

CLARENCE CITY COUNCIL (PLANNING AUTHORITY) MEETING**TUESDAY 13 FEBRUARY 2024****TABLE OF CONTENTS**

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BUSINESS TO BE CONDUCTED AT THIS MEETING IS TO BE CONDUCTED IN THE ORDER IN WHICH IT IS SET OUT IN THIS AGENDA UNLESS THE COUNCIL BY ABSOLUTE MAJORITY DETERMINES OTHERWISE

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1. ACKNOWLEDGEMENT OF COUNTRY

The Mayor will:

- make the following statement:

“Before proceeding, I pay my respects to the Mumirimina people as the traditional and original custodians of the lands on which we meet, and I acknowledge the continuing connection of the Tasmanian Aboriginal people to the skies, land and waterways.

I pay respect to Elders past and present.”

- invite those present to pause for a moment of quiet reflection and respect before commencing the council meeting.
- advise the Meeting and members of the public that Council Meetings, not including Closed Meeting, are livestreamed, audio-visually recorded and published to Council’s website. The meeting is not protected by privilege. A link to the Agenda is available via Council’s website.

2. APOLOGIES

Cr Chong
Cr Hulme (Leave of Absence)

3. DECLARATIONS OF INTERESTS OF COUNCILLORS OR CLOSE ASSOCIATE

In accordance with Regulation 8 of the Local Government (Meeting Procedures) Regulations 2015 and Council’s adopted Code of Conduct, the Mayor requests Councillors to indicate whether they have, or are likely to have a pecuniary interest (any pecuniary benefits or pecuniary detriment) or conflict of interest in any item on the Agenda.

4. DEPUTATIONS

5. REPORTS OF OFFICERS**5.1 DEVELOPMENT APPLICATION PDPLANPMTD-2023/036809 – 66 KENNEDY DRIVE AND 63 CAMBRIDGE PARK DRIVE, CAMBRIDGE - BULKY GOODS, TAKEAWAY FOOD PREMISES AND BOUNDARY ADJUSTMENT****EXECUTIVE SUMMARY****PURPOSE**

The purpose of this report is to consider the application made for a Bulky Goods, Takeaway Food Premises and Boundary Adjustment at 66 Kennedy Drive and 63 Cambridge Park Drive, Cambridge.

RELATION TO PLANNING PROVISIONS

The land is zoned Cambridge Commercial Particular Purpose Zone and subject to the Parking and Sustainable Transport Code, Road and Railway Assets Code, Signs Code, Flood Prone Hazard Areas Code and Safeguarding of Airports Code under the *Tasmanian Planning Scheme - Clarence* (the Scheme). In accordance with the Scheme the proposal is a Discretionary development.

LEGISLATIVE REQUIREMENTS

The report on this item details the basis and reasons for the recommendation. Any alternative decision by Council will require a full statement of reasons in order to maintain the integrity of the Planning approval process and to comply with the requirements of the Judicial Review Act and the Local Government (Meeting Procedures) Regulations 2015.

Council is required to exercise a discretion within the statutory 42-day period which expires on 14 February 2024.

CONSULTATION

The proposal was advertised in accordance with statutory requirements and one representation was received raising the issue of Bicycle Parking.

RECOMMENDATION:

A. That the Planning Application for Bulky Goods, Takeaway Food Premises and Boundary Adjustment at 66 Kennedy Drive and 63 Cambridge Park Drive, Cambridge (CI Ref PDPLANPMTD-2023/036809) be approved subject to the following conditions and advice.

1. GEN AP1 – ENDORSED PLANS.

2. GEN AP3 – AMENDED PLAN.
Amended plans showing:
 - detailed articulation along the northern facade of the building facing Bungana Way at 63 Cambridge Park Drive must be submitted to and approved by Council's Head of City Planning prior to the commencement of works. When approved, the plans will form part of the permit.
3. GEN V8 – BICYCLE STORAGE.
Parking facilities for **28 bicycles** must be provided on-site. A plan showing the location and design must be submitted to and approved by Council's Head of City Planning, and the facilities must be constructed prior to the commencement of the use.
4. GEN C1 – ON-SITE CAR PARKING.
255 car parking spaces must be provided on the property located at 63 Cambridge Park Drive prior to the commencement of the use. Each space, including accessible parking, must be clearly marked and used solely for parking purposes.
5. GEN AM3 – EXTERNAL COLOURS.
6. GEN M14 – STORAGE AREAS.
7. External lighting is not to operate within the hours of 11pm to 6am, excluding any security lighting.
8. GEN AM7 – OUTDOOR LIGHTING.
9. GEN S3 – SIGN EXTERNAL ILLUMINATION.
10. GEN S2 – SIGN LOCATION.
11. The signs must be illuminated only between the hours of 10am – 10pm.
12. An illuminated sign visible from public places in adjacent roads must not create the effect of flashing, animation or movement, unless it is providing direction or safety information.
13. GEN S7 – SIGN MAINTENANCE.
14. ENG A1 – NEW CROSSOVER.
15. ENG A5 – SEALED CAR PARKING.
16. ENG A7 – REDUNDANT CROSSOVER.
17. ENG M1 – DESIGNS DA.

18. An erosion and sedimentation control plan, in accordance with the Derwent Estuary Program Soil & Water Management on Building & Construction Sites document, must be submitted and approved by Council's Head of Infrastructure and Natural Assets prior to the commencement of the use/prior to the issue of a certificate of likely compliance (CLC) for building works, (whichever occurs first). All debris/construction materials must be contained within the property. All works must be carried out in compliance with the approved erosion and sediment control plan or to the satisfaction of Council's Head of Infrastructure and Natural Assets prior to the commencement of works.
19. ENG M6 – CONSTRUCTION FENCING.
20. ENG S1 – INFRASTRUCTURE REPAIR.
21. ENG S3A – WATER SENSITIVE URBAN DESIGN PRINCIPLES – PART 5.
22. ENG S2C – URBAN DRAINAGE SYSTEMS MODIFICATIONS.
23. A plan for the management of construction must be submitted and approved by Council's Head of Infrastructure and Natural Assets prior to the issue of a Building or Plumbing Permit. The plan must outline the proposed demolition and construction practices in relation to:
 - proposed hours of work (including volume and timing of heavy vehicles entering and leaving the site, and works undertaken on-site);
 - proposed hours of construction;
 - identification of potentially noisy construction phases, such as operation of rock breakers if any;
 - control of dust and emissions during working hours;
 - Access and Parking during construction;
 - proposed screening of the site and vehicular access points during work; and
 - procedures for washing down vehicles, to prevent soil and debris being carried onto the street.
24. Council, as a Stormwater authority, formed a view that the proposed development will intensify the stormwater discharge from the property and hence requires approval under the *Urban Drainage Act 2013* and the stormwater is to be designed as per Council's Stormwater Management Procedure for new development (Stormwater-Management-Procedure-for-New-Development (1).pdf). This requirement will be assessed as part of engineering plans assessment if the proposed DA is approved.
25. LAND 1A – LANDSCAPE PLAN.
26. LAND 3 – LANDSCAPE BOND (COMMERCIAL).

27. The development must meet all required Conditions of Approval specified by TasWater notice dated 27 November 2023 (TWDA 2023/00816-CCC).

ADVICE

- a. This Permit will lapse after two years from the date on which it is granted unless the development/use has been substantially commenced. Upon request, under Section 53(5A) of the *Land Use Planning and Approvals Act 1993*, Council may grant an extension of time for a further two years. A further two years may be granted upon request under Section 53(5B) of the *Land Use Planning and Approvals Act 1993*. Any such requests must be made in writing and within six months of the day on which the permit has lapsed.
 - b. This is a town planning permit only. Please be aware that a building permit and/or a plumbing certificate of likely compliance or plumbing permit may be required before the development can proceed. It is recommended that you contact Council's Building Department on (03) 6217 9580 to discuss the requirement for any additional permits or certification.
 - c. Non-compliance with this permit is an offence under Section 63 of the *Land Use Planning and Approvals Act 1993* and may result in enforcement action under Division 4A of the *Land Use Planning and Approvals Act 1993*, which provides for substantial fines and daily penalties.
 - d. Detailed plans and specifications for all food handling areas, showing all internal surfaces, fittings and fixtures, must form part of a request for report from an Environmental Health Officer in accordance with Regulation 26B(3) of the *Building Regulations 2016* where the proposed work is notifiable building work or Regulation 28 of the *Building Regulations 2016* where the proposed work is permit building work. The plans must comply with the *Food Act 2003*, the Tasmanian Appendix Part H102 Food Premises of Volume 1 of the National Construction Code and the Food Standards Code.
 - e. The site must be registered as a business in accordance with the *Food Act 2003* prior to the commencement of the use.
 - f. The applicant must obtain approval from CASA for the proposed lighting at 66 Kennedy Drive and 63 Cambridge Park Drive prior to the commencement of the use.
- B. That the details and conclusions included in the Associated Report be recorded as the reasons for Council's decision in respect of this matter.

DEVELOPMENT APPLICATION PDPLANPMTD-2023/036809 – 66 KENNEDY DRIVE AND 63 CAMBRIDGE PARK DRIVE, CAMBRIDGE - BULKY GOODS, TAKEAWAY FOOD PREMISES AND BOUNDARY ADJUSTMENT /contd...

ASSOCIATED REPORT**1. BACKGROUND**

In 2008, Council received an application, D-2008/241 to extend the existing homemakers centre, which included the development of additional specialist/bulky goods stores on the adjoining property at 63 Cambridge Park Drive. The application was approved by Council on 2 September 2008.

In 2010, an application was made for a two-year extension to the permit in accordance with Section 53(5A) of the *Land Use Planning and Approvals Act 1993*.

On 1 September 2012 the permit expired, and the applicant lodged another planning application, D-2012/301 for the same development as previously approved. This application was approved on 13 November 2012 and expired two years later.

In 2023, this current application was lodged and is predominately the same as that previously approved, but with an additional tenancy, food service and boundary adjustment. Due to the cost of works being in excess of \$25 million and having received a representation, this application requires Council determination at a special meeting, as per Council's decision of 5 September 2022.

2. STATUTORY IMPLICATIONS

- 2.1.** The land is zoned Cambridge Commercial Particular Purpose Zone under the Scheme.
- 2.2.** The proposal is discretionary because it does not meet the Acceptable Solutions under the Scheme.
- 2.3.** The relevant parts of the Planning Scheme are:
 - Section 5.6 – Compliance with Applicable Standards;

- Section 6.10 – Determining Applications;
- Section CLA-P3.0 – Cambridge Commercial Particular Purpose Zone;
- Section C1.0 – Signs Codes;
- Section C2.0 – Parking and Sustainable Transport Code;
- Section C3.0 – Road and Railway Assets Code;
- Section C12.0 – Flood Prone Hazard Areas Code; and
- Section C16.0 – Safeguarding of Airports Codes.

2.4. Council’s assessment of this proposal must also consider the issues raised in any representations received, the outcomes of the State Policies and the objectives of Schedule 1 of the *Land Use Planning and Approvals Act, 1993* (LUPAA).

3. PROPOSAL IN DETAIL

3.1. The Site

The proposed development encompasses two sites, 66 Kennedy Drive and 63 Cambridge Park Drive, which are adjoining allotments situated on the northern side of the Tasman Highway. Both parcels have a secondary frontage to Bungana Way.

The property located at 66 Kennedy Drive is where the established homemaker centre and associated car parking is located. The site is a large 10.86 hectare lot that is an irregular shape and is highly visible from the Tasman Highway.

The adjoining property located at 63 Cambridge Park Drive comprises of a vacant grassed land parcel of 2.8 hectares. It has a direct frontage to Cambridge Park Drive of 159.9m in length and is visible from the Tasman Highway. The site is burdened by an easement for drainage (5m wide) that runs along the site’s northern boundary, and a TasWater easement (3m wide) that runs along the western boundary.

The land slope is generally flat and is clear of significant vegetation and is fully serviced.

3.2. The Proposal

The proposal is to extend the existing homemaker centre onto the land situated at 63 Cambridge Park Drive. The proposal is for eight bulky good tenancies, two located on the existing homemaker centre site and six located on the vacant adjoining lot, along with a takeaway food premises and the realignment of the western boundary.

The two new bulky goods tenancies located on the existing homemaker centre site will add an additional 1606m² of floor area to the existing centre. Tenancy C1 will have a floor area of 797m² and Tenancy C2 will be 809m² in area.

The proposed development on the adjoining vacant lot is a single level building with a total floor area of 10,440m², with six tenancies ranging in size from 700m² to 3840m². The proposed building design would be consistent with the scale, appearance, and nature of the existing homemaker centre. The development on this site will also include a drive-through fast food restaurant, detail of the occupier is unknown at this stage. The restaurant would be located in the south-eastern corner of the lot, situated closer to the Tasman Highway than the other buildings, and is anticipated to operate 24 hours.

The fast food restaurant will consist of a 275m² building with a height of 6m, two parallel drive-through lanes with associated “car queuing” capacity, twenty on-site car parking spaces and two motorcycle spaces. The proposal also includes various wall and building fascia signs on the building to identify the business and an 8m high pylon sign located along the frontage facing Cambridge Park Drive.

The main bulky goods buildings would be clad using pre-cast concrete panels with Colorbond roof sheeting. The external walls facing the Tasman Highway and Cambridge Park Drive would be clad using different paint finishes, canopies and glazed entry areas, and large signage over each tenancy.

The façade facing Bungana Way would serve as the service area for the bulky goods tenancies, and presents as large expanses of blank walls, broken up with roller doors, entry ways and glazing.

It is proposed to relocate the existing boundary of 66 Kennedy Drive to the east by approximately 3.5m. The revised location is proposed to align with the eastern wall of proposed Tenancy C2. This will allow the tenancies to be appropriately separated for servicing and for fire rating reasons.

The proposal also involves the relocation of a section of the TasWater easement located in the north-west corner of 63 Cambridge Park Drive.

- **Parking**

The proposal provides 255 parking spaces on-site at 63 Cambridge Park Drive, eight of which will be accessible parking located at the building entrances, 28 bicycle parking spaces and 12 motorcycle parking spaces across the site. No additional parking spaces are proposed for the proposed two tenancies located on the existing homemaker centre.

Parking for customers will be located in front of the retail buildings and staff parking is provided at the back of house area along Bungana Way. The loading areas for the bulky goods sales building have been provided in appropriate locations, to the back of those buildings, separated from parking activity.

Vehicle access will be via an existing two-way access point to Cambridge Park Drive, a two-way access and exit point and a one-way exit point to Cambridge Park Drive near the fast food restaurant, and a proposed service road along the eastern boundary is to have a two access and exit point at Bungana Way, with an exit only onto Cambridge Road.

- **Signage**

The signage proposed for the development is to be located on the main façade facing the Tasman Highway and Cambridge Park Drive for the bulky good tenancies, and on the western facade of Tenancy E5 and E6. The site will also include two 9.4m high pylon signs at the frontage to Cambridge Park Drive to advertise the homemaker centre. The fast food restaurant will include wall signs and an 8m high pylon sign. All signage is to be illuminated.

4. PLANNING ASSESSMENT

4.1. Compliance with Applicable Standards [Section 5.6]

“5.6.1 A use or development must comply with each applicable standard in the State Planning Provisions and the Local Provisions Schedules.”

4.2. Determining Applications [Section 6.10]

“6.10.1 In determining an application for any permit for use or development the planning authority must, in addition to the matters required by section 51(2) of the Act, take into consideration:

- (a) all applicable standards and requirements in this planning scheme; and*
- (b) any representations received pursuant to and in conformity with section 57(5) of the Act, but in the case of the exercise of discretion, only insofar as each such matter is relevant to the particular discretion being exercised.”*

References to these principles are contained in the discussion below.

4.3. General Provisions

The Scheme contains a range of General Provisions relating to specific circumstances not controlled through the application of Zone, Code or Specific Area Plan provisions.

There are no General Provisions relevant to the assessment of this proposal.

4.4. Compliance with Zone and Codes

The proposal does not require an assessment against the Safeguarding of Airports Code because the proposed development height is below the Obstacle Surface Layer (OSL) height of 47m, and it is not a sensitive use within the airport noise attenuation area.

The proposal meets the Scheme's applicable Acceptable Solutions of the Cambridge Commercial Particular Purpose Zone and the Signs Code, Parking and Sustainable Transport Code, Road and Railway Assets Code and Flood Prone Hazard Areas Codes with the exception of the following.

Cambridge Commercial Particular Purpose Zone

- **Clause CLA-P3.6.2 A2** for side and rear setbacks. Buildings are to have a setback from a side and rear boundary of not less than 3m. However, the proposed tenancies located on the shared boundary between 66 Kennedy Drive and 63 Cambridge Park Drive will have a zero metre setback to this shared boundary.

The proposed setback must be considered against Performance Criteria (P2) of the Clause CLA-P3.6.2 Setbacks.

Clause	Performance Criteria	Assessment
CLA-P3.6.2 P2	<i>“Buildings must be sited a sufficient distance from side and rear boundaries to enhance the streetscape, provide adequate space for vehicle access, parking, maintenance access and landscaping and help to attenuate site impacts, having regard to:</i>	It is proposed to relocate the existing boundary between 66 Kennedy Drive and 63 Cambridge Park Drive. The revised location is proposed to align with the eastern wall of the proposed building, tenancy C2, on the existing homemaker centre site. As a result, Tenancy C2 and the adjoining Tenancy E1 on 63 Cambridge Park Drive will both have a nil setback to this shared boundary.
	<i>(a) the site's area and dimensions and the proportionate intrusion;</i>	The subject sites are both irregular shaped with curved frontages to Bungana Way and Cambridge Park Drive.

		<p>The total area both sites occupy is 13.75ha with the intrusion area representing a very small portion of the site area.</p>
	<p>(b) <i>compatibility with buildings on adjacent properties in the streetscape;</i></p>	<p>Given the proposed development is an extension to the existing homemaker centre, the façade facing the Tasman Highway and Bungana Way will appear as a continuation of the existing centre, in relation to appearance, scale and size and therefore will be compatible with the adjoining buildings.</p>
	<p>(c) <i>compatibility with setback on the adjoining property and whether the reduction would leave inadequate space between the buildings for a landscaped buffer to enhance the appearance of the area;</i></p>	<p>The reduced setback on the western side of 63 Cambridge Park Drive will allow for vehicle access along the opposite side of the site, which in turn will provide reasonable separation and a landscape buffer between the homemaker centre and the adjoining office building located at 89 Cambridge Park Drive.</p>
	<p>(d) <i>the setback on the opposite side of the site and whether the reduction will be offset by landscaping on that side; and</i></p>	
	<p>(e) <i>whether the proposed height of the building and length of the proposed setback from side and rear boundaries will cause an unreasonable loss of amenity to the adjoining property including unreasonable overshadowing of any area required for a landscaping treatment.”</i></p>	<p>The single storey nature of the buildings and the 9m side setback from the adjoining lot to the east will not be intrusive on the broader landscape in relation to overshadowing.</p> <p>Due to the above reasoning, the nil setback proposed is assessed as not being unreasonable.</p>

- Clause CLA-P3.6.3 A1** in relation to design where a building must contain at least 70% glazing facing a road, and walls are to be clad in muted colours. The proposed façade facing Bungana Way will contain less than the required 70% glazing and is to be clad in various primary colours that are not muted.

The proposed relies on Performance Criteria (P1) of Clause CLA-P3.6.3 Design.

Clause	Performance Criteria	Assessment
CLA-P3.6.3 P1	<p><i>“The design of buildings must enhance the appearance of the site and the streetscape having regard to:</i></p> <p><i>(a) making a positive contribution to the character of the area, by promoting an attractive image, especially for building elements that face the Tasman Highway;</i></p> <p><i>(b) the need for buildings to:</i></p> <p><i>(i) use external cladding with suitable tone, texture, materials, relief and fenestration;</i></p> <p><i>(ii) not present blank facades to the street or to customer car parking areas;</i></p> <p><i>(iii) ensure walls fronting the Tasman Highway and any internal car park contain sufficient glazing, to ensure the premises interacts positively with the pedestrian environment and enhances the gateway entrance to Hobart;</i></p>	<p>The proposed development facing the Tasman Highway will complement the existing homemaker centre and respond appropriately to the Local Area Objectives (CLA3.2) for the Cambridge Commercial Particular Purpose Zone, particularly in relation to making a positive contribution to the character of the area by promoting an attractive image that faces the Tasman Highway.</p> <p>The design of the proposed development is consistent with the existing homemakers centre on the adjoining site, in terms of the appearance to the Highway and surrounding properties.</p> <p>The proposed building façades on Cambridge Park Drive are well articulated and contain substantial fenestration at ground level through varied tones, awnings above the footpath and emphasis to entries through varied heights and glazed entry awnings. Notably the buildings will present an attractive frontage to the highway through these treatments, along with landscaping and the site layout. However, the façade facing Bungana Way currently presents as a large façade with minimal use of texture, materials, relief and fenestration.</p>

	<p>(c) <i>whether ancillary shops, offices, cafes or other facilities are integrated with the design of buildings containing the principal use;</i></p> <p>(d) <i>the minimisation of visual intrusiveness of roof-top service infrastructure, including service plants and lift structures by integrating them into the building design;</i></p> <p>(e) <i>wind protection for the convenience, comfort and safety of pedestrians;</i></p> <p>(f) <i>the local area objectives; and</i></p>	<p>The frontage facing Bungana Way has been designed to be the loading areas for the bulky goods sales buildings, which is an appropriate location, to the rear of these buildings, separated from carpark activity and pedestrians.</p> <p>Through negotiation with the applicant, a concept plan has been provided (attachment 4) to amend this façade, which includes articulation and fenestration at ground level through varied tones, awnings, windows and entries which would be of a suitable scale to be in context with the scale of the building.</p> <p>Given the proximity of this façade to Bungana Way it is considered appropriate to impose a condition requiring alteration to this part of the development to provide better articulation consistent with Clause CLA-P3.6.3 P1 above.</p> <p>The fast food restaurant located at the Tasman Highway end of the site will include plant and service equipment, which is proposed to be roof mounted and generally screened from view.</p> <p>There are no wind protection measures proposed.</p> <p>The proposal is consistent with the local area objectives for the Cambridge commercial precinct, by providing tenancies for bulky good sales and associated businesses, while the built form will contribute to an attractive gateway entrance to Hobart.</p>
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	(g) <i>an urban design context report.”</i>	An urban design context report prepared by Leffler Simes Architects was submitted in support of the application. The report compared the proposed development with surrounding built form. The report concluded that the design of the proposed development would complement the existing character of the area, in relation to appearance, scale, materials, height and shop frontages.
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- **Clause CLA-P3.6.4 A1** for passive surveillance, where walls facing a road must contain windows and door openings that make up at least 40% of the surface area. The frontage facing Bungana Way does not contain windows and door openings that represent 40% of the surface area.

The proposal relies on Performance Criteria (P1) of Clause CLA-P3.6.4 Passive Surveillance.

Clause	Performance Criteria	Assessment
CLA-P3.6.4 P1	<p><i>“Building design must provide for passive surveillance of public spaces, having regard to:</i></p> <p>(a) <i>providing the main entrance or entrances to a building that are clearly visible from nearby buildings and public spaces;</i></p> <p>(b) <i>locating windows to adequately overlook the street and adjoining public spaces;</i></p>	<p>The pedestrian entrances to the proposed tenancies are clearly visible from Cambridge Park Drive. In each case, dedicated pedestrian access is provided to the tenancy and feature architectural elements to provide definition.</p> <p>There are ample shopfront windows and glazing proposed within the south and west facing façades to provide passive surveillance between the centre and the parking area and streets beyond. Security lighting will be provided within the parking area, pathways and any entrapment spaces.</p>

	<p>(c) <i>incorporating shop front windows and doors for ground floor shops and offices, so that pedestrians can see into the building and vice versa;</i></p>	<p>As discussed above, the frontage facing Bungana Way has been designed to be the loading areas, which is an appropriate location to separate parking activity and pedestrians. However, the current design presents relatively simple concrete panel facades, with large roller doors and staff access doors.</p> <p>The applicant notes that incorporating shop front windows and doors for shops along this façade is not practical given that the northern portion of the building is at the rear of the proposed tenancies and serves as a loading/serving area.</p> <p>However, the applicant has provided a concept plan to amend this façade, which includes articulation and fenestration at ground level through varied tones, awnings, windows and entries which would be of a suitable scale to be in context with the scale of the building.</p> <p>Given the current design of the north facing façade fronting Bungana Way is made up of relatively simple concrete panelling with minimal passive surveillance, it is considered appropriate to impose a condition requiring alteration to this part of the facades to provide better passive surveillance consistent with Clause CLA-P3.6.4 P1 above.</p>
	<p>(d) <i>locating external lighting to illuminate any entrapment spaces around the building site;</i></p>	<p>The design of the proposed development creates large open pedestrian spaces that can be easily viewed from several viewpoints. Therefore, the site would be void of any entrapment spaces.</p>

	(e) <i>providing external lighting to illuminate car parking areas and pathways;</i>	A lighting design plan prepared by COVA was submitted in support of the application. The lighting plan shows the car parking areas and pathways will be illuminated by external lighting throughout the car parking area, pedestrian spaces and the service road.
	(f) <i>the need for public access to provide high visibility for users and provide clear sight lines between the entrance and adjacent properties and public spaces; and</i>	A 2.2m wide pedestrian footpath has been provided in the middle of the northern row of the carpark to facilitate safe pedestrian access.
	(g) <i>the need to provide for sight lines to other buildings and public spaces.”</i>	The main building facades facing south and west provide sight lines between the tenancies, parking area and streets beyond from the shopfront windows and glazing.

- **Clause CLA-P3.6.5 A1** in relation to landscaping. Considering the proposed development will be visible from both the Tasman Highway and Bungana Way, the proposal relies on Performance Criteria (P1) of Clause CLA-P3.6.5 Landscaping as follows.

Clause	Performance Criteria	Assessment
CLA-P3.6.5 P1	<p><i>“Landscaping must enhance the appearance of the site and the streetscape, having regard to:</i></p> <p>(a) <i>the appearance and amenity of the development, including any public car parking area;</i></p>	A landscape plan was provided in support of the application (attachment 2). This plan shows landscaping along Cambridge Park Drive and Bungana Way, which will enhance the appearance of the development from both street frontages, particularly when viewed from the Tasman Highway.

	<p>(b) <i>the need to recognise the importance of the appearance of Tasman Highway as the gateway entrance to Hobart, by providing landscaped buffers to enhance buildings and sites abutting the Highway;</i></p> <p>(c) <i>the ability to provide a range of plant height and forms to create diversity, interest and amenity;</i></p> <p>(d) <i>using landscaping to soften the visual impact of buildings by breaking up building mass and enhancing architectural elements;</i></p> <p>(e) <i>the area within 10m of a boundary abutting the Tasman Highway, or 6m to any other road, excluding site entry or exit access, must be landscaped; and</i></p> <p>(f) <i>the local area objectives.”</i></p>	<p>The proposed development makes provision for landscaping within the following areas of the two properties:</p> <ul style="list-style-type: none"> • Within the front setback adjoining Cambridge Park Drive, landscaping will be provided from a depth of 6m to 7.7m; • Along the east boundary there will be 3m wide landscaping strips; • Along the frontage of Bungana Way there will be between 7m and up to 20m of landscaping; and • Landscaped outstands in the carpark areas. <p>A range of plant heights is proposed, and a condition will be included requiring a detailed landscaping plan which provides for a range of plants.</p> <p>The proposed range of landscaping areas will soften the visual impact of buildings and meets the Performance Criteria P1.</p>
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Signs Code

- **Clause C1.6.1 A1** in relation to design and siting of signs. The proposed facia signs and pylon signs will exceed the required dimensions of the acceptable solution for this standard.

The proposal relies on Performance Criteria (P1) of Clause C1.6.1 Design and Siting of Signs as follows.

Clause	Performance Criteria	Assessment
C1.6.1 P1	<p><i>“A sign must:</i></p> <p>(a) <i>be located within an applicable zone for the relevant sign type as set out in Table C1.6; and</i></p> <p>(b) <i>be compatible with the streetscape or landscape, having regard to:</i></p> <p>(i) <i>the size and dimensions of the sign;</i></p> <p>(ii) <i>the size and scale of the building upon which the sign is proposed;</i></p> <p>(iii) <i>the amenity of surrounding properties;</i></p> <p>(iv) <i>the repetition of messages or information;</i></p> <p>(v) <i>the number and density of signs on the site and on adjacent properties; and</i></p> <p>(vi) <i>the impact on the safe and efficient movement of vehicles and pedestrians.”</i></p>	<p>The proposed signs are located within the applicable zone for the sign type as set out in Table C1.6.</p> <p>The development proposes two pylon signs along the southern boundary adjacent to Cambridge Park Drive. These signs are consistent with other signs approved along the frontage of the Homemaker Centre and is considered appropriate for the purposes of business identification and are of a scale appropriate to the development as a whole and consistent with wider developments along the Tasman Highway.</p> <p>Facia signs are also proposed on the southern and western facades of the tenancies, these signs are consistent with the existing development and appropriate for the scale of the proposed development. Furthermore, these signs are designed to complement the architectural form of the buildings.</p> <p>Surrounding properties which are visible from the subject sites are Zoned Cambridge Commercial Particular Purpose zone and Rural and it is considered their amenity would not be adversely affected by the signs.</p> <p>Each tenancy is proposed to have one sign. There would be no likely repetition of messages or information.</p>

		<p>The number of facia signs meets the Acceptable Solution in standard A3 of this Clause, although the three pylon signs exceeds the required number. Nevertheless, the homemaker centre consists of two large pylon signs that are comparable to the proposed signs, in relation to design, siting and purpose.</p> <p>The proposed signs are well setback from the Highway, and given their location on-site, this will not result in an impact on sightlines for vehicles along the highway, service road or effect efficient movement around or onto the site.</p>
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- **Clause C1.6.2 A1** in relation to illuminated signs, for which there are no acceptable solutions. Each of the proposed sign types, facia signs, transom signs and pylon signs will all be illuminated.

The proposal is required to be considered against the corresponding performance criteria (P1) of Clause C1.6.2 Illuminated Signs as follows.

Clause	Performance Criteria	Assessment
C1.6.2 P1	<p><i>“An illuminated sign must not cause an unreasonable loss of amenity to adjacent properties or have an unreasonable effect on the safety, appearance or efficiency of a road, and must be compatible with the streetscape, having regard to:</i></p> <p>(a) <i>the location of the sign;</i></p>	<p>The transom signs above the entrance door of each tenancy would be in the form of a single illuminated sign for each tenancy on the front facades of the building, which is appropriate for business identification reasons.</p> <p>The pylon signs will be located along the Cambridge Park Drive frontage, and the facia signs are to be located over the entry doors to the fast food restaurant.</p>

	(b) <i>the size of the sign;</i>	The signs will be of various types and sizes, ranging from the large pylon signs being 9.4m in height to the smaller fascia signs that are 2m x 2m.
	(c) <i>the intensity of the lighting;</i>	The signs will advertise each tenancy and are proposed to be of low intensity lighting, with this being an appropriate response for a commercial centre.
	(d) <i>the hours of operation of the sign;</i>	The signs are proposed to be illuminated between the hours of 10am – 10pm, which is considered reasonable given the location of the signs on a major highway and the separation from adjoining properties.
	(e) <i>the purpose of the sign;</i>	As stated above, the purpose of the sign is for business identification.
	(f) <i>the sensitivity of the area in terms of view corridors, the natural environment and adjacent residential amenity;</i>	The site is located within an established commercial centre with the nearest residential properties located over 400m to the south-west (Acton Park rural living area). The site is also located within distant visual proximity of the Hobart Airport. Subject to the illumination only occurring during 10am – 10pm, the signs will not affect residential amenity, the natural environment or view corridors.
	(g) <i>the intended purpose of the changing message of the sign;</i>	The proposed signs would consist of a static message as opposed to changing messages.
	(h) <i>the percentage of the sign that is illuminated with changing messages;</i>	There will be no changing messages on any of the proposed signs.
	(i) <i>proposed dwell time; and</i>	As discussed above, the signs will be static and therefore a dwell time is not relevant.

	<p>(j) <i>whether the sign is visible from the road and if so the proximity to and impact on an electronic traffic control device.”</i></p>	<p>As discussed above, the proposed signs are setback from the Highway, and given their location on-site, this will not result in an impact on sightlines for vehicles along the highway, service road or efficient movement around or onto the site.</p> <p>For the above reasons, the proposed signage is considered appropriate and satisfies the above criteria subject to the imposition of permit conditions addressing sign illumination hours, illumination effect and general maintenance.</p>
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Parking and Sustainable Transport Code

- **Clause C2.6.3 A1** for the number of accesses provided for each frontage, which is to be no more than one or no more than the existing number of accesses. The property located at 63 Cambridge Park Drive will consist of three accesses along Cambridge Park Drive, one entry/exit, one exit only for customers, and an exit for the service road.

The proposal relies on Performance Criteria (P1) of Clause C2.6.3 Number of Accesses for Vehicles as follows.

Clause	Performance Criteria	Assessment
C2.6.3 P1	<p><i>“The number of accesses for each frontage must be minimised, having regard to:</i></p> <p>(a) <i>any loss of on-street parking; and</i></p>	<p>A Traffic Impact Assessment prepared by Stantec dated 20/09/2023 was submitted in support of the application.</p> <p>The proposed accesses will not result in any loss of on-street parking along Cambridge Park Drive, due to this section of the road not containing any parking spaces.</p>

Clause	Performance Criteria	Assessment
C3.5.1 P1	<p><i>“Vehicular traffic to and from the site must minimise any adverse effects on the safety of a junction, vehicle crossing or level crossing or safety or efficiency of the road or rail network, having regard to:</i></p> <p>(a) <i>any increase in traffic caused by the use;</i></p> <p>(b) <i>the nature of the traffic generated by the use;</i></p> <p>(c) <i>the nature of the road;</i></p> <p>(d) <i>the speed limit and traffic flow of the road;</i></p> <p>(e) <i>any alternative access to a road;</i></p> <p>(f) <i>the need for the use;</i></p> <p>(g) <i>any traffic impact assessment; and</i></p>	<p>As mentioned above, the applicant submitted a Traffic Impact Assessment as part of the application, this report concludes:</p> <ul style="list-style-type: none"> Given that the proposed development is part of a larger shopping centre, there is expected to be a proportion of multipurpose trips to the precinct, reducing the overall traffic generation compared to if each land use were considered individually. The proposed development could be expected to generate an additional 134 and 217 vehicle movements during the Friday afternoon and Saturday midday peak periods. The additional traffic likely to be generated by the proposed development is considered negligible in transport engineering terms, particularly given a large portion of this traffic will be passer-by-traffic. To this end, it is considered that the additional traffic will be able to be accommodated on the surrounding road network without compromising on its function or safety. <p>There is no alternative access to the site.</p> <p>The proposed bulky goods use, and food services is aligned with the existing zone purpose.</p>

	(h) <i>any advice received from the rail or road authority.”</i>	The road authority and the traffic/transport groups have not raised any concerns with the proposed development, nor provided any specific advice to the applicant.
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Flood Prone Hazard Areas Code

- **Clause C12.6.1 A1** in relation to buildings and works within a flood prone hazard area for which there are no acceptable solutions. The proposal locates part of Tenancy C2, E1, E5, E6 and the fast food restaurant within the Flood prone Hazard Area shown on the planning scheme maps, and thereby triggers an assessment against this provision.

The proposal relies on Performance Criteria (P1) of Clause C12.6.1 Buildings and Works within a Flood Prone Hazard Area as follows.

Clause	Performance Criteria	Assessment
C12.6.1 P1	<p><i>“P1.1 Buildings and works within a flood-prone hazard area must achieve and maintain a tolerable risk from a flood, having regard to:</i></p> <p><i>(a) the type, form, scale and intended duration of the development;</i></p> <p><i>(b) whether any increase in the level of risk from flood requires any specific hazard reduction or protection measures;</i></p> <p><i>(c) any advice from a State authority, regulated entity or a council; and</i></p> <p><i>(d) the advice contained in a flood hazard report.</i></p>	<p>A Concept Services Report was provided as part of the application, prepared by JMG Engineers and Planners dated 4/12/2023, which includes an assessment for the flood prone hazard area.</p> <p>The flood prone hazard areas are contained along both the east and west side boundaries, and a small section running through Tenancy E1. The modelling of the flood path indicates that overflow from the Harvey Norman detention basin travels east along Bungana Way and the northern edge of the building E before passing the western side of the Entura building, in the overland flow path swale constructed as part of the original subdivision development.</p>

	<p>An assessment of the pre-development flow condition was undertaken. This demonstrates Bungana Way is already utilised as the primary overland flow path and there is no change in the flood risk condition. Both pre and post development flows record a maximum flood risk classification of H2. Thus, there is no change in flood risk classification in Bungana Way following the development. Additionally, flow that previously discharged to Bungana Way is diverted across the new carpark. The pre and post development flow conditions demonstrate this change in flow.</p> <p>The report concluded that the development will not increase the level of risk to surrounding areas or properties and as such, no specific hazard reduction measures are required.</p> <p>The re-distribution of flow away from the existing Building C and new Building E to Cambridge Park Drive reduces the risk of flooding to these buildings and adjacent properties.</p> <p>It is demonstrated the immediate downstream stormwater infrastructure, including the overland flow path adjacent to the Entura building at 89 Cambridge Park Drive has sufficient capacity to accommodate the increase in flow associated with the development.</p>
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		No advice from a State authority was received, and Council's development engineers have not raised any concern in relation to the need for sufficient measures to manage the possible downstream impact.
	<p><i>P1.2</i> <i>A flood hazard report also demonstrates that the building and works:</i></p> <p>(a) <i>do not cause or contribute to flood on the site, on adjacent land or public infrastructure; and</i></p> <p>(b) <i>can achieve and maintain a tolerable risk from a 1% annual exceedance probability flood event for the intended life of the use without requiring any flood protection measures."</i></p>	<p>The Concept Services Report that was provided as part of the application, prepared by JMG Engineers and Planners dated 4/12/2023 concluded that there is no increase in risk from flood to any adjacent land.</p>

5. REPRESENTATION ISSUES

The proposal was advertised in accordance with statutory requirements and one representation was received. The following issue was raised by the representor.

5.1. Bicycle Parking

The representor's position was that:

- The bicycle parking provided by the proposed development is inadequate and disappointing. Firstly, due to there being no bike parking offered to staff, or secure and weatherproof cages or lockers.
- Secondly, the number of bike parking for customers is the bare minimum statutory requirement, and the parking spaces are too narrow for e-bikes.

Comment

Under the Tasmanian Planning Scheme – Clarence, Table C2.1 the proposed development is required to provide a total of 28 new bicycle spaces, in which the developer proposes to provide. Any additional spaces provided would be above and beyond what Council is able to reasonably request of the developer.

Within the Cambridge Commercial Particular Purpose zone there are no requirements for secure bicycle parking. Therefore, this request is above what Council can reasonably request of the developer.

In relation to the width of the bicycle spaces, the proposed bicycle parking has been designed in accordance with the relevant Australian Standard, Parking Facilities Part 3: Bicycle Parking (AS2890.3:2015).

6. EXTERNAL REFERRALS

The proposal was referred to TasWater, who have provided a number of conditions to be included on the planning permit if granted.

The proposal was referred to TasNetworks, who have provided advice that the development is unlikely to adversely affect TasNetwork's operations.

The proposal was referred to Hobart Airport who provided advice that the designers are to consult with CASA in relation to the lighting, which could have the potential to be a hazard to pilots. A condition of the permit should be included for the applicant to obtain approval from CASA for the lighting.

The proposal was referred to the Department of State Growth who did not make comment in relation to the proposal.

7. STATE POLICIES AND ACT OBJECTIVES

7.1. The proposal is consistent with the outcomes of the State Policies, including those of the State Coastal Policy.

7.2. The proposal is consistent with the objectives of Schedule 1 of LUPAA.

8. COUNCIL STRATEGIC PLAN/POLICY IMPLICATIONS

There are no inconsistencies with Council's adopted Strategic Plan or any other relevant Council Policy.

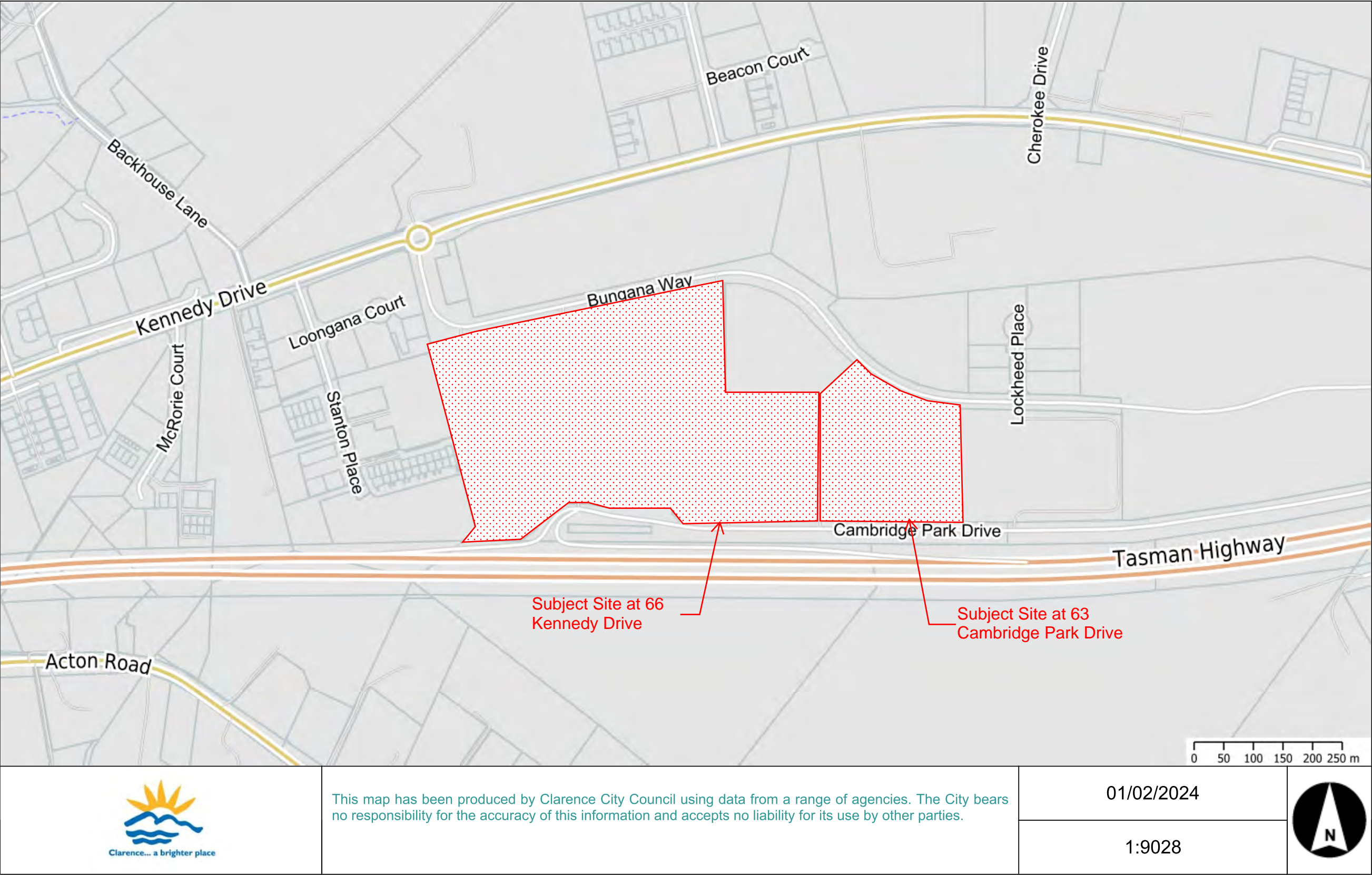
9. CONCLUSION

The proposal satisfies the relevant requirements of the Scheme and is therefore recommended for approval subject to conditions.

Attachments: 1. Location Plan (1)
2. Proposal Plan (51)
3. Site Photos (2)
4. Concept Plan Bungana Way Frontage (2)

Daniel Marr
HEAD OF CITY PLANNING

Attachment 1
Location Plan



ISSUE	AMENDMENT	DATE	CHK'D
A	TOWN PLANNING ISSUE	04.05.23	SJE
B	ARTIST IMPRESSION UPDATED TO SUIT WITH UPDATED PLAN, STREETSCAPE PERSPECTIVE ADDED	04.09.23	SJE
C	PYLON SIGNS MOVED WITHIN BOUNDARY	13.11.23	SJE

PROPOSED BUILDING E - CAMBRIDGE HOMEMAKER CENTRE

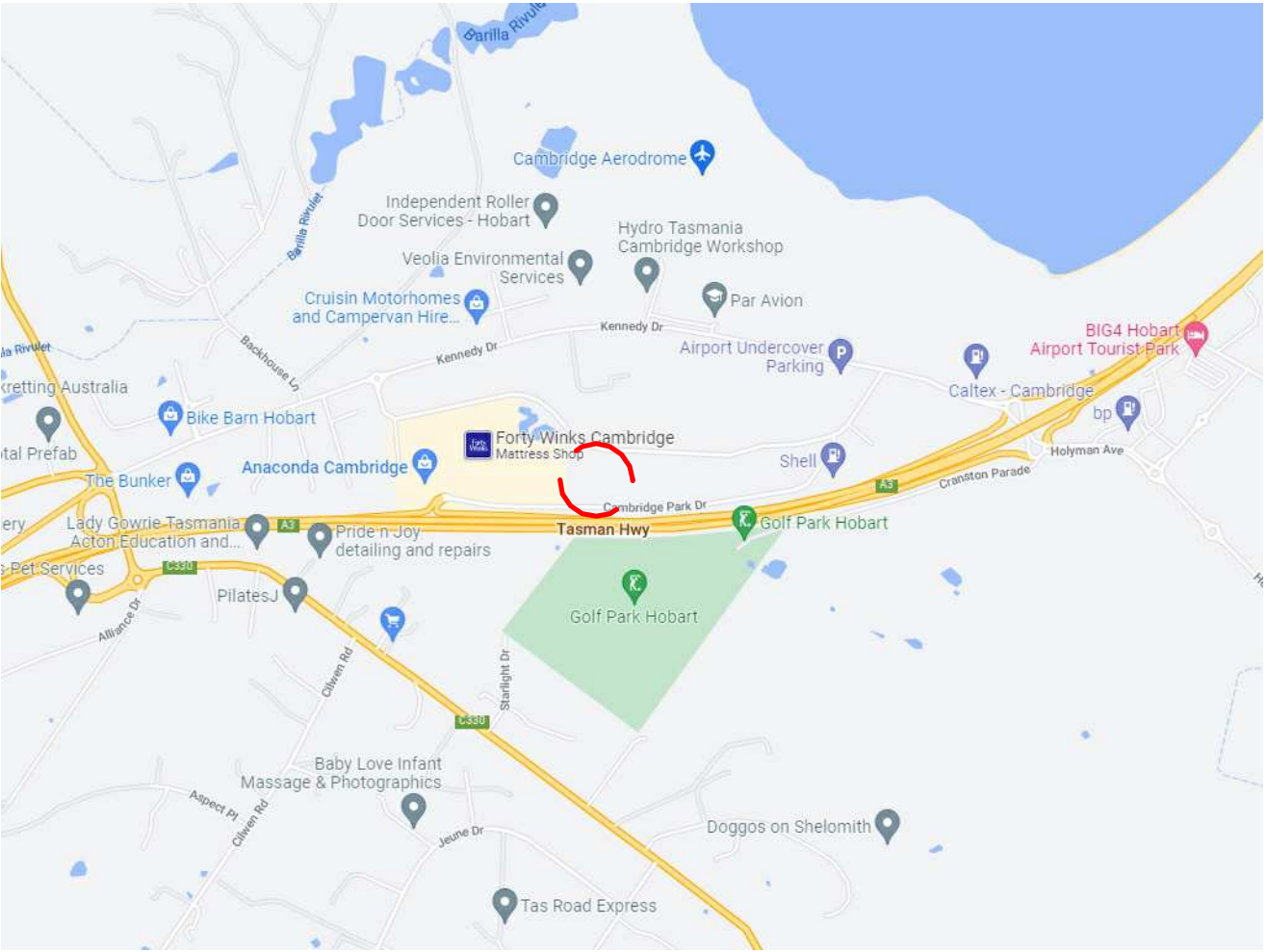
CAMBRIDGE PARK DRIVE, CAMBRIDGE, TAS

TOWN PLANNING APPLICATION



ARTISTS IMPRESSION

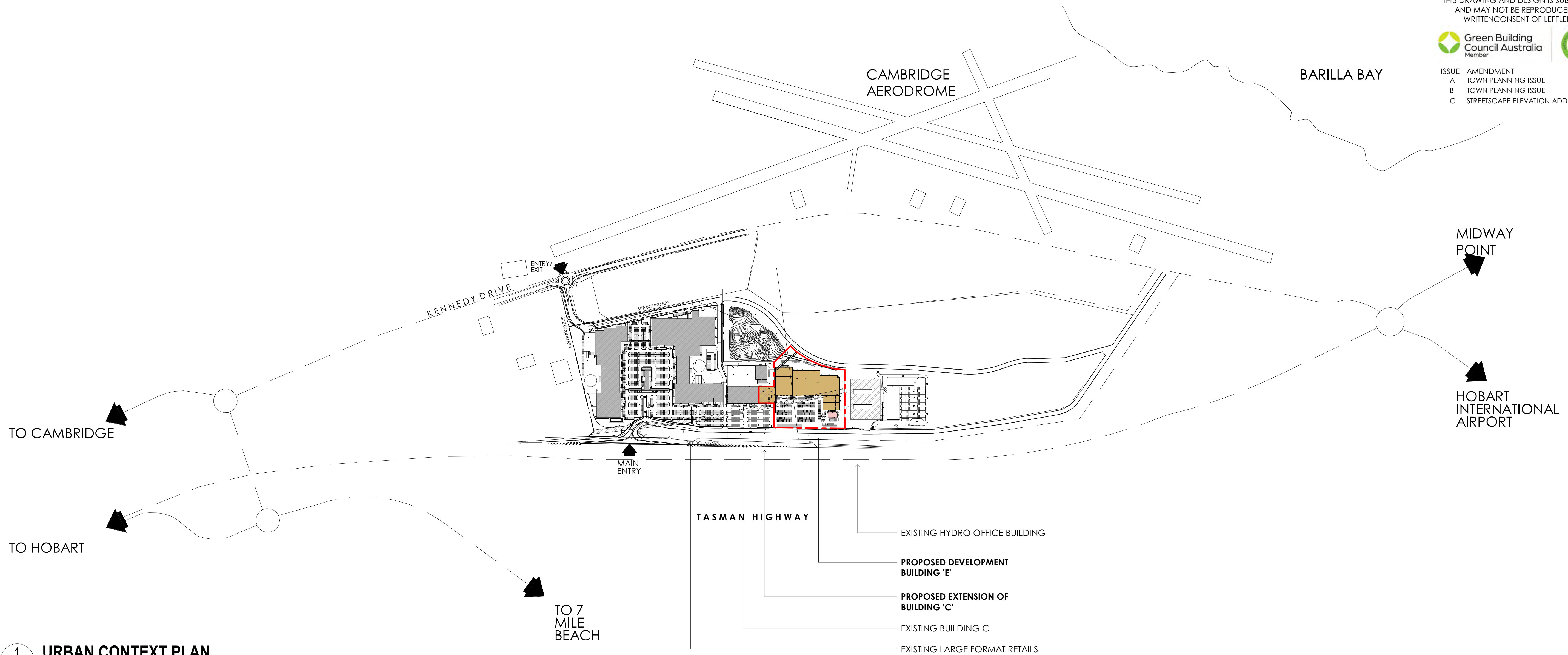
TOWN PLANNING - DRAWING LIST		
Sheet Number	Sheet Name	Scale
DA001	COVER SHEET	NTS
DA010	URBAN CONTEXT PLAN	1:5000 @ A1
DA015	EXISTING CONDITION & DEMOLITION PLAN	1:500 @ A1
DA020	PROPOSED SITE PLAN	1:500 @ A1
DA021	PROPOSED ROOF PLAN	1:500 @ A1
DA151	PROPOSED ELEVATIONS	1:250 @ A1
DA152	PROPOSED ELEVATIONS	1:250 @ A1
DA153	FAST FOOD ELEVATIONS	1:250 @ A1
DA161	PROPOSED SECTIONS	1:200 @ A1
DA162	PROPOSED SECTIONS	1:200 @ A1
DA171	SIGNAGE DETAILS	1:50 @ A1
DA300	ARTIST IMPRESSIONS	NTS



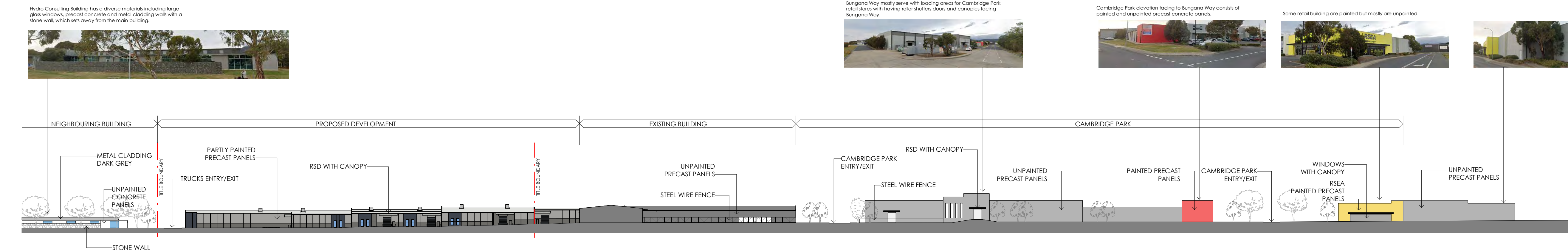
LOCALITY PLAN

IMAGE SOURCE: GOOGLE

COVER SHEET



1 URBAN CONTEXT PLAN
Scale: 1 : 5000



2 STREETSCAPE ELEVATION (BUNGANA WAY)
Scale: 1 : 1000

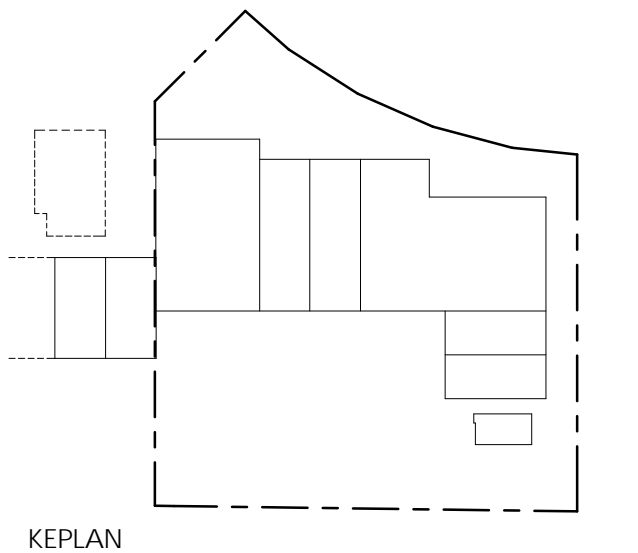




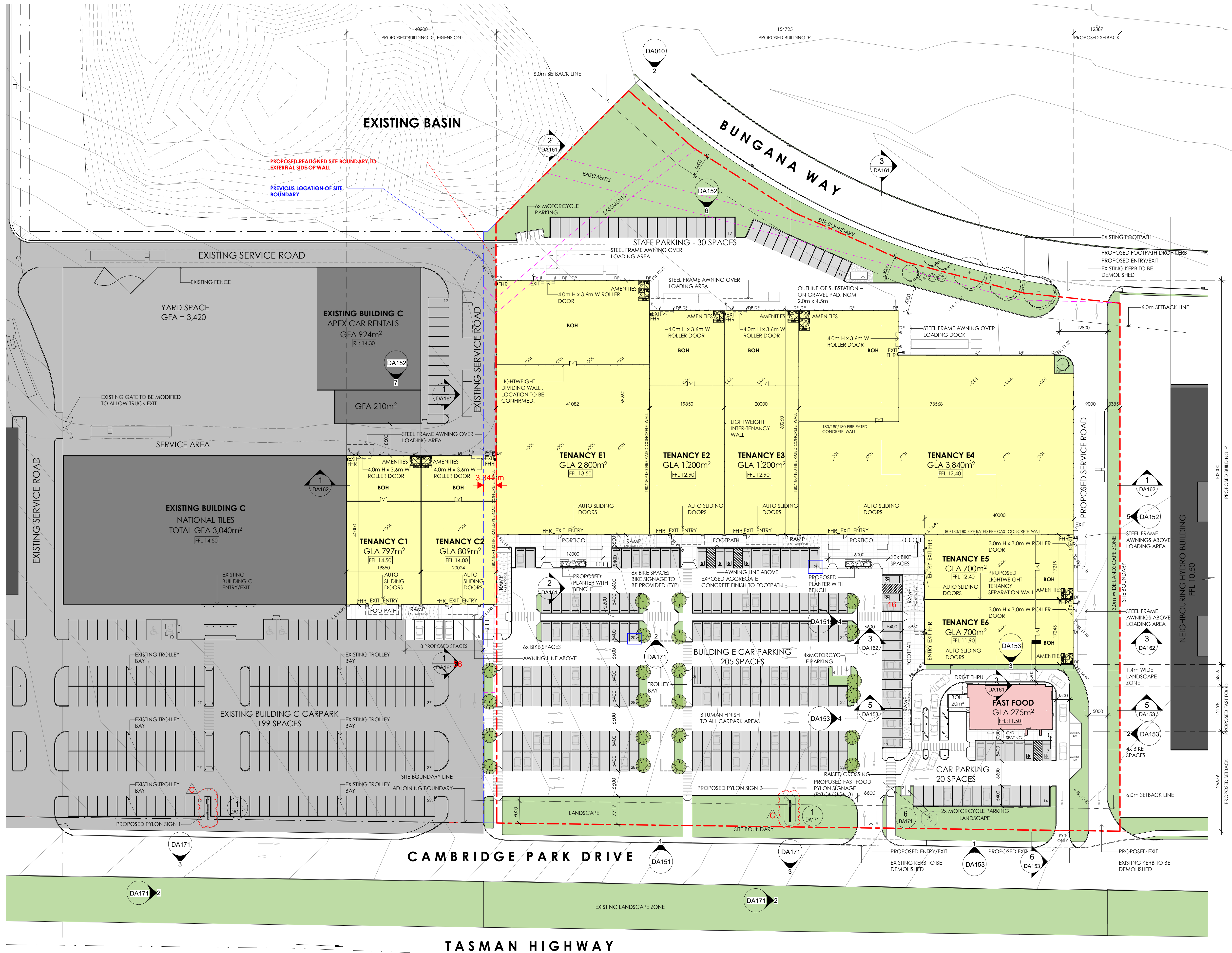
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ISSUE	AMENDMENT	DATE	CHK'D
A	TOWN PLANNING ISSUE	04.05.23	SJE



EXISTING CONDITION & DEMOLITION PLAN



1 SITE PLAN/FLOOR PLAN
Scale: 1:500

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ISSUE	AMENDMENT	DATE	CHK'D
A	TOWN PLANNING ISSUE	04.05.23	SJE
B	NEW PEDESTRIAN PATH ADDED, NEW FAST FOOD EXIT ADDED, FAST FOOD CAR PARKING LENGTH AMENDED TO 5.4M, FAST FOOD WAITING BAY AREA ADDED, LANDSCAPE AREA BETWEEN FAST FOOD AND TENANCY E6 REDUCED, MOTORCYCLE PARKING ADDED, TROLLEY BAY ADDED, BIKE SIGNAGE NOTE ADDED, RAISED FOOTPATH NOTE ADDED, LANDSCAPE AREA ALONG BUNGANA WAY AMENDED, TENANCY E4 BOH RECONFIGURED AND FLOOR AREA AMENDED, WINDOWS ADDED TO TENANCY E1-E4 BOH AREA, AREA SCHEDULE UPDATED	04.09.23	SJE
C	PLYON SIGNS MOVED WITHIN BOUNDARY	13.11.23	SJE

AREA SUMMARY

BUILDING 'C' EXISTING

TENANCY C	4174m ²
TENANCY 'C' EXISTING CAR SPACES	199

BUILDING 'C' EXTENSION

TENANCY C1	797m ²
TENANCY C2	809m ²
TOTAL AREA BUILDING 'C' EXTENSION	1,606m ²

BUILDING 'E'

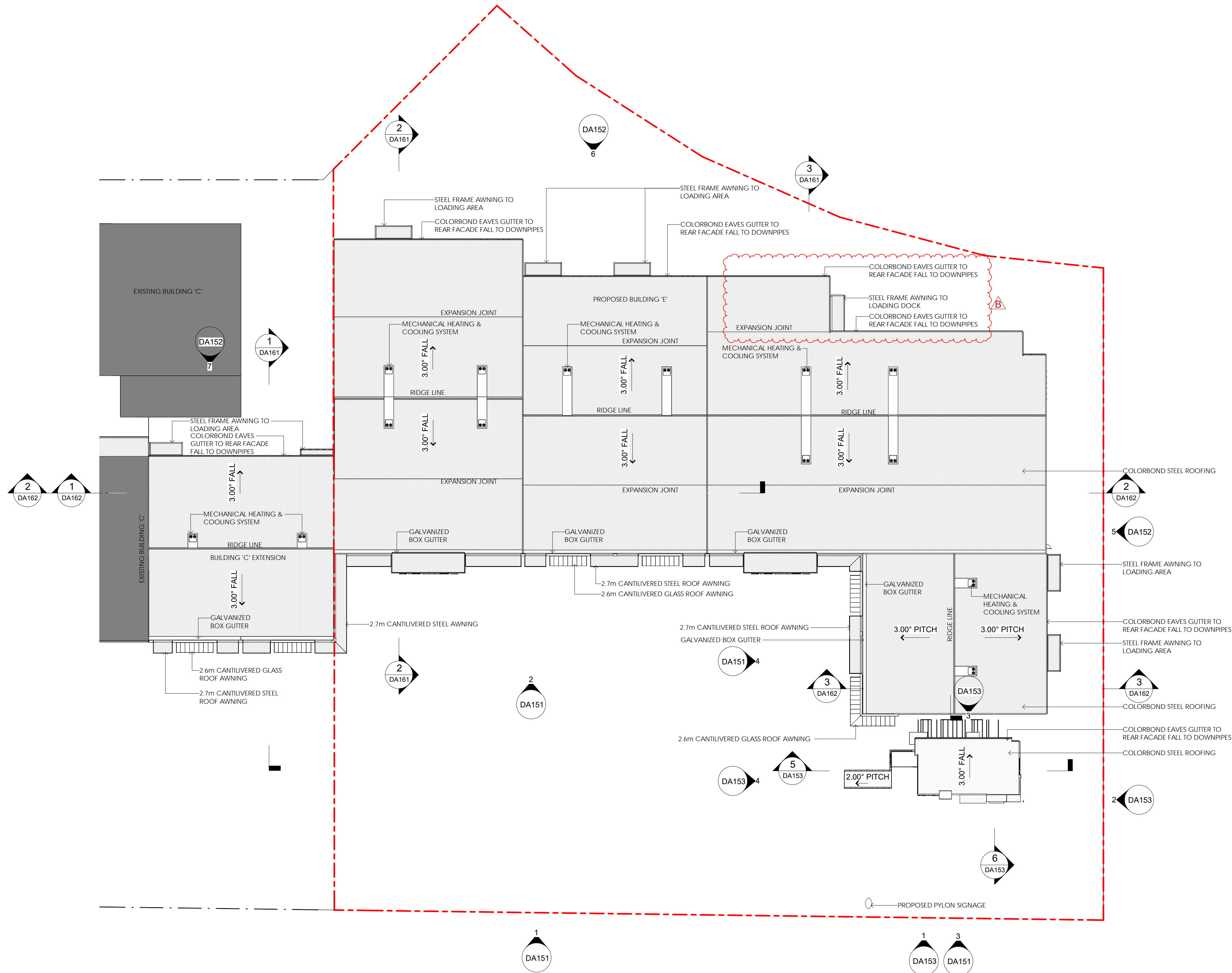
SITE AREA (APPROX.)	27,385 m ²
TENANCY E1	2,800m ²
TENANCY E2	1,200m ²
TENANCY E3	1,200m ²
TENANCY E4	3,840m ²
TENANCY E5	700m ²
TENANCY E6	700m ²
TOTAL AREA BUILDING 'E'	10,440m ²

TOTAL NEW BUILD AREA GLA BUILDING 'C' & 'E'	12,046m²
TENANCY FAST FOOD	275m ²
GRAND TOTAL NEW BUILD AREA GLA BUILDING 'C' & 'E' & FF	12,321m²

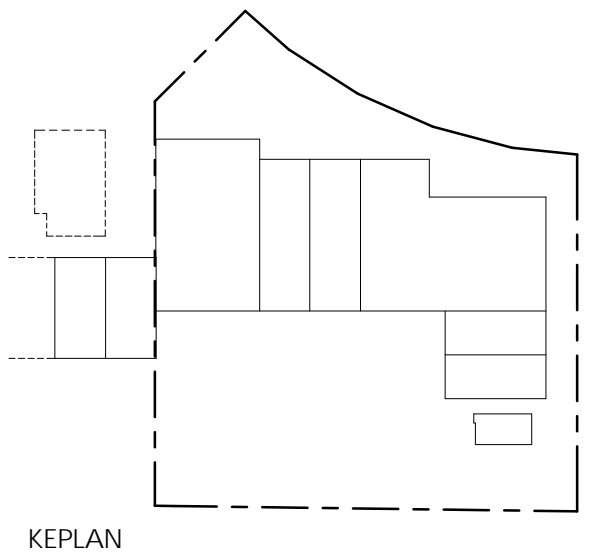
CAR PARKING SUMMARY

BUILDING 'C' ADDITIONAL SPACES	8
BUILDING 'E' CAR SPACES	205
FAST FOOD CAR SPACES	21
STAFF CAR SPACES	30
MOTORCYCLE PARKING SPACES	12
BIKE PARKING SPACES	28
TOTAL NEW CAR SPACES	264
REQUIRED @ 1/50 CSP PER SQM FOR LFR	241
REQUIRED FAST FOOD CAR SPACES	20
TOTAL REQUIRED CAR SPACES	261

PROPOSED SITE PLAN



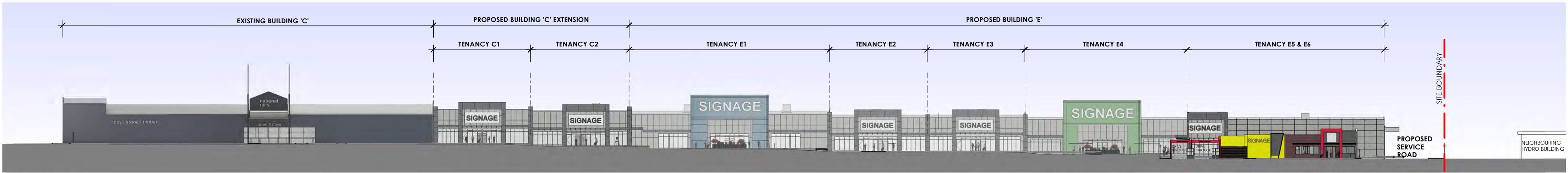
1 ROOF PLAN
Scale: 1 : 500



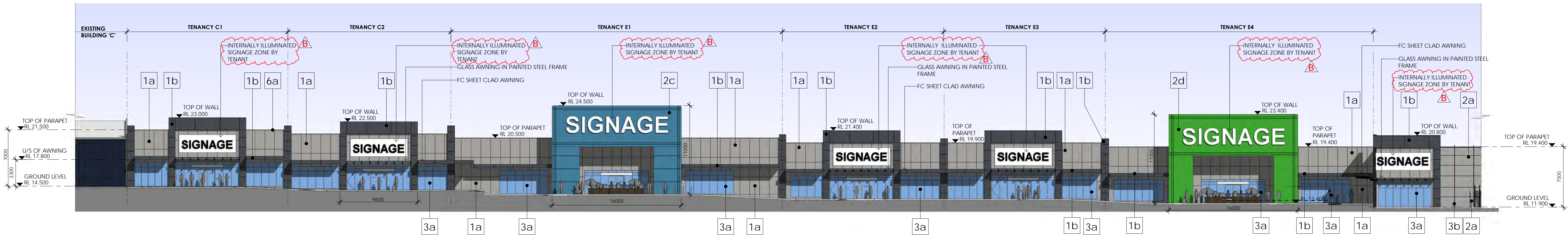
KEY PLAN



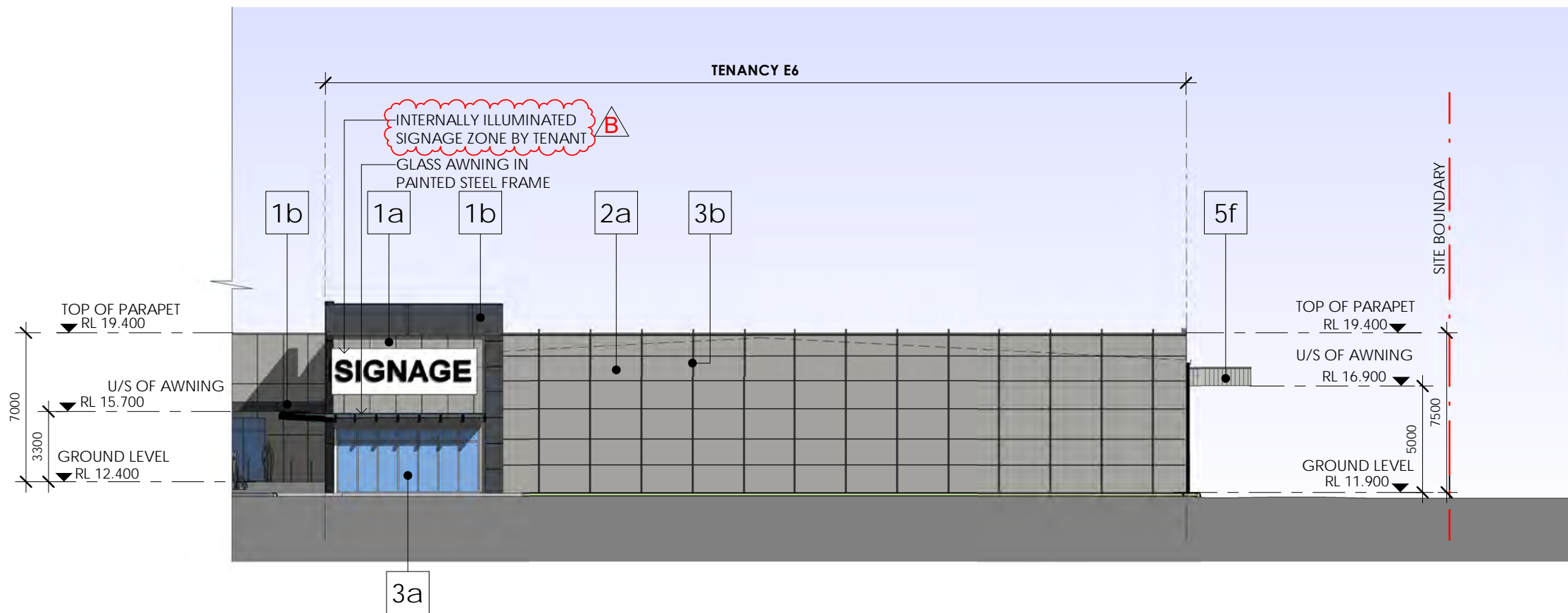
ISSUE	AMENDMENT	DATE	CHK'D
A	TOWN PLANNING ISSUE	04.05.23	SJE
B	EXTERNAL FINISHES SCHEDULE UPDATED, SIGNAGE ILLUMINATION TYPE (INTERNALLY ILLUMINATED) ADDED	04.09.23	SJE



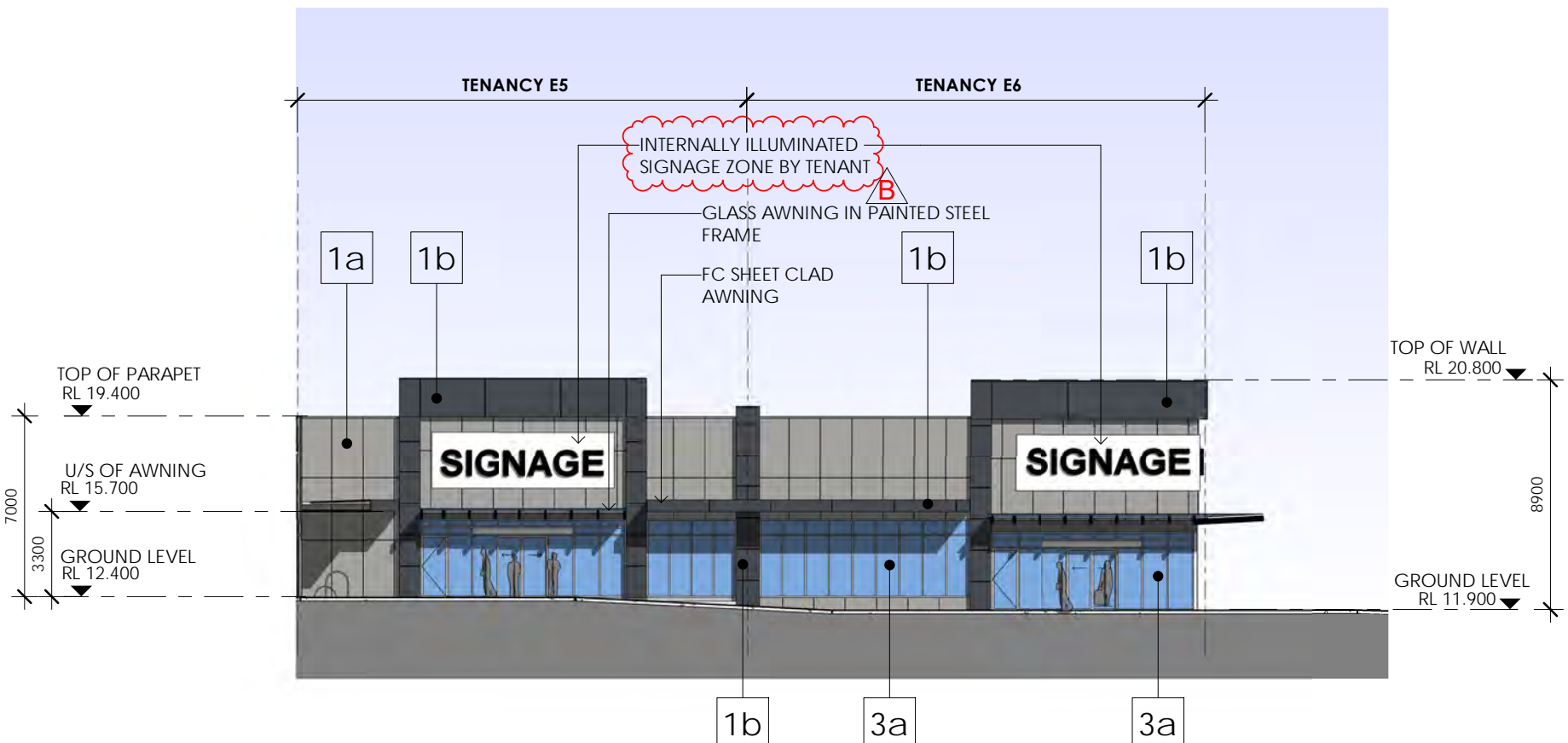
1 **STREETSCAPE ELEVATION**
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2 **SOUTH ELEVATION 1**
Scale: 1 : 250

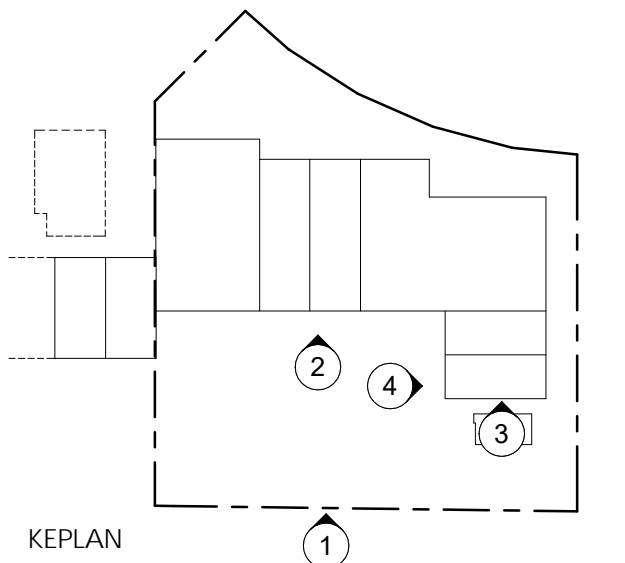


3 **SOUTH ELEVATION 2**
Scale: 1 : 250

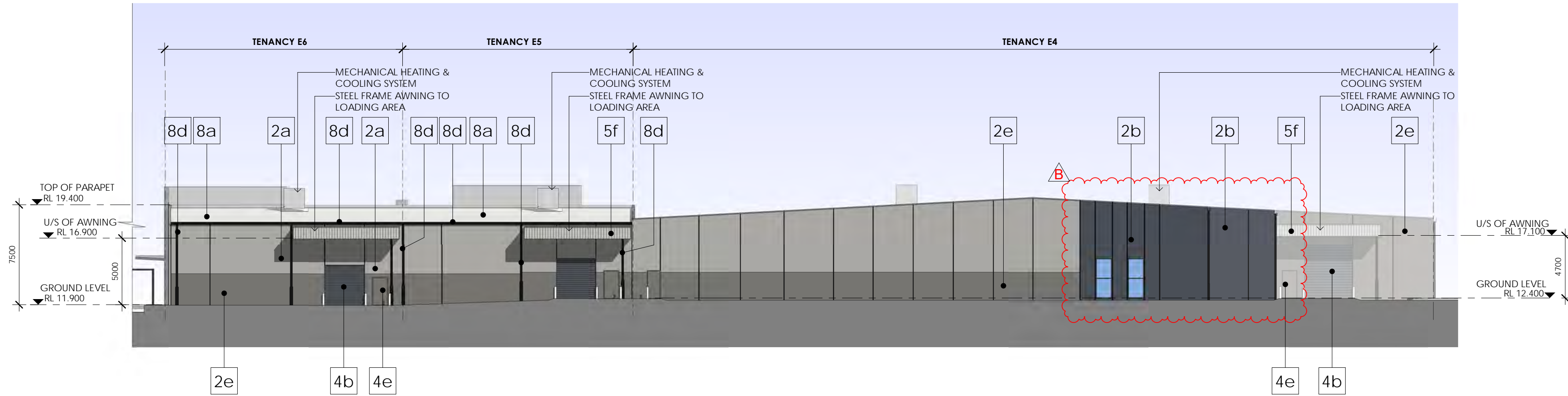


4 **WEST ELEVATION**
Scale: 1 : 250

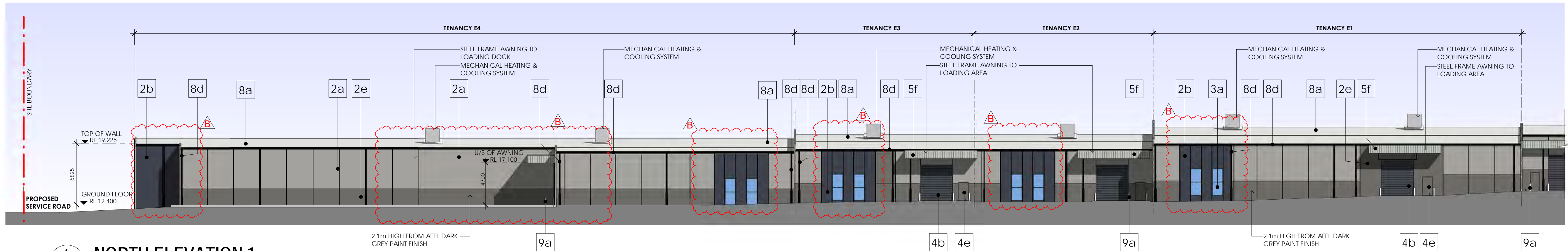
EXTERNAL FINISHES	
CODE	DESCRIPTION
1a	FC SHEET CLADDING - 'FLOODED GUM'
1b	FC SHEET CLADDING - 'IRONSTONE'
2a	PRECAST CONCRETE PANEL - 'FLOODED GUM'
2b	PRECAST CONCRETE PANEL - 'IRONSTONE'
2c	PAINTED PRECAST CONCRETE PANEL - BLUE
2d	PAINTED PRECAST CONCRETE PANEL - GREEN
2e	PAINTED PRE-CAST CONCRETE PANELS 'MALAY GREY'
3a	POWDERCOATED ALUMINIUM FRAMED WINDOW WITH CLEAR GLAZING - 'NATURAL ANODIZED'
3b	KNOTWOOD ALUMINIUM BATTENS 50X200mm - POWDERCOATED 'IRONSTONE'
4b	METAL ROLLER DOOR - 'IRONSTONE'
4e	PAINTED METAL CLAD EXT. DOOR - 'MALAY GREY'
5f	COLORBOND METAL CLAD AWNING - 'SHALE GREY'
6a	COLORBOND CAPPING - DULUX 'FLOODEDGUM'
8a	METAL ROOF SHEETING
8d	COLORBOND EAVES GUTTER & DOWNPIPES - 'BLACK'
9a	STEEL GALVANISED BOLLARDS



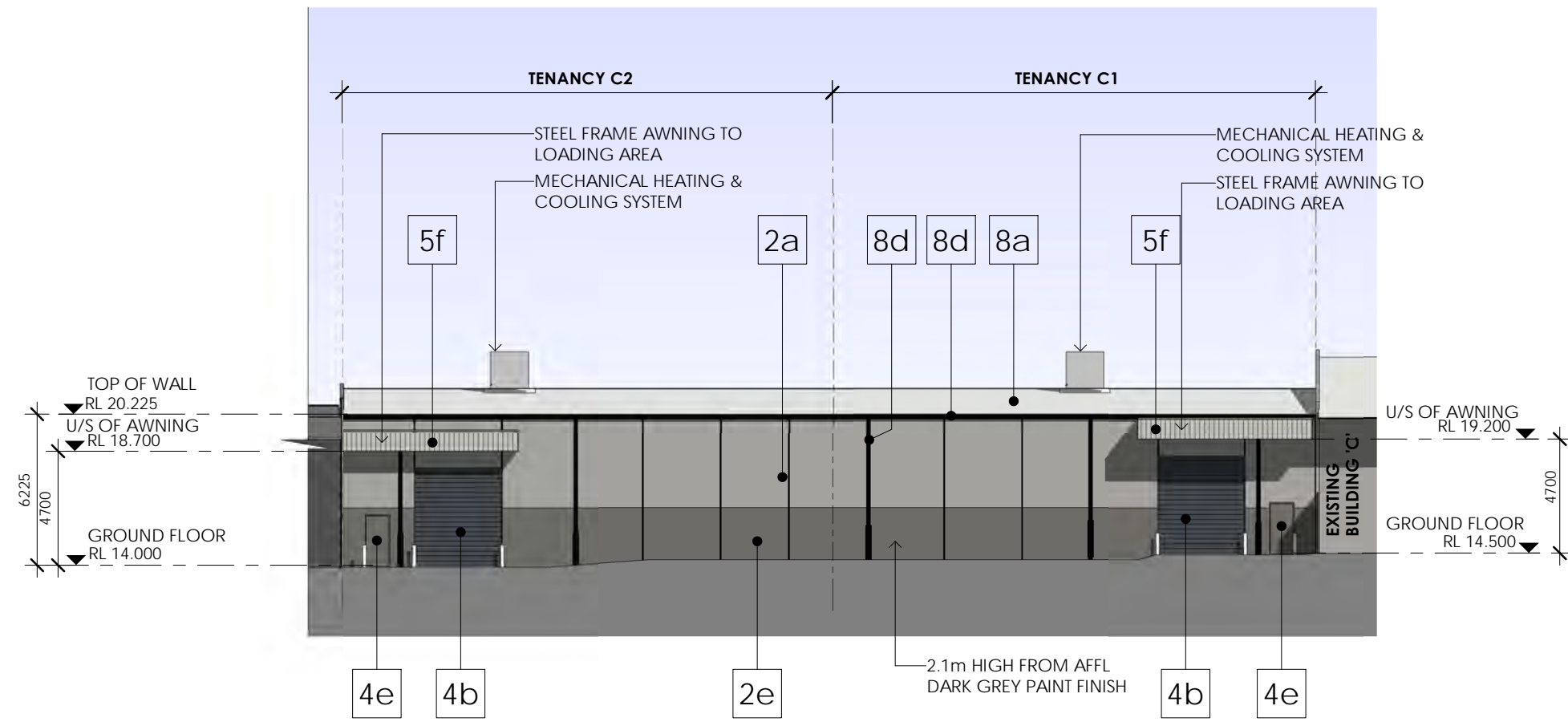
PROPOSED ELEVATIONS



5 EAST ELEVATION
Scale: 1 : 250

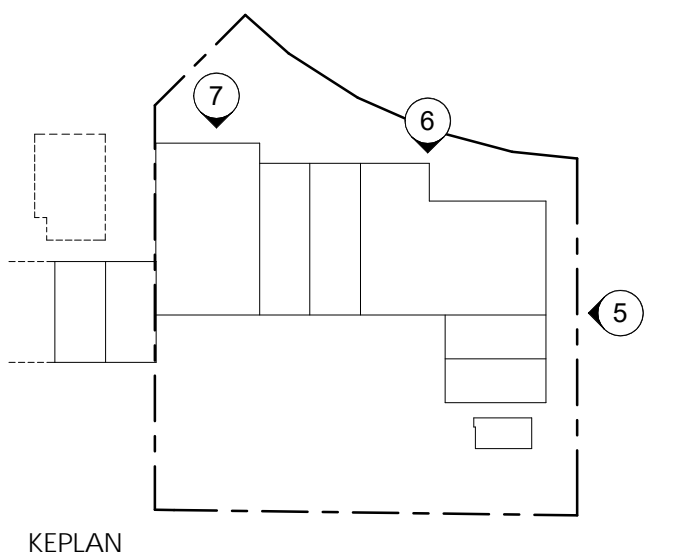


6 NORTH ELEVATION 1
Scale: 1 : 250

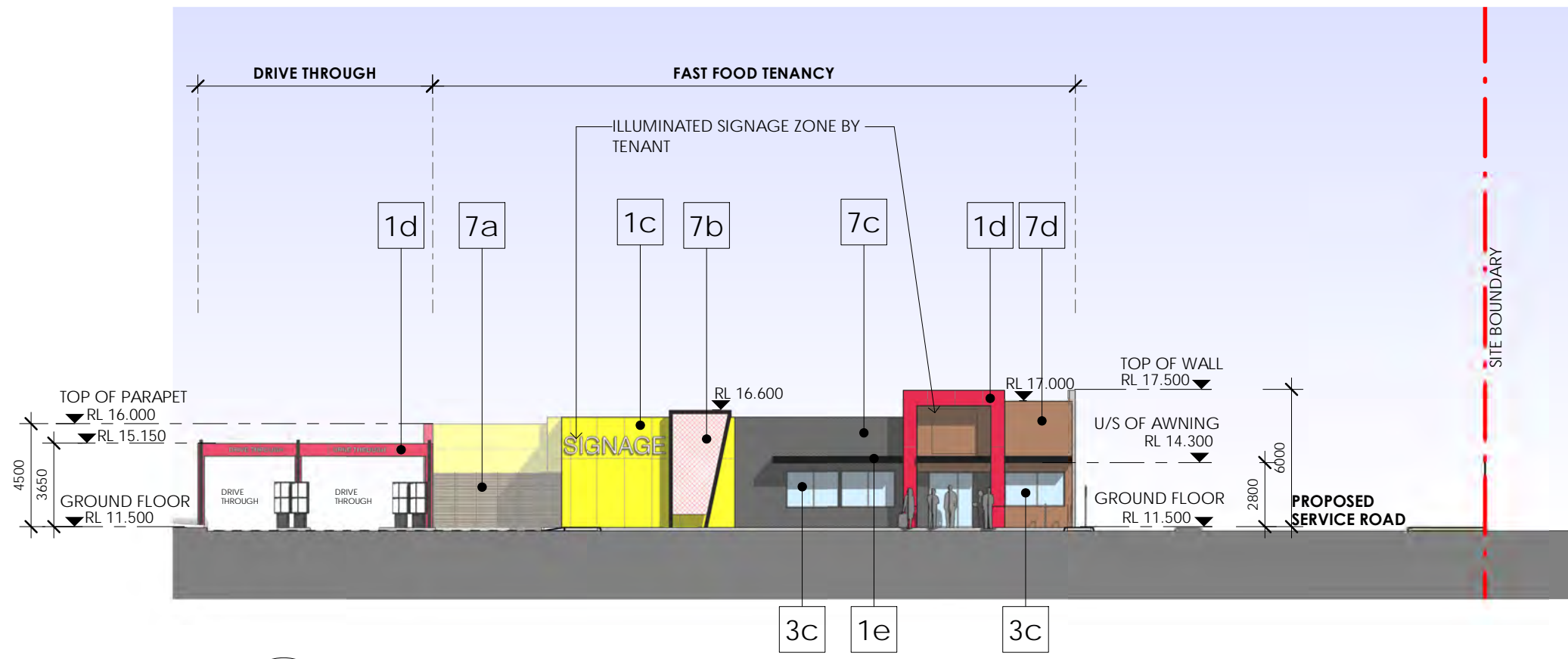


7 NORTH ELEVATION 2
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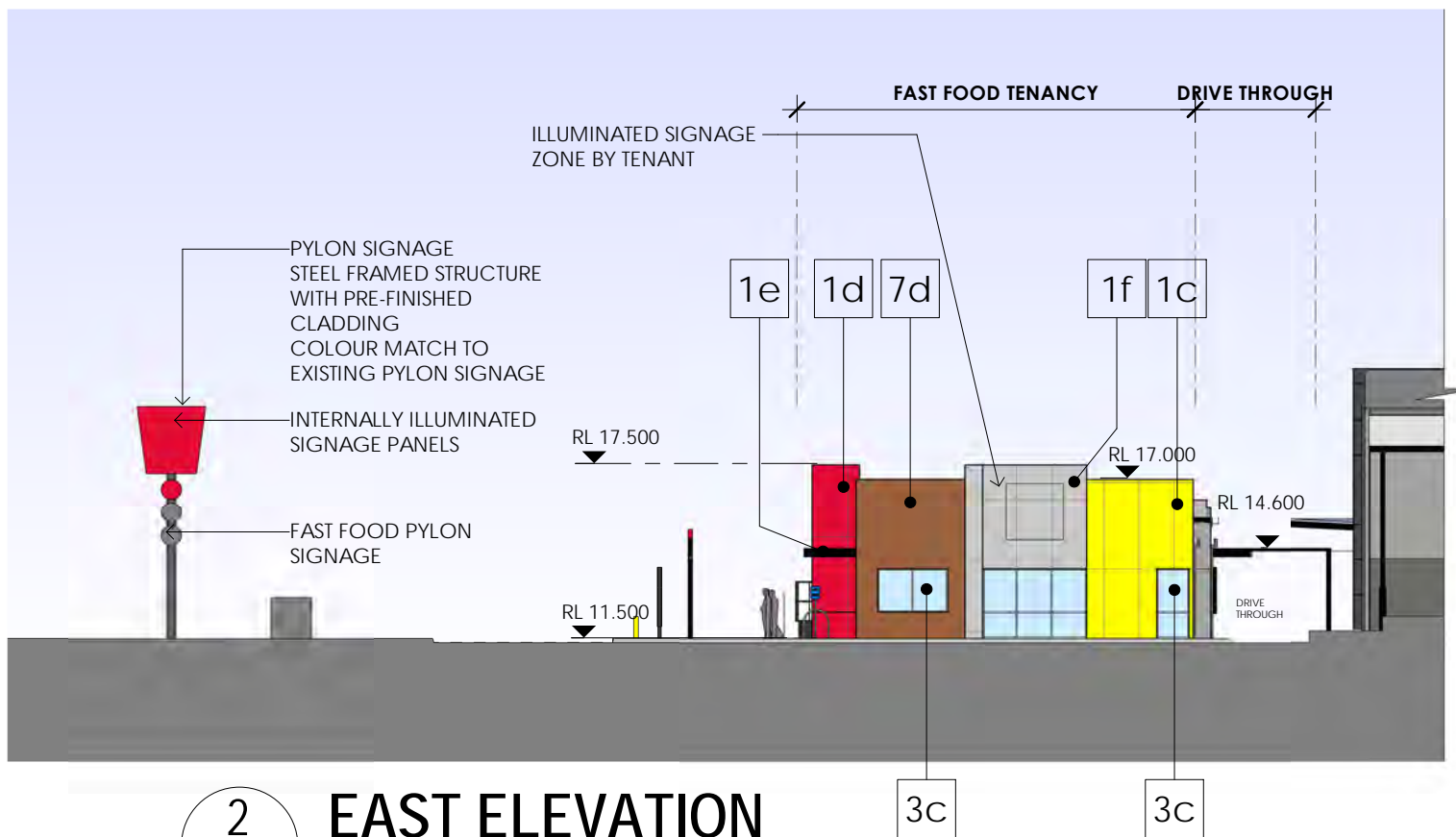
EXTERNAL FINISHES	
CODE	DESCRIPTION
1a	FC SHEET CLADDING - 'FLOODED GUM'
1b	FC SHEET CLADDING - 'IRONSTONE'
2a	PRECAST CONCRETE PANEL - 'FLOODED GUM'
2b	PRECAST CONCRETE PANEL - 'IRONSTONE'
2c	PAINTED PRECAST CONCRETE PANEL - BLUE
2d	PAINTED PRECAST CONCRETE PANEL - GREEN
2e	PAINTED PRE-CAST CONCRETE PANELS 'MALAY GREY'
3a	POWDERCOATED ALUMINIUM FRAMED WINDOW WITH CLEAR GLAZING - 'NATURAL ANODIZED'
3b	KNOTWOOD ALUMINIUM BATTENS 50X200mm - POWDERCOATED 'IRONSTONE'
4b	METAL ROLLER DOOR - 'IRONSTONE'
4e	PAINTED METAL CLAD EXT. DOOR - 'MALAY GREY'
5f	COLORBOND METAL CLAD AWNING - 'SHALE GREY'
6a	COLORBOND CAPPING - DULUX 'FLOODEDGUM'
8a	METAL ROOF SHEETING
8d	COLORBOND EAVES GUTTER & DOWNPIPES - 'BLACK'
9a	STEEL GALVANISED BOLLARDS



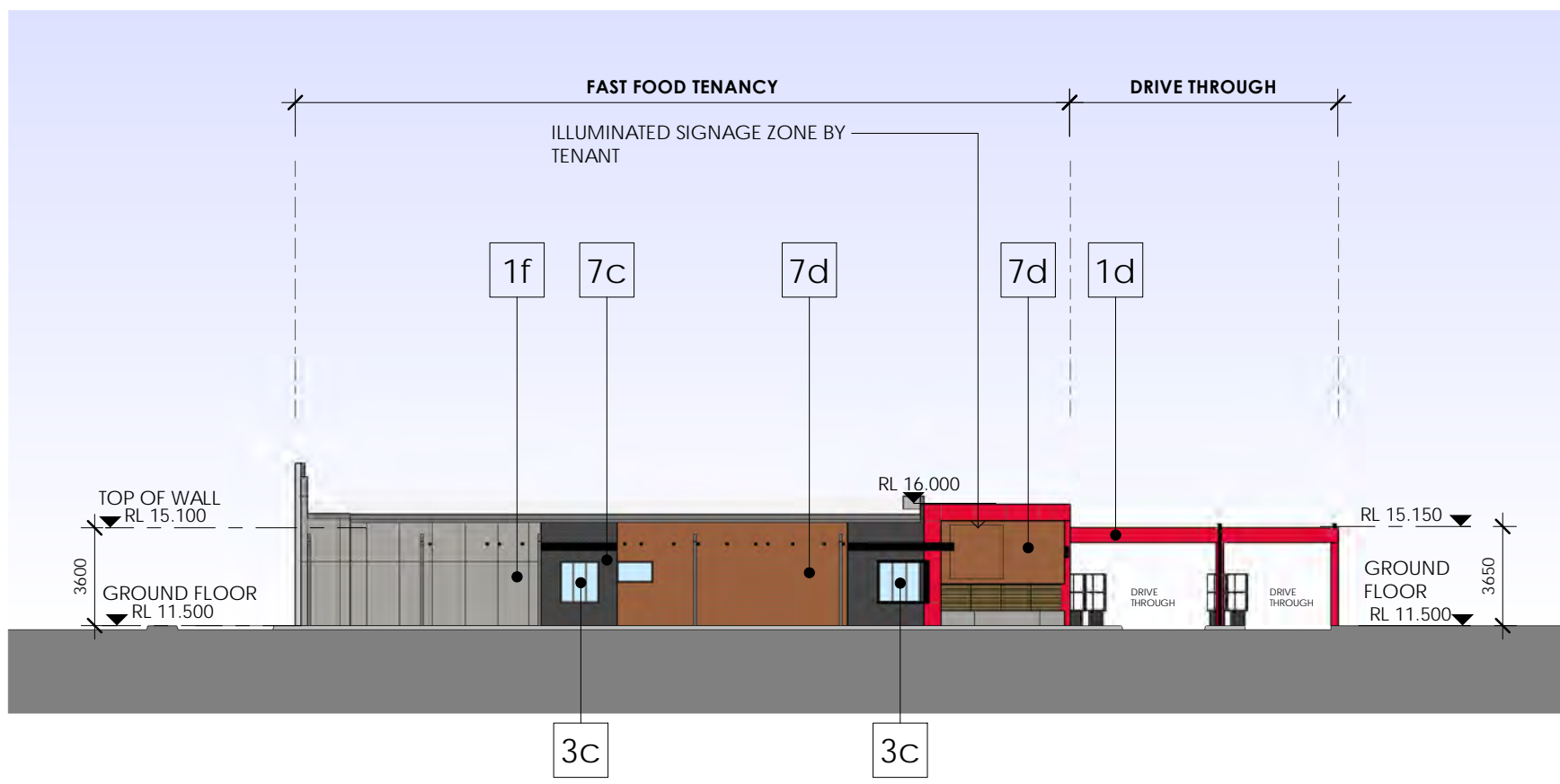
PROPOSED ELEVATIONS



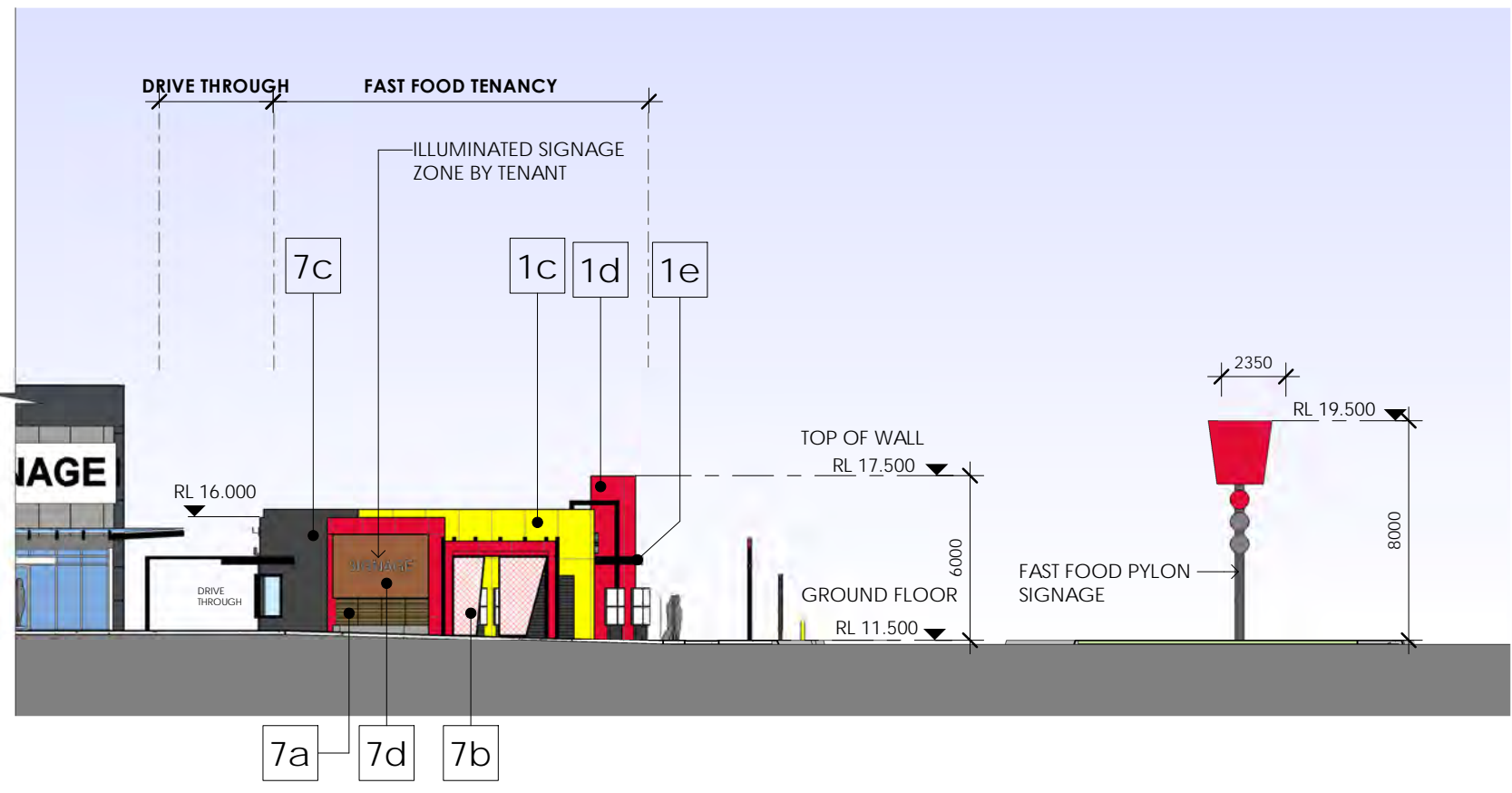
1 FAST FOOD SOUTH ELEVATION
DA020 Scale: 1 : 250



2 EAST ELEVATION
DA020 Scale: 1 : 250

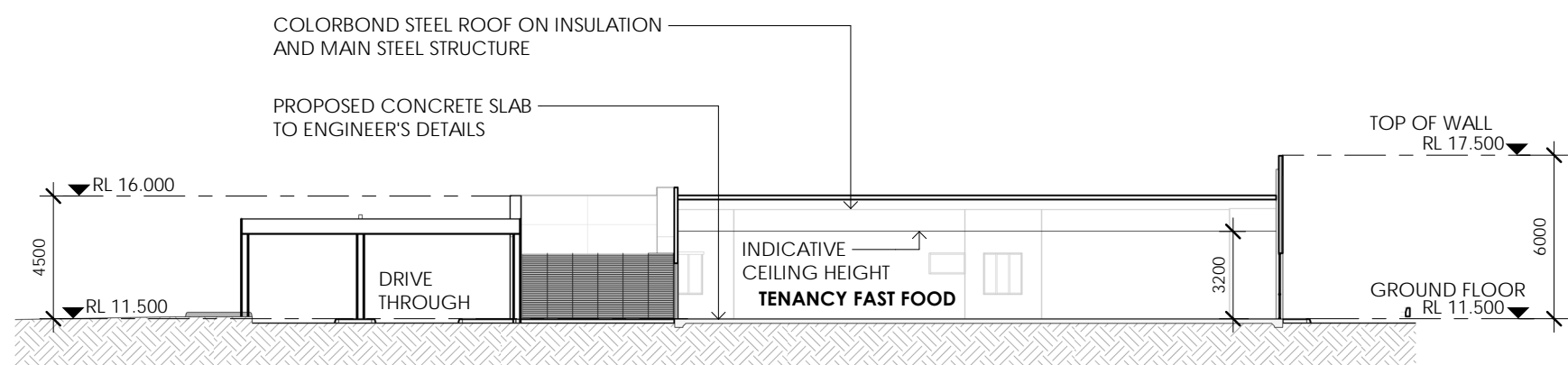


3 FAST FOOD NORTH ELEVATION
DA020 Scale: 1 : 250

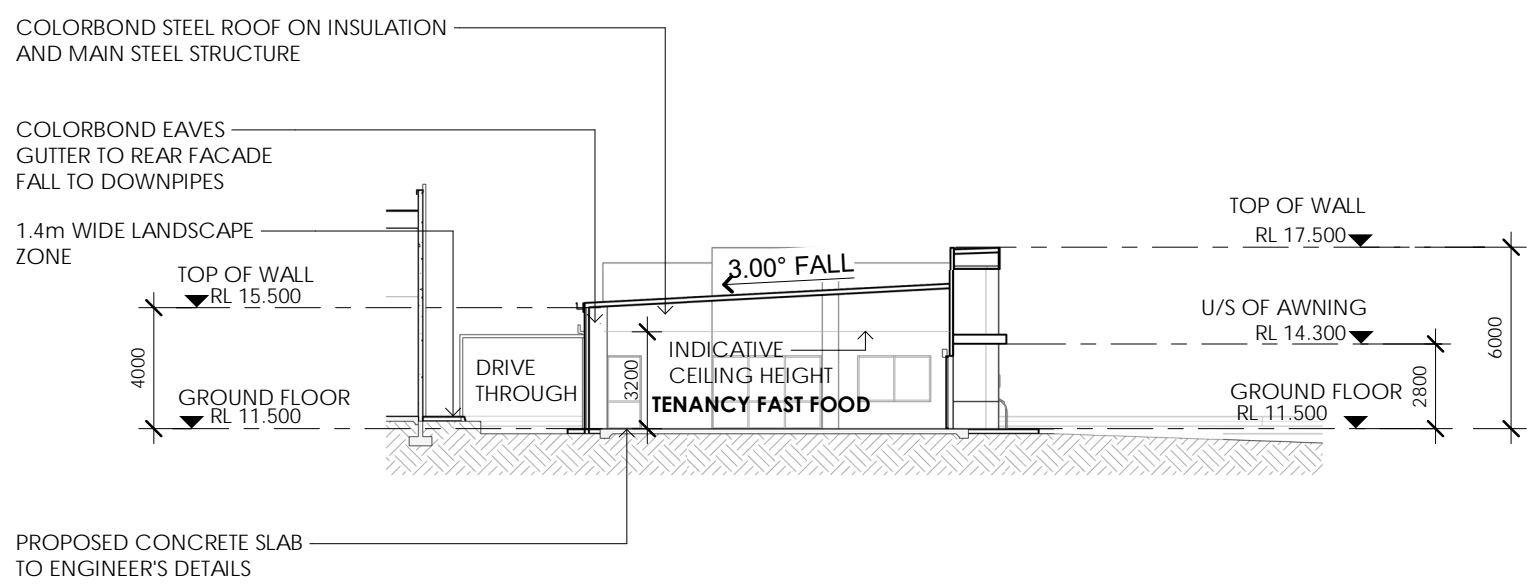


4 EAST ELEVATION
DA020 Scale: 1 : 250

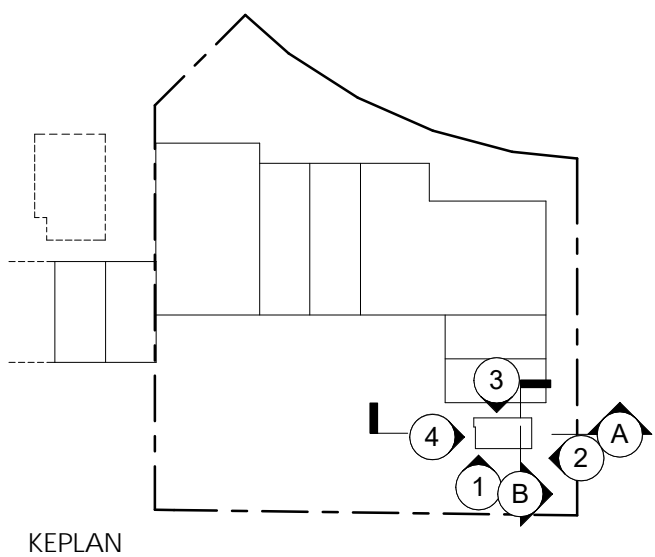
EXTERNAL FINISHES	
CODE	DESCRIPTION
1c	FC SHEET CLADDING - 'YELLOW'
1d	FC SHEET CLADDING - 'RED'
1e	FC SHEET CLADDING - 'BLACK'
1f	FC SHEET CLADDING - 'CHARCOAL'
3c	POWDERCOATED ALUMINIUM FRAMED WINDOW WITH CLEAR GLAZING - 'IRONSTONE'
7a	TIMBER BATTENS SCREENING WALLS
7b	PAINTED METAL FRAME WITH MESH INFILL 'BLACK'
7c	BLACK BRICK WALL
7d	TIMBER WALL CLADDING



5 FAST FOOD SECTION A-A
DA020 Scale: 1 : 250

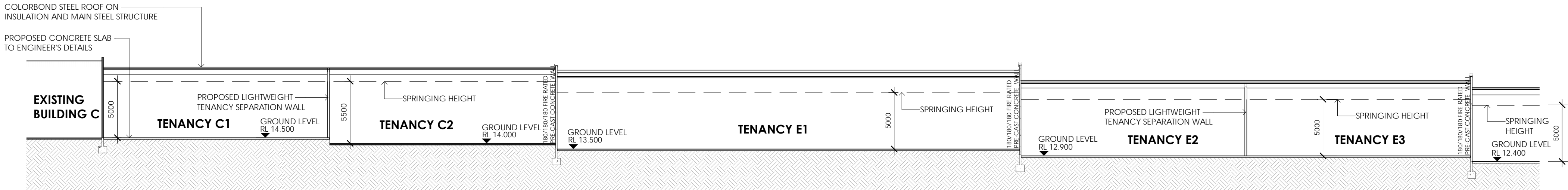


6 FAST FOOD SECTION B-B
DA020 Scale: 1 : 250

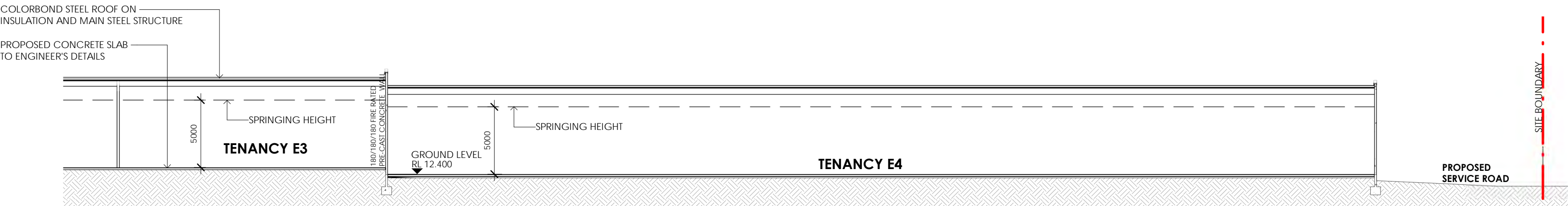


FAST FOOD ELEVATIONS

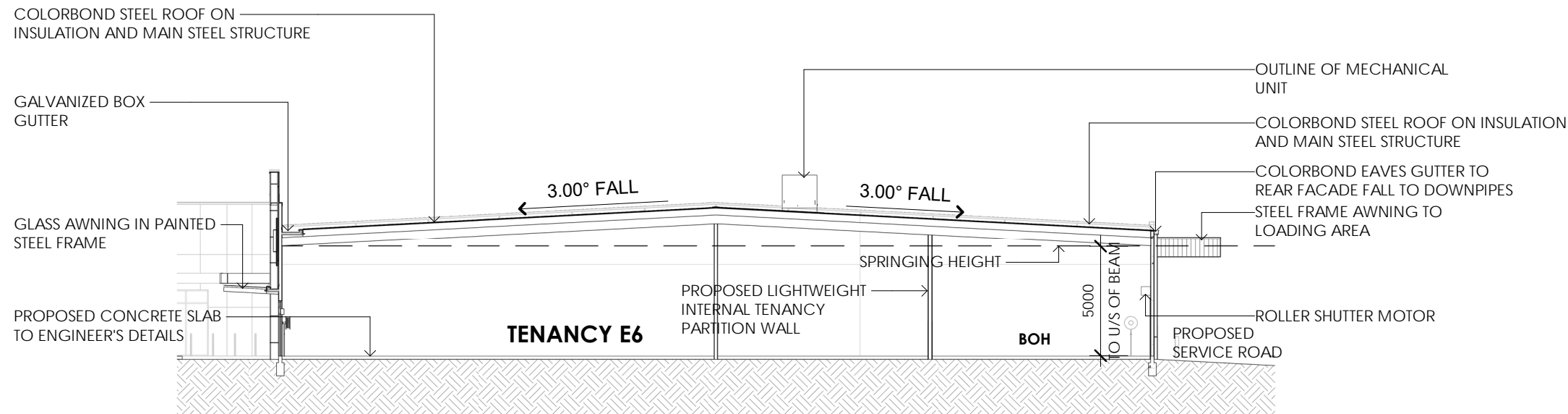




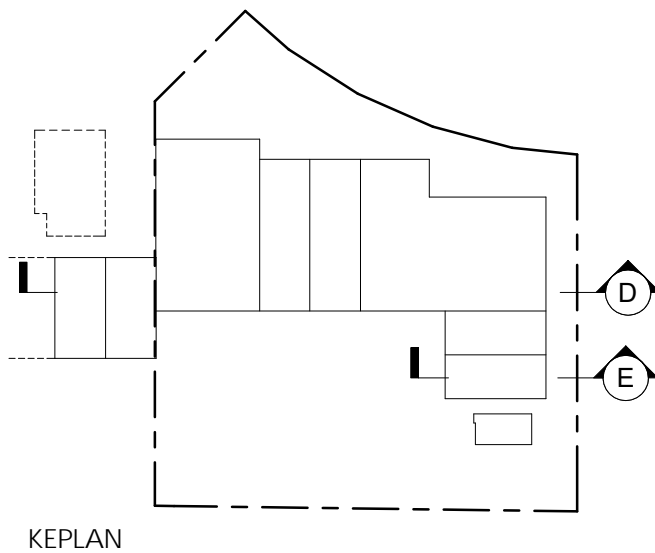
1 BUILDING SECTION D-D (PART-1)
Scale: 1 : 250



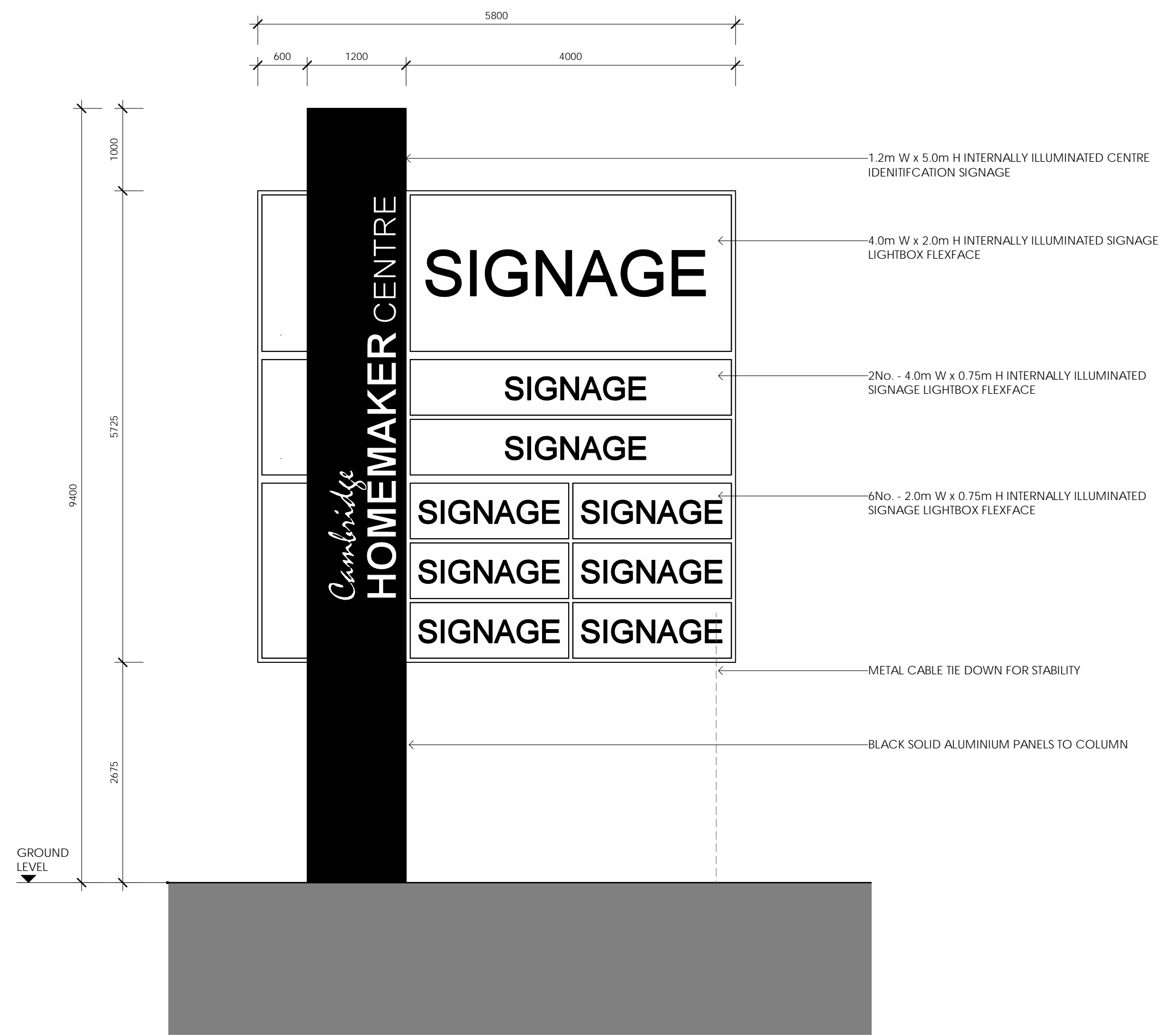
2 BUILDING SECTION D-D (PART-2)
Scale: 1 : 250



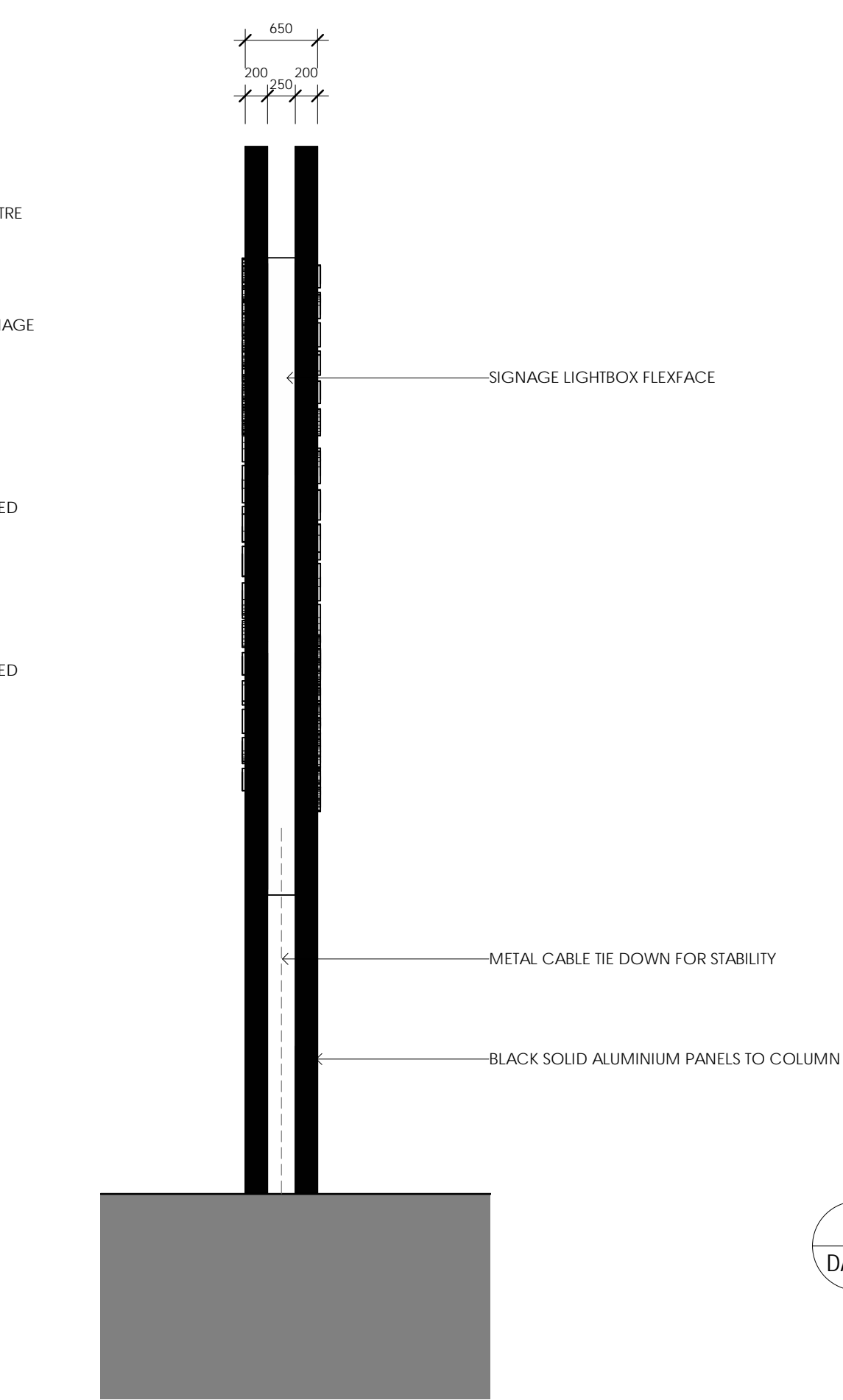
3 SECTION E-E
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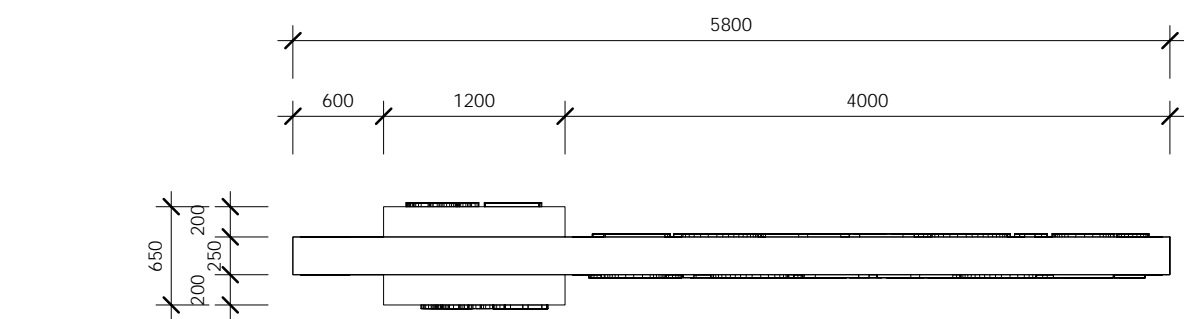
PROPOSED SECTIONS



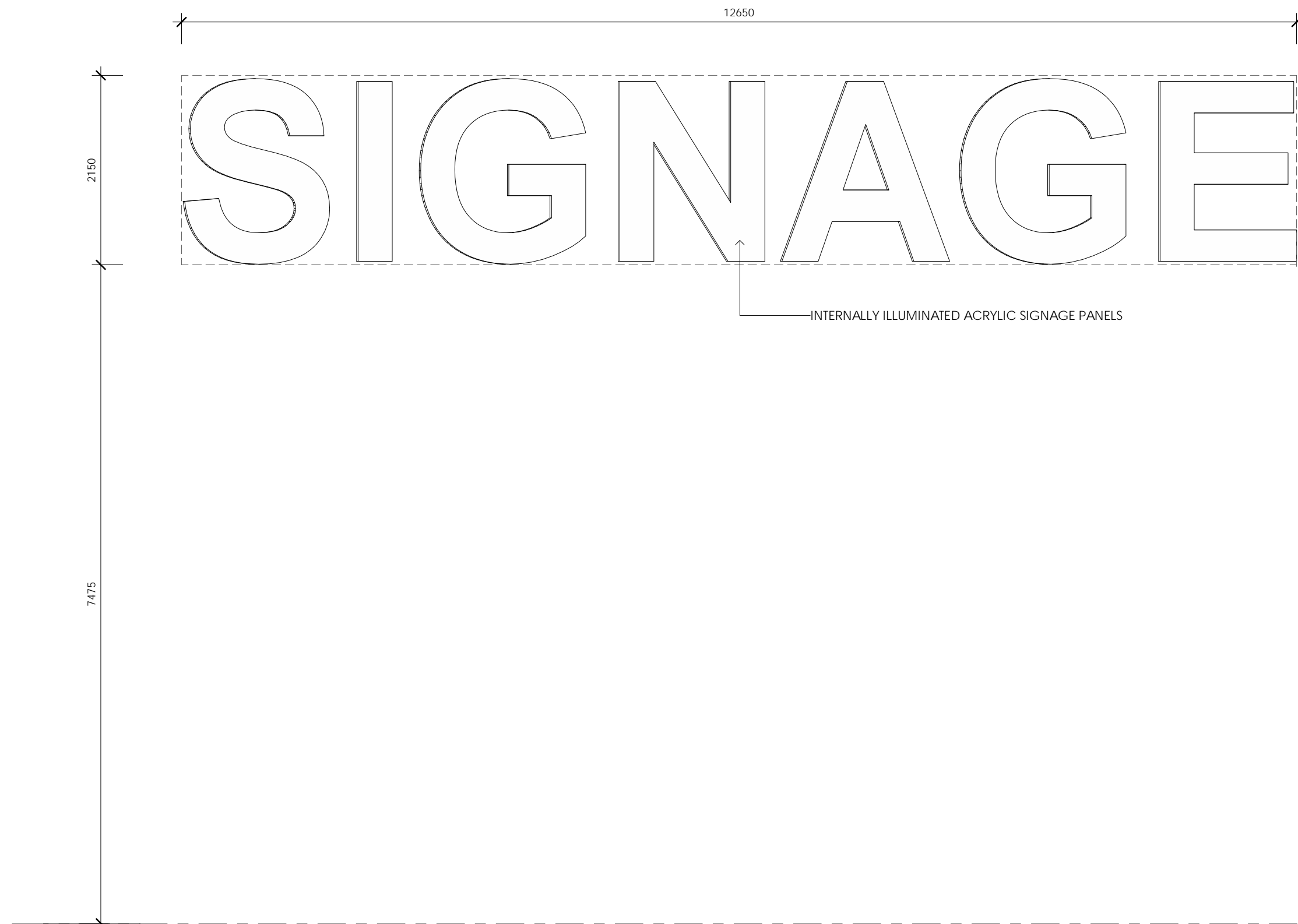
2 PYLON SIGN 1 & 2 FRONT & REAR ELEVATION
Scale: 1 : 50



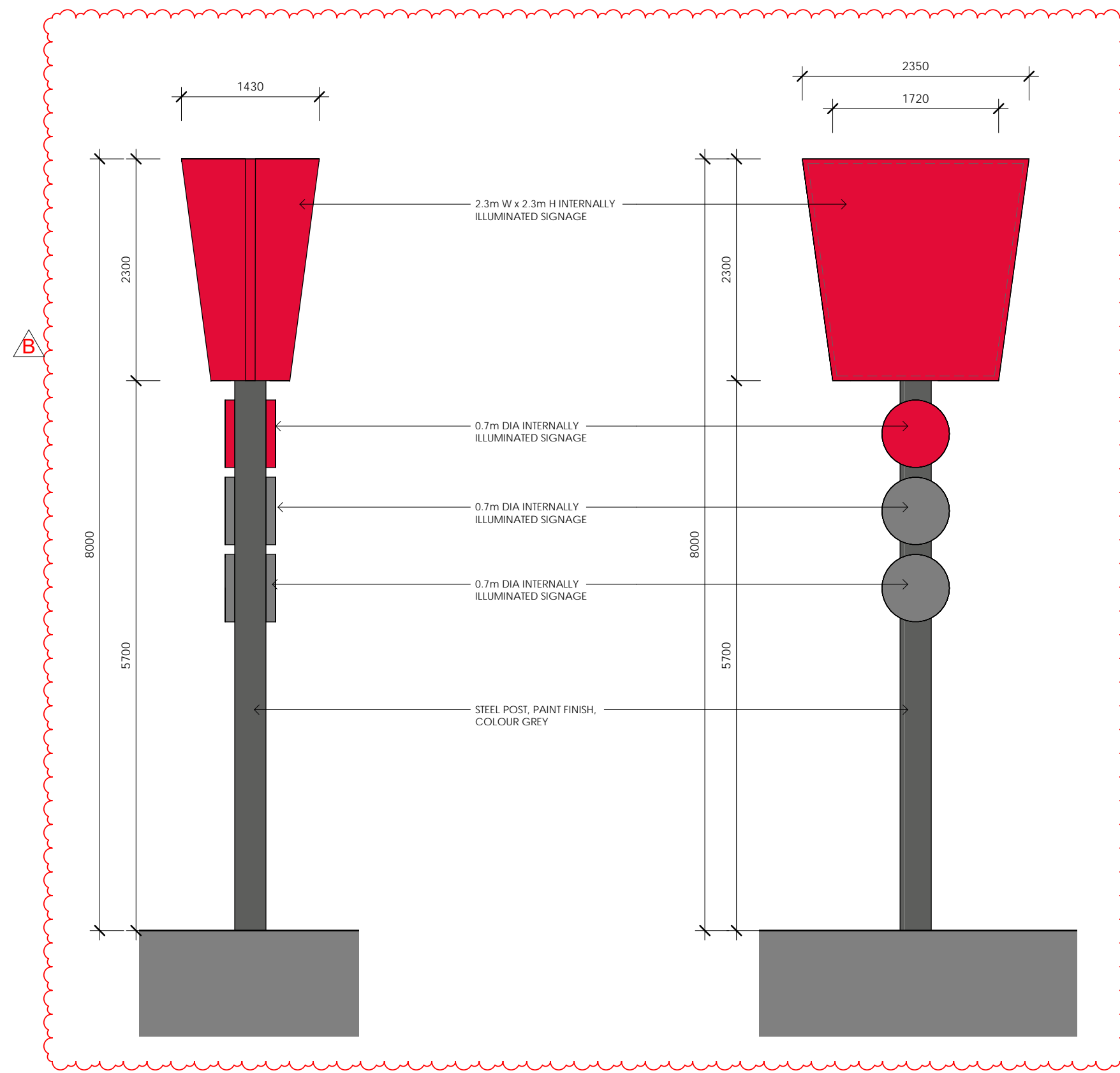
3 PYLON SIGN 1 & 2 SIDE ELEVATION
Scale: 1 : 50



1 PYLON SIGN PLAN
Scale: 1 : 50

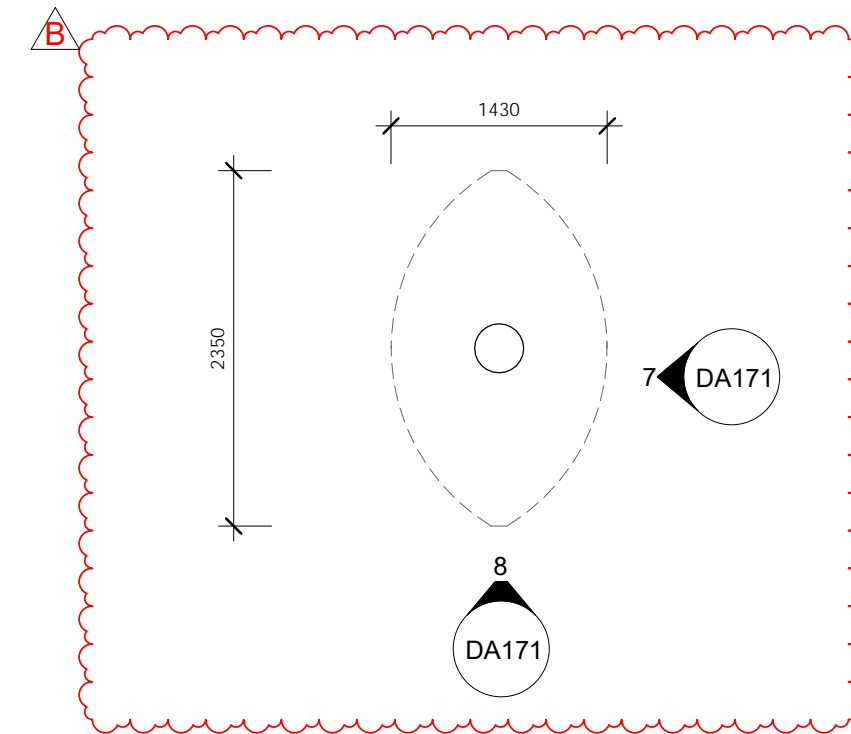


4 TENANCY SIGNAGE TYPE 1
Scale: 1 : 50

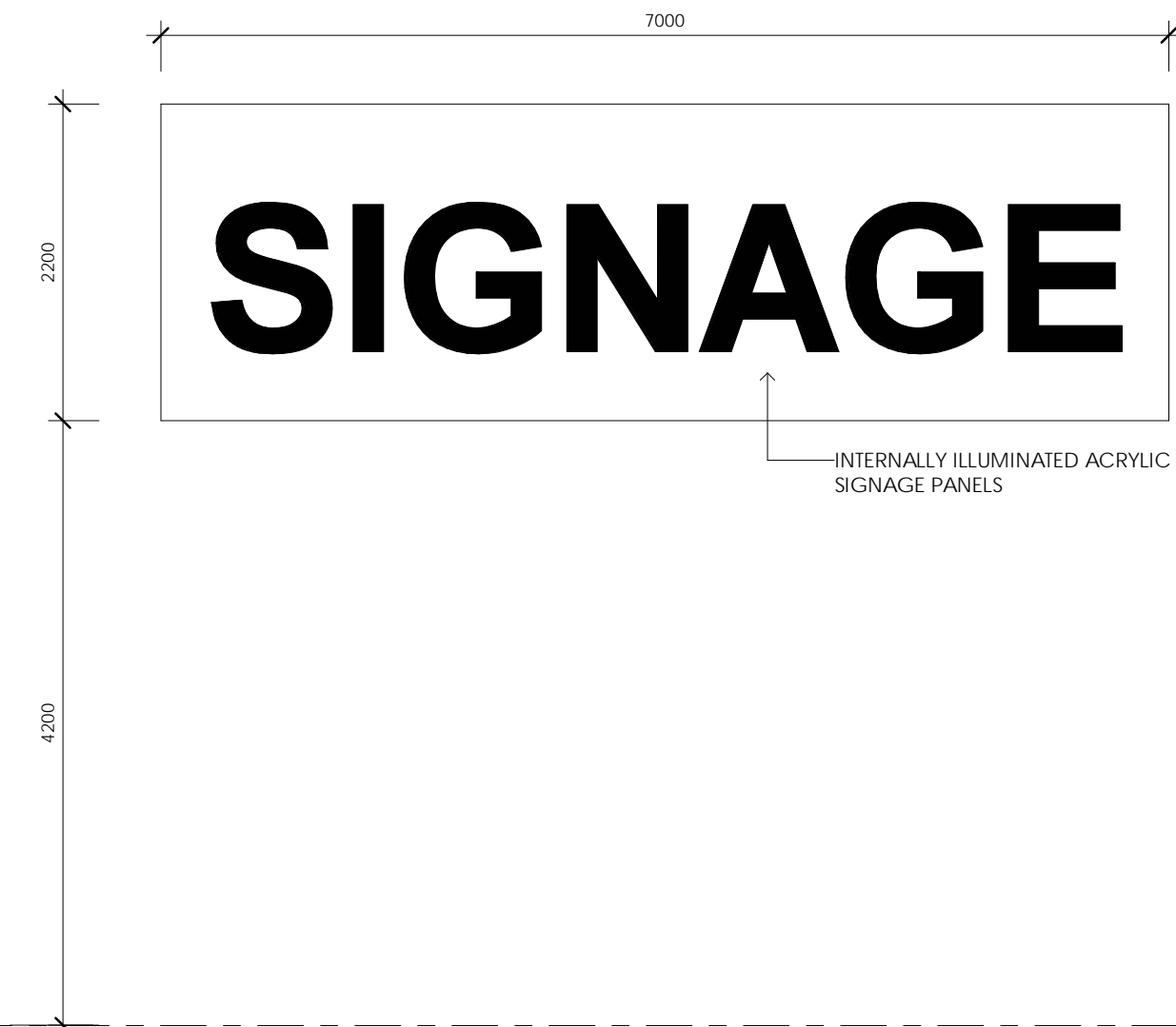


8 PYLON SIGN 3 SIDE ELEVATION
Scale: 1 : 50

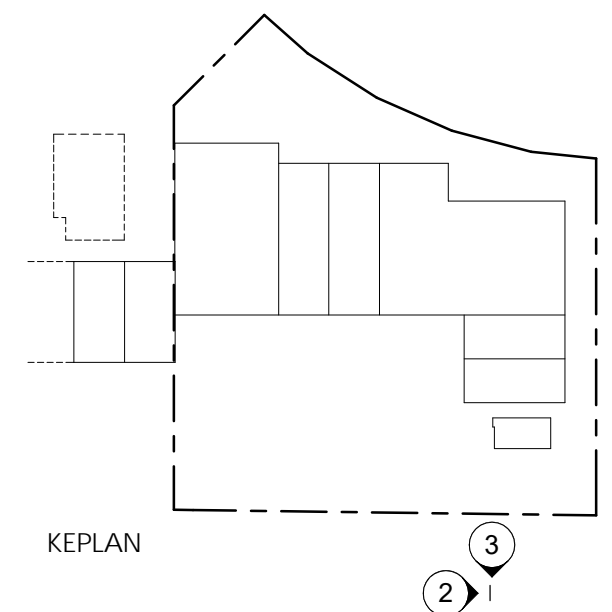
7 PYLON SIGN 3 FRONT & REAR ELEVATION
Scale: 1 : 50



6 PYLON SIGN 3 PLAN
Scale: 1 : 50



5 TENANCY SIGNAGE TYPE 2
Scale: 1 : 50





ARTIST IMPRESSION '1' - AERIAL VIEW FROM TASMAN HIGHWAY



ARTIST IMPRESSION '2' - VIEW OF FAST FOOD FROM TASMAN HIGHWAY



ARTIST IMPRESSION '3' - VIEW OF DRIVE THRU

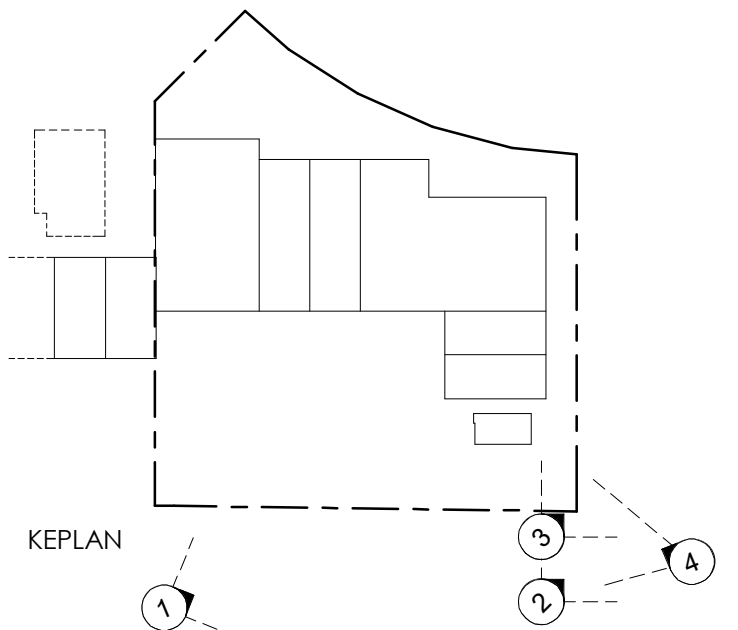


ARTIST IMPRESSION '4' - VIEW OF STREETSCAPE

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ISSUE	AMENDMENT	DATE	CHK'D
A	TOWN PLANNING ISSUE	04.05.23	SJE
B	ARTIST IMPRESSION UPDATED TO SUIT WITH UPDATED PLAN, STREETSCAPE PERSPECTIVE ADDED	04.09.23	SJE
C	PYLON SIGNS MOVED WITHIN BOUNDARY	13.11.23	SJE



ARTIST IMPRESSIONS

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T: +61 2 99093344
T: +61 3 96546344
T: +61 7 31235544

SCALE
NTS @ A1

PROPOSED BUILDING E
HARVEY NORMAN CENTRE CAMBRIDGE PARK, TAS

JOB NO: 5145
DATE: OCT '22
DRAWN: ASH

DWG NO. DA300
REV. C

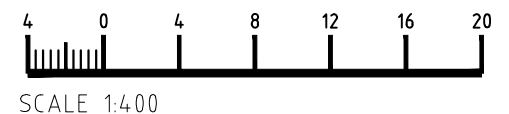
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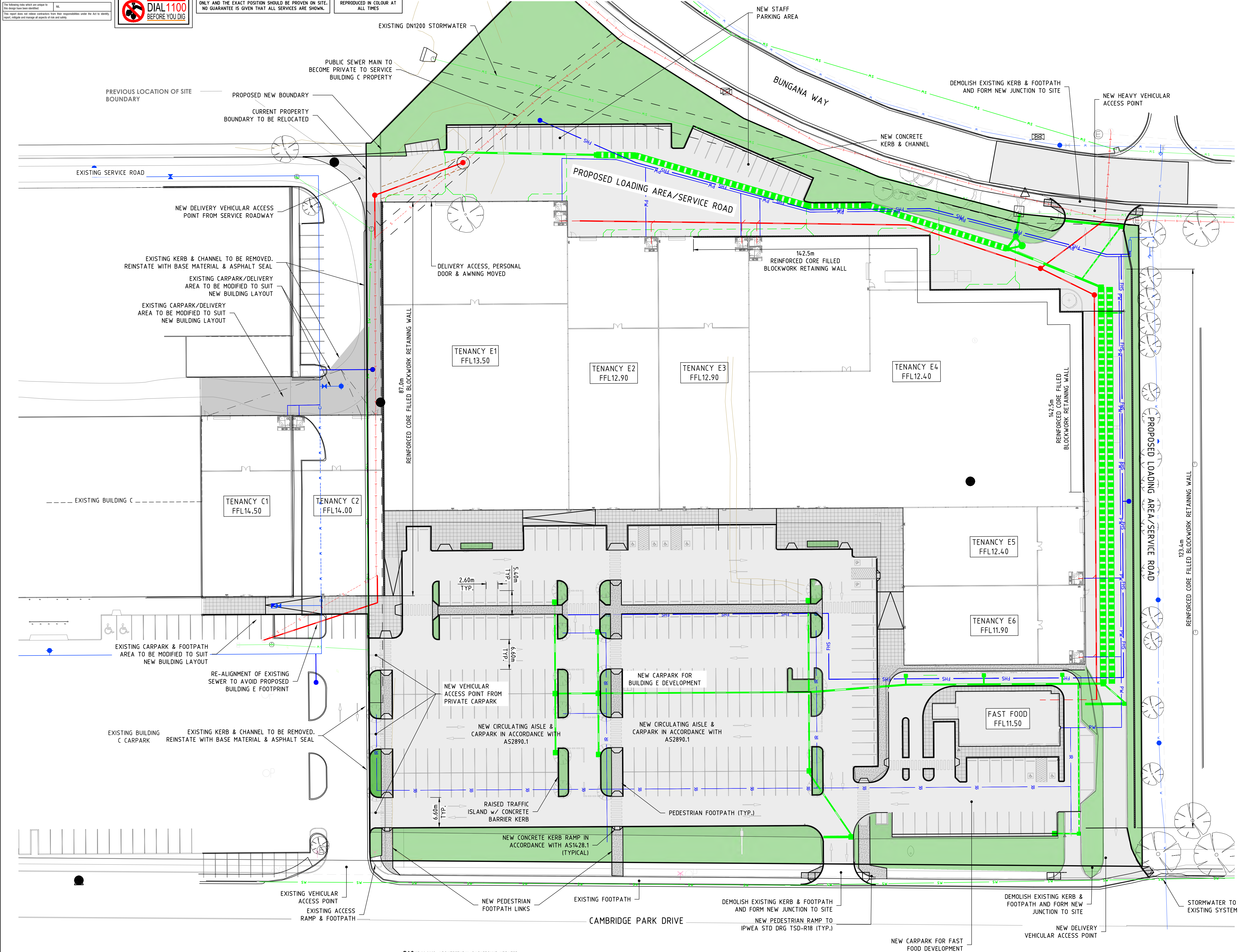
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LEGEND

- CARPARK PAVEMENT AREA
- CONCRETE DRIVEWAY AREA
- HEAVY VEHICLE PAVEMENT AREA
- LANDSCAPING AREA (REFER ARCHITECTURAL)
- CONCRETE KERB & CHANNEL
- BLOCKWORK RETAINING WALL
- PEDESTRIAN FOOTPATH
- DDA COMPLIANT FOOTPATH AREAS
- DDA COMPLIANT ACCESS RAMPS
- PROPOSED BUILDING FOOTPRINT



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DA2	05.09.2023	ARCHITECTURAL BACKGROUND UPDATED
DA1	15.06.2023	ISSUED FOR DEVELOPMENT APPROVAL
P1	16.02.2023	PRELIMINARY - FOR COMMENT
REV	DATE	REMARK

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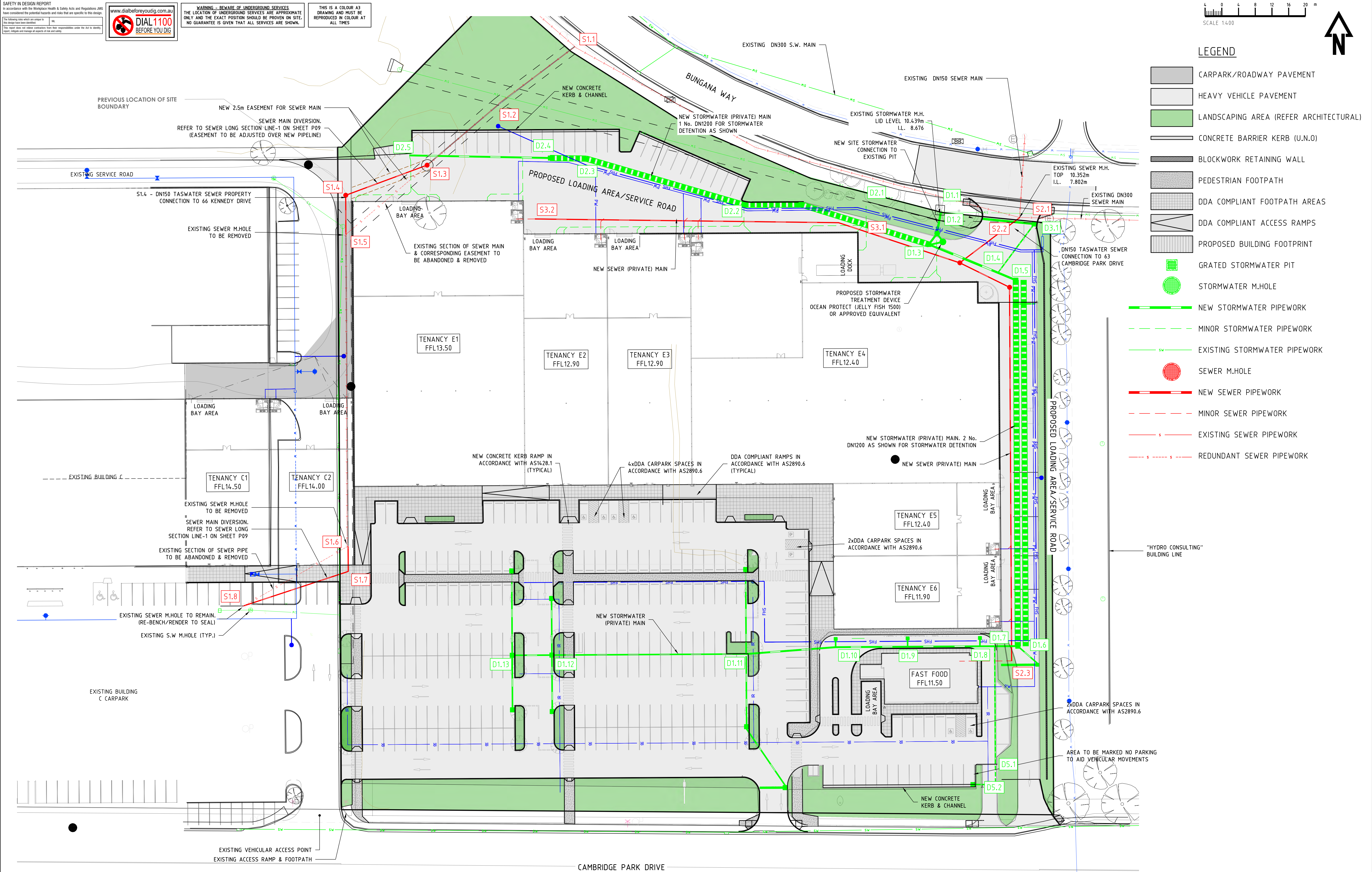


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PROJECT
CAMBRIDGE HOMEMAKER CENTRE, BUILDING E

TITLE
CIVIL SERVICES OVERALL SITE PLAN

PROJECT NO.	220860CS
DWG NO.	P01
REVISION	DA2
PLOT DETAILS GA PLANS.DWG	



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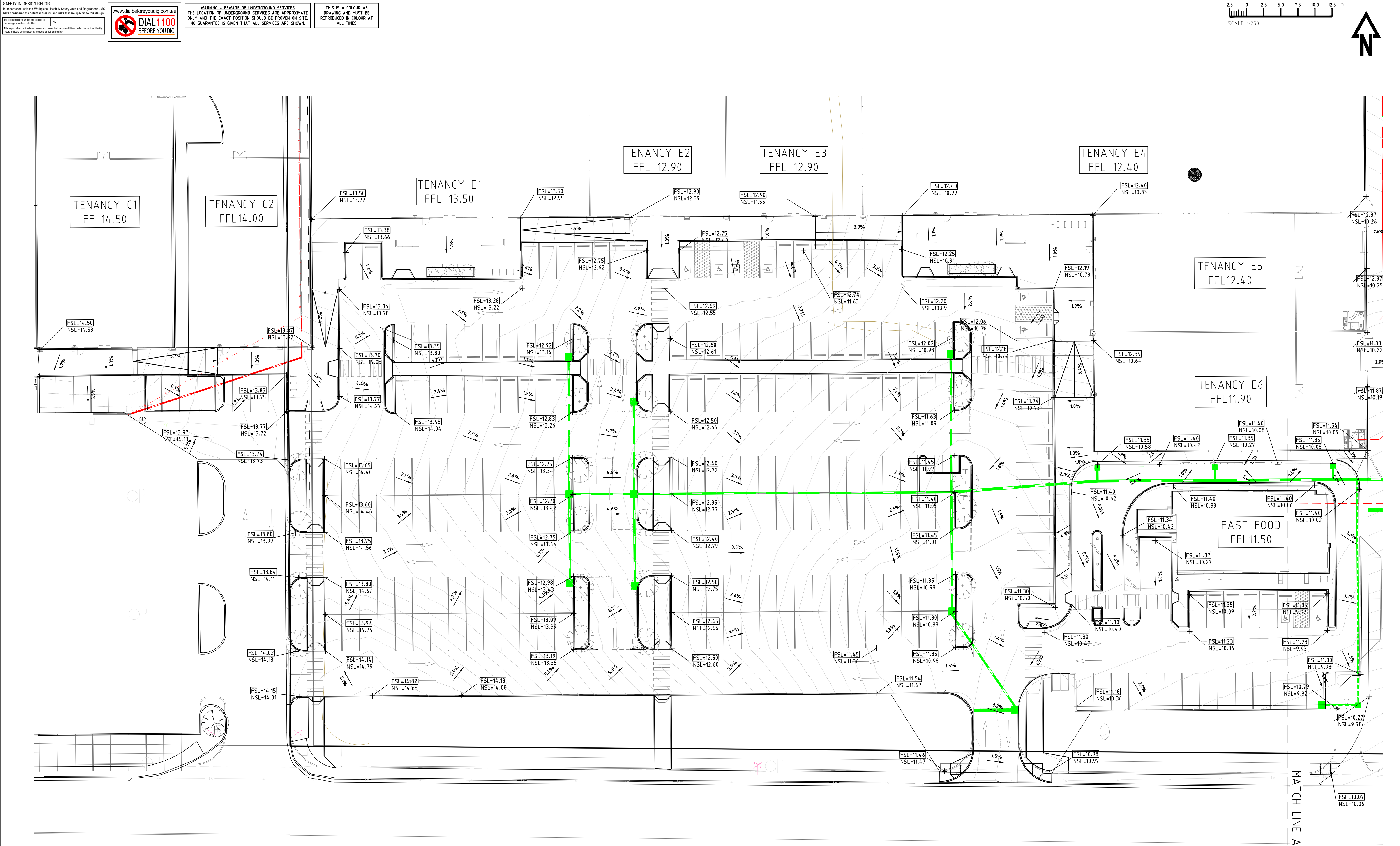
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PROJECT
CAMBRIDGE HOMEMAKER CENTRE, BUILDING E

TITLE
CIVIL SERVICES SEWER & STORMWATER

PROJECT NO.	220860CS
DWG NO.	P02
REVISION	DA2
PLOT DETAILS GA PLANS.DWG	

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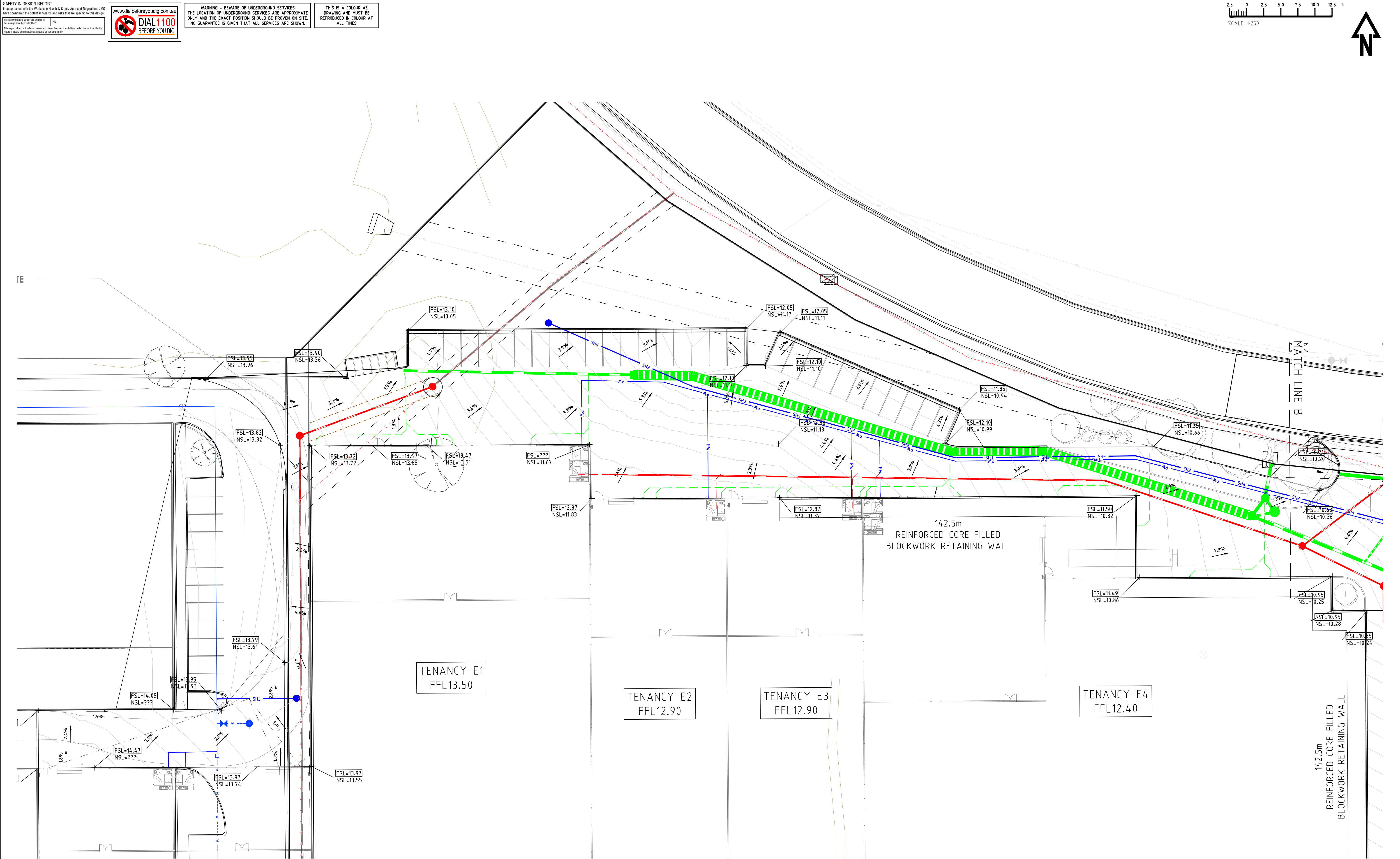
ABN 76 473 834 852
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PROJECT
CAMBRIDGE HOMEMAKER CENTRE, BUILDING E

TITLE
CIVIL SERVICES MAIN CARPARK SURFACE LEVEL & GRADES

PROJECT NO.	220860CS
DWG NO.	P03
REVISION	DA2
PLOT DETAILS	GA PLANS.DWG

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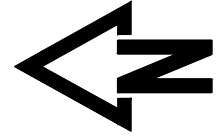
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PROJECT
CAMBRIDGE HOMEMAKER CENTRE, BUILDING E

TITLE
CIVIL SERVICES LOADING & STAFF PARKING SURFACE LEVEL & GRADES

PROJECT NO.	220860CS
DWG NO.	P04
REVISION	DA2
PLOT DETAILS	GA PLANS.DWG

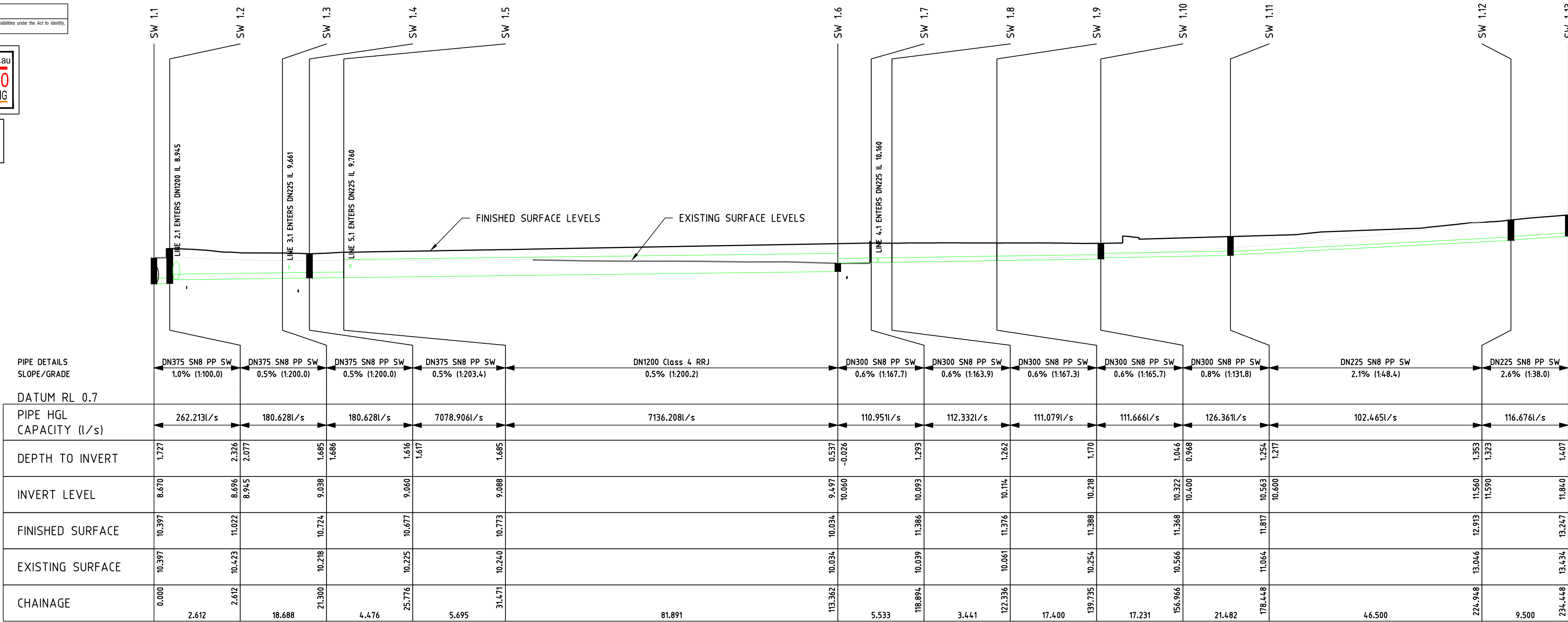


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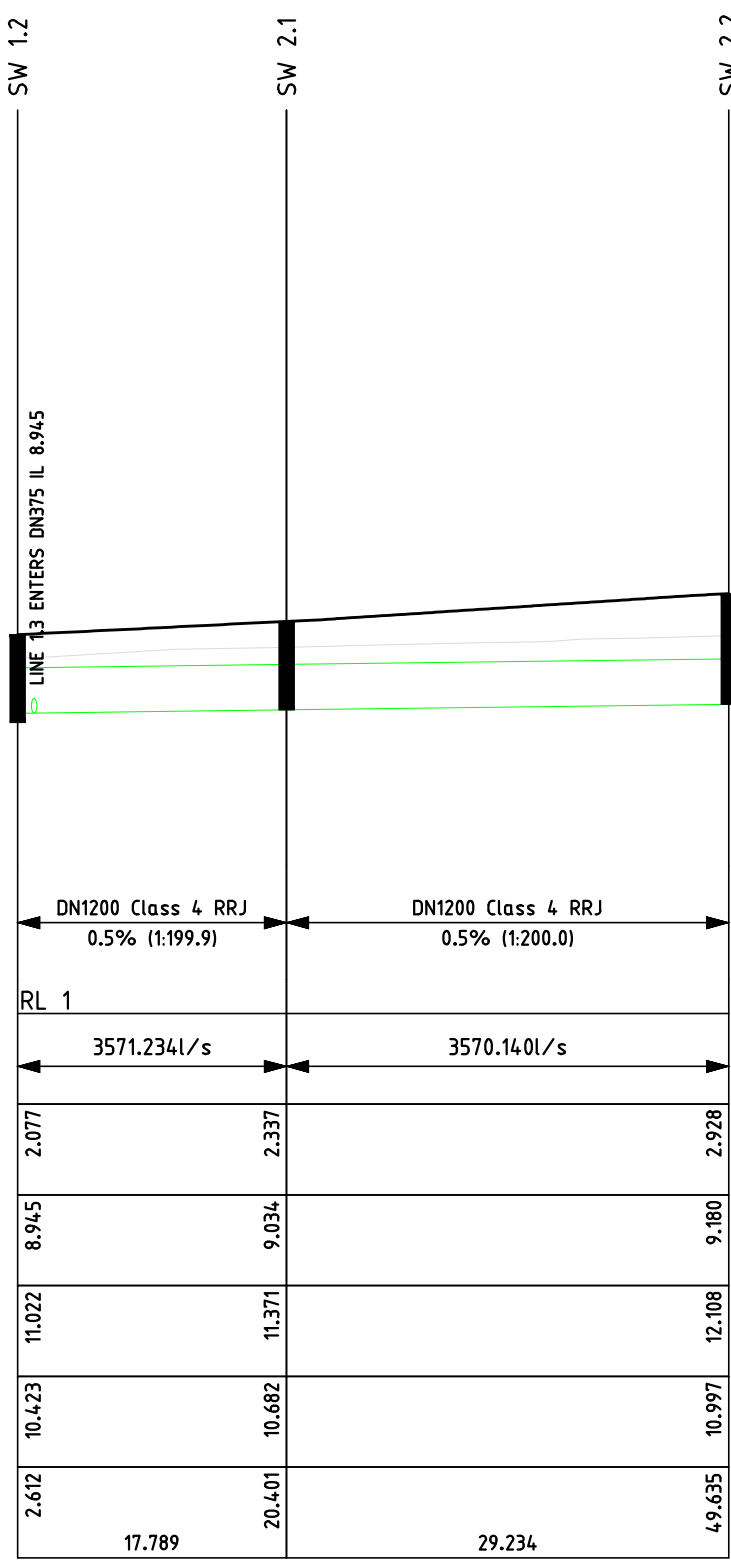
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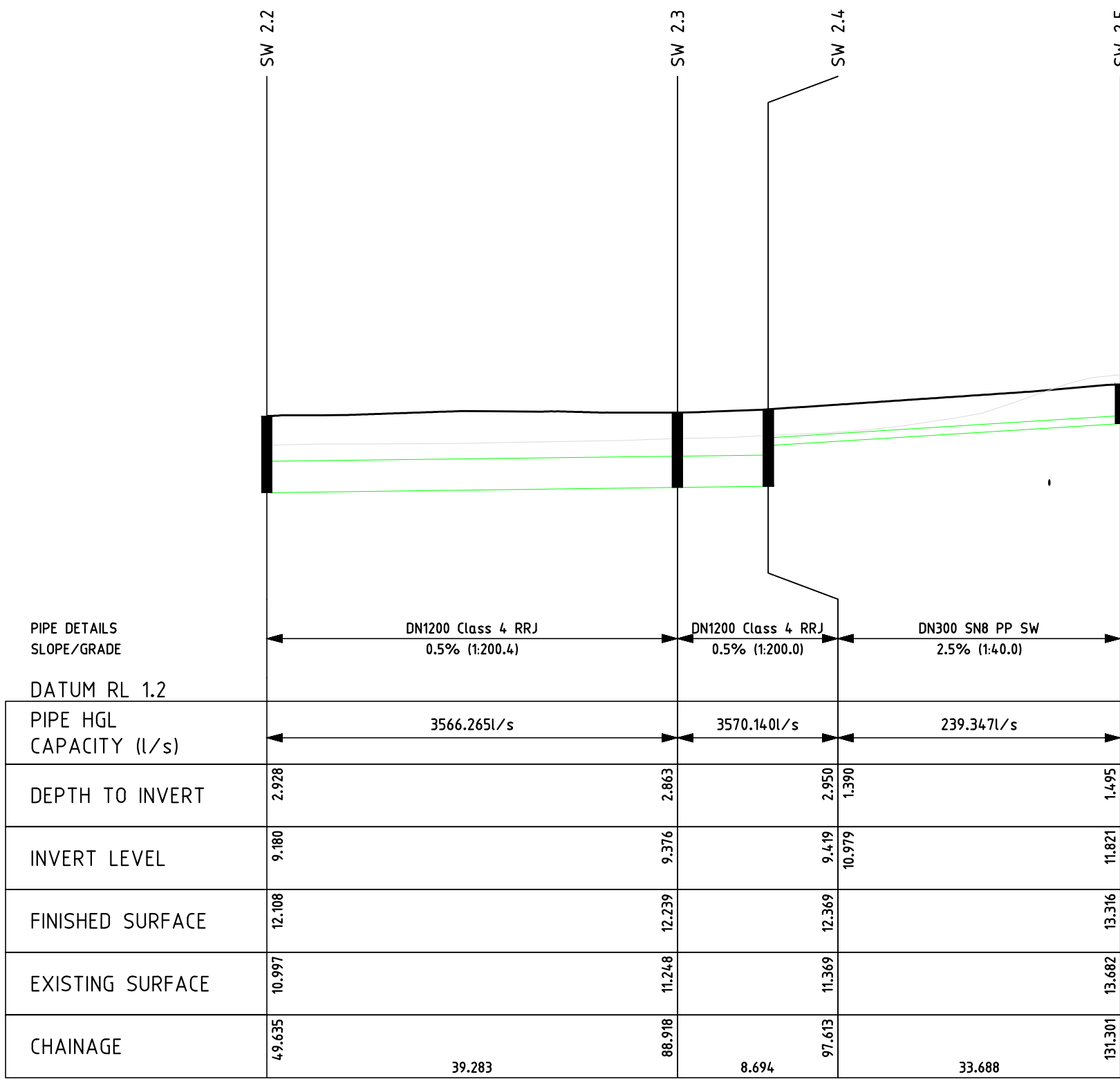
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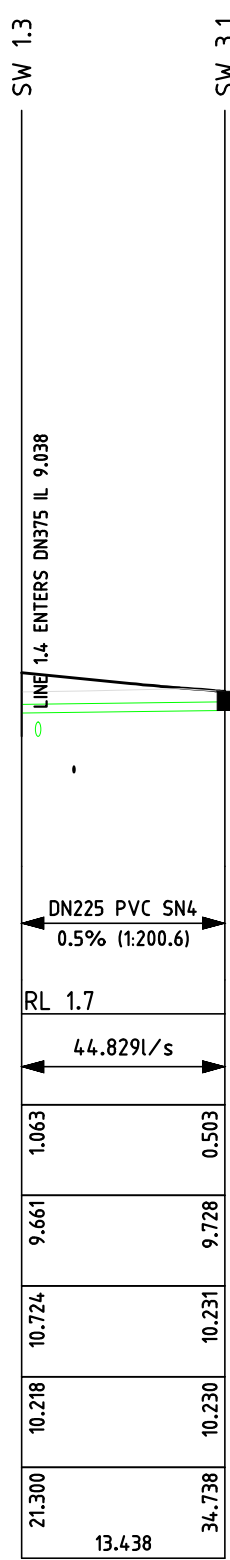
STORMWATER PROFILE LINE 1
SCALES: HORIZONTAL 1:500 VERTICAL 1:200



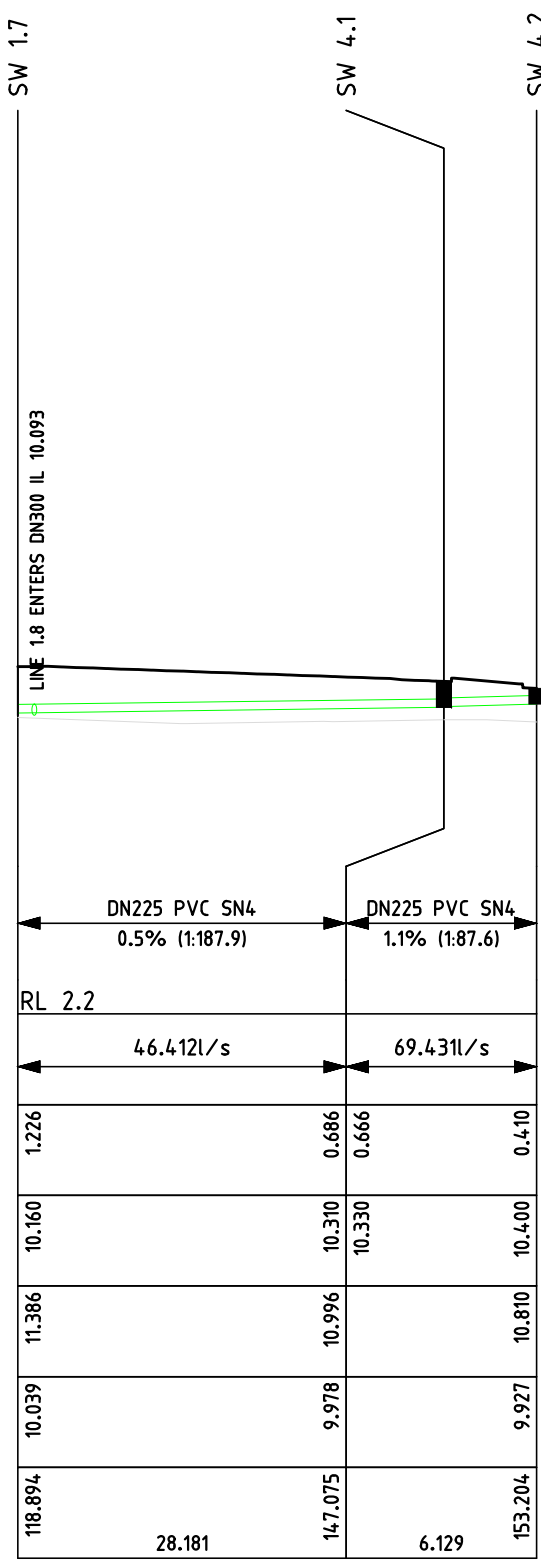
STORMWATER PROFILE LINE 2
SCALES: HORIZONTAL 1:500 VERTICAL 1:200



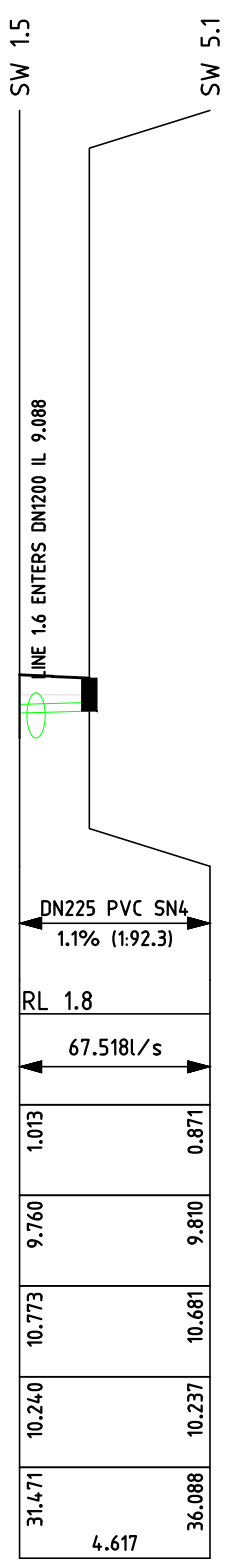
STORMWATER PROFILE LINE 2
SCALES: HORIZONTAL 1:500 VERTICAL 1:200



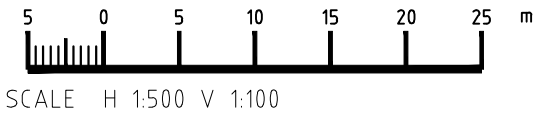
STORMWATER PROFILE LINE 3
SCALES: HORIZONTAL 1:500 VERTICAL 1:200



STORMWATER PROFILE LINE 4
SCALES: HORIZONTAL 1:500 VERTICAL 1:200



STORMWATER PROFILE LINE 5
SCALES: HORIZONTAL 1:500 VERTICAL 1:200



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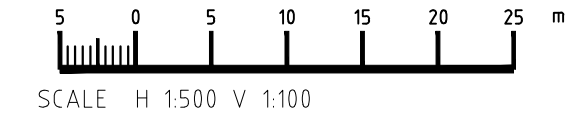
PROJECT
CAMBRIDGE HOMEMAKER
CENTRE, BUILDING E

TITLE
CIVIL SERVICES
STORMWATER LONGITUDINAL
SECTIONS

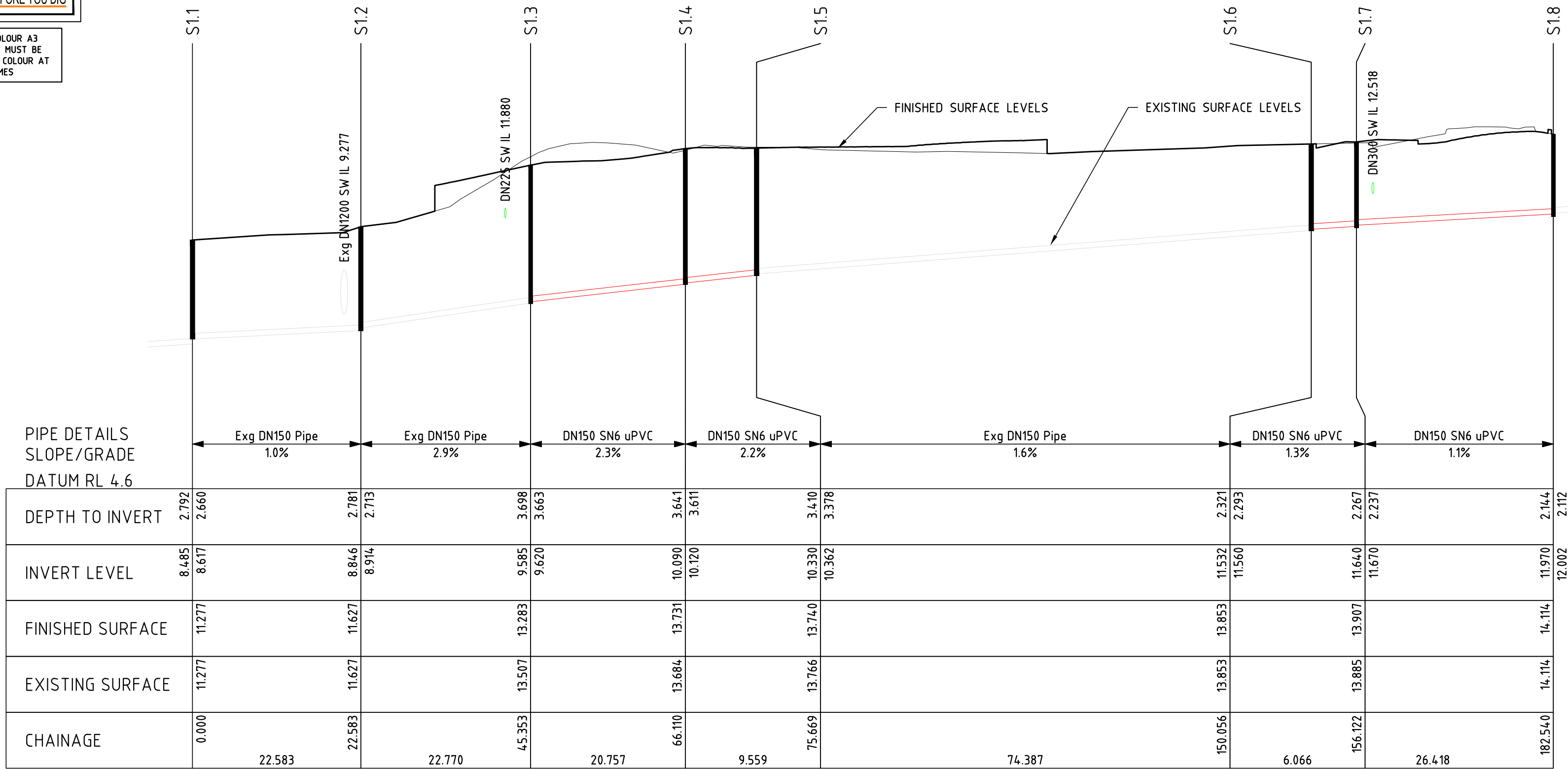
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DWG NO. P06 REVISION DA2
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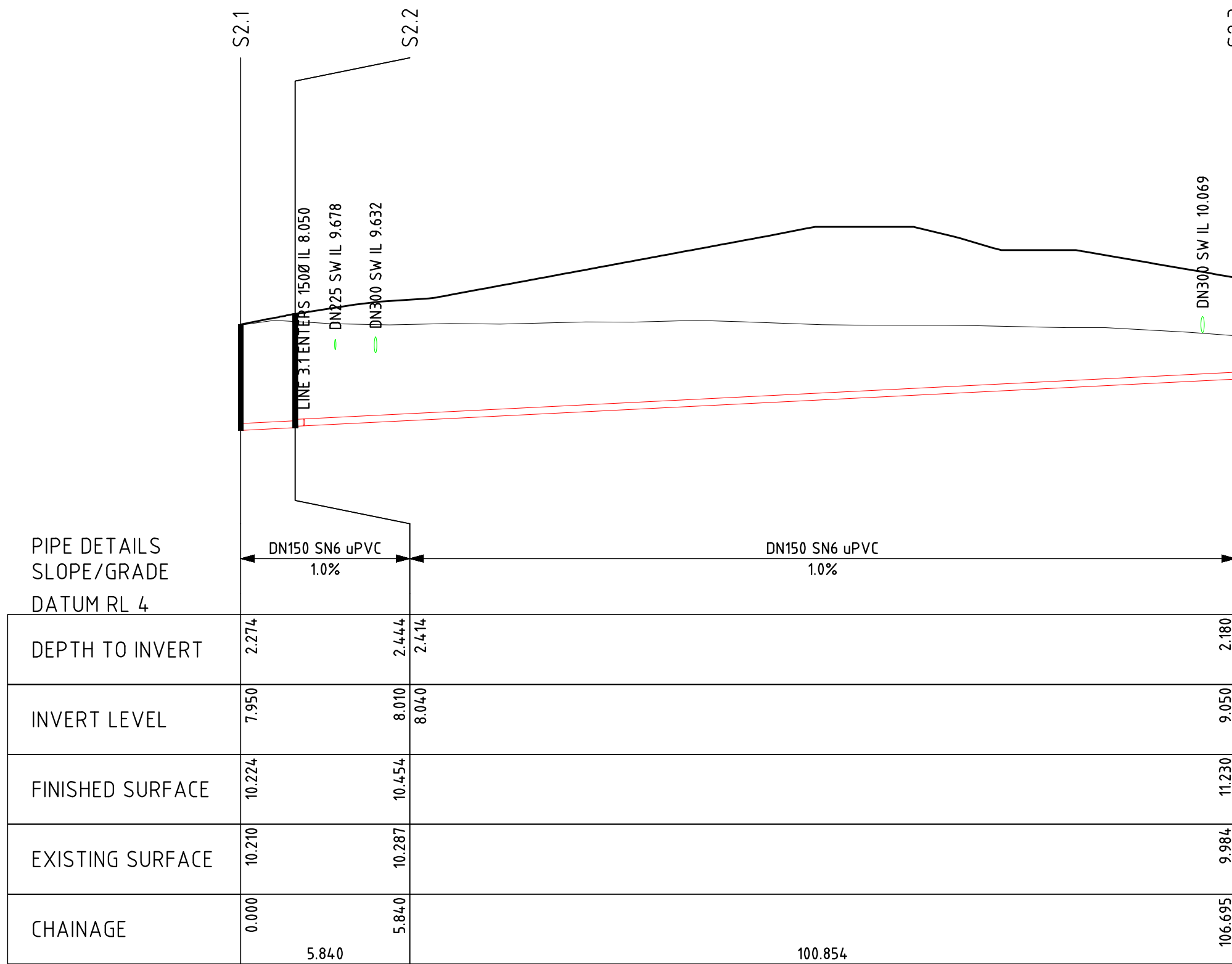
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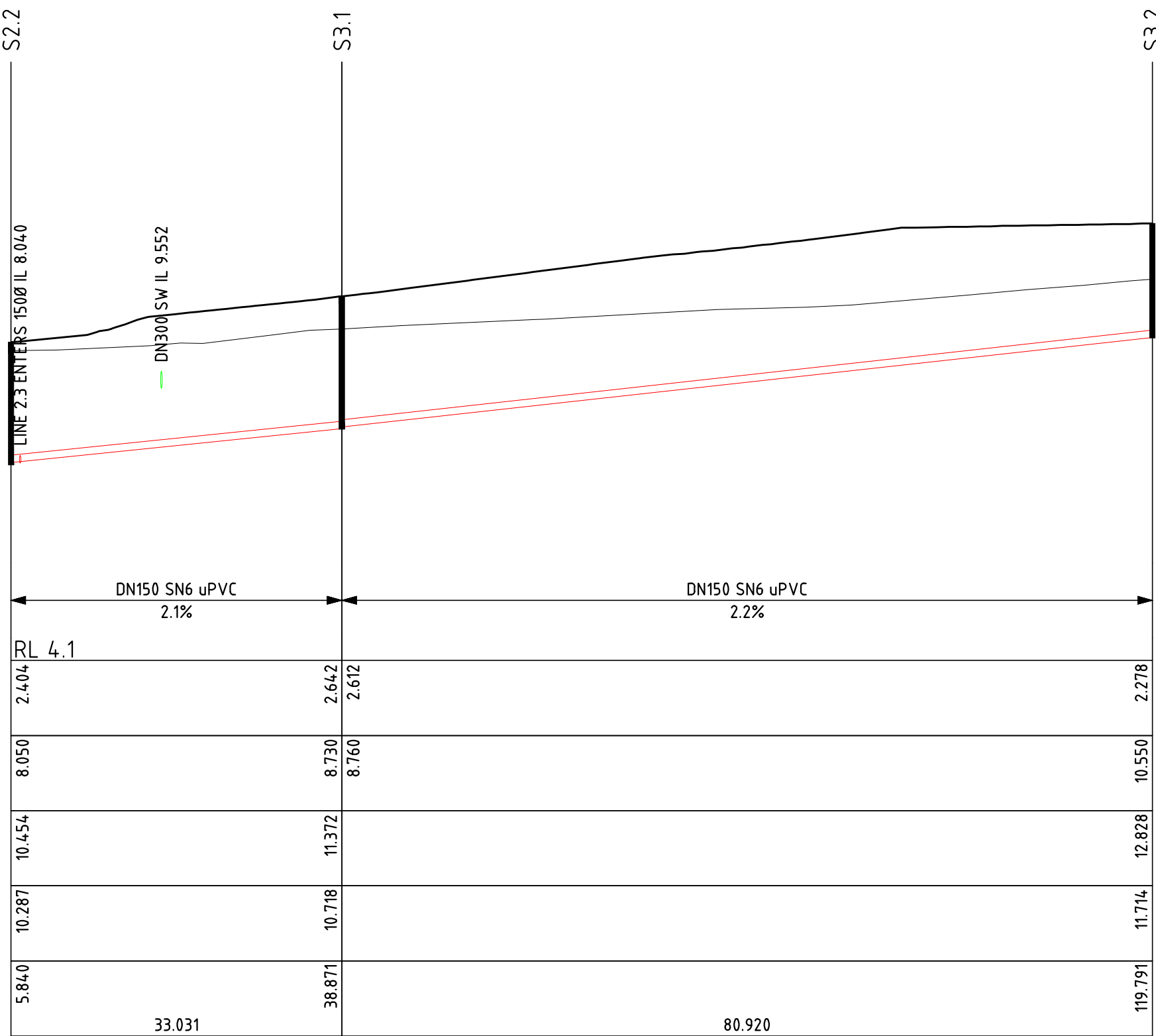
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SEWER LONGITUDINAL SECTION FOR LINE 1
SCALES: HORIZONTAL 1:500 VERTICAL 1:100



SEWER LONGITUDINAL SECTION FOR LINE 2
SCALES: HORIZONTAL 1:500 VERTICAL 1:100



SEWER LONGITUDINAL SECTION FOR LINE 3
SCALES: HORIZONTAL 1:500 VERTICAL 1:100

DA2	05.09.2023	ARCHITECTURAL BACKGROUND UPDATED
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PROJECT
**CAMBRIDGE HOMEMAKER
CENTRE, BUILDING E**

TITLE
**CIVIL SERVICES
SEWER LONGITUDINAL
SECTIONS**

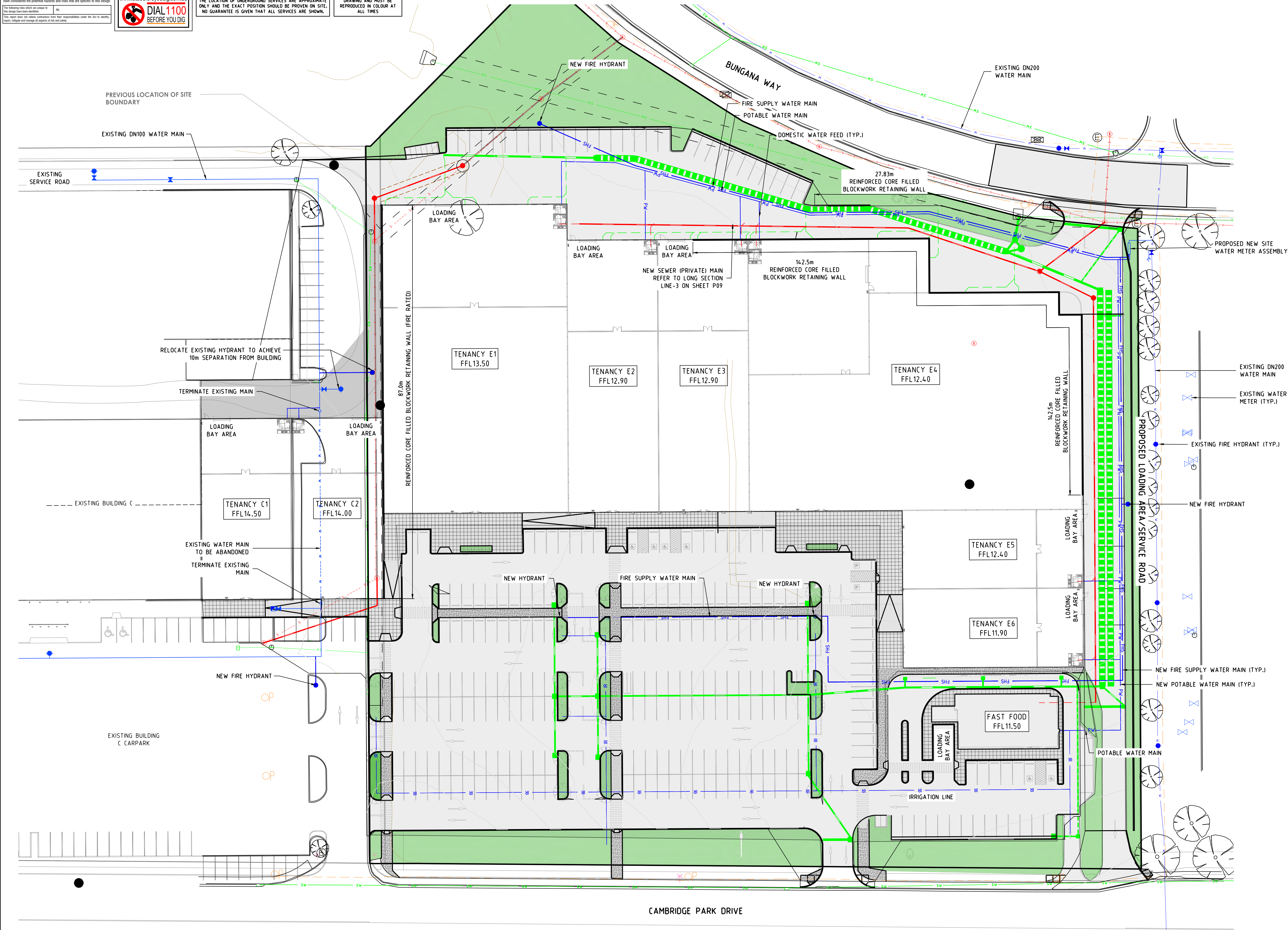
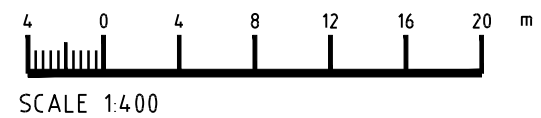
PROJECT NO.	220860CS
DWG NO.	P07
REVISION	DA2
PLOT DETAILS	GA PLANS.DWG

SAFETY IN DESIGN REPORT
In accordance with the Workplace Health & Safety Acts and Regulations JMG have considered the potential hazards and risks that are specific to this design.
The following risks were assessed as:
This report does not release contractors from their responsibilities under the Act to identify, report, mitigate and manage all aspects of risk and safety.



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ONLY AND THE EXACT POSITION SHOULD BE PROVEN ON SITE.
NO GUARANTEE IS GIVEN THAT ALL SERVICES ARE SHOWN.

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DA2	05/09/2023	ARCHITECTURAL BACKGROUND UPDATED
DA1	15/06/2023	ISSUED FOR DEVELOPMENT APPROVAL
P1	16/02/2023	PRELIMINARY - FOR COMMENT
REV	DATE	REMARK
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The following risks were assessed as:
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Accepted	B. GAMLIN	Date
(Designer/Head)		
Accepted	C. MALES	Date
(Team Leader)		
Accepted	C. MALES	Date
(Principal)		
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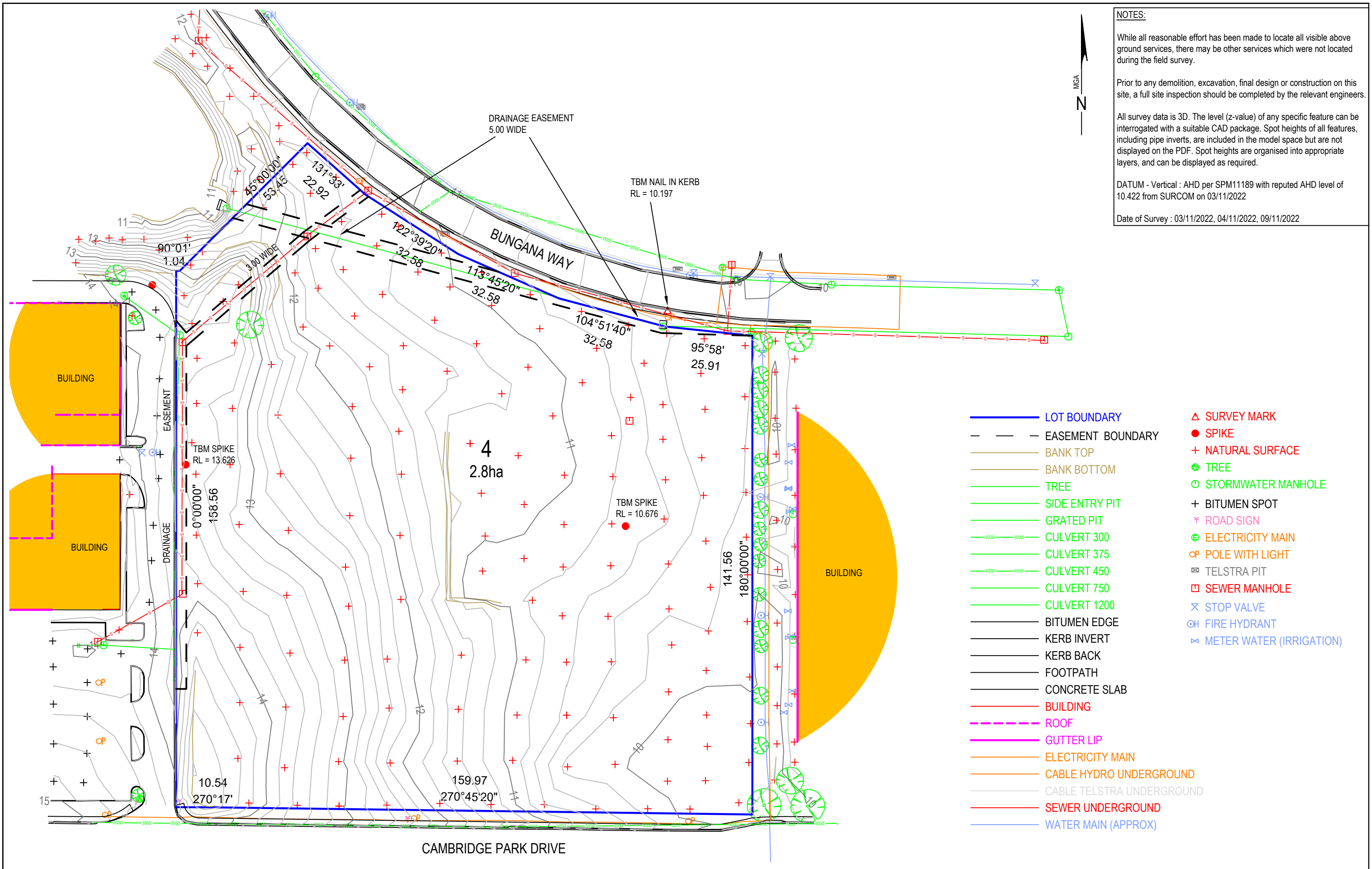
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PROJECT
CAMBRIDGE HOMEMAKER CENTRE, BUILDING E

TITLE
CIVIL SERVICES CONCEPT FIRE & DOMESTIC WATER

PROJECT NO.	220860CS
DWG NO.	P08
REVISION	DA2
PLOT DETAILS	GA PLANS.DWG

NOT FOR CONSTRUCTION



NOTES:


While all reasonable effort has been made to locate all visible above ground services, there may be other services which were not located during the field survey.

Prior to any demolition, excavation, final design or construction on this site, a full site inspection should be completed by the relevant engineers.

All survey data is 3D. The level (z-value) of any specific feature can be interrogated with a suitable CAD package. Spot heights of all features, including pipe inverts, are included in the model space but are not displayed on the PDF. Spot heights are organised into appropriate layers, and can be displayed as required.

DATUM - Vertical : AHD per SPM11189 with reputed AHD level of 10.422 from SURCOM on 03/11/2022

Date of Survey : 03/11/2022, 04/11/2022, 09/11/2022

AMENDMENTS			Project Name and Address		Drawing Title		SCALE		Contour Interval		FILE REF:	
No.	Revision/Issue	Date										
			63 Cambridge Park Drive Cambridge, 7170		DETAIL PLAN		0 10 20 30 40 1:1000 at A3		0.200 m		13122	
			Unit G04 40 Mollie Street, HOBART TAS 7000 P 03 6118 2030 E admin@lccsurvey.com		Calardu Cambridge Pty Ltd CT. 157366 / 4		THIS DOCUMENT IS, AND SHALL REMAIN, THE PROPERTY OF LEARY COX & CRIPPS, LAND & ENGINEERING SURVEYORS. THE DOCUMENT MAY ONLY BE USED FOR THE PURPOSE FOR WHICH IT WAS COMMISSIONED AND IN ACCORDANCE WITH THE TERMS OF ENGAGEMENT FOR THE COMMISSION. UNAUTHORISED USE OF THE DOCUMENT IN ANY MANNER IS PROHIBITED.		SHEET 1 of 1		GeoCivil Ref 1312201 AutoCAD Ref 1312201 MGA2020	

sewer main located by detailed survey, refer Leary Cox & Cripps detail site survey ref 13122

This main was adandoned when the old sorell trunk main was relocated into Cambridge park Drive in 2006. These works were documented by CCC. Refer JMG drg J061169CH-C73 which shows the easement that this was located in but not the main.

This 200dia main constructed as part of the Homemaker centre development in 2006. Location shown on TasWater GIS is incorrect. Refer JMG drg J061169CH-C73 and Leary Cox & Cripps detail site survey ref 13122 which show the main within 89 Cambridge Park drive

Trunk main adandoned when the Homemaker centre was constructed in 2006/2007. Works documented by Clarence Council. Refer JMG drawing J061169CH-C73



TasWater Infrastructure

- Water Reticulation Main
- Stormwater Rising Main
- Stormwater Gravity Reticulation Main
- Recycled Water Distribution Main

Private Infrastructure

- Water Mains - Private
- Stormwater Gravity Main - Private

Abandoned Infrastructure

- Water Abandoned Line
- Sewer Abandoned Line
- Recycled Water Abandoned Line

NOTE:

The representation of the TasWater assets shown on this map was derived from data supplied by TasWater. TasWater makes no representation as to the accuracy or completeness of the assets shown on this map.

CONCEPT SERVICES REPORT

BUILDING E, CAMBRIDGE HOMEMAKER CENTRE

PREPARED FOR

CALARDU CAMBRIDGE

September 2023



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Appendix A - Architectural Plans

Appendix B - Concept Civilworks Plans

Appendix C - Water and Sewer Demand Calculations

Appendix D - TasWater Email Correspondence

Appendix E - Ocean Protect Documentation

Issuing Office: 117 Harrington Street, Hobart 7000 JMG Project No. J220860CS								
Document Issue Status								
Ver.	Issue Date	Description	Originator		Checked		Approved	
1	14/06/2023	Issue to Client for review	AIH		BBG		CJM	
2	04/09/2023	Revised to address C.C.C RFI	AIH		CJM	<i>[Signature]</i>	CJM	<i>[Signature]</i>

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1. Introduction

This concept services report has been prepared in support of a development application to be lodged with the Clarence City Council (CCC) for the construction of a new retail complex on Cambridge Park Drive, located between the Existing Cambridge Homemaker Centre, and the former Hydro Consulting Building. Works are to be undertaken on two titles, the existing Homemaker centre site CT 157366/2 at 66 Kennedy Drive and the undeveloped land comprising CT 157366/4 at 63 Cambridge Park Drive. In order to facilitate the development a boundary adjustment is proposed between these two lots to align the new boundary with the proposed wall line of tenancies C2 & E1.

This development includes;

- two additional tenancies C1 & C2 to the east of the existing National Tiles tenancy,
- 6 new tenancies and a stand-alone fast-food outlet to be constructed within the adjusted boundaries of CT 157366/4 and referred to as Building E.

The proposed architectural layout can be seen below in Figure 1, while the full-size drawings are contained within Appendix A.

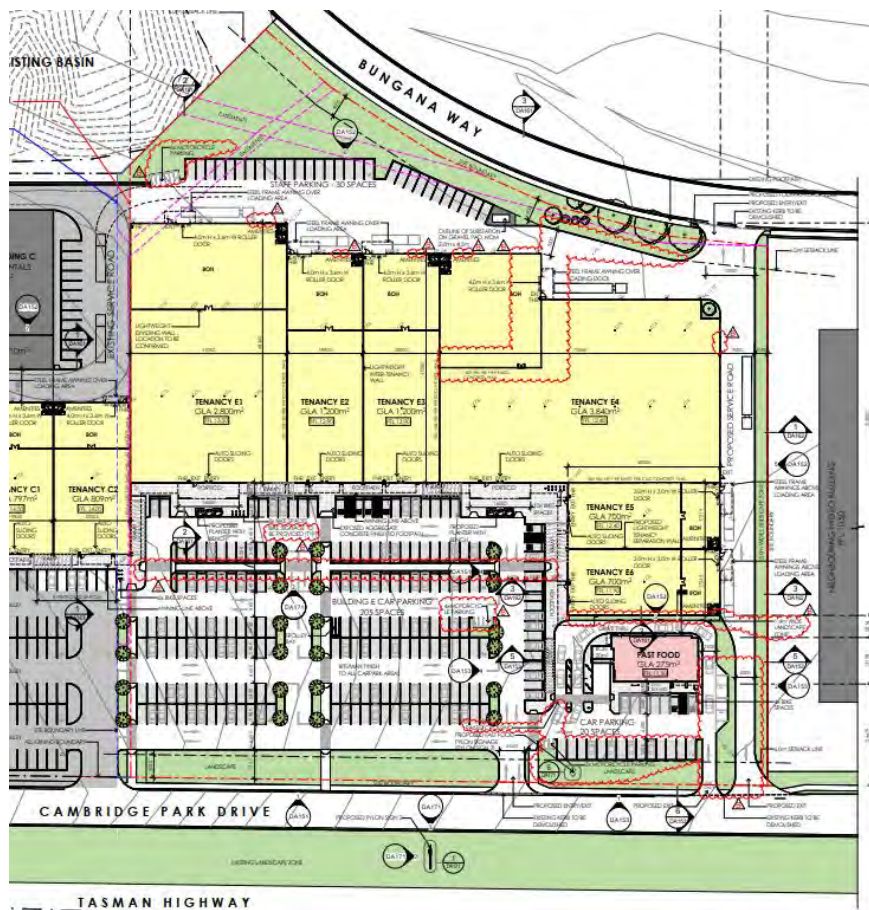


Figure 1 - Proposed Development

This report confirms the servicing requirements for the development, investigates its impact on existing infrastructure and identifies any upgrades required to meet compliance with current standards.

2. Power, Lighting and Communications

2.1 Applicable Design Standards

- Electrical Infrastructure within the site shall be designed in accordance with AS/NZS3000, Australian / New Zealand Wiring Rules.
- Lighting of common areas, where required, shall be provided to meet AS/NZS1158 .3.1 - 2020.
- National Broadband Network will be provided to the site tenancies in accordance with the NBN commercial works policy.

2.2 Proposed System

The new retail tenancies C1 and C2 would be connected to the existing consumers mains supplying Building C. The capacity of the existing substation and LV consumers mains to support the new load from the additional tenancies need to be determined, however, early estimates indicate that approximately 150kVA would be available from the existing substation. The capacity of the existing consumers mains from the substation to Building C (National Tiles) **is not known and this will need to be determined from “As Installed” documentation or by direct inspection of cables.** Building E and the fast-food tenancy are to be connected to TasNetworks existing mains in Bungana Way via a new TasNetworks substation located on the Building E title CT 157366/4.



Figure 2 - Existing and Proposed Electrical Supply

The proposed Building E development occupies an area of 2.8Ha, and is to be generally divided into carparking, retail tenancies and a fast-food outlet.

Design flow for the fully developed site is calculated at 2.17L/sec, determined in accordance with WSAA Gravity Sewer Code of Australia and the TasWater supplement to the same code.

There is an existing DN300 gravity trunk main running along Bungana Way, parallel to the low side of site. It is proposed the Building E development discharge to this main via sewer maintenance hole A259284, located adjacent the boundary with 89 Cambridge Park Drive.

The maintenance hole has an invert level of 7.8m AHD, which is sufficiently low enough to drain the entirety of the site.

Drawing P03, *Civil Services Overall Site Plan*, attached within Appendix B, details the internal sewer network, while all supporting sewer and water calculations are attached as Appendix C.

4. Water

4.1 Applicable Design Standards

The water reticulation system for the site shall be designed to comply with AS3500.1 National Plumbing and Drainage Code - Water Supply.

Water metering shall be provided in accordance with TasWater's Water Metering & Guidelines.

Backflow Protection of the site shall be provided in accordance with TasWater's Water Boundary Backflow Containment Selection Guidelines.

Fire hydrant water supply and coverage of the site is to be provided in accordance with AS2419 - *Fire hydrant installations System design, installation and commissioning*.

4.2 Proposed System

Potable water demand for the site is calculated in accordance with WSAA Water Supply Code of Australia and the TasWater supplement and is estimated at 3.03 L/sec.

The requirements for fire flow consider the development to consist of "Class 6 Buildings" (shopping centre), as per the NCC, with a maximum building area <5000m² between firewalls. As such, AS2419.1 requires 2 fire hydrant outlets to flow simultaneously, with a minimum required flow rate of 10L/sec at 200kPa residual pressure from each hydrant.

It is proposed the water connection be made to the DN200 TasWater water main, A243076, directly adjacent the sites Northern access at Bungana Way, where there is sufficient room to locate any necessary valving arrangements adjacent to the service road access.

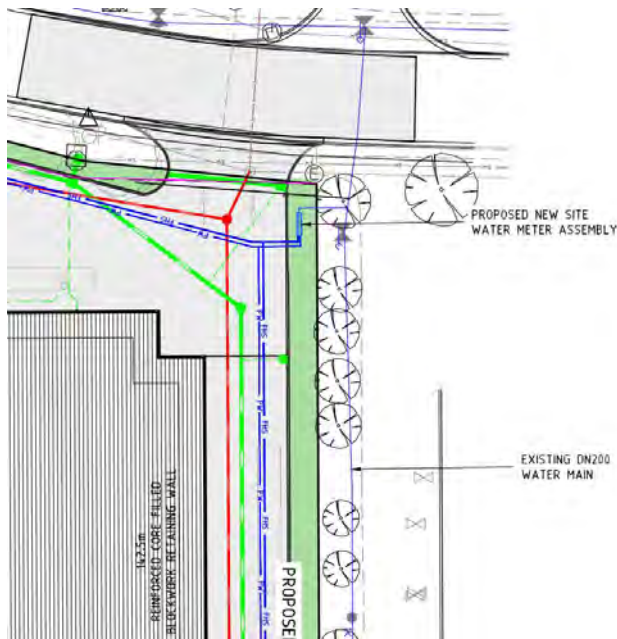


Figure 4 - Building E Water Connection

TasWater, in email correspondence dated 15/12/2023, and included in Appendix D have confirmed that modelling indicates there is sufficient capacity within the system to accommodate both peak hour demand for potable water and peak day plus 20L/sec fire flow.

It is anticipated a DN50 Low Hazard Domestic water assembly in accordance with TWS-W-0002 sheet 13 and a DN150 fire service meter assembly, typically in accordance with TWS-W-0002 sheet 17, will be required for the Building E site. This will be confirmed as part of the detailed engineering design process.

Due to the addition of tenancies C1 & C2 on the adjacent site TasWater have advised in correspondence dated 24th January 2023, and included in appendix D, that the existing system servicing these new and existing tenancies must be modified to meet current standard.

These modifications are:

- The two DN150 water meter assemblies are to be upgraded from their current arrangement of mechanical water meters and manually operated fire flow bypass to a DN150 electromagnetic flow meter with no bypass, generally to TWS-W-0002 sheet 18. The location and condition of the existing assemblies are shown in the figures below.



Figure 5 Meter Assembly Locations



Figure 6 Meter Assembly

It is expected this will provide sufficient flow and pressure to meet minimum requirements, this will be confirmed through modelling (EPAnet) during the development engineering design phase.

- The location of the internal hydrant to the north of Tenancies C1 & C2 is to be relocated nominally 3.5m further north to maintain a minimum 10m separation from the existing building. The location of the hydrant adjacent to the wall of the new building will require this wall to be constructed in accordance with the requirements of AS2419.1 Clause 3.5.5.2
- An additional hydrant is proposed to be installed off the existing main in the carpark at the front of Tenancy C2 in order to provide coverage to these tenancies, this hydrant can be located more than the minimum 10m from the building.

- The current arrangement includes two independent networks, these are to be joined with internal pipework to provide a ring main.

All supporting water calculations are attached as part of Appendix C.

5. Stormwater

5.1 Applicable Design Requirements

The public stormwater infrastructure and discharge from the site shall be designed in accordance with the CCC *Stormwater Management Procedure for New Development (SWMPND)* & the *Tasmanian Stormwater Policy Guidance and Standards for Development*.

The stormwater reticulation system within the site shall be designed to comply with AS3500.3 National Plumbing and Drainage Code - Stormwater Drainage.

5.2 Detention

The proposed works involve an infill development of the Building C site, shown as tenancies C1 and C2 on the attached plan and the new Building E site including carparks and associated access roads.

The building C and E sites will exist on separate titles and for the purpose of stormwater can be considered separate sites.

The building C site is currently fully impermeable, its development will result in no change to stormwater runoff quantity with existing concrete paving and roadway converted to new roof area. Tenancies C1 & C2 will drain to the existing wetland and detention basin constructed as part of the original Cambridge Homemaker centre works.

The Building E development site, however, is located downstream of this existing wetland, **while council have notified JMG that the “Hydro” detention basin, located downstream of the site is already at design capacity.** Thus, stormwater detention must be provided to restrict post-development flows from the development to the existing level, for a 5% AEP event.

Due to the size of the development, the *SWMPND* requires development specific design.

Analysis, utilising the Rational Method and Boyd’s formula, has been used to provide an indication of the storage volume necessary to achieve the required stormwater discharge rate. These results are tabulated below.

Immediate Site Area	27,385	m ²
Catchment T.O.C	20	min
Pre-Development 5% AEP Flow	150	L/sec
Post-Development 5% AEP Flow	355	L/sec
Storage Volume	245	m ³

Table 1: Site Stormwater Discharge summary

Note: more detailed analysis will be undertaken during the detailed design phase.

The site is generally divided into 3 distinct catchments, shown below in Table 2.

Catchment	Area (m2)	Allowable discharge (L/sec)	Required Detention Volume (m3)
Northern Landscaping	1,650	11	N/A
Northern Carpark & Roof	12,014	84	108
Southern Carpark & Roof	13,721	66	137

Table 2: Building E Catchment analysis

Assessment of the site levels and internal stormwater infrastructure suggest this storage volume can be provided through the upsizing of several sections of new internal pipework to DN1200 RCP. Refer drawing J220860CS-P02 in Appendix B.

5.3 Stormwater Quality

Stormwater treatment is to meet the quality targets documented in the *SWMPND*.

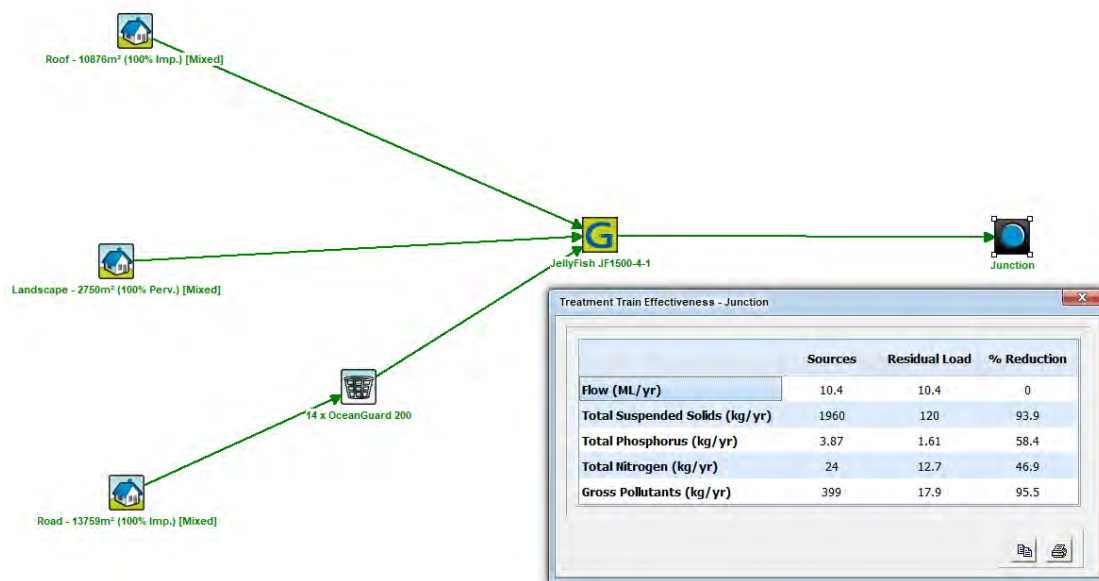
Tenancies C1 & C2 result in an improvement to water quality, as roadway area is replaced with roofed area. Furthermore, this space will continue to drain to the existing wetland which provides treatment. No new treatment is proposed for these new tenancies.

Due to the existing topography of the Building E site which generally falls from south to north it has not been possible to utilise the landscape setback along Cambridge Park Drive for natural treatment of carpark run-off. Other landscaping areas within the development present only limited opportunities for natural treatment therefore it has been determined that the run-off generated on the site is best treated through proprietary devices.

While planting within the carpark will be considered for use as WSUD during the development engineering approval phase, the planned areas are too small to provide meaningful contribution to the treatment train.

Ocean Protect have provided a design solution that meets the requirements of the *SWMPND*, which is summarised below. This design does not preclude the selection of other proprietary systems during detailed design provided these can show how they will achieve compliance with the site run-off water quality guidelines.

The site will be treated with a single *Jellyfish 1500* tertiary treatment device, all internal pits are to be fitted with OceanGuard primary filtration devices.



All supporting documentation provided by Ocean Protect is provided in Appendix E.

6. Overland Flow Paths

6.1 Limitations

The presented analysis is limited to a range of parameters as per below:

- The hydrology and hydraulic models are restricted and limited to the 1% AEP + Climate Change storm event, considering an ensemble analysis. Adopting the median storm event from 5min to 24h time analysis, per AR&R 2019 requirements.
- All parameters have been derived from best practice manuals and available relevant studies, including AR&R 2019 guidelines and Clarence City Council advice.
- The present analysis is to be used only for the subject area and should not be used as a general flood study for the region.

6.2 Catchment Analysis

The subject area has been divided into two different regions. The southern region, within the extensions of the carpark (Building C & E) and the northern region with the boundary influences from the upstream catchment to the existing wetland.

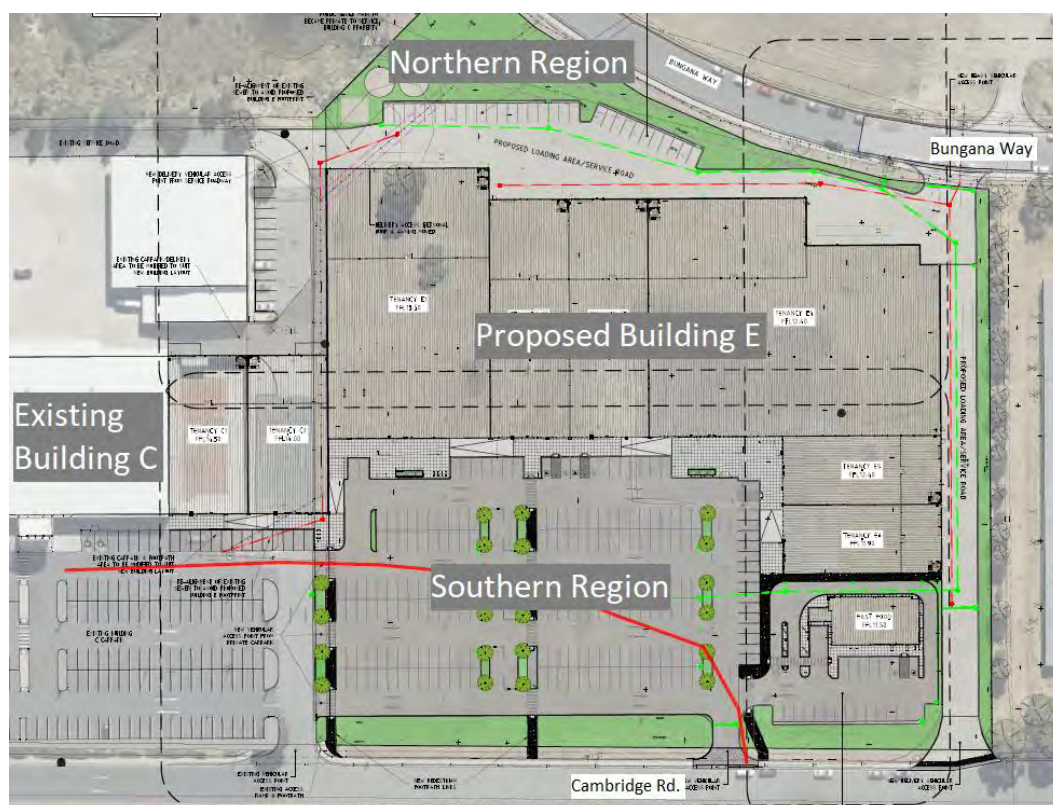


Figure 7: Catchment Regions

The modelling of the southern region takes into consideration both the existing carpark extensions of Building C and the proposed new carpark for Building E. The analysis of the northern region, on the other hand, considered the current upstream catchment influences and the impact of extensions that discharges into the existing wetland. The following figures and table provide summary data to better demonstrate these parameters.

Table 3: Catchment (General Parameters)

Region	Catchment Area (ha)	Description	Average Slope (%)
Southern	0.931	Existing Carpark Building C	2.0
	1.197	New Carpark Building E	2.5
Northern	36.0	Upstream Catchment (Figure 8)	2.0



Figure 8: Screenshot from Civil 3D - Catchments

6.3 Hydrology

The following flows have been calculated using the hydrological modelling software Watercom DRAINS (DRAINS). All meteorological data (Rainfall IFDs, temporal patterns, rainfall pre-burst data and climate change factors) were extracted from the Australian Rainfall & Runoff (ARR) Data Hub and the Bureau of Meteorology (BOM). These parameters are all region-specific based on the following coordinates:

- Longitude: 147.474
- Latitude: -42.834

The ARR Data Hub (which sources information from the *Climate Change in Australia* Website) provide projections for Interim Climate Change Factors all around the country. ARR advises that the design of significant stormwater infrastructure is based on a predicted Climate Change increase in the year 2100, but the Data Hub only provides data up until 2090. As such, the data was extrapolated linearly to determine the factor for the year 2100—a simple yet appropriate extrapolation that best fits the data set.

Table 2: Climate Change, Allowance

Location	Cambridge, Tasmania
Representative Concentration Pathway (RCP)	8.5
Year	2090
Factor	3.090 (16.3%)
Year	2100
Factor (Extrapolated)	18.3%

The DRAINS RAFTS hydrological model from the Watercom Drains software has been utilised to determine catchment flow rates. The model has been calculated using two different hydrological approaches, RAFTS and IL-CL, as the regions present two different catchment conditions. Where the Northern Region Catchment is considered as a single general area with a centroid analysis point (RAFTS) and (IL-CL) for the urban developed with high-density perviousness in the southern region catchment.

RAFTS is a storage routing hydrological model appropriate for rural or larger urban catchments. Additionally, IL-CL is the hydrological model more appropriate for urban and developed areas as per Book 5 - Chapter 3 - 3.5.3 (AR&R 2019) in utilising stormwater structures.

The losses for the northern catchment were selected based on recommendations from ARR and CCC Subdivision. CCC engineer Jardine **Warwick's** confirmed via email to Justin Boocock (23/09/2022 - Appendix F) that 2mm/hr (Continuing Loss) is a more appropriate value based on Council calibration investigations. CCC have provided no additional comment on the Initial Loss value for large mixed catchments such as the northern one; therefore, 27mm IL has been adopted (per ARR data hub).

For the IL-CL conditions, were adopted a pervious initial loss of 5mm and continuing loss of 1mm/h. Both values were adjusted from the original AR&R Data Hub results, being calibrated against the Rational Method as basic guidance.

The screenshot displays two panels for hydrological model configuration. The left panel, titled 'Storage Routing Hydrological Model', shows the 'RAFTS' model type selected. It includes input fields for 'Impervious Area Initial Loss (mm)' (0), 'Impervious Area Continuing Loss (mm/h)' (1), 'Pervious Area Initial Loss (mm)' (27), 'Pervious Area Continuing Loss (mm/h)' (2), and a 'BX' value of 1. The right panel, titled 'Initial Loss - Continuing Loss Model', shows the 'IL-CL' model type. It includes input fields for 'Impervious Area Initial Loss (mm)' (0), 'Impervious Area Continuing Loss (mm/hr)' (1), 'Pervious Area Initial Loss (mm)' (5), and 'Pervious Area Continuing Loss (mm/hr)' (1).

Figure 9: Screenshot from Drains - Hydrological Models Impervious & Pervious Values Adopted for Northern and Southern Region Catchments Respectively

6.4 Sub-Catchment Properties

The northern region catchment adopts the following properties:

Table 3: Physical Parameters for the Northern Catchment

Condition	Manning's 'n' value	Percentage Impervious
Northern Region Catchment	0.025	60

A Manning's n value of 0.025 (average) is typically selected for a mix of medium grass density and high density finishing surfaces such as concrete or asphalt. This average value was adopted due to the lack of information regarding the upstream stormwater system condition.

However, the southern region catchment, was modelled and calculated considering both surface contours and additional parameters below.

- Effective Impervious Area (EIA)
- Remaining Impervious Area (RIA) a
- Pervious Area (PA)

- Additional Time - “Time in minutes required for the longest water drop’s distance to get into the stormwater network.”
- Retardance Coefficient n^*

Table 4: Retardance Coefficient n^*

Surface Type	Roughness Coefficient n^*
Concrete or Asphalt	0.01-0.013
Bare Sand	0.01-0.016
Gravelled Surface	0.012-0.03
Bare Clay-Loam Soil (eroded)	0.012-0.033
Sparse Vegetation	0.053-0.130
Short Grass Prairie (Veldt or Scrub)	0.10-0.20
Lawns	0.17-0.48

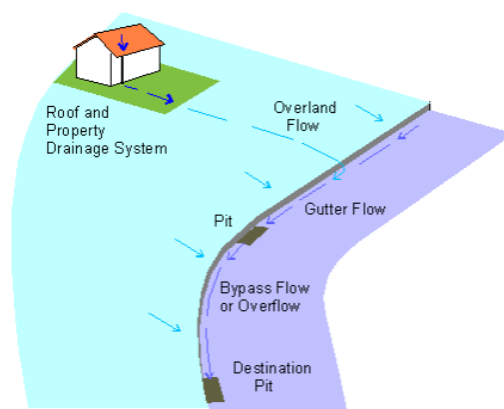


Figure 10: Screenshot from Drains - Overland Flow Scheme

Sub-Catchment Data

Sub-Catchment Data

Sub-catchment name
Carpark Building C

Sub-catchment area (ha)
0.931

Sub-catchment name
Carpark Building E

Sub-catchment area (ha)
1.197

Hydrological Model

☒ Default model
☐ You specify

☐ abbreviated data
☒ more detailed data

Note: The additional times you specify will be added to the times calculated from flow path length, slope and roughness to get the total times of concentration.

Hydrological Model

☒ Default model
☐ You specify

☐ abbreviated data
☒ more detailed data

Note: The additional times you specify will be added to the times calculated from flow path length, slope and roughness to get the total times of concentration.

Percentage of area
Additional time (mins)
Flow path length (m)
Flow path slope (%)
Retardance coefficient n^*

EIA
RIA
PA

Percentage of area
Additional time (mins)
Flow path length (m)
Flow path slope (%)
Retardance coefficient n^*

EIA
RIA
PA

Where EIA = Effective Impervious Area
RIA = Remaining Impervious Area
PA = Pervious Area

Where EIA = Effective Impervious Area
RIA = Remaining Impervious Area
PA = Pervious Area

Figure 11: Screenshot from Drains - Southern Region Carpark Sub-Catchment (Parameters)

Sub-Catchment Data

Sub-catchment name	atchment to Wetland	Sub-catchment area (ha)	36
Hydrological Model	<input checked="" type="radio"/> Default model <input type="radio"/> You specify	Impervious Area (% of total)	58
		Sub Catchment Slope (%)	2.5
		Manning's n	0.025

Figure 12: Screenshot from Drains - Northern Region Catchment to Wetland - Parameters

6.5 Hydrological Results

All the following results are calculated and based in a major event of 1% AEP within the before mentioned climate change factor.

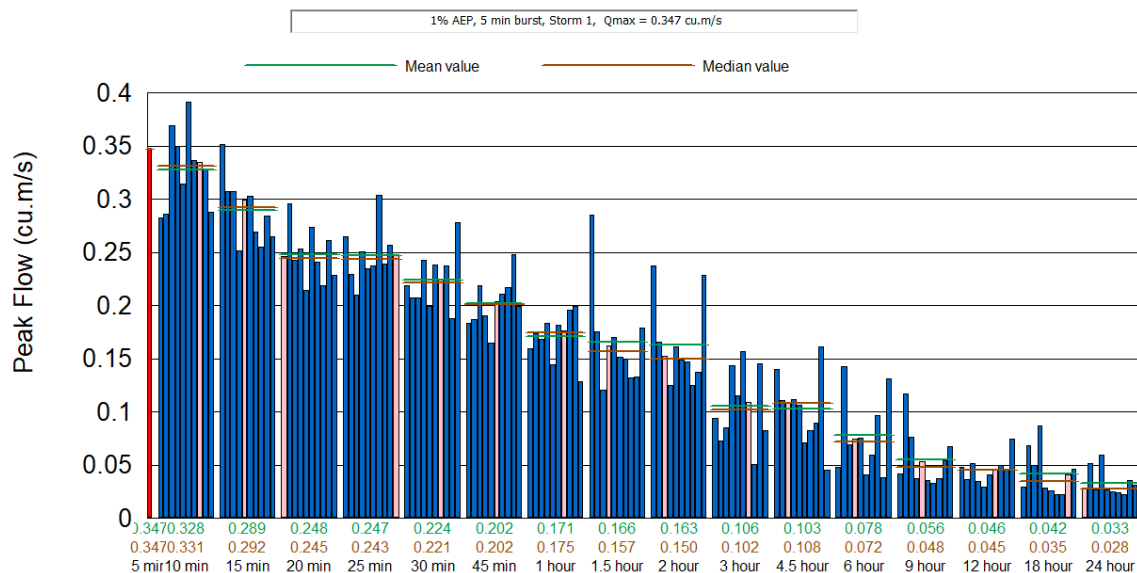


Figure 13: Screenshot from Drains - Peak Flow (Carpark Building C) of 0.347 m³/s

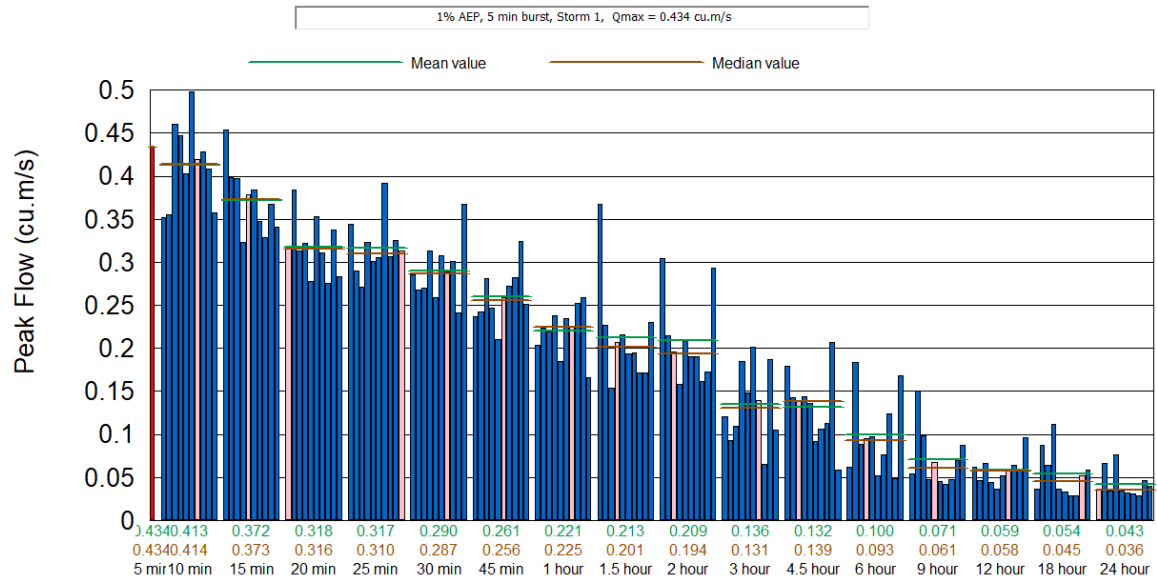


Figure 14: Screenshot from Drains - Peak Flow (Carpark Building E) of 0.434 m³/s

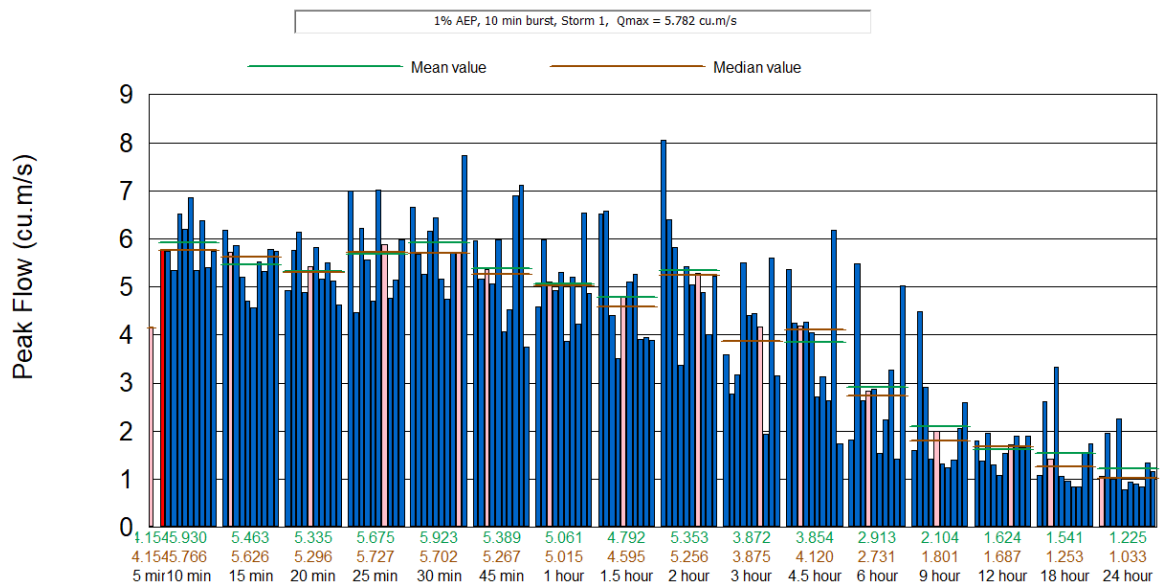


Figure 15: Screenshot from Drains - Peak Flow (Northern Catchment) of 5.782m³/s

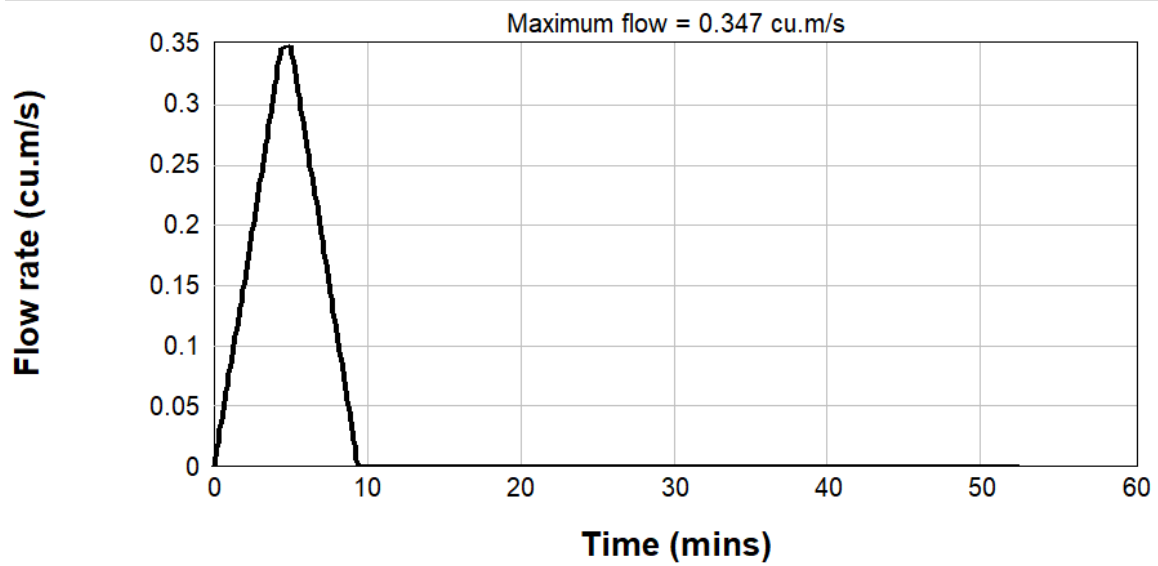


Figure 16: Screenshot from Drains - Median Total Hydrograph (Carpark Building C) of 0.347 m³/s; 5min Event

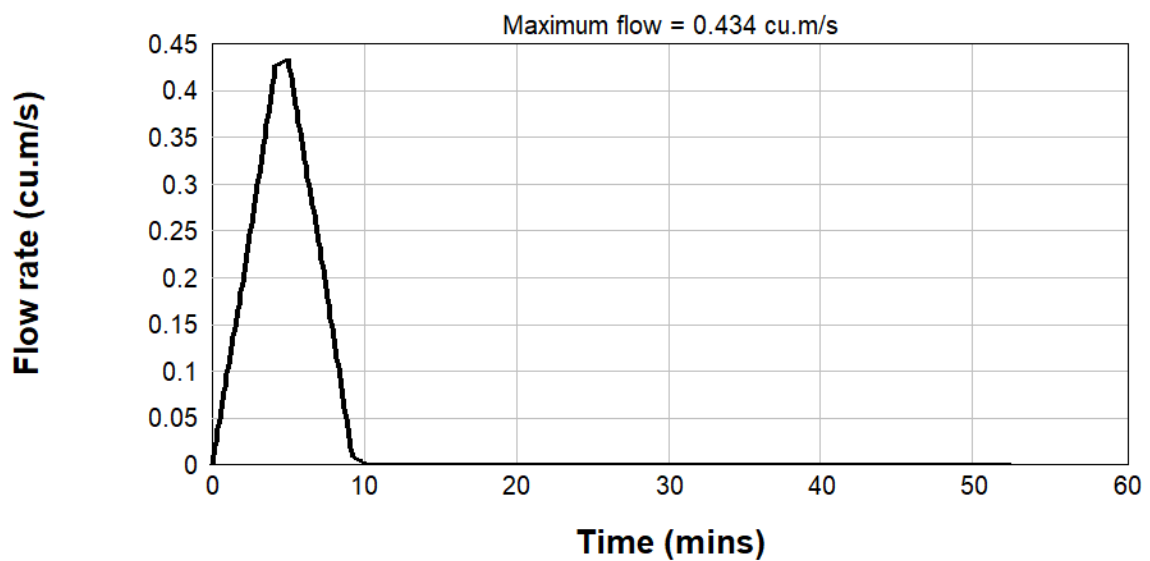


Figure 17: Screenshot from Drains - Median Total Hydrograph (Carpark Building E) of 0.434 m³/s; 5min Event

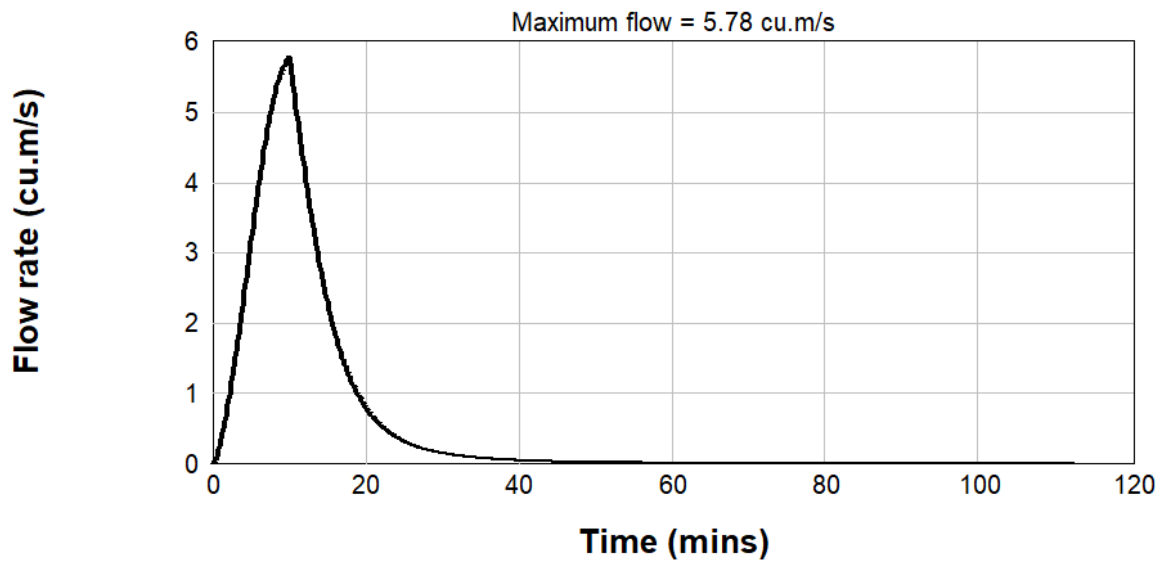


Figure 18: Screenshot from Drains - Median Total Hydrograph (Northern Catchment) of 5.782m³/s; 10min Event

6.6 HEC-RAS (2D Analysis)

A HEC-RAS model has been used to undertake a 2D unsteady flow analysis using the flows above. The software is an ARR-recognised 2D modelling program, ideal for overland flows, depths, velocities and overland flood extents.

6.7 Surface, Geometry and Flow Boundaries

The analysed surface considers the parameters described in sections 6.3 / 6.4. In addition, the geometry mesh has been defined as an appropriate region surrounding the watercourse.

The inflow and the outflow set a suitable distance upstream and downstream from the target modelling area to ensure that the model has time to stabilise at the upstream end and is not influenced by backwater at the downstream end.

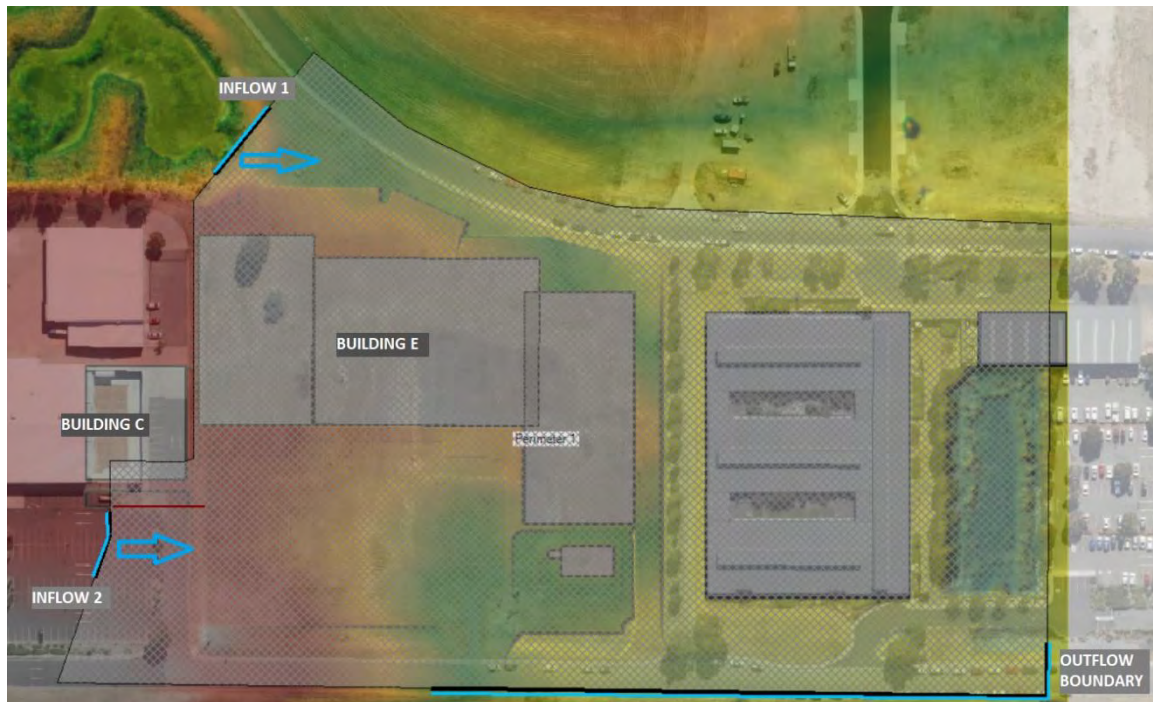
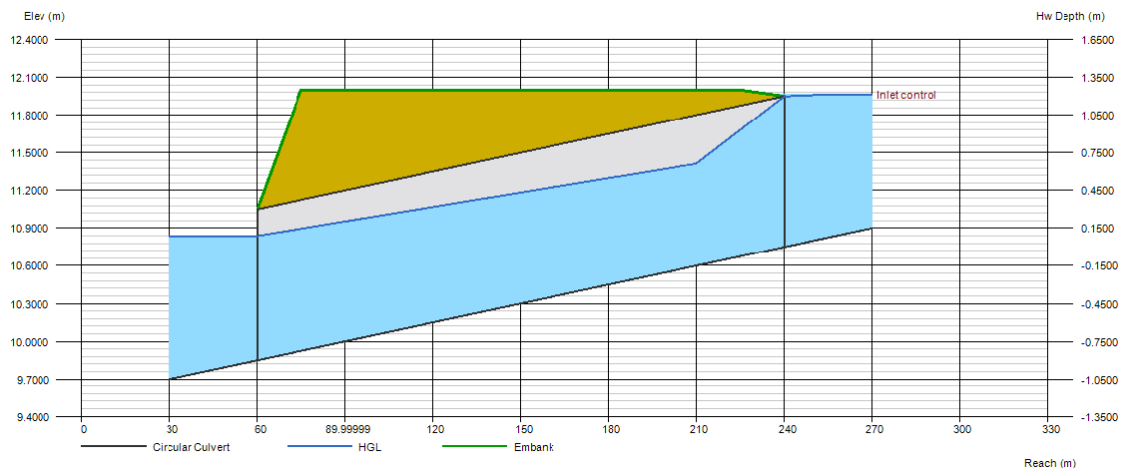


Figure 19: HEC-RAS Screenshot - Geometry Mesh and Flow

6.8 Inflow Scheme & Considerations

The Inflow 1 has been applied right after the wetland inlet structure, a DN1200 stormwater pipe. Therefore, the total overland flow is considered as per the scheme below.

Inflow 1= (Northern Catchment Peak Flow - (Inlet Structure Capacity with 30% blockage factor))



Invert Elev Dn (m)	= 9.8500	Calculations	
Pipe Length (m)	= 180.0000	Qmin (cms)	= 1.0000
Slope (%)	= 0.5000	Qmax (cms)	= 2.1000
Invert Elev Up (m)	= 10.7500	Tailwater Elev (m)	= (dc+D)/2
Rise (mm)	= 1200.0		
Shape	= Circular	Highlighted	
Span (mm)	= 1200.0	Qtotal (cms)	= 2.0000
No. Barrels	= 1	Qpipe (cms)	= 2.0000
n-Value	= 0.012	Qovertop (cms)	= 0.0000
Culvert Type	= Circular Concrete	Veloc Dn (m/s)	= 2.0063
Culvert Entrance	= Square edge w/headwall (C)	Veloc Up (m/s)	= 2.5799
Coeff. K,M,c,Y,k	= 0.0098, 2, 0.0398, 0.67, 0.5	HGL Dn (m)	= 10.8387
		HGL Up (m)	= 11.5274
		Hw Elev (m)	= 11.9645
Embankment		Hw/D (m)	= 1.0120
Top Elevation (m)	= 12.0000	Flow Regime	= Inlet Control
Top Width (m)	= 150.0000		
Crest Width (m)	= 100.0000		

Figure 20: Hydraflow Max DN1200 Pipe Capacity (2.0m³/s)

- Overland Flow = (5.782m³/s - (2.0m³/s - 30%))
- Overland Flow = 4.382m³/s

Inflow 2 = (Catchment Carpark Building C)+(Catchment Carpark Building E)

Inflow 2 = 0.347 + 0.434 (m³/s)

Inflow 2 = 0.781 m³/s

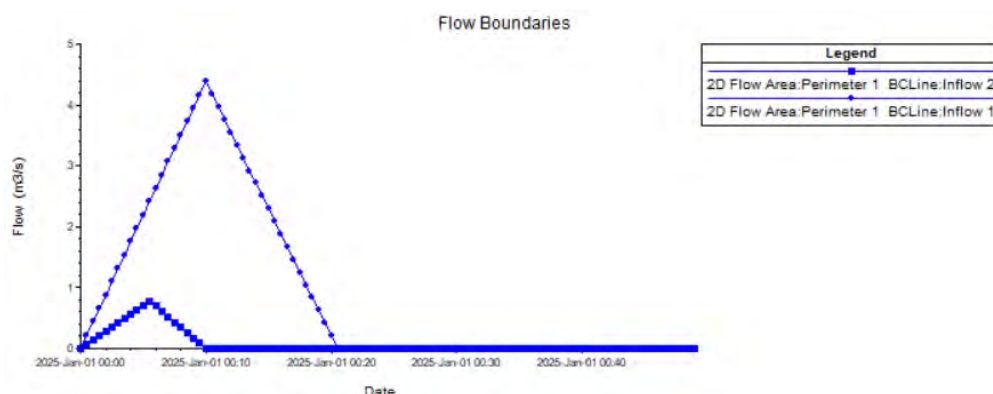


Figure 21: HEC-RAS Screenshot: Overland Hydrographs from Drains Analysis

6.9 HEC-RAS Results

Results of the hydraulic modelling, for the predevelopment site, are shown below in Figure 22 & 23. This modelling indicates that overflow from the Harvey Norman detention basin travels east along Bungana Way and the northern edge of the Building E site before passing the western side of the Entura building in the overland flow path swale constructed as part of the original subdivision development.

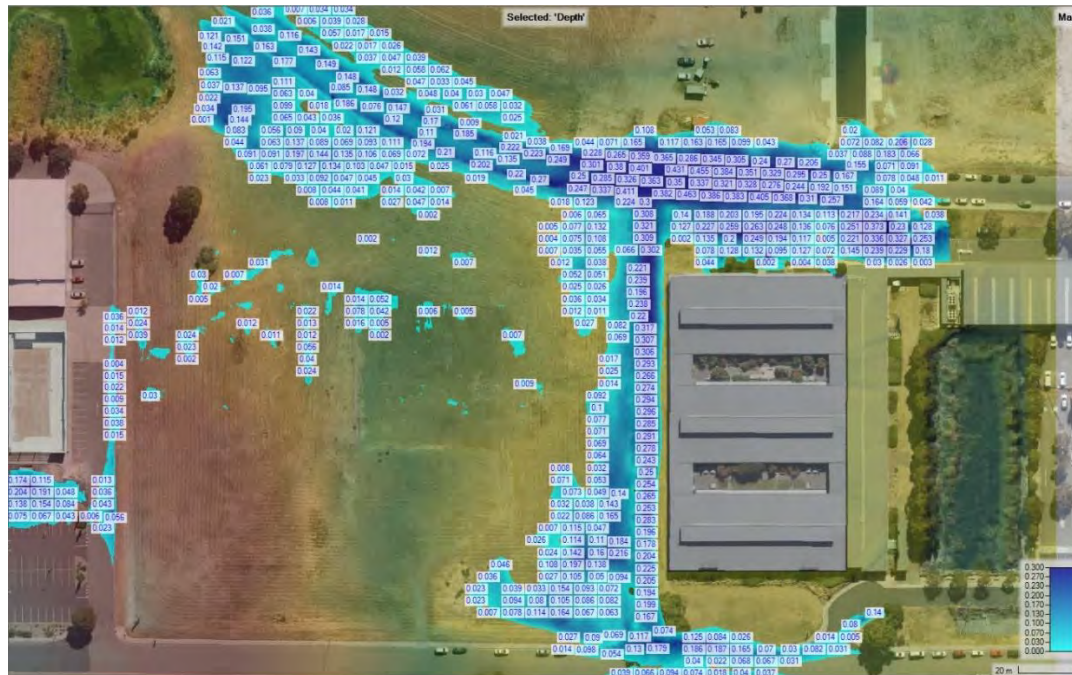


Figure 22: HEC-RAS Screenshot: Max. Depths Pre-Development

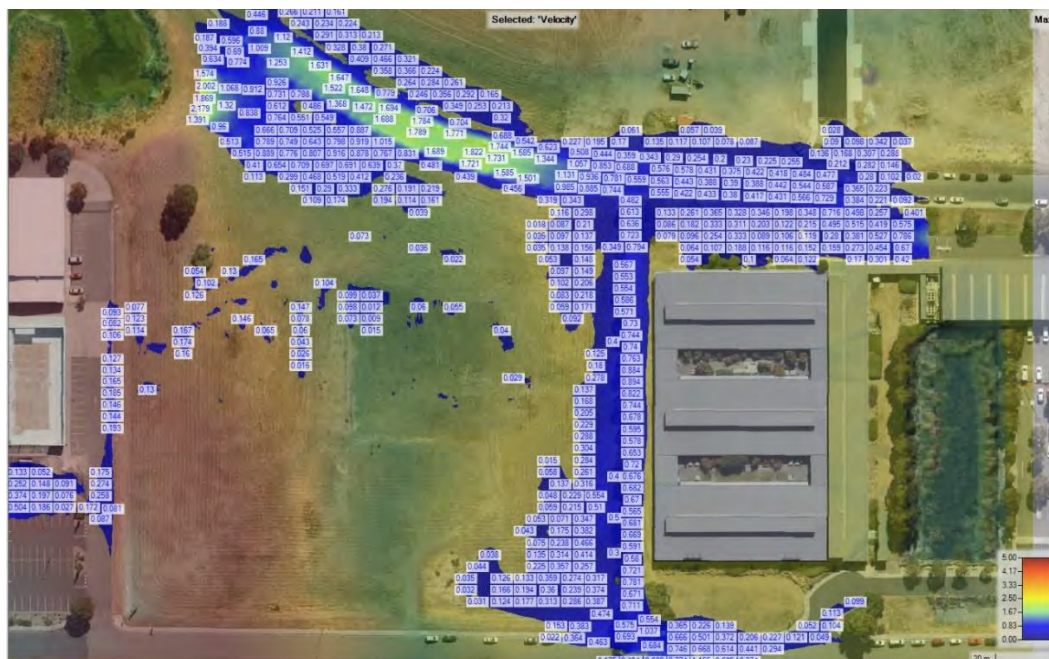


Figure 23: HEC-RAS Screenshot: Max. Velocity Pre-Development

Figures 24 & 25 present results of the hydraulic modelling post development. The main impacts of the development on flows paths are:

- Flows originating in the southern carpark of Building C no longer flow north along the service road on the eastern end of the building. These flows together with run-off generated by the new building E southern carpark travel through the carpark and discharge onto Cambridge Park Drive before rejoining flows coming out of the Entrua overland flow path swale.
- There is a slight realignment of flows downstream of the Harvey Norman detention basin as a result of the earthworks for the loading dock carpark, this encroachment has no adverse impact on the Hazard risk rating of the current flows experienced on Bungana Way.
- The works do not impact the overland flow path running from north to south on the western side of the Entrua Building.



Figure 24: HEC-RAS Screenshot: Max. Depths Post-Development

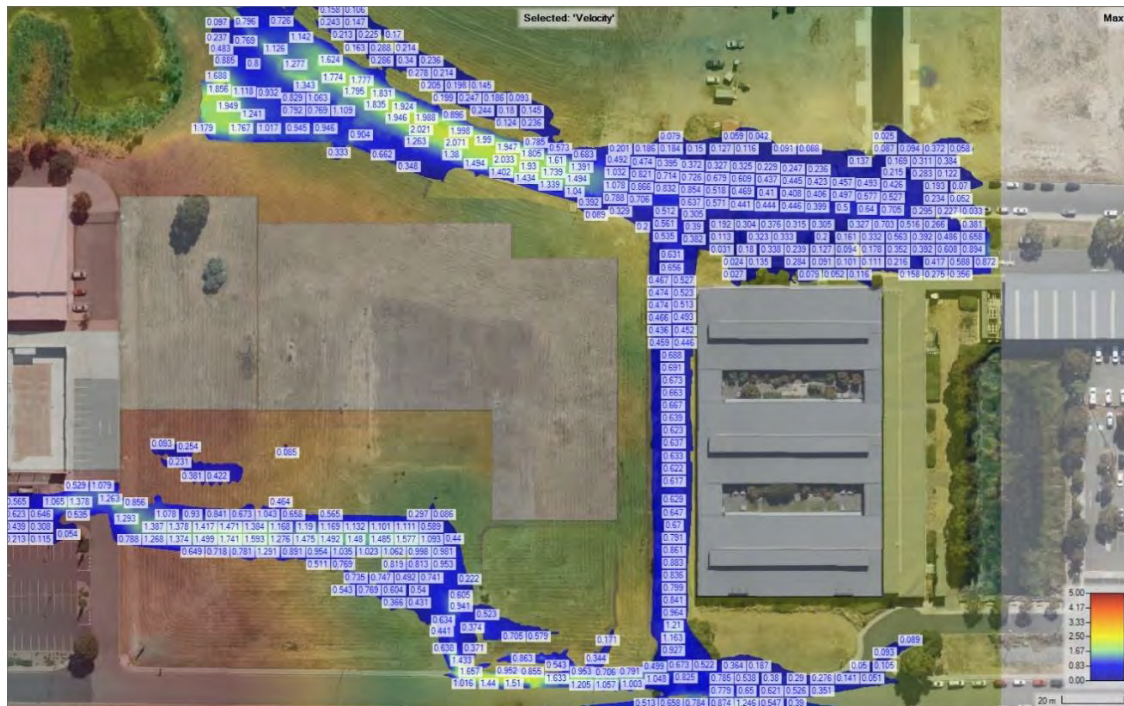


Figure 25: HEC-RAS Screenshot: Max. Velocity Post-Development In summary, the 2D analysis provided the following results:

Northern Region

	Max. Depth	Max. Velocity	Max. Flood Risk Category
Pre Development	0.4	1.8	H2
Post Development	0.39	1.99	H2

*Max. depth and velocity do not occur simultaneously at the same location.

Southern Region

	Max. Depth	Max. Velocity	Flood Risk Category
Pre Development			
Post Development	0.11	1.74	H1

*Max. depth and velocity do not occur simultaneously at the same location.

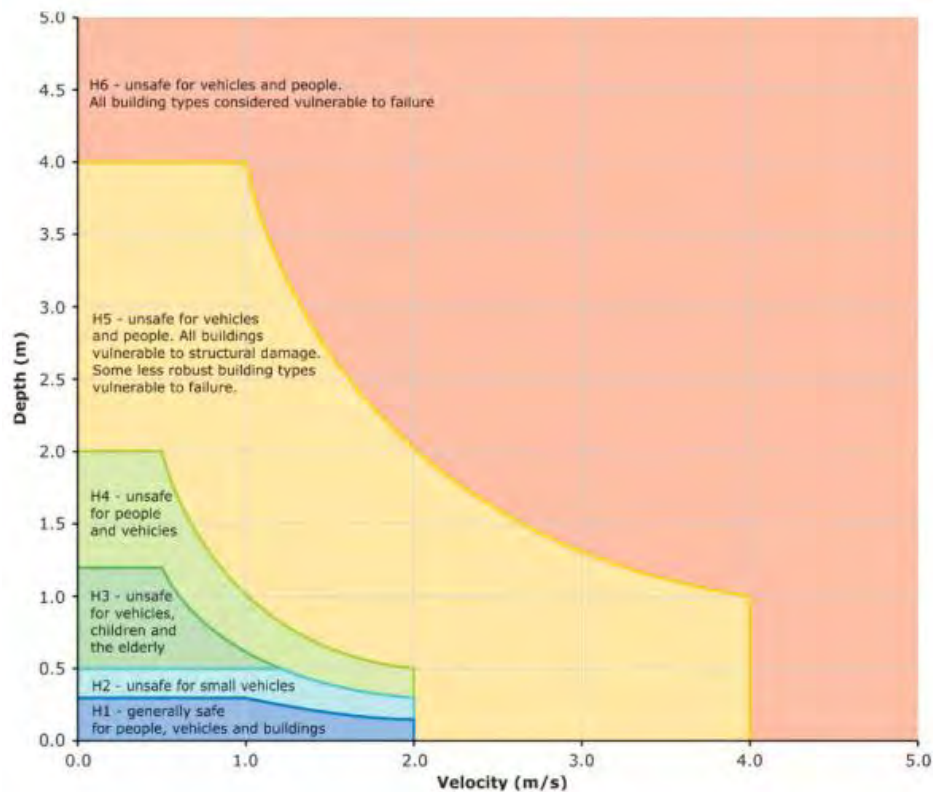


Figure 26: Combined Flood Hazard Curve Classifications

Overall, the model provides evidence that the new development is predominately located outside the overland flow zone and the small area of the northern loading bay carpark earthworks that does encroach into the flow zone will not affect the flow so that it adversely impacts neighbouring properties or structures for the 1% AEP with Climate Change storm event.

6.10 Flood Hazard Area Code C12 Assessment

For development within a Flood Hazard Area overlay subdivision and development must address clauses E12.6 & E12.7 of the Tasmanian Planning Scheme. A small incursion of the Flood Hazard Area overlay occurs into the site as shown on the Flood prone areas mapping, as per below, requiring Section 12.6 of the *Tasmanian Planning Scheme* to be addressed.

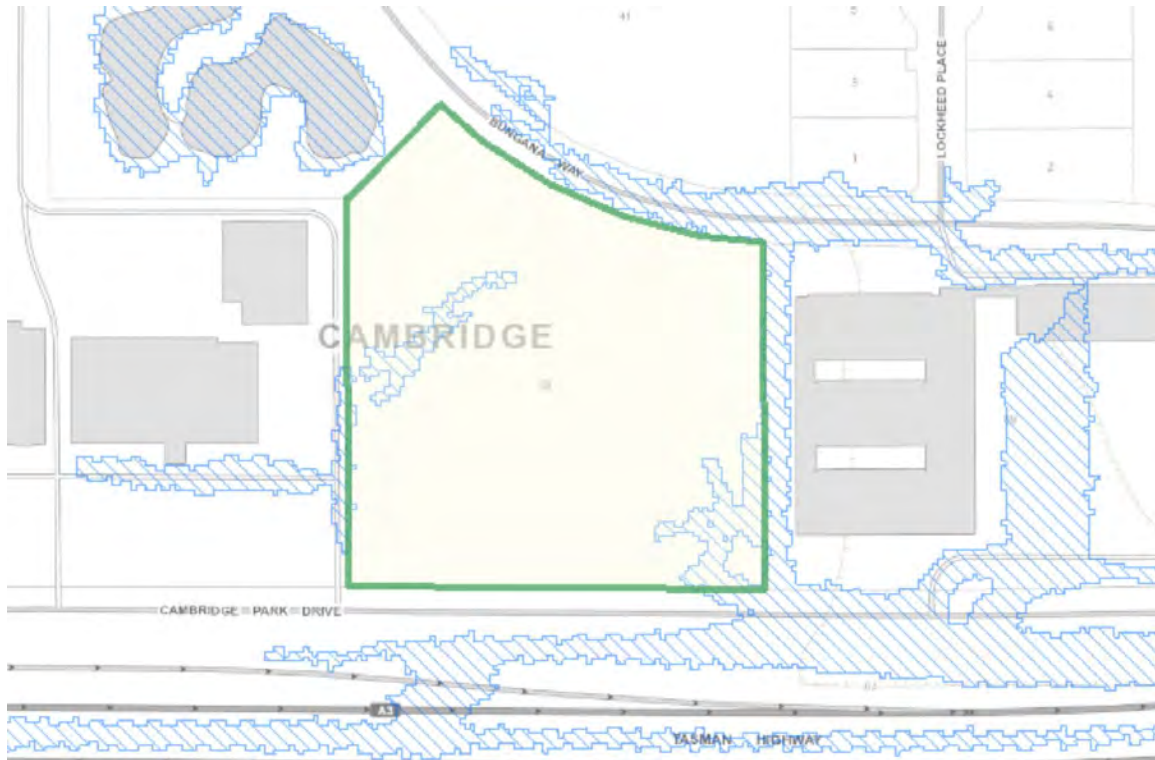


Figure 27 - Flood-prone hazard areas excerpt

C12.6 Development Standards for Buildings and Works

C12.6.1 Buildings and works within a flood-prone hazard area

P1.1

Buildings and works within a flood-prone hazard area must achieve and maintain a tolerable risk from a flood, having regard to:

- (a) the type, form, scale and intended duration of the development;
- (b) whether any increase in the level of risk from flood requires any specific hazard reduction or protection measures;
- (c) any advice from a State authority, regulated entity or a council; and (d) the advice contained in a flood hazard report.

The information presented as part of Chapter 6 - Overland Flow, demonstrates that the development will not be subject to inundation. The floor level of the building is located over 300mm above the post development flood levels.

P1.2

A flood hazard report also demonstrates that the building and works:

- (a) do not cause or contribute to flood on the site, on adjacent land or public infrastructure; and
- (b) can achieve and maintain a tolerable risk from a 1% annual exceedance probability flood event for the intended life of the use without requiring any flood protection measures.

The development does not increase the level of risk to surrounding areas or properties and as such no specific hazard reduction measures are required.

The re-distribution of flow away from the existing Building C and new Building E to Cambridge Park Drive *reduces* the risk of flooding to these buildings and adjacent properties.

It is demonstrated the immediate downstream stormwater infrastructure, including the overland flow path adjacent to the Entura building at 89 Cambridge Park Drive has sufficient capacity to accommodate the increase in flow associated with the development.

C12.7.1 Subdivision within a flood-prone hazard area

P1

Each lot, or a lot proposed in a plan of subdivision, within a flood-prone hazard area, must not create an opportunity for use or development that cannot achieve a tolerable risk from flood, having regard to:

- (a) any increase in risk from flood for adjacent land;*
- (b) the level of risk to use or development arising from an increased reliance on public infrastructure;*
- (c) the need to minimise future remediation works;*
- (d) any loss or substantial compromise by flood of access to the lot, on or off site;*
- (e) the need to locate building areas outside the flood-prone hazard area;*
- (f) any advice from a State authority, regulated entity or a council; and*
- (g) the advice contained in a flood hazard report.*

Analysis undertaken and presented in section 6 of this report demonstrates that the subdivision boundary adjustment can comply with the requirements of the planning scheme by:

- not increasing the risk of flooding on adjacent land,
- not have an increased reliance on public infrastructure, not require remediation works.
- Not require remediation works
- Not change or compromise access to the lot, on or off site
- Buildings can be located outside of the flood prone hazard area
- Complying with any requirements of Section 6 of this report and councils requirements.

7. Conclusion

The proposed Building E development and construction of tenancies C1 & C2 at the Cambridge Homemaker meet the necessary requirements for the development to proceed to Development Engineering Approval.

Preliminary design suggests sufficient capacity within the existing network to accommodate the power, lighting and communications demand of the new site. A new substation is required to service the Building E site.

There is sufficient capacity within the existing sewer and water systems for the development. Preliminary design confirms the site can be serviced with internal sewer and water systems. Modifications to the existing homemaker centre sewer connection and water meter assemblies are required to ensure the site meets current requirements following the boundary adjustment and construction of tenancies C1& C2.

As there is insufficient capacity in the downstream receiving network for flow generated by the development, stormwater detention is required. Preliminary calculations estimate 245m³, this is to be provided through the upsizing of the internal stormwater pipework. Stormwater quality treatment can be provided using a proprietary system to meet the water quality discharge requirements.

The subdivision and development can comply with the development standards clauses 12.6 7 12.7 of the Tasmanian Planning Scheme

8. References

- Development Technical Standards.* (n.d.). Retrieved from <https://www.taswater.com.au/Development/Technical-Standards>
- Installing Pit and Conduit Infrastructure.* (n.d.). Retrieved from <https://www.nbnco.com.au/content/dam/nbnco/documents/installing-pit-and-conduit-infrastructure.pdf>
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https://planningreform.tas.gov.au/__data/assets/pdf_file/0004/559759/Tasmanian-Planning-Scheme-State-Planning-Provisions-effective-20-July-2022.pdf
- Preparation and Installation Guide for-SDUS and MDUS.* (n.d.). Retrieved from <https://www.nbnco.com.au/content/dam/nbnco2/2018/documents/NewDevs/preparation-and-installation-guide-for-sdus-and-mdus.pdf>

Attachment 3 Site Photos



Photo 1 - looking northeast from Cambridge Park Drive towards the vacant lot at 63 Cambridge Park Drive



Photo 2 - looking northeast from existing homemakers centre at Cambridge Park Drive towards the vacant lot at 63 Cambridge Park Drive



Photo 3 - looking west on Cambridge Park Drive towards existing homemakers centre

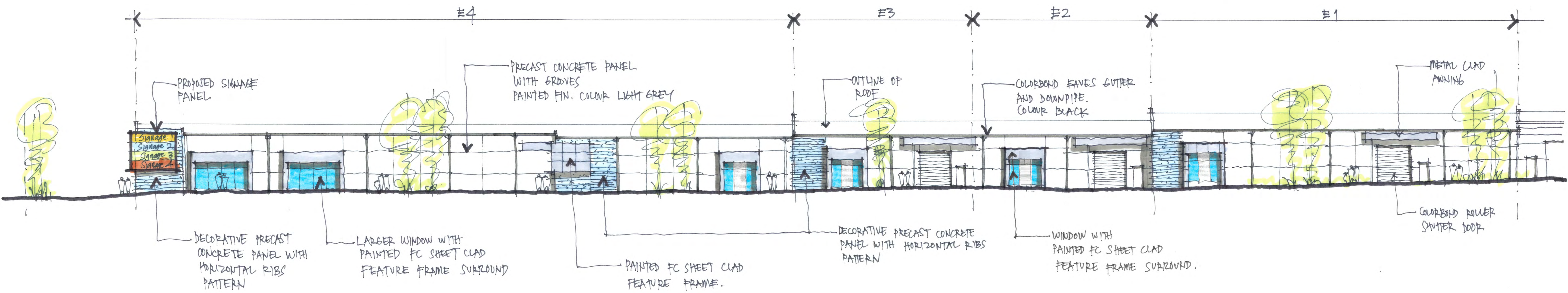
Attachment 3 Site Photos



Photo 4 - looking east on Bunguna Way



Photo 5 - looking west on Bunguna Way towards existing homemakers centre



PROPOSED ELEVATION ALONG BUNGANA WAY
SCALE 1:250

FOR INFORMATION ONLY
PROPOSED BUILDING E, CAMBRIDGE PARK TAS
LSA SK-02 20.12.2023

ING BASIN

FOR INFORMATION ONLY
PROPOSED BUILDING - E, CAMBRIDGE PARK T&S
LSA SK-02 20.12.2023
FLOOR PLAN SCALE 1:250

2
DA1613
DA16

DA152

—6x MOTORCYCLE
PARKING

STAFF PARKING - 30 SPACES

—STEEL FRAME AWNING OVER
LOADING AREA

DECORATIVE PRECAST
CONCRETE PANEL

—STEEL FRAME AWNING OVER
LOADING AREA

— WINDOW WITH PAINTED —
FC SHEET CLAD FEATURE
FRAME SURROUND

OUTLINE OF SUBSTATION
ON GRAVEL PAD, NOM
2.0m x 4.5m

~ DECORATIVE PRECAST
CONCRETE PANEL WITH
FC SHEET CLAD FEATURE
FRAME OVER.

—EXISTING FOOTPATH

PROPOSED FOOTPATH DRAFT

—PROPOSED ENTRY/EXIT

—EXISTING KERB TO BE

EXISTING SERVICE ROAD

BOH

WINDOW WITH—
PAINTED FC SHEET
CLAD FEATURE
FRAME

BOH

BOH

BOH

—STEEL FRAME AWNING OVER
LOADING DOCK

DECORATIVE PRECAST
CONCRETE PANEL

— PROPOSED
STORAGE
PANEL
OVER

LIGHTWEIGHT —
DIVIDING WALL .
LOCATION TO BE
CONFIRMED.

TENANCY E1
GLA 2,800m²
FFL 13.50

TENANCY E2
GLA 1,200m²
FFL 12.90

TENANCY E3
GLA 1,200m²
FFL 12.90

TENANCY E4
GLA 3,840m²
FFL 12.40

TO SERVICE ROAD