

**Light Horse Business Centre**  
**Application No. 06\_0139**  
**Proponent's Response to DOP**  
**(Attachment A)**

## **Introduction**

The purpose of this submission is to respond to the matters raised by DOP in Attachment A to its letter of 21 February 2009. Those matters are:

- Project Description
- Public v Operational Areas
- Odour Management
- Community Consultation
- Contributions

## **Project description**

The Proponent is seeking project approval for the construction and operation of a resource recovery facility (**RRF**) and landfill facility upon its site at Eastern Creek (**Site**). The RRF will include a Material Processing Centre (**MPC**) and Waste Transfer Station (**WTS**).

These activities require significant supporting infrastructure, particularly to comply with the provisions of the *Protection of the Environment Operations Act 1997* (**POEO Act**) respect to environmental mitigation measures.

Other Site operations that will support the landfill facility and RRF include:

- an administration building;
- workshop building for maintenance;
- amenity berms;
- material stockpile areas;
- drop-off zones;
- an internal road network;
- wheel wash stations to mitigate tracking of mud off site;
- an on-site detention basin to manage wastewater produced by the landfill; and
- weighbridges to record and manage waste loads entering and existing the Site in accordance with DECC Guidelines.

Site plant and equipment will include the following:

- dump trucks (3);
- water cart (1);
- multi purpose Hook lift Truck (1);
- excavators (6);
- loaders (5);
- bulldozer (1);

- compactors (2);
- mobile screens (3);
- mobile crusher (1);
- modular recycling installation (fixed crusher) (1);
- forklifts (2);
- magnet (1); and
- utes.

The purpose/use of the workshop is to provide maintenance services to building plant and machinery used in connection with the landfill and the RRF including:

- a raised enclosed MPC/WTS structure;
- wheel washing station;
- inwards/outwards weighbridge (known as Weighbridge 1) for vehicles entering the facility and 1 way dump truck weighbridge facility (known as Weighbridge 2) for loads entering the landfilling area;
- administration building which will include employee amenities, administration offices, training rooms, first aid facilities, logistics central control and a communication centre;
- workshop building and plant storage bays for maintenance and service activities for Site trucks, plant and equipment;
- bunded above ground double skin diesel fuel tanks;
- leachate drainage works including leachate wells, sump, riser and pumps;
- non-leachate site drainage/stormwater system including pipework, culverts, sumps, tanks and detention ponds;
- water treatment facilities;
- telemetry controlled water spray and sprinkler system with provision for manual override installed at the stockpile areas and earthen berms;
- dust, wind speed and water quality monitoring systems;
- lightings; and
- landfill gas extraction system.

DOP has asked for details on the construction material and finishes of buildings. The Proponent provides the following details below, though is happy to accept a condition that details about the materials and finishes be provided prior to the issue of a construction certificate.

The workshop which is proposed will be a colorbond custom orb steel clad shed with estimated dimensions of 78 x 33 x 8 metres with an appearance generally as shown in *Figures 3.3 and 3.4* of the EA at Appendix C. The workshop will comprise 4 standard service bays with inspection pits and 2 larger bays allowing the maintenance of larger items of plant. Mobile items of plant will from time to time be driven to the workshop where routine

maintenance and repairs will be carried out. Maintenance on smaller items and equipment such as pumps, generators and motors will also be carried out at the workshop.

In the fabrication bays, other items to be used around the Site may be fabricated or repaired. These other items may include items such as barriers, steps, guards and gates.

Adjoining the workshop will be a (Workcover approved) Australian Standard spray booth in which plant and machinery may be spray painted from time to time.

Office, store and amenities sections are also contained within the facility.

The plan contained within the EA provides for 14 staff car parking spaces and an additional 6 car parking spaces designated for visitors.

External finishes for buildings are anticipated to be colorbond steel custom orb variety in muted non-reflective colours consistent with a rural setting as external cladding on steel frames. All foundations and lower exposed walls will be a rendered cement finish on brick and all driveway entrances and external aprons will be concrete hardstand.

Vehicle pathway entrance directions and exists will be appropriately signposted.

All window and door frames will be powder coated aluminium variety.

External water tanks will be of the Polytank variety and of colours complementary to the building.

Please see enclosed plans prepared by Nettleton Tribe dated April 2009 being drawing nos. 3949\_SK24 to SK29 inclusive and 3949\_SK30-31. The Proponent asks that these plans be included as part of the application for the Proposal.

DOP has asked for fully dimensioned plans with the final level (final landform) being sought. The Proponent is in the process of commissioning further plans to construction certificate engineering standards and will provide them in the near future. The Proponent is happy to accept a condition that the final detailed plans be the subject of approval prior to the issue of a construction certificate.

### **Public v operational areas**

The general principles applicable to the Site are based upon the following features:

- Tarred and sealed onsite roads signposted in accordance with general traffic management principles applicable on NSW public roads;
- Separation of smaller vehicles (less than 3 tonnes) from vehicles greater than 3 tonnes;
- One way traffic movement around the site designed to minimize the opportunities for collision;
- Small vehicles enter the site via the in-bound weighbridge and to the MPC entrance where they will discharge their contents under supervision and in designated bays. Those vehicles will then depart the MPC via a separately designated exit, returning then to the outbound weighbridge;
- Larger vehicles (more than 3 tonne) after entering via the weighbridge, will bypass the MPC and be directed to the northern processing areas. Travelling in a one way direction, they will again by pass the MPC on their return journey to be weighed before exiting the Site;
- No small vehicles will be allowed to drive down the haul road into the quarry for landfilling;
- Only specially designated vehicles including the Proponent's dump trucks will be permitted onto the haul road;
- Traffic on the haul road will be one-way at any given time and will be controlled by a traffic controller.

#### *Internal Site Circulation*

The proposed internal road system is identified on the Site Layout Plan (Figure 3.3 of the EA and in more detail on the Nettleton Tribe diagrams). It will involve a system of 8 metre wide roadways providing access to the various elements of the development including weighbridges, workshop, MPC, Waste Transfer Station, waste drop-off zone, landfill, administration building and parking areas.

The roadways have been designed to rationalise and facilitate the 'flow' of materials. The main circulation roadways from the MPC will operate with a one-way traffic flow with two-way connectors to/from the drop-off zone and landfill. The proposed arrangement represents a very logical, efficient and relatively conflict-free system for vehicle activity.

To facilitate traffic management and to observe occupational health and safety requirements, advisory (directional) signage as well as regulatory (one-way etc) signage will be provided including a 20kph speed restriction.

The design of the access roads, manoeuvring and carpark areas will be suitable for the intended traffic movements and will accord with the requirements of:

- AS 2890.1 and 2;
- Austroads;
- NSW WorkCover; and
- Council's Development Control Plans.

There is no cross over of traffic proposed between Hanson's facility and the Proponent's. Hanson accesses its asphalt area from within its own site and not via the Proponent's road. When the current owner purchased the eastern side of the quarry site from Hanson there were several contractual conditions agreed to between the parties with a view to a future boundary alignment.

Hanson inserted these into the contract.

The purposes of the alignments were as follows:

- (a) To enable the future transfer of the "Asphalt" Lot to Hanson. This is that portion of land which is currently part of Lot 2 DP 226213 and upon which Hanson conducts an asphalt batching plant;
- (b) To enable the future transfer of the "Haul Road site" to Hanson which is at the northern boundary of the Hanson Lot. This northern boundary of this portion of land lies 6 metres to the south of the existing access road owned by the Proponent;
- (c) To enable the future transfer of a small triangle of land at the eastern most edge of the Proponent's land in order to ensure that the Proponent's land properly and physically connected with the registered Right of Carriageway through the Australand site to Old Wallgrove Road.

For a range of reasons irrelevant to the EA the application to carry out these boundary realignments has not proceeded to date. However, a future application will be made to Blacktown Council to give effect to these contractual obligations and the boundary line between the two properties will

be clearly marked both by signage and the installation of a 2 metre high cyclone style mesh fence.

Details of this application will be sent to the DOP for information purposes at the time of lodgement with Council.

### **Odour management**

The Proponent has indicated its proposed use of a chemical called "Biomagic" in connection with the processing of green waste at the facility.

BioMagic is an industrial bio-stimulant that is non-hazardous and completely biodegradable. Its properties allow for instant odour elimination upon contact with malodorous molecules and can be used in the treatment of liquid and solid organic waste. The formula is designed to hyper-accelerate the activity of indigenous microbes, mainly facultative anaerobes, inhabiting waste stream environments by providing an abundance of oxygen (electron acceptor) for metabolism to occur.

One of BioMagic's properties is the molecule negative net charge, which acts as an oxidising agent in atmospheric conditions as well, adds to BioMagic's uniqueness by allowing the instantaneous oxidation of malodorous compounds, thereby eliminating atmospheric odours on contact.

BioMagic is comprised of oxygen, water and nitrogen. It is safe on the skin, harmless to animals and very good for the environment. BioMagic is a non-biocide, non-enzyme, non-bacterial, non-volatile, pH neutral liquid that may be sprayed on or mixed with odour producing organic waste. BioMagic contains no perfume or colouring. It does not "mask" the odour; it eliminates it.

BioMagic contains 30 or more times the amount of oxygen and nutrients available of all known products now available. BioMagic is a hydrated compound. This means that BioMagic attracts moisture. Keeping bacteria moist allows the bacteria to keep working. It also contains a surfactant that allows it to migrate into a biomass.

In the presence of sufficient oxygen and nutrients, bacteria will become aerobic. In the aerobic form, the bacteria can consume about 7 to 10 times the waste compared to the anaerobic state and they do not produce hydrogen sulphide, thus eliminating odours. BioMagic oxidises H<sub>2</sub>S instantaneously. Mixing BioMagic into a solution chemically eliminates the H<sub>2</sub>S. Spraying BioMagic in the air chemically eliminates the H<sub>2</sub>S instantly.

Biomagic will be used at the site on stockpiles of green waste and composting products to eliminate odours. It is expected that the solution will be used on the active tipping area as well for methane oxidisation. It will also control odours from uncovered tipping areas. To treat odorous areas 1 L of solution will be mixed with 10,000 L of water. It will be sprayed using water carts or

specially designed mixing tanks next to the green waste/composting operations). It may also be used in conjunction with leachate recirculation/treatment to minimize any leachate odours. Used in conjunction with strict management procedures described in the EA it is expected that odour issues will be adequately controlled at the facility.

See information on Biomagic (certificate of analysis) attached.

### **Community consultation**

Community consultation undertaken since exhibition of the EA includes maintaining on the Dial a Dump Industries website ([www.dadi.com.au](http://www.dadi.com.au)) a video link relating to the Project, together with a blog at [dadi@mysquarespace.com.au](mailto:dadi@mysquarespace.com.au)

The Proponent is also pleased to have been given the opportunity by DOP to respond to the objections/submissions made during the Exhibition Period.

DOP has asked for a copy of the minutes and methodology for social research focus groups conducted on 16 and 24 October 2007. Please see attached letter dated 4 March 2009 from ERM that provides further information regarding the focus group research.

Also enclosed are copies of briefing presentations and handouts given to Minchinbury residents about the Proposal.

### **Contributions**

The DGRs require the Proponent to address developer contributions for the Project as follows:

*"The Proponent is to:*

- *Review the project against any existing draft or likely requirements for the provision of regional and local infrastructure in the Western Sydney Employment Hub in consultation with the Roads and Traffic Authority, BCC and any relevant service providers; and*
- *Describe the contributions that would be made towards the provision of this infrastructure and justify these contributions."*

The Project is classified as a "major project" under clause 27 of the *State Environmental Planning Policy – Major Projects 2005* as it involves receipt, transfer and recovery of wastes over 75,000 tonnes per annum.

The Project also includes a waste disposal facility (landfill) to be operated in conjunction with the resource recovery and transfer activities. The Project is therefore subject to assessment under Part 3A of the *Environmental Planning & Assessment Act, 1979*.

The land in respect of which application for the Project is being sought comprises the following 4 lots:

1. Lot 2 DP 262213;
2. Lot 1 DP 400697;
3. Lot W DP 419612; and
4. Lot 10 DP 241859. (**Land**)

The Land was rezoned in 1999 under SEPP 59 for employment, residential and regional open space purposes. The Pioneer Quarry forming part of the Land that is the subject of the present DA was subsequently rezoned under clause 31A of SEPP 59 as being suitable for use as a non-putrescible waste facility.

The Proponent has proposed a bond of \$9,045,060 to Blacktown Council in respect of the Project. This is because there is no current section 94 Contributions Plan in place in respect of the Site. Blacktown City Council had advised the Proponent that it expected to have finalised and exhibited a section 94 contributions plan by the end of calendar year 2008. That has not occurred.

On 17 August 2007, Council provided the Proponent with a revised draft cost distribution schedule for the Eastern Creek Precinct under SEPP 59. The contribution thought to be required for the whole of the Proponent's land is shown below. This table was provided to the Proponent by the Council.

*The contribution required for the whole of the Proponent's land is shown below.*

<i>Net development area (m2)</i>	<i>735,828</i>
<i>Drainage Works Cost + 40%</i>	<i>\$12,674,799</i>
<i>Drainage Land Cost + 20%</i>	<i>\$13,266,080</i>
<b>TOTAL</b>	<b>\$25,940,879</b>
<i>Road Works Cost</i>	<i>\$7,413,502</i>
<i>Road Works Land Cost</i>	<i>\$ 942,001</i>
<b>TOTAL</b>	<b>\$8,355,503</b>

*\*Net Development Area excludes areas designated for riparian areas, drainage land, conservation reserves, zone substation land.*

**Total contribution \$34,296,382.**

The Proponent's gross land area is, according to Council, approximately 937,700 square metres.

As the DOP is aware, the Proponent proposes to undertake a boundary realignment to achieve a realignment of title boundaries. When this realignment is finalised, according to the Proponent's surveyors, the Net Developable Area will be 194,100 square metres.

Plans are attached that show proposed Lot 1 as 26.47 Ha and Lot 4 as 25.94 Ha. This gives a total gross area of 52.41 Ha at surface.

Quarry void having an area <b>at surface as if it was land</b> of	22.602 Ha
Including north eastern bund area unusable	7.385Ha
	30.307Ha

Net developable area at surface (actual land) is	22.11Ha
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Applying the Council contribution rate of \$46.60 per square metre, the contributions payable, if a valid section 94 contributions plan was in place, would be \$9,045,060.

The Proponent is prepared to accept as a condition of Project approval that it provides a bond of \$9,045,060 in respect of the Project. The Proponent proposes to enter into a VPA either with the DOP or Council or both to fund infrastructure requirements on this basis.

Draft Statement of Commitments

BCC requirements shown in blue.

DECC requirements shown in Red.

The Proponent’s original commitments in the EA shown in black

Item	Commitment	Responsibility	Timing
1.	Scope of Development		
	The proponent will carry out the approved aspects of the development in accordance with the EA lodged with the DoP prepared by ERM December, 2008.	LHBC	At all times
2.	Statutory Requirements		
	The proponent will obtain and maintain all licenses, permits and approvals as required.	LHBC	At all times
3.	Construction and Operation EMP		
	<p>A Construction Environmental Management Plan (CEMP) and an Operational Environmental Management Plan (OEMP) will be developed and approved by the Director- General and will respectively:</p> <ul style="list-style-type: none"> <li>describe all activities to be undertaken on the site during construction and operation;</li> <li>describe the work program outlining relevant timeframes that must be met during construction and operation;</li> <li>detail statutory and other obligations that must be met during construction and operation, including all approval and agreements required from authorities and other stakeholders;</li> <li>describe the roles and responsibilities for all relevant personnel involved in construction and operation;</li> <li>detail the environmental management procedures, monitoring and reporting to be implemented during the construction and operation phases and timing and triggers for their implementation;</li> <li>detail what incident management procedures will be in place during construction and operation;</li> <li>detail procedures for community consultation and complaints handling during construction and operation; and</li> <li>be made available for public viewing after approval from the Director-General.</li> <li>Council is particularly concerned about the proposed screening procedures for putrescibles and how this will be controlled, as the odour modeling is predicated on no putrescibles</li> </ul>	LHBC / Director- General	<p>CEMP – prepared prior to commencement of any site activity and implemented for the duration of construction.</p> <p>OEMP – prepared prior to commencement of operations and implemented for the duration of operations.</p>

being accepted at the Facility and only a non-putrescible landfill is permissible on the land.

- The provision of a temporary stockpile storage area for after hours deliveries in the vacant area adjacent to the west berm at the southern boundary of the area of operations (as shown in red on the site plan), to further reduce any potential adverse noise and air quality impacts during night-time operations. Agreed

#### Site Security

A gate shall also be provided at the above location in order to restrict after hours activity and vehicular movement to the designated after hours delivery area only (as shown in red on the site plan) and, further, prevent the Facility from becoming a quasi 24 hour operation.

The site to be secured, and the gate to be locked, at all times outside the approved hours of operation and any after hours operations - shall be strictly confined to this designated area.

It is considered inappropriate for this land to be set aside for future sub-letting or future development as to do so would prevent the development operating in the manner outlined above.

Except as expressly provided by these conditions works and activities must be carried out in accordance with the proposal contained in the documents:

- a) Light Horse Business Centre, Volume 1 - Environmental Assessment Report, Final Report, Environmental Resource Management Australia, December 2008; and
- b) Light Horse Business Centre, Volume 2 - Environmental Resource Management Australia, December 2008.

#### Environment Protection License

Prior to commencing any activity associated with the proposal, including construction activities, the applicant must apply for and be issued with an Environment Protection License from the Environment Protection Authority.

Waste must not be received and /or disposed of at the premises until the Environment Protection Authority has granted the applicant with an Environment Protection License which approves the receipt and disposal of waste at the premises.

#### Site Environmental Waste Management Plan

Council should be afforded the opportunity to comment on the assessment and any proposed conditions from the NSW Department of Environment and Climate Change (DECC), as they will be the responsible environmental regulatory authority, prior to the issue of any determination by the Minister. Noted

The proponent is to submit a revised Site Environmental Waste Management Plan (SEWMP) relating to all aspects of the operation every 3 years to DECC, to ensure that the site is operating in accordance with best practice environmental management procedures using the latest technology. In this regard the recommendations of the SEWMP are to be immediately implemented upon DECC's approval

#### Rehabilitation of the Quarry

The quarry void is only to be filled with non-putrescible waste in accordance with the list specified in Section 3.3 (pages 60 and 61) of the Final EAR, prepared by ERM, dated December 2008.

Throughout the life of the operation, suitably qualified consultants shall be engaged to monitor the progressive infilling and rehabilitation of the Quarry to ensure that it is being undertaken in accordance with the submitted Environmental ~assessment Report prepared by ERM, dated December 2008. Prior to any use of the final quarry surface, suitably qualified consultants shall certify that the site is suitable for its intended SEPP 59 employment land use- :

Throughout the life of the approved filling of the quarry, a suitably qualified consultant is to prepare contour lot fill diagrams and lot fill compaction certificates in accordance with Council's requirements. Once filled, a restriction as to user pursuant to Section 888 of the Conveyancing Act 1919 with Council's standard wording must be placed on filled lots.

### Environmental Management

The recommendations of the Light Horse Business Centre - Environmental Assessment Report (Volume 7 & 2) (Report No.: 0088621), prepared by Environmental Resources Management Australia dated December 2008, shall be implemented during the operations of the approved development.

The requirements of the approved Site Environmental Waste Management Plan (SEWMP) shall be implemented throughout the life of the consent.

Any asbestos or asbestos contaminated materials received during the operation of the approved development is to be wrapped and immediately transported to the landfill and disposed of in accordance with the relevant statutory requirements.

The proponent is to submit a revised SEWMP relating to all aspects of the operation every 3 years to DECC to ensure that the site is operating in accordance with best practice environmental management procedures using the latest technology. In this regard the recommendations of the SEWMP are to be immediately implemented upon DECC's approval.

A Site Auditor accredited by NSW DECC is to be engaged for the life of the land filling operations to certify that the site is suitable for its intended SEPP 59 employment land use once the land is filled.

### Dust Control

All sealed road surfaces contained within the proponent's operational land, including the entire route to, and to the quarry, are to be sealed and appropriately maintained by the proponent to the consent authority's satisfaction,

All dust control measures are to be via automatic systems to be in operation all year round whether or not the business is operating at the time.

The measures, including ongoing monitoring of dust levels, outlined in the approved work method statement regarding dust control are to be implemented during the operations of the approved development for the life of the consent.

Regular wetting down of all sources of dust on the site is to take \*place to mitigate the impact of dust during construction and for the life of operations of the landfill and resource recovery

facility.

#### Consolidation of Lots

The lots on which the operational area is situated as per Plan No. 6 shall be consolidated into one title which shall be registered with the Land Property Office.

#### Local Infrastructure Contributions

Council expects that a VPA or contributions be levied for the entire operational area of the proposal as identified in Plan No. 6 in the final EAR submitted with the Application.

The Applicant will make developer contributions for the entire operational area shown in Plan No. 6 in accordance with any relevant Blacktown City Council that applies. to the development area, before any Construction Certificate is issued for the development.

If a Contributions Plan has not been prepared for the development area before the determination of the application, the Applicant shall enter into a Planning Agreement with Blacktown City Council that satisfies the Applicant's developer contribution obligation for local infrastructure in accordance with the 'Stage 3 Release Area Precinct Plan'. Agreement is with DoP

Prior to the issue of a Construction Certificate, the Applicant must provide documentary evidence from Blacktown City Council that its developer contributions have been made through either a Contributions Plan or a Planning Agreement. See above.

This is NOT Agreed

The two Lots are owned by different registered Proprietors.

\*Net Development Area excludes areas designated for riparian areas, drainage land, conservation reserves, zone substation land.

The Applicants' gross Land area is (as shown in the Council Schedule) approximately 937,700sqm

Plan 4 shows each of the Applicant's existing Lots.

The Applicants propose to undertake a boundary realignment to achieve a realignment of title boundaries as shown in the Block Plan attached.

As a result of the boundary alignment the project area will be limited within two new proposed land titles and the areas marked "non operational" in separate titles will be clearly excluded from this project.

Plan 6A shows the areas of net developable land within the project area.

The proponents propose to offer to Bond Developer Contributions

### Traffic Matters

Traffic Signals at the intersection of Old Wallgrove Road and the existing right-of-carriageway - a traffic safety solution in the form of traffic signals is required in the interim.

Proponent should be required to install traffic signals as a part of this application.

The Traffic Signals at the intersection of Old Wallgrove Road and the right of carriageway are to be operating prior to commencement of the approved development.

All access to the approved development is to be via the right of carriageway off Old Wallgrove Road until suitable replacement public road access is available. There is to be strictly no access from Archbold Road.

All required off-street car parking spaces and internal roads shall be maintained to a standard suitable for the intended purpose.

All loading and unloading operations shall take place at all times wholly within the confines of the land-

Access and parking for people with disabilities shall be maintained in accordance with provisions of Australian Standards 1428.1 and 2890.1.

The existing right-of-carriageway driveway to the development site is to be 8.0 metres wide and any rectification works to be carried out by the Developer at no cost to Council.

based on a square metre basis generally in accordance with the Draft Developer Contributions Plan published by Blacktown Council.

Plan 6A prepared by Land Partners Registered Surveyors shows the Net Developable Area. To be 194,100sqm.

Applying the Blacktown Council contribution rate \$46.60psm = the Developer offers to bond \$9,045,060 in respect of this Project.

The Proponent Does NOT agree that interim traffic lights are warranted until a permanent road is constructed and proposed instead to install STOP signs at Quarry Road.

Intersection of Old Wallgrove Road and the existing right-of-carriageway to have Traffic Signals as per the Roads & Traffic Authority's of New South Wales (RTA) consideration and approval prior to the issue of any Construction Certificate relating to the approved development, whether by Council or an appropriately accredited certifier.

In lieu of issuing a separate Construction Certificate, the above-mentioned engineering works can be included on an overall Construction Certificate provided that SPECIFIC REFERENCE is made to the relevant Engineering works. In such instances, the certifier shall provide evidence that they are accredited to do so. This is not applicable where Roads Act or Local Government Act Approvals are required.

Council does not permit the private certification of works on existing public roads or reserves, or any land under the care and control of Council. In this regard Council will not accept a Construction or Compliance certificate from a Private Certifier for any works on Old Wallgrove Road, Eastern Creek.

Any Construction Certificate issued in relation to this consent shall incorporate and address the design of those works required by Scope of Engineering Works and ' other sections of this consent which do not' require separate Roads Act 1993 or Local Government Ad 1993 approval and any ancillary works necessary to make the construction effective. All works on existing public roads require separate engineering approval pursuant to the Roads Act 1993.

The Construction Certificate for Engineering works may be issued by Council or by an appropriately qualified certifier,

#### Environmental Management

Prior to the issue of any Construction Certificate, details of the bitumen all weather sealing to be provided along the entire route to, the quarry void and to the temporary stockpile area designated for after hours deliveries with stockpile areas /work floor areas being in a suitable all weather surface (as shown highlighted on the site plan) to mitigate potential dust problems are to be submitted to the certifying authority.

Prior to the issue of any Construction Certificate, the environmental consultants engaged for the project by the Proponent, shall certify that the relevant recommendations to be implemented prior to the issue of any Construction Certificate have been implemented to their satisfaction.

A work method statement regarding dust control during construction and operation of the approved development must be approved by the Consent Authority prior to the issue of any Construction Certificate.

The work method must control dust to the levels as outlined in the appropriate Australian Standard. The work method must outline the Australian Standard being used for the occupational exposure standard and include monitoring of dust levels generated during earthworks

A Conservation Management Plan for the conservation area identified on the subject property is to be submitted to the appropriate authority for approval prior to the issue of any Occupation Certificate for the approved development to ensure that the Applicant's commitment in this regard is met.

Prior to the issue of any Occupation Certificate, the environmental consultants engaged for the project by the Proponent for the preparation of the Environmental Assessment Report prepared by ERM, dated December 2008, shall certify that the relevant recommendations to be implemented prior to the operation of the approved development have been implemented to their satisfaction and that the site is suitable for the commencement of the approved development.

#### Tree Protection –

Any tree not indicated on the approved plans as being removed or greater than 3m from the building perimeter shall be effectively protected against damage-

#### Landscaping and Appearances

additional information is required to be submitted for Council's separate approval prior to the issue of any Construction Certificate for the approved development:

(a) Details of the proposed external building materials and finishes, demonstrating compliance with the ESD and energy and water efficiency requirements of Sections 7.2, 7.3 and 1.1.6 of the SEPP 59 Eastern Creek Precinct Plan.

(b) Details of the proposed site perimeter fencing, including relevant animal proof measures, are to be provided to the Consent Authority prior to the issue of any Construction Certificate. The site perimeter fencing shall be setback at least 1 metre from the site perimeter to allow

suitable landscaping to be placed between the fence and the site perimeter.

A detailed landscaping plan prepared by a suitably qualified person which provides for the embellishment of the site, including the proposed earthen berms and perimeter landscaping, by providing:

- (i) Suitable native ground covers, shrubs and trees endemic to the area to complement the height, scale, design and function of the approved development.
- (ii) The stabilisation of any exposed soil areas.
- (iii) Measures designed to enable easy long-term maintenance of the property.

Planting of a combination of 35 litre, 75 litre and 100 litre trees. All shrubs to be planted are to have a minimum pot size of 200mm.

#### Stormwater Management & Site Works and Drainage

Any required retaining wall(s) and/or other effective method to retain excavated or filled ground (not being Exempt Development under the Blacktown Local Environmental Plan), together with any associated groundwater drainage system, shall be designed by an appropriately qualified person. Details of such site works shall accompany the Construction certificate-

Soil erosion and sediment control measures shall be designed in accordance with Council's Soil Erosion and Sediment Control Policy'. Details shall accompany any Construction Certificate.

#### Drainage

Where drainage involves the provision of drains across land owned by others, evidence of the creation of necessary easements must be submitted to Council for concurrence prior to the issue of a Construction Certificate for engineering works.

Council requires that any lot created not draining directly to a public road be serviced by an inter-allotment drainage line and appropriate easement. Designs including longitudinal sections of the inter-allotment drainage lines are to be included with any Construction Certificate for engineering works.

Where the internal driveway cannot be drained to an internal pit, a grated drain shall be provided at the property boundary.

### Erosion and Sediment Control

Soil erosion and sediment control measures for road, drainage, On Site Stormwater Detention and earth works shall be designed in accordance with Council's Soil Erosion and Sediment Control Policy and Engineering Guide for Development. Details and are to be included with the plans and specifications to accompany any Construction Certificate.

### Stormwater Quality Control

Stormwater Treatment Measures for the proposed development shall be designed in accordance with the requirements of Council's Stormwater Quality Control Policy. Details are to be included, with the plans and specifications accompanying any Construction Certificate. Any variation to the proposed CDS unit (model no: P 15 12 & P1012) will require a lodgment of a Section 96 application to Council for amendment of the consent

The following scope of works shall be included in the design documentation accompanying the Construction Certificate for engineering works:

- (a) The existing depression/watercourse through the site must be piped and/or channeled to contain stormwater discharges up to the 1% A.E.P. (100 year Average Recurrence Interval) event.
- (b) Overland flows up to the 1% A.E.P. (100 year Average Recurrence Interval) event must be intercepted at the boundary of the site and conveyed through the site in a piped or channeled discharge system and discharged in a satisfactory manner. li
- (c) Overland flows must be intercepted at the property boundary, conveyed through the site in a piped or channeled drainage system to match or set local condition, and discharged in a satisfactory manner.
- (d) Any drainage currently entering the site is to be collected and conveyed in an approved manner to the nearest appropriate point of discharge.

### On-Site Detention

On-site detention systems within private or common courtyard areas shall be designed so they do not impact on the amenity of the development or the use of such areas.

In relation to this consent, Construction Certificate must be issued for the On-Site Detention

(OSD) system and Stormwater Treatment Measures (STM) device prior to the issue of the Construction Certificate. This is to ensure that the OSD system and the STM device will be located in an area of the site in which they will function hydraulically and will not conflict with any other structures proposed for the site.

Therefore, prior to the issue of any Construction Certificate it will be necessary for a condition to be imposed on any consent granted for the detailed Stormwater Design and supporting calculations to be submitted to Blacktown City Council for review and approval. Please find attached Council's stormwater drainage issues to be addressed for the Applicant's information and action.

The location of the proposed stormwater basins needs to be coordinated with the RTA Western Sydney Employment Hub, Proposed Erskine Park Link Road Network the Concept Plan exhibited, it appears that road widening of approximately 20 metres would be required on the eastern side of the existing Archbold Road Reserve.

The basins are to be located clear of any proposed future road widening works, which is to be demonstrated on the detailed Stormwater Design plans submitted to Blacktown City Council for approval. Noted

Provision needs to be made in the site drainage design to account for the final landform over the quarry void. If the final landform is landscaped with no new impervious area, then the flows from the quarry void final landform can bypass the proposed detention basins. Otherwise additional storage and treatment measures will be required for the quarry void area.

Details of the final landform bypass arrangements are to be provided to Blacktown City Council for approval prior to the issue of any Construction Certificate. Also any upstream catchment areas that drain into the operational area should be diverted to bypass the proposed basins or included in the basin modeling and design. Noted

A certificate from a Registered Engineer (NPER) to be submitted to Council certifying that the structures associated with the on-site detention system have been designed to withstand all loads likely to be imposed on them during their lifetime.

A certificate from a Professional Civil Engineer/Registered Surveyor must be obtained verifying that the On Site Detention system will function hydraulically in accordance with the requirements of Upper Parramatta River Catchment Trust and Council's current development

guide.

Any Construction Certificate issued for or including an On-site stormwater Detention (OSD) System must be accompanied by;

(a) A Drainage Design Summary Sheet per Appendix B1 of the Upper Parramatta River Catchment Trust Handbook, current version.

(b) Full drainage calculations and details for all weirs, overland flow-paths and diversion/catch drains - including catchment plans and areas, times of concentration and estimated peak run-off volumes.

(c) A completed OSD Detailed Design Submission and Checklist per Appendix 09 of the above-mentioned Handbook.

(d) A complete verification of Council's OSD General Guidelines and Checklist requirements being satisfied.

(e) A Maintenance Schedule is to be presented with the designer's name, his signature and date on it in accordance with the Upper Parramatta River Catchment Trust handbook guideline. (If an underground tank is involved this must include reference to Workcover Authority of NSW Occupational Health & Safety Ad 1983 and Confined Spaces Regulation)

#### SURFACE STORMWATER MANAGEMENT ASSESSMENT

. The location of the proposed stormwater basins needs to be coordinated with the RTA esteemed Employment Hub Proposed Erskine Park Link Road Network Concept Plan.

From the Concept Plan exhibited, it appears that road widening of approximately 20m would be required on the eastern side of the existing Archbold Road reserve.

The basins are to be located clear of any proposed future road widening works.

Provision needs to be made in the site drainage design to account for the final landform over the quarry void. If the final landform is landscaped with no new impervious area, then the flows from the quarry void final landform can bypass the proposed detention basins.

Otherwise additional storage and treatment measures will be required for the quarry void area.

Details of the final landform bypass arrangements are to be provided. Also any upstream catchment areas that drain into the operational area should be diverted to bypass the proposed basins or included in the basin modeling and design.

The catchment' plan provided only shows the proposed site layout. An equivalent plan is required for existing conditions to confirm actual pre and post development areas draining to the Quarry and Quarry North Catchments.

The green waste and any other areas generating leachate are to be isolated from the site stormwater drainage system for all events up to and including the critical 100 year ARI design event.

Suitable bunding, storage and arrangements for alternative disposal to sewer or other legal discharge point is to be provided for stormwater from these areas.

Also, site stormwater from other areas shall be prevented from entering the green waste and other leachate generating areas.

This includes overflows from adjacent buildings roofs. Details of these measures are to be provided with the detail design.

Rainwater tank size should be varied in proportion to the building roof area while still providing a total storage of at least 40kL. The proportional allocation of storage maximises the rainwater capture efficiency.

The 20 year ARI design standard nominated for the site piped stormwater system is in accordance with Council's standards. Overland flow paths are to be provided to safely convey overland flows in excess of the design pipe system flows in accordance with Council's engineering requirements and standards.

Please note that the maximum velocity depth product for overland flows in accessible areas is 0.4mZIs. Where overland flow paths are located in the vicinity of proposed buildings, Council's freeboard requirements are to be satisfied. A failsafe check shall also be conducted to ensure that any adjoining floor levels are not inundated in the critical 100 year ARI design event

assume 50% blockage of the proposed pit and pipe system.

The proposed overland flow swale to the stormwater basins shall be sized for the critical 100 year ARI design flows with freeboard of at least 200mm. The overland flow swales shall be landscaped to prevent erosion and should include rock armouring and planting/grassing as required to be in keeping with the Water Sensitive Urban design objectives of the Precinct Plan. Details of the proposed overland flow swales and adjoining diversion banks are to be provided.

The proposed stormwater basins are to be fenced with approved man proof fencing to prevent unauthorised entry.

Energy dissipaters are to be provided at the outlets of the basins. The outlet from Basin 1 (northern basin) should be directed to the existing culvert under Archbold Road.

A 0.3m deep extended detention zone included is to be included the water quality model.

This extended detention zone is to be provided above the irrigation reuse volume and below the OSD volume and include an additional outlet for the water quality treatment function. The design of the basin is to be amended accordingly to be consistent with the water quality modeling.

The daily' time step for the MUSIC water quality modeling is not acceptable and needs to be changed to 6 minutes as part of the detail design as the smallest catchment time of concentration is in the order of 10 minutes.

The MUSIC model indicates that the nominal detention time for the wetlands is 1 hour or less. This does not allow sufficient hydraulic residence time to act effectively as a wetland and therefore the extended detention outlet is to be amended to provide appropriate detention times. The MUSIC model is to be amended accordingly.

The MUSIC model nominates CDS P1512 and P1012 gross pollutant traps. Certified designs are to be provided by the manufacturer confirming compliance with the Council's stormwater quality control policy requirements for each unit. The devices are to be fitted with oil baffles to control hydrocarbons and any accidental spills.

Inspection, maintenance and monitoring plans are to be provided with the detail design.

Section 6.3 table 6.1 of EA the pre-development roughness value should be 0.04 not the 0.02

[listed to be consistent with the modeling provided.](#)

## WATER MANAGEMENT

### Hydrogeological Assessment Report

Prior to issuing an Environment Protection License the proponent must submit to the Environment Protection Authority in writing, a revised hydrogeological assessment report prepared by a suitably qualified independent expert, with further information on:

- a) additional hydrogeological investigations;
- b) the existing information contained within appendices B and C of the documents referred to in condition 1; and
- c) any other relevant information.

The additional hydrogeological assessment report must include, but not be limited to, the following;

- i. drilling, utilizing rock coring methods, in suitable proximity to the pit :  
  
a minimum of two additional deep bores to a minimum depth of 150metres; and \* additional intermediate wells of 100 meters depth and screening of those wells over 12 metres;
- ii. hydraulic testing, utilizing packer or slug testing, within the bores in i) on the intersection of .  
--- fractured/pervious zones;
- iii. monitoring of water levels and water quality;
- iv. converting the bores into monitoring wells;
- v. . mapping the nature and extent of fractures and seepages on the quarry void (pit) floor and walls;
- vi. measurement of rainfall at the site, and any consequent the rise in pit water levels and pit pump out volumes; and
- vii. any other relevant investigations deemed necessary.

The revised hydrogeological assessment report must provide at a minimum:

. \* the results of investigations required in i;

- \* maps of all fractures, lithology and weathered zones within the pit;

a determination the rate of pit water rise due to groundwater ingress and seepage;

+ an assessment of the information required in i), ii) and iii); and,

based on the assessment in iv) a viewpoint as to:

the likelihood of a leachate plume into surrounding strata in the long term, assuming that a liner is not installed and a negative groundwater gradient is not maintained (and the ground water is allowed to rebound to its natural levels); and if there is a likelihood of a plume an estimate the extent of that plume.

#### Stormwater Management

Stormwater from all areas of the premises which has the potential to mobilise sediments and other material must be controlled and diverted through appropriate erosion and sediment control/pollution control measures or structures.

#### Water Pollution

Except as otherwise expressly provided in any Environment Protection license Condition for the project, the proponent must comply with section 120 of the Protection of the Environment Operations Act 1997. Section 120 of the Protection of the Environment Operations Act 1997 prohibits the pollution of waters.

#### SOIL, WATER AND LEACHATE MANAGEMENT PLAN

The Proponent shall prepare and implement a Soil, Water and Leachate Management Plan for the project to the satisfaction of the EPA. This plan must:

a) Be submitted to the EPA for approval prior to construction or preparation of the site commencing;

b) Be prepared by a suitably qualified and experienced expert;

c) Be prepared in consultation with the DECC/EPA add:

d) Include:

r A site water balance;

An erosion and sediment control plan;

\* A stormwater management scheme;

A surface water, groundwater and leachate monitoring program; and

A surface water, groundwater and leachate response plan.

#### LEACHATE MANAGEMENT SYSTEM

##### Leachate Collection System - Landfill

The application for an Environment Protection License by the proponent must also be accompanied by a report providing design details of the proposed leachate collection, conveyance, extraction, storage, treatment and disposal systems, including but not limited to:

a) a construction quality assurance (CQA) plan for the collection, conveyance and storage measures;

b) details of the proposed leachate pre-treatment system, including its capacity;

c) a program for the installation and commissioning of the systems; and

d) details of the applicant's trade waste agreement with Sydney Water Corporation.

e) No waste may be disposed of in the landfill until the proponent has constructed the proposed leachate collection system and the leachate treatment plant and has secured a trade waste agreement with Sydney Water Corporation for the disposal of treated leachate.

##### Leachate Management - Waste Processing / Resource Recovery Facility

The Proponent shall:

a) Ensure the floor of all areas used to store, sort and/or process waste is comprised of an

impervious surface;

b) Install a leachate barrier system on any surface to be used for the direct impoundment of leachate, such as composting and other outdoor areas;

c) Ensure that this leachate barrier system:

Has a re-compacted clay or modified soil layer that is at least 60 centimetres thick and has an in situ coefficient of permeability of less than  $1 \times 10^{-9}$  m/s, or some other suitable liner approved by the DECC; and Drains to the leachate dams at a minimum gradient of 5%;

d) Collect all leachate in the leachate dams to prevent it from escaping from the site to surface water, groundwater or subsoil.

e) Treat all water from waste storage or handling areas, including the organic waste storage area, or that has been contaminated by leachate, as leachate;

f) Ensure that the leachate dams:

1 Are capable of accepting a 1 in 10 year, 24 hour duration storm event without overflowing;

2 Have a re-compacted clay or modified soil layer that is at least 90 centimetres thick and an in situ coefficient of permeability of less than  $1 \times 10^{-1}$  m/s, or some other suitable liner approved by DECC;

3 Have sides with a slope of less than 1 vertical to 3 horizontal; and

4 Have a 0.5 metre freeboard at all times.

#### COMMUNITY INFORMATION AND COMPLAINTS

The proponent must operate and maintain a community information and complaints line which is accessible 24 hrs per day.

The development and implementation of a complaints management system that includes the following elements:

i. a hotline for receiving complaints about the development;

- ii. a commitment by the Applicant to:
- iii. investigate the source of the odour and/or dust;
- iv, take immediate action to reduce the odour and/or dust impact(s) to agreed levels; and
- v. contact the complainant about the action taken in response to the complaint
- vi. a record of complaints and Applicants responses or actions, readily accessible to the community and regulatory authorities, and
- vii. a system for providing feedback to the community

#### Water Balance Report

The site water balance must:

- a) Identify the source of all water collected or stored on the site, including rainfall, stormwater and groundwater:
- b) Include details of all water use on site and any discharges:
- c) Describe the measures that would be implemented to minimise water use on site.

#### Erosion and Sediment Control Plan

The erosion and sediment control plan must:

- a) Be consistent with the requirements in the latest version of Managing Urban Stormwater: Soils and Construction (Landcorn);
  - b) Identify the activities on site that could cause soil erosion and generate sediment; and c) Describe what measures would be implemented to;
- 1 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
  - 2 Maintain these structures over time.

The stormwater management scheme must:

a) Be consistent with the guidance in the latest version of Managing Urban Stormwater:

Council Handbook (DECC);

b) Erosion and sediment control works during construction must be consistent with the requirements of Landcorn's Managing Urban Storm water: Soils and Construction (2004).

Stormwater control dams must have sufficient capacity to cater for the 90th percentile 5 day rainfall event. Any pumped discharges from the dam(\$) must have a concentration of less than 50 mg/L (Total Suspended Solids), no discharges should contain water that has come in contact with waste, and total ammonia concentration must be less than 0.9 mg/L at pH 8.

c) Include the detailed plans for the proposed surface water management system. The surface water, groundwater, and leachate monitoring program and response plan The surface water, groundwater, and leachate monitoring program must:

a) Be generally consistent with the guidance in DECC's EPA Environmental Guidelines for Composting & Related Organics Processing Facilities; and

b) Include:

\* Baseline data;

\* Details of the proposed monitoring network; and

The parameters for testing and respective trigger levels for action under the surface water, groundwater and leachate response plan.

The surface water, groundwater and leachate response plan must:

a) Include a protocol for the investigation, notification and mitigation of any exceedences of the respective trigger levels; and

b) Describe the array of measures that could be implemented to respond to any surface or groundwater contamination that may be caused by any development.

### Waste Outputs

Except for the following, the Proponent shall dispose of all outputs produced from the waste processing and for resource recovery facility on site to the Landfill:

- a) Recyclables extracted and delivered off-site for resource recovery purposes;
- b) Industrial Waste and hazardous wastes extracted from the input waste stream and lawfully disposed of off-site; and
- c) Output waste derived materials approved for use under the Protection of the Environment Operations Act, 1997 and Regulations.

The following categories of organics must not be received at the facility:

- i. Organics that are contaminated by chemicals and / or pathogens that will not be rendered harmless by the process or that may constitute a health or environmental risk, including clinical and related waste and diseased carcasses.
- ii. Organics containing contaminants classified as hazardous wastes or industrial wastes under the Protection of the Environment (Operations) Act 1997.

### Storage & Handling - Waste and Products

The Proponent shall store all chemicals, fuels and oils used on site in an appropriately designed impervious bunded area that contains 110 percent of the largest container contained within the bund. These bunds shall be designed and installed in accordance with the requirements of all relevant Australian standards, and/or DECC's Environment Protection Manual Technical Bulletin

### Bunding and Spill Management.

### Windrow Management

The Proponent shall manage windrow composting operations in accordance with AS 4454-2003:

Composts, Soil Conditioners and Mulches, Appendix N, Best practice guidelines for Composting Systems, the EPA Environmental Guidelines for Composting & Related Organics Processing

Facilities, or other practices approved by the DECC/EPA.

#### Litter Control

The proponent shall:

- a) Implement suitable measures to prevent unnecessary proliferation of litter both on and off site; and
- b) Inspect and clear the site and surrounding area, of litter on a daily basis.

#### Pest, Vermin & Noxious Weed Management

The Proponent shall:

- a) Implement suitable measures to manage pests, vermin and declared noxious weeds on site;
- b) Inspect the site on a regular basis to ensure that these measures are working effectively, and that pests, vermin or noxious weeds are not present on site in sufficient numbers to pose an environmental hazard, or cause the loss of amenity in the surrounding area; and
- c) Perform ongoing monitoring of weed infestation on and adjoining the site.

Note: For the purposes of this condition, noxious weeds are those species subject to an order declared under the Noxious Weeds Act 1993.

#### Fire Management

The proponent shall:

- a) Prepare a Fire Response Plan for the site, which should include but not be limited to mitigation measures, and include the number of days material can be stored on site with the opportunity for the DECC to make comments and recommendations prior to construction commencing and the plan being implemented;
- b) Implement suitable measures to minimise the risk of fire on site;
- c) Extinguish any fires on site promptly; and

d) Maintain adequate fire-fighting capacity on site.

#### Rehabilitation and Closure

Upon cessation of waste operations, the Proponent shall decommission the project and rehabilitate the site to the satisfaction of the EPA.

The Proponent shall prepare and implement a Rehabilitation and Closure Plan to the satisfaction of the EPA. This plan must:

- a) Be prepared in consultation with DECC, SCA, Blacktown City Council by a suitably qualified and experienced expert;
- b) Define the objectives and criteria for rehabilitation and closure;
- c) Investigate options for the future use of the site;
- d) Describe the measures that would be implemented to achieve the specified objectives and criteria for the rehabilitation and closure; and
- e) Calculate the cost of implementing these measures; and describe how the performance of these measures would be monitored over time.

#### NOISE-EMISSIONS & HOURS OF OPERATION

##### Hours of Operation - Construction Phase

Construction hours should be limited to between the hours of 7:00am to 6:00pm Monday to Friday, 8:00am to 4:00pm Saturdays.

##### Hours of operation Operational Phase

Hours of operation of both landfill and waste processing/resource recovery facility are limited to between the hours of 7:00am to 6:00pm Monday to Friday and 8:00am to 4:00pm on Saturdays, Sundays and Public Holidays.

Any approval for the Facility, if issued, should restrict operations to daytime only, seven days per week, with extension of operations into evening and night-time hours permissible only after the provision of additional information to the satisfaction of DECC.

This additional information must include either a table of calculated Assessment Background Levels (ABLs) with an explanation for significant variations in the ABLs, in particular why background noise levels are as low as 32 to 34 dBA some days, to the satisfaction of DECC, or, alternatively, re-measured background noise levels, tabulated ABLs and calculated RBLs are to be provided, to the satisfaction of DECC. Wind direction is to be provided together with wind speed, for the period of ambient noise monitoring, to assess the affect of wind direction on background noise levels. If the additional information indicates lower RBLs than presented in the NIA, then revised predicted noise levels, incorporating additional feasible and reasonable mitigation measures if necessary, are to be provided. If possible, measured noise levels from operation of the facility are to be incorporated in any revised noise level predictions.

#### Noise, Blasting and Vibration

Air blasting and ground vibration must be within limits in the ANZECC guidelines, in particular 'Technical basis for guidelines to minimise annoyance due to blasting overpressure and ground vibration, September 1990.'

a) Noise from the development is to be measured at the most affected point or within the residential boundary, or at the most affected point within 30 metres of a dwelling (rural situations) where the dwelling is more than 30 metres from the boundary, to determine compliance with the LAeq minute) noise limits. Where it can be demonstrated that direct measurement of noise from the project is impractical, the DECC 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.

b) The noise emission limits identified apply under meteorological conditions of: Wind speed up to 3m/s at 10 metres above ground level; or Temperature inversion conditions of up to 30C/100m and wind speed up to 2m/s at 10 metres above the ground.

The position of the boundary Bunds as stipulated in the EA is to be appropriately demonstrated, by submission of an appropriate survey plan.

#### Traffic Movements

The proponent should ensure that all truck movements within the Landfill and Resource Recovery Facility only occur within the hours of operation.

#### AIR EMISSIONS

##### Air Quality

Prior to the issue of an Environment Protection License, the proponent must develop, in consultation with the DECC (and to the satisfaction of the DG of Planning), an air quality management plan to be incorporated into the Operational Environmental Management Plan. The plan shall include, but not be limited to:

- a) The number and location of continuous monitoring points for fine particulates (PM<sub>10</sub>) during each stage of works, ensuring sufficient representation of the relevant sensitive receptors at each stage of the proposed works;
- b) The development and identification of PM<sub>10</sub> concentration trigger levels at which:
  - viii. Dust management actions must be taken, and specification of the relevant actions; and
  - ix. Works at the site must cease.

Note: The location and operation of monitoring stations must be conducted in accordance with the requirements of the DECC's Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales,

- c) A list of key operational measures to be implemented to minimise odour impacts. For example, some of the following measures may be appropriate:
  - x. Ensuring that no more than 20,000 tonnes of garden wastes are stockpiled on site at any one time:

xi. Any non complying putrescible wastes received at the facility to be quarantined and disposed of at the appropriate off site facility within 24 hours.

#### Annual Audit

The proponent must provide an annual audit of the design, operation and odour management practices of the operation with the primary aim of identifying improvements that lead to attainment of best practice in regard to minimising odour emitted from the premises. The proponent must implement all reasonable audit recommendations. The scope of such an audit to be regularly reviewed in consultation with the DECC.

#### Odour Emissions

The DECC may require the proponent to conduct assessments or investigations that identify the extent of any potentially offensive odour emissions beyond the boundary of the premises.

The scope of such investigations to be agreed to by the DECC and may include revised air dispersion modeling based on actual site emissions data, well designed field investigations according to German standards, and, or use of field olfactometers, and analysis of detailed complaints records and on-site meteorological data, Except as otherwise expressly provided in any Environment protection license condition for the project, the Proponent must comply with section 129 of the Protection of the Environment Operations Act 1997. Section 129 of the Protection of the Environment Operations Act 1997 provides that the licensee must not cause or permit the emission of any offensive odour from the premises.

#### Dust & Particulate Matter

The Proponent must maintain the premises in a condition which prevents the emission of dust. All operations and activities occurring at the premises must be carried out in a manner that will minimise the emission of dust from the premises. The DECC may require the proponent to conduct dust monitoring to identify the extent and any potential for dust emission beyond the boundary of the Premises.

For each ambient monitoring point specified below (by a point number), the proponent must monitor (by sampling and obtaining results by analysis) the concentration of each pollutant specified in the table below in Column 1. The licensee must use the sampling method, units of measure, and sample at the frequency, specified opposite in the other columns:

#### 1 Pollutant measure

a Particulate Matter (PMIO) ug/m<sup>3</sup> Continuous AM-22

#### Monitoring meteorological parameters

The Proponent will be required to install a weather station to monitor parameters in the table below, the proponent must monitor (by sampling and obtaining results by analysis) the parameters specified in Column 1. The applicant must use the sampling method, units of measure, averaging period and sample at the frequency, specified opposite in the other columns.

### BIODIVERSITY AND ABORIGINAL HERITAGE

#### Vegetation Management

Cumberland Plain Woodland at the Premises must not be disturbed.

Hollow bearing trees at the premises must not be removed without the written consent of Blacktown City Council.

Clean Up Notices issued by the Environment Protection Authority to the Proponent in relation to creek rehabilitation and restatement work within Lot 2 or DP 26221 3 must be complied with at all times.

#### Aboriginal & Cultural Heritage

Should any Aboriginal cultural artefact matter be detected on site, the Proponent must ensure that work cease immediately and the DECC and the Local Aboriginal Land Council be contacted prior to work commencing again.

### PRIOR TO CONSTRUCTION CERTIFICATE

#### (ENGINEERING MATTERS)

## Definitions

Where any consent requires both engineering and building works to be undertaken, a separate Construction Certificate may be issued for each category of works i.e.s a separate construction Certificate for the Engineering works nominated in "Prior to Construction Certificate (Engineering)" and a separate Construction Certificate for all building works relating to the erection and fit-out of a structure. This excludes all works on existing public roads significant enough to warrant separate engineering approval pursuant to the Roads Act 1993.

## Compliance with the Eastern Creek Precinct Plan (Eastern Precinct - Stage 3)

Prior to the issue of any consent by the Minister, an Environmental Performance Statement and an addendum to the Environmental Assessment Report prepared by ERM, dated Decernber.2008, is to be submitted to the Consent Authority demonstrating the consideration of alternative fact each building will at least have a 23KL tank.

Details of the proposed animal proof measures to be implemented are to be submitted to the Consent Authority prior to the issue of any approval. Will give details of the cyclone wire fencing Hutchinson

## Scope of Consent

1. This consent relates to the architectural drawings details submitted with the Application, subject to compliance with any other conditions of this consent.
2. The area of the land identified as non-operational land is not to be used for any purpose without the prior separate approval of the Consent Authority.

This Consent is subject to compliance with, and implementation (at the relevant stages, e.g. Pre Construction, During Construction, Pre Occupation, Operational) of the recommendations provided in Light Horse Business Centre - Environmental Assessment Report (Volume 1 & 2) (Report No.: 0088621) prepared by Environmental Resources Management Australia dated December 2008. Noted

PRIOR TO CONSTRUCTION CERTIFICATE

(PLANNING MATTERS)

Necessary Plan Amendments

Plan amendments, as shown in red on the attached site plan, shall be made in order to satisfactorily control the development and adequately address issues in relation to the amenity of surrounding residential areas, such as noise and air quality:

Provision shall be made for a temporary stockpile storage area for after hours deliveries in the vacant area adjacent to the west berm at the southern boundary of the area of operations, to further reduce any potential adverse noise and air quality impacts during night-time operations.

Details of the hardstand to be provided in this temporary stockpile area are also to be provided to the certifying authority and shown on the Construction Certificate drawings.

A gate shall be provided at the location shown in order to restrict after-hours activity and vehicular movement to the designated after hours delivery area only (as shown in red on the site plan) and prevent after hours use of the Facility.

The Applicant shall, at a minimum, indicate the provision of, in close proximity to the proposed office buildings, at least 50 marked car spaces on site for the proposed number of staff, with at least 2 percent or part thereof of those spaces provided for disabled drivers, clearly marked and signposted.

Additional car spaces are also to be provided on site for the anticipated number of visitors or contractors to the site during operations. Suitable provision is also to be made for truck parking facilities on site.

#### General Services

In order to ensure suitable provision of services, Service Authority Clearances from Sydney Water, Integral Energy and the relevant telecommunications provider must be obtained prior to the issue of any Construction Certificate/Occupation Certificate for the approved development..Agreed

Prior to the issue of any Construction Certificate, all aspects of the building design shall comply with the applicable performance requirements of the Building Code of Australia so as to achieve and maintain acceptable standards of structural sufficiency, safety (including fire safety), health and amenity for the ongoing benefit of the community. Compliance..+~. with the;..performance requirements can only be achieved by :

(a) Complying with the deemed to satisfy provisions, or

(b) Formulating an alternative solution which :-

- (i) complies with the performance requirements, or
- (ii) is shown to be at least equivalent to the deemed to satisfy provision, or
- (iii) A combination of (a) and (b).

A preliminary assessment of the plans submitted with the application has disclosed that the following design and/or construction issues need to be addressed prior to the issue of any Construction Certificate to ensure compliance with the Building Code of Australia:

(a) Sections C, D, E, F and J

For Council to issue the Construction Certificate a separate application must be made on the prescribed form complete with detailed plans and specifications. You are further advised that Council does not permit the private certification of works on existing public roads or reserves Council property or any property under the care and control of Council. In this regard Council will not accept a Construction or Compliance Certificate from a Private Certifier for any works on Old Wallgrove Road, Eastern Creek.

ROADS ACT ONLY Prior to the issue of any Construction Certificate for the approved development it is necessary to obtain the separate approval of Council pursuant to the Roads Act 1993 for all relevant civil works on existing public roads as nominated in "Prior to Construction Certificate (Engineering)" and/or "Scope of Engineering Works and other sections of this consent " The application for this Engineering Approval must be made on the prescribed form and is to include detailed design plans and specifications prepared by a Chartered Professional Engineer or suitably experienced Registered . Surveyor

#### Design and Works Specifications

23. All engineering works required by Scope of Engineering Works and other sections of this consent must be designed and undertaken in accordance with the relevant aspects of the following documents except as otherwise authorised by this consent:

(a) Blacktown City Council's Works Specification - Civil (Current Version)

(b) Blacktown City Council's Engineering Guide for Development (Current Version)

(c) Blacktown City Council Development Control Plan (Current Version)

(d) Blacktown City Council Soil Erosion and Sediment Control Policy (Current Version)

(e) Blacktown City Council On Site Detention General Guidelines and Checklist-

(f) Upper Parramatta River Catchment Trust ,On Site Stormwater Detention Handbook Third Edition December 1999.

(g) Blacktown City Council Stormwater Quality Control Policy

Design plans, calculations and other supporting documentations prepared in accordance with the above requirements MUST be submitted to Council with any application for Construction Certificate, Road Act 1993 of Local Government Act 1993 Approval.

Any Construction Certificates issued by Private Certifiers must also be accompanied by the above documentations.

NOTE: Any variations from these design requirements must be separately approved by Council.

#### Payment of Engineering Fees

If it is the applicant's intention to engage Council to undertake the checking of the engineering design plans and the issue of the Construction Certificate for the engineering works nominated in the "Prior to Construction Certificate (Engineering)" section, it will be necessary to submit the relevant engineering plans to obtain a quote for this service.

A verbal quote will be provided within 48 hours based upon Council's Goods and Services Pricing Schedule. this will be confirmed in writing-

If it is the applicant's intention to engage Blacktown City Council to undertake Construction inspections and the issue of the Compliance Certificate for engineering works, it will be necessary to contact Council's Development Services Engineering for a quote.

A verbal quote will be provided within 48 hours based upon Council's Goods and Services Pricing Schedule. This will also be confirmed in writing.

### Other Fees and Security Deposits

In conjunction with the civil engineering works required to be constructed as part of this development you will be required to submit to Council security bond(s) for maintenance and/or path paving works as well as a contribution for the final asphaltic concrete (AC) surfacing of the roadwork. These matters are individually addressed within the Consent conditions.

Prior to release of any bond securities held by Council for civil engineering works payment of a bond release inspection fee in accordance with Council's Goods and Services Pricing Schedule must be made.

### Roadworks

Road pavements are to be designed by a Professional Civil Engineer in accordance with the current version of Council's Engineering Guide for Developments and based upon soil tests performed by a registered NATA Soils Laboratory and the traffic loadings listed in "Scope of Engineering Works" of this consent. The pavement designs must be lodged with Council for approval prior to issue of the Construction Certificate for Engineering works.

A Traffic Management / Control Plan shall be included as part of the Roads Act Approval for road and drainage works to be carried out within public road reserves in strict compliance with the requirements of current Australian Standard 1742.3 (Traffic Control Devices for Works on Roads) and current RTA Traffic Control at Work Sites manual. Any persons preparing such traffic control layout plans shall be RTA accredited.

A Road Opening Occupancy License is required from the relevant Road Authorities (Council or RTA) for all works on existing public roads. The application for this license must be accompanied by Traffic Management / Control Plans.

### Other Matters

No construction preparatory work (including tree or vegetation removal, ground clearing, excavation, filling, and the like) shall be undertaken on the land prior to a valid Construction Certificate being issued for the construction works.

Any future substation or other utility installation required to service the approved subdivision/development shall not under any circumstances be sited on future or existing

Council land, including road reservations and/or public reserves. Any proposal to locate a proposed substation or other utility installation on Council land shall be negotiated with and fully endorsed by the relevant Council Directorates.

Details of the Stormwater Design are to be submitted to and approved by Blacktown City Council prior to the issue of any Construction Certificate.

#### Asset Management

A detailed estimate of the cost of civil engineering work must be submitted to Council prior to the issue of the Construction Certificate for engineering works. If engineering works are of a value greater than \$25,000, documentary proof of payment of the levy required by the Building and Construction Industry Long Service Payments Act must be provided to Council prior to any approval of engineering plans either by Council or an appropriately accredited certifier. Hutchison Have this factored in there preliminary's.

#### Other Approvals/Clearances/Adjoining Owners Permission

Written evidence shall be obtained from the Roads & Traffic Authority indicating compliance with its requirements, including the payment of any necessary supervision fees. A copy of any such permission shall accompany any Construction Certificate.

Sydney Water Corporation approval in the form of appropriately stamped Construction Certificate Plans is to be obtained to verify that the proposed works meets the Corporation's requirements concerning drainage connections into stormwater channels basins , and ancillary works relating to water or sewer mains-

49. Written permission from the affected property owners shall be obtained to:

- (a) discharge stormwater onto adjoining land;
- (b) carry out works on adjoining land; and
- (e) drain the site across adjoining land;

prior to the issue of any Construction Certificate. A copy of any such permission and evidence of the creation of necessary easements must be submitted to Council prior to the issue of any Construction Certificates.

Prior to commencement of construction of footway crossings a clearance shall be obtained from the relevant telecommunications carriers and Integral Energy that all necessary ducts have been provided under the proposed crossing.

#### Work Adjacent to Easements

Foundations adjacent to easements shall not place a loading on the pipe within the easement. Foundations shall be located at:

- (a) the depth of the invert of the existing pipeline, and/or
- (b) the depth of the invert of the proposed pipeline-

All development shall be kept clear of the drainage easement(s) on the land, and no alteration to the existing surface levels within the easement(s) is to be made.

Pier and beam style construction shall be used adjacent to easements to the depth of the invert of the proposed or existing pipeline. A Registered Engineer (NPER) shall certify that this condition has been satisfied.

#### Ancillary Works

Ancillary works shall be undertaken at no cost to Council to make the engineering works required by this consent effective. Such works shall include but are not limited to the following:

- (a) the relocation of underground services where required by the positioning of new drainage and road infrastructure;
- (b) the relocation of aboveground power and telephone services; and
- (c) the matching of new infrastructure into existing or future designed infrastructure.

#### Street Furniture

In the event that the RTA requires upgrading of the intersection between Old Wallgrove Road and the Quarry Road (ROC) in association with the traffic signals required to be provided at this intersection on safety grounds, a notation is to be placed on the Engineering Construction Plans "that all necessary street furniture e-g. light poles, street name poles and bus shelters will be black powder coated to the satisfaction of Blacktown City Council and that these light poles

will comply with Council's specifications".

Toilet facilities shall be provided on the land prior to construction commencing and throughout the duration of construction at the rate of 1 toilet for every 20 persons or part thereof employed at the site.

A sign is to be erected and maintained in a prominent position on the site in accordance with Clause 98-A (2) of the Environmental Planning and Assessment Regulations 2000 indicating;

(a) the name, address and telephone number of the principal certifying authority for the work, and

(b) the name of the principal contractor (if any) for the building work and a telephone number on which that person may be contacted outside working hours, and

(c) stating that unauthorised entry to the work site is prohibited. –

This condition does not apply to:

(a) building work carried out inside an existing building, or

(b) building work carried out on premises that are to be occupied continuously (both during and outside working hours) while the work is being carried out.

Should the Development work:

(a) be likely to cause pedestrian or vehicular traffic in a public place to be obstructed or rendered inconvenient, or

(b) involve the enclosure of a public place, a hoarding or protective barrier shall, be erected between the work site and the public place. Such hoarding or barrier shall be designed and erected in accordance with Council's current Local Approvals Policy under the Local Government Act 1993.

Where necessary, an awning shall be erected, sufficient to prevent any substance from, or in connection with, the work falling into the public place.

The hoarding, awning or protective barrier shall be effectively illuminated between sunset and

sunrise where it may be hazardous to any person in the public place.

Building and construction materials, plant, equipment and the like shall not be placed or stored at any time on Council's footpath, roadway or any public place. ,

Soil erosion and sediment control measures shall be provided in accordance with Council's Soil Erosion and Sediment Control Policy.

All soil erosion and sedimentation control measures indicated in the documentation accompanying the Construction Certificate shall be installed prior to the commencement of development works., and shall be maintained throughout the development works.

A single vehicle/plant access to the land shall be provided to minimise ground disturbance and transport of soil onto any public place. Such access shall be provided in accordance with the requirements of Appendix "F" of Council's Soil Erosion and Sediment Control Policy. Single sized 40mm or larger aggregate placed 150mm deep, and extending from the street kerb/road shoulder to the land, shall be provided as a minimum.

Any excavation and/or backfilling associated with the development shall be executed safely and in accordance with appropriate professional standards, with any excavation properly guarded and protected to prevent such work being dangerous to life or property.

Should any excavation associated with the development extend below the level of the base of the footings of a building or any other structure on any adjoining allotment of land (including a public place), that building or structure:

- (a) shall be preserved and protected from damage, and
- (b) if necessary, shall be underpinned and supported in accordance with structural design details accompanying the Construction Certificate, and
- (c) the owner(s) of which shall, at least, 7 days before any such excavation or supporting work commences, be given notice of such intention and particulars of the excavation or supporting work.

#### Notification to Council

The person having the benefit of this consent shall, at least 2 days prior to work commencing on site, submit to Council a notice under Clauses 135 and 136 of the Environmental Planning

and Assessment Regulation 2000, indicating details of the appointed Principal, Certifying Authority and the date construction work is proposed to commence.

#### Notice of Work Commencement

At least 5 full working days written notice shall be given of the commencement of engineering works. Such notice shall be accompanied by evidence of the contractor's Public Liability and Workers Compensation Insurances. For Public Liability insurance this should be a minimum of \$10,000,000. Hutchinson

80 Prior to the commencement of any earthworks, and after the road centrelines have been pegged and/or permanently marked, the site shall be inspected by Council's representative or an appropriately accredited private certifier and the applicant's representative to identify and appropriately mark:-

(i) The trees to be retained.

(ii) All areas to be left undisturbed and cordoned off.

#### Sydney Water Authorisation

Sydney Water Corporation's approval, in the form of appropriately stamped Construction Certificate plans, shall be obtained and furnished to the Principal Certifying Authority to verify that the development meets the Corporation's requirements concerning the relationship of the development to any water mains, sewers or stormwater channels..

OR

The approved plans are to be submitted to a Sydney Water Customer Centre or Quick Check Agent, to determine whether the development will affect Sydney Water's sewer and water mains, stormwater drains and/or easements and if further requirements need to be met. The plans must be appropriately stamped and all amended plans will require restamping. For Quick Check Agent details, please refer to the "Building Plumbing and Developing" Section of the website [w.sydneywater.com.au](http://w.sydneywater.com.au), then follow the "Developing Your Land" link or telephone "1 3 20 92 for assistance.

#### Roads and Traffic Authority

Written evidence shall be obtained from the Roads & Traffic Authority indicating compliance

with its requirements, including the payment of any necessary works supervision fees. A copy of such approval shall be lodged with Council.

Structural details of the nominated building component(s), prepared and/or certified by a professional engineer or other appropriately qualified person, shall be lodged with Council prior to commencing or erecting that portion of the approved development.

#### Nominated Component

(a) Footing piers

(b) Footing system

(c) Floor slab

(d) Structural concrete

(g) Structural steelwork

(h) Retaining walls

#### DURING CONSTRUCTION WORKS

##### Building Code of Australia Compliance

All building work shall be carried out in accordance with the provisions of the Building Code of Australia.

The building(s) shall be set out by a registered surveyor and a survey report lodged with the Principal Certifying Authority to verify the approved position of each structure in relation to the property boundaries.

##### Nuisance Control

Any objectionable noise, dust, concussion, vibration or other emission from the development works shall not exceed the limit prescribed in the Protection of the Environment Operations Act 1997.

The hours of any offensive noise-generating development works shall be limited to between 7.00am to 6.00pm, Mondays to Fridays; 8.00am to 1 pm, Saturdays: and no such work to be

undertaken at any time on Sundays or public holidays.

Construction work on all buildings shall not occur on Saturdays and Sundays on weekends adjacent to a public holiday.

#### Waste Control

The waste material sorting, storage and re-use requirements of the approved Waste Management Plan and Council's Site Waste Management and Minimisation Development Control Plan shall be implemented during the course of development works.

#### Construction Inspections

The person having the benefit of this consent is required to notify the Principal Contractor for the building construction project that various mandatory and critical stage inspections must be conducted by an accredited certifier, and may include inspections (where applicable):

- (a) At the commencement of the building work; and
- (b) After excavation for, and prior to placement of, any footings; and
- (c) Prior to pouring any in-situ reinforced concrete building element; and
- (d) Prior to the covering of the framework for any floor, wall roof or other building element, and prior to covering waterproofing in any wet areas; and
- (e) Prior to covering waterproofing in any wet areas (but for a minimum of 10% of rooms with wet areas in any class 2,3 or 4 building); and
- (f) Prior to covering any stormwater drainage connections; and
- (g) After the building work has been completed and prior to any Occupation Certificate being issued in relation to the building-

The critical stage inspection "(g)" must be carried out by the Principal Certifying Authority.

Any inspection conducted by an accredited certifier other than the nominated PCA for the project must be verified by way of a Compliance Certificate issued for the relevant works.

Note: Failure to ensure the relevant inspections are conducted will preclude the issue of an

### Occupation Certificate.

#### Compaction Requirements

81. In relation to any required road works on the right of carriageway or its intersection with Old Wallgrove Road, land shall be filled where necessary. All fill including existing fill shall be compacted in accordance with the Council's 'Works Specification - Civil (current version)'. A compaction certificate shall be obtained from a Registered Engineer. (NPER) verifying that the correct compaction requirements have been met.

Removal of any unsuitable soil and/or fill material and its replacement with suitable material compacted in accordance with the current version of Council's "Works Specification - Civil ", Special attention is drawn to the following requirements of Council's Works Specification - Civil (Current Version):

- (a) Submission of compaction certificates for fill within road reserves.
- (b) Submission of compaction certificates for road sub-grade.
- (c) Submission of compaction certificates for road pavement materials (sub-base and base courses).
- (d) The submission of 2 contour lot fill diagrams and lot fill compaction certificates. A Restriction as to User with Council's standard wording must be placed on filled lots.
- (e) Compliance Certificates from road material suppliers.

#### Tree Protection

Existing vegetation shall be left undisturbed except where roads, drainage lines and filling and/or building works are proposed.

Prior to the commencement of any earthworks, and after the road centre lines have been pegged and/or permanently marked, the site shall be inspected by Council's representative or an appropriately accredited private certifier and the applicant's representative to identify and appropriately mark;-

- (i) The trees to be retained.

(ii) All areas to be left undisturbed and cordoned off.

There is to be no storage of materials stockpiling of excavated material or parking of machinery within the drip line of the crown of any trees to be retained.

Prior to the removal of any branches' of any trees which are to be retained, Council is to be notified at least 24 hours prior to any activity and the work is to be undertaken by a qualified Arborist.

#### Maintenance of Soil Erosion Measures

Soil erosion and sediment control measures shall be implemented in accordance with Council's. Soil Erosion and Sediment Control Policy.

Re-vegetation must be applied to disturbed areas as soon as practical after completion of earthworks and must be established prior to release of the maintenance security. All open drains must be turfed.

All required soil erosion and sediment control measures are to be maintained during the entire construction period until disturbed areas are restored by turfing paving or revegetation. Infringement Notices incurring a monetary penalty may be issued by Council where the maintenance of measures is inadequate.

#### Inspections of Works

In relation to any required road works as a part of the required provision of traffic signals to be approved by the RTA at the intersection of the right of carriageway and Old Wallgrove Road, inspection Compliance Certificates issued by a Registered Engineer (NPER) or Registered Surveyor or Compliance Certificates issued by an accredited certifier, under Part A of Environmental Planning and Assessment Act 7979 as amended, are to be issued for works covered by the Construction Certificate for engineering works at the completion of the following mandatory inspection stages;

(i) Soil Erosion and Sediment Control

(a) Implementation of erosion and sediment control

(b) Revegetation of disturbed areas

(c) Construction of major controls (i.e. gabions mattresses shotcreting etc)

(d) Removal of: sediment basins/ fencing etc.

(e) internal sediment/ pollution control devices

(f) Final Inspection

(ii) Traffic Control

(a) implementation of traffic control

(b) Maintenance of traffic control during works

(c) Removal of traffic control

(iii) Construction of Drainage works (including inter-allotment)

(a) Pipes before backfilling including trench excavation and bedding

(b) Sand Backfilling

(c) Final pipe inspection

(d) Pit bases and headwall aprons '

(e) Pit Walls/ wingwalls<sup>1</sup> headwalls

(f) Concrete pit tops

(g) Connection to existing system

(h) Tailout works

(i) Final Inspection

(iv) Construction of Road Pavement

(a) Boxing out

- (b)Sub-grade roller test
- (c)Subsoil drainage
- (d)Sandstone roller test layer ?
- (e)Sandstone roller test layer 2
- (f)Kerb pre-laying
- (g)Kerb during laying including provision of roof-water outlets
- (h)Sandstone depth
- (i)Pavement profiles
- (j)DGB depths and roller tests
- (k)Wearing Course
- (l)Kerb final
- (m)Concrete tests
- (n)Formwork concrete pavements
- (o)Final inspection
- (v) Provision of Street Furniture
- (a)Street Furniture (including street signs guideposts guardrail etc)
- (b)Erection of fencing adjoining public/ drainage reserves
- (vi) Footpath Works
- (a)Footpath Trimming and/or turfing (to ensure 4% fall)
- (b)Pathway construction (cycle/ link pathways)

(c) Path-paving construction

(d) Service Adjustments

(e) Final Inspection

(vii) Construction of on-site detention system

(a) Steel and Formwork for tank/ HED control pit

(b) Completion of HED control pit

(c) Pit formwork

(d) Pipes upstream1 downstream of HED control pit before backfilling

(e) Completion of OSD system

(viii) Stormwater Quality Control

(a) Installation of Stormwater Quality Control devices

(b) Final Inspection

(ix) Traffic Control

(a) Implementation of traffic control

(b) Maintenance of traffic control during works

(x) Council Inspection of Drainage Structures (pipelines and pits)

(a) All road drainage

(xi) Final overall Inspections

(a) Preliminary overall final inspection

(b) Overall final inspection

ALTERNATIVELY, one comprehensive inspection Certificate or Compliance certificate may be

issued to include all of the above-mentioned stages of construction.

Inspection of the works required pursuant to the engineering approval issued under the Roads Act 1993 must be made by Council's Development Overseers who can be contacted on 9839 9718 between 7am - 8am and 12.30pm - 1.30pm. A site inspection is required prior to commencement of work. A minimum twenty-four (24) hours notice must be given prior to any required inspection. A schedule of mandatory inspections are listed in Council's Works Specification - Civil (current version).

#### Public Safety

The applicant is advised that all works undertaken in a public place are to be maintained in a safe condition at all times. Council may at any time and without prior notification make safe any such works Council considers to be unsafe and recover all reasonable costs incurred from the applicant.

#### Site Security

Chain wire gates and security fencing must be provided around the site in order to prevent unauthorised access and dumping of rubbish.

#### Other Necessary Approvals

In relation to matters concerning the Archaeological Survey, should any archaeological material be uncovered during construction activities on any location within the proposed development then all works should cease immediately and representatives of the DECC and a member of the Western Sydney Aboriginal Stakeholder Groups is to be contacted-

#### Traffic Control Plan

Where amendments to the approved Traffic Control Plan are required, a new plan shall be prepared and approved prior to implementation. Such plans shall be prepared in strict compliance with the requirements of the current version of Australian Standard 1742.3 (Traffic Control Device for works on Roads) as well as the current version of the RTA Traffic Control at Work Site manual. Any person preparing such Traffic Control plans shall have the relevant RTA accreditation, which must be stated on the submitted plans.

#### Powder Coated Furniture

Where the conditions of this consent permit the installation of powder coated furniture (i.e. street lighting poles, bus shelters, rubbish bins, seats or any other items of street furniture), a certificate from the manufacturers shall be provided to Council confirming that the nominated powder coated items have been prepared and coated in accordance with Australian Standard ASJNZ 4506-2005 (service condition category 3). This certificate must be no more than 3 months old and shall be provided to Council prior to the installation of the relevant items of street furniture. Any items of street furniture not so certified shall be removed and replaced at no cost to Council with items appropriately certified.

#### Other Matters

intersection of Old Wallgrove Road and the existing right-of-carriageway to be upgraded with Traffic Signals approved by the New South Wales Roads & Traffic Authority,

All required car parking spaces shall be provided on site

All internal roads, including the roads to the quarry, and in the quarry void, and hardstand areas, are to be bitumen sealed.

#### Road Damage

The cost of repairing any damage caused to Council's assets in the vicinity of the land as a result of the development works shall be met in full by the applicant/developer.

Note: Should the cost of damage repair work not exceed the road maintenance bond Council will automatically call up the bond to recover its costs. Should the repair costs exceed the bond amount a separate invoice will be issued.

#### Compliance with Conditions

An Occupation Certificate shall not be issued until such time as all conditions of this consent, other than "Operational" conditions, have been satisfied. The use or occupation of the development prior to compliance with all conditions of consent, other than "Operational" conditions, may render the applicant/developer liable to legal - proceedings.

Prior to occupation/use of a new building; it is necessary to obtain an Occupation Certificate from the principal certifying authority in accordance with the provisions of Section 109H of the

Environmental Planning & Assessment Act 1979.

#### Service Authorities

A final written clearance shall be obtained from Sydney Water Corporation, Integral Energy and Telstra (or any other recognised communications carrier) if such clearance (in the form of a Section 73 Certificate, Notification of Arrangement, etc) has not previously been issued.

#### Temporary Facilities Removal

Any hoarding or similar barrier erected to protect a public place shall be removed from the land and/or public place.

Any temporary -toilet facilities provided .during construction works shall be appropriately dismantled, disconnected and removed from the land.

Any temporary soil erosion control measure installed during development works shall be removed and other permanent measures required by Council's Soil Erosion Control Policy shall be provided.

Any temporary builder's sign or other site information sign shall be removed from the land.

Any temporary site access provided for the purpose of development works shall be removed and the kerb and gutter and/or previous roadworks reinstated in a manner satisfactory to Council. Should the reinstatement involve the provision of a new vehicular crossing, layback, kerb and gutter or road shoulder works the separate approval of Council's Maintenance Section shall be obtained (and any appropriate fees paid) prior to such works commencing-

#### Fire Safety Certificate

A final fire safety certificate complying with Clause 153 of the Environmental Planning and Assessment Regulation 2000 shall be issued prior to the use or change of use of the building, except in the case of any Class I a and Class 10 building(s).

#### Landscaping Car Parking

All landscaping, car parking, lighting, fencing, signage, bitumen sealed hardstand and internal roads, including the sealed 'roads to the quarry, and in the quarry void, shall be completed in accordance with approved plans as amended by conditions of this consent,. All turfed areas

shall be finished level with adjoining surfaces and graded to approved points of drainage discharge.

Entrance/exit points are to be clearly signposted and visible from the street and the site at all times.

Access and parking for people with disabilities shall be provided in accordance with Australian Standard 2890.1.

All required internal roads and car parking spaces shall be line-marked, sealed with a hard standing, all-weather material to a standard suitable for the intended purpose.

#### Fee Payment

Any fee payable to Council as part of a Construction, Compliance or Occupation Certificate or inspection associated with the development (including the registration of privately issued certificates) shall be paid in full.

#### Survey Certificate Works as Executed plans

A works-as-executed plan (to a standard suitable for microfilming) under the hand of a Chartered Professional Engineer or a Registered Surveyor must be lodged with Blacktown City Council when the engineering works are completed. The works as executed plan must confirm that the On Site Detention system identification plate has been installed in accordance with the Upper Parramatta River Catchment Trust Guidelines.

Upon completion of the works a certificate from a Registered Surveyor -must be obtained and submitted to Council verifying the finished floor levels for the lots have been achieved upon completion of the construction of the floor, All levels must be to Australian Height Datum

Upon completion of the works a certificate from a Registered Surveyor must be obtained and submitted to Council verifying the finished surface levels for the lot@) have been maintained in accordance with those established at the time of creation of the Jot.

A certificate from a Chartered Professional Engineer/Registered Surveyor must be obtained and submitted to Council verifying that the on-site detention system as constructed will function hydraulically in accordance with the approved design plans.

A certificate from a Registered Engineer (NPER) must be lodged with Council verifying that the

structures associated with the on-site detention systems have been constructed to withstand all loads likely to be imposed on them during their lifetime.

Certificate shall be submitted by a Registered Surveyor indicating that all pipelines and associated structures lie wholly within any easements required by this consent. W3. Written evidence is to be obtained from the Roads & Traffic Authority indicating compliance with its requirements including the payment of any necessary works supervision fees.

The submission to Council of all Inspection/Compliance Certificates required by the "During Construction (Engineering)" Section of this consent.

#### Easements/Restrictions/Positive Covenants

Restrictions and positive covenants must be provided over the on-site detention storage areas and outlet works.

Restrictions and positive covenants must be provided over the overland flow-path.

Restrictions and positive covenants must be provided over the Stormwater Quality Control devices and outlet works.

Any easement(s) or restriction(s) required by this consent must nominate Blacktown City Council as the authority to release vary or modify the easement(s) or restriction(s). The form of easement or restriction created as a result of this consent must be in accordance with the following:

(a) Blacktown City Council's standard recitals for Terms of Easements and Restrictions (Current Version).

(b) The standard format for easements and restrictions as accepted by the Land and Property information Office.

#### Inspections

Any additional Council inspections beyond the scope of any Compliance Certificate package and needed to verify full compliance with the terms of this consent will be charged at the individual inspection rate nominated in Council's Fees and Charges Schedule. –

All road stormwater drainage structures (pipelines and pits) must be inspected by a CCTV in

accordance with Council's current Works Specification Civil. CCTV reports must be submitted to Council in the form of VHS video tape or DVD of the inspection video, a hard copy printout of the SEWRAT (or equivalent) report, and a CCTV certified statement in accordance with section 6.8 of Council's Works Specification Civil and that any defects identified by this inspection have been rectified.

#### Other Matters

Retaining wall(s) and/or other effective methods to retain excavated or filled ground (other than those sites works which may be Exempt Development under the Blacktown Local Environmental Plan), together with any associated groundwater drainage system, shall be constructed and/or provided in accordance with the plans attached to the Construction Certificate.

#### General

No goods, materials or trade waste shall be stored at any time outside the building other than in approved garbage receptacles.

Spillage of light, if any, shall be controlled so as not to cause nuisance to the amenity of adjoining land.

Emission of sound from the land shall be controlled at all times so as to not unreasonably impact upon nearby owners/occupants.

The hours of operation of the development shall not be outside of the following nominated times. Any alteration to these hours will require the separate approval of Council.

Approved hours of operation: Landfill: 7 days a week, 6am-6pm.

Resource Recovery Facility: 7 days a week, 6am-10pm

No trucks are to enter the site between 10pm and 6am unless they are tipping road base from night works in the temporary material storage area situated at the entrance to the site off the quarry road.

No on-site activities of any kind are to occur within the operational area between 10pm and 6am, with the exception of afterhours essential road works tipping and the site is to be fenced

and secured accordingly to prevent entry past the temporary night storage area. Workshop?

The area of the land not approved by this consent, and marked as such on the approved plans, shall be kept in a neat and tidy manner at all times.

#### Landscaping

All landscaped areas provided in accordance with the approved landscaping design plan shall be maintained at all times in a suitable manner.

The security fence with associated dense landscaping provided in accordance with the Council approved plan shall be maintained to a satisfactory standard at all times-

#### Use of Premises

The use of the approved development shall, at all times, be conducted in a manner consistent with the terms and conditions of this consent.

No mounds of recycled materials or building material awaiting recycling is to be higher than the adjacent earth berms or 10M whichever is the lesser.

No nuisance or interference with the amenity of the area shall be created by reason of any process or operation on the land causing the emission of noise, dust, smoke or any polluted discharge whatsoever. Note: The Protection of the Environment Operations Act 1997 requires Council to investigate complaints where only one person complains-

## 4. Construction Environmental Performance

### 4.1 Surface Water

4.1.1	Preparation of an Erosion and Sediment Control plan and a Stormwater Management Plan prepared in accordance with DECC (2006) Managing Urban Stormwater: Harvesting for Reuse guidelines and will be adhered to and include:	LHBC/Construction Contractors	Detailed design phase and during construction
	<ul style="list-style-type: none"><li>• Installation of temporary erosion and sediment control structures and sediment fences to prevent the movement of sediment from construction areas;</li><li>• Minimisation of time excavated surfaces are left exposed;</li></ul>		

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- Restriction of traffic to defined internal roads;
  - Ensuring any chemical (diesel for operating machinery) are stored on site and appropriately banded in sealed containers;
  - Regular inspection and maintenance of erosion / siltation control devices to ensure effectiveness for the entire construction period;
  - regular inspection of the stormwater treatment measures and site drainage system (including sumps, pipelines, pumps, bunds, tanks, oil/ water separators, sediment traps and storages), during the construction period with maintenance works triggered as required;
- Installation of on-site detention (OSD) basins. Basin 1 is to have a storage capacity volume of 3,900m<sup>3</sup> and Basin 2 to have a capacity volume of 1,600m<sup>3</sup>. One of these regional detention basins is proposed to be located at the site, within the Quarry North Catchment adjacent to the northern site boundary and the M4 Motorway. Another is proposed to the west of the site towards Ropes Creek.
- The basins are to be designed for the retention and storage of surface water flows from the pit and operational areas to contain runoff for the 1 in 100 year rainfall event;
  - If required a surface stormwater pond will be placed adjacent to OSD basins to receive water pumped from the in pit clean operational stormwater pond. Mixing with the OSD basins will be prevented with the use of appropriate surface grading and bunding;
  - Development of a settling basin at the detailed design phase for pre-treatment before entry to the OSD basins to provide further attenuation and capture of sediment that may reach the OSD detention basins.

#### 4.2 Groundwater

4.2.1	The existing nine (9) bore wells are to be prepared for monitoring by a suitably qualified expert. This will require BH01 deep well to either be unblocked or another BH01 deep well constructed for monitoring.	LHBC/Construction Contractors	During Construction
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#### 4.3 Leachate

4.3.1	A detailed design specification for the leachate collection system shall be prepared to the satisfaction of NSW Benchmark Techniques and DECC.	LHBC	Prior to construction
4.3.2	A detailed design specification for the leachate treatment system shall be prepared to the satisfaction of Sydney Water and DECC.	LHBC	Prior to construction
4.3.3	A S.73 Trade Waste Certificate shall be gained from Sydney Water Corporation to determine disposal quantity and quality of leachate to Sydney Water Corporation sewage system.	LHBC	Prior to construction
4.3.4	The leachate collection and treatment system shall be constructed in accordance with the detailed design specifications, EPL and Trade Waste Agreement with Sydney Water Corporation.	LBHC	During construction

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#### 4.4 Air Quality

4.4.1	A gas management system shall be developed at the detailed design stage and implemented at the relevant stages and then maintained as filling of the pit occurs over the life of the landfill and beyond as required.	LHBC	Prior to commencement of landfilling
4.4.2	<ul style="list-style-type: none"><li>• The Construction Environmental Management Plan to be developed for the Project and will include the following dust mitigation and monitoring measures to minimise particulate matter emissions during the construction phase:</li><li>• use of water carts and watering of exposed surfaces when necessary. This could include spray mists and sprinkler systems for crushing, grinding and chipping operations and on all material stockpiles;</li><li>• minimising dust generating activities on days of extreme unfavourable weather conditions when there is a high risk of dust generation e.g. dry, windy conditions;</li><li>• defining of trafficked areas;</li><li>• imposition of site vehicle speed limits;</li><li>• stabilising exposed areas as quickly as possible;</li><li>• construction of perimeter berms around the main area of operations to provide a barrier for dust emissions;</li><li>• cleaning spills of potentially dust materials immediately;</li><li>• wheel wash for all vehicles travelling off-site; and</li><li>• sealing of operational surfaces at the RRF.</li></ul>	LHBC/Construction Contractor	Throughout construction
4.5 Noise			
4.5.1	<ul style="list-style-type: none"><li>• To reduce construction noise experienced at the nearby residences, the following DECC Environmental Noise Control Manual (ENCM) time limits for construction activities where construction noise is audible at residential premises will be adhered to:</li><li>• Monday to Friday, 7am to 6pm;</li><li>• Saturday, 8am to 1pm (or 7am to 1pm if inaudible at residential premises); and</li><li>• No construction on Sundays or public holidays.</li></ul>	LHBC/Construction Contractor	During construction
4.5.2	<ul style="list-style-type: none"><li>• Construction of impervious noise barriers at various positions around the facility, including 10 m high barriers to the north, north-west, west and south of the main area of operations and retention of the existing earth mound to the north-east of the quarry pit.</li></ul>	LHBC/Construction Contractor	During construction
4.5.3	<ul style="list-style-type: none"><li>• The following measures will be implemented as part of the CEMP:</li><li>• Informing potentially affected residents in advance as to the extent and timing of potentially noisier construction activities and responsibly advising when noise levels during such works may be relatively high.;</li></ul>	LHBC/Construction Contractor	During construction

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- Where known to be readily available, deploying equipment having lower noise emission levels;
- Maintain construction equipment to ensure rated noise emission levels are not exceeded;
- Provide a contact telephone number via which the public may seek information of make a complaint. A log of complaints should be maintained and actioned by the site supervisor in a responsive and timely manner; and
- Undertake construction activities in accordance with DECC (2000) Industrial Noise Policy (INP).

#### 4.6 Traffic

4.6.1	An operational traffic assessment for access way onto the Precinct Plan Stage 3 road system will be submitted.	LHBC	
			<ul style="list-style-type: none"> <li>• When an application is made to construct the stage 3 road system by the then owner of the non operational land, and</li> <li>• when the Precinct road through the adjacent Australand site is constructed and its egress point from the Precinct is known.</li> </ul>
4.6.2	<p>The following construction to be undertaken to the existing contractual ROC and completed prior to operations:</p> <ul style="list-style-type: none"> <li>• construct a sealed industrial standard road pavement generally 7.0 metres wide along the existing section of 'haulage road' (AS 2890.2 for design and Council standards for construction);</li> <li>• install guard rail along the northern side of the road along the edge of the quarry road to RTA standard for design;</li> <li>• install 'barrier' centreline along the roadway with 40 kph speed restriction and appropriate lighting.</li> </ul>	LHBC/Construction Contractor	During construction
4.6.3	<ul style="list-style-type: none"> <li>• The following construction to be undertaken for the internal site road network and completed prior to operations;</li> <li>• construct a sealed industrial standard road pavement (Council design standard);</li> <li>• provide appropriate directional and regulatory signposting;</li> <li>• provide appropriate lighting along the internal road network;</li> <li>• provide appropriate fencing and barriers to avoid any safety issues in relation to the</li> </ul>	LHBC/Construction Contractor	During construction

- quarry wall (vehicular and pedestrian);
- provide paved parking areas and line marked areas (AS 2890.1 design standard); and
- ensure that the design provides for the access and maneuvering for all vehicles accessing the site (AS2890.2 design standard).

#### 4.7 Visual Amenity

4.7.1	• The site will be maintained in an orderly manner and the material stockpiles, waste, plant, equipment and vehicle parking will be kept to designated areas.	LHBC/Construction Contractor	Throughout construction
4.7.2	• LHBC will install outdoor lighting in accordance with Australian Standards, AS4282-1977 'Control of Obtrusive Effects of Outdoor Lighting' and AS1158 'Lighting for Roads and Public Places'. The lighting will be kept to the minimum necessary to safety and efficiency purposes and will be directed away from residences and roads through the use of directional lighting equipment and shielding.	LHBC/Construction Contractor	During Construction
4.7.3	LHBC will construct building elements using muted colour tones which blend into the surrounding natural environment	LHBC/Construction Contractor	During Construction
4.7.4	LHBC shall undertake landscaping works prior to operation of the RRF facility. Landscaping shall be undertaken along internal roadways, on berms and around the administration building.	LHBC/Construction Contractor	During Construction
4.7.5	The north-western visual barrier wall shall be coloured using green tones which compliment the surrounding vegetation.	LHBC/Construction Contractor	During Construction
<b>4.8 Ecology</b>			
4.8.1	Fencing is to be constructed around the identified Endangered Ecological Communities on site to restrict vehicular and pedestrian access.	LHBC/Construction Contractor	Prior to construction
4.8.2	As part of the ECMP all stockpiled materials are not to be located in close proximity to the EECs or any individual native trees on site.	LHBC/Construction Contractor	Throughout construction
<b>4.9 Aboriginal Heritage</b>			
4.9.1	Two weeks notice will be given to the Deerubbin Local Aboriginal Land Council (DLALC), Darug Custodian Aboriginal Corporation (DCAC), Darug Tribal Aboriginal Corporation (DTAC) and Darug Aboriginal Cultural Heritage Assessments (DACHA) prior to construction to allow organisation of Aboriginal site monitors to inspect horizon top soil stripping and collect any surface artifacts within the operational areas of the site.	LHBC, DLALC, DCAC, DTAC and DACHA	Two weeks prior to horizon topsoil stripping within the operational areas of the site
4.9.2	Should LHBC uncover previously unrecorded relics (non-Indigenous heritage items) during construction, works will cease immediately at that location and the NSW Heritage Office will be notified and advice sought as to the appropriate course of action.	LHBC	During construction
4.9.3	Areas to be disturbed within the moderate and high sensitivity zones, subsurface investigation within the impact zone, by way of archaeological salvage excavation including test pits, will be	LHBC	Prior to construction works

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undertaken prior to commencement of groundbreaking works, to properly assess the scientific significance of these areas.

#### 4.10 Hazards and Risk

4.10.1	Relevant standards and requirements relating to fire/ emergency measures and procedures will be adhered.	LHBC/Construction Contractor	During Construction
4.10.2	Additional soil testing of stockpile materials will be initiated to ascertain the presence of any contaminants prior to its use for capping; as amenity berms or transportation off site.	LHBC	During construction
4.10.3	Prior to removal of stockpiles from the site additional samples are collected and analysed on a regular basis.	LHBC	Prior to removal of stockpile materials
4.10.4	Following the removal of the stockpiled material additional field work and laboratory analysis and reporting are to be undertaken to a level commensurate with the site area intended for redevelopment and according to relevant published guidelines.	LHBC	Once stockpiles have been removed, prior to construction of the RRF
4.10.5	The risk of soil contamination by spills will be minimised throughout the Project by implementation of appropriate procedures for safe handling and storage of fuel and chemicals and spill response procedures.	LHBC/Construction Contractor	During Construction
4.10.6	• Electricity transmissions lines should be installed underground (where possible)	LHBC/Construction Contractor	During Construction
4.10.7	• Reticulated or bottled gas shall be installed and maintained in accordance with AS/NZS 1596-2002: Storage and Handling of LP Gas and the requirements of the relevant authorities.	LHBC/Construction Contractor	During Construction
4.10.8	• A reticulated hydrant supply should be installed in accordance with the requirements of AS 2419.1 (1994). Hydrants should be installed at regular intervals throughout the internal road network and should be readily accessible without having to leave the sealed internal road network.	LHBC/Construction Contractor	During Construction
4.10.9	• A dedicated static water supply of at least 10,000 litres should be provided for fire fighting activities. If the storage is also required for alternate uses, the draw off for these uses will need to be above the 10,000 litres.	LHBC/Construction Contractor	During Construction
4.10.10	The landslip along the northern face of the pit shall be stabilised and monitored as specified within the Jeffery and Katauskas Pty Ltd (2008) Geotechnical Stability Assessment.	LHBC	During Construction
4.11 Waste management			
4.11.1	A Construction Waste Management Plan (CWMP) shall be prepared to ensure that all general wastes produced during the construction phase are disposed of off-site to appropriate waste facilities. The CWMP shall be made available to all construction staff to ensure waste is managed appropriately during construction.	LHBC	During construction
4.12 Socio-economic			
4.12.1	Where possible, LHBC will locally source jobs created for construction.	LBHC/Construction Contractor	On hiring of construction staff
4.12.2	• Preparation of Local Communication Strategy for the dissemination of information	LBHC	To be prepared prior to

regarding the Project to the local community.

construction and implemented during construction

4.13 • Voluntary Planning Agreement

4.13.1 • A VPA is to be finalised between DoP, RTA, Council and the proponents to address the contributions required a part of this project including the timing of infrastructure provision.

The proponent

Prior to construction.

## 5. Operational Environmental Performance

### 5.1 Surface Water

5.1.1 A detailed stormwater management plan shall be developed and include the requirements set out in the Surface Water Report prepared by Storm Consulting dated November, 2008, which will include management for spills from drainage lines, sediment traps, check dams, erosions control, bunds infiltration areas, sediment fences, filters and all other erosion and sediment control devices.

LHBC

Prior to commencement of operations

5.1.2 • Water sampling at the OSD basins and in pit stormwater pond to be conducted quarterly for the first 12 months of operations and six-monthly for following years to ensure re-used/released water is of the appropriate quality for end-use in accordance with ANZECC guidelines and relevant NSW guidance and the sites Environmental Protection License. Water sampling shall test for compliance with specified water quality standards for discharge. Sampling requirements will include TSS, turbidity, ammonia, Biochemical Oxygen Demand, TN and TP.

LHBC

Monitoring to occur on a quarterly basis for the first 12 months and then six-monthly for all following years of operation.

5.1.3 An OSD basin and Gross Pollutant Trap Cleaning Program to be implemented to provide more frequent monitoring as site settles from development. The Cleaning Program will include:

LHBC

Cleaning Program to be implanted on a quarterly basis and monitoring and recording to be undertaken in compliance with the Environmental Protection License issued for the Project.

- sediment and weed removal from the OSD basins and its associated sediment control/stilling basin; and
- checking integrity of in-pit stormwater basin, plus sediment removal.

A maintenance and monitoring check-sheet shall be developed that allows for the data entry, location of stormwater management devices on-site (e.g. based on a map with numbered locations), type of monitoring (visual, water sampling, etc), outcome (e.g. all clear, device needs cleaning), actions taken, and any follow up required.

5.1.4 Periodic removal of sediment and other materials from site storages and sediment traps and waste oil and sludge from the oil / water separators and wheel wash sediment separator, immediate stabilisation and disposal at an appropriate off-site facility. Storage dams will have markers that indicate when sediment is to be removed so that minimum storage requirements can be maintained.

LHBC

As required during operations

5.1.5 Diesel fuel will be stored in bunded above ground double skin diesel fuel tanks located near the

LHBC

Tanks to be installed prior to

	workshop. The tanks will be designed and manufactured in accordance with AS1940 and AS1692.		operations.
	Any refuelling facilities or fuel/ chemical (including oil and lubricant) storages, are to be located in covered, bunded areas or self bunded storage containers, designed to prevent the entry of stormwater and capable of containing the full storage volume of the container plus an additional 10%.		Management of tanks to occur throughout operations
5.1.6	Potential spills will be contained, in the first instance, by bunding and grading to sumps with backup containment created by the main storage basins. Spill kits will be available on-site and staff will be trained in their use to contain spills and prevent them from entering the stormwater drainage system. Runoff from areas where spills can occur will not be discharged off-site.	LHBC	Training of staff to occur within the first 6 months of operation.  Spill maintenance to occur throughout operations
5.2 Groundwater			
5.2.1	A groundwater monitoring program is to be prepared to the satisfaction of DECC and the Environmental Protection License (EPL) issued for the Project to satisfy reporting requirements.	LHBC	Prior to operation
5.2.2	Water quality samples shall be taken from all nine (9) bore wells to establish the base water quality standard for groundwater quality monitoring. The base water quality samples are to be provided to DECC satisfaction.	LHBC	Prior to operation
5.3 Leachate			
5.3.1	The LEMP will set out leachate management to maintain the collection and treatment system. Visual inspections of the leachate collection system (sump and riser) shall be undertaken quarterly for the first 18 months of initial operations and if no adverse impacts of operations is observed, will be reduce to every 6 months throughout the life of the Landfill and RRF. Visual inspection shall also occur proceeding significant rainfall events. Submission of water quality monitoring results shall be submitted to the relevant authority as required by the EPL.	LHBC	Preparation of the management plan prior to operations.  Monitoring to be conducted throughout the life of the Project.
5.3.2	The leachate collection system shall be monitored for clogging every year throughout the life of the landfill and RRF. The system shall be unclogged as required to maintain the level of leachate within the pit below the regional groundwater table.	LHBC	During operations
5.4 Air Quality			
5.4.1	A real-time dust monitoring and reactive control system will be implemented to identify activities that may lead to off-site air quality impacts. The dust monitoring can be used to assess compliance with DECC ambient air quality criteria. A minimum of one real time monitor (e.g. DustTrak, TEOM, E-Bam, E-Sampler) will be used to identify real-time impacts and delineate short term particulate matter concentrations and thus trigger required maintenance/ repairs or development of engineering solutions.	LHBC	Throughout operations

5.4.2	Monitoring will be undertaken as per DECC (1996) Environment Guidelines: Solid Waste Landfills for the gas management system. Unless otherwise approved by DECC, monitoring will be conducted monthly for initial operations, and if no adverse impacts are observed, will be reduced to quarterly after six months of operations and to annually after 18 months of operation.	LHBC	Initial monitoring to be conducted monthly and reduce to monitoring annually after 18 months where no adverse impacts are observed.
	Monitoring would include a walkover along chimneys with monitoring of landfill gas (methane and hydrogen sulfide) undertaken using a suitable LFG monitor e.g. GA 2000, capable of reading % gas and % LEL.		
	Monitoring shall also include recording of odour observations including the monitoring of BioMagic key odour sources to minimise emissions.		Monitoring to be conducted throughout operations
5.4.3	An Air Quality Management Plan (AQMP) shall be prepared which will be included in the LEMP and EWMP to be developed for the Project, with a focus on activities which generate the most significant emissions – in this instance those associated with haulage movements and transfer and loading activities.	LHBC	Prepared prior to commencement of operations and implemented for Throughout operations
5.5 Noise			
5.5.1	<ul style="list-style-type: none"> <li>On-site plant and equipment are to be properly maintained to ensure rated noise emission levels are not exceeded.</li> </ul>	LHBC	Throughout operations
5.5.2	<ul style="list-style-type: none"> <li>With the application of reasonable and feasible mitigation, operational noise levels at residences will not exceed 55bB(A)<sub>L<sub>eq,15min</sub></sub>.</li> </ul>	LHBC	Throughout operations
5.5.3	<ul style="list-style-type: none"> <li>A contact telephone number will be provided on a sign on the site fence for the public to seek information or make a noise complaint.</li> </ul>	LHBC	Throughout operations
5.5.4	<ul style="list-style-type: none"> <li>A log of noise complaints will be maintained and actioned in a responsive manner.</li> </ul>	LHBC	Throughout operations
5.5.5	<ul style="list-style-type: none"> <li>Normal hours of operation between 6am to 10pm, with landfilling operations further restricted to the hours between 6am and 6pm (receivable material would only occur after 10pm on occasion). A public notice shall be posted on the site fence informing the public when waste will be received after normal hours of operation.</li> </ul>	LHBC	Throughout operations
5.6 Traffic			
5.6.1	<ul style="list-style-type: none"> <li>The existing contractual ROC and internal site road network to be maintain at all times to the Australian Standards for roadway design AS 2890.1 and AS2890.2.</li> </ul>	LHBC	Throughout operations
	<ul style="list-style-type: none"> <li>Regular monitoring of the road network is to be undertaken throughout the life of the landfill and the ongoing operation of the RRF. Any reported damage to the road network is to be recorded and repaired within a timely manner.</li> </ul>	LHBC	Throughout operations
5.7 Visual Management			
5.7.1	<ul style="list-style-type: none"> <li>Where possible, use of highly reflective external materials/ colours on the site will be avoided unless necessary for safety reasons.</li> </ul>	LHBC	Throughout operations
5.7.2	<ul style="list-style-type: none"> <li>LHBC will operate outdoor lighting in accordance with Australian Standards</li> </ul>	LHBC	Throughout operations

AS4282-1977 'Control of Obtrusive Effects of Outdoor Lighting' and AS1158 'Lighting for Roads and Public Places'. The lighting will be kept to the minimum necessary to safety and efficiency purposes and will be directed away from residences and roads through the use of directional lighting equipment and shielding.

- 5.7.3 • LHBC will maintain building elements using muted colours which blend into the surrounding natural environment. LHBC Throughout operations
- 5.7.4 The site is will be maintained in an orderly manner and the material stockpiles, waste, plant, equipment and vehicle parking will be kept to designated areas. LHBC Throughout operations
- 5.7.5 • LHBC shall maintain landscaped areas on site throughout operations. LHBC Throughout operations

5.8 Hazards and Risks

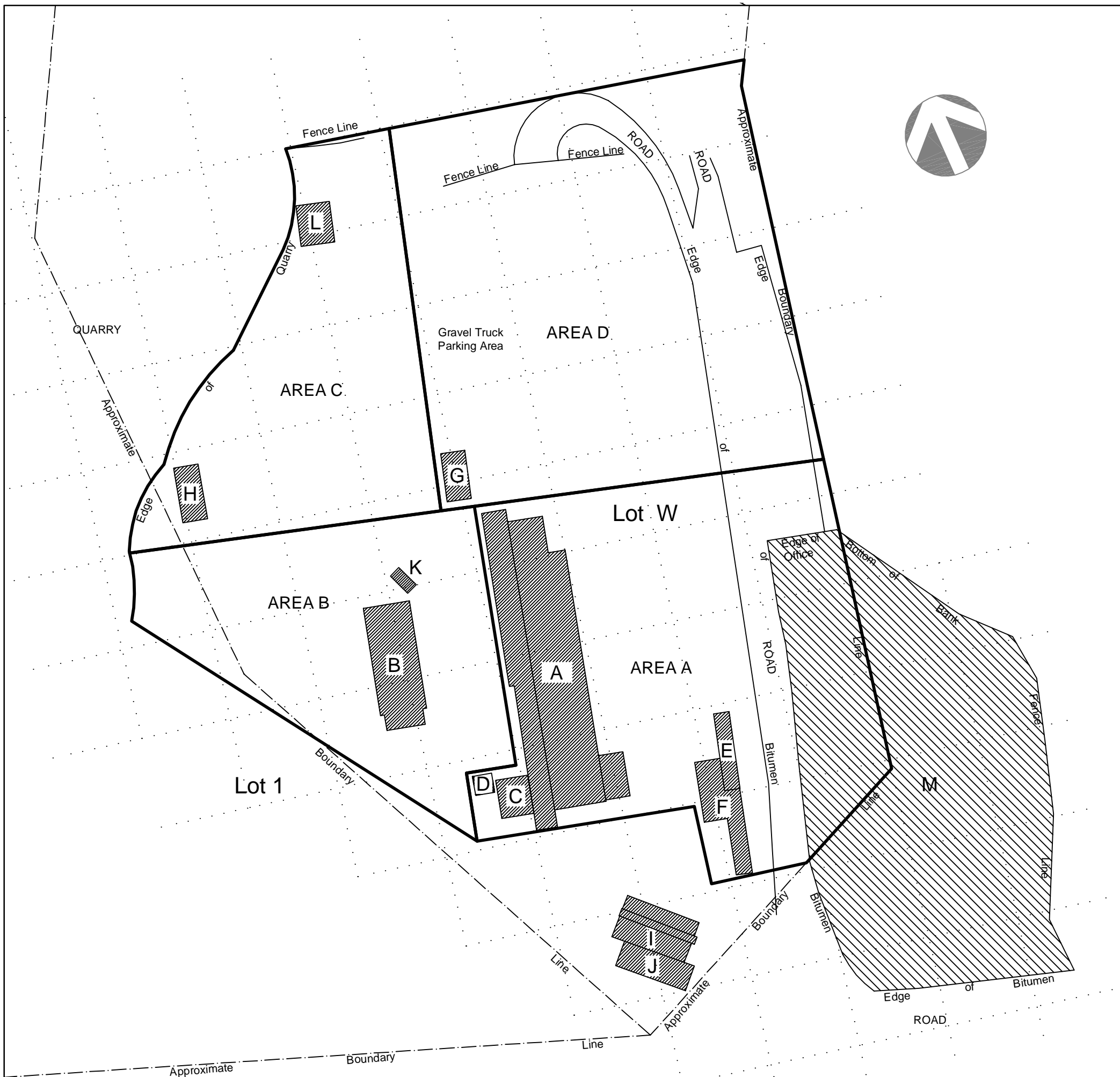
- 5.8.1 The risk of soil contamination by spills will be minimised throughout the Project by implementation of appropriate procedures for safe handling and storage of fuel and chemicals and spill response procedures. LHBC Throughout operations

- 5.8.2 Provide and maintain Asset Protection Zones (APZs) as follows: LHBC Establish APZs prior to operation.

Potential Hazard	Bushfire	Recommended APZ	Justification of Recommended APZ
Grassland adjoining site to east, south and west	vegetation	10m IPA + 1.8m non-combustible radiant heat fence or earthen embankment (rock and soil) with a minimal basal width of 10m. If over 20m separation, the latter is not required.	Non-residential nature of Project. NB the Project design provides over 20 m of separation so a radiant heat fence or earthen embankment is not required.
Woodland in the north-west corner of site		20m IPA + appropriate construction standards and berms.	The small size and isolated nature of this remnant vegetation pocket, along with the non-residential nature of the Project.
Riparian vegetation of Ropes Creek tributary		20m	Non-residential nature of the Project and the narrow width of these

Maintain APZs throughout operations

	in the southern portion of the site		vegetation fingers.	
5.8.3	<ul style="list-style-type: none"> <li>Emergency Response Procedures including evacuation procedures shall be developed for the occurrence of a fire.</li> </ul>	LHBC		Prior to operation
5.8.4	<ul style="list-style-type: none"> <li>Geotechnical inspections of the pit shall be undertaken every 6 months and any identified stability issues rectified as required. All geotechnical inspections shall be documented and reported as part of a management plan of the pit integrity.</li> </ul>	LHBC		Throughout landfilling
5.9 Waste Management				
5.9.1	<ul style="list-style-type: none"> <li>A Site Environmental Waste Management Plan (SEWMP) shall be produced to manage general waste streams produced during operations. The SEWMP shall be made available to all operational staff upon commencement of employment. The SEWMP shall ensure putrescible waste and recycling waste receptacles are provided within the RRF and associated buildings. The SEWMP will ensure that all putrescible waste shall be collected and disposed of off-site.</li> </ul>	LHBC		Throughout operations.
5.10 Greenhouse Gas				
5.10.1	Inventory of emissions will be prepared and maintained to monitor greenhouse gas throughout the life of the Project.	LHBC		Throughout operations
5.10.2	<ul style="list-style-type: none"> <li>Undertake an internal review annually to identify techniques to minimise energy use and assess if equipment is operating at optimum energy efficiency. Internal review to address inventory of emissions levels.</li> </ul>	LHBC		Annually, throughout the life of the Project
5.10.3	<ul style="list-style-type: none"> <li>Energy efficiency to be a priority for of all new mobile and fixed equipment during procurement for both diesel and electric powered equipment..</li> </ul>	LHBC		Procurement of mobile and fixed equipment
5.10.4	<ul style="list-style-type: none"> <li>All greenhouse gas producing equipment will be maintained to retain high levels of energy efficiency.</li> </ul>	LHBC		Throughout operations
5.11 Health and Safety				
5.11.1	<ul style="list-style-type: none"> <li>LHBC will implement health, safety and risk management plans for the Project.</li> </ul>	LHBC		Throughout operations
5.12 Socio- economic				
5.12.1	<ul style="list-style-type: none"> <li>Where possible LHBC will locally source staff.</li> </ul>	LHBC		On hiring of operational staff
5.12.2	<ul style="list-style-type: none"> <li>Preparation of Local Communication Strategy for the dissemination of information regarding the Project to the local community.</li> </ul>	LBHC		Throughout operations



**Building Schedule**

A - WAREHOUSE/WORKSHOP	1,394 m <sup>2</sup>
B - OFFICE	345 m <sup>2</sup>
C - SHED	77 m <sup>2</sup>
D - SHED	23 m <sup>2</sup>
E - COVERED TRUCK WASH	74 m <sup>2</sup>
F - OPEN TRUCK WASH	175 m <sup>2</sup>
G - OFFICE	72 m <sup>2</sup>
H - WAREHOUSE	83 m <sup>2</sup>
I - FUEL BOWSERS	202 m <sup>2</sup>
J - FUEL TANK	118 m <sup>2</sup>
K - AMENITIES	18 m <sup>2</sup>
L - SUBSTATION	84 m <sup>2</sup>
M - PARKING AND OFFICES	5,905 m <sup>2</sup>
<b>Total Area</b>	<b>8,570 m<sup>2</sup></b>

**Land Area Schedule**

Area A	8,038 m <sup>2</sup>
Area B	4,492 m <sup>2</sup>
Area C	4,508 m <sup>2</sup>
Area D	8,892 m <sup>2</sup>
<b>Total Area</b>	<b>25,930 m<sup>2</sup></b>

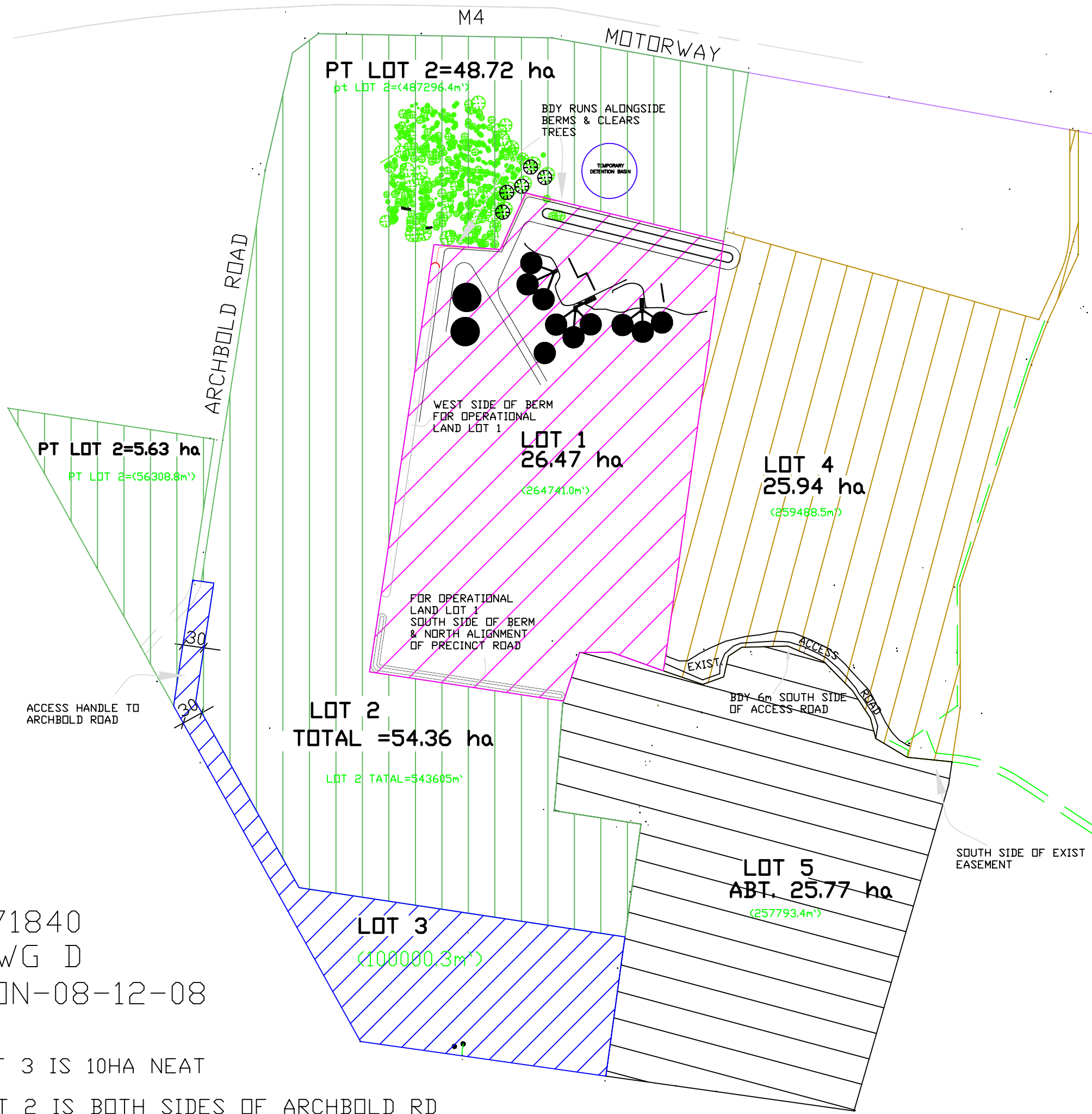
**Disclaimer:** Boundaries have not been surveyed and are approximate only. Building areas measured on a GLA basis.

Plan prepared for: **THAQUARRY PTY LTD**

**SITE LAYOUT**  
Old Wallgrove Road  
EASTERN CREEK, NSW

Date: 25/06/2008  
Ref: 33487BB Rev: 3  
Scale: 1: 1000 at A3

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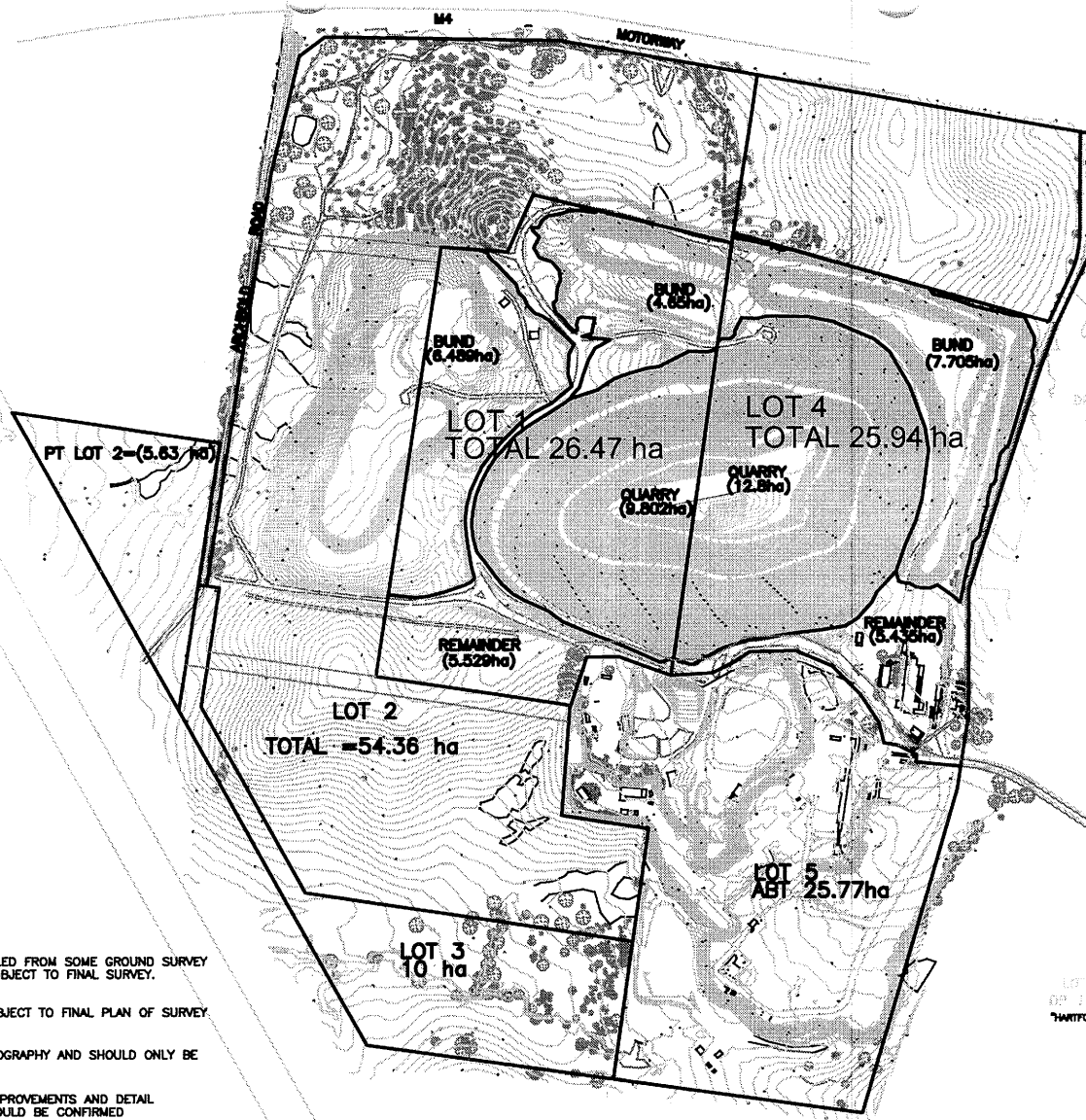


#71840  
 DWG D  
 MON-08-12-08

LOT 3 IS 10HA NEAT

LOT 2 IS BOTH SIDES OF ARCHBOLD RD

BDY BETWEEN LOTS 4 & 5 IS 6M SOUTH OF EXIST ACCESS ROAD



**NOTES**

- \* BOUNDARY DIMENSIONS AND AREAS HAVE BEEN COMPILED FROM SOME GROUND SURVEY AND PLANS MADE AVAILABLE AT LPI. NSW AND ARE SUBJECT TO FINAL SURVEY.
- \* LOTS 1 - 5 ARE PROPOSED LOTS ONLY AND ARE SUBJECT TO FINAL PLAN OF SURVEY
- \* CONTOURS IF SHOWN ARE AN INDICATION OF THE TOPOGRAPHY AND SHOULD ONLY BE USED FOR PLANNING PURPOSES.
- \* DO NOT SCALE OFF THIS PLAN - RELATIONSHIP OF IMPROVEMENTS AND DETAIL TO BOUNDARIES IS DIAGRAMMATIC AND IF CRITICAL SHOULD BE CONFIRMED BY A BOUNDARY SURVEY.
- \* THE PURPOSE OF THIS PLAN IS TO CALCULATE AREAS TAKEN UP BY THE EXISTING QUARRY VOID, BUND STOCKPILES AND IDENTIFY THE REMAINING LAND AS POSSIBLE DEVELOPABLE AREA REGARDING THE PROPOSED LOTS 1 & 4

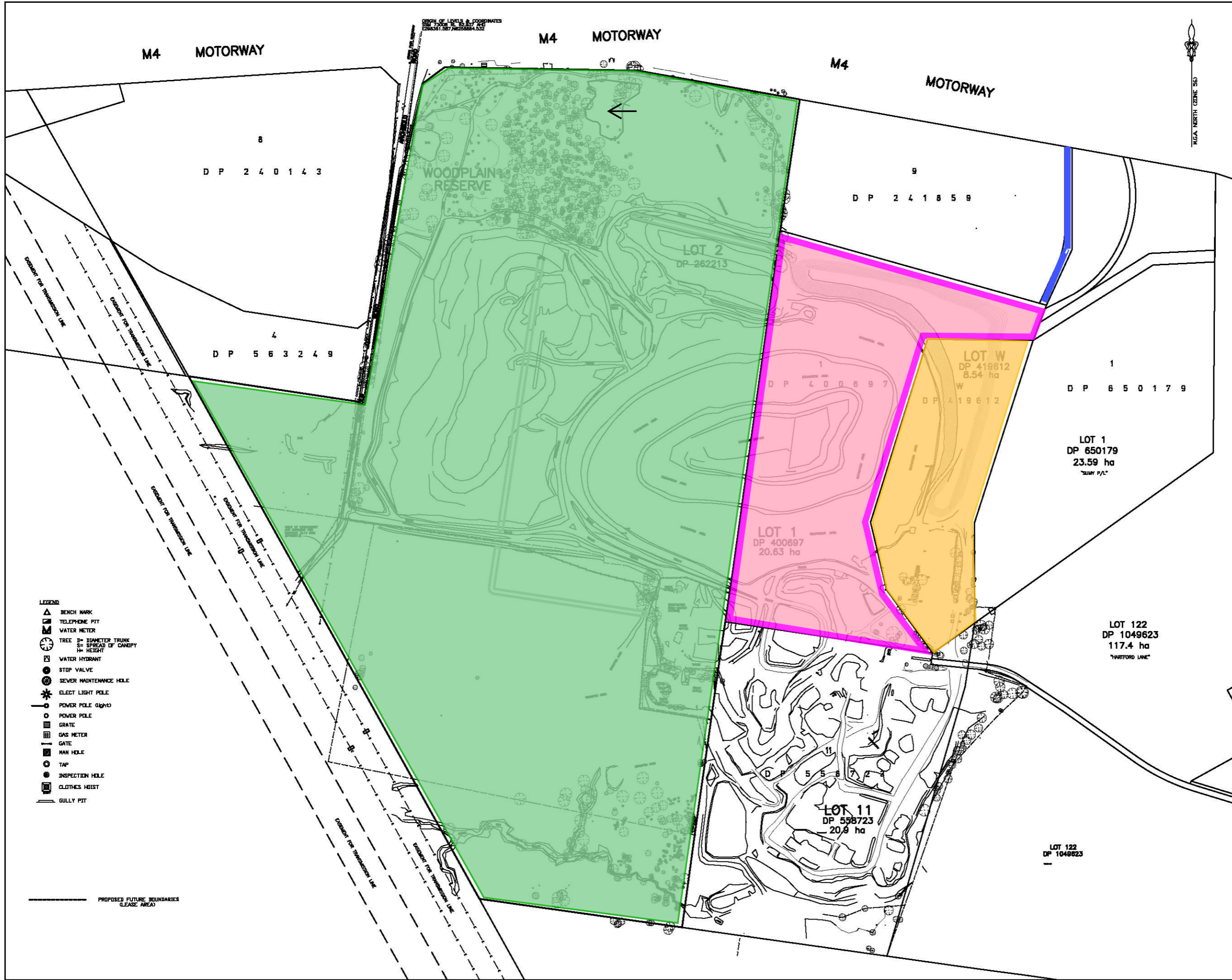
NOTES:  
 SCALED DIMENSIONS SHOULD NOT BE USED AS PRINTS ARE SUBJECT TO DISTORTION  
 THIS PLAN DOES NOT DEFINE THE BOUNDARIES.

No.	DATE	APP'D	AMENDMENT

L.S.A.	BLACKTOWN
	DIAL A DUMP INDUSTRIES
	QUIRT

LANDPARTNERS LTD BUILT ENVIRONMENT CONSULTANTS LEVEL 1, 20 Smith Street PARRAMATTA 2150 Telephone (02)9685 2000 Fax (02)9685 2001	
DATE: AHD	DATE OF SURVEY: N/A
JOB No. 71840	PRINT FILE:
REDUCTION RATIO: NTS	ISSUE FOR: -
	DATE: 11-03-08

JOB TITLE: RATEABLE AREA CALCULATIONS FOR PROPOSED LOTS 1 & 4 QUARRY ROAD, EASTERN CREEK	PLAN No. 71840 RATE CALCS VERSION - 1
SURVEYOR: GS	SHEET 1 of 1 SHEETS
DRAWN BY: GS	



**CLIENT**  
**LIGHT HORSE BUSINESS CENTRE**

**PROJECT**  
**PLAN No.4 OF LHBC AREA QUARRY RD, EASTERN CREEK**

**NOTES**  
 The title boundaries shown hereon were not marked at the time of survey and have been determined by plan dimensions only and not by field survey.  
 Services shown hereon have been located where possible by field survey. If not able to be so located, services have been picked from the records of relevant authorities where available and have been noted accordingly on the plan. Where such records do not exist or are inadequate a notation has been made hereon.  
 Prior to any demolition, excavation or construction on the site, the relevant authority should be contacted for possible location of further underground services and detailed locations of all services.

PPP/CF	LFL	DD/MM/YY	COMMENT

PPP/CF	LFL	DD/MM/YY	COMMENT

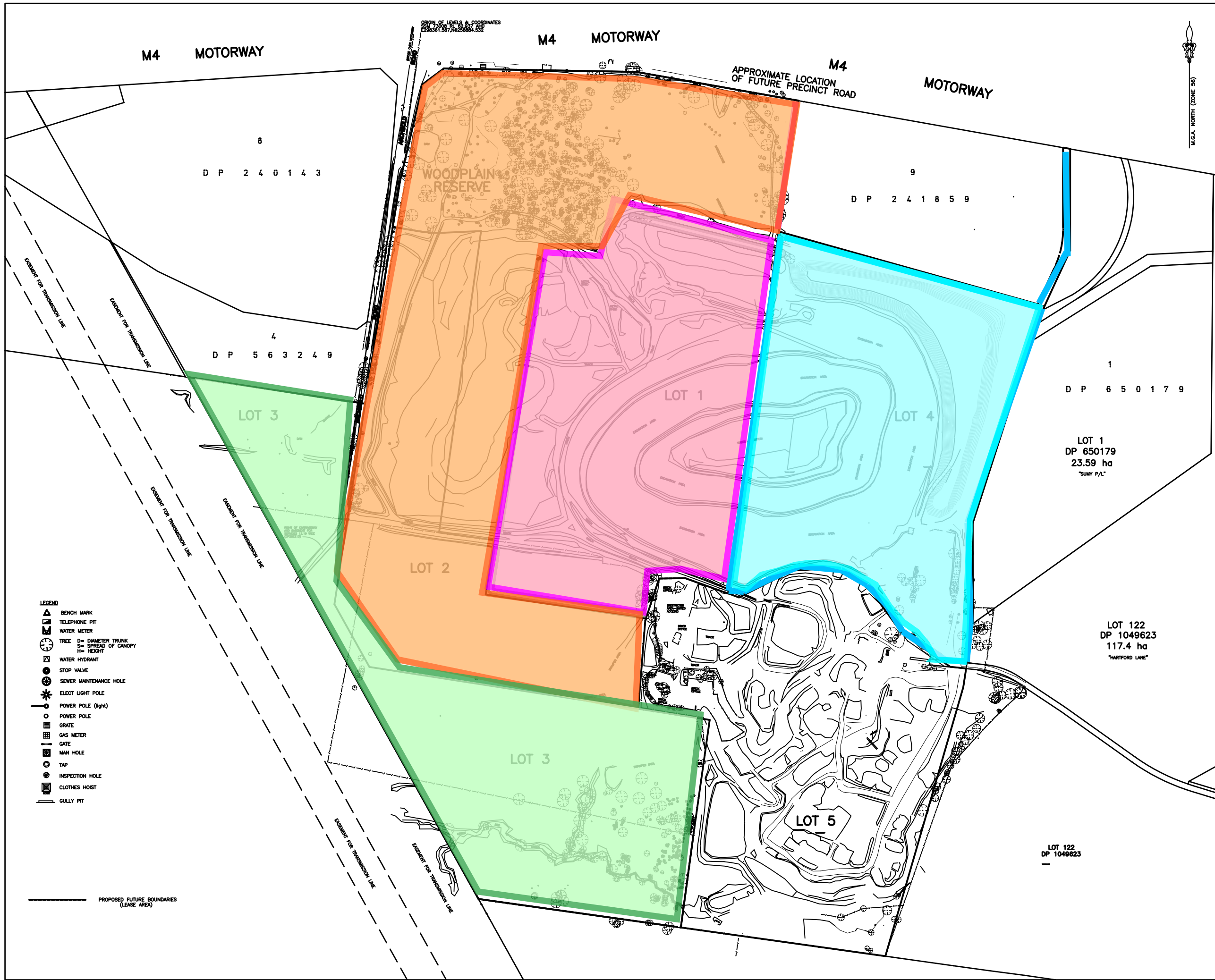
Symbols shown are indicative only. The symbol size and orientation does not necessarily represent the real size or orientation of the feature.

**LOT 122**  
 DP 1049623  
 117.4 ha  
 "HARFORD LANE"

Sydney Office  
 Level 1, 20 Smith Street  
 Parramatta NSW 2150  
 PO Box 3485  
 Parramatta NSW 2150  
 (02) 9688 2000  
 (02) 9686 2001  
 sydney@landpartners.com.au  
 www.landpartners.com.au

<b>HEIGHT DATUM</b> AHD	<b>LOCAL AUTHORITY</b> BLACKTOWN COUNCIL
<b>HEIGHT ORIGIN</b> SSM 73008 RL 82.937	<b>SCALE</b> 1:3000 (A1)
<b>MENDAM</b> 56	<b>CONTOUR INTERVAL</b> ?.? Metre
<b>CG-GRID SYSTEM</b> MGA	<b>SURVEYOR</b> BS
<b>DATE OF SURVEY</b> 01/04/05	<b>DATE</b> 01/08/08
<b>CGAD FILE</b> 68124	<b>DRAWN</b> L.J.Mc
<b>DATE</b> 01/08/08	<b>DATE</b> 01/08/08
<b>AUTOCAD FILE</b> 71825	<b>CHECKED</b> GKO
<b>DATE</b> 01/08/08	<b>DATE</b> 01/08/08
<b>ARCHIVE FILE</b> 68124 &	<b>APPROVED</b> GKO
<b>DATE</b> 01/08/08	<b>DATE</b> 01/08/08

**PLAN No.4**  
 SHEET 4 OF 9  
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**CLIENT**  
LIGHT HORSE BUSINESS CENTRE

**PROJECT**  
PLAN No.8  
OF  
LHBC AREA  
QUARRY RD, EASTERN CREEK

**NOTES**  
The title boundaries shown hereon were not marked at the time of survey and have been determined by plan dimensions only and not by field survey.  
Services shown hereon have been located where possible by field survey. If not able to be so located, services have been plotted from the records of relevant authorities where available and have been noted accordingly on the plan. Where such records do not exist or are inadequate a notation has been made hereon.  
Prior to any demolition, excavation or construction on the site, the relevant authority should be contacted for possible location of further underground services and detailed locations of all services.

PPP/CF	LPL	DD/MM/YY	COMMENT

Symbols shown are indicative only. The symbol size and orientation does not necessarily represent the real size or orientation of the feature.

**LANDPARTNERS**  
built environment consultants

Sydney Office  
Level 1, 20 Smith Street  
Parramatta NSW 2150  
PO Box 3485  
Parramatta NSW 2150  
Tel: (02) 9685 2000  
Tel: (02) 9685 2001  
Email: sydney@landpartners.com.au  
www.landpartners.com.au

HEIGHT DATUM	LOCAL AUTHORITY	
AHD	BLACKTOWN COUNCIL	
HEIGHT ORIGIN	SCALE	
SSM 73008 RL 62.937	1:3000 (A1)	
MERIDIAN	CONTOUR INTERVAL	
56	?.? Metre	
CO-ORD SYSTEM	SURVEYOR	DATE OF SURVEY
MGA	BS	01/04/05
CGAD FILE	DRAWN	DATE
68124	L.J.Mc	01/08/08
AUTOCAD FILE	CHECKED	DATE
71825	GKO	01/08/08
ARCHIVE FILE	APPROVED	DATE
68124 &	GKO	01/08/08
PLAN NUMBER	PLAN No.8	

HEIGHT DATUM AHD LOCAL AUTHORITY BLACKTOWN COUNCIL  
HEIGHT ORIGIN SSM 73008 RL 62.937 SCALE 1:3000 (A1)  
MERIDIAN 56 CONTOUR INTERVAL ?.? Metre  
CO-ORD SYSTEM MGA SURVEYOR BS DATE OF SURVEY 01/04/05  
CGAD FILE 68124 DRAWN L.J.Mc DATE 01/08/08  
AUTOCAD FILE 71825 CHECKED GKO DATE 01/08/08  
ARCHIVE FILE 68124 & APPROVED GKO DATE 01/08/08  
PLAN NUMBER PLAN No.8

SHEET 8 OF 9  
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- LEGEND**
- ▲ BENCH MARK
  - ⊠ TELEPHONE PIT
  - ⊡ WATER METER
  - ⊙ TREE D= DIAMETER TRUNK S= SPREAD OF CANOPY H= HEIGHT
  - ⊕ WATER HYDRANT
  - ⊖ STOP VALVE
  - ⊗ SEWER MAINTENANCE HOLE
  - ⊛ ELECT LIGHT POLE
  - ⊚ POWER POLE (light)
  - ⊙ POWER POLE
  - ⊠ GRATE
  - ⊡ GAS METER
  - ⊠ GATE
  - ⊠ MAN HOLE
  - ⊙ TAP
  - ⊙ INSPECTION HOLE
  - ⊠ CLOTHES HOIST
  - ⊠ GULLY PIT

PROPOSED FUTURE BOUNDARIES (LEASE AREA)

**LIGHT HORSE BUSINESS CENTRE  
OLD WALLGROVE ROAD, EASTERN CREEK**

**Proposed Recycling Centre and Landfill**

Last year we circulated an information brochure to the Minchinbury community explaining that development consent would be sought for a building and demolition waste materials Recycling Centre and Landfill to be located at the now disused Pioneer Quarry.

Some residents were not even aware that they lived so close to a quarry which had been operating for 50 years and did not know that concrete crushing and bitumen recycling is being, and has been carried on there for many years.

The Quarry is located about half a kilometre from the nearest Minchinbury residences and is about 700 metres across in one direction and about 400 metres across in the other. It is deeper than the distance from the highest span of the harbor bridge down to sea level.



Naturally, you will want to know about us and our project and we want you to have all the facts because we think that if we provide you with the accurate information then any concerns which you might have about the proposal can be allayed.

First we'll begin by telling you about ourselves.

At Light Horse Business Centre we are not a faceless multinational waste company we are ordinary working people who are engaged on a project.

We aim to build a business, dispose of waste, recycle materials, create jobs, develop land and remain profitable enough to keep doing these things no matter where the world economy goes.

Our operating company is "Dial A Dump Industries" and it started life as Dial A Dump Pty Ltd in 1984 initiated by its founder Ian Malouf, who began the business when he left school.

Slowly building up the business, the company now employs almost 100 people at Alexandria where the Group's Fleet, Plant and Equipment are serviced and maintained.



In 2002 we bought the Alexandria Landfill from Sydney City Council.

This is a non putrescible landfill accepting predominantly building and demolition waste. It is located about 7 kms from the centre of Sydney and halfway between the City and Sydney Airport.

Immediately on its boundary are a Motel, two fast food outlets a number of show rooms, factories and residences.

At this site we recover from the waste stream hardfill building and demolition materials, soils, sand, greenwaste and timber and we Recycle them into Building and Landscaping Materials for sale.

Processing of materials for re-use can be conducted in ways which have no impact on the surrounds provided that the area and the facility is designed for the purpose. Alexandria Landfill and Recycling currently applies world's best practice to the issues of dust and water management.

You are invited to look at our website at [www.dadi.com.au](http://www.dadi.com.au)

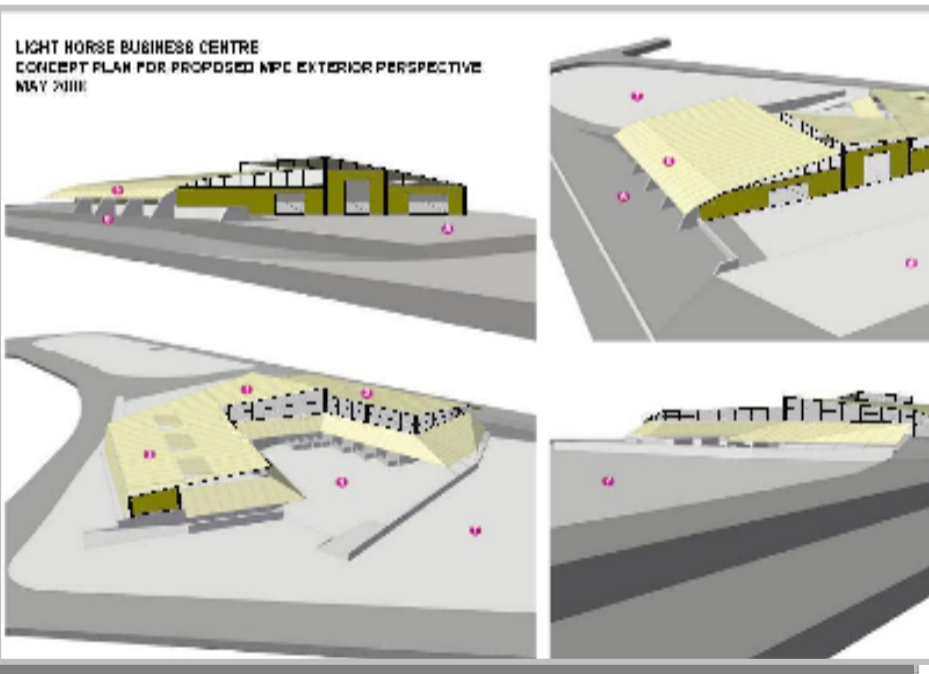
**This site at Alexandria (like the one proposed at Eastern Creek) does not accept foodwastes.**

**Our Eastern Creek Proposal**

In 2006 we bought 120 Hectares of land including the Pioneer Quarry at Eastern Creek The road which runs from the surface to the bottom is more than 3 kilometres long.

We propose to build a recycling centre and to use the Quarry as a landfill for those mixed materials which can't be recycled.

This is what we expect the facility will look like.



We understand that you would be curious and have concerns about the concept of an additional landfill being started in your neighbourhood.

We have given a great deal of thought to those areas of concern and because we also live in Sydney we are especially conscious that we are all entitled to enjoy our homes and families with the best amenity possible.

We have therefore given careful thought to these particular areas of concern and so much as space allows we want to address those issues.

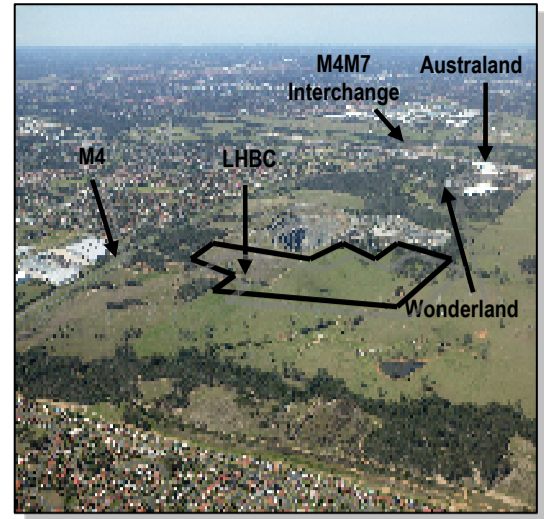
**Visual**

The facility will be surrounded on three sides by high "berms" or hills similar to those which are already there. This means that like now, the Quarry area cannot be seen from any residential area.

Its northern boundary "berm" would be exactly where the current hill surrounding the Quarry is and is about 500 metres from Minchinbury.

Bands of trees and reserve areas separate us from our northern neighbours

**This is the view from that hill and as you can see Minchinbury is still a considerable distance away.**



In this project much of the sorting of materials will occur inside new purpose built factory buildings. In the case of sand, soil, brick and concrete recycling distance, position, high berms, landscaping and trees and the strategic use of water sprays will ensure no dust.

**Odour** - No-one wants to live near a site which generates bad odour and certainly very few people want to work there. Bad odours are caused at landfill sites which accept foodstuffs and or chemical wastes. When foodstuffs decay and rot they give off unpleasant odours.

The site is zoned for filling with dry waste and this can not change. There is no proposal ever for this site to accept foodstuffs, chemicals sludges or other odour causing materials. Bricks, Concrete and Soil do not smell.

**Greenwaste** - Waste recycling companies need to be able to accept and recycle the full range of garden /land based materials otherwise it would be impractical to say, yes we can take your clean fill or soil but not your grass clippings.

We process the grass clippings and tree loppings and use them to upgrade recycled soils and potting mixes.



Other companies may use animal products in this process to accelerate composting. We do not. Properly managed and without using such accelerants, greenwaste and woodchips also do not smell.

Recycling of greenwaste in this way is also beneficial to the environment. Our recycling places an in-built limitation on the landfilling of organic materials. This in turn reduces the likelihood of future generation of landfill gases. This is good for the environment and a positive contribution to limiting climate change.

**Explosions** – Quarrying has ceased and there will be no further use of explosives.

**Water Management** - People have asked where will you get the water from? We place a high premium on ecological sustainability with roof water collection tanks planned for all buildings and the re-use of stormwater from detention basins.

The overall site is quite large and consequentially has a good catchment area. On site Water will be harvested from roofs and collection points where it will be stored in tanks for re-use.

Because of the geology of the site there is no risk to groundwater from the Quarry and leachate will be appropriately re-used or treated before disposal.

**Access and Traffic** - If you live in Minchinbury you might be concerned that there would be an increase in trucks or other heavy vehicles travelling through or near residential areas. This is not the case and in fact, even when fully operational there will be fewer trucks than when the Quarry was operating.

The site has a private road connecting to Old Wallgrove Road which is nearly 1.5 kilometres from the Minchinbury residential community. The site does not generate one extra vehicle in the residential area.

**Noise** - You may never previously have noticed the noises associated with Quarrying (except for blasting which has now ceased.) Recycling of brick, concrete and quarry materials has been happening on the site for more than 25 years and all we propose to do is to continue this under more modern conditions. Because of the way the site is laid out these activities will not be heard in Minchinbury and we might emphasise, there is no processing to take place at night.

**Dust** - Quarrying generates quite a deal of dust especially when blasting takes place and in past years there was not much emphasis placed on dust mitigation. Now it is very different and a great deal of care is taken to ensure that airborne dust is prevented. This is because employers are very much more conscious about caring for the health of their employees than in past years.

Sealing of roads, installation of water sprays, updated traffic control systems will all contribute to ensuring that dust associated with quarrying in past years will not be occurring into the future.

**Asbestos** - Our proposal is very clear about the landfill's potential as a destination for asbestos. Everyone is concerned about Asbestos and rightly so and we wanted to address this issue head on.

The use of asbestos has been very prevalent in Australia sometimes in the form of insulation but more often in its 'bonded' or sheet form in roofing or wall materials.

A higher proportion of houses in western Sydney have some form of asbestos product in them than the remainder of Sydney and as people want to renovate or upgrade their houses the disposal of asbestos presents them with a problem.

Bonded asbestos presents a very limited risk to humans if it can be disposed of safely whilst still in sheet form. Asbestos cannot be recycled and must by law be landfilled.

The bottom of a very deep quarry is by far the safest method of disposal and we think that most people would agree with that. Alternative and unacceptable ways for people to dispose of it is to dump it in the bush or hide it amongst other waste.

We believe that people should be encouraged to properly and safely manage their asbestos waste in accordance with approved procedures.

Our procedures require that smaller quantities delivered to us must be delivered wrapped and sealed in plastic bags and which are then buried in that state.

Asbestos is not water soluble and cannot harm groundwater.

We have been asked what we do about the 'hidden' asbestos and there is no doubt that this can happen. We minimize the incentive for people to 'hide' asbestos amongst other waste by providing legitimate and safe workplace methods for its disposal and by having alert and well trained staff with detailed procedures to spot it, remove it and dispose of it wherever and whenever it may be found.

We work on site everyday and it is in our interests and Yours for us to maintain safe workplace practices.

**Recycling** - We recycle only such things as soil, tiles, brick, concrete, timber, asphalt, greenwaste, rubble, metal, tyres, paper, glass and sand. These are normal dry construction, demolition and cleanup items which, when thrown out, in some cases can be recovered, recycled and re-used. These are described in a number of ways as mixed or dry or clean up or demolition wastes. The important thing is that they do not contain food.

Such items are all sorted and processed within a brand new purpose built factory building and are then either recycled for sale or transported off site for recycling by others.

Reprocessing and re-use of plastics reduces the burden on the planet's oil resources.

Re-use of metals means that we must quarry less ore from the ground.

Leftover rubbish which is too mixed to be separated or asbestos or insulation material (which must by law be buried) will be taken to the bottom of the Quarry and buried there.

There is NO opportunity or technique for recycling those materials and therefore they must be safely disposed of by burying in accordance with the Department of Environment and Climate Change (DECC) guidelines for such waste.

Bricks, concrete and soil type materials will be recycled in the same way that concrete and rocks have been recycled on the site by the previous owners for the last 25-50 years.



Recycled materials are required to meet stringent DECC requirements under the 3 F's regime and must be certified by an independent laboratory as meeting those standards before they are sold.

These recovered and processed materials will then be available for re-use by the community. In this way the environment is preserved while still creating job opportunities.

This proposal has been 3 years in review and has been supervised by some of the most experienced and reputable environmental scientists in Australia. Their work, at our request, has been double checked by equally reputable scientists and has been triple checked by the Council's Environmental Health Unit, the Traffic Management section, the Building and Engineering sections and the Drainage Engineering section of Council. The whole process is of course also subject to the intense scrutiny of the experts and scientists in the NSW Department of Environment and Climate Change.

The requirements of this project to meet accepted environmental standards have been exceeded by a safety margin of at least 40% and traffic generation is expected to be less than when the Quarry was operating.

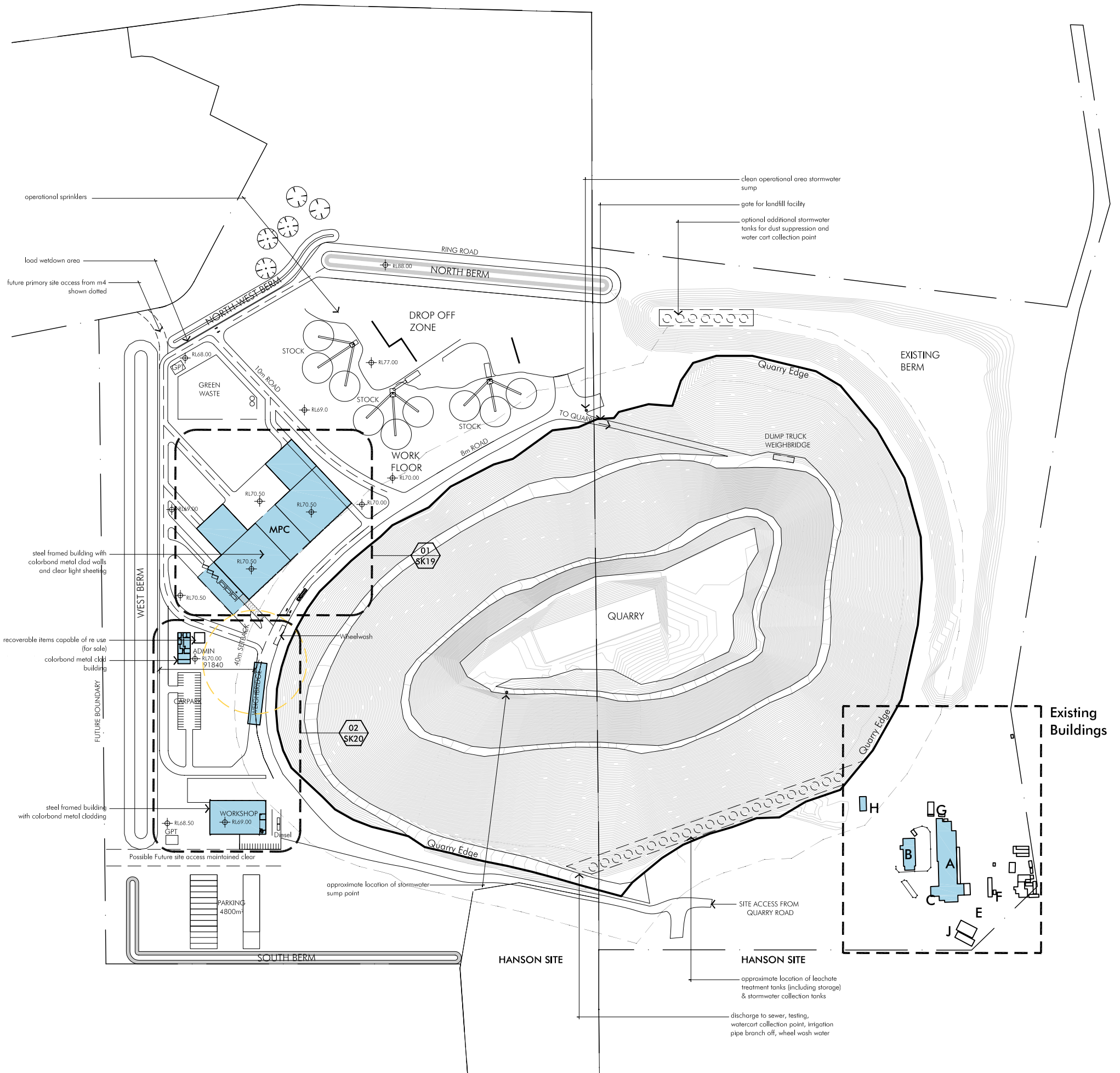
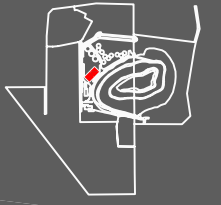
As will probably be apparent this is not an advertisement written by a PR company We, here, the staff at Light Horse Business Centre put this together hoping to better inform you.

**We want to thank You for your courtesy and input into this proposal and invite you to view the detailed plans and designs which are available on exhibition.**

**If you have any questions which we have not answered to your satisfaction please write to us at [info@dadi.com.au](mailto:info@dadi.com.au)**

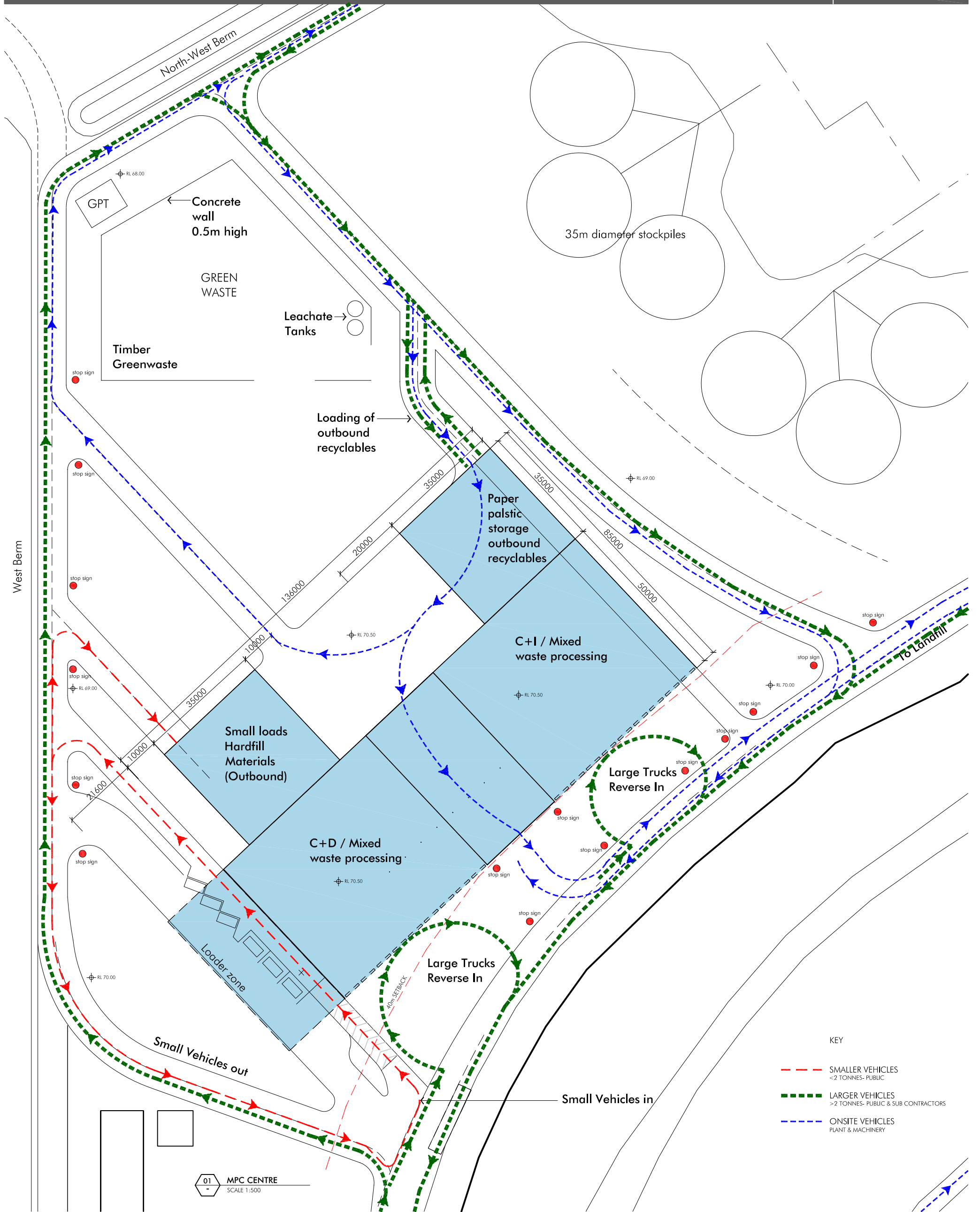
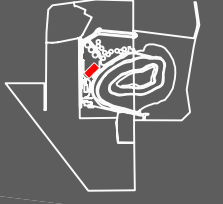


# LIGHT HORSE BUSINESS CENTRE



**NOTE:**  
 ALL SETOUT DIMENSIONS RELATIVE TO  
 WEIGHBRIDGE LOCATION AS SHOWN ON SURVEY  
 REFER SURVEY DWG\_PLAN No.3.

# LIGHT HORSE BUSINESS CENTRE



**KEY**

- SMALLER VEHICLES <2 TONNES- PUBLIC
- LARGER VEHICLES >2 TONNES- PUBLIC & SUB CONTRACTORS
- ONSITE VEHICLES PLANT & MACHINERY

01 MPC CENTRE  
SCALE 1:500

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**Hutchinson Builders**  
23 Dunning Avenue  
Rosebery NSW

LHBC

Project  
**Light Horse Business Centre**  
Eastern Creek NSW

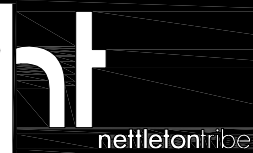
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April 2009  
**3439\_SK25**

Number  
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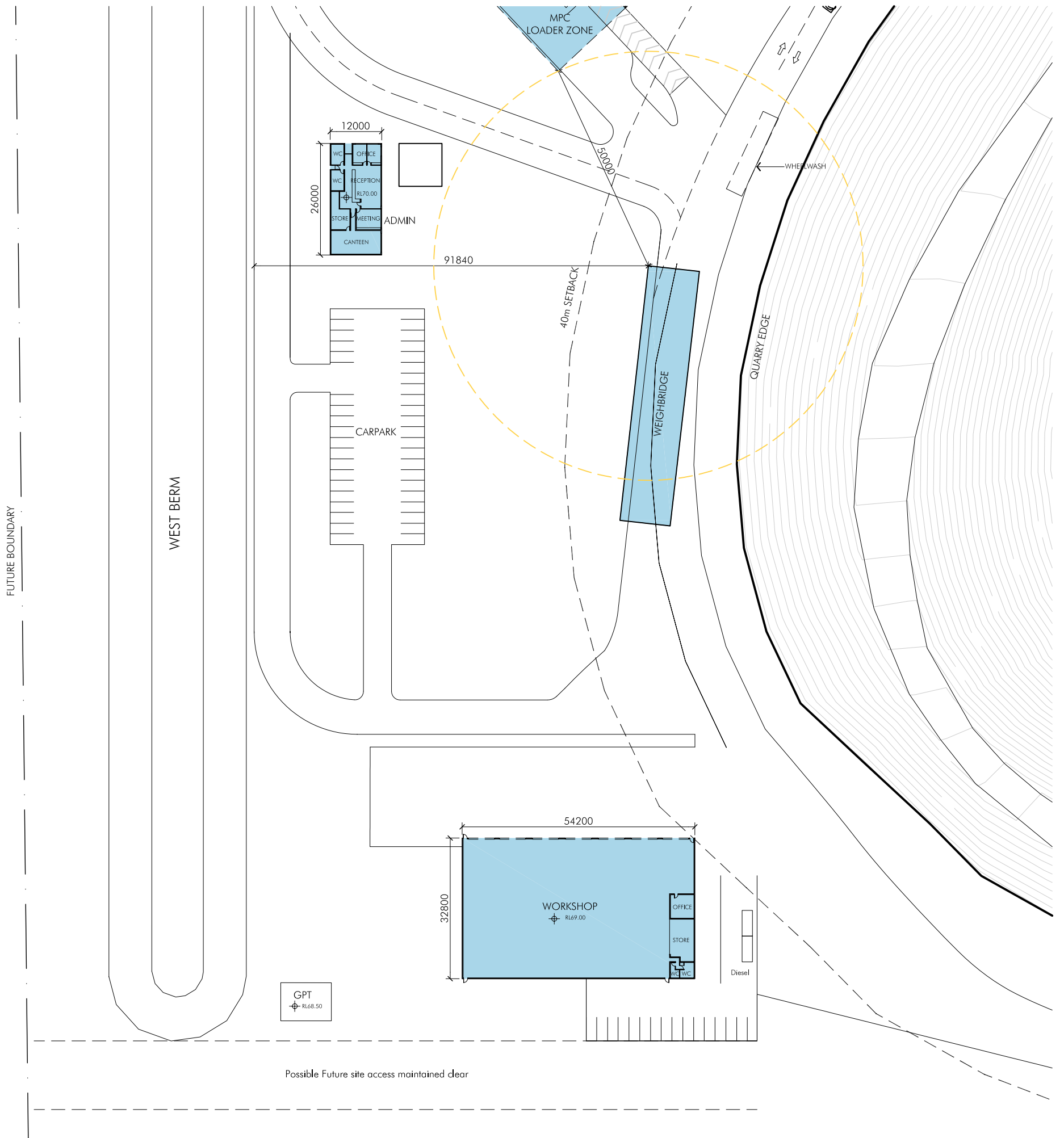
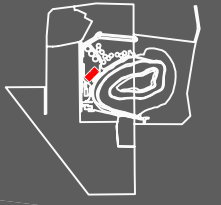
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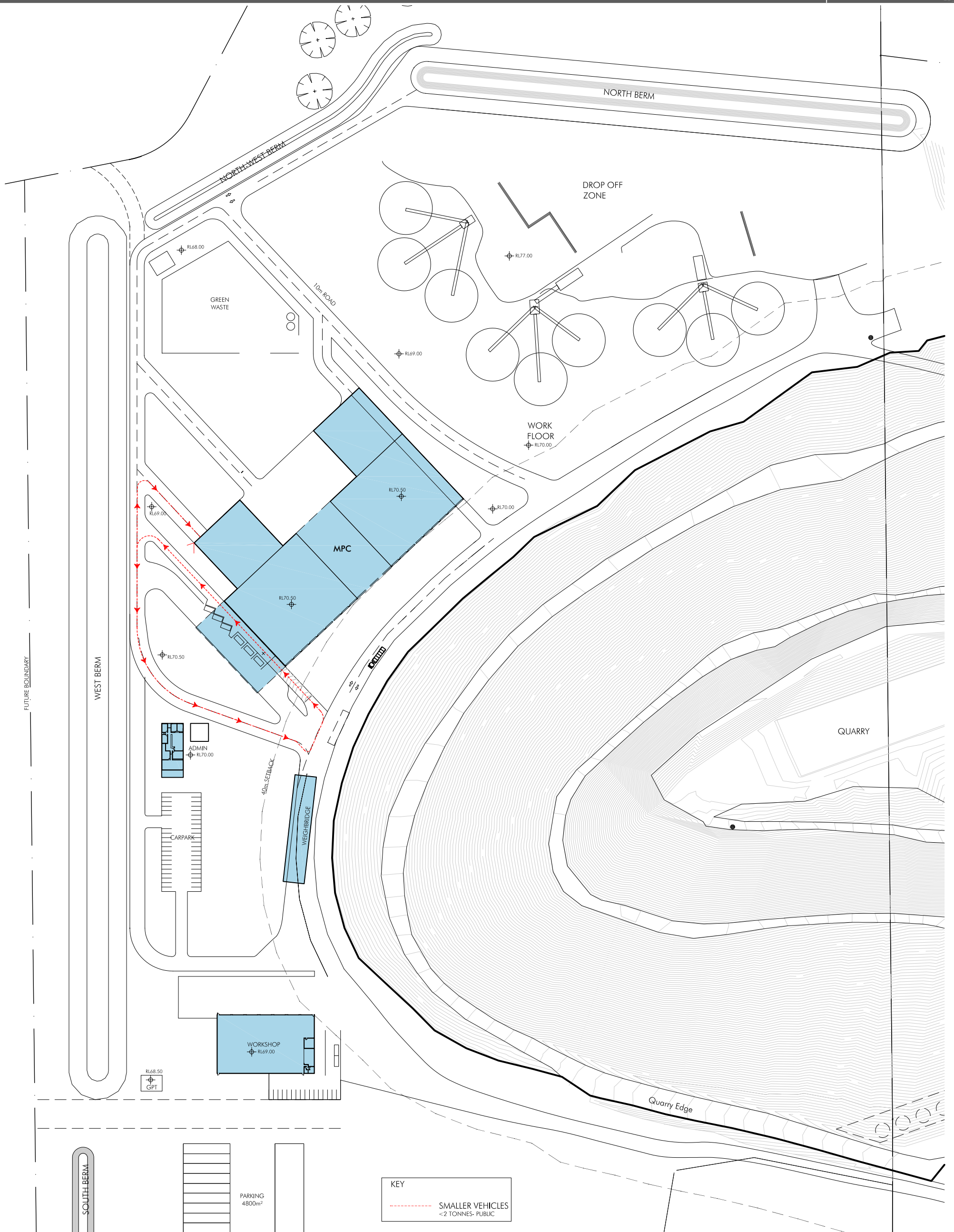
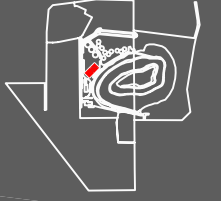
nettletontribe partnership pty ltd ABN 581661681722  
117 Willoughby Road, Rosebery NSW 2065  
t:02 94316431 f:02 94397474  
c: Sydney n: Melbourne e: info@nettletontribe.com.au w: nettletontribe.com.au

# LIGHT HORSE BUSINESS CENTRE



**02 ADMIN & WORKSHOP**  
SCALE 1:500

# LIGHT HORSE BUSINESS CENTRE



Client  
**Hutchinson Builders**  
 23 Dunning Avenue  
 Rosebery NSW

**LHBC**

Project  
**Light Horse Business Centre**  
 Eastern Creek NSW

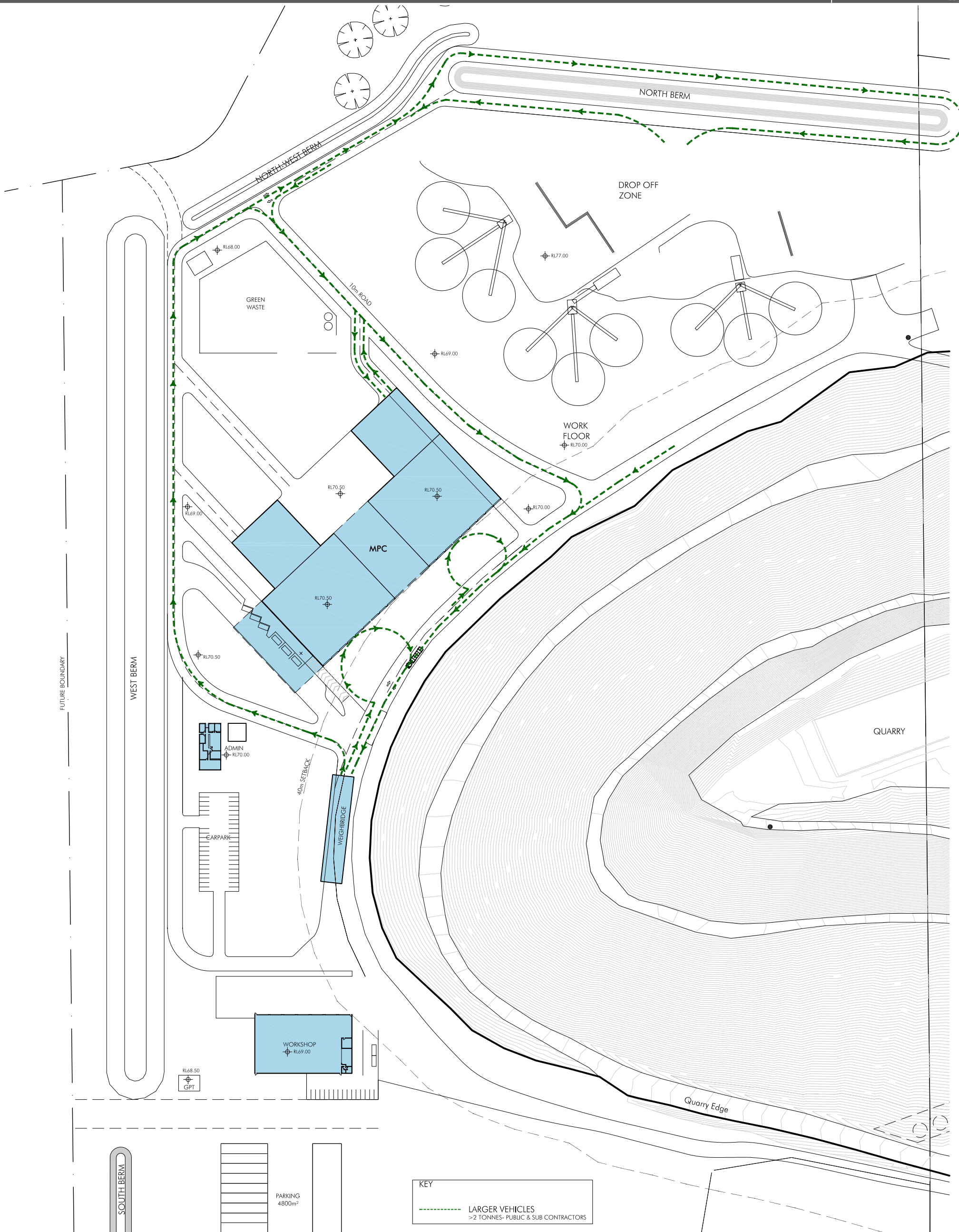
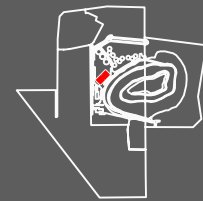
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**Traffic Flow chart 01**  
 1:1000 @ a3  
 April 2009  
**3439\_SK27**



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 nettletontribe  
 117 willoughby road crowsnest NSW 2061  
 t:02 9431 6431 f:02 9439 7474  
 c: Sydney n: Melbourne e: info@nettletontribe.com.au w: nettletontribe.com.au

# LIGHT HORSE BUSINESS CENTRE



Client  
Hutchinson Builders  
23 Dunning Avenue  
Rosebery NSW

LHBC

Project  
Light Horse Business Centre  
Eastern Creek NSW

Title  
Scale  
Date

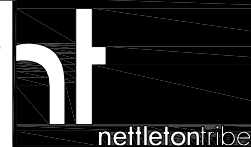
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April 2009

3439\_SK28

Number

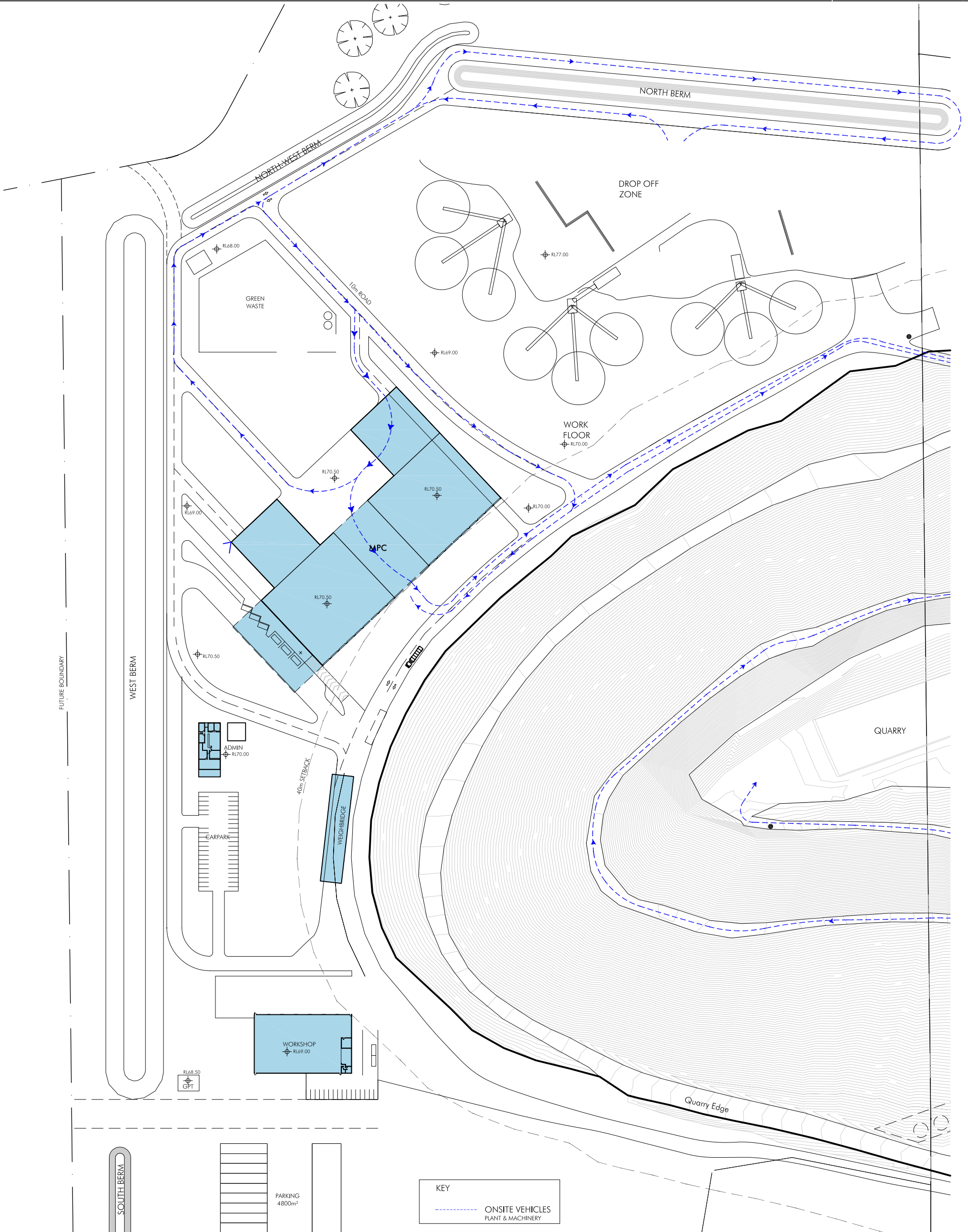
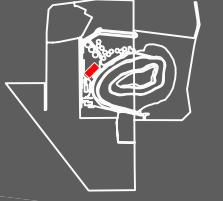
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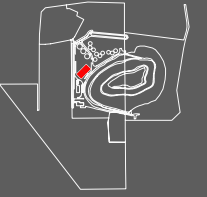


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c: Sydney n: Melbourne o: Adelaide w: nettletontribe.com.au

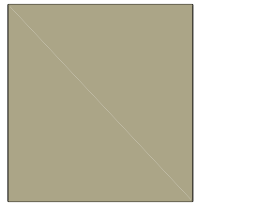
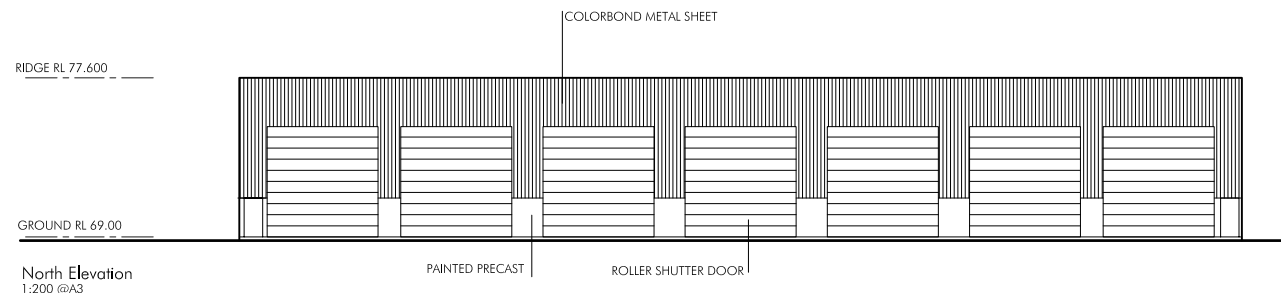
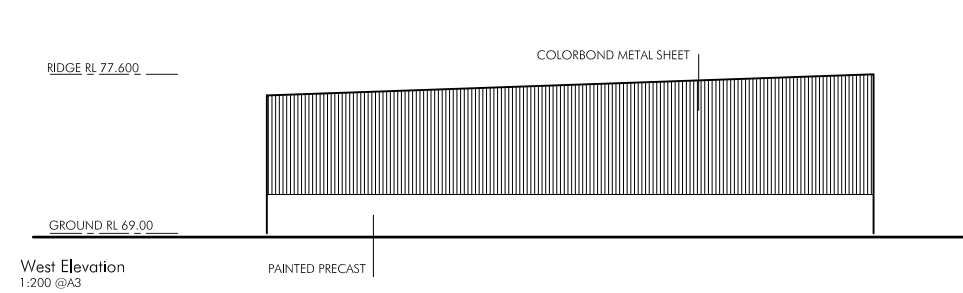
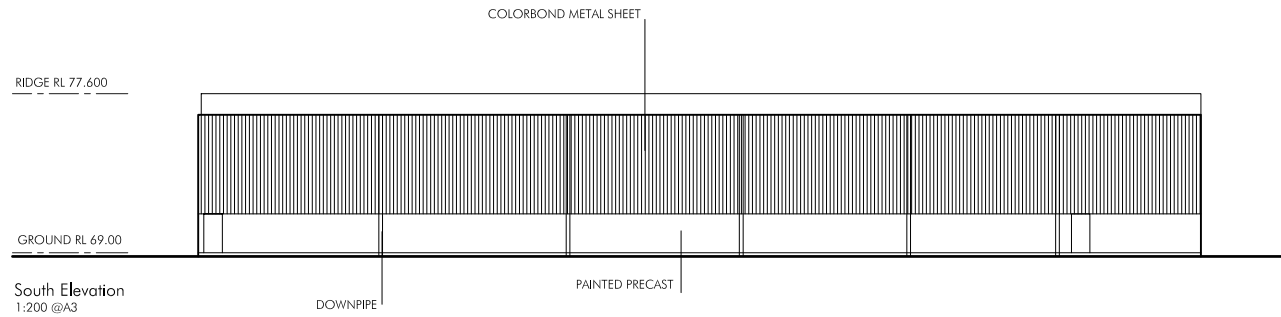
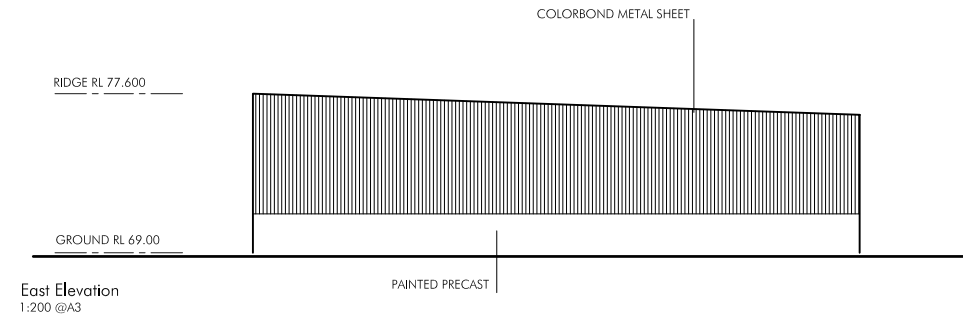
# LIGHT HORSE BUSINESS CENTRE



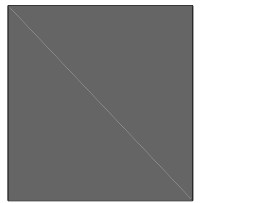
# LIGHT HORSE BUSINESS CENTRE



## WORKSHOP ELEVATIONS



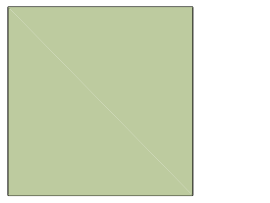
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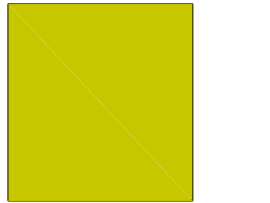
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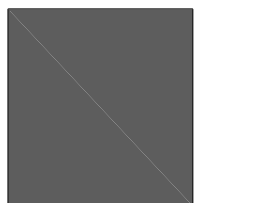
COLORBOND METAL SHEET - SHALE GRAY



CLEARLITE SHEETING

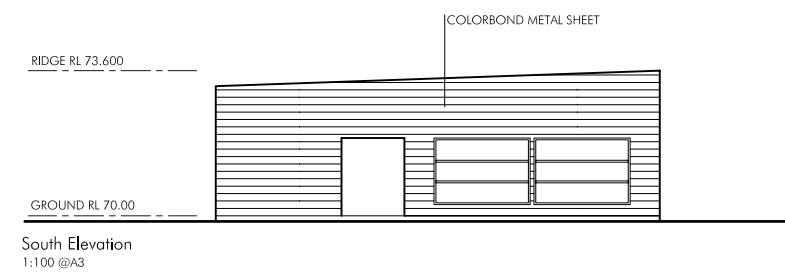
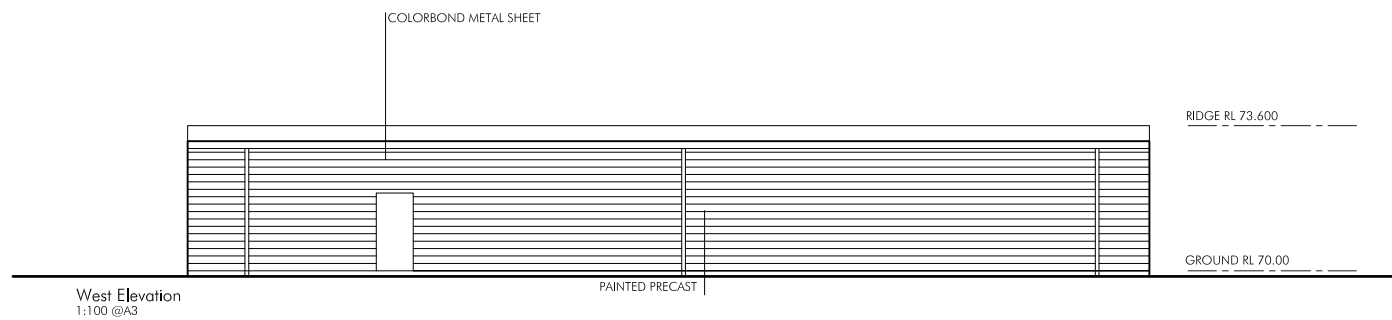
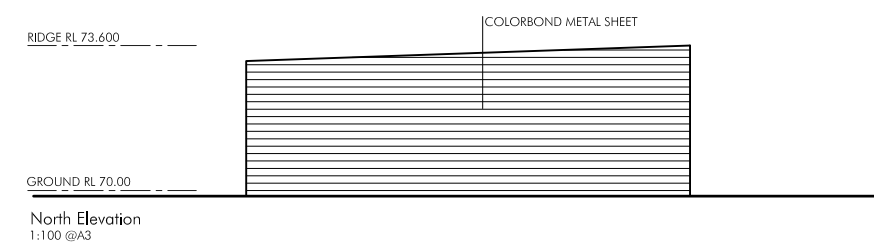
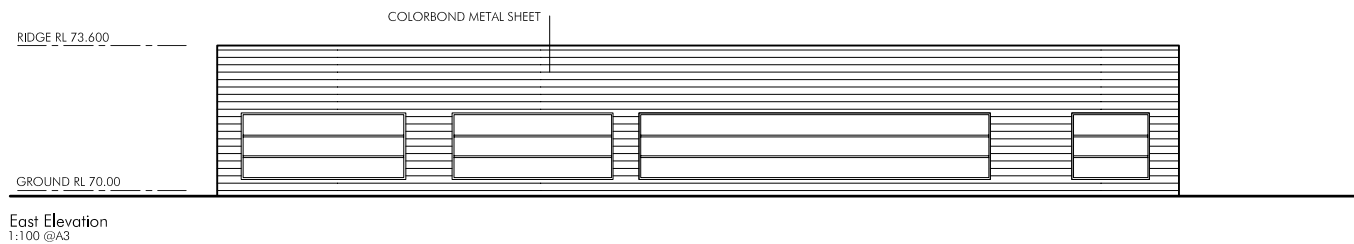


ROLLER SHUTTER DOORS



GUTTERS AND DOWNPIPES

## ADMINISTRATION BUILDING ELEVATIONS



Client  
Hutchinson Builders  
23 Dunning Avenue  
Rosebery NSW

LHBC

Project  
Light Horse Business Centre  
Eastern Creek NSW

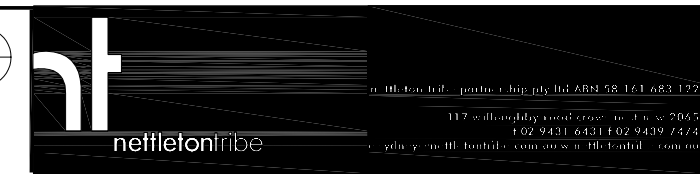
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Date April 2009

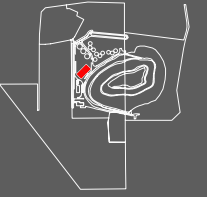
Number 3439\_SK31



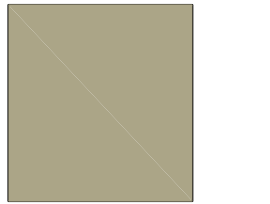
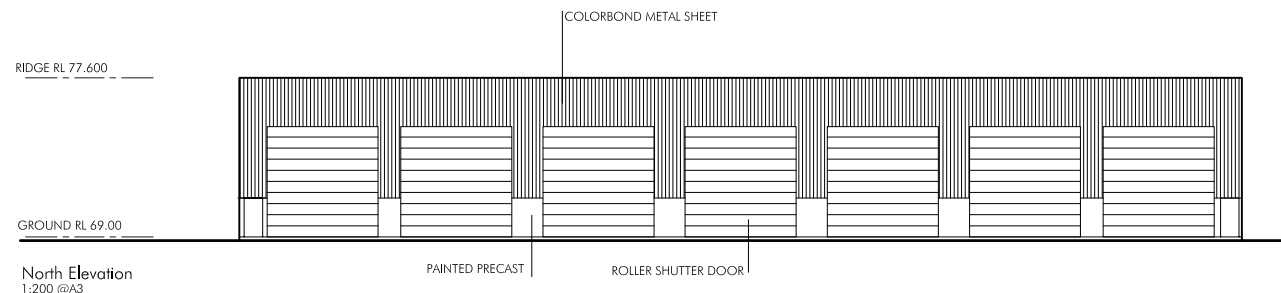
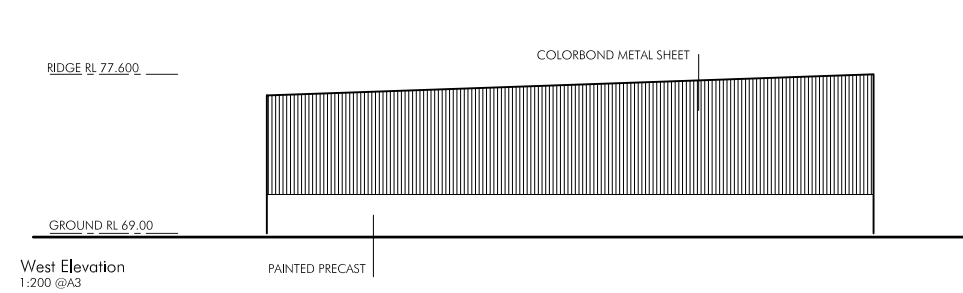
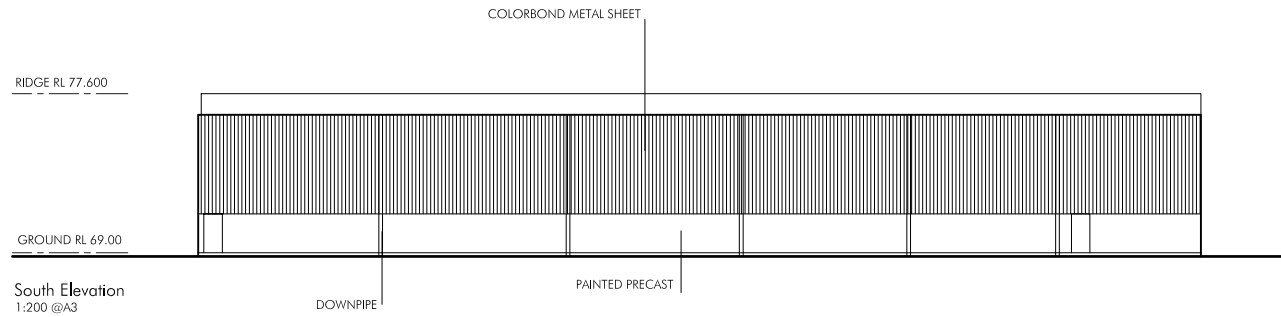
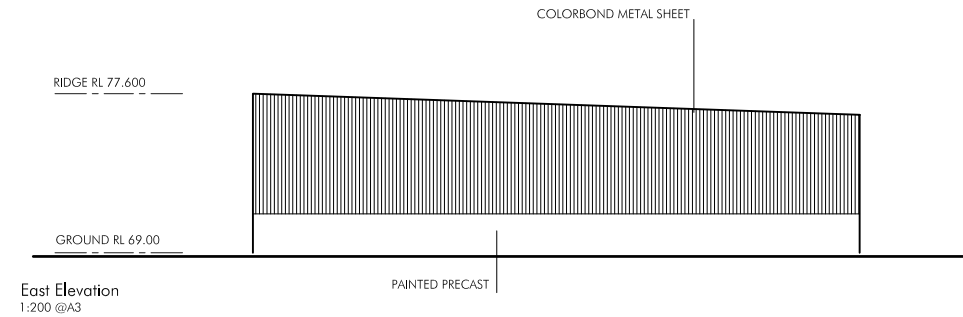
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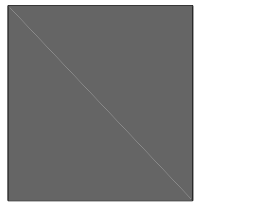
# LIGHT HORSE BUSINESS CENTRE



## WORKSHOP ELEVATIONS



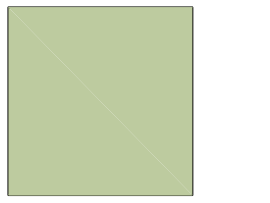
PAINTED PRECAST DULUX - SELF DISTRUST



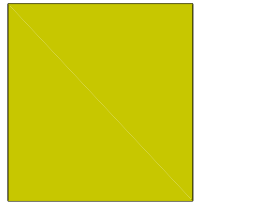
COLORBOND METAL SHEET - WINDSPRAY



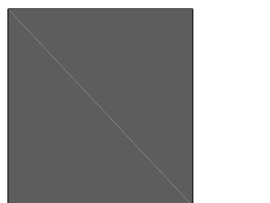
COLORBOND METAL SHEET - SHALE GRAY



CLEARLITE SHEETING

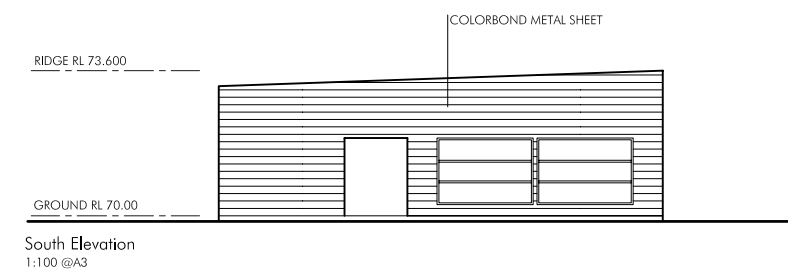
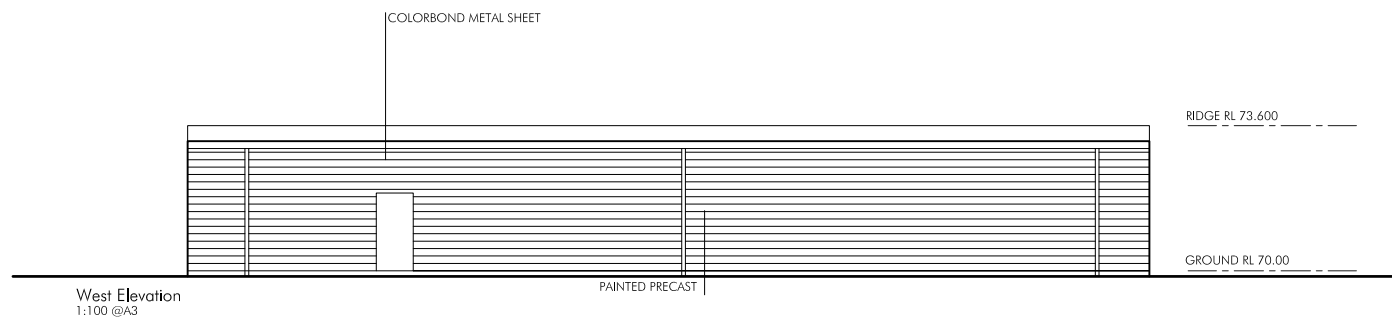
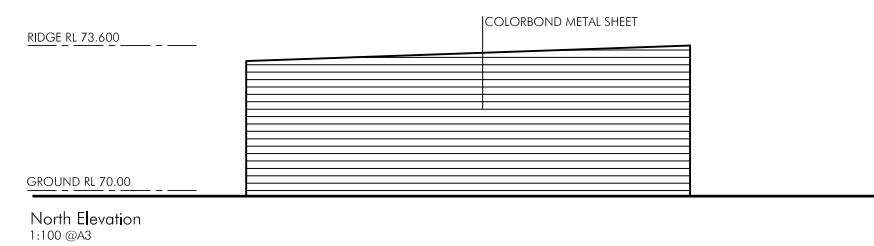
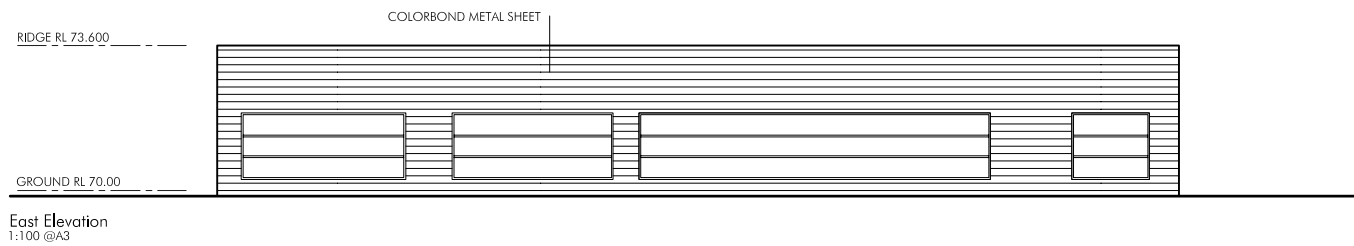


ROLLER SHUTTER DOORS



GUTTERS AND DOWNPIPES

## ADMINISTRATION BUILDING ELEVATIONS



Client  
Hutchinson Builders  
23 Dunning Avenue  
Rosebery NSW

LHBC

Project  
Light Horse Business Centre  
Eastern Creek NSW

Title Admin & Workshop Elevations

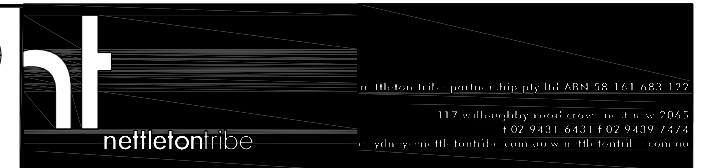
Scale 1:200/100 @ a3

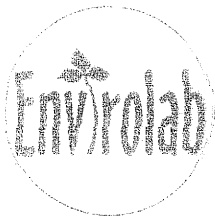
Date April 2009

Number 3439\_SK31



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*Envirolab Services Pty Ltd*

ABN 37 112 535 645

54 Frenchs Rd Willoughby NSW 2069

ph 02 9958 5801 fax 02 9958 5802

email: [lnotaras@envirolabservices.com.au](mailto:lnotaras@envirolabservices.com.au)

## CERTIFICATE OF ANALYSIS 17447

**Client:**

Environmental Investigations  
17/1A Coulson St  
Erskineville  
NSW 2043

Attention: Tony Guirguis

**Sample log in details:**

Your Reference:	<u>E871.1, St Peters</u>
No. of samples:	1 Water
Date samples received:	29/02/08
Date completed instructions received:	29/02/08

**Analysis Details:**

Please refer to the following pages for results, methodology summary and quality control data.  
Samples were analysed as received from the client. Results relate specifically to the samples as received.  
Results are reported on a dry weight basis for solids and on an as received basis for other matrices.  
*Please refer to the last page of this report for any comments relating to the results.*

**Report Details:**

Date results requested by:	4/03/08
Date of Preliminary Report:	Not Issued
Issue Date:	4/03/08

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Accredited for compliance with ISO/IEC 17025.

Tests not covered by NATA are denoted with \*.

**Results Approved By:**

  
\_\_\_\_\_  
Jacinta Hurst  
Operations Manager

Envirolab Reference: 17447  
Revision No: R 00



Total Phenolics in Water		
Our Reference:	UNITS	17447-1
Your Reference	-----	S1
Date Sampled	-----	29/02/2008
Type of sample		Water
Date extracted	-	3/03/2008
Date analysed	-	4/03/2008
Total Phenolics (as Phenol)	mg/L	0.10

<i>Metals in Waters - Total</i>		
Our Reference:	UNITS	17447-1
Your Reference	-----	S1
Date Sampled	-----	29/02/2008
Type of sample		Water
Date digested	-	3/03/2000
Date analysed	-	3/03/2008
Arsenic - Total	mg/L	<0.03
Beryllium - Total	mg/L	<0.06
Cadmium - Total	mg/L	<0.06
Chromium - Total	mg/L	0.06
Cobalt - Total	mg/L	<0.12
Copper - Total	mg/L	0.47
Mercury - Total	mg/L	0.008
Molybdenum - Total	mg/L	<0.18
Nickel - Total	mg/L	0.24
Lead - Total	mg/L	0.20
Antimony - Total	mg/L	<0.90
Selenium - Total	mg/L	<0.72
Tin - Total	mg/L	<0.30
Vanadium - Total	mg/L	1.1
Zinc - Total	mg/L	1.4

Miscellaneous Inorganics		
Our Reference:	UNITS	17447-1
Your Reference	-----	S1
Date Sampled	-----	29/02/2008
Type of sample		Water
Date prepared	-	4/03/2008
Date analysed	-	4/03/2008
Total Cyanide	mg/L	<0.05
Fluoride, F	mg/L	0.40

Method ID	Methodology Summary
GC.13	Water samples are analysed directly by purge and trap GC-MS.
GC.16	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS.
GC.3	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID.
GC.12	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS.
GC-5	Soil samples are extracted with hexane/acetone and waters with dichloromethane and analysed by GC with dual ECD's.
GC.8	Soil samples are extracted with hexane/acetone and waters with dichloromethane and analysed by GC with dual ECD's.
GC-6	Soil samples are extracted with hexane/acetone and waters with dichloromethane and analysed by GC-ECD.
LAB.30	Total Phenolics - determined colorimetrically following distillation.
Metals.20 ICP-AES	Determination of various metals by ICP-AES.
Metals.21 CV-AAS	Determination of Mercury by Cold Vapour AAS.
LAB.13	Cyanide - determined colourimetrically, following distillation. Based on APHA 20th ED, 4500-CN_C.E.
LAB.26	Fluoride determined by ion selective electrode (ISE) in accordance with APHA 20th ED, 4500-F-C.

QUALITY CONTROL VOC's in water	UNITS	PQL	METHOD	Blank
Date extracted	-			[NT]
Date analysed	-			[NT]
Dichlorodifluoromethane	µg/L	10	GC.13	<10
Chloromethane	µg/L	10	GC.13	<10
Vinyl Chloride	µg/L	10	GC.13	<10
Bromomethane	µg/L	10	GC.13	<10
Chloroethane	µg/L	10	GC.13	<10
Trichlorofluoromethane	µg/L	10	GC.13	<10
1,1-Dichloroethene	µg/L	1	GC.13	<1.0
Trans-1,2-dichloroethene	µg/L	1	GC.13	<1.0
1,1-dichloroethane	µg/L	1	GC.13	<1.0
Cis-1,2-dichloroethene	µg/L	1	GC.13	<1.0
Bromochloromethane	µg/L	1	GC.13	<1.0
Chloroform	µg/L	1	GC.13	<1.0
2,2-dichloropropane	µg/L	1	GC.13	<1.0
1,2-dichloroethane	µg/L	1	GC.13	<1.0
1,1,1-trichloroethane	µg/L	1	GC.13	<1.0
1,1-dichloropropene	µg/L	1	GC.13	<1.0
Carbon tetrachloride	µg/L	1	GC.13	<1.0
Benzene	µg/L	1	GC.13	<1.0
Dibromomethane	µg/L	1	GC.13	<1.0
1,2-dichloropropane	µg/L	1	GC.13	<1.0
Trichloroethene	µg/L	1	GC.13	<1.0
Bromodichloromethane	µg/L	1	GC.13	<1.0
trans-1,3-dichloropropene	µg/L	1	GC.13	<1.0
cis-1,3-dichloropropene	µg/L	1	GC.13	<1.0
1,1,2-trichloroethane	µg/L	1	GC.13	<1.0
Toluene	µg/L	1	GC.13	<1.0
1,3-dichloropropane	µg/L	1	GC.13	<1.0
Dibromochloromethane	µg/L	1	GC.13	<1.0
1,2-dibromoethane	µg/L	1	GC.13	<1.0
Tetrachloroethene	µg/L	1	GC.13	<1.0
1,1,1,2-tetrachloroethane	µg/L	1	GC.13	<1.0
Chlorobenzene	µg/L	1	GC.13	<1.0
Ethylbenzene	µg/L	1	GC.13	<1.0
Bromoform	µg/L	1	GC.13	<1.0
m+p-xylene	µg/L	2	GC.13	<2.0
Styrene	µg/L	1	GC.13	<1.0
1,1,2,2-tetrachloroethane	µg/L	1	GC.13	<1.0
o-xylene	µg/L	1	GC.13	<1.0
1,2,3-trichloropropane*	µg/L	1	GC.13	<1.0

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QUALITY CONTROL VOC's in water	UNITS	PQL	METHOD	Blank
Isopropylbenzene	µg/L	1	GC.13	<1.0
Bromobenzene	µg/L	1	GC.13	<1.0
n-propyl benzene	µg/L	1	GC.13	<1.0
2-chlorotoluene	µg/L	1	GC.13	<1.0
4-chlorotoluene	µg/L	1	GC.13	<1.0
1,3,5-trimethyl benzene	µg/L	1	GC.13	<1.0
Tert-butyl benzene	µg/L	1	GC.13	<1.0
1,2,4-trimethyl benzene	µg/L	1	GC.13	<1.0
1,3-dichlorobenzene	µg/L	1	GC.13	<1.0
Sec-butyl benzene	µg/L	1	GC.13	<1.0
1,4-dichlorobenzene	µg/L	1	GC.13	<1.0
4-isopropyl toluene	µg/L	1	GC.13	<1.0
1,2-dichlorobenzene	µg/L	1	GC.13	<1.0
n-butyl benzene	µg/L	1	GC.13	<1.0
1,2-dibromo-3-chloropropane	µg/L	1	GC.13	<1.0
1,2,4-trichlorobenzene	µg/L	1	GC.13	<1.0
Naphthalene	µg/L	1	GC.13	<1.0
Hexachlorobutadiene	µg/L	1	GC.13	<1.0
1,2,3-trichlorobenzene	µg/L	1	GC.13	<1.0
Surrogate	%		GC.13	[NT]
Dibromofluoromethane				
Surrogate toluene-d8	%		GC.13	[NT]
Surrogate 4-BFB	%		GC.13	[NT]

QUALITY CONTROL	UNITS	PQL	METHOD	Blank
<b>vTPH &amp; BTEX in Water</b>				
Date extracted	-			[NT]
Date analysed	-			[NT]
TPH C6 - C8	µg/L	10	GC.16	<10
Benzene	µg/L	1	GC.13	<1.0
Toluene	µg/L	1	GC.13	<1.0
Ethylbenzene	µg/L	1	GC.13	<1.0
m+p-xylene	µg/L	2	GC.13	<2.0
o-xylene	µg/L	1	GC.13	<1.0
Surrogate	%		GC.13	[NT]
Dibromofluoromethane				
Surrogate toluene-d8	%		GC.13	[NT]
Surrogate 4-BFB	%		GC.13	[NT]
<b>sTPH in Water (C10-C36)</b>				
Date extracted	-			[NT]
Date analysed	-			[NT]
TPH C10 - C14	µg/L	50	GC.3	<50
TPH C15 - C28	µg/L	100	GC.3	<100
TPH C29 - C36	µg/L	100	GC.3	<100
Surrogate	%		GC.3	[NT]
o-Terphenyl				
<b>PAHs in Water</b>				
Date extracted	-			[NT]
Date analysed	-			[NT]
Naphthalene	µg/L	1	GC.12	<1
Acenaphthylene	µg/L	1	GC.12	<1
Acenaphthene	µg/L	1	GC.12	<1
Fluorene	µg/L	1	GC.12	<1
Phenanthrene	µg/L	1	GC.12	<1
Anthracene	µg/L	1	GC.12	<1
Fluoranthene	µg/L	1	GC.12	<1
Pyrene	µg/L	1	GC.12	<1
Benzo(a)anthracene	µg/L	1	GC.12	<1
Chrysene	µg/L	1	GC.12	<1
Benzo(b,k)fluoranthene	µg/L	2	GC.12	<2
Benzo(a)pyrene	µg/L	1	GC.12	<1
Indeno(1,2,3-c,d)pyrene	µg/L	1	GC.12	<1
Dibenzo(a,h)anthracene	µg/L	1	GC.12	<1
Benzo(g,h,i)perylene	µg/L	1	GC.12	<1
Surrogate	%		GC.12	[NT]
p-Terphenyl-d14				

QUALITY CONTROL	UNITS	POI	METHOD	Blank
Organochlorine Pesticides in water				
Date extracted	-			[NT]
Date analysed	-			[NT]
HCB	µg/L	0.2	GC-5	<0.2
alpha-BHC	µg/L	0.2	GC-5	<0.2
gamma-BHC	µg/L	0.2	GC-5	<0.2
beta-BHC	µg/L	0.2	GC-5	<0.2
Heptachlor	µg/L	0.2	GC-5	<0.2
delta-BHC	µg/L	0.2	GC-5	<0.2
Aldrin	µg/L	0.2	GC-5	<0.2
Heptachlor Epoxide	µg/L	0.2	GC-5	<0.2
gamma-Chlordane	µg/L	0.2	GC-5	<0.2
alpha-Chlordane	µg/L	0.2	GC-5	<0.2
Endosulfan I	µg/L	0.2	GC-5	<0.2
pp-DDE	µg/L	0.2	GC-5	<0.2
Dieldrin	µg/L	0.2	GC-5	<0.2
Endrin	µg/L	0.2	GC-5	<0.2
pp-DDD	µg/L	0.2	GC-5	<0.2
Endosulfan II	µg/L	0.2	GC-5	<0.2
DDT	µg/L	0.2	GC-5	<0.2
Endrin Aldehyde	µg/L	0.2	GC-5	<0.2
Endosulfan Sulphate	µg/L	0.2	GC-5	<0.2
Methoxychlor	µg/L	0.2	GC-5	<0.2
Surrogate TCLMX	%		GC-5	[NT]

QUALITY CONTROL	UNITS	PCL	METHOD	Blank
OP Pesticides in water				
Date extracted	-			[NT]
Date analysed	-			[NT]
Diazinon	µg/L	0.2	GC.8	<0.2
Dimethoate	µg/L	0.2	GC.8	<0.2
Chlorpyrifos-methyl	µg/L	0.2	GC.8	<0.2
Ronnel	µg/L	0.2	GC.8	<0.2
Chlorpyrifos	µg/L	0.2	GC.8	<0.2
Fenitrothion	µg/L	0.2	GC.8	<0.2
Bromophos ethyl	µg/L	0.2	GC.8	<0.2
Ethion	µg/L	0.2	GC.8	<0.2
Surrogate TCLMX	%		GC.8	[NT]
QUALITY CONTROL	UNITS	PQL	METHOD	Blank
PCBs in Water				
Date extracted	-			[NT]
Date analysed	-			[NT]
Arochlor 1016	µg/L	2	GC-6	<2
Arochlor 1232	µg/L	2	GC-6	<2
Arochlor 1242	µg/L	2	GC-6	<2
Arochlor 1248	µg/L	2	GC-6	<2
Arochlor 1254	µg/L	2	GC-6	<2
Arochlor 1260	µg/L	2	GC-6	<2
Surrogate TCLMX	%		GC-6	[NT]
QUALITY CONTROL	UNITS	PQL	METHOD	Blank
SVOC's in water				
Date extracted	-			[NT]
Date analysed	-			[NT]
Phenol	µg/L	10	GC.12	<10
Bis (2-chloroethyl) ether	µg/L	10	GC.12	<10
2-Chlorophenol	µg/L	10	GC.12	<10
1,3-Dichlorobenzene	µg/L	10	GC.12	<10
1,4-Dichlorobenzene	µg/L	10	GC.12	<10
2-Methylphenol	µg/L	10	GC.12	<10
1,2-Dichlorobenzene	µg/L	10	GC.12	<10
bis-(2-Chloroisopropyl) ether	µg/L	10	GC.12	<10
3/4-Methylphenol	µg/L	20	GC.12	<20
N-nitrosodi-n-propylamine	µg/L	10	GC.12	<10
Hexachloroethane	µg/L	10	GC.12	<10
Nitrobenzene	µg/L	10	GC.12	<10
Isophorone	µg/L	10	GC.12	<10
2,4-Dimethylphenol	µg/L	10	GC.12	<10
2-Nitrophenol	µg/L	10	GC.12	<10

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QUALITY CONTROL SVOC's in water	UNITS	PCCL	METHOD	Blank
bis (2-Chloroethoxy) methane	µg/L	10	GC.12	<10
2,4-Dichlorophenol	µg/L	10	GC.12	<10
1,2,4-Trichlorobenzene	µg/L	10	GC.12	<10
Naphthalene	µg/L	10	GC.12	<10
4-Chloroaniline	µg/L	10	GC.12	<10
Hexachlorobutadiene	µg/L	10	GC.12	<10
2-Methylnaphthalene	µg/L	10	GC.12	<10
Hexachlorocyclopentadiene	µg/L	10	GC.12	<10
2,4,6-Trichlorophenol	µg/L	10	GC.12	<10
2,4,5-Trichlorophenol	µg/L	10	GC.12	<10
2-Chloronaphthalene	µg/L	10	GC.12	<10
2-Nitroaniline	µg/L	10	GC.12	<10
Dimethyl phthalate	µg/L	10	GC.12	<10
2,6-Dinitrotoluene	µg/L	10	GC.12	<10
Acenaphthylene	µg/L	10	GC.12	<10
3-Nitroaniline	µg/L	10	GC.12	<10
Acenaphthene	µg/L	10	GC.12	<10
2,4-Dinitrophenol	µg/L	100	GC.12	<100
4-Nitrophenol	µg/L	100	GC.12	<100
Dibenzofuran	µg/L	10	GC.12	<10
Diethylphthalate	µg/L	10	GC.12	<10
4-Chlorophenylphenylether	µg/L	10	GC.12	<10
4-Nitroaniline	µg/L	10	GC.12	<10
Fluorene	µg/L	10	GC.12	<10
2-methyl-4,6-dinitrophenol	µg/L	100	GC.12	<100
Azobenzene	µg/L	10	GC.12	<10
4-Bromophenylphenylether	µg/L	10	GC.12	<10
Hexachlorobenzene	µg/L	10	GC.12	<10
Pentachlorophenol	µg/L	100	GC.12	<100
Phenanthrene	µg/L	10	GC.12	<10
Anthracene	µg/L	10	GC.12	<10
Carbazole	µg/L	10	GC.12	<10
Di-n-butylphthalate	µg/L	10	GC.12	<10
Fluoranthene	µg/L	10	GC.12	<10
Pyrene	µg/L	10	GC.12	<10
Butylbenzylphthalate	µg/L	10	GC.12	<10
Bi(2-ethylhexyl) phthalate	µg/L	10	GC.12	<10
Benzo(a)anthracene	µg/L	10	GC.12	<10
Chrysene	µg/L	10	GC.12	<10

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QUALITY CONTROL	UNITS	POCL	METHOD	Blank
SVOC's in water				
Di-n-octylphthalate	µg/L	10	GC.12	<10
Benzo(b)fluoranthene	µg/L	10	GC.12	<10
Benzo(k)fluoranthene	µg/L	10	GC.12	<10
Benzo(a)pyrene	µg/L	10	GC.12	<10
Indeno(1,2,3-c,d)pyrene	µg/L	10	GC.12	<10
Dibenzo(a,h)anthracene	µg/L	10	GC.12	<10
Benzo(g,h,i)perylene	µg/L	10	GC.12	<10
Ethylmethanesulfonate	µg/L	10	GC.12	<10
Aniline	µg/L	10	GC.12	<10
Pentachloroethane	µg/L	10	GC.12	<10
Benzyl alcohol	µg/L	10	GC.12	<10
Acetophenone	µg/L	10	GC.12	<10
N-nitrosomorpholine	µg/L	10	GC.12	<10
3-methylphenol	µg/L	10	GC.12	<10
N-nitrosopiperidine	µg/L	10	GC.12	<10
2,6-Dichlorophenol	µg/L	10	GC.12	<10
Hexachloropropene-1	µg/L	10	GC.12	<10
N-nitroso-n-butylamine	µg/L	10	GC.12	<10
Safrole	µg/L	10	GC.12	<10
1,2,4,5-Tetrachlorobenzene	µg/L	10	GC.12	<10
Trans-iso-safrole	µg/L	10	GC.12	<10
1,3-Dinitrobenzene	µg/L	10	GC.12	<10
Pentachlorobenzene	µg/L	10	GC.12	<10
1-Naphthylamine	µg/L	10	GC.12	<10
2,3,4,6-Tetrachlorophenol	µg/L	10	GC.12	<10
2-Naphthylamine	µg/L	10	GC.12	<10
5-Nitro-o-toluidine	µg/L	10	GC.12	<10
Diphenylamine	µg/L	10	GC.12	<10
Phenacetin	µg/L	10	GC.12	<10
Pentachloronitrobenzene	µg/L	10	GC.12	<10
Dinoseb	µg/L	10	GC.12	<10
Methapyrilene	µg/L	10	GC.12	<10
p-Dimethylaminoazobenzene	µg/L	10	GC.12	<10
2-Acetylaminofluorene	µg/L	10	GC.12	<10
7,12-Dimethylbenz(a)anthracene	µg/L	10	GC.12	<10
3-Methylcholanthrene	µg/L	10	GC.12	<10
a-BHC	µg/L	10	GC.12	<10
b-BHC	µg/L	10	GC.12	<10
g-BHC	µg/L	10	GC.12	<10
d-BHC	µg/L	10	GC.12	<10
Heptachlor	µg/L	10	GC.12	<10

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QUALITY CONTROL	UNITS	PQL	METHOD	Blank				
SVOC's in water								
Aldrin	µg/L	10	GC.12	<10				
Heptachlor Epoxide	µg/L	10	GC.12	<10				
γ-Chlordane	µg/L	10	GC.12	<10				
α-Chlordane	µg/L	10	GC.12	<10				
Endosulfan I	µg/L	10	GC.12	<10				
p,p'-DDE	µg/L	10	GC.12	<10				
Dieldrin	µg/L	10	GC.12	<10				
Endrin	µg/L	10	GC.12	<10				
p,p'-DDD	µg/L	10	GC.12	<10				
Endosulfan II	µg/L	10	GC.12	<10				
Endrin Aldehyde	µg/L	10	GC.12	<10				
p,p'-DDT	µg/L	10	GC.12	<10				
Endosulfan Sulphate	µg/L	10	GC.12	<10				
Surrogate 2-fluorophenol	%		GC.12	[NT]				
Surrogate Phenol-d6	%		GC.12	[NT]				
Surrogate Nitrobenzene-d5	%		GC.12	[NT]				
Surrogate 2-fluorobiphenyl	%		GC.12	[NT]				
Surrogate 2,4,6-Tribromophenol	%		GC.12	[NT]				
Surrogate p-Terphenyl-d14	%		GC.12	[NT]				
QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
Total Phenolics in Water						Base II Duplicate II %RPD		
Date extracted	-			3/3/08	17447-1	3/03/2008    3/03/2008	LCS-W1	3/3/08%
Date analysed	-			4/3/08	17447-1	4/03/2008    4/03/2008	LCS-W1	4/3/08%
Total Phenolics (as Phenol)	mg/L	0.05	LAB.30	<0.050	17447-1	0.10    0.10    RPD: 0	LCS-W1	90%
QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
Metals in Waters - Total						Base II Duplicate II %RPD		
Date digested	-			3/3/08	[NT]	[NT]	LCS-W1	3/3/08%
Date analysed	-			3/3/08	[NT]	[NT]	LCS-W1	3/3/08%
Arsenic - Total	mg/L	0.03	Metals.20 ICP-AES	<0.03	[NT]	[NT]	LCS-W1	105%
Beryllium - Total	mg/L	0.06	Metals.20 ICP-AES	<0.06	[NT]	[NT]	LCS-W1	113%
Cadmium - Total	mg/L	0.06	Metals.20 ICP-AES	<0.06	[NT]	[NT]	LCS-W1	109%
Chromium - Total	mg/L	0.06	Metals.20 ICP-AES	<0.06	[NT]	[NT]	LCS-W1	111%
Cobalt - Total	mg/L	0.12	Metals.20 ICP-AES	<0.12	[NT]	[NT]	LCS-W1	108%

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
Metals in Waters - Total						Base II Duplicate II %RPD		
Copper - Total	mg/L	0.06	Metals.20 ICP-AES	<0.06	[NT]	[NT]	LCS-W1	110%
Mercury - Total	mg/L	0.0003	Metals.21 CV-AAS	<0.0003	[NT]	[NT]	LCS-W1	115%
Molybdenum - Total	mg/L	0.18	Metals.20 ICP-AES	<0.18	[NT]	[NT]	LCS-W1	106%
Nickel - Total	mg/L	0.12	Metals.20 ICP-AES	<0.12	[NT]	[NT]	LCS-W1	110%
Lead - Total	mg/L	0.18	Metals.20 ICP-AES	<0.18	[NT]	[NT]	LCS-W1	106%
Antimony - Total	mg/L	0.9	Metals.20 ICP-AES	<0.90	[NT]	[NT]	LCS-W1	109%
Selenium - Total	mg/L	0.72	Metals.20 ICP-AES	<0.72	[NT]	[NT]	LCS-W1	105%
Tin - Total	mg/L	0.30	Metals.20 ICP-AES	<0.30	[NT]	[NT]	LCS-W1	111%
Vanadium - Total	mg/L	0.12	Metals.20 ICP-AES	<0.12	[NT]	[NT]	LCS-W1	107%
Zinc - Total	mg/L	0.12	Metals.20 ICP-AES	<0.12	[NT]	[NT]	LCS-W1	110%
QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
Miscellaneous Inorganics						Base II Duplicate II %RPD		
Date prepared	-			3/3/08	17447-1	4/03/2008    4/03/2008	LCS-W1	4/3/08%
Date analysed	-			3/3/08	17447-1	4/03/2008    4/03/2008	LCS-W1	4/3/08%
Total Cyanide	mg/L	0.005	LAB.13	<0.005	17447-1	<0.05    [N/T]	LCS-W1	113%
Fluoride, F	mg/L	0.08	LAB.26	<0.08	17447-1	0.40    0.40    RPD: 0	LCS-W1	105%

**Report Comments:**

Unable to report organics due to the nature of the sample. The sample contains surfactants

Metals in water: PQL raised due to sample matrix.

Total Cyanide - PQL raised due to sample matrix.

Asbestos was analysed by Approved Identifier: Not applicable for this job

INS: Insufficient sample for this test

NT: Not tested

PQL: Practical Quantitation Limit

RPD: Relative Percent Difference

NA: Test not required

LCS: Laboratory Control Sample

NR: Not requested

<: Less than

>: Greater than

**Quality Control Definitions**

**Blank:** This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.

**Duplicate:** This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.

**Matrix Spike:** A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.

**LCS (Laboratory Control Sample):** This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.

**Surrogate Spike:** Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

**Laboratory Acceptance Criteria:**

Duplicates: <5xPQL - any RPD is acceptable; >5xPQL - 0-50% RPD is acceptable.

Matrix Spikes and LCS: Generally 70-130% for inorganics/metals; 60-140% for organics and 10-140% for

SVOC and speciated phenols is acceptable.

Surrogates: 60-140% is acceptable for general organics and 10-140% for

SVOC and speciated phenols.

4 March, 2009

Felicity Greenaway  
Department of Planning  
23-33 Bridge Street  
SYDNEY NSW 2000

*Our Reference: 0088621 – Response to Exhibition Process*



Dear Felicity,

**RE: FOUCS GROUPS FOR MP06-0139 LIGHT HORSE BUSNIESS  
CENTRE**

## 1. INTRODUCTION

This letter has been prepared in response to a request made by DoP for further information regarding the focus group research completed by ERM for the above Part 3A Project Application on behalf of the Lighthouse Business Centre.

The Director General's Requirements (DGRs) issued for the project on the 6 May, 2008 required consultation to be undertaken with relevant government authorities, landowners and the community. The DGRs required the consultation process and issues raised to be described within the Environmental Assessment.

ERM was commissioned to undertake the following with respect to consultation for this project:

- o Meetings with local and state government authorities at nominated intervals throughout the Part 3A process;
- o Conduct a Planning Focus Meeting (PFM) with government agencies; and
- o Conduct research in the form of focus groups which were aimed at engaging the community.

The meetings, focus groups and PFM were conducted in addition to the broad community consultation process undertaken by the proponent (Light Horse Business Centre).

## **2. THE BROAD COMMUNITY CONSULTATION PROCESS**

As identified within Section 5.3 of the Environmental Assessment Report (EAR), the proponent undertook the following broad consultation process:

*In October 2006, the proponent prepared and distributed pamphlets to all Minchinbury residences and businesses via a letterbox drop. The pamphlets provided information about the Project, the proponent and responded to issues of potential community concern relating to the Project, including noise and dust management and traffic generation. The pamphlet also invited residents to make comments and/or inquires.*

*The proponent also prepared a media release issued in October 2006 which provided an overview of the site history, the Project, the current stage in the approvals process and proposed environmental management measures.*

Following the consultation process undertaken by the proponent, ERM was engaged to participate in meetings with government authorities, initiate and facilitate the PFM and convene the focus groups.

## **3. FOCUS GROUPS**

### **3.1 SCOPING AND METHODOLOGY**

The focus groups aimed to capture the views and perceptions of residents who may have been unaware of the proposal and therefore were less likely to have participated in activities organised by the local action group(s).

The strength of focus group research is the ability to engage people who are likely to be impacted by a particular proposal, but who are unlikely to participate in general community consultation activities for a range of reasons including; availability of time, information, preference not to be involved in public forums, etc. The focus group provides an opportunity to discuss in depth the views and perceptions of participants.

The methodology used by ERM in the conduct of the focus groups for the project included the following steps:

ERM undertook a demographic analysis of the Minchinbury locality to ascertain the key characteristics of its demographic profile. These were used to set the criteria for selection of focus group participants.

The criteria selected required each group include:

- o Range of age cohorts over 18 years;
- o Gender balanced: 50% male and 50% female;
- o A mix of family types including:
  - o Parents with children 12 years and under;
  - o Parents with children older than 13 years; and
  - o Adults with no children.
- o All participants should be resident within the suburb of Minchinbury.

ERM engaged an accredited market research firm, Marketinfo Pty Ltd, to recruit focus group participants for two focus groups using a random telephone selection process. A map showing the general location of participants recruited is included within *Appendix A*.

As shown on the map with the exception of two participants, the majority of participants were residents in the northern area of the suburb of Minchinbury. Those not residing in Minchinbury were included because they had recently moved from this area.

The focus group participants were therefore recruited independently of ERM. This process ensures that the participant group is randomly selected and that the confidentiality of the people that attend is maintained. This process encourages people to discuss their views openly as part of the focus group.

Prior to each focus group being conducted, Marketinfo Pty Ltd advised participants by letter of the time and venue of the focus groups. The letter stated that the group would canvas their opinion about development within the Minchinbury locality. This ensured that participants did not opt out of the group on the basis that the Lighthouse proposal did not interest them.

### 3.2 FOCUS GROUP STRUCTURE

The focus groups were facilitated by two facilitators from ERM's social research team. A focus group guide was used to ensure consistency in discussion for each group. A copy of the Focus Group Guide is included in *Appendix B*.

The discussions taking place during each focus group was recorded so that the statements made during discussions could be checked where required during preparation of the social impact assessment (SIA) which described the consultation process and issues raised as required by the DGRs. This information was submitted as part of the EAR.

In line with confidentiality requirements these recordings were destroyed on completion of the SIA report.

### 3.3 FOCUS GROUP OBSERVATIONS

#### 3.3.1 *Participant's Awareness of the Quarry*

In each group the Project was introduced. As part of that introduction the groups were shown an aerial photograph of the site and surrounds. They were also given A3 size maps of the area which showed the site and surrounding residential areas. All participants were able to locate their residences on the maps. As noted in the SIA report, at this point the majority of focus group participants made general observations expressing surprise at how close the project site was to their respective residences.

We hope this letter clarifies the queries raised by DoP regarding the focus group process. Should you have any queries please do not hesitate to contact Steve O'Connor on (02) 4964 2150 for further information.

Yours sincerely,  
for Environmental Resources Management Australia Pty Ltd



Steve O'Connor  
Principal

Appendix A

## LOCATION OF FOCUS GROUP PARTICIPANTS



Appendix B

# FOCUS GROUP GUIDE

## **Focus Group Guide**

### **Welcome and Introduction (5 min)**

- o This group will run for 1.5 hours.
- o We want to hear your views on the issues discussed.
- o There are no right or wrong answers.
- o I will keep you on topic and make sure we move through all of the material we need to cover tonight with the aim of finishing on time.
- o Katie/Laura will be taking notes and recording the group in order to summarise the views expressed. This is a standard part of focus group research to ensure that we capture exactly what you say.
- o The information you provide will be confidential. The project write up will not identify you individually and once we finish the group we will not be able to identify or contact you subsequently.

### **Questions (25min)**

#### **Ice breaker (5 min)**

I'm going to get you to introduce yourselves to the group individually. Tell us who you are and how long you have lived in your current home?

#### **General questions (30 min)**

Imagine I have just moved into the house next door to you. I've just finished unloading the removalist truck and I've come over to ask for advice on the closest place to take the children for a snack and a run around. Where would you send me?

How would you describe the neighbourhood and wider area to someone you work with? What is good about it? What don't you like?

What would you like the area to look like in ten years time? Do you see any reason why it won't look the way you would like it to? (Discuss any threats to the potential for the area to develop the way people would like to see it develop).

Thinking about the things which you have identified as being the most important characteristics of the community how would you rate them in terms of their importance to you / which is most important, which is least?

Fish for information on:

Noise disruption to residents

Traffic disruption

Use of natural bushland areas

Problems with dust

If they don't mention these raise them e.g. are you ever woken at night by noise? Where do you walk your dogs. Is there any bushland in the area?

## **Light Horse Project (40min)**

*Introduce the project*

A proposal is being prepared for submission to the Department of Planning for approval for the construction and operation of a Waste Management and Landfill Facility at Eastern Creek. The Project will include establishment and operation of a Materials Processing Centre (MPC), Waste Transfer Station (WTS) and Inert and Solid Waste Landfill at the site. All waste received will be from construction and demolition (C&D), commercial and industrial (C&I) and green waste. Environmental Resources Management Australia Pty Ltd (ERM) has been engaged by LHBC to undertake an Environmental Assessment (EA) for the Project.

**Exercise (25 min)** Participants will need maps they can draw or write on.

*The exercise should be approx 15 minutes discussion in small group, 6 min report back from individual groups, 6 min analysis of common and differing points.*

### **Small group discussion**

I'm going to get you to break into groups of three and discuss the strength and weaknesses of the project as you see them.

- o What questions does the proposal raise for you?
- o Do you know anything about the area which will influence how the project might work?
- o What concerns might you have about its establishment and longer term operation?
- o Do you see any way to manage these concerns? If so what are they?
- o What benefits do you believe it will bring? If so what are they?

### **Reforming into full group.**

Ask one person to report back on the key points identified.

List issues on a white board or butchers paper as they are identified.

Discuss the common points and differing points. Ask whether there is general agreement on points.

### **Summary**

Are there any additional questions which you have regarding the proposal given the discussion we have had?

### **Explanation of project (10min)**

The 3A assessment process requires that the proposal considers impacts to:

- o Surface and Groundwater;
- o Soils and landforms;
- o Air quality;
- o Visuals;

- o Noise and vibration;
- o Heritage;
- o Traffic and transport;
- o Ecology;
- o Hazards and risks
- o Waste; and
- o Socioeconomics.

Once the study has been completed it will be submitted to the Department of Planning for assessment and determination. At this stage we anticipate that will occur in early 2008.

Remember as researchers we have no way to contact you once the group is finished so if you do want further information there will be an opportunity for public comment when the proposal is lodged with the Department of Planning. If you do want to comment you can do that direct to the Department of Planning or through Blacktown City Council who will also have an interest in the project.

#### **Focus group materials**

- o Attendance sheet
- o Name tags for all of us
- o White board or butchers paper
- o Recorder - check batteries and tape to ensure its working. Take spare batteries and tape in case the thing breaks
- o Copies of maps of the site which can be drawn on by participants
- o Pens for participants
- o Markers for white board or butchers paper

### Will this generate more traffic?

Quarry trucks have been entering and leaving the quarry by a private road for most of the last fifty years with no impact on the residential area. This is largely expected to continue and overall we do not expect any increase beyond that.

### What about noise?

The most effective methods of addressing noise involve distance, landscaping and landforms.

The machinery we use in processing is state of the art and when operating is quiet enough to hold normal conversation alongside.

It will be more than half a kilometre away from residential areas and surrounded by earthen banks and tree corridors. There will be no noise heard in the residential area from the landfill or from recycling activities .

We will be working with Blacktown City Council to ensure that all aspects of our proposal are worked through having regard to community interests. We intend holding an information meeting and if you have any questions we are happy to answer them and invite you to contact us.

For further information contact:

**Light Horse Business Centre**  
**PO Box 1040, MASCOT NSW 1460**

Tel: (02) 9519 9999  
email: [joi@dadi.com.au](mailto:joi@dadi.com.au)

Fax: (02) 9516 5559



[www.dadi.com.au](http://www.dadi.com.au)

Printed and circulated October 2006

# A Message to our Minchinbury Neighbours

from



**Old Wallgrove Road, Eastern Creek**

Dear Neighbours,

We are the Light Horse Business Centre and we are part of the DAD Industries Group.



We are a home grown Sydney business and we remove building waste and recycle it for other uses by the community.

Last year we purchased the old Pioneer Quarry which has been operating for about fifty years extracting blue metal rock used in road building.



**Aerial View of the Site**

The Quarry is now near the end of its life and must be filled and rehabilitated to return the landform to its pre Quarry level.

Council has zoned the land surrounding the Quarry for Industrial use and we propose to lodge a Development Application to use that land for recycling, waste transfer and landfilling.

Our group of companies is a market leader in recycling of building and demolition materials and making building and landscaping products.

On the Quarry site we propose to develop a facility where brick, concrete, soil and similar waste materials are received, processed and then sold for re-use by the community.

This ensures that fewer natural resources are wasted, cheaper landscaping and building products are available for consumers and additional employment opportunities are provided in an Environmentally Sustainable Development.

Our predominant business is Recycling of building and landscaping materials. Some materials of course cannot be recycled and for them there is no other alternative but landfilling.

Recycling is an important activity in a world of shrinking resources. The more we can recover and re-use a second and third time around the less of the planet's resources we consume and the less energy we waste.



**Stockpiles of Sand/Soil**

We understand that you may be concerned about the impact our business proposal may have on your community and your property values.

We want to reassure you that it is our aim and intention that there will be no negative impacts for you.

Our intention is to make certain that through the development application process every step is taken to ensure that the community interests are protected. On the contrary, there will be enhanced business and employment opportunities for young people in the area and improved infrastructure.

We will do this by ensuring that the processing facility is developed behind the existing natural hills and shielded by trees and landscaping. The facility will not be seen from Minchinbury.

It is also natural to be concerned about dust and odours as these are commonly associated in peoples' minds with Landfills.

#### **Will the Landfill accept foodstuffs?**

**NO!** This proposed Landfill will take predominantly building and demolition waste and **no foodstuffs, sludge or hazardous chemicals**. There is no smell from bricks and rubble and concrete and soil.

#### **Will there be dust?**

We use modern spray mist technology to efficiently use water to settle dust. We don't waste water but for the safety and convenience of our employees we make sure there is no out of control dust.

It is important to remember that the Quarry is over 150 metres deep and it will be several decades before the filled area comes anywhere near the surface. Even then the filling activity will be completely hidden from view.

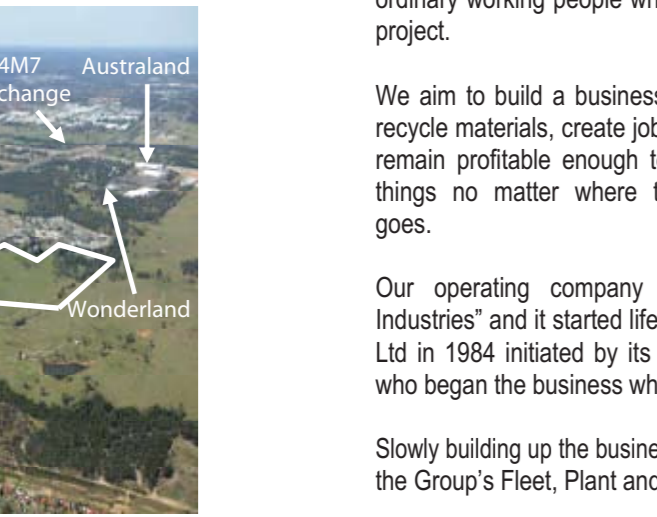
**Briefing Presentation to the Residents of Minchinbury**



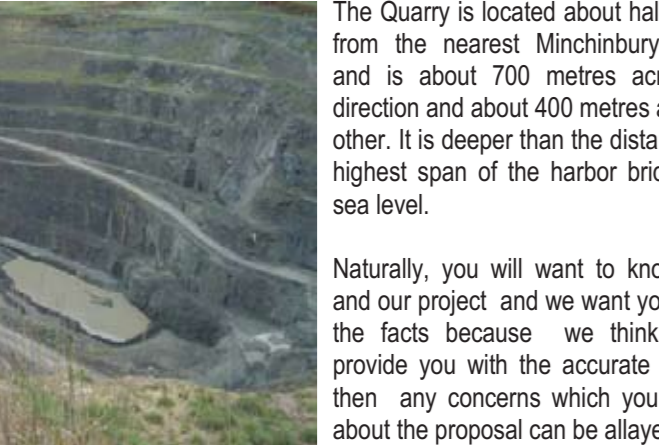
**LIGHT HORSE BUSINESS CENTRE  
OLD WALLGROVE ROAD, EASTERN CREEK**

**Proposed Recycling Centre and Landfill**

Last year we circulated an information brochure to the Minchinbury community explaining that development consent would be sought for a building and demolition waste materials Recycling Centre and Landfill to be located at the now disused Pioneer Quarry.



Some residents were not even aware that they lived so close to a quarry which had been operating for 50 years and did not know that concrete crushing and bitumen recycling is being, and has been carried on there for many years.



The Quarry is located about half a kilometre from the nearest Minchinbury residences and is about 700 metres across in one direction and about 400 metres across in the other. It is deeper than the distance from the highest span of the harbor bridge down to sea level.

Naturally, you will want to know about us and our project and we want you to have all the facts because we think that if we provide you with the accurate information then any concerns which you might have about the proposal can be allayed.

**First we'll begin by telling you about ourselves.**

At Light Horse Business Centre we are not a faceless multinational waste company we are ordinary working people who are engaged on a project.



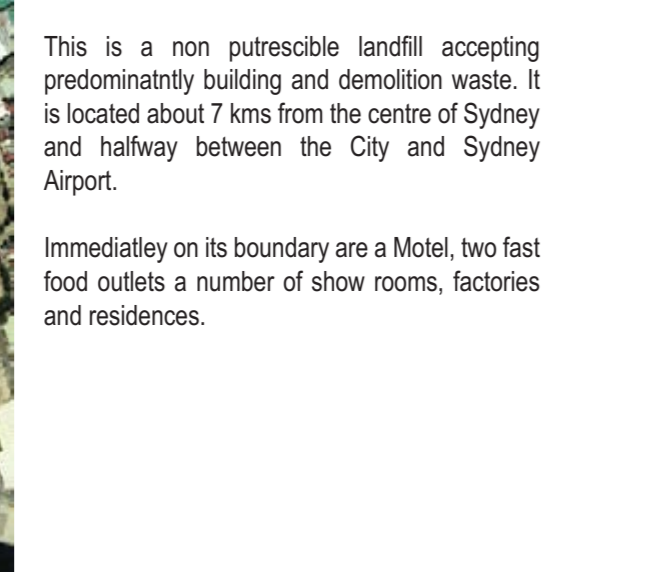
We aim to build a business, dispose of waste, recycle materials, create jobs, develop land and remain profitable enough to keep doing these things no matter where the world economy goes.

Our operating company is "Dial A Dump Industries" and it started life as Dial A Dump Pty Ltd in 1984 initiated by its founder Ian Malouf, who began the business when he left school.

Slowly building up the business, the company now employs almost 100 people at Alexandria where the Group's Fleet, Plant and Equipment are serviced and maintained.

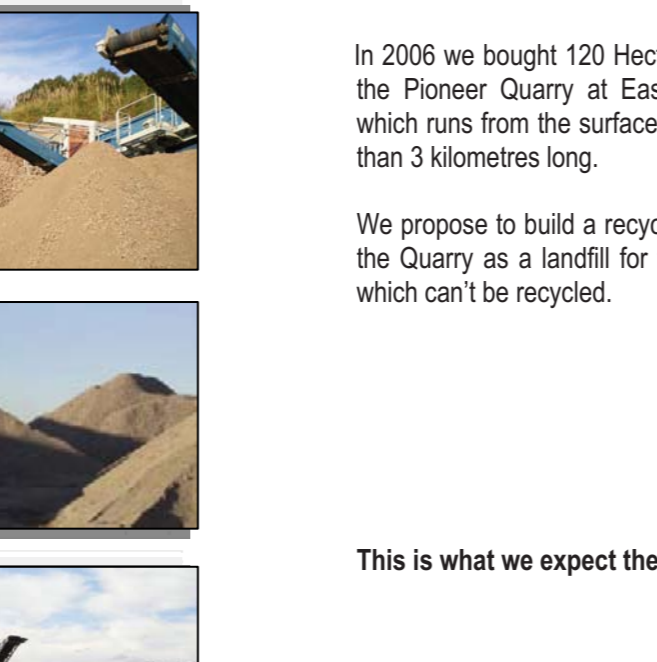
In 2002 we bought the Alexandria Landfill from Sydney City Council.

**This site at Alexandria (like the one proposed at Eastern Creek) does not accept foodwastes.**



This is a non putrescible landfill accepting predominatnly building and demolition waste. It is located about 7 kms from the centre of Sydney and halfway between the City and Sydney Airport.

Immediately on its boundary are a Motel, two fast food outlets a number of show rooms, factories and residences.



**This is what we expect the facility will look like.**



In 2006 we bought 120 Hectares of land including the Pioneer Quarry at Eastern Creek The road which runs from the surface to the bottom is more than 3 kilometres long.

We propose to build a recycling centre and to use the Quarry as a landfill for those mixed materials which can't be recycled.

The site is zoned for filling with dry waste and this can not change. There is no proposal ever for this site to accept foodstuffs, chemicals sludges or other odour causing materials. Bricks, Concrete and Soil do not smell.

Waste recycling companies need to be able to accept and recycle the full range of garden /land based materials otherwise it would be impractical to say, yes we can take your clean fill or soil but not your grass clippings.

We process the grass clippings and tree loppings and use them to upgrade recycled soils and potting mixes.

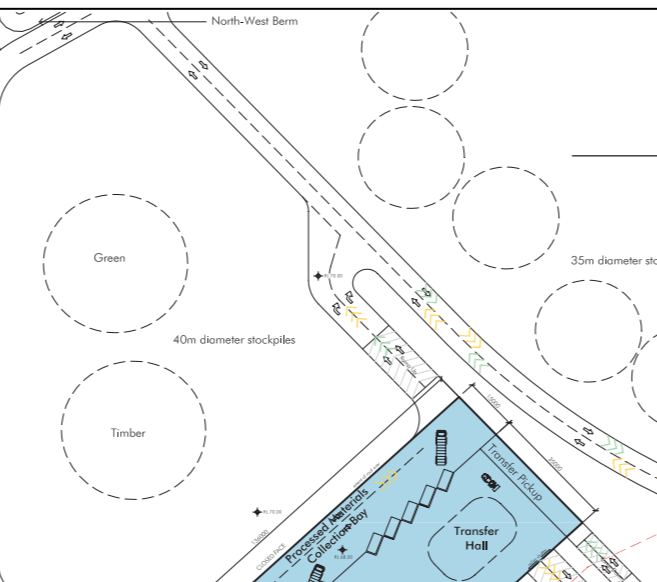
Other companies may use animal products in this process to accelerate composting. We do not. Properly managed and without using such accelerants, greenwaste and woodchips also do not smell.

Recycling of greenwaste in this way is also beneficial to the environment. Our recycling places an in-built limitation on the landfilling of organic materials. This in turn reduces the likelihood of future generation of landfill gases. This is good for the environment and a positive contribution to limiting climate change.

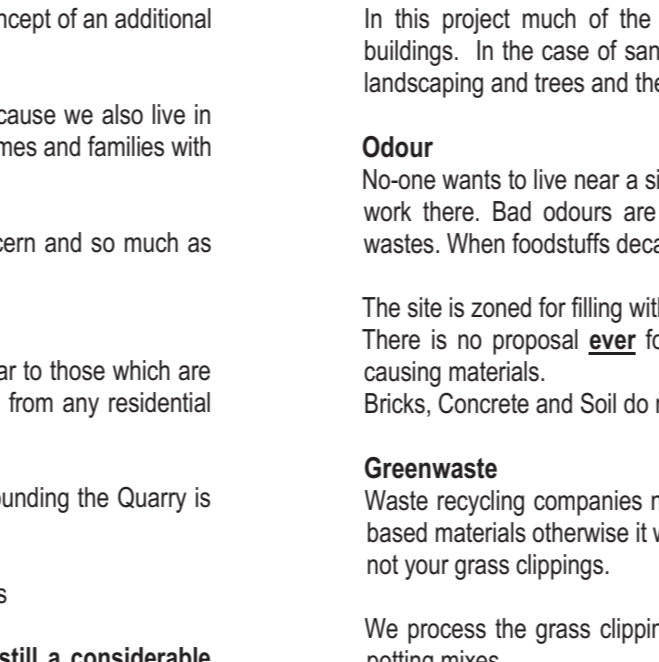
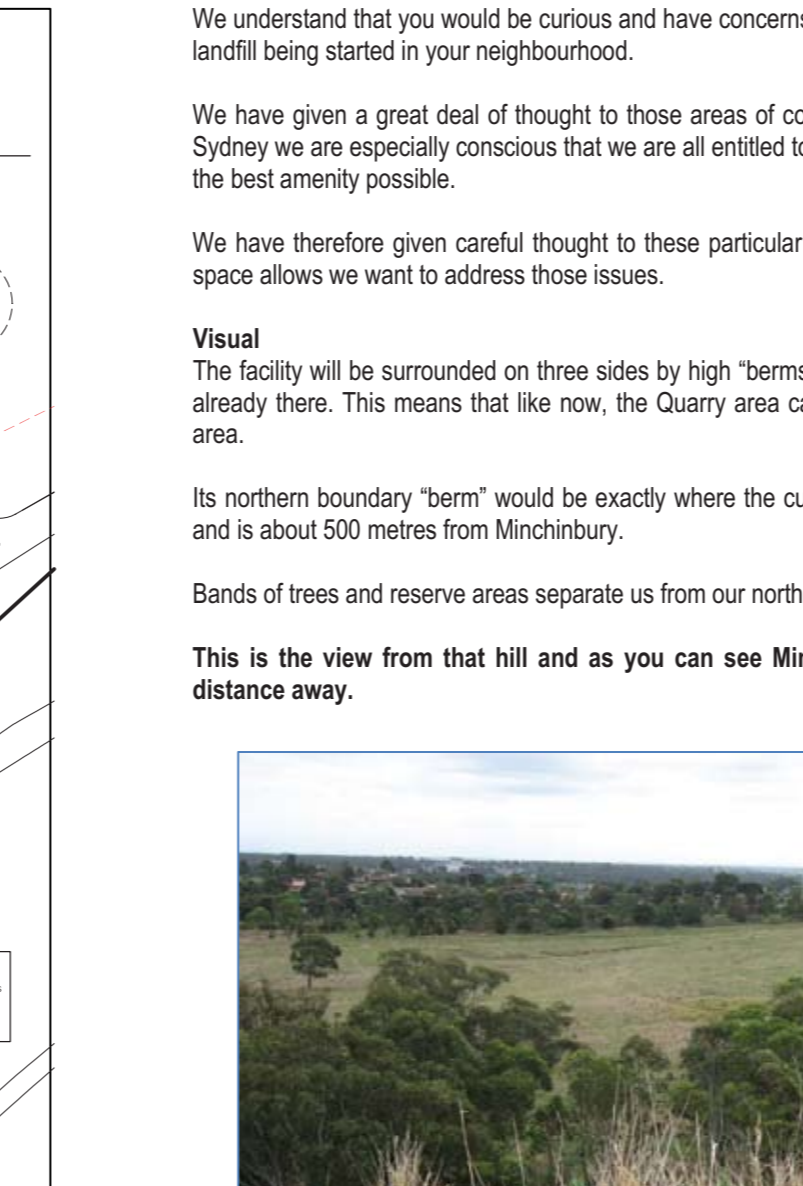
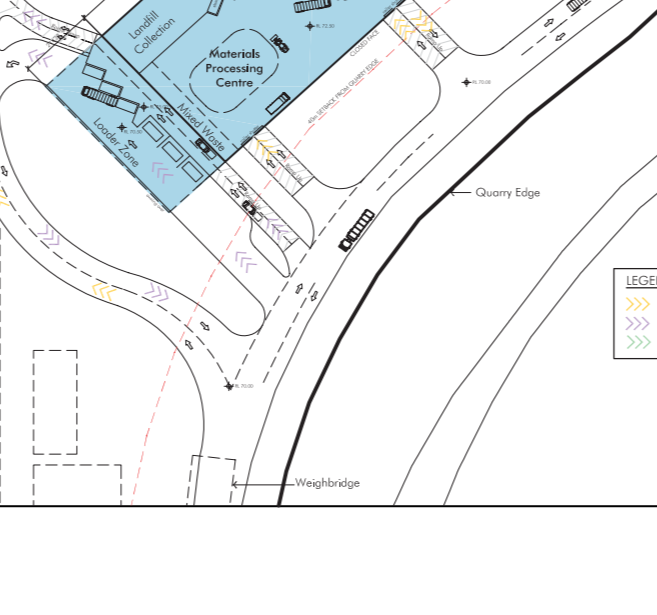
**Explosions** – Quarrying has ceased and there will be no further use of explosives.

**Water Management**  
People have asked where will you get the water from? We place a high premium on ecological sustainability with roof water collection tanks planned for all buildings and the re – use of stormwater from detention basins.

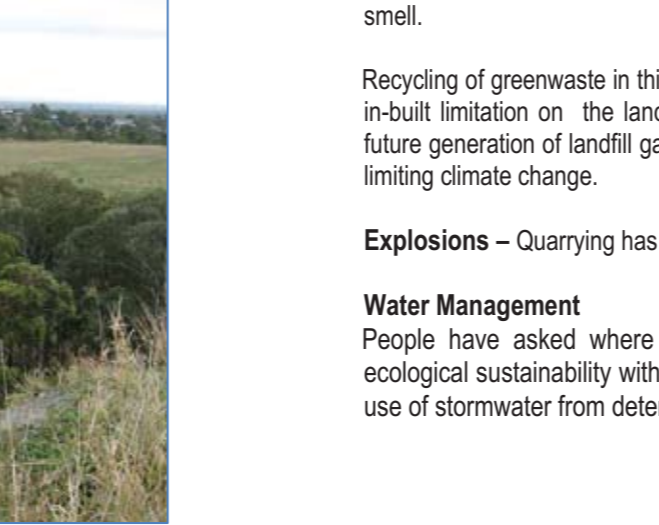
You are invited to look at our website at [www.dadi.com.au](http://www.dadi.com.au)



**This is the view from that hill and as you can see Minchinbury is still a considerable distance away.**



**This is the view from that hill and as you can see Minchinbury is still a considerable distance away.**



We understand that you would be curious and have concerns about the concept of an additional landfill being started in your neighbourhood.

We have given a great deal of thought to those areas of concern and because we also live in Sydney we are especially conscious that we are all entitled to enjoy our homes and families with the best amenity possible.

We have therefore given careful thought to these particular areas of concern and so much as space allows we want to address those issues.

The bottom of a very deep quarry is by far the safest method of disposal and we think that most people would agree with that. Alternative and unacceptable ways for people to dispose of it is to dump it in the bush or hide it amongst other waste.

Our procedures require that smaller quantities delivered to us must be delivered wrapped and sealed in plastic bags and which are then buried in that state.

We have been asked what we do about the 'hidden' asbestos and there is no doubt that this can happen. We minimize the incentive for people to 'hide' asbestos amongst other waste by providing legitimate and safe workplace methods for its disposal and by having alert and well trained staff with detailed procedures to spot it, remove it and dispose of it wherever and whenever it may be found.

We work on site everyday and it is in our interests and Yours for us to maintain safe workplace practices.

This proposal has been 3 years in review and has been supervised by some of the most experienced and reputable environmental scientists in Australia. Their work, at our request, has been double checked by equally reputable scientists and has been triple checked by the Council's Environmental Health Unit, the Traffic Management section, the Building and Engineering sections and the Drainage Engineering section of Council. The whole process is of course also subject to the intense scrutiny of the experts and scientists in the NSW Department of Environment and Climate Change.

The requirements of this project to meet accepted environmental standards have been exceeded by a safety margin of at least 40% and traffic generation is expected to be less than when the Quarry was operating.

As will probably be apparent this is not a glossy brochure written by a PR company We, here, the staff at Light Horse Business Centre put this pamphlet together hoping to better inform you.

**We want to thank You for your courtesy and input into this proposal and invite you to view the detailed plans and designs which are available on exhibition.**

**If you have any questions which we have not answered to your satisfaction please write to us at [info@dadi.com.au](mailto:info@dadi.com.au)**

In this project much of the sorting of materials will occur inside new purpose built factory buildings. In the case of sand, soil, brick and concrete recycling distance, position, high berms, landscaping and trees and the strategic use of water sprays will ensure no dust.

**Odour**  
No-one wants to live near a site which generates bad odour and certainly very few people want to work there. Bad odours are caused at landfill sites which accept foodstuffs and/or chemical wastes. When foodstuffs decay and rot they give off unpleasant odours.

The site is zoned for filling with dry waste and this can not change. There is no proposal ever for this site to accept foodstuffs, chemicals sludges or other odour causing materials. Bricks, Concrete and Soil do not smell.

Waste recycling companies need to be able to accept and recycle the full range of garden /land based materials otherwise it would be impractical to say, yes we can take your clean fill or soil but not your grass clippings.

We process the grass clippings and tree loppings and use them to upgrade recycled soils and potting mixes.

Other companies may use animal products in this process to accelerate composting. We do not. Properly managed and without using such accelerants, greenwaste and woodchips also do not smell.

Recycling of greenwaste in this way is also beneficial to the environment. Our recycling places an in-built limitation on the landfilling of organic materials. This in turn reduces the likelihood of future generation of landfill gases. This is good for the environment and a positive contribution to limiting climate change.

**Explosions** – Quarrying has ceased and there will be no further use of explosives.

**Water Management**  
People have asked where will you get the water from? We place a high premium on ecological sustainability with roof water collection tanks planned for all buildings and the re – use of stormwater from detention basins.

You are invited to look at our website at [www.dadi.com.au](http://www.dadi.com.au)

The overall site is quite large and consequentially has a good catchment area. On site Water will be harvested from roofs and collection points where it will be stored in tanks for re-use.

Because of the geology of the site there is no risk to groundwater from the Quarry and leachate will be appropriately re-used or treated before disposal.

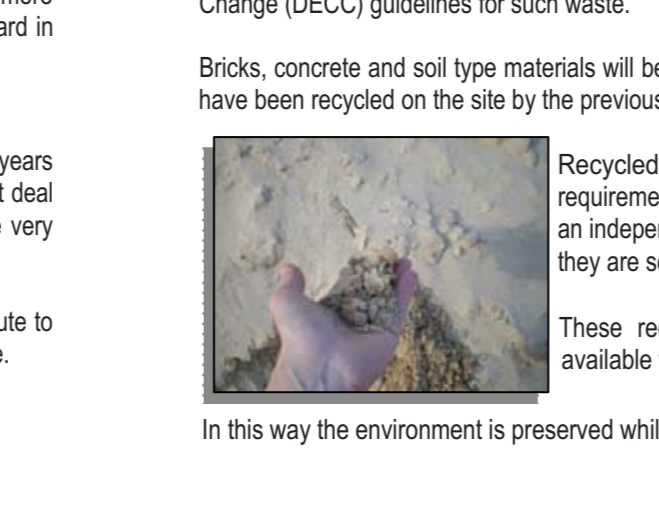
**Access and Traffic**  
If you live in Minchinbury you might be concerned that there would be an increase in trucks or other heavy vehicles travelling through or near residential areas. This is not the case and in fact, even when fully operational there will be fewer trucks than when the Quarry was operating.

The site has a private road connecting to Old Wallgrove Road which is nearly 1.5 kilometres from the Minchinbury residential community. The site does not generate one extra vehicle in the residential area.

**Noise**  
You may never previously have noticed the noises associated with Quarrying (except for blasting which has now ceased.) Recycling of brick, concrete and quarry materials has been happening on the site for more than 25 years and all we propose to do is to continue to do so under more modern conditions. Because of the way the site is laid out these activities will not be heard in Minchinbury and we might emphasise, there is no processing to take place at night.

**Dust**  
Quarrying generates quite a deal of dust especially when blasting takes place and in past years there was not much emphasis placed on dust mitigation. Now it is very different and a great deal of care is taken to ensure that airborne dust is prevented. This is because employers are very much more conscious about caring for the health of their employees than in past years.

Sealing of roads, installation of water sprays, updated traffic control systems will all contribute to ensuring that dust associated with quarrying in past years will not be occurring into the future.



**Recycling**

We recycle only such things as soil, tiles, brick, concrete, timber, asphalt, greenwaste, rubble, metal, tyres, paper, glass and sand. These are normal dry construction, demolition and cleanup items which, when thrown out, in some cases can be recovered, recycled and re-used. These are described in a number of ways as mixed or dry or clean up or demolition wastes. The important thing is that they do not contain food.

Such items are all sorted and processed within a brand new purpose built factory building and are then either recycled for sale or transported off site for recycling by others.

Reprocessing and re-use of plastics reduces the burden on the planet's oil resources. Re-use of metals means that we must quarry less ore from the ground.

Leftover rubbish which is too mixed to be separated or asbestos or insulation material (which must by law be buried) will be taken to the bottom of the Quarry and buried there.

There is NO opportunity or technique for recycling those materials and therefore they must be safely disposed of by burying in accordance with the Department of Environment and Climate Change (DECC) guidelines for such waste.

Bricks, concrete and soil type materials will be recycled in the same way that concrete and rocks have been recycled on the site by the previous owners for the last 25-50 years.

Recycled materials are required to meet stringent DECC requirements under the 3 F's regime and must be certified by an independent laboratory as meeting those standards before they are sold.

These recovered and processed materials will then be available for re-use by the community.

In this way the environment is preserved while still creating job opportunities.

**Asbestos**

Our proposal is very clear about the landfill's potential as a destination for asbestos. Everyone is concerned about Asbestos and rightly so and we wanted to address this issue head on.

The use of asbestos has been very prevalent in Australia sometimes in the form of insulation but more often in its 'bonded' or sheet form in roofing or wall materials.

A higher proportion of houses in western Sydney have some form of asbestos product in them than the remainder of Sydney and as people want to renovate or upgrade their houses the disposal of asbestos presents them with a problem.

Bonded asbestos presents a very limited risk to humans if it can be disposed of safely whilst still in sheet form. Asbestos cannot be recycled and must by law be landfilled.

The bottom of a very deep quarry is by far the safest method of disposal and we think that most people would agree with that. Alternative and unacceptable ways for people to dispose of it is to dump it in the bush or hide it amongst other waste.

We believe that people should be encouraged to properly and safely manage their asbestos waste in accordance with approved procedures.

Our procedures require that smaller quantities delivered to us must be delivered wrapped and sealed in plastic bags and which are then buried in that state.

We have been asked what we do about the 'hidden' asbestos and there is no doubt that this can happen. We minimize the incentive for people to 'hide' asbestos amongst other waste by providing legitimate and safe workplace methods for its disposal and by having alert and well trained staff with detailed procedures to spot it, remove it and dispose of it wherever and whenever it may be found.

We work on site everyday and it is in our interests and Yours for us to maintain safe workplace practices.

This proposal has been 3 years in review and has been supervised by some of the most experienced and reputable environmental scientists in Australia. Their work, at our request, has been double checked by equally reputable scientists and has been triple checked by the Council's Environmental Health Unit, the Traffic Management section, the Building and Engineering sections and the Drainage Engineering section of Council. The whole process is of course also subject to the intense scrutiny of the experts and scientists in the NSW Department of Environment and Climate Change.

The requirements of this project to meet accepted environmental standards have been exceeded by a safety margin of at least 40% and traffic generation is expected to be less than when the Quarry was operating.

**We want to thank You for your courtesy and input into this proposal and invite you to view the detailed plans and designs which are available on exhibition.**

**If you have any questions which we have not answered to your satisfaction please write to us at [info@dadi.com.au](mailto:info@dadi.com.au)**

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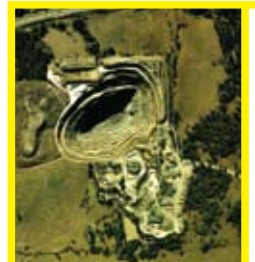
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# Briefing Presentation Blacktown City Council





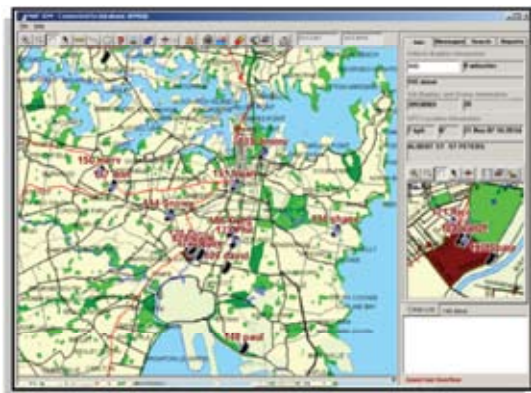
## DIAL A DUMP INDUSTRIES

Since its commencement in 1984 Dial A Dump has operated a waste collection and transportation business.



Using its own wholly owned fleet of specialised trucks and suite of bins it provides waste transportation and disposal services to the large and small scale building sectors and the home and domestic market.

The use of GPS tracking technology and computerized dispatch systems maximizes efficiency and minimizes costs. The availability of a second depot located in western Sydney presents the opportunity to expand the fleet, the services while at the same time containing fuel and operating costs.



This business is wholly incorporated within the Alexandria Landfill Pty Ltd structure and it, together with waste disposal (landfilling) and waste recycling and sales all work integrally together.

## DIAL A PRODUCT



Waste materials disposed of at the Alexandria Landfill site or collected and transported by Dial A Dump Trucks can often be recycled.



Since 2004 a substantial business has been developed under the name **Dial A Product** which recycles, manufactures and sells a range of landscaping and building associated products all of which must meet EPA product standards.

These products are marketed both to the wholesale markets where they are rebagged and sold and also directly to the public on a retail basis.



## ALEXANDRIA LANDFILL – our experience

We operate a landfill and recycling centre on a 15.6 Ha site at Alexandria. Here we are surrounded by commercial premises, restaurants, food manufacturers and residences.

This site is managed so as to minimise impact on the environment and neighbours.



## EASTERN CREEK - our Land



A void created by 50 years of rock quarrying is estimated to be 11million m<sup>3</sup> in volume. The site is identified by SEPP 59 as suitable for use as a class two inert and solid waste landfill and the land is zoned (industrial) employment lands.



**OUR PROPOSAL - Proposed Recycling Centre and Non Putrescible Landfill**

We recover from the waste stream hardfill building and demolition materials and we recycle them into Landscaping Materials for sale.



Traditionally the use of crushed brick and concrete aggregates in plumbing applications had been inhibited by the content of sand consistency fines in the finished product.

Processing of materials for re-use can be conducted in ways which have no impact on the surrounds particularly if the facility is designed for the purpose.

Alexandria Landfill operations currently applies world's best practice to the issues of dust and water management at the site which it operates at Alexandria and on the immediate boundary of which, are private residences, two fast food restaurants and a motel.



### **Potential Impacts of Landfilling**

Possible impacts which landfilling may generally have on the environment and the surrounding landholders may include:

- Traffic
- Noise
- Dust
- Odour
- Water Management

## **Traffic**

Access to the site would be via a private right of carriageway pending the construction of a precinct road connecting the site with Old Wallgrove road.

There is no proposed traffic through residential areas of Minchinbury.



## **Noise**

There is no activity proposed for the site which would generate anywhere near the noise generated by the previous Quarrying activities. For example – there will be no use of explosives as there has been for the last fifty years. Many residents would not be aware of the presence of the Quarrying activities.

Here is a picture taken from the northern bund showing how far distant the residential area is in comparison to Minchinbury.



### Odour

The limitation on landfilling of organic materials reduces the likelihood of future generation of landfill gases. This is good for the environment and a positive contribution to limiting climate change.

There is no proposal ever for this site to accept foodstuffs or other odour causing materials.

Bricks, Concrete and soil do not smell.

### What happens if someone drops in some food?

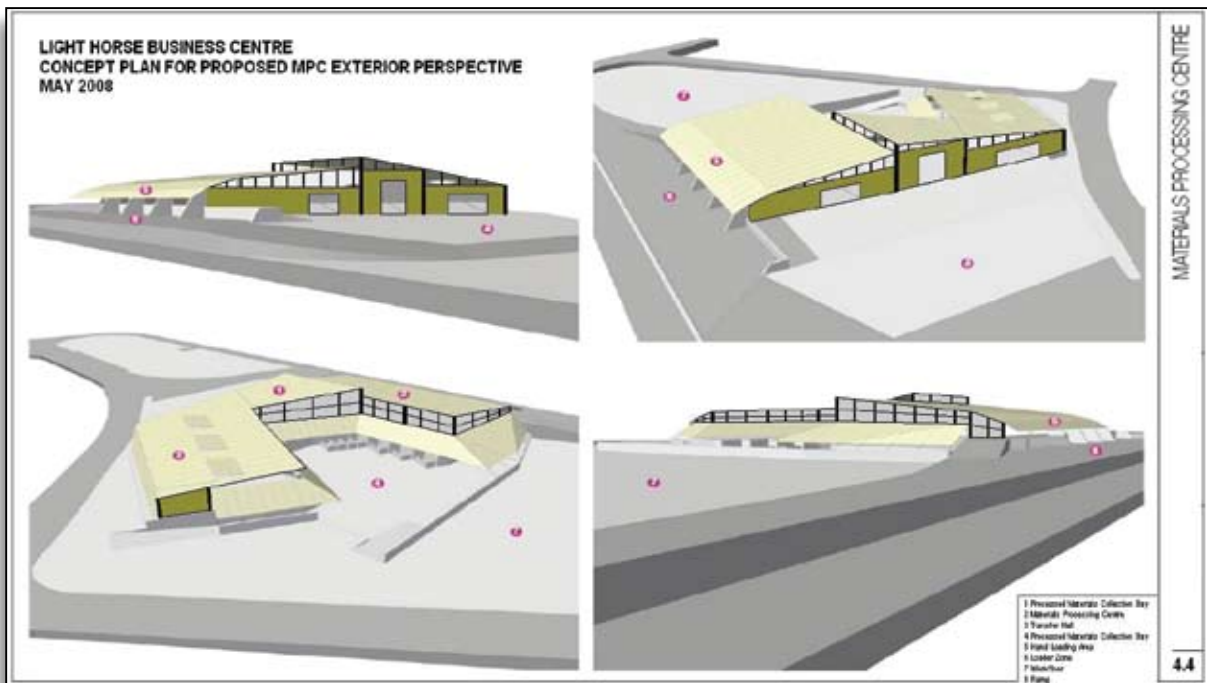
It is picked out, bagged and sent to another landfill.

Properly managed and without using accelerants greenwaste and woodchips also do not smell.

There is NO proposal to accept sludges or hospital or toxic or chemical wastes.

### Dust

Waste Transfer activities will take place indoors.



Other Recycling activities shown in the previous photographs, managed as they are at Alexandria, do not generate inconvenience even for near neighbours. Strategic use of Water sprays and proper planning manage these issues.



## Water Management

The Applicant places a high premium on ecological sustainability with roof water collection tanks planned for all buildings and the re – use of stormwater from detention basins.

Because of the geology of the site there is no risk to groundwater from the Quarry and leachate will be appropriately treated.



Everyone is concerned about Asbestos and rightly so.

Asbestos cannot be recycled and must by law be landfilled.

Legal Landfilling facilities help to avoid people dumping asbestos in the bush.

Stringent workplace measures exist to ensure that if it is received it is managed in a safe and proper manner.

Smaller quantities delivered to the facility must be delivered wrapped and sealed and they are buried in that state.

Other safe work procedures exist to ensure that non wrapped or non disclosed material is managed on site accordingly by trained staff and immediately buried deeply and safely.

## Employment Opportunities

It is expected that this site will generate local employment opportunities during construction but also afterwards in transportation and communications, recycling processes, landfilling plant operation, mechanical and support services, administration and finance.

The development in this area will compensate for any job losses connected with the cessation of quarrying and in a time of rising unemployment is expected to aid as a catalyst to further development of Stage 3 of the western end of the Precinct.



Dial A Dump Industries Pty Ltd  
PO Box 1040  
MASCOT NSW 1460

Tel. (02) 9515 9999  
Fax. (02) 9516 5559  
email: [ianmalouf@dadi.com.au](mailto:ianmalouf@dadi.com.au)

**DIAL A DUMP**  
INDUSTRIES  
**THE SKY'S THE LIMIT**

**DIAL A DUMP**  
KEEPING AUSTRALIA CLEAN

**ALEXANDRIA LANDFILL**  
PREMIER WASTE MANAGEMENT FACILITY



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PO Box 1040

Mascot NSW 1460

ABN 75 131 565 583