

**Assessment of the Aboriginal Heritage
Jacfin Warehousing facility
Lot II DP 229784
Templar Road
Erskine Park**

March 2008



Report to JBA Urban Planning Consultants

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I. INTRODUCTION AND BACKGROUND

Jo McDonald Cultural Heritage Management (JMcD CHM) was commissioned by Jacfin Pty Ltd to conduct an assessment of the Aboriginal heritage in the proposed site for the Jacfin Warehousing facility in Lot 11 DP 229784, Templar Road, Erskine Park.

I.1 Background

This development was declared on 6th September 2007 to be a project to which Part 3A of the Environmental Planning and Assessment Act 1979 applies.

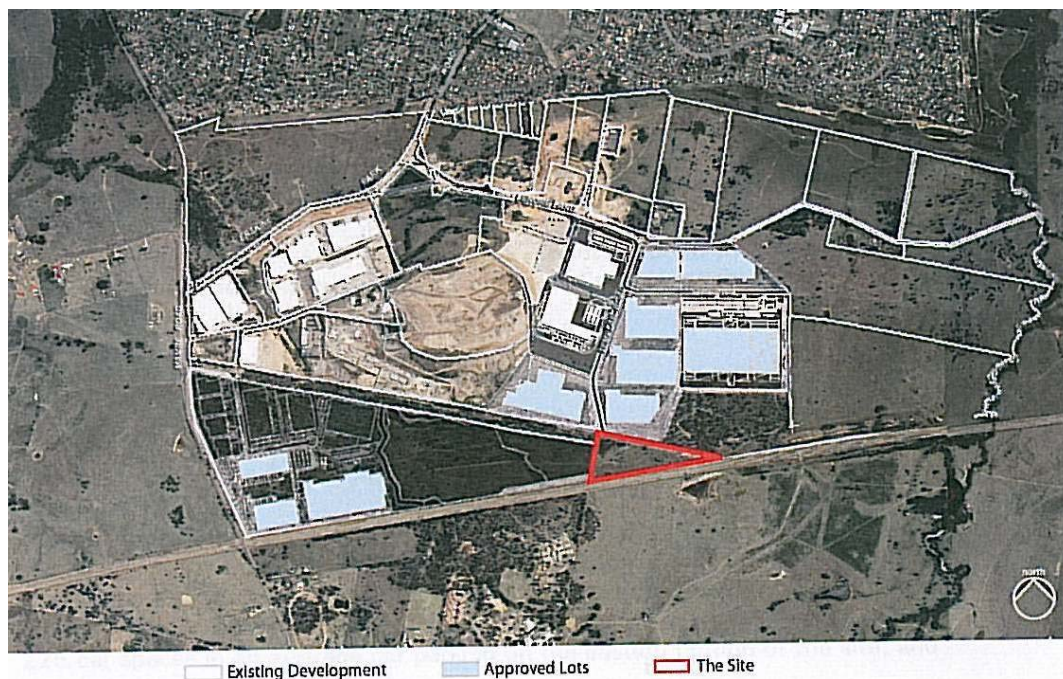
On 26th November 2007, the Department of Planning issued the Director General's requirements for this project. As part of these requirements, the Director General requested that an assessment must be made "determining the presence of Aboriginal heritage on the site; and any mitigation, management measures or offset measures to reduce any impacts" (DoP 2007:4).

This report fulfils these requirements.

I.2 The Study Area

The study area consists of Lot 11 DP 229784, a 4.1 hectare triangular shaped site, 2km east of Mamre Road, located within the Erskine Park Employment Area (EPEA). It is bounded to the north by the former CSR site (currently under development), to the south by the Warragamba-Prospect Water Supply Pipeline and to the west by a biodiversity conservation area.

Figure I: The study area (highlighted in red)



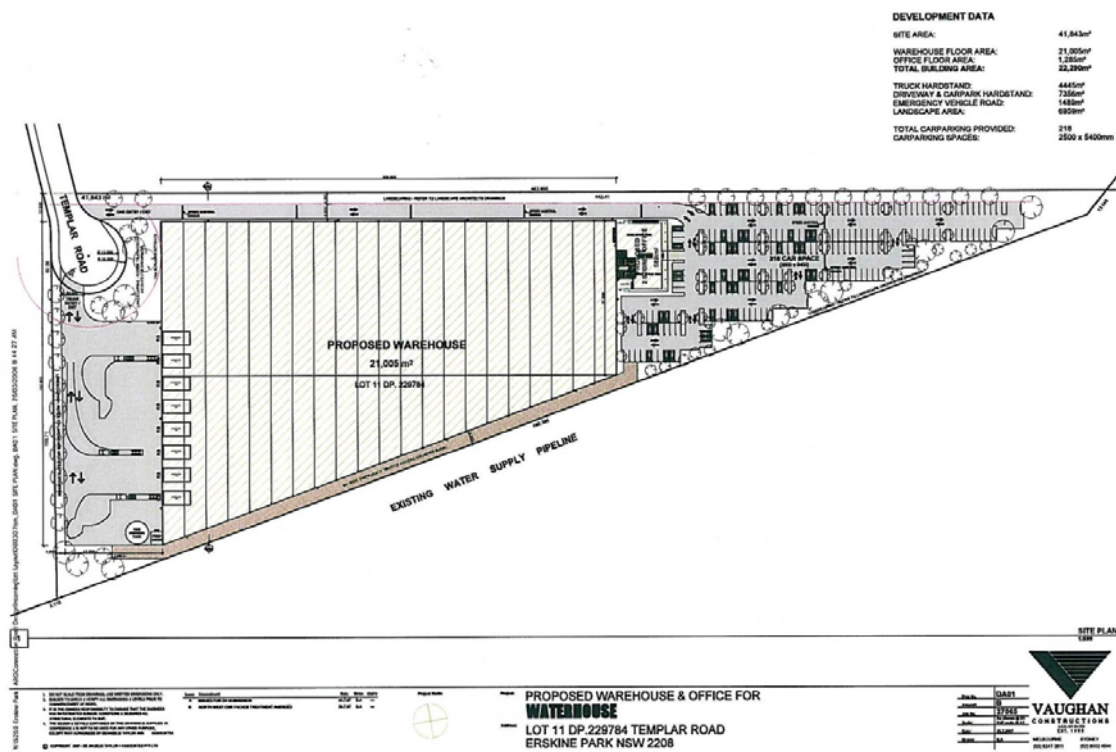
1.3 Proposed Development

The proposed development here incorporates the construction of:

- ⊗ A single storey warehouse with associated loading area at its western side;
- ⊗ A two storey office building adjoining the warehouse on its eastern side;
- ⊗ 218 car parking spaces on the eastern portion of the site;
- ⊗ Landscaping across the site;
- ⊗ A road extension from Templar Road to the boundary of the site, which will provide vehicular access to the site;
- ⊗ Utilities and services connections from adjacent locations to the site; and
- ⊗ Stormwater, drainage and bulk earthworks associated with the development of the site.

The impact of the development will result in the total destruction of any archaeological deposits here.

Figure 2: Proposed development at Lot 11 DP 229784



1.4 Summary of findings and recommendations

One open artefact scatter and two isolated artefacts were identified within the study area as a result of the field survey (JEO1; JEO2 & JEO3).

It is recommended that:

- 1 There are no Zone 1 lands in Lot 11 DP229784, therefore no areas affected by these this development proposal warrants conservation;
- 2 Development impact on Lot 11 DP 229784 will require the destruction of identified surface finds (Aboriginal 'objects') and an area of 2.6hs identified as having moderate to good potential to contain intact archaeological deposit. Usually this impact would require a section 90 consent from the Director General of the Department of Environment and Climate Change. As this is a Part 3a development, the Director General of the department of Planning will need to condition the development to consider the presence of sensitive Indigenous heritage within this development land;
- 3 Most of the subject land is assessed as Zones 2 and 3. The identified surface site (JEP01) is ranked as having moderate potential (Zone 3) to contain associated intact archaeological deposit. The two isolated finds (JEP02 and 03) fall in Zone 4. A target landscape which includes Zone 2 and 3 should be chosen for sub-surface investigation (salvage) as mitigation against the proposed development impact;
- 4 DLALC, DCAC, DTAC and DACHA have been informed of the current development proposal and should be involved in the selection of the recommended sub-surface investigations area. Their wishes, as expressed in their reports on the area's cultural significance, should be considered.

1.5 Aboriginal stakeholder Consultation

The study area falls within the boundaries of the Deerubbin Local Aboriginal Land Council (DLALC) and is within the area of interest to the Darug Custodian Aboriginal Corporation (DCAC), Darug Tribal Aboriginal Corporation (DTAC) and Darug Aboriginal Cultural Heritage Assessments (DACHA).

All of the above Aboriginal Groups were informed of the current project on 13th February 2008 and participated in the field inspection. A copy of this report in draft form will be submitted to all of the groups for their comment and these comments will be included in the final version of the report.

1.6 Report Authorship

This report was written by Fran Scully and Jo McDonald.

2. ENVIRONMENT AND CONTEXT

2.1 Vegetation

Originally, the Cumberland Plain contained a complex of woodland and forest associations adapted to the mostly clayey soils. Post-contact land uses (both pastoral and recreational) have impacted heavily on the indigenous vegetation across the Cumberland Plain, including the study area.

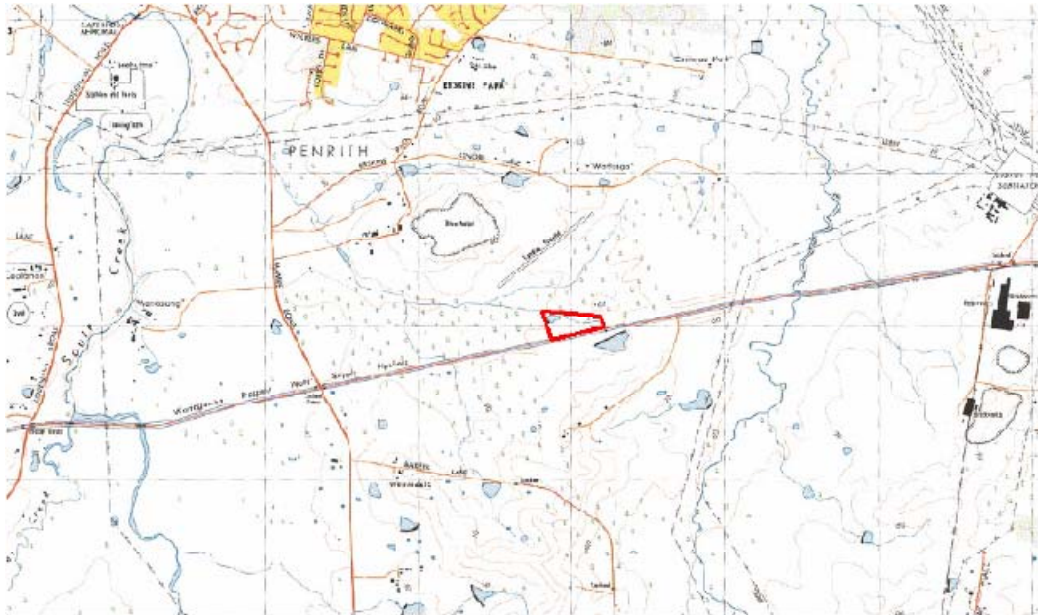
Since 1974, extensive regeneration has taken place in surrounding properties, although the study area does not seem to have been subjected to this. At the time of the field inspection, this site was vegetated with native and pasture grasses and reeds in a drainage depression. A few forest red gum (*Eucalyptus tereticornis*) trees were scattered across the study area, these appeared to be quite young.



Plate 1: View of the study area looking south to the pipeline

Plate 2: view of the study area looking west to the biodiversity conservation area

Figure 3: The study area in its local context. Prospect 1:25k topographic map.



2.2 Geology and soil

Background data on the geology and soil in this area are limited to the 1:100,000 maps of geology (Clark and Jones 1991), soil landscapes (Hazelton, Bannerman and Tile 1989), vegetation (NPWS 2000) and general reports on land use (Dias and Thomas 1997; DIPNR 2003).

The study area is underlain by beds of middle-Triassic Bringelly Shale of the Wianamatta Formation. This consists of claystone, siltstone, carbonaceous claystone and laminate with some coal.

The main geoarchaeological consequences of the underlying Wianamatta Formation geology are:

- ☉ Low relief landforms with well developed and quite high density drainage networks. Water sources are relatively easily found, with both ephemeral and permanent streams and ponds forming significant elements in the prehistoric landscape; and
- ☉ Poor soils have precluded significant intensive agricultural use of the area. This naturally low fertility has assisted in the preservation of natural woodland, promoted pastoral land-use and minimised the effects of land disturbance from clearance and agriculture in some areas. There is thus a higher potential for *in situ* undisturbed preservation of archaeological sites.

The soils produced from the weathering of these shale rocks are inherently fine-grained with high proportions of fine sands and silts in the upper soil stratigraphy and clay-rich subsoils. The active soil zone is typically <10-20cm with a sharp contact of subsoil clays. This makes the dating of fine resolution archaeological contexts more difficult. Soils deriving from these rocks tend to be acidic, which limits the range of materials, especially bone and shellfish, likely to be found in prehistoric archaeological contexts.

While Bringelly Shale does not contain stone material suitable for stone artefact manufacture, a thin cap of Tertiary river gravels containing silcrete cobbles is exposed in a road cutting in Luddenham Road, about 3km west of the site. This cap of Tertiary river gravels is similar to the St. Marys Formation, located within the former ADI site, approximately 8km north of the study area. Previous excavations at ADI have revealed extensive evidence for on-site use and manufacture of artefacts from this raw material (JMcD CHM 1997b:50). Another possible source of raw material is a discrete area of Volcanic Breccia, located about 350m north of the site in the CSR Quarry. The geology here is of sedimentary breccia and basalt, which may have been used in the manufacture of hatchet heads and other artefacts.

Although the underlying geology at the site had been identified as Bringelly Shale, this doesn't preclude the presence of other rock types across the study area.

The Soil Landscape map places the site within the Blacktown Soil Landscape. The soil materials are dominated by a biomantle (Paton *et al* 1995; Johnson 1989, 2002) overlying a heavier textured subsoil. Blacktown soils are generally shallow to moderately deep (<100cm) and have moderately reactive plastic subsoils, with low soil fertility and poor soil drainage (Bannerman and Hazelton 1989:28).

2.3 Topography

In general, the topography of the study area can be described as gently sloping, with higher elevation towards the eastern end and the lowest point in the centre. The north western side of the property consist of floodplain associated a lower order tributary of South Creek. There is a farm dam in the north western corner of the site.

2.4 Faunal resources

Faunal resources in the study area would have consisted of a range of woodland food, including kangaroo, possum, bandicoots, snakes, goannas, lizards, emu and echidna.

2.5 Hydrology and Stream Order

The study area is located approximately 1.5km west of Ropes Creek and 1-1.5km east of South Creek. It is just below and to the west of the watershed dividing these two major catchments. Flowing through the northwest corner of the subject land is a first order stream.

McDonald and Mitchell (1994) first used stream order as part of their predictive model for Aboriginal site location. This method identifies the smallest tributary streams as first order streams and the classification continues stepwise downstream. Two first order streams join at a first order node to form a second order stream; two second order streams join at a second order node to form a third order stream and so on.

The logic behind the stream order model is that in any particular climate and landscape a threshold catchment area is probably necessary to allow permanent stream flow or the establishment of waterholes with extended longevity (i.e. months to years). In the context of the Cumberland Plain with an average annual rainfall of between 700 and 900mm, the critical point where these conditions are met appears to be at the junction of two second or third order streams (second and third order nodes). At this stage of model-testing this is not a firm conclusion but more of a prediction and it should be noted that the critical point might also depend on other characteristics of the catchment. The results of the RHIP (Stages 2 and 3) Salvage (JMcD CHM 2001a; 2005a) offers support to the model as does more recent work across the broader Cumberland Plain (e.g. AMBS 2000; JMcD CHM 2001 b, 2002c, 2002d, 2003, 2004b & c, 2005b, 2006; S. Garling 2000).

There are no second or third order streams on the site so it would be expected that any archaeological evidence found on the site would be sparse and represent little more than a background scatter, though there may be some evidence of more focussed activity.

3. ARCHAEOLOGICAL CONTEXT

3.1 Ethnohistorical evidence for the Cumberland Plain

On 22nd April 1788, Governor Philip ordered the first major inland expedition crossed the Cumberland Plain. At this time, evidence of Aboriginal people was seen 'everywhere' in the form of huts, camp fires, burning trees and partially eaten food (Flannery 1996:91). Barrallier, in his expedition through *Darug* and *Gandangara* territory in the early 19th century, describes the swamps in the Nepean River area as being excellent sources of fish, shellfish and 'enormous' eels. He states that:

the people from this area usually fed upon opossum and squirrels, which are abundant in that country, and also upon kangaroo rats and kangaroo, but they can only catch this last one with the greatest trouble, and they are obliged to unite in great numbers to hunt it (Barrallier 1802 [1975]: 2-3).

Such a kangaroo hunt, with a large group using fire, spears and 'tomhawks' was described near Menangle Swamp. The participants were spaced at '30 paces ... [and] formed a circle which contain[ed] an area of 1 or 2 miles' (Barrallier 1802[1975]: 3). Based on this description, in the order of 100 people may have been involved in this hunt, suggesting that such activities may have involved co-operation between several bands.

Lizards and grubs, 'particularly those which are found in the trunks of trees' were also documented as part of the diet (Barrallier 1802[1975]: 6, Collins 1798[1975]:462). For the purpose of collecting these grubs (*Cahbrogal*) a specific utensil was used, this being described as:

a switch about twelve inches long and the thickness of a fowl's feather ... One of the extremities of this stick is provided with a hook. ... [which is used upon finding evidence of these grubs in the bark of trees having] widen[ed] the hole ... with their axe ... dip their switch into the hole, and, by means of the hook, draw it out, and eat it greedily. (Barrallier 1802 [1975]: 6).

Other specialized, inland, adaptations to localized resources include the 'squirrel traps' in hollow trees and 'decoys for the purpose of ensnaring birds' (Tench 1793[1961]: 154-5). These decoys were assessed as having great utility as they were full of quail feathers. The accounts described these structures as complex (see also Philip in *HAR*, 1:156 and Collins 1798[1975]: 462) and that they were made of reeds and 'underwood'. They were described as being 'long and narrow, shaped like a mound raised over a grave; with a small aperture at one end for admission of the prey; and a grate made of sticks at the other' (Tench 1793[1961]: 154-5). One such structure described by Collins 'was between 40-50 feet long' (1798[1975]: 462). He also describes animal and bird traps near inland lagoons as consisting of holes with camouflaged tops (*ibid.*).

Early accounts remarked on the facility with which men of the inland tribes climbed trees (Hunter 1793, Tench 1793, Collins 1798, Barrallier 1802). This was done for the purpose of obtaining possums (usually with assistance of smoke) and was achieved by cutting notches for toeholds 'with a stone hatchet' (Hunter 1793[1968]: 430; Tench 1793[1961]: 233). Possums and other tree dwelling animals were indeed the staple of the woodland tribes and that edge-ground hatchets were identified as the dominant subsistence item in the inland toolkit.

At the time of contact, Aboriginal camp sites on the Cumberland Plain were described (Collins 1798[1975]: 460) as being made of the bark of a single tree, bent in the

middle and placed on its two ends on the ground 'exactly resembling two cards, set up to form an acute angle' (Tench 1793[1961]: 154; and see Philip 1789[1970]: 55-77) and 'affording shelter to only one miserable tenant (Collins 1798[1975]: 460). These shelters (*gunyahs*) would be grouped together, up to a total of nine (Barrington 1802: 20).

It is not clear from the early accounts what sort of family or social groupings might have been expected in these camps, nor the spatial arrangement of these. It is also unclear for how long such camps would have been occupied, whether these were base or transient camps.

3.2 Archaeology in the Sydney Region

The first human colonisation of the Australian continent is generally accepted as happening *c.* 43-45ka (O'Connell & Allen 2004). Evidence from archaeological excavations has demonstrated that the Sydney region has been populated for the last 30,000 years. Early excavations from the Blue Mountains and south coast gave initial occupation dates of *c.* 22,000 BP (Kings Tableland, Blue Mountains) and *c.* 20,000 BP (Burrell Lake, South Coast) respectively (Stockton 1993; Lampert 1971). More recent work in Parramatta has increased the antiquity of occupation in the Sydney Region to 30,000 BP (JMcD CHM 2005b). Although the Cumberland Plain has been inhabited for *c.* 30,000 years, evidence shows that the region was most intensively occupied in the last 3,000 years (Attenbrow 1981, 1987; Kohen 1986; McDonald 1986; Smith 1987).

Many of the earliest excavations in this region were of rockshelters in the sandstone country surrounding the Cumberland Plain (e.g. Attenbrow 2002, 2004; McDonald 1994; Nanson *et al.* 1987). Much of our information about the original inhabitants of the locality came from these. Development pressures in Western Sydney over the last decades have led to the increased excavation of open sites in the Cumberland Plain. This ongoing work, combined with other archaeological investigations over the past twenty years has provided substantial evidence for Aboriginal occupation, settlement patterns and resource use in this region. Archaeologically, the Cumberland Plain is now one of the most extensively investigated regions in Australia.

McCarthy first proposed the Eastern Regional Sequence (ERS) in the 1940's and further developed it through to the 1960's (1948, 1964) as a framework for understanding changes in lithic technologies in the Sydney region from the late Pleistocene through to the Holocene. Subsequent archaeological work in this region has further refined this (Attenbrow 1997, 2002, 2004; Hiscock and Attenbrow 1998, 2005; McDonald 1994). Looking at the sequence of technological changes provides a context from which we can assess and comprehend changes in occupation patterns and resource exploitation in this region. The ERS is a regional variant of the Core Tool and Scraper Tradition changing to the Small Tool Tradition and consists of 4 phases: Pre-Bondaian; Early Bondaian; Middle Bondaian; Late Bondaian (Table 1).

The change from Pre-Bondaian to Bondaian is characterised by a major shift in raw material use and a later predominance of smaller implements. Phases within the Bondaian are characterised by the introduction and subsequent decline of the backed artefact, the increasing dominance of bipolar flaking and a change in proportions of raw material.

Table 1: The Eastern Regional Sequence (recent dates from JMcD CHM 2005b).

Period	Age	Description
Pre-Bondaian	30,000-9,000 BP	Preference for the use of silicified tuff unless at an extreme distance from sources. This is augmented with quartz or other local materials, also grainy stone raw materials. Cores and tools vary widely in size, some quite large. No backed artefacts, elouera or ground stone. The predominant technique is unifacial flaking. Bipolar flakes are rare. The 30,000BP date possibly indicates the earliest time frame for this phase
Early Bondaian	9,000-4,000 BP	The use of silicified tuff declines, more use is made of local stone materials, especially at sites occupied for the first time. Backed artefacts appear sporadically. Bipolar flaking is widely in use but only rarely at individual sites. Bifacial flaking probably continues as predominant technique
Middle Bondaian	4,000-1,000 BP	The use of different raw material types varies between and within sites over time. Main phase of backed artefact. Introduction of asymmetric alternating flaking. Substantially smaller cores and tools. Increase in bipolar flaking. Ground stone artefacts appear, though infrequently and present at fewer than half the dated sites. Elouera appear but are rare
Late Bondaian	1,000 BP to European Contact	The use of different raw material types continues to vary. Backed artefacts become rare or absent from most sites. Bipolar cores make up 2% or more at most sites. Ground stone found at most dated sites but usually <2% of assemblages. Elouera remain rare.

The following is a summary of the findings of previous archaeological work on the Cumberland Plain:

In general:

- ☉ The complexity of the Cumberland Plain's archaeological record is far greater than was previously identified on the basis of surface recording and more limited test excavation. Similarly, the time span of Aboriginal occupation has been demonstrated to be far greater than was originally thought (e.g. by Kohen 1986);
- ☉ Gross patterning is identifiable on the basis of environmental factors: archaeological landscapes on permanent water are more complex than sites on ephemeral or temporary water lines (McDonald 1996: 115). This has now been documented broadly across the Cumberland Plain with excavations in the RHDA, at the former ADI Site (ADI-EPI; Xavier College), on the Parramatta River (sites CG1 and RTA-G1) and at Greystanes Estate (Site PH2+3).

Specifically:

- ☉ Most sites encountered will be of mid- to late Holocene age. Specific geomorphic conditions (e.g. deep sand bodies) for the preservation of

- Pleistocene-aged assemblages do occur but are not common on the Cumberland Plain;
- ☉ Where sandstone features occur (e.g. overhangs and platforms) they may have been used for habitation, processing basalt ground-edged axes or the production of art;
 - ☉ Most areas, even those with sparse or no surface manifestations, contain sub-surface archaeological deposits;
 - ☉ Where lithic concentrations are found in aggrading or stable landscapes, they are largely intact and have the potential for internal structural integrity. Sites in alluvium possess potential for stratification;
 - ☉ The density and diversity of implements and *debitage* is conditioned by permanence of water (stream order), landscape unit and distance to lithic source;
 - ☉ Where silcrete outcrops occur naturally there will be evidence for quarrying and likely some reduction activity in the vicinity; and
 - ☉ Contrary to earlier models for the region (e.g. Kohen 1986, Smith 1989) many areas contain extremely high artefact densities, with variability appearing to depend on the range of lithic activities present. Densities in excess of 400/600 artefacts/metre square are not uncommon in the RHDA on knapping concentrations.

3.3 Previously recorded sites

A search of the AHIMS database was lodged on 13th February 2008. The results of this search have not been received yet and will be included when they are.

A previous search of the AHIMS database from 2006 (TEC 2006a) lists nineteen sites and three PADs in the Erskine Park area. Of the nineteen sites listed, all are classified as Open Camp Sites (artefact scatters) or isolated finds.

3.4 Previous work in the Erskine Park area

Twelve previous studies (surveys, assessments and excavations) have been carried out in the vicinity of the study area between 1994 and the date of the assessment.

In 1994, Susan McIntyre conducted a survey over 2km² area, directly north of the current study area, across from the site of the Erskine Park Blue Metal Quarry. One open site and two isolated artefacts were found. McIntyre assessed that the sites were either disturbed or not *in situ* and saw no need to conserve/record them further.

The same area was re-surveyed in 1998 by Jo McDonald. As a result of this survey, 6 open artefact scatters (EPQI-6) and 1 isolated find were located. The open site and 2 isolated finds identified in the earlier survey were not relocated, however, it was thought possible that McIntyre's open site may have formed a part of one of the newly identified open artefact scatters. As a result of previous land use mapping across the area, McDonald assessed that there were large parts of the site with minimal levels of prior disturbance (JMcD CHM 1998:1). In total, 51 lithics were recorded from the 6 open artefact scatters, with silcrete being the most common raw material. The total

assemblage from the 6 sites were characterised by debitage, but 4 backed artefacts were also identified. Two retouched silcrete flakes were also present, along with 2 indurate mudstone retouched flakes and one silcrete core.

The Austral Land site to the west of the biodiversity conservation area west of the current study area was surveyed in 2000 by Stephanie Garling on behalf of Jo McDonald Cultural Heritage Management. As a result of this survey, five open artefacts (EP1, 2, 4, 6 & 8) and three isolated artefacts (EP3, 5 & 9) were located. As a result of this work it was recommended that EP8 be monitored during EP6+7 be salvaged prior to any development taking place. This report details the results of those salvage excavations.

In 2002, a survey was conducted on Lot 2, DP 120673, approximately 1.5km east of the study area by John Appleton. This study area was 62.23 hectares in size. Two isolated artefacts were located (HP1 & HP2). An area of PAD was identified with HP1, which was extended into a wider area of potential archaeological sensitivity (PAS). The area of PAD and PAS posed no constraint to development, but it was recommended that permission be sought for collection of the artefacts and monitoring of any future earthworks.

Two survey assessments were carried out in the vicinity of the study area in 2004. The first was by Navin Officer along a proposed 132kV Transmission Line approximately 1.5km north of the current study area. This transmission line was to extend from the Sydney West Substation approximately 3.5km westwards to Erskine Park. Two open artefact scatters (EP1&2) and one area of PAD were identified (EP PAD1). Again, silcrete was the dominant raw material type from both open artefact scatters. It was recommended that the power pole locations should avoid the locations of EP1 and EP2, but if this was not possible, permission should be sought for a *Heritage Impact Permit* for the sites. Also, if impact with EP PAD1 was unavoidable, a limited programme of archaeological testing should take place to "ascertain the presence and integrity of any Aboriginal sites/relics located in the area" (Navin Officer 2003:20).

The second survey from 2003 was conducted by Susan McIntyre-Tamwoy on the area of a proposed road development designed to service the St. Marys Quarry site. The study area comprised a narrow parcel of land on the eastern side of Mamre Road at its junction with Erskine Park Road (just north of the current study area). This study area was largely contained within existing road easements. All of the study area was judged to have low archaeological potential except for an area east of the proposed roundabout. This area had previously been assessed as having high archaeological sensitivity (JMcD CHM 2000) and was confirmed by McIntyre-Tamwoy's study. Recommendations here stated that the proposed development be modified to exclude the area of high archaeological sensitivity, but that the development could proceed without further constraint in other areas. However, if locations of identified relics would be impacted, a consent to destroy should be sought from the Director General NPWS.

Two further studies were carried out in the vicinity in 2004. The first was by HLA-Envirosciences, who re-surveyed the area that had previously been assessed by Susan McIntyre (1984) and Jo McDonald (1998). However, this study did not review McDonald's assessment and found no new material, nor did they re-locate other previously known sites in the area.

Bobbie Oakley's 2004 study of the proposed Lenore Lane reconstruction identified 3 PADs (LL PAD1, LL PAD2, LL PAD3). This study area consisted of a 1.36km length of

road, with a variable road reserve (between 40m and 29m) on both sides of the road. Oakley recommended that the proponent apply for a s87 permit to test the 3 PADs prior to the development taking place.

Navin Officer conducted a study of the "Erskine Park Employment Area" in 2005. The Erskine Park employment Area incorporated an 80ha area west of the current study area. Two sites (EP1 & EP2) and one PAD (EP PAD1) had previously been identified within this study area and were not re-located during this survey. A further three sites (EPRC1, 2 & 3) were identified during this survey. Navin Officer also divided the study area into a series of "zones of differing predicted subsurface archaeological potential" (Navin Officer 2005a:i). Five non-Indigenous sites were also identified (EPRCH1-5). This assessment recommended that a programme of archaeological testing be undertaken in order to fully understand the nature of the predicted zones of archaeological potential.

A programme of subsurface archaeological testing was carried out by Navin Officer on the CSR lands in Erskine Park, also in 2005. Two-hundred and fifty six pits were machine excavated across the study area, with 285 lithic items recovered from 88 of these pits. The lithic assemblage was characterised by a 'microlithic' technology, including microblades, bondi points and backed artefacts, with silcrete and silicified tuff comprising 81% of the collection. This assemblage was identified as being typical of the Late Phase in the Australian Prehistoric stone technology. Low artefact densities (averaging 1.2 artefacts per square metre) were thought to indicate that the area had been used for "low intensity occupation suggesting transient camps and activities peripheral to a base camp or main occupation area" (Navin Officer 2005b:ii).

In 2006, Total Earth Care conducted an Aboriginal Heritage and Archaeological Assessment on land in the Erskine Park Business and Industrial Precinct, to the north east of the current study area. An open artefact scatter (EC1) and 2 isolated finds were located as a result of survey. Recommendation was made for a subsurface testing programme to be carried out prior to development taking place.

Subsequent to the above survey, Total Earth Care carried out a salvage excavation at the Erskine Park Business and Industrial Precinct. A total of 1014 lithics were recovered from 120m², indicating a density of 8.5 lithics per m². This was interpreted as representing a medium density artefact scatter, with a number of discrete knapping floors occurring at the hill top. The location of the knapping floors on the hill top was thought to result from the hill top being "a relatively level piece of significantly raised land in a resource procurement area between two catchments" (Total Earth Care 2006b:1).

In 2007, JMcD CHM carried out a programme of salvage excavations on the Austral Land site, west of the biodiversity conservation area adjacent to the western boundary of the current study area. A total of 8,867 lithics were recovered from 298 m², indicating a density of 29.8 lithics per m². This density is considerably higher than that recovered from the area excavated by Total Earth Care in 2006, probably reflecting the proximity of the salvage area to 2nd and 3rd order streams. Test excavation across two sample areas was augmented by four open area excavations. Despite some localised surface disturbance, the sub-surface archaeological deposit was remarkably intact in all but one of the open areas (Area D). The pattern of artefact distribution identified here was typical of that recorded elsewhere on the Cumberland Plain. The lithics analysis

demonstrates that different parts of the site were preferentially used at different times in prehistory, with the western part of the study area being preferred more recently.

3.5 Predictive model

Based on previous work in this region, then, the following predictions are made for the current study area:

- ☉ There may be evidence of localised or sporadic use of the current study area;
- ☉ Occupation is likely to date to the Bondaian;
- ☉ The most likely raw material used for stone tool production will be silcrete.

3.6 Land use impact assessment

Land use impact assessment allows the quantification of known disturbances and impacts to the study area. As a result of the land use impact assessment, areas of archaeological sensitivity can be identified across the site. Previous impacts across the study area are divided into one of the following categories:

High disturbance – Severe disturbance to the soil. Buildings, houses, reservoirs, suburbs, roads, market gardens, poultry farms, BMX tracks, rubbish tips, formed tracks, dams, drains and other excavations.

Moderate disturbance – Cleared of trees at some time, cultivates or extensive soil disturbance probable, caused by machinery or extended periods of trampling. Much of this area has been used for small agricultural pursuits such as orchards and the remainder carries improved pasture.

Low disturbance – Partly cleared and grazed at some time (particularly on shale geology), but apparently never subject to extreme soil disturbance. Heavily vegetated areas (particularly on sandstone geology) may currently be weed infested in places.

On the basis of air photo interpretation, it had been identified that there has been low to moderate disturbance across 64% of the site.

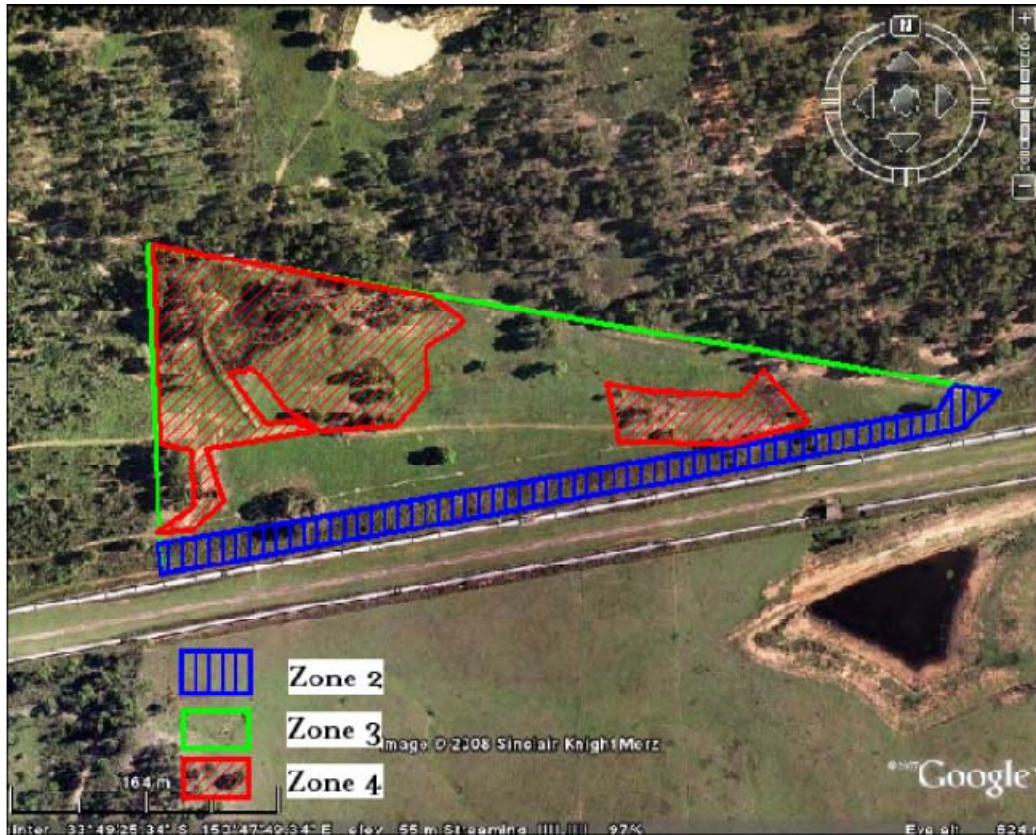
Table 2: Proportions of different disturbance zones in the subject land.

Land use impact categories	Management zones	Area (ha)	%f
None	Zone 1	0	0
Low	Zone 2	0.6	15.0
Moderate	Zone 3	2.0	49.3
High	Zone 4	1.5	35.7
		4.1	100

Areas with the following types of disturbance were identified:

- ☉ Tracks;
- ☉ Areas of deflated exposure; and
- ☉ Earthworks related with the farm dam/bund construction associated with the creek in the north-west corner of the study area.

Figure 4: Land use mapping within the study area, showing land use impact categories and resultant management zones



4. SURVEY RESULTS

4.1 Fieldwork methodology

The pedestrian survey of the study area was carried out on Tuesday 19th and Wednesday 20th February 2008. Fran Scully (JMcD CHM), Leanne Watson (DCAC), Gordon Workman, Jamie Workman (DTAC) and Gordon Morton (DACHA) participated on Tuesday 19th and Fran Scully (JMcD CHM) and Steve Randall (DLALC) participated on Wednesday 20th February.

Ground surface visibility was extremely low over the vast majority of the study area, so particular attention was paid to areas of exposure.



Plate 3 and Plate 4: Exposure in the eastern section of the site, close to JEP01

4.2 Survey results

One open artefact scatter and two isolated artefacts were identified within the study area as a result of the field survey (Figure 5). A combined total of 6 artefacts were recorded at these sites.

Figure 5: The study area showing locations of identified artefacts



JEP01

Four artefacts were recorded at this small artefact scatter in the eastern portion of the study area. The artefacts were located on an area of exposure, just south of the northern boundary of the study area. JEP01 was located on the highest point in the study area.

The artefacts consisted of two small quartz flakes, one piece of undiagnostic red silcrete and 1 possible piece of flaked glass. This latter type of artefact can indicate post contact use of settler materials in the period following 1788.



Plate 5: The artefacts at JEP01



Plate 6: A close up of the possible piece of flaked glass at JEP01

JEP02

An isolated artefact was located in an area of exposure on the southern side of the study area. This area of exposure was situated close to the wetter area in the centre of the site. This artefact was a large piece of undiagnostic grey silcrete,



Plate 7: The piece of silcrete at JEP02



Plate 8: View from the exposure to the wetter area at the centre of the site

JEP03

An isolated artefact was located on a small area of exposure west of JEP02. This exposure was higher than the surrounding ground surface and as such, was drier. The artefact here was one piece of undiagnostic grey silcrete.



Plate 9: The artefact at JEP03



Plate 10: The exposure at JEP03

4.3 Effective survey coverage

Effective survey coverage of the study area was significantly hampered by the poor ground surface visibility over the majority of the study area. This lack of visibility was due to the dense grass coverage across the site. Areas of visibility were in the form of exposures and part of the bund wall around the dam.

5. DISCUSSION

5.1 Archaeological sensitivity

In order to appropriately manage the Aboriginal heritage values in the study area, it needs to be assessed for its archaeological significance and/or potential. This assessment includes the identification of lands with the greatest potential to contain intact archaeological deposit (i.e. only minimally disturbed by previous land use impact) and those which are locally and regionally threatened by urban development. These two factors affect the assessment of high conservation potential.

An archaeological sensitivity map (Figure 4 **Error! Reference source not found.**) has been created for this site on the basis of the previous land use mapping and the results of the survey. Four zones of archaeological sensitivity are commonly identified for this purpose, although only three are found within the current study area.

- ☉ Zone 1 – High archaeological potential
- ☉ Zone 2 – Moderate archaeological potential
- ☉ Zone 3 – Low archaeological potential
- ☉ Zone 4 – No archaeological potential

These zones are used to assist in the assessment of the sites and landscapes within the study area.

No areas of high archaeological potential (Zone 1) have been identified within the study area (Table 2). Almost half (49%) of the study area has been identified as having moderate archaeological potential and a smaller proportion (15%) has good potential (Zone 2). The remaining 35% of the study area has been assessed as having low to no archaeological potential.

Cultural significance

This usually refers to the importance of a site or feature to the local Aboriginal community. Certain sites, items and landscapes may have traditional significance or contemporary importance to the community. This importance may involve both traditional links with specific areas, as well as an overall concern by Indigenous people for continued protection of their sites in general. Cultural significance must be assessed by the relevant Aboriginal community – in this case Deerubbin Local Aboriginal Land Council, Darug Custodial Aboriginal Corporation, Darug Tribal Aboriginal Corporation and Darug Aboriginal Cultural Heritage Assessments.

A report outlining the field inspection of the study area and its assessed cultural or Aboriginal significance will be forwarded by the Aboriginal groups and included in the appendices.

Scientific significance

One of the aims of cultural heritage management is to preserve a representative sample of the archaeological resource for the benefit of future scientific researchers and the general public. Assessment of scientific significance involves placing a site or heritage item within a broader regional framework, as well as assessing the site's individual merits in light of current archaeological discourse. This usually includes an assessment of a

site's potential to answer current archaeological research questions. Assessment is also based on the condition (integrity), content, and representative of a site, e.g. is it representative of a certain site type? Is it a rare or exceptional example? Can it contribute information that no other site can?

On the basis of the field inspection of the study area and the intactness/integrity of archaeological deposits in surrounding areas, it is highly likely that this site retains intact archaeological deposit, particularly in the eastern section of the site. Previous land use here includes clearing for pastoral purposes, which will not have a substantial impact on sub-surface deposits. Therefore this site is assessed as having ***moderate-good potential***.

Public significance

This usually refers to a site's potential to educate the general public about Aboriginal culture, but can have a broader definition. Increase in public awareness and understanding about a site's Indigenous and scientific values may spare other sites from inadvertent or intentional destruction. Educating the public to appreciate the past may increase the chances of archaeological resources surviving into the future.

Public significance may also include the different community values placed on a site or heritage place. These may include its importance to local residents or the wider community: e.g. aesthetic values, recreational values, links with local European history and local identity.

Developments in the EPEA have significantly changed the nature of the environs of this site. This and the fact that the archaeological evidence here has low visibility, the study area has been assessed as having ***low public significance***.

Management Principles

The following general management principles apply for sites and landscapes with Aboriginal heritage values which occur within the study area. These principles are predicated on the assessment of archaeological sensitivity based on previous levels of land-use disturbance.

- ☉ Sites and/or landscapes with high archaeological potential or Aboriginal significance (particularly in threatened landscape) should be identified as worthy of conservation and development impacts on these should be avoided.
- ☉ Sites and/or landscapes with good archaeological potential or Aboriginal significance (particularly in threatened landscape) should be avoided if possible by development proposals. If impacts are unavoidable then these features should be subject of further investigation to ensure that information is retrieved prior to their destruction. Selection of salvage areas should be made on the basis of a 'whole of development' approach and be landscape based;
- ☉ Sites and/or landscapes with moderate archaeological potential or Aboriginal significance should be managed on the basis of their assessed significance. These area would only require sub-surface investigation if they provided landscape parameters which are poorly understood in the local and regional context; and

- ☉ Sites and/or landscapes of low or no archaeological potential or Aboriginal significance do not require planning consideration or further archaeological investigation in relation to the proposed development.

Managing identified sites/landscapes

The proposed management strategy for the study area is predicated on a landscape-based philosophy. Rather than targeting only surface sites of known extent or known significance (e.g. by surface manifestation or through sub-surface investigation), zones based on landscape parameters have been defined. These areas should be managed on the basis of their archaeological sensitivity.

- ☉ No land within the current study area has been identified as worthy of conservation;
- ☉ Approximately 15% of the study area has been assessed as Zone 2, having good archaeological potential;
- ☉ Almost half the current study area has moderate archaeological sensitivity (Zone 3);
- ☉ Approximately 35% of the study area has been assessed as Zone 4, having low-no archaeological potential.

Land in Zone 4 poses no constraint to development. Further archaeological works will not be required in these areas.

Land in Zones 2 and 3 may require further archaeological investigation prior to the proposed development taking place, in areas which are poorly understood in a regional context.

6.1 Regional landscape analysis

Lot II DP229784 is located in a part of western Sydney that is undergoing rapid development. The landscape modifications in this area due to the development of the Erskine Park Employment Area (EPEA) are having a significant impact on a previously agrarian neighbourhood with localised industrialised area (CSR site).

It is important to adequately record the surviving archaeological evidence and place this into a wider regional picture prior to their destruction. A previous regional study (JMcD CHM 2003) identified certain landscapes across the Cumberland Plain are more “threatened” than other landscapes by existing levels of development. These landscapes are at the greatest risk of being lost completely from the conservation estate. Aboriginal sites located in these landscapes would have intrinsically higher conservation potential, since the number of such sites likely to be remaining in the Cumberland Plain, is low. Hence these are intrinsically more worthy of either conservation – or where they are not in pristine condition – further scientific investigation through salvage of their assemblages.

The high value landscapes are:

- Shale hillslopes (Minchinbury and to a slightly lesser degree, Ashfield);
- First order tributary creeklines; and
- Shale ridges and low ridgetops (particularly Minchinbury and Bringelly).

The subject shale hillslope landscape associated with a first order tributary creek line – particularly those in Zones 2 and 3 – is a regionally threatened landscape. None of the previous excavations in the surrounding areas have successfully targeted this particular landscape (section 3.4).

An appropriate management strategy then is to salvage archaeological information from the area of the subject site (approximately 2.6ha) which is moderate to good condition (Zones 2 and 3). The remainder of the land (Zone 4: 1.5ha) should be considered unconstrained in respect to development.

6.2 Land use impact assessment

Previous land uses in this area include clearing for pastoral purposes. This is not likely to have had a significant impact on sub-surface archaeological deposits. This is exemplified in the nearby Austral Land site, salvaged in 2006 as part of its current development. Here, it was found that the archaeological deposit was significantly more intact than had been previously thought, despite a level of visible surface disturbance. Lot 11 DP229784 has undergone substantially less surface disturbance and hence it is highly likely that the sub-surface archaeological deposit is largely intact.

7. RECOMMENDATIONS

The following recommendations are based on consideration of:

- ④ Legal requirements under the terms of the *National Parks and Wildlife Act (1974)* (as amended) which states that it is illegal to damage, deface or destroy an Aboriginal object or Place without first obtaining the written consent of the Director-General, Department of Environment & Conservation, NSW;
- ④ The requirements of the Director General of the Department of Planning under Part 3a of the Environmental Planning and Assessment Act 1979;
- ④ The results of the current survey and assessment of the Indigenous heritage in Lot II DP229784 and previous survey results from the surrounding areas;
- ④ The archaeological management zones identified across Lot II DP229784 and the fact that surface sites and artefacts were found where visibility allowed;
- ④ The interests of Deerubbin Local Aboriginal Land Council, Darug Custodian Aboriginal Corporation, Darug Tribal Aboriginal Corporation and Darug Aboriginal Cultural Heritage Assessments; and
- ④ The likely impacts of the proposed development.

It is recommended that:

1. 1 There are no Zone 1 lands in Lot II DP229784, therefore no areas affected by these this development proposal warrants conservation;
2. 2 Development impact on Lot II DP 229784 will require the destruction of identified surface finds (Aboriginal 'objects') and an area of 2.6hs identified as having moderate to good potential to contain intact archaeological deposit. Usually this impact would require a section 90 consent from the Director General of the Department of Environment and Climate Change. As this is a Part 3a development, the Director General of the department of Planning will need to condition the development to consider the presence of sensitive Indigenous heritage within this development land;
3. 3 Most of the subject land is assessed as Zones 2 and 3. The identified surface site (JEPO1) is ranked as having moderate potential (Zone 3) to contain associated intact archaeological deposit. The two isolated finds (JEPO2 and 03) fall in Zone 4. A target landscape which includes Zone 2 and 3 should be chosen for sub-surface investigation (salvage) as mitigation against the proposed development impact;
4. 4 DLALC, DCAC, DTAC and DACHA have been informed of the current development proposal and should be involved in the selection of the recommended sub-surface investigations area. Their wishes, as expressed in their reports on the area's cultural significance, should be considered.
5. One copy (each) of this report should be sent to:

Mr, Frank Vincent
Chairperson,
Deerubbin Local Aboriginal Land Council
PO Box V184
NSW 2770.

Ms. Leanne Watson,
Darug Custodian Aboriginal Corporation,
PO Box 81,
WINDSOR, NSW, 2756

Mr. Gordon Workman,
Darug Tribal Aboriginal Corporation
PO Box 441
BLACKTOWN, NSW, 2148

Mr. Gordon Morton
Darug Aboriginal Cultural Heritage Assessments
90 Hermitage Road
KURRAJONG HILLS. NSW, 2758

8. REFERENCES

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- Barry, F. 2005 Its not set in stone: a landscape approach to archaeology in the Cumberland Plain. Investigations from the Western Sydney Orbital/Westlink M7. BA Honours thesis, University of Sydney.
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- Jo McDonald CHM Pty Ltd 1998 Archaeological salvage of site WGO3-2 (NPWS #45-5-971) at Wattle Grove, NSW. Report prepared for Delphin Management Services Pty Ltd.
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- Jo McDonald CHM Pty Ltd 2004a Archaeological salvage excavations in the Greystanes Estate Residential Lands: site PH2+3 (NPWS #45-5-2547), former CSR Lands, Greystanes, NSW. Report prepared for Delfin Lend Lease.
- Jo McDonald CHM Pty Ltd 2004b Archaeological investigations at "The Vineyard" Wallgrove Road, Horsley Park, NSW (NPWS #45-5-2986). Report prepared for Austral Brick Company Pty Ltd.
- Jo McDonald CHM Pty Ltd 2005a Archaeological subsurface investigations at Austral 4 (#45-5-3076), the M7 Hub, Old Wallgrove Road, Horsley Drive. Report prepared for Macquarie Goodman.
- Jo McDonald CHM Pty Ltd 2005b Archaeological salvage excavation of site RTA-G1 109-113 George Street Parramatta Report to Landcom Pty Ltd.

Jo McDonald CHM Pty Ltd 2005c Archaeological salvage excavations of eight archaeological landscapes in the Second Ponds Creek Valley Rouse Hill Development Area, NSW. Report to RHI (Stage 3) Pty Ltd and Landcom.

Jo McDonald CHM Pty Ltd 2006a Archaeological subsurface investigations at SEPP59 EC3/1 (#45-5-3201) and EC3/2 (#45-5-3202), Wonderland Surplus, Old Wallgrove Road, Eastern Creek. Report prepared for Australand Holdings Pty Ltd.

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Jo McDonald CHM Pty Ltd 2006c Archaeological salvage excavations of the Colebee Release Area, Schofields, NSW. Report prepared for Medallist Golf Holdings Pty Ltd.

Jo McDonald CHM Pty Ltd 2007 Salvage excavation of four archaeological sites in the Caddies Creek precinct, Rouse Hill Regional Centre, NSW. Report prepared for Lend Lease GPT (Rouse Hill) Pty Ltd.

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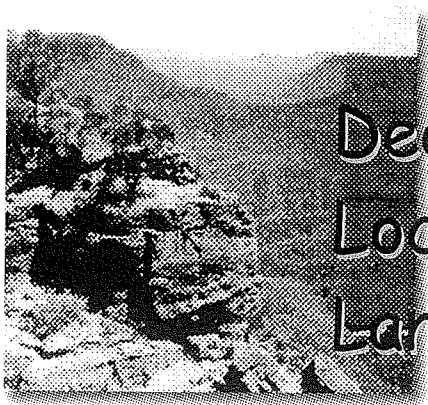
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Total Earth Care (Brown, O.J.F) 2006 Archaeological excavation of Site EC1 and surrounds (AHIMS# 37-2-1851), Erskine Park Industrial Estate, Lenore Lane, Erskine Park Report prepared for Valad Property Group

Appendix I

Responses from Aboriginal Groups

(to be inserted)



Deerubbin
Local Aboriginal
Land Council

COPY

5/271 Beames Avenue
PO Box 3184
Mt Druitt Village
NSW 2770 Australia

Ph: (02) 9832 2457
Fax: (02) 9832 2496
Email: Staff@Deerubbin.org.au
Web: <http://www.deerubbin.org.au>

Mark Tooker
Worley Parsons
P.O. Box 515
NORTH SYDNEY NSW 2059

Our Reference: 1844

29 February 2008

**Subject: Protection of Aboriginal Cultural Heritage
Jacfin Warehousing, Erskine Park**

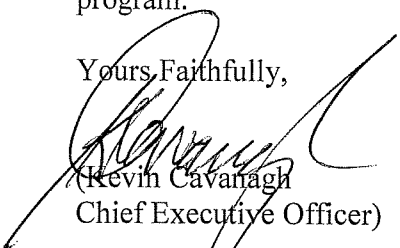
Dear Mr. Tooker,

A representative of the Deerubbin Local Aboriginal Land Council (Steve Randall) inspected Jacfin land at Erskine Park on 19 February 2008. An Aboriginal cultural heritage assessment was undertaken to evaluate the likely impact the proposed development has on the cultural heritage of the land. Consulting archaeologist Fran Scully of Jo McDonald CHM Pty Ltd carried out a scientific survey at the same time

Our representative reports, that, visibility was poor because of the long grass, no Aboriginal cultural material (in the form of stone artefacts, for example) was found, although a number of Aboriginal sites were located on the surrounding properties.

Deerubbin LALC therefore, recommends further investigations with a test excavation program.

Yours Faithfully,


(Kevin Cavanagh
Chief Executive Officer)

c.c. Tanya Koeneman – Senior Aboriginal (Cultural) Heritage Officer, Department of Environment & Climate Change (DECC).

c.c. Fran Scully – Jo McDonald, Cultural Heritage Management Pty Ltd

c.c. General Manager – Penrith City Council

Tables of Compliance

Table 1 – State Environmental Planning Policy No. 55 – Remediation of Land

Section	Requirement	Proposal	Compliance
Clause 7(1)A	<p>A consent authority must not consent to the carrying out of any development on land unless:</p> <p>(a) it has considered whether the land is contaminated, and</p> <p>(b) if the land is contaminated, it is satisfied that the land is suitable in its contaminated state (or will be suitable, after remediation) for the purpose for which the development is proposed to be carried out, and</p> <p>(c) if the land requires remediation to be made suitable for the purpose for which the development is proposed to be carried out, it is satisfied that the land will be remediate before the land is used for that purpose.</p>	<ul style="list-style-type: none"> ▪ The site is considered suitable for commercial and/or industrial land-use (refer to Contamination Report at Appendix C). ▪ The proposed modifications raise no further implications with respect to SEPP55. 	Y
Clause 8(1)A	<p>A person may carry out a remediation work in accordance with this Policy, despite any provision to the contrary in an environmental planning instrument, except as provided by clause 19(3).</p>	<ul style="list-style-type: none"> ▪ N/A. Remediation work is not required as the site is suitable for the proposed development. 	N/A
Clause 8(2)A	<p>A person must not carry out a category 1 remediation work except with the consent of the consent authority.</p>	<ul style="list-style-type: none"> ▪ N/A. Remediation work is not required as the site is suitable for the proposed development. 	N/A

Table 2 – Draft State Environmental Planning Policy No. 66 – Integration of Land Use and Transport (DSEPP 66)

Section	Requirement	Proposal	Compliance
Clause 9	<p>Before granting consent for development to which any of the planning objectives of this Policy relate, the consent authority must consider the following:</p> <p>(a) Whether carrying out the development will further the aims and the planning objectives of this Policy,</p> <p>(b) Whether the development is consistent with the policy on location of specific land uses and the general policies on the Integrated Land Use and Transport Policy Package or complies with clause 10,</p> <p>(c) whether adequate consultation with the Director-General of Transport NSW and any appropriate planning agency, transport agency and transport provider takes place in accordance with clause 11,</p> <p>(d) whether the transport implications are considered in accordance with clause 12,</p> <p>(e) whether the development incorporates travel demand management mechanisms and features that will minimise the demand for travel and use of cars including the following:</p> <p>(i) An urban form and structure that encourage walking, cycling and public transport use,</p> <p>(ii) Parking requirement designed to discourage car use in areas with good public transport access,</p> <p>(iii) Provision of adequate trip-end facilities for cyclists such as secure bicycle storage,</p> <p>(iv) Residential densities that will help achieve a passenger threshold for viable public transport services especially in accordance with clause 13 for new residential release areas,</p> <p>Employment or floor space densities in commercial or employment areas that reflect the accessibility of the area by suitable public transport services and facilities,</p> <p>Suitable provision for taxis.</p>	<ul style="list-style-type: none"> ▪ The proposed development is not inconsistent with these aims. It is within an identified employment zone with good access to arterial roads and the motorway system. It is presumed that improvements to the surrounding road system will make the site more accessible and more attractive to potential future public transport connections. ▪ It is considered appropriate that this employment generating use is located in an area specifically designated for such uses in both the Metropolitan Strategy and the Draft SEPP (for the Western Sydney Employment Hub) ▪ The proposed warehouse on industrially zoned land is consistent with The Right Place for Business Policy accompanying the draft SEPP. 	<p>Y</p>

Section	Requirement	Proposal	Compliance
Clause 11 – Consultation with Director-General of Transport NSW and appropriate planning agencies, transport agencies and transport providers	<p>(1) Before granting consent to any development, the consent authority, should ensure:</p> <p>(a) that adequate consultation has occurred with the Director-General of Transport NSW and any appropriate planning agency, transport agency and transport provider, and</p> <p>(b) that the views of the Director-General of Transport NSW and any appropriate planning agency, transport agency and transport provider are taken into consideration, subject to this clause.</p> <p>(2) The Director-General of Transport NSW is required to be consulted under this clause only in relation to an instrument, plan or development application specified, or of a class or description specified, by the Director-General in a notification to a person or consent authority to whom subclause (1) applies stating that the Director-General wishes to be consulted.</p>	<ul style="list-style-type: none"> ▪ The application will be referred to in relation to this clause 	Noted
	<p>(3) In the case of a development application in respect of which the Director-General of Transport NSW or any appropriate planning agency, transport agency or transport provider is required to be consulted under this clause, a consent authority:</p> <p>(a) must forward a copy of the application to the Director-General of Transport NSW or the appropriate planning agency, transport agency or transport provider within 7 days after it is received, and</p> <p>(b) must not determine the application until:</p> <p>(i) it has received and considered the views of the Director General of Transport NSW or the appropriate planning agency, transport agency or transport provider with respect to the application, or</p> <p>(ii) the Director General of Transport NSW or the appropriate planning agency, transport agency or transport provider has informed the consent authority that it does not wish to make any representations concerning the application, or</p> <p>(iii) 21 days have elapsed since the date on which the copy of the application was forwarded to the Director-General of Transport NSW or the appropriate planning agency, transport agency or transport provider, whichever first occurs.</p>	<ul style="list-style-type: none"> ▪ The application will be referred to in relation to this clause 	Noted

Section	Requirement	Proposal	Compliance
Clause 12 – Considering the transport implications of development	<p>(1) Any consideration of a study of the traffic or other transport implications of a development application should include consideration of the extent to which the study has:</p> <p>(a) assessed the accessibility of the site by a range of transport modes including public transport, walking and cycling, and</p> <p>(b) proposed reasonable ways of minimising travel demand especially by car and maximising the share of travel by modes other than the car.</p> <p>(2) In considering any advice regarding traffic, a consent authority in determining a development application:</p> <p>(a) should ensure that any advice regarding road safety, traffic flow, parking or the like, or any support expressed for a proposal in terms of road traffic issues, is considered in the wider transport context including managing the demand for travel especially by car and the achievement of the aims and the planning objectives of this Policy, and</p> <p>(b) must not, as a result of the advice, adopt planning provisions or impose condition of consent that would be inconsistent with the aims and the planning objectives of this Policy, unless the person or consent authority is able to provide reasons that justify any such inconsistency.</p> <p>(3) When providing advice on a development application, the Director-General of Transport NSW and any appropriate planning agency, transport agency and transport provider is to consider the wider transport context including managing the demand for travel especially by car and the achievement of the aims and the planning objectives of this Policy.</p>	<ul style="list-style-type: none"> ▪ A Traffic Report was undertaken by Masson Wilson Twiney and can be found at Appendix I. ▪ The traffic generation and parking provision proposed is consistent with the development potential envisaged for the site as part of the Erskine Park Employment Area. ▪ Suitable space within the warehouse will be available for bicycle parking. ▪ Other reasonable ways of minimising car demand are unique/specific to this site. Instead it is assumed development of the site (with good access to the arterial road and motorway system) and improvements to the surrounding road system will make the site more attractive to potential future public transport connections. 	Proposal is not inconsistent

Table 3 – Sydney Regional Environmental Plan No. 20 – Hawkesbury – Nepean River (No.2 1997)

SREPP	Requirement	Proposal	Compliance
Clause 5 – General Planning Considerations	The following matters should be considered: (a) the aim of this plan, (b) the strategies listed in the Action Plan of the Hawkesbury-Nepean Environmental Planning Strategy, (c) whether there are any feasible alternatives to the development or other proposal concerned, (d) the relationship between the different impacts of the development or other proposal and the environment, and how those impacts will be addressed and monitored.	<ul style="list-style-type: none"> ▪ Consideration of the impacts of proposed development has been undertaken in accordance with the aims of the SREP and its strategies – see below. ▪ The proposed is consistent with the planning considerations and principles as outlined in Section 6.3 of the EAR and appended consultant reports. ▪ It is considered that the use of the site for employment purposes is directly consistent within the context without any adverse environmental impacts. 	Y
Clause 6 – Specific planning policies and recommended strategies	(1) Total Catchment Management Total catchment management is to be integrated with environmental planning for the catchment. Strategies: (a) refer the application or other proposal for comment to the councils of each adjacent or downstream local government area, which is likely to suffer a significant adverse environmental effect from the proposal. (b) Consider the impact of the development concerned on the catchment (c) Consider the cumulative environmental impact of development proposals on the catchment.	<ul style="list-style-type: none"> ▪ The proposal incorporates suitable methods of controlling surface and stormwater runoff, which is integrated effectively with the total water management cycle for the Erskine Park Employment Area (refer to Water Management, Access and Services Report at Appendix H). 	Y
	(2) Environmental Sensitive Areas <i>The environmental quality of environmentally sensitive areas must be protected and enhanced through careful control of future land use changes and through management and (where necessary) remediation of existing uses. The Strategies:</i>	<ul style="list-style-type: none"> ▪ This site does not fall within an “environmentally sensitive area” pursuant to the REP. 	N/A

SREPP	Requirement	Proposal	Compliance
<p>Clause 6 – Specific planning policies and recommended strategies continued...</p>	<p>(a) Rehabilitate parts of the riverine corridor from which sand, gravel or soil are extracted so that the attached aquatic plant beds are replaced and water quality and faunal habitats improved.</p> <p>(b) Minimise adverse impacts on water quality, aquatic habitats, riverine vegetation and bank stability.</p> <p>(c) Minimise direct and indirect adverse impacts on land reserved or dedicated under the National Parks and Wildlife Act 1974 or the Forestry Act 1916 and conservation area sub-catchments in order to protect water quality and biodiversity.</p> <p>(d) Protect wetlands (including upland wetlands) from future development and from the impacts of land use within their catchments.</p> <p>(e) Consider the need to include buffer zones (such as adequate fire radiation zones) for proposals on land adjacent to land reserved or dedicated under the National Parks and Wildlife Act 1974 or the Forestry Act 1916.</p> <p>(f) Consideration should be given to the impact of the development concerned on the water table and the formation of acid sulphate soils.</p> <p>(g) New development in conservation area sub-catchments should be located in areas that area already cleared.</p>		
	<p>(3) Water quality</p> <p>Future development must not prejudice the achievement of the goals of use of the river for primary contact recreation (being recreational activities involving direct water contact, such as swimming) and aquatic ecosystem protection in the river system. If the quality of the receiving waters does not currently allow these uses, the current water quality must be maintained, or improved, so as not to jeopardise the achievement of the goals in the future. When water quality goals are set by the Government these are to be the goals to be achieved under this policy.</p> <p>Strategies:</p>	<ul style="list-style-type: none"> ▪ Proposed water quality measures and strategies will be implemented, including gross pollutant traps to ensure safe water quality for the site (refer to Water Management, Access and Services Report at Appendix H). ▪ Soil and erosion control measures will be implemented during construction of the proposed development, refer to Section 6.5 of the SEE and Water Management, Access and Services Report at Appendix H. ▪ Water quality goals for primary contact recreation and aquatic ecosystem protection are not directly relevant to the current proposal. 	Y

SREPP	Requirement	Proposal	Compliance
<p>Clause 6 – Specific planning policies and recommended strategies continued...</p>	<p>(a) Quantify, and assess the likely impact of, any predicted increase in pollutant loads on receiving waters;</p> <p>(b) Consider the need to ensure that water quality goals for primary contact recreation and aquatic ecosystem protection are achieved and monitored;</p> <p>(c) Approve development involving primary contact recreation or the withdrawal of water from the river for human contact (not involving water treatment), such as showers, only in locations where water quality is suitable (regardless of water temperature);</p> <p>(d) Do not carry out development involving on-site disposal of sewerage effluent if it will adversely affect the water quality of the river or groundwater. Have due regard to the nature and size of the site;</p> <p>(e) Develop in accordance with the land capability of the site and do not cause land degradation;</p> <p>(f) Minimise or eliminate point source and diffuse source pollution by the use of best management practice;</p> <p>(g) Site and orientate development appropriately to ensure bank stability. Plant appropriate native vegetation along banks of the river and tributaries of the river, but not so as to prevent or inhibit the growth of aquatic plants in the river, and consider the need for a buffer of native vegetation;</p> <p>(h) Protect the habitat of native aquatic plants.</p>	<ul style="list-style-type: none"> ▪ The sites sewage system will not have a negative environmental impact. ▪ Development will be in accordance with the land capability of the site, with a careful balance of cut and fill within the site providing minimal erosion. ▪ It is not anticipated that the proposed development will impact on bank stability or aquatic plants (refer to Flora and Fauna Report at Appendix D). 	
	<p>(4) Water quantity Aquatic ecosystems must not be adversely affected by development, which changes the flow characteristics of surface or groundwater in the catchment. The strategies include:</p> <p>(a) Future development must be consistent with the interim or final river flow objectives that are set for the time being by the government;</p> <p>(b) Encourage on-site stormwater retention, infiltration and (if</p>	<ul style="list-style-type: none"> ▪ Proposed stormwater control measures and impacts addressed at Water Management, Access and Services Report at Appendix H. ▪ One site rainwater tanks and rain gardens will be implemented. ▪ Impact on the quality of the water table has been assessed in the Contamination Report at Appendix C. There will be likely no impact on the water table. 	Y

SREPP	Requirement	Proposal	Compliance
Clause 6 – Specific planning policies and recommended strategies continued...	<p>appropriate) reuse;</p> <p>(c) Consider the need for restricting or controlling development requiring the withdrawal or impoundment of water because of the effect on the total water budget of the river;</p> <p>(d) Consider the impact of development on the level and quality of the water table;</p>		
	<p>(5) Cultural Heritage</p> <p>The importance of the river is contributing to the significance of items and places of cultural heritage significance should be recognised, and these items and places should be protected and sensitivity managed and, if appropriate, enhanced. Strategies include:</p> <p>(a) Encourage development, which facilitates the conservation of heritage items if it does not detract from the significance of items.</p> <p>(b) Protect Aboriginal sites and places of significance</p>	<ul style="list-style-type: none"> ▪ An Aboriginal archaeology assessment is located at Appendix E. No land within the current study area is considered to be of high conservation significance. ▪ Measures have been implemented to protect and preserve any significant items that may be found (refer to Section 6.11 of the EAR). ▪ Indigenous bodies have been involved in the site studies. 	Y
	<p>(6) Flora and Fauna</p> <p>Manage flora and fauna communities so that the diversity of species and genetics within the catchment is conserved and enhanced. Strategies include:</p> <p>(a) Conserve and, where appropriate, enhance flora and fauna communities, particularly threatened species, populations and ecological communities, aquatic habitats, wetland flora, rare flora and fauna, riverine flora, flora with heritage value, habitats for indigenous and migratory species of fauna, and existing or potential fauna corridors.</p> <p>(b) Locate structures where possible in areas, which are already cleared or disturbed instead of clearing or disturbing further land.</p> <p>(c) Minimise adverse environmental impacts protect existing habitat and, where appropriate, restore habitat values by the use of management practices.</p> <p>(d) Consider the impact on ecological processes, such as waste</p>	<ul style="list-style-type: none"> ▪ Flora and Fauna Report Appendix D, notes that none of the vegetation present on the site is of biodiversity conservation value or significance, and no habitats or natural resources of relevance to threatened biota will be lost as a result of the development proposed. ▪ The assessment has considered the above matters and concludes the proposal will not constitute a significant effect on any threatened species, populations or ecological communities or their habitats. 	Y

SREPP	Requirement	Proposal	Compliance
Clause 6 – Specific planning policies and recommended strategies continued...	<p>assimilation and nutrient cycling.</p> <p>(e) Consider the range of flora and fauna inhabiting the site of the development concerned and the surrounding land, including threatened species and migratory species, and the impact of the proposal on the survival of threatened species, populations and ecological communities, both in the short and longer terms.</p> <p>(f) Consider the need to provide and manage buffers, adequate fire radiation zones and building setbacks from significant flora and fauna habitat areas.</p> <p>(g) Consider the need to control access to flora and fauna habitat areas.</p>		
	<p>(10) Urban development</p> <p><i>All potential adverse environmental impacts on urban development must be assessed and controlled. The strategies include:</i></p> <p>(a) When considering a proposal for the rezoning or subdivision of land which will increase the intensity of development of that land (for example, by increasing cleared or hard surface areas) so that effluent equivalent to that produced by more than 2,500 people will be generated, consider requiring the preparation of a Total Water Cycle Management Study or Plan.</p> <p>(b) Consider urban design options to reduce environmental impacts (such as variable lot sizes and shapes, and the clustering of development).</p>	<ul style="list-style-type: none"> ▪ These considerations do not relate to the current proposal, however, the environmental impacts of the development have been considered within the SEE and consultant reports. 	N/A
	<p>(11) Recreation and tourism</p> <p>The value of the riverine corridor as a significant recreational and tourist asset must be protected.</p> <p>Strategies:</p> <p>(a) Provide a wide range of recreational opportunities along the river which are consistent with conserving the river's natural values and character.</p> <p>(b) Plan and manage recreational and tourist developments, and associated access points, cycleways and footpaths, so as to</p>	<ul style="list-style-type: none"> ▪ This DA does not raise any issues in relation to recreation and tourism, being located in an area designated for employment generating uses. ▪ The visual impact of the development from surrounding areas is considered at Appendix G. 	N/A

SREPP	Requirement	Proposal	Compliance
<p>Clause 6 – Specific planning policies and recommended strategies continued...</p>	<p>minimise any adverse environmental impacts on the river. Locate them where river banks are stable, away from river shallows, major beds of attached aquatic plants or fish breeding areas, where the proposed activities do not conflict with surrounding recreational activities and where significant flora and fauna habitats will not be adversely affected. The upgrading of existing public access to the river is to be preferred over the creation of new access points.</p> <p>(c) Minimise conflicts between recreational uses.</p> <p>(d) Consider the availability of, or need to provide, land for vehicle parking and for suitable access (including access for cars and buses), for boat service areas and for water, electricity and sewage disposal.</p> <p>(e) Consider the environmental impact of ancillary services for recreation and tourist developments, such as amenities blocks and vehicle parking.</p> <p>(f) Consider the visual impact of development on the surrounding area.</p>		
	<p>(12) Metropolitan strategy</p> <p>Policy: Development should complement the vision, goal, key principles and action plan of the Metropolitan Strategy.</p> <p>Strategies:</p> <p>(a) Consider the impacts of transport infrastructure proposals on water quality and air quality.</p> <p>(b) Consider the impacts of metropolitan waste disposal on water quality.</p> <p>(c) Consider the impacts of development on air quality.</p> <p>(d) Consider the need for waste avoidance, waste reduction, reuse and recycling measures.</p> <p>(e) Consider the implications of predicted climate change on the location of development and its effect on conservation of natural resources.</p>	<ul style="list-style-type: none"> ▪ Consideration of the Metropolitan Strategy is at Section 3.2 of the EAR. ▪ On site proposed water quality measures and strategies will be implemented, including gross pollutant traps to ensure safe water quality for the site (refer to Water Management, Access and Services Report at Appendix H). ▪ The development is situated within an approved zone for an industrial warehouse. The Erskine Park Employment Area has been zoned suitable for such developments. ▪ A land fill and cut process will be in place with the re use of soil from one section of the site to another, thereby minimising the balance of cut and fill on the site. ▪ A Waste Management Plan will be prepared and submitted prior to issue of the Construction Certificate. 	<p>Y</p>

SREPP	Requirement	Proposal	Compliance
<p>Clause 6 – Specific planning policies and recommended strategies continued...</p>		<ul style="list-style-type: none"> ▪ Air quality mitigation measures are considered in the Statement of Commitments at Section 7.0 of the EAR. ▪ It is not considered that the introduction of an industrial warehouse in an area already earmarked and zoned for a particular capacity of employment generating uses will significantly impact on nor effect the conservation of natural resources. 	

Table 4 – Penrith Local Environmental Plan 1994 (Erskine Park Employment Area)

Section	Requirement	Proposal	Compliance
Part 1 Preliminary			
<p>Clause 2</p> <p>Aims and Objectives</p>	<p>(1) The aims of this plan are:</p> <p>(a) to make land available for economic and employment generating development in the City of Penrith; and</p> <p>(b) to promote development which is consistent with the council's vision for the City of Penrith contained in its Strategic Management Plan, namely, one of a region having a harmony of urban and rural qualities with a strong commitment to environmental protection and enhancement; and</p> <p>(c) to promote development which observes responsible and environmentally sound management practices to minimise any adverse environmental impact of that development on surrounding localities.</p> <p>(2) The objectives of this plan are:</p> <p>(a) to provide a planning framework which allows development control plans and a staging plan to supplement the controls embodied in this plan; and</p> <p>(b) to preserve the amenity of the residential communities of Erskine Park and St Clair; and</p> <p>(c) to require development to be assessed in accordance with, and to observe, sound environmental planning principles; and</p> <p>(d) to require development to observe relevant environmental performance criteria; and</p> <p>(e) to promote the development of land for industrial land uses which require a variety of land types; and</p> <p>(f) to promote a variety of employment based activities whilst protecting the viability of existing business centres; and</p> <p>(g) to create an environmentally attractive and safe work environment; and</p>	<ul style="list-style-type: none"> ▪ The proposed development will provide economic and employment growth within the City of Penrith. ▪ The proposed development is integral in providing diversity among Penrith's urban and rural regions and implementing adequate environmental measures to protect and enhance the site and its surrounds. ▪ There are responsible and environmentally sound management practices in place so that there will be no adverse environmental impacts on the surrounding locality. ▪ The proposed development will not impact upon the nearest residential neighbourhoods of St Clair and Erskine Park, being significantly separated from these areas, but the development also incorporates appropriate environmental safeguards. ▪ The development is for an industrial land use, developed to adhere to appropriate environmental performance criteria. ▪ The development will provide vitality and interest in the Erskine Park Employment Hub whilst protecting the viability of existing business centres, by only incorporating a minor ancillary office component. ▪ The proposed development will be environmentally attractive using colours and materials that complement the surrounding environment (refer to Statement of commitments at Section 7.0 of the EAR). ▪ The proposed development provides an efficient and orderly utilisation of land, providing a warehouse development of 	Y

Section	Requirement	Proposal	Compliance
	<p>(h) to promote development which is efficient in terms of transportation, energy and land utilisation; and</p> <p>(i) to make land available to accommodate all required special land uses including roads, drainage and other infrastructure; and</p> <p>(j) to facilitate the appropriate provision of, or of funding for, major infrastructure works; and</p> <p>(k) to limit the potential risk to life and property from flood events; and</p> <p>(l) to maximise conservation of urban bushland; and</p> <p>(m) to prohibit offensive and hazardous industries and other industries specified in this plan; and</p> <p>(n) to prohibit development of land for any purpose if, as a result of carrying out the development, there will be direct vehicular access between that land and either Erskine Park Road or Mamre Road.</p>	<p>appropriate scale, in close proximity to transport networks, on land designated for employment use.</p> <ul style="list-style-type: none"> ▪ The proposed development will provide for roads, drainage and other infrastructure necessary to support the development. ▪ The developer commits to pay contribution in accordance with the Erskine Park Contributions Plan to fund necessary infrastructure works. ▪ The flood risk from the proposed development has been assessed in the Flooding Report at Appendix K. ▪ The site will not disturb the Biodiversity Corridor to the west, nor will clearing of the scattered trees on the site impact on any significant urban bushland. ▪ The occupant of the warehouse is yet to be determined. The future occupant will not be an offensive and hazardous industry. ▪ The proposed development will have no vehicular access to or from Erskine Park Road or Mamre Road. 	
Part 2 The Land Use Zones in this Plan			
Clause 8 Zoning	Zone No. 4(e1) (Employment – Restricted) – coloured purple and lettered	<ul style="list-style-type: none"> ▪ The proposed development is located in Zone No.4(e1) (Employment – Restricted). 	Y
Clause 9 Zone No. 4(e1) (Employment Restricted Zone)	<p>(1) Objectives of Zone</p> <p>(a) to prohibit certain development which is likely to have an adverse environmental effect on the amenity of adjoining localities; and</p> <p>(b) to promote development which does not have an adverse environmental effect on the adjoining residential and rural communities arising from air, noise or other pollution; and</p> <p>(c) to permit retail activities which are:</p> <p>(i) compatible with the concept of the employment area; and</p>	<ul style="list-style-type: none"> ▪ The proposal is consistent with the objectives of the zone in that an appropriate employment generating use is provided without adverse environmental impacts nor impacts on established business centres (only a minor ancillary office component is proposed). ▪ The proposal is permissible with consent. 	Y

Section	Requirement	Proposal	Compliance
<p>Clause 9 Zone No. 4(e1) (Employment Restricted Zone) continued...</p>	<p>(ii) unlikely to prejudice the viability of existing business centres, or are primarily intended to service persons working in the Erskine Park Employment Area; and</p> <p>(d) to permit office development of a type which:</p> <p>(i) would not be readily located in a traditional business zone; and</p> <p>(ii) would be unlikely to prejudice the viability of existing business centres; and</p> <p>(e) to permit development for the purposes of recreation facilities, child care centres and community facilities in association with, or independent of, other permitted development to serve the needs of the workforce of the Area and the adjoining residential and rural communities; and</p> <p>(f) to prohibit development of land for any purpose if, as a result of carrying out the development, there will be direct vehicular access between that land and either Erskine Park Road or Mamre Road; and</p> <p>(g) to promote development of land with frontage to Mamre Road and Erskine Park Road if the buildings or works resulting from the carrying out of the development will, by their architectural and landscape design, enhance the rural scenic character of those roads and their roles as gateways to the City of Penrith.</p> <p>(2) Without Development Consent Nil.</p> <p>(3) Only with Development Consent</p> <p>Any land use other than those included in Item 4.</p>	<ul style="list-style-type: none"> ▪ See Above 	

Section	Requirement	Proposal	Compliance
Clause 9 Zone No. 4(e1) (Employment Restricted Zone) continued...	(4) Prohibited Amusement parks; boarding houses; camp or caravan sites; dwellings (other than those used in conjunction with other land uses that are not prohibited in this zone and situated on the land on which such other uses are conducted); general stores; generating works; industries listed in Schedule 2; junk yards; materials recycling yards; motor showrooms; offensive or hazardous industries; offensive or hazardous storage establishments; shops (other than those primarily intended to service persons working in the Erskine Park Employment Area or shops trading principally in bulky goods or motor vehicle parts and accessories); vehicle body repair workshops; waste disposal.		
Part 3 Special Provisions Applying Generally			
Clause 10 Environmental considerations	(1) Notwithstanding any other provision of this plan, the council must not consent to the carrying out of development on land to which this plan applies where, in the opinion of the Council, it will have an adverse environmental effect on adjoining residential or rural lands. (2) In deciding whether a development will have an adverse environmental effect, the council must take into consideration: (a) any adverse impact of the carrying out of that development on the existing or likely future amenity of adjoining residential or rural lands likely to be caused by air, water, noise or any other pollution; and (b) the effect of the development on the visual amenity of adjoining residential and rural lands; and (c) the effect of the development on water quality through particulate or chemical emissions or sedimentation and the measures proposed to improve the existing water quality and to minimise any such effect; and (d) the extent of likely air emissions from the development and the measures proposed to improve the existing air quality and to minimise and control those emissions; and	<ul style="list-style-type: none"> ▪ The proposed development will not have any adverse environmental impacts or impact on the visual amenity on the adjoining residential lands. ▪ There are water practices in place to ensure adequate water quality management. ▪ Consideration of water quality, visual amenity and noise is provided at Appendix H, G and L. ▪ Consideration of Air Quality is considered in the Erskine Park Section of the Penrith DCP 1996 at Table 5 below. 	Y

Section	Requirement	Proposal	Compliance
Clause 10 Environmental considerations continued...	(e) waste management needs for the development and the adequacy of proposed waste management measures; and (f) the hazardous nature and quantities of any materials or substances to be used or stored as part of the development; and (g) proposed ongoing monitoring procedures and management plans for the development, to mitigate any adverse environmental effects.	<ul style="list-style-type: none"> ▪ A Waste Management Plan will be submitted prior to the issue of Construction Certificate. ▪ No hazardous materials will be stored as part of this development. ▪ The Statement of Commitments provides the necessary management to mitigate any adverse environmental impacts. 	
Clause 11 Efficiency considerations	In determining whether to grant consent for development on land to which this plan applies, the council must take into consideration: (a) the energy efficiency of the proposal in terms of building design, solar access, site layout, technology and the like; and (b) the extent to which the development maximizes opportunities for the recycling of waste; and (c) whether the development makes the most efficient use of the land; and (d) whether the development promotes efficiency in terms of: (i) the overall transport network within the Erskine Park Employment Area; and (ii) traffic, parking and access; and (iii) public transport.	<ul style="list-style-type: none"> ▪ Further consideration of energy efficient materials for the development is in the Statement of Commitments at Section 7.0 of the EAR. ▪ The site is triangular in shape. The site layout and design provides best practice and optimal efficiency in regards to the constraints for the sites shape. ▪ A Waste Management Plan will be submitted prior to issue of Construction Certificate. ▪ The proposed car parking spaces is consistent with the DCP requirements. ▪ The proposed site will be efficient with the overall transport network within the Erskine Park Employment Area. The extension of Templar Road to the site is consistent with the CSR approval by the Minister for Planning. 	Y
Clause 12 Subdivision of land	(1) A person must not subdivide land to which this plan applies without the consent of the council. (2) A person must not open a road on land to which this plan applies without the consent of the council. (3) The council must not grant consent to the subdivision of land to which this plan applies if the subdivision would create an allotment containing land in more than one zone.	<ul style="list-style-type: none"> ▪ N/A – The proposal does not include subdivision. 	N/A

Section	Requirement	Proposal	Compliance
Clause 13 Staging for provision of services	(1) In this clause “services” includes roads, water, sewerage, electricity, telephone, gas and trunk drainage services. (2) The council must not grant consent to any development on land to which this plan applies unless the proposed development, and the way in which it will be carried out, will be in accordance with any staging plan and management plan for the planning, funding and implementation of services contained within a development control plan applying to the land.	<ul style="list-style-type: none"> Services will be provided in accordance within the Water Management, Access and Services Report at Appendix H. 	Y
Clause 14 Provision of services	The council must not grant consent to the carrying out of development on land to which this plan applies unless arrangements have been made that are satisfactory to the Water Board for the amplification and reticulation of water services to the land, and the provision of sewerage services to the land.	<ul style="list-style-type: none"> Services will be provided in accordance within the Water Management, Access and Services Report at Appendix H. 	Y
Clause 15 Drainage	The council must not grant consent to any development on land to which the plan applies unless: (a) arrangements satisfactory to the council have been made for the implementation of that part of the council’s Trunk Drainage and Water Quality Management Scheme to which the land drains; and (b) the development conforms with the provisions of the council’s Trunk Drainage and Water Quality Management Scheme.	<ul style="list-style-type: none"> Services will be provided in accordance within the Water Management, Access and Services Report at Appendix H. 	Y
Clause 16 Advertising	A person must not erect an advertisement on land to which this plan applies except with the consent of the council.	<ul style="list-style-type: none"> A small sign is proposed as part of the development application (approx 6m x 1m). 	
Clause 17 Tree Preservation	(1) In this clause, “tree” means: (a) a living perennial plant which: (i) has one or more self supporting trunks, any one or more of which has a circumference of 30cm or more (at a height of 40cm above the ground); or (ii) has a height of 3 metres or more, or a branch spread of more than 3 metres; or (b) any tree or plant, irrespective of size, listed in a register of	<ul style="list-style-type: none"> Approval for the removal of trees is sought as part of this development application. There are no significant trees identified on site (see Flora and Fauna Report at Appendix D) and clearing relates to scattered individual regrowth trees. 	

Section	Requirement	Proposal	Compliance
<p>Clause 17</p> <p>Tree Preservation continued...</p>	<p>significant trees, which is a register kept at the office of the council;</p> <p>(c) any palm, cycad or tree fern.</p> <p>(2) A person is prohibited from ringbarking, cutting down, digging up, topping, lopping, removing or injuring by mechanical or chemical means any tree, and from taking any other action which could cause the death of any tree, except with the consent of the council.</p> <p>(3) Notwithstanding subclause (2), the consent of the council is not required:</p> <p>(a) for the pruning of a tree for the purpose of its regeneration or shaping; or</p> <p>(b) for necessary action in relation to a tree to prevent imminent personal injury or imminent damage to property; or</p> <p>(c) for the taking of appropriate action where the tree has otherwise become dangerous, but only if 7 days' notice of the action proposed has been given to the council; or</p> <p>(d) for the removal of noxious plants, being plants listed as noxious plants in a pamphlet published by the Hawkesbury River County Council and available to the public in the office of the council.</p> <p>(4) This clause does not apply to tree trimming, tree removal or other similar measures carried out by an electricity supply authority, which is in accordance with any tree management agreement approved by the council.</p>		
Part 4 Special Provisions Applying to Specific Land			

Section	Requirement	Proposal	Compliance
<p>Clause 18 Flood liable land</p>	<p>(1) This clause applies to the land within Zone No. 4(e) or 4(e1) shown diagonally hatched on the map.</p> <p>(2) The council must not grant consent for development on the land to which this clause applies for purposes other than:</p> <p>(a) landscaping; or</p> <p>(b) a parking area; or</p> <p>(c) the outdoor storage of goods, materials or products.</p> <p>(3) The council must not grant consent to the carrying out of development on land to which this clause applies unless it is satisfied that:</p> <p>(a) the development will not have a significant adverse effect on the characteristics of floods in Ropes Creek; and</p> <p>(b) the development is not likely to result in any significant risk to life or property as a result of a standard flood.</p> <p>(4) Development on land to which this clause applies may be carried out only if the floor level of any building or outdoor storage area that will result from the proposed development will be located above the standard flood level. This subclause does not apply to development for the purpose of structures used for drainage, flood mitigation or water quality management.</p>	<ul style="list-style-type: none"> ▪ The site is not considered flood liable. There are drainage swales, rain harvesting tanks, rain-gardens and a headwall chamber that will be implemented to ensure that velocities and depths through the site are not hazardous to pedestrians and vehicles. The proposed development will not have an adverse impact on the characteristics of floods in Ropes Creek (refer to Flooding Report at Appendix K). 	Y
<p>Clause 19 Development in Zone No. 4(e1)</p> <p>Clause 19</p>	<p>(1) This clause applies to land within Zone No. 4(e1).</p> <p>(2) The council must not grant consent to development of land within Zone No. 4(e1) unless it is satisfied that:</p> <p>(a) wherever appropriate, proposed buildings are compatible with the height, scale, siting and character of existing residential buildings in the vicinity; and</p> <p>(b) goods, plant, equipment and other material resulting from the development are to be stored within a building or will be suitably screened from view from residential buildings and associated land; and</p> <p>(c) the elevation of any building facing, or significantly exposed to</p>	<ul style="list-style-type: none"> ▪ The proposed development is consistent with surrounding developments in regards to height, scale and materials (A maximum ridge height of approximately 15m is proposed). ▪ The proposed development is significantly separated from the residential neighbourhood of St Clair, to mitigate any potential adverse impacts. ▪ Suitable storage for goods, plant, equipment and other material will be stored appropriately and screened from view surrounding developments. ▪ The materials used and structure of the building has been 	Y

Section	Requirement	Proposal	Compliance
Development in Zone No. 4(e1) continued...	<p>view from, land on which a dwelling house is situated has been designed to present an attractive appearance; and</p> <p>(d) noise generation from fixed sources or motor vehicles associated with the development will be effectively insulated or otherwise minimised; and</p> <p>(e) the development will not otherwise cause nuisance to residents, by way of hours of operation, traffic movement, parking, headlight glare, security lighting or the like; and</p> <p>(f) windows facing residential areas, or from which residential areas might be viewed, have been treated to avoid overlooking of private yard space or windows in residences; and</p> <p>(g) the development will provide adequate off-street parking, relative to the demand for parking likely to be generated; and</p> <p>(h) the site of the proposed development will be suitably landscaped, particularly between any building and the street alignment.</p>	<p>designed to complement the surrounding built environment and natural environment. The visual impact of the building from the only residential building to the south has been considered in the Visual Assessment at Appendix G.</p> <ul style="list-style-type: none"> ▪ The proposed development provides adequate off-street parking in accordance with the DCP and is considered significantly separated from the potential noise receivers to the south. ▪ The development is sufficiently separated from residences to ensure no impact for noise, traffic, parking, headlight glare and the like. ▪ Suitably landscaping of the site is proposed (refer to Appendix J) in accordance with this requirement. 	
Clause 21 Office premises in Zone No. 4(e1)	<p>Notwithstanding any other provisions of this plan, the council may grant consent to development on land within Zone No. 4(e1) for the purpose of offices only where it is satisfied that:</p> <p>(a) land suitable for development for that purpose would not be readily available in an existing business zone; and</p> <p>(b) development on the land for that purpose would be unlikely to prejudice the viability of existing business centres.</p>	<ul style="list-style-type: none"> ▪ The proposed warehouse facility includes an ancillary office (minor in the context of the overall development) which will not undermine the viability of existing business centres. 	Y
Clause 28 Development along particular roads	<p>The council must not consent to the development of land within Zone No. 4(e) or 4(e1) for any purpose if, as a result of carrying out the development, there will be direct vehicular access between that land and either Erskine Park Road or Mamre Road.</p>	<ul style="list-style-type: none"> ▪ There will be no direct vehicle access from the site to Erskine Park Road or Mamre Road. 	Y

Table 5 – Penrith Development Control Plan 2006 – 6.14 Erskine Park Employment Area

Section	Requirement	Proposal	Compliance
1.0 Introduction			
1.5 Objectives of this Section	<p>This section is aimed at promoting the aims and objectives specified in Clause 2 of Penrith LEP 1994 and the objectives of the Environmental Planning and Assessment Act 1979. In general terms this section aims to:</p> <p>(a) Provide a framework that will lead to a high standard of development in the Erskine Park Employment Area encouraging local employment and creating an area which is pleasant, safe and efficient to work in;</p> <p>(b) Ensure that development takes account of the physical nature of the local environment, particularly Ropes Creek, ridgelines and the natural landscape;</p> <p>(c) Ensure that development does not result in pollution of waterways and in particular of Ropes Creek and South Creek;</p> <p>(d) Promote the development of a visually attractive physical environment where the form, scale, colour, shape and texture of urban elements are managed in a way which will achieve an aesthetically pleasing balance which does not adversely affect the amenity of the existing residential areas;</p> <p>(e) Identify and provide for public amenities and service infrastructure to accommodate development in the Erskine Park Employment Area;</p> <p>(f) Promote the creation of a landscaped area within the electricity transmission easement to act as a buffer between the employment zones and the residential communities;</p> <p>(g) Establish environmental criteria and controls for development within the area to ensure that the environmental quality of adjoining areas is not compromised;</p> <p>(h) Ensure that development is consistent with the objectives of the Threatened Species Conservation Act with particular regard to the endangered ecological communities, flora and fauna present on the site;</p>	<ul style="list-style-type: none"> ▪ The proposed development will promote local employment which is pleasant, safe and efficient to work in. ▪ The proposed development's scale, height and materials complement the surrounding natural environment is visually screened by the ridgeline to the south and does not adversely impact upon the amenity of existing residential areas (refer to Visual Assessment at Appendix G). ▪ The Water Management, Access and Services Report at Appendix H details water quality measures to protect the surrounding catchment. ▪ There is appropriate public amenities and service infrastructure to service the site and accommodate the growing development in the Erskine Park Employment Area. ▪ The proposed development is situated in a industrial/employment hub with no adverse impacts on the surrounding residential development. The Environmental Assessment and Statement of Commitments ensure the environmental quality of the adjoining area will not be compromised. ▪ A Waste Management Plan will be submitted prio to issue of Construction Certificate, water quality procedures (Appendix H) and the design/materials of the building will be implemented to ensure and promote the environmental sustainability of the site and adjoining areas. ▪ Flora and Fauna Report Appendix D indicates there will be no significant impact on TSC Act species. The site will not disturb the Biodiversity Corridor to the west, nor will clearing of the scattered trees on the site impact on any significant urban bushland. 	Y

Section	Requirement	Proposal	Compliance
1.5 Objectives of this Section continued...	(i) Facilitate conservation of urban bushland; and (j) Protect, restore and enhance riparian corridors within the Erskine Park Employment Area.	<ul style="list-style-type: none"> ▪ There is no impact on riparian corridors from the proposal. 	
2.0 Drainage			
2.1.2 Requirements	(a) Council's preferred drainage/flooding/water quality control option is shown in Map 1 (this includes wetland treatment systems in combination with flood detention basin proposals). Whole of life costs and ease of maintenance will be critical considerations in determining the form of the final drainage option. (b) Where considered appropriate land, which forms part of the road frontage building setback areas, may be considered for inclusion within the functional drainage land. (c) All stormwater control system elements (quantity and quality) shall demonstrate environmentally sensitive soft engineering best practice in keeping with the ecologically sensitive nature of the Erskine Park Employment Area. (d) All Pollution Control facilities shall be designed, installed and maintained in such a manner that they shall control runoff from the site and prevent accidental and deliberate discharges of harmful substances from reaching local waterways. (e) There are two distinct sub-catchments within the Employment Area, identified generally as the "Western" catchment discharging into South Creek and the "Eastern" catchment discharging into Ropes Creek, both of which discharge into the greater South Creek Catchment. (f) The greater South Creek Catchment is subject to the criteria contained within the Sydney Regional Environmental Plan No. 20 – Nepean River and the South Creek Stormwater Management Plan. The values, objectives and options for managing stormwater quality within the two sub-catchments shall conform with the overall guiding framework contained within the South Creek Stormwater Management Plan, which has been adopted by Council.	<ul style="list-style-type: none"> ▪ Environmentally sensitive stormwater design and water quality treatments will be used on site to harvest and collect water. ▪ Appropriate stormwater controls and management will be implemented and installed to maintain runoff from the site. ▪ The water quality measures for the site will satisfy the requirements stated. ▪ These considerations are addressed in the Water Management, Access and Services Report at Appendix H. ▪ The provisions of SREP 20 have been addressed at Table 3 above. 	Y

Section	Requirement	Proposal	Compliance
<p>2.1.2 Requirements continued...</p>	<p>Flood mitigation strategies shall achieve no net increase in flood peaks, over existing conditions, for all storms up to and including the 1% AEP events.</p> <p>(g) Specific water quality treatment objectives define the level of water quality control for various types of development, the priority pollutants for different land uses, and the relative performance criteria associated with each treatment strategy. These objectives are detailed in the relevant Stormwater Management Plan for the local or regional catchment.</p> <p>(h) Retention criteria for specific pollutants may not provide sufficient information to allow for the selection of a single pollution control strategy. Each strategy must comply with the Treatable Flow Rate (TFR) for the site and target pollutant (see definitions). Where the style and/or size of the development is outside of the TFR criteria then it will be necessary to model the proposed pollution controls against the water quality treatment objectives, using one of the following approaches.</p> <p>(i) The use of a TFR of 60 L/s (gross pollutants) and a TFR of 10 L/s (TSS) to size the water quality control strategy will apply to those areas with in excess of 300m² of impervious catchment or for subdivision of land involving the creation of 3 or more allotments, up to a maximum of 5 ha in total. Catchments in excess of 5 ha are to provide detailed hydrological calculations using the runoff produced by the 50th percentile annual rainfall and verifying the ability of the proposed pollution control strategy to retain the pollutants of concern to the levels defined in Table 2.</p> <p>(j) Different styles of development produce different types of pollutants and consequently the treatment strategies employed on each site will vary depending on the size of the catchment, the form of the development and the type of pollutants generated by the activities on the site. To assist in developing water quality control strategies for new developments, a set of minimum pollutant retention criteria has been provided in Table 2.</p> <p>(k) Pollutant retention is a function of loading rate. Table three has been</p>	<ul style="list-style-type: none"> ▪ See Above 	<p>Y</p>

Section	Requirement	Proposal	Compliance
2.1.2 Requirements continued...	<p>prepared to assist in determining the loading rates for different styles of development and various pollutants. Where different loading rates to those shown in Table 3 are used, a detailed investigation and justification of the appropriate loading rates will be required.</p> <p>(l) Notwithstanding the criteria described herein, the Council reserves the right to consider devices and/or other alternative strategies on a site-specific basis, taking into account the potential cumulative benefit of alternative strategies, the development activity and/or the potential for harm to the environment.</p>	<ul style="list-style-type: none"> ▪ See Above 	<p>Y</p>
4.0 Transport and Carparking			
4.1 Transport Network Objectives	<p>(a) To create a road network which enables a safe and efficient access for all users, while minimising through traffic on minor roads;</p> <p>(b) To incorporate sustainable landscape and drainage opportunities in the design of the transport network;</p> <p>(c) To encourage the use of efficient alternate transport, including public transport, bicycles, and pedestrians;</p> <p>(d) To provide traffic facilities to give safe and efficient access to Mamre Road and Erskine Park Road;</p> <p>(e) To provide for a future road link to the Western Sydney Orbital and to provide all properties within this estate a direct connection to this link road;</p> <p>(f) To minimise the number of road entry points to designated roads and the northern access road thereby allowing more efficient traffic management; and</p> <p>(g) To maintain the capacity of the State Arterial Roads (Erskine Park and Mamre) by minimising the number of access points.</p>	<ul style="list-style-type: none"> ▪ The proposed road extension (CSR approval by the Minister for Planning) from Templar Road to the site will provide safe and efficient access to and from the site. ▪ The proposed road extension will provide access to Lenore Lane that links Mamre Road and therefore allows access to the Western Sydney Orbital. ▪ The proposed link road will allow for a minimisation in the number of road entry points and access points. ▪ Refer to Section 6.3 of the EAR for a discussion of the suitability of the road access compared to DCP requirements. 	<p>N</p> <p>Variation to DCP Traffic Strategy Map (See Section 6.3 of EAR)</p>
4.3 Requirements	<p>(a) The two main access roads to the Employment Area shall be located, designed and constructed generally in accordance with Map 2 – Traffic Strategy.</p>	<ul style="list-style-type: none"> ▪ Adequate access to ensure safety, traffic flow and appropriate landscaping will be provided. Refer to Section 5.5 of the EAR. ▪ A Traffic and Transport Report has been prepared at Appendix I 	<p>Variation to DCP (See Above)</p>

Section	Requirement	Proposal	Compliance
<p>4.3 Requirements continued...</p>	<p>(b) Access points shall be located so as to optimise safety, traffic flow and landscape opportunity. The northern access road shall be access controlled such that:</p> <p>North of northern access road (existing location of Lenore Lane) Access to Lenore Lane will be limited to one access point per lot in existence at the date of adoption of this Section. Upon redevelopment, the access point for lot 5A, DP162129 shall be combined with one of the adjoining lots.</p> <p>South of northern access road Access to Lenore Lane shall be limited to the three points as shown on Map 2 of this Section.</p> <p>(c) All parking shall be provided either on site or in centralised off road locations.</p> <p>(d) Upgrading of Erskine Park Road and Mamre Road shall be undertaken to accommodate the increases in traffic generated by this development.</p> <p>(e) Direct vehicular access to Mamre Road shall only be permitted at the signalised intersections with Erskine Park Road and the Western Access Road. Direct vehicular access to Erskine Park Road shall only be permitted at the signalised intersection to Lenore Lane and at one combined intersection for the property north of Erskine Park Road and the eastern block for Lot 16 DP259146. No other direct vehicular access to these designated roads will be permitted.</p> <p>In determining whether a signalised intersection is required for access to Erskine Park Road from the abovementioned two properties, Council will make an assessment of likely traffic generation from fully developed sites. Should a signalized intersection be required, this shall be funded on a proportional basis by the developers of the two properties. This intersection will be omitted from the Section 94 Contributions Plan as only two landowners are involved.</p> <p>(f) All intersections within the internal road network shall incorporate traffic facilities, which promote safe and efficient traffic movement.</p>	<p>(including the RTA guide to traffic generating development and safety access to the development.</p> <ul style="list-style-type: none"> ■ No direct access to Mamre Road is proposed. 	

Section	Requirement	Proposal	Compliance
4.3 Requirements continued...	(g) The proponent shall have regard to "Guide for Traffic Generating Development", Roads and Traffic Authority of NSW, December 1993.		
4.4 Car Parking	Off-Street Parking Requirements Warehouses: 1 space/100m ² Office Premises: 1 space/40m ²	<ul style="list-style-type: none"> The proposed development satisfies the off-street parking requirements for the development with total number of car parking spaces at 218. (Refer to Appendix I and Section 6.8 of the EAR). 	Y
5.0 Site Development and Urban Design			
5.1 Height 5.1.2 Requirements	<p>(a) Maximum height for buildings and structures within the 4(e1) zone (adjacent to the northern (Transgrid) transmission line easement) shall not exceed 12 metres.</p> <p>Maximum building heights for buildings and structures in the southern 4(e1) zone and the 4(e) zone will be determined on merits.</p> <p>Variations to the building height in the northern 4(e1) zone will only be considered where it can be demonstrated that:-</p> <ol style="list-style-type: none"> the proposed height is satisfactory when considered in relation to the distance to adjoining residential areas and the views from those properties; the building, or part thereof, is not visually obtrusive; the additional height is required due to the nature of the proposed development; and the overall design of the development, including landscaping and building materials, reduces the impact of height and bulk of the building. <p>(b) Generally, buildings should be sited on mid-slope to avoid visual impact on ridges and to be in harmony with the existing landscape; and</p> <p>(c) On sloping sites, the building or buildings should be designed, where possible, so as to "step" physically up or down the site to avoid visual impact on ridges.</p>	<ul style="list-style-type: none"> The proposed warehouse will be no higher than 14.8m, significantly smaller than the approved Kimberley Clark facility (22.7m) west of the site and the nearby Interlink Industrial Estate (also west of the site) proposes 13.7m, which are of similar bulk and scale to the proposed development. Based on the merits of the proposal including Visual Impact of the development (Appendix G) it is considered that the proposed bulk, scale and height is considered satisfactory. 	Y

Section	Requirement	Proposal	Compliance								
5.2 Coverage 5.2.2 Requirements	<p>(a) Site coverage shall not exceed 50%; and</p> <p>(b) Where land is included in Biodiversity or Hypsela Conservation areas or Electricity Transmission Line Easements, that land can be included in site coverage calculations.</p>	<ul style="list-style-type: none"> The site area is 41,843m² with a total building area of 21,594m². The total site coverage is 51.6%. Justification for this minor variation to the DCP is included at Appendix G. 	N								
5.3 Setbacks 5.3.2 Requirements	<p>(a) The setback standards are outlined in the table below. Where the property has frontage to more than one road, Council will consider a variation to setbacks on the secondary road frontage.</p> <p>Setback Requirements</p> <table border="1"> <thead> <tr> <th>Setback Type</th> <th>Setbacks</th> </tr> </thead> <tbody> <tr> <td>Loop Road to Lenore Lane</td> <td>15m</td> </tr> <tr> <td>Rear and Side Boundaries</td> <td>5m</td> </tr> <tr> <td>Water Supply Pipeline</td> <td>5m</td> </tr> </tbody> </table> <p>(b) Notwithstanding sub-clause (a) above, no development other than the following development is permitted within the defined setback for any road within this Employment Area:</p> <ol style="list-style-type: none"> landscaping in accordance with the provisions of Part 8 of this section; maintenance/rehabilitation of biodiversity corridors or areas in accordance with the provisions of Part 7 of this section; utility services installation; accessways and driveways (not permitted in setbacks to designated roads); approved signage; street furniture; and drainage works. <p>(d) Existing remnant vegetation within front, rear and side setback areas shall be retained and enhanced as an integral part of the landscaping proposals for each development.</p>	Setback Type	Setbacks	Loop Road to Lenore Lane	15m	Rear and Side Boundaries	5m	Water Supply Pipeline	5m	<ul style="list-style-type: none"> The proposed setbacks are as follows: Setbacks from Templar Road (15 metres), northern frontage (11.5 metre), southern boundary (6 metres), and western boundary (42.5 metres) seek to reduce the impact of the built form on public domain and adjoining properties. The setbacks comply with the standards prescribed by Council's DCP which require a 15m setback to road frontages and 5m to side and rear boundaries. The setbacks comply with the standards prescribed by Council's DCP. 	Y
Setback Type	Setbacks										
Loop Road to Lenore Lane	15m										
Rear and Side Boundaries	5m										
Water Supply Pipeline	5m										
5.4 Urban	(a) In assessing development proposals, Council will have regard to the	<ul style="list-style-type: none"> The building's design is capable of exhibiting a high standard of 	Y								

Section	Requirement	Proposal	Compliance
<p>Design</p> <p>5.4.2</p> <p>Requirements – Architectural / Design</p>	<p>quality of building design and materials (type and colour);</p> <p>(b) The use of large, uninterrupted areas of metal cladding or untreated concrete surfaces for wall construction is not supported. Applicants shall vary materials or finishes for external walls to provide attractive streetscapes and quality building designs. Council may limit the use of a single construction material to 50% of a wall surface area;</p> <p>(c) Details of samples of external materials and finishes shall be submitted with the Development Application;</p> <p>(d) External materials should not have an index of reflectivity above 20%;</p> <p>(e) Energy efficient design principles should be employed in all building designs;</p> <p>(f) Walls shall be articulated to provide more varied streetscapes, where visible from public roads or adjacent residential areas;</p> <p>(g) Part of the cross-section of buildings shall be projected to reduce apparent height and scale of external walls, including:</p> <ul style="list-style-type: none"> - awnings and/or upper storeys that project above footpaths; - roofs with eaves that project beyond external walls; - colonnades. <p>(h) Building elevations with frontage to a street must present a building form of significant architectural and design merit;</p> <p>(i) Entrances to buildings must be highlighted by architectural features consistent with the overall design of the building;</p> <p>(j) Particular care should also be taken in:</p> <ul style="list-style-type: none"> - designing roof elements; and - locating plant and mechanical equipment including exhausts, so as to reduce their visual impact from elevated locations <p>(k) External material colours to be consistent with the following palette of colours developed for the Erskine Park Employment Area:</p>	<p>architectural design and will utilise quality materials and finishes to establish a varied and articulated frontage to Templar Road.</p> <ul style="list-style-type: none"> ▪ Reflectivity will be managed through the use of external materials that do not exceed 20%. ▪ Finishes and materials will be chosen to minimise the perceived scale and mass of the warehouse and prevent the monotonous building form. ▪ The proposed external material colours will be determined following detailed design, the chosen palette of colours will be consistent with those required. ▪ A visual assessment was undertaken by JBA Urban Planning Consultants and is at Appendix G, and concludes that the limited local visual impacts of the development will be mitigated through architectural design, setbacks, landscaping and ultimately future development of adjoining properties and that the proposed warehouse is a suitable response to the emerging Erskine Park Employment Area which encourages industrial development. ▪ Final resolution of the external materials and colours in accordance with these DCP requirements is a Statement of Commitment, to be finalised with the Department of Planning prior to issue of the Construction Certificate. 	<p>Y Capable of Complying</p>

Section	Requirement	Proposal	Compliance
Requirements – Architectural / Design continued...	<ul style="list-style-type: none"> ▪ Earth Tones - stone colours, browns, muted greens, sand, dark red/ plums; and ▪ Cool Tones - soft greys, grey/blues. 		
5.4.3 Requirements – Siting/Building Orientation	<p>(a) Buildings shall be sited on mid-slope in such a manner so as not to intrude/project into the skyline when viewed from adjoining residential areas;</p> <p>(b) Building elevations oriented towards residential areas shall be minimised. Where site constraints create difficulties in complying in this regard, elevations shall be appropriately detailed using fenestration, broken building planes and other architectural devices;</p> <p>(c) Design and layout of buildings shall give consideration to local climatic conditions. For example:</p> <ul style="list-style-type: none"> ▪ where possible, buildings should take advantage of a north or northeasterly aspect; ▪ western orientations should be avoided; ▪ trees should be planted around the building to create shade, screening and wind breaks. <p>(d) Development should not seriously impede the access of solar radiation to surrounding land and development.</p>	<ul style="list-style-type: none"> ▪ The proposed warehouse allows for minimal intrusion and impact on adjoining properties. ▪ The site is triangular in shape. The site layout and design provides best practice and optimal efficiency in regards to the constraints for the sites shape. ▪ Design, layout and visual assessment of the development addressed in detail at Section 6.4 (Built Form), Section 6.14 (Consideration of Alternatives) and the Visual Assessment at Appendix G. 	Y
5.5 Signage and Estate Entrance Walls	<p>(a) Signage within the Employment Area on the individual allotments will be required to comply with the provisions of Part 3 Section 3.1 Penrith DCP 2006. All advertising is required to be:</p> <ul style="list-style-type: none"> ▪ constructed of high quality, durable materials; ▪ considered in conjunction with the design and construction of buildings; 	<ul style="list-style-type: none"> ▪ A small sign (approx 6m x 1m) is proposed on the western elevation, this will add visual interest to the development and is considered minor in the context of the overall development. 	Y
5.5.2 Requirements	<ul style="list-style-type: none"> ▪ restricted generally to one sign identifying the name of the occupants 	<ul style="list-style-type: none"> ▪ N/A 	N/A

Section	Requirement	Proposal	Compliance
continued...	<p>and/or products manufactured or produced on the site; and</p> <ul style="list-style-type: none"> ▪ contained wholly within the site. <p>(b) Decorative masonry entrance walls and high quality Estate signage (indicating the name of the Estate) shall be provided, as shown on Map 2 – Traffic Strategy, at the following entrance points to the Erskine Park Employment Area:</p> <ul style="list-style-type: none"> ▪ the intersections of Mamre Road and Erskine Park Road; ▪ on Erskine Park Road for south-bound traffic leaving the Erskine Park residential area; ▪ the intersection of Mamre Road and the proposed Western Access Road; and ▪ on Lenore Lane at the future eastern entrance to the estate at Ropes creek when the link to the Western Sydney Orbital is constructed. <p>(c) The entrance walls and signage referred to in (b) above are to be funded by contributions levied under the Section 94 Contributions Plan for the Erskine Park Employment Area.</p> <p>The proposed works for the Ropes Creek entrance to the estate will however be funded by a separate, second account within the Section 94 Contributions Plan for this estate.</p>		
5.6 Lighting 5.6.2 Requirements	<p>(a) External lighting shall be designed to ensure that light is wholly contained within the property boundaries; and</p> <p>(b) Full details of proposed lighting shall be submitted with the development application.</p>	<ul style="list-style-type: none"> ▪ Provision will be made for external lighting during the detailed design phase and will comply with the relevant requirements of <i>Control of Obtrusive Effects of Outdoor Lighting (Standards Australia, AS4282)</i>. ▪ No adverse impacts are anticipated on any adjoining properties, with lighting designed to be wholly contained within the property boundaries. ▪ This has been included as a Statement of Commitment at Section 7.0 of the EAR. 	Y

Section	Requirement	Proposal	Compliance
6.1.2 Requirements continued...	<p>4(e1) zone. Developers in all zones should ensure through design of their development that no offensive noise is emitted.</p> <p>(c) Where it is considered likely that a development may cause an adverse impact on nearby rural or residential areas, a noise impact statement from a qualified acoustical engineer will be required to be submitted to Council for consideration with the Development Application. A noise impact statement will need to demonstrate that the proposed development will not create any adverse impact.</p> <p>(d) All development shall comply with the requirements of relevant Australian Standards and State Government policies and guidelines relating to Noise.</p> <p>(e) The acoustic criteria adopted by this section will be implemented in the following manner:</p>	<p>occupant for the warehouse is yet to be determined, if the proposed noise levels for the use is predicted to be higher than the criteria nominated then further assessment/mitigation measures will be undertaken at this time.</p>	
6.2 Waste Management 6.2.2 Requirements	<p>(a) Compliance with the requirements of Penrith Development Control Plan 2006 Part 2 Section 2.9 Waste Planning;</p> <p>(b) A waste management plan shall be submitted in accordance with the requirements of Penrith Development Control Plan 2006 Part 2 Section 2.9 Waste Planning;</p> <p>(c) Incinerators will not be permitted as a means of waste disposal;</p> <p>(d) Adequate storage for waste materials shall be provided on the site and this waste must be removed at regular intervals and not less frequently than once a week; and</p> <p>(e) Proposed arrangements for the removal of waste shall be submitted with Development Applications.</p>	<ul style="list-style-type: none"> ▪ A Waste Management Plan will be submitted prior to Construction Certificate (Statement of Commitments at Section 7.0 of the EAR). 	<p>Capable of Complying</p>
6.3 Soil Erosion and Sediment Control 6.3.2 Requirements	<p>(a) Compliance with the requirements of Penrith Development Control Plan 2006 Part 2 Section 2.4 Erosion and Sediment Control accompanying Code of Practice for Soil Erosion and Sediment Control; and</p> <p>(b) Development consent will not be issued unless Council is satisfied that appropriate sediment control measures will be implemented during the construction phase of the development.</p>	<ul style="list-style-type: none"> ▪ Appropriate sediment control measures will be implemented during the construction phase of the proposed development. Refer to Water Management, Access and Services Report at Appendix H and the Statement of Commitments at Section 7.0 of the EAR. 	<p>Capable of Complying</p>

Section	Requirement	Proposal	Compliance
6.4 Air Pollution 6.4.2 Requirements	<p>(a) The emission of air impurities is to be controlled and limited to the standards allowed by the Protection of the Environment Operations Act, 1979, to the satisfaction of Council and the Environmental Protection Authority at all times;</p> <p>(b) Applicants may be required to provide information detailing the potential impact of their development on air quality in the region; and</p> <p>(c) An assessment of the merits of the proposal will be made at the Development Application stage. However, applicants should be able to demonstrate that the most efficient means of minimizing emissions are being utilised.</p>	<ul style="list-style-type: none"> ▪ Appropriate dust control measures will be implemented during the preparation and construction stages of the proposed development. ▪ Possible emissions (for example dust) can be managed with the following measures: <ul style="list-style-type: none"> - Trucks entering and leaving the site carrying loads of potential dust emitters will be covered; - Stockpiles of soil or other material will be covered or sprayed with water on a regular basis, particularly during dry or windy conditions; - Specific areas of the site, such as trafficable areas and stockpiles will be watered on a regular basis; - All equipment maintained on site will be maintained in an efficient operating condition and operated in a proper and efficient manner. Service records will be maintained; - Emissions generated by vehicles and machinery on site will be in accordance with DEC requirements; - Activities generating a high amount of dust will be avoided in dry or windy conditions; and - Dust monitoring, including dust deposit gauges and high volume air samplers will be implemented if required. ▪ The proposed development will maintain existing air quality and improve local air quality where possible and ensure future development does not adversely impact on existing air quality. 	Y
6.5 Storage, Transportation and/or Processing of Chemical Substances 6.5.2	<p>The following information is to be submitted with any Development Application which involves the storage, transportation and/or processing of chemical substances:</p> <p>(a) Detailed description of the use and all methods/procedures associated with the use, including flow diagrams;</p> <p>(b) A floor plan of the subject premises depicting the dimensions of the building and indicating the internal layout of all equipment, storage</p>	<ul style="list-style-type: none"> ▪ The operator of the site is not yet known and it is unlikely to be used for the storage, transportation and processing of chemical substances. Should it become occupied the operation of the building will be in accordance with the requirements stated for storage transportation and the processing of any chemical substances. 	N/A

Section	Requirement	Proposal	Compliance
Requirements	<p>and display areas;</p> <p>(c) A comprehensive list of all chemicals/goods and quantities proposed to be utilised in the activity and actually stored on the subject premises;</p> <p>(d) A description of the method of storage of chemicals/goods on the premises, and the type of containment or packaging to be used;</p> <p>(e) A description of the method of transportation of chemicals/goods to/from the premises (include the size and nature of vehicles, proposed routes and frequency of delivery to and from the site);</p> <p>(f) Details regarding the number of vehicles likely to be involved with the use at any one time and the provision and allocation of storage/standing areas for such vehicles;</p> <p>(g) Details of onsite water quality control; and</p> <p>(h) Details of waste treatment and transportation.</p>		
6.6 Stormwater Pollution Control 6.6.2 Requirements	<p>(a) Developments shall be designed so that all liquid waste and spillage are contained and properly disposed of; and</p> <p>(b) Only clean and unpolluted water shall be allowed to enter Council's stormwater disposal system.</p>	<ul style="list-style-type: none"> ▪ Water to and from the site will be suitably managed, in accordance with the Water Quality Plan at Appendix H and Section 6.5 of the EAR. ▪ Other relevant commitments to protect water quality are included in the Flora and Fauna Report at Appendix D. 	Y

Section	Requirement	Proposal	Compliance
6.7 Energy Efficiency 6.7.2 Requirements	<p>Development must demonstrate that the following have been taken into account in the design process:-</p> <ul style="list-style-type: none"> ▪ Potential for effluent re-use ▪ Water minimisation techniques, including water recycling ▪ Waste minimisation techniques, including recycling 	<ul style="list-style-type: none"> ▪ Appropriate water minimisation techniques have been implemented as part of the proposed development and are discussed at Section 5.6 of the EAR and at the Water Management, Access and Services Report at Appendix H. ▪ Waste minimisation techniques have been implemented as part of the proposed development. A Waste Management Plan will be submitted prior to issue of Construction Certificate. ▪ The re-use of construction materials will also take place, where possible. ▪ Final approval of energy efficient materials will be by Department of Planning prior to issue of the Construction Certificate (refer to Statement of Commitments at Section 7.0 of the EAR). 	Y
6.8 Contaminated Lands 6.8.2 Requirements	<p>(a) Contaminated land is land which represents or potentially represents an adverse health or environmental impact because of the presence of potentially hazardous substance. Development Applications for contaminated land will be assessed in accordance with the provisions of the Environmental Planning and Assessment Act (Contaminated Land) 1996.</p> <p>(b) Contaminated land shall be required to be remediated prior to development proceeding on site. Remediation shall involve the treating and / or mitigation of the contaminants.</p>	<ul style="list-style-type: none"> ▪ A Stage 1 and Limited Stage 2 Environmental Site Assessment were undertaken. Based on the findings of the Stage 1 ESA and limited Stage 2 ESA, CES concluded that the site in its present condition is considered suitable for commercial and/or industrial land-use. Results are at Appendix C. 	Y
	<p>(a) Construction works (all development) shall generally be restricted to the following hours:</p> <ul style="list-style-type: none"> ▪ Monday to Friday, 7.00 a.m. to 6.00 p.m. ▪ Saturday, 7.00 a.m. to 1.00 p.m. ▪ No work on Sundays or Public Holidays <p>(b) The hours of operation for premises involved in any type of employment generating activity shall be dealt with on a merits basis. Council appreciates that because of the nature of certain activities shift work may be essential to the viability of the development.</p>	<ul style="list-style-type: none"> ▪ The proposed construction works will generally be restricted to the requirements outlined. ▪ Hours of operation for the premises will be submitted to Penrith City Council for approval prior to Occupation Certificate. 	Y

Section	Requirement	Proposal	Compliance
6.8.2 Requirements continued...	In considering applications Council shall have regard to the likely impact of the trading hours of a particular activity on the amenity of adjoining residential and rural areas.		
7.0 Biodiversity			
7.3 Biodiversity Management Plan 7.3.2 Requirements	<p>(a) Where a development is located within, or may otherwise affect an area of native vegetation, the following information will be required to accompany a development application:</p> <ul style="list-style-type: none"> ▪ vegetation survey of the land undertaken by a qualified person; ▪ fauna survey of the site undertaken by a qualified person; ▪ an “eight-part test” as identified in Section 5A of the Environmental Planning and Assessment Act 1979. ▪ Council will determine whether a Species Impact Statement is required to be prepared if the development is likely to significantly affect a threatened species. ▪ a Plan of Management for the land containing the native vegetation outlining how it is proposed to be conserved and managed in the future. <p>Council may specify additional requirements or guidelines for undertaking adequate fauna or vegetation surveys.\</p> <p>Biodiversity Areas</p> <p>(b) No clearing of native vegetation should occur within biodiversity areas as identified by Map 3, unless otherwise permitted by clause 17 of Penrith Local Environmental Plan 1994 (Erskine Park Employment Area);</p> <p>(c) Plans of Management for native vegetation should ensure that biodiversity areas and adjoining land retain dominant native species and allow natural processes to continue. Management of biodiversity areas should have regard to the value of the vegetation as fauna habitat;</p>	<ul style="list-style-type: none"> ▪ The Flora and Fauna Assessment at Appendix D addresses the Guidelines for Threatened Species Assessment, prepared by the Department of Environment & Conservation (DEC)³ and the Department of Primary Industries (DPI) for assessments pursuant to Part 3A of the EP&A Act, with respect to the assessment and evaluation of likely impacts of the proposed development. ▪ As noted in earlier parts of this Report, the proposed development on the subject site at Erskine Park is not considered of concern with respect to threatened biota or their habitats, primarily because of the nature and condition of the site, and its current context. No vegetation present on the subject site is of biodiversity conservation value or significance, and modification of the site as proposed would not involve the loss of relevant or significant habitat or resources for any threatened biota. ▪ The proposed development has taken into account the Biodiversity Strategy 2005 and Biodiversity Management Plan (approved by the Minister for Planning) when assessing the site for construction. This is discussed within the report at Section 2.5. ▪ Variation to Council’s Biodiversity map within the DCP is outlined at Section 6.3 of the EAR. 	<p style="text-align: center;">N</p> <p style="text-align: center;">Variation to Council’s Biodiversity Map is provided at Section 6.3 of the EAR</p>

Section	Requirement	Proposal	Compliance
7.3.2 Requirements continued...	<p>(d) Areas of native vegetation (desirable minimum width of 150 metres), with a width-to-length ratio as small as possible, should be retained or allowed to naturally regenerate so as to provide fauna habitat;</p> <p>(e) Where land disturbance occurs, natural regeneration is the preferred method of rehabilitation;</p> <p>(f) Locally indigenous species should be used for revegetation and restoration of native bushland;</p> <p>(g) Measures are to be taken to avoid fragmentation of vegetation in biodiversity areas by roads (other than possible road links as indicated by Map 2), tracks, services, and the like;</p> <p>Biodiversity Corridors</p> <p>(h) Where land disturbance occurs, natural regeneration is the preferred method of rehabilitation;</p> <p>(i) Locally indigenous species should be used for revegetation and restoration of native bushland;</p> <p>(j) Measures are to be taken to avoid fragmentation of vegetation in biodiversity corridors by roads (other than possible road links as indicated by Map 2), tracks, services, and the like;</p> <p>(k) No clearing of native vegetation should occur within biodiversity corridors as identified by Map 3, unless otherwise permitted by clause 17 of Penrith Local Environmental Plan 1994 (Erskine Park Employment Area);</p> <p>(l) Road signs should be erected where corridors cross roads to alert motorists to the significance of fauna at these sites;</p> <p>(m) Non-essential roads and tracks in biodiversity corridors are to be closed and rehabilitated;</p> <p>(n) Local native seed and other plant material is to be collected from the site for rehabilitation works and propagation for subsequent landscape works. Seed is to be collected, identified and stored by a suitably qualified person; and</p>	<ul style="list-style-type: none"> ■ See Above 	<p>N</p>

Section	Requirement	Proposal	Compliance
7.3.2 Requirements continued...	<p>(o) All buildings and improvements adjoining biodiversity areas should be located so as to minimise risk of loss from wildfire.</p> <p>Riparian Regeneration Corridors</p> <p>(p) Riparian regeneration corridors are to be established along the two creeklines, to be retained and relocated, shown in Map 3 of this Section.</p>		
8.0 Landscaping			
8.1 Landscape Design 8.1.2 Requirements	<p>Removal of existing vegetation can result in a lower take up of water contributing to a rising ground water table and potential problems with salinity. Saline soils can damage roads, parking areas and buildings as well as ultimately causing scouring and effecting vegetation growth. Once soils have become saline it is virtually impossible to reverse the effects. Preservation of existing vegetation, particularly larger trees on ridgelines can help reduce or delay the impact of salinity.</p> <p>(a) Existing trees are to be preserved wherever possible. The siting and layout of a development at the initial concept stage must consider the location of trees with a view to their preservation. Existing trees shall not be removed prior to the written consent of Council being obtained;</p> <p>(b) The existing vegetation to be retained must be protected from soil compaction, root, trunk and limb damage, soil contamination and changes in surface level that will affect the health of the specimen; and</p> <p>(c) Protection measures are to be installed prior to the commencement of any earthworks. A manproof, sturdy and durable chainwire fence of sufficient height shall be erected 1 metre beyond the dripline of each specimen for the full circumference of all vegetation to be protected.</p>	<ul style="list-style-type: none"> ▪ Removal of scatted individual trees on site will have no adverse impacts on the water table. ▪ Suitable replacement species, complementing the warehouse facility will be proposed. 	<p>N</p> <p>Suitable replacement species to be provided via Landscape Plan</p>

Section	Requirement	Proposal	Compliance
8.2.2 Requirements – Selection and Use of Planting Material	<p>(a) A framework planting of endemic canopy and shrub species is to be established for all developments. This will enhance the sense of place for each development site. Consideration to be given to features such as bird attracting qualities, aromatic foliage and flowers, and habitat value as well as visual qualities, site suitability, and proximity to biodiversity corridors or areas. Habitat value is to be given high priority;</p> <p>(b) Smaller scale and less visually prominent planting may include species other than those endemic to the area. This will produce variety and interest in the landscape at this scale. This does not apply to development adjoining Biodiversity Areas or within or adjoining Biodiversity Corridors;</p> <p>(c) Property entrances may be highlighted with feature planting, and need not be limited to native or endemic species. No plant species shall be used on site that could become a weed within remnant bushland areas or creeklines;</p> <p>(d) Plant species should be carefully selected to meet service authority requirements in easement locations;</p> <p>(e) Plant material in carparks should be used to provide shade, ameliorate views of large expanses of paved areas and cars, and to identify entrances to carparks;</p> <p>(f) Trees in carparks should be given sufficient area for root development;</p> <p>(g) Narrow strips of landscaped area between an allotment boundary and building, or between parking areas and a building should be avoided;</p> <p>(h) Island planting beds should be interspersed throughout large parking areas. Planting should consist of ground covers, shrubs to 1 metre, shade producing and canopy species;</p> <p>(i) Plant material shall be a mix of super-advanced, advanced and normal nursery stock that will provide a quick effect especially in visually prominent areas. Larger plant sizes would be appropriate in some locations;</p>	<ul style="list-style-type: none"> ▪ A landscape plan has been provided at Appendix J. The indicative planting species identified on the landscape plan proposes the use of several taller growing plants which will screen the warehouse and compensate for the removal of trees described above. These include <i>Lophostemon conferta</i> (up to 40m in height), <i>Cycas revolute</i> (6m), <i>Eucalyptus fibrosa</i> (30m), <i>Melaleuca linariflora</i> (8m), <i>Melaleuca stypheloides</i> (20m), <i>Eucalyptus crebra</i> (35m), and <i>Eucalyptus moluccana</i> (25m). ▪ Smaller scale and less visually prominent plants will also be provided. These smaller scale plants will be integrated into the landscape with the taller plants, including the car park and office areas as well as the proposed water retention measures. ▪ The property entrance from Templar Road will be vegetated accordingly, with taller plant species proposed to screen the warehouse. ▪ The proposed plant species have been selected according to authority requirements with a selection of endemic species included. ▪ The proposed landscaping within the car park (to the east of the site) has been designed to provide adequate shade and softness. ▪ Sufficient area will be allocated to all plants for appropriate root development. ▪ All planting will be placed with sufficient strips of land between the allotment boundary and building or car park and building. ▪ Island planting has been designed so that it is evenly dispersed across the car park. ▪ Plant material will be a mix of nursery stock. ▪ Grassed areas will be provided in areas that are not specifically designed for pedestrian use. 	Y

Section	Requirement	Proposal	Compliance
8.2.2 Requirements – Selection and Use of Planting Material continued...	(j) Groundcovers should be considered as a grass alternative in areas not specifically designed for pedestrian use; (k) Presentation of a building facade to the street should be complemented with appropriate enframing or screening vegetation. The visual impact of large expanses of wall should be reduced in scale by architectural treatment as well as by dense grove planting or other landscape design solutions; and (l) Consideration should be given to solar access and energy conservation, with the appropriate use of deciduous trees.	<ul style="list-style-type: none"> ▪ Screening vegetation is proposed for the entry of the site at Templar Road. ▪ Solar access and energy conservation has been taken into consideration in regards to plant type. 	
8.2.3 Requirements – Hard Landscape Materials	(a) Paving, structures and wall materials should complement the architectural style of buildings on the site and be of local origin where possible; and (b) Materials should cause minimal detrimental visual impact, and the use of subtle coloured materials and block or brick paving is encouraged.	<ul style="list-style-type: none"> ▪ The paving, structures and wall materials will complement the architectural style of the building and natural environment and not cause any detrimental visual impact (refer to Landscape Plan at Appendix J). 	Y
8.2.4 Requirements – Performance Standards and Maintenance	Council will require by way of conditions of development consent, that the landscape works be maintained throughout the duration of construction works, and in perpetuity for the life of the development. The onus for satisfactory maintenance is on the applicant until the development has been completed, and on the owner thereafter. Again, these requirements should be read in conjunction with Penrith Development Control Plan 2006 Part 2 Section 2.6 Landscape.	<ul style="list-style-type: none"> ▪ The landscape works will be maintained throughout construction and for the life of the development, as reflected in the Statement of Commitments at Section 7.0 of the EAR. 	Y

Table 6 – Penrith Local Environmental Plan 1999 (Flora and Fauna Conservation)

Section	Requirement	Proposal	Compliance
<p>Clause 2</p> <p>Aims and Objectives</p>	<p>(1) The general aims of this plan are:</p> <p>(a) to protect and preserve native vegetation and natural biological diversity in the City of Penrith as a major contribution to the achievement of ecologically sustainable development; and</p> <p>(b) to improve the condition of existing native vegetation and encourage the revegetation and rehabilitation of land with appropriate native vegetation management; and</p> <p>(c) to rationalise vegetation management controls in certain environmental planning instruments applying to non urban areas to ensure a consistent approach to the control and management of biological resources; and</p> <p>(d) to manage exotic vegetation in accordance with its cultural and landscape significance; and</p> <p>(e) to protect native vegetation and existing landforms for their scenic values, and to retain the unique visual identity of the landscape; and to promote the management of native vegetation in a manner which is compatible with its conservation status: and</p> <p>(g) to identify and maintain flora and fauna corridors between remnant areas of native vegetation.</p> <p>(3) The objectives of the flora and fauna corridors and native vegetation areas are set out in Part 2.</p>	<ul style="list-style-type: none"> ▪ None of the vegetation present on the subject site is of biodiversity conservation value or significance, and modification of the site as proposed would not involve the loss of relevant or significant habitat or resources for any threatened biota (refer Flora and Fauna Report at Appendix D). ▪ A number of native plants will be used in the revegetation and rehabilitation process with appropriate native vegetation management (refer to Landscape Plan at Appendix J). ▪ The revegetation works will be maintained throughout the life of the development, as reflected in the Statement of Commitments at Section 7.0 of the EAR. ▪ Any exotic species within the site will be managed in accordance with its cultural and landscape significance. ▪ There is no requirement for the provision of measures to protect the Biodiversity Corridor from the possible impacts of bushfire emanating from the site. 	<p>Y</p>

Section	Requirement	Proposal	Compliance
<p>Clause 7</p> <p>Native Vegetation Areas</p>	<p>(1) This clause applies to the land shown distinctively marked by stippling on the map.</p> <p>(2) The objectives of the native vegetation areas are:</p> <p>(a) to prevent inappropriate clearing of native vegetation not located within flora and fauna corridors; and</p> <p>(b) to protect flora and fauna habitat and maintain natural ecosystem processes; and</p> <p>(c) to encourage and promote native vegetation management; and</p> <p>(d) to promote sustainable agriculture; and</p> <p>(e) to promote and maintain a diverse local rural landscape and associated amenity.</p> <p>(3) A person must not clear native vegetation on land to which this clause applies except with the consent of the council.</p> <p>(4) Despite subclause (3), consent is not required where native vegetation:</p> <p>(a) is a danger to life or property; or</p> <p>(b) is less than five metres from a building or work approved by the council.</p> <p>(5) Except as otherwise provided by this plan, the council must not grant consent to work on land to which this clause applies that, in the opinion of the council, is contrary to one or more aims of this plan, or one or more objectives of this clause.</p> <p>(6) Subject to subclause (5), the council must not consent to development on land, unless it has considered a flora and fauna assessment for that land.</p> <p>(7) The council must not grant consent to clearing of vegetation on land to which this clause applies unless the council is of the opinion that the proposed development has taken into account the following matters:</p> <p>(a) the effect of clearing, including bushfire mitigation measures on flora and fauna species existing on or likely to utilise the land; and</p> <p>(b) the presence of threatened species, populations and ecological communities in accordance with the Act; and</p> <p>(c) the local and regional significance of the vegetation; and</p>	<ul style="list-style-type: none"> ▪ No threatened flora species have been recorded on the subject site. ▪ The site is generally clear of vegetation with the exception of grasses and a small number of scattered trees located across the site and along the northern boundary. ▪ A number of native plants will be used in the revegetation and rehabilitation process with appropriate native vegetation management (refer to Landscape Plan at Appendix J). ▪ There will be no imposition of impacts for bushfire protection on the Biodiversity Corridor as a result of the proposed development and the proposed crossing of the constructed watercourse to the immediate north of the site will not adversely affect the functioning of that Corridor to any relevant extent. ▪ None of the vegetation present on the subject site is of biodiversity conservation value or significance, and modification of the site as proposed would not involve the loss of relevant or significant habitat or resources for any threatened biota. ▪ There will be no significant impacts on threatened flora, fauna or endangered ecological communities listed under the TSC Act (refer Flora and Fauna Report at Appendix D). 	<p>Y</p> <p>Y</p> <p>Y</p>

Section	Requirement	Proposal	Compliance
Clause 7 Native Vegetation Areas continued...	<p>(d) any measures to be taken to ameliorate any impacts; and</p> <p>(e) the significance of any flora and fauna species, population or ecological community listed under the Threatened Species Conservation Act 1995; and</p> <p>(f) the requirements of any species recovery plan under the Threatened Species Conservation Act 1995.</p> <p>(8) Subject to subclause (7), the council must not consent to development on land to which this plan applies unless the type and location of that development is generally in accordance with any development control plan applying to the land.</p> <p>(9) Despite subclause (6), the council may consent to a development which is not generally in accordance with a development control plan where it is of an opinion that the development otherwise satisfies the objectives of that plan.</p> <p>(10) Where a development application is made in respect of land to which a development control plan having provisions about the type and location of development does apply, in determining the application the council:</p> <p>(a) must have regard to the provision of any general development control plan applying to the land; and</p> <p>(b) may have regard to any overall plan for development of an area, including the land, prepared by or on behalf of the applicant.</p>	<ul style="list-style-type: none"> ▪ See Above 	
Clause 8 Management of Exotic Vegetation	<p>(1) This clause applies to exotic vegetation on land to which this plan applies.</p> <p>(2) A person must not ringbark, cut down, poison, dig up, lop, remove, injure, or wilfully destroy any exotic vegetation to which this clause applies by any action except with the consent of the council.</p> <p>(3) Despite subclause (2), consent is not required where:</p> <p>(a) the plant or plants are dead; or</p> <p>(b) the plant or plants are a declared noxious weed under the Noxious Weeds Act 1993; or</p> <p>(c) the plant or plants are less than five metres from a building or work approved by the council; or</p>	<ul style="list-style-type: none"> ▪ The site is generally clear of exotic vegetation. 	Y

Section	Requirement	Proposal	Compliance
Clause 8 Management of Exotic Vegetation continued...	<p>(d) the plant or plants are fruit trees that require an annual pruning, or is within a timber plantation; or</p> <p>(e) the plant or plants is of a species identified in a development control plan as having potential to cause damage to foundations and sewer lines, or is of a species that is identified as undesirable.</p> <p>(4) This clause does not apply to tree trimming, tree removal or other similar measures carried out by an electricity authority, if the work being undertaken is in accordance with a tree management plan agreement approved by the council.</p>		
Clause 10 Plans of Management	<p>(1) Where the council considers it necessary or desirable to provide more detailed provisions than are contained in this plan, it may prepare or cause to be prepared a plan of management in respect of native vegetation on the land to which this plan applies.</p> <p>(2) Nothing in this plan requires the consent of the council to be obtained for any activity that is carried out in the ordinary course of occupation, use or management of land, where that activity is carried out in accordance with a plan of management which has been consented to by the council pursuant to this clause.</p>	<p>It is considered that the Statement of Commitments at Section 7.0 of the EAR effectively cover the ongoing management of vegetation on the site.</p>	<p>It is not considered that a plan of management is warranted as the Statement of Commitments effectively covers the ongoing management of vegetation on the site.</p>

Visual Impact Assessment – Part 3A Project Application

Templar Road, Erskine Park Industrial Warehouse Development

Submitted to
Minister of Planning
On Behalf of Jacfin Pty Ltd

April 2008 ■ 08002

1.0 Introduction

JBA Urban Planning Consultants has undertaken a visual impact assessment (VIA) to determine the visual impacts of the warehouse proposed to be constructed on Lot 11 DP 229784, Erskine Park (the subject site).

The VIA has considered:

- Applicable planning context including the Director General's Environmental Assessment Requirements issued for the project, and Erskine Park Employment Area Development Control Plan; and
- Urban and landscape design to ensure satisfactory aesthetic quality and amenity is achieved for both warehouse users and the adjoining domain.

An appropriate composition of building elements, textures, materials and colours is proposed whilst also reflecting the use, internal design and structure of the development. Aesthetics will respond to the environment and context and to the desired future character of the Erskine Park Employment Area.

2.0 Site Description

2.1 Site Location and Context

The site is a 4.1ha (41,843m²) wedge-shaped site with a legal property description of Lot 11 DP 229784. It is located within the Erskine Park Employment Area, some 2km east of Mamre Road. It has a northern boundary of 463m to the CSR industrial site, a 480m boundary to a Water Supply pipeline to the south and a boundary of some 167m to industrial zoned land to the west (includes a 60m western boundary to a Crown Road Reserve).

The contextual location of the site is shown in **Figure 1**. Photos of the site and are shown in **Figures 2** and **3** (NB: the location from where photos have been taken is indexed at Appendix A of this report).



Figure 1 – Site Location

The site is slightly lower than the surrounding area, which is characterised by the Erskine Park Employment Area to the north and grass covered hills and undulations to the east, south and west. A constraints map is attached at Appendix B of this report.

Land to the north of the site is primarily known as the CSR land and is the subject of a recent Ministerial Concept Plan approval for industrial warehouse purposes. These lands are currently being cleared for construction work to begin (**Figures 4** and **5**). Further north of the CSR lands is the BlueScope Steel development situated to the west of Templar Road, see **Figure 6** below.

The lands to the east and south are characterised by cleared, open areas comprising paddocks and rural residential properties (**Figures 7 – 9**). The eastern and southern landscape generally exhibits low groundcover and little evidence of shrub understorey, although the Sydney Water Pipeline immediately south of the site is a significant feature in the visual landscape.

The Biodiversity Corridor, established by the State Government under the Biodiversity Strategy 2005 and Biodiversity Management Plan is located immediately west of the site. Land to the north-east of the subject site will also eventually form part of the Biodiversity Corridor, following dedication of land for that purpose by CSR.



Figure 2 – The site looking south with the southern ridgeline in the background



Figure 3 - The site looking south showing the southern pipeline. Emmaus Retirement Village and School Trinity School are located beyond the trees in the background.



Figure 4 – View of the Erskine Park Employment Area looking north from the subject site



Figure 5 – Erskine Park Employment Area north east of the subject site



Figure 6 – BlueScope Steel development on Templar Road



Figure 7 – Grassy paddocks border the site to the south



Figure 8 – The ridgeline also defines the view shed from the north and east



Figure 9 – Rural residential properties on the southern ridgeline

2.2 Surrounding Development

CSR site

A large parcel of industrial land to the north of the site is owned by CSR. The Minister for Planning recently approved a Concept Plan (MP06_0216) and Project Application (MP06_0208) for the industrial development of the CSR lands and the implementation of a new Biodiversity Management Plan and biodiversity offset scheme for the Erskine Park Employment Area.

The biodiversity offset scheme is subject to a Planning Agreement entered into by the Minister for Planning and CSR. This was a second stage of development of the CSR site, with the first stage having been approval of an industrial development for Blue Scope Steel (**Figures 6 and 10**).

The Concept Plan and Major Project Application included development of the site for industrial purposes, subdivision of the site, relocation of an existing creek, and the construction of an industrial building in the south-western corner of the site. Approval of the Concept Plan and Project Application was granted on 1 March 2007. The project proposed the realignment of an existing creek on the site towards the southern boundary of the CSR site and the Crown Road Reserve, adjoining the north west corner of the Jacfin site.



Figure 10 – BlueScope Steel (eastern facade fronting Templar Road)

Austral Bricks site

To the west of the subject site is a 64ha site owned by Austral Bricks, known as Interlink Industrial Estate and being developed by Goodman International. This site has been the subject of two recent Project Approvals (MP06_0253 and MP06_0254) by the Minister for Planning for the establishment of a warehouse and distribution complex for Woolworths and Kimberley-Clark. These projects also require the implementation of the Biodiversity Management Plan and biodiversity offset scheme (in accordance with a Planning Agreement) on the eastern portion the Austral Bricks site.

A further Project Application was lodged by Goodman International in July 2007 to develop the remaining undeveloped lots with Interlink Industrial Estate for light industrial, warehouse and distribution uses.

3.0 The Project

Project Approval is being sought for the:

- Development of the site for employment/industrial purposes including the following elements:
 - a single storey warehouse with a floor area of 21,005m²;
 - a 1,285m² two storey office building adjoining the warehouse at its eastern façade;
 - a loading area in the western portion of the site with direct access to the warehouse facility via roller shutter doors at its western façade;
 - 218 car spaces in an at-grade car parking on the eastern portion of the site; and
 - associated landscaping of the site.
- The construction of a road extension from Templar Road to the boundary of the subject site (including new drainage channel crossing) providing vehicular access to the site;
- Construction of utilities and services connections from adjacent locations to the site; and
- Stormwater, drainage and bulk earth works associated with the development of the site.

4.0 Visual Impact Assessment

A visual impact analysis of the site and its surrounds was undertaken, including an on-site inspection and photographic desk top analysis to determine the features of the site and surrounding context. The natural environment and existing built form has been assessed, identifying the opportunities and constraints of the site and its surrounds. The constraints of the site have been identified as follows:

- Adjoining and surrounding Erskine Park Employment Area development;
- Clusters of natural vegetation;
- Key ridgelines particularly to the south;
- Local access roads such as Templar Road;
- Surrounding rural residential dwellings;
- Emmaus and Trinity Colleges; and
- Emmaus Retirement Village

Distant Site Views

There are no public vantage points from which the proposed development can be seen (**Figures 11** and **12**). Views of the site from the southern ridgeline, the only elevated overview location, are virtually non-existent as shown in **Figures 13** and **14**. The ridgeline and surrounding topography limit the visual catchment for properties south of the pipeline. The large tracts of rural residential properties to the south and dwellings situated along Bakers Lane have limited direct views of the site. The proposed warehouse will accordingly have a minor visual impact from the wider locale.



Figure 11 – Views of the site looking south from Templar Road across the CSR lands currently under construction



Figure 12 – The site is south of the CSR lands and north of the Pipeline



Figure 13 – Looking north from Bakers Lane



Figure 14 – Looking north from Bakers Lane

Local Views

Local views of the site are limited to Templar Road when approaching from the north (**Figures 15** and **16**), as well as very limited views south of the Sydney Water pipeline, looking north. It should be noted however, that the latter view is only accessible from within the Emmaus Retirement Village property and is generally not publicly accessible (**Figures 17 – 19**). The site cannot be directly viewed from the Emmaus Retirement Village dwellings, common areas within the Village or the Trinity and Emmaus Catholic Schools located slightly further up the ridge.

We note that the land south of the pipeline adjacent to the Emmaus property, whilst currently similarly undeveloped, is also earmarked for future industrial uses as part of the Western Sydney Employment Hub. This area will also be developed for industrial warehouse purposes with buildings of similar bulk and scale to those being constructed within the Erskine Park Employment Area. Future views from the south will present as an industrial visual catchment, with warehouse and similar industrial development constructed south of the pipeline blocking views of the proposed warehouse.

The localised Templar Road views (i.e.: the north western corner of the warehouse) are likely to have the most significant visual impact, particularly upon approach to the site. These impacts will only be short term until the Erskine Park Precinct is fully developed, with other similar-sized warehouse buildings constructed on surrounding properties assisting to screen the visual impacts of this development from the north.



Figure 15 – View of the site across CSR lands



Figure 16 – View of the site across the CSR lands with proposed Templar Road extension to the site (to the right of photo)



Figure 17 – Views to the site from Emmaus Retirement Village



Figure 18 – Views to the site from Emmaus Retirement Village



Figure 19 – Views to the site from Emmaus Retirement Village

5.0 Design Principles

The Director General's Environmental Assessment Requirements (DGRs) issued by the DG on 26 November 2007 require the Environmental Assessment to address the visual impacts of the proposal, including landscaping, design, setbacks, signage and lighting. The DGRs further require consideration of the *"relevant State government technical and policy guidelines, as well as industry guidelines"* and identifies the *Control of Obtrusive Effects of Outdoor Lighting (Standards Australia, AS4282)* as a specific matter relevant to the proposal's visual impacts.

In order to address the DGRs satisfactorily, we have assessed the proposal against the Penrith Local Environmental Plan 1994 (Erskine Park Employment Area) and the Erskine Park Employment Area Development Control Plan (DCP), as the relevant statutory instruments that require development to address visual impacts. The Compliance Table at **Appendix F** of the Environmental Assessment contains a comprehensive assessment of the proposal against those provisions. The proposal's response to the key matters called up by the DGRs are outlined below.

Design

The project involves the construction of a large warehouse building which by its very nature if not designed and screened adequately could impact on the visual amenity of the area. To that end, the proposed building will be no higher than 14.8 metres, significantly smaller than the approved Kimberley Clark facility west of the site which has a roof height of 22.7 metres.

Similarly, the nearby Interlink Industrial Estate (also west of the site) proposes 13.7 metre high warehouses, which are of a similar bulk and scale to the proposed development.

The building's design exhibits a high standard of architectural design and will utilise quality materials and finishes to establish a varied and articulated frontage to Templar Road. Pre-cast concrete wall panels, colorbond metal roof and wall cladding, pre-finished metal wall cladding, and glazed entry doors and windows on the office component, will be off-set with contrasting colour panels to provide visual relief. Whilst the proposed external material colours will be determined following detailed design, the chosen palette of colours will be consistent with those required by the Erskine Park Employment Area DCP (eg: earth tones such as stone colours, browns, muted greens, sand, dark red / plums; and cool tones such as soft greys, grey / blues) as outlined in the Statement of Commitments at **Section 7** of the Environmental Assessment). Finishes and materials will be chosen to minimise the perceived scale and mass of the warehouse and prevent a monotonous building form. Reflectivity will be managed through the use of external materials that do not exceed 20%, consistent with Council's DCP requirements (see Statement of Commitments in **Section 7** of the Environmental Assessment).

While large, the scale of the proposed building will be consistent with other existing and proposed developments in the area. Further, despite the magnitude of change from a vegetated site to a large warehouse, the site is zoned for industrial uses, is located within the Erskine Park Employment Area and is close to existing and proposed industrial developments to the north of the site. It is therefore considered that the proposed development is consistent with the desired future character of the industrial area as promoted by the applicable planning controls.

Setbacks

Setbacks from Templar Road (15 metres), northern frontage (11.5 metre), southern boundary (6 metres), and western boundary (42.5 metres) seek to reduce the impact of the built form on public domain and adjoining properties. The setbacks comply with the standards prescribed by Council's DCP which require a 15m setback to road frontages and 5m to side and rear boundaries.

Compliance with the mandated setbacks will provide an open streetscape for landscaping and enhance the visual quality of the development.

Landscaping

Visual relief will be further provided through landscaping within the proposed setbacks in accordance with the Landscape Plan. We note the landscape plan for the project has been prepared in conjunction with the Whelans Insites recommendations (Flora and Fauna report) based on Penrith DCP 2006.

The visual impact of the development is softened by a landscape zone of at least 5 metres wide fronting Templar Road. Further, the retention and restoration of the vegetated buffer to the north of the site and the biodiversity corridor to the west will act to screen views of the building.

The indicative planting species identified on the landscape plan proposes the use of several taller growing plants which will screen the warehouse. These include *Lophostemon conferta* (up to 40m in height), *Cycas revolute* (6m), *Eucalyptus fibrosa* (30m), *Melaleuca linariflora* (8m), *Melaleuca stypheloides* (20m), *Eucalyptus crebra* (35m), and *Eucalyptus moluccana* (25m).

Signage

A colorbond metal screen with mounted tenant signage is proposed on the northern and western elevations (ie: on approach to the site from Templar Road). The single signage structure is proposed at this location to provide a quality entrance statement to the site and meets the objectives of the DCP which collectively seek to ensure advertising / signage is:

- constructed of high quality, durable materials;
- considered in conjunction with the design and construction of buildings;
- restricted generally to one sign identifying the name of the occupants and/or products manufactured or produced on the site; and
- contained wholly within the site.

The Table of Compliance at **Appendix F** of the Environmental Assessment demonstrates that the proposed signage also complies with the provisions of Part 3 Section 3.1 Penrith DCP 2006.

Lighting

Provision will be made for external lighting during the detailed design phase and will comply with the relevant requirements of *Control of Obtrusive Effects of Outdoor Lighting (Standards Australia, AS4282)*. No adverse impacts are anticipated upon the use and enjoyment of adjoining premises and surrounding areas, particularly rural residential areas south of the pipeline.

The lighting shall be designed to ensure that light is wholly contained within the property boundaries.

6.0 Conclusion

The proposed warehouse is a suitable response to the emerging Erskine Park Employment Area which encourages industrial development. The development addresses Templar Road through architectural design and creation of an inviting arrival point.

The development is located in the southern part of the Erskine Park Employment Area. The height of the building is moderate at 14.8 metres and although the building occupies a large footprint, is capable of being screened from adjoining areas. The building is set back from site boundaries and perimeter landscaping is proposed.

As the Erskine Park Employment Area develops, views to the site will become increasingly restricted. The site will eventually only be visible once the bridge over the dry creek is crossed when approaching from north. When viewed from major land uses to the south (such as the retirement village and schools) it is apparent that the proposed development will not be visible due to vegetation and the southern ridgeline which shields the Employment Area from Bakers Lane and beyond. We note that in the longer term, the area south of the pipeline is also earmarked for industrial development and accordingly the site will be screened from all perspectives.

The limited local visual impacts of the development will be mitigated through architectural design, setbacks, landscaping and ultimately future development of adjoining properties. With the provision of appropriate landscaping and architectural finishes, and implementation of the Statements of Commitment, the visual amenity of the area will be maintained and the proposed warehouse will make a positive contribution to the Erskine Park Employment Area.

APPENDIX A – PHOTO INDEX




■ The Site

APPENDIX B – CONSTRAINTS MAP



-  The Site
-  Approved Lots (Interlink Estate & CSR Estate)
-  Biodiversity Corridor
-  Southern Land Uses

 Contour Intervals (Source: Prospect 9030-2N, Topographic Map - Land and Property Information NSW 2001)