

## 6 ASSESSMENT

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### 6.1 Director General's Environmental Assessment Report

6.1.1 The purpose of this submission is for the Director General to provide a report on the project to the Minister for the purposes of deciding whether or not to grant approval to the project pursuant to Section 75J of the Act.

6.1.2 Section 75I(2) sets out the scope of the Director General's report to the Minister. Each of the criteria set out therein have been addressed below, as follows:

(a) a copy of the proponent's environmental assessment and any preferred project report; and

The proponent's EA is included at **Appendix F** whilst the preferred project report is set out for the Ministers consideration at **Appendix C**.

(b) any advice provided by public authorities on the project; and

All advice provided by public authorities on the project for the Minister's consideration is set out at **Appendix E**.

(c) a copy of any report of a panel constituted under Section 75G in respect of the project; and

No independent hearing and assessment panel was undertaken in respect of this project.

(d) a copy of or reference to the provisions of any State Environmental Planning Policy (SEPP) that substantially govern the carrying out of the project; and

A brief assessment of each relevant State Environmental Planning Policies that substantially govern the carrying out of the project is set in **Appendix G**.

(e) except in the case of a critical infrastructure project – a copy of or reference to the provisions of any environmental planning instrument that would (but for this Part) substantially govern the carrying out of the project and that have been taken into consideration in the environmental assessment of the project under this Division; and

An assessment of the development relative to the prevailing EPI's is provided in **Appendix G**.

(f) any environmental assessment undertaken by the Director General or other matter the Director General considers appropriate.

The environmental assessment of the project is this report in its entirety.

(g) a statement relating to compliance with the environmental assessment requirements under this Division with respect to the project.

On 20 May 2006, the Director General issued DGEAR's in respect of the project application which related to urban design; transport, traffic and access; surplus lands; heritage and archaeology; planning agreements and / or developer contributions; contamination and geotechnical issues; acoustics and noise; waste management; drainage and stormwater management; and utilities infrastructure.

In addition to these key issues, the proponent was also required to address:

- the suitability of the site;
- the likely environmental, social and economic impacts of the proposal;
- justification for undertaking the project;
- the public interest;
- planning provisions applying to the site including permissibility and the provisions of all plans and policies;

- consideration of alternatives to the proposal;
- nature and extent of any non compliance with specified EPI's;
- proposed mitigation and management of residual impacts; and
- a draft statement of commitments detailing measures for environmental management and mitigation measures for monitoring the project.

A "test of adequacy" was undertaken by the Department which determined that the matters contained in the Environmental Assessment Requirements were adequately addressed in the EA prior to public exhibition.

## **6.2 Summary of Significant Issues**

- 6.2.1 Following the exhibition period and having regard to the requirements of Section 75I(2), there are a number of outstanding issues which require further consideration and resolution under Clause 8B of the Regulations as set out below.

## **6.3 Rail Corridor Access Issues**

### Issue Summary

- 6.3.1 The Hospital is bisected by the southern railway which will accommodate the SSFL. The Concept Plan proposes vehicular and pedestrian access across the railway line between to the two campuses.

### Raised By

- 6.3.2 RailCorp, Transport Infrastructure Development Corporation (TIDC)

### Consideration

- 6.3.3 Under the Liverpool Hospital Concept Plan, the existing Elizabeth Street at-grade access at the site's southern perimeter would be downgraded to emergency access only, whilst two new bridges spanning the railway corridor would connect the new north link road to the proposed multi-level car park in the south west of the East Campus. Each of the bridges is proposed to be solely vehicular or pedestrian-use specific (Figure 10 overleaf).

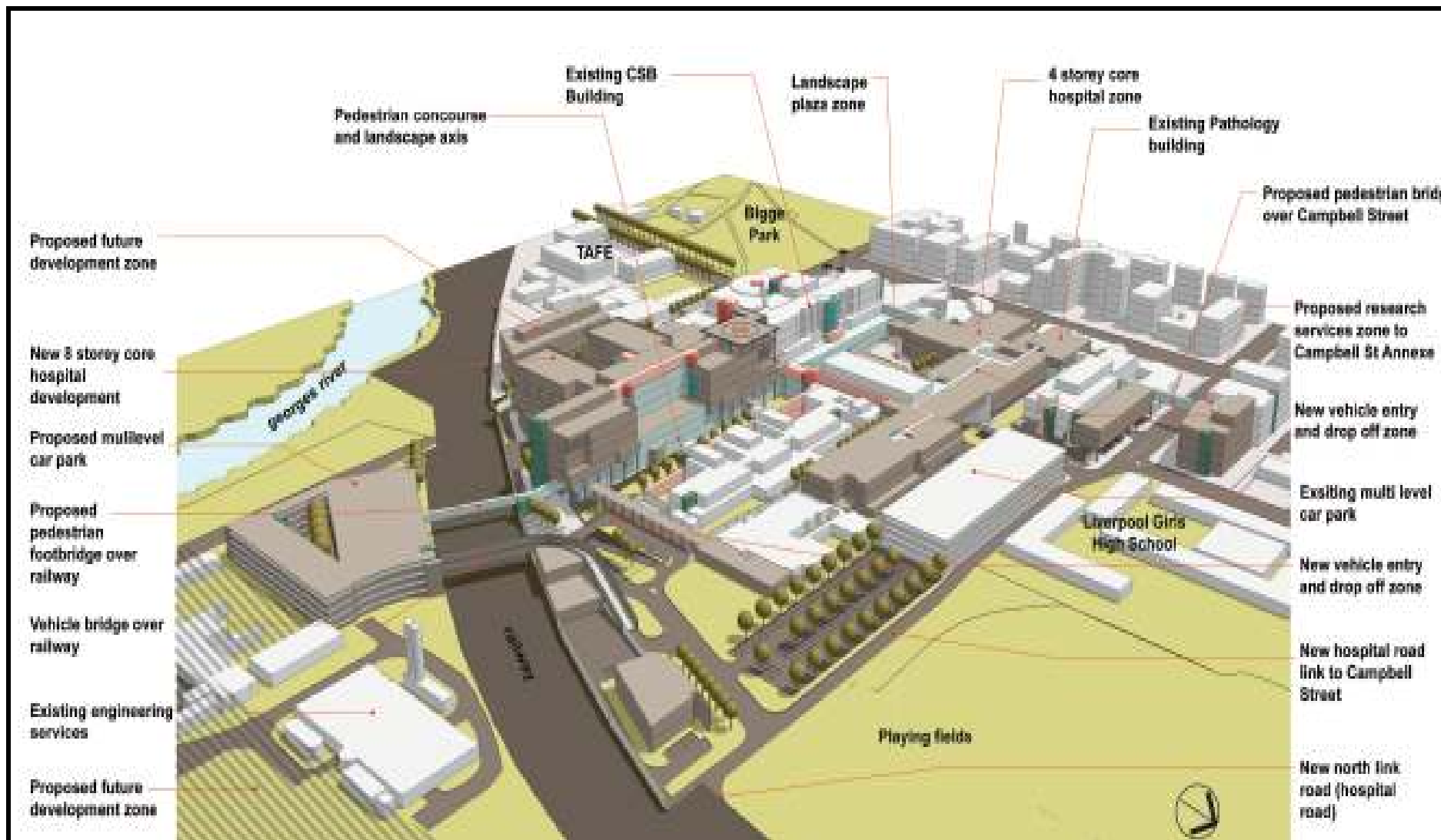


Figure 10: Proposed Liverpool Hospital Redevelopment Illustrating Access across the Railway Line

- 6.3.4 The exhibited scheme's access arrangements seek to respond to the Australian Rail Track Corporation's (ARTC) Southern Sydney Freight Line (SSFL) proposal. That proposal foreshadows the closure of the existing crossing at Liverpool Hospital due to the increased frequency and duration of train activity.
- 6.3.5 RailCorp and TIDC expressed concern that the proposed grade separated pedestrian and vehicular access bridges would not be constructed prior to the commissioning of the SSFL, thereby raising significant implications for access to the hospital via the Elizabeth Street crossing. RailCorp, as the land owner of the passenger rail tracks) went so far as indicating that the Elizabeth Street crossing would be closed permanently upon commencement of the SSFL on the following grounds:
- Clearing an accessible path for emergency vehicles would delay emergency responses to unacceptable levels. Alternative access arrangements would be faster.
  - Emergency use of the level crossing would effectively "lock down" signal interlocking and stabling operations at Liverpool Station, therefore potentially creating substantial interruption to rail services on the Cumberland, South, Inner West and Bankstown lines.
  - Forecast increases in rail traffic within the Liverpool corridor will make the line impassable for up to 50 minutes of every hour.
  - Logistical constraints and coordination issues between Liverpool Hospital, RailCorp and ARTC (as SSFL owner) would be difficult to implement in a workable and equitable manner.
- 6.3.6 The proponent does not consider the total exclusion of any rail crossing to be a viable option. The existing level crossings pattern of use suggests the Hospital's expansion would need to rely more heavily on direct access across the railway corridor in the future. In order to provide an efficient and functioning hospital, the proponent has advised that any proposal would require ready access between the two campuses for all hospital users. In this regard, the proponent sought monetary compensation through funding assistance for the construction of the new bridge from RailCorp and ARTC.
- 6.3.7 RailCorp indicated that it would not be entirely funding the bridge, however it would be willing to explore options for the construction of any future bridge, including the provision of limited funding. On this basis, the proponent, RailCorp, TIDC and ARTC have been in on going negotiations facilitated by Premier's Department's Infrastructure Implementation Group (IIG) to address coordination between the hospital and SSFL projects, funding, and construction of grade separated crossings of the rail line prior to commissioning of the SSFL. Whilst initial discussions focussed on the construction of an underpass, the four parties have now agreed to the construction of two above ground crossings (pedestrian and vehicular).
- 6.3.8 In principle agreement has now also been reached between the proponent and RailCorp that the existing level crossing will be closed with the exception of specified emergency and other planned uses (for example, flood, fire, rail disaster events rather than hospital emergency vehicles).
- 6.3.9 The Minister's approval of the SSFL on 21 December 2006 requires the ARTC to contribute to plans to accelerate provision of alternative crossings proposed at Liverpool Hospital. The Minister's approval also requires the ARTC to cooperate with NSW Health and RailCorp, including contribution in cash or kind, to provide alternative vehicular and pedestrian access across the rail corridor prior to the commencement of the SSFL operations (Approval Condition No. 34 of MP No. 05\_0089).
- 6.3.10 In this regard, the IIG discussions have negotiated a process whereby ARTC, whilst working within the rail corridor on the SSFL, will also take on the responsibility of detailed design, construction and cost (in part) of the bridge. Connell Wagner has been engaged by NSW Health to commence the bridge design works to a point where these structures could be costed prior to their hand over to ARTC.
- 6.3.11 The ongoing negotiations / discussions between the proponent, RailCorp, TIDC and ARTC will be

formalised through the execution of a voluntary planning agreement (VPA) (as committed to by the proponent in its Statement of Commitments) to coincide with the lodgement of the first subsequent project application (post early works approval proposed as part of this concept plan approval). The VPA will secure funding, outline construction roles and methodologies for the grade separated crossings prior to the 2009 scheduled operation dated of the SSFL, and identify criteria for emergency use and other planned uses of the existing level crossing.

#### Resolution

6.3.12 The IIG has, in consultation with the four parties, identified the targeted timeframes to progress construction of the rail bridges. At this stage, key milestones are:

- Preliminary Design Report completed and agreed with stakeholders – April 2007.
- Preliminary Detail Design completed and agreed with stakeholders – May 2007.
- VPA finalised, signed and funding, budget resolved – June 2007.
- Preliminary Detail Design and terms agreed and handover to ARTC – June 2007.
- Detailed designs, DA, approvals, procurement – March 2008.
- Construct vehicle bridge over rail lines – March 2008.
- Construct pedestrian bridge over rail lines – February 2008.
- Completion, commissioning, contingency – April 2009.
- Change use of level crossing ready for SSFL – May 2009.

6.3.13 The deferred timing of the VPA is considered appropriate as the parties are undertaking regular design and project coordination meetings to resolve interface issues and facilitate information exchange relating to detailed design (including the conjoint design process for the bridges already underway), and project requirements and milestones which will assist in formalising the content of the future VPAs.

6.3.14 It is considered that the rail crossing issues have been satisfactorily resolved insofar as they dictate any approval of the Concept Plan. At this stage, no further work / investigations are warranted and the Department is of the view that no conditions of approval are required.

## **6.4 Liverpool Turnback – Noise and Vibration Issues**

### Issue Summary

6.4.1 Proposed construction of Liverpool Turnback within the rail corridor.

### Raised By

6.4.2 RailCorp and Transport Infrastructure Development Corporation (TIDC).

### Consideration

6.4.3 A new turnback facility, comprising construction of a 1.5 kilometre track and side platform, extension of the overhead concourse and footbridge, provision of lift and stairs, relocation and installation of overhead wiring, modification to the existing signalling system, and extension of communications systems is proposed to be constructed between Liverpool Rail Station and the new SSFL (all within the rail corridor).

- 6.4.4 The 1.5 kilometre track is proposed to extend just north of the Shepherd Street overhead bridge past the hospital (Figure 9), raising the turnback's operational noise and its management as issues requiring resolution. The proponent's noise and vibration impact assessment, "Master Plan Noise and Ground Vibration Survey performed at the Liverpool Hospital" prepared by Sinclair Knight Merz and dated 14 August 2006, considers noise impacts from the Liverpool Turnback proposals and in doing so, recognises that noise mitigation measures are required to address potential noise impacts.
- 6.4.5 This assessment acknowledges that noise levels from expanded rail operations (i.e.: the Liverpool Turnback) have the potential to adversely affect hospital operations without attenuation. TIDC has questioned the noise criteria used in the proponent's noise impact assessment (including AS 2021: Aircraft Noise Intrusion – Building Siting and Construction and AS 2107: Recommended Design Sound Levels and Reverberation Times for Building Interiors) and has recommended that any noise assessment should be undertaken against the criteria identified in Chapter 163 of the Environment Protection Authority's Environmental Noise Control Manual. TIDC has also recommended a design based approach including:
- Considering the acoustic performance of facades facing the railway tracks.
  - Consideration of glazing, wall construction and openings during detailed design phase to ensure an acceptable acoustic environment.
  - Locating noise and vibration sensitive equipment and work areas away from eastern and southern building facades (i.e.: those facing the railway).
  - Locating operating theatres and MRI equipment in the centre of the new Clinical Building, as is currently the case in the existing Clinical Services Building.
- 6.4.6 The Department considers that noise and vibration impacts, and in particular noise impacts associated with the proposed Liverpool Turnback, is an important environmental issue for the Liverpool Hospital redevelopment. Appropriate mitigation and ongoing management measures must respond adequately to the project-related impacts. Whilst the SSFL project has assessed the noise and vibration impacts arising from its presence, the Liverpool Turnback and Liverpool Hospital proposals must also consider existing and proposed noise and vibration impacts associated with the rail corridor.
- 6.4.7 The noise impact assessment undertaken for the recently approved SSFL indicates in the case of Liverpool Hospital, the noise and vibration assessment determined that "Planning Levels" (i.e.: the accepted noise objectives in Chapter 163 of the Environmental Noise Control Manual) were already exceeded and a 4m noise attenuation barrier wall, whilst improving the noise impacts would not reduce them to acceptable Planning Levels.

#### Resolution

- 6.4.8 The proponent has entered into a number of key commitments to address noise and vibration associated with the proposed rail corridor works including:
- Use of building fabrics along the corridor to respond to the anticipated increases in noise and vibration.
  - Adopting mitigation measures set out in the Draft Interim Guidelines for the Assessment of Noise from Rail Infrastructure Projects dated September 2006 (prepared by Department of Planning and Department of Environment and Conservation) and Draft Planning Guidelines for Development Adjacent Rail Corridors dated November 2006 (prepared by the Department of Planning).
  - Engagement of a suitably qualified acoustic consultant to ensure building isolation and internal noise requirements are met.

- Adopting the recommendations made by TIDC outlined above in 6.4.5.
- Comply with noise control measures and building acoustic work contained in the SSFL Environmental Assessment as relevant.

NSW Health has indicated that the proposed VPAs to be entered into with RailCorp will be used to formalise design, construction and funding roles / responsibilities of the above commitments (where relevant).

- 6.4.9 The Department notes that the assessment has focussed on mitigating impacts on existing development and that assessing impacts of future development within the corridor is somewhat problematic due to the uncertain nature of those works as well as the detailed design of the hospital redevelopment. In acknowledging Liverpool City's importance as a River City in the Metropolitan Strategy and the Hospital's status in the State Infrastructure Strategy, future land use planning and development will need to continue to respond to existing and future operations within the corridor and on the hospital campuses.
- 6.4.10 The Department has recommended a modification which requires all future project applications to address noise and vibration impacts and outline mitigation measures. This modification will provide an opportunity for the proponent to consider advances in best practice noise mitigation technology in conjunction with the ARTC and RailCorp and the SSFL and Liverpool Turnback proposals are delivered.

## 6.5 Land Acquisition and Landowner's Consent Matters

### Issue Summary

- 6.5.1 The proponent has indicated that it will seek to acquire land currently located within the rail corridor, Liverpool Girls and Boys High Schools, Hart Park, and Remembrance Reserve. The proposal also encroaches on land currently occupied by the South Western Institute of TAFE.

### Raised By

- 6.5.2 Department of Education and Training, RailCorp, Department of Planning and Collingwood Heritage and Regional Museum Precinct Action Committee (community group, herein known as CHARMPAC).

### Consideration

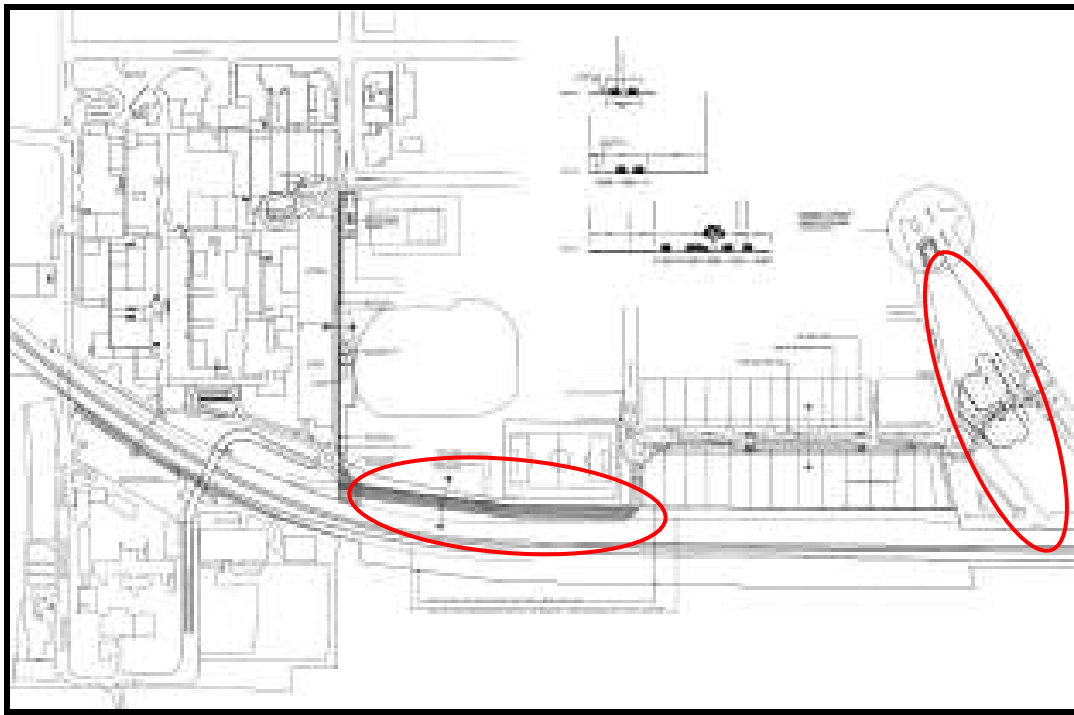
- 6.5.3 NSW Health, as a public authority, is not required to obtain formal landowner's consent pursuant to Clause 8F(1)(a) of the Environmental Planning and Assessment Regulation, 2000 subject to notice of the application being served to the owner(s) of the land prior to the application being made.
- 6.5.4 The proponent served written notice on Department of Planning, Liverpool City Council, RailCorp, Department of Education and Training, and RTA advising of the Part 3A application including provision of the northern link road on 24 August 2006, in accordance with Clause 8F(3) of the *Environmental Planning and Assessment Regulation, 2000*. Of those organisations, RailCorp and Department of Education and Training have indicated in writing that VPAs would be an appropriate mechanism through which to address and secure the required land acquisition. The Department's Land Management Branch has confirmed by email that it has no objection as the landholder of Berryman Reserve to the extension of Hart Street (i.e. the new northern link road). The proponent has advised that Council and RTA have indicated in-principle verbal support for the proposal and negotiations have commenced through the Premier's Department IIG and one-on-one meetings to resolve this issue.
- 6.5.5 There is no legal impediment to the Concept Plan being approved in the absence of advice from Council and the RTA. To further address this issue, a modification has been recommended requiring landowner's consent to be obtained prior to any future project applications being lodged for those portions of the Concept Plan area that are not owned by the proponent.

6.5.6 Delivery of the proposal relies on the acquisition of:

- Land owned by RailCorp within the rail corridor to facilitate the north link road, and potentially the two bridges.
- Portions of Lachlan Street, Hart Street, Hart Park and Berryman Reserve (owned by Council and the Department of Planning) to provide for the north link road and reconfiguration of Hume Highway access.
- A two metre wide strip of land along the southern boundary and south-east corner of Liverpool Girls High School to facilitate widening of an east-west oriented road.
- Land within the TAFE site currently used for staff car parking to be redeveloped as a future "core medical zone".

6.5.7 RailCorp was initially concerned that the proposal did not give appropriate consideration to rail corridor issues, including retention of the existing corridor to accommodate the planned SSFL and Liverpool Turnback (discussed below) within the corridor, potential expansion of the corridor into hospital lands, reservation of other land along the rail corridor to accommodate the traction supply upgrading works (i.e. a new zone substation).

6.5.8 The proponent has confirmed that the Concept Plan reflects RailCorp's (and others) proposed infrastructure corridor and land boundaries in the preferred project report. Furthermore, Drawing Figure 11 demonstrates that the land required for the north link road (shaded grey), whilst owned by RailCorp, is actually outside the rail corridor and therefore is unlikely to impact on the planned works within the corridor.



**Figure 11: Extent of Land Acquisition**

6.5.9 Preliminary investigations indicate that the traction supply upgrade substation can be accommodated adjacent to the north link road with minimal impact to the rail corridor. Discussions between the proponent and RailCorp to determine final location and design details are ongoing, however it appears that a solution can and will be brokered.

- 6.5.10 The Department of Education and Training in its submission has not objected to the proposal as it relates to the school and TAFE lands. The proposed redevelopment of the TAFE car park for hospital uses will have obvious implications in terms of displacing car parking and the TAFE facilities planning and possibly limiting the TAFE's growth. The Department of Education and Training is keen to continue negotiations with the proponent, and has suggested that a joint health / education venture on the TAFE site is worth considering. The opportunity to employ integrated land use principles between the two institutions is supported by the Department (of Planning) and accordingly the deferment of development on the TAFE site. The recommended imposition of development principles will not compromise the potential to deliver a joint venture if agreed to between the proponent and Department of Education and Training.
- 6.5.11 Similarly, neither Council, the Department's Land Management Branch nor RTA have raised any objection to the north link road at this stage. Where alternative arrangements must be made to access land not currently owned by the proponent, the Department will have to be satisfied that such arrangements are suitable and of minimal impact prior to a commencement of any construction stage, major construction activity or construction compound.

#### Resolution

- 6.5.12 The Department sees no foreseeable issues that would compromise or stymie the Concept Plan. Issues of land acquisition associated with circulation networks and the future redevelopment of the TAFE lands are proposed to be the subject of VPAs with the relevant organisations. It is unlikely that the Minister will be requested to be a signatory to any of the VPAs other than the one related to Berryman Reserve, as the Department owns that land.
- 6.5.13 Future project applications will have to be accompanied by landowner's consent for those portions of the Concept Plan area that are not owned by the proponent. A modification ensuring minimal impact to non-Health owned lands has also been recommended.

### **6.6 Conservation, Heritage and Archaeology**

#### Issue Summary

- 6.6.1 Impacts on the adjoining TAFE site and Bigge Park Conservation Area, impacts of proposed four storey car park on TAFE's heritage significance, application to have TAFE State Heritage listed.

#### Raised By

- 6.6.2 Local resident; CHARMPAC; NSW Heritage Office, Liverpool City Council and Department of Planning.

#### Consideration

- 6.6.3 There are no locally or State heritage listed items on the Hospital itself. There are also no State heritage listed items within close proximity to the Hospital site, however it is understood that both Liverpool City Council and CHARMPAC have made formal applications to the Heritage Office requesting the TAFE site be nominated as a State Heritage Register. The two applications are in the preliminary stages of assessment, having been made as recently as December 2006 and January 2007. The Heritage Office has advised that it has acknowledged receipt of the nominations and that the applications are currently under consideration.
- 6.6.4 The proponent's heritage report, "*Liverpool Hospital Statement of Heritage Impact*" (August 2006), purports to be a heritage impact statement in accordance with the NSW Heritage Office's Guidelines. The Department's view is that the report is primarily a desk top assessment which reviews various heritage inventories / listings / registers, and on that basis, makes the following observations and

conclusions<sup>1</sup>:

- Bigge Park will not be impacted at all as the proposed development is not adjacent to the Park. The retention of most of the "Avenue Planting", identified in NSW Health's Section 170 Register, will ensure a continuous tree canopy from Bigge Park through Elizabeth Street and further east.
- Development Zone A may have heritage impacts on the highly significant brick boundary wall and accordingly any works within this area must consider this feature.
- Any new building envelope in Development Zone F should not protrude the existing ridge heights (approximately 14 metres) of Buildings A, B and C currently on the TAFE site to maintain distance views looking back toward the TAFE.
- The proposed construction of a car park within Development Zone F for hospital uses is of little impact as it would be consistent with the historical use of the TAFE site for hospital uses.
- Retention of 1 Campbell Street is not warranted despite the proposed heritage listing of the building in Council's LEP.
- Whilst there are no immediate plans for Hugh Jardine House, the proposed construction of a car park west of the building is unlikely to raise significant issues.

6.6.5 The HIS concludes by making a number of recommendations which include the restriction of building heights within the vicinity of the TAFE building, mitigating visual impacts through the positioning of mechanical and plant equipment, carrying out further investigations prior to construction, photo archiving / recording of structures proposed for demolition, and retention of significant landscape elements including trees and fences.

6.6.6 Statements of commitment address the provision of a site interpretation strategy, preparation of site wide archaeological assessments and heritage assessments for Hugh Jardine House, archival recording prior to and following development, sensitive design consideration and enforcement of protective measures to ensure minimal impact to the Avenue Planting and the Hospital / TAFE boundary wall (**Appendix B**).

6.6.7 The NSW Heritage Office has advised that the HIS' justification for new development within proximity of the heritage items (i.e. the TAFE building) is deficient, and has also identified the lack of a detailed visual assessment, thorough landscape assessment, and archaeological assessment as further concerns. Design modifications and on site interpretation have been raised as matters to be considered in the event that further investigations conclude a higher order of significance.

6.6.8 CHARMPAC's concerns relate primarily to the heritage impacts of the proposal on the TAFE site particularly as the building is historically significant and has been nominated for listing on the State Heritage Register. CHARMPAC is particularly concerned about the visual impact of the new hospital buildings on the TAFE's current curtilage and visual setting.

6.6.9 The Department's view is that the redevelopment as proposed within the existing hospital lands will have little heritage impact, despite the nature of the proponent's heritage report. This is particularly evidenced through the lack of nominated heritage items within this area and the proponent's visual assessment, submitted with the preferred project report, which indicates that the new buildings will be screened by existing development (Figure 12).

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<sup>1</sup> Any references to the names or places of heritage items is as they appear on the register listing specified.



**Figure 12: Photomontages of the Proposed Hospital Redevelopment looking north down College Street; east down Campbell Street; east down Elizabeth Street; and north east from Bigge Park (respectively)**

- 6.6.10 This is reinforced through the precedent set by the existing seven storey Clinical Services Centre fronting Elizabeth Street and overlooking the TAFE and Bigge Park, the physical separation that the 20 metre wide Elizabeth Street affords from the more significant TAFE buildings, and the presence of three (3) buildings between the hospital and Blocks A, B and C accommodating maths and science faculties, administration, bookshop, canteen and adult education facilities.
- 6.6.11 Concern is however raised with the future development zone located south of Elizabeth Street which is on TAFE land. That portion of the site, which currently accommodates at-grade car parking for TAFE staff, proposes a maximum four storey height limit adjacent to TAFE buildings. Without having a better understanding of the rationale for proposing the four storey height limit across the entire expanse of this zone, and the relationship that any future structure would have to the TAFE buildings and their

curtilage, it is difficult to give outright support this element of the proposal. The heritage report's conclusions that a car park in this location would be consistent with the site's previous hospital uses, is not a particularly convincing argument from a heritage / re-use perspective. An active use which may be mutually beneficial to the TAFE and the Hospital may be appropriate with parking centralised. This may also be more sensitive to the adjoining heritage items.

- 6.6.12 The Department concedes there is limited benefit in stymieing the Liverpool Hospital redevelopment on the basis of the State Heritage Register application particularly given the Hospital proposal's extensive social and economic improvements, and ability to consider heritage impacts. The Department has recommended a modification which outlines environmental assessment requirements (EARs) that would have to be complied with by any future development proposal for this portion of the site.
- 6.6.13 The development principles proposed, have been drafted with the assistance of the Heritage Office, and require any future project / development application to consider character, scale, form, siting, materials and colour, and detailing. The EARs also require the proponent to demonstrate best endeavours have been used to explore joint ventures between the Hospital and the TAFE as well as standard heads of consideration such as traffic impacts, car parking provision and urban design.
- 6.6.14 It is considered that these EARs would provide an opportunity to better determine the concerns regarding the visual impact to / from heritage items as they relate to the TAFE site. The principles would also provide an opportunity for the proponent to better respond to any future listing of the TAFE site on the State Heritage Register, should it eventuate.
- 6.6.15 The shortfalls identified in the proponent's heritage report by the NSW Heritage Office, including the lack of a thorough landscape assessment and no archaeological assessment can be resolved. Recommended modifications to the concept plan could be imposed which would require the preparation of such documentation prior to the lodgement of future project / development applications. These would reinforce the proponent's current commitment to undertake an archaeological assessment prior to the commencement of works on the site (**Appendix B**).
- 6.6.16 Whilst the Department acknowledges that the proposed works may disturb archaeological relics present within the land captured by the Concept Plan proposal, these have been assessed as having limited significance and whether they indeed exist, can only be ascertained during the excavation process. Should such relics become apparent, their research potential will be realised and appropriately managed through a programme of archaeological monitoring and evaluation in accordance with current best practice techniques.
- 6.6.17 Similarly a landscape assessment could be deferred as the existing hospital does not have particularly dominant landscaping on site, with the exception of the main entrance on the Elizabeth Street / Goulburn Street intersection. The proposed development is predominantly located away from any recognised landscape settings within Bigge Park and the TAFE complex.
- 6.6.18 The proposal does not definitively state the full nature and extent of works proposed within the future development zone on East Campus, and particularly Hugh Jardine House. Whilst there are no identified heritage items on the Liverpool Hospital site, "Avenue Planting" and Hugh Jardine House are acknowledged as having some heritage value. Avenue Planting is listed on the proponent's Section 170 Register (established under the Heritage Act, 1977) and relates to "...old Livistona Palms along driveways around the rectangular courtyard and Liquid Amber trees along the median strip of the entrance driveway". The Liverpool Heritage Study (1992) suggests that these trees were once located within the Hospital grounds and adjacent to Elizabeth Street, however they appear to have been removed or relocated to the Elizabeth Street / Goulburn Street intersection since the publication of that document. Remnants of the median strip trees appear to be located on the East Campus.
- 6.6.19 Hugh Jardine House (circa 1936) is located on the East Campus and is a single storey dark face brick building. The hipped main roof is book-ended by gable roofed wings. Several other wings suggests a number of additions have been made to the original structure as its function changed and expanded.

Hugh Jardine House has variously been used for cancer, geriatric and general patients accommodating approximately 60 beds at one point. The House has also been used as the Children's Ward.

### Resolution

- 6.6.20 Whilst the adjoining TAFE complex and Bigge Park have historic value, Liverpool Hospital's current height and visual presence has already partially compromised the curtilage and setting of these items. The proposed development will not significantly deteriorate the heritage significance, curtilage and setting of the nearby heritage items and landscape, primarily as these items will be "buffered" from the Hospital redevelopment by the existing Clinical Services Centre, Elizabeth Street and other structures.
- 6.6.21 At this stage, the Concept Plan only proposes development parcels. The articulation, materials and colour of the future façade elements could be designed so as to be sympathetic to existing heritage if considered prudent. The final design details of the proposed external finishes can be resolved at project / development application stage.
- 6.6.22 The Department recognises that there are heritage impacts arising from the proposal's encroachment on the TAFE site. The Heritage Office has been consulted during the Department's assessment of this aspect of the proposal and assisted in the preparation of design principles through the recommended EARs to guide any future development adjacent to the TAFE buildings.
- 6.6.23 The proponent has made several statements of commitment that ensure the implementation of most of the recommendations made in the heritage report. It is recommended that a condition be imposed to ensure that all recommendations are implemented at an appropriate time.
- 6.6.24 On balance, the Department is generally satisfied that the heritage impacts arising as a result of the development proposal can be adequately compensated for by implementing the recommendations set out within the proponent's heritage report and through provision of mitigation measures (i.e. Statement of Commitments and recommended Modifications) in the unlikely event that any archaeological items are uncovered during excavation.

## **6.7 Vehicular and Pedestrian Accessibility**

### Issue Summary

- 6.7.1 Potential vehicular traffic impacts, vehicular and pedestrian accessibility to the hospital, internal circulation and emergency access / egress.

### Raised By

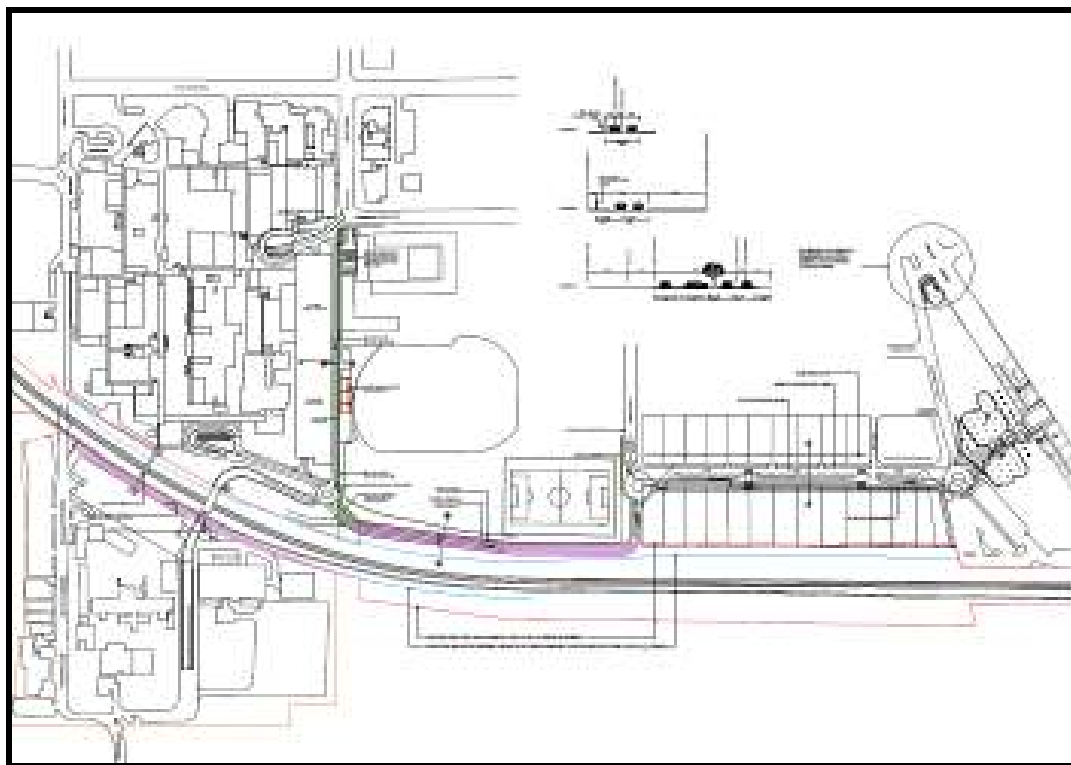
- 6.7.2 Department of Planning; Liverpool City Council, Ministry of Transport

### Consideration

- 6.7.3 Vehicular and pedestrian access across the rail corridor will be resolved through the construction of the two bridges. As discussed in Section 6.4 above, the existing level crossing will also be retained for specific emergency purposes, to be formalised through the VPA process.
- 6.7.4 The proponent's Statements of Commitment to upgrade the existing pedestrian link along College and Moore Street to the public transport interchange at Liverpool Rail Station, promote alternative forms of transport including increased use of rail, bus, transit-way services, car pooling and cycling, and introduction of a work place travel plan (i.e. TravelSmart incentive program) all address the vehicular traffic impacts and accessibility concerns previously raised.
- 6.7.5 Two overhead pedestrian bridges over Campbell Street and Elizabeth Street are proposed under the Concept Plan proposal. The Department is not convinced at this stage that such bridges are central to

the hospital's functioning and will not detract from streetscape, reduce amenity and pose safety risks. In response the Department's recommended modifications that where such bridges will only be supported where a clear hospital function and / or safety reasons can be demonstrated. This will ensure that street activation principles are not compromised, particularly in light of the Department's Centres and Centres project.

- 6.7.6 Of the issues raised, the north link road connecting the hospital to the Hume Highway is the remaining issue which requires resolution. The proponent has commenced detailed design of the link road from the East Campus to the Hume Highway including footpath and cycleway (Figure 13).



**Figure 13: Draft Detailed Design Plans of Northern Link Road**

- 6.7.7 The link road will divert vehicles heading north which currently access the Hume Highway through Forbes, Goulburn or Bigge Streets, away from the High Schools, health precinct and CBD. The alternative access is important in alleviating any further congestion in the surrounding street work particularly during the afternoon peak.
- 6.7.8 The north link road relies on the proponent acquiring portions of land currently owned by Liverpool City Council, Department of Education, RailCorp and the Department of Planning. Decommissioning of the existing Hume Highway / Remembrance Avenue intersection and construction of a new intersection slightly east will also be required. The proponent has commenced discussions with the RTA and to date feedback has been positive. The preparation and execution of VPAs with the four relevant State Government agencies and Council has been committed to in the proponent's Statements of Commitment.
- 6.7.9 The VPAs will formalise the detailed design, construction, and costs of the link road and associated infrastructure including the construction of the new intersection. The road construction will then be subject to an approval process under either Part 3A or Part 4 of the EP&A Act. The road will abut the rail corridor, the High Schools' playing fields, Hart Park and medium density residential properties on Hart Street. The new road will not require the relocation of any classrooms or other school facilities. It is the Department's view that there are no insurmountable issues associated with the north link road that future design or engineering solutions and / or conditions of consent cannot resolve.

### Resolution

- 6.7.10 On balance, the Department is satisfied the northern link road does not raise any adverse traffic, noise or amenity impacts. The proponent's Statement of Commitments and future approval process(s) will formalise land acquisition issues and provide for mitigation measures.
- 6.7.11 Furthermore, the north link road is supported on the basis that it will reduce the demand for use of the existing level crossing and divert traffic away from the West Campus (and subsequently school, health and CBD precincts) reducing traffic congestion. The link road will also improve access to Warwick Farm Station and activate passive surveillance in an area that currently experiences poor amenity.

## **6.8 Car Parking Provision**

### Issue Summary

- 6.8.1 Provision of adequate car parking on the hospital site.

### Raised By

- 6.8.2 Department of Planning; Liverpool City Council.

### Consideration

- 6.8.3 There are currently 1,506 car parking spaces on the Liverpool Hospital site (including 21 spaces at the Health Services Building located on Goulburn Street Annexe), however over two thirds of these spaces are allocated to hospital staff. At present there are only 273 spaces available on-site for visitors / day patients and consequently these spaces are heavily utilised.
- 6.8.4 Approximately 330 on-street spaces are available in Goulburn, Campbell, Forbes, Lachlan, Elizabeth, College and Hart Streets. At any given time, approximately 60% of these on-street car parking spaces are utilised by hospital staff.
- 6.8.5 The Hospital's close proximity to Liverpool's CBD necessitates consideration of broader car parking implications having regard to the Hospital expansion and forecast growth in the CBD. Liverpool City Council is currently reviewing its DCP No. 3 – City Centre Development to determine future workforce and resident populations. Initial recommendations suggest that commercial and retail floor space be constrained to 1 space per 50m<sup>2</sup> and that a proportion of permitted parking for retail and commercial floor space be located off-site (i.e. monetary contributions be collected in advance). It should be noted that these investigations did not anticipate the Hospital's expansion as proposed under the Concept Plan.
- 6.8.6 On this basis, the proponent's traffic study, "*Liverpool Hospital Site Concept Plan for Redevelopment – Traffic, Transport and Parking Assessment Report*" (August 2006) concluded that the most appropriate methodology of determining future car parking requirements is to pro-rata existing staff, day / out-patients and visitor car parking with the projected future quantum of staff, and future provision of beds and services respectively. Future staff numbers are expected to increase by 58.4% from the existing 3030 employees to 4880.
- 6.8.7 A breakdown of existing and future staff car parking numbers is provided below in Table 2 overleaf:

**Table 2: Provision of Existing and Proposed Staff Car Parking**

	Beds	Staff	Parking Provision			
			Staff Parking	Patient / Visitor Parking	AHS / VMO	Modal Shift
Existing	603	3030	1200	276	110	80%
Proposed	941	4900	1900	480	172	65%
Change	<b>+338</b> <b>(+56%)</b>	<b>+1870</b> <b>(+62%)</b>	<b>+700</b> <b>(58%)</b>	<b>+204</b> <b>(74%)</b>	<b>+62</b> <b>(+56%)</b>	<b>-15</b> <b>(-19%)</b>

NB: AHS = area health service vehicles, VMO = visiting medical officers (not hospital designated staff)

6.8.8 In terms of the staff car parking, the traffic report indicates that the Hospital will reduce travel mode of "car driver" hospital users by 19% from the current 80% modal split to a preferred 65%. This means that applying the revised modal split to the proposed 1900 staff car parking spaces would garner 1544 staff spaces. When this figure is adjusted to include a peaking allowance, a total of 1744 staff car parking spaces are required for the future hospital. The proponent has rounded this figure off to 1740 staff car parking spaces, which when combined with the staff, patient / visitor, AHS and VMO parking equates to a total of 2392 on site car parking spaces (Table 3).

**Table 3: Provision of Existing and Proposed Staff Car Parking**

	Beds	Staff	Parking Provision		
			Staff Parking	Patient / Visitor Parking	AHS / VMO
Proposed	941	4900	1740	480	172

6.8.9 It should be noted that the traffic report calculation are rounded up / down in some instances which can result in discrepancies of up to 50 spaces. This is negligible given the long term car parking amount and assumptions used to determine future demand. The discrepancy in these figures arises from the application of the forecasted proportional increase in beds / services (calculated at 55-60%) to the existing car parking spaces (variously referenced as 273 and 276 spaces). The Department has calculated that the proposed 338 bed increase from 603 existing beds to 941 proposed beds equates to a 56% increase, which when applied to 273 and 276 existing spaces equates to a maximum demand for 430 on site patient / visitor spaces.

6.8.10 A clear nexus between the hospital's expansion and proposed car parking provision is required to ascertain whether the overall quantum of car parking is appropriate, and also whether the staged provision of car parking (on a project by project basis) is appropriate for the future building / service use. The current traffic report seeks to provide a maximum number car parking spaces based largely on a pro-rata assumption. The lifespan of the project, changing needs of the Hospital, impacts to on-street car parking, and planned future uses / services and staff / visitor / patient breakdown do not appear to have been considered and require further consideration which can be resolved over time.

6.8.11 Provision of on-site car parking is optimal. The majority of car parking will be through basement car parking areas however the existing northern multi level car park (Campbell Street) is proposed to be expanded and a new multi-deck car park is proposed on the East Campus adjacent to the railway line. The Department is cognisant of the design and safety issues associated with such facilities and has recommended Modifications which outline EARs for any future proposal incorporating multi-deck car parking. Materials and façade treatments, visual impact analysis and safety are key considerations.

Resolution

6.8.12 It is recommended that a maximum threshold of 2062 spaces be provided, providing an increase of 556 spaces subject to the imposition of Modifications which require submission of a staging plan detailing car parking requirements, as well as a requirement that project specific car parking reports be

submitted with future project / development applications.

- 6.8.13 Provision of multi-deck car parking should be minimised on the site. The Department has recommended future EARs pursuant to Section 75P(1) to ensure any such facilities are of minimal visual impact, maintain amenity and provide a safe and secure environment.

## 6.9 Ecologically Sustainability Principles

### Issue Summary

- 6.9.1 The proposal's compliance with the five ESD principles.

### Raised By

- 6.9.2 Department of Planning

### Consideration

- 6.9.3 There are five accepted ESD principles:

- (a) decision-making processes should effectively integrate both long-term and short-term economic, environmental, social and equitable considerations (the integration principle);
- (b) if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation (the precautionary principle);
- (c) the principle of inter-generational equity - that the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations (the inter-generational principle);
- (d) the conservation of biological diversity and ecological integrity should be a fundamental consideration in decision-making (the biodiversity principle); and
- (e) improved valuation, pricing and incentive mechanisms should be promoted (the valuation principle).

- 6.9.4 The Department has considered the Liverpool Hospital redevelopment in relation to the ESD principles and has made the following conclusions:

- **Integration Principle** - the social and economic benefits of the proposal are well documented and reinforced through the Minister's declaration of the proposal as a critical infrastructure project. The environmental impacts are and will be addressed through the proponent's Statement of Commitments and recommended modifications, including EARs for future proposals. Additionally the environmental impacts will be assessed as applications are lodged for individual buildings or precincts within the two Campuses. The Department's assessment has duly considered all issues raised by the community and public authorities. The proposal as recommended for approval does not compromise a particular stakeholder or hinder the opportunities of others. The proposal's promotion of good public transport access is very important and supported.
- **Precautionary Principle** – the Environmental Assessment is supported by technical and environmental reports which conclude that proposal's impacts can be successfully mitigated. No irreversible or serious environmental impacts have been identified. The Modifications require additional information to ensure the proposal's extent and nature is fully documented and opportunities are provided for proposed mitigation and management measures to incorporate best practices.

- **Inter-Generational Principle** – the site is already used as a health campus, with little natural environment existing. The redevelopment and expansion of the Hospital will ensure that a more efficient and functional facility is provided to the community. Through implementation of the Concept Plan current environmental and management practices employed by the hospital will be upgraded, enhanced or introduced that will ensure the environment is protected for future generations. Recommended conditions of consent seek to ensure that construction impacts are minimised particularly with respect to the Georges River catchment.
- **Biodiversity Principle** – as stated above there is little natural vegetation on the site and the Hospital does not contain any threatened or vulnerable species, populations, communities or significant habitats. Construction impacts will be managed through the recommended conditions, ensuring any indirect impacts to Georges River ecology are minimal.
- **Valuation Principle** – the existing and proposed Hospital is an economic driver in the Liverpool CBD and LGA. The Hospital employs 3030 full time staff and will deliver up to 1900 additional operational jobs. The multiplier effects of the Hospital are highly significant, particularly having regard to the Hospital's location in proximity to the CBD.

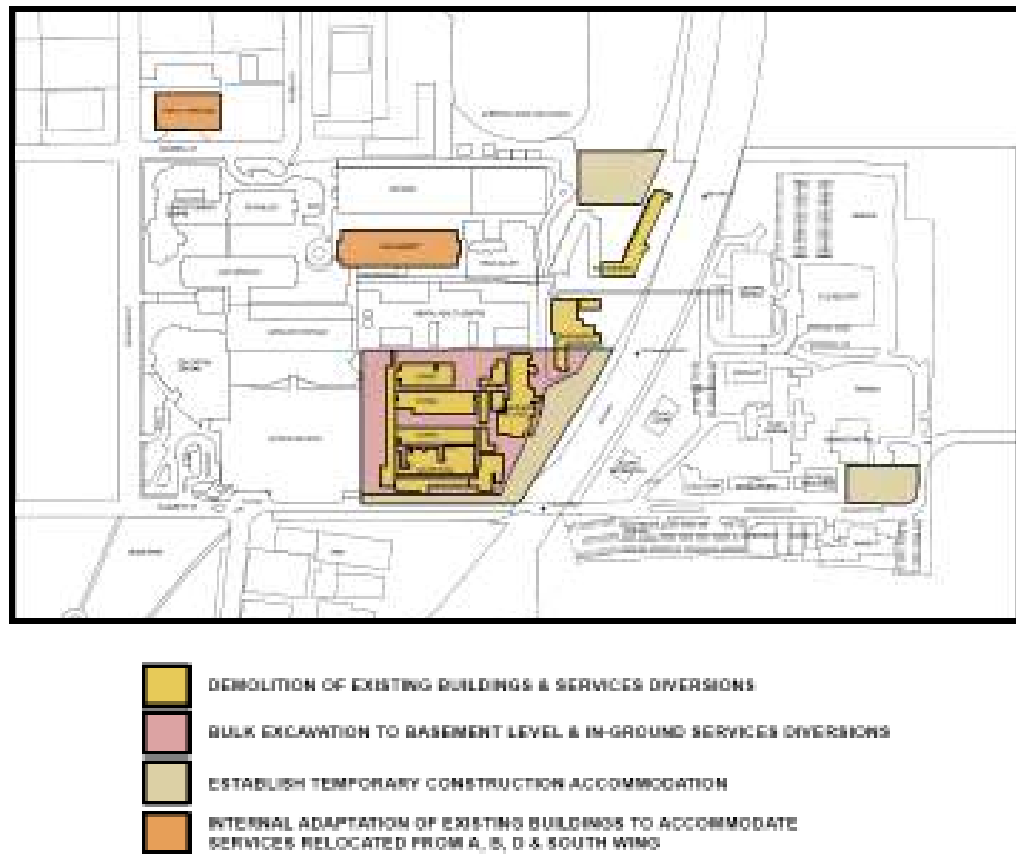
6.9.5 The proponent is committed to ESD principles and has reinforced this through the Statement of Commitments and the Environmental Assessment which explores key ESD opportunities, including mechanical, electrical and hydraulic systems as well as architectural designs to ensure high environmental performance is delivered.

## 6.10 Early Works

6.10.1 Early works approval is sought concurrently with the concept plan approval. Works proposed are illustrated in Figure 14 below.

6.10.2 The works proposed include:

- Identification, diversion, relocation and reconnection of existing reticulated services (in-ground and above ground) that may be affected by the proposed demolition of existing buildings and / or earthworks excavation.
- Archaeological assessment and investigations, preparation and implementation of a heritage management plan for monitoring, removal, archiving and protection of materials as required for building demolitions and / or excavation.
- Demolition of South Wing, B Wing, D Wing, Workshops and Linen (corporate services linen and associated workshops), Engineering (engineering offices, workshops and sheds), interconnecting corridors and Ron Dunbier – East Wing shaded yellow in Figure 15.
- Construction of new facades / service wall for the western wing of the existing Ron Dunbier accommodation building.
- Internal adaptation of existing buildings to accommodate dislocated services (as a result of demolitions).
- Bulk excavation.
- Identification, monitoring and removal of hazardous materials following further detailed hazardous material and soil contamination investigations.
- Structural works to ground level including piling, piers, slabs and columns.



**Figure 14: Early Works Package**

- 6.10.3 Whilst the blanket approval of bulk excavation and structural works is not an ideal planning outcome, the Department supports the inclusion of these activities in the early works package on the basis that the Government's Budget Committee has approved the proposal, the project has been declared a critical infrastructure project, and the proponent has appointed a Managing Contractor to commence works. The latter, in particular will ensure minimal risk as the contractor will be responsible for project managing both design components (i.e. below and above ground works).
- 6.10.4 The proponent's Statement of Commitments for the early works package are extensive (**Appendix B**) and therefore only a limited number of conditions are recommended for any approval.
- 6.11 Future Approvals**
- 6.11.1 The proponent has requested the flexibility to have proposals assessed under Part 5A of the EP&A Act with Liverpool City Council as the consent authority or Part 3A of the EP&A Act with the Minister as the approval authority. The introduction of a \$10 million monetary threshold is proposed to determine assessment and approval roles.
- 6.11.2 The Department sees no clear reason why the Minister should depart from the \$15 million monetary threshold identified in the Major Projects SEPP. The Concept Plan assessment has determined that the State significant issues have been addressed by the Concept Plan assessment and the Department is of the view that no additional planning value / outcomes could be delivered through the introduction of the \$10 million threshold as requested by the proponent.
- 6.11.3 Furthermore, the Department is satisfied that the proposed approval articulates clearly enough the parameters for future project applications that both the proponent and the assessment authority (either the Department or Council will be required to consider).
- 6.11.4 The proponent has acknowledged that for Part 3A development, delegation of the Director General's

assessment functions could be explored. The Department concurs with this view however it considers that any delegation should be explored on a project by project basis, if and when Part 3A projects are lodged for assessment. The matter does not require resolution at this stage and does not preclude approval of the concept plan or project approval for early works.

6.11.5 The proponent has submitted an indicative staging plan to specify the scope of works that could comprise future applications:

- Stage 1 – construction of new clinical services block, cancer services centre expansion, physical resources building and site works.
- Stage 2 – west campus infrastructure including north link road and rail crossings and approaches.
- Stage 3 – east campus works including central energy and engineering services expansion, child care expansion and multi-deck car park.
- Stage 4 – research building and Campbell Street overhead pedestrian bridge.
- Stage 5 – Women and children's health, aged care, allied health and mental health expansion.
- Stage 6 – community health services development on TAFE car park site and Elizabeth Street overhead crossing.
- Identification, diversion, relocation and reconnection of existing reticulated services (in-ground and above ground) that may be affected by the proposed demolition of existing buildings and / or earthworks excavation.
- The proponent has indicated that the medi-hotel and pathology expansion would be the subject of development applications to Liverpool City Council.

6.11.6 Whilst approval of this staging plan is not being sought, the Department is of the view that a clearer understanding of future project delivery is required particularly to understand how individual components of the Hospital will function and confirm progressive bed and car parking numbers. Accordingly, the recommended modifications require the submission of a staging plan to the Department.