

# Statement of Environmental Effects

**Masterplan Proposals for  
St Leo's Catholic College  
16 Woolcott Ave, Wahroonga**

Rev A  
10th August 2012



Sydney Melbourne Hong Kong

**pmdl**

ARCHITECTURE  
INTERIORS  
MASTERPLANNING



## Statement of Environmental Effects - Rev A

### 1. Introduction

St Leo's Catholic College is a Catholic systemic school with 955 students from Year 7 to Year 12 and 108 staff, of which 75 are full time staff. The College is co-educational with 370 female and 585 male students.

The College campus occupies two lots, with a combined site area of just over 5 hectares. It is bounded by Unwin Road to the west and Woolcott Avenue to the east, residential to the south and Diocese facilities and Our Lady of the Rosary Primary School to the north. See **Figure 1-Location Map**.



**Figure 1: Location Map**

St Leo's College was founded by the Christian Brothers in 1956 as a school for boys and construction of its first classroom building commenced shortly after. The later extension of this building incorporated accommodation for the Christian Brothers, which remains today providing unsuitable and outdated accommodation for the College Staff offices. In 1983 the College passed to the control of the Education Office of Sydney at which time the College became co-educational. When the newly created Diocese of Broken Bay was formed, the College came under the jurisdiction of the Catholic Schools Office.



## Statement of Environmental Effects - Rev A



Figure 2: Construction of School commences in 1956.

In May 2011 the CSO appointed **pmdl** to carry out a masterplan study of the site and in September 2011 an overall vision for the site was agreed and presented as the masterplan concept for the College. At its heart, the masterplan sort to rationalise and update the existing College's functions and activities into contemporary learning spaces.

Figure 3

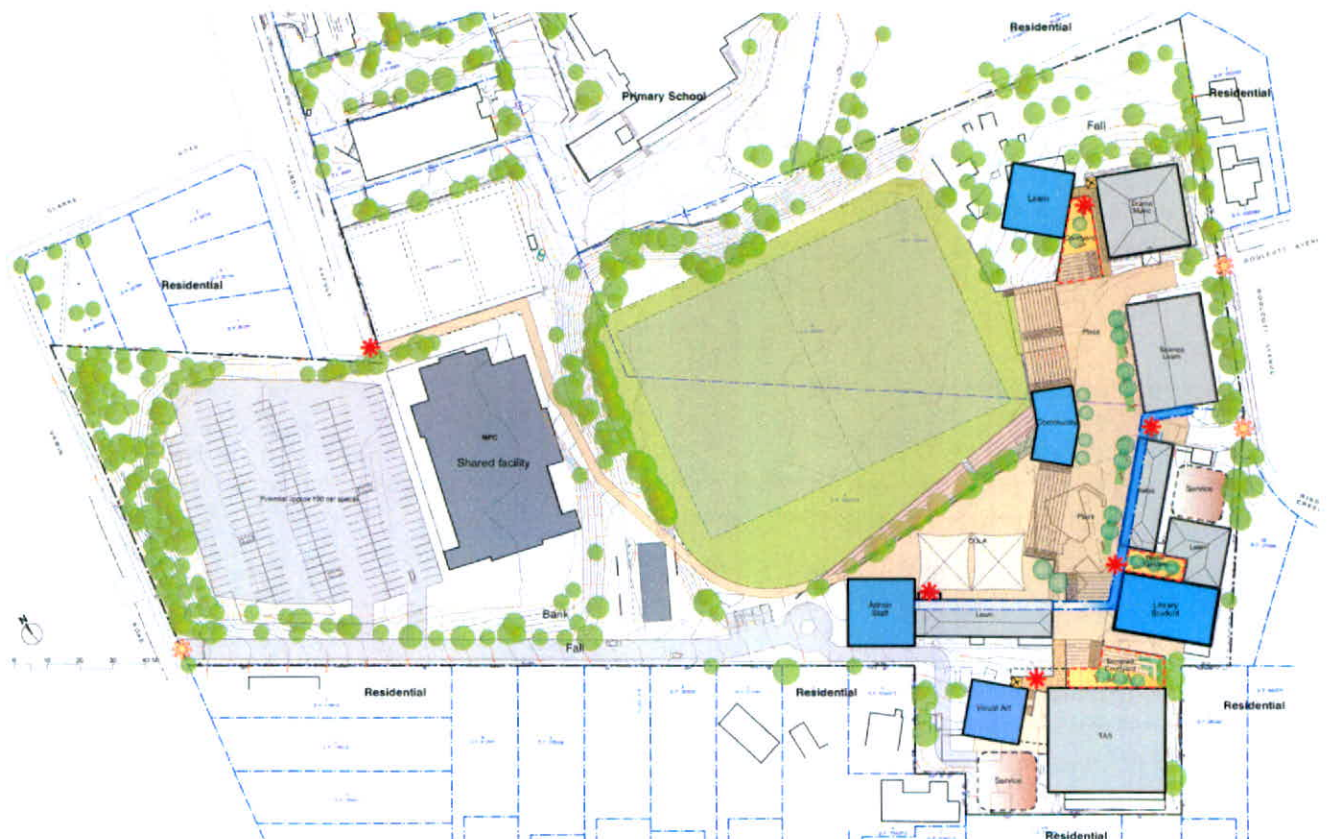


Figure 3: Masterplan Concept September 2011



## Statement of Environmental Effects - Rev A

In January 2012 the masterplan proposals were further developed to meet the objectives of the Schools detailed brief requirements, the CEC's CBGA guidelines for funding and the relevant planning controls for submission to Hornsby Shire Council for approval of the masterplan concept.

Under Section 83B of the Environmental Planning and Assessment Act 1979 it is permissible to lodge an application for masterplan proposals to Hornsby Shire Council as a Staged Development Application outlined as follows.

- (1) *For the purposes of this Act, a "staged development application" is a development application that sets out the concept proposals for the development of a site, and for which detailed proposals for separate parts of the site are to be the subject of subsequent development applications. The application may set out detailed proposals for the first stage of development"*
- (3) *If consent is granted on the determination of a staged development application, the consent does not authorise the carrying out of development on any part of the site unless consent is subsequently granted to carry out development on that part of the site following a further Development Application in respect of that part of the site.*

This staged development application seeks Council's consent for a masterplan concept for the St Leo's College site. The SEE describes the proposals, identifies their potential environmental impacts and outlines how these impacts have in principle been mitigated by the proposed design. The issues addressed include those discussed with Council planning officers in a pre DA meeting held on 15 February 2012, as detailed in the meeting minutes attached. **Appendix 1.**

This SEE accompanies the following documentation submitted in support of the DA:

- Survey Plans 29290A01 H Sheets 3 to 5, prepared by **Degotardi, Smith & Partners**
- Architectural Drawings 2233 DA100/A, DA101/A, DA102/A, DA103/A, DA104/A, DA105/A, DA106/A, DA107/A, DA108/A, DA201/A, DA202/A, DA301/A, DA302/A prepared by **pmdl**
- Stormwater Management Plans 12155C1 Sheets 1 to 5 prepared by **Site Plus**
- Sediment Control and Soil Management Plan 12155C1 Sheet 6 prepared by **Site Plus**
- Landscape Masterplan MP01A and MP02A, prepared by **Arterra**
- Tree Survey and removal Plans TP01A and TP02A prepared by **Arterra**
- Aborigicultural Impact Assessment Report Rev A dated 24th April 2012, prepared by **Arterra**
- Landscape Masterplan Report Rev A dated 24th April 2012, prepared by **Arterra**
- Ecological Assessment, Final Report, prepared by **Molino Stewart**
- Traffic Impact Assessment April 2012, prepared by **Brown Smart Consulting**

## 2. Description of Site and Locality

### 2.2 The Site and Existing Facilities

The masterplan proposes new and refurbished buildings and external landscaping works across two allotments as indicated on the survey plans. These comprise of the following

Lot A DP 404491	Area 14,920m <sup>2</sup>
Lot 4 DP 1034913	Area 37,212m <sup>2</sup>

The combined site has an area of just over 5.2 hectares. The site slopes from east to west with a fall of over 20 metres across this length. The site features significant trees, many of which contribute to the blue gum high forest situated along the northern ridge to the site and remain mainly unaffected by the proposals.

The existing buildings on site range in age over the 56 years since the first building was constructed and their mixture of character and materials are reflective of the growth and change of uses over time. The main collection of buildings occupy the east and south east parts of the site. Generally the campus features poor space between buildings, acting as service or simple circulation space as opposed to quality outdoor spaces relating to the building uses.

These existing buildings range in height from one to three storeys. The apparent scale of the higher buildings is reduced by being accommodated into the gradient of the site.



## Statement of Environmental Effects - Rev A

The site is accessed by vehicle from both Unwin Road and Woolcott Ave. Pedestrian access is gained via these routes as well as from Yardley Avenue, which is the entry point for students who travel to school by train. These multiple accesses to the site create haphazard circulation throughout the campus, provide no clear demarcation between public and student realms and no real front door to the College. The level changes over the site contribute to the difficulties in establishing clear circulation through the campus as well as restricting service and maintenance opportunities.

The formal entry to the College is from Woolcott Avenue, with a loop road through the site providing one way vehicular flow, off which there is carparking and opportunities for service vehicle delivery. The location of this road and associated carparking creates a conflict between pedestrian and vehicular movement during school operation times. Kiss and drop for cars occurs along Woolcott Avenue with this street being recognised by residents, staff and parents as a one way vehicular flow during pick up and drop off times. Bus drop off/pick up occurs on Unwin Road which often causes traffic issues at peak times.

In 2009 the CSO received funding as part of the BER for a multipurpose hall facility to serve Our Lady of the Rosary Primary School, as well as St Leo's School requirements. This facility is located centrally within the high school site, occupying part of the western play field. It was completed as CDC development and has been located with little surrounding infrastructure.

### 2.2 The Locality

St Leos College is located in the northern Sydney suburbs of Sydney. It is 18km north west of Sydney CBD and 1.3km south of the regional centre of Hornsby. Its nearest railway station is Waitara approximately 500m to the north of the school entry on Yardley Avenue. The school is surrounded mostly by single detached housing on generous garden allotments to the east, south and west. The local housing stock exhibits a mixture of architectural styles and construction types including small to large one and two storey dwelling houses of brick, fibro and weatherboard construction.

North of the site are some higher density Diocese owned facilities, including Centacare and the affiliated primary school (Our Lady of the Rosary Catholic Primary School) as well as remnant bushland.

Unusually, the College has very little street frontage or address to surrounding streets. The primary street address is from Unwin Road to the west, but the frontage is about 90m. A second access is also available from Woolcott Ave in the east but again enjoys a relatively constrained public frontage of 70m. Woolcott Ave is also only accessible from the Pacific Hwy. A third pedestrian access to the College is from the end of Yardley Ave to the north.

Contextually, the site lies between the major transportation linkages and arteries of the Pacific Highway and Northern and North Shore railway lines. It is also in close proximity to the intersection of Pennant Hills Road, Pacific Hwy and the F3 Freeway.

St Leos also lies in the heart of an educational precinct being part of a collective of secondary private and selective schools in the area, including Barker College, Abbotsleigh School for Girls, Hornsby Girls High, Normanhurst Boys High, and Loreto Normanhurst School for Girls.

## 3.0 Planning Instrument

### Hornsby Shire LEP 1994

The site is zoned Special Use A (Community Purposes) under the current Hornsby LEP 1994

The objectives of this zoning are

- (a) to provide for the cultural needs of the community
- (b) to identify land for the provision of community services and facilities.
- (c) to provide for development that is within the environmental capacity of a low density residential environment.

Development for Educational establishments is permissible under the Special Use A zoning with development consent. Being a Special Use A zoning adjacent to residential A zonings the site will be subject to additional requirements under the Community Uses DCP. However as the DCP is a policy control not a development standard within an environmental planning instrument, any variation can be considered on its merits without the need for an objection under SEPP1. **Figure 4:**



## Statement of Environmental Effects - Rev A

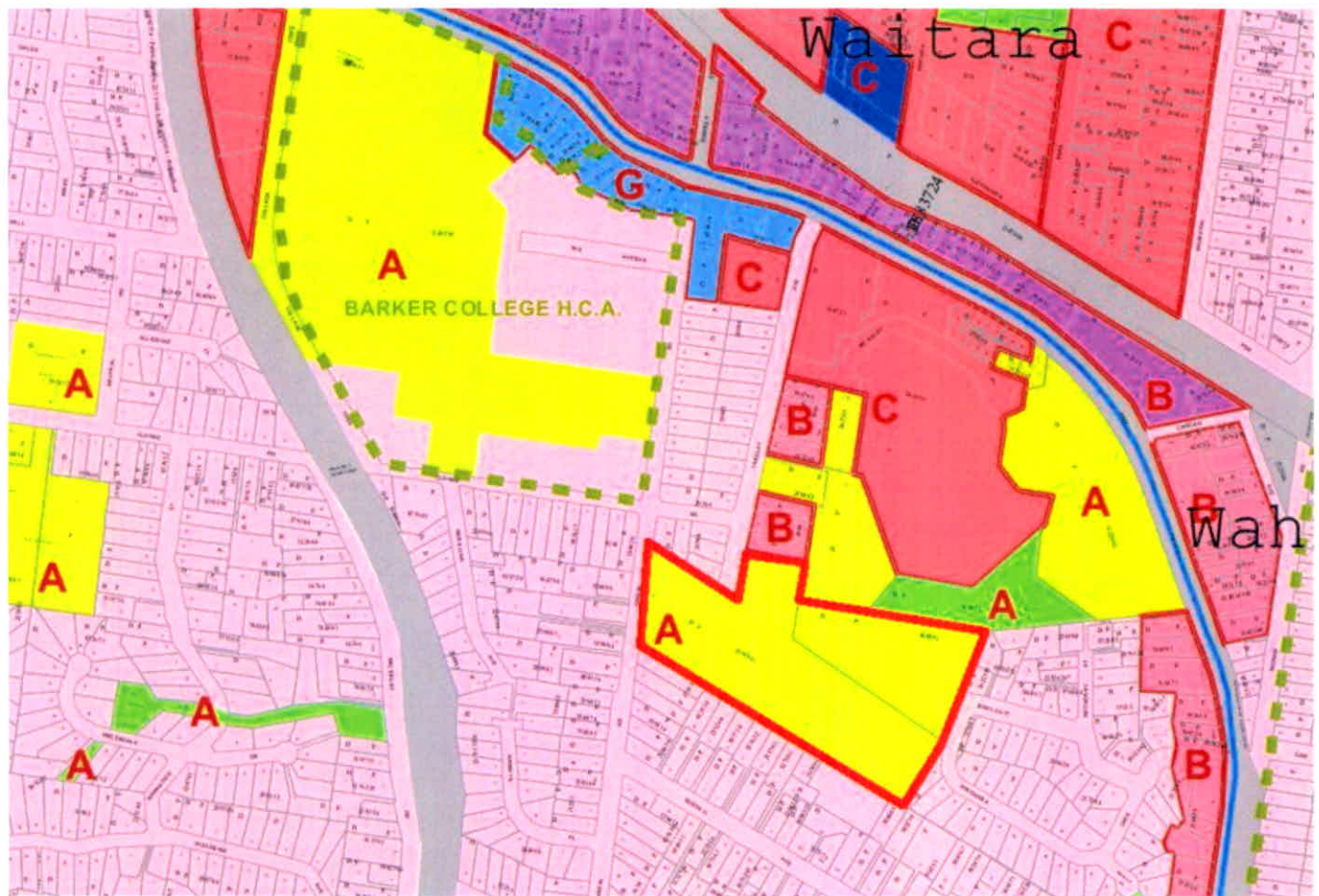


Figure 4: Hornsby LEP 1994 zoning.

The following issue based DCPS apply to this development.

- Community Uses DCP
- Access and Mobility DCP
- Car Parking DCP
- Sustainable Water DCP
- Waste Management DCP

There is considerable overlap in the provisions of these DCPS. The Community Uses DCP is the principle DCP applying to this development and incorporates many of the provisions of the other DCPs. Issues relating to the development under the provisions of the Community Uses and applicable DCPs are addressed in the relevant sections of item 4.0 Proposed Development.

Under the draft Hornsby LEP 2010, which is anticipated to come into force late 2012, the land is zoned R2 Low density residential.

The objectives of this zoning are.

- (a) To provide for the housing needs of the community within low density residential environment.
- (b) To enable other land uses that provide facilities or services to meet the day to day needs of residents. This includes Educational establishments

This would indicate that development for Educational establishments is also permitted on the site with development consent under the draft LEP. Hence any staging of the masterplan proposals submitted as subsequent separate DAs will be permitted under this zoning. **Figure 5**



## Statement of Environmental Effects - Rev A

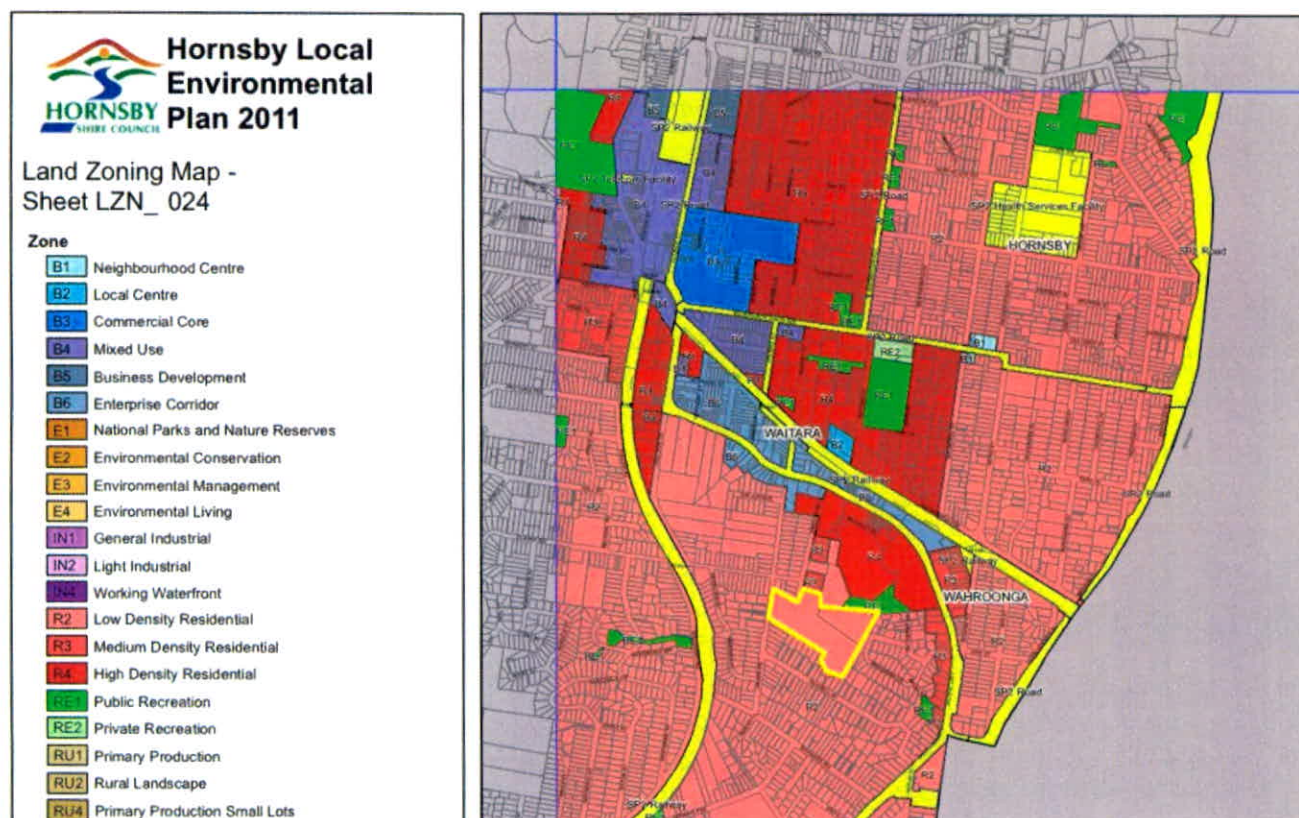


Figure 5: Draft LEP zoning

#### 4.0 Proposed Development

##### The Masterplan

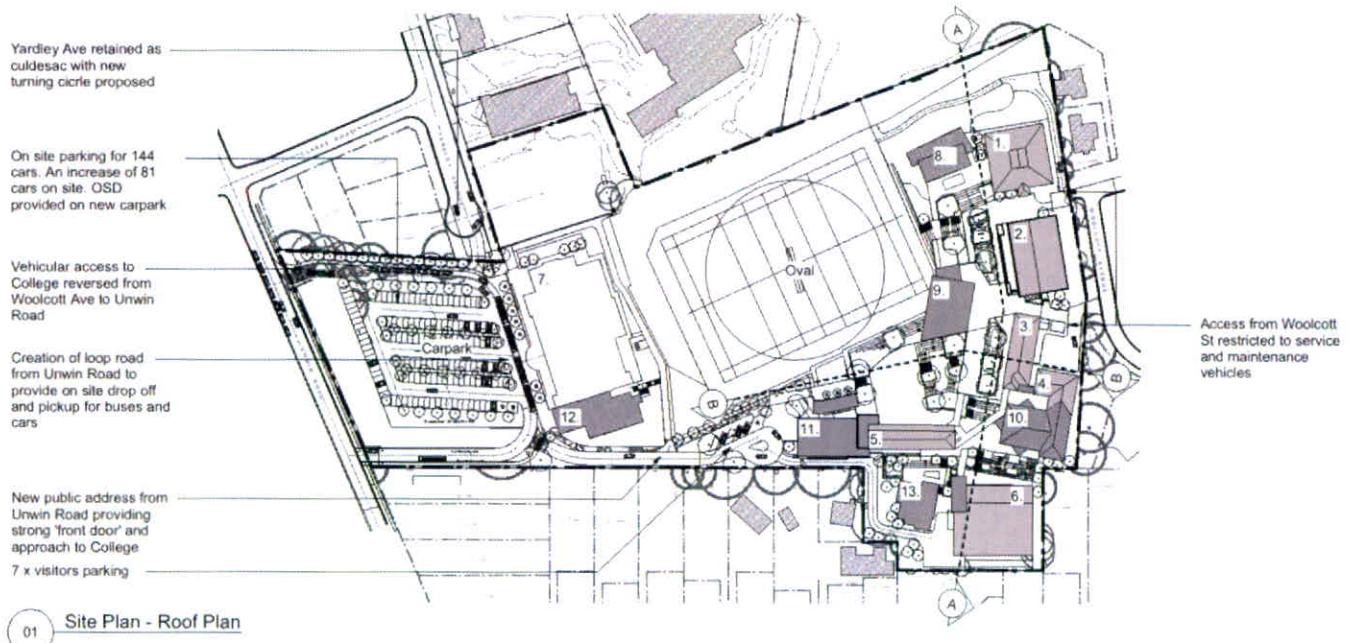
The masterplan proposals for St Leo's Catholic College were developed by **pmdl** in conjunction with the College and CSO to rationalise, optimise and upgrade the existing school facilities to reinforce the utilisation and cohesion of the site. The masterplan proposals are designed to meet an existing school need, with no increases in student or staff numbers intended and no change in school activities or operations.

The key objectives of the masterplan are to provide the following. **Figure 6**

- A strong sense of place and reinforcement of St Leo's identity.
- A new public address to the School from Unwin road, providing a 'front' door and celebrating the arrival for students, staff and visitors, by reversing the main access from Woolcott Ave to Unwin Road..
- A new more open and connected campus centred around a "College street" linking all facilities and extending the learning spaces outside.
- Structured terraces and associated landscaping providing generous transitions and links between levels and more usable outdoor space for learning, socialising, display, play and gathering.
- The rationalisation of access to the site by providing a loop road from Unwin Road that will bring car and bus drop off/pick up into the site and free up the surrounding residential streets.
- The provision of car parking on site to serve the school.
- New administration and staff facilities enhancing the sense of arrival and front door and reinforcing the duty of care and separation of students and visitors.
- Rationalisation of existing facilities to provide best use of these. Demolition of those facilities that have limited future life and restrict site circulation, the ability to connect spaces and opportunities for external learning.
- Introduction of new buildings to provide contemporary facilities that reflect the changing learning environment and attitudes to education and reinforce the concept of connected spaces and transitioning between interior and exterior space.
- A rationalisation of vehicular, pedestrian and service access to reduce conflicts between student and cars.
- To provide disabled access to all facilities on site.



## Statement of Environmental Effects - Rev A



**Figure 6: Masterplan Proposal April 2012**

### Description of Proposals

As part of the masterplan exercise the existing facilities on site were audited and assessed based on their suitability for current and future use. A key part of the assessment was looking at the opportunity for buildings and spaces to respond to future use given their location on site, footprint and adaptability.

The result of the audit was a number of outdated buildings being identified for demolition and temporary structures earmarked for removal, outlined as follows.

- Demolition of the existing old brothers accommodation, two GLAs with change facilities under, administration and staff building, music facility, and locker area and school shop, all of which were deemed poor facilities with limited future potential.
- Demolition of the existing chapel which, although located central to the campus and pivotal to the College's Liturgical life, religious education programs and significant events, provided limited opportunities for celebration involving large gatherings and restricted site circulation and the ability to create connected spaces.
- Removal of nine existing demountables from all over the site, all of which currently provide additional GLA facilities.

The removal of these existing structures will free up the site for new facilities and external works that reinforce the masterplan concept by providing meaningful and connected external spaces flanked by buildings that strengthen enliven and engage with these spaces.

The new additions will reinforce the existing built fabric and layout of the school and improve the usable space and circulation between existing buildings. They will also improve the amenity of the site by incorporating updated learning spaces and student support facilities, all of which are necessary to support a contemporary learning environment. The new facilities, all which are school use, are in keeping with the existing and proposed permissible use of the site.

The new buildings and external works on site are summarised as follows.

- New three storey administration building with a lift serving the 3 new levels and a fourth existing level of adjacent GLA block.
- New chapel, that will serve as a community building with flexible use, accommodating up to one year group, max 190 persons at any one time.
- New 2 storey library facility, which shall become the technological and social hub of the campus, incorporating new student facilities located under the west end of the building.
- New two storey classroom building with 6 GLAs and shared learning zone.
- New single storey visual arts building and lift to serve the lower three half levels of the site.



## Statement of Environmental Effects - Rev A

- New single storey trade training facility located adjacent to the existing multipurpose hall, incorporating two commercial kitchens and associated facilities.
- External walkways over several levels providing undercover horizontal connections between existing and new buildings.
- A central landscaped civic "street" created by the demolition and adaptation of existing buildings and creation of new buildings to define the space.
- Creation of defined and articulated level changes within the main learning precinct by the introduction of generous terracing, soft landscaping and wide stairs connecting the levels along obvious circulation routes.
- A new loop road from Unwin Road and carparking for 137 cars, including 2 disabled spaces.
- A new entry drive and approach to the College's front door, including visitor parking for 7 cars, including one disabled, and a turning circle for cars and small buses/service vehicles.
- The reconfiguration of service vehicle access to the SE and NE areas of the site.

The remaining retained existing buildings on site are proposed for refurbishment and include the following.

- The existing library converted into a new music, drama and learning facility.
- The existing Science building refurbished to provide updated science facilities and flexible GLAs.
- The existing GLA building A converted to student services at ground level, retaining GLAs above
- The existing GLA building C refurbished to provide updated GLA facilities and access.
- The existing Brian Berg Hall refurbished to provide updated TAS facilities including domestic kitchen and workshop facilities.

### Staging

The masterplan will be developed over 4 to 6 stages, as the funding becomes available and College priorities dictate. At present it is anticipated that the first stage of the development will be the new administration building and associated landscape and civil works, including the reversal of the vehicular entry from Unwin Road, and first stage of terracing to the playfield.

These stage 1 works could occur without affecting the number of cars parking spaces currently provided on site. Whilst from a parking perspective stage 1 works may not necessarily require the construction of the additional carpark, the OSD requirements for this stage may challenge this requirement.

To retain flexibility in the staging of the development no commitment to or detail of stage 1 works have been included as a part of this staged application for Council's consent. Stage 1, like all subsequent stages, will be the subject of a separate DA and consent, for which greater detail on the development in terms of building appearance, form and materials will be provided as part of the submission.

### Height

In the current Hornsby LEP 1994 the school is zoned as a special use A in a Residential A zoned area. There are no specific height limitations for this zoning in either the LEP 1994 or the Community DCP, only insofar that any development should be of a scale consistent with the land's zoning objectives, which are "to be compatible with the low density residential environment"

The proposed new buildings on site are predominantly 1 and 2 storeys in height with 3 storeys in areas where they connect to existing buildings of similar or greater height. There are two existing buildings on site that are three storeys high, being the GLA buildings Block B and Block C. Following the slope of the site the GLA Block C building actually becomes 3 1/2 storeys at its western end.

The new proposals that connect to these GLA blocks, are no higher than these existing buildings. The new staff/administration building is specifically designed into the slope of the site to ensure the scale is kept to a minimum. As a result it is one storey less than the GLA Block C building it connects to. Only the lift and stair extend to serve the fourth level of the existing building and these are located on the north side set well back from the south edge adjoining the neighbouring properties.



## Statement of Environmental Effects - Rev A

### FSR & Site Coverage

The masterplan proposals involves a large amount of demolition works as well as removal of existing demountables to meet its objectives of opening up the campus, connecting outdoor spaces and providing locations for new facilities to reinforce this approach. The additional area of new building replacing those demolished and removed is not much greater. As such the net increase in building area over the site is not significant. The FSR increases by 1700m<sup>2</sup> from just under 1:0.23 to 1:0.26, well within the 1:0.40 FSR for the Special Use A zoning adjacent to a residential A zoning.

In terms of building footprint the increase in area from 7,861m<sup>2</sup> to 7,985m<sup>2</sup> is 124m<sup>2</sup>, and increase in building coverage from 15.1 to 15.35%, well within the 40% max site coverage for the Special Use A zoning adjacent to a residential A zoning.

These calculations assume an area for the site including both lots, as these are difficult to separate with school buildings spanning across both lots. However if assessed as individual lots the existing and new FSRs and site coverage for each are still well within the 1:0.4 ratio. We understand it may be a condition of consent of the masterplan concept for these lots to be consolidated for assessment of the subsequent DAs, particularly those relating to buildings and works than span across both lots.

### Design, Materials and Finishes

The development will have a contemporary design and appearance with a combination of modern and traditional building materials and glazing styles. The new buildings will emulate the overall bulk, height and scale of the existing buildings on site and employ the general design theme of the masonry structure combined with greater areas of contemporary glazing and cladding materials and sunscreen devices to shade and animate the facades.

Their design, whilst respectful of the existing structures, will be intentionally and unmistakably contemporary in order to reflect the College's progressive attitude to education, provide an animated, engaging and transparent backdrop to the campus and thereby improve connections and transitions between interior and exterior spaces,

### Traffic and Car Parking

The masterplan proposals do not increase the school student or staff population, nor activities on the site. The school population are intended to remain the same with approximately 955 students and 75 full time staff. There are currently 140 year 12 students of which approximately 1/2 reach driving age prior to completing the High School Certificate.

Existing carparking is scattered around the site, the majority of which is along the access road from Unwin Road, off the loop road from Woolcott Ave and immediately off Woolcott Street behind the existing classroom block. The total number of structured and semi structured car spaces on site is 66.

Whilst there will be no changes to traffic demands and therefore no planning requirement to provide additional car parking on site this application seeks to address existing issues with carparking and access, including the following

- The conflict between parking and pedestrian access on the site
- The need for more structured student drop off and pick up by car and to relocate this from the residential precinct in Woolcott Avenue to the educational precinct off Unwin Road.
- The opportunity to provide a new front door and approach to the School and the implications of this on the number of existing carparking along the current access road from Unwin Road
- The opportunity to bring buses into the site from Unwin Road for drop off and collection as well excursions.

The traffic consultant has reviewed the existing traffic arrangements on the site and has recommended a number of adjustments that meet the masterplan requirements. These have been incorporated to the proposals to provide the following.

- A new loop road with entry from and exit onto Unwin Road that serves as a kiss and drop for cars and drop off and pick up for buses. This simplifies and clearly defines the vehicle circulation within the school grounds, addresses the conflict between vehicles and pedestrians and frees up surrounding streets from these activities and movements.
- Access to a new carpark providing 137 car spaces, including 2 disabled spaces, located on the smaller of the two play fields between Unwin Road and the multi-purpose hall.
- Access to the new front door to the school with a turning circle suitable for cars, minibuses and **small** service vehicles and an additional 7 visitor parking spaces, including one disabled



## Statement of Environmental Effects - Rev A

- Access to the service road serving the SE corner of the site and refurbished TAS facilities.
- Possibility for managed access for buses from Yardley Avenue at restricted times of the day.
- Service access from Woolcott Avenue via original entry to the College accessing dedicated service zone and waste collection area.

Refer to Landscape Masterplan and Landscape Report prepared by **Arterra** and the Traffic Impact Assessment prepared by **Brown Smart Consulting**

### Landscape & Vegetation

The construction of the masterplan proposals will require the removal of 190 of the 448 existing trees on site as outlined in the Arboricultural Impact Assessment prepared by **Arterra**. The remaining 255 have no or minimal impact from construction related activity. Of the 190 trees identified for removal, many are in relatively poor physical condition and do not contribute greatly to the landscaped amenity of the site.

However some of those to be removed are good specimens and their loss will impact on the visual amenity of the site. In response to this the masterplan includes new planting of over 150 trees over the life of the project.

It is important to note that dominating the main developed areas of the school are Eucalypt species that are subject to particularly heavy leaf, twig and bark drop. Not only does it create an excessive maintenance burden but is a safety issue particularly in heavily used playground areas

Of those trees to be removed the clearing of native vegetation has been identified in the Ecological Assessment prepared by **Molino Stewart** as being acceptable.

The proposals meet the Community Uses DCP requirement for landscaped area (exclusive of buildings, carparking and roads) which should be a minimum of 45% of the site. The landscaped area of the masterplan proposals is 66%.

Refer to the Arboricultural Impact Assessment Report and Landscape Plans LC01 & LC02 prepared by **Arterra** and Ecological Report prepared by **Molino Stewart**.

### Recreation Space

Under the Community DCP the amount of recreation space provided should be at a minimum rate of 20m<sup>2</sup> per student enrolled at school, equating to 19,100m<sup>2</sup> of recreation space for the St Leo's site. The central playfield provides 9,600m<sup>2</sup> of grassed recreation space, existing tennis courts 1,860m<sup>2</sup> of hard surface recreation space and the new hall 945m<sup>2</sup> of internal recreation space. In addition to this is the areas of hard and soft landscaping in the form of level terraces and the main pedestrian street provide a further 4,500m<sup>2</sup>. This equates to a total of 16,900m<sup>2</sup> of recreation space, 2,300m<sup>2</sup> less than that required under the DCP.

However as the DCP is a policy control not a development standard within an environmental planning instrument, any non compliance can be considered on its merits without the need for an objection under SEPP1. The fact that the recreation space provided is 89% of that required and the ease of access to these recreation spaces from the main campus should be sufficient grounds for acceptance.

### Stormwater & Drainage

The existing pipework and OSD system of 5,000m<sup>2</sup> over the main play field is to remain. The increase in impervious area created by new buildings and hard landscaping works (including new access roads and the carpark) is 7,716m<sup>2</sup>. Of this area there are parts of the site with minimal increased impervious area that will need to drain into existing systems in Woolcott Avenue and the easement located at the SE corner of the site.

A new OSD system will be incorporated into the design for the new carpark and be will be sufficient to cater for the total increase impervious area of 7,716m<sup>2</sup>.

The design for the OSD system is shown on Stormwater Management plans prepared by **Site Plus**.

### Social Impact

St Leo's Catholic College provides general community level benefits in education for youth, employment, culture and community. Improvement of the facilities on site will greatly benefit the students, staff and general community.

The school will continue to operate on the site thereby having minimal impact at neighbourhood level in terms of general amenity, noise and privacy.



## Statement of Environmental Effects - Rev A

The proposal seeks to provide contemporary spaces to the campus that reflect the changing learning environment and attitudes to education, replacing existing temporary and out of date structures. This will provide an improvement to the educational services available in this area.

### Access and Mobility

The standards of the Access and Mobility DCP are generally consistent with AS 1428.1 and the BCA. The masterplan proposals have in broad principle been designed in accordance with these.

On a site with a change in level of over 20 metres the strategy for disabled access was given significant consideration. Hence a key aim of the masterplan was to rationalise and improve levels across the entire site to provide disabled access to all school facilities. The reconfiguration and regrading of the site enabled the creation of three basically level pedestrian streets within the school. These upper, middle and lower streets, together with a fourth elevated walkway and two strategically located lifts effectively provide disabled access to all areas of the main campus.

The strategy is that disabled students, staff or visitors can be dropped off or park at the new main entrance to the school from which point they have level and vertical access to all areas of the main campus buildings located within the east and SE parts of the site.

This is achieved by the strategic location of two lifts, one located within the new administration building providing access to all 4 upper levels of the school, and the second lift located adjacent to the visual arts building, providing access to the lower levels, being a half level down to visual arts and full level to the lower floor of the refurbished TAS building.

Disabled access to the lower level of the GLA block located at the NE end of the site is provided by the creation of the 'middle' street between the upper street and play field which links the decked courtyard to the GLAs at RL179.00 to the terrace outside the student entry to the administration building at RL 178.30.

Disabled access to the two remote buildings, the existing multi-purpose hall and new trade training kitchen facility which are located to the west of the main campus, is assumed to be provided by either of the following.

- Vehicular access to the entry of these buildings, where there is provision for disabled parking and level access to the buildings, or
- Assisted pedestrian access via the max 1 in 12 grade paths linking the administration building to the Multi-purpose hall.

This strategy for access has been developed by pmdl in general agreement with Accessibility Solutions, who will provide detailed assessments of compliance for the separate DAs submitted for each stage.

### Acoustic Privacy

The new facilities do not introduce any new activities to the site, they are a replacement of existing and temporary facilities with new contemporary buildings and structures. The nature of the new facilities incorporating improved building fabric to meet section J requirements will provide better acoustic properties and an improved buffer to neighbouring properties than the existing structures these replace.

It is intended that many of the proposed new facilities will be air conditioned, including the library and staff/administration buildings. The plant for these buildings will be located with due consideration for the neighbouring properties and acoustically treated as required and will be subject to further assessment as part of the separate DAs for each stage of works.

No changes to the use of the site are proposed that might introduce noisier activities on site, hence noise levels should remain constant. The hours of operation of the school will not change as result of the proposal and as such, and any noise generated will occur during existing school hours.

### Visual Privacy

The new proposals aim to retain visual privacy to neighbouring properties by being predominantly located within the heart of the school well away from adjoining boundaries with residential properties. However to the east and south there are two new buildings proposed that replace existing or temporary structures and these are located closer to the perimeter of the site.

These buildings are to be specifically designed to turn their back on neighbouring properties to the SE and SW, by incorporating solid wall elements with reduced openings for both visual and acoustic privacy. The location of these



## Statement of Environmental Effects - Rev A

new buildings is ideal for this purpose as it enables them to be orientated and opened up to the north, providing the desirable connections between interior and exterior spaces that promote flexible and social learning.

### Streetscape

The proposed demolition works, additions and new buildings are located within the heart of the school, set well back from the Unwin Road frontage and masked by existing retained buildings from Woolcott Avenue frontage. In addition to this is the fact that the school has very little street frontage or address to surrounding streets and the new building heights are in keeping with the existing scale of the school. As such, the proposal will have minimal impact on the existing streetscapes.

Refer to Architectural Drawing DA101 Site Plan, prepared by **pmdl**.

### Solar Access

The new proposals aim to minimise potential overshadowing to neighbouring properties by being predominantly located within the heart of the school well away from adjoining boundaries with residential properties. However to the east and south there are two new buildings proposed that replace existing or temporary structures and these are located closer to the perimeter of the site.

The first of these, a new 3 storey Administration building connected to the existing 3 storey GLA building, replaces the existing 2 storey GLA and changeroom facilities in the same location. Located 6 metres back from this southern side boundary the one storey increase in height of the new building has some minimal but not unreasonable impact on the amount of sunlight to the residential property directly to the south, 11A Russell Ave.

The impact on 11A Russell Ave is limited to some additional overshadowing of the property's private open space from approx 10.30am to 12.30pm, insofar that it overshadows approx half the area of its private open space. Between 12.30 and 3pm the amount of overshadowing reduces to nil. The new building does not create any additional overshadowing of the actual residence at any time of the day.

The second of the new perimeter buildings is the library, which again connects to an existing 2 storey building but, in following the decent in slope, becomes 3 storeys at one point through the middle of the building. This 3 storey section is designed to be located well away from any boundaries. The building elevation closest to the SE boundary is limited to 2 storeys in height and has been setback from 6 to 9 metres from that boundary. This building more than complies with the Community Uses DCP setback requirement for special use zoning of 3 metres from a rear or secondary front property boundary and 1 metre for a side boundary.

The impact of this new building on the adjacent residential sites is limited to some additional overshadowing of 27 Windarra Crescent's open space at 3pm and minimal additional overshadowing of 25A Russell Ave's property from say 11.30am to 12.30pm.

However it is important to note that all the affected residential sites are heavily treed and are most likely in shadow for the majority of the day.

Refer to Architectural Drawing DA301B Shadow Diagrams, prepared by **pmdl**.

### Servicing and Maintenance

Whilst the fall across the site limits service and maintenance opportunities, this has been addressed by providing a number of service access points that connect to create a circuit of maintenance access around the campus. The existing service access to the south servicing the TAS building is proposed to be relocated to the edge of the site in this area allowing new visual arts building to better relate and connect to the existing TAS facility.

A second maintenance access point is formalised to the north east of the existing library, new music/drama facility, to provide maintenance access to this corner of the site and the play field. Access from the play field to the new entry forecourt to the College completes the circuit for maintenance access. Service access to the upper street is provided via Woolcott Avenue, which includes an area for the collection of all waste.

Emergency access to the school is provided from Unwin Road to the entrance of the new Administration building. However if required emergency access to the upper pedestrian street will be retained from Woolcott Avenue.

### Bushfire

No bushfire issues have been identified for this site.



## Statement of Environmental Effects - Rev A

### Heritage

No heritage issues have been identified for this site.

### Ecological

Ecological issues related to the Blue Gum High Forest and existing habitats are addressed in the Ecological Assessment prepared by **Molino Stewart**.

### Sustainable Water

The objectives of this element of the Community DCP to conserve water resources and reduce impacts on ecosystems has been addressed by measures such as protecting trees to be retained, providing sediment and erosion controls, minimising impervious surfaces, maintaining pre-development flows, and using low water indigenous plants and mulch garden beds.

These are described in greater detail in Soil and Sediment Control Plan prepared by **Site plus** and Landscape Masterplan Report prepared by **Arterra**.

### Contamination

The site for St Leos College has historically been used for school purposes from 1956. Photographic evidence from 1943 reveal that the site was not previously built upon but that clearing of the site had been undertaken. **Figure 7** An area in the north east corner of the site appears to be remnant Blue Gum high forest, which remains today. It is understood that there is no known history of uses that might result in soil contamination such as industry or commercial horticulture.



**Figure 7 - Aerial Photo from 1943.**

### Crime Prevention

Educational use is relatively low crime risk as it does not involve the casual access by the public. In addition to this is the fact that the existing site can be effectively secured out of school hours and that this line of security will be improved by the masterplan proposals.

Within the site the masterplan proposes to open up the campus to improve supervision and surveillance. This is achieved through the demolition of existing structures that impede vision and circulation and creation of a series of



## Statement of Environmental Effects - Rev A

connected outdoor spaces and clearly defined pedestrian paths throughout the campus. Transparency between the buildings and external spaces will be maximised to both promote learning opportunities and enhance supervision on the site.

The provision for adequate external lighting of outdoor spaces and circulation routes will further contribute to safety and surveillance. The general objectives of this part of the Community DCP can be met by conventional measures such as fencing, lighting, security doors and windows and alarm systems.

### Services

The masterplan proposal fits into the existing site infrastructure and services. At this stage it is understood that the existing substation on Woolcott Avenue should have the capacity to meet the electrical demands of the new proposals but if not should be able to be upgraded to do so.

A further assessment of the gas supply to site needs will need to occur for subsequent DAs.

### Waste Management Planning

Garbage storage, recycling and removal facilities exist on site at the SW corner of the play field accessed from Unwin Road. It is proposed that waste storage and collection will be relocated to the service area created at the east end of the site and accessed directly off Woolcott Street.

Waste management will be addressed in detail in further DA submissions lodged for each stage of the masterplan works. This will be in accordance with the Waste Management DCP to initially include the design of waste facilities and ongoing waste management and later demolition and construction waste management plans, provided by the successful building tenderer to meet the conditions of DA consent.

## 5.0 Summary

It is the conclusion of this SEE that in principle the masterplan proposals meet the objectives and provisions of the Hornsby Shire LEP 1994 and relevant DCPs as well as the other planning assessment criteria of Section 79C of the Environmental Planning and Assessment Act 1979

The development is compatible with the amenity of the area and is within the environmental capacity of the low density residential environment for the following reasons,

- Low FSR at 0.26:1 and site coverage of 20%
- Rationalisation of vehicular access to discourage drop off and pick up from surrounding streets
- Provision for increased on site parking
- Predominantly 2 building height with 3 storeys in areas to connect to existing buildings and located well away from boundaries. The proposals are no higher than the existing buildings on site
- Compatible contemporary architectural character and generous setbacks
- Retention of Blue Gum High Forest on the northern ridge.
- Retention of significant trees and high proportion of landscaping.

In addition to this the proposals greatly improve the amenity of the school services and activities on the campus by providing updated 'state of the art' learning spaces and facilities and creating quality and connected outdoor spaces and clear lines of entry, circulation and security.

We look forward to receiving Council's support of this application for the masterplan concept.



## Statement of Environmental Effects - Rev A



## APPENDIX 1 : Council Minutes



Date: 15.02.2012 Job#: 2233 Pages: 4

Project: St Leo's Catholic College Wahroonga DA Proposals

Minutes: Meeting with Hornsby Council

Location: Hornsby Shire Council offices

From: Vicki Van Dijk

Distribution: All below

## Minutes:

Apologies	Present			
	Rodney Pickle	HSC	Peter Doddrell	pmdl
	Chris Fraser	HSC	Vicki Van Dijk	pmdl
	Radek Zarzycki	HSC	John Menday	DBB CSO
	Dennis Hope	HSC	Dean Brodie	Brown Smart

Item				Action
<b>1.00</b>	<b>Introduction</b>			
<b>1.01</b>	<b>pmdl</b> summarised the motives for the CSO and St Leos engaging <b>pmdl</b> to prepare a masterplan for their site as follows.			Note
	a. No new development in the school for over 20 years and parents seeking an upgrade to existing facilities.			
	b. Government funding for Catholic Schools available to assist in implementation of masterplan			
	c. Changes to curriculum and pedagogy and advances in technology demand different types of learning spaces to that provided in existing facilities.			
<b>1.02</b>	<b>pmdl</b> explained issues with the existing site as follows.			Note
	a. Conflict between cars and service vehicles and students /staff			
	b. Need to provide better disabled access and generally safer and more direct pedestrian access for all students and staff around the site.			
	c. Adhoc arrangement of buildings and poor connection and relationship of buildings and outdoor spaces, compounded by 20 metre fall across site.			
	d. Need for a public front door to the school and sense of arrival			
	e. Need to demarcate public and student zones to address duty of care and security issues with current site.			
<b>1.03</b>	<b>pmdl</b> described underlying concept of masterplan was to reverse axis and entry point, for the School from Woolcott Street to Unwin Road.			Note
<b>1.04</b>	<b>pmdl</b> confirmed that there was no increase in student numbers proposed. The new proposals were simply addressing the need for new and refurbished buildings and better outdoor spaces that would help to rationalise the site and facilitate new pedagogies and embrace new technologies.			Note
<b>1.05</b>	<b>pmdl</b> explained that the overall building footprint and paved surfaces would remain fairly much as existing but that these would be distributed differently throughout the site to create meaningful and connected external spaces.			Note
<b>1.06</b>	<b>pmdl</b> advised they saw the main issues for Council being traffic and parking, hydrology and environmental.			note



Item		Action
<b>2.00</b>	<b>Traffic</b>	
<b>2.01</b>	DB described the reversal of orientation, address and access to the site as essentially removing the entrance from a residential zone and bringing it into the educational precinct.	Note
<b>2.02</b>	Council confirmed that they has few complaints from residents in Woolcott Street, as many have simply resigned themselves to the fact it can't be improved in the current arrangement.	Note
<b>2.03</b>	Council advised that the main traffic issue was at the junction of Clarke and Unwin Roads and that this was compounded by poor pedestrian amenity.	Note
<b>2.04</b>	Council explained Unwin Road issues. Council have resisted removing on street parking along one side of Unwin Road to keep amount of traffic down.  They reported no progress on the issue of the Unwin Road and Pacific Highway junction explaining they were limited in what could be done due to existing petrol station, tree and substation. council suggested that St Leo's traffic may be encouraged to access the site via Clarke Road	Note
<b>2.05</b>	Council indicated that parking beat surveys would not be required. DB to carry out intersection counts only.	DB
<b>2.06</b>	Council requested a student/staff transport survey be undertaken for the site, suggesting the school consider limiting the amount of parking for Year 12 students.	DB, pmdl
<b>2.07</b>	<b>pmdl</b> advised that there was currently parking on site for 68 cars. The Masterplan proposals showed additional parking for up to a further 190 cars, however this would be reduced by the Council requirement for tree shading to the carpark.	Note
<b>2.08</b>	<b>pmdl</b> advised that the proposed carpark provided the potential for bringing buses onto the site for excursions. Council advised that bus companies were looking for a solution to the pick up and drop off of students for St Leos. Council advised the need to accommodate for buses up to 14.5 metres in length and that driveways should be sufficiently wide enough to accommodate bus turning circles.	Note
<b>2.09</b>	Council suggested that caparking may not necessarily be required in stage one works as that stage, the administration building, did not ultimately reduce the amount of parking on site. However it did highlight the issue of starting implementation of the masterplan with the administration building as there would be a loss of parking on site during the construction of that building.	Note
<b>2.10</b>	Council advised that wombat crossing on Unwin Road required upgrading and that this should be included into St Leos proposals to suit proposed changes to pedestrian routes.	Note
<b>2.11</b>	<b>pmdl</b> advised that the majority of pedestrian traffic to the site was student traffic from the train station via yardley avenue. Council suggested an upgrade to the pedestrian amenity along this street to create a continuous footway of 2 metres wide.	Note
<b>3.00</b>	<b>Environmental</b>	
<b>3.01</b>	<b>pmdl</b> confirmed that there was Blue Gum High forest along northern bank of the site away from the proposed development. They confirmed that the CS had engaged services of environment consultant to undertake necessary tests and assessment of impact.	Note



Item		Action
	<p>3.02 it was noted that there was also scattered Blue Gums near proposed GLA building, which is shown to be in the location of existing GLA demountables, and proposed visual art building and service road. Council advised <b>pmdl</b> to look at how these buildings meet the ground to avoid impacting tree roots.</p> <p>3.03 Council confirmed that a Fauna and Flora assessment of site was not required and that submission of the existing tree assessment would be sufficient.</p>	<p>Note</p> <p>Note</p>
4.00	<p><b>OSD</b></p> <p>4.01 <b>pmdl</b> advised that the existing OSD for the School site was identified as the main play field.</p> <p>4.02 Council suggested proposed carpark could act as an improved and greater capacity detention system for site as 150mm catchment basin.</p> <p>4.03 Council requested an assessment of existing against proposed roof and impervious areas to determine any increase and OSD requirements.</p> <p>4.04 Council advised of water runoff issues to residents on low side of Unwin Road and suggested if carpark was not constructed in stage 1 works that a berm be created on the play field above Unwin Road as an interim OSD measure for the site. CSO confirmed that this area was already bermed.</p>	<p></p> <p>SLCC</p> <p>pmdl</p> <p>Note</p> <p>Note</p>
5.00	<p><b>DCP Issues</b></p> <p>5.01 Council referred <b>pmdl</b> to Council's Community uses DCP, specifically parking, site coverage and landscape.</p> <p>5.02 Council confirmed that an acoustic assessment was not required as the proposed buildings were in much same location as existing and their uses not changed significantly.</p> <p>5.03 <b>pmdl</b> explained that the change of level across the site affected their ability to meet height limits set in the LEP zoning requirements. <b>pmdl</b> advised that they would be seeking a variation to this height limit for the new administration building.</p>	<p></p> <p>Note</p> <p>Note</p>
6.00	<p><b>DA Requirements</b></p> <p>6.01 Council advised that the School could submit a Staged DA which was a concept masterplan DA that identified the location and massing of proposed buildings but didn't require too much detail about the appearance and finishes of these.</p> <p>6.02 Council advised that this form of DA approval required each stage of the masterplan to then be submitted and approved as separate DAs. This provided the School with greater flexibility in determining the future staging of the project as opposed to being committing to it at this stage and being locked into a set of DA conditions.</p> <p>6.03 Council confirmed that under this type of DA some of the proposed buildings, in particular those earmarked for refurbishment, could be dealt with as CDCs under the SEPP 2007 Infrastructure.</p> <p>6.04 It was agreed that this form of DA suited the both the CSO, as it provided the School with a direction and vision from which they could prioritise staging, and residents, by providing them with an overview of what was intended on the site before it was developed in detail.</p>	<p></p> <p>Note</p> <p>Note</p> <p>Note</p> <p>Note</p>



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

**pmdl Architecture & Design Pty Ltd**

**Sydney**

Suite 801, 28 Clarke Street (PO Box 1465)  
Crows Nest NSW 2065, Australia

Phone: +612 8458 5500

Fax: +612 8458 5555

Email: [sydney@pmdl.com.au](mailto:sydney@pmdl.com.au)

ABN 56 062 961 317

**Melbourne**

Level 3, 479 St Kilda Road  
Melbourne Victoria 3004, Australia

Phone: +613 9427 8885

Fax: +612 8458 5555

Email: [melbourne@pmdl.com.au](mailto:melbourne@pmdl.com.au)

**pmdl Architecture + Design (HK Limited)**

**Hong Kong**

20/F, Hollywood Centre  
233 Hollywood Road  
Sheung Wan, Hong Kong

Phone: +852 2836 6992

Email: [hongkong@pmdl.com.au](mailto:hongkong@pmdl.com.au)

Nominated architects – Andrew Perder 5317 | David Morris 5865 | Peter Doddrell 5134