

# Project Approval

## Section 75J of the *Environmental Planning and Assessment Act 1979*

I approve the project referred to in Schedule 1, subject to the conditions in Schedules 2 to 4

These conditions are required to:

- prevent, minimise, and/or offset adverse environmental impacts;
- set standards and performance measures for acceptable environmental performance;
- require regular monitoring and reporting; and
- provide for the ongoing environmental management of the project.



Kristina Keanelly MP  
Minister for Planning

Sydney

7 August

2009

### SCHEDULE 1

|                            |                                                                                                                                                             |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Application Number:</b> | 07_0086                                                                                                                                                     |
| <b>Proponent:</b>          | Redlake Enterprises Pty Ltd                                                                                                                                 |
| <b>Approval Authority:</b> | Minister for Planning                                                                                                                                       |
| <b>Land:</b>               | Lot 161 DP 774440, Lot 1 DP 1003492, Lot 1 DP 597372, Lot 513 DP 585256                                                                                     |
| <b>Project:</b>            | Subdivision of the site for industrial purposes, bulk earthworks across the site and the establishment of a WesTrac Facility and associated infrastructure. |

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## DEFINITIONS

|                                |                                                                                                                                                                                                                                                                                                                         |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ARI                            | Average Recurrence Interval                                                                                                                                                                                                                                                                                             |
| AEMR                           | Annual Environmental Management Report                                                                                                                                                                                                                                                                                  |
| BCA                            | Building Code of Australia                                                                                                                                                                                                                                                                                              |
| Conservation area              | Area marked in red in Appendix 2                                                                                                                                                                                                                                                                                        |
| Council                        | Port Stephens Council                                                                                                                                                                                                                                                                                                   |
| Day                            | The period from 7am to 6pm on Monday to Saturday, and 8am to 6pm on Sundays and Public Holidays                                                                                                                                                                                                                         |
| DECC                           | Department of Environment and Climate Change                                                                                                                                                                                                                                                                            |
| Department                     | Department of Planning                                                                                                                                                                                                                                                                                                  |
| Director-General               | Director-General of Department of Planning, or delegate                                                                                                                                                                                                                                                                 |
| DWE                            | Department of Water and Energy                                                                                                                                                                                                                                                                                          |
| EA                             | Environmental Assessment titled <i>Environmental Assessment Report</i> prepared by Asquith & deWitt Pty Ltd and dated April 2008                                                                                                                                                                                        |
| Environmental Protection Works | Works associated with the rehabilitation of land towards its natural state or any work to protect land from environmental degradation, and includes bush regeneration works, wetland protection works, erosion protection works, dune restoration works and the like.                                                   |
| EP&A Act                       | <i>Environmental Planning and Assessment Act 1979</i>                                                                                                                                                                                                                                                                   |
| EP&A Regulation                | <i>Environmental Planning and Assessment Regulation 2000</i>                                                                                                                                                                                                                                                            |
| EPL                            | Environment Protection Licence                                                                                                                                                                                                                                                                                          |
| Evening                        | The period from 6pm to 10pm                                                                                                                                                                                                                                                                                             |
| HCCREMS                        | Hunter & Central Coast Regional Environmental Management Strategy                                                                                                                                                                                                                                                       |
| HWC                            | Hunter Water Corporation                                                                                                                                                                                                                                                                                                |
| Inventory Area                 | The outdoor storage area identified in drawing A0102 of the EA                                                                                                                                                                                                                                                          |
| Land                           | Land means the whole of a lot, or contiguous lots owned by the same landowner, in a current plan registered at the Land Titles Office at the date of this approval                                                                                                                                                      |
| Minister                       | Minister for Planning, or delegate                                                                                                                                                                                                                                                                                      |
| Night                          | The period from 10pm to 7am on Monday to Saturday, and 10pm to 8am on Sundays and Public Holidays                                                                                                                                                                                                                       |
| Privately-owned land           | Land that is not owned by a public agency or the Proponent                                                                                                                                                                                                                                                              |
| Project                        | The development as described in the EA                                                                                                                                                                                                                                                                                  |
| Proponent                      | Redlake Enterprises Pty Ltd or its successors                                                                                                                                                                                                                                                                           |
| Reasonable and Feasible        | Reasonable relates to the application of judgement in arriving at a decision, taking into account: mitigation benefits, cost of mitigation versus benefits provided, community views and the nature and extent of potential improvements. Feasible relates to engineering considerations and what is practical to build |
| Response to Submissions        | The Proponent's response to issues raised in submissions                                                                                                                                                                                                                                                                |
| RTA                            | Roads and Traffic Authority                                                                                                                                                                                                                                                                                             |
| Site                           | The land referred to in Schedule 1                                                                                                                                                                                                                                                                                      |
| Stage 1                        | Establishment of a WesTrac Facility and associated infrastructure                                                                                                                                                                                                                                                       |
| Stage 2 and 3                  | Establishment of an industrial subdivision                                                                                                                                                                                                                                                                              |
| Statement of Commitments       | The Proponent's commitments in Appendix 3                                                                                                                                                                                                                                                                               |

## **SCHEDULE 2 ADMINISTRATIVE CONDITIONS**

### **OBLIGATION TO MINIMISE HARM TO THE ENVIRONMENT**

1. The Proponent shall implement all reasonable and feasible measures to prevent and/or minimise any harm to the environment that may result from the construction and operation of the project.

### **TERMS OF APPROVAL**

2. The Proponent shall carry out the project generally in accordance with the:
  - (a) EA;
  - (b) site plans A-101, A-102 and A-151 (see Appendix 1);
  - (c) response to submissions including the Overview Architectural Design Revision E, dated October 2008;
  - (d) statement of commitments; and
  - (e) conditions of this approval.
3. If there is any inconsistency between the above, the conditions of this approval shall prevail to the extent of the inconsistency.
4. The Proponent shall comply with any reasonable requirement/s of the Director-General arising from the Department's assessment of:
  - (a) any reports, plans, programs, strategies or correspondence that are submitted in accordance with this approval; and
  - (b) the implementation of any actions or measures contained in these reports, plans, programs, strategies or correspondence submitted by the Proponent.

### **LIMITS OF APPROVAL**

5. This approval shall lapse if the Proponent does not substantially commence the building works associated with Stage 1 of the project within 5 years of the date of this approval.

### **STRUCTURAL ADEQUACY**

6. The Proponent shall ensure that all new buildings and structures, and any alterations or additions to existing buildings and structures, are constructed in accordance with the relevant requirements of the BCA.

#### *Notes:*

- Under Part 4A of the EP&A Act, the Proponent is required to obtain construction and occupation certificates for the proposed building works.
- Part 8 of the EP&A Regulation sets out the requirements for the certification of the project.

### **DEMOLITION**

7. The Proponent shall ensure that all demolition work is carried out in accordance with *Australian Standard AS 2601-2001: The Demolition of Structures*, or its latest version.
8. All works involving the removal and disposal of asbestos must be undertaken by a contractor who holds a current WorkCover licence. Removal must be carried out in accordance with the National Occupational Health and Safety Commissions *Code of Practice for the Safe Removal of Asbestos*.

### **PROTECTION OF PUBLIC INFRASTRUCTURE**

9. Prior to commencement of construction, the Proponent shall:
  - (a) prepare a dilapidation report of the public infrastructure in the vicinity of the site (including roads, gutters, footpaths, etc) in consultation with Council; and
  - (b) submit a copy of this report to the Director-General and Council.
10. The Proponent shall:
  - (a) repair, or pay the full costs associated with repairing any public infrastructure that is damaged by the development; and
  - (b) relocate, or pay the full costs associated with relocating any public infrastructure that needs to be relocated as a result of the development.

11. The relocation of the 132kV overhead powerline located on site must be undertaken in accordance with EnergyAustralia's requirements and at no cost to Energy Australia.

#### **OPERATION OF PLANT AND EQUIPMENT**

12. The Proponent shall ensure that all plant and equipment used on site is:
- (a) maintained in a proper and efficient condition; and
  - (b) operated in a proper and efficient manner.

#### **MANAGEMENT PLANS/MONITORING PROGRAMS**

13. With the approval of the Director-General, the Proponent may submit any management plan or monitoring program required by this approval on a progressive basis.

#### **SECTION 94 CONTRIBUTIONS**

14. Prior to the issue of a subdivision certificate, the Proponent shall pay Council \$129,933 as a contribution towards the provision of infrastructure and services.

*Note: This contribution is subject to indexation by the Implicit Price Deflator, as published by the Australian Bureau of Statistics.*

#### **REGIONAL CONTRIBUTIONS**

15. Prior to the commencement of operations of Stage 1, or as otherwise agreed by the Director-General, the Proponent shall pay the Department \$667,000 or provide equivalent works in kind, towards the upgrade of Tomago Road.

*Note: Equivalent works in kind include the provision of street lighting along Tomago Road.*

16. Prior to the issue of a subdivision certificate for Stages 2 and 3, the Proponent shall contribute towards regional infrastructure. The following contributions shall be paid to the satisfaction of the Director-General:
- (a) \$29,000 per developable hectare paid to the Department; or
  - (b) in accordance with any Special Infrastructure Contributions Plan for the Lower Hunter.

*Notes:*

- *The contribution to be paid will be the lesser of the \$29,000 and any Special Infrastructure Contributions Plan.*
- *Equivalent works in kind may be carried out in lieu of the relevant monetary contributions.*

#### **SERVICE PROVIDERS / ADDITIONAL APPROVALS**

17. Prior to the construction of any utility works, the Proponent shall obtain relevant approvals from service providers, including HWC and Council.
-

**SCHEDULE 3  
SPECIFIC ENVIRONMENTAL CONDITIONS**

**DESIGN AND SUBDIVISION WORKS**

1. Prior to the commencement of construction of Stage 2 and 3, the Proponent shall revise the subdivision plan for the project, to the satisfaction of the Director-General, to exclude development within the 22 hectare conservation area, as identified in Appendix 2 (area marked in red). The revised subdivision plan must identify:
  - (a) location and size of lots;
  - (b) the location of estate roads and details of any necessary restrictive covenants, easements and/or rights of way required for access, drainage, services and the 132kV overhead powerline within the site; and
  - (c) the proposed staging of lot registration.
2. Prior to the commencement of construction of Stage 2 and 3, the Proponent shall prepare Design Guidelines for the site to the satisfaction of the Director-General. These guidelines shall:
  - (a) be prepared in consultation with DECC and Council;
  - (b) include the proposed layout of each stage; and
  - (c) detail development controls for the design and development of individual sites (such as site coverage, set backs, building heights, stormwater management and drainage, access and parking, landscaping, waste removal and storage, and energy and water conservation/efficiency requirements).
3. Prior to commencement of works associated with Stage 2, unless otherwise agreed with the Director-General the Proponent shall:
  - (a) engage a registered surveyor to survey and permanently mark the boundaries of the excluded conservation area, as identified in Condition 1 of Schedule 3;
  - (b) submit a survey plan of these boundaries to the Director-General and DECC;
  - (c) ensure that these boundaries are clearly marked at all times in a permanent manner that allows operating staff, the landowner and inspecting officers to clearly identify those boundaries; and
  - (d) subdivide the conservation area (as identified in Condition 1 of Schedule 3) from the development area, with the title of the conservation area to be transferred to DECC within 7 days of the registration of the subdivision plan.
4. Prior to the issue of a Subdivision Certificate for each stage of the project, the Proponent shall ensure that all civil works for the stage are completed and that each lot is connected to services, drainage and utilities.

**SOIL AND WATER**

**Fill**

5. Any fill material brought to site must be Virgin Excavated Natural Material and/or Excavated Natural Material that meets the criteria for Virgin Excavated Natural Material.

*Note: Virgin Excavated Natural Material is defined under the Protection of the Environment Operations Act 1997.*

**Discharge Limits**

6. The Proponent shall comply with Section 120 of the *Protection of the Environment Operations Act 1997*.

**Bunding**

7. All chemicals, fuels and oils shall be stored in appropriately banded areas, with impervious flooring and sufficient capacity to contain 110% of the largest container stored within the bund. The bund(s) shall be designed and installed in accordance with the:
  - (a) requirements of all relevant Australian Standards; and
  - (b) DECC's *Storing and Handling Liquids: Environmental Protection* manual.

## Management

8. The Proponent shall prepare and implement a Soil and Water Management Plan for the project to the satisfaction of the Director-General. This plan must:
  - (a) be submitted to the Director-General for approval at least one month prior to the commencement of construction of Stage 1;
  - (b) be updated and submitted to the Director-General for approval at least one month prior to the commencement of construction of Stages 2 and 3;
  - (c) be prepared in consultation with Council, HWC and DECC;
  - (d) include :
    - a Site Water Balance;
    - a Sediment and Erosion Control Plan;
    - an Acid Sulfate Soils Management Plan;
    - a Stormwater Management Scheme; and
    - a Groundwater Monitoring Program for Tomago sand beds;
    - a Wastewater Management Plan.
9. The Site Water Balance must:
  - (a) include details of:
    - sources and security of water supply;
    - water use/re-use on site;
    - water management on site;
    - reporting procedures;
  - (b) describe measures to minimise potable water use by the project and maximise reuse of rainwater harvested from the site; and
  - (c) be reviewed and recalculated each year in light of the most recent water monitoring data.
10. The Erosion and Sediment Control Plan must:
  - (a) be consistent with the requirements of Landcom's (2004) *Managing Urban Stormwater: Soils and Construction*;
  - (b) identify the activities on site that could cause soil erosion and generate sediment; and
  - (c) describe what measures would be implemented to:
    - minimise soil erosion and the transport of sediment to downstream waters, including the location, function and capacity of any erosion and sediment control structures; and
    - maintain these structures over time.
11. The Acid Sulfate Soils Management Plan must:
  - (a) be consistent with the NSW State Government's *Acid Sulfate Soils Manual* (ASSMAC 1998); and
  - (b) include details of measures to be implemented in relation to the management and handling of any acid sulfate soils identified during construction works.
12. The Stormwater Management Scheme must:
  - (a) be prepared in consultation with Council and DECC;
  - (b) be prepared in accordance with DECC's *Managing Urban Stormwater* guidelines and HCCREMS *Water Sensitive Urban Design Solutions for Catchments Above Wetlands*;
  - (c) demonstrate that post development flows will not exceed predevelopment flows for a range of ARI from 1 year up to and including the 100 year ARI;
  - (d) investigate alternative options to avoid discharges to the adjoining wetlands to the south of the site;
  - (e) demonstrate that the existing stormwater drainage channels have capacity to accommodate post development flows under a range of tidal conditions;
  - (f) demonstrate that the extended detention depth of the infiltration area allows vegetation growth and minimises groundwater mounding;
  - (g) include provision for the drainage flow paths for culverts under Tomago Road through the site;
  - (h) includes details of the:
    - stormwater detention (capacity and location),
    - treatment and control infrastructure including pre-treatment for the infiltration area to reduce sediment and nutrient loads, the drainage design for the disposal of stormwater off-site and the method of controlled release from the site; and
    - measures to monitor and maintain the stormwater treatment and control infrastructure; and
  - (i) include a program to monitor stormwater quantity (including inflows, outflows and bypass flows) and quality (including but not limited to total suspended solids, total phosphorus and total nitrogen) during operation of the project.

13. The Groundwater Monitoring Program must:
  - (a) be prepared in consultation with DWE;
  - (b) included details of a program to monitor groundwater levels and quality;
  - (c) the groundwater levels and quality impact assessment criteria;
  - (d) procedures for reporting the monitoring results against the criteria,
  - (e) contingency measures to address exceedances; and
  - (f) a description of how the effectiveness of actions and measures would be monitored over time.
14. The Wastewater Management Plan must:
  - (a) include the final design of the sewerage system;
  - (b) demonstrate that the design of the sewerage system is consistent with HWC's and Council's requirements and that the system has been designed in a manner that will allow connection to a future regional wastewater transportation scheme;
  - (c) demonstrate that the disposal and irrigation of treated sewage is consistent with the *Environmental Guidelines Use of Effluent by Irrigation* (DECC) and the *Australian guidelines for water recycling: managing health and environmental risks (phase1) - 2006*;
  - (d) outline the design and management of the irrigation system, including measures to minimise soil degradation and nutrient and salt accumulation; and
  - (e) include details of the management of any solid waste including methods to monitor and dispose of the waste;
  - (f) include:
    - the wastewater and soil quality impact assessment criteria and the effluent treatment and irrigation system performance measures;
    - details of the wastewater and soil monitoring program;
    - procedures for reporting the monitoring results against the criteria, to determine the annual site nutrient and salt balance and the trigger levels for nitrogen and phosphorus in the soil;
    - contingency measures to address exceedances, pollutant triggers and problems with wastewater management systems; and
    - a description of how the effectiveness of actions and measures would be monitored over time.

## TRAFFIC AND TRANSPORT

### Road Works and Access – Stage 1

15. Prior to the commencement of construction of Stage 1 (except in relation to the relocation of power lines), the Proponent shall:
  - (a) implement a "No Stopping" restriction along the Tomago Road frontage of the site;
  - (b) install a temporary access to Tomago Road to the satisfaction of RTA; and
  - (c) prepare and implement a Construction Traffic Management Plan to the satisfaction of the RTA. The Plan shall include:
    - details of the staging plan for the construction works;
    - a risk assessment to identify hazards to traffic control associated with the site, the level of risk posed and control measure to be implemented;
    - a Vehicle Movement Plan for the management of construction traffic; and
    - a Traffic Control Plan in accordance with the RTA's Traffic Control at Work Sites manual.
16. Prior to the commencement of the construction of the Stage 1 buildings, or otherwise agreed with the Director-General, the Proponent shall finalise the design of the access to Tomago Road in accordance with the RTA's *Road Design Guide* and relevant Austroads guidelines, and to the satisfaction of the RTA.
17. In finalising the design of the access to Tomago Road, the Proponent shall:
  - (a) ensure the access location on Tomago Road has a Safe Intersection Sight Distance in either direction in accordance with RTA's *Road Design Guide* for the prevailing speed limit;
  - (b) ensure that the swept path of the largest vehicle entering/exiting the site and manoeuvrability through the site is in accordance with the relevant Australian Standard and to RTA's satisfaction; and
  - (c) sign a *Works Authorisation Deed* with the RTA.
18. Prior to the commencement of operation of Stage 1, the Proponent shall construct a Channelised Right Turn and Auxiliary Left Turn treatments at the access location off Tomago Road to the satisfaction of the RTA.
19. Prior to the commencement of operation of Stage 1, the Proponent shall install street lighting along Tomago Road between the site and the intersection with Pacific Highway in accordance with Australian Standards and RTA's satisfaction.

20. Prior to the transportation of any oversized and/or overmass vehicles and machinery to and from the site, the Proponent shall notify RTA, with transportation to be undertaken in accordance with RTA's requirements.

#### Internal Works

21. The Proponent shall ensure that the estate internal road network, Stage 1 internal road network and parking associated with Stage 1 of the project are designed, constructed and maintained in accordance with the latest versions of the Australian Standards AS 2890.1:2004 and AS 2890.2:2002.
22. The Proponent shall ensure that:
- all parking generated by Stage 1 is accommodated on site, and that no vehicles associated with Stage 1 shall park on the public road system at any stage; and
  - the Stage 1 of the project does not result in any vehicles queuing on the public road network.
23. The Proponent shall provide parking for bicycles and associated facilities such as change rooms for Stage 1 of the project.

#### Road Works – Stages 2 and 3

24. Prior to the commencement of construction of Stages 2 and 3 the Proponent shall provide a transport verification study that:
- is undertaken by a suitability qualified traffic engineer;
  - has been prepared in consultation with RTA and Council;
  - includes current traffic counts and 10 year traffic growth projections;
  - details traffic generation rates for each stage;
  - demonstrates that the site access would accommodate traffic generated by Stages 2 and 3; and
  - if required, details any upgrades required to Tomago Road and the site access to accommodate Stages 2 and 3.

#### NOISE

25. The Proponent shall comply with the restrictions in Table 1, unless otherwise agreed by the Director-General.

*Table 1: Construction and Operation Hours for the Project*

| Activity                    | Day                        | Time              |
|-----------------------------|----------------------------|-------------------|
| Construction                | Monday – Friday            | 7:00am to 6:00pm  |
|                             | Saturday                   | 8:00am to 1:00pm  |
|                             | Sunday and Public Holidays | Nil               |
| Operation – Inventory Area  | All days                   | 7:00am to 10:00pm |
| Operation – All other areas | All days                   | All times         |

*Notes:*

- Construction activities may be conducted outside the hours in Table 1 provided that the activities are not audible at any residence beyond the boundary of the site.
- The limits for operation hours of the inventory area do not apply if the Proponent has an agreement with the relevant owner of lands within these locations to operate outside these hours and the Proponent has advised the Department in writing of the terms of this agreement.
- The inventory area is defined in Schedule 1.

26. The proponent shall ensure that the noise generated from the site does not exceed the noise impact assessment criteria in Table 2.

*Table 2: Site Noise Limits (dB(A))*

| Location                                           | Day              |                           | Evening          |                           | Night            |                           |                          |
|----------------------------------------------------|------------------|---------------------------|------------------|---------------------------|------------------|---------------------------|--------------------------|
|                                                    | L <sub>Aeq</sub> | L <sub>Aeq</sub> (15 min) | L <sub>Aeq</sub> | L <sub>Aeq</sub> (15 min) | L <sub>Aeq</sub> | L <sub>Aeq</sub> (15 min) | L <sub>Aeq</sub> (1 min) |
| At any residence or other noise sensitive receiver | 50               | 43                        | 45               | 37                        | 40               | 35                        | 60                       |

*Notes:*

- Noise emission limits apply under meteorological conditions of wind speeds up to 3 m/s at 10 metres above ground level or temperature inversions conditions of 3 °C/100m and wind speed up to 2 m/s at 10 metres above the ground. To determine compliance with this condition, noise from the development must be measured at the most affected point within the residential boundary, or at the most affected point within 30 metres of the dwelling where the dwelling is more than 30 metres from the boundary.
- However, where it can be demonstrated that direct measurement of noise from the development is impractical, the EPA may accept alternative means of determining compliance (see Chapter 11 of the NSW Industrial Noise Policy). The modification factors in Section 4 of the NSW Industrial Noise Policy shall also be applied to the measured noise levels where applicable.
- The noise limits do not apply if the Proponent has an agreement with the relevant owner of lands within these locations to generate higher noise levels and the Proponent has advised the Department in writing of the terms of this agreement.

27. The Proponent shall ensure that the noise from the operation of Stage 1 does not exceed the noise limits presented in Table 3.

*Table 3: Project Noise Limits (dB(A))*

| Location                                           | Day                       | Evening | Night |                                                |
|----------------------------------------------------|---------------------------|---------|-------|------------------------------------------------|
|                                                    | L <sub>Aeq</sub> (15 min) |         |       | L <sub>Aeq</sub> (1 min) or L <sub>A</sub> max |
| At any residence or other noise sensitive receiver | 35                        | 35      | 35    | 60                                             |

*Note: Refer to the notes associated with Condition 26 of Schedule 3 for guidance.*

28. Prior to the commencement of the construction of the noise barrier, the Proponent shall provide the detailed specifications of the noise barrier to the Director-General and to demonstrate that the barrier will achieve the predicted levels of performance detailed in the EA.
29. Within 6 months of the commencement of operation of Stage 1 of the Project and during a period in which the Stage 1 of the project is operating at normal capacity, the Proponent shall conduct a Noise Audit of the project to the satisfaction of the Director-General. This audit shall:
- be undertaken by a suitably qualified acoustical expert and in accordance with the *NSW Industrial Noise Policy*;
  - validate the predictions made in the EA;
  - demonstrate compliance with the noise limits in Table 3; and
  - describe the contingencies that would be implemented, and the timing for implementation, should non compliances be detected.
30. Prior to the commencement of construction of Stage 2 and 3, the Proponent shall prepare a noise verification study demonstrating that traffic noise would not exceed criteria in DECC's *Environmental Criteria for Road Traffic Noise*. For those residents where traffic noise levels would exceed criteria in DECC's *Environmental Criteria for Road Traffic Noise* the Proponent shall implement all reasonable and feasible measures to mitigate noise impacts, to the satisfaction of the Director-General.

## **ABORIGINAL AND CULTURAL HERITAGE**

31. The Proponent shall prepare and implement an Aboriginal Heritage Management Plan for the project to the satisfaction of the Director-General. The Plan must:
- (a) be submitted to the Director-General for approval prior to the commencement of construction;
  - (b) be prepared by a suitably qualified consultant and in consultation with DECC and relevant Aboriginal stakeholders;
  - (c) identify and describe all known heritage items on the site and areas of archaeological significance;
  - (d) include a strategy for the salvage and storage of salvaged objects during construction and for the long term management of these objects;
  - (e) include a component within the site induction program for construction workers outlining measures to be employed to manage and minimise impacts to heritage;
  - (f) identify procedures to be followed should previously unidentified objects be uncovered or additional impacts to sites be identified; and
  - (g) the procedure for continued consultation with Aboriginal stakeholders.

## **AIR QUALITY**

32. The Proponent shall carry out all reasonable and feasible measures to minimise dust generated by the project, ensuring that suitable control measures are implemented to manage dust generated from stockpiles of fill and filling activities.
33. During construction, the Proponent shall ensure that:
- (a) all trucks entering or leaving the site with loads have their loads covered;
  - (b) trucks associated with the project do not track dirt onto the public road network; and
  - (c) public roads used by these trucks are kept clean.
34. The Proponent shall not cause or permit the emission of any offensive odour from the site.
- Note: Offensive odour is defined under the Protection of the Environment Operations Act 1997.*
35. Within 6 months of the commencement of operations during a period in which the project is operating at normal capacity, the Proponent shall conduct an Odour Audit of the project to the satisfaction of the Director-General. This audit shall:
- (a) be undertaken by a suitably qualified and experienced person;
  - (b) assess whether the project is complying with odour assessment criteria detailed in relevant DECC guidelines; and
  - (c) provide details of any odour complaints received, and any action taken to respond to these complaints.

## **VISUAL IMPACT**

### **Landscaping**

36. Prior to commencement of construction, the Proponent shall revise the Landscape Management Plan (including drawings LA01, LA02, 01, 02, 03, 04 and 05 ) in consultation with Council and to the satisfaction of the Director-General. The Plan must:
- (a) be submitted at least one month prior to the commencement of construction of the Stage 1 buildings;
  - (b) be updated and submitted to the Director-General for approval at least one month prior to the commencement of construction of Stages 2 and 3;
  - (c) use predominantly endemic species,
  - (d) where practicable, provide for the early planting of advanced plants along the northern, eastern and western boundary to minimise the visual impacts of the project; and
  - (e) provide for the maintenance of landscaping on site.

### **Signage**

37. Business identification signage detailed in Overview Architectural Design Revision E and dated 8 October 2008, is approved as part of this project approval. Any changes to the signage, including any addition signage associated with Stage 1 or estate signage, must be approved prior to installation. In seeking approval for any additional signage the Proponent shall submit detailed plans of this signage to the Director-General. These plans must be prepared in consultation with Council. Following approval, the Proponent must ensure that the signage is installed in accordance with the approved plans.

### **Fencing**

38. Prior to installing any boundary fencing on the site and any fencing associated with Stage 1 of the project, the Proponent shall submit detailed plans of this fencing to the Director-General for approval. These plans must be prepared in consultation with Council. Following approval, the Proponent must ensure that the fencing is installed in accordance with the approved plans.

### **Lighting**

39. The Proponent shall ensure that the lighting associated with the project:
- (a) complies with the latest version of Australian Standard *AS 4282(INT)-Control of Obtrusive Effects of Outdoor Lighting*; and
  - (b) is mounted, screened and directed in such a manner that it does not create a nuisance to surrounding properties, the public road network or the adjoining conservation area and wetlands.

### **ENERGY EFFICIENCY**

40. The Proponent shall prepare and implement an Energy Efficiency Plan for the project to the satisfaction of the Director-General. This plan must:
- (a) be submitted to the Director-General for approval prior to the commencement of operations on the site;
  - (b) describe the measures that would be implemented to minimise energy use on the site;
  - (c) include a program for monitoring the effectiveness of these measures, and a protocol for the periodic review of the plan.

### **WASTE MANAGEMENT**

41. The Proponent shall ensure that any waste generated on the site during the project is classified in accordance with the DECC's *Waste Classification Guidelines* and disposed of to a facility that may lawfully accept the waste.
-

**SCHEDULE 4  
ENVIRONMENTAL MANAGEMENT, REPORTING & AUDITING**

**ENVIRONMENTAL MANAGEMENT STRATEGY**

42. The Proponent shall prepare and implement an Environmental Management Strategy for the project to the satisfaction of the Director-General. This strategy must be submitted to the Director-General prior to carrying out any development on site, and:
- (a) provide the strategic context for environmental management of the project;
  - (b) identify the statutory requirements that apply to the project;
  - (c) describe in general how the environmental performance of the project would be monitored and manage;
  - (d) describe the procedures that would be implemented to:
    - keep the local community and relevant agencies informed about the operation and environmental performance of the project;
    - receive, handle, respond to, and record complaints;
    - resolve any disputes that may arise during the course of the project;
    - respond to any non-compliance;
    - manage cumulative impacts; and
    - respond to emergencies; and
  - (e) describe the role, responsibility, authority, and accountability of all the key personnel involved in environmental management of the project; and
  - (f) includes an Environmental Monitoring Program which consolidates the various monitoring requirements in schedule 3 and of this approval into a single document.

**INCIDENT REPORTING**

43. Within 7 days of detecting an exceedance of the limits/performance criteria in this approval or an incident causing (or threatening to cause) material harm to the environment, the Proponent shall report the exceedance/incident to the Department, and any other relevant agency. This report must:
- (a) describe the date, time, and nature of the exceedance/incident;
  - (b) identify the cause (or likely cause ) of the exceedance/incident;
  - (c) describe what action has been taken to date; and
  - (d) describe the proposed measures to address the exceedance/incident.

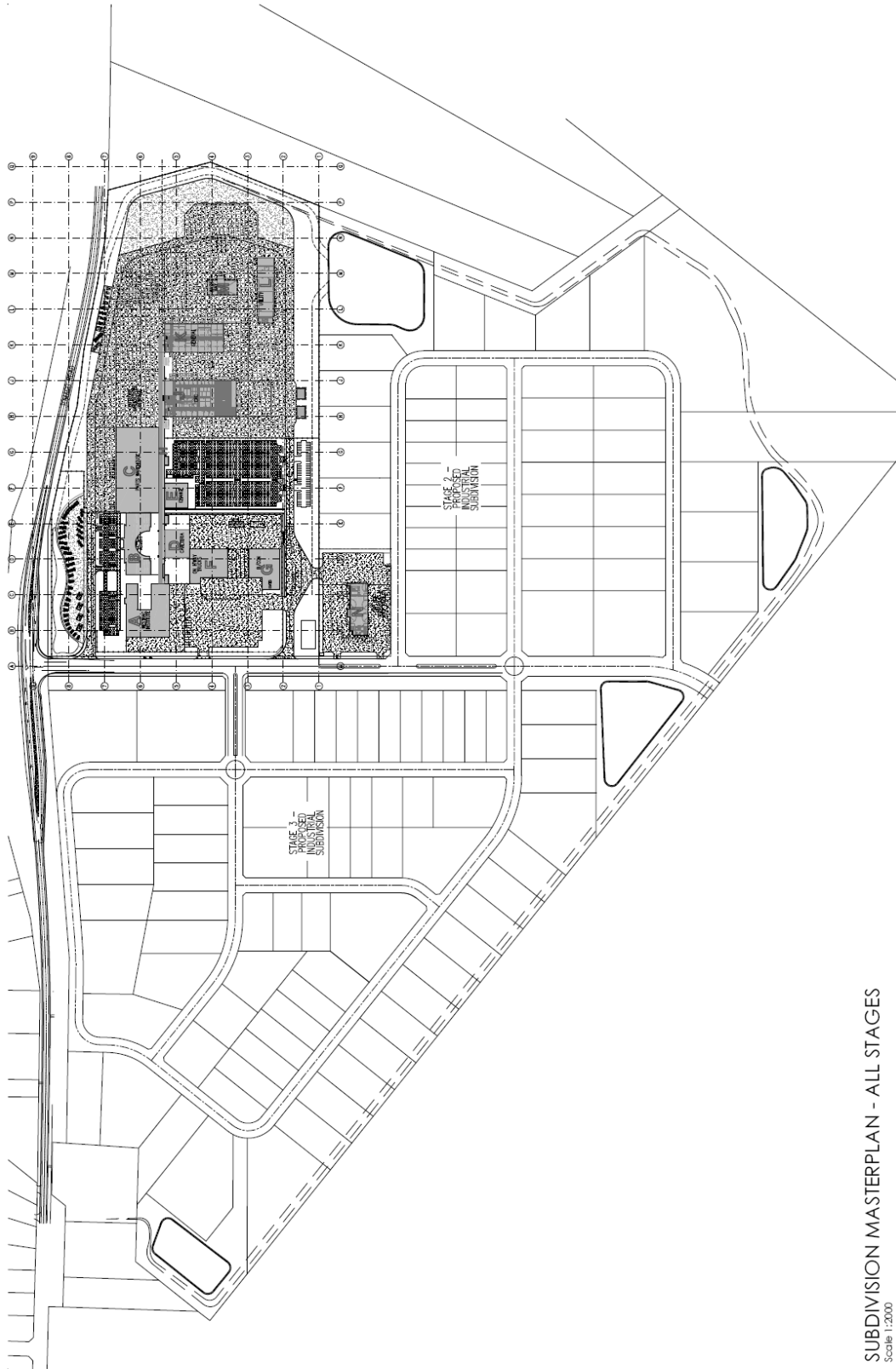
**ANNUAL REPORTING**

44. Within 12 months of this approval, and annually thereafter, the Proponent shall submit an AEMR to the Director-General and relevant agencies. This report must:
- (a) identify the standards and performance measures that apply to the project;
  - (b) describe the works carried out in the last 12 months;
  - (c) describe the works that will be carried out in the next 12 months;
  - (d) include a summary of the complaints received during the past year, and compare this to the complaints received in previous years;
  - (e) include a summary of the monitoring results for the project during the past year;
  - (f) include an analysis of these monitoring results against the relevant:
    - impact assessment criteria/limits;
    - monitoring results from previous years; and
    - predictions in the EA;
  - (g) identify any trends in the monitoring results over the life of the project;
  - (h) identify any non-compliance during the previous year; and
  - (i) describe what actions were, or are being, taken to ensure compliance.

**PRE-OPERATION COMPLIANCE AUDIT**

45. Prior to the commencement of operations, the Proponent shall submit work as executed plans to the Department for all the development associated with the project. These plans must be prepared by a suitably qualified and experienced expert, and include plans showing the work as executed plans laid over the approved plans to demonstrate that the development has been carried out in accordance with the approved plans.
46. Notwithstanding condition 14 of schedule 3, the Director-General may require an update on compliance with all, or any part, of the conditions of this approval. Any such update shall meet the reasonable requirements of the Director-General and be submitted within such period as the Director-General may agree.

# APPENDIX 1: PROJECT LAYOUT PLAN



SUBDIVISION MASTERPLAN - ALL STAGES

| NO. | DATE       | DESCRIPTION        | BY | CHECKED | APPROVED |
|-----|------------|--------------------|----|---------|----------|
| 1   | 10/01/2008 | PRELIMINARY LAYOUT |    |         |          |
| 2   | 10/01/2008 | FINAL LAYOUT       |    |         |          |
| 3   | 10/01/2008 | FINAL LAYOUT       |    |         |          |
| 4   | 10/01/2008 | FINAL LAYOUT       |    |         |          |
| 5   | 10/01/2008 | FINAL LAYOUT       |    |         |          |
| 6   | 10/01/2008 | FINAL LAYOUT       |    |         |          |
| 7   | 10/01/2008 | FINAL LAYOUT       |    |         |          |
| 8   | 10/01/2008 | FINAL LAYOUT       |    |         |          |
| 9   | 10/01/2008 | FINAL LAYOUT       |    |         |          |
| 10  | 10/01/2008 | FINAL LAYOUT       |    |         |          |



PROPOSED NEW  
WESTRAC FACILITY,  
TOMAGO  
300 WESTERN PARK ROAD  
WEST PERTH WA 6005



FOR A FULLER UNDERSTANDING OF THIS PLAN, REFER TO THE PROJECT LAYOUT PLAN AND THE SUBDIVISION MASTERPLAN. THIS PLAN IS A SUMMARY OF THE INFORMATION PROVIDED IN THE PROJECT LAYOUT PLAN AND THE SUBDIVISION MASTERPLAN. IT IS NOT A SUBSTITUTE FOR THE PROJECT LAYOUT PLAN AND THE SUBDIVISION MASTERPLAN. FOR MORE INFORMATION, CONTACT THE PROJECT MANAGER.

PROJECT NO. 7754 DA A-101 A

DATE: OCT 2008 1:2000@B1

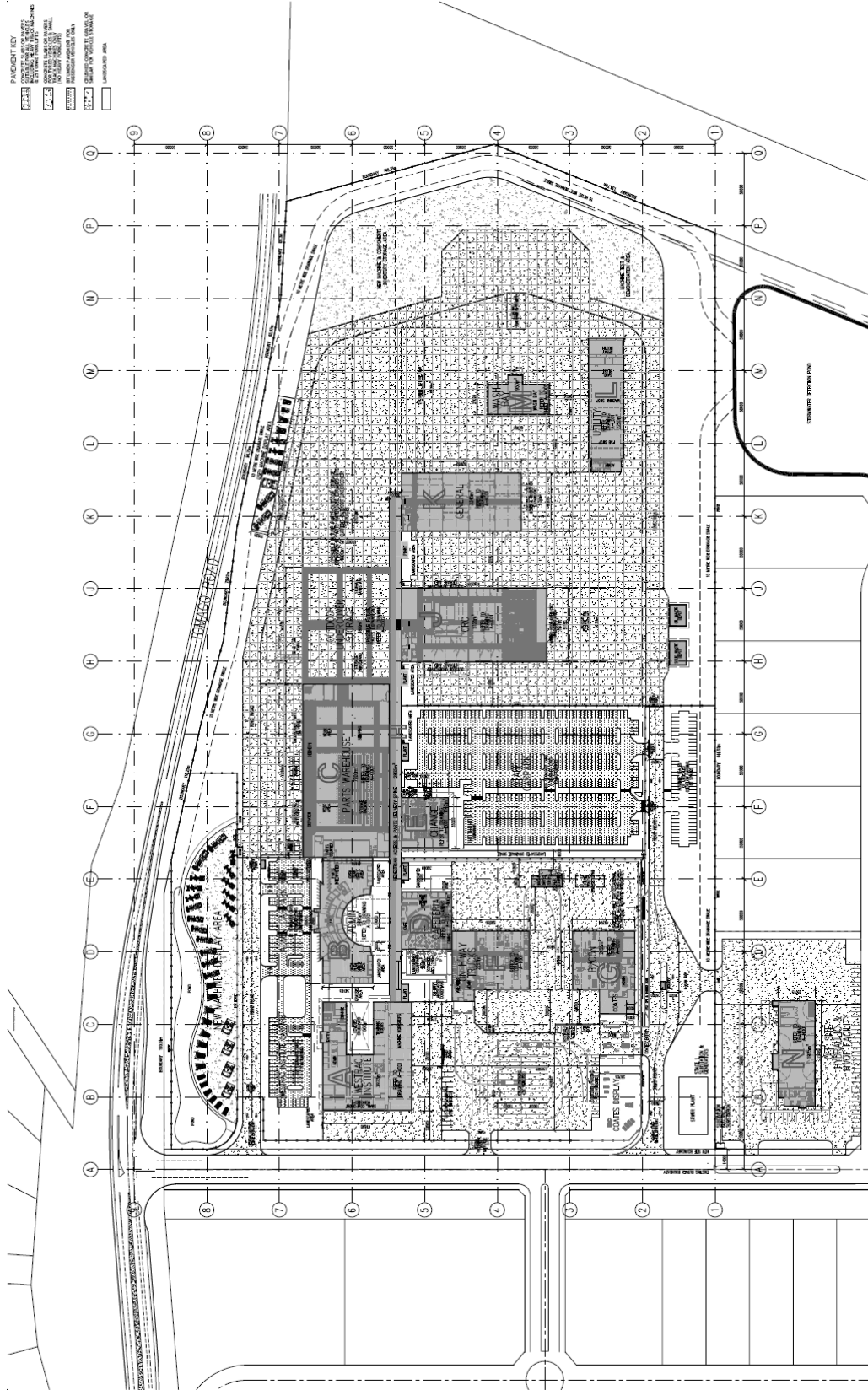
DESIGNED BY: E&E

DRAWN BY: E&E

CHECKED BY: E&E

APPROVED BY: E&E

- PAVEMENT KEY**
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**STAGE 1 SITE PLAN**  
Scale 1:1000

| NO. | DATE       | DESCRIPTION        | BY       | CHECKED  | APPROVED |
|-----|------------|--------------------|----------|----------|----------|
| 1   | 10/10/2008 | PRELIMINARY DESIGN | J. SMITH | M. JONES | P. BROWN |
| 2   | 15/10/2008 | REVISED DESIGN     | J. SMITH | M. JONES | P. BROWN |
| 3   | 20/10/2008 | FINAL DESIGN       | J. SMITH | M. JONES | P. BROWN |

**Westpac**  
WESTPAC FINANCIAL GROUP LIMITED  
100 WESTPAC ROAD  
SYDNEY NSW 2000

**PROPOSED NEW WESTRAC FACILITY, TOMAGO**  
REGULATORY ENTERPRISES  
13 KINGS PARK ROAD  
WEST PERTH WA 6005



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**PROPOSED NEW WESTRAC FACILITY, TOMAGO**

**STAGE 1 SITE ELEVATIONS**

**REDLAKE ENTERPRISES**  
 L3, 300 KINGS PARK ROAD  
 WEST PERTH WA 6005

DATE: 1:000@B1  
 OCT 2018  
 PROJECT NO: 7254  
 DRAWING NO: DA A-151

**WESTRAC**

**Westrac**

**REDLAKE ENTERPRISES PTY LIMITED**  
 A/C 100 03 00

**PROJ. NO. 7254**

**STAGE 1**

**DATE: 1:000@B1**

**OCT 2018**

**PROJECT NO: 7254**

**DRAWING NO: DA A-151**

**PROPOSED NEW WESTRAC FACILITY, TOMAGO**

**STAGE 1 SITE ELEVATIONS**

**REDLAKE ENTERPRISES**  
 L3, 300 KINGS PARK ROAD  
 WEST PERTH WA 6005

DATE: 1:000@B1  
 OCT 2018  
 PROJECT NO: 7254  
 DRAWING NO: DA A-151

**WESTRAC**

**Westrac**

**REDLAKE ENTERPRISES PTY LIMITED**  
 A/C 100 03 00

**PROJ. NO. 7254**

**STAGE 1**

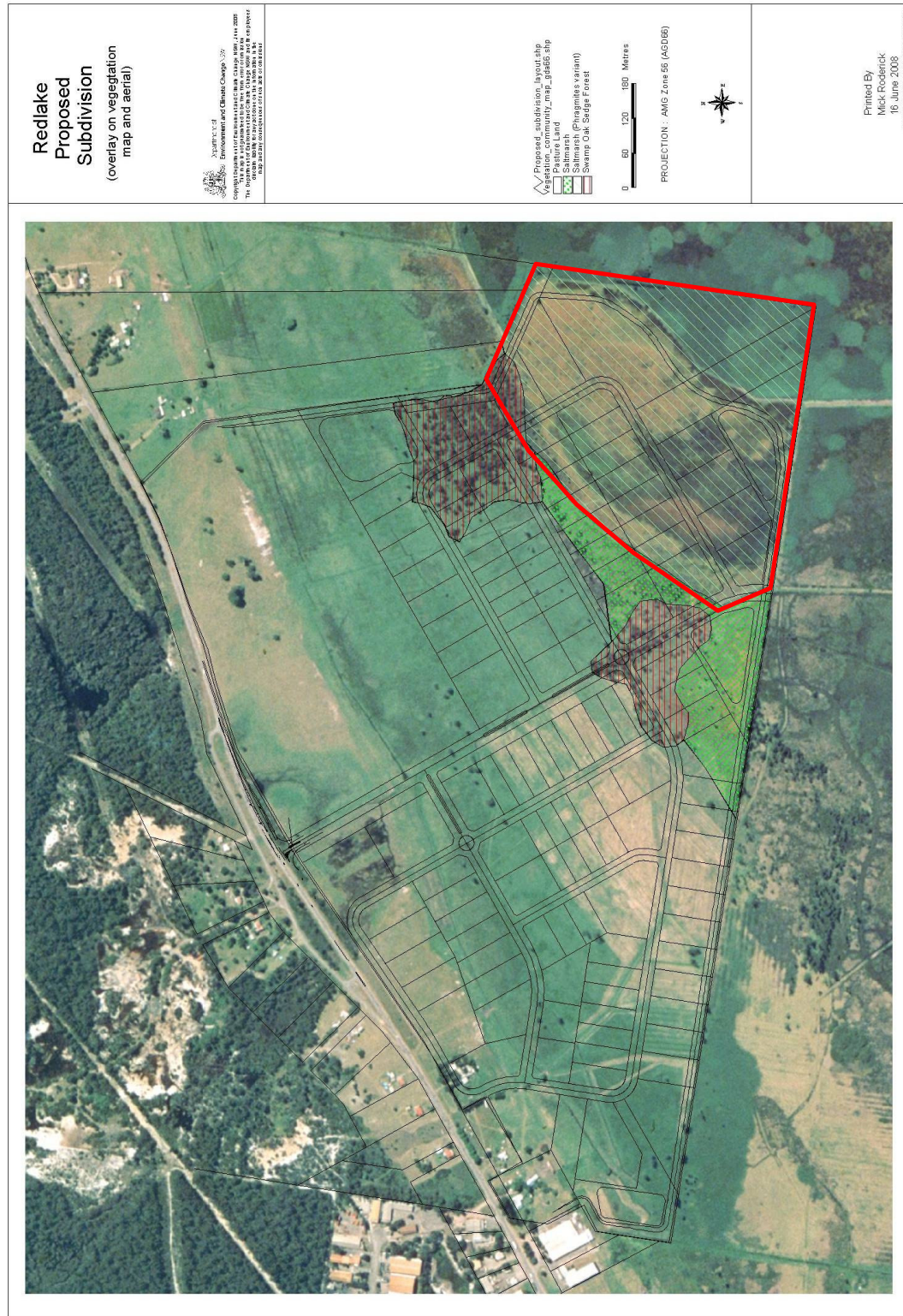
**DATE: 1:000@B1**

**OCT 2018**

**PROJECT NO: 7254**

**DRAWING NO: DA A-151**

## APPENDIX 2: CONSERVATION AREA



**APPENDIX 3:  
STATEMENT OF COMMITMENTS**

# Section 8

## Draft Statement of Commitments

### 8.1 PLANS, DOCUMENTATION AND APPROVALS

The proposed development will be completed in accordance with the submitted plans and descriptions of proposed development provided in this Environmental Assessment Report.

It is noted that any changes to the proposed development will require further approval of the relevant authorities.

The proposed development will be carried out in accordance with all approvals granted by relevant authorities.

### 8.2 FLORA & FAUNA (INCLUDING WETLANDS)

The proposed development will seek to minimise the impact on Flora and Fauna by adopting the full range of recommendations of the report prepared by Ecobiological, included at **Appendix J**. This will involve the following:

- Avoiding use of potentially harmful chemicals;
- The conduct of pre-clearing surveys; and
- The use of management and Monitoring Plans.

More specifically the strategies involve the following:

#### MANAGEMENT STRATEGIES

- Avoiding the use of insecticides and herbicides in the study area to retain the integrity of the habitat for insectivorous Microchiropteran bats and to prevent deformities or death to Wallum Froglets in the area.
- Pre-clearing surveys will be carried out prior to any vegetation clearing in the area. The actual felling of any habitat trees will be attended by a suitably experienced fauna ecologist in order to

ensure the safety of any fauna to be found in the hollows. Trees having potential habitat hollows will be 'soft felled' by an experienced machine operator.

- Consideration will be given to incorporating an amphibian translocation plan into the management plan governing pre-clearing survey protocols in order to relocate a population of Common Green Tree Frog which may be placed at risk of extinction with the removal of the two stands of swamp oak, and the Bleating Tree Frog. This plan would incorporate appropriate hygiene protocols to prevent the spread of amphibian diseases.
- Prior to commencement of construction detailed management plans will be prepared to cover the following:
  - Pre-clearing survey protocols
  - A management and monitoring plan for the adjacent Ramsar wetland (Kooragang Nature Reserve) which will consider the following:
    - The nature and control of sediment run-off during construction phase;
    - The chemical content of the fill and of the groundwater seepage from that fill;
    - The volume, path and content of stormwater discharging from the site during and after development;
    - The handling of hydrocarbon waste from the site during construction and operation stages;
    - The existing flow regime of surface and groundwater flow from the site into the wetlands;
    - Impact of development on the quality of sub-surface drainage water that discharges into the wetland;
    - The current ecological character of the wetland in the immediate vicinity of the potential impact area;
    - The impact of weed invasion during and after construction phase; and

- Minimising the impact of lighting.
- An appropriate 100m buffer will be provided in the SE corner of the subject site adjoining the Ramsar site boundary.

## ONGOING MONITORING

A monitoring plan will also be prepared to document the ongoing status of the protected Ramsar Wetland to the south of the subject site, with an ongoing comparison to an established baseline status.

## 8.3 TRAFFIC & ACCESS

The recommendations contained in the report of September 2007 prepared by Mark Waugh Pty Ltd, will be adopted, including the construction of the necessary intersections off Tomago Road and Old Punt Road. The full report is included at **Appendix G**.

The upgrade of the Tomago Road intersection with the Pacific Highway includes the following:

- Installation of traffic control signals with provision for pedestrians.
- Provision of paved area for cyclists.
- Provision of two right-turn lanes on the Pacific Highway for traffic turning into Tomago Road.
- Tomago Road widened to two lanes eastbound, near the highway.
- Relocation of bus stop facilities.
- Removal of the right-turn exit from Tomago Road to the Pacific Highway.

The upgrade of the Old Punt Road intersection with the Pacific Highway includes the following:

- Installation of traffic control signals.
- Provision of an improved left-turn lane from Old Punt Road to the Pacific Highway.
- Longer merge lane on the Pacific Highway from Old Punt Road.

The recommendations of the Traffic Management Plan for the import of fill material prepared by Mark Waugh Pty Ltd, and included at **Appendix G** will be adopted. This plan includes the following measures:

- All cyclist movements will remain as per the current situation with cyclists using the road carriageway.
- All parking associated with employees on the site can be contained within the site with no requirement to park on Tomago Road.
- All deliveries will approach the site from the west, turning right into the site and then departing by turning left onto Tomago Road.
- No loading/delivery to be completed along the Tomago Road frontage.
- No delivery vehicles will be permitted to stand on the roadway. All vehicles are to be unloaded within the site.
- NO alteration to the existing speed zone (90km/h) will need to be applied.
- General signage and line marking are included due to the nature of the passing traffic and the location and nature of the works.
- All signs shall be permanently mounted and shall be covered outside working hours. The signs shall be uncovered at the beginning of the working day before any trucks access the site.
- A copy of the Traffic Control Plan will be on site at all times.
- The site ganger will complete a daily traffic control checklist.

#### 8.4 ACOUSTICS

The proposed development will comply with the requirements of DECC in relation to criteria for noise emissions. In particular the proposed development will comply with the recommendations of the report prepared by Spectrum Acoustics included at **Appendix O**.

A Construction Management and Environmental Management Plan will be prepared to manage noise emissions, and submitted, as required, prior to construction or commencement of operations.

More specifically, the following will be included:

- Fill of the WesTrac site will commence on the eastern site boundary and extend to the west to provide a noise buffer between trucks importing fill and residences east of the site.
- **Constructions Noise** - In accordance with DECC recommendations construction will only be carried out during daytime hours, and a construction noise criterion of background ( $LA_{90}$ ) + 5dB will be adopted.
- **Operational Noise** - The Project-Specific Noise Levels (PSNL) for the development will be:
  - 43dB(A)  $L_{eq}$  (15 min) Day (7am-6pm)
  - 37dB(A)  $L_{eq}$  (15 min) Evening(6pm-10pm)
  - 35dB(A)  $L_{eq}$  (15 min) Day (10pm-7am)
- **Sleep Disturbance** - Disturbance to sleep will be minimised by ensuring that maximum internal noise levels do not exceed 50dB(A) and maximum external noise levels do not exceed 60dB(A),  $L_{max}$ .
- **Traffic Noise** - Recommended criteria,  $L_{eq}$  (1 hour) between 7am and 10pm (day) is 60dB(A) and between 10pm and 7am (night) is 55dB(A).
- A 3.5m high acoustic barrier will be erected along a portion of the eastern site boundary. An acoustic barrier comprises an earth mound or a fence or a fence on a mound, and requires a minimum mass of 15kg/m<sup>2</sup> and must make contact with the ground.
- Future industries will be required to submit noise impact assessments as part of the Development Application / approval process.

## 8.5 ARCHAEOLOGY

The proposed development will comply with the recommendation of the Archaeological report prepared by Indigenous Outcomes included at **Appendix P**. Specifically the LALC will be consulted, and given the appropriate opportunity to collect relics from the site prior to the commencement of Construction.

## 8.6 AIR QUALITY

All vehicles and machinery will be maintained to minimise emissions to air.

All spray-painting will be contained within the proposed spray booth. The spray booth will be designed to meet the specifications and standards of Workcover Authority and DECC.

Dust will be controlled during the construction phase through implementation of appropriate management measures. Filling operations will involve the use of larger or heavier types of fill material, thus minimising the opportunity for smaller particulates to be carried by wind.

A Construction Management and Environmental Management Plan will be prepared to manage potential air emissions and submitted as required prior to construction or commencement of operations. The plan in particular will address dust control.

Dust control measures will include the following:

- Covering loads where required;
- Amending of operations under excessive wind conditions including ceasing of operations if required;
- Use of water tankers as required to control dust;
- Rehabilitation through vegetation of surfaces to be left unsealed;
- Truck wheel washes or other dust removal measures;
- Ensuring that all service areas are sealed, or as a minimum treatment, covered with gravel;
- Dirt tracked onto access routes will be cleaned away as soon as practicable;
- Vehicles will be regularly washed; and
- Customer's machinery brought to site will in most circumstances be cleaned of excess dirt or dust prior to any work being undertaken on it.

## 8.7 WATER QUALITY

Water quality measures will be installed in accordance with the report prepared by Asquith & de Witt, included in this report as **Appendix F**.

The water quality objective for the site was to determine a solution of 'no impact' to the downstream receiving waters. The MUSIC (Model for Urban Stormwater Improvement Conceptualisation) model was established to verify the quantity of the run off to the wetlands for 'no impact', post development. Reuse, a treatment train, gross pollutant trap, swale and constructed wetland was sized to meet the target objective verified with MUSIC.

Water quality will be monitored, and a management plan, as detailed in the Flora & Fauna Report prepared by Ecobiological contained at **Appendix J**, will be prepared to address the construction and operational phases. More specifically this management plan will include:

- The nature and control of sediment run-off during the construction phase particularly as a result of an exceptional storm event;
- The chemical content of the fill and of the groundwater seepage from that fill that would disperse into the wetlands over the long term;
- The volume, path and content of stormwater discharging from the site during and after development;
- The handling of hydrocarbon waste from the site during construction and operation stages;
- Existing flow regime of subsurface and groundwater flow from the subject site into the wetlands;
- At times of peak rainfall, sub-surface drainage through the fill is likely to discharge into the wetland - what will be the impact of the development on the quality of this water;
- The current ecological character of the wetland in the immediate vicinity of the potential impact area; and
- The impact of weed invasion during and after construction phase.

A monitoring plan will also be put in place to document the ongoing water quality status, measured against an established baseline.

All products stored on-site having the potential to contaminate stormwater in the event of spillage will also be contained within a bounded area to the requirements of DECC.

## STORMWATER CONTROLS

Water quality control on site will be 2 proposed washpads. All vehicles and parts requiring washing will be taken to one of these, and no washing outside of these washpads will occur. WesTrac has standardised control over these facilities country wide at its existing operations.

A Construction Management and Environmental Management Plan will be prepared to manage potential water quality issues and submitted as required prior to construction or commencement of operations.

The stormwater treatment train will be used for removal of the pollutants from the stormwater runoff prior to discharging to the wetlands downstream.

- Gross Pollutant Traps will be installed at the entry to each of the constructed wetlands as a proprietary product for screening of heavy sediment and litter.
- A large open channel swale drain has been designed into the development layout for street drainage, drainage of the intersection and secondary flows during major storm events. End of line treatment basins have been spread over the site to reduce the distances drainable for stormwater runoff.
- Basins have been located to have discharge outlets to the existing discharge points from the site along the southern boundary, post development.
- The site will be filled for development of the subdivision to a level that is flood free.
- Geotechnical approval will be obtained on the fill type and its properties prior to being used on the site. However the preferred fill type is granular material with particles not greater than 100mm diameter. The fill will be pH neutral and will be screened for properties under the supervision of geotechnical engineers, prior to supply to the site. No ash will be used for filling.

## SOIL AND WATER MANAGEMENT PLAN

- The sediment basins have been designed for settlement of Type F soils. A higher criteria level of protection has been adopted for the design sizing of the sediment basins, reflecting the sensitivity of the receiving waters downstream. The 95<sup>th</sup> percentile, 5 day rainfall event has been selected as the standard for this site, which provides an increased capacity to capture runoff and minimised the potential risk of sediment laden water leaving the site and discharging to the wetlands.

- Access is to be limited to the designated all weather roads, any truck exiting out of the site shall be thoroughly cleaned and limit the exportation of clay and sediment on public roads, and entry is prohibited on remaining land.
- Works shall be undertaken in the following construction sequence:
  - 1) Install sediment fencing and cut drains to meet the requirements of the SWMP. Waste collection bins shall be installed adjacent to site office.
  - 2) Construct stabilised site access in location nominated by the Contractor and in accordance with Port Stephens Council's requirements.
  - 3) Construct sediment basins for disturbed areas in accordance with the rate per hectare provided in the SWMP. Install risers and two pegs in the floor of the basin and have them marked to show the top of the sediment storage zone. Ensure the basin is cleared of sediment once the design capacity is reached.
  - 4) Redirect clean water around the construction site.
  - 5) Install sediment control protection measures at all natural and man-made drainage structures. Maintain until all the disturbed areas are stabilised.
  - 6) Clear and strip the work areas in accordance with the Geotechnical advice provided.
  - 7) Any disturbed areas, other than lot grading areas, shall immediately be covered with site topsoil within 7 days of clearing. Lot re-graded shall be covered with bitumen emulsion as specified.
  - 8) Apply permanent stabilisation to site (landscaping).
- Sediment control conditions will include the following:
  - Proprietary sediment fencing shall be installed by the Contractor in accordance with their approved SWMP and elsewhere at the discretion of the site superintendent to contain sediment fractions as near as possible to their source.
  - Sediment removed from any trapping device shall be relocated where further pollution to down slope lands and waterways cannot occur.

- Stockpiles shall be located by the Contractor in accordance with their approved SWMP and elsewhere at the discretion of the site superintendent. Where stockpiles are to be in place longer than 30 days they shall be stabilised by covering with mulch or with temporary vegetation.
  - Water shall be prevented from entering the permanent drainage system unless it is sediment free. Drainage pits are to be protected in accordance with the Contractor's approved SWMP.
  - Temporary sediment traps at pits shall be retained until after lands they are protecting are completely rehabilitated.
  - Dust suppression will be required for the control of airborne particles during construction. This will be via standard water cart usage during earthworks and pavement construction of the hardstand areas.
- Site maintenance requirements include the following:
    - Waste bins are to be provided for all construction refuse. They are to be emptied at least weekly and refuse is to be disposed in accordance with the site manager's recommendations.
    - The site manager shall inspect the site at least weekly and shall:
      - Ensure that all drains are operating effectively and shall make any necessary repairs;
      - Remove any spilled material from area subject to runoff or concentrated flow;
      - Remove trapped sediment where the capacity of the trapping device falls below 60%;
      - Inspect the sediment basins after each rainfall even and/or weekly. Ensure that all sediment is removed once the sediment storage zone is full. Ensure that outlet and emergency spillway works are maintained in a fully operational condition at all times;
      - Ensure rehabilitated lands have effectively reduced the erosion hazard and initiate upgrading or repair bas appropriate;

- Construct additional erosion and sediment control works as may be appropriate to ensure the protection of down slope lands and waterways;
- Maintain erosion and sediment control measures in a fully functioning condition at all times until the site is rehabilitated;
- Ensure that the revegetation scheme is adhered to and that the all grass covers are kept healthy, including watering and mowing; and
- Remove temporary soil conservation structures as the last activity in the rehabilitation program.

## 8.8 FLOW REGIME

The proposed development will comply with the water balance prepared by Asquith & de Witt and enclosed at **Appendix F**.

The water balance model outcomes will be complied with and intend to provide the following:

- A water balance model including recycling, uses and quantities associated with the operation of the WesTrac facility, as a guide for WesTrac;
- An estimate for the rainwater storage requirements to ensure water security for the project;
- An estimate of recharge to the HWC Special Area;
- An estimate of the quantity of runoff discharging to the wetlands downstream; and
- An identification of the expected key risks to water management based on the outcomes of the water balance.

## 8.9 WATER REUSE

The proposed development will comply with the water harvesting and recycling plan outlined in the report prepared by Asquith & de Witt, included at **Appendix F**.

More specifically, the washpads proposed on site for the purpose of cleaning heavy vehicle equipment prior to workshop activities will be the primary water quality control on site. The process will involve using a biodegradable detergent which releases free oil after addition of an

emulsion breaker for efficient oil separation and collection, together with a detergent stripping stage using a foam fractionator. The resultant treated water will be recycled through a filtration and sterilisation stage. A portion of treated water is removed from the circuit and sent for final treatment to the site sewage treatment plant.

Water for washpad operations is derived from three (3) sources:

- Rainwater harvesting;
- Town water; and
- Recycled water.

The resultant wastewater will be pumped to a settling tank after dosing with a primary flocculant. The primary flocculant dose breaks all emulsions and presents free oil and wastewater to the skid mounted oil/water separator. Oil/water separation is achieved using a heavy duty coalescing plate separator.

Wastewater produced by the separator is further treated by a foam fractionator.

The treated washpad wastewater will be recycled after surfactant removal. Recycled water undergoes further treatment using chlorination and sand filtration. The recycled water feeds a low pressure wash unit with inline UN sterilisation. The spent washwater drains to the solids sump at the start of processing for reuse.

## 8.10 SOIL EROSION AND SEDIMENTATION

Erosion and sedimentation controls will be installed in accordance with the report prepared by Asquith & de Witt and enclosed at **Appendix F**.

More specifically, measures to be implemented during construction include:

- Disturbance only of areas to be immediately worked on and regeneration of dust and erosion free surfaces - landscaping, concrete, bitumen sealing as soon as practical thereafter.
- Provision of and continued maintenance of sediment fencing to low perimeter locations.
- Provision of mesh and gravel or geotextile inlet filters.
- Contract specifications requiring stabilised site access, low flow earth flow earth banks and wind erosion screens.

- A construction programme that provides for the sediment basin to be constructed at the outset with all site runoff, where practical, piped or channelled to this basin for primary treatment/settlement before leaving the site via a mesh supported geotextile filter/riser before discharging to the wetlands.
- Contract specifications requiring regular maintenance of all erosion and sediment control structures and devices for the full contract and maintenance period.

Furthermore, sediment control conditions will include the following:

- Proprietary sediment fencing shall be installed by the Contractor in accordance with their approved SWMP and elsewhere at the discretion of the site superintendent to contain sediment fractions as near as possible to their source.
- Sediment removed from any trapping device shall be relocated where further pollution to down slope lands and waterways cannot occur.
- Stockpiles shall be located by the Contractor in accordance with their approved SWMP and elsewhere at the discretion of the site superintendent. Where stockpiles are to be in place longer than 30 days they shall be stabilised by covering with mulch or with temporary vegetation.
- Water shall be prevented from entering the permanent drainage system unless it is sediment free. Drainage pits are to be protected in accordance with the Contractor's approved SWMP.
- Temporary sediment traps at pits shall be retained until after lands they are protecting are completely rehabilitated.
- Dust suppression will be required for the control of airborne particles during construction. This will be via standard water cart usage during earthworks and pavement construction of the hardstand areas.

#### 8.11 ACID SULPHATE SOILS

In the event that it is necessary to disturb acid sulphate soils, an Acid Sulphate Soils Management Plan will be prepared and submitted to the Department of planning prior to the disturbance of such soils.

## 8.12 SEWERAGE DISPOSAL

The proposed on-site sewerage system will be maintained in good working order and meet the water quality standards established by the MUSIC model, and outlined above in the water quality section of this Statement of Commitments and also in the report at **Appendix F**.

The NOVACLEAR MBR treatment process will operate on a fill and draw batch system where incoming waste is first stored within the balance tank, then transferred to the aeration tanks and decanted via the final MBR process.

The batch system is subject to biological treatment for a prescribed period of time with both anoxic and aerobic cycles possible. The sludge remains within the aeration and MBR tanks to provide the biological population for the subsequent cycle.

RAS pumps circulate the activated sludge between aeration tanks and between the MBR tanks and balance tanks for EBPR conditions. Excess biomass is pumped on a regular basis to a sludge holding tank for further digestion and disposal.

The NOVACLEAR MBR process involves a number of measures to monitor and control equipment, including the following:

- Influent flow meter between primary pump station and EQ tank.
- D.O meters for each cell to provide oxygen monitoring and blower control.
- Continuous NTU monitoring following tertiary filtration.
- Continuous UV intensity monitoring and lamp failure alarms.
- Continuous  $Cl^2$  monitoring and set point failure alarms.
- High level alarms on all treatment tanks.
- Low level alarms on all dosing tanks.
- Final effluent flow meter following final irrigation pump.
- Motor overload protection with auxiliary alarm outputs on all pumps and air blowers where practical.
- Current sensing and amp meters on all submersible pumps where required.

All alarms will be locally activated on both the main electrical control panel and scada computer interface. All alarms will be presented as volt free contacts (or 4-20ma outputs for metering) within a dedicated marshalling box.

The SCADA system will be linked via an independent telemetry system to a remote console. An auto dialler will alert remote operators of system alarms or equipment failure.

### 8.13 WASTE MANAGEMENT

All waste, as identified in the EAR, will be stored on-site, with the waste stream separated into recyclable and non recyclable, and disposed of or recycled by approved contractors. The following table outlines the waste likely to be generated by the facility, and storage and disposal methods for processing this:

| Waste                                 | Storage Location                                                      | Disposal Method                                                                       |
|---------------------------------------|-----------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Wood / Timber (pallets, wood blocks ) | Collected in recycling area for removal                               | Collected in recycling area for removal off site                                      |
| Oiled rags                            | Collected in dedicated identified bins within the workshops           | Removed by same licensed contractor as waste oil and disposed of at approved facility |
| Coolant                               | Circulated to waste coolant collection tank                           | Removed by a Licensed contractor to a approved facility                               |
| Paper                                 | Collected in various recycling areas around the site                  | Removed by a Licensed contractor to a approved facility                               |
| Cardboard                             | Collected in various recycling areas around the site                  | Removed by a Licensed contractor to a approved facility                               |
| Scrap Steel                           | Stored in fabrication shop                                            | Removed from site by scrap metal merchant                                             |
| Scrap Aluminium                       | Stored in fabrication shop                                            | Removed from site by scrap metal merchant                                             |
| Scrap Brass                           | Stored in fabrication shop                                            | Removed from site by scrap metal merchant                                             |
| Rubber tyres                          | Stored in inventory attachment area                                   | Removed from site by tyre handler to approved disposal facility                       |
| Rubber drive belts                    | Stored in inventory attachment area                                   | Removed from site by tyre handler to approved disposal facility                       |
| Cleaning Rags                         | General waste bins                                                    | Normal rubbish removal                                                                |
| Waste oil                             | Circulated to waste oil collection tank                               | Removed by a Licensed contractor to a approved facility                               |
| Oil filters                           | Collected in waste oil area                                           | Removed by same licensed contractor as waste oil and disposed of at approved facility |
| Used Batteries                        | Bunded storage area awaiting pick up                                  | Removed by a Licensed contractor to a approved facility                               |
| General waste                         | General waste bins                                                    | Normal rubbish removal                                                                |
| Paint                                 | Stored behind paint shop in approved flammable cupboard               | Removed by a Licensed contractor to a approved facility                               |
| Plastic wrap                          | General waste bins                                                    | Normal rubbish removal                                                                |
| Food Waste                            | Cafeteria garbage                                                     | Normal rubbish removal                                                                |
| Air conditioning gas                  | Recovered using approve A/C equipment stored with empty gas cylinders | Exchanged with licensed contractor                                                    |

A waste management plan will be prepared prior to operation of the facility.

#### **8.14 HAZARDOUS MATERIALS**

Hazardous Materials will be stored in accordance with Workcover Authority requirements.

Storage layout will be within racking on shelves or in the case of oils and fuels as per the designated areas shown on the plans.

Storage conditions will be as shown on the plans.

#### **8.15 UTILITIES**

The proposed development will comply with the requirements of the relevant utility authorities, and evidence of the necessary approvals will be provided to the Department prior to construction.

#### **8.16 OUTDOOR LIGHTING**

All outdoor lighting will be designed to comply with the requirements of AS 4282, Control of Obtrusive Effects of Outdoor Lighting.

#### **8.17 BCA**

The proposed development will comply with either the 'deemed to satisfy' provisions of the Building Code of Australia, or alternatively provide a performance-based solution prepared by a suitably qualified person.

#### **8.18 ROAD CONSTRUCTION AND DRAINAGE**

Road construction and drainage works will comply with Port Stephens Council & Roads and Traffic Authority Standards.

#### **8.19 LANDSCAPING**

All landscaping will be carried out in accordance with the landscape concept plan prepared by Terras Landscape Architects, and included with the Project Application documentation. A detailed landscape plan will be prepared for each stage of the development and submitted with construction certificate applications.

#### **8.20 VECTOR MANAGEMENT PLAN**

A Vector Management Plan will be prepared prior to construction of buildings.