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Wellington 6141

Ref: 10780.010
3 September 2018

Issued via email: Alistair@urbanp.co.nz

Dear Alistair

**Southern Cross Hospital Expansion, Newtown
Transport Response to Section 92 Request for Further Information**

Southern Cross Hospital Ltd (“Southern Cross”) lodged an application for resource consent (SR 414740) to expand their current operation at 90 Hanson Street, Newtown. Wellington City Council has subsequently issued a Section 92 request for further information, of which a number of items relate to traffic and transport matters. A response to each of these is provided in turn below.

1. Item 1 Information Request

Clarify what the existing parking occupancy and duration demand is between staff and visitors.

The Transportation Assessment Report (“TAR”) provided as part of the application identifies the observed parking demand for the existing Hospital activity peaked at 98 spaces around 11am. At present, on-site parking is currently allocated approximately 50/50 between staff and visitors. Further interrogation of the parking data during the peak confirms that demand was measured at around 55% staff and 45% visitors, indicating the current allocation aligns well with the demands experienced. Whilst respective staff and visitor demands fluctuate throughout the day, the current allocations and demands serve to provide an indication of the proportional split around the daily peak period.

2. Item 2 Information Request

Clarify how many of the on-site parking spaces are proposed to be allocated to long and short stay parking spaces and what the demand is for each respectively.

Future on-site parking will be allocated on a similar basis to the existing arrangements, with some flexibility around a proportion of on-site spaces being shared between staff / visitors to enable efficient maximum utilisation of the resource.

Taking account of the future parking demand forecast within the TAR for the proposed expansion, then some 75 staff and 62 visitor car parks is expected to be generated by the site during the peak. With the proposed arrangements providing a total of some 117 on-site carparks, up to 11 staff and 9 visitor vehicles could be expected to utilise the available kerbside parking at the busiest times.

3. Item 3 Information Request

Clarify the details of the on-street parking surveys and clarify the usage for the different types of parking restrictions.

Section 7.1.1 of the Transportation Assessment Report¹ (“TAR”) provides details of the parking occupancy survey undertaken to identify demand generated by the current hospital activity, including time of day and extent of the survey study area.

The observed on-street parking occupancy data has been interrogated further to separately identify occupancy within the Residents² and Unrestricted (‘All day’) spaces, as illustrated below.



On-street parking occupancy

The occupancy levels recorded within the allocated resident’s carpark indicate there is significant availability throughout the course of the day, ensuring a good level of amenity is maintained for these users.

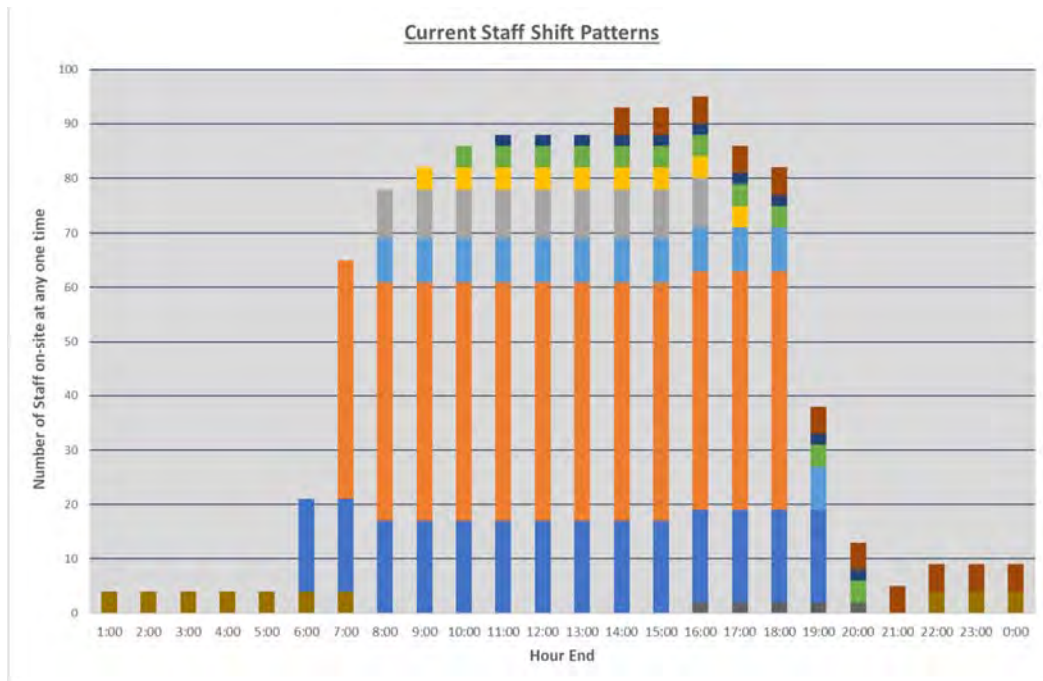
4. Item 4 Information Request

Clarify how many staff are on-site at different hours of the day and week including change over periods for staff.

The graph below illustrates the number of staff on-site at any one time, disaggregated by shift (there are 10 different shifts in total, with each represented by a different colour).

¹ Prepared by TDG (now Stantec) and dated 26 April 2018

² It is noted that the resident’s carpark along the eastern side of Hanson Street adjacent to the site enable non-residents to park within these spaces for up to two hours, between 8am and 5pm Monday to Friday.



Existing Staff Shift Patterns

At present, a maximum of around 95 staff may typically be on-site during the busiest part of the day (around 4pm). With the hospital activity generally operating as a daytime medical facility, only a small number of staff are on-site overnight. With multiple shift periods, there are no significant shift overlaps of the kind that can occur at other medical / hospital sites which include large day/night shift changeovers.

The number of full time equivalent staff is expected to increase by around 30 with the proposed expansion.

5. Item 5 Information Request

The applicant should confirm how many generated trips enter and exit the site during morning and evening peak and change over periods for staff.

As described in the response to Item 4 above, there are no significant shift changeover periods at this site.

Development site traffic generation during the typical AM and PM commuter peak periods will predominantly involve staff trips; peak patient visiting times are generally focused around mid-morning and mid-afternoon. Using the existing staff numbers described in response to Item 4 above, and factoring them to take account of the new staff³ that will be added by the proposed expansion, the expected number of associated vehicle movements for those staff driving to the site⁴ along with forecast visitor trips, is set out in **Table 1** below for the AM and PM commuter peak hours.

³ Estimated at 30 full time equivalent staff (day time only)

⁴ Assumed that up to two thirds of staff members could potentially drive to the site

| Period | Total Staff Arriving & Departing | Vehicle Trips | | |
|--------------------|----------------------------------|--------------------------|---------------|-----------|
| | | Staff Trips ⁵ | Visitor Trips | Total |
| 6:00-7:00am | 60 | 40 | - | 40 |
| 7:00-8:00am | 18 | 12 | - | 12 |
| 8:00-9:00am | 5 | 3 | 15 | 18 |
| 4:00-5:00pm | 12 | 8 | 25 | 33 |
| 5:00-6:00pm | 5 | 3 | 15 | 18 |
| 6:00-7:00pm | 60 | 40 | - | 40 |

Table 1: Forecast AM and PM Network Peak Site Trip Generation

As shown, and given the shift patterns employed at the site, most staff will arrive or depart prior to and after the network traffic peaks. Taking account of visitor movements, then the forecast development site traffic is expected to generate around 18 trips during the typical commuter peak hours. Such traffic volumes are modest and are not of a quantum that is expected to have any significant operational impact on the safety or capacity of the adjacent road network.

6. Item 6 Information Request

Confirm the height clearance within both on-site parking spaces and confirm the height clearance for ambulances for this site.

The height clearances within each of the parking levels can be confirmed as:

- Lower Parking Level: 2.6m; and
- Upper Parking Level: 3.2m.

Height clearance for ambulances (2.8m) at the lower parking level drop-off area can therefore be achieved for the patient transfer ambulances operated by Southern Cross. Appropriate height limit signage will be installed at this entrance to the site, with taller vehicles able to service the site via the northern carpark.

7. Item 7 Information Request

Confirm the driveway gradient to the level 1 parking lot. The driveway gradient must not exceed 1:20 for 6m back from the property boundary.

The developed driveways design has necessarily had to be cognisant of achieving a suitable level grade between the drop-off area and the floor level of the existing main entrance (i.e. to provide an accessible route between the drop-off and the existing hospital building level). The gradient of the driveway at the entrance to the lower parking level is illustrated within the detail of the plans provided at **Appendix A**. As shown, the gradient at the entry driveway can be confirmed at 1:13 (downgrade into the site) and on the exit driveway gradient at 1:11 (downgrade to the footpath).

These gradients deviate from the 1:20 measured from the property boundary for the first 6 metres into the site, as identified in AS/NZS2890.1. However, the Standard goes on to describe that grades of up to 1:8 are considered appropriate in instances where the driveway slope is a downgrade; where the user class is 1, 1A or 2; and where the access connects to a Local Road and serves a carpark of not more than 100 spaces. In essence, the issue of gradient here is to ensure that drivers exiting a site have adequate forward inter-visibility to pedestrians

⁵ Assumed that up to two thirds of staff members could potentially drive to the site

on the footpath i.e., if the slope is an upgrade then driver sightlines may be limited if the vehicle bonnet is elevated above the line of the adjacent footpath, which is not the case in this instance given the downgrade. With the exception of user class the exit driveway design satisfies these caveats, and provides a shallower grade than the 1:8 specified.

Overall, the alignment through the drop-off area serves to limit vehicle operating speeds and the urban design elements included at the carpark exit appropriately delineate pedestrian routes and provide good forward inter-visibility to the adjacent Hanson Street footpath. The design as proposed is therefore not considered to introduce safety effects that are any different from achieving a 1:20 grade.

8. Item 8 Information Request

Show visibility splays at all the vehicle crossings and between the driveway and pedestrian paths within the site. The proposed internal pedestrian paths must be defined clearly with complying visibility splays.

The plans provided at **Appendix B** illustrate the pedestrian visibility splays around the site (as green triangles), which satisfy the requirement of AS/NZS 2890.1.

9. Item 9 Information Request

Confirm the total volume of earthworks to be transported during construction activities.

Initial investigations into the quantum of earthworks required indicate that around 3,950m³ of material will need to be transported to / from site. This translates to around 570 truckloads, assuming a 12-tonne truck with a 7m³ capacity.

10. Item 10 Information Request

Plans should be re-submitted showing all dimensions of parking spaces and aisles and height clearance.

A full set of plans showing all parking space dimensions have been separately provided by the architects. Height clearances within the two parking levels are identified in Item 6 above.

11. Item 11 Information Request

The applicant has stated that the hospital currently leases 35 parking spaces at the nearby sports ground for the staff. The Applicant should clarify the address of this sports ground.

The spaces currently leased by the hospital are located within the southeast corner of the adjacent property, at 54 Hall Street, as illustrated below.



12. Item 12 Information Request

TDG should provide more information about their parking surveys referred to in their assessment such as location, size of the medical centres, types of medical services and on-site parking provision.

As described in the TAR, the parking occupancy survey undertaken at the existing hospital activity, along with prior parking surveys undertaken at the site to inform earlier expansion schemes, indicate a measured parking demand of some 3.6 spaces per 100m² GFA associated with consulting room activities.

In addition, TDG has also undertaken surveys of parking demand at Southern Cross sites elsewhere, including the North Harbour campus in Auckland. That site comprises healthcare, consultancy and ward beds. Detailed parking utilisation surveys identified the 2,674m² GFA healthcare consulting rooms generated a peak parking demand of 3.0 spaces per 100m² GFA. This rate, which is lower than that adopted within the TAR, serves to validate the appropriateness of the forecast parking demand for the proposed Newtown site expansion.

Moreover, the 3.6 spaces per 100m² GFA parking demand rate adopted for this latest development proposal aligns with that used for the previous application for expansion at the site, which was accepted by Council and consented.

In response to Council's Request for Further Information, we trust this response satisfactorily addresses the traffic and transport matters requiring further explanation.

Yours sincerely

TDG, now Stantec New Zealand

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Principal Transportation Planner

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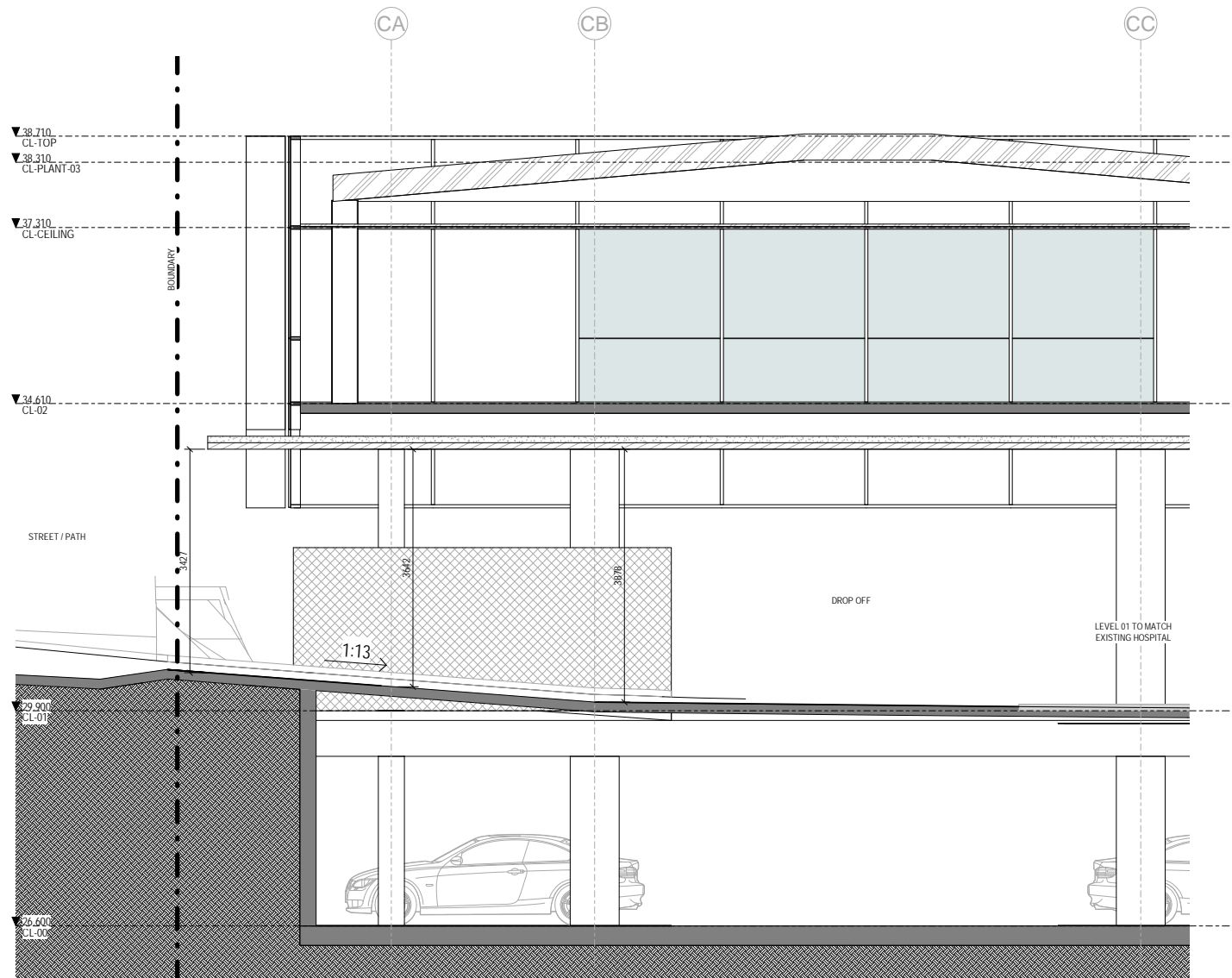
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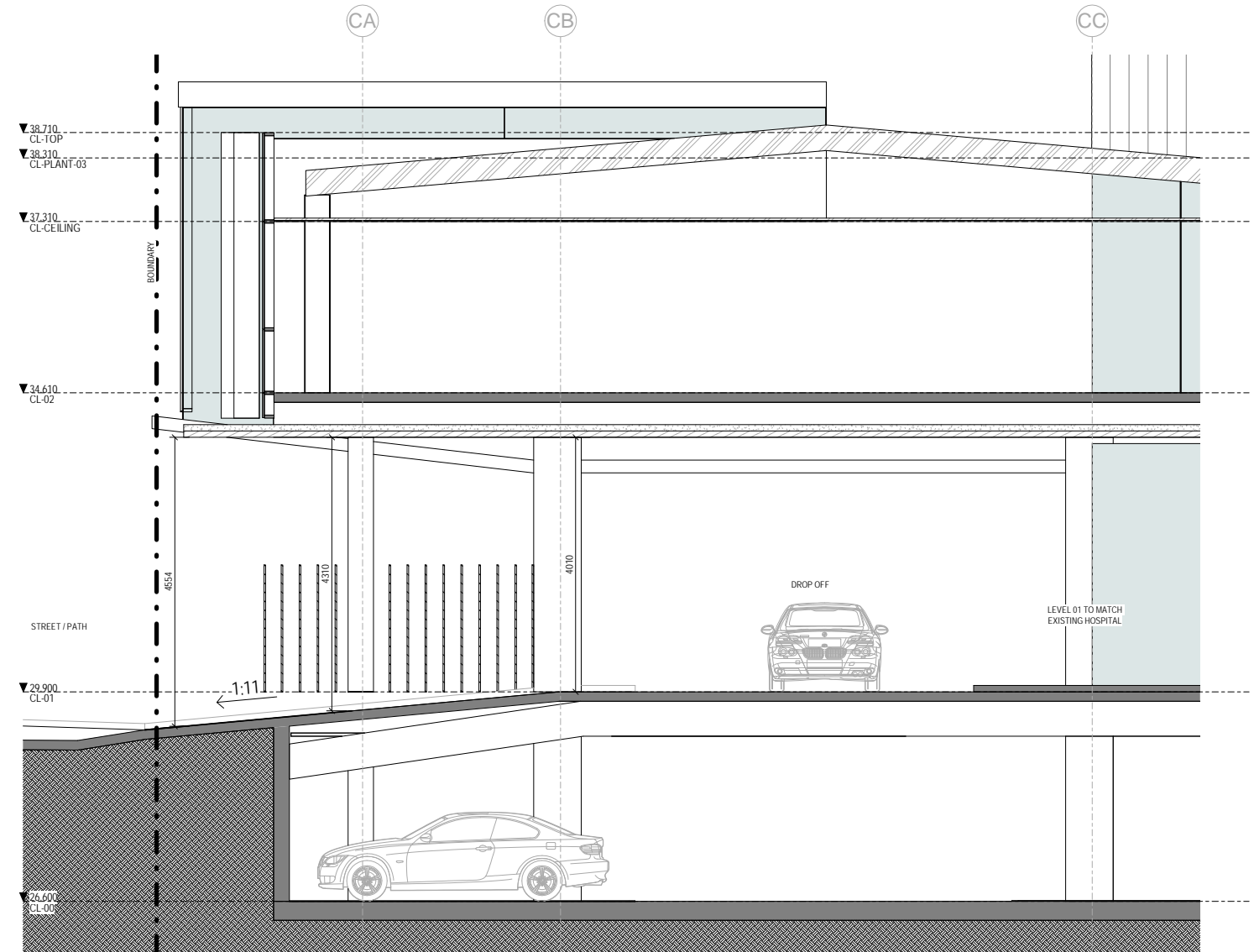
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Appendix A

Driveway Designs



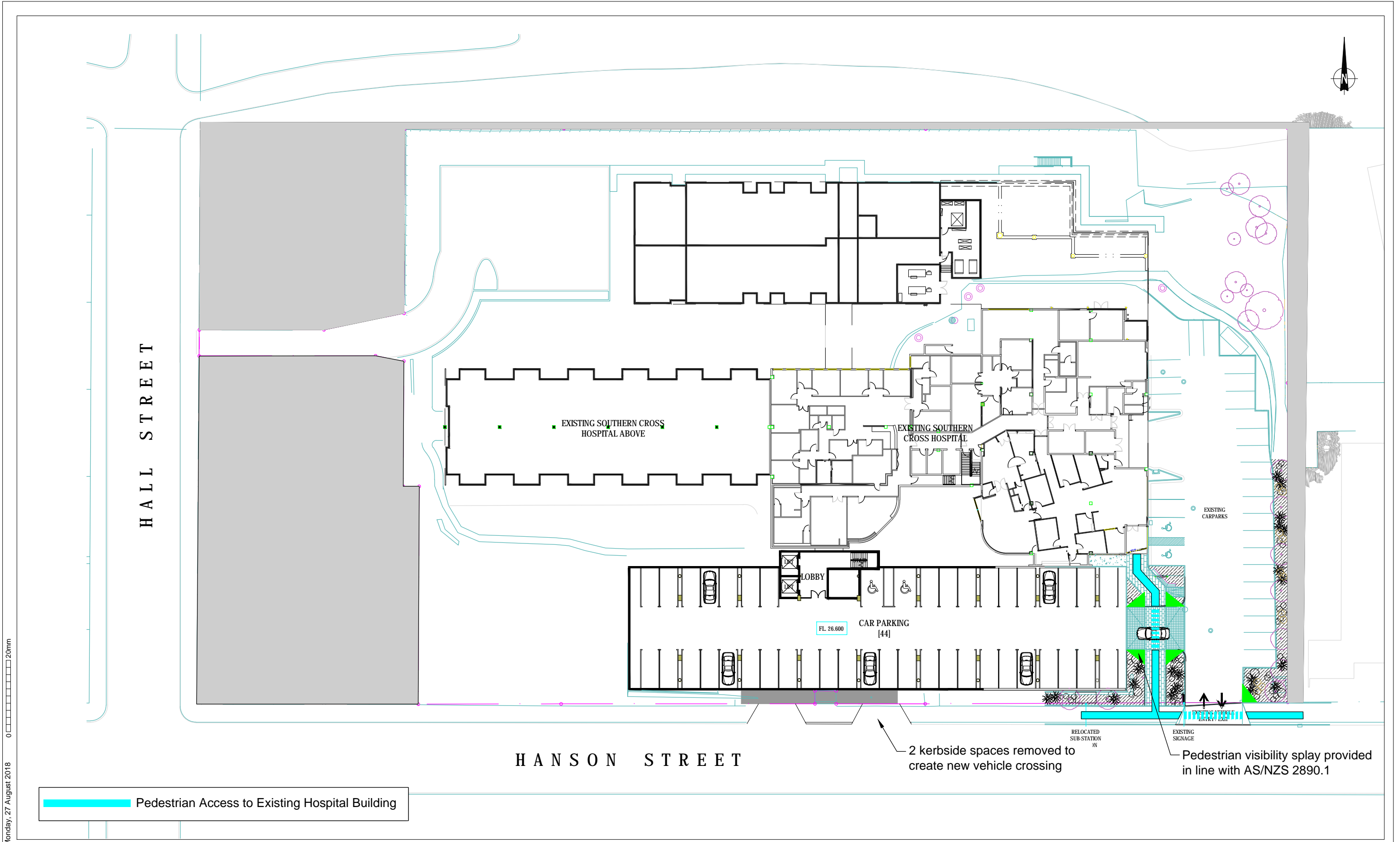
1 CROSS SECTION ENTRY
A00.006 1:50



2 CROSS SECTION EXIT
A00.003 1:50

Appendix B

Carpark Layouts



Monday, 27 August 2018 0 20mm

Pedestrian Access to Existing Hospital Building

| REVISION | DATE | DESCRIPTION |
|----------|----------|---|
| A | 06/03/18 | Base : A00-004-Proposed Site Plan-Level01 |
| B | 11/04/18 | Amended base incorporating 5.2m wide drop-off area |
| C | 24/04/18 | Updated Base : A00-003 Level00 & Level01 (24/04/18) |
| ---- | ---- | ---- |
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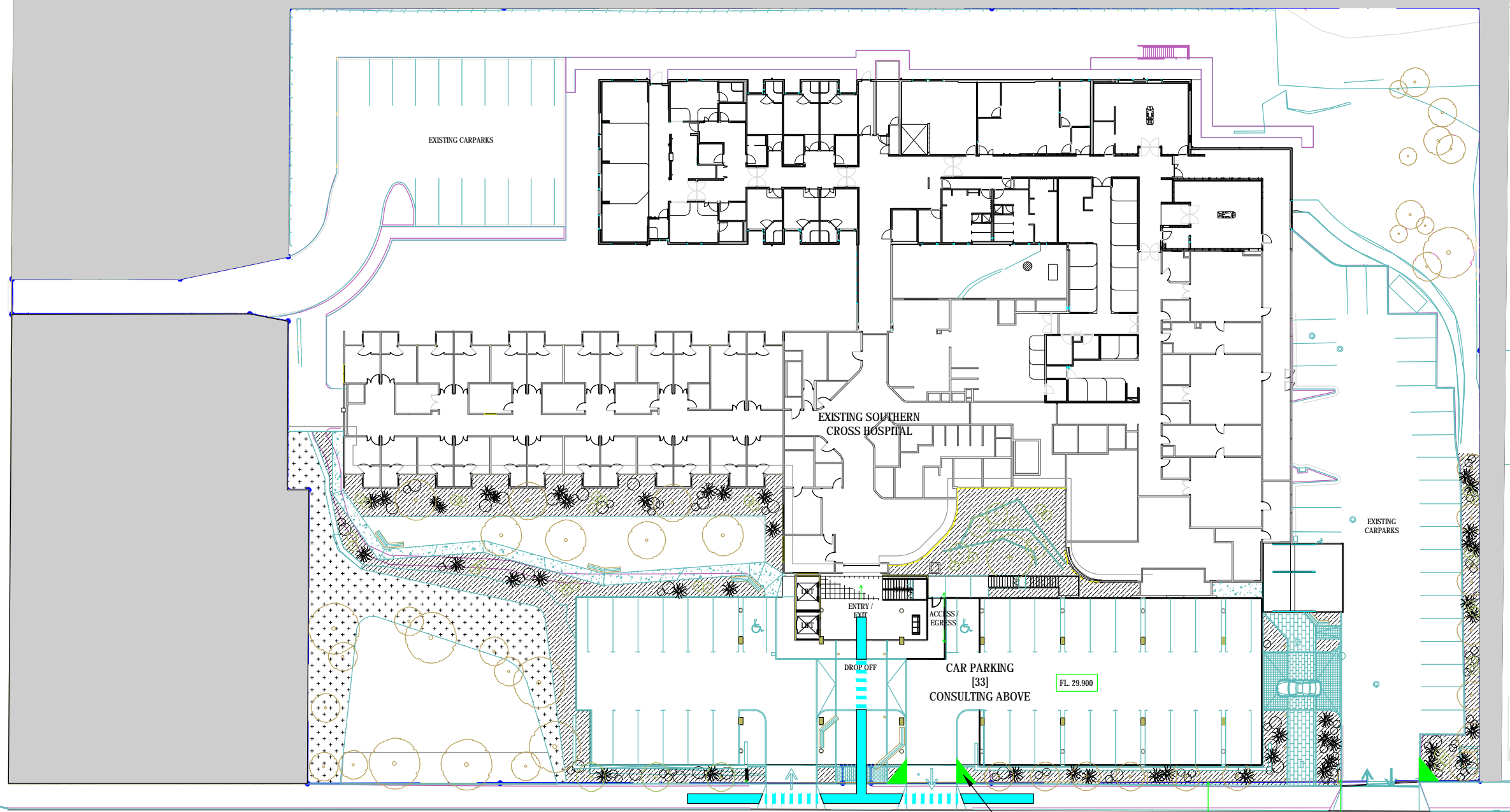
Southern Cross Hospital Expansion
Lower Level Parking Layout

DRAWN: MP
 DATE: 24/04/18
 SCALE: 1:500 @ A3
 DWG NO:10780N1D

TDG 4




HALL STREET



HANSON STREET

Pedestrian visibility splay provided in line with AS/NZS 2890.1

 Pedestrian Access to Existing Hospital Building

Monday, 27 August 2018 0 20mm

| REVISION | DATE | DESCRIPTION |
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| ---- | ---- | ---- |
| ---- | ---- | ---- |
| ---- | ---- | ---- |

Southern Cross Hospital Expansion
Upper Level Parking Layout

DRAWN: MP
 DATE: 24/04/18
 SCALE: 1:500 @ A3
 DWG NO:10780N1D

