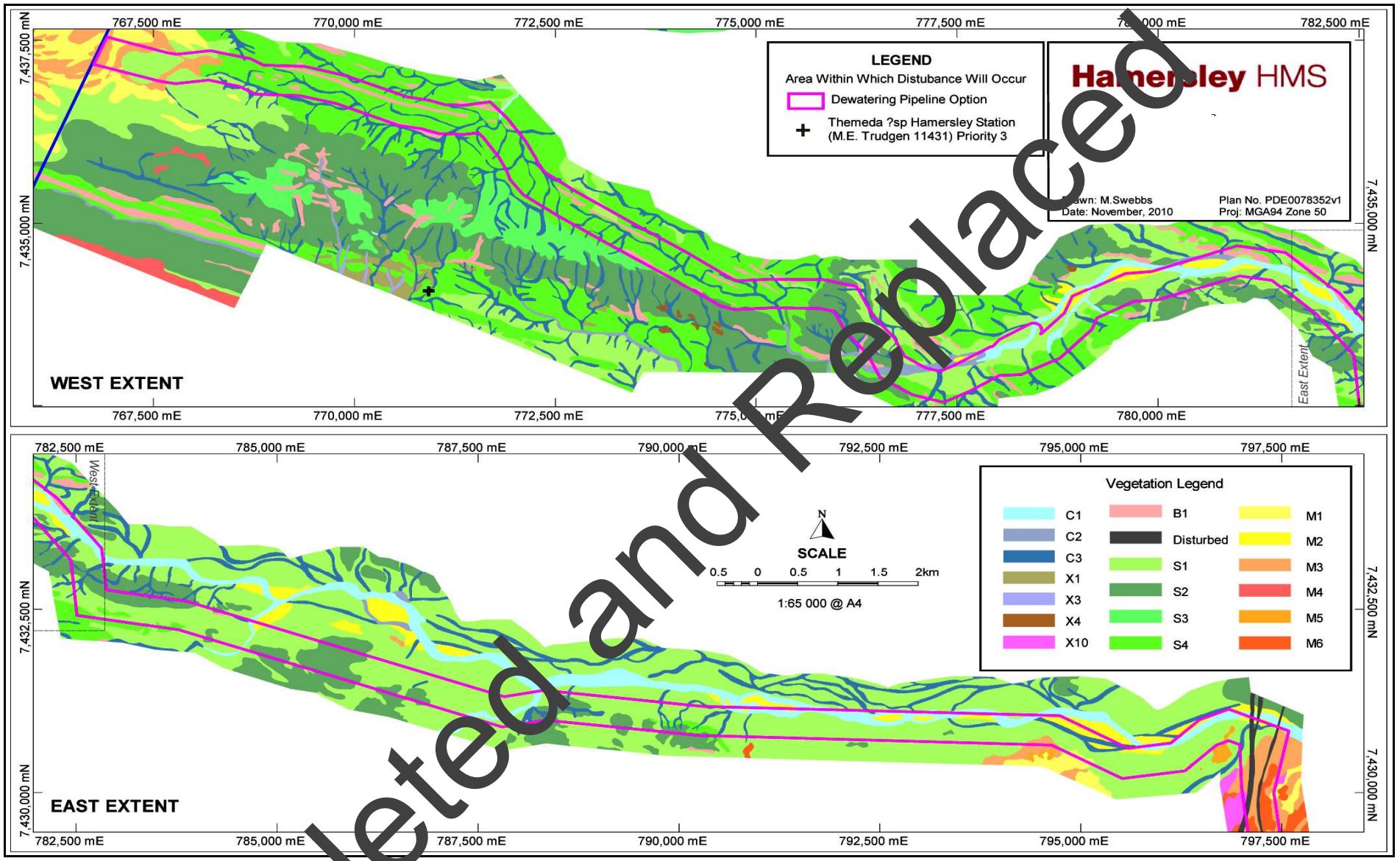



***Figure 4: Vegetation Mapping along Kalgan Creek***

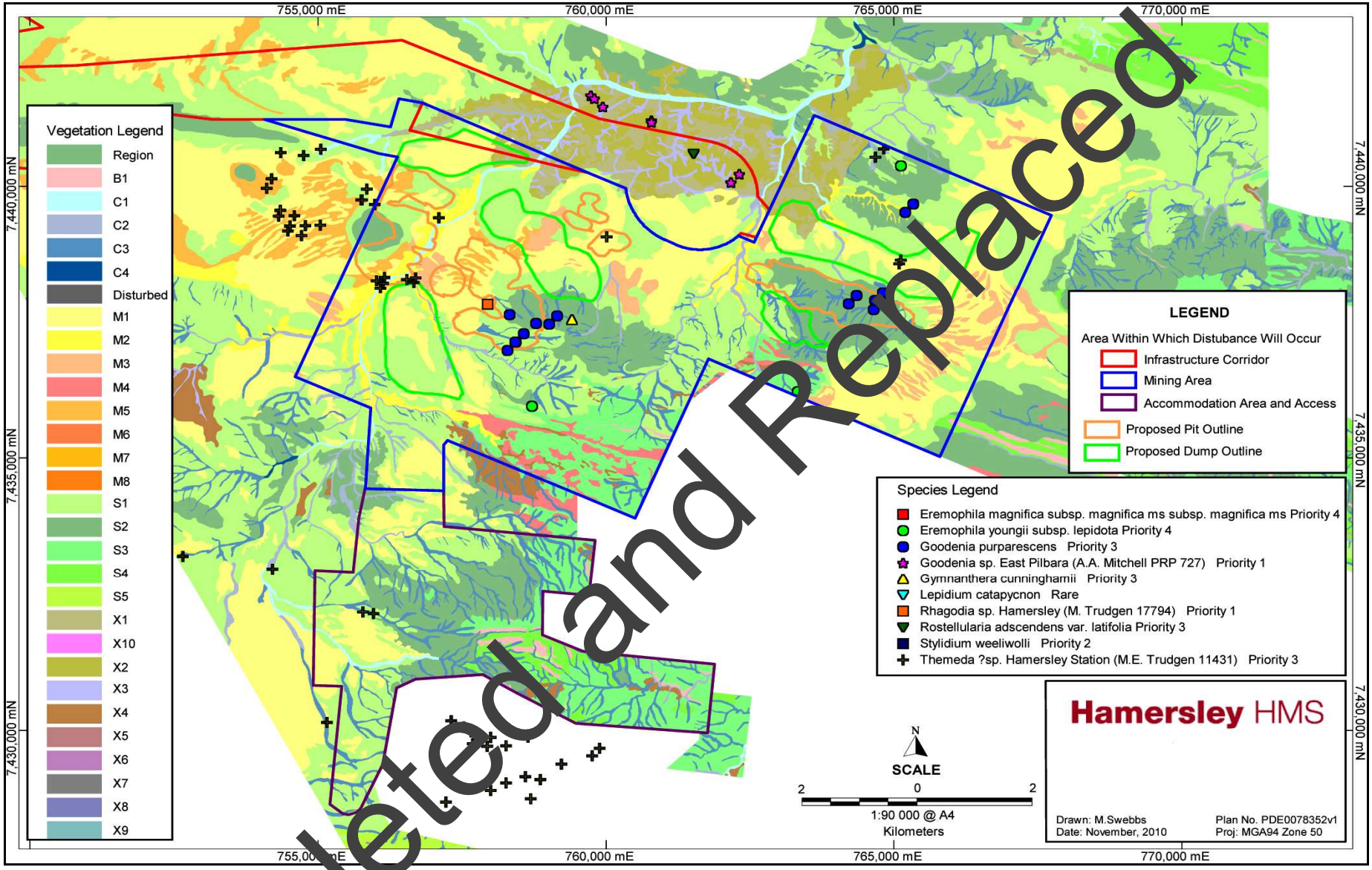



***Figure 5: Vegetation Mapping in the Mining Area***

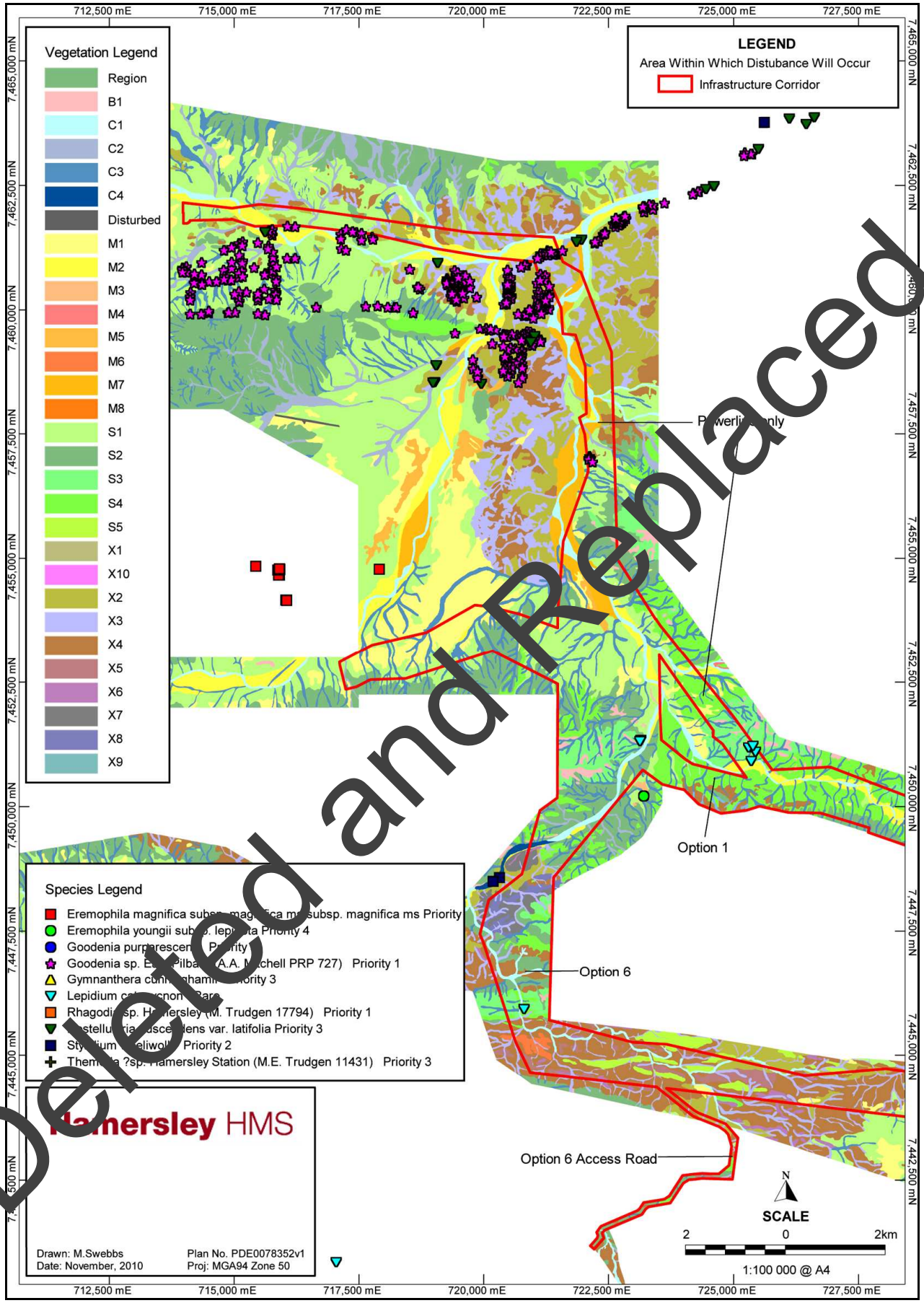





***Figure 6: Vegetation Mapping in the Western Portion of the Infrastructure Corridor.***

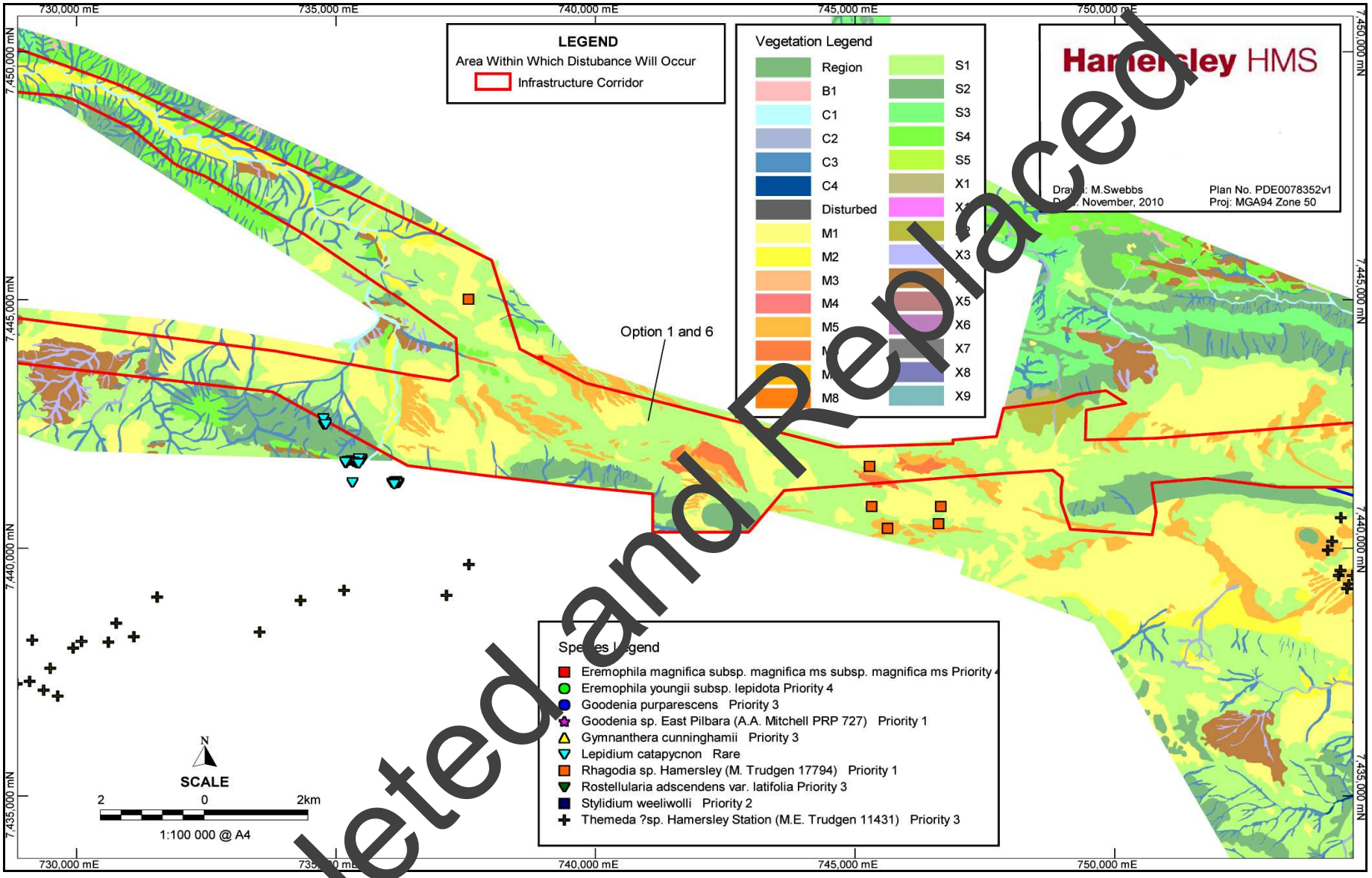



***Figure 7: Vegetation Mapping in the Eastern Portion of the Infrastructure Corridor.***

Attachment 1 to Ministerial Statement 854

Change to Proposal

---

**Proposal:** Hope Downs 4 Iron Ore Mine, Shire of East Pilbara

**Proponent:** Hamersley HMS Pty Limited

---

**Change:** Realignment of the infrastructure corridor and the Kalgan Creek excess water pipeline realignment, and re-development and relocation of two existing groundwater bores

**Key Characteristics Table:**

| Element | Description of proposal | Description of approved change to proposal |
|---|---|---|
| **General** | | |
| Project life | 25-30 years (approximately) | 25-30 years (approximately) |
| Location | See Figure 2 | See Figure 2 |
| Project area | • 20,135 ha comprising:<br>• mining area – 5,805 ha<br>• infrastructure corridor - 3,960 ha<br>• excess water discharge infrastructure – 2,520 ha<br>• accommodation area – 1,850 ha | • **21,235 ha comprising:**<br>• **mining area – 5,967 ha**<br>• **infrastructure corridor – 10,553 ha**<br>• **excess water discharge infrastructure – 2,865 ha**<br>• accommodation area – 1,850 ha |
| **Disturbance area** | | |
| Vegetation clearing | Clearing up to 5,470 ha comprising:<br>• mining area – 4,000 ha<br>• infrastructure corridor - 1,100 ha<br>• excess water discharge infrastructure – 180 ha<br>• accommodation area – 190 ha | Clearing up to 5,470 ha comprising:<br>• mining area – 4,000 ha<br>• infrastructure corridor - 1,100 ha<br>• excess water discharge infrastructure – 180 ha<br>• accommodation area – 190 ha |
| **Mining Operation** | | |
| Mining method | Open cut | Open cut |
| Dewatering rate | Up to 20 GL/a<br>Up to 140 m of drawdown to approximately 500 m relative to sea level (RSL) | Up to 20 GL/a<br>Up to 140 m of drawdown to approximately 500 m relative to sea level (RSL) |

| | | |
|---|---|---|
| Discharge of excess water to Kalgan Creek | Discharge location:<br>• Approximately 16 km east of the mining area, downstream of Kalgan Pool<br>The maximum footprint of creekbed saturation shall not:<br>• exceed 29 km from point of discharge; and<br>• extend closer than 30 km from the Fortescue Marsh Boundary.<br>Length of water pipeline:<br>• approximately 16 km | Discharge location:<br>• Approximately 16 km east of the mining area, downstream of Kalgan Pool<br>The maximum footprint of creekbed saturation shall not:<br>• exceed 29 km from point of discharge; and<br>• extend closer than 30 km from the Fortescue Marsh Boundary.<br>Length of water pipeline:<br>• approximately 16 km |
| Discharge of excess water to Hope Downs 1 | Length of water pipeline:<br>• Up to 52 km for option 1 or 65 km for option 6 | Length of water pipeline:<br>• Up to 52 km for option 1 or 65 km for option 6 |
| Infrastructure corridor | Length:<br>• Up to 52 km for option 1 or up to 65 km for option 6 | Length:<br>• Up to 52 km for option 1 or up to 65 km for option 6 |

**Abbreviations**

| | | | |
|---|---|---|---|
| ha | hectares | m | metres |
| GL/a | Gigalitres per annum | km | kilometres |

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

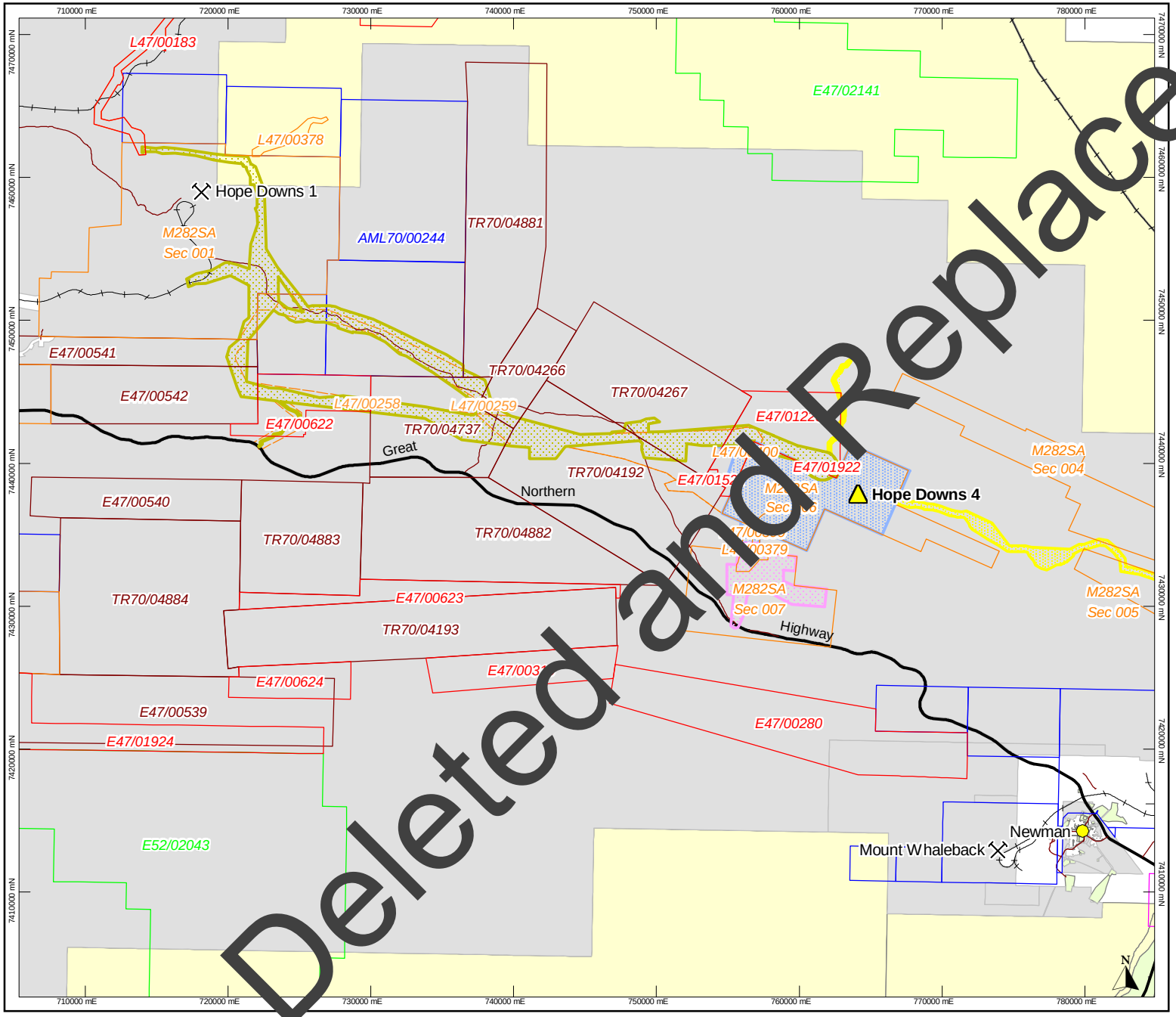
**List of Figures:**

Figure 8: Hope Downs 4 Project Area (revised)
Figure 9: Conceptual Mine Layout and Associated Infrastructure (revised)
Figure 10: Vegetation Mapping along Kalgan Creek (revised)
Figure 11: Vegetation Mapping in the Mining area (revised)
Figure 12: Vegetation Mapping in the Western Portion of the infrastructure corridor (revised)
Figure 13: Vegetation Mapping in the Eastern Portion of the infrastructure corridor (revised)



**Dr Paul Vogel**
CHAIRMAN
Environmental Protection Authority
under delegated authority

Approval date: 28 March 2012






## LEGEND

- Area Within Which Distubance Will Occur
- Infrastructure Corridor
- Mining Area
- Excess Water Pipeline Options
- Accommodation Area and Access
- Hope Downs 4
- Town
- Railway
- Road
- Highway
- Hamersley Iron (HI)
- ROBE
- Hope Downs Joint Venture (HDJV)
- Rhodes Ridge Joint Venture (RRJV)
- Rio Tinto Exploration (RTX)
- Pending HDJV Tenure
- BHP Mining Lease
- Crown Land
- Pastoral Lease
- Reserve

**SCALE**

10 0 10km

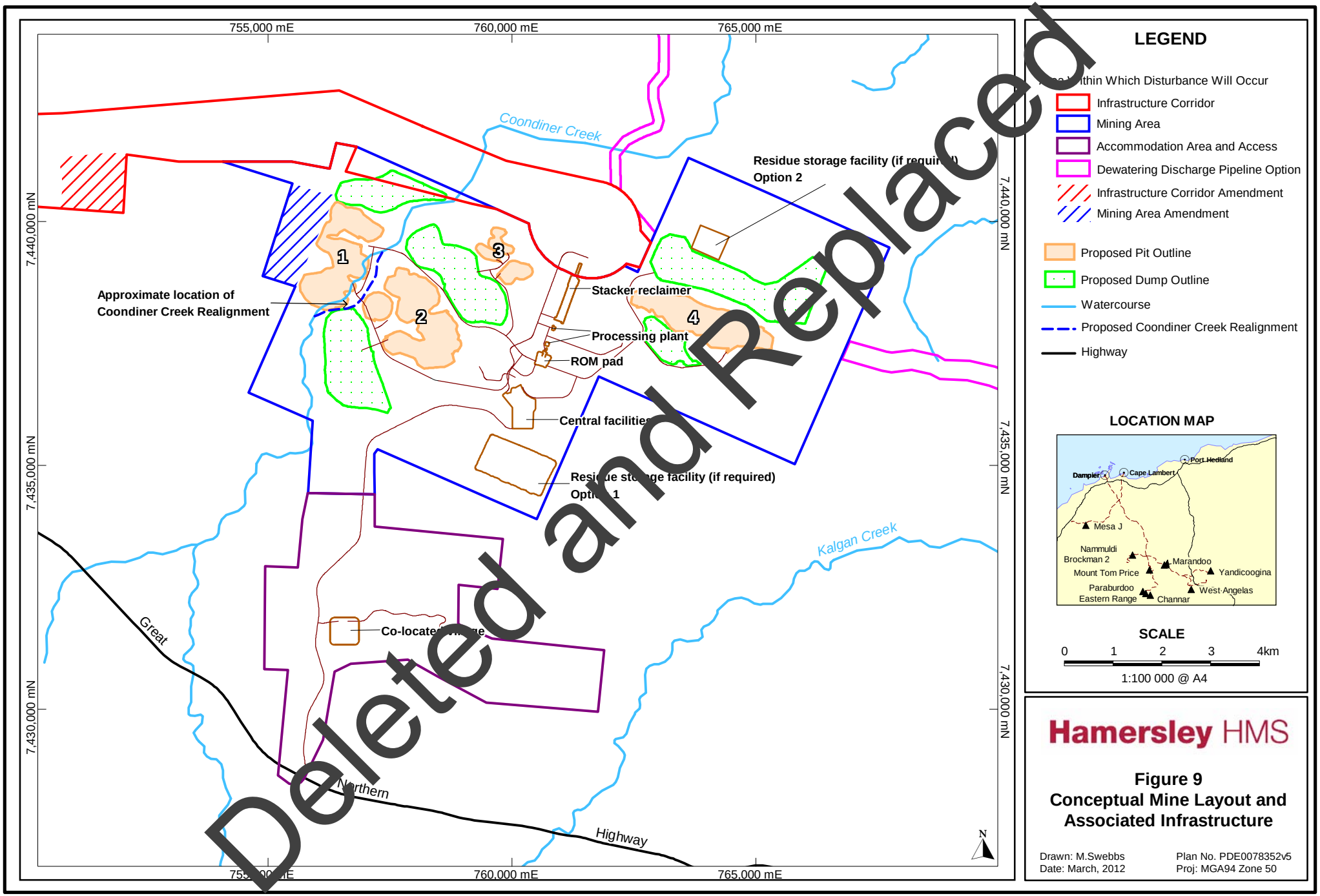
1:400 000 @ A4

Hamersley HMS

**Figure 8**
**Hope Downs 4**
**Project Area**

Drawn: M.Swebbs
Date: July, 2011

Plan No. PDE0078352v3
Proj: MGA94 Zone 50






## LEGEND

- Area within Which Disturbance Will Occur
  - Infrastructure Corridor
  - Mining Area
  - Accommodation Area and Access
  - Dewatering Discharge Pipeline Option
  - Infrastructure Corridor Amendment
  - Mining Area Amendment
- Proposed Pit Outline
- Proposed Dump Outline
- Watercourse
- Proposed Coondiner Creek Realignment
- Highway

### LOCATION MAP




### SCALE

0 1 2 3 4km

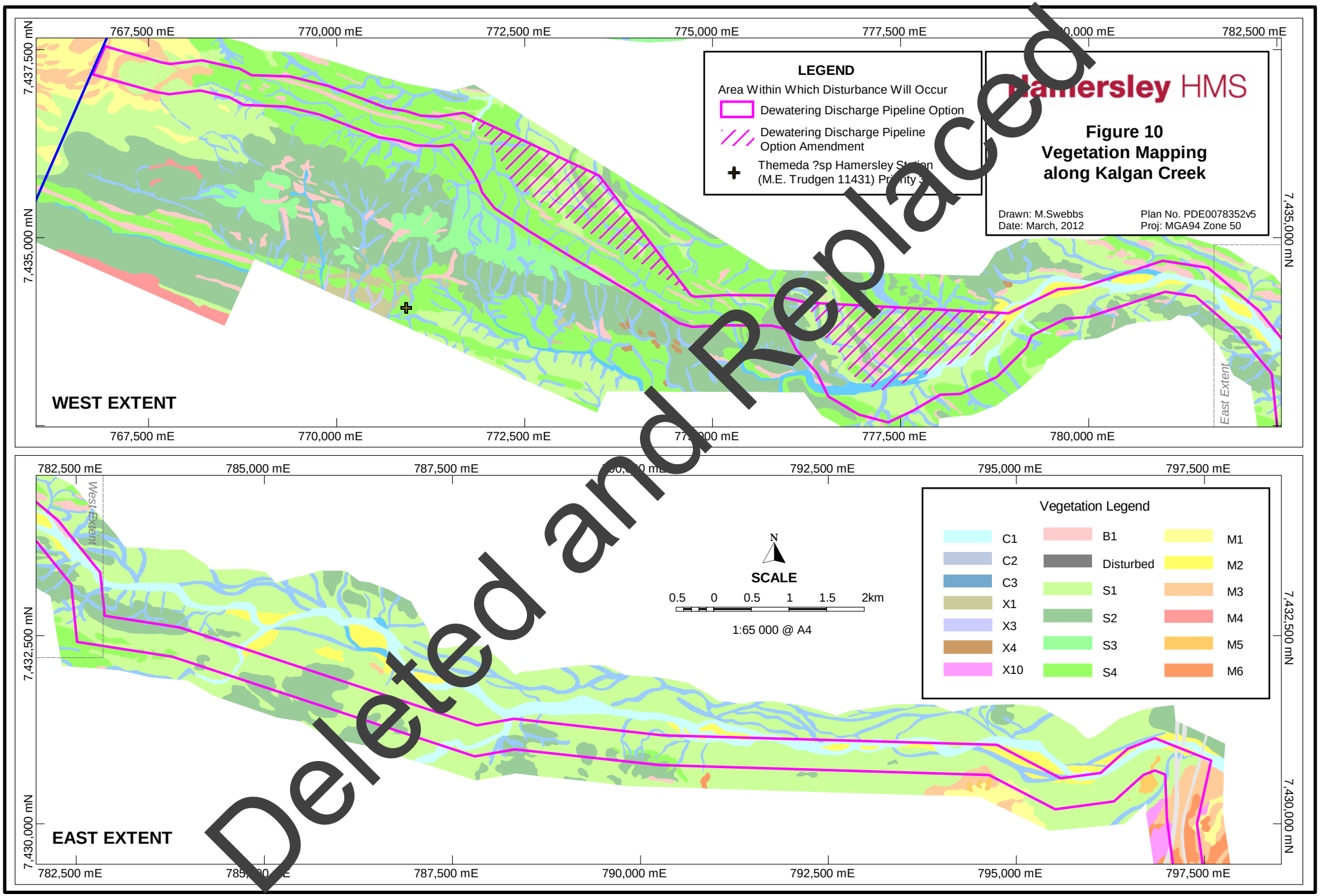
1:100 000 @ A4

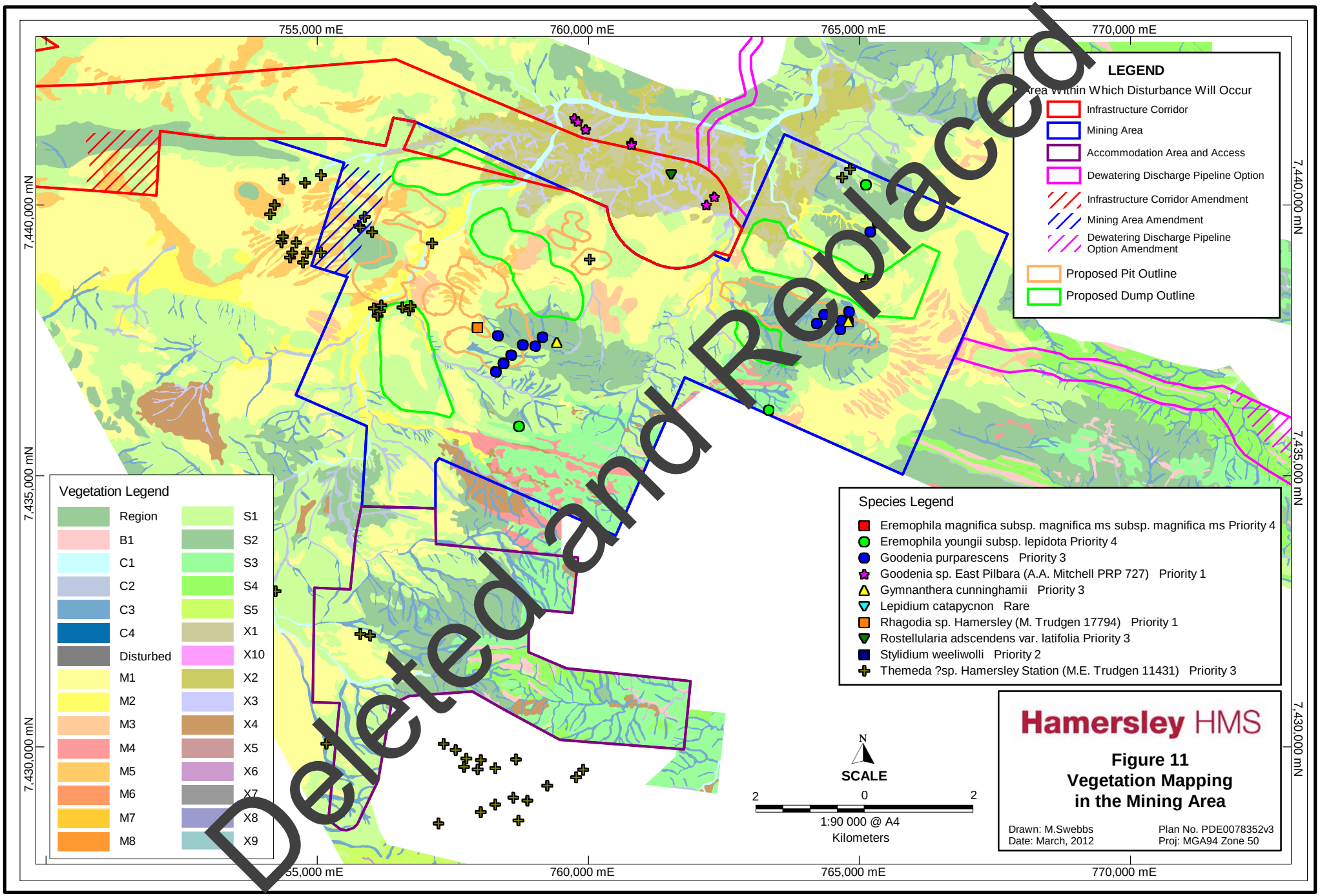
Hamersley HMS

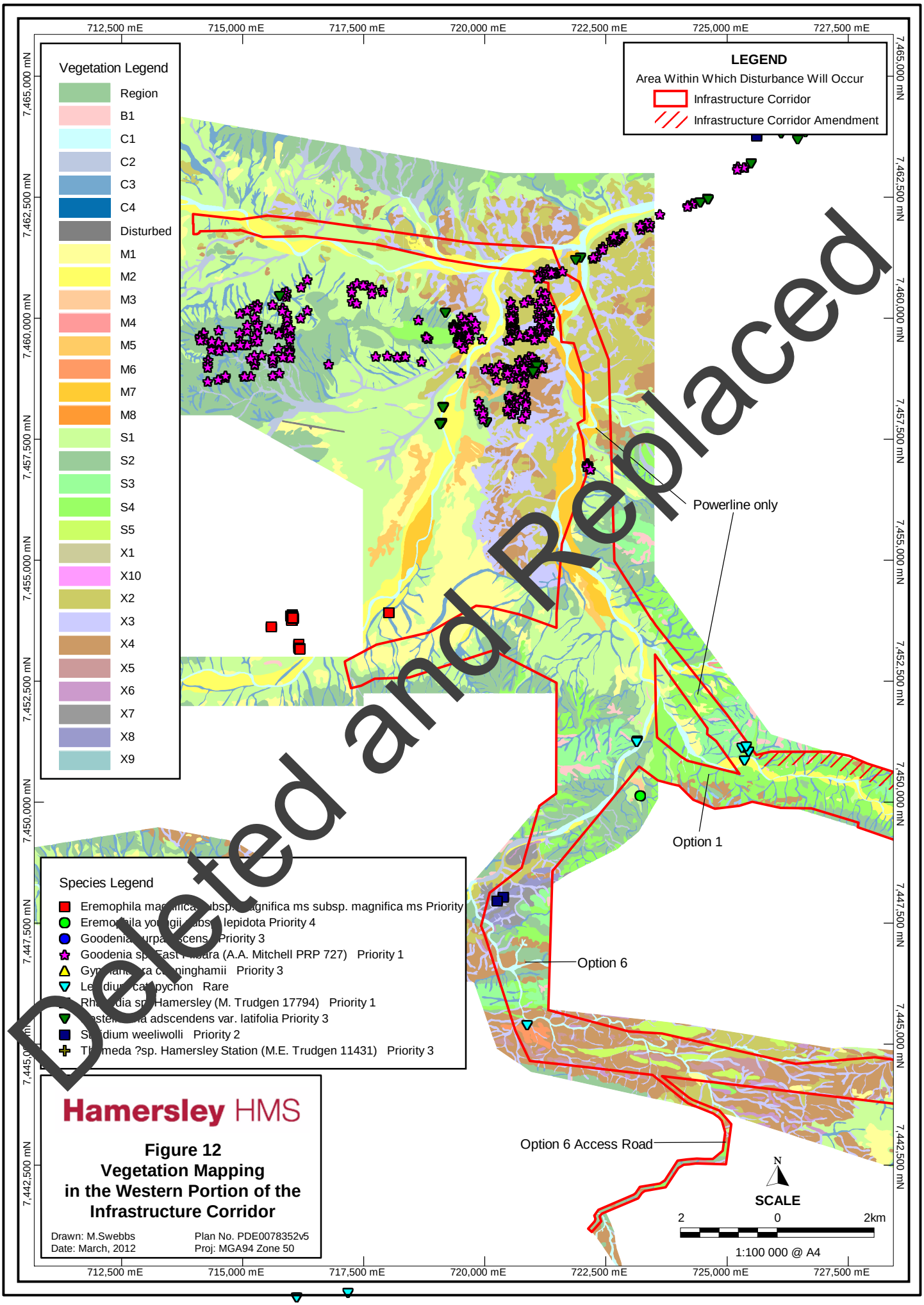
**Figure 9**
**Conceptual Mine Layout and Associated Infrastructure**

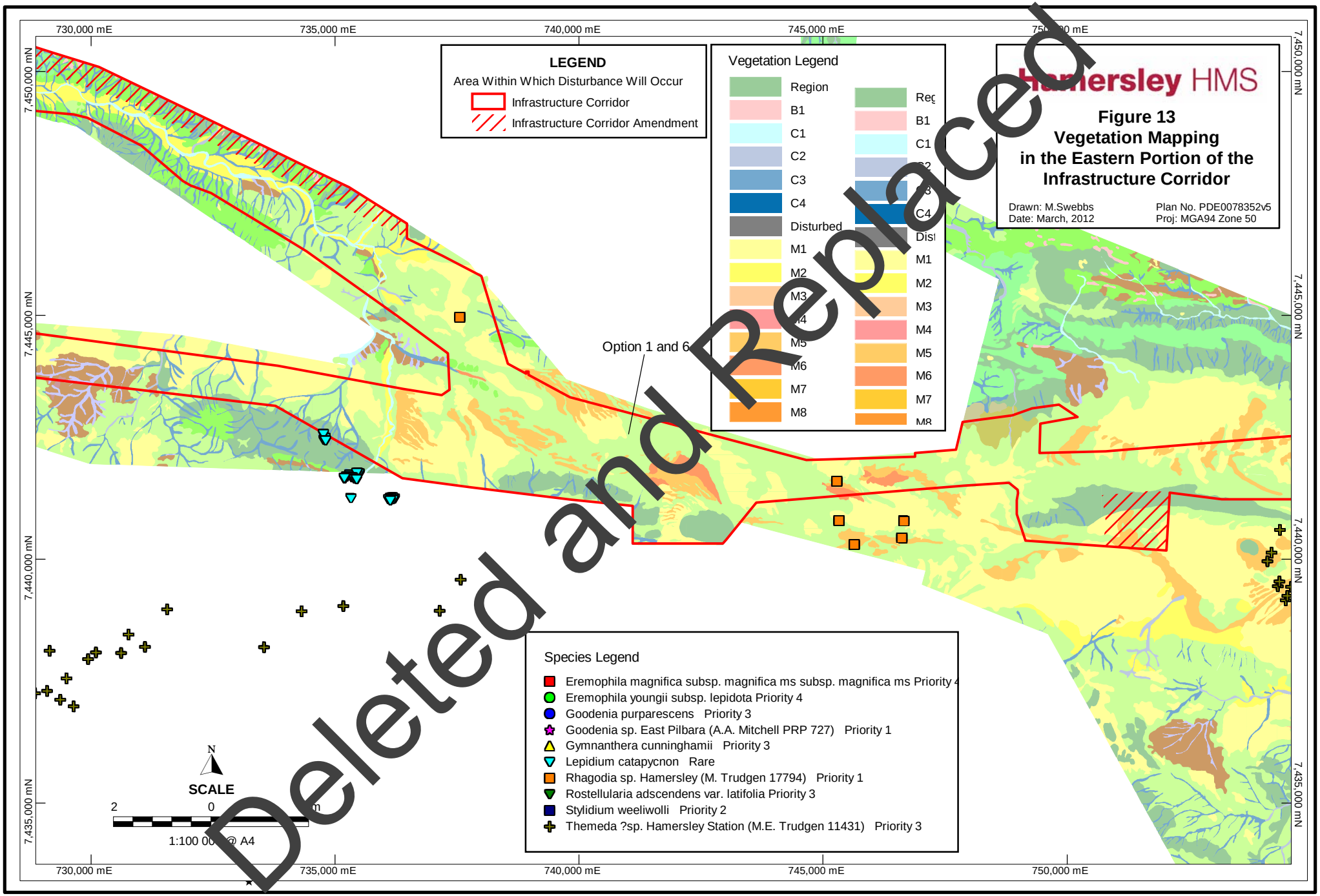
Drawn: M.Swebbs
Date: March, 2012

Plan No. PDE0078352v5
Proj: MGA94 Zone 50






712,500 mE
715,000 mE
717,500 mE
720,000 mE
722,500 mE
725,000 mE
727,500 mE
7,465,000 mN
7,462,500 mN
7,460,000 mN
7,457,500 mN
7,455,000 mN
7,452,500 mN
7,450,000 mN
7,447,500 mN
7,445,000 mN
7,442,500 mN
Vegetation Legend
Region
B1
C1
C2
C3
C4
Disturbed
M1
M2
M3
M4
M5
M6
M7
M8
S1
S2
S3
S4
S5
X1
X10
X2
X3
X4
X5
X6
X7
X8
X9
LEGEND
Area Within Which Disturbance Will Occur
Infrastructure Corridor
Infrastructure Corridor Amendment
Powerline only
Option 1
Option 6
Option 6 Access Road
Species Legend
Eremophila magnifica subsp. magnifica ms subsp. magnifica ms Priority
Eremophila youngii subsp. lepidota Priority 4
Goodenia purpurascens Priority 3
Goodenia sp. East Pilbara (A.A. Mitchell PRP 727) Priority 1
Gyrostemon cunninghamii Priority 3
Lepidium catapycnon Rare
Rhagodia sp. Hamersley (M. Trudgen 17794) Priority 1
Tecticornia adscendens var. latifolia Priority 3
Sclerolaena weeliwolli Priority 2
Thryptomene ?sp. Hamersley Station (M.E. Trudgen 11431) Priority 3
Deleted and Replaced
Hamersley HMS
Figure 12
Vegetation Mapping
in the Western Portion of the
Infrastructure Corridor
Drawn: M.Swebbs
Date: March, 2012
Plan No. PDE0078352v5
Proj: MGA94 Zone 50
N
SCALE
2 0 2km
1:100 000 @ A4



Attachment 2 to Ministerial Statement 854

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

---

**Proposal:** Hope Downs 4 Iron Ore Mine, Shire of East Pilbara

**Proponent:** Hamersley Hope Management Services Pty Ltd

---

**Change:** Removal of Infrastructure Corridor Option 6, changes to Project Area

**Key Characteristics Table:** This table replaces Table 1 in Schedule 1 and Attachment 1

| Element | Description of proposal | Description of approved change to proposal |
|---|---|---|
| **General** | | |
| Project life | 25-30 years (approximately) | 25-30 years (approximately) |
| Location | See Figure 2 | **See Figure 1** |
| Project area | • 21,235 ha comprising:<br>• mining area – 5,967 ha<br>• infrastructure corridor – 10,553 ha<br>• excess water discharge infrastructure – 2,865 ha<br>• accommodation area – 1,850 ha | • **19,050 ha** comprising:<br>• mining area – 5,967 ha<br>• infrastructure corridor – **8,365 ha**<br>• excess water discharge infrastructure – 2,865 ha<br>• accommodation area – 1,850 ha |
| **Disturbance area** | | |
| Vegetation clearing | Clearing up to 5,470 ha comprising:<br>• mining area – 4,000 ha<br>• infrastructure corridor - 1,100 ha<br>• excess water discharge infrastructure – 180 ha<br>• accommodation area – 190 ha | Clearing up to 5,470 ha comprising:<br>• mining area – 4,000 ha<br>• infrastructure corridor - 1,100 ha<br>• excess water discharge infrastructure – 180 ha<br>• accommodation area – 190 ha |
| **Mining Operation** | | |
| Mining method | Open cut | Open cut |
| Dewatering rate | Up to 20 GL/a<br>Up to 140 m of drawdown to approximately 500 m relative to sea level (RSL) | Up to 20 GL/a<br>Up to 140 m of drawdown to approximately 500 m relative to sea level (RSL) |
| Discharge of excess water to Kalgan Creek | Discharge location:<br>• Approximately 16 km east of the mining area, downstream of Kalgan Pool<br>The maximum footprint of creekbed saturation shall not: | Discharge location:<br>• Approximately 16 km east of the mining area, downstream of Kalgan Pool<br>The maximum footprint of creekbed saturation shall not: |

| | | |
|---|---|---|
| | • exceed 29 km from point of discharge; and<br>• extend closer than 30 km from the Fortescue Marsh Boundary.<br>Length of water pipeline:<br>• approximately 16 km | • exceed 29 km from point of discharge; and<br>• extend closer than 30 km from the Fortescue Marsh Boundary.<br>Length of water pipeline:<br>• approximately 16 km |
| Discharge of excess water to Hope Downs 1 | Length of water pipeline:<br>• Up to 52 km for option 1 or 65 km for option 6 | Length of water pipeline:<br>• **Up to 52 km** |
| Infrastructure corridor | Length:<br>• Up to 52 km for option 1 or up to 65 km for option 6 | Length:<br>• **Up to 52 km** |

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

**List of Replacement Figures:**

**Figure 1:** **Regional Location of Hope Downs 4**
**Replaces Figure 1 in Schedule 1**

**Figure 2:** **Hope Downs 4 Project Area**
**Replaces Figure 2 in Schedule 1 and Figure 8 in Attachment 1**

**Figure 3:** **Conceptual Mine Layout and Associated Infrastructure**
**Replaces Figure 3 in Schedule 1 and Figure 9 in Attachment 1**

**Figure 4:** **Vegetation Mapping along Kalyan Creek**
**Replaces Figure 4 in Schedule 1 and Figure 10 in Attachment 1**

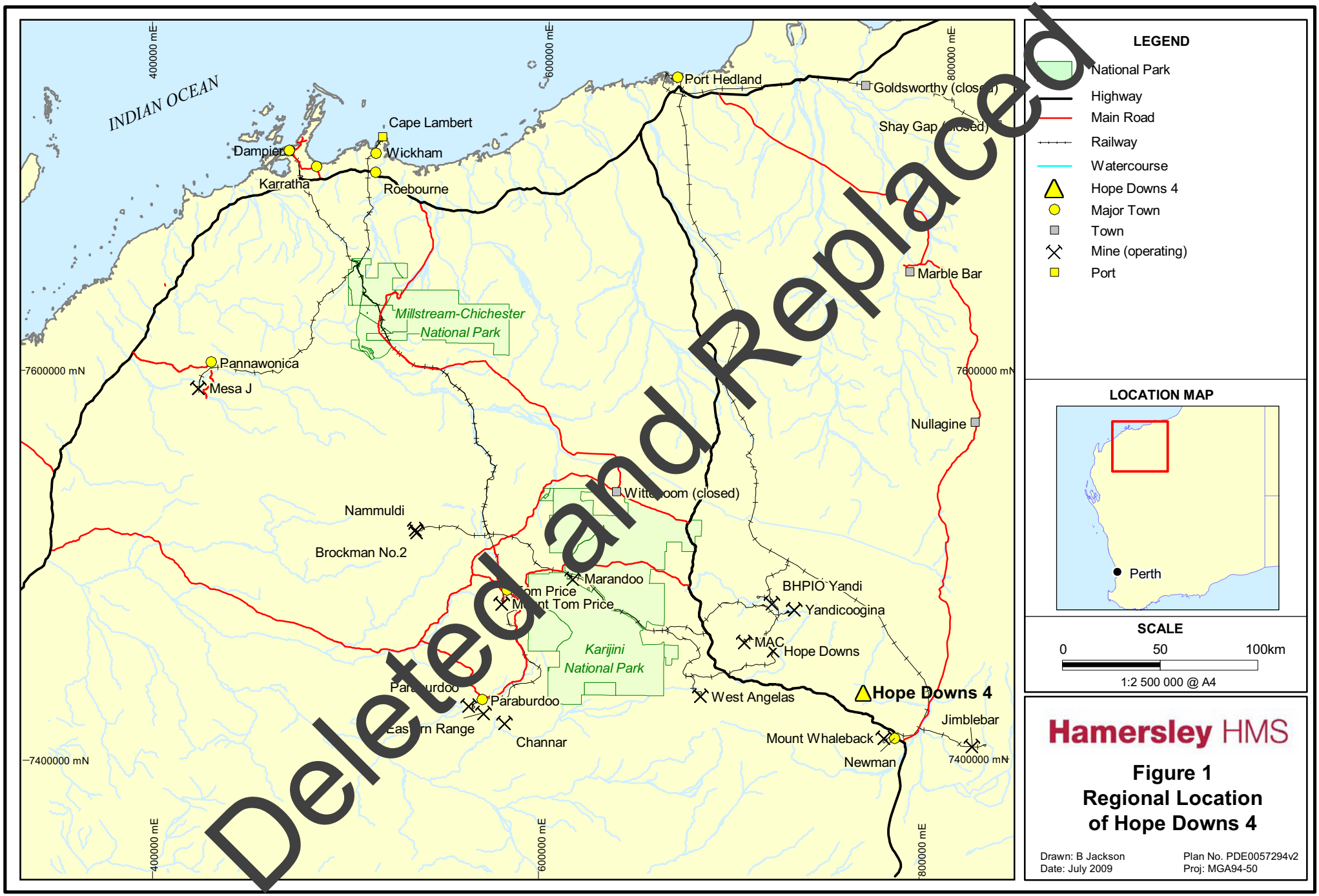
**Figure 5:** **Vegetation Mapping in the Mining Area**
**Replaces Figure 5 in Schedule 1 and Figure 11 in Attachment 1**

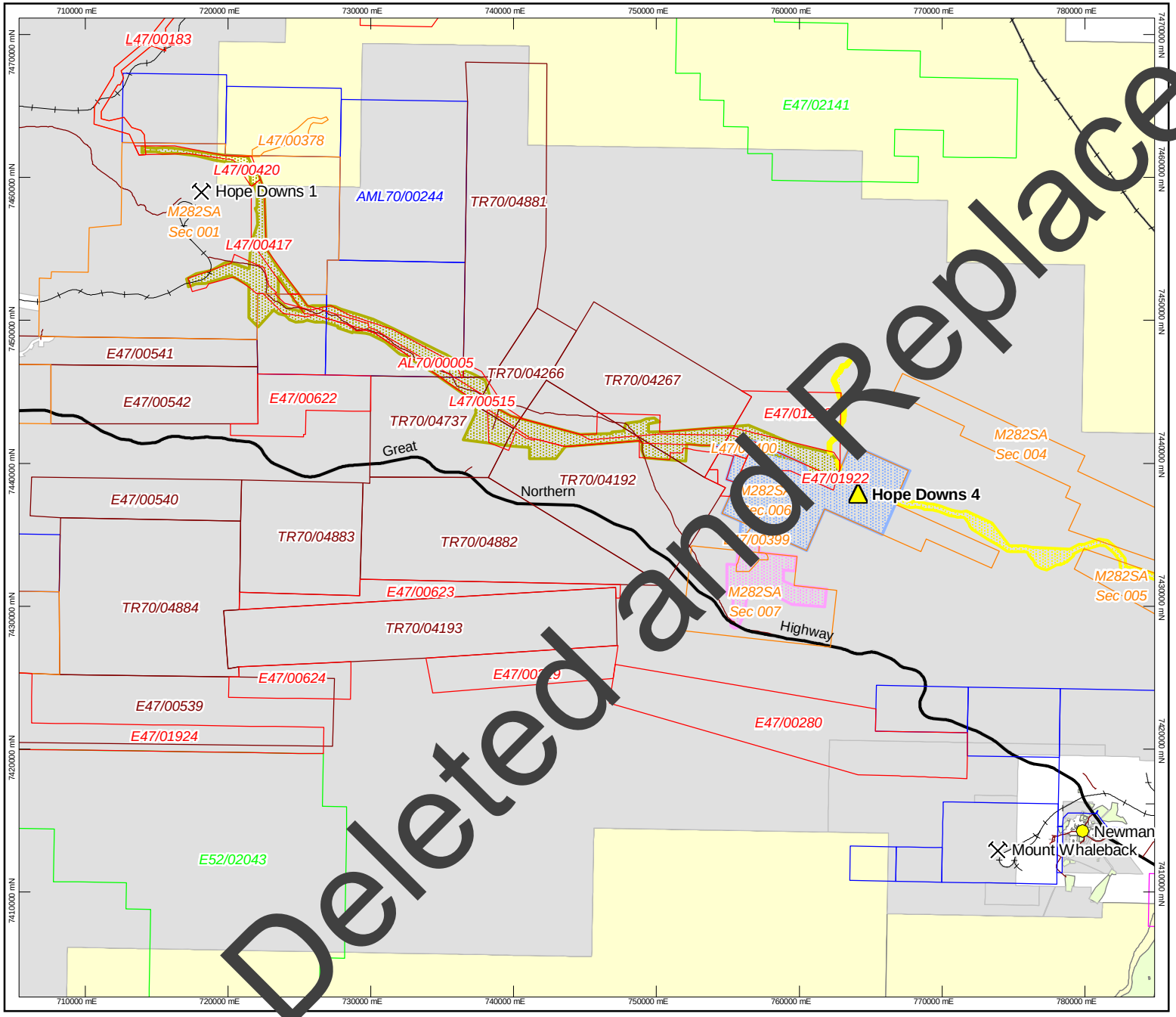
**Figure 6:** **Vegetation Mapping in the Western Portion of the Infrastructure Corridor**
**Replaces Figure 6 in Schedule 1 and Figure 12 in Attachment 1**

**Figure 7:** **Vegetation Mapping in the Eastern Portion of the Infrastructure Corridor**
**Replaces Figure 7 in Schedule 1 and Figure 13 in Attachment 1**

**Dr Paul Vogel**
CHAIRMAN
Environmental Protection Authority
under delegated authority

Approval date: 7 January 2013


INDIAN OCEAN
400000 mE
600000 mE
800000 mE
7600000 mN
7400000 mN
Port Hedland
Goldsworthy (closed)
Shay Gap (closed)
Cape Lambert
Wickham
Dampier
Karratha
Roebourne
Marble Bar
Millstream-Chichester National Park
Pannawonica
Mesa J
Nullagine
Wittenoom (closed)
Nammuldi
Brockman No.2
Marandoo
Tom Price
Mount Tom Price
BHPIO Yandi
Yandicoogina
MAC
Hope Downs
Karijini National Park
Paraburdoo
West Angelas
Hope Downs 4
Eastern Range
Channar
Mount Whaleback
Jimblebar
Newman
Deleted and Replaced
LEGEND
National Park
Highway
Main Road
Railway
Watercourse
Hope Downs 4
Major Town
Town
Mine (operating)
Port
LOCATION MAP
Perth
SCALE
0
50
100km
1:2 500 000 @ A4
Hamersley HMS
Figure 1
Regional Location
of Hope Downs 4
Drawn: B Jackson
Date: July 2009
Plan No. PDE0057294v2
Proj: MGA94-50




Deleted and Replaced

## LEGEND

- Area Within Which Distubance Will Occur
- Infrastructure Corridor
- Mining Area
- Excess Water Pipeline Options
- Accommodation Area and Access
- Hope Downs 4
- Town
- Railway
- Road
- Highway
- Hamersley Iron (HI)
- ROBE
- Hope Downs Joint Venture (HDJV)
- Rhodes Ridge Joint Venture (RRJV)
- Rio Tinto Exploration (RTX)
- Pending HDJV Tenure
- BHP Mining Lease
- Crown Land
- Pastoral Lease
- Reserve

N

**SCALE**

10 0 10km

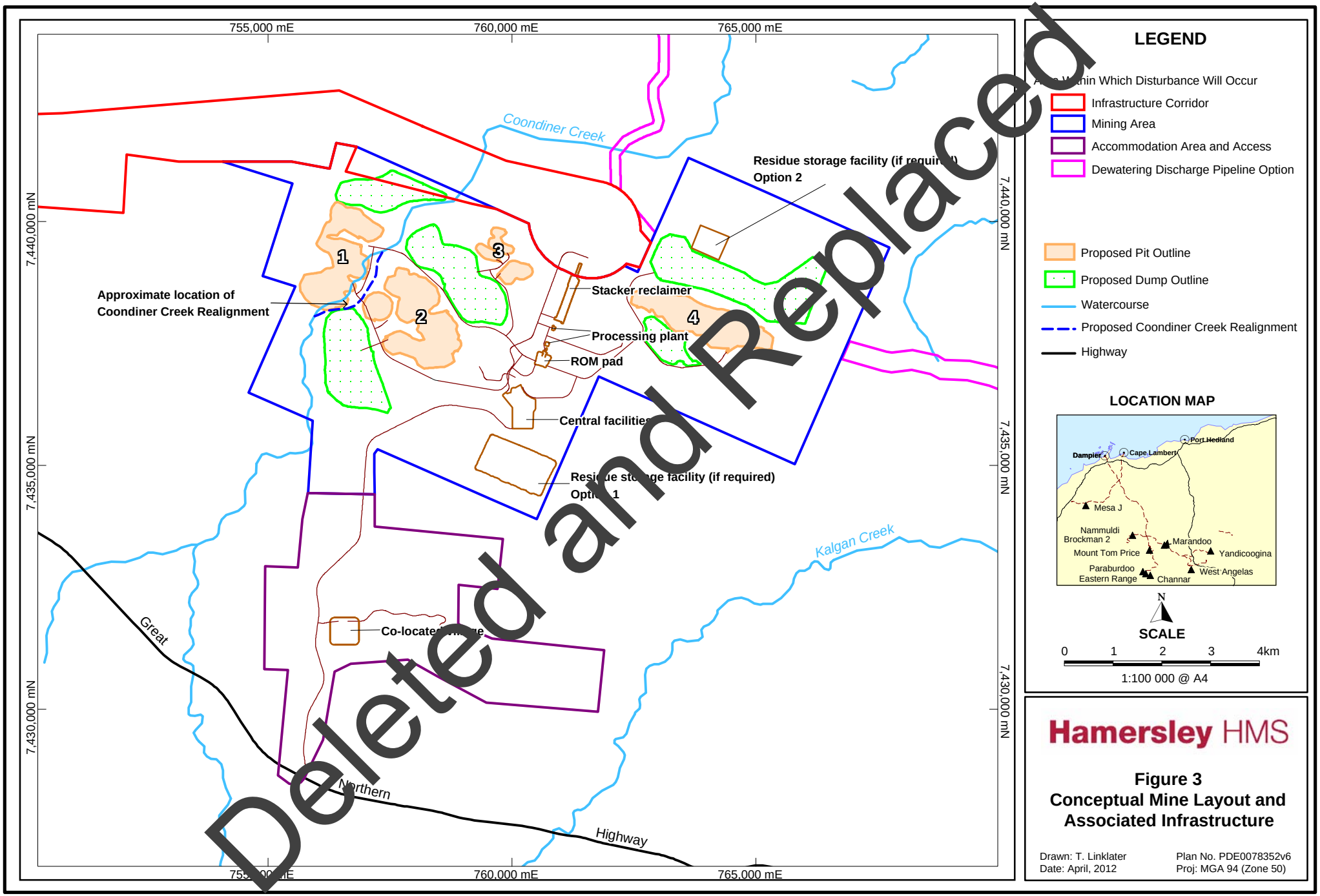
1:400 000 @ A4

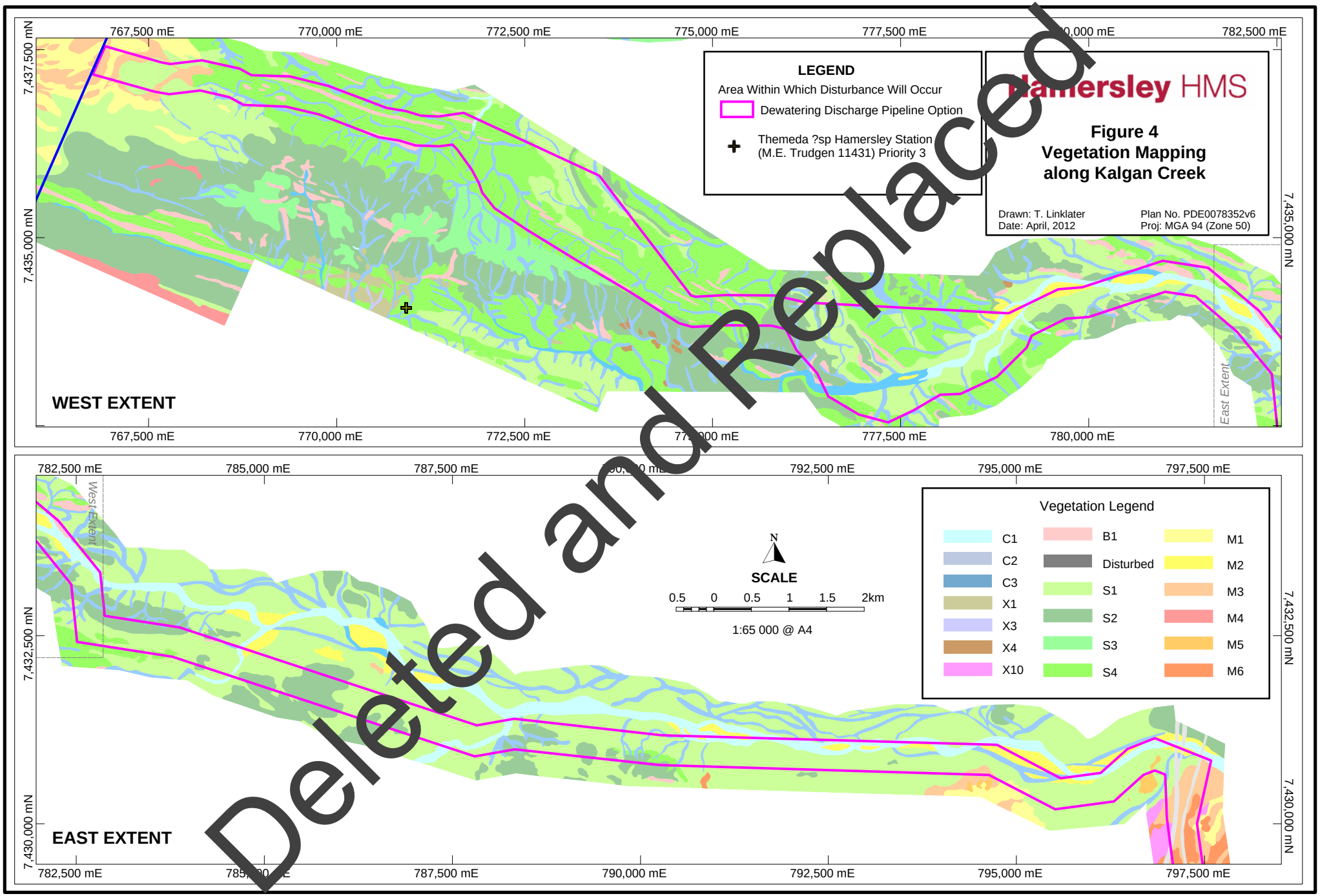
Hamersley HMS

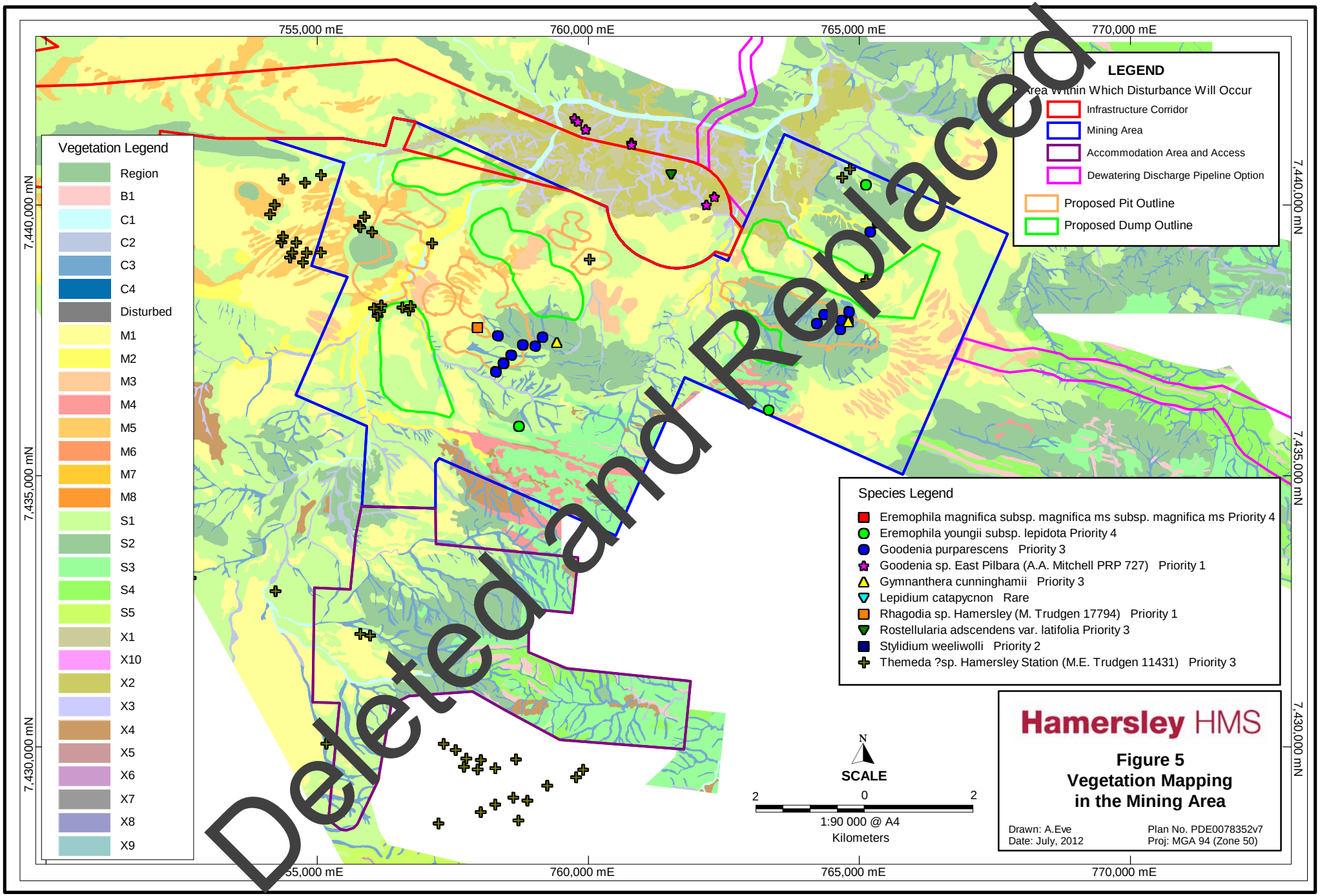
**Figure 2**
**Hope Downs 4**
**Project Area**

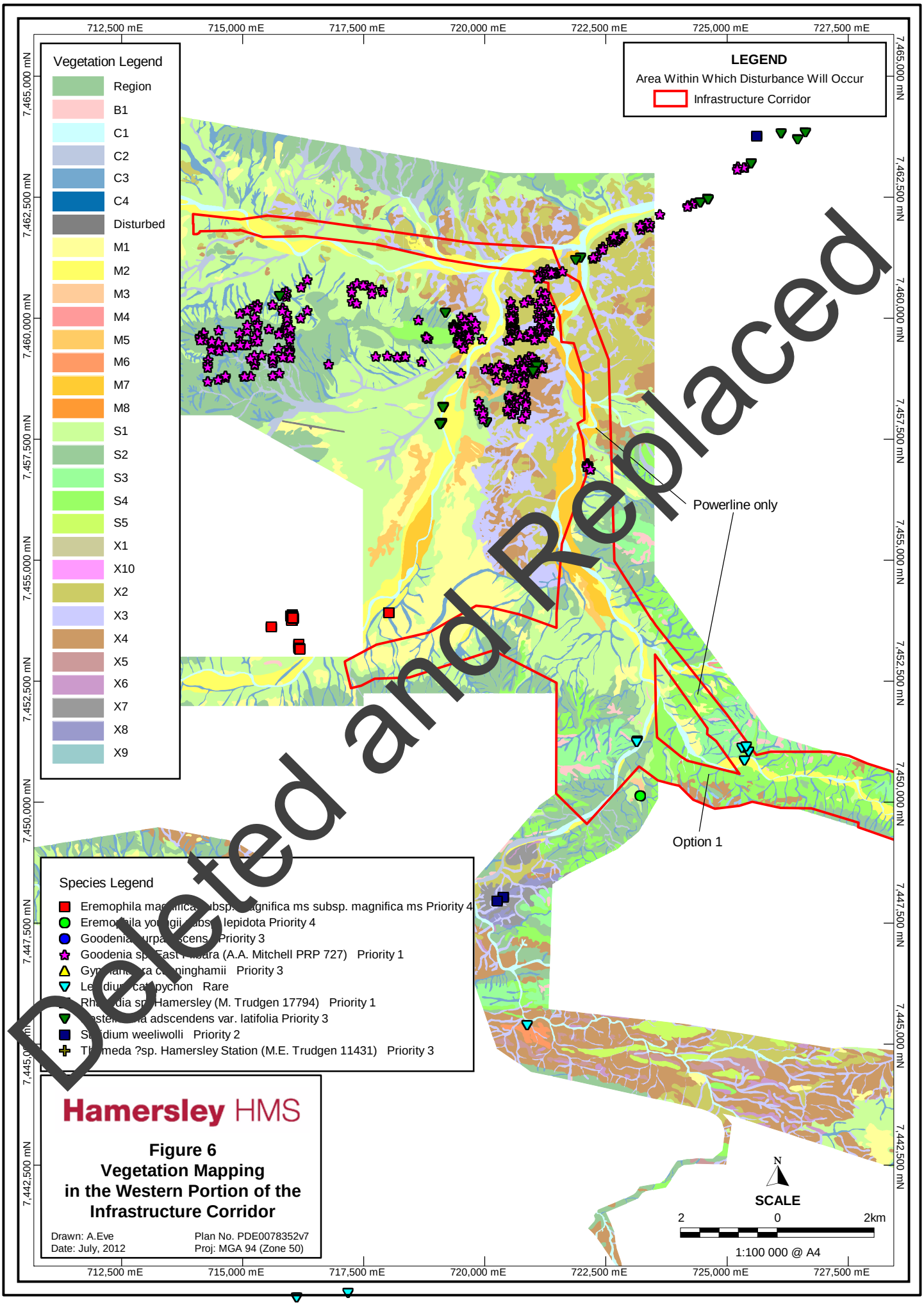
Drawn: A.Eve
Date: July, 2012

Plan No. PDE0078352v7
Proj: MGA94 Zone 50


755,000 mE
760,000 mE
765,000 mE
7,440,000 mN
7,435,000 mN
7,430,000 mN
Coondiner Creek
Kalgan Creek
Great Northern Highway
Residue storage facility (if required) Option 2
Approximate location of Coondiner Creek Realignment
Stacker reclaimer
Processing plant
ROM pad
Central facilities
Residue storage facility (if required) Option 1
Co-located mine
1
2
3
4
Deleted and Replaced
LEGEND
Area Within Which Disturbance Will Occur
Infrastructure Corridor
Mining Area
Accommodation Area and Access
Dewatering Discharge Pipeline Option
Proposed Pit Outline
Proposed Dump Outline
Watercourse
Proposed Coondiner Creek Realignment
Highway
LOCATION MAP
Port Hedland
Dampier
Cape Lambert
Mesa J
Nammuldi
Brockman 2
Marandoo
Mount Tom Price
Yandicoogina
Paraburdoo
Eastern Range
Channar
West Angelas
N
SCALE
0 1 2 3 4km
1:100 000 @ A4
Hamersley HMS
Figure 3
Conceptual Mine Layout and Associated Infrastructure
Drawn: T. Linklater
Date: April, 2012
Plan No. PDE0078352v6
Proj: MGA 94 (Zone 50)




755,000 mE
760,000 mE
765,000 mE
770,000 mE
7,440,000 mN
7,435,000 mN
7,430,000 mN
Vegetation Legend
Region
B1
C1
C2
C3
C4
Disturbed
M1
M2
M3
M4
M5
M6
M7
M8
S1
S2
S3
S4
S5
X1
X10
X2
X3
X4
X5
X6
X7
X8
X9
LEGEND
Area Within Which Disturbance Will Occur
Infrastructure Corridor
Mining Area
Accommodation Area and Access
Dewatering Discharge Pipeline Option
Proposed Pit Outline
Proposed Dump Outline
Species Legend
Eremophila magnifica subsp. magnifica ms subsp. magnifica ms Priority 4
Eremophila youngii subsp. lepidota Priority 4
Goodenia purparescens Priority 3
Goodenia sp. East Pilbara (A.A. Mitchell PRP 727) Priority 1
Gymnanthera cunninghamii Priority 3
Lepidium catapycnon Rare
Rhagodia sp. Hamersley (M. Trudgen 17794) Priority 1
Rostellularia adscendens var. latifolia Priority 3
Stylidium weeliwolli Priority 2
Themeda ?sp. Hamersley Station (M.E. Trudgen 11431) Priority 3
N
SCALE
2 0 2
1:90 000 @ A4
Kilometers
Hamersley HMS
Figure 5
Vegetation Mapping
in the Mining Area
Drawn: A.Eve
Date: July, 2012
Plan No. PDE0078352v7
Proj: MGA 94 (Zone 50)
Deleted and Replaced



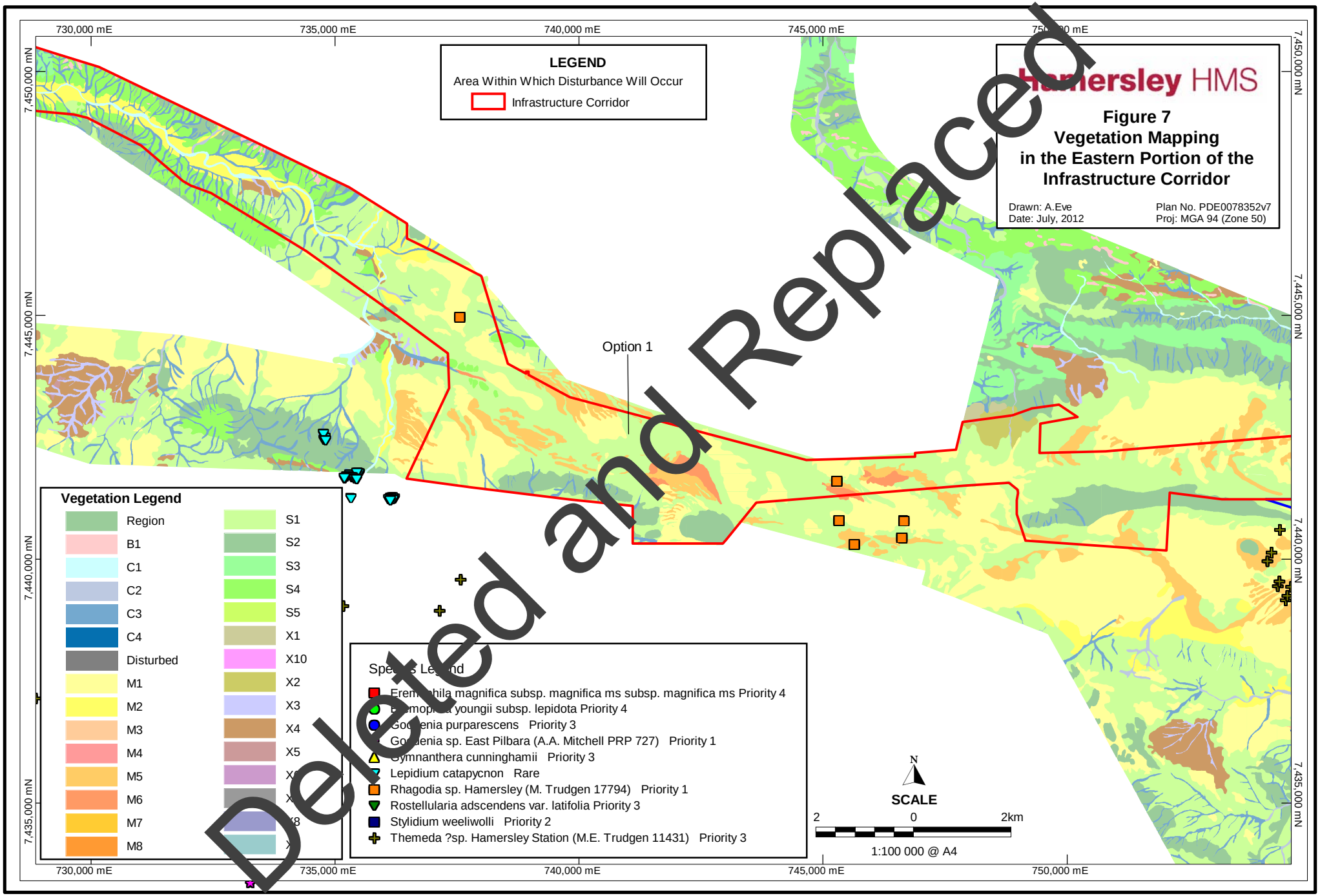

Deleted and Replaced

Hamersley HMS

**Figure 6**
**Vegetation Mapping**
**in the Western Portion of the**
**Infrastructure Corridor**

Drawn: A.Eve
Date: July, 2012

Plan No. PDE0078352v7
Proj: MGA 94 (Zone 50)


730,000 mE
735,000 mE
740,000 mE
745,000 mE
750,000 mE
7,450,000 mN
7,445,000 mN
7,440,000 mN
7,435,000 mN
LEGEND
Area Within Which Disturbance Will Occur
Infrastructure Corridor
Option 1
Hamersley HMS
Figure 7
Vegetation Mapping
in the Eastern Portion of the
Infrastructure Corridor
Drawn: A.Eve
Date: July, 2012
Plan No. PDE0078352v7
Proj: MGA 94 (Zone 50)
Vegetation Legend
Region
B1
C1
C2
C3
C4
Disturbed
M1
M2
M3
M4
M5
M6
M7
M8
S1
S2
S3
S4
S5
X1
X10
X2
X3
X4
X5
Species Legend
Eremophila magnifica subsp. magnifica ms subsp. magnifica ms Priority 4
Eremophila youngii subsp. lepidota Priority 4
Goodenia purparescens Priority 3
Goodenia sp. East Pilbara (A.A. Mitchell PRP 727) Priority 1
Gymnanthera cunninghamii Priority 3
Lepidium catapycnon Rare
Rhagodia sp. Hamersley (M. Trudgen 17794) Priority 1
Rostellularia adscendens var. latifolia Priority 3
Stylidium weeliwolli Priority 2
Themeda ?sp. Hamersley Station (M.E. Trudgen 11431) Priority 3
N
SCALE
2 0 2km
1:100 000 @ A4
Deleted and Replaced

# Attachment 3 to Ministerial Statement 854

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

This Attachment replaces Schedule 1, Attachment 1 and Attachment 2 in Ministerial Statement 854

---

**Proposal:** Hope Downs 4 Iron Ore Mine, Shire of East Pilbara

**Proponent:** Hamersley Hope Management Services Pty Ltd

---

**The Proposal (Assessment Number: 1738)**
The proposal is to develop and operate four open pit iron ore mining zones and associated infrastructure at the Hope Downs 4 Iron Ore Project (HD4) located approximately 30 km north west of Newman within the Shire of East Pilbara.

The location of the various project components is shown in Figures 2 and 3.

The main characteristics of the proposal are summarised in Table 1 below. A detailed description of the proposal is provided in Sections 4, 7 and 8 of the project referral document, *Hope Downs 4 Iron Ore Project: Public Environmental Review*, prepared by Strategen, Leederville, Western Australia (January 2010).

**Change:** Change to Project Area to expand the excess water discharge infrastructure corridor

**Key Characteristics Table:**

| Element | Description of proposal | Description of approved change to proposal |
|---|---|---|
| **General** | | |
| Project life | 25-30 years (approximately) | 25-30 years (approximately) |
| Location | See Figure 1 | See Figure 1 |
| Project area | • 19,050 ha comprising:<br>• mining area – 5,967 ha<br>• infrastructure corridor – 8,365 ha<br>• excess water discharge infrastructure – 2,865 ha<br>• accommodation area – 1,850 ha | • **19,375 ha** comprising:<br>• mining area – 5,967 ha<br>• infrastructure corridor – 8,365 ha<br>• **excess water discharge infrastructure corridor – 3,190 ha**<br>• accommodation area – 1,850 ha |
| **Disturbance area** | | |
| Vegetation clearing | Clearing up to 5,470 ha comprising:<br>• mining area – 4,000 ha<br>• infrastructure corridor - 1,100 ha<br>• excess water discharge | Clearing up to 5,470 ha comprising:<br>• mining area – 4,000 ha<br>• infrastructure corridor - 1,100 ha<br>• excess water discharge |

| | | |
|---|---|---|
| | infrastructure – 180 ha<br>• accommodation area – 190 ha | infrastructure – 180 ha<br>• accommodation area – 190 ha |
| **Mining Operation** | | |
| Mining method | Open cut | Open cut |
| Dewatering rate | Up to 20 GL/a<br>Up to 140 m of drawdown to approximately 500 m relative to sea level (RSL) | Up to 20 GL/a<br>Up to 140 m of drawdown to approximately 500 m relative to sea level (RSL) |
| Discharge of excess water to Kalgan Creek | Discharge location:<br>• Approximately 16 km east of the mining area, downstream of Kalgan Pool<br>The maximum footprint of creekbed saturation shall not:<br>• exceed 29 km from point of discharge; and<br>• extend closer than 30 km from the Fortescue Marsh Boundary.<br>Length of water pipeline:<br>• approximately 16 km | Discharge location:<br>• Approximately 16 km east of the mining area, downstream of Kalgan Pool<br>The maximum footprint of creekbed saturation shall not:<br>• exceed 29 km from point of discharge; and<br>• extend closer than 30 km from the Fortescue Marsh Boundary.<br>Length of water pipeline:<br>• approximately 16 km |
| Discharge of excess water to Hope Downs 1 | Length of water pipeline:<br>• Up to 52 km | Length of water pipeline:<br>• Up to 52 km |
| Infrastructure corridor | Length:<br>• Up to 52 km | Length:<br>• Up to 52 km |

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

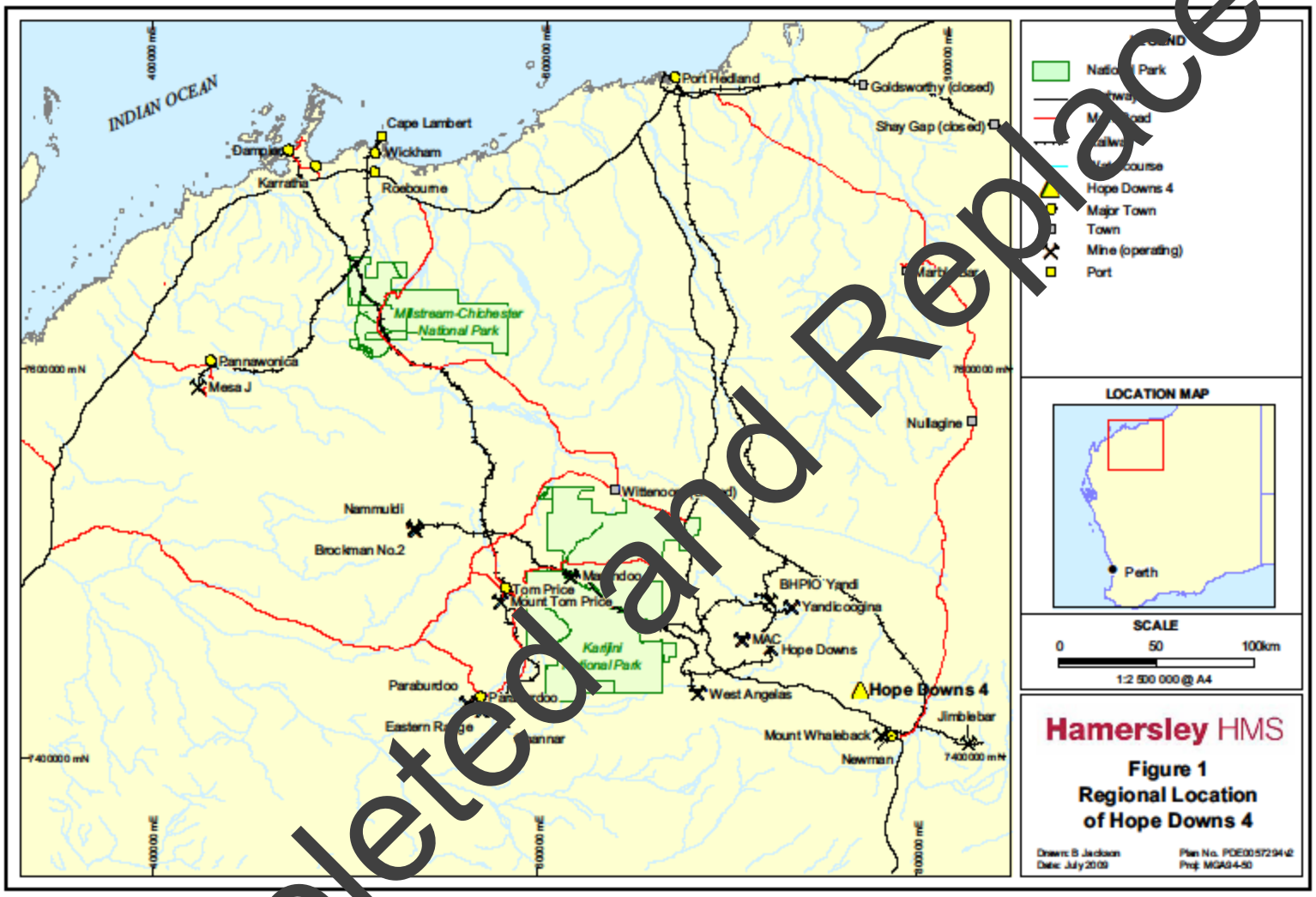
**Figures:**

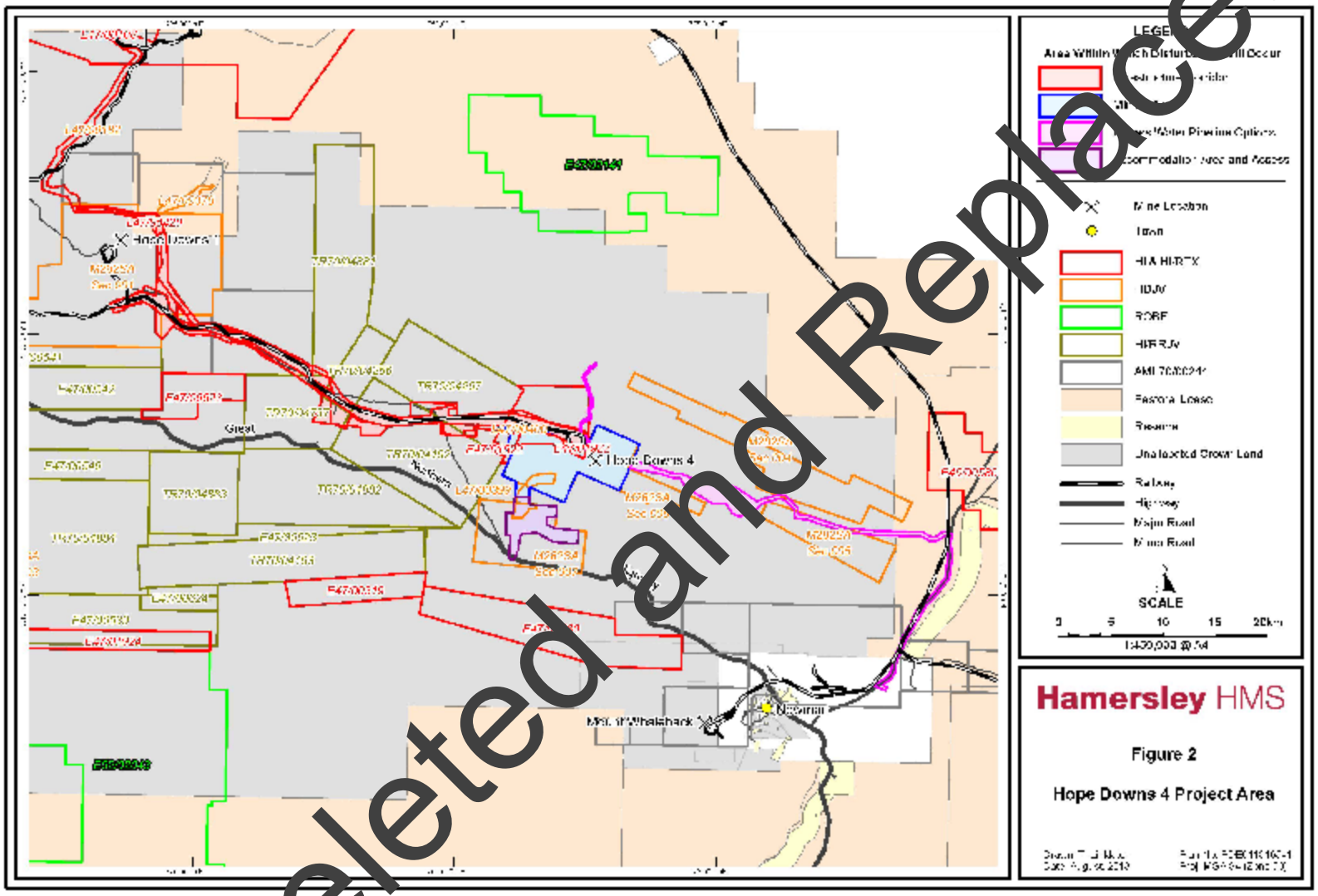
Figure 1: Regional location of Hope Downs 4 Iron Ore Mine
Figure 2: Hope Downs 4 Project Area
Figure 3: Conceptual Mine layout and Associated Infrastructure
Figure 4: Vegetation Mapping along Kalgan Creek
Figure 5: Vegetation Mapping in the Mining Area
Figure 6: Vegetation Mapping in the Western Portion of the Infrastructure Corridor
Figure 7: Vegetation Mapping in the Eastern Portion of the Infrastructure Corridor

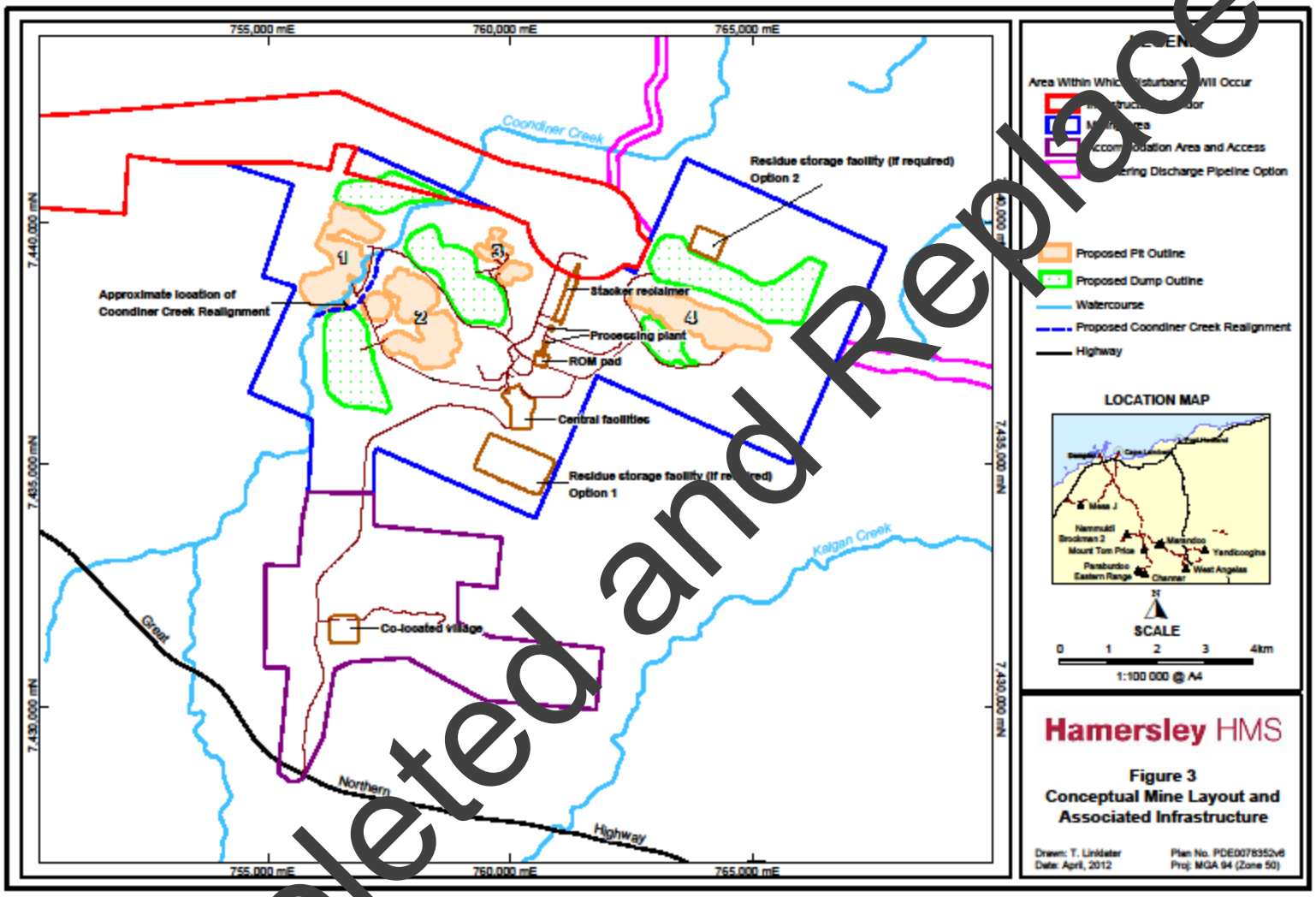


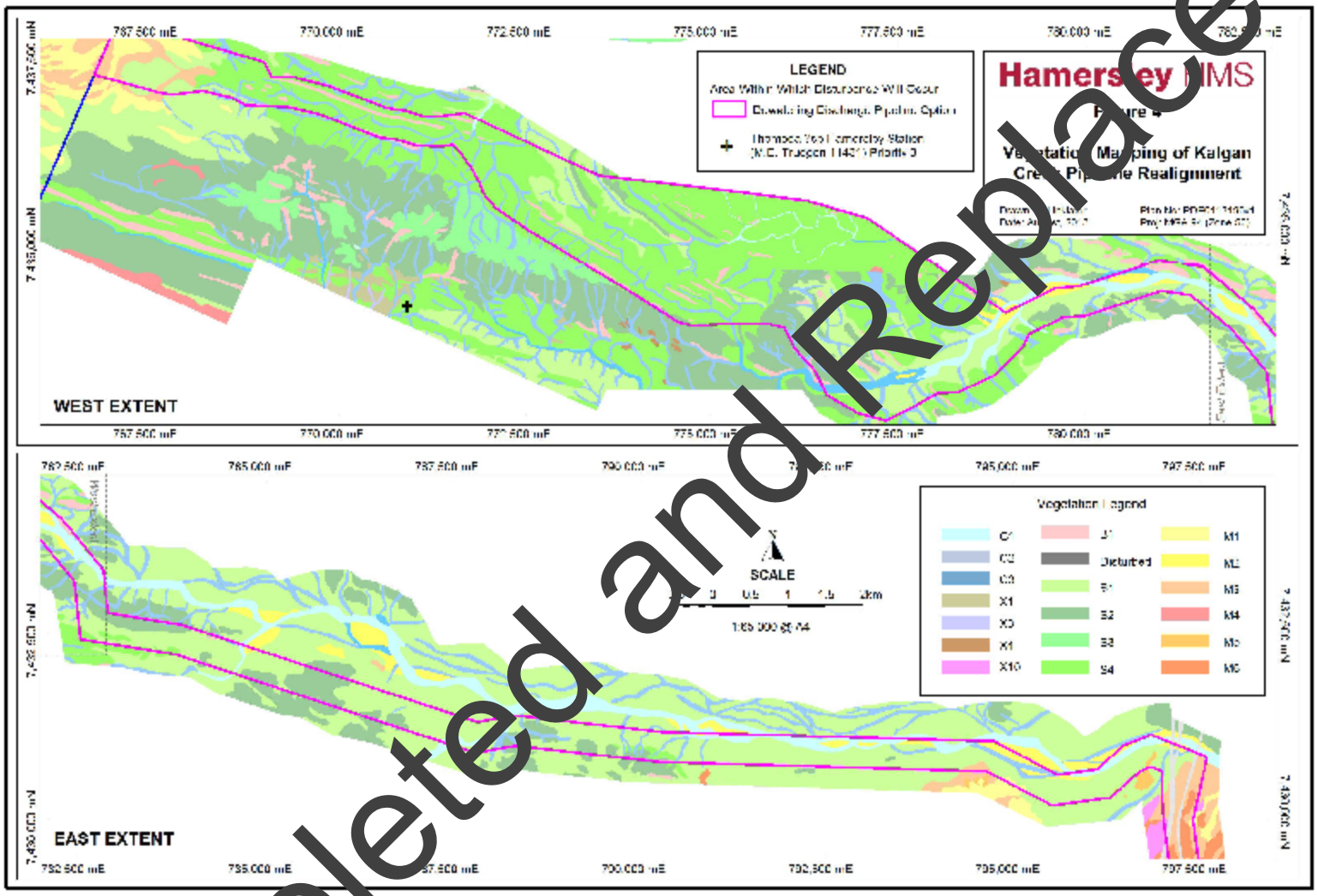
**Dr Paul Vogel**
CHAIRMAN
Environmental Protection Authority
under delegated authority

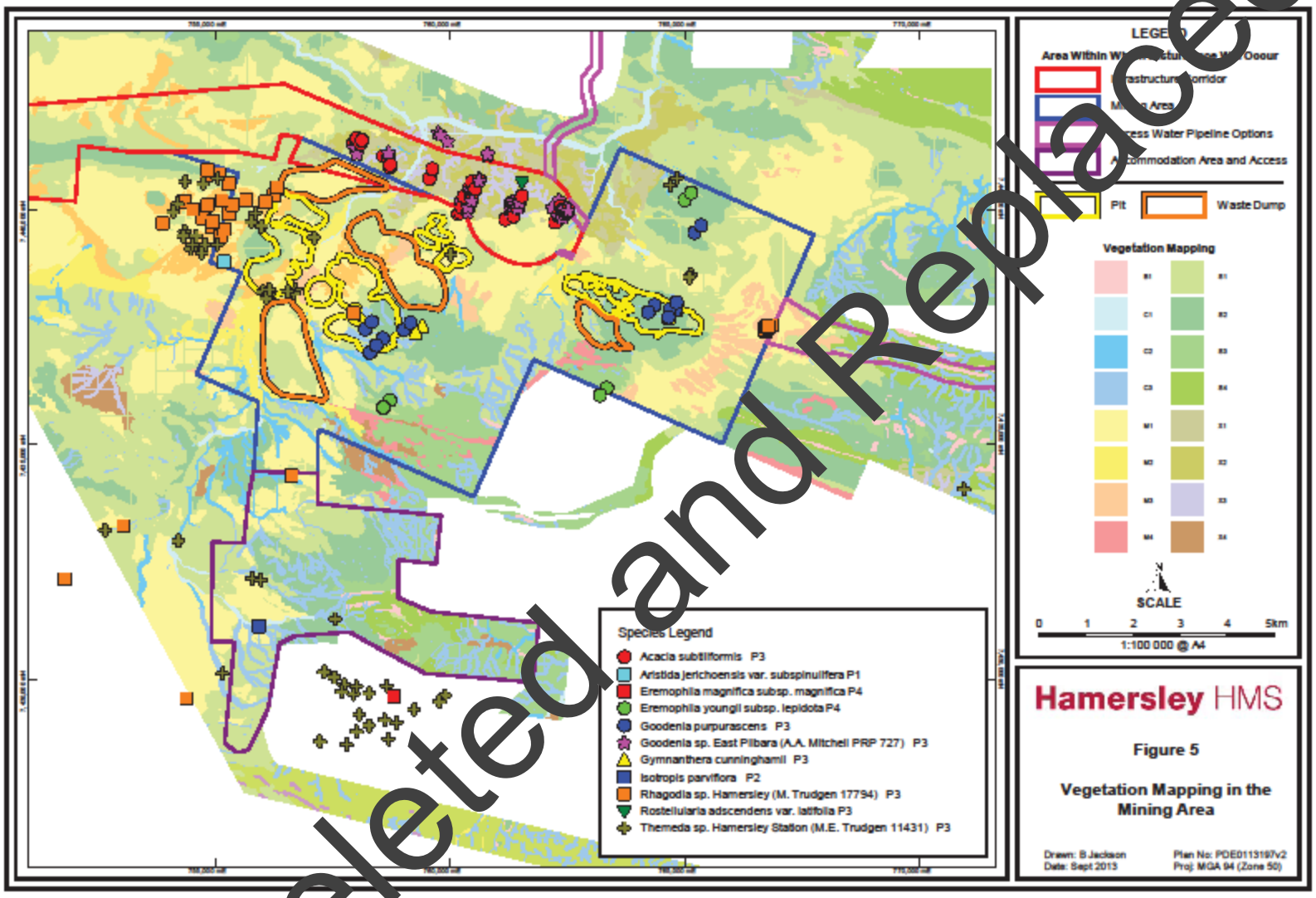
Approval date: 17 September 2013

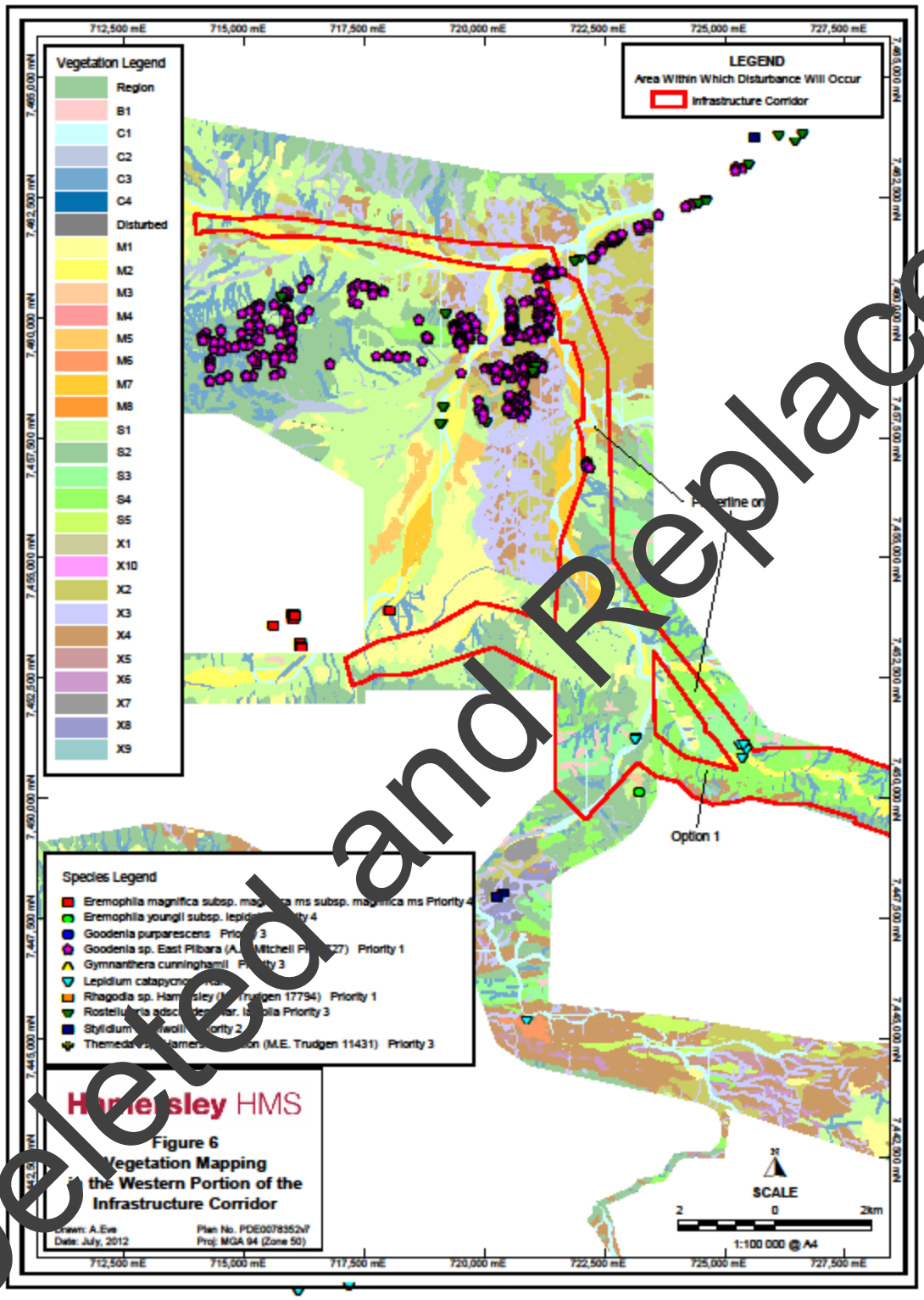


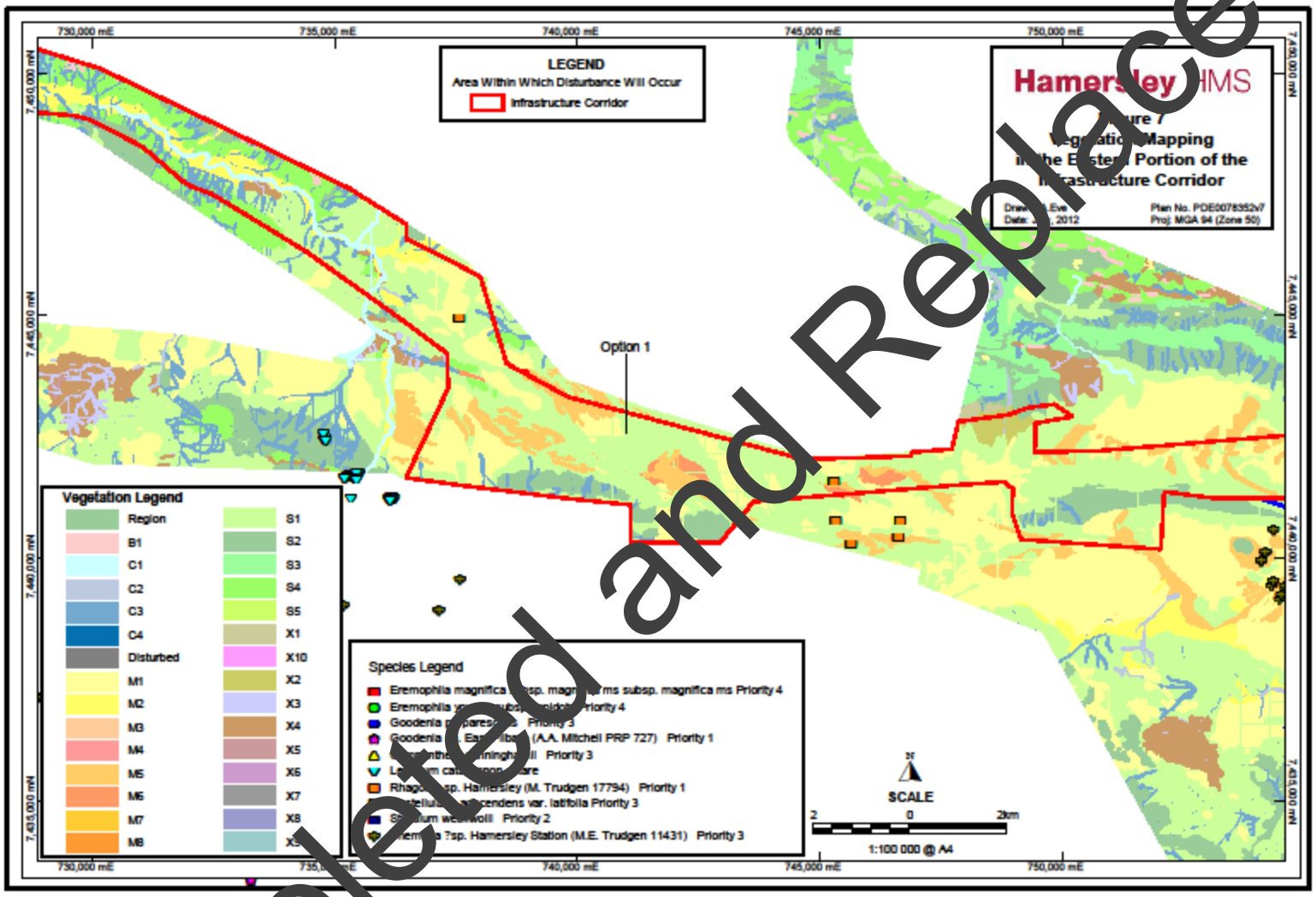












Attachment 4 to Ministerial Statement 854

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

This Attachment replaces the key characteristics table in Attachment 3, and Figure 3 of Attachment 3.

**Proposal:** Hope Downs 4 Iron Ore Mine Shire of East Pilbara

**Proponent:** Hamersley HMS Pty Limited

**Changes:**

- Construction, commissioning, and operation of a new tailings storage facility in previously mined pits in Area 3.
- The change is for abstraction of recirculation water as a result of seepage from in-pit storage of tailings. Abstraction of up to 3 gigalitres per annum (GL/a) to account for recirculation water in addition to 20 GL/a for dewatering is required (total of 23 GL/a). There is no change to the abstraction of groundwater that is not recirculation water, or the extent of groundwater drawdown from dewatering authorised under Schedule 1 of MS 854 (up to 140 metres of drawdown to approximately 500 metres relative to sea level (RSL)).
- Figures 2 and 3 have been referenced in the Key Characteristics Table.

The conceptual mine layout and associated infrastructure for the proposal in Schedule 1 of MS 854 (Figure 3) has been updated to reflect the changes described above and the elements of the proposal that have been implemented in accordance with the key characteristics of the approved proposal.

The reference to figures depicting the location of the physical and operational elements have been corrected in the Key Characteristics Table (to Figures 2 and 3) as it is these figures that show the mine layout and associated infrastructure for the proposal.

**Key Characteristic Table:**

| Element | Previously Authorised Extent | Authorised Extent |
|---|---|---|
| Project Life | 25-30 years (approximately) | 25-30 years (approximately) |
| Location | See Figure 1 | See Figure**s 2 and 3** |
| Project Area | 19,375 ha comprising:<br>• mining area - 5,967 ha<br>• infrastructure corridor- 8,365 ha<br>• excess water discharge infrastructure corridor - 3,190 ha<br>• accommodation area - 1,850 ha | 19,375 ha comprising:<br>• mining area - 5,967 ha<br>• infrastructure corridor- 8,365 ha<br>• excess water discharge infrastructure corridor - 3,190 ha<br>• accommodation area - 1,850 ha |
| **Disturbance area** | | |
| Vegetation clearing | Clearing up to 5,470 ha comprising:<br>• mining area - 4,000 ha<br>• infrastructure corridor - 1,100 ha | Clearing up to 5,470 ha comprising:<br>• mining area - 4,000 ha<br>• infrastructure corridor - 1,100 ha |

| Element | Previously Authorised Extent | Authorised Extent |
|---|---|---|
| | • excess water discharge infrastructure - 180 ha<br>• accommodation area - 190 ha | • excess water discharge infrastructure - 180 ha<br>• accommodation area - 190 ha |
| **Mining Operation** | | |
| Mining method | Open pit | Open pit |
| Dewatering rate | Up to 20 GL/a<br>Up to 140 m of drawdown to approximately 500 m relative to sea level (RSL) | **Up to 23 GL/a (including 3 GL/a of re-circulation water)**<br>Up to 140 m of drawdown to approximately 500 m relative to sea level (RSL) |
| Discharge of excess water to Kalgan Creek | Discharge location:<br>• Approximately 16 km east of the mining area, downstream of Kalgan Pool<br>The maximum footprint of creek bed saturation shall not:<br>• exceed 29 km from point of discharge; and<br>• extend closer than 30 km from the Fortescue Marsh Boundary.<br>Length of water pipeline:<br>• approximately 16 km | Discharge location:<br>• Approximately 16 km east of the mining area, downstream of Kalgan Pool<br>The maximum footprint of creek bed saturation shall not:<br>• exceed 29 km from point of discharge; and<br>• extend closer than 30 km from the Fortescue Marsh Boundary.<br>Length of water pipeline:<br>• approximately 16 km |
| Discharge of excess water to Hope Downs 1 | Length of water pipeline:<br>• up to 52 km | Length of water pipeline:<br>• up to 52 km |
| **Ore processing (waste)** | - | **In-pit and out of pit tailings storage facilities** |
| Infrastructure corridor | Length:<br>• up to 52 km | Length of water pipeline:<br>• up to 52 km |

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

**Figures:**

Figure 3: Conceptual mine layout and associated infrastructure.

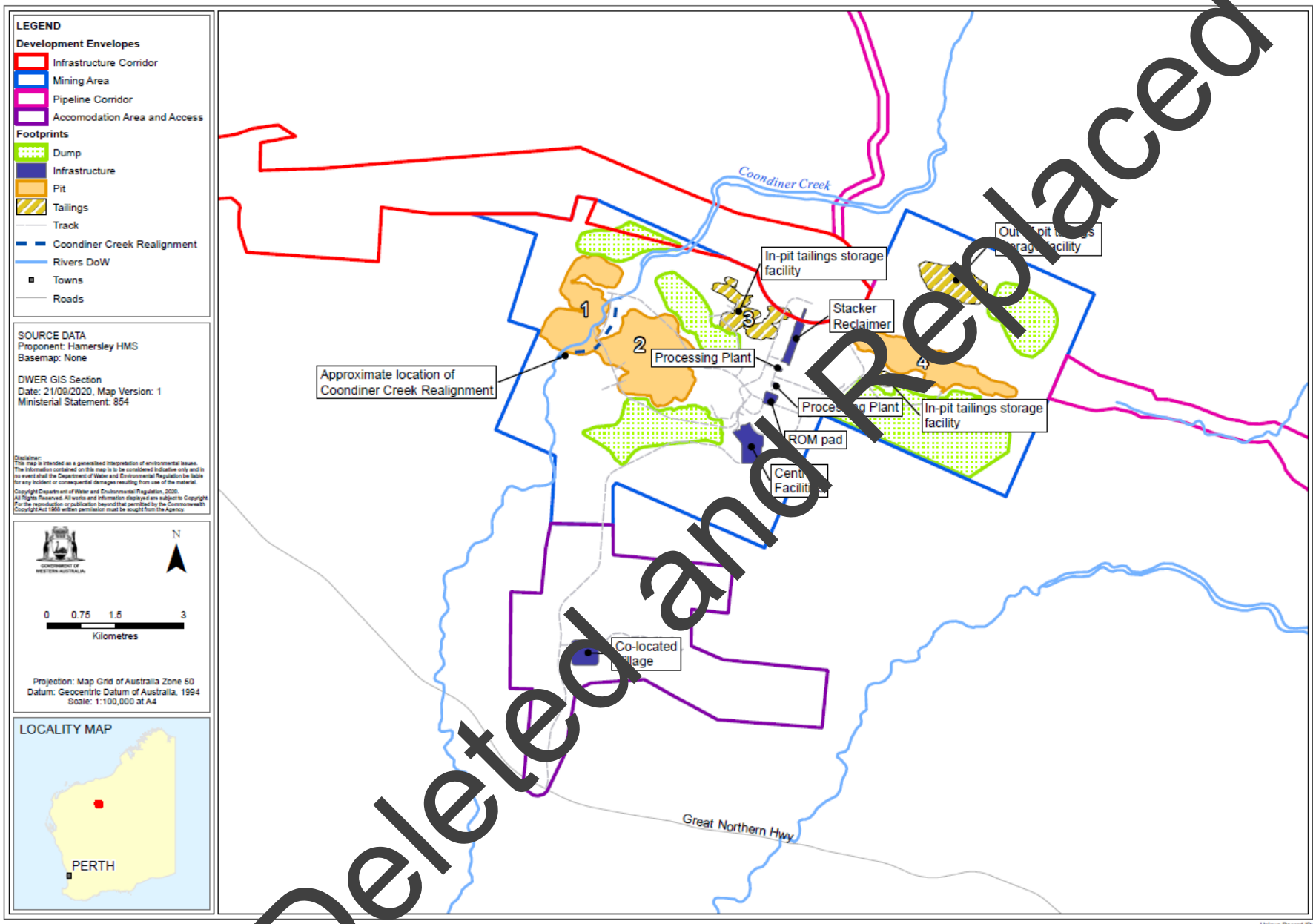





**Figure 3: Conceptual mine layout and associated infrastructure**

[signed 2 October 2020]

**Mr Robert Harvey**
DEPUTY CHAIRMAN
Environmental Protection Authority
under delegated authority