



Oakdale West Estate Kemps Creek Lot 4A & 4B Civil Report

CLIENT/ GOODMAN

DATE/ SEPTEMBER 2022

CODE/ REP106-03-15-272

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APPENDICIES

Appendix A – Proposed Site Plans, Staging and Catchment Plans

Appendix B – List of Civil Works Drawings

Abbreviations

| | |
|-------|---|
| OWIE | Oakdale West Industrial Estate |
| WNSLR | Western North South Link Road (Now Compass Drive) |
| TfNSW | Transport for NSW |
| OEH | Office of Environment and Heritage |
| EP | Equivalent Persons |
| ET | Equivalent Tenancy |
| IWM | Integrated Water Management |
| GPS | Goodman Property Services (Aust) Pty Ltd |
| STP | Sewerage Treatment Plant |
| SWC | Sydney Water Corporation |
| WELS | Water Efficiency Labelling |
| EIS | Environmental Impact Statement |
| SSDA | State Significant Development Application |
| RMS | Roads and Maritime Service |
| EPLR | Erskine Park Link Road |

1 Executive Summary

AT&L has been engaged by Goodman Property Services (Aust) Pty Ltd to provide a Civil report to support the Development Application for the proposed industrial buildings 4A & 4B at the Oakdale West Industrial Estate (OWIE). The Development consists of two (2) new warehouse buildings each with ancillary office facilities, external hardstand spaces, staff carparking, landscaping and solar panels.

Approval is requested for the construction, operation and use, and fit-out of the buildings. Building 4A spans 16,785 sqm of warehouse space and 650 sqm of office space, creating a total Gross Lettable Area of 17,435 sqm. The building has a proposed ridge height of 13.7m. Building 4B spans 14,700 sqm of warehouse space and 850 sqm of office space, creating a total Gross Lettable Area of 15,550 sqm. The building has a proposed ridge height of 13.7m. 24/7 operations are proposed with a focus on warehouse and industrial use.

The proposed developments comply with MOD 11 of SSD 7348 Concept Plan that is currently with the Department of Planning & Environment for assessment. The applications will be submitted to Penrith City Council as a local council development application.

The proposed buildings form part of the larger OWIE which comprises 154 hectares of land within the Western Sydney Employment Area (WSEA) and is owned by a Joint Venture (JV) between Goodman and Brickworks Limited. The subject sites are benched, serviced and ready for aboveground construction. SSD 7348 approved the infrastructure to these development pads.

For the purpose of this report, it is assumed that the infrastructure stage works per SSD 7348 are approved and completed. This includes but not limited to; Bulk earthworks, Access Roads, Services, Stormwater Basins, Stormwater system and connection into each lot.

This development application encompasses the planned phase of works on the Oakdale West site, specifically on-lot works associated with Lot 4A and Lot 4B. The on-lot works include:

- Proposed detailed earthworks to accommodate the building and external levels
- Proposed stormwater (piped) system and connection to drainage stub provided in the infrastructure works.
- Proposed overland flow path to relevant basin, outlined in SSD 7348. Lot 4A and Lot 4B drain to Basin 4.
- Proposed hardstand and carpark pavement
- Proposed erosion and sediment controls

This report is prepared to satisfy condition C11 with SSD 7348:

Future DAs shall demonstrate the design of the warehouses, offices and hardstand areas are consistent with (or the latest revision of) the:

- (a) Civil, Stormwater and Infrastructure Services Report, prepared by AT&L, dated October 2018; and*
- (b) Flood Impact Assessment: Oakdale West Estate, prepared by Cardno, dated 27 March 2017.*

This report is to be read in conjunction with AT&L's latest civil report prepared for SSD 7348, which is entitled 'REP005-01-15-272-MOD 7 Civil Report'.

The site is located in the Penrith City Council Local Government area. Under SSD 7348, precinct based bio-retention basins will be provided as part of the infrastructure works. The basins are designed to both attenuate stormwater flows and treat the nutrients to Penrith City Council treatment rates. The precinct based Site Detention is designed to mitigate post development flows to pre-developed flows for peak Average Reoccurrence Interval (ARI) events and has been sized to ensure that for all storm events up to and including the 1% AEP event.

2 Introduction

The aim of the report is to assess the potential impacts of the proposed development with respect to stormwater and has been prepared in accordance with Penrith City Council current design guidelines and the relevant Australian Standards.

AT&L has been engaged by Goodman Property Services (Aust) Pty Ltd to provide a Civil Report to support the Development Application for the proposed industrial buildings 4A & 4B at the Oakdale West Industrial Estate (OWIE).

The Development consists of two (2) new warehouse buildings each with ancillary office facilities, external hardstand spaces, staff carparking, landscaping and solar panels.

Approval is requested for the construction, operation and use, and fit-out of the buildings.

Building 4A spans 16,785 sqm of warehouse space and 650 sqm of office space, creating a total Gross Lettable Area of 17,435 sqm. Building 4A has a proposed ridge height of 13.7m.

Building 4B spans 14,700 sqm of warehouse space and 850 sqm of office space, creating a total Gross Lettable Area of 15,550 sqm. Building 4B has a proposed ridge height of 13.7m.

24/7 operations are proposed with a focus on warehouse and industrial use.

The proposed developments comply with MOD 11 of SSD 7348 Concept Plan that is currently with the Department of Planning & Environment for assessment.

The applications will be submitted to Penrith City Council as a local council development application.

The proposed buildings form part of the larger OWIE which comprises 154 hectares of land within the Western Sydney Employment Area (WSEA) and is owned by a Joint Venture (JV) between Goodman and Brickworks Limited.

The subject sites are benched, serviced and ready for aboveground construction. SSD 7348 approved the infrastructure to these development pads.

2.1 Scope of Report

This report generally discusses the design philosophy behind the following components of the Stormwater Management design for Oakdale West Industrial Estate (OWIE):

- Stormwater Management
 - Infrastructure Biodiversity and Bioretention Basin
 - Piped and Overland Flows
 - Water Balance across the site
- Erosion and Sediment Control
- Pavement
- Site Services

The proposed Lot 4A is bound by the future Southern Link Road to the north, Lot 4B to the northeast, Lot 4E to the east, and Lot 44 DP708347 to the south.

The proposed Lot 4B is bound by the future Southern Link Road to the north, Road No. 6 to the northeast (now called Cuprum Close), Lot 4E to the east, and Lot 4A to the south.

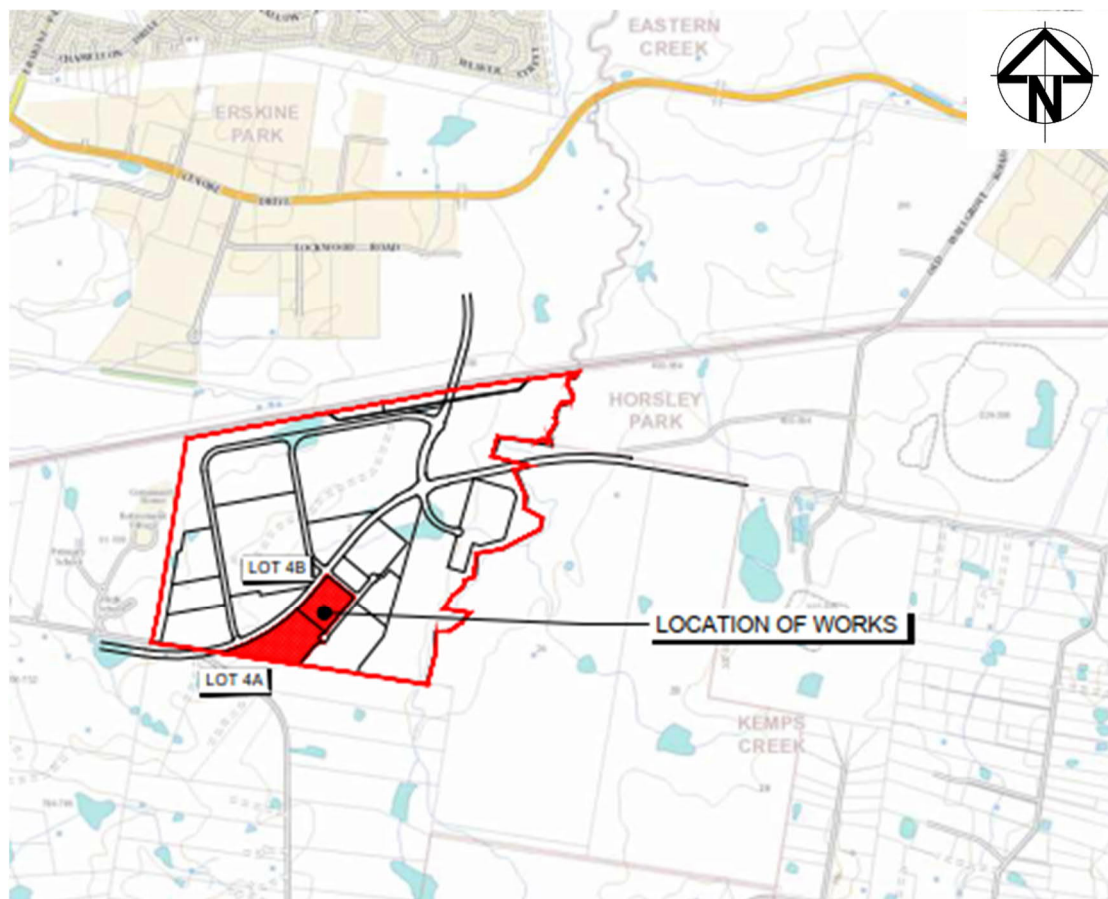


Figure 1 – Locality Plan

3 Stormwater Management

3.1 The Existing Site

For the purpose of this report, it is assumed the infrastructure stage works are approved and works completed. This includes but not limited to; Bulk earthworks, Access Roads, Services, Stormwater Basins, Stormwater system and connections into lots. The works are detailed in Stage 1 consent, SSD 7348.

Refer to Drawing C1087 within Appendix A for a post-development stormwater catchment plan indicating the location of basins and catchments provided in the infrastructure stage.

3.2 Proposed Site Stormwater Drainage

Lot 4A and Lot 4B are a part of a larger catchment which ultimately discharges into Bio-Retention Basin No.4 as shown in Appendix A. For additional details on Basin 4, refer to 'REP005-01-15-272-MOD 7 Civil Report' submitted and approved under SSDA 7348.

- Lot 4A is approximately 4.73Ha. The proposed stormwater discharge point is located to the northeast of Lot 4A. An existing stormwater stub is provided into Lot 4A for connection into stormwater system contained within the Right of Way 01 (constructed under SSDA 7348). A GPT will be provided to capture the gross pollutants generated within Lot 4A before discharging to Right of Way 01.

- Lot 4B is approximately 2.61Ha. The proposed stormwater discharge point to the northeast of Lot 4B. An existing stormwater stub is provided into Lot 4B for connection into the stormwater system within Road No. 6 (now called Cuprum Close). A GPT will be provided to capture the gross pollutants generated within Lot 4B before discharging into Road No.6.

Refer to the Civil Drawings for layout and details for the proposed stormwater network across the site.

3.3 Council Requirements, SSD Consent Conditions & Recommendations

This report is prepared to satisfy condition C11 with SSD 7348, which states:

Future DAs shall demonstrate the design of the warehouses, offices and hardstand areas are consistent with (or the latest revision of) the:

- (a) *Civil, Stormwater and Infrastructure Services Report, prepared by At&L, dated October 2018; and*
- (b) *Flood Impact Assessment: Oakdale West Estate, prepared by Cardno, dated 27 March 2017.*

All estate level stormwater drainage for the OWIE development is designed to comply with the following:

- Penrith City Council Design Guidelines for Engineering Works;
- Penrith City Council Water Sensitive Urban Design (WSUD) Policy December 2013; and
- C3 Water Management DCP.

A summary of the design requirements adopted is listed below:

- All stormwater drainage within the Lot 4A and Lot 4B will be the responsibility of Goodman;
- Finished Floor Levels (FFL) of proposed buildings within the precinct (separate approval) to have minimum 500mm freeboard to 1% AEP overland flows; and
- Gross pollutant trap (GPT) will be installed within Lot 4A and Lot 4B on the final downstream stormwater pit prior to discharging. As these GPT's will be located on-lot they will be owned and maintained by Goodman. The GPT will capture 90% of Gross Pollutants from Lot 4A and Lot 4B as per the PCC WSUD guidelines.

Rainwater tanks are desirable for re-use for irrigation, toilet and other non-potable water uses. Rainwater tank size is determined in accordance with the Penrith City Council C3 Water Management DCP to meet 80% of non-potable demand for irrigation and toilet flushing. Refer to Section 4 of this report for a more detailed description on rainwater harvest tanks.

3.3.1 Modelling Software

DRAINS modelling software has been used to calculate the Hydraulic Grade Line (HGL) of the estate level stormwater pipes. DRAINS is a computer program used for designing and analysing

urban stormwater drainage systems and catchments. It is widely accepted by Council's across NSW as the basis for stormwater design and has been confirmed by Penrith City Council as the preferred stormwater software analysis package.

MUSIC modelling software will be used to evaluate the non-potable water from rainwater tanks once the number to toilets, roof and gutter design, and landscape irrigation needs are finalised. For a detailed description of the MUSIC modelling refer to Section 4 of this report.

3.3.2 Hydrology

- Pipe drainage shall be designed to accommodate the 5% AEP storm event;
- The combined piped and overland flow paths shall be designed to accommodate the 1% AEP storm event;
- Where trapped low points are unavoidable and potential for flooding private property is a concern, an overland flowpath capable of carrying the total 1% AEP storm event shall be provided. Alternatively, the pipe and inlet system may be upgraded to accommodate the 1% AEP storm event;
- Rainfall intensities shall be as per the Intensity-Frequency-Duration table in accordance with the Australian Rainfall and Runoff (AR&R) volume 2;
- Times of concentration for each sub catchment shall be determined using the kinematic wave equation;
- Runoff coefficients shall be calculated in accordance with AR&R. The fraction impervious shall be determined from analysis of the sub catchments;
- Flow width in gutter shall not exceed 2.5m for the minor design storm event;
- Velocity depth ratios shall not exceed 0.4 for all storms up to and including the 1% AEP event;
- Inlet pits to be spaced so that flow width shall not exceed 80l/sec;
- Bypass from any pit on grade shall not exceed 15% of the total flow at the pit; and
- Blockage factors of 20% and 50% shall be adopted for pits on grade and at sags respectively, with these blockage factors in-built to each pit within the DRAINS model.

3.3.3 Hydraulics

- A hydraulic grade line HGL design method shall be adopted for all road pipe drainage design. The HGL shall be shown on all drainage long sections;
- The minimum pipe size shall be 375mm diameter RCP;
- Maximum spacing between pits shall not exceed 75m;
- The minimum pipe grade shall be 0.5%;
- All pipes shall be Rubber Ring Jointed unless noted otherwise;
- The minimum cover over pipes shall be 450mm in grassed areas and 600mm within carriageways;
- Where minimum cover cannot be achieved due to physical constraints the pipe class shall be suitably increased;
- All trafficable shall be Reinforced Concrete Pipes or Fibre Reinforced Cement equivalent;
- The pipe friction coefficients to adopted shall be:

| Materials | Mannings – n | Colebrook-White – k | Min. Pipe Class |
|-----------|--------------|------------------------|-----------------|
|-----------|--------------|------------------------|-----------------|

| | | | |
|-----|-------|------|---|
| RCP | 0.012 | 0.6 | 3 |
| FRC | 0.01 | 0.15 | 3 |

Table 1 – Pipe Details

- All pipes classes shall be designed for the ultimate service loads and where applicable, construction loads will be designed for;
- Pipes discharging to the overland flow path shall adopt a minimum tailwater level equivalent to respective overland flow level;
- Pit Loss coefficients shall be calculated in accordance with Missouri Charts;
- A minimum 150mm freeboard shall be maintained between pit HGL and pit surface levels for the minor storm event;
- Overland flowpaths shall maintain a minimum of 500mm freeboard to all habitable floor levels; and
- Pits deeper than 1.2m shall contain step irons at 300 mm centres.

3.3.4 Catchments

A Stormwater Catchment Plan for Lot 4A and Lot 4B, and flow paths into Bio-retention Basin No. 4 are shown in Appendix A.

3.3.5 Overland Flows

Overland flows within the hardstand area and carpark have been designed to be safely conveyed to inground drainage for all storms above the 5% AEP up to 1% AEP.

All flow widths and velocities are design in accordance with the Penrith City Council Design Guidelines for Engineering Works.

Stormwater pipes from all recessed docks are design for the 1% AEP.

3.4 Conclusion

As highlighted in the above section, all stormwater drainage within Lot 4A and 4B development has been designed in accordance with the Penrith City Council Engineering Guidelines. This includes design of the stormwater network (pits and pipes) and GPTs.

Finished Floor Levels (FFL) to have minimum 500mm freeboard to 1% AEP overland flows.

4 Water Balance

4.1 General

The water balance was simulated using a water cycle management model as part of the MUSIC Model to allow the evaluation of various elements of the water cycle to be assessed at differing stages in the development.

Penrith City Council WSUD policy (July 2015) stipulates the rainwater tanks to meet 80% of non-potable demand including outdoor use, toilets and laundry.

4.2 Water Balance Objective

Potable water supplies in the Sydney area are in recognised short supply with projected population increases, potential climate change and periods of extended drought and any development in sources of the Sydney region places increasing demands on an already reduced water supply. As a result, government bodies, together with Sydney Water have encouraged sustainable development by the implementation of an integrated approach to water cycle management (potable water, sewage, stormwater and rainwater) to minimise demands of potable water supplies.

Whilst opportunities for Water Reuse include such initiatives as regional stormwater harvesting, black water recycling and recycled water, this development is limited to rainwater collection and reuse on an individual lot by lot basis.

Once the number to toilets, roof and gutter design, and landscape irrigation needs are finalised, we will use MUSIC to establish an estimated tank size for each lot within the development and demonstrated the volume of water reuse possible and provide a more sustainable servicing solution.

4.3 Water Balance End Uses

AT&L has identified the following water demand end uses to be required across the development:

- Toilet and urinal flushing; and
- Landscape watering (outdoor garden use).

The proportion of total water demands for irrigation and toilet flushing within the development could be met with the use of recycled roof water drained directly into a rainwater tank. The tank should be sized to ensure the site meets the requirement to meet the 80% non-potable reuse requirement. This is in accordance with Penrith City Council's WSUD policy.

4.4 Total Site Demands and Non-Potable Re-use Rates

The following rates were adopted from the Penrith City Council WSUD technical Guidelines for Industrial and Commercial developments (Section 4.5):

- 0.1 kL/day per toilet or urinal;
- 0.4 kL/year/m² as PET-Rain for Sprinklers; and
- 0.3 kL/year/m² as PET-Rain for Subsurface irrigation.

4.5 Rainwater Reuse

The use of rainwater collected in rainwater tanks from runoff on the roofs of the warehouse roofs provides a valuable alternative to potable water for a variety of non-potable end uses, such as vehicle washing, air conditioning cooling, and toilet flushing and watering.

We have assumed for this development, irrigation and toilet flushing will be plumbed to the rainwater tanks. Other uses such as truck washing maybe considered at the detailed design stage.

A rainwater tank model was constructed to simulate the rainwater tank operations and select the optimal rainwater tank size, in doing so, the following considerations were made:

- Rainfall received;
- Roof area or runoff area;
- Roof Wetting;
- First Flush; and
- Rainwater demands (by end use).

4.6 Rainwater Tank Model Assumptions

The rainwater tank model assumptions built into the scenarios assumed the following.

4.6.1 Rainfall Received

The rainfall runoff that could potentially be captured by the rainfall tank from the roof of each building was simulated individually for the 'dry', 'wet' and 'average' rainfall year within each scenario run.

4.6.2 Roof Wetting, First Flush Diversions and Overflow

While it is assumed that rainfall runoff has the potential to runoff 100% of the area of the roof into the rainwater tank, the proportion of rainfall that actually reaches the rainwater tank is affected by four factors:

- It is assumed that the initial 2mm of rainfall that falls on the roof is considered 'wetting', that is, potential rainfall runoff that is not captured by the rainwater tank, but is rather 'lost runoff' as evaporation or other;
- To prevent sediment and other pollutants entering the rainwater tank, a portion of the initial runoff from the roof is transferred to stormwater, this is known as the 'first flush'. The portion of water diverted as part of the first flush differs for each facility depending on the amount of pollution each roof is susceptible to;
- As the development is located in a predominantly light industrial area, where there may be potential for some roof pollution, a standard first flush volume of 1mm of runoff from across the roof area has been adopted; and
- Any roof runoff that exceeds the rainwater tank capacity is 'overflow' and is directed to the stormwater drainage system.

4.7 Conclusion

The use of rainwater harvest tanks and the design basis to size the tanks to ensure as a minimum, 80% of all non-potable water on each lot can be sourced from the tank, demonstrates a commitment to water recycling and minimising the usage of mains water.

This is in line with the industry best practise and the NSW State Government's objective of reducing the amount of potable (drinking) water consumed for non-potable uses.

5 Sedimentation and Erosion Control

5.1 Sedimentation and Erosion Control (Construction)

A Soil and Water Management Plan (SWMP) will be prepared in accordance with the NSW Department of Housing Publication titled: Managing Urban Stormwater – Soils and Construction (2004) for Lot 4A and Lot 4B.

The key objective of the SWMP are:

- Acknowledging the activities on a construction site which may contribute to erosion, sedimentation and water quality impacts;
- The implementation of industry best management practices to minimise adverse water quality and sedimentation impacts brought about through construction activities on waterbodies surrounding the work; and
- Establishment of processes that effectively manage erosion, sedimentation and water quality practices during the life of the project.

5.1.1 Design of Sediment and Erosion Control Measures

Suitable erosion and sediment controls shall be provided by the Contractor and maintained throughout all stages of works, including at completion of the bulk earthworks.

All design, documentation, installation and maintenance of sediment and erosion controls will be in accordance with the requirements of:

- Protection of the Environment Operations Act;
- Penrith City Council's specifications; and
- Office of Environment and Heritage's 'Managing Urban Stormwater: Soils and Construction. Landcom, (4th Edition) (The "Blue Book") Volume 1 and Volume 2.

Temporary sediment basin in Lot 4A and Lot 4B will be provided within the infrastructure stage associated with the SSD 7348 Stage 1 consent works. The basins are to be maintained throughout the construction phase of the on-lot works, until such time that the site has been suitably stabilised and the sediment basin is no longer required to meet the requirements of the Blue Book.

5.2 Site Inspection and Maintenance

The inspection and maintenance requirements outlined in this section must be carried out while either earthworks or quarrying is being conducted, and all areas re-established.

The Contractor will be required to inspect the site after every rainfall event and at least weekly, and will:

- Inspect and assess the effectiveness of the SWMP and identify any inadequacies that may arise during normal work activities or from a revised construction methodology;
- Construct additional erosion and sediment control works as necessary to ensure the desired protection is given to downstream lands and waterways;
- Ensure that drains operate properly and to affect any repairs;

- Remove spilled sand or other materials from hazard areas, including lands closer than 5 metres from areas of likely concentrated or high velocity flows especially waterways and paved areas;
- Remove trapped sediment whenever less than design capacity remains within the structure;
- Ensure rehabilitated lands have affectively reduced the erosion hazard and to initiate upgrading or repair as appropriate;
- Maintain erosion and sediment control measures in a fully functioning condition until all construction activity is completed and the site has been rehabilitated;
- Remove temporary soil conservation structures as the last activity in the rehabilitation.
- Inspect the sediment basin during the following periods:
 - During construction to determine whether machinery, falling trees, or construction activity has damaged and components of the sediment basin. If damage has occurred, repair it;
 - After each runoff event, inspect the erosion damage at flow entry and exit points. If damage has occurred, make the necessary repairs;
 - At least weekly during the nominated wet season (if any), otherwise at least fortnightly; and
 - Prior to, and immediately after, periods of 'stop work' or site shutdown.
- Clean out accumulated sediment when it reaches the marker board/post, and restore the original volume. Place sediment in a disposal area or, if appropriate, mix with dry soil on the site;
- Do not dispose of sediment in a manner that will create an erosion or pollution hazard;
- Check all visible pipe connections for leaks, and repair as necessary;
- Check all embankments for excessive settlement, slumping of the slopes or piping between the conduit and the embankment, make all necessary repairs;
- Remove the trash and other debris from the basin and riser; and
- Submerged inflow pipes must be inspected and de-silted (as required) after each inflow event.

5.2.1 Sediment Basin Maintenance

Stormwater within the settling zone should be drained or pumped out within 5 days (design time), if the nominated water quality targets can be met, to the satisfaction of the superintendent. Flocculation should be employed where extended settling is likely to fail to meet the objectives within the 5-day time period.

Flocculation is when flocculating agents are applied to the sediment basins causing the colloidal particles to clump into larger units or 'floc' that can either settle in a reasonable time or be filtered.

Refer to Appendix E4 of the Blue Book for flocculation methodologies and manufacturer's instructions for application rates, regarding the proposed sediment basins.

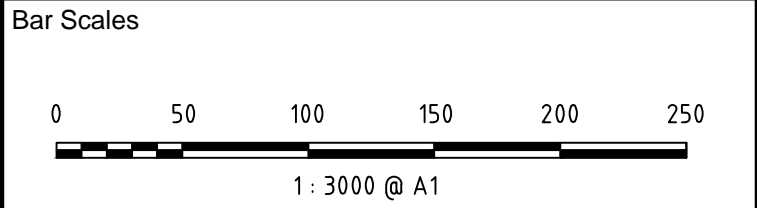
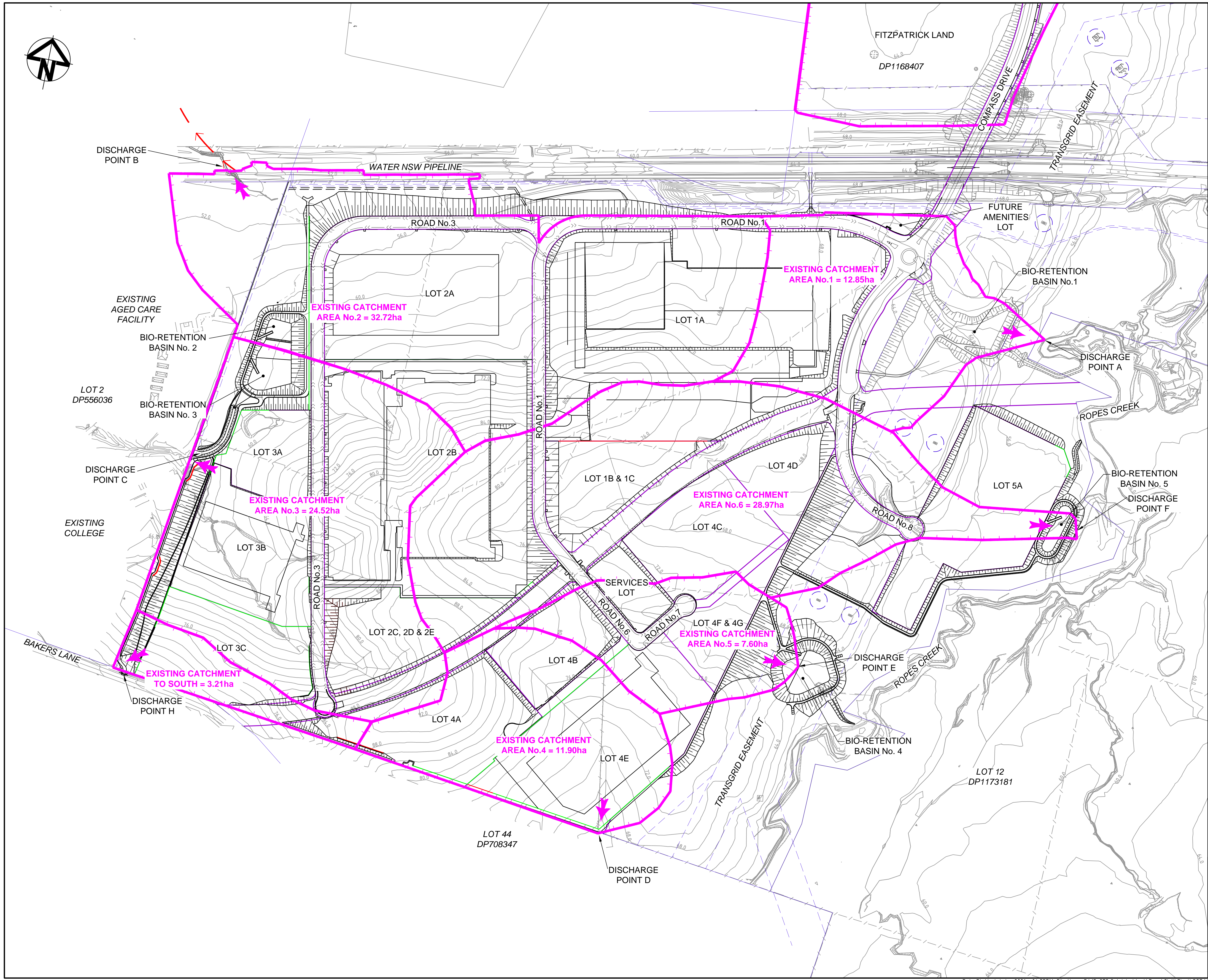
5.3 Conclusion

The erosion control measures proposed for the site will comply with the requirements of Penrith City Council Engineering Guidelines and in accordance with the latest revision AT&L infrastructure report.

A SWMP will ensure that the best management practice is applied to the development site in controlling and minimising the negative impacts of soil erosion.

Appendix A

Proposed Infrastructure Catchment Plans



| | | |
|-----|-------------------------------|----------|
| A11 | ISSUED FOR SSD APPROVAL MOD 7 | 04-06-21 |
| A10 | ISSUED FOR INFORMATION MOD 7 | 18-05-21 |
| A9 | ISSUED FOR SSD APPROVAL MOD 6 | 20-10-20 |
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| A7 | ISSUED FOR INFORMATION MOD 3 | 19-11-19 |
| A6 | ISSUED FOR INFORMATION MOD 3 | 12-11-19 |

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| NOT TO BE USED FOR CONSTRUCTION | | |

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| Scales | | 15-272-C1086.dwg | |
| 1 : 3000 | Drawn | GB | |
| | Designed | GB | |
| Height Datum | AHD | Checked | AM |
| Grid | MGA | Approved | AM |



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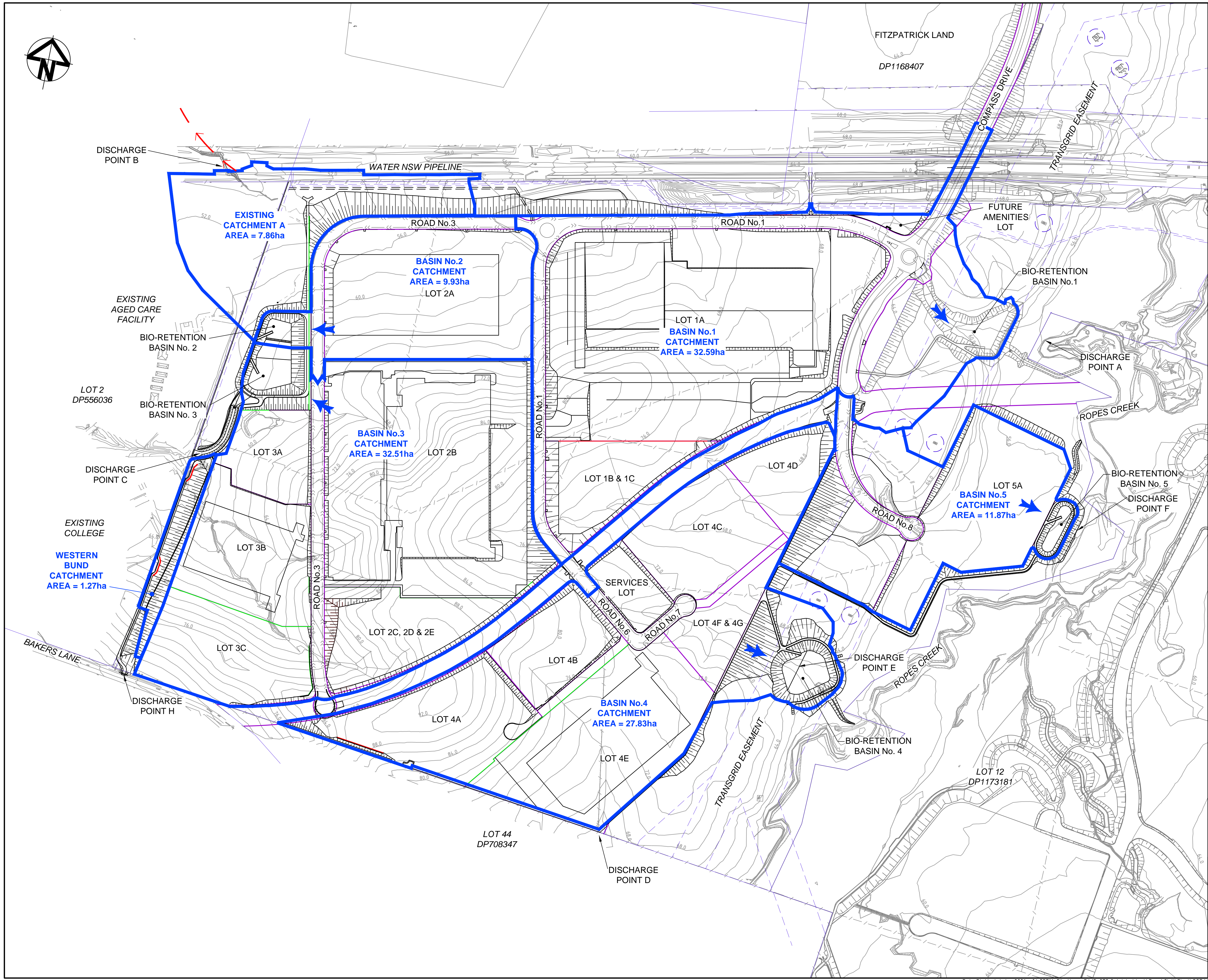
Project

PROPOSED INDUSTRIAL DEVELOPMENT OAKDALE WEST

Title

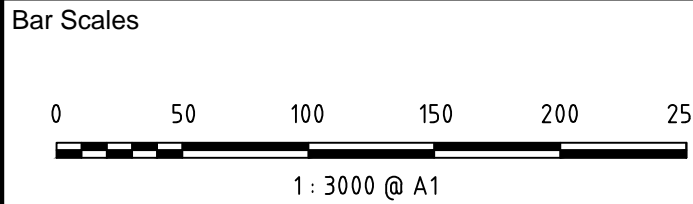
STORMWATER DRAINAGE CATCHMENT PLAN (PRE-DEVELOPED)

| | | |
|--------------|-------------|-------|
| Drawing No. | Project No. | Issue |
| 15-272-C1086 | 15-272 | A11 |



LEGEND

CATCHMENT BOUNDARY



| | | |
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| A11 | ISSUED FOR SSD APPROVAL MOD 7 | 04-06-21 |
| A10 | ISSUED FOR INFORMATION MOD 7 | 18-05-21 |
| A9 | ISSUED FOR SSD APPROVAL MOD 6 | 20-10-20 |
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| Scales | 1 : 3000 | 15-272-C1087.dwg | |
| | | Drawn | GB |
| Height Datum | AHD | Designed | GB |
| | | Checked | AM |
| Grid | MGA | Approved | AM |

Client

Civil Engineers and Project Managers

Level 7, 153 Walker Street
North Sydney NSW 2060
ABN 96 130 882 405
Tel: 02 9439 1777
Fax: 02 9923 1055
www.atl.net.au
info@atl.net.au

Project

PROPOSED INDUSTRIAL DEVELOPMENT OAKDALE WEST

Title

STORMWATER DRAINAGE CATCHMENT PLAN (POST-DEVELOPED)

| | | |
|--------------|-------------|-------|
| Drawing No. | Project No. | Issue |
| 15-272-C1087 | 15-272 | A11 |

Appendix B

AT&L – Drawing List of Civil Works

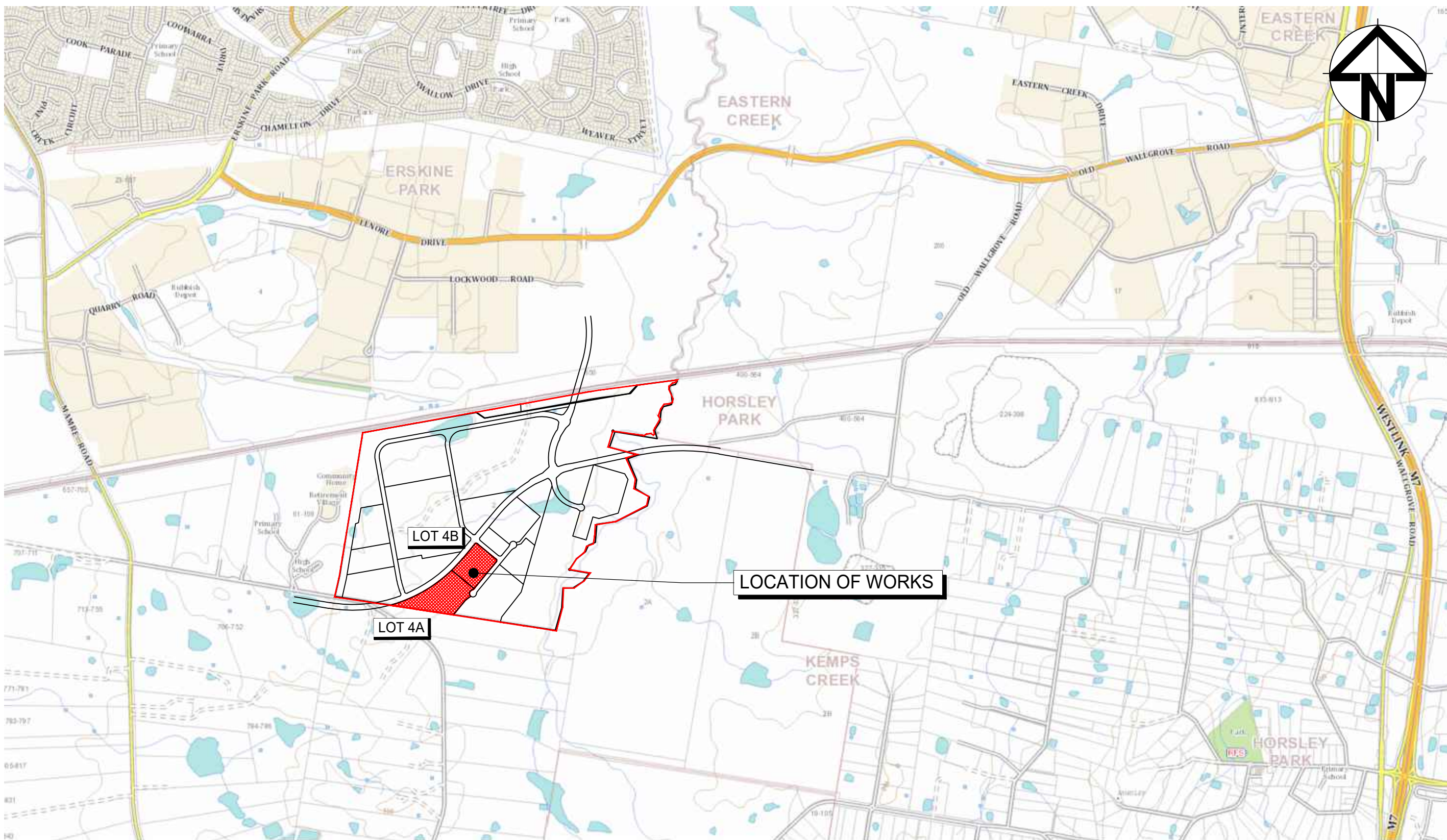
OAKDALE WEST

7800-SERIES LOT 4A & 4B

CIVIL WORKS PACKAGE



DEVELOPMENT APPLICATION

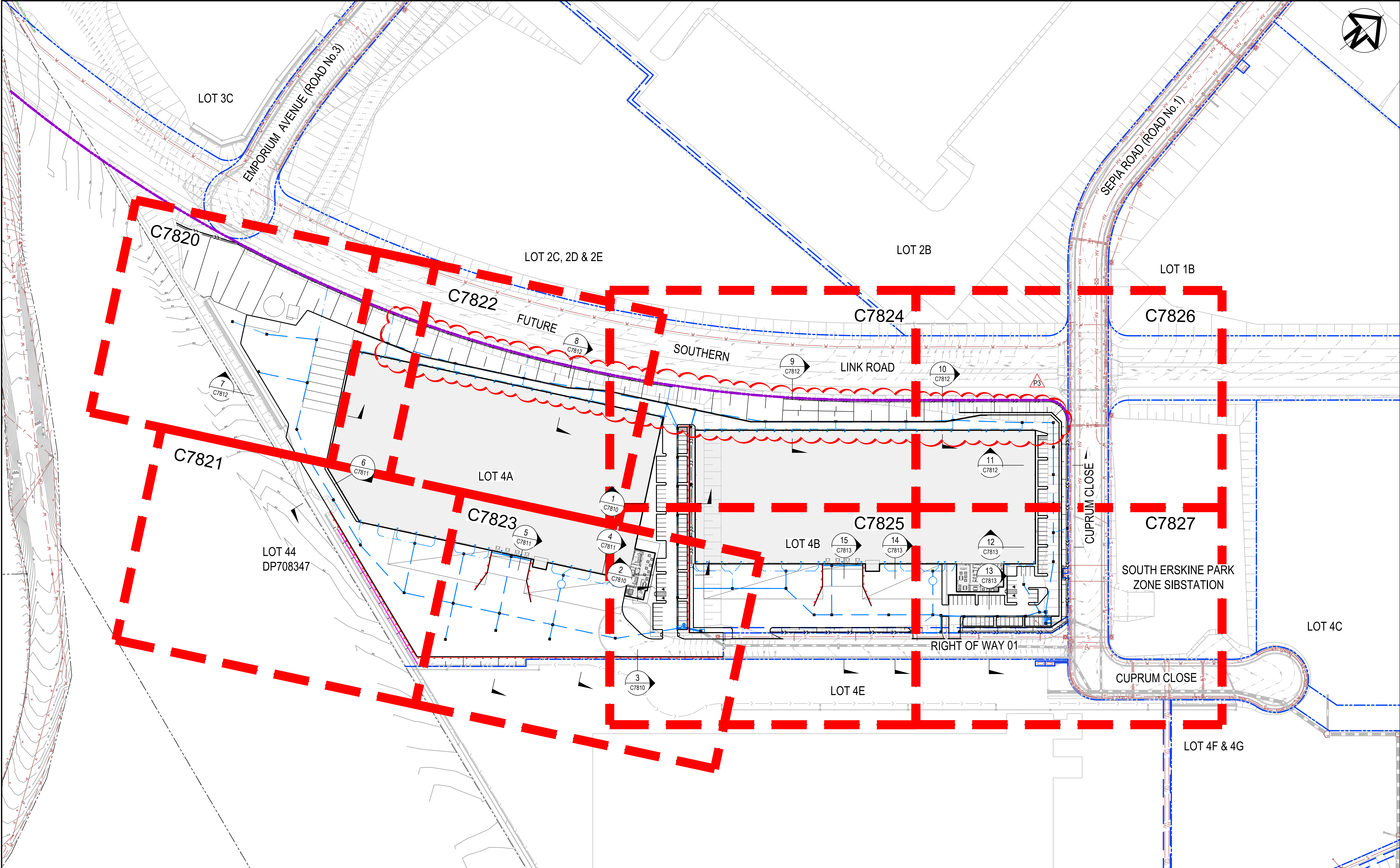
| DRAWING LIST | |
|--------------|--|
| DRAWING No. | DRAWING TITLE |
| 15-272-C7800 | COVER SHEET DRAWING LIST LOCALITY PLAN |
| 15-272-C7801 | GENERAL NOTES |
| 15-272-C7805 | GENERAL ARRANGEMENT PLAN |
| 15-272-C7810 | TYPICAL SECTIONS SHEET 1 |
| 15-272-C7811 | TYPICAL SECTIONS SHEET 2 |
| 15-272-C7812 | TYPICAL SECTIONS SHEET 3 |
| 15-272-C7813 | TYPICAL SECTIONS SHEET 4 |
| 15-272-C7815 | BULK EARTHWORKS PLAN |
| 15-272-C7820 | SITEWORKS AND STORMWATER DRAINAGE PLAN SHEET 1 |
| 15-272-C7821 | SITEWORKS AND STORMWATER DRAINAGE PLAN SHEET 2 |
| 15-272-C7822 | SITEWORKS AND STORMWATER DRAINAGE PLAN SHEET 3 |
| 15-272-C7823 | SITEWORKS AND STORMWATER DRAINAGE PLAN SHEET 4 |
| 15-272-C7824 | SITEWORKS AND STORMWATER DRAINAGE PLAN SHEET 5 |
| 15-272-C7825 | SITEWORKS AND STORMWATER DRAINAGE PLAN SHEET 6 |
| 15-272-C7826 | SITEWORKS AND STORMWATER DRAINAGE PLAN SHEET 7 |
| 15-272-C7827 | SITEWORKS AND STORMWATER DRAINAGE PLAN SHEET 8 |
| 15-272-C7830 | PAVEMENT PLAN |
| 15-272-C7835 | RETAINING WALL GENERAL ARRANGEMENT PLAN |
| 15-272-C7836 | RETAINING WALL PROFILES |
| 15-272-C7840 | EROSION AND SEDIMENT CONTROL PLAN |
| 15-272-C7841 | EROSION AND SEDIMENT DETAILS |






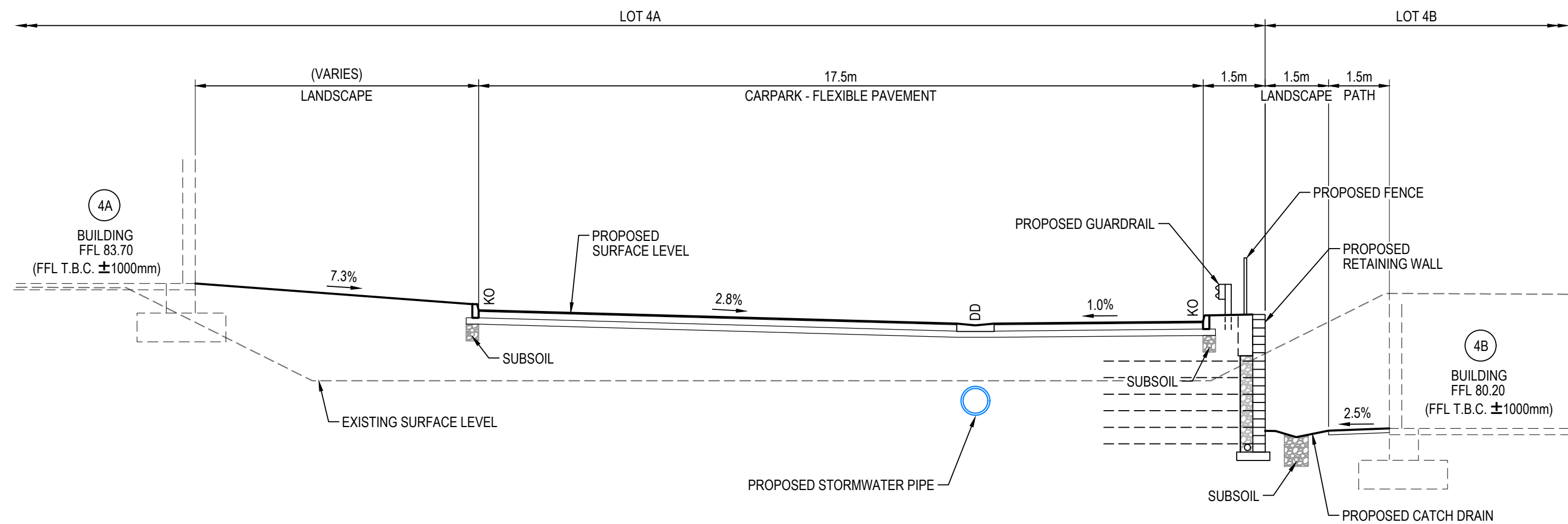
LOCALITY PLAN

NTS

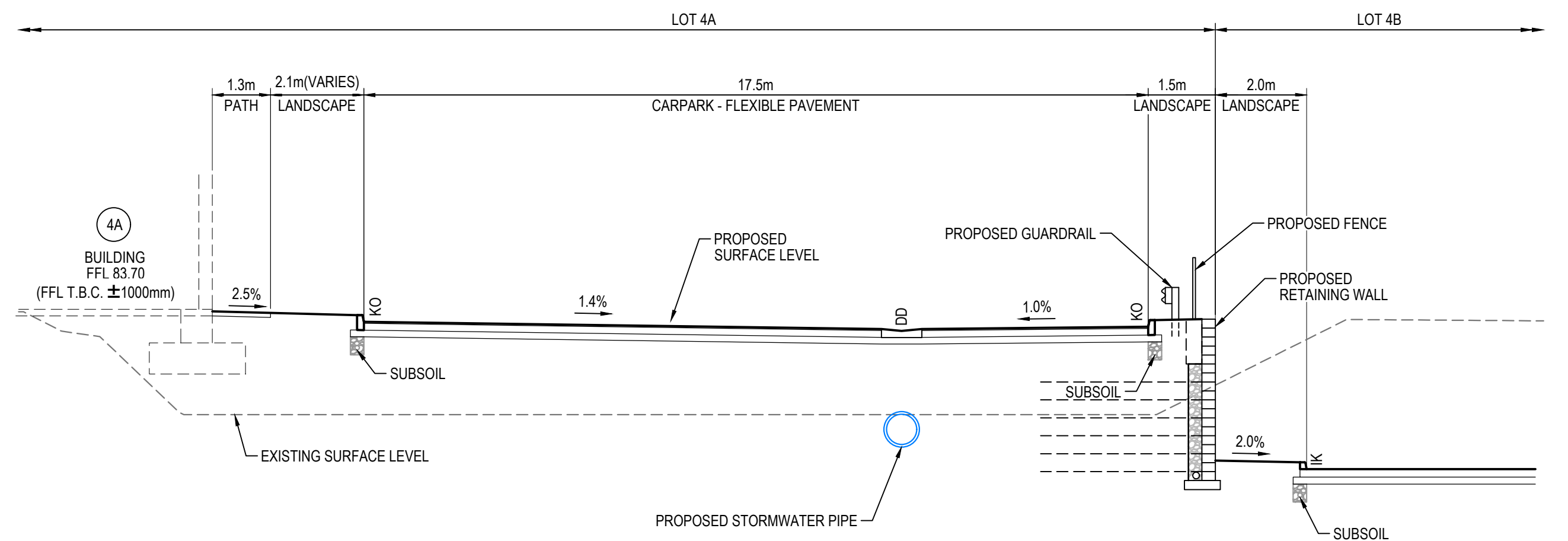
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|-------|------------------|----------|------------|--|--|-----------------|----------|----------|--|---|-------------|
| | | | Bar Scales | THIS DRAWING CANNOT BE COPIED OR REPRODUCED IN ANY FORM OR USED FOR ANY OTHER PURPOSE OTHER THAN THAT ORIGINALLY INTENDED WITHOUT THE WRITTEN PERMISSION OF AT&L | Client <div></div> | Scales | Drawn | YR | Project <div>PROPOSED INDUSTRIAL DEVELOPMENT OAKDALE WEST - LOT 4A & 4B</div> | Civil Engineers and Project Managers <div><div>Level 7, 153 Walker Street North Sydney NSW 2060 ABN 96 130 882 405 Tel: 02 9439 1777 Fax: 02 9923 1055 www.atl.net.au info@atl.net.au</div></div> | |
| | | | | | | | Designed | JC | | | |
| | | | | | | Grid | LOCAL | Checked | | | DS |
| | | | | | | Height Datum | AHD | Approved | | | DS |
| | | | | | | | | | Title | COVER SHEET DRAWING LIST LOCALITY PLAN | |
| P2 | ISSUED FOR DA | 19-08-22 | | | | | | | Status | FOR APPROVAL NOT TO BE USED FOR CONSTRUCTION | A1 |
| P1 | ISSUED FOR DRAFT | 15-08-22 | | | | | | | Project - Drawing No. | 15-272-C7800 | Issue P2 |
| Issue | Description | Date | | | | | | | | | |



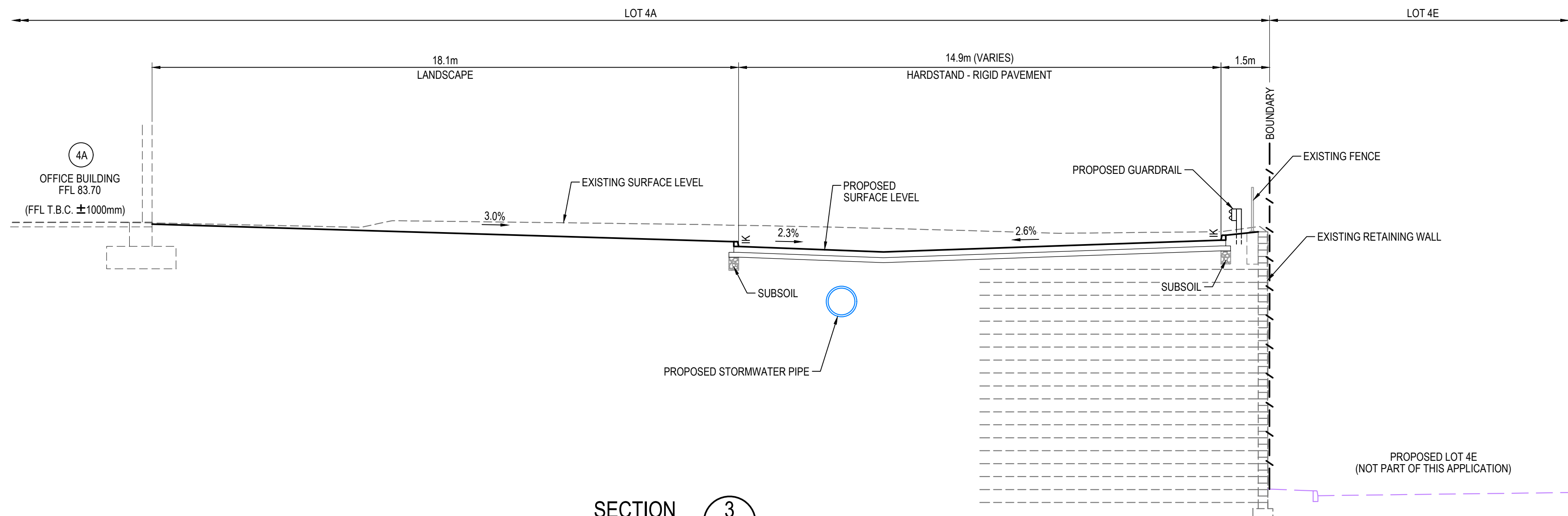
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|--|--|------------|--|--|---|---|----|-------------|--|--|---|
| | | Bar Scales |  | THIS DRAWING CANNOT BE COPIED OR REPRODUCED IN ANY FORM OR USED FOR ANY OTHER PURPOSE OTHER THAN THAT ORIGINALLY INTENDED WITHOUT THE WRITTEN PERMISSION OF AT&L | Client  | Scales | | Drawn | | Project PROPOSED INDUSTRIAL DEVELOPMENT OAKDALE WEST - LOT 4A & 4B | Civil Engineers and Project Managers  <div>Level 7, 153 Walker Street North Sydney NSW 2060 ABN 96 130 882 405 Tel: 02 9439 1777 Fax: 02 9923 1055 www.atl.net.au info@atl.net.au</div> |
| 1 : 1000 | | | | | | YR | | | | | |
| Grid LOCAL | | | | | | Designed | JC | | | | |
| Height Datum AHD | | | | | | Checked | DS | | | | |
| | | | | | | Approved | DS | | | | |
| | | | | Title GENERAL ARRANGEMENT PLAN | | Status FOR APPROVAL NOT TO BE USED FOR CONSTRUCTION | | A1 | | | |
| P3 FIRE BRIGADE ACCESS ROAD REVISED 23-08-22 | | | | | | Project - Drawing No. 15-272-C7805 | | Issue P3 | | | |
| P2 ISSUED FOR DA 19-08-22 | | | | | | | | | | | |
| P1 ISSUED FOR DRAFT 15-08-22 | | | | | | | | | | | |
| Issue Description Date | | | | | | | | | | | |



SECTION 1
1 : 100 C7805, C7824



SECTION 2
1 : 100 C7805, C7823, C7825



SECTION 3
1 : 100 C7805, C7823, C7825

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| | | |
| P2 | ISSUED FOR DA | 19-08-22 |
| P1 | ISSUED FOR DRAFT | 15-08-22 |
| Issue | Description | Date |


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| Bar Scales |
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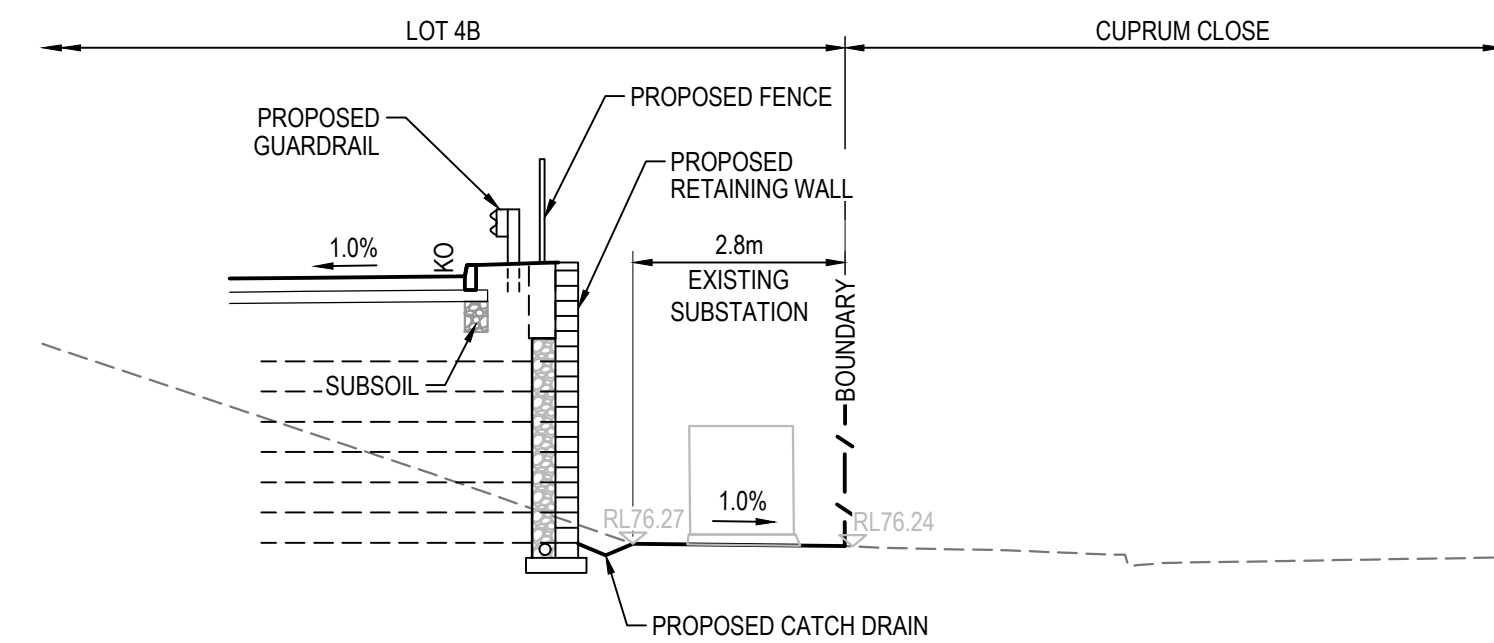
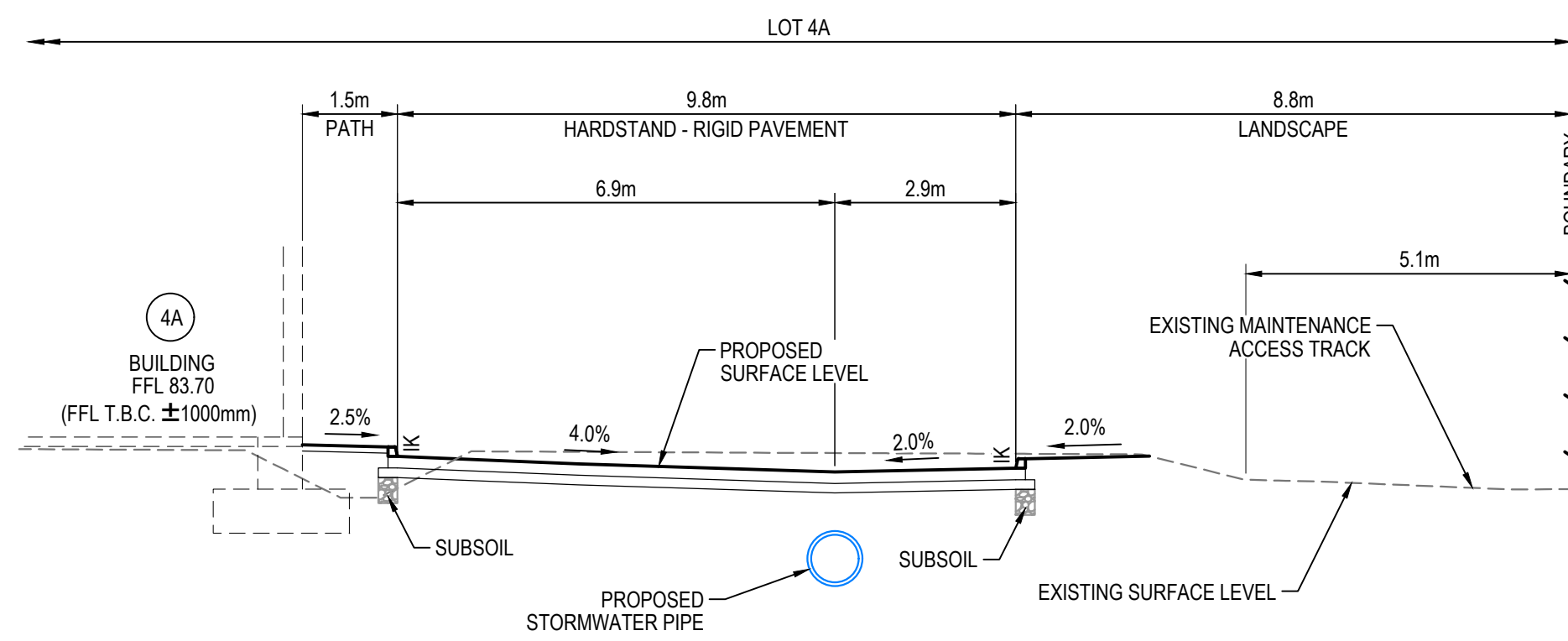
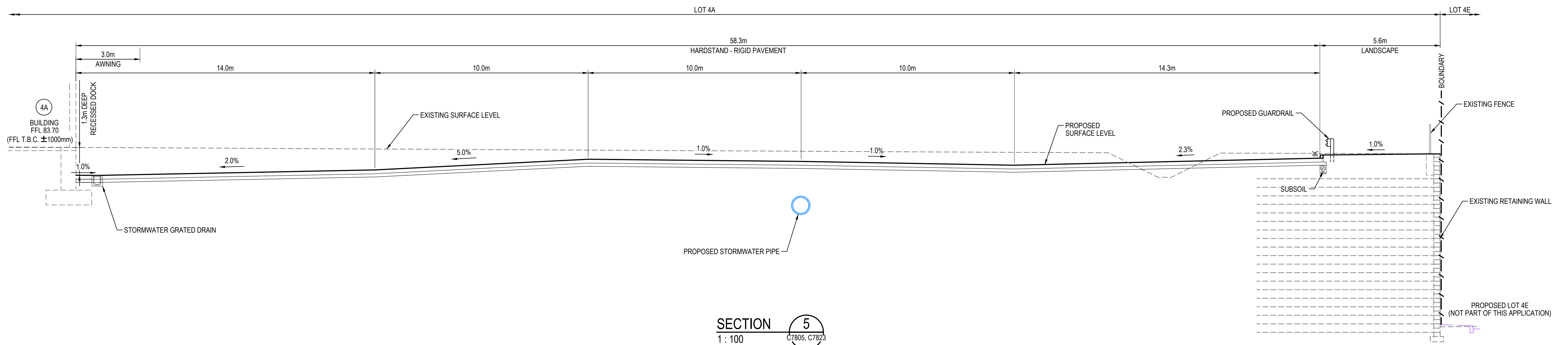
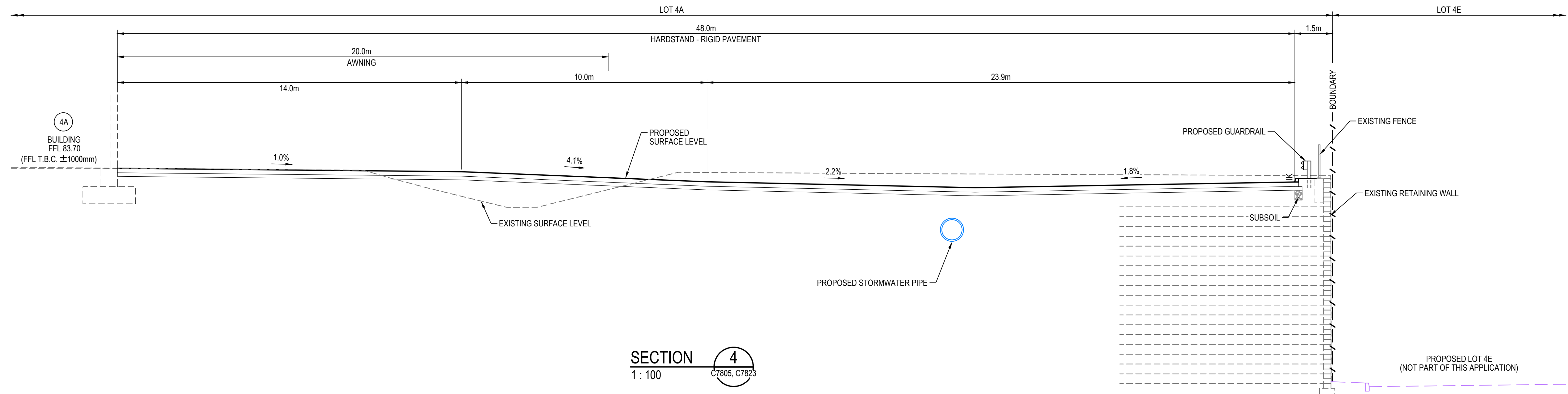
THIS DRAWING CANNOT BE COPIED OR REPRODUCED IN ANY FORM OR USED FOR ANY OTHER PURPOSE OTHER THAN THAT ORIGINALLY INTENDED WITHOUT THE WRITTEN PERMISSION OF AT&L



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| Scales | 1 : 100 | Drawn | YR |
| | | Designed | JC |
| Grid | LOCAL | Checked | DS |
| Height Datum | AHD | Approved | DS |

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|---------|---|
| Project | PROPOSED INDUSTRIAL DEVELOPMENT OAKDALE WEST - LOT 4A & 4B |
| Title | TYPICAL SECTIONS SHEET 1 |

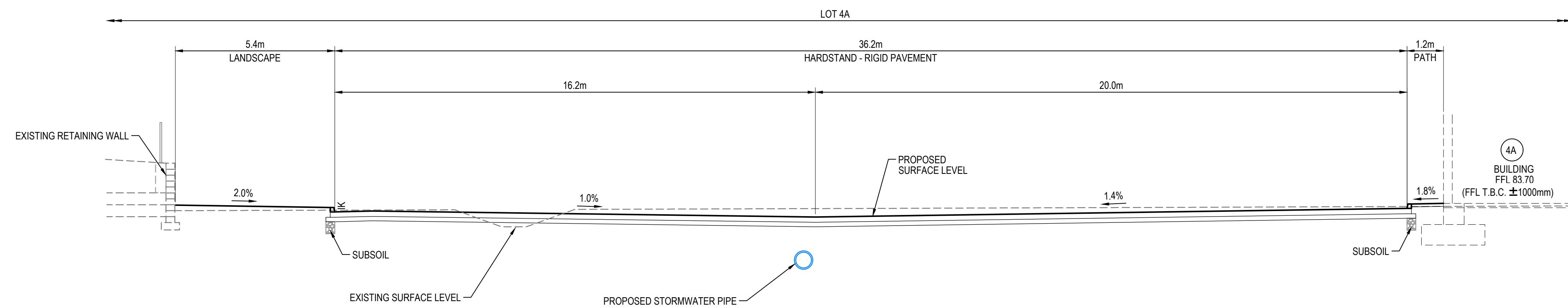
| | | |
|---|---|-------------|
| Civil Engineers and Project Managers | | |
|  | Level 7, 153 Walker Street North Sydney NSW 2060 ABN 96 130 882 405 Tel: 02 9439 1777 Fax: 02 9923 1055 www.atl.net.au info@atl.net.au | |
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| Status | FOR APPROVAL NOT TO BE USED FOR CONSTRUCTION | A1 |
| Project - Drawing No. | 15-272-C7810 | Issue P2 |



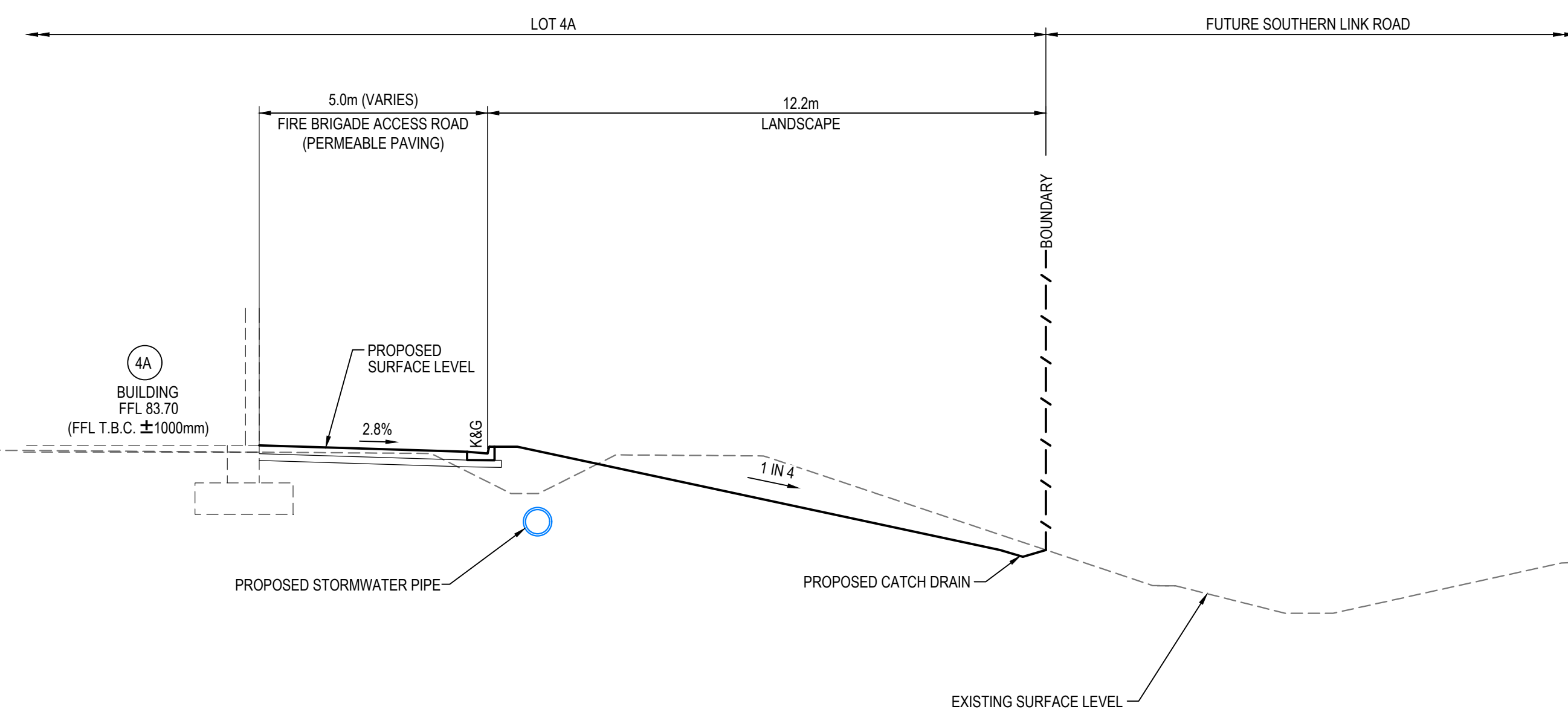
SECTION A
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SECTION 6
1 : 100 C7805, C7821

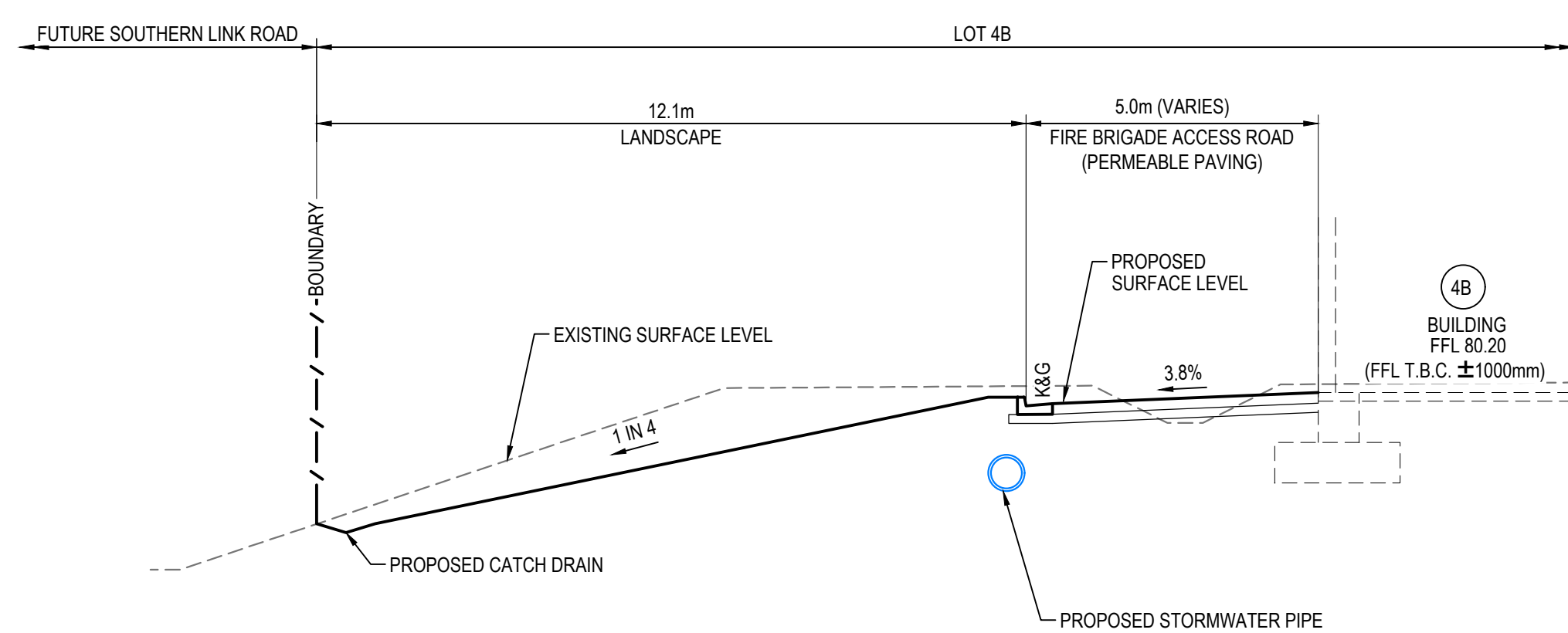
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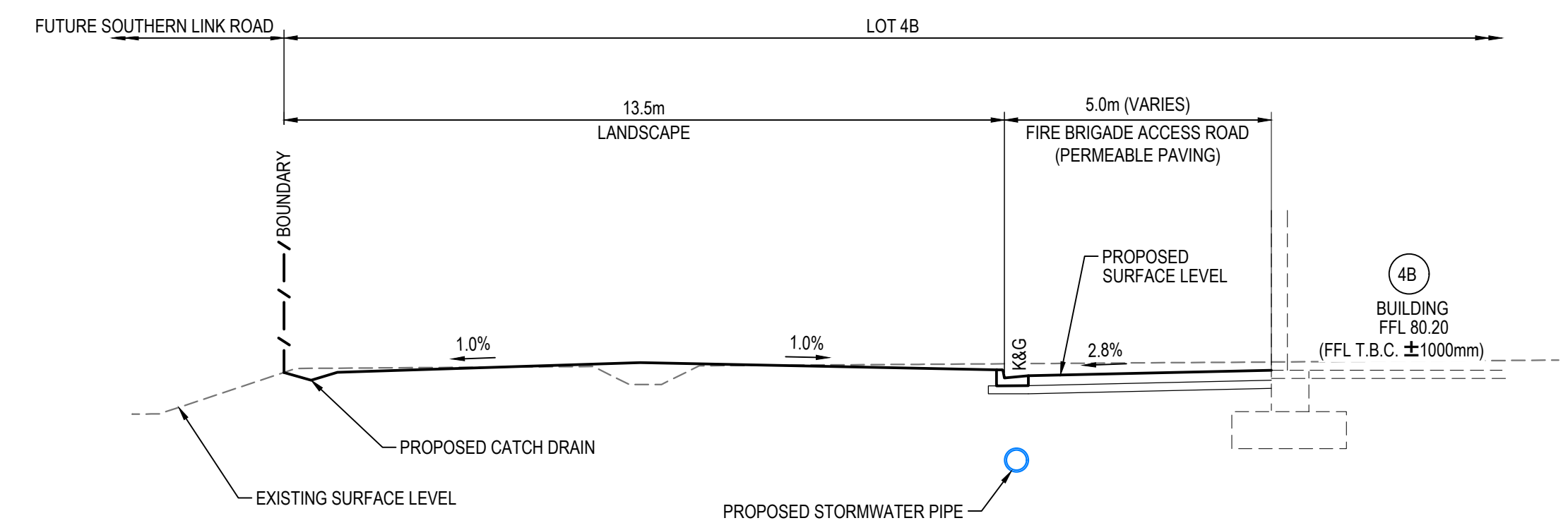
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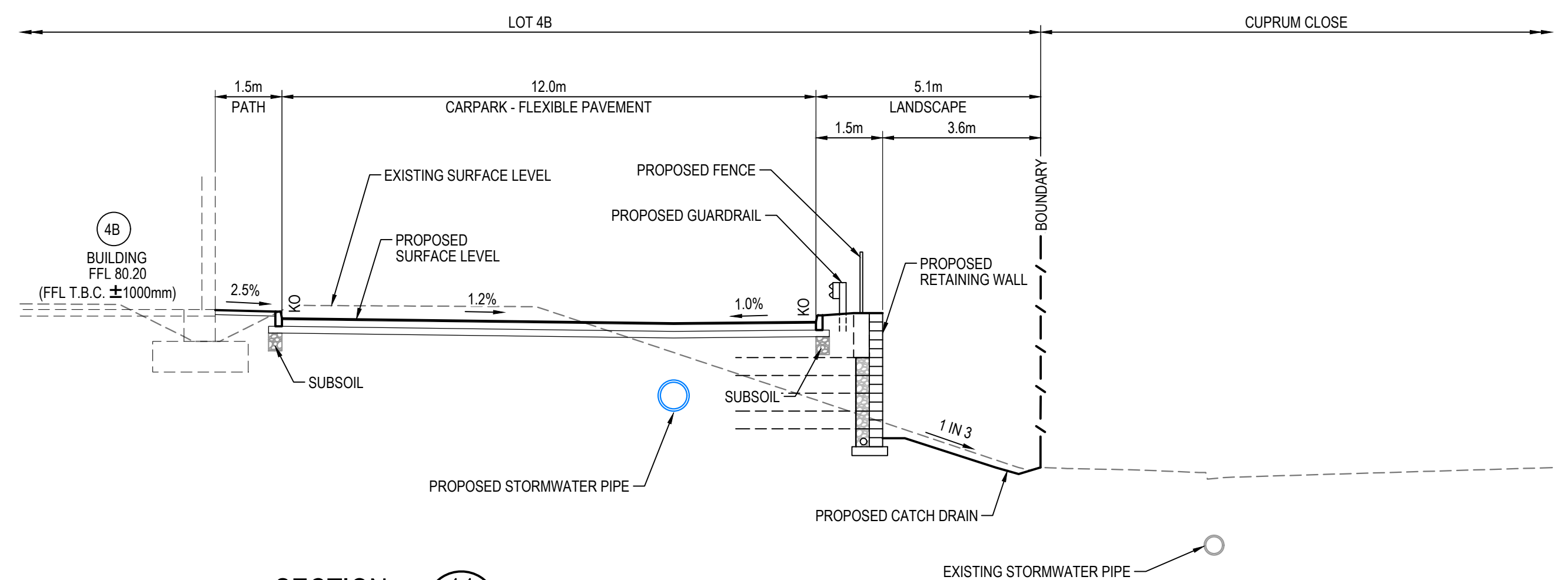
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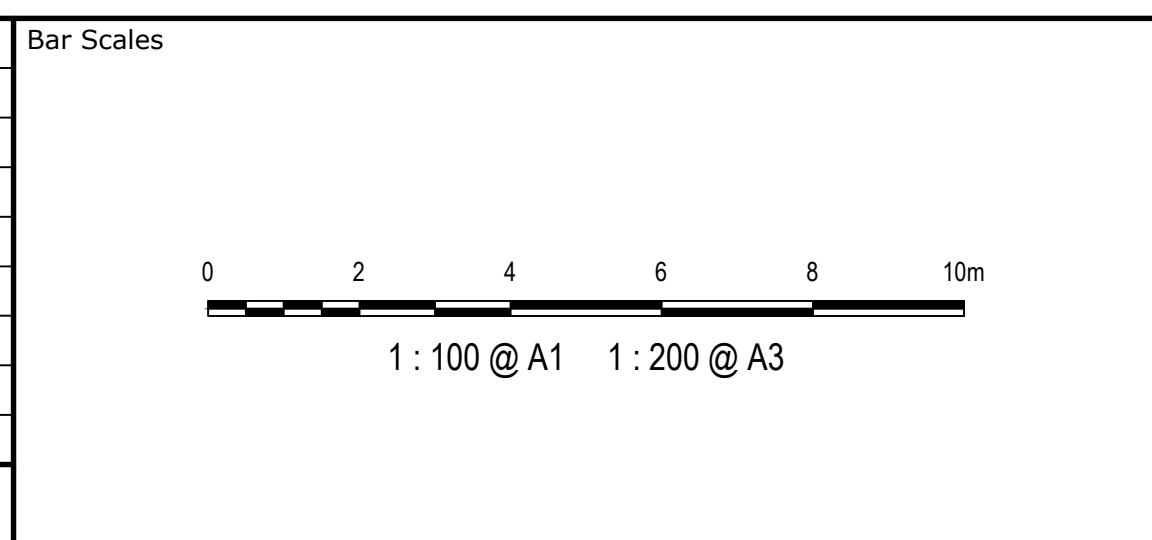


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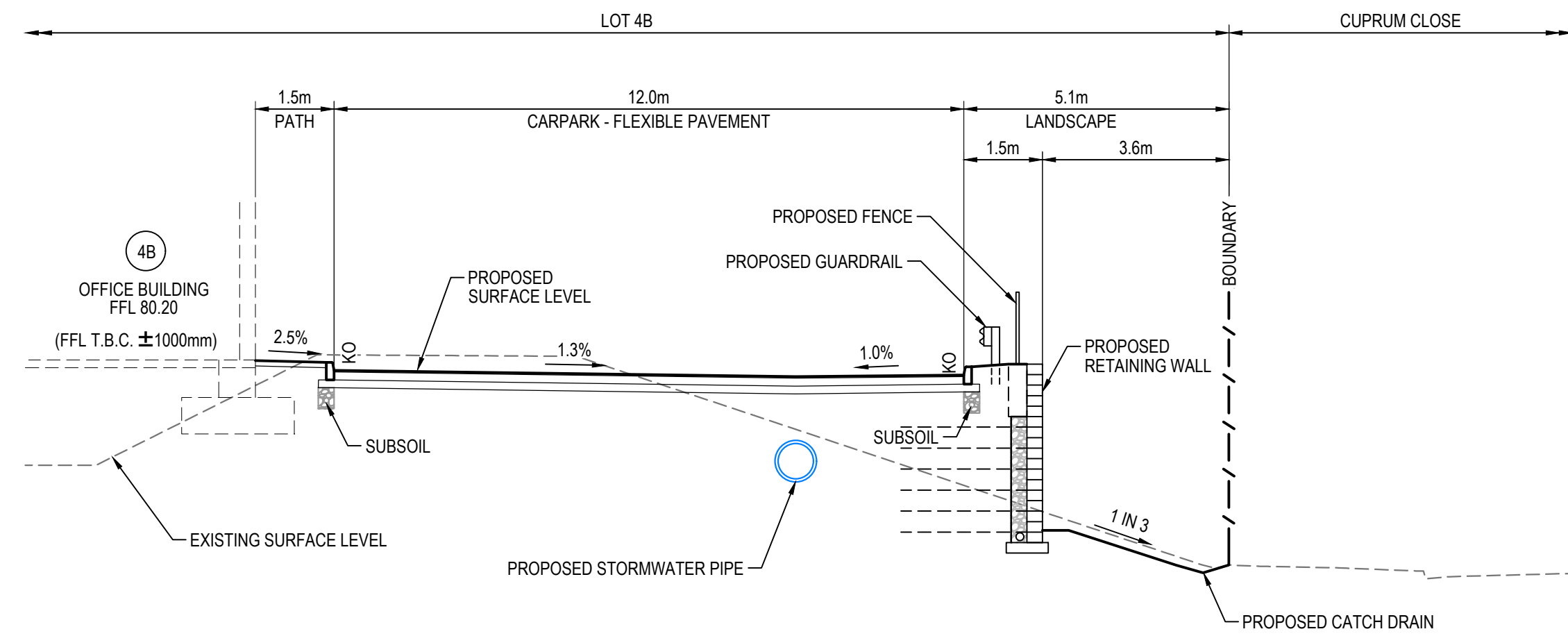
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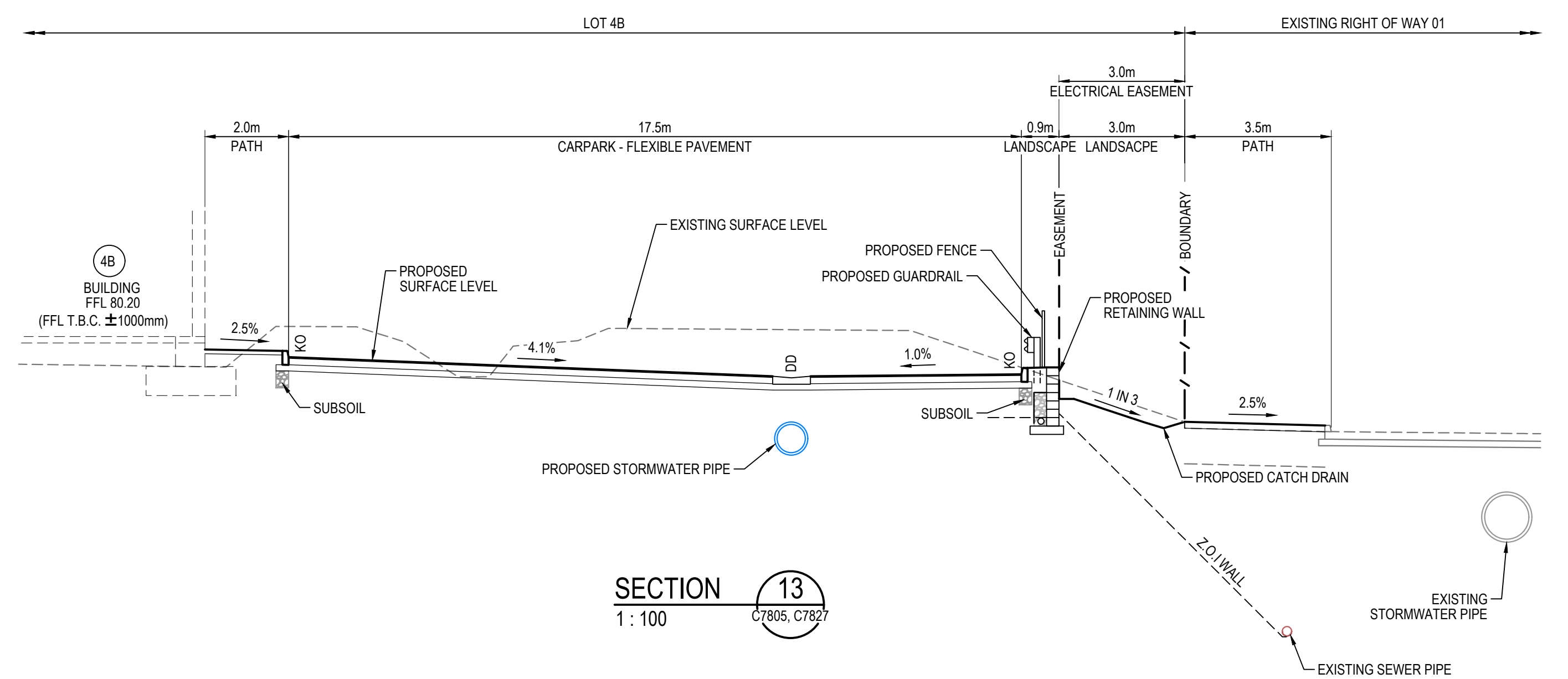
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| PROPOSED INDUSTRIAL DEVELOPMENT OAKDALE WEST - LOT 4A & 4B | TYPICAL SECTIONS SHEET 3 |

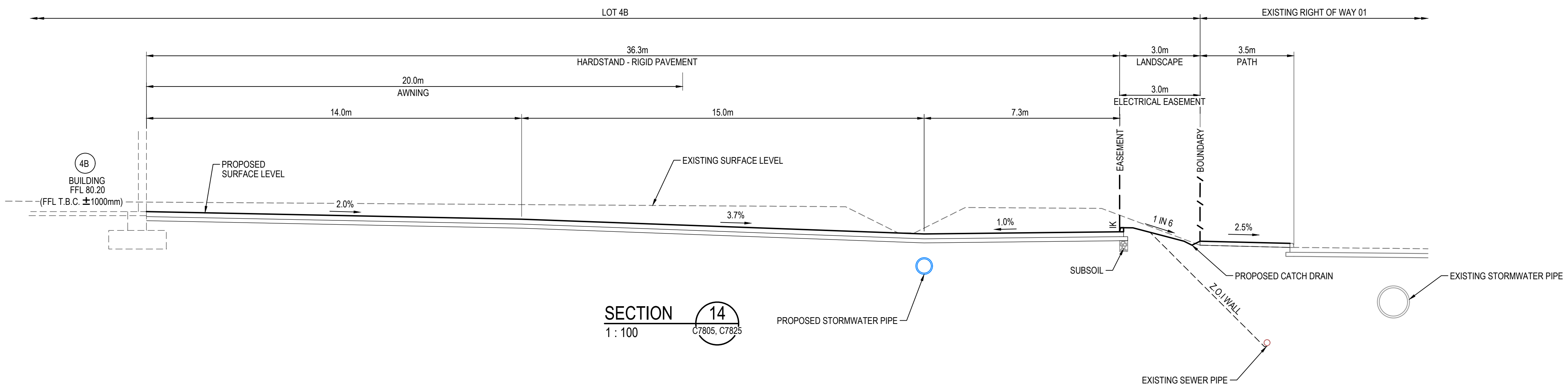
| Civil Engineers and Project Managers | Status | Issue |
|---|--|----------|
| at&l Level 7, 153 Walker Street North Sydney NSW 2060 ABN 96 130 882 405 Tel: 02 9439 1777 Fax: 02 9923 1055 www.atl.net.au info@atl.net.au | FOR APPROVAL NOT TO BE USED FOR CONSTRUCTION Project - Drawing No. 15-272-C7812 | A1 P3 |



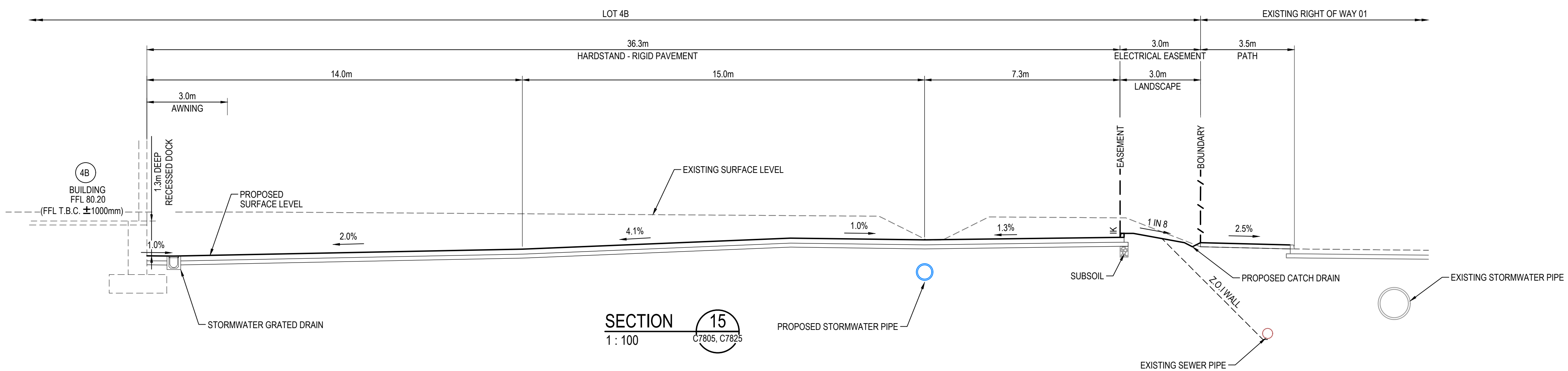
SECTION 12
1 : 100



SECTION 13
1 : 100

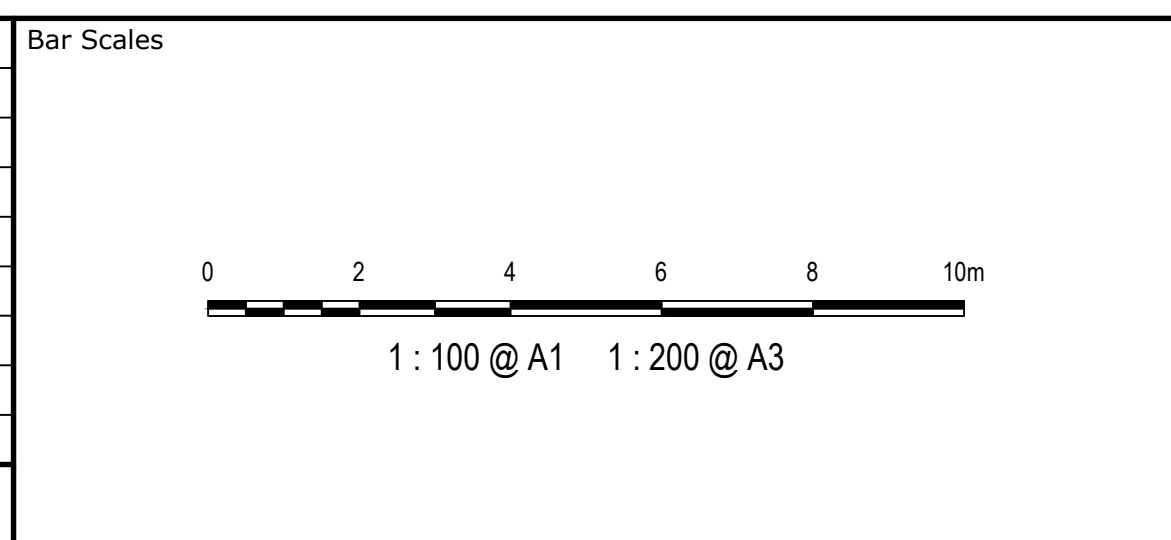


SECTION 14
1 : 100



SECTION 15
1 : 100

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| P2 | ISSUED FOR DA | 19-08-22 |
| P1 | ISSUED FOR DRAFT | 15-08-22 |
| Issue | Description | Date |




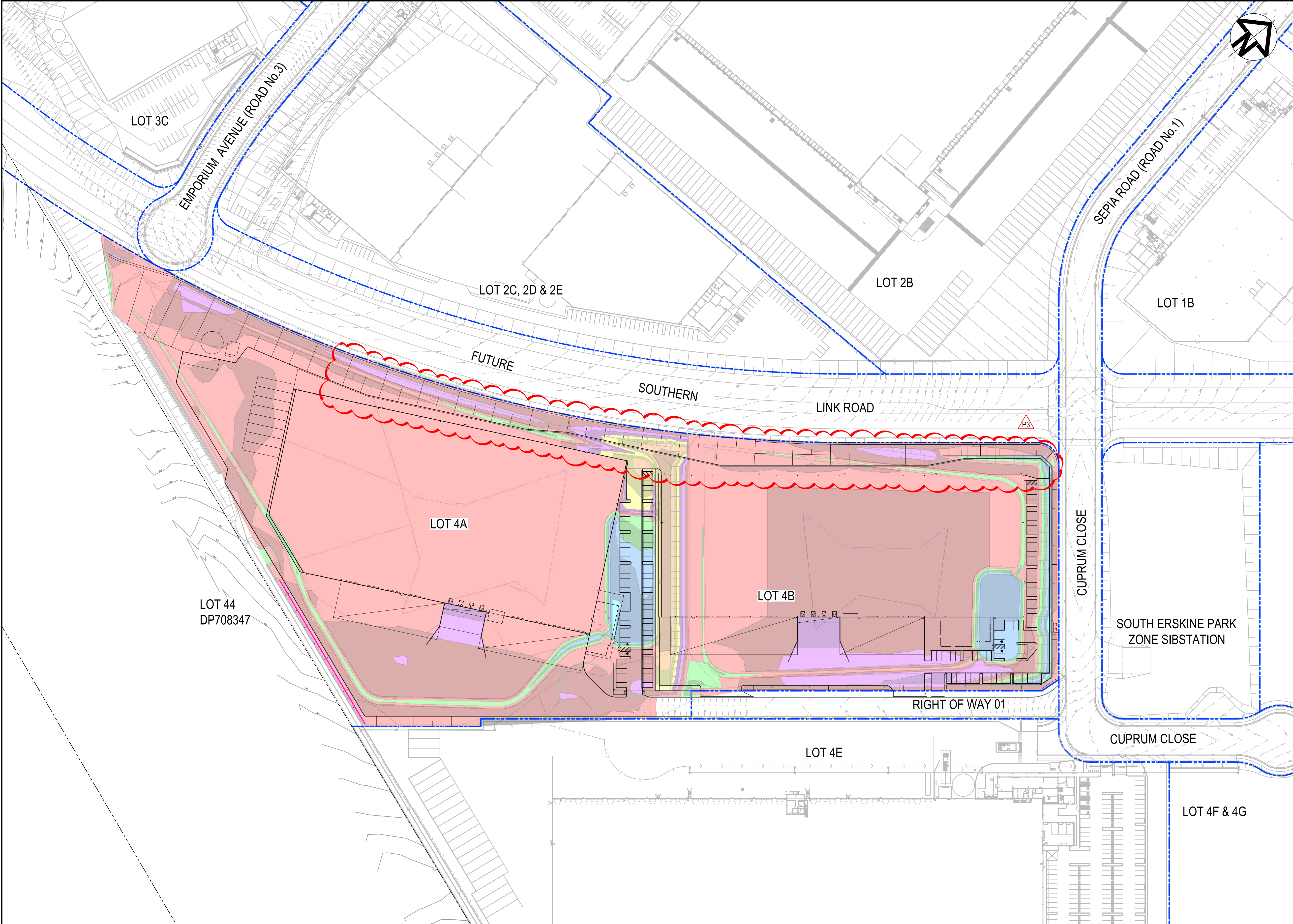
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| | | | |
|--------------|---------|----------|----|
| Scales | 1 : 100 | Drawn | YR |
| | | Designed | JC |
| Grid | LOCAL | Checked | DS |
| Height Datum | AHD | Approved | DS |

| | |
|---------|---|
| Project | PROPOSED INDUSTRIAL DEVELOPMENT OAKDALE WEST - LOT 4A & 4B |
| Title | TYPICAL SECTIONS SHEET 4 |

| | | |
|---|---|-------------|
| Civil Engineers and Project Managers | | |
|  | Level 7, 153 Walker Street North Sydney NSW 2060 ABN 96 130 882 405 Tel: 02 9439 1777 Fax: 02 9923 1055 www.atl.net.au info@atl.net.au | |
| Status | <div>FOR APPROVAL</div> <div><u>NOT TO BE USED FOR CONSTRUCTION</u></div> | A1 |
| Project - Drawing No. | 15-272-C7813 | Issue P2 |



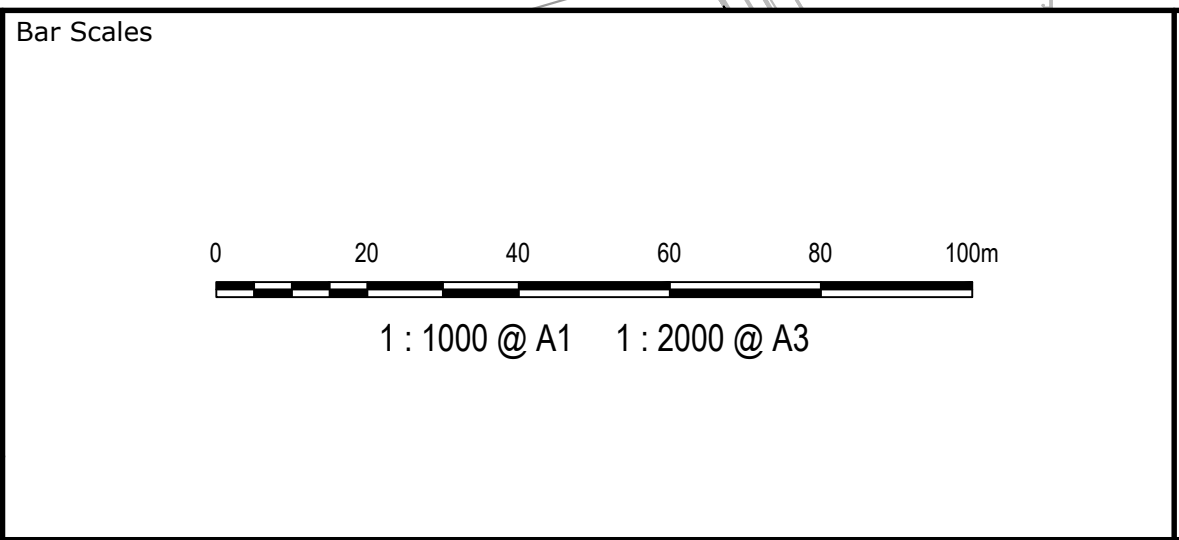
| LOT 4A | | |
|----------------|-----------------|----------------|
| NET CUT (cu.m) | NET FILL (cu.m) | BALANCE (cu.m) |
| -19,152 | +2,798 | -16,353 EXPORT |

| LOT 4B | | |
|----------------|-----------------|----------------|
| NET CUT (cu.m) | NET FILL (cu.m) | BALANCE (cu.m) |
| -20,285 | +2,907 | -17,478 EXPORT |

| CUT/FILL DEPTH RANGE LEGEND | | |
|-----------------------------|-------------|--------|
| Lower_value | Upper_value | Colour |
| -100 | to -4.0 | m |
| -4.0 | to -3.5 | m |
| -3.5 | to -3.0 | m |
| -3.0 | to -2.5 | m |
| -2.5 | to -2.0 | m |
| -2.0 | to -1.5 | m |
| -1.5 | to -1.0 | m |
| -1.0 | to -0.5 | m |
| -0.5 | to 0.0 | m |
| 0.0 | to 0.5 | m |
| 0.5 | to 1.0 | m |
| 1.0 | to 1.5 | m |
| 1.5 | to 2.0 | m |
| 2.0 | to 2.5 | m |
| 2.5 | to 3.0 | m |
| 3.0 | to 3.5 | m |
| 3.5 | to 4.0 | m |
| 4.0 | to 100 | m |

- NOTES
- THE ABOVE VOLUMES ARE CALCULATED WITH THE ASSUMPTION THAT THE INFRASTRUCTURE WORKS ARE COMPLETED.
 - ASSUMED 300mm SET DOWN FROM PRELIMINARY FINISHED LEVELS.
 - THE VOLUMES DO NOT TAKE INTO ACCOUNT THE FOLLOWING :-
 - BULKING FACTORS OF REMOVED CUT
 - REMOVAL OF EXISTING BUILDING SLABS AND PAVEMENTS
 - REMOVAL AND/OR REMEDIATION OF ANY EXISTING UNCONTROLLED FILL
 - PROPOSED LANDSCAPING
 - STORMWATER AND UTILITY TRENCHING
 - EROSION AND SEDIMENTATION CONTROL SWALES AND BASINS
 - NO ALLOWANCE FOR RETAINING WALL BACKFILL MATERIAL

| Issue | Description | Date |
|-------|----------------------------------|----------|
| P3 | FIRE BRIGADE ACCESS ROAD REVISED | 23-08-22 |
| P2 | ISSUED FOR DA | 19-08-22 |
| P1 | ISSUED FOR DRAFT | 15-08-22 |



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| Scales | Drawn | YR |
|--------------|----------|----|
| 1 : 1000 | Designed | JC |
| Grid | Checked | DS |
| LOCAL | Approved | DS |
| Height Datum | Approved | DS |
| AHD | | |

| Project | PROPOSED INDUSTRIAL DEVELOPMENT OAKDALE WEST - LOT 4A & 4B |
|---------|---|
| Title | BULK EARTHWORKS PLAN |

Civil Engineers and Project Managers

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North Sydney NSW 2060
ABN 96 130 882 405
Tel: 02 9439 1777
Fax: 02 9923 1055
www.atl.net.au
info@atl.net.au

Status

FOR APPROVAL

NOT TO BE USED FOR CONSTRUCTION

Project - Drawing No.

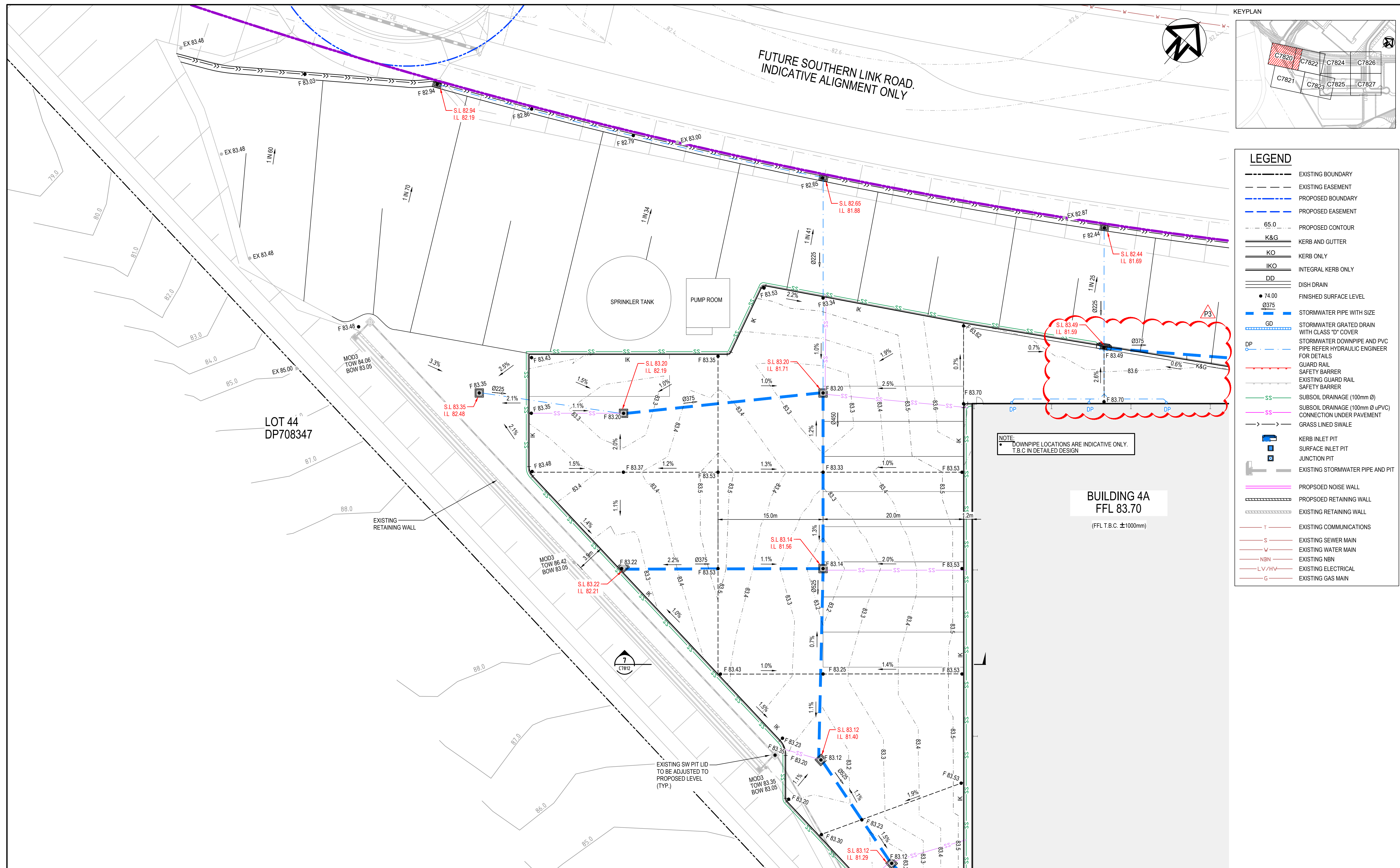
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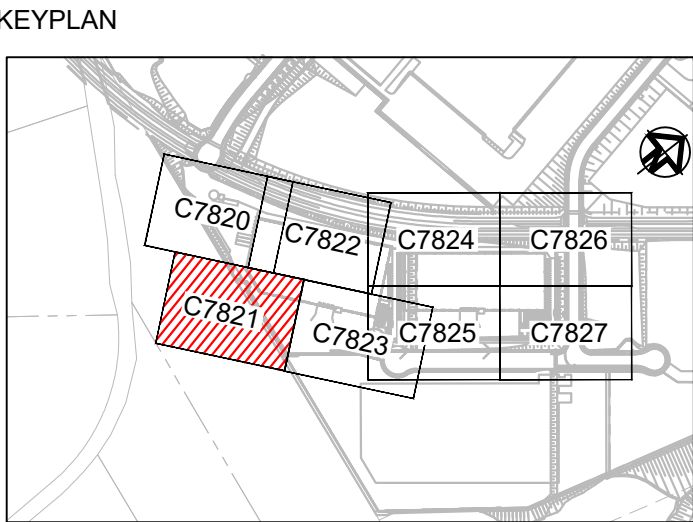
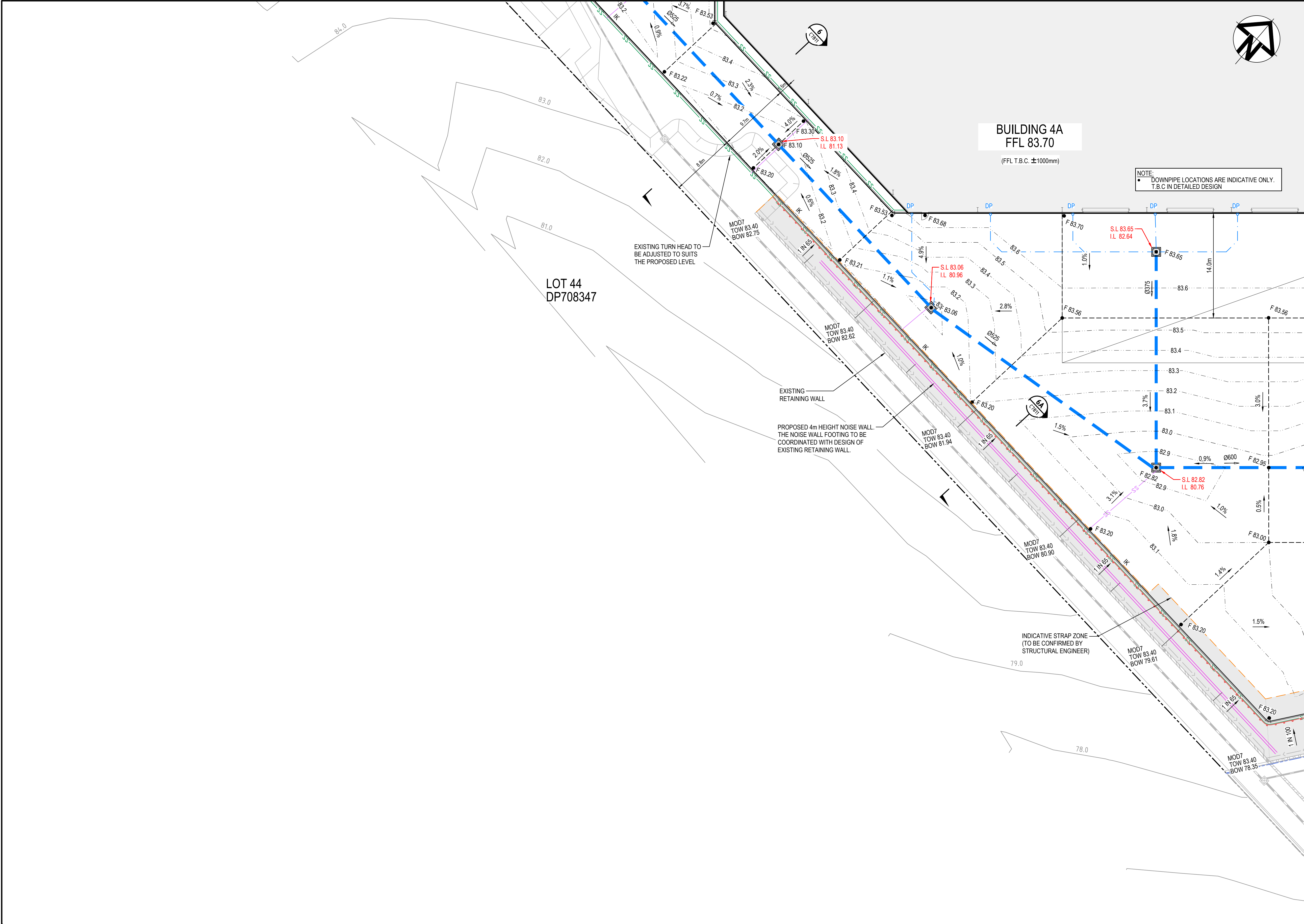
Issue

A1

Issue

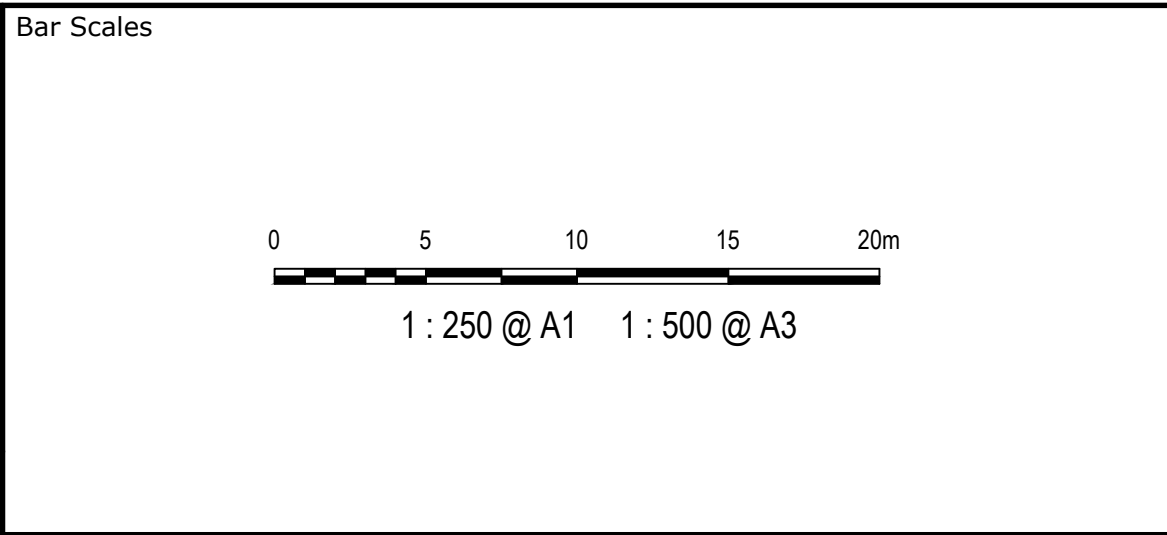
P3





| LEGEND | |
|--------|---|
| | EXISTING BOUNDARY |
| | EXISTING EASEMENT |
| | PROPOSED BOUNDARY |
| | PROPOSED EASEMENT |
| | PROPOSED CONTOUR |
| | K&G KERB AND GUTTER |
| | KO KERB ONLY |
| | IKO INTEGRAL KERB ONLY |
| | DD DISH DRAIN |
| | FINISHED SURFACE LEVEL |
| | STORMWATER PIPE WITH SIZE |
| | STORMWATER GRATED DRAIN WITH CLASS "D" COVER |
| | STORMWATER DOWNPIPE AND PVC PIPE REFER HYDRAULIC ENGINEER FOR DETAILS |
| | GUARD RAIL |
| | SAFETY BARRIER |
| | EXISTING GUARD RAIL |
| | SAFETY BARRIER |
| | SUBSOIL DRAINAGE (100mm Ø) |
| | SUBSOIL DRAINAGE (100mm Ø uPVC) CONNECTION UNDER PAVEMENT |
| | GRASS LINED SWALE |
| | KERB INLET PIT |
| | SURFACE INLET PIT |
| | JUNCTION PIT |
| | EXISTING STORMWATER PIPE AND PIT |
| | PROPOSED NOISE WALL |
| | PROPOSED RETAINING WALL |
| | EXISTING RETAINING WALL |
| | EXISTING COMMUNICATIONS |
| | EXISTING SEWER MAIN |
| | EXISTING WATER MAIN |
| | EXISTING NBN |
| | EXISTING ELECTRICAL |
| | EXISTING GAS MAIN |

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| P2 | ISSUED FOR DA | 19-08-22 |
| P1 | ISSUED FOR DRAFT | 15-08-22 |
| Issue | Description | Date |



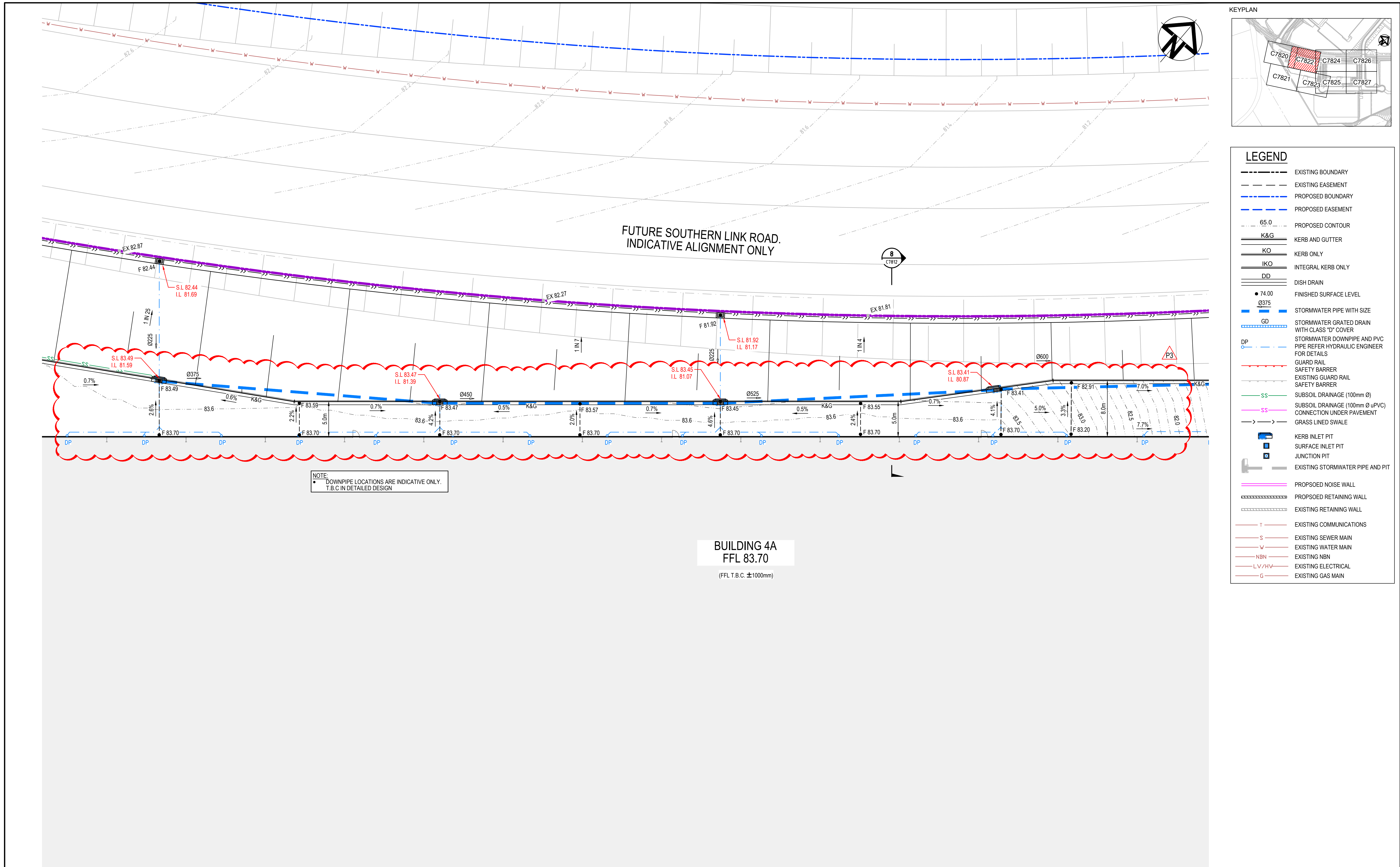
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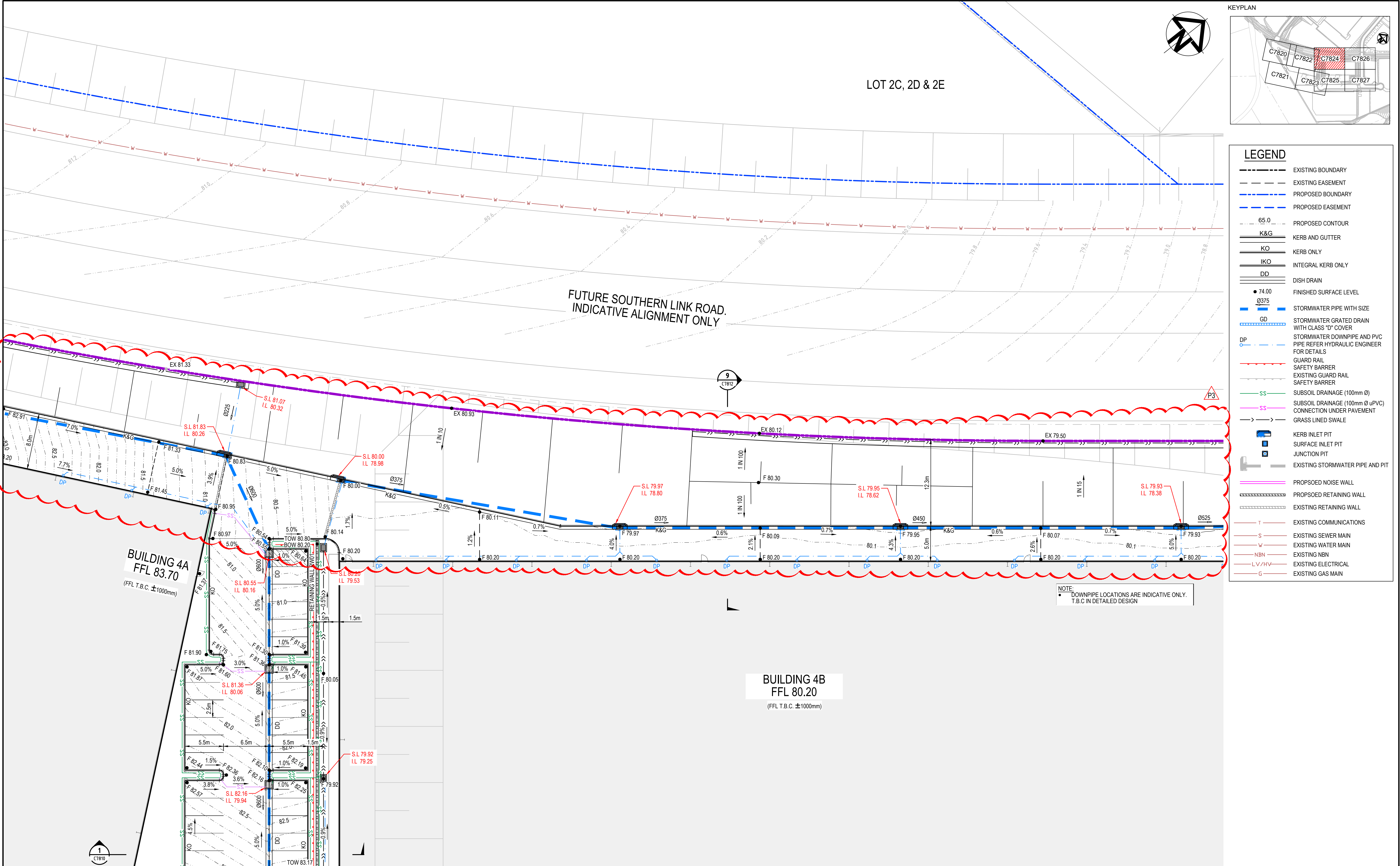
| | | | |
|--------------|---------|----------|----|
| Scales | 1 : 250 | Drawn | YR |
| | | Designed | JC |
| Grid | LOCAL | Checked | DS |
| Height Datum | AHD | Approved | DS |

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| Project | PROPOSED INDUSTRIAL DEVELOPMENT OAKDALE WEST - LOT 4A & 4B |
| Title | SITWORKS AND STORMWATER DRAINAGE PLAN SHEET 2 |

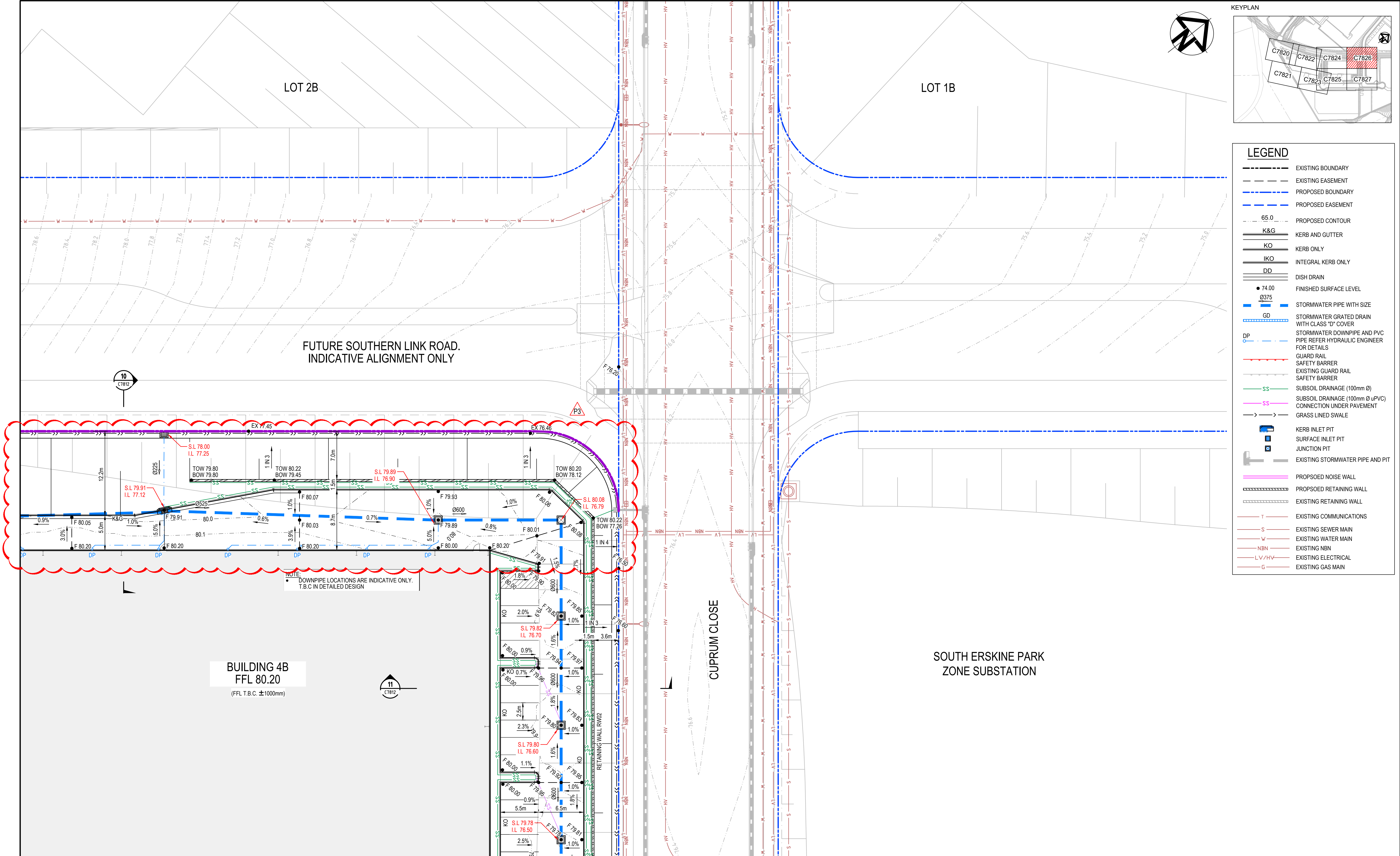
| | | |
|--|---|-------------|
| Civil Engineers and Project Managers | | |
| | | |
| Level 7, 153 Walker Street North Sydney NSW 2060 ABN 96 130 882 405 Tel: 02 9439 1777 Fax: 02 9923 1055 www.atl.net.au info@atl.net.au | | |
| Status | FOR APPROVAL NOT TO BE USED FOR CONSTRUCTION | A1 |
| Project - Drawing No. | 15-272-C7821 | Issue P2 |



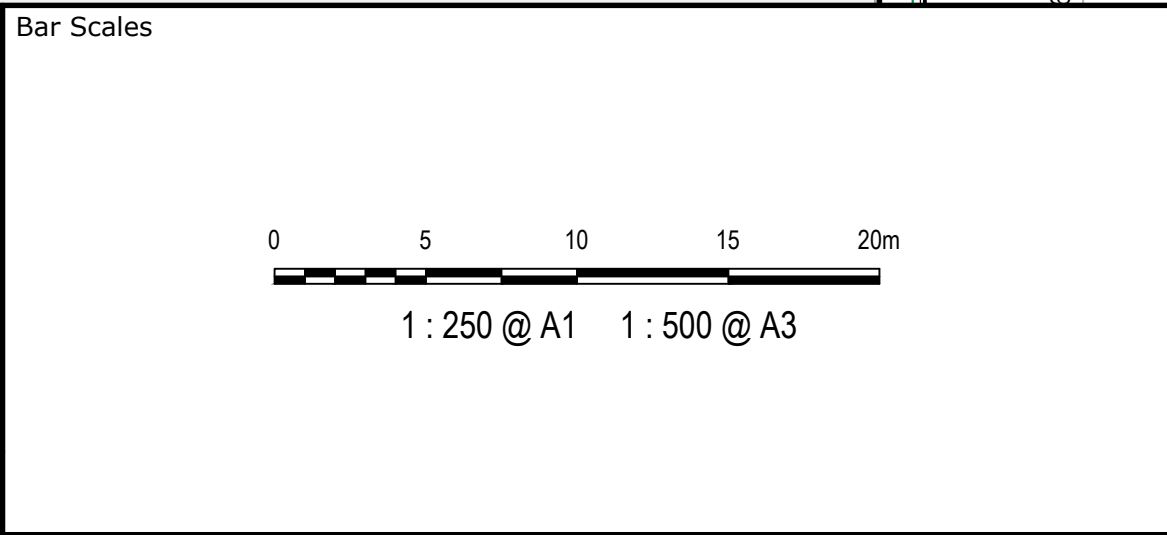
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|-------------------------------------|--|--|--|--|--|---------|--|--|------------------|--|--|----------|--|--|---------|--|--|--|--|--|
| Bar Scales | | | THIS DRAWING CANNOT BE COPIED OR REPRODUCED IN ANY FORM OR USED FOR ANY OTHER PURPOSE OTHER THAN THAT ORIGINALLY INTENDED WITHOUT THE WRITTEN PERMISSION OF AT&L | | | Client | | | Scales | | | Drawn | | | Project | | | Civil Engineers and Project Managers | | |
| 0 5 10 15 20m | | | 1 : 250 @ A1 1 : 500 @ A3 | | | Goodman | | | 1 : 250 | | | Designed | | | YR | | | Level 7, 153 Walker Street North Sydney NSW 2060 ABN 96 130 882 405 Tel: 02 9439 1777 Fax: 02 9923 1055 www.atl.net.au info@atl.net.au | | |
| | | | | | | | | | Grid LOCAL | | | Checked | | | DS | | | PROPOSED INDUSTRIAL DEVELOPMENT OAKDALE WEST - LOT 4A & 4B | | |
| | | | | | | | | | Height Datum AHD | | | Approved | | | DS | | | SITWORKS AND STORMWATER DRAINAGE PLAN SHEET 3 | | |
| P3 FIRE BRIGADE ACCESS ROAD REVISED | | | 23-08-22 | | | | | | | | | | | | | | | Status FOR APPROVAL NOT TO BE USED FOR CONSTRUCTION | | |
| P2 ISSUED FOR DA | | | 19-08-22 | | | | | | | | | | | | | | | Project - Drawing No. 15-272-C7822 | | |
| P1 ISSUED FOR DRAFT | | | 15-08-22 | | | | | | | | | | | | | | | Issue P3 | | |
| Issue | | | Description | | | Date | | | | | | | | | | | | | | |



| | | |
|--|--|--|
| | | <div>Bar Scales</div> <div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></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| P3 | FIRE BRIGADE ACCESS ROAD REVISED | 23-08-22 |
| P2 | ISSUED FOR DA | 19-08-22 |
| P1 | ISSUED FOR DRAFT | 15-08-22 |
| Issue | Description | Date |



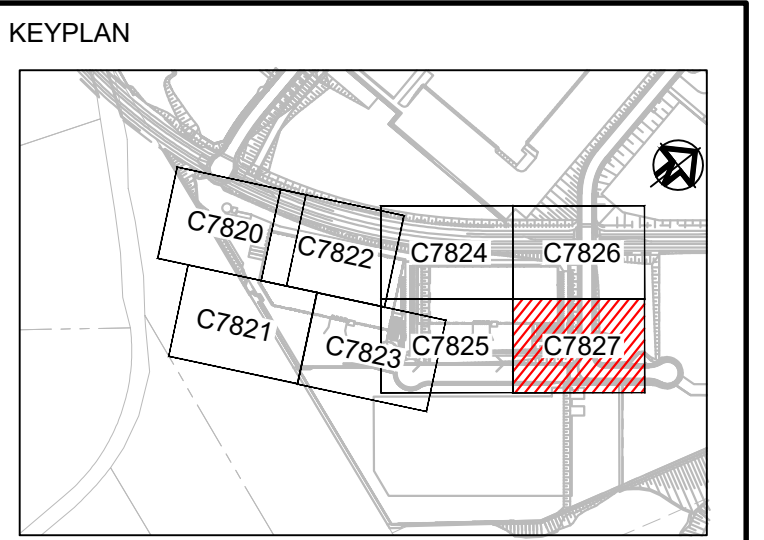
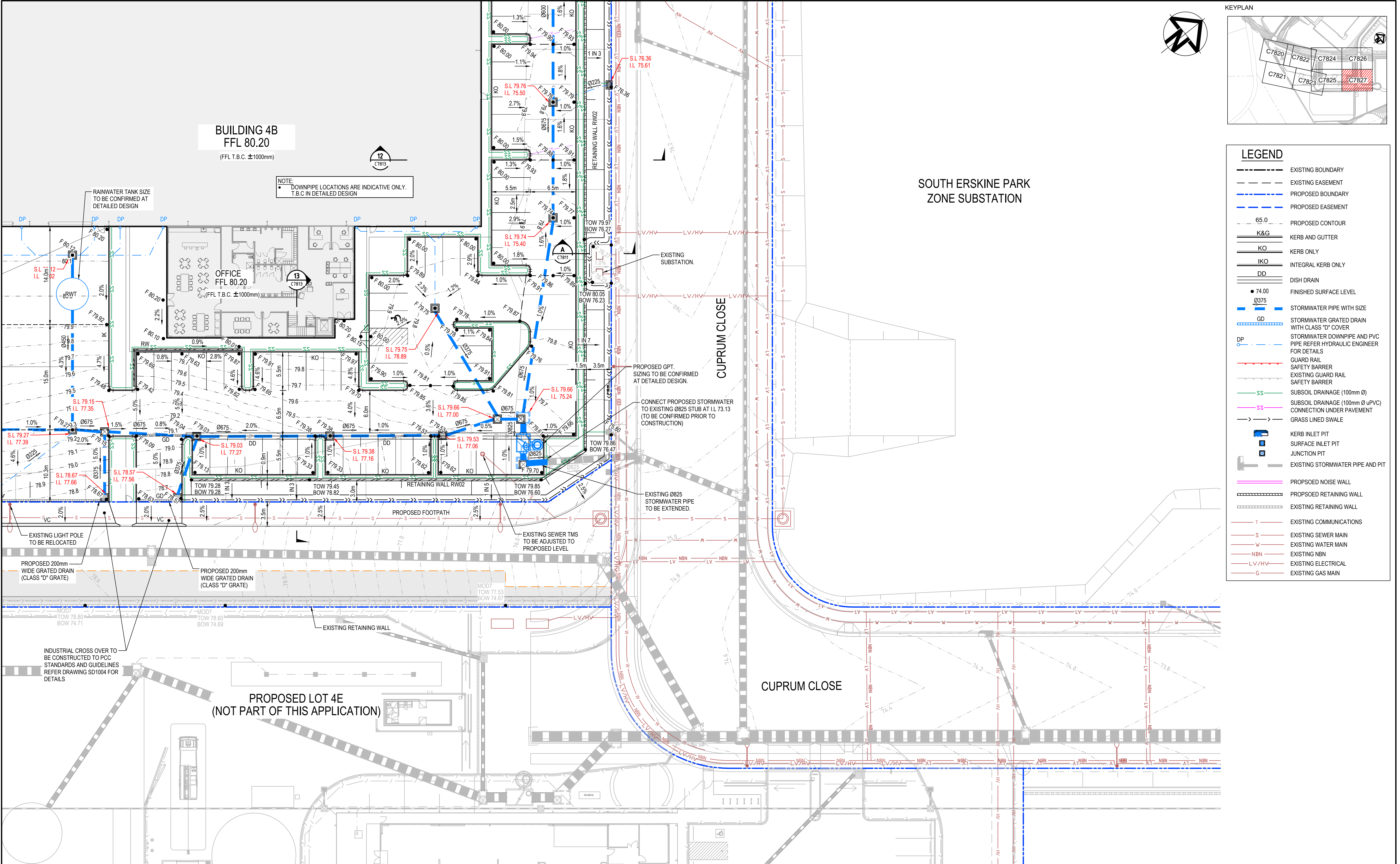
THIS DRAWING CANNOT BE COPIED OR REPRODUCED IN ANY FORM OR USED FOR ANY OTHER PURPOSE OTHER THAN THAT ORIGINALLY INTENDED WITHOUT THE WRITTEN PERMISSION OF AT&L



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| Scales | 1 : 250 | Drawn | YR |
| | | Designed | JC |
| Grid | LOCAL | Checked | DS |
| Height Datum | AHD | Approved | DS |

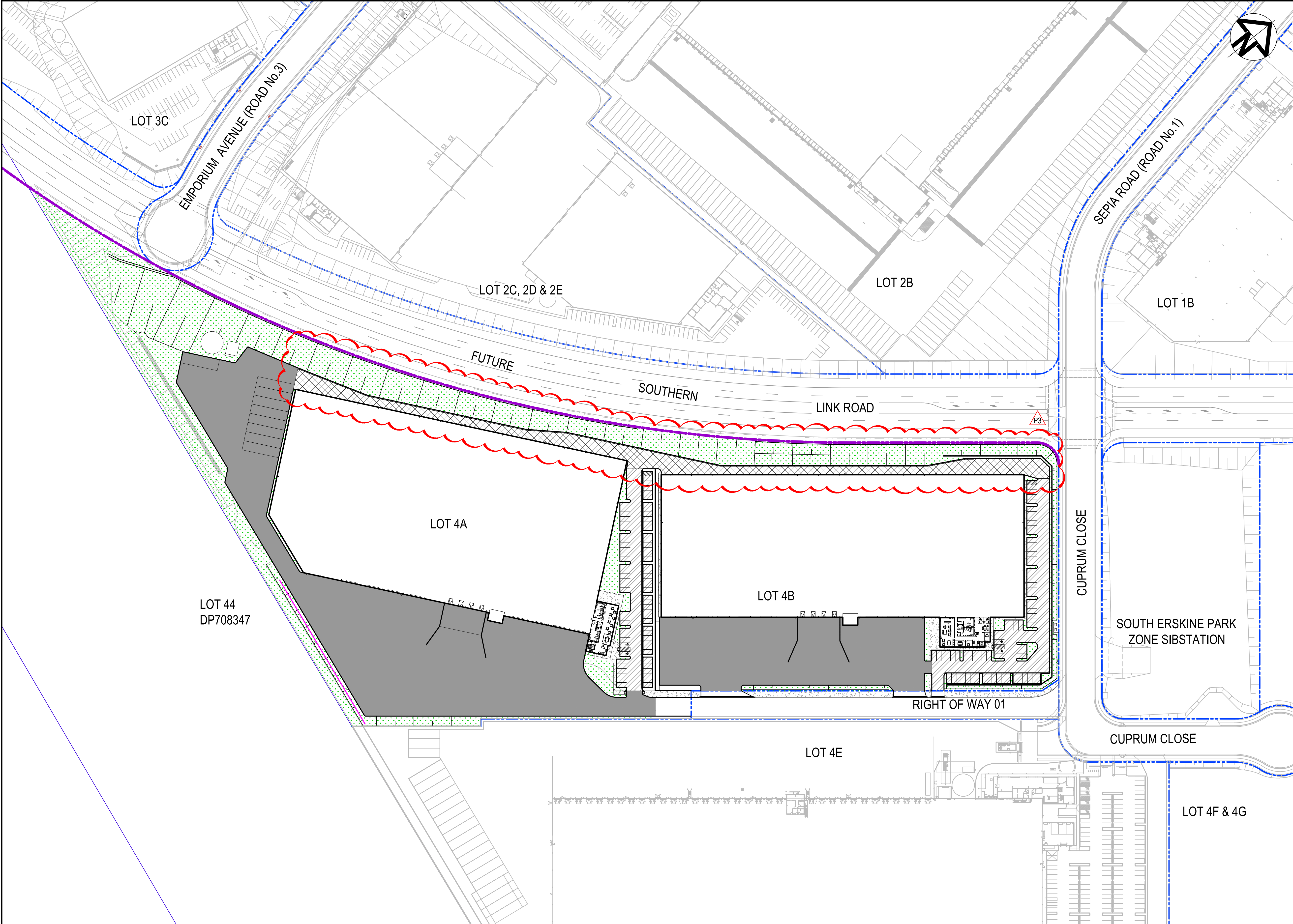
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| Project | PROPOSED INDUSTRIAL DEVELOPMENT OAKDALE WEST - LOT 4A & 4B |
| Title | SITWORKS AND STORMWATER DRAINAGE PLAN SHEET 7 |

| | | |
|--|---|-------------|
| Civil Engineers and Project Managers | | |
| | | |
| Level 7, 153 Walker Street North Sydney NSW 2060 ABN 96 130 882 405 Tel: 02 9439 1777 Fax: 02 9923 1055 www.atl.net.au info@atl.net.au | | |
| Status | FOR APPROVAL NOT TO BE USED FOR CONSTRUCTION | A1 |
| Project - Drawing No. | 15-272-C7826 | Issue P3 |



| LEGEND | |
|--------|---|
| | EXISTING BOUNDARY |
| | EXISTING EASEMENT |
| | PROPOSED BOUNDARY |
| | PROPOSED EASEMENT |
| | PROPOSED CONTOUR |
| | K&G |
| | KO |
| | IKO |
| | DD |
| | FINISHED SURFACE LEVEL |
| | STORMWATER PIPE WITH SIZE |
| | STORMWATER GRATED DRAIN WITH CLASS "D" COVER |
| | STORMWATER DOWNPIPE AND PVC PIPE REFER HYDRAULIC ENGINEER FOR DETAILS |
| | GUARD RAIL |
| | SAFETY BARRIER |
| | EXISTING GUARD RAIL |
| | SAFETY BARRIER |
| | SUBSOIL DRAINAGE (100mm Ø) |
| | SUBSOIL DRAINAGE (100mm Ø uPVC) CONNECTION UNDER PAVEMENT |
| | GRASS LINED SWALE |
| | KERB INLET PIT |
| | SURFACE INLET PIT |
| | JUNCTION PIT |
| | EXISTING STORMWATER PIPE AND PIT |
| | PROPOSED NOISE WALL |
| | PROPOSED RETAINING WALL |
| | EXISTING RETAINING WALL |
| | EXISTING COMMUNICATIONS |
| | EXISTING SEWER MAIN |
| | EXISTING WATER MAIN |
| | EXISTING NBN |
| | EXISTING ELECTRICAL |
| | EXISTING GAS MAIN |

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|--|---|---------------|----------|--|------------------|----------|-------|-------------|------|--|------------|--|--|--|---------------------------|--|---|---------------|---|--------|--|-------|--|---------|--|---------|--|----|--|--|--|------------|--|-------------|--|-------|--|------------------|--|------------|--|--|--|--|--|-------------|--|---|--|--|--------|---|----|-----------------------|--------------|----------|
| <table><tr><td>P2</td><td>ISSUED FOR DA</td><td>19-08-22</td></tr><tr><td>P1</td><td>ISSUED FOR DRAFT</td><td>15-08-22</td></tr><tr><td>Issue</td><td>Description</td><td>Date</td></tr></table> | P2 | ISSUED FOR DA | 19-08-22 | P1 | ISSUED FOR DRAFT | 15-08-22 | Issue | Description | Date | <table><tr><td colspan="2">Bar Scales</td></tr><tr><td colspan="2"></td></tr><tr><td colspan="2">1 : 250 @ A1 1 : 500 @ A3</td></tr></table> | Bar Scales | | | | 1 : 250 @ A1 1 : 500 @ A3 | | <p>THIS DRAWING CANNOT BE COPIED OR REPRODUCED IN ANY FORM OR USED FOR ANY OTHER PURPOSE OTHER THAN THAT ORIGINALLY INTENDED WITHOUT THE WRITTEN PERMISSION OF AT&L</p> | <p>Client</p> | <table><tr><td colspan="2">Scales</td><td colspan="2">Drawn</td><td colspan="2">Project</td></tr><tr><td colspan="2">1 : 250</td><td colspan="2">YR</td><td colspan="2">PROPOSED INDUSTRIAL DEVELOPMENT OAKDALE WEST - LOT 4A & 4B</td></tr><tr><td colspan="2">Grid LOCAL</td><td colspan="2">Designed JC</td><td colspan="2" rowspan="2">Title</td></tr><tr><td colspan="2">Height Datum AHD</td><td colspan="4">Checked DS</td></tr><tr><td colspan="2"></td><td colspan="2">Approved DS</td><td colspan="2">SITWORKS AND STORMWATER DRAINAGE PLAN SHEET 8</td></tr></table> | Scales | | Drawn | | Project | | 1 : 250 | | YR | | PROPOSED INDUSTRIAL DEVELOPMENT OAKDALE WEST - LOT 4A & 4B | | Grid LOCAL | | Designed JC | | Title | | Height Datum AHD | | Checked DS | | | | | | Approved DS | | SITWORKS AND STORMWATER DRAINAGE PLAN SHEET 8 | | <p>Civil Engineers and Project Managers</p> <p>Level 7, 153 Walker Street North Sydney NSW 2060 ABN 96 130 882 405 Tel: 02 9439 1777 Fax: 02 9923 1055 www.atl.net.au info@atl.net.au</p> <table><tr><td>Status</td><td>FOR APPROVAL NOT TO BE USED FOR CONSTRUCTION</td><td>A1</td></tr><tr><td>Project - Drawing No.</td><td>15-272-C7827</td><td>Issue P2</td></tr></table> | Status | FOR APPROVAL NOT TO BE USED FOR CONSTRUCTION | A1 | Project - Drawing No. | 15-272-C7827 | Issue P2 |
| P2 | ISSUED FOR DA | 19-08-22 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P1 | ISSUED FOR DRAFT | 15-08-22 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Issue | Description | Date | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bar Scales | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 : 250 @ A1 1 : 500 @ A3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Scales | | Drawn | | Project | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 : 250 | | YR | | PROPOSED INDUSTRIAL DEVELOPMENT OAKDALE WEST - LOT 4A & 4B | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Grid LOCAL | | Designed JC | | Title | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Height Datum AHD | | Checked DS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Approved DS | | SITWORKS AND STORMWATER DRAINAGE PLAN SHEET 8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Status | FOR APPROVAL NOT TO BE USED FOR CONSTRUCTION | A1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Project - Drawing No. | 15-272-C7827 | Issue P2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |



LEGEND

HEAVY DUTY RIGID PAVEMENT

ASPHALT PAVEMENT
CARPARK AISLES

LANDSCAPE

FOOTPATH

FIRE ACCESS TRACK
(PERMEABLE PAVING)

NOTE: PAVEMENT THICKNESS SUBJECT TO DETAILED DESIGN

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| | | |
| P3 | FIRE BRIGADE ACCESS ROAD REVISED | 23-08-22 |
| P2 | ISSUED FOR DA | 19-08-22 |
| P1 | ISSUED FOR DRAFT | 15-08-22 |
| Issue | Description | Date |

Bar Scales

020406080100m

1 : 1000 @ A1 1 : 2000 @ A3

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Client

| | | | |
|--------------|----------|----------|----|
| Scales | 1 : 1000 | Drawn | YR |
| | | Designed | JC |
| Grid | LOCAL | Checked | DS |
| Height Datum | AHD | Approved | DS |

Project

PROPOSED INDUSTRIAL DEVELOPMENT
OAKDALE WEST - LOT 4A & 4B

Title

PAVEMENT PLAN

Civil Engineers and Project Managers

Level 7, 153 Walker Street
North Sydney NSW 2060
ABN 96 130 882 405
Tel: 02 9439 1777
Fax: 02 9923 1055
www.atl.net.au
info@atl.net.au

Status

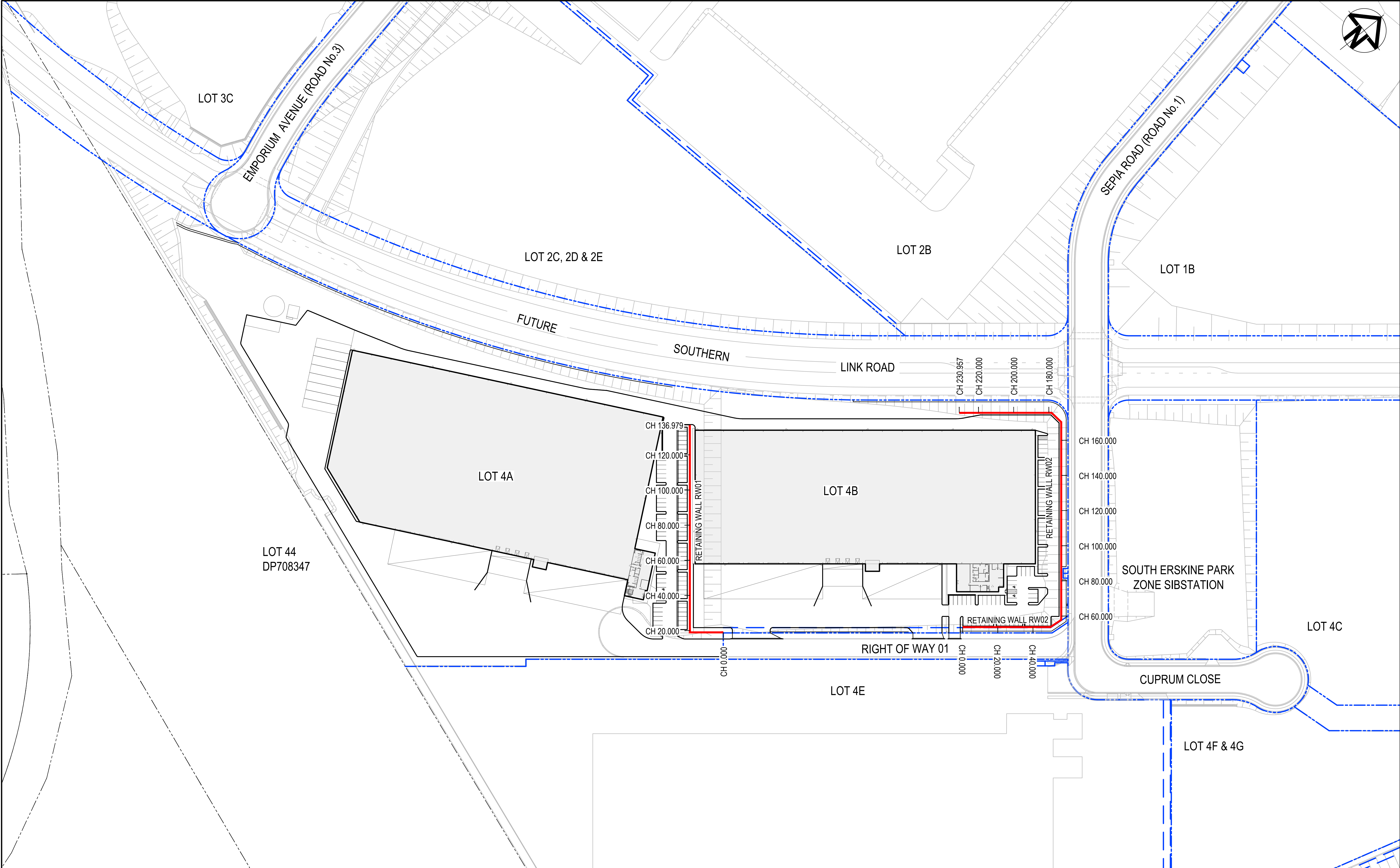
FOR APPROVAL
NOT TO BE USED FOR CONSTRUCTION

Project - Drawing No.

15-272-C7830

Issue

P3



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| P2 | ISSUED FOR DA | 19-08-22 |
| P1 | ISSUED FOR DRAFT | 15-08-22 |
| Issue | Description | Date |

Bar Scales

0 20 40 60 80 100m

1 : 1000 @ A1 1 : 2000 @ A3

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Client

Goodman

| | | | |
|--------------|----------|----------|----|
| Scales | 1 : 1000 | Drawn | YR |
| | | Designed | JC |
| Grid | LOCAL | Checked | DS |
| Height Datum | AHD | Approved | DS |

Project

PROPOSED INDUSTRIAL DEVELOPMENT
OAKDALE WEST - LOT 4A & 4B

Title

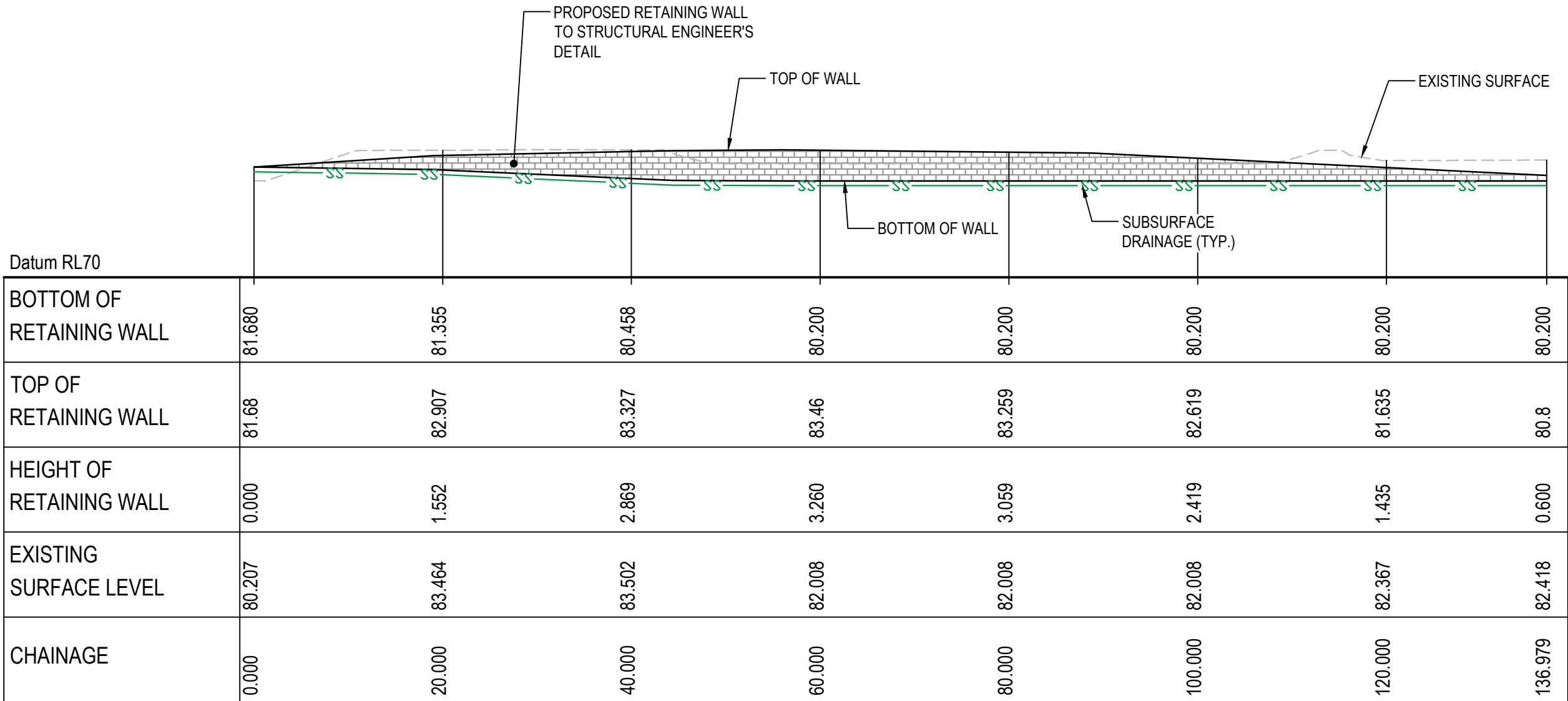
RETAINING WALL GENERAL ARRANGEMENT PLAN

Civil Engineers and Project Managers

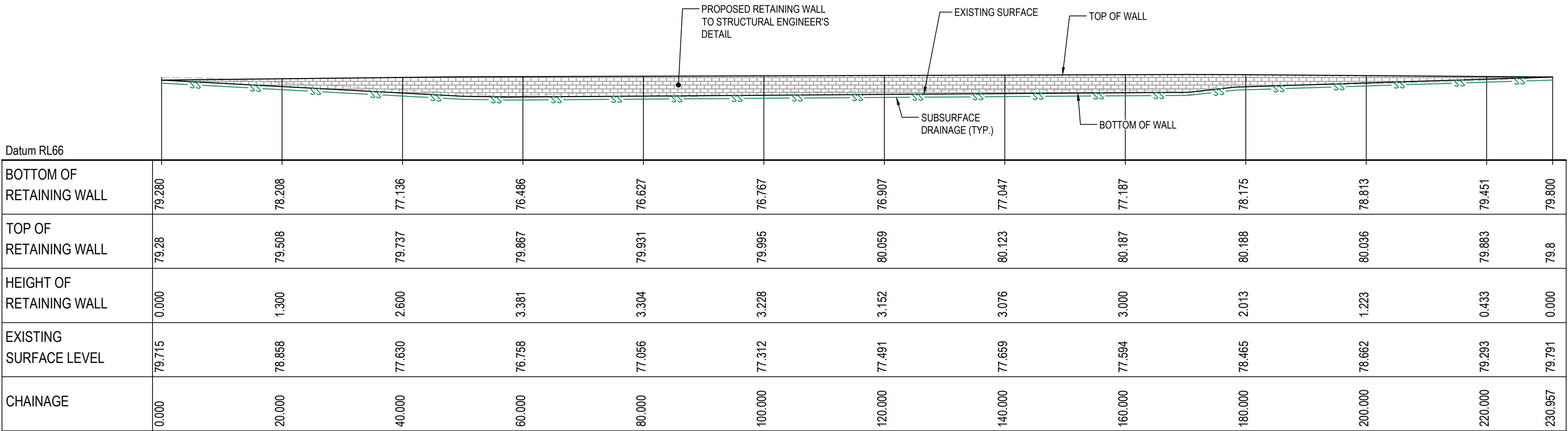
at&l

Level 7, 153 Walker Street
North Sydney NSW 2060
ABN 96 130 882 405
Tel: 02 9439 1777
Fax: 02 9923 1055
www.atl.net.au
info@atl.net.au

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| Status | FOR APPROVAL NOT TO BE USED FOR CONSTRUCTION | A1 |
| Project - Drawing No. | 15-272-C7835 | Issue P2 |

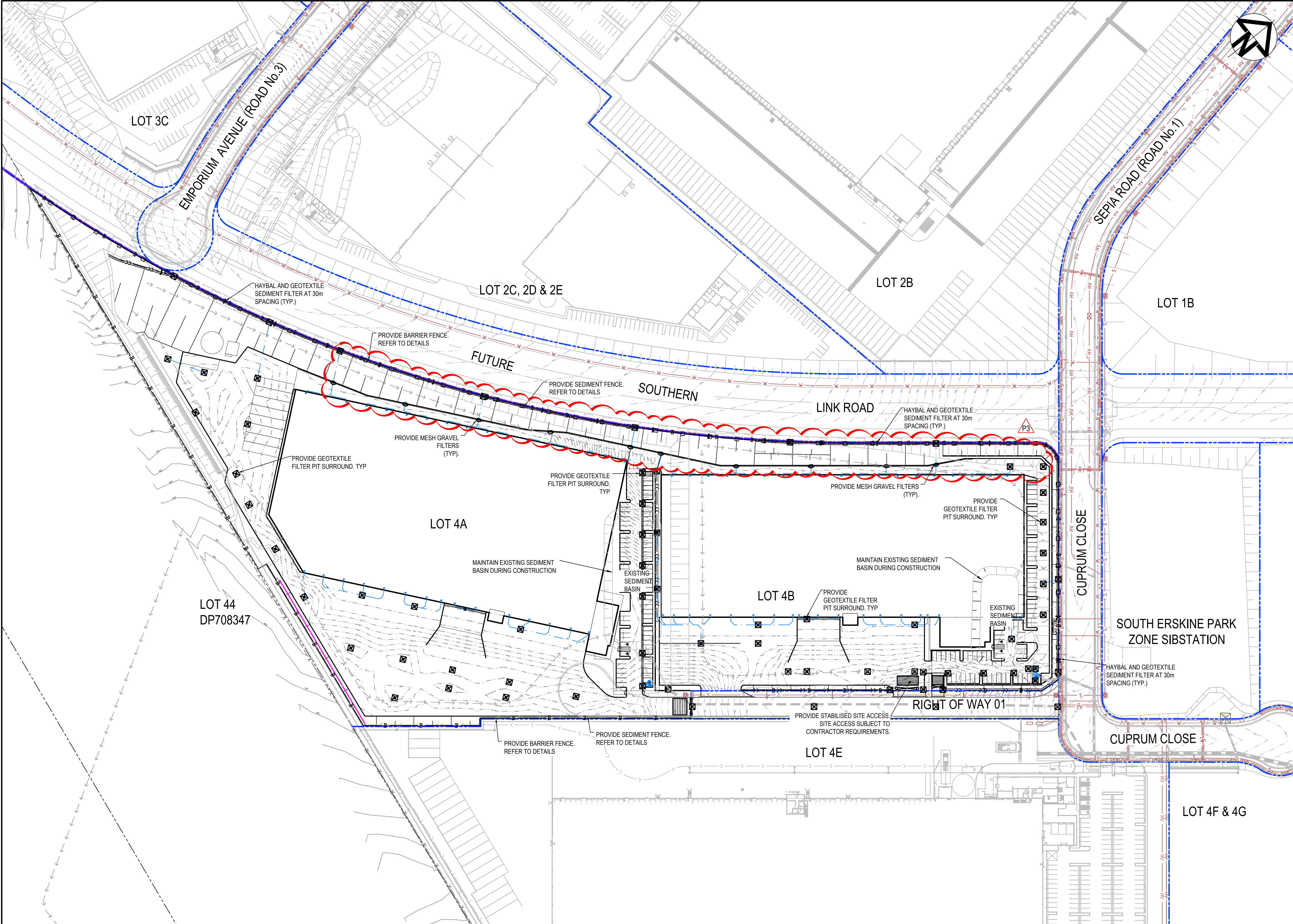


RETAINING WALL RW01 PROFILE
SCALE 1:500 HORI.
1:500 VERT.



RETAINING WALL RW02 PROFILE
SCALE 1:500 HORI.
1:500 VERT.

| | | | | | | | | | | | |
|-----------------|------------------|------------|--|--|--|----------|----------------------------|----|--|---|-------------|
| | | Bar Scales | <div><div></div><div>01020304050m</div><div>1 : 500 @ A1 1 : 1000 @ A3</div></div> | THIS DRAWING CANNOT BE COPIED OR REPRODUCED IN ANY FORM OR USED FOR ANY OTHER PURPOSE OTHER THAN THAT ORIGINALLY INTENDED WITHOUT THE WRITTEN PERMISSION OF AT&L | Client <div><div></div><div>Goodman</div></div> | Scales | Drawn | YR | Project <div>PROPOSED INDUSTRIAL DEVELOPMENT OAKDALE WEST - LOT 4A & 4B</div> | Civil Engineers and Project Managers <div><div>at&I</div><div>Level 7, 153 Walker Street North Sydney NSW 2060 ABN 96 130 882 405 Tel: 02 9439 1777 Fax: 02 9923 1055 www.atl.net.au info@atl.net.au</div></div> | |
| | | | | | | 1 : 500 | Designed | JC | | | |
| Grid | LOCAL | | | | | Checked | DS | | | | |
| Height Datum | AHD | | | | | Approved | DS | | | | |
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| P2 | ISSUED FOR DA | 19-08-22 | | | | | Title | | Status | FOR APPROVAL NOT TO BE USED FOR CONSTRUCTION | A1 |
| P1 | ISSUED FOR DRAFT | 15-08-22 | | | | | RETAINING WALL PROFILES | | Project - Drawing No. | 15-272-C7836 | Issue P2 |
| Issue | Description | Date | | | | | | | | | |



LEGEND

SEDIMENT FENCE (SD 6-8)

CATCH DRAIN

BARRIER FENCE

STRAW BALE FILTER (SD 6-7)

MESH AND GRAVEL INLET FILTER (SD 6-11)

GEOTEXTILE INLET (SD 6-12)

STABILISED SITE ACCESS AND TRUCK WASH DOWN AREA (SD 6-14)

PROPOSED SITE ACCESS GATE

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| P3 | FIRE BRIGADE ACCESS ROAD REVISED | 23-08-22 |
| P2 | ISSUED FOR DA | 19-08-22 |
| P1 | ISSUED FOR DRAFT | 15-08-22 |
| Issue | Description | Date |

Bar Scales

0

20

40

60

80

100m

1 : 1000 @ A1 1 : 2000 @ A3

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Client

Goodman

| | | | |
|--------------|----------|----------|----|
| Scales | 1 : 1000 | Drawn | YR |
| | | Designed | JC |
| Grid | LOCAL | Checked | DS |
| Height Datum | AHD | Approved | DS |

Project

PROPOSED INDUSTRIAL DEVELOPMENT
OAKDALE WEST - LOT 4A & 4B

Title

EROSION AND SEDIMENT CONTROL PLAN

Civil Engineers and Project Managers

at&l

Level 7, 153 Walker Street
North Sydney NSW 2060
ABN 96 130 882 405
Tel: 02 9439 1777
Fax: 02 9923 1055
www.atl.net.au
info@atl.net.au

Status

FOR APPROVAL
NOT TO BE USED FOR CONSTRUCTION

Project - Drawing No.

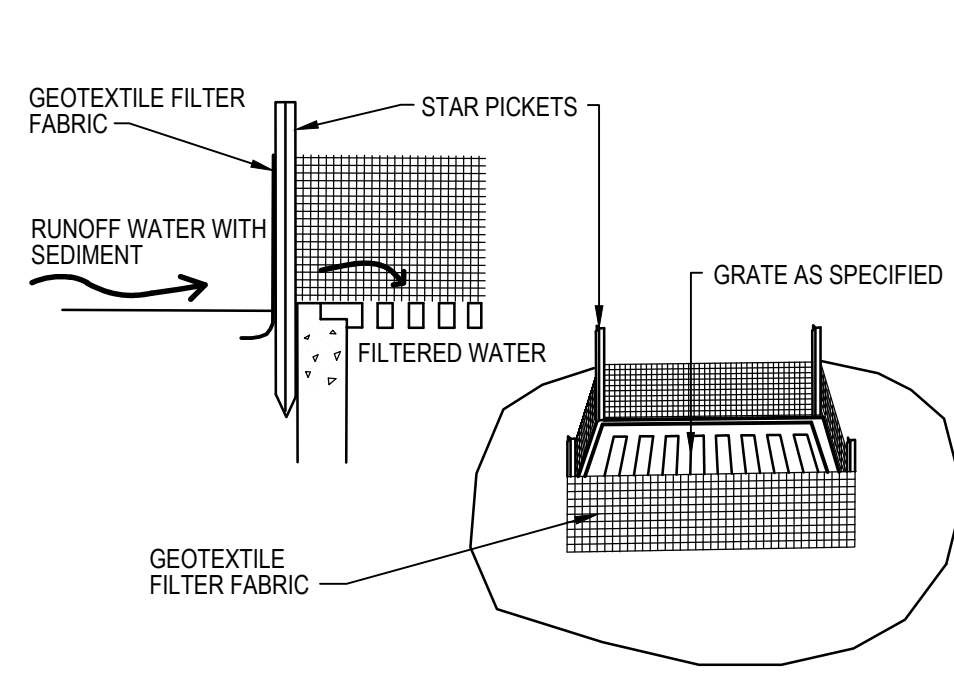
15-272-C7840

Issue

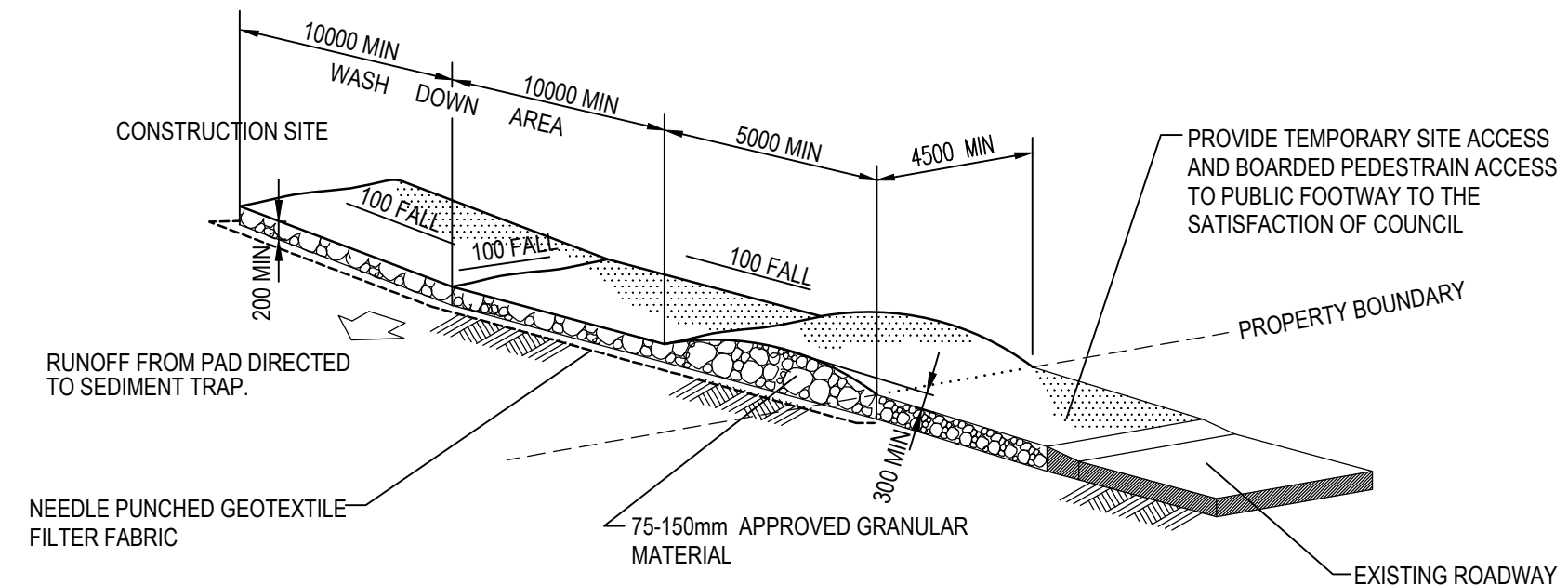
P3

A1

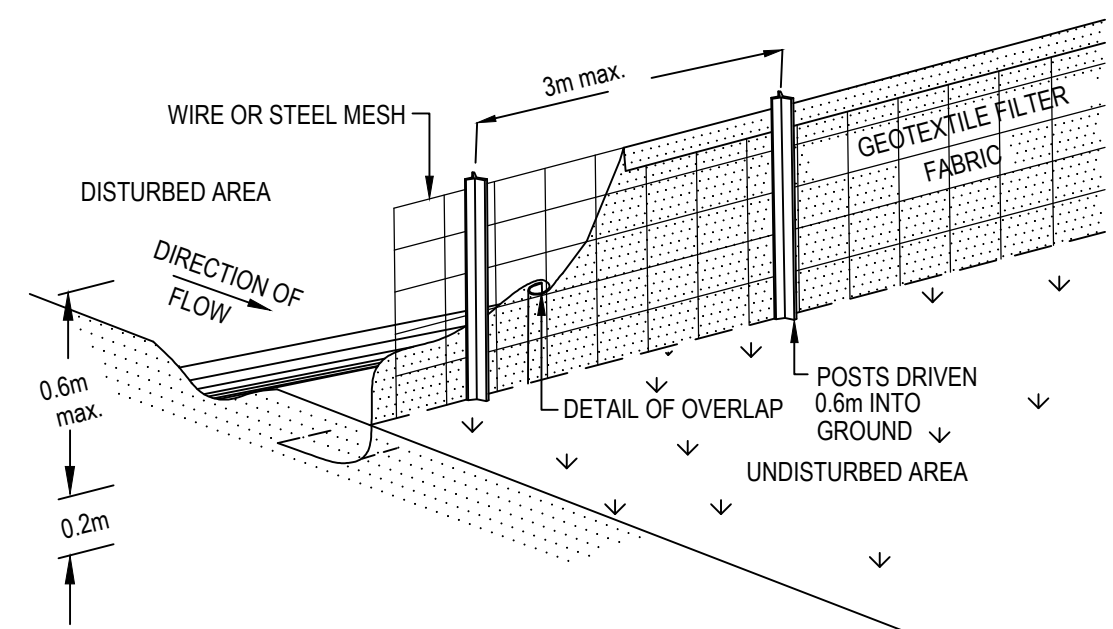
F:\15-272 Oakdale West\Drgs\Civil\Final\SSDA\7000_On-Lot Works Packages\7800 LOT 4A 4B\15-272-C7840.dwg



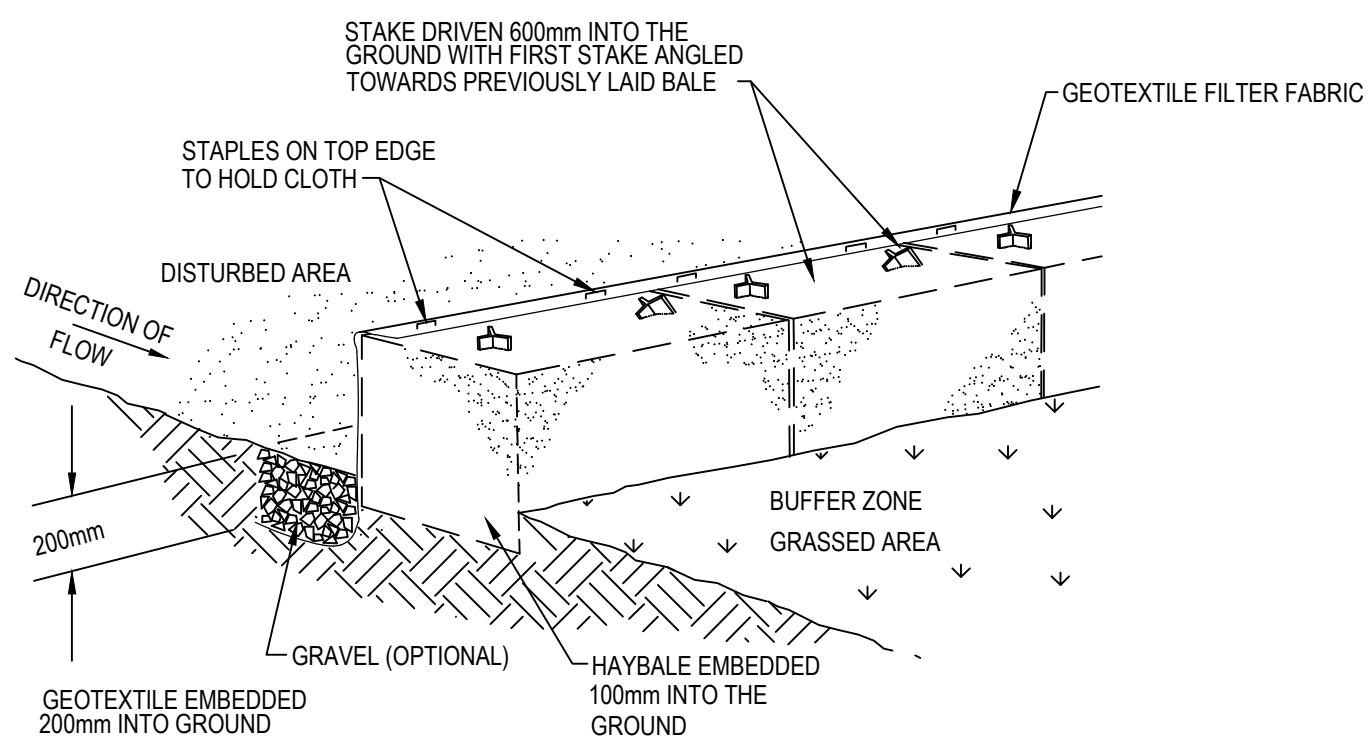
GEOTEXTILE FILTER PIT SURROUND
NTS



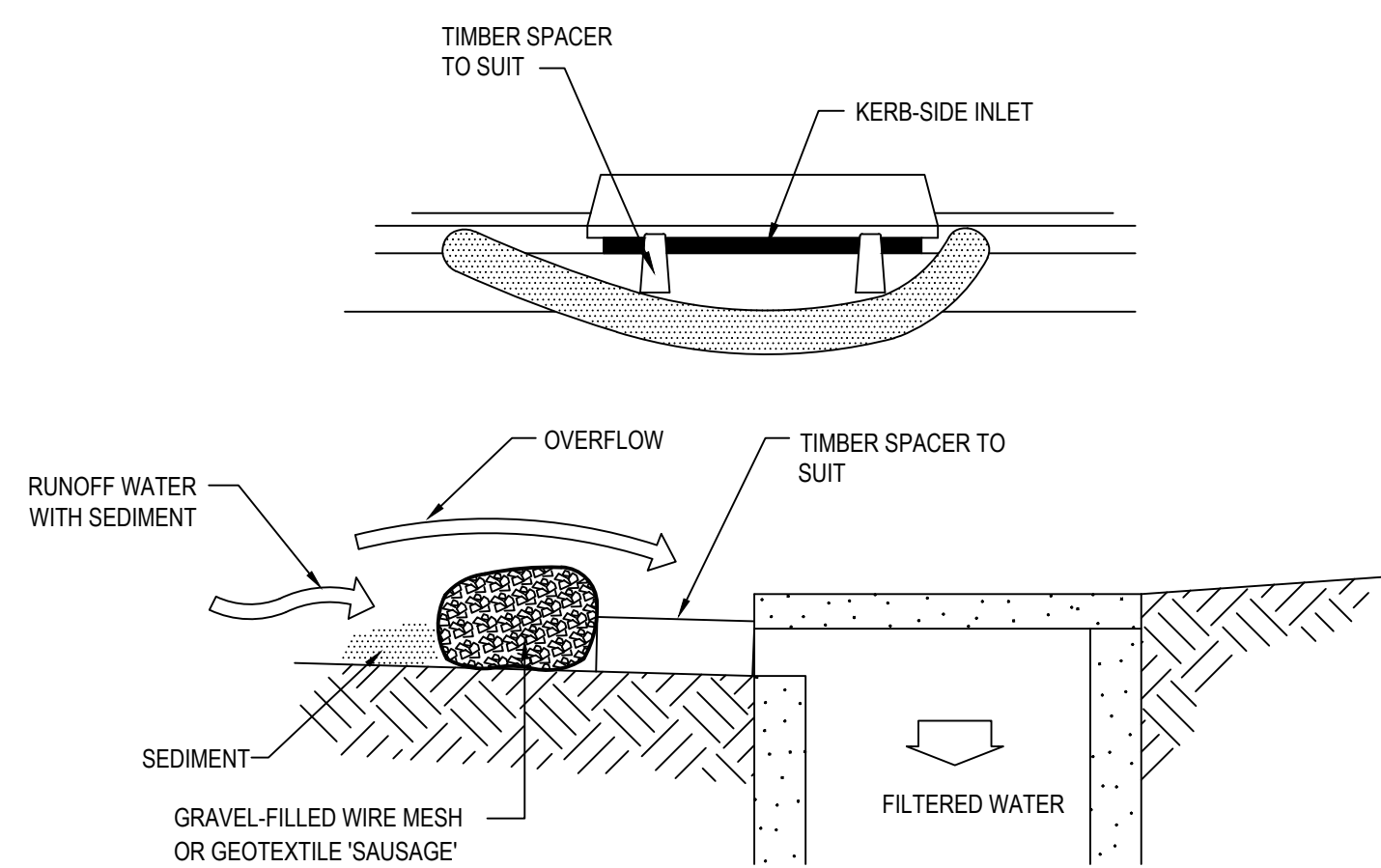
STABILISED SITE ACCESS AND TRUCK WASH DOWN AREA
NTS



SEDIMENT FENCE
NTS



HAYBALE AND GEOTEXTILE SEDIMENT FILTER
NTS



MESH AND GRAVEL INLET FILTER
NTS

| | | | | | | | | | | | | |
|-------|------------------|------------|--|--------|---|-----------------|----------|----------|---------|--------------------------------------|---|----|
| | | Bar Scales | THIS DRAWING CANNOT BE COPIED OR REPRODUCED IN ANY FORM OR USED FOR ANY OTHER PURPOSE OTHER THAN THAT ORIGINALLY INTENDED WITHOUT THE WRITTEN PERMISSION OF AT&L | Client | <div><div></div><div>Goodman</div><div></div></div> | Scales | Drawn | YR | Project | Civil Engineers and Project Managers | | |
| | | | | | | NTS | Designed | JC | | | | |
| | | | | | | Grid | LOCAL | Checked | | | DS | |
| | | | | | | Height Datum | AHD | Approved | | | DS | |
| | | | | | | | | | Title | EROSION AND SEDIMENT DETAILS | Status FOR APPROVAL NOT TO BE USED FOR CONSTRUCTION | A1 |
| | | | | | | | | | | | | |
| P2 | ISSUED FOR DA | 19-08-22 | | | | | | | | | | |
| P1 | ISSUED FOR DRAFT | 15-08-22 | | | | | | | | | | |
| Issue | Description | Date | | | | | | | | | | |
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