



**Hospital South Production
Kitchen**

Traffic Impact Assessment

Prepared for
Jaws Architects

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Rev00



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1. Introduction

1.1 Background

The Tasmanian Health Service (THS) currently provides remote catering services for all southern THS sites including the Royal Hobart Hospital (RHH) at the Hobart International Airport, 900 Loop Road, Cambridge. Currently providing 2 million meals per year, they require additional floor area to be able to meet the current and anticipated increased meals per day. Their current site does not allow for any expansion, and therefore a new greenfield site is required. The new facility includes the main production kitchen as well as an administration building for staff which is connected via a linkway. The facility is proposed to be located within a vacant parcel of land on Bracken Street in Cambridge, Tasmania, and is in close proximity to the Hobart International Airport (the Airport). Operation of the facility is proposed to begin in 2026.

The proposed site is located within land owned by the Commonwealth of Australia and therefore is excluded in the local Planning Scheme zones. The relevant authority, the Airport, has confirmed that a Traffic Impact Assessment is required for this greenfield development.

1.2 Scope

Jaws Architects has secured the design works for the production kitchen and engaged pitt&sherry to undertake a Traffic Impact Assessment (TIA) for the proposed production kitchen.

This report has been prepared with reference to the Department of State Growth's (the Department's) Publication *Traffic Impact Assessments (TIA) Guidelines*.

2. Existing conditions

2.1 Site location

As shown in Figure 1, the production kitchen is proposed to be located on vacant land on Bracken Street in Cambridge.

The location of the site is approximately 20km east of the Hobart city centre, 11km southeast of Sorell and 2km north of Seven Mile Beach. The Airport is located approximately 1.3km north of the site.

The site is located within the land of Commonwealth of Australia and not specified under the local Planning Scheme zoning map. Therefore, it is not subject to the local planning scheme provisions.



Figure 1: Site location (base map source: theLIST)

2.2 Surrounding road network

2.2.1 Bracken Street

Bracken Street (shown in Figure 2 and Figure 3) is a Commonwealth owned sealed access road¹ that provides direct access to the site. It is connected to Grueber Avenue at its western end and transitions into Sinclair Place on the eastern end. Bracken Street is 11m wide.

Bracken Street permits two-way traffic and is subject to the default Tasmanian urban road speed limit of 50 km/h. It currently carries approximately 100² vehicles per day.



Figure 2: Bracken Street - facing east near Grueber Ave



Figure 3: Bracken Street - facing west toward Grueber Ave

¹ Road hierarchy and authority sourced from theLIST map.

² Daily vehicle volume calculated using traffic data collected in October 2024 and assuming a peak to daily ratio of 10%.

2.2.2 Grueber Avenue

Grueber Avenue (shown in Figure 4 and Figure 5) is a Commonwealth owned sealed local road³ that operates between Holyman Avenue, where it transitions to Grueber Avenue at the Airport's main entrance, and Surf Road, a Clarence City Council owned local road. It generally operates in a northwest-southeast direction and is configured with one lane in each direction. Grueber Avenue has 3.5m wide lanes and 1.5m wide sealed shoulders.

Grueber Avenue is subject to a posted speed limit of 60 km/h to the north-west of Bracken Street and 80km/h to the south-east. Grueber Avenue carries approximately 2,200⁴ vehicles per day.



Figure 4: Grueber Avenue - facing south-east



Figure 5: Grueber Avenue - facing north-west

2.2.3 Holyman Avenue

Holyman Avenue is a Commonwealth owned sealed arterial road⁵ and is the primary access road to Hobart International Airport. Holyman Avenue becomes Grueber Avenue south of the Airport's main entrance. It runs in a northwest-southeast direction and is configured with one lane in each direction. Several roundabouts are located along Holyman Avenue. Holyman Avenue is subject to a signposted speed limit of 60 km/h.

2.2.4 Tasman Highway

The Tasman Highway is owned by the Department of State Growth and is classified as a National/ State Highway⁶. It connects Hobart to Launceston via the East Coast of Tasmania.

The Tasman Highway is configured with one lane in each direction for the majority of its length, however, from Cambridge to the Hobart it is generally configured with two lanes in each direction. The Tasman Highway is subject to varying speed limits along its extent; west of the Hobart Airport Interchange it is subject to a speed limit of 110km/h, east of the Interchange it is subject to a speed limit of 80km/h.

The Tasman Highway carries approximately 26,100⁷ vehicles per day, of which approximately 10% are heavy vehicles.

³ Road hierarchy and authority sourced from theLIST map.

⁴ Daily vehicle volume calculated using traffic data collected in October 2024 and assuming a peak to daily ratio of 10%.

⁵ Road hierarchy sourced from theLIST map "Road Centreline" layer.

⁶ Road hierarchy sourced from theLIST map "Road Centreline" layer.

⁷ Data sourced from State Growth's traffic data website at counter station A0113225 and located approximately 4.5km northeast of the site. The available traffic data was collected in 2023.

2.3 Surrounding intersections

2.3.1 Overview

The following key intersections are located in the vicinity of the site:

- Grueber Avenue/ Bracken Street – give-way controlled T-intersection
- Grueber Avenue/ Long Street – three-leg give-way controlled roundabout; and
- Hobart Airport Interchange – double roundabout.

The most relevant intersection to the proposed production kitchen facility is the Grueber Avenue/ Bracken Street intersection. The available sight distance at this intersection is reviewed and discussed in the following sections.

2.3.2 Sight distance

The existing available Approach Sight Distance (ASD) and Safe Intersection Sight Distance (SISD) at the Grueber Avenue/ Bracken Street intersection was determined during a site visit undertaken in October 2024.

ASD is the minimum sight distance which a motorist should have along the minor road to an intersection hold line or other sign or device indicating an upcoming intersection. ASD allows sufficient recognition of an upcoming intersection.

SISD is the minimum sight distance which should be provided between a vehicle travelling on a major road and a vehicle on a minor road attempting to turn into or travel through the major road. SISD allows enough time for a vehicle on the minor road to complete a necessary manoeuvre onto or through a major road without a collision.

Approach Sight Distance

The ASD was taken from a point on the minor road to the hold line in accordance with the *Austrroads Guide to Road Design Part 4A: Unsignalised and Signalised Intersections* (AGRD Part 4A) as shown in Figure 6. ASD was generally measured from a height of 1.1m, noting that this would generally produce a lower ASD, however, was also considered at a height of 2.4m for trucks. The Austrroads ASD requirements are defined by the equation shown in Figure 7.

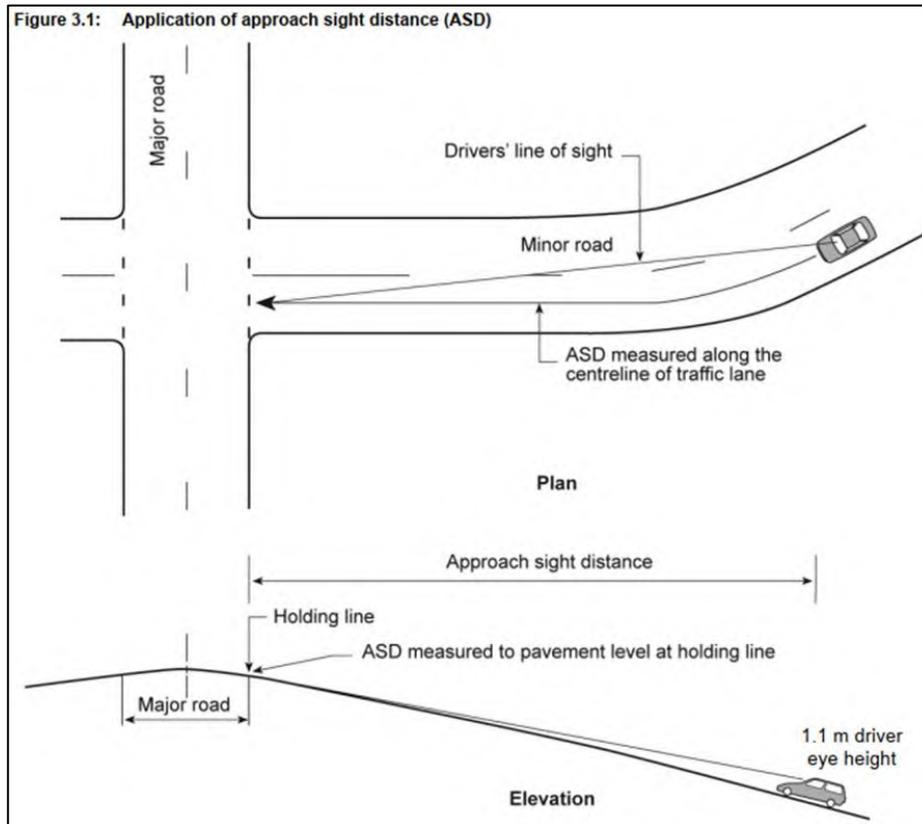


Figure 6: *Austrroads Guide to Road Design Part 4A: unsignalised and signalised intersections application of ASD*

Equation 1 provides the formula for ASD and Figure 3.1 illustrates the application of ASD:

$$ASD = \frac{R_T \times V}{3.6} + \frac{V^2}{254 \times (d + 0.01 \times a)}$$

1

where

- ASD = approach sight distance (m)
- R_T = reaction time (sec), refer to *AGRD Part 3* (Austrroads 2016a) for guidance on values
- V = operating (85th percentile) speed (km/h)
- d = coefficient of deceleration, refer to Table 3.1. Refer also to *AGRD Part 3*, Table 5.3 for further information on coefficient selection
- a = a longitudinal grade in % (in direction of travel: positive for uphill grade, negative for downhill grade)

Figure 7: *Austrroads ASD equation*

Using the above ASD equation, the following parameters were assumed for the largest general vehicle proposed to be utilised during site operation.

Table 1: AGRD Part 4A sight distance parameters

Reaction time (R_T)	2.0 – Desirable reaction time for trucks around horizontal curves
Operating speed (V)	Road speed limit, unless otherwise discerned based on the site visit
Coefficient of deceleration (d)	0.24 – provided by Austroads for trucks
Longitudinal grade in percentage (a)	Varies based on intersection

The Austroads ASD requirements for trucks on flat longitudinal grades for the varying road speed limits were calculated as shown below in Table 2, noting that as roads surrounding the site are relatively flat, a longitudinal grade of 0% was used for ASD calculations.

Table 2: Austroads ASD requirements for trucks on flat longitudinal grades

Travel speed	Austroads ASD minimum requirement
40km/h	48m
50km/h	69m
60km/h	92m

The observed ASD and the ASD requirements for trucks at the intersection is shown in Table 3. Note that the operating speeds have been conservatively estimated (i.e. per speed restriction, 50km/h), despite the fact vehicles would generally travel slower due to the road's short length.

Table 3: Approach sight distance

Intersection	Operating speed minor road	ASD	Required ASD
Grueber Avenue/ Bracken Street	50km/h	>120m	69m

Based on the above, the Grueber Avenue/ Bracken Street intersection currently meets ASD requirements.

Safe Intersection Sight Distance

The SISD was measured in accordance with AGRD Part 4A as shown in Figure 8. SISD was generally measured from a height of 1.1m, noting that this would generally produce a lower SISD, however was also considered at a height of 2.4m for trucks.

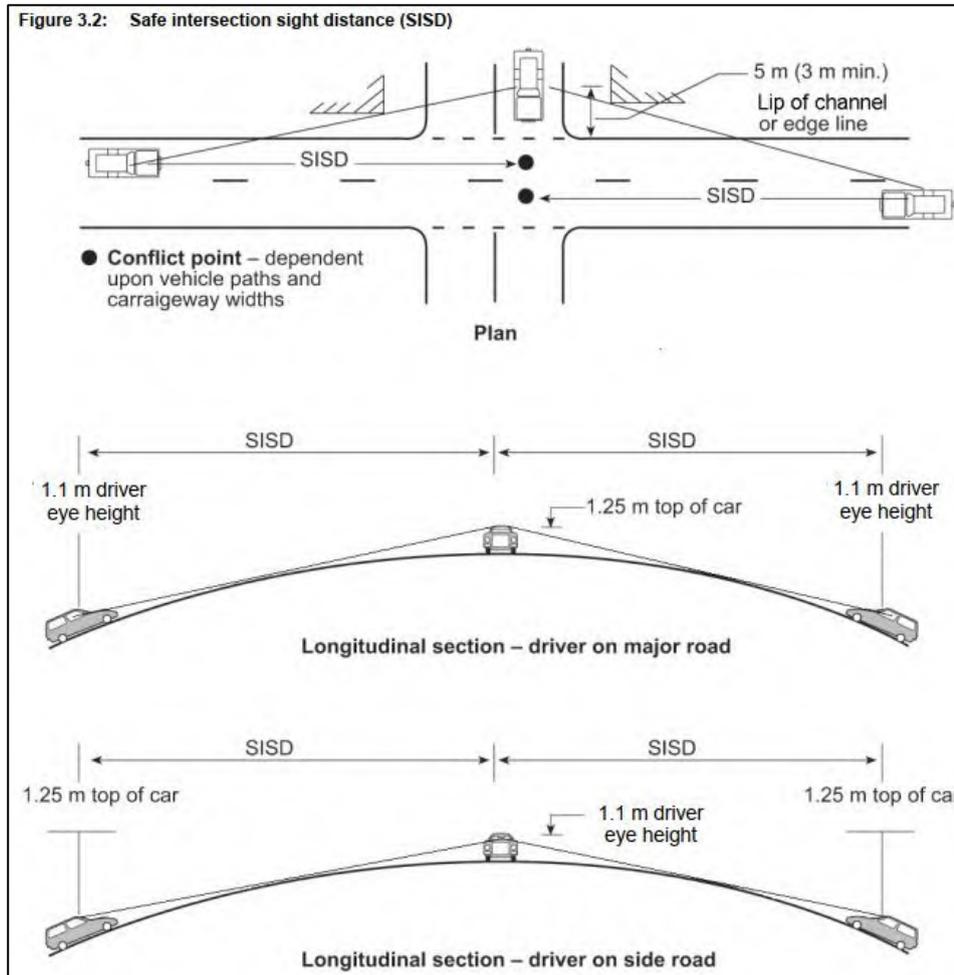


Figure 8: Austroads Guide to Road Design Part 4A: unsignalised and signalised intersections application of SISD

The Austroads SISD requirements are defined by the equation shown in Figure 9.

$$SISD = \frac{D_T \times V}{3.6} + \frac{V^2}{254 \times (d + 0.01 \times a)} \quad 2$$

where

- SISD = safe intersection sight distance (m)
- D_T = decision time (sec) = observation time (3 sec) + reaction time (sec) – refer to AGRD Part 3 (Austroads 2016b) for a guide to values
- V = operating (85th percentile) speed (km/h)
- d = coefficient of deceleration – refer to Table 3.3 and AGRD Part 3 for a guide to values
- a = longitudinal grade in % (in direction of travel: positive for uphill grade, negative for downhill grade)

Figure 9: Austroads SISD equation

The parameters defined in Table 1 were used to determine the Austroads SISD requirements for trucks on flat longitudinal grades for varying road speed limits and are shown below in Table 4, noting that as roads surrounding the site are relatively flat, a longitudinal grade of 0% was used for SISD calculations.

Table 4: Austroads SISD requirements for trucks on flat longitudinal grades

Travel speed	Austroads SISD minimum requirement
40km/h	82m
50km/h	110m
60km/h	142m
70km/h	178m
80km/h	216m

The observed SISD and the SISD requirements for trucks at the intersections is shown in Table 5. The operating speeds have been taken as the speed limit. This is expected to be conservative based on observations made on site, noting that vehicles travelling south-eastbound would be slowing down from 80km/h approaching the 60km/h limit, and vehicles travelling north-westbound would be speeding up to 80km/h.

Table 5: Safe Intersection Sight Distance

Intersection	Direction	Operating speed on major road	Available SISD	Required SISD
Grueber Avenue/ Bracken Street	North-east	80km/h	>250m	216m
	South-west	80km/h	>250m	216m

Based on the above, Grueber Avenue/ Bracken Street intersection meets SISD requirements in both directions.

2.4 Public and active transport

2.4.1 Public transport

There are no public bus services in the immediate vicinity of the site.

A Skybus operates between Hobart City and the Airport which is approximately 1.3km north of the site. The Skybus operates between approximately 8:00am and 10:00pm most days at 30-minute intervals.

2.4.2 Active transport

A 1.5m wide footpath is located on the north-western side of Bracken Street. The footpath does not, however, continue along Grueber Avenue. No bicycle lanes, or off-road bicycle paths are located on Grueber Avenue in the vicinity of the site either, although it is understood that cyclists often ride along Grueber Avenue, utilising the 1.5m wide shoulders.

A popular pedestrian track is located along the boundary of the Airport runway between two ends of Surf Road.

2.5 Parking

Grueber Avenue does not permit on-street parking.

There is no parking restriction applied on the majority of Bracken Street and it was observed during the site visit that vehicles (including light vehicles and trucks) park on-street parallel to the kerb.

2.6 Existing traffic volumes

2.6.1 Traffic data

The following network peak hours can be sourced from the Department of State Growth's counter station A0113225 on the Tasman Highway, during weekdays:

- AM peak hour 11:00am to 12:00pm; and
- PM peak hour 4:00pm to 5:00pm.

Vehicle movement peak hours in the vicinity of the site are assumed to coincide with the greater network peak hours. As such, a vehicle movement survey was undertaken by pitt&sherry at Grueber Avenue/ Bracken Street intersection during the PM peak hour to discern existing traffic volumes.

2.6.2 Traffic volumes

The recorded existing PM peak hour traffic volumes at the Grueber Avenue/ Bracken Street intersection are shown below in Figure 10. The PM peak hour was chosen for counts as it is expected to have the highest volume of traffic.

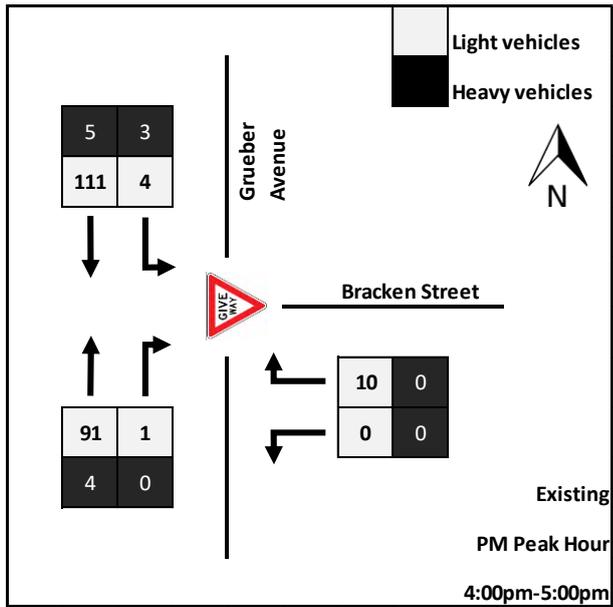


Figure 10: Existing traffic volumes – Existing PM peak hour

2.7 Existing traffic operation

2.7.1 Traffic modelling software

The traffic operation at the intersection has been assessed using SIDRA Intersection 9.0 modelling software. SIDRA bases the intersection performance on the vehicle delays and the corresponding Level of Service (LOS). It is generally accepted that LOS D or better is an acceptable level of intersection operation. Table 6 shows the criteria that SIDRA Intersection adopts in assessing the LOS.

Table 6: SIDRA Intersection Level of Service

LOS	Delay per Vehicle (secs)		
	Signals	Roundabout	Sign Control
A	10 or less	10 or less	10 or less
B	10 to 20	10 to 20	10 to 15
C	20 to 35	20 to 35	15 to 25
D	35 to 55	35 to 50	25 to 35
E	55 to 80	50 to 70	35 to 50
F	Greater than 80	Greater than 70	Greater than 50

2.7.2 Intersection layout

The geometry of the Grueber Avenue/ Bracken Street intersection (shown in Figure 11) has been modelled with reference to aerial imagery and survey information, which informed the width and length of trafficable lanes, as well as the overall intersection layout.

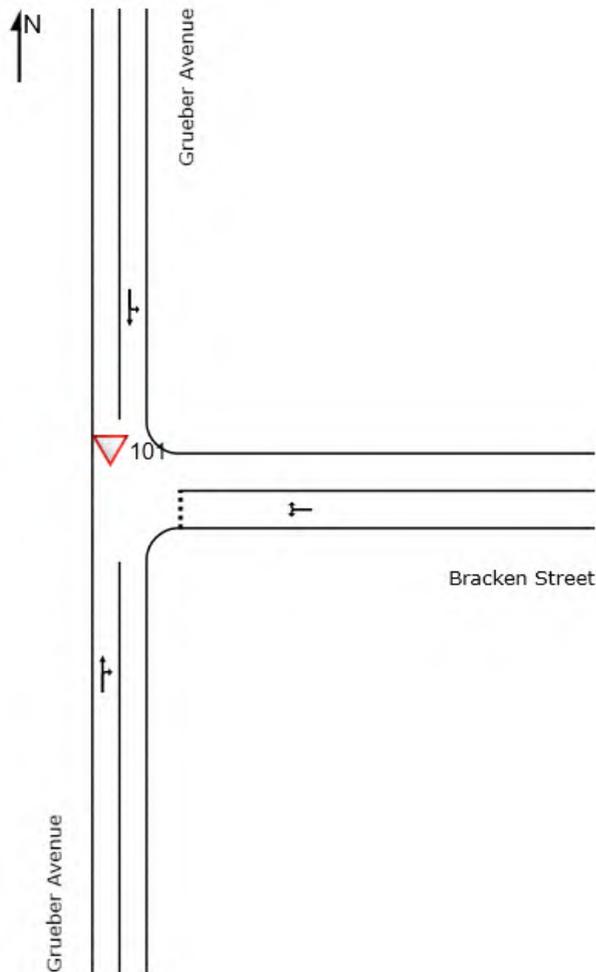


Figure 11: Grueber Avenue/ Bracken Street Intersection Layout

2.7.3 Traffic modelling results

A summary of the SIDRA traffic modelling results at the Grueber Avenue/ Bracken Street intersection for degree of saturation, average delay and 95th percentile queue for the existing PM peak hour is provided in Table 7, detailed results are provided in Appendix B.

Table 7: SIDRA Intersection traffic modelling results – existing PM peak hour

Approach	Degree of Saturation	Average Delay (secs)	95 th Percentile Queue (m)	LOS
South-east: Grueber Avenue	0.05	0.1	0.1	A
North-west: Grueber Avenue	0.01	6.5	0.3	A

North-east: Bracken Street	0.07	0.4	0.0	A
All Vehicles	0.07	0.5	0.3	A

Based on the above, the intersection currently operates well with minimal queues and delays during the PM peak hour.

The modelling results align with observations made on site.

2.8 Road safety

2.8.1 Crash history

Crash data for the most recent 10-year period (2014 – 2024) has been reviewed from the Department of State Growth's Spatial Data website⁸.

There are no recorded crashes recorded within 500m radius of the proposed production kitchen, indicating that there are no existing crash patterns of concern.

⁸ <https://spatialselector.stategrowth.tas.gov.au/>

3. Development proposal

3.1 Overview

The Department of Health (DoH) is planning to develop a production kitchen facility which will supply meals for the Royal Hobart Hospital (RHH). The facility is proposed to be located on Bracken Street in Cambridge, Tasmania. The development will all be located on one level. A breakdown of the uses on site is provided in Table 8.

Table 8: Floor area breakdown

Use	Total Area	
Production Kitchen Building	2,000m ²	
Staff Office Building	400m ²	
Car Park	Staff and visitor parking	67 spaces
	DDA parking	2 spaces

A snapshot of the site layout is shown in Figure 12. Full architectural design plans are included in Appendix A. Vehicle swept paths are included in Appendix C.

A site access road off Bracken Street has also been designed as part of the development. The road will be 11.0m wide with a cul-de-sac at the south-eastern end. The cul-de-sac will have a radius of 12.5m.

It is noted that the plans show potential future expansion of the facility. The timing of this is yet to be determined. Facility expansion has therefore not been assessed in this report.

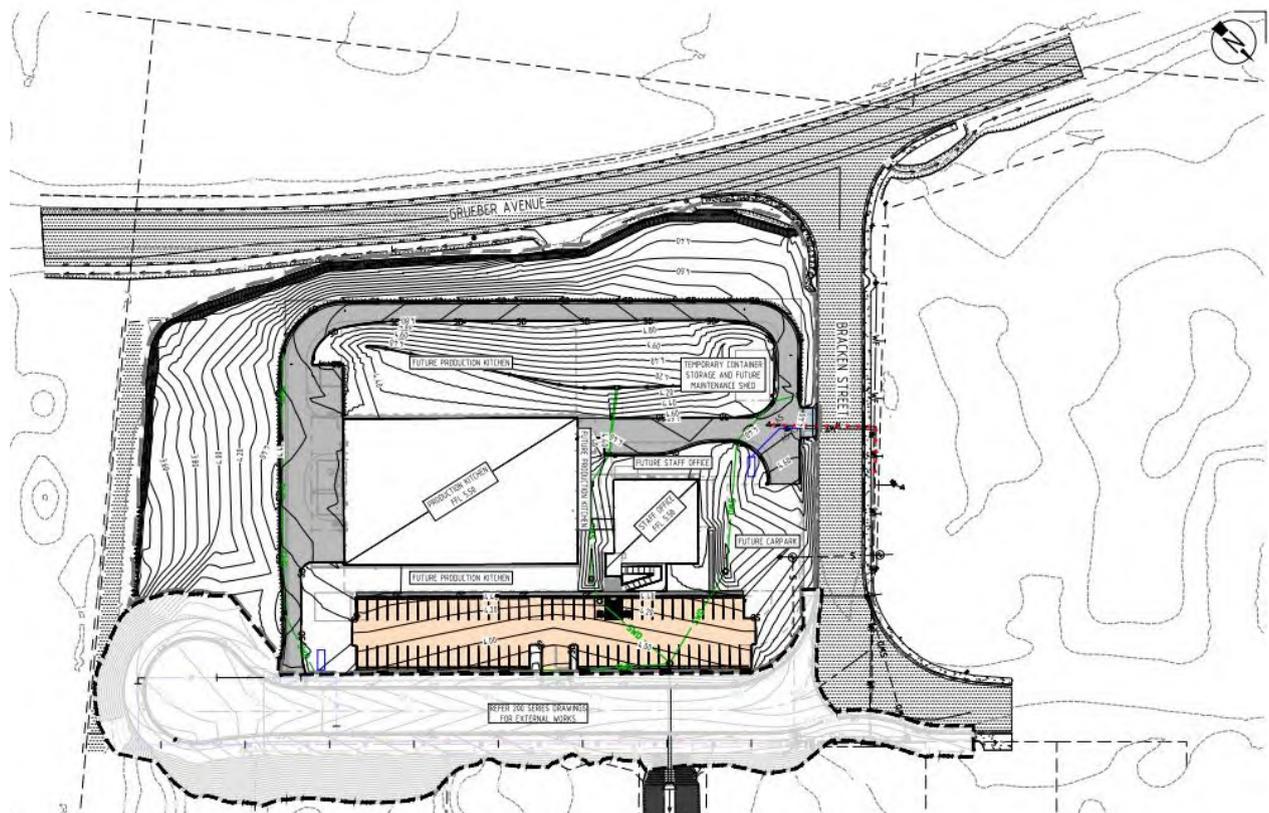


Figure 12: Site layout snapshot

3.2 Staffing and operation

The production kitchen will operate from 5:00am to 5:00pm 7 days per week. On weekdays the facility will have full staffing of up to 60 people; on the weekend there will be reduced staffing of up to 28 people as the chefs, administration and day production team are not on site.

Shift times and staffing levels are shown in Table 9.

Table 9: Staffing and shift times

Shift time	Role	Number of Staff
Food services staff		
6:00am – 2:00pm	Production day team	13
	Chef	10
7:00am – 3:00pm	Production shift team	7
	Catering clerk	1
	Cleaner	1
8:00am – 4:00pm	Trayline	8
	Ware wash	6
Administration, operations, supervisors and drivers		
5:00am – 2:00pm	Executive chef	1
6:00am – 2:00pm	Production supervisor	1
8:00am – 4:00pm	Drivers	4
	Administrative officer	1
	Supervisor	2
9:00am – 5:00pm	Operations manager	1
	Food and retail manager	1
	Business support officer	3

Based on the above, the following times would be the busiest for traffic volumes and parking:

- Highest traffic generation – AM: 5:00am to 6:00am – 24 staff movements
- Highest traffic generation – PM: 2:00pm to 3:00pm – 25 staff movements
- Parking: 9:00am to 2:00pm – 60 staff

3.3 Site access and operation

There will be two types of traffic generated to the site:

- Staff and visitors accessing the car park
- Commercial and heavy vehicles accessing the production kitchen facility.

There are three access/ exit points proposed:

- Staff access – secure entry and exit point for staff vehicles
- Commercial vehicle access – entry point for commercial and heavy vehicles accessing the production kitchen facility; and
- Commercial vehicle exit – exit point for commercial and heavy vehicles accessing the production kitchen facility.

3.3.1 Access

The staff access and commercial vehicle access will be located off the site access road. The commercial vehicles exit point is located on Bracken Street between Grueber Avenue and the 90-degree bend. The staff access will be a secure access with separate boom gates located for both entering and exiting vehicles. The boom gate on entry will be controlled by a swipe card or similar. The boom gate on exit will open automatically for exiting vehicles. The commercial vehicle access and exit will also be secured by way of boom gates that will operate in a similar fashion.

The width of accesses is outlined in Section 5.2.

3.3.2 Circulation

Staff and visitors will travel directly into the car park from the staff access.

Commercial and heavy vehicles will travel along the circulation road which runs along the boundary of the site and provides access to the goods delivery bay, dirty delivery bay and goods loading bay. Trucks will stop and reverse back to each of these bays to be loaded/ unloaded. They will exit via the commercial vehicle exit directly onto Bracken Street. The commercial vehicle circulation road is of varying width, with the minimum width being 4.45m.

3.4 Vehicle parking

The proposed car park will provide 69 90-degree car parking spaces as follows:

- Two DDA accessible car parking spaces with a shared space, one DDA accessible space is 2.4m wide and 5.4m long; the other is 2.5m wide and 5.4m long, the shared space is 3.93m wide and 5.4m long.
- 62 employee only parking spaces are 2.4m wide and 5.4m long with a 6.3m wide parking aisle
- 5 parking spaces suitable for visitor or employee parking, which 2.5m wide and 5.4m long. Wheel stops are provided for each of the car parking spaces.

3.5 Bicycle parking and end of trip facilities

There is no bicycle parking shown on the site plans. If bicycle parking was required for staff, there is sufficient space on site to accommodate this.

3.6 Deliveries, maintenance and waste collection

It has been advised that the largest vehicle accessing the site during operation is an 8.8m medium rigid vehicle (MRV).

3.6.1 Deliveries

The following delivery vehicles are expected at the site:

- Food supply vehicles: 8 – 10 per day;
- Food service delivery vehicles (to RHH): 4 trucks delivering as required from 6:00am each day

3.6.2 Maintenance and waste collection

The following maintenance and waste collection vehicles are expected at the site:

- General waste skip bin collection: Daily
- Recycled cardboard skip bin collection: Fortnightly
- Mixed waste skip bin (glass, metal, plastic) collection: Fortnightly
- Truck washing: Daily; and
- Grease interceptor trap pumping: 3 monthly

4. Traffic Impact Assessment

4.1 Traffic generation

4.1.1 Guidance document rate

Traffic generation rates have been derived from the New South Wales Government publication *Guide to Transport Impact Assessment* (TfNSW Guide).

This site best aligns with a business park:

Business park refers to developments that permit a range of land uses in an integrated complex. The developments generally incorporate a mix of office, retail and wholesale stores, warehousing, workshops, manufacturing, light industrial, showrooms and scientific research establishments.

Based on the above, the same rate can be utilised for both the production kitchen and office.

The TfNSW Guide specifies person generation rates for business parks in a regional area as follows:

- AM site peak hour person trips = 0.82 person trips/ 100m² GFA; and
- PM site peak hour person trips = 0.98 person trips/ 100m² GFA.

Based on the location of the site and the nature of the shift work, it has been assumed in this instance that 100% of people will drive to site, 1 person per car which would therefore align the person generation rate with the traffic generation rate.

Based on the above, the traffic generation of the proposed development during the AM and PM peak hours on the road network has been determined as shown in Table 10.

Table 10: Traffic generation

Use	Peak hour	Traffic generation rate	Floor area	Traffic generation
Business park	AM Peak hour	0.82 person trips/ 100m ² GFA	2,400m ²	20 trips
	PM Peak hour	0.98 person trips/ 100m ² GFA		24 trips

4.1.2 Calculation of rate from first principles

As shown in Section 3.2, the highest traffic generation at the AM site peak hour (not the network peak hour) could be up to 33 vehicle movements from 7:00am to 8:00am and the highest traffic generation at the PM site peak hour could be up to 37 vehicle movements from 2:00pm to 3:00pm. These rates are expected to very conservative, however, exceed that of the TfNSW Guide.

4.1.3 Rates utilised

Based on the above assessment, the PM peak is considered the worst-case scenario. The first principles rate was utilised. As a conservative assessment, it has been assumed that the same number of existing vehicles are on the road network at 2:00pm to 3:00pm as were counted during the PM network peak hour (4:00pm to 5:00pm). As such, an additional 37 vehicles have been added to the existing vehicle volumes experienced at the intersection during the PM peak hour. In reality the impact is expected to be slightly lower.

4.1.4 Traffic distribution and assignment

The following directional split (i.e. the ratio between inbound and outbound traffic movements) has been adopted based on the information provided regarding expected use:

Table 11: Traffic distribution during peak periods

	Light Vehicles		Heavy Vehicles	
	Ingress	Egress	Ingress	Egress
AM Peak Hour	100%	0%	50%	50%
PM Peak Hour	0%	100%	50%	50%

The distribution of vehicles during the PM peak hour is shown below in Figure 13.

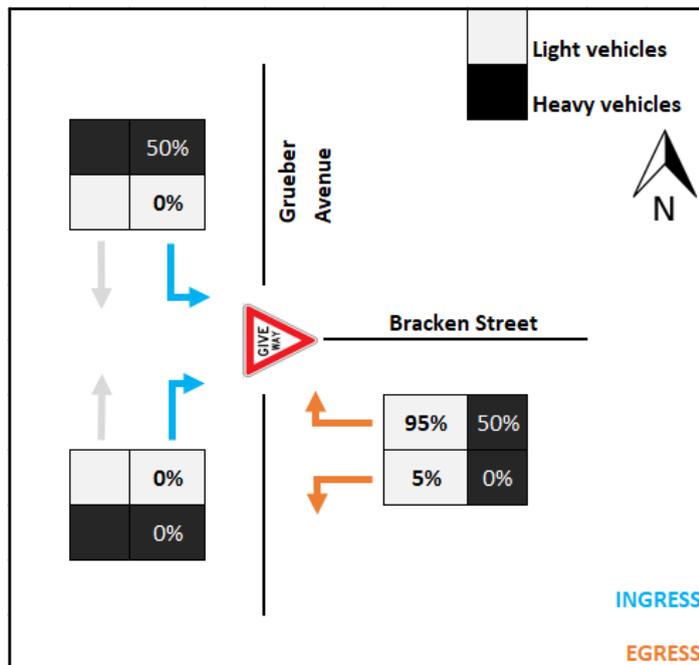


Figure 13: PM peak hour traffic distribution and assignment diagram

4.2 Traffic impacts

4.2.1 Post development

The traffic impact of the development on the Grueber Avenue/ Bracken Street intersection has been estimated for the year 2026, post development of the site.

The expected 2026 post development traffic volumes for the weekday Development PM peak hour are shown below in Figure 14.

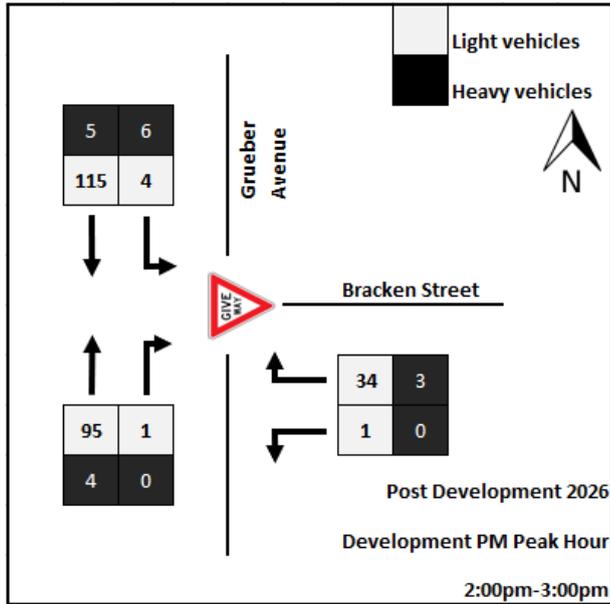


Figure 14: Post development 2026 traffic volumes – PM peak hour

A summary of the SIDRA Intersection results for the degree of saturation, average delays and 95th percentile queue for the post development 2026 scenario is provided in Table 12 and the full results are provided in Appendix B.

Table 12: SIDRA Intersection traffic modelling results - post development PM peak

Approach	Degree of Saturation	Average Delay (secs)	95 th Percentile Queue (m)	LOS
South-east: Grueber Avenue	0.05	0.1	0.1	A
North-west: Grueber Avenue	0.05	6.9	1.2	A
North-east: Bracken Street	0.07	0.5	0.0	A
All Vehicles	0.07	1.2	1.2	A

Based on the results shown above, post development, Grueber Avenue/ Bracken Street intersection is expected to continue to operate well with minimal queues and delays and a LOS A.

4.2.2 10-years post development

The traffic impact of the proposed residential development on the Grueber Avenue/ Bracken Street intersection has also been estimated for the year 2036 Existing traffic on the surrounding road network unrelated to the development has been grown by a yearly compounding growth rate of 2%. This rate does not include further development of the Commonwealth-owned land surrounding the site.

It is noted that the traffic generated by the development was not increased for the 10-years post development scenario as no expansion of the site has been confirmed or time frames provided at this stage.

The expected 2036 10-years post development traffic volumes for the weekday Development PM peak hour are shown below in Figure 15.

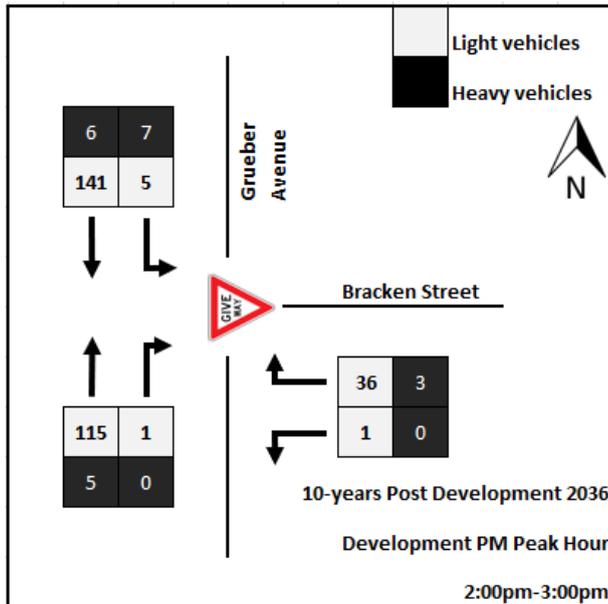


Figure 15: 10-years post development 2036 traffic volumes - PM peak hour

A summary of the SIDRA Intersection results for the degree of saturation, average delays and 95th percentile queue for the 10-years post development 2036 scenario are provided in Table 13 and the full results are provided in Appendix B.

Table 13: SIDRA Intersection traffic modelling results - 10-years post development PM peak

Approach	Degree of Saturation	Average Delay (secs)	95 th Percentile Queue (m)	LOS
South: Grueber Avenue	0.07	0.1	0.1	A
North: Grueber Avenue	0.05	7.2	1.3	A
East: Bracken Street	0.09	0.5	0.0	A
All Vehicles	0.09	1.2	1.3	A

Based on the results shown above, 10 years post development, Grueber Avenue/ Bracken Street intersection is expected to continue to operate well with minimal queues and delays and a LOS A.

4.3 Intersection turn lanes

The *Austrroads Guide to Traffic Management Part 6: Interchanges and Crossings Management (2020)* (Austrroads Guide to Traffic Management Part 6) specifies warrants for providing left and right turn treatments at unsignalised intersections. Treatments include basic right and left turn facilities (BAR/ BAL), channelised right turn and short lane right turn facilities (CHR/ CHR(s)), auxiliary left turn and short lane left turn facilities (AUL/ AUL(s)) and channelised left turn facilities (CHL). Further information on the design of each of these facilities in Tasmania can be found within the *Standard Drawings for Intersections and Interchanges*, here:

https://www.transport.tas.gov.au/roadworks/contractor_and_industry_information/standard_drawings.

Figure 16 is an excerpt from the Austrroads Guide to Traffic Management Part 6. It shows the volumes of traffic at an intersection subject to a speed limit of ≤ 70 km/h which would warrant turn treatments.

The assessment has been completed for the Grueber Avenue/ Bracken Street intersection.

The assessment has been completed using the PM peak hour traffic volumes.

Note that Curve 1 (red) and Curve 2 (blue) represent the boundary between the treatment types.

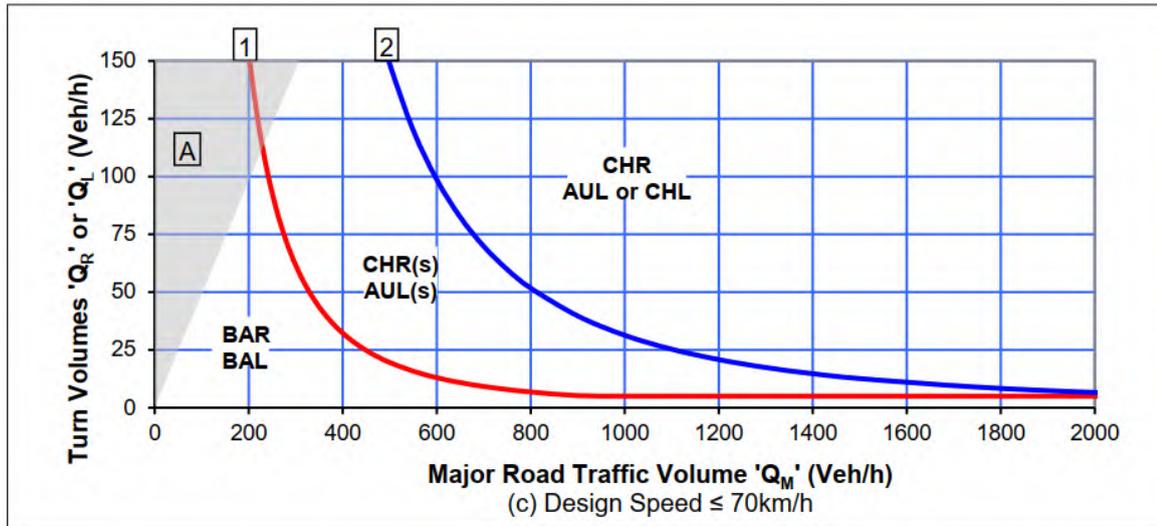
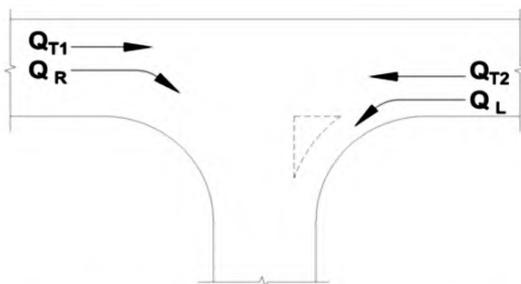


Figure 16: Warrants for turn treatments at unsignalised intersections (Source: Austroads Guide to Traffic Management Part 6: Intersections, Interchanges and Crossings Management (2020))

The calculation of Q_M is shown below in Figure 17 and completed in Table 14.



Road type	Turn type	Splitter island	Q_M (veh/h)
Two-lane two-way	Right	No	$= Q_{T1} + Q_{T2} + Q_L$
	Left	Yes	$= Q_{T1} + Q_{T2}$
		Yes or no	$= Q_{T2}$

Figure 17: Calculation of Q_M

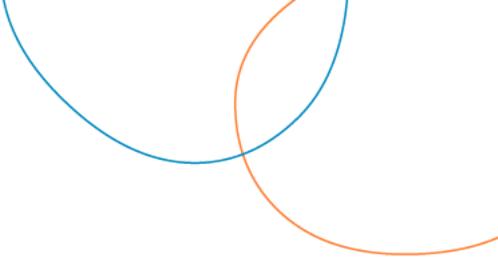
Table 14: Opposing movements to turning vehicles - Grueber Avenue/ Bracken Road intersection

Peak Hour	QM (veh/ hr)		QR (veh/ hr)	QL (veh/ hr)
	QM Right	QM Left		
PM	229	120	1	10

The Austroads Guide recommends a basic left turn (BAL) and basic right turn (BAR) treatment at this location.

Although recommended by Austroads as a minimum requirement, the BAL and BAR lane are not considered necessary for the following reasons:

- The volumes of left and right turns into Bracken Street are very low
- Through traffic at Grueber Avenue is low
- SIDRA intersection traffic modelling results show minimal delays
- The speed limit on Grueber Avenue is relatively low at 60km/h

- 
- There is good sight distance approaching the intersection in each direction; and
 - Grueber Avenue is wide (3.5m lanes with 1.5m sealed shoulders), and such would often provide sufficient space for passing of the turning vehicle (depending on where in the lane the turning vehicle is located).

5. Transport assessment

5.1 Parking

5.1.1 Car park provision

There will be a maximum of 60 staff on site at any time. 69 car parking spaces are provided, including 2 DDA spaces, which is considered sufficient.

The National Construction Code (NCC) requires the following for commercial buildings:

- 1 DDA accessible space for every 100 car parking spaces or part thereof.

As the proposed residential development is providing 2 DDA accessible parking spaces, it meets the NCC requirements.

5.1.2 Parking layout

The car parking layout has been assessed against the requirements of Australian Standard AS 2890.1. In order to determine the user class of the carpark, Table 1.1 (shown Figure 18) of the Australian Standard has been reviewed.

TABLE 1.1
CLASSIFICATION OF OFF-STREET CAR PARKING FACILITIES

User class	Required door opening	Required aisle width	Examples of uses (Note 1)
1	Front door, first stop	Minimum for single manoeuvre entry and exit	Employee and commuter parking (generally, all-day parking)
1A	Front door, first stop	Three-point turn entry and exit into 90° parking spaces only, otherwise as for User Class 1	Residential, domestic and employee parking
2	Full opening, all doors	Minimum for single manoeuvre entry and exit	Long-term city and town centre parking, sports facilities, entertainment centres, hotels, motels, airport visitors (generally medium-term parking)
3	Full opening, all doors	Minimum for single manoeuvre entry and exit	Short-term city and town centre parking, parking stations, hospital and medical centres
3A	Full opening, all doors	Additional allowance above minimum single manoeuvre width to facilitate entry and exit	Short term, high turnover parking at shopping centres
4	Size requirements are specified in AS/NZS 2890.6 (Note 2)		Parking for people with disabilities

Figure 18: Excerpt of Table 1.1 from Australian Standard AS 2890.1

The car parking layout has been reviewed against AS 2890.1 and AS 2890.6. The requirement for car parking space dimensions is specified in Table 15.

Table 15: Car park layout requirements

Car park	Feature	Minimum Requirement (AS 2890.1/ AS 2890.6)	Proposed
Employee car parking – User Class 1A – 90 degree parking	Parking space width	2.4m	2.4m
	Parking space length	5.4m	5.4m
	Parking aisle width	5.8m	6.2m
	Blind aisle width	1.0m	1.0m min.
Visitor car parking – User Class 2 – 90-degree parking	Parking space width	2.5m	2.5m
	Parking space length	5.4m	5.4m
	Parking aisle width	5.8m	6.2m
DDA accessible – 90 degree parking	Parking space width	2.4m	2.4m and 2.5m
	Parking space length	5.4m	5.4m
	Shared area width (side)	2.4m	4.0m
	Shared area length (side)	5.4m	5.4m
	Shared area width (rear) – parking aisle	2.4m	2.4m
	Shared area length (rear) – parking aisle	2.4m	>2.4m

Based on the above, all standard car parking spaces and DDA compliant car parking spaces meet the dimensional requirements of AS 2890.1 and AS 2890.6.

As more car parking spaces are provided than vehicles expected to be on site at any one time, the provision of end of aisle turning bays (in case all parking spaces are full) is not required. Should all visitor spaces be full, it is expected that visitors would utilise a vacant car parking space to turn around and exit the car park.

5.2 Site access

5.2.1 Width

The access width has been assessed against the requirements of Australian Standard AS 2890.1. In order to determine the user class of the carpark Table 3.1 (shown in Figure 19) and Table 3.2 (shown in Figure 20) of the Australian Standard have been reviewed.

TABLE 3.1
SELECTION OF ACCESS FACILITY CATEGORY

Class of parking facility (see Table 1.1)	Frontage road type	Access facility category				
		Number of parking spaces (Note 1)				
		<25	25 to 100	101 to 300	301 to 600	>600
1,1A	Arterial	1	2	3	4	5
	Local	1	1	2	3	4
2	Arterial	2	2	3	4	5
	Local	1	2	3	4	4
3,3A	Arterial	2	3	4	4	5
	Local	1	2	3	4	4

Figure 19: Excerpt of Table 3.1 from Australian Standard AS 2890.1

TABLE 3.2
ACCESS DRIVEWAY WIDTHS

metres			
Category	Entry width	Exit width	Separation of driveways
1	3.0 to 5.5	(Combined) (see Note)	N/A
2	6.0 to 9.0	(Combined) (see Note)	N/A
3	6.0	4.0 to 6.0	1 to 3
4	6.0 to 8.0	6.0 to 8.0	1 to 3
5	To be provided as an intersection, not an access driveway, see Clause 3.1.1.		

NOTE: Driveways are normally combined, but if separate, both entry and exit widths should be 3.0 m min.

Figure 20: Excerpt of Table 3.2 from Australian Standard AS 2890.1

The car park access meets the requirements of AS 2890.1. The Standard requires the access to be a combined entry and exit width between 3.0m and 5.5m. The proposed development will provide a combined entry and exit of 6.3m at the car park which exceeds the requirement.

It is noted, however, that the entry and exit will have boom gates. Depending on the manufacturer of the boom gates, there will be a width required to accommodate the equipment. Allowance should be given for a 3.3m vehicle lane in each direction to allow for 3.0m travel width plus a 0.3m buffer to allow for clearance. This may result in the loss of one parking space, however as the car park is well above requirements this is not considered to be an issue.

The one-way entry for heavy vehicles is 4.0m and the one-way exit is 7.0m. The suitability of these has been determined using vehicle swept paths as discussed in Section 5.3 of this report. It is expected that the commercial vehicle access will also have boom gates for site security, although these are not shown on the plans.

5.2.2 Queuing

It is proposed to use boom gates to limit access to the site to staff and approved visitors.

The below assessment has been completed assuming that a swipe card controlled access gate (or similar) is provided at the staff access.

In order to determine the queuing area requirements, the storage queue length that will not be exceeded 95% of the time has been calculated using queuing theory which states:

$$N = \frac{\log(0.05)}{\log(\rho) - 1}$$

Where

N = Storage queue length required

ρ = utilization factor = $\frac{r}{s}$

r = average arrival rate (vehicles per hour)

s = service rate (vehicles per hour)

AS 2890.1 indicates that a card reader can service up to 400 vehicles per hour. As this is expected to be in ideal conditions, a service rate of 300 vehicles per hour has been estimated (one vehicle serviced every 12 seconds).

Assuming 25 light vehicle trips to the staff access during the AM and PM peak hours, the 95th percentile queue length is 0.62 vehicles.

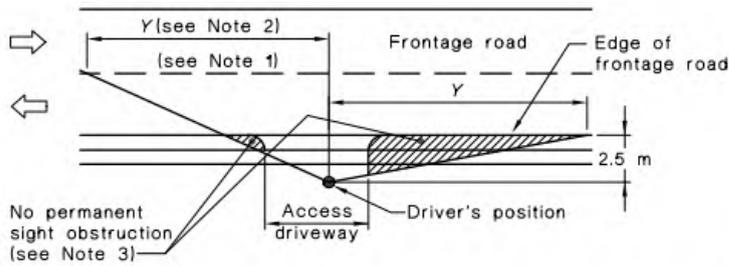
It is noted, however, that depending on the operation of the facility, all vehicles may arrive and depart in a more condensed time frame (i.e. within 30 minutes). This would increase the likelihood of a two-vehicle queue. Queued vehicles have sufficient space to be stored within the site access road without impeding other vehicle movements. It is expected that sufficient stopping sight distance would be provided to stored vehicles.

This vehicle queue can be accommodated on the site access road (for entry) and within the car park (for exit) and is considered suitable.

5.2.3 Sight distance

Light vehicles – staff access

The sight distance at the staff access was taken at driver's eye height 2.5m back from the edge of the frontage road in accordance with Australian Standard AS/NZS 2890.1:2004 Parking facilities Part 1: Off-street car parking (AS 2890.1) as shown in Figure 21 below.



Frontage road speed (Note 4) km/h	Distance (Y) along frontage road m		
	Access driveways other than domestic (Note 5)		Domestic property access (Note 6)
	Desirable 5 s gap	Minimum SSD	
40	55	35	30
50	69	45	40
60	83	65	55
70	97	85	70
80	111	105	95
90	125	130	Use values from 2 nd and 3 rd columns
100	139	160	
110	153	190	

NOTES:

- Centre-line or centre of road (undivided road), or right hand edge of right hand through lane (divided road).
- A check to the left is not required at a divided road where the median is wide enough to shelter a vehicle leaving the driveway.
- Parking on this side of the frontage road may need to be restricted on either side of the driveway so that the sight distance required by the above table to an approaching vehicle is not obstructed.
- This is the posted or general speed limit unless the 85th percentile speed is more than 5 km/h above the limit in which case the tabulated speed nearest the 85th percentile shall be adopted.
- The values in the table apply only to left turn and right turn manoeuvres into two-way roads up to four lanes wide and one-way streets regardless of width, either for a 5 s gap, desirable at lower frontage road speeds, or minimum stopping sight distance based on 2 s reaction time.
Crossing manoeuvres (e.g. from an access opposite the stem of a T-junction) over four lanes or more, and turning manoeuvres into a six lane two-way road would require longer gaps unless there was a median wide enough to store a vehicle and allow a two stage manoeuvre.
- These distances are based on stopping sight distances with reaction time of 1.5 s for traffic approaching along the frontage road and are applicable to a frontage road speed of up to 80 km/h only. Wherever practicable sight distance provided at domestic property accesses should meet the values given in the second or third columns of the Table.
- When checking sight distance the driver's eye height and the height of the object (approaching vehicle) are to be taken as 1.15 m above the road surface.

Figure 21: AS 2890.1 sight distance requirements

The following sight distance will be available at the main access:

- North-west – clear sight lines to the end of Sinclair Place; and
- South-east – clear sight lines to end of proposed cul-de-sac.

Based on the above, the sight distance will be sufficient.

Heavy vehicles – sight distance for commercial vehicle traffic entering a public roadway from an access driveway

The sight distance for commercial vehicle traffic entering a public roadway from an access driveway was taken at driver's eye height 3.0m back from the edge of the frontage road in accordance with AS 2890.2:2018 Off-street commercial vehicle facilities (AS 2890.2) as shown in Figure 22 below. The required sight distances for both a 5 second and 8 second gap are also shown below in Figure 22, although it is noted that only a 5s gap is necessary for the sight distance at the commercial vehicle exit.

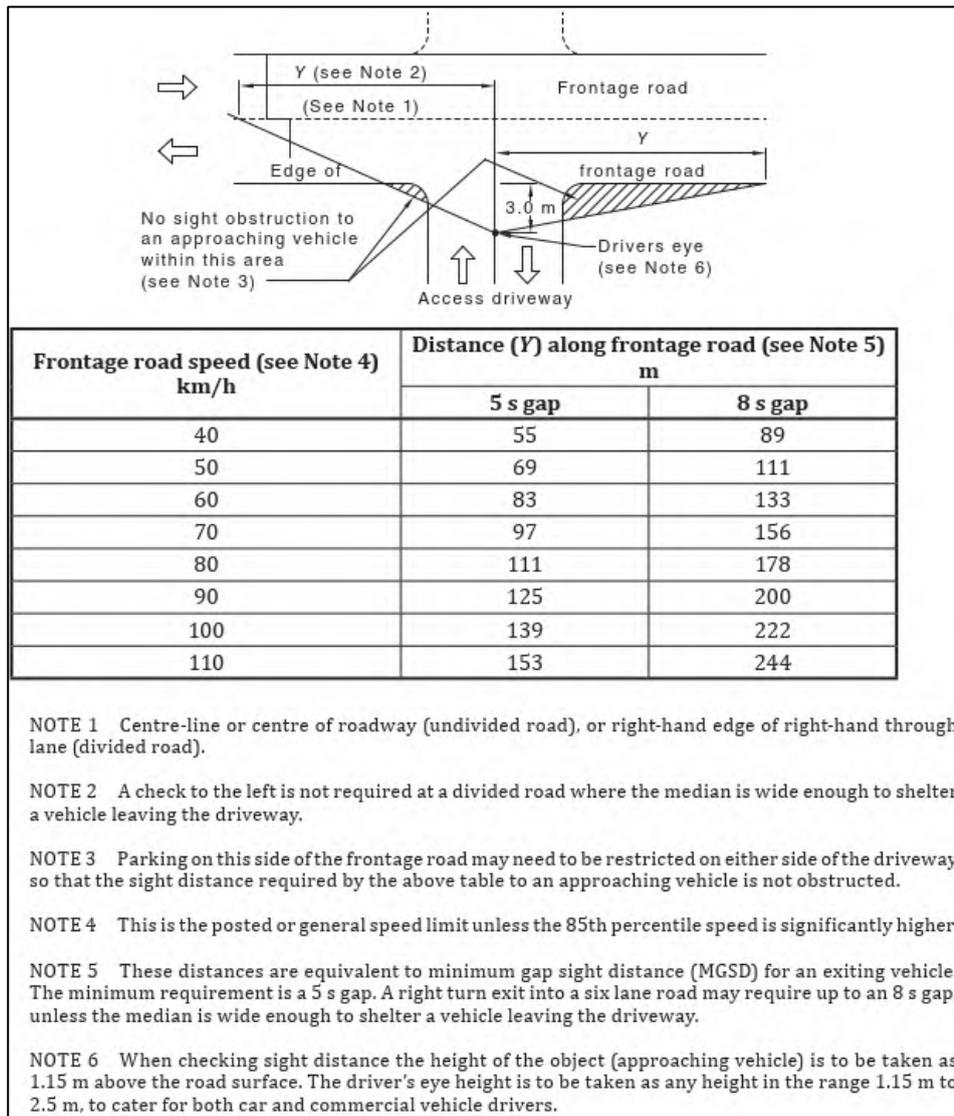


Figure 22: AS 2890.2 sight distance requirements

The following sight distance is available at the commercial vehicle exit:

- North-east – clear sight lines to the end of Bracken Street and Sinclair Place; and
- South-west – clear sight lines to Grueber Avenue.

As sight lines are clear to the intersection and beyond the Bracken Street 90-degree bend, sight distance is considered to be sufficient.

5.3 Site circulation, loading and deliveries

Turning paths were completed utilising an 8.8m MRV. The vehicle was set for a forward speed of 10km/h and a reversing speed of 5km/h. This is expected to be reasonable for the proposed entry of vehicles into the facility, and for the navigation of vehicles throughout the facility.

Swept paths included in Appendix C show that an 8.8m MRV can enter and exit the site in a forward direction and manoeuvre as required within the site.

The swept paths also show that the site access road can accommodate vehicles up to the size of a 19m semi-trailer.

5.4 Temporary container storage

It is noted that the below should be reassessed by way of a Construction Traffic Management Plan based on the construction methodology of the chosen contractor.

It is understood that a number of shipping containers will be stored at the temporary container storage. These will be lifted into place via a crane. Should this be completed after construction of the commercial vehicle exit, where they will be required to enter, and other site infrastructure, the following is recommended based on vehicle turning radius and available storage within the site:

- Crane to travel forward into the site via the truck exit and complete a turning manoeuvre such that it can stop alongside the temporary container storage area. Spotters will be required during this manoeuvre
- 19m semi-trailer to travel forward into the site via the truck exit and stop when it is no longer extended into Bracken Street. Crane to move containers from back of the truck to storage area. The 19m semi-trailer will then be required to reverse back out the way it came in such that the front of the truck is facing north-east. The truck would then continue on Bracket Street and turn around using the cul-de-sac on the site access road. Spotters will be required to manage traffic on Bracken Street during the reverse manoeuvre.

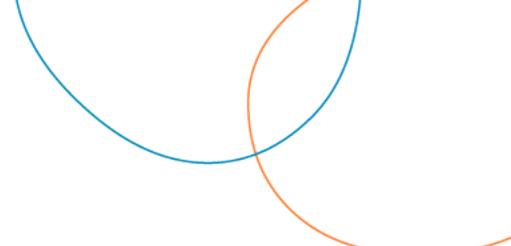
Minor temporary gravel widening may be required at the truck exit to accommodate the turning paths of the vehicles.

The largest crane expected to be required for lifting is a 60-tonne crane. A lifting plan can generally be provided by the supplier to confirm how crane lifts may be undertaken. Circulation roads should be structurally designed for the largest vehicle expected to utilise them.

6. Conclusion

Jaws Architects has engaged pitt&sherry to undertake a Traffic Impact Assessment (TIA) for the proposed Production Kitchen Facility. The findings of the assessment and recommendations presented within this report may be summarised as follows:

- Based on the modelling results presented within this report, the Grueber Avenue/ Bracken Street intersection currently operates well with acceptable queues and delays on all approaches. The intersections are both anticipated to operate well post development and 10-years post development
- The most recent 10-year crash history showed no crash history or road safety issues of concern. The development is not expected to result in an increased risk of crashes
- The number of car parking spaces is expected to be sufficient for the site
- The 90-degree car parking spaces and the DDA accessible parking space can meet the requirements of AS 2890.1 and AS 2890.6, respectively
- The proposed accesses can meet the requirements of AS 2890.1
- The site layout is suitable to allow an 8.8m MRV, the largest vehicle expected to access the site, to enter and exit in a forward direction and manoeuvre as required; and
- Safe intersection sight distance is sufficient.



Important information about your report

In some circumstances the scope of services may have been limited by a range of factors such as time, budget, access and/or site disturbance constraints. The Report may only be used and relied on by the Client for the purpose set out in the Report. Any use which a third party makes of this document, or any reliance on or decisions to be made based on it, is the responsibility of the Client or such third parties.

The services undertaken by pitt&sherry in connection with preparing the Report were limited to those specifically detailed in the report and are subject to the restrictions, limitations and exclusions set out in the Report. The Report's accuracy is limited to the time period and circumstances existing at the time the Report was prepared. The opinions, conclusions and any recommendations in the Report are based on conditions encountered and information reviewed at the date of preparation of the Report. pitt&sherry has no responsibility or obligation to update the Report to account for events or changes occurring after the date that the report was prepared. If such events or changes occurred after the date that the report was prepared render the Report inaccurate, in whole or in part, pitt&sherry accepts no responsibility, and disclaims any liability whatsoever for any injury, loss or damage suffered by anyone arising from or in connection with their use of, reliance upon, or decisions or actions based on the Report, in whole or in part, for whatever purpose.

Architectural Plans

Appendix A

HOSPITALS SOUTH PRODUCTION KITCHEN

GRUEBER AVENUE, CAMBRIDGE, TAS 7190

EXTERNAL ROAD WORKS

NOTE:

THE FOLLOWING INSPECTIONS AND TESTING MUST BE COMPLETED BY ADG ENGINEERS BEFORE ENGINEERING CERTIFICATION WILL BE ISSUED. THE CONTRACTOR IS TO PROVIDE A MINIMUM OF 72 HOURS NOTICE TO ADG FOR REQUIRED INSPECTIONS. SHOULD THE CONTRACTOR FAIL TO REQUEST AN INSPECTION, THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL COSTS TO ALLOW FOR THE WORKS TO BE INSPECTED TO THE SATISFACTION OF ADG. ANY INSPECTIONS THAT FAIL ARE TO BE RE-INSPECTED WITH ALL REINSPECTION COSTS TO BE PAID BY THE CONTRACTOR.

- a) PRESTART
- b) EARTHWORKS - FINAL STRIPPING OF TOPSOIL, INSTALLATION OF SEDIMENT AND EROSION CONTROL MEASURES
- c) UNSUITABLE GROUND
- d) SIDE AND CUT OFF DRAINS
- e) STORMWATER PIPE LAID ON BEDDING PRIOR TO BACKFILL
- f) STORMWATER TRENCH BACKFILLED PRIOR TO PAVEMENT PLACEMENT

- g) STORMWATER STRUCTURE BASE SLABS
- h) SEWER RETICULATION EXTERNAL WORKS
- i) WATER RETICULATION EXTERNAL WORKS
- j) PAVEMENT SUBGRADE
- k) PAVEMENT REINFORCING
- l) PAVEMENT PRIOR TO SEALING (PRESEAL)
- m) STEEL REINFORCEMENT OF CONCRETE STRUCTURES
- n) PRACTICAL COMPLETION
- o) ON MAINTENANCE
- p) OFF MAINTENANCE
- q) ANY OTHER INSPECTIONS AND TESTING IN ACCORDANCE WITH LGAT GUIDELINES, SPECIFICATIONS AND DRAWINGS
- r) ANY OTHER INSPECTIONS AND TESTING IN ACCORDANCE WITH TASWATER GUIDELINES, SPECIFICATIONS AND DRAWINGS
- s) ANY OTHER INSPECTIONS AND TESTING AS REQUIRED BY HOBART INTERNATIONAL AIRPORT PTY LTD AND DEPARTMENT OF HEALTH REQUIREMENTS.

GENERAL NOTES:

- G1. ALL DIMENSIONS SHOWN ARE IN METERS UNLESS OTHERWISE SHOWN.
- G2. ALL SETOUT ON SITE IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. CONTRACTOR TO ALLOW FOR ALL MEANS NECESSARY TO ACCURATELY SETOUT THE WORKS.
- G3. ALL WORKS TO BE CONSTRUCTED IN ACCORDANCE WITH PROJECT SPECIFICATIONS AND WHERE FURTHER DETAILS ARE REQUIRED THE CONTRACTOR SHALL REFER TO LOCAL GOVERNMENT ASSOCIATION OF TASMANIA (LGAT) DEVELOPMENT GUIDELINES, TASWATER GUIDELINES, ASSOCIATED STANDARD DRAWINGS AND SPECIFICATIONS UNO.
- G4. SHOULD ANY OF THE CONSTRUCTED WORKS BE CONSTRUCTED OUTSIDE OF THE TOLERANCES SPECIFIED WITHIN THE PROJECT SPECIFICATION AND LOCAL AUTHORITY REQUIREMENTS, THE CONTRACTOR WILL RECTIFY AT THEIR COST INCLUSIVE OF ANY ADDITIONAL COSTS INCURRED BY ADG.
- G5. EXISTING SERVICES HAVE BEEN PLOTTED FROM SUPPLIED DATA AND AS SUCH THEIR ACCURACY CANNOT BE GUARANTEED. NO RESPONSIBILITY IS TAKEN BY ADG OR THE PRINCIPAL FOR THE ACCURACY AND COMPLETENESS OF THIS INFORMATION. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ACCURATELY ESTABLISH THE LOCATION AND LEVEL OF ALL EXISTING SERVICES PRIOR TO THE COMMENCEMENT OF ANY WORK. ANY DISCREPANCIES SHALL BE REPORTED TO THE SUPERINTENDENT. CONTRACTOR TO LOCATE AND PROTECT SERVICES AS REQUIRED DURING PROPOSED WORKS.
- G6. THE CONTRACTOR IS TO CHECK THROUGH LOCATING, POTHOLING AND SURVEY ALL CRITICAL CONNECTION POINTS FOR ALL CIVIL WORKS SHOWN ON THE DRAWINGS INCLUDING ANY POTENTIAL EXISTING SERVICES CLASHES PRIOR TO COMMENCEMENT OF CIVIL WORKS. CONTRACTOR TO IMMEDIATELY REPORT ANY DISCREPANCIES TO ADG AND AWAIT FORMAL DIRECTION PRIOR TO COMMENCING CIVIL WORKS.
- G7. ON COMPLETION OF SERVICES INSTALLATION, ALL DISTURBED AREAS SHALL BE RESTORED TO ORIGINAL LEVEL, INCLUDING KERBS, FOOTPATHS, CONCRETE AREAS, GRAVEL AREAS, GRASSED AREAS AND ROAD PAVEMENTS.
- G8. CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR OF ANY DAMAGE TO AUTHORITY/COUNCIL'S INFRASTRUCTURE. SUCH REPAIR OR REINSTATEMENT TO BE CARRIED OUT IMMEDIATELY TO THE SATISFACTION OF INFRASTRUCTURE OWNER/MANAGER/AUTHORITY/COUNCIL.
- G9. CONTRACTOR TO UNDERTAKE ALL WORKS IN ACCORDANCE WITH ALL WORKPLACE HEALTH AND SAFETY REQUIREMENTS.
- G10. WHERE ANY EXCAVATION OR CONSTRUCTION WORKS ARE TO BE IN CLOSE PROXIMITY TO NEIGHBOURING LOT BOUNDARIES OR INFRASTRUCTURE, CONTRACTOR TO ALLOW IN SCOPE OF WORKS TO PROVIDE ALL MEASURES NECESSARY TO ENSURE THE INTEGRITY OF EXISTING BOUNDARIES AND INFRASTRUCTURE. THIS MAY INCLUDE THE USE OF LOW VIBRATION EQUIPMENT, TRENCH SHORING ETC AS REQUIRED.
- G11. PRIOR TO THE CONTRACTOR COMMENCING ANY WORKS DETAILED ON THESE DRAWINGS, THE CONTRACTOR IS TO NOTIFY ADG ENGINEERS (AUST.) Pty. Ltd. AND RECEIVE WRITTEN CONFIRMATION THAT WORKS CAN COMMENCE
- G12. CONTRACTOR TO PROVIDE AS CONSTRUCTED DRAWINGS FOR ALL CONSTRUCTED WORKS IN ACCORDANCE WITH HOBART INTERNATIONAL AIRPORT PTY LTD.
- G13. CONTRACTOR TO UNDERTAKE ALL WORKS IN ACCORDANCE WITH RELEVANT APPROVALS.
- G14. CONTRACTOR TO ALLOW TO LIAISE/CO-ORDINATE WITH ELECTRICAL, LANDSCAPE AND OTHER SERVICE CONTRACTORS THROUGHOUT CIVIL CONSTRUCTION.
- G15. CONTRACTOR TO ORGANISE ALL DEMOLITION PERMITS PRIOR TO ANY DEMOLITION WORKS COMMENCING ON SITE.
- G16. CONTRACTOR TO UNDERTAKE DILAPIDATION REPORT FOR ADJOINING PROPERTIES AND HOBART INTERNATIONAL AIRPORT PTY LTD ROADS AND VERGES PRIOR TO

COMMENCEMENT OF ANY WORKS ON SITE.

- G17. CONTRACTOR TO UNDERTAKE POST CONSTRUCTION DILAPIDATION REPORT AND HOBART INTERNATIONAL AIRPORT PTY LTD ROADS AND VERGES AT PRACTICAL COMPLETION.
- G18. CONTRACTOR TO CLEAR AND GRUB ALL VEGETATION ON SITE AS IDENTIFIED IN THE APPROVED VEGETATION MANAGEMENT PLAN. CONTRACTOR TO ENSURE ALL TREE ROOTS AND STUMPS ARE COMPLETELY REMOVED AND BACKFILLED TO LEVEL 1 SUPERVISION. CONTRACTOR TO ALLOW TO MULCH ALL CLEARED VEGETATION AND STOCKPILE ON SITE OR REMOVE FROM SITE AS DIRECTED.
- G19. DRAWINGS TO BE READ IN CONJUNCTION WITH THE FOLLOWING CONSULTANTS/CONTRACTORS DRAWINGS:
 - SURVEYOR - ARTHUR MOEHRKE SURVEYS PTY LTD
 - ARCHITECT - JAWS ARCHITECTS
 - HYDRAULICS - ENGINEERING SOLUTIONS TASMANIA
 - STRUCTURAL - ADG ENGINEERS (AUST.) PTY LTD
 - ELECTRICAL - ENGINEERING SOLUTIONS TASMANIA
 - COMMUNICATIONS - TBC
 - MECHANICAL - ENGINEERING SOLUTIONS TASMANIA
 - LANDSCAPE - TBC
 - TRAFFIC - PITT & SHERRY
 - GEOTECHNICAL - ENVIRO-TECH CONSULTANTS
- G20. CONTRACTOR TO PREPARE AND HAVE APPROVED BY RELEVANT AUTHORITY: ROAD OPENING PERMIT AND TRAFFIC MANAGEMENT PLAN FOR ALL WORKS WITHIN HOBART INTERNATIONAL AIRPORT PTY LTD ROAD RESERVES. CONTRACTOR TO ALLOW FOR ALL COSTS ASSOCIATED WITH IMPLEMENTATION OF THE TMP.
- G21. NO WORKS ARE TO BE UNDERTAKEN ON LAND OUTSIDE OF THE SITE BOUNDARY WITHOUT FORMAL APPROVAL BY THE OWNER/CUSTODIAN OF THAT LAND INCLUDING BUT NOT LIMITED TO PRIVATE PROPERTY, ROAD RESERVE, PARKS/OPEN SPACE, EASEMENTS.
- G22. THE CONTRACTOR SHALL HAVE AN APPROVED SET OF CONSTRUCTION DRAWINGS AND APPROVALS ON SITE AT ALL TIMES.
- G23. ALL WATER AND SEWER RETICULATION WORKS TO BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT TASWATER WATER SUPPLY AND SEWERAGE DESIGN AND CONSTRUCTION CODE.
- G24. CONTRACTOR TO INSTALL INFORMATION SIGNAGE IN ACCORDANCE WITH LOCAL AUTHORITY STANDARDS PRIOR TO COMMENCEMENT OF WORKS.
- G25. CONTRACTOR TO PREPARE CONSTRUCTION MANAGEMENT PLAN IN ACCORDANCE WITH LOCAL AUTHORITY REQUIREMENTS AND HAVE APPROVED BY LOCAL AUTHORITY WHERE REQUIRED.
- G26. PROPRIETARY ITEMS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS UNO.
- G27. DRAWINGS INDICATE FINAL DESIGN OUTCOME ONLY. CONTRACTOR TO ALLOW FOR ALL TEMPORARY MEASURES REQUIRED DURING CONSTRUCTION IN ORDER TO ACHIEVE THE FINAL DESIGN OUTCOME.
- G28. ALL CONTOURS AND LEVELS ARE IN METRES TO THE AUSTRALIAN HEIGHT DATUM (AHD-TAS83).
- G29. ALL CO-ORDINATES SHOWN ARE PLANAR WITH MGA2020 Z55 ORIGIN IN ACCORDANCE WITH THE SITE SURVEY.

LOCALITY PLAN

NOT TO SCALE



PROPERTY DESCRIPTION
LOT: 1 ON CT152454

DRAWING SCHEDULE

DRAWING No.	DRAWING TITLE
C200	DRAWING SCHEDULE NOTES AND LOCALITY PLAN
C201	GENERAL NOTES SHEET 1 OF 2
C202	GENERAL NOTES SHEET 2 OF 2
C203	OVERALL LAYOUT PLAN
C204	EXISTING FEATURES LAYOUT PLAN
C210	EROSION AND SEDIMENT CONTROL LAYOUT PLAN CONSTRUCTION PHASE SHEET 1 OF 2
C211	EROSION AND SEDIMENT CONTROL LAYOUT PLAN CONSTRUCTION PHASE SHEET 2 OF 2
C212	EROSION AND SEDIMENT CONTROL LAYOUT PLAN STABILISATION PHASE SHEET 1 OF 2
C213	EROSION AND SEDIMENT CONTROL LAYOUT PLAN STABILISATION PHASE SHEET 2 OF 2
C230	ROADWORK AND DRAINAGE LAYOUT PLAN SHEET 1 OF 2
C231	ROADWORK AND DRAINAGE LAYOUT PLAN SHEET 2 OF 2
C232	ROADWORK AND DRAINAGE NOTES AND DETAILS
C233	ROADWORK LONGITUDINAL SECTION
C234	ROADWORK CROSS SECTIONS SHEET 1 OF 2
C235	ROADWORK CROSS SECTIONS SHEET 2 OF 2
C237	SIGNAGE AND LINEMARKING LAYOUT PLAN
C238	CUL-DE-SAC SETOUT PLAN
C239	RSK02 SETOUT PLAN
C250	STORMWATER DRAINAGE LONGITUDINAL SECTIONS
C251	STORMWATER CATCHMENT PLAN
C260	WATER LAYOUT PLAN
C261	WATER LONGITUDINAL SECTION
C271	SEWER LAYOUT PLAN
C272	SEWER LONGITUDINAL SECTION

ADG CIVIL SERVICES

WORK IN PROGRESS

PRINT IN COLOUR



Client DEPARTMENT OF HEALTH TASMANIA	Discipline CIVIL	Status PRELIMINARY	Title DRAWING SCHEDULE NOTES AND LOCALITY PLAN	
Project Name HOSPITALS SOUTH PRODUCTION KITCHEN GRUEBER AVENUE CAMBRIDGE, TAS	Designed By MB	Checked By SW		Approved By SW
Project No. 27536	Drawn By AB	Scale at A1 NTS		
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			Revision	

PRELIMINARY
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EXISTING FEATURES AND DEMOLITION NOTES:

1. THE CONTRACTOR WILL MAKE THEMSELVES FULLY AWARE OF THE EXISTING FEATURES OF THIS SITE AND ENSURE ANY ADDITIONAL WORKS REGARDING TREATMENT OF EXISTING SERVICES AND INFRASTRUCTURE NOT SHOWN ON THE PLANS ARE INCLUDED IN THE CONTRACT.
2. CONTRACTOR TO LOCATE AND PROTECT ALL EXISTING SERVICES ON SITE PRIOR TO COMMENCEMENT OF WORKS.
3. CONTRACTOR TO ORGANISE ALL DEMOLITION PERMITS PRIOR TO ANY DEMOLITION WORKS COMMENCING ON SITE.
4. SERVICES ON NEIGHBOURS DEVELOPMENTS SHOWN AS EXISTING AS ASSUMED WILL BE CONSTRUCTED PRIOR TO COMMENCEMENT OF WORKS.
5. CONTRACTOR TO ALLOW TO DEMOLISH ALL EXISTING STRUCTURES, ROADS AND SERVICES AS SHOWN ON CXX WITHIN LIMIT OF WORKS AND REMOVE FROM SITE U.N.O.
6. CONTRACTOR TO ALLOW FOR TEMPORARY FENCE FOR PERIMETER OF SITE FOR DURATION OF CIVIL WORKS CONTRACT.
7. CONTRACTOR TO UNDERTAKE AND PROVIDE CCTV OF ALL EXISTING STORMWATER LINES IN THE VICINITY OF THE WORKS PRE-AND POST-CONSTRUCTION. SHOULD THE CCTV IDENTIFY DAMAGE WITHIN THE STORMWATER PIPES THAT HAS OCCURRED DURING CONSTRUCTION, THE CONTRACTOR WILL RECTIFY THE DAMAGE BY MEANS DIRECTED BY HIAPL WHICH MAY INCLUDE BUT NOT BE LIMITED TO PIPE RELINING OR PIPE REPLACEMENT.

SEDIMENT AND EROSION CONTROL NOTES:

SEDIMENT CONTROL

1. ALL EROSION AND SEDIMENT CONTROL MEASURES TO BE IN ACCORDANCE WITH INTERNATIONAL EROSION CONTROL ASSOCIATION (IECA) AUSTRALIA GUIDELINES AND THE SPECIFICATIONS.
2. EROSION AND SEDIMENT CONTROL DETAILS SHOWN ARE MINIMUM REQUIREMENTS. IT IS THE CONTRACTORS RESPONSIBILITY TO INSTALL ADDITIONAL CONTROL MEASURES AS DEEMED NECESSARY THROUGHOUT CONSTRUCTION.
3. THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN ALL SEDIMENT CONTROL DEVICES IN A FUNCTIONAL ORDER AND REPLACE ALL BLOCKED SEDIMENT DEVICES AS REQUIRED UNTIL SUCCESSFUL OFF MAINTENANCE OF WORKS.
4. CONSTRUCTION OF ALL SEDIMENT MANAGEMENT DEVICES TO THE SATISFACTION OF THE SUPERINTENDENT. SHALL BE COMPLETED AND EFFECTIVE PRIOR TO:
 - a. STRIPPING OF TOPSOIL AND GRASS.
 - b. BULK EARTHWORKS TO THE SITE.
 - c. SERVICES INSTALLATION.
 - d. PAVEMENT CONSTRUCTION.
5. ALL SEDIMENT MANAGEMENT MEASURES ARE TO REMAIN IN PLACE UNTIL INSTRUCTION IS RECEIVED IN WRITING FROM THE SUPERINTENDENT TO REMOVE ALL OR PART OF THE SILT CONTROL APPLICATIONS.
6. THE BULK EARTHWORKS AND SEDIMENT CONTROL LAYOUT PLAN SHALL BE READ IN CONJUNCTION WITH THE APPROVED DRAWINGS.
7. PRIOR TO COMMENCEMENT OF CONSTRUCTION APPROVAL IS TO BE OBTAINED FROM THE SUPERINTENDENT FOR THE LOCATION OF THE SITE ACCESS POINT AND WASH DOWN AREA WHICH ARE TO BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD.
8. IF EROSION AND SEDIMENT CONTROL DEVICES HAVE BEEN FOUND TO BE DIFFERENT OR FAILED IN SERVICE, CORRECTIVE ACTION IS TO BE UNDERTAKEN IMMEDIATELY WHICH MAY INCLUDE AMENDMENTS/ ADDITIONS TO THE ORIGINAL APPROVED EROSION CONTROL PLANS. SUCH AMENDMENTS ARE TO BE APPROVED BY SUPERINTENDENT, IF DEEMED NECESSARY AND RELEVANT.

OVERALL

9.
 - a. TEMPORARY DRAINAGE CONTROL FLOW SHOULD BE DIVERTED AROUND THE WORK SITE WHERE POSSIBLE.
 - b. ALL DRAINAGE, EROSION AND SEDIMENT CONTROLS TO BE INSTALLED AND BE OPERATIONAL BEFORE COMMENCING UP-SLOPE EARTHWORKS.
 - c. IN AREAS WHERE RUNOFF TURBIDITY IS TO BE CONTROLLED, EXPOSED SURFACES TO BE EITHER MULCHED, COVERED WITH EROSION CONTROL BLANKETS OR TURFED IF EARTHWORKS ARE EXPECTED TO BE DELAYED FOR MORE THAN 14 DAYS.

SEDIMENT FENCE

10. FOR SEDIMENT FENCE STANDARD DETAIL AND SPECIFICATION REFER TO INTERNATIONAL EROSION CONTROL ASSOCIATION AUSTRALASIA (IECA) BEST PRACTICES STANDARD DRAWINGS SF-01 AND SF-02 SEDIMENT FENCE.

TEMPORARY CONSTRUCTION ENTRY/EXIT

11. FOR CONSTRUCTION ENTRY / EXIT STANDARD DETAIL AND SPECIFICATION REFER TO INTERNATIONAL EROSION CONTROL ASSOCIATION AUSTRALASIA (IECA) BEST PRACTICES STANDARD DRAWINGS EXIT-01 AND EXIT-02 CONSTRUCTION EXIT - ROCK PAD (CONSTRUCTION SITES ONLY), EXIT-03 - ROCK PADS FOR BUILDING SITES AND EXIT-04 AND EXIT-05 CONSTRUCTION EXIT - VIBRATION GRID.

KERB INLET

12. FOR KERB INLET STANDARD DETAIL AND SPECIFICATION REFER TO INTERNATIONAL EROSION CONTROL ASSOCIATION AUSTRALASIA (IECA) BEST PRACTICES STANDARD DRAWING ESC-03 KERB INLET SEDIMENT TRAPS.

REVEGETATION

13. FOR REVEGETATION STANDARD SPECIFICATION REFER TO INTERNATIONAL EROSION CONTROL ASSOCIATION AUSTRALASIA (IECA) BEST PRACTICES STANDARD DRAWING R-01 REVEGETATION GENERAL.

OPERATION AND MAINTENANCE

14. IN ACCORDANCE WITH IECA ESC GUIDELINES, ALL ESC MEASURES SHALL BE INSPECTED:
 - AT LEAST DAILY (WHEN WORK IS OCCURRING ON SITE) OR WEEKLY (WHEN WORK IS NOT OCCURRING ON SITE)
 - WITHIN 24 HOURS OF EXPECTED RAIN; AND
 - WITHIN 18 HOURS OF A RAINFALL EVENT (I.E. AN EVENT OF SUFFICIENT INTENSITY AND DURATION TO MOBILISE SEDIMENT ON SITE).
17. IN ACCORDANCE WITH IECA ESC GUIDELINES, MAINTENANCE OF ESC MEASURES SHALL OCCUR IN ACCORDANCE WITH THE FOLLOWING TABLE:

MAINTENANCE SCHEDULE		
ESC MEASURE	MAINTENANCE TRIGGER	TIMEFRAME FOR COMPLETION OF MAINTENANCE
OTHER ESC MEASURES	THE CAPACITY OF ESC MEASURES FALLS BELOW 75%	BY THE END OF THE DAY

GENERAL

18. CIVIL CONTRACTOR IS TO PROVIDE AN UPDATED PROGRAM OF ESC MAINTENANCE AND CONTROL OF ALL STAGES OF WORK FOR APPROVAL BY THE SUPERINTENDENT.

IECA STANDARD DRAWINGS REGISTER	
DRAWING NUMBER	DRAWING DESCRIPTION
EXIT-01	CONSTRUCTION EXIT - ROCK PAD
EXIT-02	CONSTRUCTION EXIT - ROCK PAD
EXIT-03	ROCK PADS FOR BUILDING SITES
CD-01	CATCH DRAINS
SF-01	SEDIMENT FENCE
SF-02	SEDIMENT FENCE
ESC-03	KERB INLET SEDIMENT TRAPS
R-01	REVEGETATION - GENERAL

*DRAWINGS TO BE READ IN CONJUNCTION WITH INTERNATIONAL EROSION CONTROL ASSOCIATION AUSTRALASIA (IECA) BEST PRACTICES STANDARD DRAWINGS AND SPECIFICATIONS.

SEDIMENT RELEASE GUIDELINES:

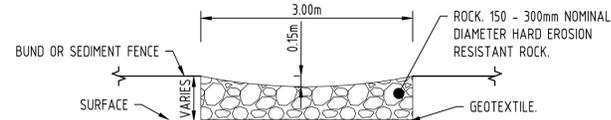
1. ALL RELEASES OF STORMWATER CAPTURED ONSITE, UNLESS OTHERWISE NOTED IN THIS STANDARD, MUST NOT EXCEED THE FOLLOWING LIMITS:
 - a. 50 mg/L OF TOTAL SUSPENDED SOLIDS (TSS) AS A MAXIMUM CONCENTRATION;
 - b. TURBIDITY (NTU) VALUE LESS THAN 10% ABOVE BACKGROUND;
 - c. pH VALUE MUST BE IN THE RANGE 6.5 TO 8.5 EXCEPT WHERE, AND TO THE EXTENT THAT, THE NATURAL RECEIVING WATERS LIE OUTSIDE THIS RANGE.
2. THE CONCENTRATION OF TSS RELEASED BY DEWATERING MAY ONLY EXCEED 50 mg/L WHERE IT CAN BE DEMONSTRATED AND SUPPORTED THROUGH DOCUMENTATION THAT:
 - a. FURTHER SIGNIFICANT RAINFALL IS FORECAST TO OCCUR BEFORE THE TSS CONCENTRATION IS LIKELY TO BE REDUCED TO 50 mg/L;
 - b. RELEASING A HIGHER CONCENTRATION OF TOTAL SUSPENDED SOLIDS WILL RESULT IN A BETTER ENVIRONMENTAL OUTCOME BY PROVIDING STORAGE FOR THE CAPTURE AND TREATMENT OF RUN-OFF FROM THE IMMINENT RAINFALL AND RUN-OFF.
 - c. ALL REASONABLE AND PRACTICABLE STEPS HAVE BEEN TAKEN TO TREAT THE WATER WITHIN BEST-PRACTICE TIME FRAMES;
 - d. FLOCCULENT HAS BEEN APPROPRIATELY APPLIED AND THE CONCENTRATION OF TSS IN THE CAPTURED WATER HAS ALREADY SIGNIFICANTLY DECREASED.
3. FOR ALL OTHER STORMWATER RELEASES, FLOWS AND DISCHARGES FROM THE SITE, THE RELEASE LIMIT PRESCRIBED IN (1a) ABOVE MUST NOT BE EXCEEDED UNLESS THE DEVELOPMENT IS IN FULL COMPLIANCE WITH THIS STANDARD.

NOTE: IT IS RECOMMENDED THAT A SITE-SPECIFIC RELATIONSHIP BETWEEN TURBIDITY AND SUSPENDED SOLIDS IS DETERMINED FOR EACH SEDIMENT BASIN. ONCE A CORRELATION BETWEEN SUSPENDED SOLIDS AND TURBIDITY HAS BEEN ESTABLISHED FOR A SEDIMENT BASIN, TESTING STORMWATER FOR COMPLIANCE WITH RELEASE LIMITS, PRIOR TO RELEASE, CAN BE DONE ON SITE WITH A TURBIDITY TUBE OR CALIBRATED TURBIDITY METER. THIS HAS THE ADVANTAGE OF PROVIDING IMMEDIATE ASSESSMENT TO JUSTIFY A RELEASE RATHER THAN WAITING FOR LABORATORY RESULTS TO CONFIRM CONCENTRATION LEVELS AND COMPLIANCE. NOTE THAT POST-RELEASE TSS VALIDATION IS APPROPRIATE TO DEMONSTRATE THAT THE NTU/TSS CORRELATION IS BEING MAINTAINED.

NOTE: BACKGROUND REFERS TO RECEIVING WATER QUALITY IMMEDIATELY UPSTREAM OF THE SITE LOCATION RELEASE POINT AT THE TIME OF RELEASE. WHERE THERE IS NO IMMEDIATE UPSTREAM RECEIVING WATER AT THE LOCATION AND TIME OF RELEASE, THEN THE TURBIDITY RELEASE LIMIT (NTU) WILL BE EQUAL TO THE RELEASE LIMIT FOR 50 mg/L TOTAL SUSPENDED SOLIDS (TSS) BASED UPON THE ONSITE CORRELATION BETWEEN TSS AND NTU.

EARTHWORKS NOTES

1. GRASS AND TOPSOIL SHALL BE STRIPPED OVER THE EXTENT OF THE WORKS UNLESS DIRECTED OTHERWISE AND STOCKPILED FOR FUTURE USE AS NON-STRUCTURAL FILL IF REQUIRED, OR REMOVE FROM SITE.
2. CONTRACTOR TO CLEAR AND GRUB ALL VEGETATION ON SITE AS IDENTIFIED IN THE APPROVED VEGETATION MANAGEMENT PLAN. CONTRACTOR TO ENSURE ALL TREE ROOTS AND STUMPS ARE COMPLETELY REMOVED AND BACKFILLED TO LEVEL 1 SUPERVISION. CONTRACTOR TO ALLOW TO MULCH ALL CLEARED VEGETATION AND STOCKPILE ON SITE OR REMOVE FROM SITE AS DIRECTED.
3. WHERE SITE TOPSOIL IS TO BE RESPREAD ON SITE, CONTRACTOR TO ALLOW TO SCREEN THE TOPSOIL OF ALL UNSUITABLE AND OVERSIZED MATERIAL. ALL UNSUITABLE MATERIAL GENERATED FROM SCREENING TO BE REMOVED FROM SITE AT CONTRACTORS EXPENSE.
4. CONTRACTOR TO ALLOW FOR ALL COSTS ASSOCIATED WITH ROCK EXCAVATION WITHIN CONTRACT RATES.
5. COMPACT THE EXPOSED SUBGRADE OR LOOSE TOP LEVEL MATERIAL TO A MINIMUM 98% STANDARD MAXIMUM DRY DENSITY TO AS1289 5.1.1. ANY 'SOFT SPOTS' IDENTIFIED BY THE PROOF ROLLING SHALL BE REMOVED AND REPLACED WITH A COMPACTED IMPORTED GENERAL FILL MATERIAL TO THE ABOVE COMPACTION REQUIREMENTS.
6. IMPORTED GENERAL FILL MATERIAL SHALL BE SUPPLIED AND COMPACTED WHERE NECESSARY TO OBTAIN SUBGRADE/PLATFORM LEVEL. IMPORTED GENERAL FILL MATERIAL SHALL BE CLEAN GRADED MATERIAL FREE OF ORGANIC MATTER AND STONES GREATER THAN 150mm AND CAPABLE OF BEING COMPACTED INTO COHERENT FILLING TO THE SPECIFIED STANDARD. THE MATERIAL SHALL HAVE A LINEAR SHRINKAGE NOT GREATER THAN 15% AND A MINIMUM C.B.R. OF 10%.
7. ALL EARTHWORKS OPERATIONS SHALL BE CARRIED OUT WITH 'LEVEL 1' SOIL ENGINEERING SUPERVISION IN ACCORDANCE WITH APPENDIX B OF AS 3798. THE NOMINATED GEOTECHNICAL TESTING AUTHORITY SHALL PROVIDE CERTIFICATION THAT ALL GENERAL EARTHWORKS OPERATIONS HAVE BEEN CARRIED OUT IN ACCORDANCE WITH THE DRAWINGS AND SPECIFICATIONS AND THE CONTROLLED FILL IS SUITABLE FOR PURPOSE WITH A MINIMUM 150KPA BEARING CAPACITY UNDER THE PLATFORM/STRUCTURES.
8. ALL EARTHWORKS FILL AND EXCAVATED AREAS SHALL BE COMPACTED TO 98% STANDARD MAXIMUM DRY DENSITY (AS 1289 5.1.1) IN LAYERS NOT EXCEEDING 150mm COMPACTED THICKNESS.
9. THE NOMINATED GEOTECHNICAL TESTING AUTHORITY SHALL PROVIDE CERTIFICATION THAT ALL GENERAL EARTHWORKS OPERATIONS HAVE BEEN CARRIED OUT IN ACCORDANCE WITH THE DRAWINGS.
10. CONTRACTOR TO UNDERTAKE ALL EARTHWORKS TESTING TO COMPLY WITH THE PROJECT SPECIFICATION AND LOCAL AUTHORITY REQUIREMENTS.
11. FINISHED SURFACES TO ALL DISTURBED AREAS ARE TO BE TREATED IN ACCORDANCE WITH LANDSCAPE DRAWINGS.
12. FINISHED EARTHWORKS SURFACES TO BE STABILISED
13. ALL EARTHWORKS TO BE CARRIED OUT AT +/- 2% OPTIMUM MOISTURE CONTENT.
14. ALL NEW WORKS TO MATCH NEATLY INTO EXISTING
15. ALL WORKS TO BE CONSTRUCTED IN ACCORDANCE WITH APPROVED MANAGEMENT PLANS.
16. CONTRACTOR TO ENSURE SUITABLE EROSION CONTROL MEASURES ARE INSTALLED INCLUDING BUT NOT LIMITED TO SHAKE DOWNS, SILT FENCE ETC.
17. DUST CONTROL MEASURES ARE TO INCLUDE SPRAYING WATER ON UNPAVED ROADS, ACCESS TRACKS AND STOCKPILES AT A SUFFICIENT LEVEL TO SUPPRESS DUST GENERATION. ADDITIONALLY CONTRACTORS ARE TO COVER OR ENCLOSE STOCKPILES WHERE REASONABLY PRACTICAL TO RESTRICT DUST MOVEMENT.
18. ALL BATTERS TO BE KEYED/STEPED INTO EXISTING MATERIAL AS DIRECTED BY GEOTECHNICAL ENGINEER. CONTRACTOR TO ALLOW FOR ALL KEYING/STEPPING AS REQUIRED.
19. ALL TEMPORARY AND FINAL BATTER SLOPES ARE TO BE INSPECTED AND APPROVED BY GEOTECHNICAL ENGINEER. CERTIFICATION OF LONG TERM STABILITY TO BE PROVIDED BY GEOTECHNICAL ENGINEER PRIOR TO PRACTICAL COMPLETION.
20. EARTHWORKS LEVELS SHOWN ARE FINISHED SURFACE LEVELS INCLUSIVE OF TOPSOIL LAYER, CARPARK LEVELS ETC. REFER STRUCTURAL ENGINEERING DRAWINGS FOR BUILDING SLAB THICKNESSES AND HYDRAULIC DRAWINGS FOR SUB-FLOOR DRAINAGE FOR DETERMINATION OF REQUIRED BULK EARTHWORKS SURFACE.
21. EARTHWORKS LEVELS SHOWN ARE FINISHED SURFACE LEVELS INCLUSIVE OF 100mm TOPSOIL LAYER.
22. FOR DETAILED GEOTECHNICAL INFORMATION, REFER GEOTECHNICAL INVESTIGATION REPORT BY ENVIRO-TECH CONSULTANTS AUGUST 2024. IT IS RECOMMENDED THAT THE GEOTECHNICAL CONSULTANT BE CONTACTED TO CONFIRM THE SOIL CONDITIONS PRIOR TO EARTHWORKS COMMENCING.
23. REFER ARCHITECTURAL DRAWINGS FOR BUILDING SETOUT.



ROCK SPILL THROUGH WEIR
SCALE 1:50

ROADWORKS AND DRAINAGE NOTES

1. ALL ROADWORKS AND DRAINAGE CONSTRUCTION AND TESTING TO BE IN ACCORDANCE WITH LGAT DEVELOPMENT GUIDELINES, DRAWINGS AND SPECIFICATIONS.
2. ALL DRAINAGE CONSTRUCTION (PRIVATELY OWNED DRAINAGE LINES INTERNAL TO THE SITE BOUNDARIES) CONSTRUCTED AND TESTED TO BE IN ACCORDANCE WITH RELEVANT AUSTRALIAN STANDARDS.
3. ALL STORMWATER DRAINAGE PIPES SITE SHALL BE U.N.O:
 - a) 300 DIA AND GREATER CLASS 2 R.C. RUBBER RING JOINTED
4. ALL STORMWATER PIPES ARE TO BE MANUFACTURED TO RELEVANT AUSTRALIAN STANDARDS INCLUDING BUT NOT LIMITED TO AS4058 AND AS1992.
5. STORMWATER DRAINAGE AND STRUCTURES HAVE BEEN DESIGNED FOR OPERATIONAL LOADS ONLY. CONTRACTOR TO CONSIDER CONSTRUCTION LOADINGS AND ENSURE NO EXCESSIVE LOADS ARE PLACED ON STORMWATER DRAINAGE OR STRUCTURES.
6. ALL PRECAST END STRUCTURES TO BE CONSTRUCTED WITH REINFORCED CONCRETE END WALL.
7. CONTRACTOR TO CONFIRM LOCATION AND LEVEL OF EXISTING STORMWATER DRAINAGE WHERE CONNECTING ON TO EXISTING.
8. CONTRACTOR TO NOTIFY THE SUPERINTENDENT OF ANY UNSUITABLE FOUNDING MATERIAL WITHIN DRAINAGE TRENCH OR STORMWATER STRUCTURES AND AWAIT DIRECTION PRIOR TO LAYING OF PIPES.
9. TRENCH BACKFILL UNDER PAVEMENT TO BE COMPACTED TO 100% STANDARD DRY DENSITY (AS1289 5.1.1) IN LAYERS NOT EXCEEDING 150mm OF CBR 15 MATERIAL OR APPROVED EQUIVALENT. TRENCH BACKFILL IN ROADS TO BE MINIMUM CBR15 MATERIAL UP TO ROAD SUBGRADE LEVEL.
10. ALL STORMWATER GRATES/LIDS WITHIN TRAFFICABLE AREAS TO BE CLASS "D" IN ACCORDANCE WITH AS3996.
11. ALL GRATES AND LIDS SHALL SIT FLAT WITH ITS SURROUND AND NOT BE LOOSE OR MOVE UNDER WHEEL LOADS.
12. ALL STORMWATER STRUCTURES TO BE CONSTRUCTED IN ACCORDANCE WITH PROJECT SPECIFICATION, AND LOCAL AUTHORITY GUIDELINES AND SPECIFICATIONS. WHERE STRUCTURES EXCEED MAXIMUM DEPTH AS IDENTIFIED WITHIN STANDARD DRAWINGS THE CONTRACTOR WILL ENSURE AN ADEQUATE STRUCTURAL DESIGN IS UNDERTAKEN FOR THE SUBJECT STRUCTURE TO BE CONSTRUCTED TO.
13. ALL FOOTPATHS TO BE CONSTRUCTED IN ACCORDANCE WITH ARCHITECTURAL/LANDSCAPING DRAWINGS AND RELEVANT AUTHORITY STANDARD DRAWINGS AND SPECIFICATIONS. FOOTPATHS TO BE CONSTRUCTED WITH MAXIMUM 2% CROSSFALL. SHOULD CONSTRUCTED FOOTPATHS EXCEED 2.5% CROSSFALL, THE CONTRACTOR WILL BE REQUIRED TO RECTIFY BY REMOVING AND REPLACING AT THEIR COST.
14. THE CONTRACTOR IS TO CONFIRM THE LOCATION OF SERVICE CONDUITS WITH THE SUPERINTENDENT PRIOR TO LAYING STORMWATER DRAINAGE.
15. ALL TRENCH EXCAVATION AND CONSTRUCTION SHALL COMPLY WITH THE REQUIREMENTS OF THE WORK HEALTH AND SAFETY ACT 2012 TASMANIA.
16. CONTRACTOR TO UNDERTAKE ROADWORKS TESTING IN ACCORDANCE WITH LGAT GUIDELINES, DRAWINGS AND SPECIFICATIONS.
17. CONTRACTOR TO UNDERTAKE AND PROVIDE CCTV OF ALL STORMWATER LINES AT ON MAINTENANCE AND OFF MAINTENANCE. SHOULD THE CCTV IDENTIFY DAMAGE OR CRACKING WITHIN THE STORMWATER PIPES, THE CONTRACTOR WILL RECTIFY THE DAMAGE WITHIN THE PIPES BY MEANS DIRECTED BY THE SUPERINTENDENT WHICH MAY INCLUDE BUT NOT BE LIMITED TO PIPE RELINING OR PIPE REPLACEMENT.

PRELIMINARY
NOT FOR CONSTRUCTION

<h1>WORK IN PROGRESS</h1>	<h1>PRINT IN COLOUR</h1>	<p>T:1300 657 402 E: info@adgce.com W: www.adgce.com Quality Assurance ISO 9001:2015 Work Health Safety ISO 45001:2018 Environmental Management ISO 14001:2015</p>	Client DEPARTMENT OF HEALTH TASMANIA	Discipline CIVIL	Status PRELIMINARY	Title GENERAL NOTES SHEET 1 OF 2
			Project Name HOSPITALS SOUTH PRODUCTION KITCHEN GRUEBER AVENUE CAMBRIDGE, TAS	Designed By MB	Checked By SW	
			Project No. 27536	Drawn By AB	Scale at A1 NTS	Drawing No. C201
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SEWER NOTES:

GENERAL:

- S1. ONLY PRODUCTS APPROVED AND CATALOGUED BY TASWATER SHALL BE USED.
- S2. WORKS MUST BE CONSTRUCTED ACCORDING TO THE MRWA SEWERAGE STANDARDS AND MRWA EDITION OF THE WSAA SEWERAGE CODE OF AUSTRALIA WSA 02-2014-3.1 AND TASWATER SUPPLEMENT TO WSA 02-2014-3.1.
- S3. THE DESIGN CONSULTANT IS RESPONSIBLE FOR THE DESIGN AND COORDINATION OF THE WORKS. ANY PROBLEM ARISING DURING CONSTRUCTION SHALL BE DIRECTED TO THE CONSULTANT.

SURVEY, SET OUT AND ASSET RECORDING

- S4. ALL CONTOURS AND LEVELS ARE IN METRES TO THE AUSTRALIAN HEIGHT DATUM (AHD-TAS83).
- S5. ALL CO-ORDINATES SHOWN ARE PLANAR WITH MGA2020 Z55 ORIGIN IN ACCORDANCE WITH THE SITE SURVEY.
- S6. CHAINAGES SHOWN ON DETAIL PLANS ARE DISCONTINUOUS AT MAINTENANCE STRUCTURES. CHAINAGES SHOWN ON LONG SECTION SHEETS ARE CONTINUOUS.
- S7. COORDINATES ARE TO SEWER LINE INTERSECTION POINT UNLESS OTHERWISE SHOWN.
- S8. BEFORE COMMENCEMENT OF WORK, THE CONTRACTOR MUST COMPLETE A LEVEL CHECK BETWEEN ALL TBM'S TO VERIFY LEVEL VALUES.
- S9. TBM'S AND CONTROL POINTS ARE TO BE MAINTAINED AND PROTECTED AT ALL TIMES DURING CONSTRUCTION. SHOULD ANY MARKS BE DISTURBED, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE CONSULTANT TO ARRANGE RE-INSTALLMENT AT THE CONTRACTORS EXPENSE.

PROPERTY CONNECTIONS

- S10. NUMBER OF LOTS TO BE SEWERED, 5 LOT
- S11. ALL PROPERTY CONNECTIONS TO BE DN150 U.N.O.
- S12. BRANCH TIE DISTANCE SHOWN ON DETAIL PLANS ARE FROM APPROVED SUBDIVISION SURVEY PEGS. BRANCH TIES FOR FUTURE LOTS ARE SHOWN AS A CHAINAGE. (CH) DISTANCE IS FROM THE DOWNSTREAM SEWER STRUCTURE.
- S13. INVERT LEVEL OF THE PROPERTY CONNECTION POINT IS SHOWN OPPOSITE THE BRANCH POSITION.

BENDS

- S14. DETECTABLE MARKERS SHALL BE INSTALLED ABOVE ALL BENDS WHICH ARE NOT DIRECTLY CONNECTED TO MAINTENANCE STRUCTURES. REFER FIGURE 104B-B.

EARTHWORKS AND RETAINING WALLS

- S15. IN AREAS SUBJECT TO EARTHWORKS, CONSTRUCTION OF SEWERS SHALL COMMENCE UNTIL EARTHWORKS HAS BEEN COMPLETED UNLESS WRITTEN APPROVAL HAS BEEN GIVEN BY TASWATER.

EMBEDMENT

- S16. EMBEDMENT SHALL BE TYPE A (REFER MRWA-S-202) UNLESS OTHERWISE SPECIFIED ON THE LONGITUDINAL SECTION. (SPECIFY NON STANDARD EMBEDMENT ON THE LONG SECTIONS)

BACKFILL

- S17. SELECTION AND COMPACTION OF TRENCH BACKFILL MATERIAL SHALL BE IN ACCORDANCE WITH TASWATER ADOPTED VERSION OF MRWA SPECIFICATION NO 04-03 AND TASWATER SUPPLEMENT TO WSA 02-2014-3.1.
- S18. REFER TO LONGITUDINAL SECTION DRAWINGS FOR BACKFILL REQUIREMENTS.

COMPACTION TESTING

- S19. TEST RESULTS SHALL BE PROVIDED TO THE SUPERINTENDENT PRIOR TO PRACTICAL COMPLETION / ACCEPTANCE OF WORKS.

- S20. THE CONTRACTOR IS REQUIRED TO UNDERTAKE ALL TESTING OF FILL COMPACTION IN ACCORDANCE WITH TASWATER ADOPTED VERSION OF THE MRWA BACKFILL SPECIFICATION 04-03 AND TASWATER SUPPLEMENT TO WSA 02-2014-3.1.

SAFETY

- S21. PRIOR TO COMMENCEMENT OF WORKS ON SITE, THE CONTRACTOR MUST ENSURE THAT ALL MATTERS RELATING TO THE WORK HEALTH AND SAFETY ACT 2012 AND WORK HEALTH AND SAFETY REGULATIONS 2022, AND OCCUPATIONAL HEALTH AND SAFETY REGULATIONS 2017, HAVE BEEN AND WILL BE COMPLIED WITH.

WORK ON LIVE SEWERS:

- S22. ALL EXISTING SEWERS MUST BE PLUGGED IN ACCORDANCE WITH TASWATER REQUIREMENTS TO STOP GAS EMISSIONS PRIOR TO ANY CONNECTIONS BEING MADE.
- S23. TO ENABLE CONNECTIONS TO LIVE ASSETS OR ANY WORK ON LIVE ASSETS, THE CONTRACTOR SHALL SUBMIT THE APPROPRIATE FORMS TO THE SUPERINTENDENT AT LEAST 3 WORKING DAYS PRIOR TO ANY WORKS ON LIVE SEWERS.
- S24. THE CONTRACTOR IS NOT PERMITTED TO BREAK INTO AN EXISTING LIVE PIPELINE, ENTER A LIVE SEWER OR REMOVE THE COVER TO A LIVE MAINTENANCE STRUCTURE UNLESS

TESTING:

- S25. THE CONTRACTOR IS TO GIVE A MINIMUM OF TWO (2) DAYS NOTICE TO THE SUPERINTENDENT AND HIAPL PRIOR TO THE TESTING BEING UNDERTAKEN. TESTING IS TO BE UNDERTAKEN IN THE PRESENCE OF THE SUPERINTENDENT.

CULTURAL HERITAGE REQUIREMENTS:

- S26. THE CONTRACTOR IS TO KEEP A COPY OF THE APPROVED CULTURAL HERITAGE MANAGEMENT PLAN ON SITE AT ALL TIMES DURING WORKS.

ENVIRONMENTAL MANAGEMENT PLAN:

- S27. ON COMMENCEMENT OF CONSTRUCTION WORKS THE CONTRACTOR MUST COMPLY WITH THE RECOMMENDATIONS OF THE EPA TASMANIA PUBLICATION "EROSION AND SEDIMENT CONTROL - THE FUNDAMENTALS FOR DEVELOPMENT IN TASMANIA"
- S28. PRIOR TO THE COMMENCEMENT OF WORK, THE CONTRACTOR IS TO SUBMIT A SITE ENVIRONMENTAL MANAGEMENT PLAN TO HIAPL.
- S29. ALL TREES AND VEGETATION ARE TO BE PROTECTED UNLESS OTHERWISE INDICATED FOR REMOVAL. THE EXTENT OF ANY VEGETATION REMOVAL SHALL BE CONFIRMED ON SITE WITH THE SUPERINTENDENT AND HIAPL PRIOR TO COMMENCEMENT, AND IN ACCORDANCE WITH ANY PLANNING PERMITS. ANY REMOVAL SHALL BE DOCUMENTED.
- S30. ALL AREAS CONTAINING CREEK VEGETATION, TREES AND RE VEGETATED AREAS NEAR THE CONSTRUCTION ZONE ARE TO BE FENCED OFF DURING THE WORKS WITH SECURE AND HIGHLY VISIBLE MATERIAL SUCH AS PARA-WEBBING FENCING.
- S31. ENSURE ALL MACHINERY, EQUIPMENT AND/OR FOOTWEAR ENTERING THE SITE IS WEED AND PATHOGEN FREE.

WATER NOTES:

GENERAL:

- W1. ONLY PRODUCTS APPROVED AND CATALOGUED BY TASWATER SHALL BE USED.
- W2. WORKS MUST BE CONSTRUCTED ACCORDING TO WSA 03-2011 MRWA EDITION. THE CONTRACTOR SHALL ENSURE THAT THEY ARE CONVERSANT WITH ALL CURRENT REVISIONS, AMENDMENTS AND UPDATES THAT THE RELEVANT WATER AGENCY HAS MADE TO THEIR STANDARDS.
- W3. DRINKING WATER (DW) AND NON-DRINKING WATER (NDW) ASSETS SHALL ONLY BE CONSTRUCTED AFTER DEEPER ASSETS AFFECTING THE WATER MAINS HAVE BEEN CONSTRUCTED (EG. SEWERAGE & DRAINAGE ASSETS).
- W4. THIS DESIGN IS TO BE READ IN CONJUNCTION WITH ROAD AND DRAINAGE PLANS.
- W5. THE CONTRACTOR SHALL OBTAIN A ROAD OPENING PERMIT FOR ANY WORKS WITHIN THE ROAD RESERVE AND COMPLY WITH ALL REQUIREMENTS OF THE ROAD OWNER.

SURVEY, SET OUT AND ASSET RECORDING

- W6. TEMPORARY BENCH MARKS (TBM) FOR THE SET OUT OF WORKS TO THE AUSTRALIAN HEIGHT DATUM (AHD) ARE PROVIDED IN THE DESIGN DRAWINGS.
- W7. ALL CONTOURS AND LEVELS ARE IN METRES TO THE AUSTRALIAN HEIGHT DATUM (AHD-TAS83).
- W8. ALL CO-ORDINATES SHOWN ARE PLANAR WITH MGA2020 Z55 ORIGIN IN ACCORDANCE WITH THE SITE SURVEY.
- W9. THE CONTRACTOR IS DIRECTLY RESPONSIBLE FOR ENSURING THE PROJECT SET OUT IS CONSISTENT WITH THE DESIGN. SHOULD ACTUAL SITE CONDITIONS CONFLICT IN ANY WAY WITH THAT DOCUMENTED, THE CONTRACTOR SHALL CONTACT THE SUPERINTENDENT FOR CLARIFICATION BEFORE PROCEEDING.
- W10. THE CONTRACTOR IS TO ENGAGE A SUITABLY QUALIFIED AND EXPERIENCED SURVEYOR TO UNDERTAKE ASSET RECORDING OF THE WORK. ALL SURVEYOR WORKS AND DATA RECORDING SHALL BE UNDERTAKEN IN ACCORDANCE WITH THE MRWA SURVEY MANUAL.
- W11. ALL SPECIFIC PIPE MATERIALS (EG. PVC-O) SHALL BE INDICATED IN THE AS CONSTRUCTED INFORMATION.

PRODUCTS AND MATERIALS

- W12. DRINKING WATER (DW) AND NON-DRINKING WATER (NDW) SYSTEM COMPONENTS SHALL BE DIFFERENTIATED AS PER SECTION 4.2 OF WSA03-2011, MRWA EDITION.

WATER MAIN ALIGNMENT, TRENCHING & COVER

- W13. OFFSETS OF MAINS FROM PROPERTY BOUNDARIES SHALL BE: MIN 600mm (MAINS < DN100) AND MIN 1m (MAINS ≥DN100).
- W14. ALL WATER MAINS SHALL PASS OVER DRAINS AND SEWERS UNLESS SHOWN OTHERWISE IN THE DESIGN DRAWINGS.

EMBEDMENT

- W15. TYPE A EMBEDMENT SAND SHALL BE USED IN ACCORDANCE WITH MRWA STANDARD DRAWING MRWA-W-203.

BACKFILL

- W16. NON TRAFFICABLE BACKFILL SHALL BE COMPLETED AS PER MRWA-W-201 AND THE CURRENT VERSION OF THE MRWA BACKFILL SPECIFICATION.

THRUST RESTRAINT

- W18. THRUST RESTRAINTS HAVE BEEN DESIGNED ON THE BASIS OF THE AHPB (GROUND STRENGTH) NOMINATED IN TABLE 1 ON C271. THE CONTRACTOR SHALL CONFIRM THE ACTUAL GROUND CONDITIONS AND DISCUSS WITH THE SUPERINTENDENT ANY GROUND CONDITIONS WHICH ARE FOUND TO BE DIFFERENT TO THAT NOMINATED.

PROPERTY SERVICES

- W19. NON-DRINKING WATER (NDW) PROPERTY SERVICES SHALL ALWAYS BE LOCATED ON THE LEFT OF THE DRINKING WATER (DW) PROPERTY SERVICE AS YOU LOOK FROM THE ROAD TO THE FRONT OF THE PROPERTY.

CONNECTIONS (ALL TYPES)

- W20. ALL PROPERTY SERVICE CONNECTIONS TO NEW RESIDENTIAL RRJ RETICULATION MAINS ARE TO BE COMPLETED USING PRETAPPED CONNECTORS. REFER IN TABLE 2 ON C271 FOR WATER CONNECTIONS SCHEDULE.

OTHER SERVICES

- W21. TO RECEIVE THE MOST UP TO DATE INFORMATION PRIOR TO CONSTRUCTION, "BEFORE YOU DIG AUSTRALIA" SHALL BE UNDERTAKEN TO AID IN THE LOCATION OF OTHER SERVICES. OTHER SERVICES SHALL BE CAREFULLY LOCATED PRIOR TO FULL EXCAVATION AT THE CONTRACTOR'S COST. ANY CLASHES OF PROPOSED NEW WORKS WITH OTHER ASSETS SHALL BE REPORTED TO THE SUPERINTENDENT IMMEDIATELY FOR CLARIFICATION.
- W22. CLEARANCES TO OTHER SERVICES SHALL BE AS PER TABLE 2 AND TABLE 5.5 OF WSA03- 2011 MRWA EDITION. THESE CLEARANCES SHALL APPLY TO SURFACE COVERS AS WELL AS UNDERGROUND ASSETS.

EARTHWORKS AND RETAINING WALLS:

- W23. IN AREAS SUBJECT TO EARTHWORKS, CONSTRUCTION OF WATER ASSETS SHALL NOT COMMENCE UNTIL EARTHWORKS AND RETAINING WALLS HAS BEEN COMPLETED UNLESS WRITTEN APPROVAL HAS BEEN GIVEN BY TASWATER.

TESTING, ASSET ACCEPTANCE AND LIVE CONNECTIONS

- W24. POST CONSTRUCTION ACTIVITIES (OF BOTH DRINKING WATER (DW) & NON-DRINKING WATER (NDW)) SUCH AS SWABBING, WATER QUALITY TESTING, PRESSURE TESTING AND CHLORINATION SHALL BE CARRIED OUT IN ACCORDANCE WITH WSA03-2011 MRWA EDITION, THE MRWA WATER QUALITY COMPLIANCE SPECIFICATION AND TASWATER SUPPLEMENT AND SPECIFICATIONS. ALL TEST RESULTS SHALL BE DOCUMENTED AND REPORTED TO THE SUPERINTENDENT.
- W25. HIAPL SHALL BE NOTIFIED IN WRITING 2 FULL WORKING DAYS IN ADVANCE OF TESTING BEING UNDERTAKEN.
- W26. BOTH ENDS OF DRINKING WATER (DW) AND NON-DRINKING WATER (NDW) MAIN TO METER PROPERTY SERVICES SHALL BE INSPECTED BY HIAPL. HIAPL SHALL BE NOTIFIED IN WRITING 2 FULL WORKING DAYS IN ADVANCE OF THIS INSPECTION BEING CARRIED OUT. BOTH ENDS OF DW-NDW MAIN TO METER PROPERTY SERVICES ARE TO REMAIN EXPOSED UNTIL INSPECTED BY HIAPL COMPLIANCE OFFICER.
- W27. EACH PROPERTY SERVICE SHALL BE "SQUIRT TESTED". THIS TEST INVOLVES PLACING EACH NETWORK UNDER PRESSURE SEPARATELY AND ENSURING THAT ONLY THE END OF THE CORRECT PROPERTY SERVICE DISCHARGES WATER.
- W28. THE CONTRACTOR'S ITP SHALL INCLUDE PROVISION FOR EACH NON-DRINKING WATER (NDW) CONNECTION TO BE SIGNED OFF AS CORRECTLY INSTALLED.
- W29. HIAPL SHALL BE NOTIFIED IN WRITING 5 / 9 FULL WORKING DAYS IN ADVANCE OF CONNECTION TO THE LIVE NETWORK BEING UNDERTAKEN. SHUT DOWN WORK SHALL BE AS SHORT AS PRACTICAL AND SCHEDULED TO COMMENCE AT 9AM ON WORKING DAYS WITH COMPLETION TO OCCUR NO LATER THAN 4PM.

NOTE:

CONTRACTOR TO ALLOW TO COORDINATE WITH HIAPL AND DOH AND OBTAIN ALL NECESSARY PERMITS.

NOTE:

CONTRACTOR TO ALLOW FOR ALL NECESSARY TRENCH SHORING MEASURES.

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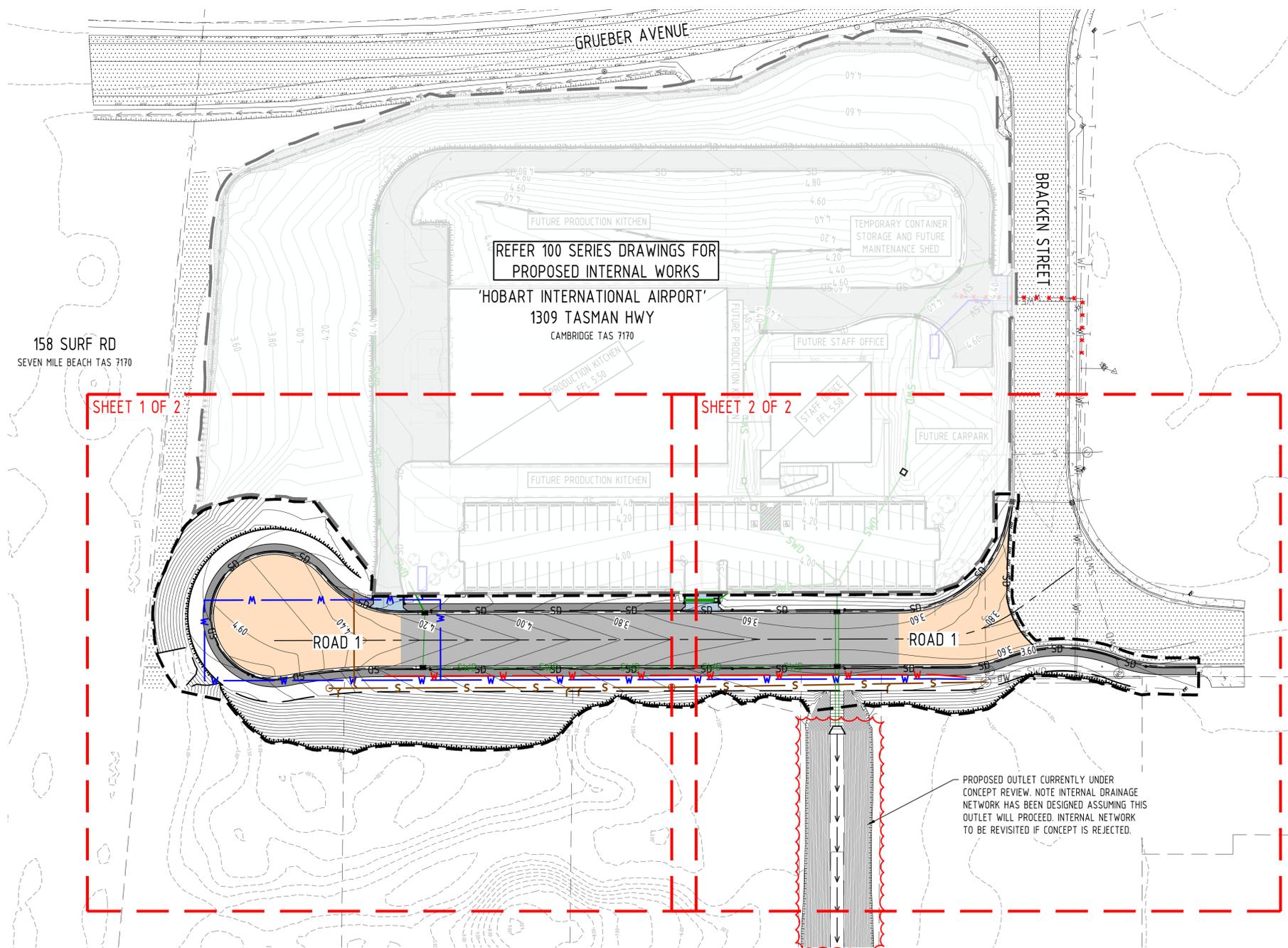
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Client DEPARTMENT OF HEALTH TASMANIA	Discipline CIVIL	Status PRELIMINARY	Title GENERAL NOTES SHEET 2 OF 2
Project Name HOSPITALS SOUTH PRODUCTION KITCHEN GRUEBER AVENUE CAMBRIDGE, TAS	Designed By MB	Checked By SW	Approved By SW
Project No. 27536	Drawn By AB	Scale at A1 NTS	Drawing No. C202
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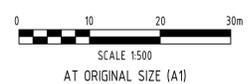


LEGEND

- 12.0 FINISHED SURFACE CONTOURS
- SITE BOUNDARY
- EXTERNAL LIMIT OF WORKS
- INTERNAL LIMIT OF WORKS
- EXISTING PROPERTY BOUNDARY
- EXISTING EASEMENT BOUNDARY
- EXISTING NOMINAL KERB LINE
- EXISTING EDGE OF BITUMEN
- EXISTING ROAD CENTERLINE
- EXISTING STORMWATER DRAINAGE
- EXISTING SEWER
- EXISTING WATER
- EXISTING TELECOMMUNICATIONS
- EXISTING BATTER
- EXISTING FENCE
- EXISTING EARTHWORKS DRAIN
- EXISTING CONCRETE DRAIN
- PROPOSED STORMWATER DRAINAGE
- PROPOSED SUBSOIL DRAINAGE
- PROPOSED SEWER
- PROPOSED WATER MAIN
- PROPOSED FIRE WATER MAIN
- PROPOSED 'TYPE KCM' MOUNTABLE KERB AND CHANNEL IN ACCORDANCE WITH LGAT STD DRG TSD-R14
- PROPOSED SEP TYPE 5. REFER IPWEA TAS STD TSD-SW12
- PROPOSED ROAD CENTRE LINE
- EXISTING ROAD
- EXISTING FOOTPATH
- PROPOSED ASPHALT PAVEMENT. REFER TO DRG C232 FOR DETAILS
- PROPOSED 1.5m WIDE FOOTPATH. REFER TO DRG C232 FOR DETAILS
- INTERSECTION AND CUL-DE-SAC - 50mm ASPHALT PAVEMENT. REFER TO DRG C232 FOR DETAILS
- PROPOSED DRIVEWAY CROSSOVER IN ACCORDANCE WITH LGAT STD DRG. TSD-09 TRANSITION TO BE HEAVY DUTY TYPE AS PER TSD-R16



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Client DEPARTMENT OF HEALTH TASMANIA	Discipline CIVIL	Status PRELIMINARY
Project Name HOSPITALS SOUTH PRODUCTION KITCHEN GRUEBER AVENUE CAMBRIDGE, TAS	Designed By MB	Checked By SW
	Project No. 27536	Drawn By AB

Approved By SW	Scale at A1 1:500
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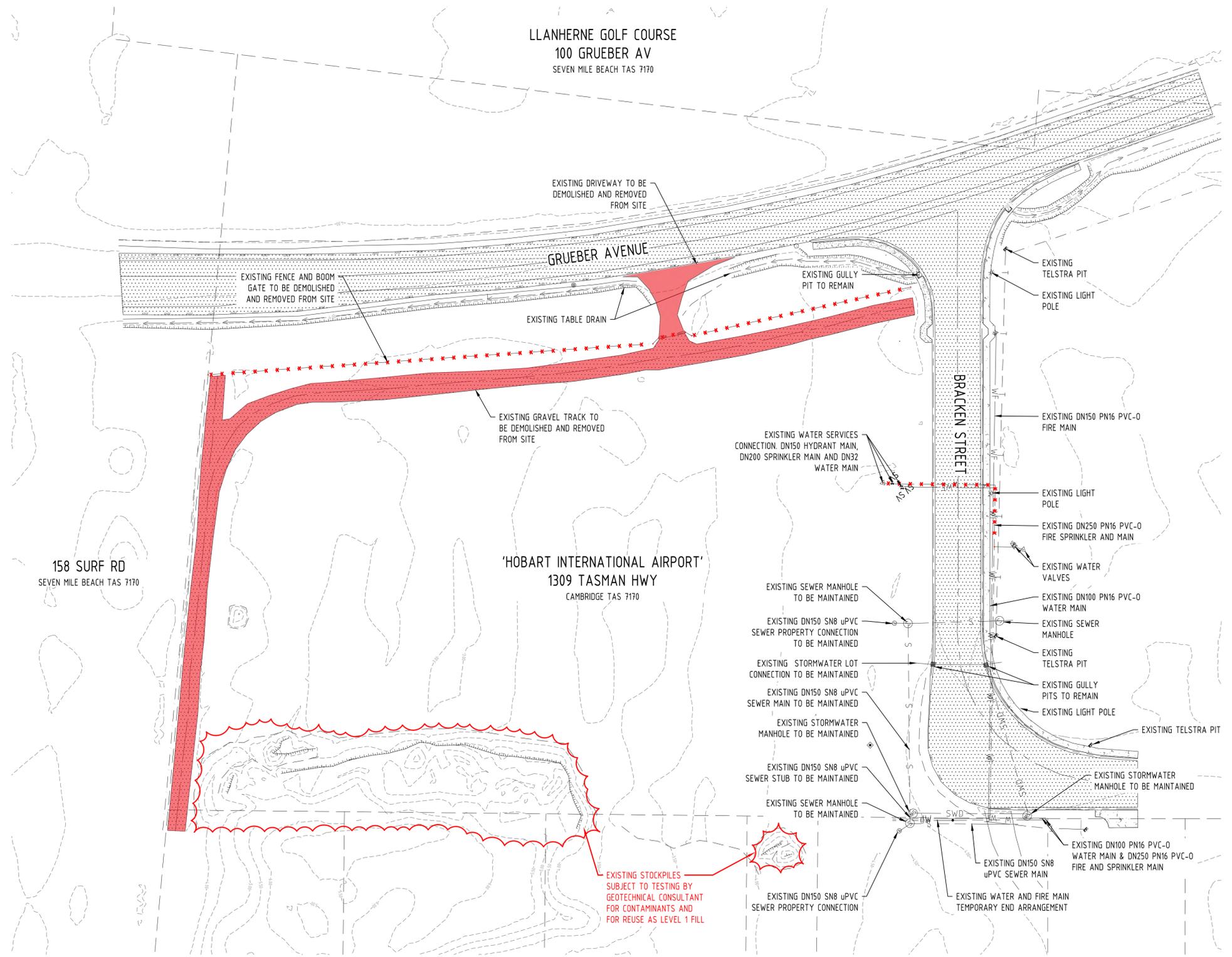
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Title OVERALL LAYOUT PLAN	
Drawing No. C203	Revision



LEGEND

- 12.0 EXISTING SURFACE CONTOURS
- LIMIT OF WORKS
- INDICATIVE SITE BOUNDARY
- EXISTING PROPERTY BOUNDARY
- EXISTING NOMINAL KERB LINE / EDGE OF ROAD
- EXISTING EDGE OF BITUMEN
- EXISTING ROAD CENTERLINE
- EXISTING STORMWATER DRAINAGE
- EXISTING SEWER
- EXISTING WATER
- EXISTING FIRE AND SPRINKLER MAIN
- EXISTING TELECOMMUNICATIONS
- EXISTING BATTER
- EXISTING FENCE
- EXISTING INFRASTRUCTURE TO BE REMOVED
- EXISTING EARTHWORKS DRAIN
- EXISTING ROAD
- EXISTING FOOTPATH
- EXISTING ROAD TO BE DEMOLISHED AND REMOVED FROM SITE

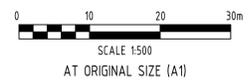


CAUTION
 THE LOCATION AND DEPTH OF EXISTING SERVICES AS SHOWN IS BASED ON INFORMATION OBTAINED FROM ARTHUR MOEHRKE SURVEYS PTY LTD DATED 26/04/24 AND HIAPL RECORDS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM THE ACTUAL LOCATION AND DEPTH OF EXISTING SERVICES PRIOR TO CARRYING OUT ANY EXCAVATION, TRENCHING OR TUNNELING WORKS.

WARNING ⚠
 EXISTING FIBRE OPTIC, ELECTRICAL AND TELECOM CABLES MAY EXIST IN THE VICINITY OF REQUIRED WORKS. FOR ALL WORK WITHIN 2.5m OF MAJOR OPTIC CABLES, THE CONTRACTOR IS REQUIRED TO HAND DIG (POTHOLE) AND EXPOSE THE CABLE/CONDUIT. BEFORE WORK CAN COMMENCE, ON SITE LOCATION SHOULD BE SOUGHT FROM AN ACCREDITED PLANT LOCATOR.



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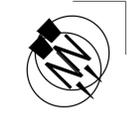
Client DEPARTMENT OF HEALTH TASMANIA	
Project Name HOSPITALS SOUTH PRODUCTION KITCHEN GRUEBER AVENUE CAMBRIDGE, TAS	

Discipline CIVIL		Status PRELIMINARY
Designed By MB	Checked By SW	Approved By SW
Project No. 27536	Drawn By AB	Scale at A1 1:500

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Title
EXISTING FEATURES
LAYOUT PLAN

Drawing No.
C204

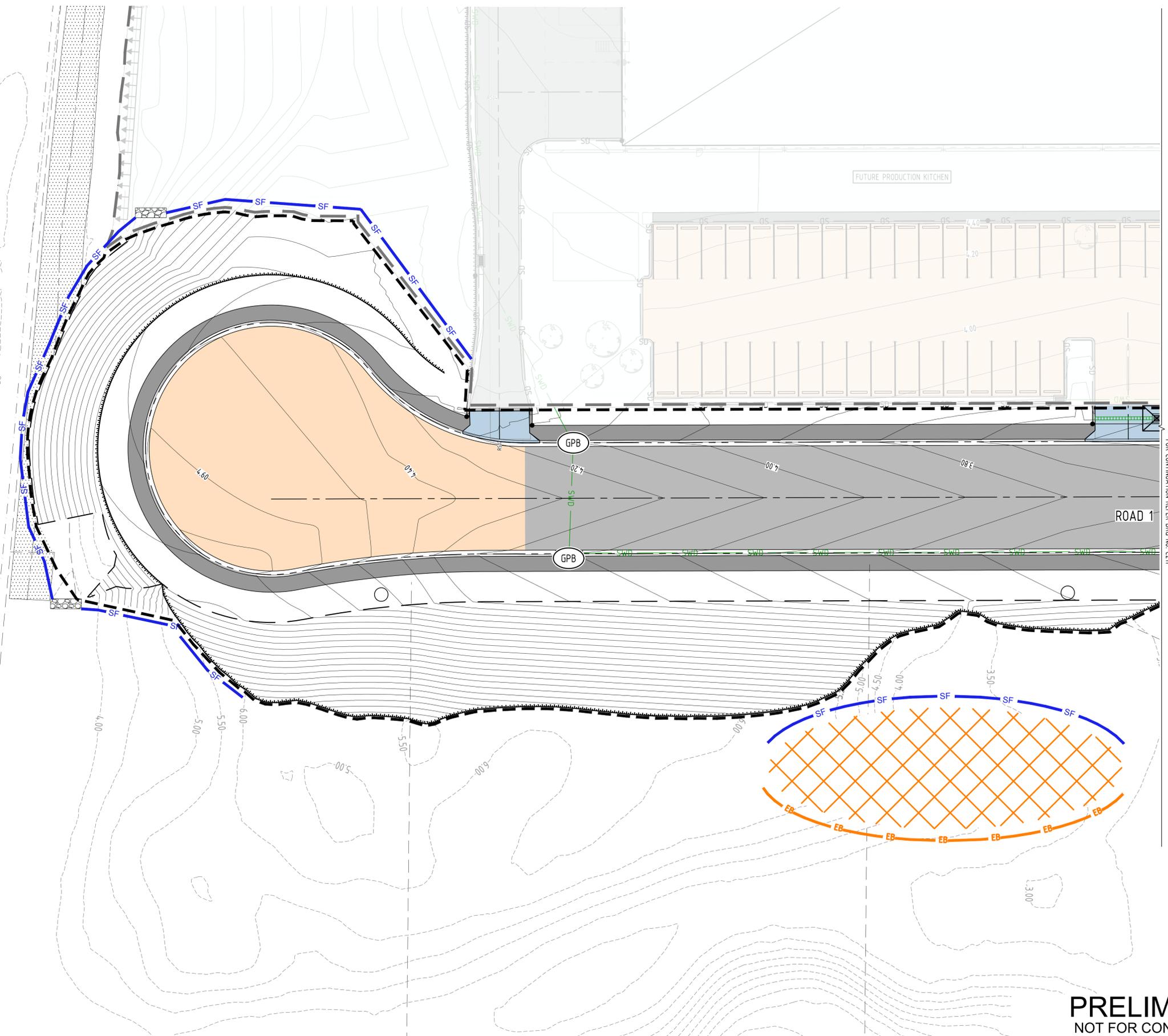


LEGEND

- INDICATIVE SITE BOUNDARY
- EXTERNAL LIMIT OF WORKS
- INTERNAL LIMIT OF WORKS
- EXISTING PROPERTY BOUNDARY
- EXISTING SURFACE CONTOURS
- EARTHWORKS CONTOURS
- EXISTING NOMINAL KERB LINE
- EXISTING STORMWATER DRAINAGE
- EXISTING STORMWATER DRAINAGE BYDA
- PROPOSED ROAD KERB
- PROPOSED BATTER
- PROPOSED STORMWATER DRAINAGE
- PROPOSED SEP TYPE 3. REFER IPWEA TAS STD TSD-SW09
- PROPOSED GRATED PIT IN ACCORDANCE WITH TSD-SW15 AND TSD-SW14
- FIELD INLET SEDIMENT BARRIER
- GULLY PIT SEDIMENT BARRIER
- SEDIMENT FENCE (INDICATIVE LOCATION)
- SEDIMENT FENCE (INDICATIVE LOCATION)
- PROPOSED SWALE
- EXISTING ROAD
- EXISTING FOOTPATH
- ROCK SPILL THROUGH WEIR. REFER DRG C201 FOR DETAIL
- CONSTRUCTION ENTRY/EXIT SHAKEDOWN AREA
- INDICATIVE LAYDOWN
- INDICATIVE SITE STOCKPILE
- PROPOSED ASPHALT PAVEMENT. REFER TO DRG C232 FOR DETAILS
- PROPOSED 15m WIDE FOOTPATH. REFER TO DRG C232 FOR DETAILS
- INTERSECTION AND CUL-DE-SAC - 50mm ASPHALT PAVEMENT. REFER TO DRG C232 FOR DETAILS
- PROPOSED DRIVEWAY CROSSOVER IN ACCORDANCE WITH LGAT STD DRG. TSD-09 TRANSITION TO BE HEAVY DUTY TYPE AS PER TSD-R16

NOTES

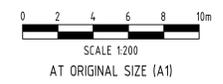
1. FOR EROSION AND SEDIMENT CONTROL NOTES AND DETAILS REFER DRG No. C201



FOR CONTINUATION REFER DRG NO. C211

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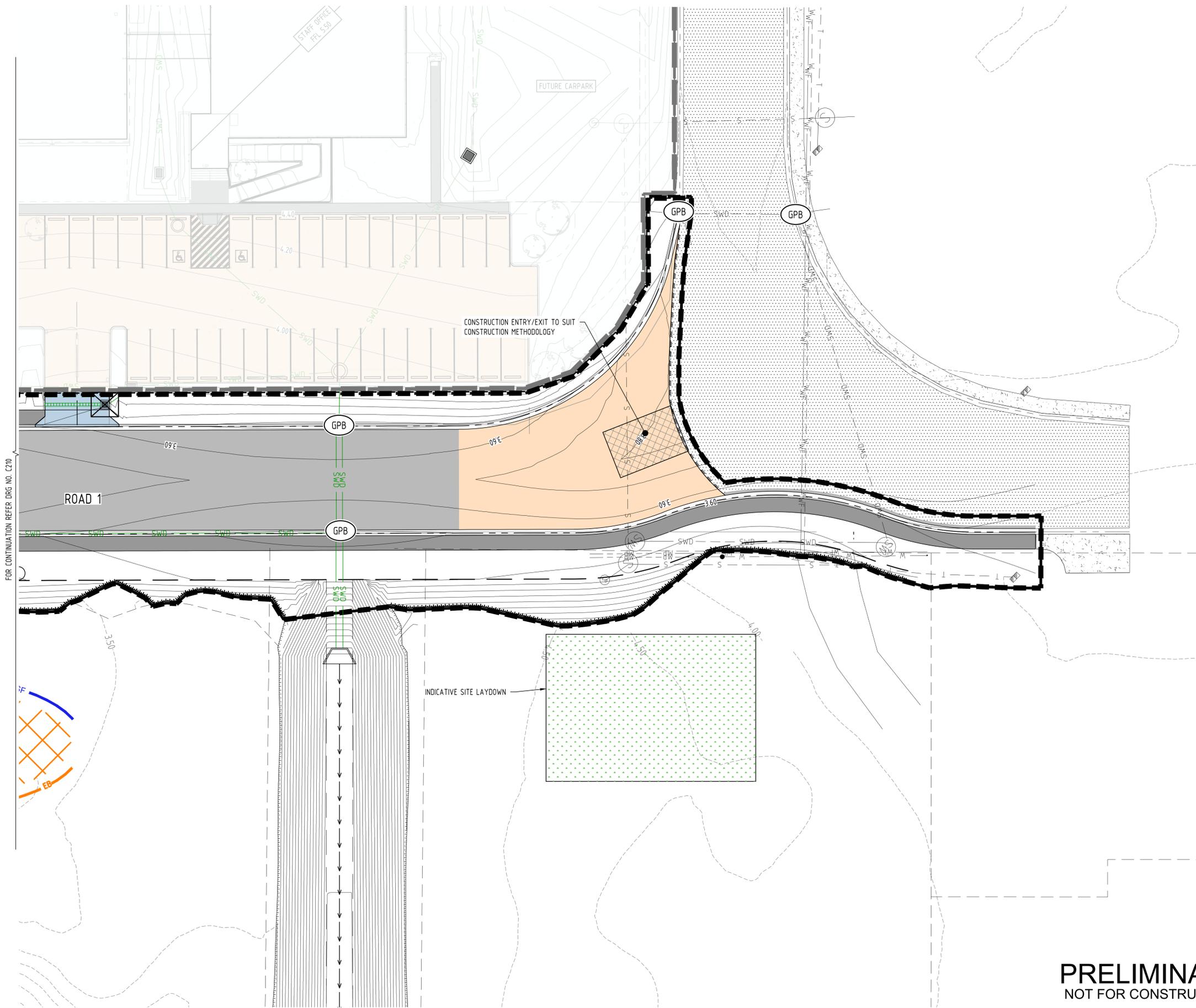
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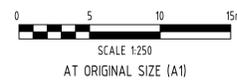
Client DEPARTMENT OF HEALTH TASMANIA		Discipline CIVIL	Status PRELIMINARY	Title EROSION AND SEDIMENT CONTROL LAYOUT PLAN CONSTRUCTION PHASE SHEET 1 OF 2	
Project Name HOSPITALS SOUTH PRODUCTION KITCHEN GRUEBER AVENUE CAMBRIDGE, TAS		Designed By MB	Checked By SW		Approved By SW
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				Drawing No. C210	

NOTES

1. FOR EROSION AND SEDIMENT CONTROL CONSTRUCTION PHASE LEGEND REFER DRG No. C210
2. FOR EROSION AND SEDIMENT CONTROL NOTES AND DETAILS REFER DRG No. C201



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Client
DEPARTMENT OF HEALTH TASMANIA

Project Name
HOSPITALS SOUTH PRODUCTION KITCHEN
GRUEBER AVENUE
CAMBRIDGE, TAS

Discipline CIVIL		Status PRELIMINARY
Designed By MB	Checked By SW	Approved By SW
Project No. 27536	Drawn By AB	Scale at A1 1:200

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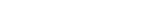
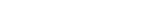
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Title
EROSION AND SEDIMENT CONTROL
LAYOUT PLAN
CONSTRUCTION PHASE SHEET 2 OF 2

Drawing No.
C211

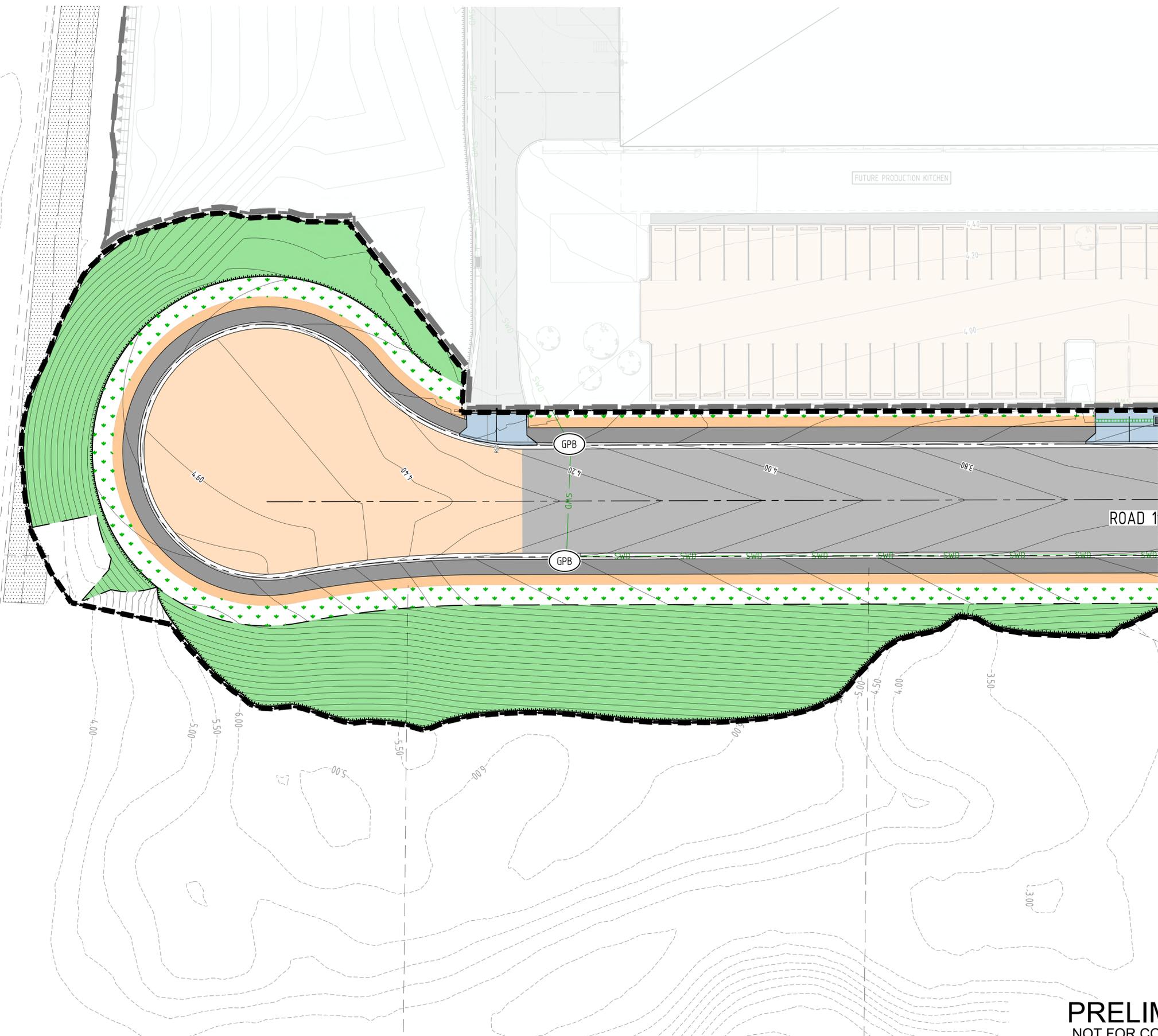


LEGEND

-  INDICATIVE SITE BOUNDARY
-  EXTERNAL LIMIT OF WORKS
-  INTERNAL LIMIT OF WORKS
-  EXISTING PROPERTY BOUNDARY
-  EXISTING SURFACE CONTOURS
-  EARTHWORKS CONTOURS
-  EXISTING NOMINAL KERB LINE
-  EXISTING STORMWATER DRAINAGE
-  EXISTING STORMWATER DRAINAGE DBYD
-  PROPOSED NOMINAL KERB LINE
-  PROPOSED BATTER
-  PROPOSED STORMWATER DRAINAGE
-  PROPOSED SEP TYPE 3. REFER IPWEA TAS STD TSD-SW09
-  PROPOSED GRATED PIT IN ACCORDANCE WITH TSD-SW15 AND TSD-SW14
-  FIELD INLET SEDIMENT BARRIER
-  GULLY PIT SEDIMENT BARRIER
-  EXISTING ROAD
-  PROPOSED ASPHALT PAVEMENT. REFER TO DRG C232 FOR DETAILS
-  PROPOSED 15m WIDE FOOTPATH. REFER TO DRG C232 FOR DETAILS
-  INTERSECTION AND CUL-DE-SAC - 50mm ASPHALT PAVEMENT. REFER TO DRG C232 FOR DETAILS
-  PROPOSED DRIVEWAY CROSSOVER IN ACCORDANCE WITH LGAT STD DRG. TSD-09 TRANSITION TO BE HEAVY DUTY TYPE AS PER TSD-R16
-  100m WIDE TURF STRIP TO BACK OF KERB/FOOTPATH
-  SOIL BINDER HYDROMULCH
-  GRASS LANDSCAPE STABILISATION

NOTES

1. FOR EROSION AND SEDIMENT CONTROL NOTES AND DETAILS REFER DRG No. C201



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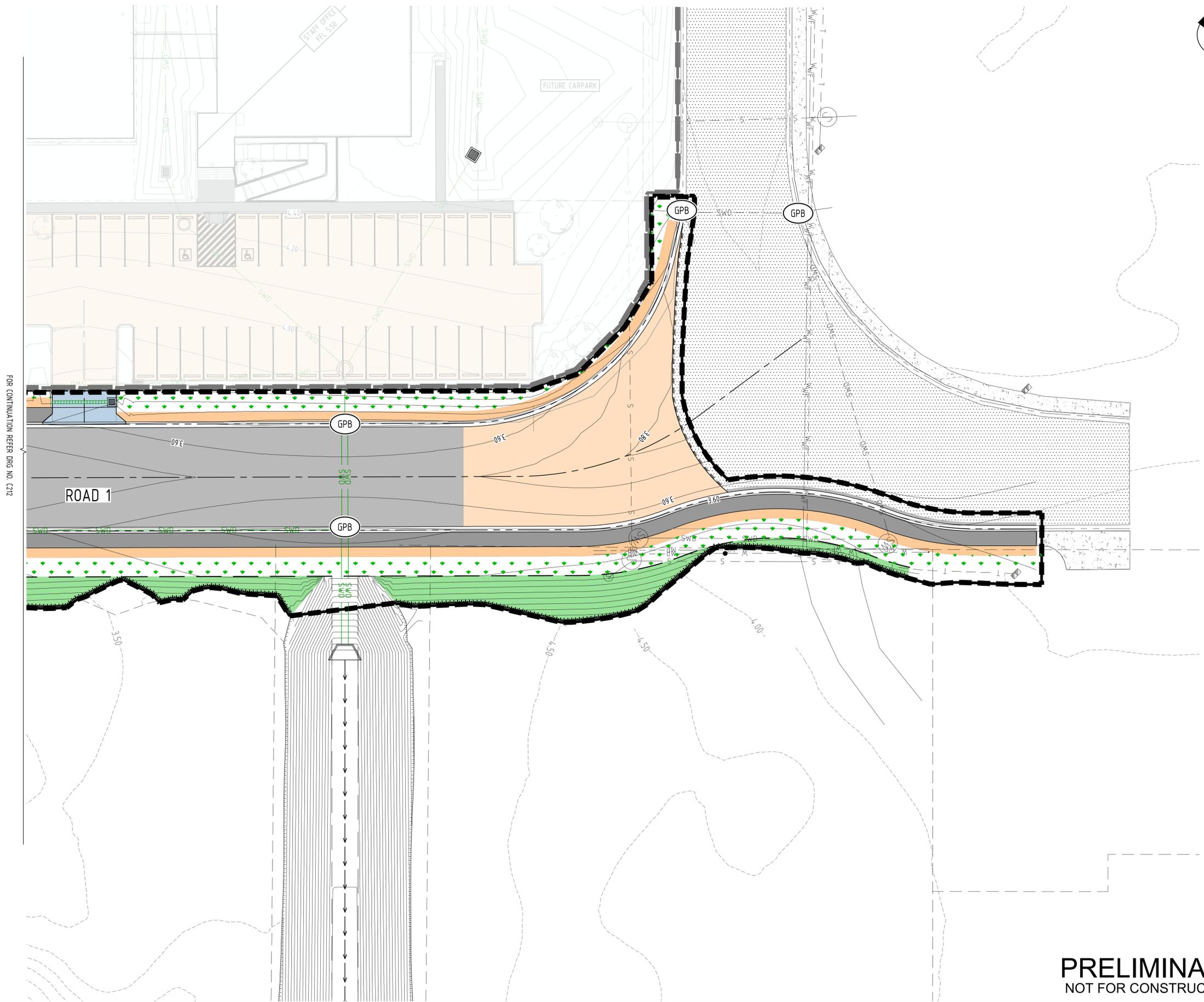


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Project Name HOSPITALS SOUTH PRODUCTION KITCHEN GRUEBER AVENUE CAMBRIDGE, TAS		Designed By MB	Checked By SW		Approved By SW
		Project No. 27536	Drawn By AB		Scale at A1 1:250
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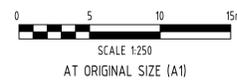
1. FOR EROSION AND SEDIMENT CONTROL STABILISATION PHASE LEGEND REFER DRG No. C210
2. FOR EROSION AND SEDIMENT CONTROL NOTES AND DETAILS REFER DRG No. C201



FOR CONTINUATION REFER DRG NO. C212

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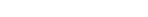
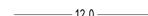
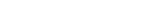
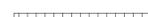
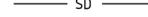
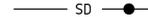


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T: 1300 657 402 E: info@adgce.com W: www.adgce.com
Quality Assurance ISO 9001:2015 | Work Health Safety ISO 45001:2018
Environmental Management ISO 14001:2015

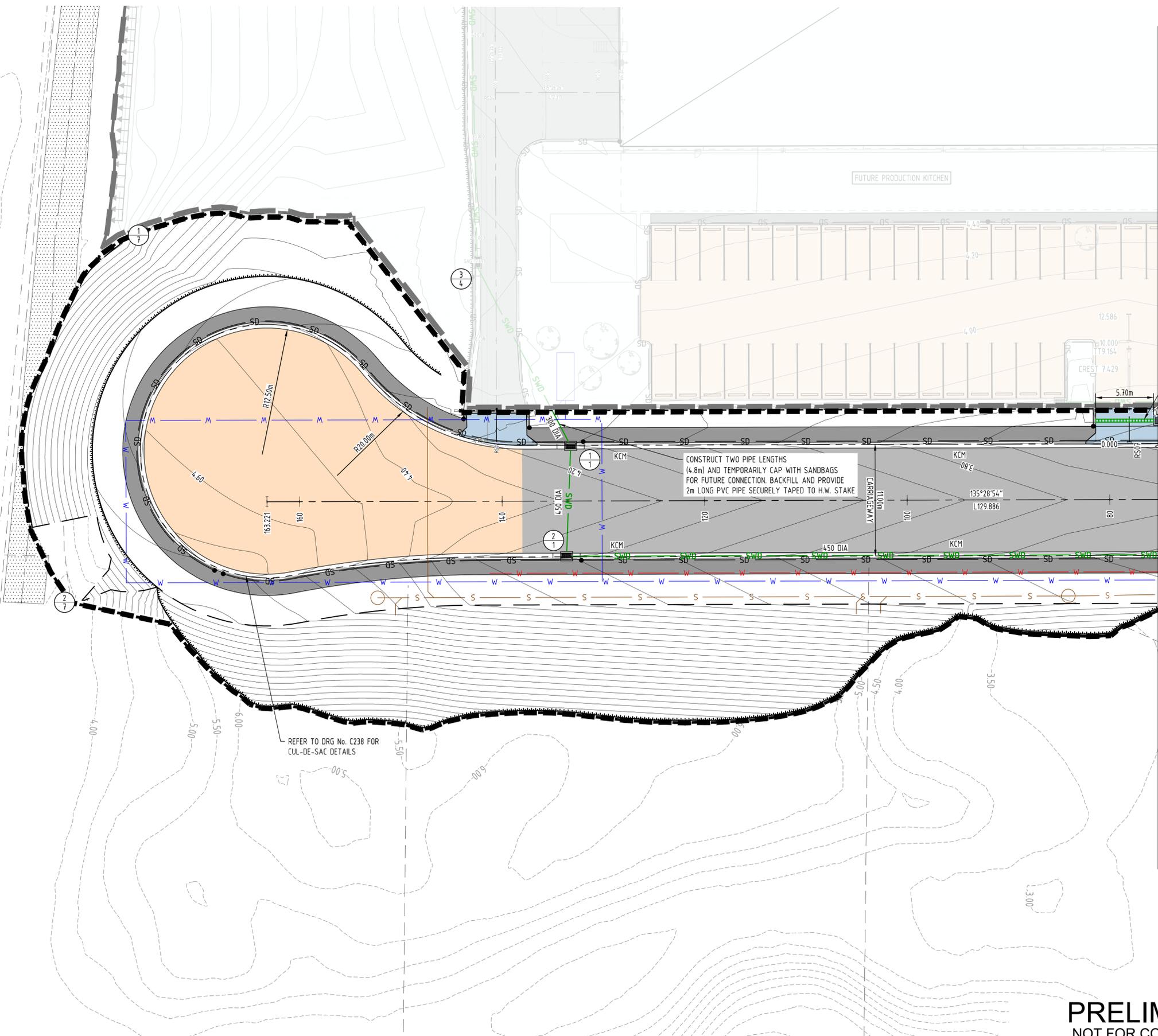
Client DEPARTMENT OF HEALTH TASMANIA		Discipline CIVIL	Status PRELIMINARY	Title EROSION AND SEDIMENT CONTROL LAYOUT PLAN STABILISATION PHASE SHEET 2 OF 2	
Project Name HOSPITALS SOUTH PRODUCTION KITCHEN GRUEBER AVENUE CAMBRIDGE, TAS		Designed By MB	Checked By SW		Approved By SW
		Project No. 27536	Drawn By AB		Scale at A1 1:250
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LEGEND

-  INDICATIVE SITE BOUNDARY
-  EXTERNAL LIMIT OF WORKS
-  INTERNAL LIMIT OF WORKS
-  12.0 FINISHED SURFACE CONTOURS
-  EXISTING PROPERTY BOUNDARY
-  EXISTING EASEMENT BOUNDARY
-  EXISTING NOMINAL KERB LINE
-  EXISTING EDGE OF BITUMEN
-  EXISTING ROAD CENTERLINE
-  EXISTING STORMWATER DRAINAGE
-  EXISTING SEWER
-  EXISTING WATER
-  EXISTING TELECOMMUNICATIONS
-  EXISTING BATTER
-  EXISTING FENCE
-  EXISTING EARTHWORKS DRAIN
-  PROPOSED STORMWATER DRAINAGE
-  PROPOSED STORMWATER OUTLET HEADWALL REFER IPWEA TAS STD DRG TSD-SW17 FOR DETAILS
-  PROPOSED SEWER
-  PROPOSED WATER MAIN
-  PROPOSED FIRE WATER MAIN
-  PROPOSED SUBSOIL DRAINAGE
-  PROPOSED SUBSOIL FLUSH POINT
-  PROPOSED 'TYPE KCM' MOUNTABLE KERB AND CHANNEL IN ACCORDANCE WITH LGAT STD DRG TSD-R14
-  PROPOSED SEP TYPE 5. REFER IPWEA TAS STD TSD-SW12
-  PROPOSED ROAD CENTRE LINE
-  DRAINAGE STRUCTURE LABEL
-  EXISTING ROAD
-  EXISTING FOOTPATH
-  PROPOSED ASPHALT PAVEMENT. REFER TO DRG C232 FOR DETAILS
-  PROPOSED 1.5m WIDE FOOTPATH. REFER TO DRG C232 FOR DETAILS
-  INTERSECTION AND CUL-DE-SAC - 50mm ASPHALT PAVEMENT. REFER TO DRG C232 FOR DETAILS
-  PROPOSED DRIVEWAY CROSSOVER IN ACCORDANCE WITH LGAT STD DRG. TSD-09 TRANSITION TO BE HEAVY DUTY TYPE AS PER TSD-R16
-  PROPOSED INDICATIVE LEASE BOUNDARY
-  ROADWORKS CHAINAGE

NOTES

1. FOR ROADWORKS AND DRAINAGE NOTES AND DETAILS REFER DRG No. C232
2. FOR STORMWATER LONGITUDINAL SECTIONS AND DETAILS REFER DRG No. C233



FOR CONTINUATION REFER DRG No. C231

PRELIMINARY
NOT FOR CONSTRUCTION

WORK IN PROGRESS

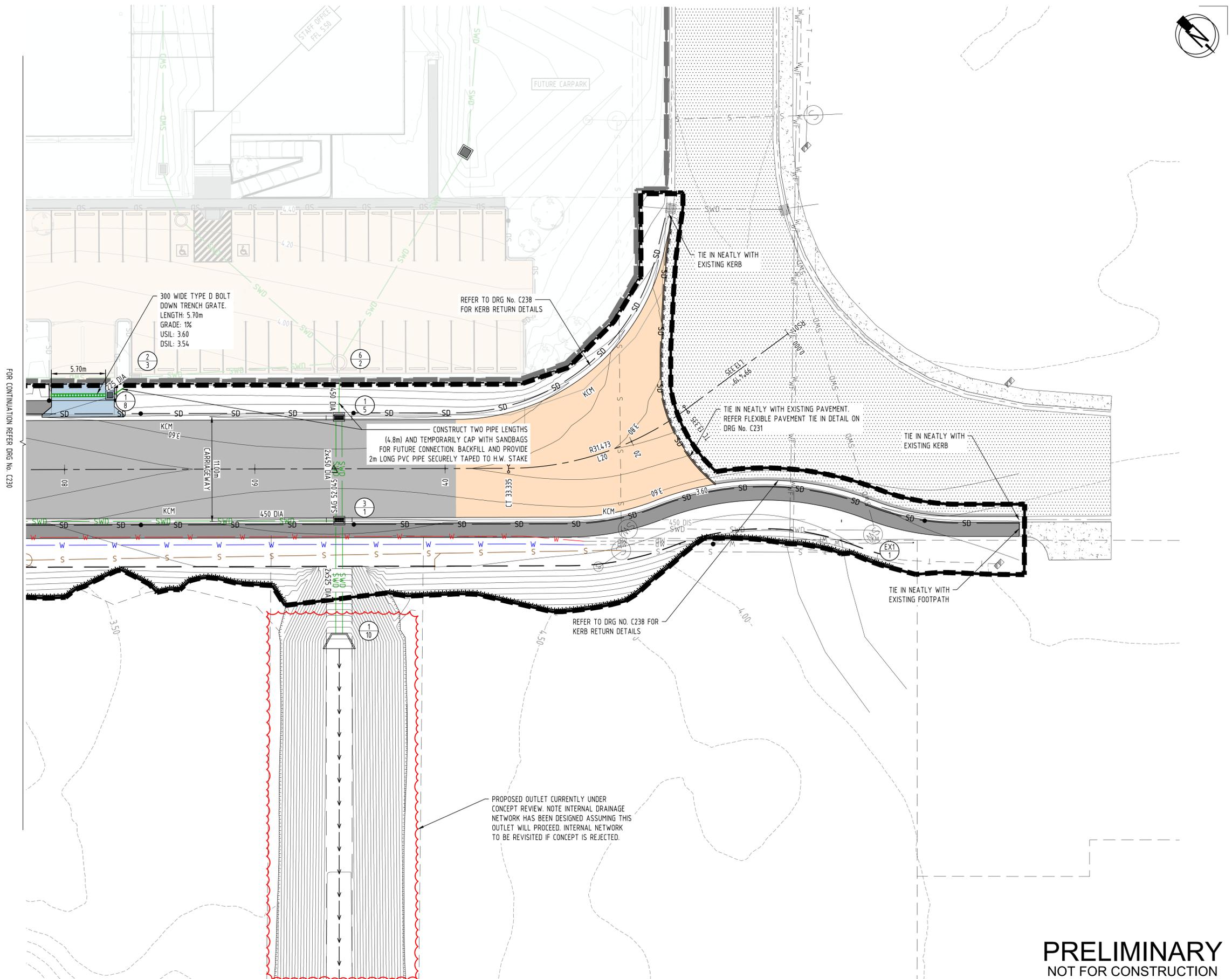


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Client DEPARTMENT OF HEALTH TASMANIA		Discipline CIVIL	Status PRELIMINARY	Title ROADWORK AND DRAINAGE LAYOUT PLAN SHEET 1 OF 2	
Project Name HOSPITALS SOUTH PRODUCTION KITCHEN GRUEBER AVENUE CAMBRIDGE, TAS		Designed By MB	Checked By SW		Approved By SW
		Project No. 27536	Drawn By AB		Scale at A1 1:250
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NOTES

1. FOR ROADWORKS AND DRAINAGE LEGEND REFER TO DRG No. C230
2. FOR ROADWORKS AND DRAINAGE NOTES AND DETAILS REFER DRG No. C232
3. FOR STORMWATER LONGITUDINAL SECTIONS AND DETAILS REFER DRG No. C233



WORK IN PROGRESS



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Client: DEPARTMENT OF HEALTH TASMANIA
 Project Name: HOSPITALS SOUTH PRODUCTION KITCHEN
 GRUEBER AVENUE
 CAMBRIDGE, TAS

Discipline: CIVIL		Status: PRELIMINARY
Designed By: MB	Checked By: SW	Approved By: SW
Project No: 27536	Drawn By: AB	Scale at A1: 1:250
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**PRELIMINARY
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Title: ROADWORK AND DRAINAGE LAYOUT PLAN SHEET 2 OF 2	
Drawing No: C231	Revision:

ROADWORKS AND DRAINAGE NOTES

REFER TO DRAWING C201 FOR ROADWORK AND DRAINAGE NOTES

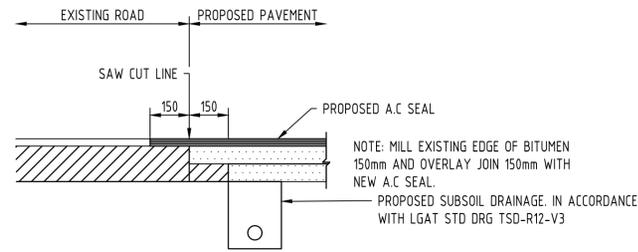
LANDSCAPE ARCHITECT COORDINATION

ALL STREETSCAPE AND CROSS LINK PATHWAY WORKS TO BE BUILT REFERENCING LANDSCAPE DRAWINGS. ANY DISCREPANCY BETWEEN CIVILS AND LANDSCAPE ARCHITECT DRAWINGS ARE TO BE HIGHLIGHTED TO SUPERINTENDENT PRIOR TO CONSTRUCTION.

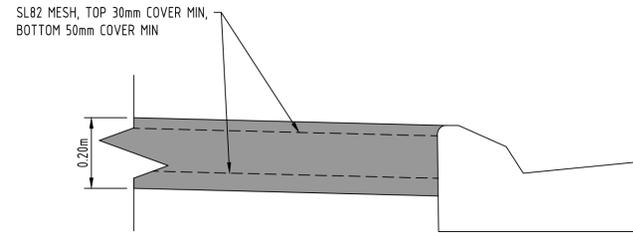
PAVEMENT DETAILS							
ROAD NAME/NUMBER	CHAINAGE	STREET TYPE	INDICATIVE DESIGN TRAFFIC (ESA)	DESIGN PERIOD	ASPHALT THICKNESS (mm)	BASE THICKNESS (mm)	SUB-BASE THICKNESS (mm)
ROAD 1	CH43.64.000 - CH 168.676	COLLECTOR WITH BUSES	8x10 ⁵	20 YEARS	40	120	120
ROAD 1 AND BRACKEN STREET INTERSECTION	-	-	8x10 ⁵	20 YEARS	50	120	120
ROAD 1 CUL-DE-SAC	-	-	8x10 ⁵	20 YEARS	50	120	120

PAVEMENT DESIGN IS BASED ON PRELIMINARY GEOTECHNICAL TESTING AND BASED ON A SUBGRADE CBR OF 10% DESIGN TRAFFIC BASED ON AUSTRROADS GUIDE TO PAVEMENT TECHNOLOGY PART 2: PAVEMENT STRUCTURAL DESIGN TABLE 12.2. EMPIRICAL DESIGN BASED ON APPENDIX F OF VICROADS RC500.22.

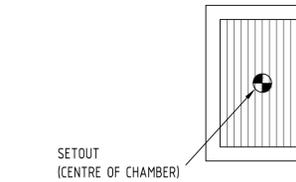
- PRIME COAT AND ASPHALT
- COMPACTED BASE COURSE (DSG CLASS 1)
- COMPACTED TO SPECIFICATION
- COMPACTED SUBBASE COURSE (DSG CLASS 3)
- COMPACTED TO SPECIFICATION
- 150mm COMPACTED SUBGRADE OR SUBGRADE REPLACEMENT COMPACTED TO SPECIFICATION



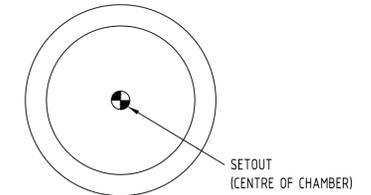
FLEXIBLE PAVEMENT JOINT DETAIL
SCALE 1:20



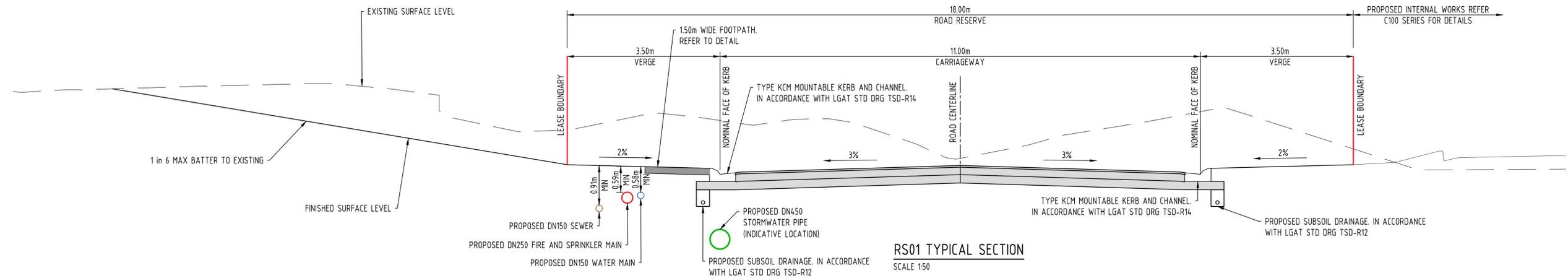
HEAVY DUTY FOOTPATH DETAIL
SCALE 1:20



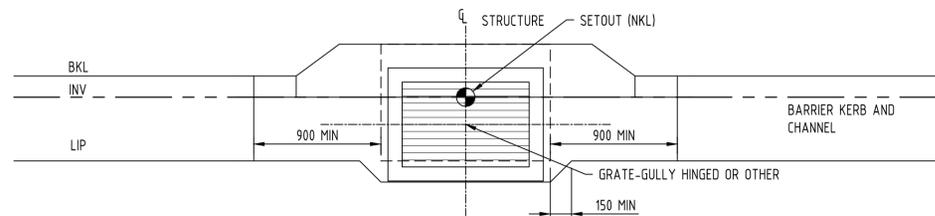
FIELD INLET SETOUT DETAILS
SCALE 1:25 @ A1
NOTE: DIMENSIONS IN MILLIMETRES



MANHOLE SETOUT DETAILS
SCALE 1:25 @ A1
NOTE: DIMENSIONS IN MILLIMETRES



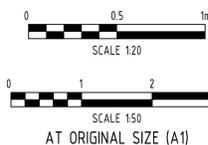
RS01 TYPICAL SECTION
SCALE 1:50



STD LGAT TYPE 3 PIT SETOUT DETAILS
SCALE 1:25 @ A1
NOTE: DIMENSIONS IN MILLIMETRES

PRELIMINARY
NOT FOR CONSTRUCTION

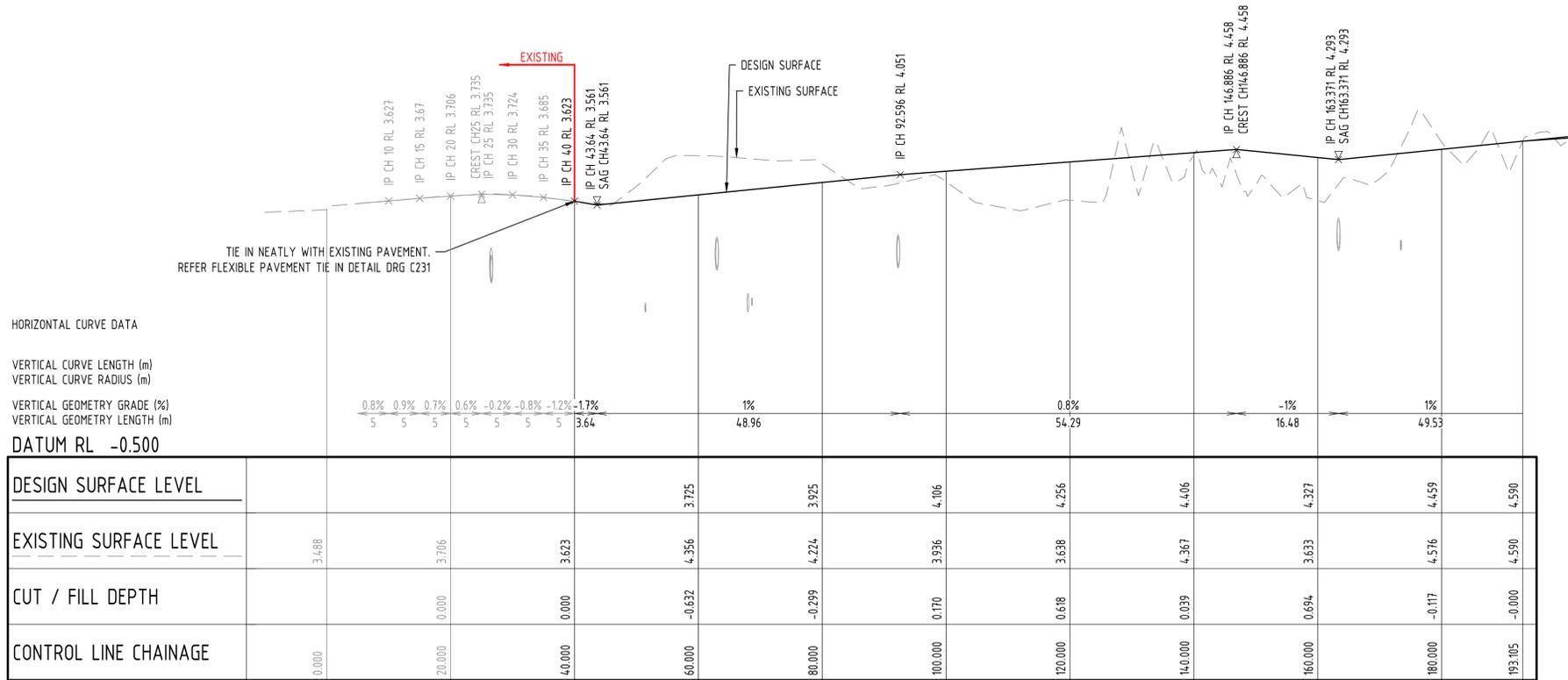
WORK IN PROGRESS



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Client DEPARTMENT OF HEALTH TASMANIA	Discipline CIVIL	Status PRELIMINARY	Title ROADWORK AND DRAINAGE NOTES AND DETAILS
Project Name HOSPITALS SOUTH PRODUCTION KITCHEN GRUEBER AVENUE CAMBRIDGE, TAS	Designed By MB	Checked By SW	Approved By SW
	Project No. 27536	Drawn By AB	Scale at A1 AS SHOWN
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			Revision

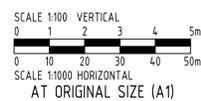


RS01 LONGITUDINAL SECTION
 SCALE: HORIZONTAL - 1:1000
 VERTICAL - 1:100

PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING
IP 1	0.000	541787.309	5256539.520		135°28'53.72"
	20.000	541801.332	5256525.259	3.706	135°28'53.72"
	40.000	541815.355	5256510.999	3.623	135°28'53.72"
	60.000	541829.377	5256496.738	3.725	135°28'53.72"
	80.000	541843.400	5256482.478	3.925	135°28'53.72"
	100.000	541857.423	5256468.217	4.106	135°28'53.72"
	120.000	541871.446	5256453.957	4.256	135°28'53.72"
	140.000	541885.468	5256439.696	4.406	135°28'53.72"
	160.000	541899.491	5256425.436	4.327	135°28'53.72"
	180.000	541913.514	5256411.175	4.459	135°28'53.72"
IP 2	193.105	541922.703	5256401.831	4.590	135°28'53.72"

PRELIMINARY
 NOT FOR CONSTRUCTION

WORK IN PROGRESS



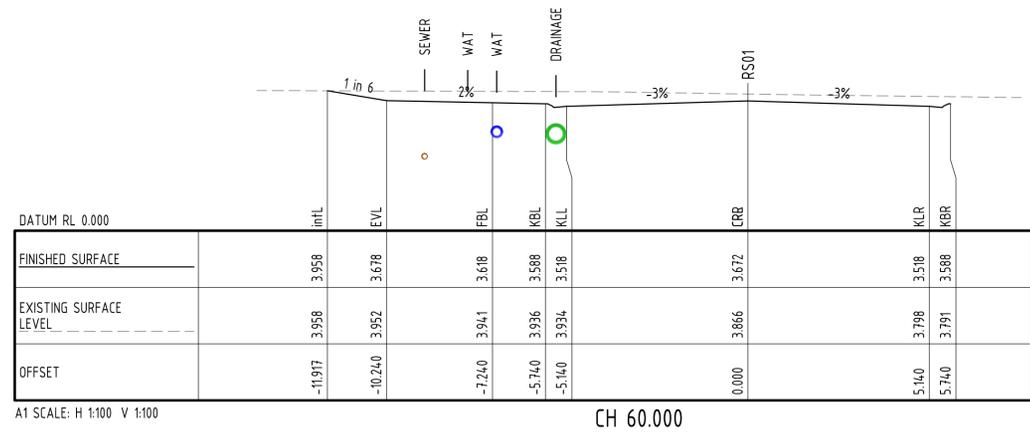
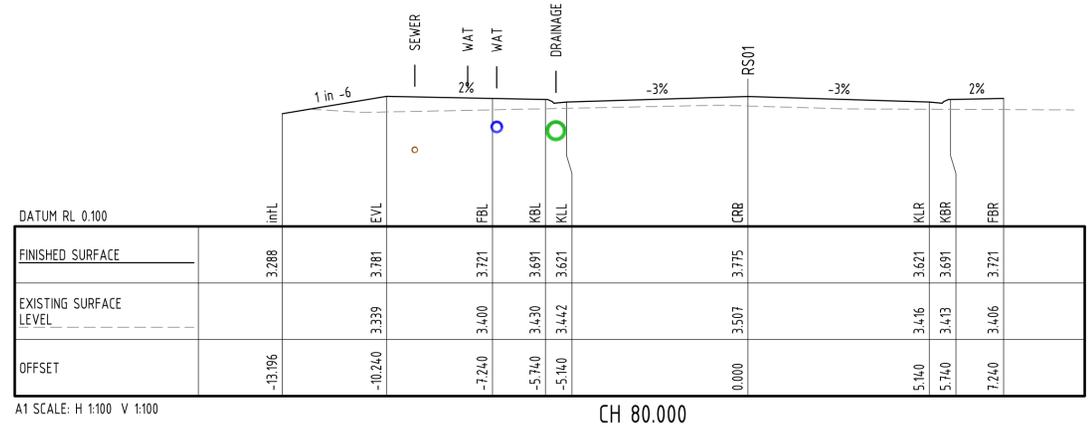
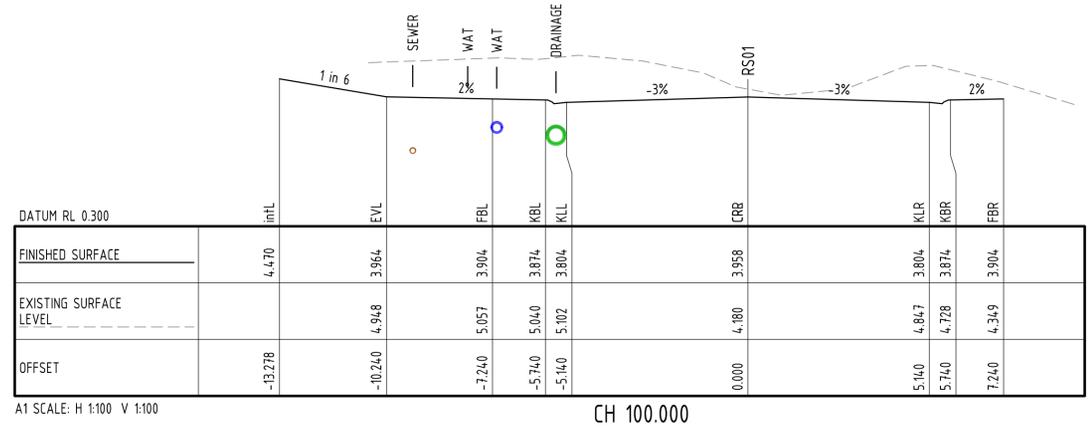
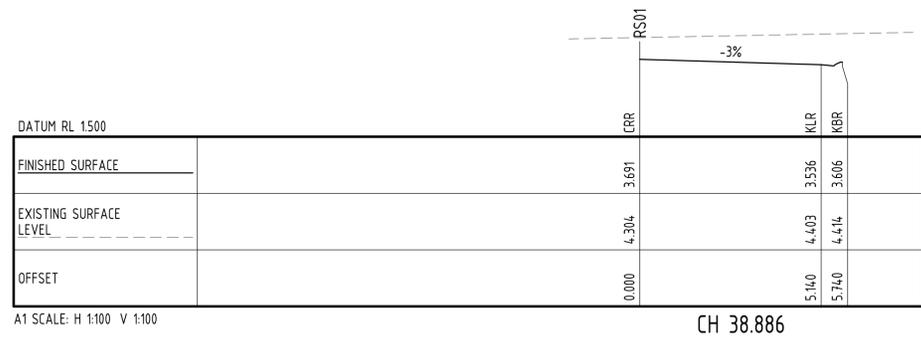
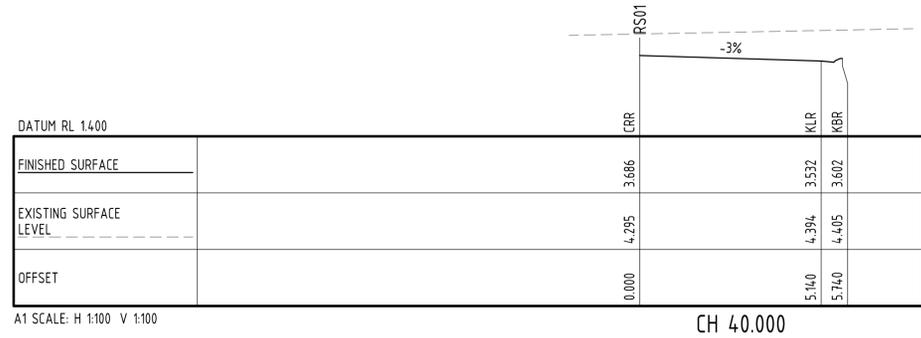
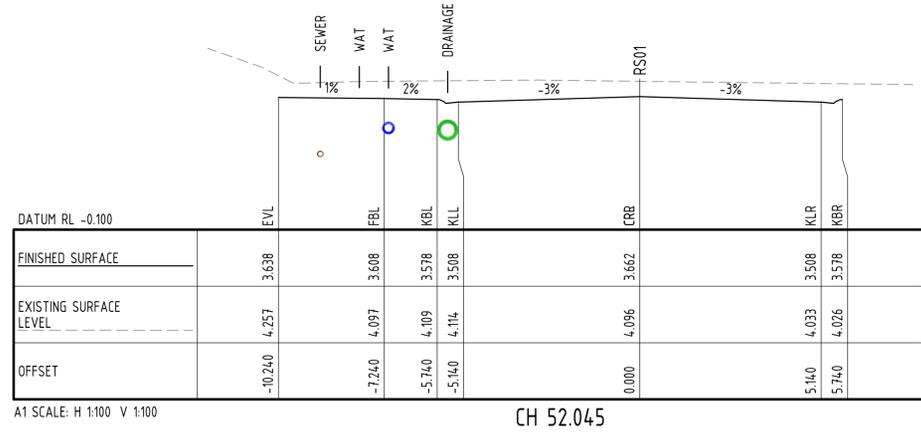
PRINT IN COLOUR



Client DEPARTMENT OF HEALTH TASMANIA	Discipline CIVIL	Status PRELIMINARY	Title ROADWORK LONGITUDINAL SECTION
Project Name HOSPITALS SOUTH PRODUCTION KITCHEN GRUEBER AVENUE CAMBRIDGE, TAS	Designed By MB	Checked By SW	Approved By SW
	Project No. 27536	Drawn By AB	Scale at A1 AS SHOWN
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			Revision

LEGEND

- CL - CONTROL LINE
- FB - BACK OF FOOTPATH
- KB - BACK OF KERB
- KL - LIP OF KERB
- INT - INTERFACE
- EV - EDGE OF VERGE

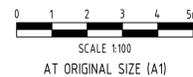


RS01 CROSS SECTIONS

SCALE: HORIZONTAL - 1:100
VERTICAL - 1:100

PRELIMINARY
NOT FOR CONSTRUCTION

WORK IN PROGRESS



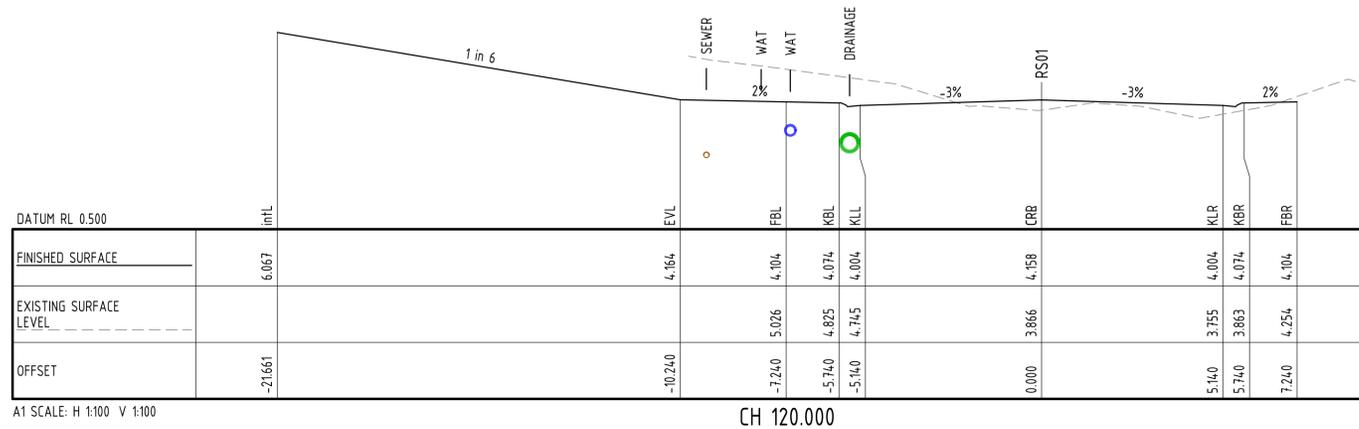
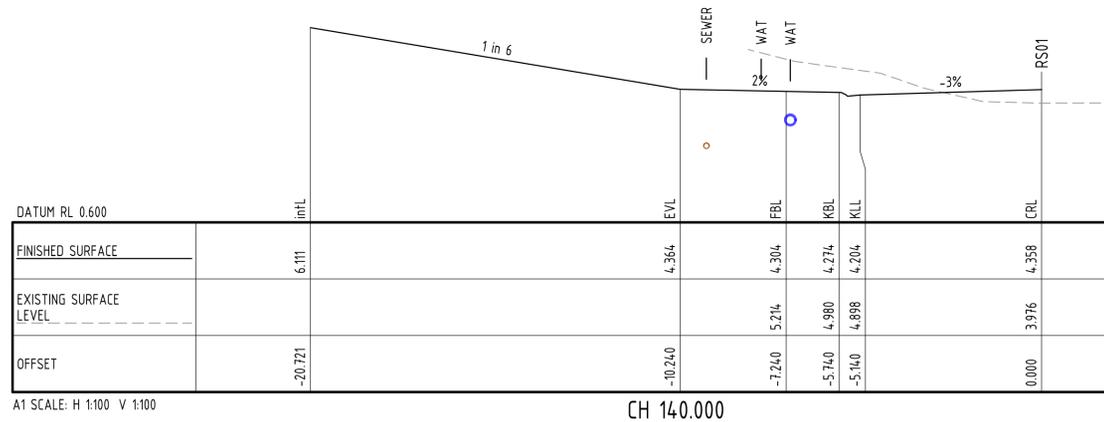
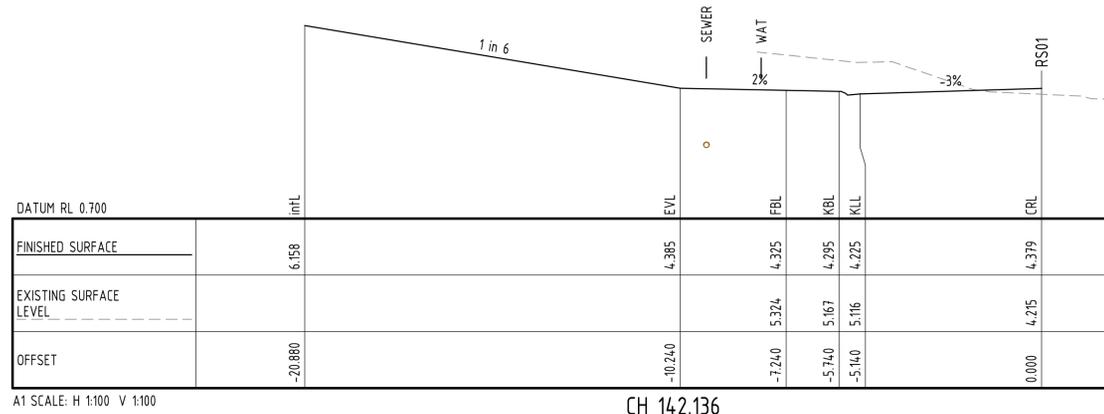
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Client DEPARTMENT OF HEALTH TASMANIA		Discipline CIVIL	Status PRELIMINARY
Project Name HOSPITALS SOUTH PRODUCTION KITCHEN GRUEBER AVENUE CAMBRIDGE, TAS		Designed By MB	Checked By SW
		Project No. 27536	Drawn By AB
		Approved By SW	Scale at A1 AS SHOWN
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			Revision

LEGEND

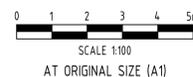
- CL - CONTROL LINE
- FB - BACK OF FOOTPATH
- KB - BACK OF KERB
- KL - LIP OF KERB
- INT - INTERFACE
- EV - EDGE OF VERGE



RS01 CROSS SECTIONS
 SCALE: HORIZONTAL - 1:100
 VERTICAL - 1:100

PRELIMINARY
 NOT FOR CONSTRUCTION

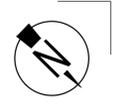
WORK IN PROGRESS



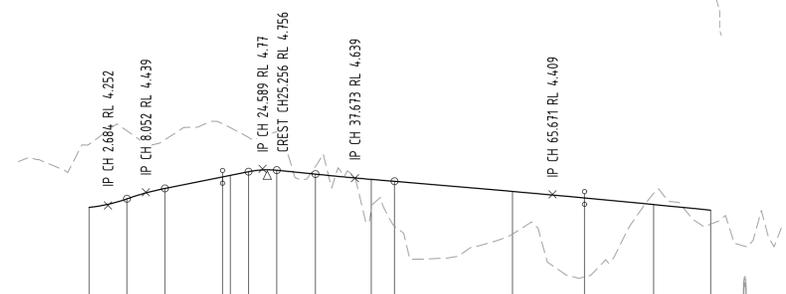
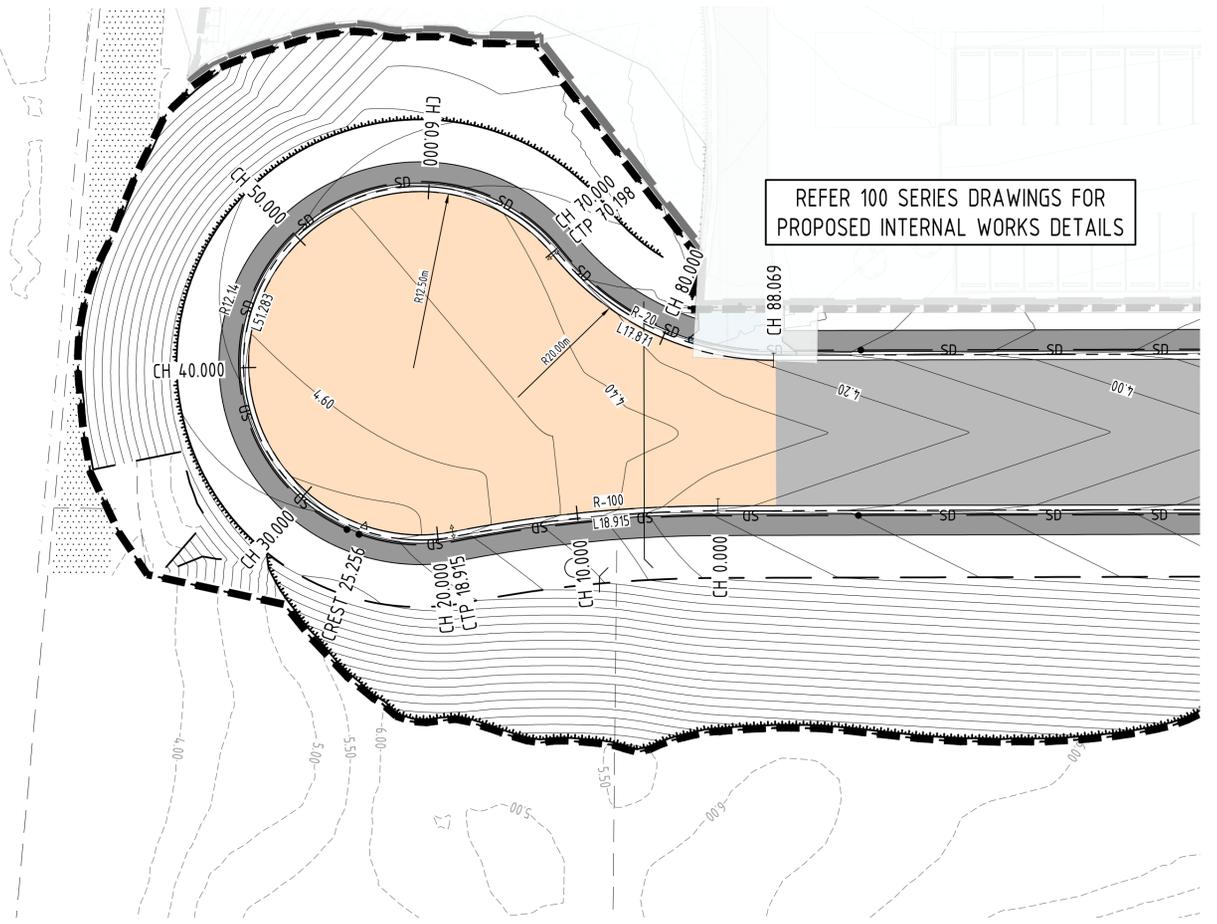
PRINT IN COLOUR



Client DEPARTMENT OF HEALTH TASMANIA		Discipline CIVIL	Status PRELIMINARY
Project Name HOSPITALS SOUTH PRODUCTION KITCHEN GRUEBER AVENUE CAMBRIDGE, TAS		Designed By MB	Checked By SW
		Project No. 27536	Drawn By AB
		Approved By SW	Scale at A1 AS SHOWN
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			Revision



CUL-DE-SAC HORIZONTAL SETOUT TABLE								
PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	54.1911.584	52564.20.469	4.225	135°28'53.75"			
IP 2	9.457	54.1918.235	52564.13.705	4.465		R = -100.000	18.915	10°50'14.18"
CC	18.915	54.1926.039	52564.08.313	4.656	124°38'39.57"			
	20.000	54.1926.903	52564.07.657	4.678	129°46'00.97"			
IP 3	27.462	54.1934.521	52564.02.452	4.741		R = 12.140	17.094	80°40'42.11"
CC	36.009	54.1930.111	52563.93.133	4.657	205°19'21.68"			
	40.000	54.1927.84.7	52563.89.868	4.621	224°09'31.19"			
IP 4	44.556	54.1925.701	52563.83.814	4.582		R = 12.140	17.094	80°40'42.11"
CC	53.103	54.1915.791	52563.86.656	4.510	286°00'03.79"			
	60.000	54.1910.038	52563.90.289	4.450	318°33'01.42"			
IP 5	61.651	54.1905.881	52563.89.498	4.436		R = 12.140	17.094	80°40'42.11"
CC	70.198	54.1907.080	52563.99.737	4.358	6°40'45.90"			
IP 6	79.133	54.1908.194	52564.09.254	4.273		R = -20.000	17.871	51°11'52.15"
	80.000	54.1905.836	52564.09.362	4.265	338°35'52.63"			
IP 7	88.069	54.1901.476	52564.16.087	4.185	315°28'53.75"			



HORIZONTAL CURVE DATA

VERTICAL CURVE LENGTH (m)
 VERTICAL CURVE RADIUS (m)
 VERTICAL GEOMETRY GRADE (%)
 VERTICAL GEOMETRY LENGTH (m)

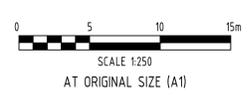
DATUM RL 0.500

DESIGN SURFACE LEVEL	EXISTING SURFACE LEVEL	CUT / FILL DEPTH	CONTROL LINE CHAINAGE
4.225	5.116	-0.891	0.000
4.345	5.309	-0.963	5.368
4.493	5.179	-0.687	10.736
4.656	5.407	-0.751	18.915
4.678	5.355	-0.677	20.000
4.730	5.216	-0.486	22.590
4.750	5.293	-0.544	26.589
4.695	4.796	-0.101	32.073
4.621	4.209	0.412	40.000
4.593	3.936	0.657	43.772
4.450	3.847	0.604	60.000
4.358	3.242	1.116	70.198
4.265	4.425	-0.160	80.000
4.185	3.986	0.200	88.069

A1 SCALE: H 1:500 V 1:50

LONGITUDINAL SECTION CUL-DE-SAC

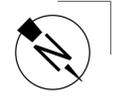
WORK IN PROGRESS



PRINT IN COLOUR

Client DEPARTMENT OF HEALTH TASMANIA	Discipline CIVIL	Status PRELIMINARY	Title CUL-DE-SAC SETOUT PLAN
Project Name HOSPITALS SOUTH PRODUCTION KITCHEN GRUEBER AVENUE CAMBRIDGE, TAS	Designed By MB	Checked By SW	Approved By SW
	Project No. 27536	Drawn By AB	Scale at A1 1:250
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PRELIMINARY
NOT FOR CONSTRUCTION



HORIZONTAL CURVE DATA

VERTICAL CURVE LENGTH (m)	31.55m VC	31.55m VC
VERTICAL CURVE RADIUS (m)	R 4417.08	R 8652.55
VERTICAL GEOMETRY GRADE (%)	0.7%	0%
VERTICAL GEOMETRY LENGTH (m)	20.78	20.78

DATUM RL -0.500

DESIGN SURFACE LEVEL	3.450	3.493	3.539	3.554	3.573	3.572	3.571	3.562	3.535	3.525
EXISTING SURFACE LEVEL	3.450	3.499	3.633	3.666	3.575	3.813	3.893	3.571	4.221	4.197
CUT / FILL DEPTH	0.000	-0.006	-0.094	-0.111	-0.002	-0.241	-0.321	-0.248	-0.686	-0.672
CONTROL LINE CHAINAGE	0.000	6.342	15.552	20.000	31.552	39.039	40.000	48.290	60.000	63.105

A1 SCALE: H 1:500 V 1:50

LONGITUDINAL SECTION RSK02



HORIZONTAL CURVE DATA

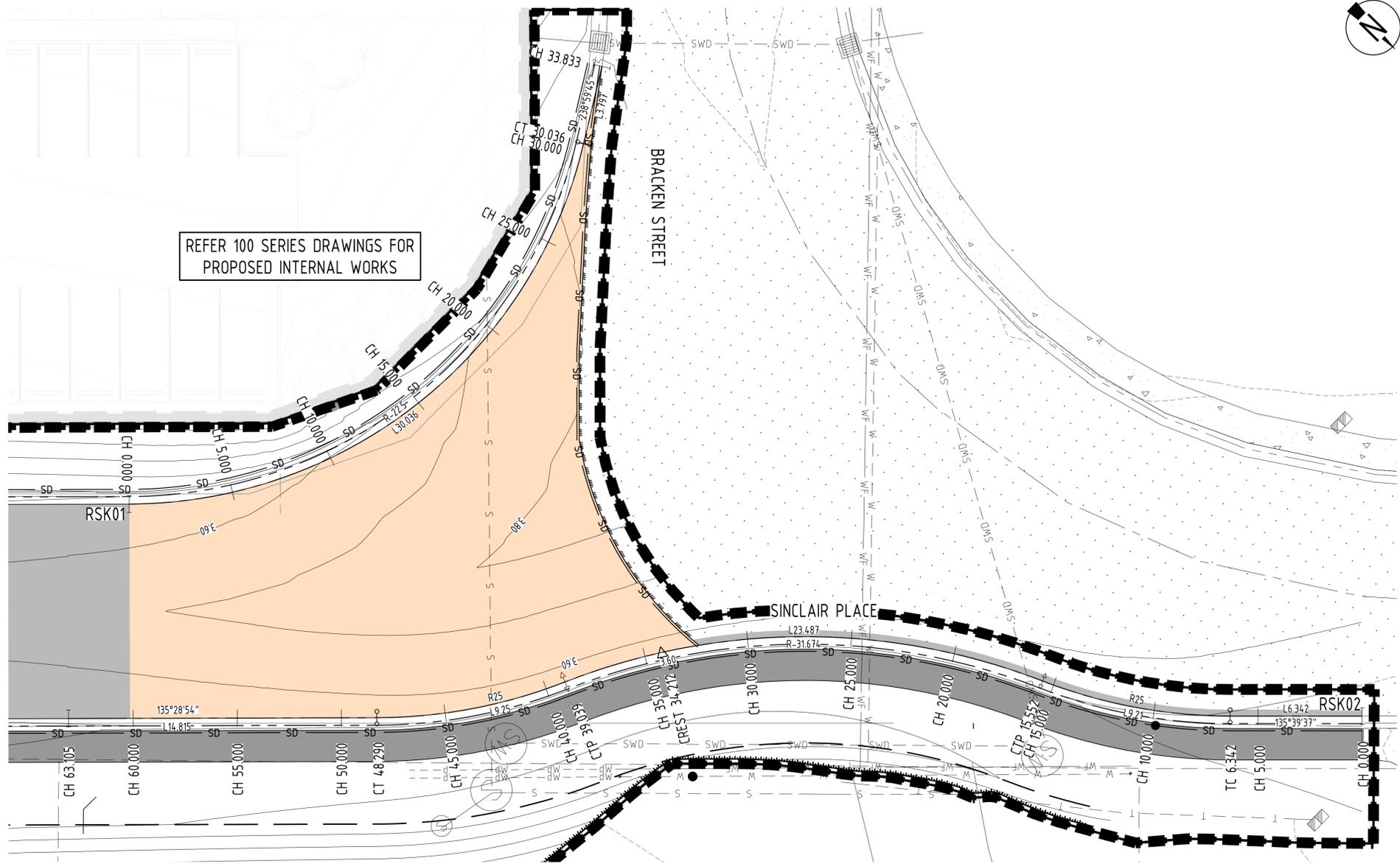
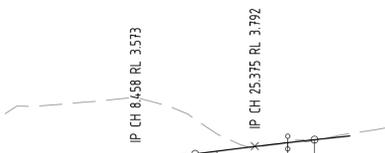
VERTICAL CURVE LENGTH (m)	16.92m VC	16.92m VC
VERTICAL CURVE RADIUS (m)	R 1957.8	R 7746.12
VERTICAL GEOMETRY GRADE (%)	0.4%	1.1%
VERTICAL GEOMETRY LENGTH (m)	13.46	16.92

DATUM RL -0.300

DESIGN SURFACE LEVEL	3.536	3.683	3.722	3.841	3.883
EXISTING SURFACE LEVEL	4.403	4.168	3.967	3.865	3.883
CUT / FILL DEPTH	-0.866	-0.486	-0.245	-0.023	0.000
CONTROL LINE CHAINAGE	0.000	16.917	20.000	30.036	33.833

A1 SCALE: H 1:500 V 1:50

LONGITUDINAL SECTION RSK01



ALIGN KERBS->RSK01 HORIZONTAL POINTS							
PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPIRAL	A.LENGTH
IP 1	0.000	541831.862	5256486.881	3.536	315°28'53.75"		
	5.000	541827.990	5256490.029	3.564	302°44'57.13"		
	10.000	541823.520	5256492.246	3.605	290°01'00.50"		
	15.000	541818.671	5256493.424	3.659	277°17'03.88"		
IP 2	15.018	541819.428	5256499.525	3.659		R = -22.500	30.036
	20.000	541813.682	5256493.504	3.722	264°33'07.26"		
	25.000	541808.798	5256492.482	3.783	251°49'10.63"		
	30.000	541804.259	5256490.410	3.841	239°05'14.01"		
CT	30.036	541804.229	5256490.391	3.841	238°59'45.19"		
IP 3	33.833	541800.974	5256488.435	3.883	238°59'45.19"		

ALIGN KERBS->RSK02 HORIZONTAL POINTS							
PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPIRAL	A.LENGTH
IP 1	0.000	541797.718	5256536.337	3.450	135°39'37.37"		
	5.000	541801.213	5256532.761	3.485	135°39'37.37"		
TC	6.342	541802.151	5256531.801	3.493	135°39'37.37"		
	10.000	541804.507	5256529.008	3.514	144°02'36.88"		
IP 2	10.947	541805.406	5256528.470	3.518		R = 25.000	9.210
	15.000	541807.020	5256524.695	3.537	155°30'09.84"		
	15.552	541807.243	5256524.190	3.539	156°46'01.78"		
	20.000	541809.279	5256520.239	3.554	148°43'14.39"		
IP 3	25.000	541812.200	5256516.188	3.566	139°40'34.24"		
	27.295	541812.100	5256512.875	3.569		R = -31.674	23.487
	30.000	541815.723	5256512.646	3.572	130°37'54.10"		
	35.000	541819.758	5256509.703	3.573	121°35'13.95"		
CC	39.039	541823.324	5256507.812	3.572	114°16'51.72"		
	40.000	541824.192	5256507.400	3.571	116°29'00.35"		
IP 4	43.664	541827.589	5256505.888	3.568		R = 25.000	9.250
	45.000	541828.416	5256504.739	3.567	127°56'33.32"		
CT	48.290	541830.869	5256502.552	3.562	135°28'53.75"		
	50.000	541832.069	5256501.332	3.559	135°28'53.75"		
	55.000	541835.574	5256497.767	3.548	135°28'53.75"		
	60.000	541839.080	5256494.202	3.535	135°28'53.75"		
	63.105	541841.257	5256491.988	3.525	135°28'53.75"		

PRELIMINARY
NOT FOR CONSTRUCTION

WORK IN PROGRESS



PRINT IN COLOUR



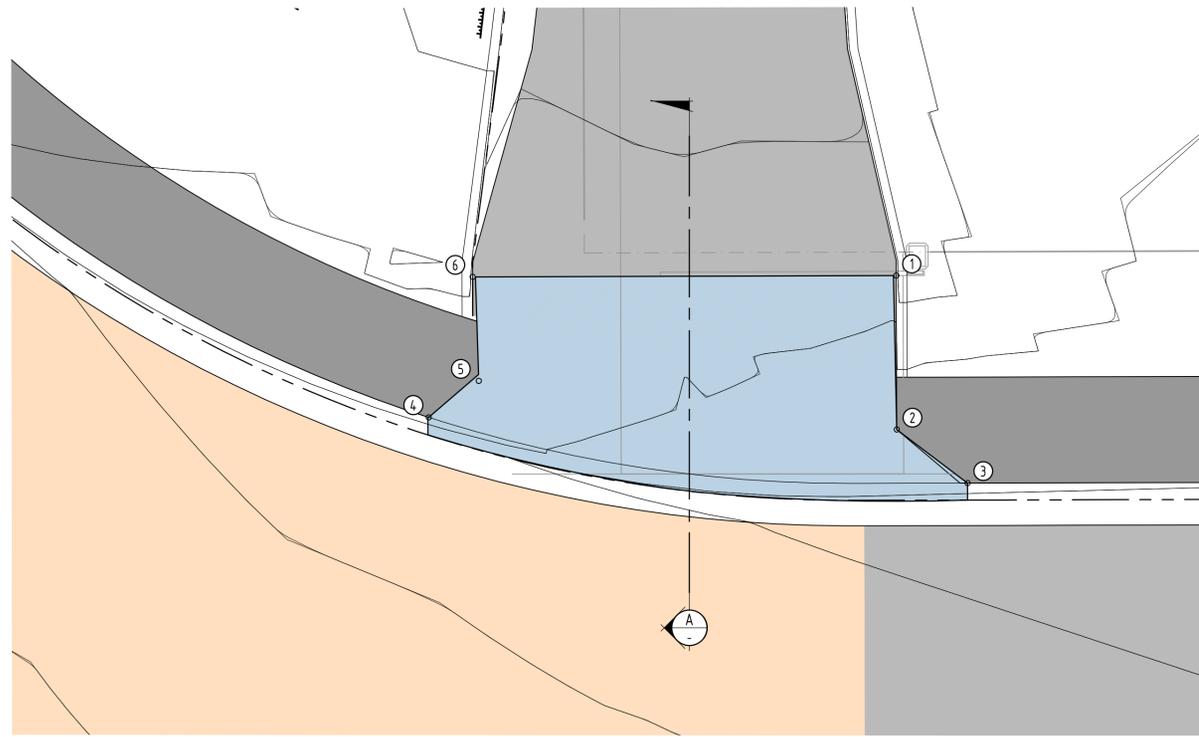
Client: DEPARTMENT OF HEALTH TASMANIA
Project Name: HOSPITALS SOUTH PRODUCTION KITCHEN
GRUEBER AVENUE
CAMBRIDGE, TAS

Discipline: CIVIL
Designed By: MB
Checked By: SW
Project No: 27536
Drawn By: AB
Scale at A1: 1:250

Status: PRELIMINARY
Approved By: SW
Title: RSK02 SETOUT PLAN
Scale at A1: 1:250

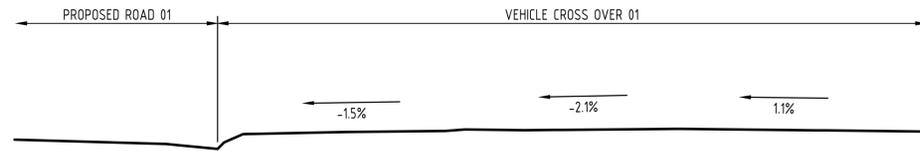
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Drawing No: C239
Revision:

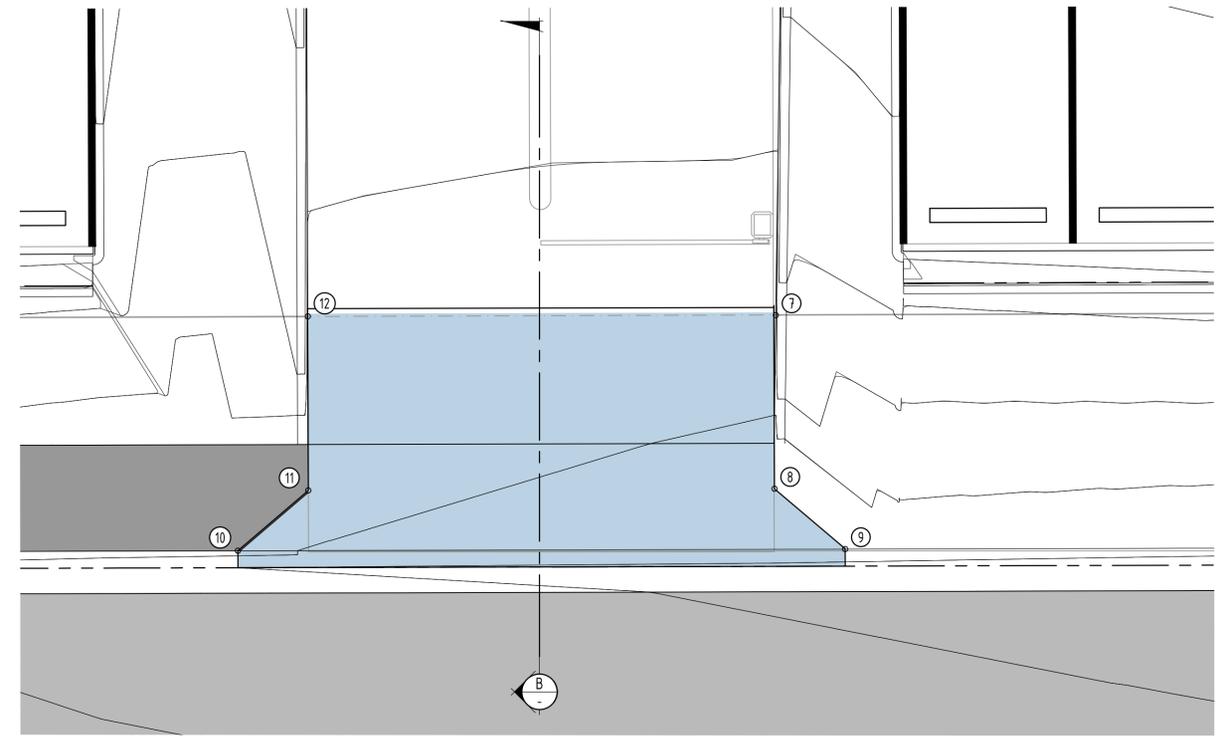


VEHICLE CROSS OVER 01 LAYOUT PLAN
SCALE 1:50

VEHICLE CROSS OVER 01 SETOUT TABLE			
POINT	EASTING	NORTHING	DESIGN RL (m)
D1	541898.509	5256414.056	4.309
D2	541900.063	5256415.585	4.264
D3	541899.902	5256416.831	4.239
D4	541904.575	5256410.724	4.318
D5	541903.711	5256410.870	4.326
D6	541902.719	5256409.781	4.347

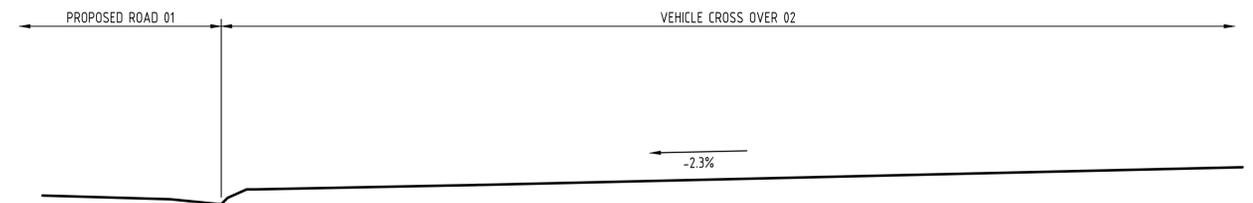


SECTION
PLAN
SCALE 1:25



VEHICLE CROSS OVER 02 LAYOUT PLAN
SCALE 1:50

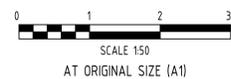
VEHICLE CROSS OVER 02 SETOUT TABLE			
POINT	EASTING	NORTHING	DESIGN RL (m)
D7	541854.201	5256458.585	3.738
D8	541855.970	5256460.288	3.677
D9	541855.879	5256461.601	3.653
D10	541861.911	5256455.466	3.705
D11	541860.604	5256455.582	3.716
D12	541858.851	5256453.856	3.768



SECTION
PLAN
AS SHOWN

PRELIMINARY
NOT FOR CONSTRUCTION

WORK IN PROGRESS



PRINT IN COLOUR



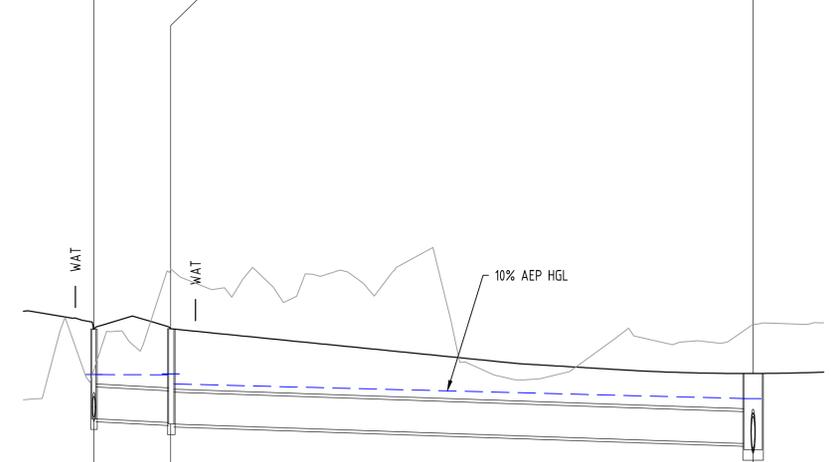
Client
DEPARTMENT OF HEALTH TASMANIA
Project Name
HOSPITALS SOUTH PRODUCTION KITCHEN
GRUEBER AVENUE
CAMBRIDGE, TAS

Discipline
CIVIL
Designed By
MB
Project No.
27536
Checked By
SW
Drawn By
AB
Status
PRELIMINARY
Approved By
SW
Scale at A1
1:50
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Title
VEHICLE CROSS OVER DETAIL

Drawing No.
C240
Revision

STRUCTURE NAME	1-1	1-2	1-3
STRUCTURE DESCRIPTION	SIDE ENTRY PIT - TYPE 3 REFER TSD-SW09-v3	SIDE ENTRY PIT - TYPE 3 REFER TSD-SW09-v3	SIDE ENTRY PIT - TYPE 5 REFER TSD-SW12-v3

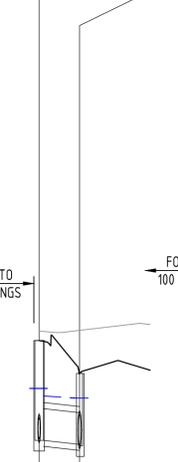


PIPE SIZE (mm)	450	450
PIPE TYPE & CLASS	RCP 4	RCP 4
PIPE GRADE (%)	0.50%	0.33%
PIPE SLOPE (1 in X)	200.0	300.3
MAXIMUM VELOCITY (m/s)	1.06	0.87
NORMAL DEPTH VELOCITY (m/s)	1.01	1.25
PIPE FLOW (cumecs)	-0.134	-0.138
CAPACITY FLOW (cumecs)	0.164	0.353
DATUM RL	-5.0	-5.0

LINE	1	2
HGL IN PIPE & WSE IN STRUCTURE	3.464	3.459 3.472 3.331
DESIGN (& EXISTING) SURFACE LEVEL	4.108 (3.530)	4.111 (4.958)
DEPTH OF INVERT BELOW DESIGN SURFACE LEVEL	1.270	1.328 1.348
INVERT LEVEL	2.838	2.784 2.764
CHAINAGE	-4.2779 10.880	82.506
SETOUT COORDINATES	E 54.1891.798 N 52564.194.10 RL 4.108	E 54.1905.849 N 52564.26.728 RL 4.111

FOR CONTINUATION REFER TO 100 SERIES INTERNAL DRAWINGS

STRUCTURE NAME	2-6	5-1
STRUCTURE DESCRIPTION	720mm DIA MANHOLE CLASS D	SIDE ENTRY PIT - TYPE 3 (K2) REFER TSD-SW09-v3

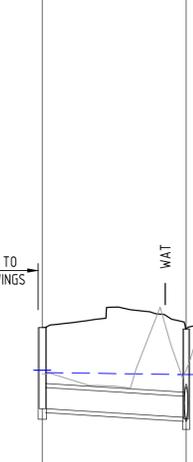


PIPE SIZE (mm)	450
PIPE TYPE & CLASS	PP SN8
PIPE GRADE (%)	1.00%
PIPE SLOPE (1 in X)	100.0
MAXIMUM VELOCITY (m/s)	1.93
NORMAL DEPTH VELOCITY (m/s)	1.24
PIPE FLOW (cumecs)	-0.134
CAPACITY FLOW (cumecs)	0.081
DATUM RL	-5.0

LINE	2
HGL IN PIPE & WSE IN STRUCTURE	3.266 3.268 3.160
DESIGN (& EXISTING) SURFACE LEVEL	3.945 (4.076)
DEPTH OF INVERT BELOW DESIGN SURFACE LEVEL	1.392 1.412
INVERT LEVEL	2.553 2.533
CHAINAGE	-38.949 5.729
SETOUT COORDINATES	E 54.1836.137 N 52564.73.941 RL 3.945

FOR CONTINUATION REFER TO 100 SERIES INTERNAL DRAWINGS

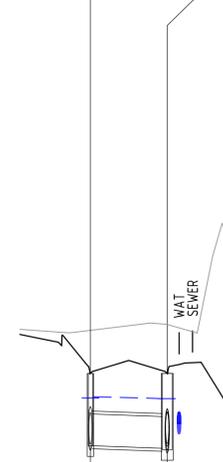
STRUCTURE NAME	4-3	1-1
STRUCTURE DESCRIPTION	SIDE ENTRY PIT - TYPE 3 REFER TSD-SW09-v3	SIDE ENTRY PIT - TYPE 3 REFER TSD-SW09-v3



PIPE SIZE (mm)	300
PIPE TYPE & CLASS	PP SN8
PIPE GRADE (%)	0.60%
PIPE SLOPE (1 in X)	166.7
MAXIMUM VELOCITY (m/s)	1.93
NORMAL DEPTH VELOCITY (m/s)	1.24
PIPE FLOW (cumecs)	-0.134
CAPACITY FLOW (cumecs)	0.081
DATUM RL	-5.0

LINE	4
HGL IN PIPE & WSE IN STRUCTURE	3.492 3.492 3.150
DESIGN (& EXISTING) SURFACE LEVEL	4.130 (3.473)
DEPTH OF INVERT BELOW DESIGN SURFACE LEVEL	1.149 1.023
INVERT LEVEL	2.980 2.858
CHAINAGE	11.377 20.381
SETOUT COORDINATES	E 54.1891.296 N 52564.00.746 RL 4.130

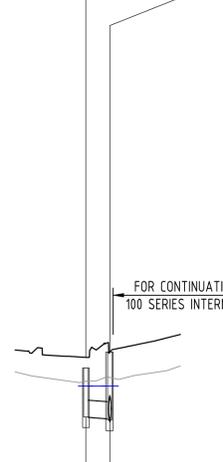
STRUCTURE NAME	5-1	1-3
STRUCTURE DESCRIPTION	SIDE ENTRY PIT - TYPE 3 (K2) REFER TSD-SW09-v3	SIDE ENTRY PIT - TYPE 5 REFER TSD-SW12-v3



PIPE SIZE (mm)	(2x)450
PIPE TYPE & CLASS	RCP 4
PIPE GRADE (%)	0.33%
PIPE SLOPE (1 in X)	303.0
MAXIMUM VELOCITY (m/s)	0.94
NORMAL DEPTH VELOCITY (m/s)	0.00
PIPE FLOW (cumecs)	0.076
CAPACITY FLOW (cumecs)	0.328
DATUM RL	-5.0

LINE	5
HGL IN PIPE & WSE IN STRUCTURE	3.132 3.132 3.103
DESIGN (& EXISTING) SURFACE LEVEL	3.479 (4.089)
DEPTH OF INVERT BELOW DESIGN SURFACE LEVEL	1.023 1.058
INVERT LEVEL	2.456 2.420
CHAINAGE	-4.626 10.879
SETOUT COORDINATES	E 54.1840.247 N 52564.77.932 RL 3.479

STRUCTURE NAME	8-1	3-2
STRUCTURE DESCRIPTION	FIELD INLET (SAG) 600x600 REFER TSD-SW15-v3	SIDE ENTRY PIT - TYPE 3 REFER TSD-SW09-v3

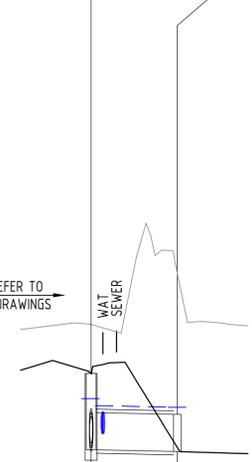


PIPE SIZE (mm)	225
PIPE TYPE & CLASS	uPVC SN8
PIPE GRADE (%)	0.63%
PIPE SLOPE (1 in X)	158.0
MAXIMUM VELOCITY (m/s)	0.46
NORMAL DEPTH VELOCITY (m/s)	0.00
PIPE FLOW (cumecs)	-0.019
CAPACITY FLOW (cumecs)	0.000
DATUM RL	-5.0

LINE	8
HGL IN PIPE & WSE IN STRUCTURE	3.301 3.301 3.289
DESIGN (& EXISTING) SURFACE LEVEL	3.707 (3.368)
DEPTH OF INVERT BELOW DESIGN SURFACE LEVEL	0.845 0.940
INVERT LEVEL	2.862 2.820
CHAINAGE	0.000 3.411
SETOUT COORDINATES	E 54.1855.44.9 N 52564.59.131 RL 3.707

FOR CONTINUATION REFER TO 100 SERIES INTERNAL DRAWINGS

STRUCTURE NAME	1-3	10-4
STRUCTURE DESCRIPTION	SIDE ENTRY PIT - TYPE 5 REFER TSD-SW12-v3	HEADWALL REFER TSD-SW17-v3

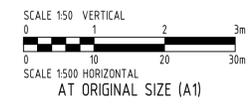


PIPE SIZE (mm)	(2x)525
PIPE TYPE & CLASS	RCP 4
PIPE GRADE (%)	0.20%
PIPE SLOPE (1 in X)	500.0
MAXIMUM VELOCITY (m/s)	0.525
NORMAL DEPTH VELOCITY (m/s)	0.525
PIPE FLOW (cumecs)	0.525
CAPACITY FLOW (cumecs)	0.525
DATUM RL	-5.0

LINE	10
HGL IN PIPE & WSE IN STRUCTURE	3.023 3.025 3.000
DESIGN (& EXISTING) SURFACE LEVEL	3.478 (4.171)
DEPTH OF INVERT BELOW DESIGN SURFACE LEVEL	1.078 1.078
INVERT LEVEL	2.400 2.376
CHAINAGE	0.000 12.205
SETOUT COORDINATES	E 54.1848.004 N 52564.85.560 RL 3.478

WORK IN PROGRESS

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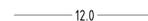
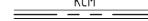
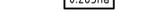
Client	DEPARTMENT OF HEALTH TASMANIA
Project Name	HOSPITALS SOUTH PRODUCTION KITCHEN GRUEBER AVENUE CAMBRIDGE, TAS

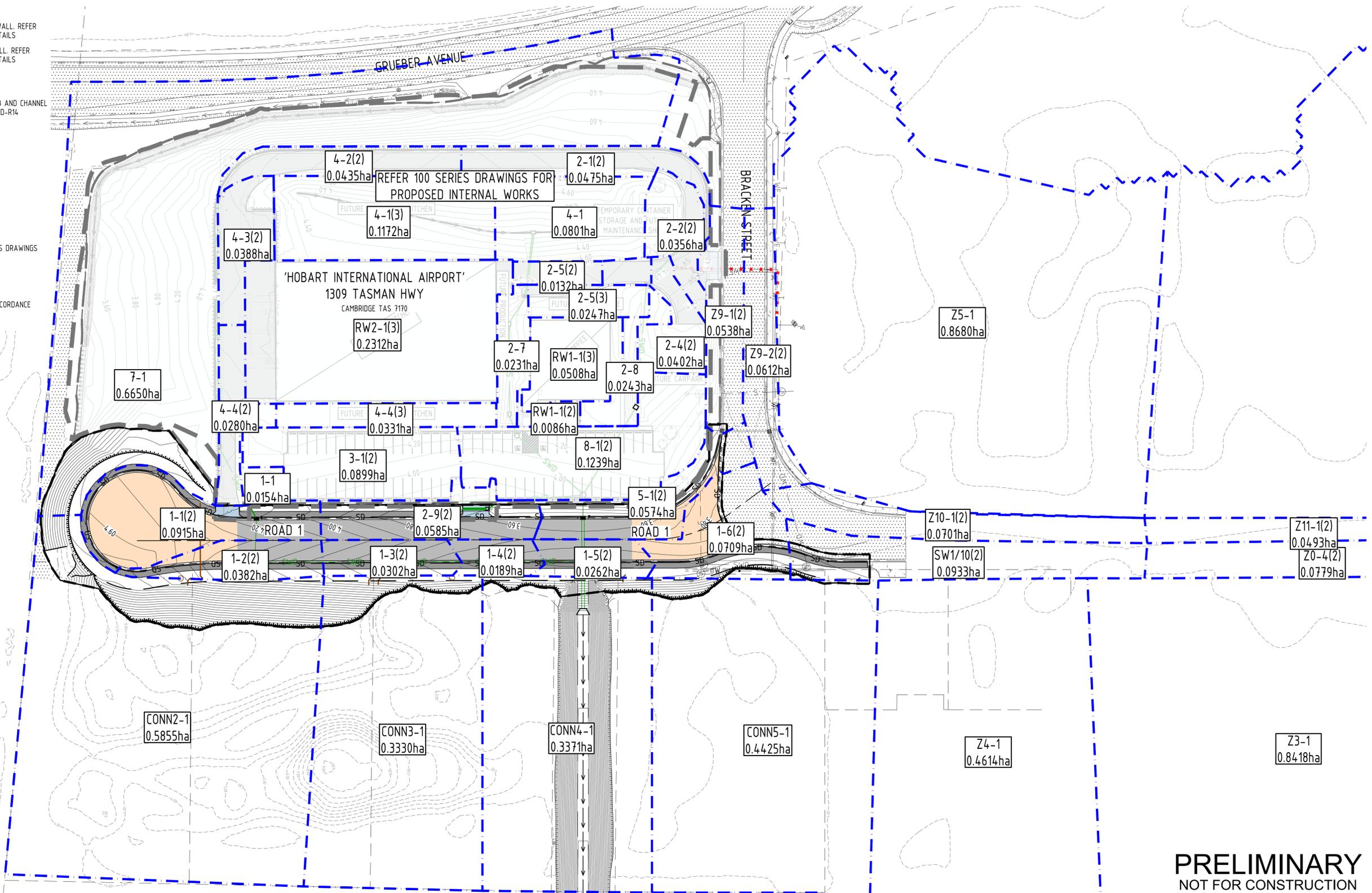
Discipline	CIVIL	Status	PRELIMINARY
Designed By	MB	Checked By	SW
Project No.	27536	Drawn By	AB
		Scale at A1	AS SHOWN

Title
**STORMWATER DRAINAGE
LONGITUDINAL SECTIONS**

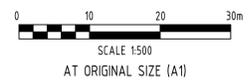
Drawing No.	C250	Revision	
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LEGEND

-  FINISHED SURFACE CONTOURS
-  SITE BOUNDARY
-  EXTERNAL LIMIT OF WORKS
-  INTERNAL LIMIT OF WORKS
-  EXISTING PROPERTY BOUNDARY
-  EXISTING EASEMENT BOUNDARY
-  PROPOSED STORMWATER DRAINAGE
-  PROPOSED STORMWATER OUTLET HEADWALL. REFER IPWEA TAS STD DRG TSD-SW17 FOR DETAILS
-  PROPOSED STORMWATER INLET HEADWALL. REFER IPWEA TAS STD DRG TSD-SW21 FOR DETAILS
-  PROPOSED SEP TYPE 5. REFER IPWEA TAS STD TSD-SW12
-  PROPOSED 'TYPE KCM' MOUNTABLE KERB AND CHANNEL IN ACCORDANCE WITH LGAT STD DRG TSD-R14
-  PROPOSED ROAD CENTRE LINE
-  CATCHMENT BOUNDARY
-  CATCHMENT LABEL
-  EXISTING ROAD
-  EXISTING FOOTPATH
-  INTERNAL CIVIL WORKS REFER 100 SERIES DRAWINGS
-  PROPOSED FOOTPATH
-  PROPOSED ROAD PAVEMENT
-  PROPOSED DRIVEWAY CROSSOVER IN ACCORDANCE WITH LGAT STD DRG. TSD-09



WORK IN PROGRESS



PRINT IN COLOUR

Client: DEPARTMENT OF HEALTH TASMANIA
 Project Name: HOSPITALS SOUTH PRODUCTION KITCHEN
 GRUEBER AVENUE
 CAMBRIDGE, TAS

Discipline: CIVIL		Status: PRELIMINARY
Designed By: MB	Checked By: SW	Approved By: SW
Project No: 27536	Drawn By: AB	Scale at A1: AS SHOWN

PRELIMINARY
NOT FOR CONSTRUCTION

Title: STORMWATER CATCHMENT PLAN

Drawing No: C251

LEGEND

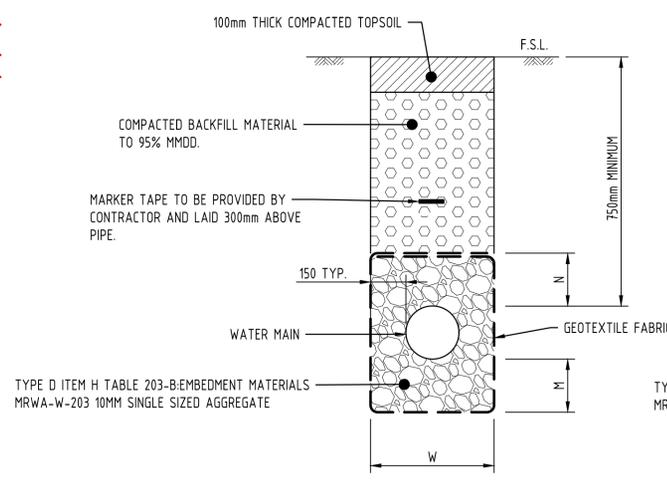
- SITE BOUNDARY
- - - EXISTING PROPERTY BOUNDARY
- - - EXISTING NOMINAL KERB LINE
- SWD — EXISTING STORMWATER DRAINAGE
- S — EXISTING SEWER
- W ● EXISTING FIRE HYDRANT
- W — EXISTING WATER
- WF — EXISTING FIRE AND SPRINKLER MAIN
- T — EXISTING TELECOMMUNICATIONS
- EXISTING BATTER
- - - EXISTING FENCE
- - - EXISTING EARTHWORKS DRAIN
- LIMIT OF WORKS
- SWD — PROPOSED STORMWATER DRAINAGE
- S — PROPOSED DN150 SEWER
- W — PROPOSED DN100 WATER MAIN
- W — PROPOSED DN250 FIRE WATER MAIN
- FH ● W — FIRE HYDRANT
- SV ● W — SLUICE VALVE
- W — END CAP
- W — DN100 uPVS THRUST BLOCK
- W — DN100 uPVS SOC
- EXISTING ROAD
- EXISTING FOOTPATH
- PROPOSED ASPHALT PAVEMENT. REFER TO DRG C232 FOR DETAILS
- PROPOSED 1.5m WIDE FOOTPATH. REFER TO DRG C232 FOR DETAILS
- INTERSECTION AND CUL-DE-SAC - 50mm ASPHALT PAVEMENT. REFER TO DRG C232 FOR DETAILS
- PROPOSED DRIVEWAY CROSSOVER IN ACCORDANCE WITH LGAT STD DRG. TSD-09 TRANSITION TO BE HEAVY DUTY TYPE AS PER TSD-R16

NOTE:
 CONTRACTOR TO ALLOW FOR INSTALLATION OF PROPERTY CONNECTION FOR EACH LEASE AREA (5 TOTAL) (DN150 HYDRANT MAIN, DN200 SPRINKLER MAIN AND DN32 WATER MAIN CONNECTIONS).
 LEASE BOUNDARIES TO BE PROVIDED BY HIAPL AND PLAN TO BE AMENDED.

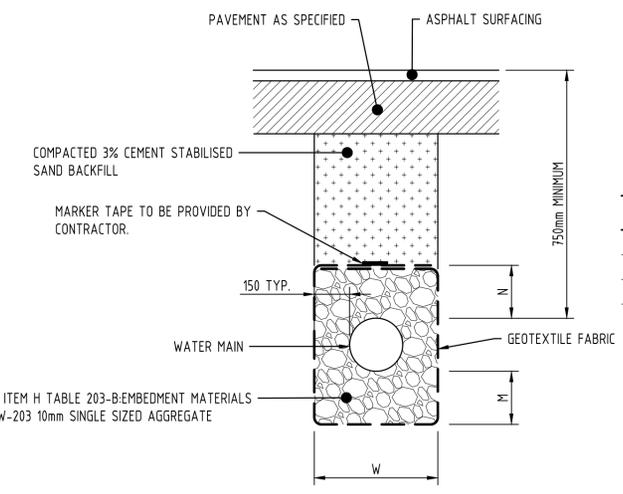
NOTE:
 EXISTING WATER MAIN INFORMATION HAS BEEN PLOTTED FROM SUPPLIED DATA AND AS SUCH ITS ACCURACY CANNOT BE GUARANTEED.

AS CONSTRUCTED / ADAC
 CONTRACTOR TO ALLOW ALL COSTS FOR SURVEYOR TO GATHER AS CONSTRUCTED SURVEY INFORMATION AND PREPARE ADAC DATA IN ACCORDANCE WITH CURRENT TASWATER REQUIREMENTS, UNLESS OTHERWISE ADVISED BY ADG ENGINEERS.

CAUTION ⚠
 EXISTING FIBRE OPTIC, ELECTRICAL & TELECOM CABLES MAY EXIST IN THE VICINITY OF REQUIRED WORKS. FOR ALL WORK WITHIN 2.5m OF MAJOR OPTIC CABLES, THE CONTRACTOR IS REQUIRED TO HAND DIG (POTHOLE) AND EXPOSE THE CABLE/CONDUIT. BEFORE WORK CAN COMMENCE, ON SITE LOCATION SHOULD BE SOUGHT FROM AN ACCREDITED PLANT LOCATOR.



TRENCH DETAIL - TYPE A
 (STANDARD - UNDER VERGE)
 N.T.S.



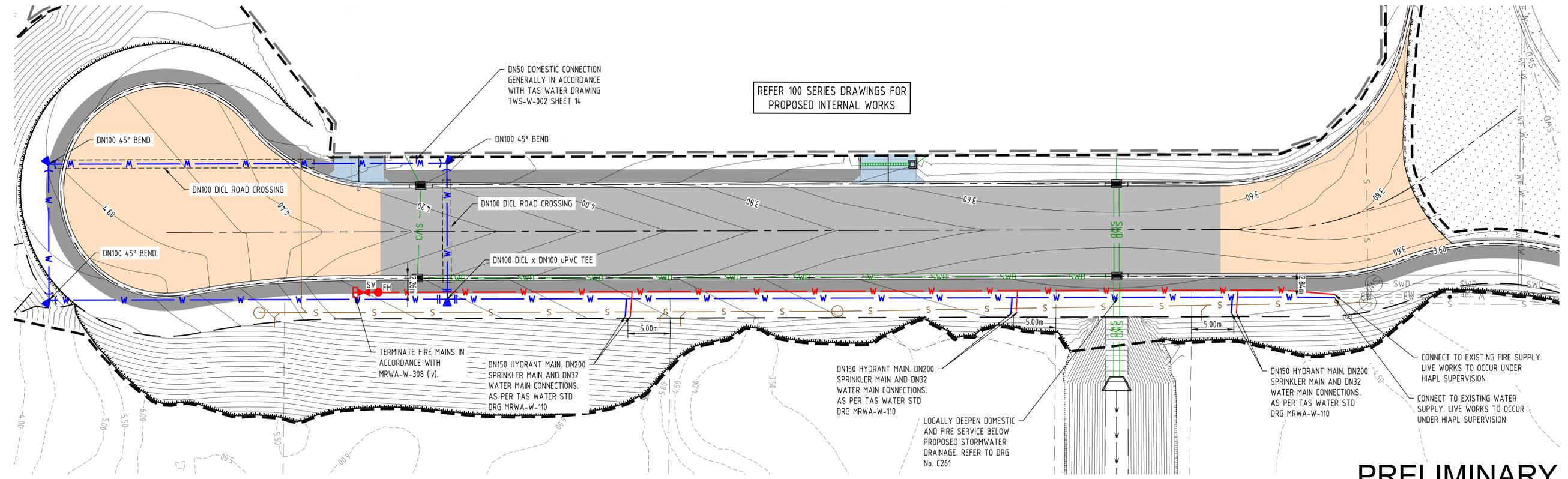
TRENCH DETAIL - TYPE B
 (STANDARD - UNDER ROAD PAVEMENTS)
 N.T.S.

TYPE 2 EMBEDMENT

PIPE SIZE DN (mm)	M (mm)	N (mm)
150-600	150	150

TRENCH WIDTHS

PIPE SIZE (mm)	W (mm)
100-150	450
200-300	600



PRELIMINARY
 NOT FOR CONSTRUCTION

WORK IN PROGRESS

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 Quality Assurance ISO 9001:2015 | Work Health Safety ISO 45001:2018
 Environmental Management ISO 14001:2015

Client: DEPARTMENT OF HEALTH TASMANIA
 Project Name: HOSPITALS SOUTH PRODUCTION KITCHEN
 GRUEBER AVENUE
 CAMBRIDGE, TAS

Discipline: CIVIL
 Status: PRELIMINARY
 Designed By: MB
 Checked By: SW
 Project No: 27536
 Drawn By: AB
 Scale at A1: 1:250

Title: WATER LAYOUT PLAN
 Drawing No: C260

NOTE:

CONTRACTOR TO ALLOW FOR INSTALLATION OF PROPERTY CONNECTION FOR EACH LEASE AREA (5 TOTAL) (DN150 HYDRANT MAIN, DN200 SPRINKLER MAIN AND DN32 WATER MAIN CONNECTIONS).
LEASE BOUNDARIES TO BE PROVIDED BY HIAPL AND PLAN TO BE AMENDED.

NOTE:

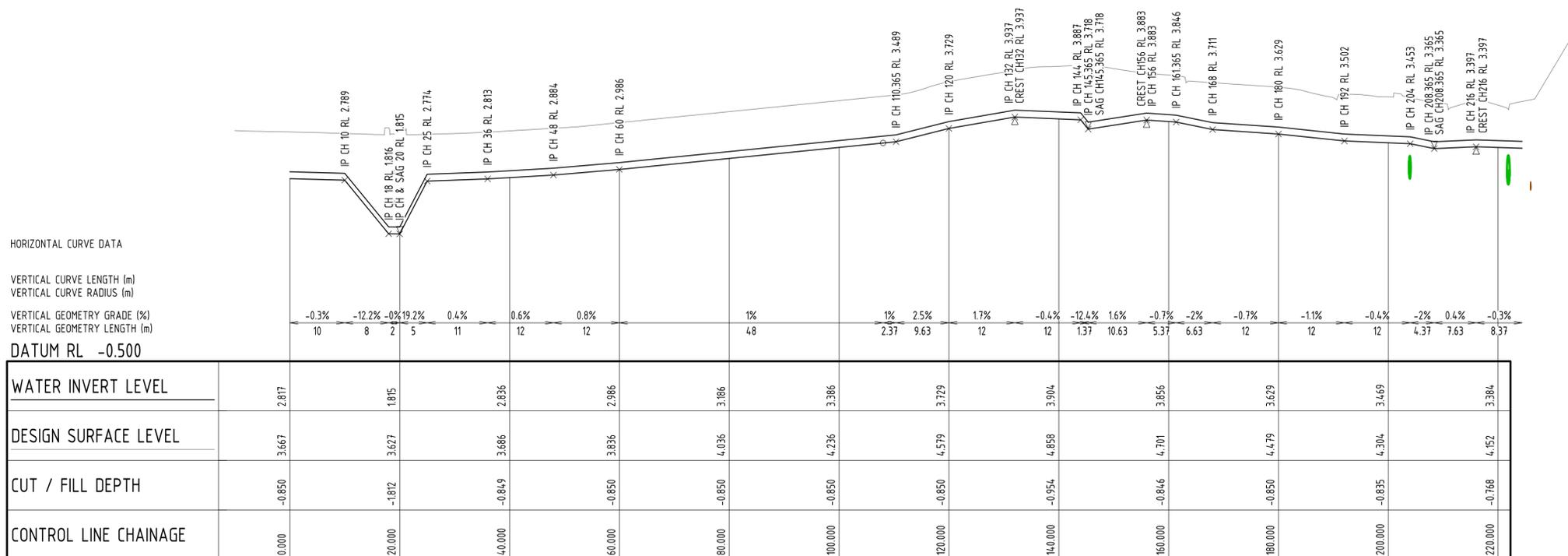
EXISTING WATER MAIN INFORMATION HAS BEEN PLOTTED FROM SUPPLIED DATA AND AS SUCH ITS ACCURACY CANNOT BE GUARANTEED.

AS CONSTRUCTED / ADAC

CONTRACTOR TO ALLOW ALL COSTS FOR SURVEYOR TO GATHER AS CONSTRUCTED SURVEY INFORMATION AND PREPARE ADAC DATA IN ACCORDANCE WITH CURRENT TASWATER REQUIREMENTS, UNLESS OTHERWISE ADVISED BY ADG ENGINEERS.

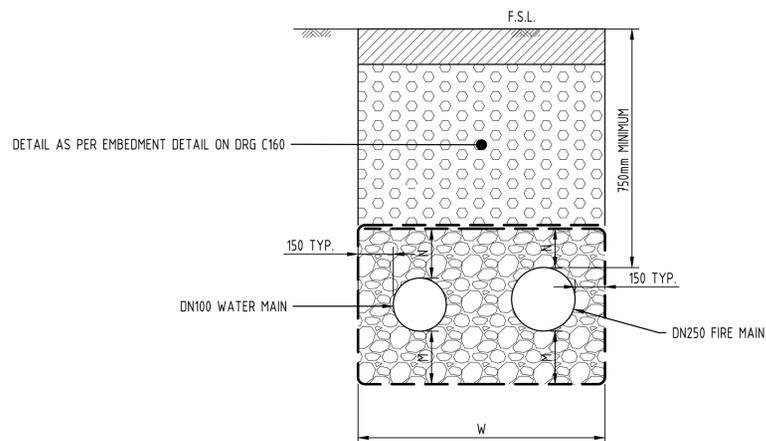
CAUTION

EXISTING FIBRE OPTIC, ELECTRICAL & TELECOM CABLES MAY EXIST IN THE VICINITY OF REQUIRED WORKS. FOR ALL WORK WITHIN 2.5m OF MAJOR OPTIC CABLES, THE CONTRACTOR IS REQUIRED TO HAND DIG (POTHOLE) AND EXPOSE THE CABLE/CONDUIT. BEFORE WORK CAN COMMENCE, ON SITE LOCATION SHOULD BE SOUGHT FROM AN ACCREDITED PLANT LOCATOR.



A1 SCALE: H 1:1000 V 1:100

DN150 WATER LONGITUDINAL SECTION



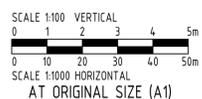
TRENCH WIDTHS

PIPE SIZE (mm)	W (mm)
100-150	450
200-300	600

TRENCH DETAIL WATER & FIRE
(STANDARD - UNDER VERGE)
N.T.S.

PRELIMINARY
NOT FOR CONSTRUCTION

WORK IN PROGRESS



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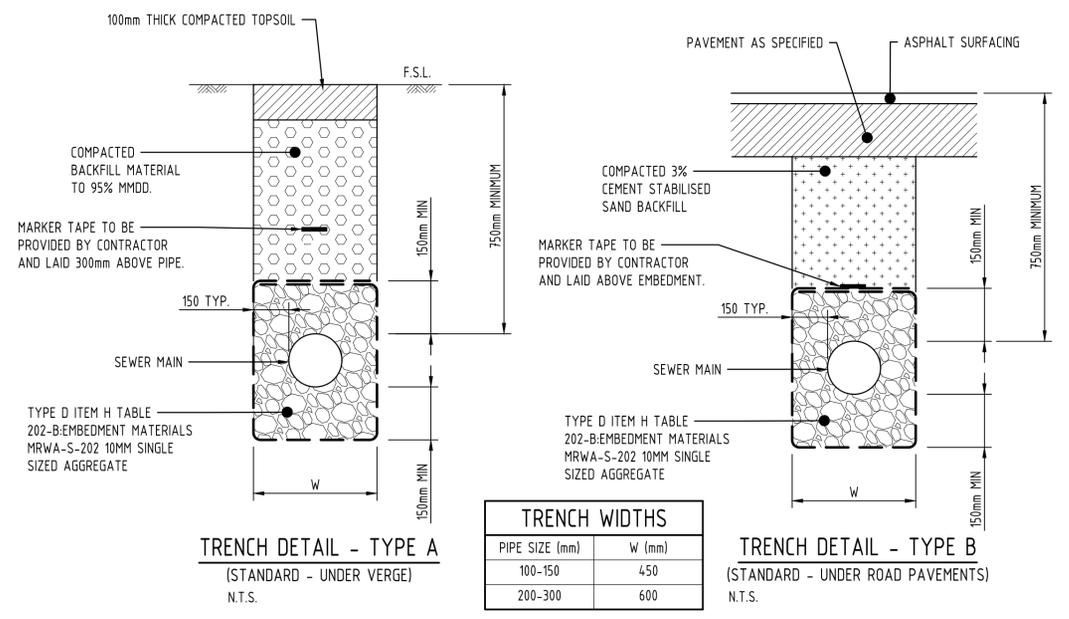


Client DEPARTMENT OF HEALTH TASMANIA		Discipline CIVIL	Status PRELIMINARY	Title WATER LONGITUDINAL SECTION
Project Name HOSPITALS SOUTH PRODUCTION KITCHEN GRUEBER AVENUE CAMBRIDGE, TAS		Designed By MB	Checked By SW	
Project No. 27536		Drawn By AB	Approved By SW	Drawing No. C261
			Scale at A1 1:250	



LEGEND

- 12.0 FINISHED SURFACE CONTOURS
- SITE BOUNDARY
- EXISTING PROPERTY BOUNDARY
- EXISTING NOMINAL KERB LINE
- EXISTING EDGE OF BITUMEN
- EXISTING EDGE OF BUILDING
- EXISTING STORMWATER DRAINAGE
- EXISTING SEWER
- EXISTING WATER
- EXISTING FIRE AND SPRINKLER MAIN
- EXISTING TELECOMMUNICATIONS
- EXISTING BATTER
- EXISTING FENCE
- LIMIT OF WORKS
- PROPOSED STORMWATER DRAINAGE
- PROPOSED DN150 SEWER
- PROPOSED SEWER HOUSE CONNECTION
- PROPOSED SEWER MANHOLE
- PROPOSED SEWER MAINTENANCE SHAFT
- PROPOSED DN100 WATER MAIN
- PROPOSED DN250 FIRE WATER MAIN
- PROPOSED WATER ROAD CROSSING CONDUIT
- PROPOSED NOMINAL KERB LINE
- PROPOSED EASEMENTS
- EXISTING ROAD
- EXISTING FOOTPATH
- PROPOSED FOOTPATH
- PROPOSED ROAD PAVEMENT. REFER TO DRG C232 FOR DETAILS



NOTE:
CONTRACTOR TO ALLOW FOR INSTALLATION OF PROPERTY CONNECTION FOR EACH LEASE AREA (5 TOTAL) DN150 uPVC CONNECTION. LEASE BOUNDARIES TO BE PROVIDED BY HIAPL AND PLAN TO BE AMENDED.

NOTE:
LOT CONTROL OVER FURNITURE LEASE AREA IS NOT ACHIEVED. FUTURE FILLING OF PROPOSED LEASE AREAS OR A PUMPED SOLUTION WILL BE REQUIRED TO SERVICE FUTURE LEASE AREA

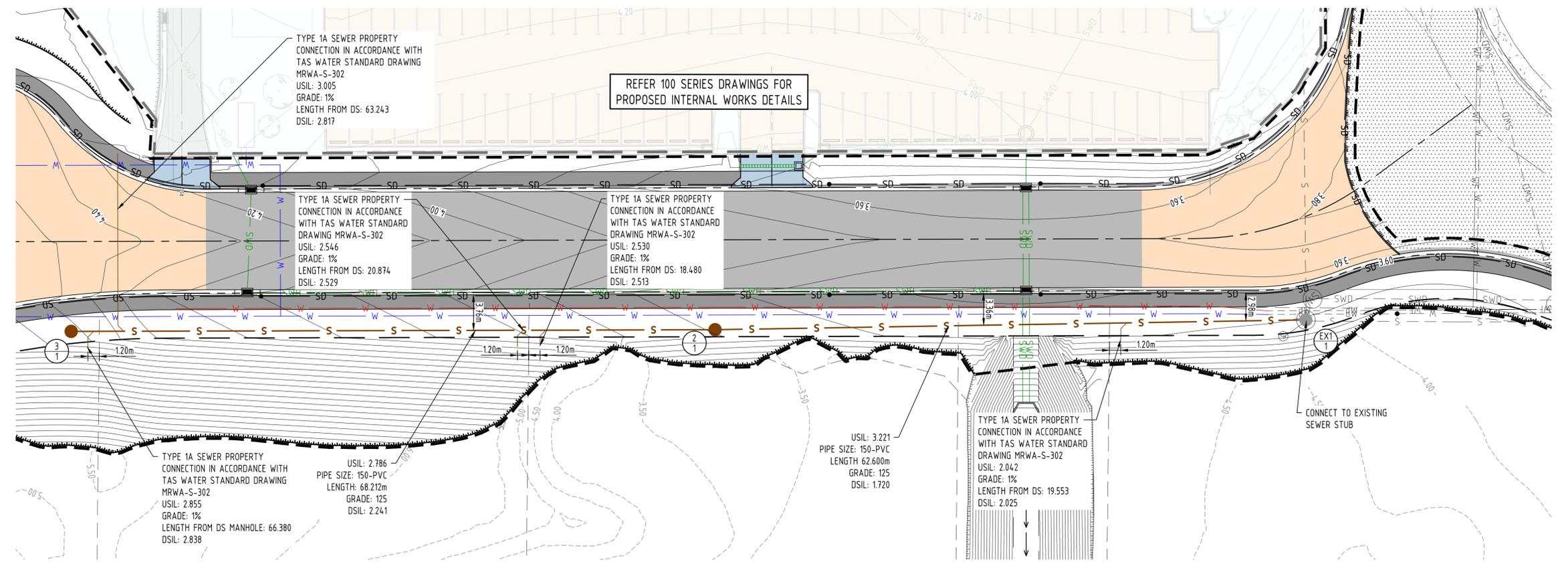
NOTE:
CONTRACTOR TO ALLOW FOR ALL NECESSARY TRENCH SHORING MEASURES.

NOTE:
FOR SEWER NOTES REFER TO DRG C202 AND LONGITUDINAL SECTIONS REFER TO DRG No. C272

CAUTION
THE LOCATION AND DEPTH OF EXISTING SERVICES AS SHOWN IS BASED ON INFORMATION OBTAINED FROM ARTHUR MOHRKE SURVEYORS DATED 28/08/24 AND HIAPL RECORDS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM THE ACTUAL LOCATION AND DEPTH OF EXISTING SERVICES PRIOR TO CARRYING OUT ANY EXCAVATION, TRENCHING OR TUNNELLING WORKS.

AS CONSTRUCTED / ADAC
CONTRACTOR TO ALLOW ALL COSTS FOR SURVEYOR TO GATHER AS CONSTRUCTED SURVEY INFORMATION AND PREPARE ADAC DATA IN ACCORDANCE WITH CURRENT TASWATER REQUIREMENTS, UNLESS OTHERWISE ADVISED BY ADG ENGINEERS.

NOTE:
INSPECTION SHAFTS & CLEAROUTS TO SURFACE IN TRAFFICABLE AREAS, TO BE INSTALLED IN ACCORDANCE WITH AS/NZS3500.2:4.2.2.



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ADG
T: 1300 657 402 E: info@adg.com W: www.adg.com.au
Quality Assurance ISO 9001:2015 | Work Health Safety ISO 45001:2018
Environmental Management ISO 14001:2015

Client: DEPARTMENT OF HEALTH TASMANIA
Project Name: HOSPITALS SOUTH PRODUCTION KITCHEN
GRUEBER AVENUE
CAMBRIDGE, TAS

Discipline: CIVIL
Status: PRELIMINARY
Designed By: MB
Checked By: SW
Project No: 27536
Drawn By: AB
Scale at A1: AS SHOWN

Title: SEWER LAYOUT PLAN
Drawing No: C271

STRUCTURE NAME	EX1 1	2 1	3 1
STRUCTURE TYPE	EX-MH	WSAA-1050-C1-D	WSAA-1050-C1-D
JUNCTION LINE			
DROP TYPE			
DEPTH TO PC		1.635	1.462 1.449
PROPERTY CONNECTION INVERT LEVEL		2.025	2.513 2.529
PC TYPE		1A	1A 1A
PC LOT No.		VERGE	VERGE VERGE
CH FROM D/S STRUCTURE		19.553	18.480 20.874

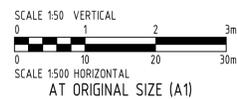


DATUM RL	-3.000		
LOCATION / EMBEDMENT	TYPE A		TYPE A
DIAMETER / CLASS	150 uPVC SN8		150 uPVC SN8
GRADE mm/m / 1 in X	8.0 125		8.0 125
DEPTH TO INVERT	1.894 1.894	1.570 1.550	1.838
INVERT LEVEL OF SEWER	1.720 1.720	2.721 2.241	2.786
DESIGN SURFACE LEVEL	3.614	3.791	4.624
RUNNING CHAINAGE	0.000	62.600	68.212 130.812

LINE 1

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WORK IN PROGRESS



PRINT IN COLOUR



Client	DEPARTMENT OF HEALTH TASMANIA		Discipline	CIVIL	Status	PRELIMINARY	Title	SEWER LONGITUDINAL SECTION	
Project Name	HOSPITALS SOUTH PRODUCTION KITCHEN GRUEBER AVENUE CAMBRIDGE, TAS		Designed By	MB	Checked By	SW	Approved By	SW	
			Project No.	27536	Drawn By	AB	Scale at A1	AS SHOWN	
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								Revision	

HOSPITALS SOUTH PRODUCTION KITCHEN

GRUEBER AVENUE, CAMBRIDGE, TAS 7190

INTERNAL CIVIL WORKS

NOTE:

THE FOLLOWING INSPECTIONS AND TESTING MUST BE COMPLETED BY ADG ENGINEERS BEFORE ENGINEERING CERTIFICATION WILL BE ISSUED. THE CONTRACTOR IS TO PROVIDE A MINIMUM OF 72 HOURS NOTICE TO ADG FOR REQUIRED INSPECTIONS. SHOULD THE CONTRACTOR FAIL TO REQUEST AN INSPECTION, THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL COSTS TO ALLOW FOR THE WORKS TO BE INSPECTED TO THE SATISFACTION OF ADG. ANY INSPECTIONS THAT FAIL ARE TO BE RE-INSPECTED WITH ALL REINSPECTION COSTS TO BE PAID BY THE CONTRACTOR.

- a) PRESTART
- b) EARTHWORKS - FINAL STRIPPING OF TOPSOIL, INSTALLATION OF SEDIMENT AND EROSION CONTROL MEASURES
- c) UNSUITABLE GROUND
- d) SIDE AND CUT OFF DRAINS
- e) STORMWATER PIPE LAID ON BEDDING PRIOR TO BACKFILL
- f) STORMWATER TRENCH BACKFILLED PRIOR TO PAVEMENT PLACEMENT

- g) STORMWATER STRUCTURE BASE SLABS
- h) SEWER RETICULATION EXTERNAL WORKS
- i) WATER RETICULATION EXTERNAL WORKS
- j) PAVEMENT SUBGRADE
- k) PAVEMENT REINFORCING
- l) PAVEMENT PRIOR TO SEALING (PRESEAL)
- m) STEEL REINFORCEMENT OF CONCRETE STRUCTURES
- n) PRACTICAL COMPLETION
- o) ON MAINTENANCE
- p) OFF MAINTENANCE
- q) ANY OTHER INSPECTIONS AND TESTING IN ACCORDANCE WITH LGAT GUIDELINES, SPECIFICATIONS AND DRAWINGS
- r) ANY OTHER INSPECTIONS AND TESTING IN ACCORDANCE WITH TASWATER GUIDELINES, SPECIFICATIONS AND DRAWINGS
- s) ANY OTHER INSPECTIONS AND TESTING AS REQUIRED BY HOBART INTERNATIONAL AIRPORT PTY LTD AND DEPARTMENT OF HEALTH REQUIREMENTS.

GENERAL NOTES:

- G1. ALL DIMENSIONS SHOWN ARE IN METERS UNLESS OTHERWISE SHOWN.
- G2. ALL SETOUT ON SITE IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. CONTRACTOR TO ALLOW FOR ALL MEANS NECESSARY TO ACCURATELY SETOUT THE WORKS.
- G3. ALL WORKS TO BE CONSTRUCTED IN ACCORDANCE WITH PROJECT SPECIFICATIONS AND WHERE FURTHER DETAILS ARE REQUIRED THE CONTRACTOR SHALL REFER TO LOCAL GOVERNMENT ASSOCIATION OF TASMANIA (LGAT) DEVELOPMENT GUIDELINES, TASWATER GUIDELINES, ASSOCIATED STANDARD DRAWINGS AND SPECIFICATIONS U.N.O.
- G4. SHOULD ANY OF THE CONSTRUCTED WORKS BE CONSTRUCTED OUTSIDE OF THE TOLERANCES SPECIFIED WITHIN THE PROJECT SPECIFICATION AND LOCAL AUTHORITY REQUIREMENTS, THE CONTRACTOR WILL RECTIFY AT THEIR COST INCLUSIVE OF ANY ADDITIONAL COSTS INCURRED BY ADG.
- G5. EXISTING SERVICES HAVE BEEN PLOTTED FROM SUPPLIED DATA AND AS SUCH THEIR ACCURACY CANNOT BE GUARANTEED. NO RESPONSIBILITY IS TAKEN BY ADG OR THE PRINCIPAL FOR THE ACCURACY AND COMPLETENESS OF THIS INFORMATION. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ACCURATELY ESTABLISH THE LOCATION AND LEVEL OF ALL EXISTING SERVICES PRIOR TO THE COMMENCEMENT OF ANY WORK. ANY DISCREPANCIES SHALL BE REPORTED TO THE SUPERINTENDENT. CONTRACTOR TO LOCATE AND PROTECT SERVICES AS REQUIRED DURING PROPOSED WORKS.
- G6. THE CONTRACTOR IS TO CHECK THROUGH LOCATING, POTHOLING AND SURVEY ALL CRITICAL CONNECTION POINTS FOR ALL CIVIL WORKS SHOWN ON THE DRAWINGS INCLUDING ANY POTENTIAL EXISTING SERVICES CLASHES PRIOR TO COMMENCEMENT OF CIVIL WORKS. CONTRACTOR TO IMMEDIATELY REPORT ANY DISCREPANCIES TO ADG AND AWAIT FORMAL DIRECTION PRIOR TO COMMENCING CIVIL WORKS.
- G7. ON COMPLETION OF SERVICES INSTALLATION, ALL DISTURBED AREAS SHALL BE RESTORED TO ORIGINAL LEVEL, INCLUDING KERBS, FOOTPATHS, CONCRETE AREAS, GRAVEL AREAS, GRASSED AREAS AND ROAD PAVEMENTS.
- G8. CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR OF ANY DAMAGE TO AUTHORITY/COUNCIL'S INFRASTRUCTURE. SUCH REPAIR OR REINSTATEMENT TO BE CARRIED OUT IMMEDIATELY TO THE SATISFACTION OF INFRASTRUCTURE OWNER/MANAGER/AUTHORITY/COUNCIL.
- G9. CONTRACTOR TO UNDERTAKE ALL WORKS IN ACCORDANCE WITH ALL WORKPLACE HEALTH AND SAFETY REQUIREMENTS.
- G10. WHERE ANY EXCAVATION OR CONSTRUCTION WORKS ARE TO BE IN CLOSE PROXIMITY TO NEIGHBOURING LOT BOUNDARIES OR INFRASTRUCTURE, CONTRACTOR TO ALLOW IN SCOPE OF WORKS TO PROVIDE ALL MEASURES NECESSARY TO ENSURE THE INTEGRITY OF EXISTING BOUNDARIES AND INFRASTRUCTURE. THIS MAY INCLUDE THE USE OF LOW VIBRATION EQUIPMENT, TRENCH SHORING ETC AS REQUIRED.
- G11. PRIOR TO THE CONTRACTOR COMMENCING ANY WORKS DETAILED ON THESE DRAWINGS, THE CONTRACTOR IS TO NOTIFY ADG ENGINEERS (AUST.) Pty. Ltd. AND RECEIVE WRITTEN CONFIRMATION THAT WORKS CAN COMMENCE
- G12. CONTRACTOR TO PROVIDE AS CONSTRUCTED DRAWINGS FOR ALL CONSTRUCTED WORKS IN ACCORDANCE WITH HOBART INTERNATIONAL AIRPORT PTY LTD.
- G13. CONTRACTOR TO UNDERTAKE ALL WORKS IN ACCORDANCE WITH RELEVANT APPROVALS.
- G14. CONTRACTOR TO ALLOW TO LIAISE/CO-ORDINATE WITH ELECTRICAL, LANDSCAPE AND OTHER SERVICE CONTRACTORS THROUGHOUT CIVIL CONSTRUCTION.
- G15. CONTRACTOR TO ORGANISE ALL DEMOLITION PERMITS PRIOR TO ANY DEMOLITION WORKS COMMENCING ON SITE.
- G16. CONTRACTOR TO UNDERTAKE DILAPIDATION REPORT FOR ADJOINING PROPERTIES AND HOBART INTERNATIONAL AIRPORT PTY LTD ROADS AND VERGES PRIOR TO

COMMENCEMENT OF ANY WORKS ON SITE.

- G17. CONTRACTOR TO UNDERTAKE POST CONSTRUCTION DILAPIDATION REPORT AND HOBART INTERNATIONAL AIRPORT PTY LTD ROADS AND VERGES AT PRACTICAL COMPLETION.
- G18. CONTRACTOR TO CLEAR AND GRUB ALL VEGETATION ON SITE AS IDENTIFIED IN THE APPROVED VEGETATION MANAGEMENT PLAN. CONTRACTOR TO ENSURE ALL TREE ROOTS AND STUMPS ARE COMPLETELY REMOVED AND BACKFILLED TO LEVEL 1 SUPERVISION. CONTRACTOR TO ALLOW TO MULCH ALL CLEARED VEGETATION AND STOCKPILE ON SITE OR REMOVE FROM SITE AS DIRECTED.
- G19. DRAWINGS TO BE READ IN CONJUNCTION WITH THE FOLLOWING CONSULTANTS/CONTRACTORS DRAWINGS:
 - SURVEYOR - ARTHUR MOEHRKE SURVEYS PTY LTD
 - ARCHITECT - JAWS ARCHITECTS
 - HYDRAULICS - ENGINEERING SOLUTIONS TASMANIA
 - STRUCTURAL - ADG ENGINEERS (AUST.) PTY LTD
 - ELECTRICAL - ENGINEERING SOLUTIONS TASMANIA
 - COMMUNICATIONS - TBC
 - MECHANICAL - ENGINEERING SOLUTIONS TASMANIA
 - LANDSCAPE - TBC
 - TRAFFIC - PITT & SHERRY
 - GEOTECHNICAL - ENVIRO-TECH CONSULTANTS
- G20. CONTRACTOR TO PREPARE AND HAVE APPROVED BY RELEVANT AUTHORITY: ROAD OPENING PERMIT AND TRAFFIC MANAGEMENT PLAN FOR ALL WORKS WITHIN HOBART INTERNATIONAL AIRPORT PTY LTD ROAD RESERVES. CONTRACTOR TO ALLOW FOR ALL COSTS ASSOCIATED WITH IMPLEMENTATION OF THE TMP.
- G21. NO WORKS ARE TO BE UNDERTAKEN ON LAND OUTSIDE OF THE SITE BOUNDARY WITHOUT FORMAL APPROVAL BY THE OWNER/CUSTODIAN OF THAT LAND INCLUDING BUT NOT LIMITED TO PRIVATE PROPERTY, ROAD RESERVE, PARKS/OPEN SPACE, EASEMENTS.
- G22. THE CONTRACTOR SHALL HAVE AN APPROVED SET OF CONSTRUCTION DRAWINGS AND APPROVALS ON SITE AT ALL TIMES.
- G23. ALL WATER AND SEWER RETICULATION WORKS TO BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT TASWATER WATER SUPPLY AND SEWERAGE DESIGN AND CONSTRUCTION CODE.
- G24. CONTRACTOR TO INSTALL INFORMATION SIGNAGE IN ACCORDANCE WITH LOCAL AUTHORITY STANDARDS PRIOR TO COMMENCEMENT OF WORKS.
- G25. CONTRACTOR TO PREPARE CONSTRUCTION MANAGEMENT PLAN IN ACCORDANCE WITH LOCAL AUTHORITY REQUIREMENTS AND HAVE APPROVED BY LOCAL AUTHORITY WHERE REQUIRED.
- G26. PROPRIETARY ITEMS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS UNO.
- G27. DRAWINGS INDICATE FINAL DESIGN OUTCOME ONLY. CONTRACTOR TO ALLOW FOR ALL TEMPORARY MEASURES REQUIRED DURING CONSTRUCTION IN ORDER TO ACHIEVE THE FINAL DESIGN OUTCOME.
- G28. ALL CONTOURS AND LEVELS ARE IN METRES TO THE AUSTRALIAN HEIGHT DATUM (AHD-TAS83).
- G29. ALL CO-ORDINATES SHOWN ARE PLANAR WITH MGA2020 Z55 ORIGIN IN ACCORDANCE WITH THE SITE SURVEY.

LOCALITY PLAN

NOT TO SCALE



PROPERTY DESCRIPTION
LOT: 1 ON CT152454

ADG CIVIL SERVICES

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Client DEPARTMENT OF HEALTH TASMANIA		Discipline CIVIL	Status PRELIMINARY	Title DRAWING SCHEDULE NOTES AND LOCALITY PLAN
Project Name HOSPITALS SOUTH PRODUCTION KITCHEN GRUEBER AVENUE CAMBRIDGE, TAS 7170		Designed By HD	Checked By MB	
		Project No. 27536	Drawn By AB	Scale at A1 AS SHOWN
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				Revision

EXISTING FEATURES AND DEMOLITION NOTES:

- THE CONTRACTOR WILL MAKE THEMSELVES FULLY AWARE OF THE EXISTING FEATURES OF THIS SITE AND ENSURE ANY ADDITIONAL WORKS REGARDING TREATMENT OF EXISTING SERVICES AND INFRASTRUCTURE NOT SHOWN ON THE PLANS ARE INCLUDED IN THE CONTRACT.
- CONTRACTOR TO LOCATE AND PROTECT ALL EXISTING SERVICES ON SITE PRIOR TO COMMENCEMENT OF WORKS.
- CONTRACTOR TO ORGANISE ALL DEMOLITION PERMITS PRIOR TO ANY DEMOLITION WORKS COMMENCING ON SITE.
- SERVICES ON NEIGHBOURS DEVELOPMENTS SHOWN AS EXISTING AS ASSUMED WILL BE CONSTRUCTED PRIOR TO COMMENCEMENT OF WORKS.
- CONTRACTOR TO LOCATE ALL EXISTING UTILITIES ON SITE AND MAKE SUITABLE ARRANGEMENTS TO HAVE DISCONNECTED U.N.O.
- CONTRACTOR TO ALLOW TO DEMOLISH ALL EXISTING STRUCTURES, ROADS AND SERVICES WITHIN LIMIT OF WORKS AND REMOVE FROM SITE U.N.O.
- CONTRACTOR TO ALLOW FOR TEMPORARY FENCE FOR PERIMETER OF SITE FOR DURATION OF CIVIL WORKS CONTRACT.
- CONTRACTOR TO UNDERTAKE AND PROVIDE CCTV OF ALL EXISTING STORMWATER LINES IN THE VICINITY OF THE WORKS. SHOULD THE CCTV IDENTIFY DAMAGE OR CRACKING WITHIN THE STORMWATER PIPES, THE CONTRACTOR WILL RECTIFY THE DAMAGE WITHIN THE PIPES BY MEANS DIRECTED BY HIAPL WHICH MAY INCLUDE BUT NOT BE LIMITED TO PIPE RELINING OR PIPE REPLACEMENT.

SEDIMENT AND EROSION CONTROL NOTES:

SEDIMENT CONTROL

- ALL EROSION AND SEDIMENT CONTROL MEASURES TO BE IN ACCORDANCE WITH INTERNATIONAL EROSION CONTROL ASSOCIATION (IECA) AUSTRALIA GUIDELINES AND THE SPECIFICATIONS.
- EROSION AND SEDIMENT CONTROL DETAILS SHOWN ARE MINIMUM REQUIREMENTS. IT IS THE CONTRACTORS RESPONSIBILITY TO INSTALL ADDITIONAL CONTROL MEASURES AS DEEMED NECESSARY THROUGHOUT CONSTRUCTION.
- THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN ALL SEDIMENT CONTROL DEVICES IN A FUNCTIONAL ORDER AND REPLACE ALL BLOCKED SEDIMENT DEVICES AS REQUIRED UNTIL SUCCESSFUL OFF MAINTENANCE OF WORKS.
- CONSTRUCTION OF ALL SEDIMENT MANAGEMENT DEVICES TO THE SATISFACTION OF THE SUPERINTENDENT. SHALL BE COMPLETED AND EFFECTIVE PRIOR TO:
 - STRIPPING OF TOPSOIL AND GRASS.
 - BULK EARTHWORKS TO THE SITE.
 - SERVICES INSTALLATION.
 - PAVEMENT CONSTRUCTION.
- ALL SEDIMENT MANAGEMENT MEASURES ARE TO REMAIN IN PLACE UNTIL INSTRUCTION IS RECEIVED IN WRITING FROM THE SUPERINTENDENT TO REMOVE ALL OR PART OF THE SILT CONTROL APPLICATIONS.
- THE BULK EARTHWORKS AND SEDIMENT CONTROL LAYOUT PLAN SHALL BE READ IN CONJUNCTION WITH THE APPROVED DRAWINGS.
- PRIOR TO COMMENCEMENT OF CONSTRUCTION APPROVAL IS TO BE OBTAINED FROM THE SUPERINTENDENT FOR THE LOCATION OF THE SITE ACCESS POINT AND WASH DOWN AREA WHICH ARE TO BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD.
- IF EROSION AND SEDIMENT CONTROL DEVICES HAVE BEEN FOUND TO BE DIFFERENT OR FAILED IN SERVICE, CORRECTIVE ACTION IS TO BE UNDERTAKEN IMMEDIATELY WHICH MAY INCLUDE AMENDMENTS/ ADDITIONS TO THE ORIGINAL APPROVED EROSION CONTROL PLANS. SUCH AMENDMENTS ARE TO BE APPROVED BY SUPERINTENDENT, IF DEEMED NECESSARY AND RELEVANT.

OVERALL

- TEMPORARY DRAINAGE CONTROL FLOW SHOULD BE DIVERTED AROUND THE WORK SITE WHERE POSSIBLE.
 - ALL DRAINAGE, EROSION AND SEDIMENT CONTROLS TO BE INSTALLED AND BE OPERATIONAL BEFORE COMMENCING UP-SLOPE EARTHWORKS.
 - IN AREAS WHERE RUNOFF TURBIDITY IS TO BE CONTROLLED, EXPOSED SURFACES TO BE EITHER MULCHED, COVERED WITH EROSION CONTROL BLANKETS OR TURFED IF EARTHWORKS ARE EXPECTED TO BE DELAYED FOR MORE THAN 14 DAYS.

SEDIMENT FENCE

- FOR SEDIMENT FENCE STANDARD DETAIL AND SPECIFICATION REFER TO INTERNATIONAL EROSION CONTROL ASSOCIATION AUSTRALASIA (IECA) BEST PRACTICES STANDARD DRAWINGS SF-01 AND SF-02 SEDIMENT FENCE.

TEMPORARY CONSTRUCTION ENTRY/EXIT

- FOR CONSTRUCTION ENTRY / EXIT STANDARD DETAIL AND SPECIFICATION REFER TO INTERNATIONAL EROSION CONTROL ASSOCIATION AUSTRALASIA (IECA) BEST PRACTICES STANDARD DRAWINGS EXIT-01 AND EXIT-02 CONSTRUCTION EXIT - ROCK PAD (CONSTRUCTION SITES ONLY), EXIT-03 - ROCK PADS FOR BUILDING SITES AND EXIT-04 AND EXIT-05 CONSTRUCTION EXIT - VIBRATION GRID.

KERB INLET

- FOR KERB INLET STANDARD DETAIL AND SPECIFICATION REFER TO INTERNATIONAL EROSION CONTROL ASSOCIATION AUSTRALASIA (IECA) BEST PRACTICES STANDARD DRAWING ESC-03 KERB INLET SEDIMENT TRAPS.

REVEGETATION

- FOR REVEGETATION STANDARD SPECIFICATION REFER TO INTERNATIONAL EROSION CONTROL ASSOCIATION AUSTRALASIA (IECA) BEST PRACTICES STANDARD DRAWING R-01 REVEGETATION GENERAL.

OPERATION AND MAINTENANCE

- IN ACCORDANCE WITH IECA ESC GUIDELINES, ALL ESC MEASURES SHALL BE INSPECTED:
 - AT LEAST DAILY (WHEN WORK IS OCCURRING ON SITE) OR WEEKLY (WHEN WORK IS NOT OCCURRING ON SITE)
 - WITHIN 24 HOURS OF EXPECTED RAIN; AND
 - WITHIN 18 HOURS OF A RAINFALL EVENT (I.E. AN EVENT OF SUFFICIENT INTENSITY AND DURATION TO MOBILISE SEDIMENT ON SITE).
- IN ACCORDANCE WITH IECA ESC GUIDELINES, MAINTENANCE OF ESC MEASURES SHALL OCCUR IN ACCORDANCE WITH THE FOLLOWING TABLE:

GENERAL

- CIVIL CONTRACTOR IS TO PROVIDE AN UPDATED PROGRAM OF ESC MAINTENANCE AND CONTROL OF ALL STAGES OF WORK FOR APPROVAL BY THE SUPERINTENDENT.

MAINTENANCE SCHEDULE		
ESC MEASURE	MAINTENANCE TRIGGER	TIMEFRAME FOR COMPLETION OF MAINTENANCE
OTHER ESC MEASURES	THE CAPACITY OF ESC MEASURES FALLS BELOW 75%	BY THE END OF THE DAY

IECA STANDARD DRAWINGS REGISTER	
DRAWING NUMBER	DRAWING DESCRIPTION
EXIT-01	CONSTRUCTION EXIT - ROCK PAD
EXIT-02	CONSTRUCTION EXIT - ROCK PAD
EXIT-03	ROCK PADS FOR BUILDING SITES
CD-01	CATCH DRAINS
SF-01	SEDIMENT FENCE
SF-02	SEDIMENT FENCE
ESC-03	KERB INLET SEDIMENT TRAPS
R-01	REVEGETATION - GENERAL

*DRAWINGS TO BE READ IN CONJUNCTION WITH INTERNATIONAL EROSION CONTROL ASSOCIATION AUSTRALASIA (IECA) BEST PRACTICES STANDARD DRAWINGS AND SPECIFICATIONS.

SEDIMENT RELEASE GUIDELINES:

- ALL RELEASES OF STORMWATER CAPTURED ONSITE, UNLESS OTHERWISE NOTED IN THIS STANDARD, MUST NOT EXCEED THE FOLLOWING LIMITS:
 - 75NTU OF TOTAL SUSPENDED SOLIDS (TSS) AS A MAXIMUM CONCENTRATION;
 - TURBIDITY (NTU) VALUE LESS THAN 10% ABOVE BACKGROUND;
 - pH VALUE MUST BE IN THE RANGE 6.5 TO 8.5 EXCEPT WHERE, AND TO THE EXTENT THAT, THE NATURAL RECEIVING WATERS LIE OUTSIDE THIS RANGE.
- THE CONCENTRATION OF TSS RELEASED BY DEWATERING MAY ONLY EXCEED 75NTU WHERE IT CAN BE DEMONSTRATED AND SUPPORTED THROUGH DOCUMENTATION THAT:
 - FURTHER SIGNIFICANT RAINFALL IS FORECAST TO OCCUR BEFORE THE TSS CONCENTRATION IS LIKELY TO BE REDUCED TO 75NTU;
 - RELEASING A HIGHER CONCENTRATION OF TOTAL SUSPENDED SOLIDS WILL RESULT IN A BETTER ENVIRONMENTAL OUTCOME BY PROVIDING STORAGE FOR THE CAPTURE AND TREATMENT OF RUN-OFF FROM THE IMMINENT RAINFALL AND RUN-OFF.
 - ALL REASONABLE AND PRACTICABLE STEPS HAVE BEEN TAKEN TO TREAT THE WATER WITHIN BEST-PRACTICE TIME FRAMES;
 - FLOCCULENT HAS BEEN APPROPRIATELY APPLIED AND THE CONCENTRATION OF TSS IN THE CAPTURED WATER HAS ALREADY SIGNIFICANTLY DECREASED.
- FOR ALL OTHER STORMWATER RELEASES, FLOWS AND DISCHARGES FROM THE SITE, THE RELEASE LIMIT PRESCRIBED IN (1a) ABOVE MUST NOT BE EXCEEDED UNLESS THE DEVELOPMENT IS IN FULL COMPLIANCE WITH THIS STANDARD.

NOTE: IT IS RECOMMENDED THAT A SITE-SPECIFIC RELATIONSHIP BETWEEN TURBIDITY AND SUSPENDED SOLIDS IS DETERMINED FOR EACH SEDIMENT BASIN. ONCE A CORRELATION BETWEEN SUSPENDED SOLIDS AND TURBIDITY HAS BEEN ESTABLISHED FOR A SEDIMENT BASIN, TESTING STORMWATER FOR COMPLIANCE WITH RELEASE LIMITS, PRIOR TO RELEASE, CAN BE DONE ON SITE WITH A TURBIDITY TUBE OR CALIBRATED TURBIDITY METER. THIS HAS THE ADVANTAGE OF PROVIDING IMMEDIATE ASSESSMENT TO JUSTIFY A RELEASE RATHER THAN WAITING FOR LABORATORY RESULTS TO CONFIRM CONCENTRATION LEVELS AND COMPLIANCE. NOTE THAT POST-RELEASE TSS VALIDATION IS APPROPRIATE TO DEMONSTRATE THAT THE NTU/TSS CORRELATION IS BEING MAINTAINED.

NOTE: BACKGROUND REFERS TO RECEIVING WATER QUALITY IMMEDIATELY UPSTREAM OF THE SITE LOCATION RELEASE POINT AT THE TIME OF RELEASE. WHERE THERE IS NO IMMEDIATE UPSTREAM RECEIVING WATER AT THE LOCATION AND TIME OF RELEASE, THEN THE TURBIDITY RELEASE LIMIT (NTU) WILL BE EQUAL TO THE RELEASE LIMIT FOR 75NTU TOTAL SUSPENDED SOLIDS (TSS) BASED UPON THE ONSITE CORRELATION BETWEEN TSS AND NTU.

EARTHWORKS NOTES

- FOR GENERAL NOTES REFER DRG No. C100 WHICH IS TO BE REQUESTED AND VIEWED PRIOR TO COMMENCEMENT OF CONSTRUCTION IF NOT SUPPLIED.
- GRASS AND TOPSOIL SHALL BE STRIPPED TO A MINIMUM DEPTH OF 100MM OVER THE EXTENT OF THE WORKS UNLESS DIRECTED OTHERWISE AND STOCKPILED FOR FUTURE USE AS NON-STRUCTURAL FILL IF REQUIRED, OR REMOVE FROM SITE.
- CONTRACTOR TO CLEAR AND GRUB ALL VEGETATION ON SITE AS IDENTIFIED IN THE APPROVED VEGETATION MANAGEMENT PLAN. CONTRACTOR TO ENSURE ALL TREE ROOTS AND STUMPS ARE COMPLETELY REMOVED AND BACKFILLED TO LEVEL 1 SUPERVISION. CONTRACTOR TO ALLOW TO MULCH ALL CLEARED VEGETATION AND STOCKPILE ON SITE OR REMOVE FROM SITE AS DIRECTED.
- WHERE SITE TOPSOIL IS TO BE RESPREAD ON SITE, CONTRACTOR TO ALLOW TO SCREEN THE TOPSOIL OF ALL UNSUITABLE AND OVERSIZED MATERIAL. ALL UNSUITABLE MATERIAL GENERATED FROM SCREENING TO BE REMOVED FROM SITE AT CONTRACTORS EXPENSE.
- CONTRACTOR TO ALLOW FOR ALL COSTS ASSOCIATED WITH ROCK EXCAVATION WITHIN CONTRACT RATES.
- COMPACT THE EXPOSED SUBGRADE OR LOOSE TOP LEVEL MATERIAL TO A MINIMUM 98% STANDARD MAXIMUM DRY DENSITY TO AS1289 5.1.1. ANY 'SOFT SPOTS' IDENTIFIED BY THE PROOF ROLLING SHALL BE REMOVED AND REPLACED WITH A COMPACTED IMPORTED GENERAL FILL MATERIAL TO THE ABOVE COMPACTION REQUIREMENTS.
- IMPORTED GENERAL FILL MATERIAL SHALL BE SUPPLIED AND COMPACTED WHERE NECESSARY TO OBTAIN SUBGRADE/PLATFORM LEVEL. IMPORTED GENERAL FILL MATERIAL SHALL BE CLEAN GRADED MATERIAL FREE OF ORGANIC MATTER AND STONES GREATER THAN 150mm AND CAPABLE OF BEING COMPACTED INTO COHERENT FILLING TO THE SPECIFIED STANDARD. THE MATERIAL SHALL HAVE A LINEAR SHRINKAGE NOT GREATER THAN 15% AND A MINIMUM C.B.R. OF 10%.
- ALL EARTHWORKS OPERATIONS SHALL BE CARRIED OUT WITH 'LEVEL 1' SOIL ENGINEERING SUPERVISION IN ACCORDANCE WITH APPENDIX B OF AS 3798. THE NOMINATED GEOTECHNICAL TESTING AUTHORITY SHALL PROVIDE CERTIFICATION THAT ALL GENERAL EARTHWORKS OPERATIONS HAVE BEEN CARRIED OUT IN ACCORDANCE WITH THE DRAWINGS AND SPECIFICATIONS AND THE CONTROLLED FILL IS SUITABLE FOR PURPOSE WITH A MINIMUM 150KPA BEARING CAPACITY UNDER THE PLATFORM/STRUCTURES.
- ALL EARTHWORKS FILL AND EXCAVATED AREAS SHALL BE COMPACTED TO 98% STANDARD MAXIMUM DRY DENSITY (AS 1289 5.1.1) IN LAYERS NOT EXCEEDING 150MM COMPACTED THICKNESS.
- THE NOMINATED GEOTECHNICAL TESTING AUTHORITY SHALL PROVIDE CERTIFICATION THAT ALL GENERAL EARTHWORKS OPERATIONS HAVE BEEN CARRIED OUT IN ACCORDANCE WITH THE DRAWINGS.
- CONTRACTOR TO UNDERTAKE ALL EARTHWORKS TESTING TO COMPLY WITH THE PROJECT SPECIFICATION AND LOCAL AUTHORITY REQUIREMENTS.
- FINISHED SURFACES TO ALL DISTURBED AREAS ARE TO BE TREATED IN ACCORDANCE WITH LANDSCAPE DRAWINGS.
- FINISHED EARTHWORKS SURFACES TO BE STABILISED TO THE SATISFACTION OF THE SUPERINTENDENT.
- ALL EARTHWORKS TO BE CARRIED OUT AT +/- 2% OPTIMUM MOISTURE CONTENT.
- ALL NEW WORKS TO MATCH NEATLY INTO EXISTING
- ALL WORKS TO BE CONSTRUCTED IN ACCORDANCE WITH APPROVED MANAGEMENT PLANS.
- CONTRACTOR TO ENSURE SUITABLE EROSION CONTROL MEASURES ARE INSTALLED INCLUDING BUT NOT LIMITED TO SHAKE DOWNS, SILT FENCE ETC.
- DUST CONTROL MEASURES ARE TO INCLUDE SPRAYING WATER ON UNPAVED ROADS, ACCESS TRACKS AND STOCKPILES AT A SUFFICIENT LEVEL TO SUPPRESS DUST GENERATION. ADDITIONALLY CONTRACTORS ARE TO COVER OR ENCLOSE STOCKPILES WHERE REASONABLY PRACTICAL TO RESTRICT DUST MOVEMENT.
- PRIOR TO THE CONTRACTOR COMMENCING ANY WORKS DETAILED ON THIS DRAWING, THE CONTRACTOR IS TO NOTIFY SUPERINTENDENT AND RECEIVE WRITTEN CONFIRMATION THAT WORKS CAN COMMENCE
- ALL BATTERS TO BE KEYED/STEPPED INTO EXISTING MATERIAL AS DIRECTED BY GEOTECHNICAL ENGINEER. CONTRACTOR TO ALLOW FOR ALL KEYING/STEPPING AS REQUIRED.
- ALL TEMPORARY AND FINAL BATTER SLOPES ARE TO BE INSPECTED AND APPROVED BY GEOTECHNICAL ENGINEER. CERTIFICATION OF LONG TERM STABILITY TO BE PROVIDED BY GEOTECHNICAL ENGINEER PRIOR TO PRACTICAL COMPLETION.
- EARTHWORKS LEVELS SHOWN ARE FINISHED SURFACE LEVELS INCLUSIVE OF TOPSOIL LAYER, CARPARK LEVELS ETC. REFER STRUCTURAL ENGINEERING DRAWINGS FOR BUILDING SLAB THICKNESSES AND HYDRAULIC DRAWINGS FOR SUB-FLOOR DRAINAGE FOR DETERMINATION OF REQUIRED BULK EARTHWORKS SURFACE.
- FOR DETAILED GEOTECHNICAL INFORMATION, REFER GEOTECHNICAL INVESTIGATION REPORT BY ENVIRO-TECH CONSULTANTS. IT IS RECOMMENDED THAT THE GEOTECHNICAL CONSULTANT BE CONTACTED TO CONFIRM THE SOIL CONDITIONS PRIOR TO EARTHWORKS COMMENCING.
- WHERE NOMINATED ON THE PROJECT DRAWINGS, PRELOADING IS TO OCCUR IN ACCORDANCE WITH THE PROJECT DRAWINGS, PROJECT SPECIFICATION AND GEOTECHNICAL REPORT. CONTRACTOR TO ALLOW FOR THE IMPORT AND REMOVAL OF ALL NECESSARY MATERIAL TO UNDERTAKE THE PRELOADING OPERATIONS. CONTRACTOR TO ALLOW TO INSTALL SETTLEMENT PLATES AT LOCATIONS NOMINATED BY THE GEOTECHNICAL ENGINEER AND ALLOW FOR WEEKLY MONITORING AND REPORTING BY SURVEY. PRELOAD IS NOT TO BE REMOVED UNTIL DIRECTED BY THE SUPERINTENDENT.
- REFER ARCHITECTURAL DRAWINGS FOR BUILDING SETOUT.

ROADWORKS AND DRAINAGE NOTES

- FOR GENERAL NOTES REFER DRG No. C100, WHICH IS TO BE REQUESTED AND VIEWED PRIOR TO COMMENCEMENT OF CONSTRUCTION IF NOT SUPPLIED.
- ALL ROADWORKS AND DRAINAGE CONSTRUCTION AND TESTING TO BE IN ACCORDANCE WITH LGAT DEVELOPMENT GUIDELINES, DRAWINGS AND SPECIFICATIONS.
- ALL DRAINAGE CONSTRUCTION (PRIVATELY OWNED DRAINAGE LINES INTERNAL TO THE SITE BOUNDARIES) CONSTRUCTED AND TESTED TO BE IN ACCORDANCE WITH RELEVANT AUSTRALIAN STANDARDS.
- DRAINAGE PITS TO BE PROVIDED WITH STUBS FOR FUTURE HYDRAULIC CONNECTION AT MINIMUM 50mm ABOVE INVERT OF PIT. WHERE REQUIRED ON THE HYDRAULIC CONSULTANTS DRAININGS.
- ALL STORMWATER DRAINAGE PIPES INTERNAL TO SITE SHALL BE U.N.O:
 - 225 DIA TO 375 DIA uPVC S8 RUBBER RING JOINTED, BLACKMAX OR APPROVED EQUIVALENT.
 - 450 DIA TO 600 DIA PP S8 RUBBER RING JOINTED, BLACKMAX OR APPROVED EQUIVALENT.
- ALL STORMWATER DRAINAGE PIPES EXTERNAL TO SITE SHALL BE U.N.O:
 - 300 DIA AND GREATER CLASS 3 R.C. RUBBER RING JOINTED
- ALL STORMWATER PIPES ARE TO BE MANUFACTURED TO RELEVANT AUSTRALIAN STANDARDS INCLUDING BUT NOT LIMITED TO AS4058 AND AS1992.
- STORMWATER DRAINAGE AND STRUCTURES HAVE BEEN DESIGNED FOR OPERATIONAL LOADS ONLY. CONTRACTOR TO CONSIDER CONSTRUCTION LOADINGS AND ENSURE NO EXCESSIVE LOADS ARE PLACED ON STORMWATER DRAINAGE OR STRUCTURES.
- ALL PRECAST END STRUCTURES TO BE CONSTRUCTED WITH REINFORCED CONCRETE END WALL.
- CONTRACTOR TO CONFIRM LOCATION AND LEVEL OF EXISTING STORMWATER DRAINAGE WHERE CONNECTING ON TO EXISTING.
- CONTRACTOR TO NOTIFY THE SUPERINTENDENT OF ANY UNSUITABLE FOUNDING MATERIAL WITHIN DRAINAGE TRENCH OR STORMWATER STRUCTURES AND AWAIT DIRECTION PRIOR TO LAYING OF PIPES.
- TRENCH BACKFILL UNDER PAVEMENT TO BE COMPACTED TO 100% STANDARD DRY DENSITY (AS1289 5.1.1) IN LAYERS NOT EXCEEDING 150mm OF CBR 15 MATERIAL OR APPROVED EQUIVALENT. TRENCH BACKFILL IN ROADS TO BE MINIMUM CBR15 MATERIAL UP TO ROAD SUBGRADE LEVEL.
- ALL STORMWATER GRATES/LIDS WITHIN TRAFFICABLE AREAS TO BE CLASS "D" IN ACCORDANCE WITH AS3996.
- ALL GRATES AND LIDS SHALL SIT FLAT WITH ITS SURROUND AND NOT BE LOOSE OR MOVE UNDER WHEEL LOADS.
- ALL STORMWATER STRUCTURES TO BE CONSTRUCTED IN ACCORDANCE WITH PROJECT SPECIFICATION, AND LOCAL AUTHORITY GUIDELINES AND SPECIFICATIONS. WHERE STRUCTURES EXCEED MAXIMUM DEPTH AS IDENTIFIED WITHIN STANDARD DRAWINGS THE CONTRACTOR WILL ENSURE AN ADEQUATE STRUCTURAL DESIGN IS UNDERTAKEN FOR THE SUBJECT STRUCTURE TO BE CONSTRUCTED TO.
- CONTRACTOR TO ENSURE ALL MANHOLE STRUCTURES COMPLY WITH THE MAXIMUM DEPTH SPECIFIED IN THE PROJECT SPECIFICATION OR LOCAL AUTHORITY FROM FINISHED SURFACE LEVEL TO UNDERSIDE OF ROOF SLAB. ANY NON CONFORMANCE IS TO BE RECTIFIED AT THE CONTRACTORS EXPENSE.
- CONTRACTOR TO INSTALL STEP IRONS WITHIN MANHOLES/FIELD INLETS WHERE REQUIRED BY LOCAL AUTHORITY.
- ALL FOOTPATHS TO BE CONSTRUCTED IN ACCORDANCE WITH ARCHITECTURAL/LANDSCAPING DRAWINGS AND RELEVANT AUTHORITY STANDARD DRAWINGS AND SPECIFICATIONS INCLUDING MINIMUM SL72 MESH PLACED CENTRALLY, MINIMUM 50mm COVER). FOOTPATHS TO BE CONSTRUCTED WITH MAXIMUM 2% CROSSFALL. SHOULD CONSTRUCTED FOOTPATHS EXCEED 25% CROSSFALL, THE CONTRACTOR WILL BE REQUIRED TO RECTIFY BY REMOVING AND REPLACING AT THEIR COST.
- WHERE A STORMWATER DRAINAGE TRENCH HAS BEEN CONSTRUCTED LONGITUDINALLY IN THE ROAD, THEN THE FINAL PAVEMENT SURFACE REPAIR WIDTH IS TO MATCH THE EXISTING LANE WIDTH AND TERMINATE 50mm CLEAR OF THE ROAD CENTERLINE OR LANE LINE LINEMARKING TO ALLOW FOR THE BITUMEN EMULSION JOINT SEAL. REINSTATEMENT OF SURFACE ADJACENT TO THE KERB OR ROAD PAVEMENT EDGE TO EXTEND FULLY TO THE KERB LINE OR EDGE OF PAVEMENT.
- THE CONTRACTOR IS TO CONFIRM THE LOCATION OF SERVICE CONDUITS WITH THE SUPERINTENDENT PRIOR TO LAYING STORMWATER DRAINAGE. ALL TRENCH EXCAVATION AND CONSTRUCTION SHALL COMPLY WITH THE REQUIREMENTS OF THE WORK HEALTH AND SAFETY ACT 2012 TASMANIA.
- CONTRACTOR TO UNDERTAKE ROADWORKS TESTING IN ACCORDANCE WITH LGAT GUIDELINES, DRAWINGS AND SPECIFICATIONS.
- CONTRACTOR TO UNDERTAKE AND PROVIDE CCTV OF ALL STORMWATER LINES AT ON MAINTENANCE AND OFF MAINTENANCE. SHOULD THE CCTV IDENTIFY DAMAGE OR CRACKING WITHIN THE STORMWATER PIPES, THE CONTRACTOR WILL RECTIFY THE DAMAGE WITHIN THE PIPES BY MEANS DIRECTED BY THE SUPERINTENDENT WHICH MAY INCLUDE BUT NOT BE LIMITED TO PIPE RELINING OR PIPE REPLACEMENT.

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Rev	Date	Description	By	Chk
02	05.12.24	ISSUED FOR PRELIMINARY TENDER	AB	SW
01	23.09.24	50% DESIGN DEVELOPMENT ISSUE	DG	MB

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Client DEPARTMENT OF HEALTH TASMANIA		Discipline CIVIL	Status PRELIMINARY
Project Name HOSPITALS SOUTH PRODUCTION KITCHEN		Designed By HD	Checked By MB
Project No. 27536		Drawn By AB	Scale at A1 NTS

Title GENERAL NOTES SHEET 1 OF 2	
Drawing No. C101	Revision 02

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STANDARD SIGNS AND LINE MARKING NOTES

1. GENERAL
 - 1.1. ALL SIGNS AND PAVEMENT MARKING IS TO BE IN ACCORDANCE WITH THE AS 1742.
 - 1.2. ALL DIMENSIONS ARE IN METERS U.N.O.
 - 1.3. REFER TO AS 1742.3 'MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES' (MUTCD) FOR APPLICATION OF LINETYPES.
2. SIGNS
 - 2.1. ALL SIGNS TO BE REFLECTORISED CLASS 1 TO AS1906 UNLESS NOTED OTHERWISE.
 - 2.2. SIGNS ARE TO BE INSTALLED WITH THE FOLLOWING CLEARANCES TO EDGE OF SIGN: LOCATION CLEARANCE NO KERB 600 BEHIND GUIDE POSTS BARRIER KERB 300 FROM FACE MOUNTABLE KERB 500 FROM FACE OF KERB
 - 2.3. PARKING CONTROL SIGNS TO BE MOUNTED TO FACE APPROACHING TRAFFIC AT 45° TO KERB OR CARRIAGEWAY EDGE. ALL OTHER SIGNS TO BE TURNED AWAY BY 5° FROM THE NORMAL TO APPROACHING HEADLIGHT.
3. SIGN SUPPORTS
 - 3.1. SLEEVED SIGNS SUPPORTS ARE TO BE PROVIDED IN ALL AREAS WHERE THEY ARE IN A PAVED SURFACE.
4. LINEMARKING
 - 4.1. REDUNDANT LINEMARKING IS TO BE GROUND OFF USING ABRASIVE METHODS.
 - 4.2. THERMOPLASTIC LINEMARKING TO BE USED FOR ALL CONCRETE SURFACES.
 - 4.3. WHERE YELLOW IS USED, THE COLOUR SHALL BE GOLDEN YELLOW, COLOR No. Y14 (AS 2700).

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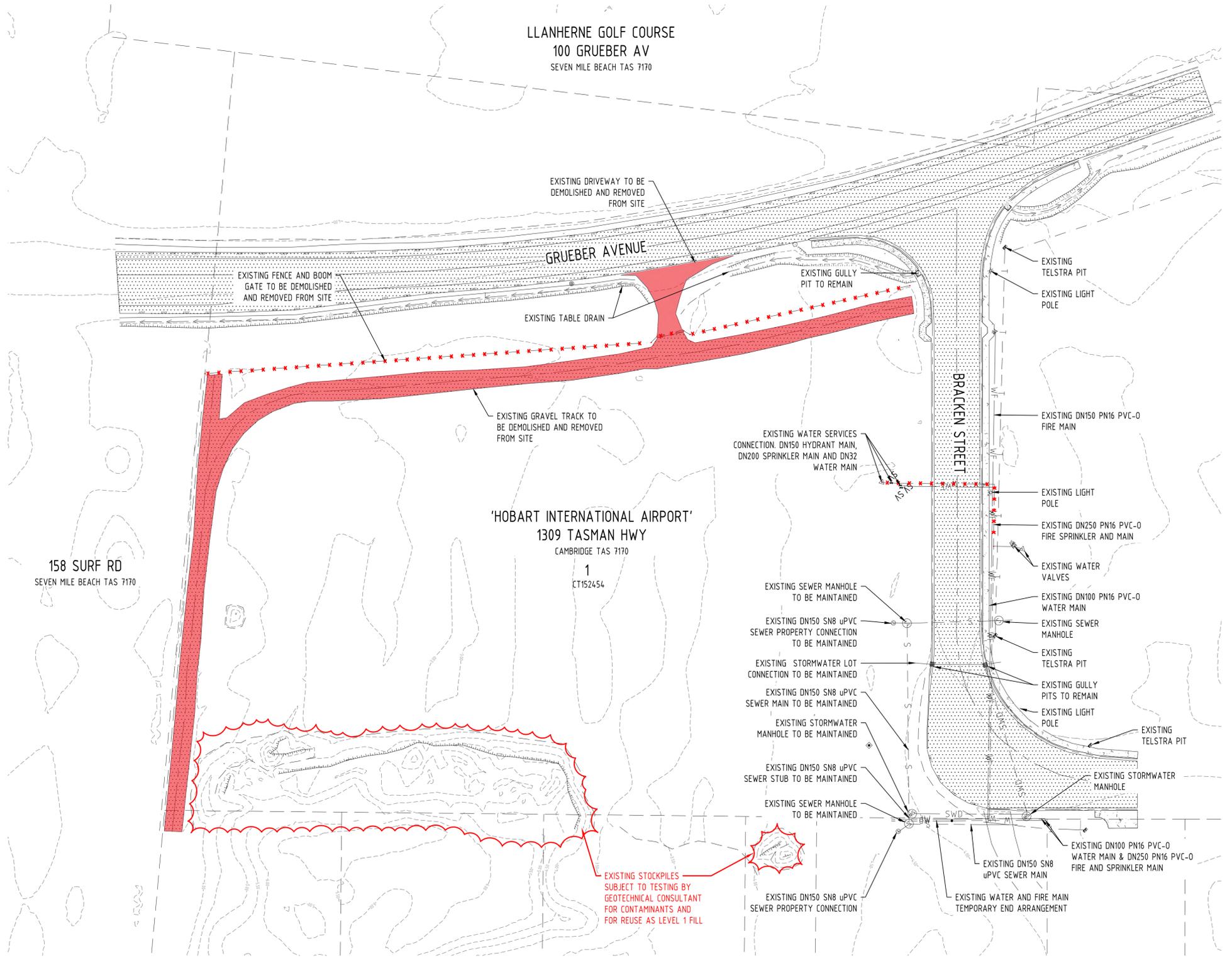


Client DEPARTMENT OF HEALTH TASMANIA	Discipline CIVIL	Status PRELIMINARY	Title GENERAL NOTES SHEET 2 OF 2	
Project Name HOSPITALS SOUTH PRODUCTION KITCHEN GRUEBER AVENUE CAMBRIDGE, TAS 7170	Designed By HD	Checked By MB		Approved By SW
Project No. 27536	Drawn By AB	Scale at A1 NTS		Drawing No. C102
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LEGEND

- 12.0 EXISTING SURFACE CONTOURS
- LIMIT OF WORKS
- INDICATIVE SITE BOUNDARY
- EXISTING PROPERTY BOUNDARY
- EXISTING NOMINAL KERB LINE / EDGE OF ROAD
- EXISTING EDGE OF BITUMEN
- EXISTING ROAD CENTERLINE
- EXISTING STORMWATER DRAINAGE
- EXISTING SEWER
- EXISTING WATER
- EXISTING FIRE AND SPRINKLER MAIN
- EXISTING TELECOMMUNICATIONS
- EXISTING BATTER
- EXISTING FENCE
- EXISTING INFRASTRUCTURE TO BE REMOVED
- EXISTING EARTHWORKS DRAIN
- EXISTING ROAD
- EXISTING FOOTPATH
- EXISTING ROAD TO BE DEMOLISHED AND REMOVED FROM SITE



CAUTION

THE LOCATION AND DEPTH OF EXISTING SERVICES AS SHOWN IS BASED ON INFORMATION OBTAINED FROM ARTHUR MOEHRKE SURVEYS PTY LTD DATED 26/04/24 AND HIAPL RECORDS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM THE ACTUAL LOCATION AND DEPTH OF EXISTING SERVICES PRIOR TO CARRYING OUT ANY EXCAVATION, TRENCHING OR TUNNELING WORKS.

WARNING ⚠

EXISTING FIBRE OPTIC, ELECTRICAL AND TELECOM CABLES MAY EXIST IN THE VICINITY OF REQUIRED WORKS. FOR ALL WORK WITHIN 2.5m OF MAJOR OPTIC CABLES, THE CONTRACTOR IS REQUIRED TO HAND DIG (POTHOLE) AND EXPOSE THE CABLE/CONDUIT. BEFORE WORK CAN COMMENCE, ON SITE LOCATION SHOULD BE SOUGHT FROM AN ACCREDITED PLANT LOCATOR.



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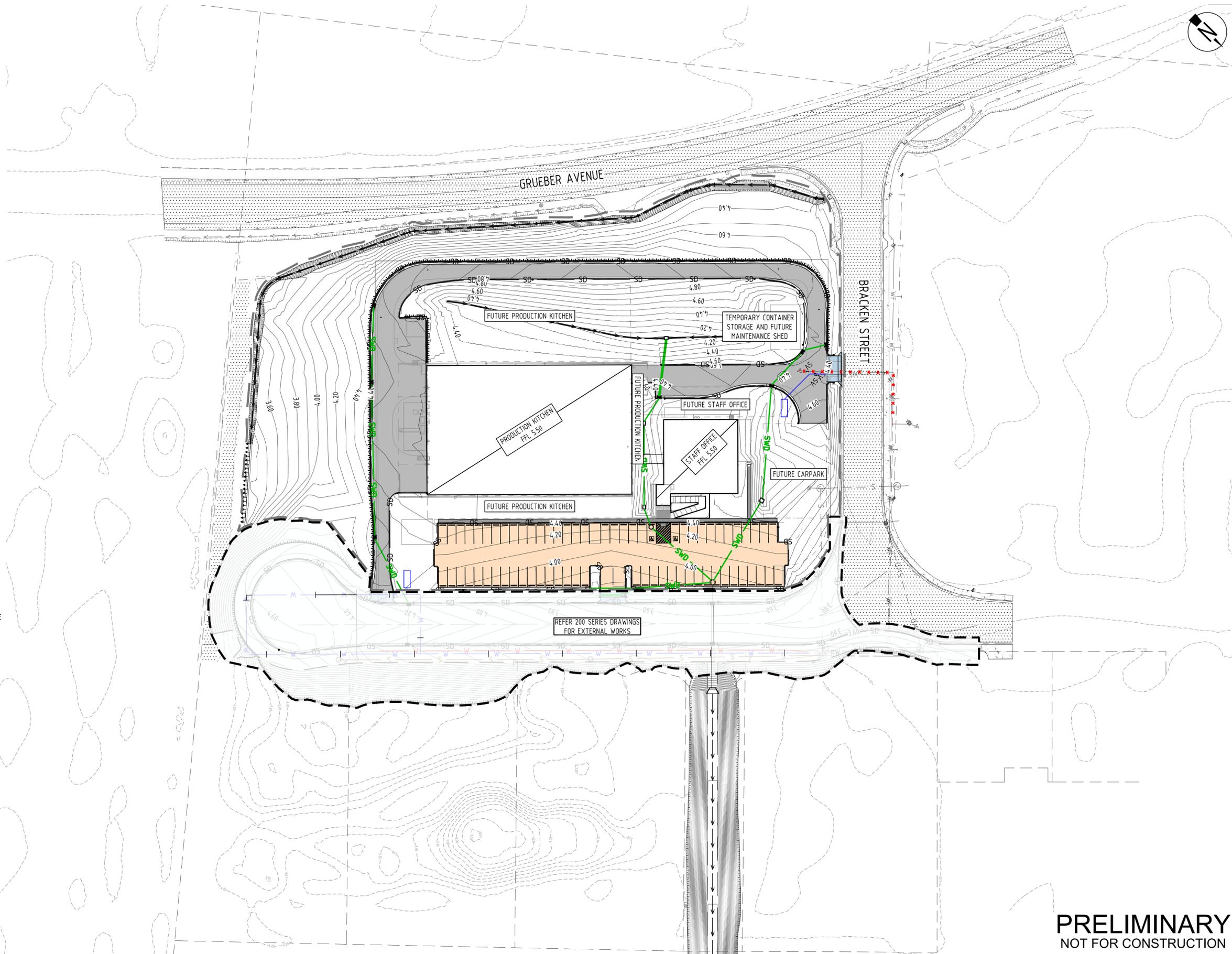
Client DEPARTMENT OF HEALTH TASMANIA	Discipline CIVIL	Status PRELIMINARY
Project Name HOSPITALS SOUTH PRODUCTION KITCHEN GRUEBER AVENUE CAMBRIDGE, TAS 7170	Designed By HD	Checked By MB
	Project No. 27536	Drawn By AB
		Scale at A1 1:500

Approved By SW	Scale at A1 1:500
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Title EXISTING FEATURES LAYOUT PLAN	Drawing No. C103	Revision 02
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LEGEND

- 12.0 FINISHED SURFACE CONTOURS
- 12.0 EXISTING SURFACE CONTOURS
- INDICATIVE SITE BOUNDARY
- EXISTING PROPERTY BOUNDARY
- EXISTING EASEMENT BOUNDARY
- EXISTING NOMINAL KERB LINE
- EXISTING EDGE OF BITUMEN
- EXISTING ROAD CENTERLINE
- SWD EXISTING STORMWATER DRAINAGE
- S EXISTING SEWER
- W EXISTING WATER
- EXISTING WATER TO BE ABANDON
- T EXISTING TELECOMMUNICATIONS
- EXISTING BATTER
- EXISTING FENCE
- INTERNAL WORKS STAGE BOUNDARY.
- EXTERNAL WORKS STAGE BOUNDARY. REFER C200 SERIES DRGS
- PROPOSED STORMWATER DRAINAGE
- SD PROPOSED SUBSOIL DRAINAGE
- S PROPOSED SEWER. REFER C200 SERIES
- W PROPOSED WATER MAIN. REFER C200 SERIES
- W PROPOSED FIRE AND SPRINKLER MAIN
- PROPOSED DISH DRAIN. IN ACCORDANCE WITH IECA STD DRG TSD-R14
- PROPOSED LEVEL SPREADER. IN ACCORDANCE WITH IECA STD DRG LS-01
- PROPOSED ROAD CENTRE LINE
- PROPOSED BATTER
- PROPOSED ROAD KERB
- PROPOSED SEP (SAG) TYPE 3. REFER IPWEA TAS STD TSD-SW09
- PROPOSED GRATED PIT IN ACCORDANCE WITH TSD-SW15 AND TSD-SW14
- PROPOSED TREE. REFER TO ARCHITECTURAL DRGS FOR DETAILS
- EXISTING ROAD
- EXISTING FOOTPATH
- PROPOSED RIGID PAVEMENT. REFER TO PAVEMENT OVERALL LAYOUT PLAN ON DRG C180
- PROPOSED FLEXIBLE PAVEMENT. REFER TO PAVEMENT OVERALL LAYOUT PLAN ON DRG C180
- HEAVY DUTY DRIVEWAY CROSSOVER IN ACCORDANCE WITH LGAT STD TSD-R09 AND LGAT STD TSD-16
- PROPOSED FOOTPATH IN ACCORDANCE WITH LGAT STD TSD-R11



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SCALE 1:500
AT ORIGINAL SIZE (A1)

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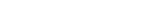
Client	DEPARTMENT OF HEALTH TASMANIA
Project Name	HOSPITALS SOUTH PRODUCTION KITCHEN
Location	GRUEBER AVENUE CAMBRIDGE, TAS 7170

Discipline	CIVIL	Status	PRELIMINARY
Designed By	HD	Checked By	MB
Project No.	27536	Drawn By	AB
Approved By	SW	Scale at A1	1:250

Title	OVERALL LAYOUT PLAN
Drawing No.	C104
Revision	02

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LEGEND

-  INDICATIVE SITE BOUNDARY
-  EXISTING PROPERTY BOUNDARY
-  EXISTING EASEMENT BOUNDARY
-  EXISTING SURFACE CONTOURS
-  EARTHWORKS CONTOURS
-  EXISTING NOMINAL KERB LINE
-  EXISTING STORMWATER DRAINAGE
-  EXISTING STORMWATER DRAINAGE DBYD
-  PROPOSED NOMINAL KERB LINE
-  PROPOSED BATTER
-  PROPOSED STORMWATER DRAINAGE
-  PROPOSED ROAD KERB
-  PROPOSED SEP (SAG) TYPE 3. REFER IPWEA TAS STD TSD-SW09
-  PROPOSED GRATED PIT IN ACCORDANCE WITH TSD-SW15 AND TSD-SW14
-  FIELD INLET SEDIMENT BARRIER
-  GULLY PIT SEDIMENT BARRIER
-  SEDIMENT FENCE (INDICATIVE LOCATION)
-  CHECK DAM
-  PROPOSED SWALE (TURFED)
-  PROPOSED LEVEL SPREADER. IN ACCORDANCE WITH IECA STD DRG LS-01
-  INTERNAL WORKS STAGE BOUNDARY. EXTERNAL WORKS STAGE BOUNDARY. REFER C200 SERIES DRGS
-  PROPOSED TREE. REFER TO ARCHITECTURAL DRGS FOR DETAILS
-  CONSTRUCTION ENTRY/EXIT SHAKEDOWN AREA
-  EXISTING ROAD
-  ROCK SPILL THROUGH WEIR. REFER DRG C112 FOR DETAIL
-  INDICATIVE SITE STOCKPILE

GENERAL NOTE:

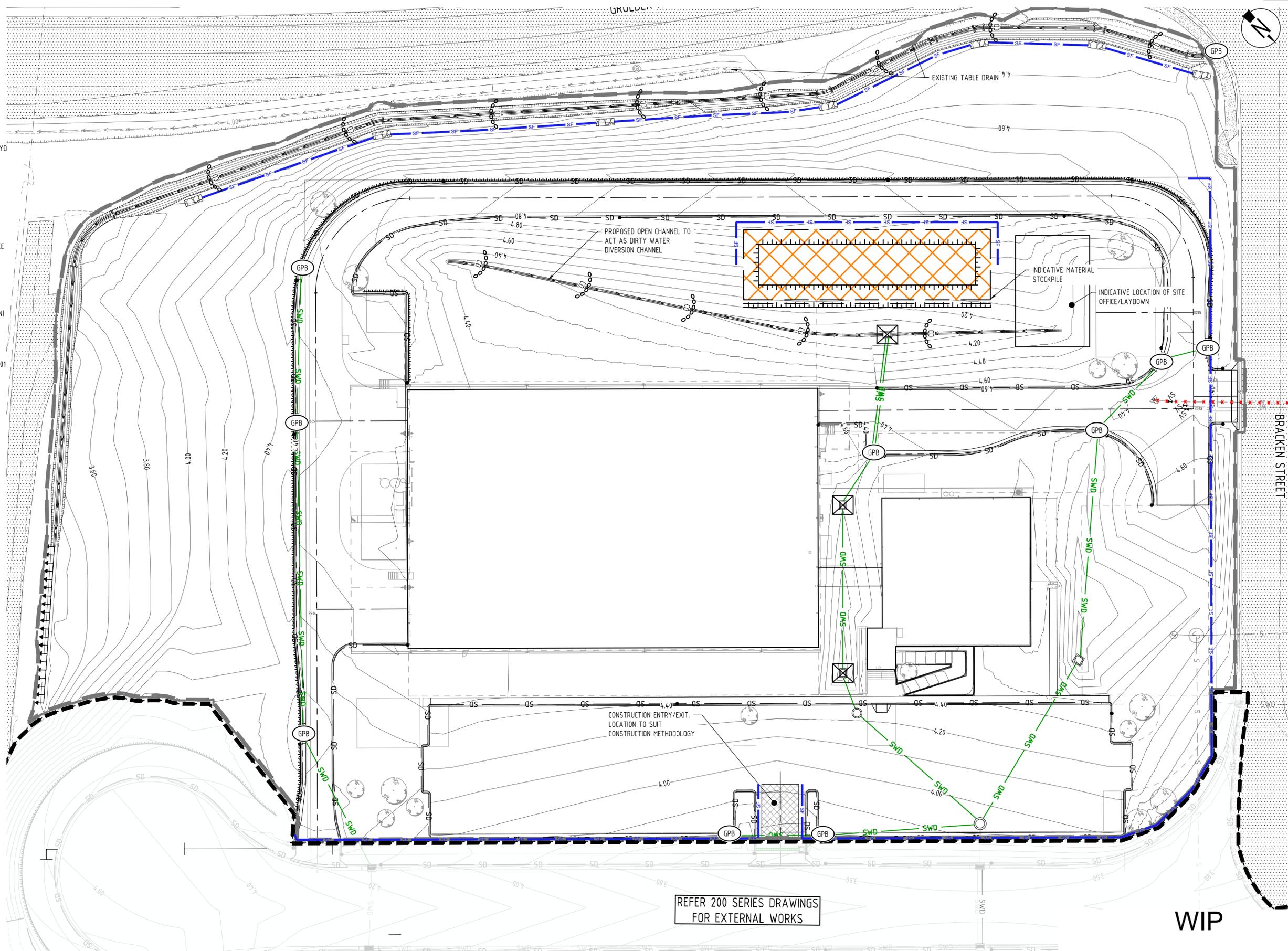
1. FOR NOTES REFER DRG No. C100, C101 & C102, WHICH IS TO BE REQUESTED AND VIEWED PRIOR TO COMMENCEMENT OF CONSTRUCTION IF NOT SUPPLIED.

EROSION AND SEDIMENT CONTROL:

CONTRACTOR TO ALLOW FOR PROVISION OF ALL REQUIRED EROSION AND SEDIMENT CONTROL DEVICES IN ACCORDANCE WITH IECA AND EPA TASMANIA POLICIES AND GUIDELINES. DESIGN SHOWN IS CONCEPTUAL AND IS A GUIDE ONLY. CONTRACTOR TO ALLOW FOR DETAILED DESIGN (INCLUDING CPESC CERTIFICATION), MAINTENANCE AND IMPLEMENTATION OF SEDIMENT AND EROSION CONTROL PLAN COMPLIANT WITH THE ABOVE.

NOTES

1. FOR EROSION AND SEDIMENT CONTROL NOTES AND DETAILS REFER DRG No. C101
2. ALL DISTURBED SURFACES TO BE LANDSCAPED IN ACCORDANCE WITH LANDSCAPE CONSULTANTS DRAWINGS
3. CONTRACTOR TO PROVIDE PUMP-OUT LOCATION AT LOWER BASE EXCAVATION. CONTRACTOR TO FLOCK WATER TO SATISFY COUNCIL GUIDELINES TO PUMP-OUT WATER.
4. CONCRETE WASHOUT TO NOT BE UNDERTAKEN ON SITE, OR TO BE UNDERTAKEN ON A DESIGNATED LOCATION. CONTRACTOR TO ESTABLISH CONCRETE WASHOUT AS PER IECA GUIDELINES.

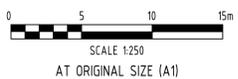


REFER 200 SERIES DRAWINGS FOR EXTERNAL WORKS

WIP

Rev	Date	Description	By	Chk
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01	23.09.24	50% DESIGN DEVELOPMENT ISSUE	DG	MB

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Client: DEPARTMENT OF HEALTH TASMANIA
 Project Name: HOSPITALS SOUTH PRODUCTION KITCHEN
 GRUEBER AVENUE
 CAMBRIDGE, TAS 7170

Discipline: CIVIL
 Status: PRELIMINARY
 Designed By: HD
 Checked By: MB
 Project No: 27536
 Drawn By: AB
 Approved By: SW
 Scale at A1: 1:250

Title: EROSION AND SEDIMENT CONTROL CONSTRUCTION PHASE LAYOUT PLAN

Drawing No: C110
 Revision: 02

LEGEND

- INDICATIVE SITE BOUNDARY
- EXISTING PROPERTY BOUNDARY
- EXISTING EASEMENT BOUNDARY
- EXISTING SURFACE CONTOURS
- EXISTING EARTHWORKS CONTOURS
- EXISTING NOMINAL KERB LINE
- EXISTING STORMWATER DRAINAGE
- EXISTING STORMWATER DRAINAGE DBYD
- PROPOSED NOMINAL KERB LINE
- PROPOSED BATTER
- PROPOSED ROAD KERB
- PROPOSED SEP (SAG) TYPE 3. REFER IPWEA TAS STD TSD-SW09
- PROPOSED GRATED PIT IN ACCORDANCE WITH TSD-SW15 AND TSD-SW14
- FIELD INLET SEDIMENT BARRIER
- GULLY PIT SEDIMENT BARRIER
- CHECK DAM
- PROPOSED STORMWATER DRAINAGE
- PROPOSED SWALE (TURFED)
- STAGE BOUNDARY
- LIMIT OF WORKS
- PROPOSED TREE. REFER TO ARCHITECTURAL DRGS FOR DETAILS
- CONSTRUCTION ENTRY/EXIT SHAKEDOWN AREA
- GRASS LANDSCAPE STABILISATION
- PROPOSED RIGID PAVEMENT. REFER TO PAVEMENT OVERALL LAYOUT PLAN ON DRG C180
- PROPOSED FLEXIBLE PAVEMENT. REFER TO PAVEMENT OVERALL LAYOUT PLAN ON DRG C180
- HEAVY DUTY DRIVEWAY CROSSOVER IN ALLUUVIAL WITH LGAT STD TSD-R09 AND LGAT STD TSD-16
- PROPOSED FOOTPATH IN ACCORDANCE WITH LGAT STD TSD-R11

GENERAL NOTE:

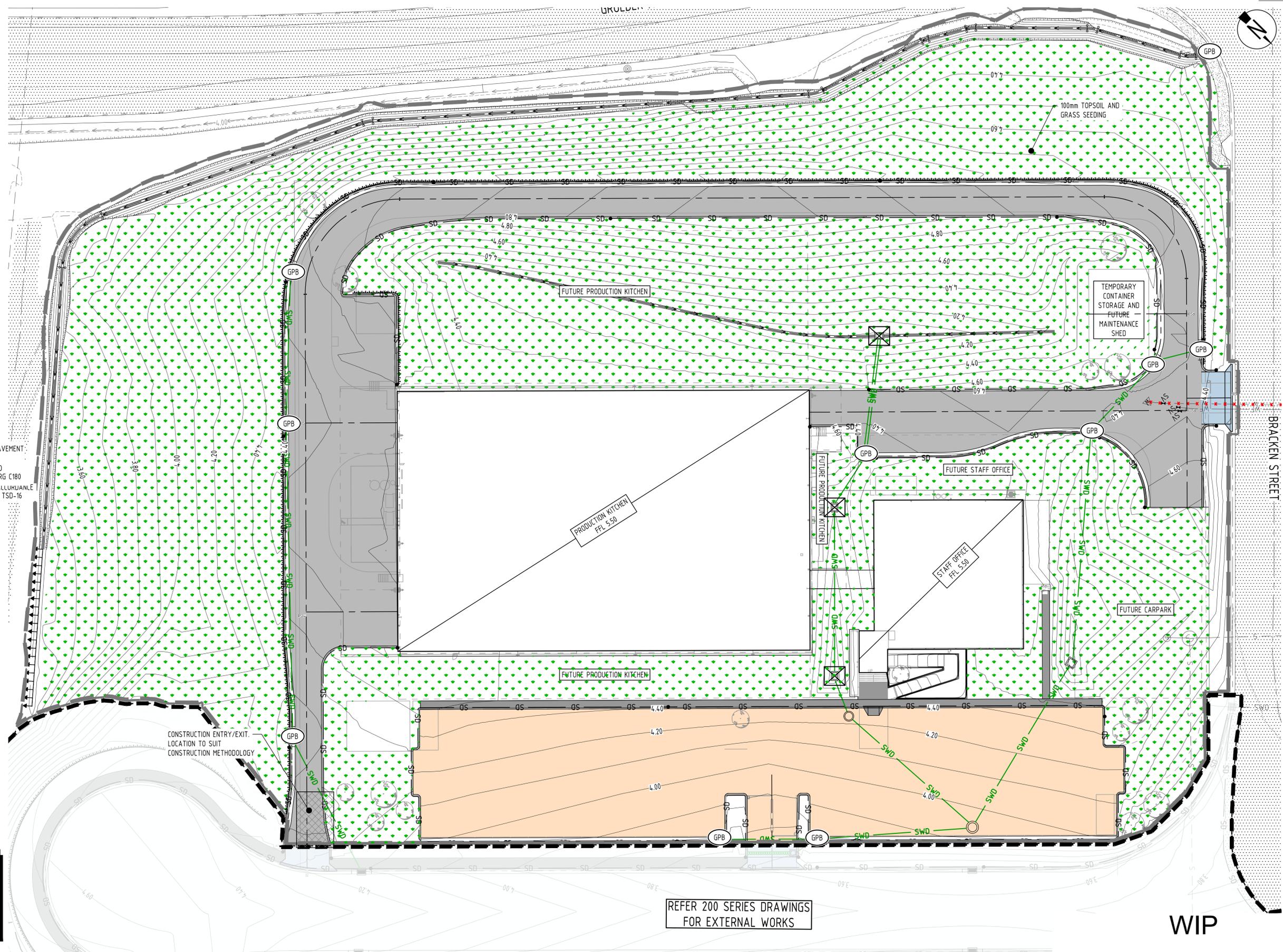
1. FOR NOTES REFER DRG No. C100, C101 & C102, WHICH IS TO BE REQUESTED AND VIEWED PRIOR TO COMMENCEMENT OF CONSTRUCTION IF NOT SUPPLIED.

NOTES

1. ALL DISTURBED SURFACES TO BE LANDSCAPED IN ACCORDANCE WITH LANDSCAPE CONSULTANTS DRAWINGS

EROSION AND SEDIMENT CONTROL:

CONTRACTOR TO ALLOW FOR PROVISION OF ALL REQUIRED EROSION AND SEDIMENT CONTROL DEVICES IN ACCORDANCE WITH IECA AND EPA TASMANIA POLICIES AND GUIDELINES. DESIGN SHOWN IS CONCEPTUAL AND IS A GUIDE ONLY. CONTRACTOR TO ALLOW FOR DETAILED DESIGN (INCLUDING CPESC CERTIFICATION), MAINTENANCE AND IMPLEMENTATION OF SEDIMENT AND EROSION CONTROL PLAN COMPLIANT WITH THE ABOVE.



REFER 200 SERIES DRAWINGS FOR EXTERNAL WORKS

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Client: DEPARTMENT OF HEALTH TASMANIA
 Project Name: HOSPITALS SOUTH PRODUCTION KITCHEN
 GRUEBER AVENUE
 CAMBRIDGE, TAS 7170

Discipline: CIVIL
 Status: PRELIMINARY
 Designed By: HD
 Checked By: MB
 Project No: 27536
 Drawn By: AB
 Approved By: SW
 Scale at A1: 1:250

Title: EROSION AND SEDIMENT CONTROL STABILISATION LAYOUT PLAN
 Drawing No: C111
 Revision: 02

NOTES:
GENERAL

- ALL SEDIMENT & EROSION CONTROL MEASURES TO BE IN ACCORDANCE WITH INTERNATIONAL EROSION CONTROL ASSOCIATION (IECA) AUSTRALIA GUIDELINES AND THE SPECIFICATIONS.
- SEDIMENT & EROSION CONTROL DETAILS SHOWN ARE MINIMUM REQUIREMENTS. IT IS THE CONTRACTORS RESPONSIBILITY TO INSTALL ADDITIONAL CONTROL MEASURES AS DEEMED NECESSARY THROUGHOUT CONSTRUCTION.
- THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN ALL SEDIMENT CONTROL DEVICES IN A FUNCTIONAL ORDER AND REPLACE ALL BLOCKED SEDIMENT DEVICES AS REQUIRED UNTIL SUCCESSFUL OFF MAINTENANCE OF WORKS.
- CONSTRUCTION OF ALL SEDIMENT MANAGEMENT DEVICES TO THE SATISFACTION OF THE SUPERINTENDENT SHALL BE COMPLETED AND EFFECTIVE PRIOR TO:
 - STRIPPING OF TOPSOIL AND GRASS.
 - BULK EARTHWORKS TO THE SITE.
 - SERVICES INSTALLATION.
 - PAVEMENT CONSTRUCTION.
- ALL SEDIMENT MANAGEMENT MEASURES ARE TO REMAIN IN PLACE UNTIL INSTRUCTION IS RECEIVED IN WRITING FROM THE SUPERINTENDENT TO REMOVE ALL OR PART OF THE SILT CONTROL APPLICATIONS.
- THE BULK EARTHWORKS AND SEDIMENT CONTROL LAYOUT PLAN SHALL BE READ IN CONJUNCTION WITH THE APPROVED DRAWINGS.
- PRIOR TO COMMENCEMENT OF CONSTRUCTION APPROVAL IS TO BE OBTAINED FROM THE SUPERINTENDENT FOR THE LOCATION OF THE SITE ACCESS POINT AND WASH DOWN AREA WHICH ARE TO BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD.
- IF EROSION AND SEDIMENT CONTROL DEVICES HAVE BEEN FOUND TO BE DIFFERENT OR FAILED IN SERVICE, CORRECTIVE ACTION IS TO BE UNDERTAKEN IMMEDIATELY WHICH MAY INCLUDE AMENDMENTS' ADDITIONS TO THE ORIGINAL APPROVED EROSION CONTROL PLANS. SUCH AMENDMENTS ARE TO BE APPROVED BY SUPERINTENDENT, IF DEEMED NECESSARY AND RELEVANT.
- TEMPORARY DRAINAGE CONTROL FLOW SHOULD BE DIVERTED AROUND THE WORK SITE WHERE POSSIBLE.
- ALL DRAINAGE, EROSION AND SEDIMENT CONTROLS TO BE INSTALLED AND BE OPERATIONAL BEFORE COMMENCING UP-SLOPE EARTHWORKS.
- IN AREAS WHERE RUNOFF TURBIDITY IS TO BE CONTROLLED, EXPOSED SURFACES TO BE EITHER MULCHED, COVER WITH EROSION CONTROL BLANKETS OR TURFED IF EARTHWORKS ARE EXPECTED TO BE DELAYED FOR MORE THAN 14 DAYS.

SEDIMENT RELEASE GUIDELINES

(INCLUDING DEWATERING & SEDIMENT BASINS):

- ALL RELEASES OF STORMWATER CAPTURED ONSITE, UNLESS OTHERWISE NOTED IN THIS STANDARD, MUST NOT EXCEED THE FOLLOWING LIMITS:
 - 75NTU AS A MAXIMUM CONCENTRATION (MEASURED USING A TURBIDITY METER).
 - TURBIDITY (NTU) VALUE LESS THAN 10% ABOVE BACKGROUND.
 - PH VALUE MUST BE IN THE RANGE 6.5 TO 8.5 EXCEPT WHERE, AND TO THE EXTENT THAT, THE NATURAL RECEIVING WATERS LIE OUTSIDE THIS RANGE.
- THE CONCENTRATION OF TOTAL SUSPENDED SOLIDS (TSS) RELEASED BY DEWATERING MAY ONLY EXCEED 75NTU WHERE IT CAN BE DEMONSTRATED AND SUPPORTED THROUGH DOCUMENTATION THAT:
 - FURTHER SIGNIFICANT RAINFALL IS FORECAST TO OCCUR BEFORE THE TSS CONCENTRATION IS LIKELY TO BE REDUCED TO 75NTU;
 - RELEASING A HIGHER CONCENTRATION OF TSS WILL RESULT IN A BETTER ENVIRONMENTAL OUTCOME BY PROVIDING STORAGE FOR THE CAPTURE AND TREATMENT OF RUN-OFF FROM THE IMMINENT RAINFALL AND RUN-OFF.
 - ALL REASONABLE AND PRACTICABLE STEPS HAVE BEEN TAKEN TO TREAT THE WATER WITHIN BEST-PRACTICE TIME FRAMES;
 - FLOCCULANT/COAGULANT HAS BEEN APPROPRIATELY APPLIED AND THE CONCENTRATION OF TSS IN THE CAPTURED WATER HAS ALREADY SIGNIFICANTLY DECREASED.
- FOR ALL OTHER STORMWATER RELEASES, FLOWS AND DISCHARGES FROM THE SITE, THE RELEASE LIMIT PRESCRIBED IN (12A) ABOVE MUST NOT BE EXCEEDED UNLESS THE DEVELOPMENT IS IN FULL COMPLIANCE WITH THIS STANDARD.

NOTE: BACKGROUND REFERS TO RECEIVING WATER QUALITY IMMEDIATELY UPSTREAM OF THE SITE LOCATION RELEASE POINT AT THE TIME OF RELEASE. WHERE THERE IS NO IMMEDIATE UPSTREAM RECEIVING WATER AT THE LOCATION AND TIME OF RELEASE, THEN THE TURBIDITY RELEASE LIMIT (75NTU) APPLIES.

SEDIMENT FENCE & SEDIMENT FENCE SPILL THROUGH WEIR

- FOR SEDIMENT FENCE STANDARD DETAIL AND SPECIFICATION REFER TO INTERNATIONAL EROSION CONTROL ASSOCIATION AUSTRALASIA (IECA) BEST PRACTICES STANDARD DRAWINGS SF-01 AND SF-02 SEDIMENT FENCE.

TEMPORARY CONSTRUCTION ENTRY/EXIT

- FOR CONSTRUCTION ENTRY / EXIT STANDARD DETAIL AND SPECIFICATION REFER TO INTERNATIONAL EROSION CONTROL ASSOCIATION AUSTRALASIA (IECA) BEST PRACTICES STANDARD DRAWINGS EXIT-01 AND EXIT-02 CONSTRUCTION EXIT - ROCK PAD (CONSTRUCTION SITES ONLY), EXIT-04 AND EXIT-05 CONSTRUCTION EXIT - VIBRATION GRID.

CHECK DAMS

- FOR CHECK DAM STANDARD DETAIL AND SPECIFICATION REFER TO INTERNATIONAL EROSION CONTROL ASSOCIATION AUSTRALASIA (IECA) BEST PRACTICES STANDARD DRAWING RCD-01 CHECK DAMS.
- SPACING BETWEEN CHECK DAMS SHALL BE AS PER THE FOLLOWING TABLE.

ROCK CHECK DAM SPACING (m)				
CHECK DAM HEIGHT (MM)	CHANNEL SLOPE	1%	2%	3%
	300	30	15	10
	400	40	20	13.3
	500	50	25	16.7
600	60	30	20	

MULCH BUNDS

- FOR BUND STANDARD DETAIL AND SPECIFICATION REFER TO INTERNATIONAL EROSION CONTROL ASSOCIATION AUSTRALASIA (IECA) BEST PRACTICES STANDARD DRAWING MB-01 MULCH FILTER BERMS

REVEGETATION

- FOR REVEGETATION STANDARD SPECIFICATION REFER TO INTERNATIONAL EROSION CONTROL ASSOCIATION AUSTRALASIA (IECA) BEST PRACTICES STANDARD DRAWING R-01 REVEGETATION GENERAL.

OPERATION AND MAINTENANCE

- REFER TO THE SEDIMENT RELEASE GUIDELINES FOR TREATMENT & DISCHARGE REQUIREMENTS FOR DISCHARGING RUNOFF OFF SITE.
- IN ACCORDANCE WITH DENR/IECA GUIDELINES, ALL ESC MEASURES SHALL BE INSPECTED:
 - AT LEAST DAILY (WHEN WORK IS OCCURRING ON SITE) OR WEEKLY (WHEN WORK IS NOT OCCURRING ON SITE)
 - WITHIN 24 HOURS OF EXPECTED RAIN, AND
 - WITHIN 18 HOURS OF A RAINFALL EVENT (I.E. AN EVENT OF SUFFICIENT INTENSITY AND DURATION TO MOBILISE SEDIMENT ON SITE).
- IN ACCORDANCE WITH DENR/IECA REQUIREMENTS, MAINTENANCE OF ESC MEASURES SHALL OCCUR IN ACCORDANCE WITH THE FOLLOWING TABLE:

MAINTENANCE SCHEDULE			
ESC MEASURE	MAINTENANCE	MAINTENANCE TRIGGER	TIMEFRAME FOR COMPLETION OF MAINTENANCE
RCD	REPLACE OR RE-INSTATE	RCD HAS COLLAPSED	PRIOR TO THE NEXT STORM
	DE-SILTING	THE CAPACITY OF THE RCD FALLS BELOW 75%	PRIOR TO THE NEXT STORM
BUNDS	REPLACE OR RE-INSTATE	BUND WALL HAS BEEN BROKEN OR LOW POINT CREATED	PRIOR TO THE NEXT STORM
SEDIMENT FENCE	REPLACE OR RE-INSTATE	IF FENCE IS DAMAGED OR HAS FALLEN DOWN	PRIOR TO THE NEXT STORM
	DE-SILTING	THE CAPACITY OF THE FENCE FALLS BELOW 75%	PRIOR TO THE NEXT STORM
OPEN DRAIN	REPLACE OR RE-INSTATE	IF LINING HAS BEEN PUNCTURED / TORN / DAMAGED	PRIOR TO THE NEXT STORM
	DE-SILTING	IF DEPOSITED SEDIMENT HAS REDUCED CAPACITY OF DRAIN & DRAIN IS OVER TOPPING	PRIOR TO THE NEXT STORM
LEVEL SPREADER	REPLACE OR RE-INSTATE	IF DIVERSION BANK HAS BEEN BROKEN OR LOW POINT CREATED	PRIOR TO THE NEXT STORM
	DE-SILTING	IF CHANNEL CAPACITY IS REDUCED / BLOCKED	PRIOR TO THE NEXT STORM
SITE ENTRY/EXIT SHAKEDOWN	DE-SILTING	IF SAND, SOIL, SEDIMENT OR MUD IS TRACKED OR WASHED ONTO THE ADJACENT SEALED ROADWAY	AT THE END OF THE DAY OR WHEN SHAKEDOWN HAS BEEN TOPPED UP
	TOP UP WITH 100MM OF NEW ROCK	WHEN VOIDS BETWEEN THE ROCK BECOME FILLED WITH MATERIAL AND THE EFFECTIVENESS OF THE ROCK PAD IS REDUCED TO A POINT WHERE SEDIMENT IS BEING TRACKED OFF THE SITE	PRIOR TO THE END OF THE DAY
	CLEAN OUT SEDIMENT STORAGE CHAMBER	IF THE CAPACITY OF THE STORAGE CHAMBER FALLS BELOW 75%	PRIOR TO NEXT STORM

DUST SUPPRESSION

- THE CONTRACTOR SHALL AT ALL TIMES MAINTAIN ON SITE DUST MANAGEMENT TO MITIGATE THE CREATION OF DUST AND NUISANCE TO ADJOINING LAND OWNERS. CONTROL MEASURES MAY INCLUDE ONE OR MORE OF THE FOLLOWING:
 - MONITOR WIND SPEED AND MODIFY ACTIVITY AND/OR IMPLEMENT DUST MANAGEMENT IF DUST IS BEING CREATED;
 - MAINTAINING EXPOSED AND/OR WORKED SURFACES IN A MOIST CONDITION TO MITIGATE DUST CREATION;
 - MINIMISING TRAFFIC MOVEMENTS AND SPEEDS TO <15KM/H ON EXPOSED SURFACES.
 - CHEMICAL SEALERS (SOIL BINDERS) PLACED OVER THE SOIL SURFACE IN NON-TRAFFICKED AREAS;
 - PROGRESSIVE REVEGETATION OF DISTURBED AREAS;

NO GO AREAS

- ALL AREAS EXTERNAL TO THE LIMIT OF WORKS BOUNDARY SHOWN ON THE LAYOUT PLANS SHALL BE CONSIDERED AS 'NO GO AREAS'.
- NO MATERIAL STORAGE, VEHICLE TRAFFICKING OR PARKING PERMITTED WITHIN 'NO GO AREAS'.

LEVEL SPREADER

- FOR LEVEL SPREADER DETAILS AND SPECIFICATIONS REFER TO INTERNATIONAL EROSION CONTROL ASSOCIATION AUSTRALASIA (IECA) DRAWING LS-01 LEVEL SPREADER.

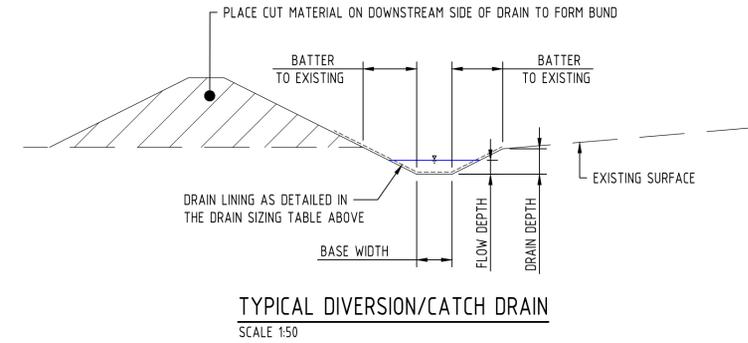
IECA STANDARD DRAWINGS REGISTER	
DRAWING NUMBER	DRAWING DESCRIPTION
EXIT-01	CONSTRUCTION EXIT - ROCK PAD
EXIT-02	CONSTRUCTION EXIT - ROCK PAD
CD-01	CATCH DRAINS
CD-02	CATCH DRAINS (EARTH LINED)
R-01	REVEGETATION - GENERAL
RFD-1	ROCK FILTER DAM PART 1
RFD-2	ROCK FILTER DAM PART 2
MB-01	MULCH BERMS
SF-01	SEDIMENT FENCE - PART 1
SF-02	SEDIMENT FENCE - PART 2
ESC-02	GRATED STORMWATER (FIELD) INLET SEDIMENT TRAP
ESC-03	KERB INLET SEDIMENT TRAPS
RCD-01	ROCK CHECK DAMS
CH-01	CHUTES - GENERAL
LS-01	LEVEL SPREADER

*DRAWINGS TO BE READ IN CONJUNCTION WITH INTERNATIONAL EROSION CONTROL ASSOCIATION AUSTRALASIA (IECA) BEST PRACTICES STANDARD DRAWINGS AND SPECIFICATIONS.

NOTES	
1.	FOR EROSION AND SEDIMENT CONTROL LAYOUT PLAN REFER DRG No. C12 - C16
2.	FOR EROSION AND SEDIMENT CONTROL CATCHMENT PLAN REFER TO DRG C19
3.	CONTRACTOR TO PROVIDE FINAL ESC DESIGN TO SUIT PROPOSED CONSTRUCTION METHODOLOGY

CONSTRUCTION TIMING:	
COMMENCEMENT DATE:	TBC
COMPLETION DATE:	TBC

EROSION AND SEDIMENT CONTROL	
CONTRACTOR TO ALLOW FOR PROVISION OF ALL REQUIRED EROSION AND SEDIMENT CONTROL DEVICES IN ACCORDANCE WITH IECA AND LIGHT REGIONAL COUNCIL POLICIES AND GUIDELINES. SEDIMENT AND EROSION CONTROL DESIGN SHOWN IS CONCEPTUAL AND IS A GUIDE ONLY. DESIGN (INCLUDING CPESC CERTIFICATION), MAINTENANCE AND IMPLEMENTATION OF SEDIMENT AND EROSION CONTROL PLAN COMPLIANT WITH THE ABOVE.	



EROSION RISK ASSESSMENT - RUSLE									
LOCATION	CONSTRUCTION TIMING	AREA (ha)	R	K	LS	P	C	A(T/ha/month)	CONTROL REQUIREMENT
INTERNAL WORKS	MAY-SEP	XX	XX	XX	XX	XX	XX	XX	TYPE 3
EXTERNAL WORKS	OCT-DEC	XX	XX	XX	XX	XX	XX	XX	TYPE 2

Rev	Date	Description	By	Chk
02	05.12.24	ISSUED FOR PRELIMINARY TENDER	AB	SW
01	08.11.24	ISSUED FOR PRELIMINARY TENDER	AB	MB

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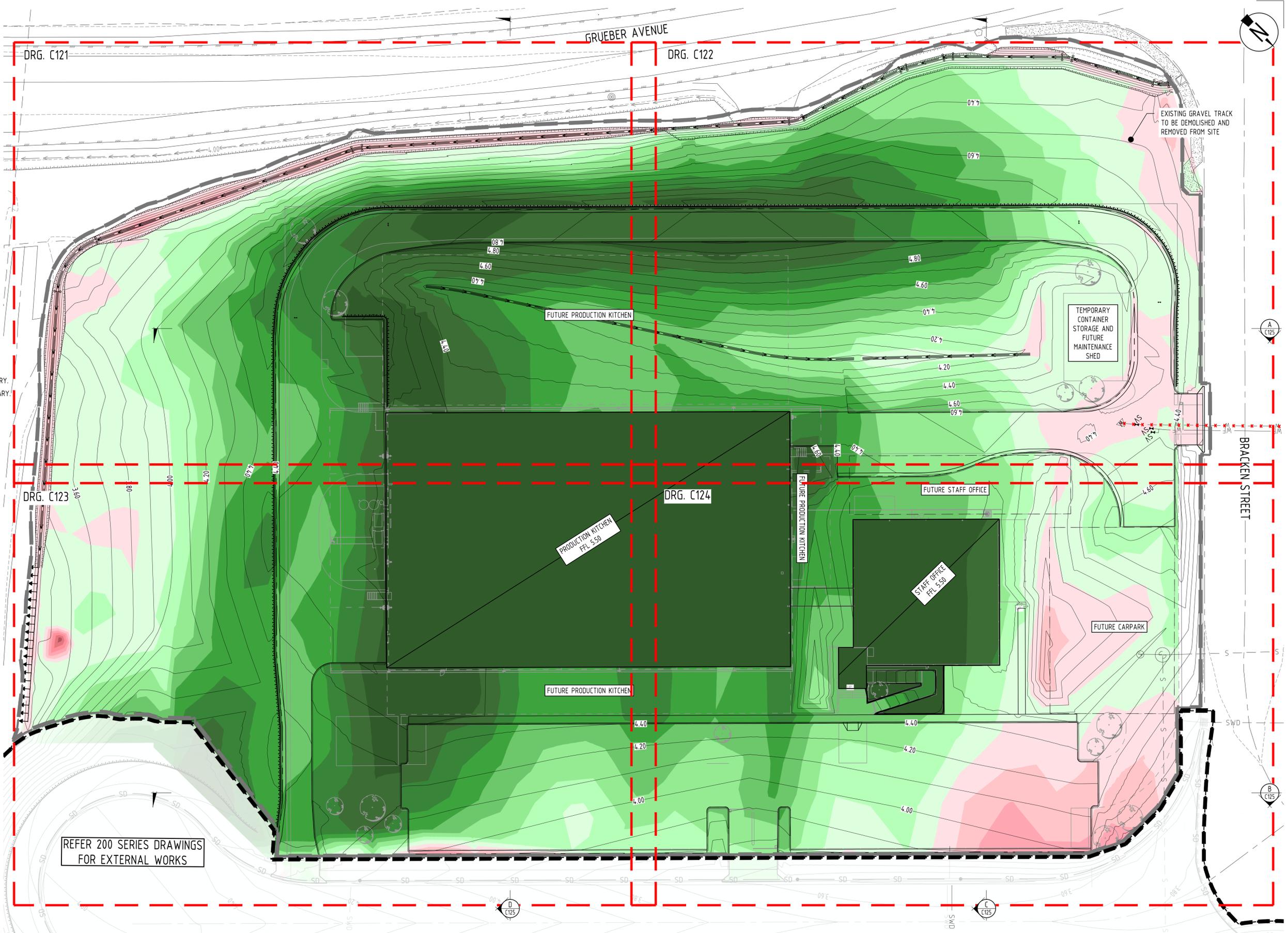
Client DEPARTMENT OF HEALTH TASMANIA		Discipline CIVIL	Status PRELIMINARY	Title EROSION AND SEDIMENT CONTROL FINISHED EARTHWORKS NOTES AND DETAILS	
Project Name HOSPITALS SOUTH PRODUCTION KITCHEN GRUEBER AVENUE CAMBRIDGE, TAS 7170		Designed By HD	Checked By MB	Approved By SW	
		Project No. 27536	Drawn By AB	Scale at A1 AS SHOWN	
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					Revision 02

LEGEND

- INDICATIVE SITE BOUNDARY
- EXISTING PROPERTY BOUNDARY
- EXISTING EASEMENT BOUNDARY
- EXISTING SURFACE CONTOURS
- 12.0 EARTHWORKS CONTOURS
- 3.42 FINISHED SURFACE GRADE
- EXISTING NOMINAL KERB LINE
- EXISTING EDGE OF BITUMEN LINE
- EXISTING ROAD CENTERLINE
- PROPOSED NOMINAL KERB LINE
- PROPOSED ROAD CENTRE LINE
- GRADE CHANGE
- EXISTING STORMWATER DRAINAGE
- EXISTING SEWER
- EXISTING WATER
- EXISTING TELECOMMUNICATIONS
- EXISTING BATTER
- EXISTING FENCE
- EXISTING EARTHWORKS DRAIN
- PROPOSED BATTER
- BUILDING OUTLINE
- PROPOSED SWALE TYPE AND SIZE VARIES
- PROPOSED EARTHWORKS PAD
- INTERNAL WORKS STAGE BOUNDARY
- EXTERNAL WORKS STAGE BOUNDARY REFER C200 SERIES DRGS

EARTHWORKS LEGEND

- CUT >1.4m
- CUT 1.2m - 1.4m
- CUT 1.0m - 1.2m
- CUT 0.8m - 1.0m
- CUT 0.6m - 0.8m
- CUT 0.4m - 0.6m
- CUT 0.2m - 0.4m
- CUT 0.0m - 0.2m
- FILL 0.0m - 0.2m
- FILL 0.2m - 0.4m
- FILL 0.4m - 0.6m
- FILL 0.6m - 0.8m
- FILL 0.8m - 1.0m
- FILL 1.0m - 1.2m
- FILL 1.2m - 1.4m
- FILL >1.4m



NOTE
FOR SITE SECTIONS REFER DRG No. C126.

Rev	Date	Description	By	Chk
02	05.12.24	ISSUED FOR PRELIMINARY TENDER	AB	SW
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SCALE 1:250
AT ORIGINAL SIZE (A1)

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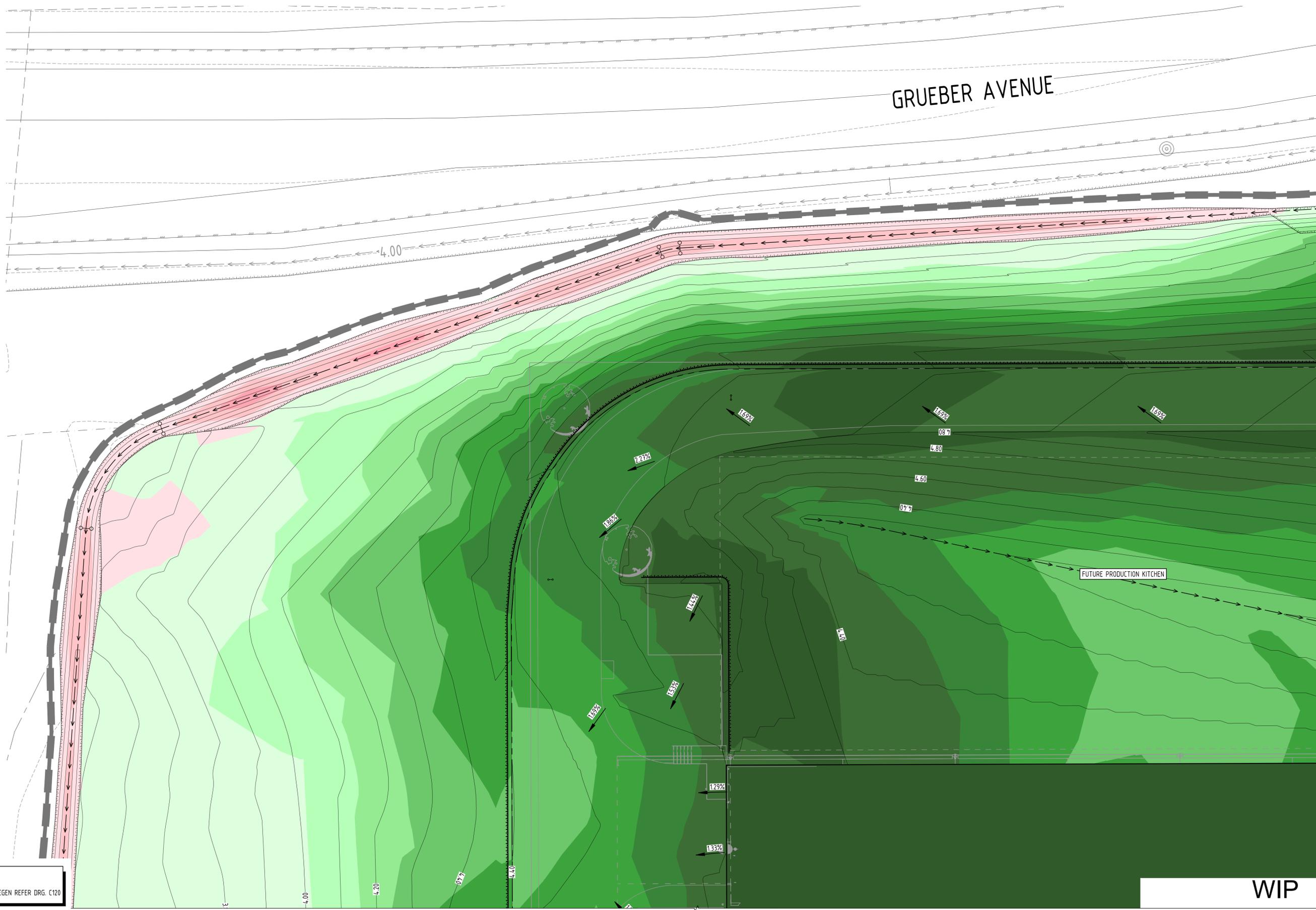
Client DEPARTMENT OF HEALTH TASMANIA	Discipline CIVIL	Status PRELIMINARY
Project Name HOSPITALS SOUTH PRODUCTION KITCHEN	Designed By HD	Checked By MB
GRUEBER AVENUE CAMBRIDGE, TAS 7170	Project No. 27536	Drawn By AB
	Approved By SW	Scale at A1 1:250

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Title EARTHWORKS OVERALL LAYOUT PLAN	Revision 02
Drawing No. C120	



GRUEBER AVENUE



FOR CONTINUATION REFER DRG. C122

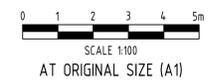
NOTE
FOR EARTHWORKS LEGEN REFER DRG. C120

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FOR CONTINUATION REFER DRG. C123

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DEPARTMENT OF HEALTH TASMANIA

Project Name
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CAMBRIDGE, TAS 7170

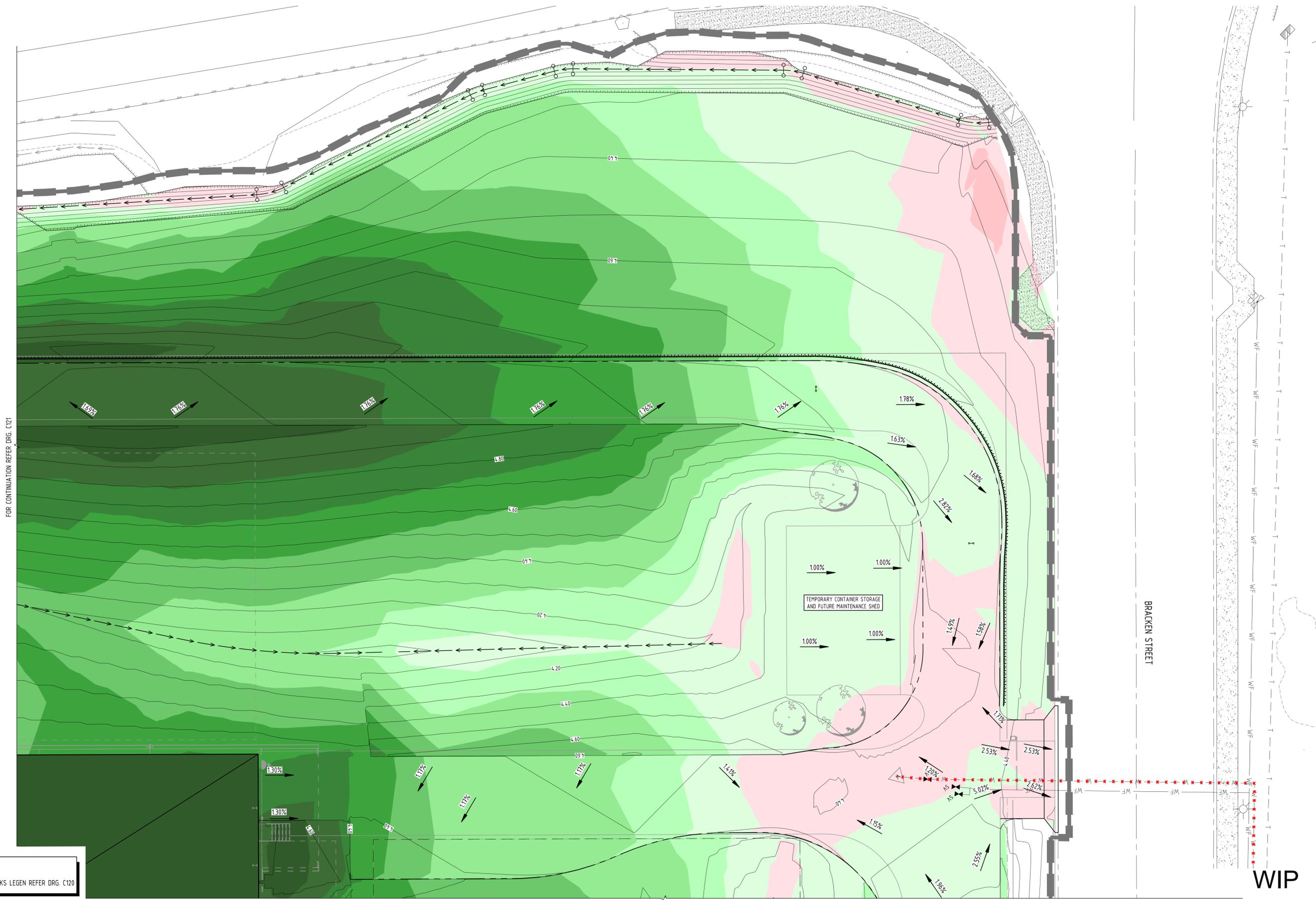
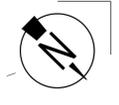
Discipline CIVIL	Designed By HD	Checked By MB	Status PRELIMINARY
Project No. 27536	Drawn By AB	Approved By SW	Scale at A1 1:125

Title
EARTHWORKS
LAYOUT PLAN
SHEET 1 OF 4

Drawing No.
C121

Revision
02

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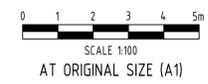
FOR CONTINUATION REFER DRG. C121

FOR CONTINUATION REFER DRG. C124

NOTE
FOR EARTHWORKS LEGEN REFER DRG. C120

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DEPARTMENT OF HEALTH TASMANIA

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CAMBRIDGE, TAS 7170

Discipline
CIVIL

Designed By
HD

Checked By
MB

Project No.
27536

Drawn By
AB

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PRELIMINARY

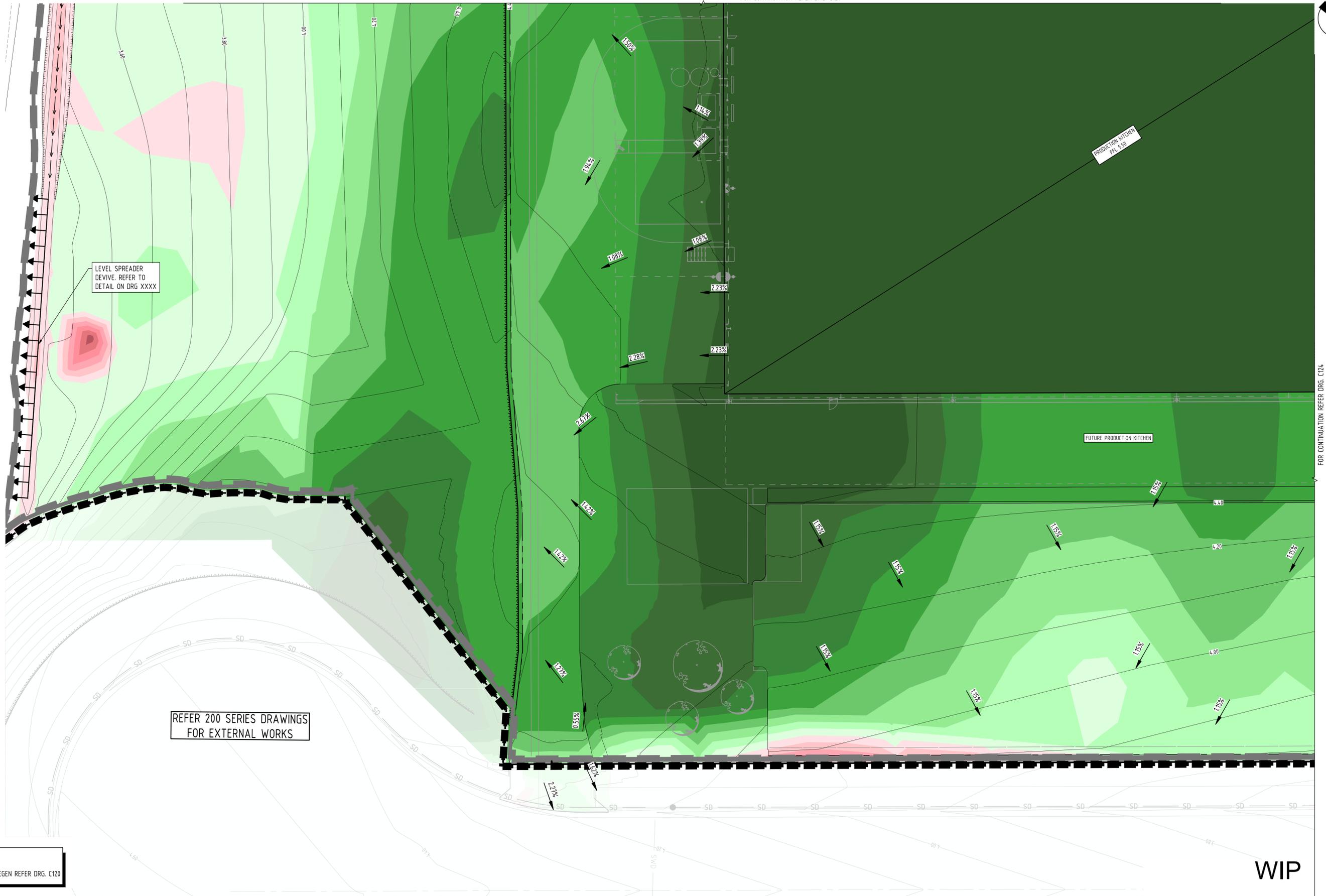
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Title
EARTHWORKS
LAYOUT PLAN
SHEET 2 OF 4

Drawing No.
C122

Revision
02



LEVEL SPREADER
DEVISE. REFER TO
DETAIL ON DRG XXXX

REFER 200 SERIES DRAWINGS
FOR EXTERNAL WORKS

PRODUCTION KITCHEN
FPL 550

FUTURE PRODUCTION KITCHEN

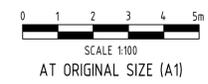
FOR CONTINUATION REFER DRG. C124

NOTE
FOR EARTHWORKS LEGEN REFER DRG. C120

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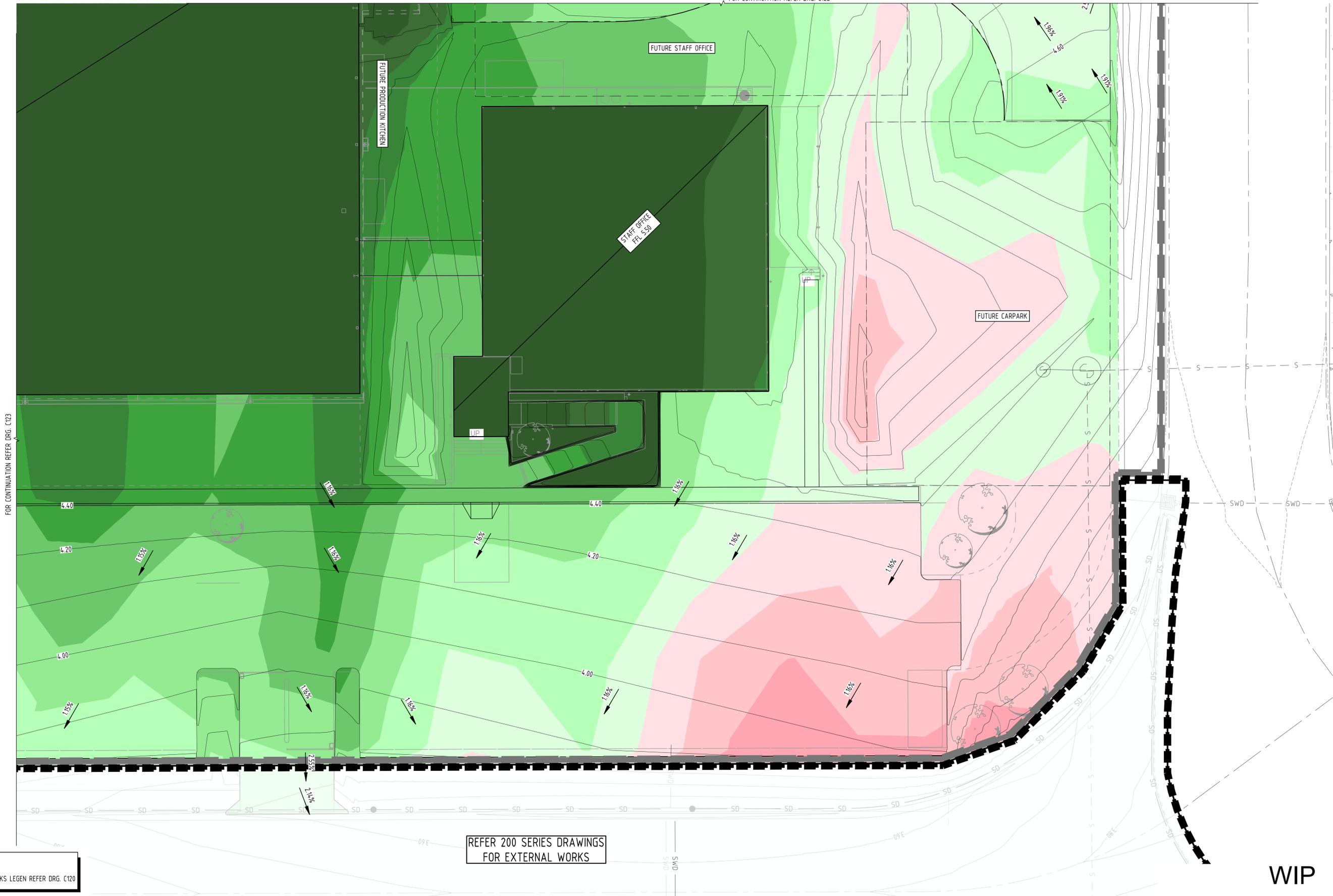
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Project No. 27536	Drawn By AB	Approved By SW	Scale at A1 1:125

Title
**EARTHWORKS
LAYOUT PLAN
SHEET 3 OF 4**

Drawing No.
C123

Revision
02

FOR CONTINUATION REFER DRG. C122



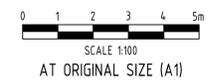
FOR CONTINUATION REFER DRG. C123

REFER 200 SERIES DRAWINGS FOR EXTERNAL WORKS

NOTE FOR EARTHWORKS LEGEN REFER DRG. C120

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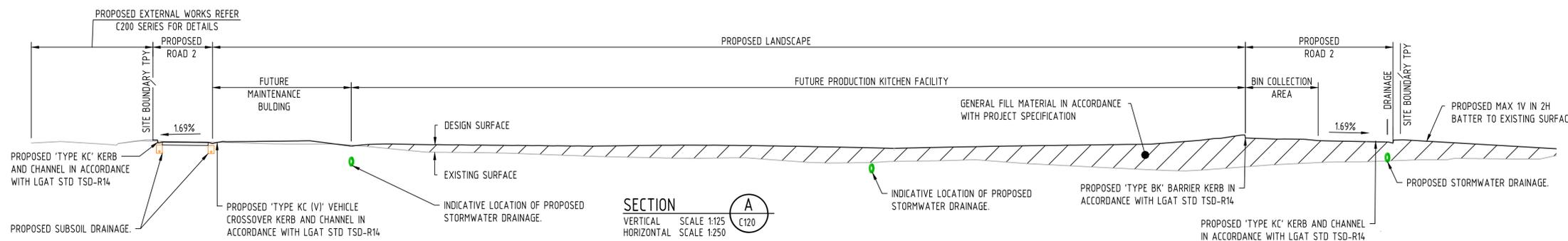
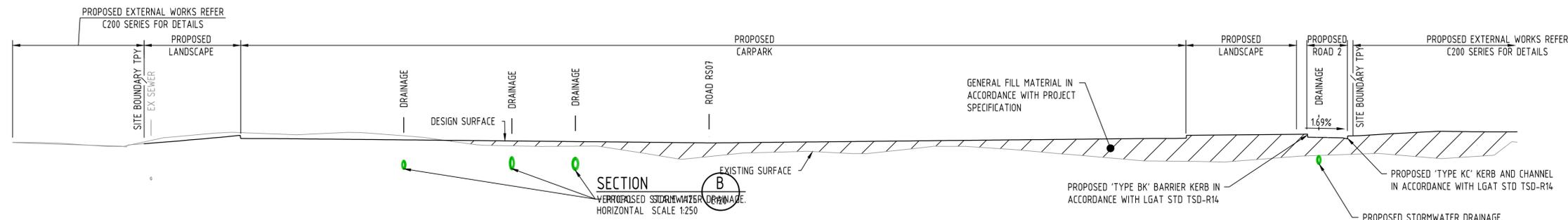
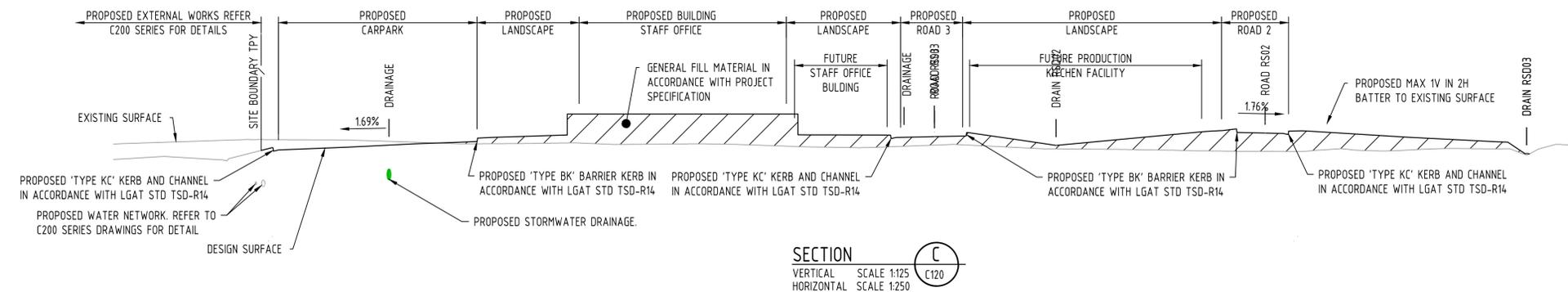
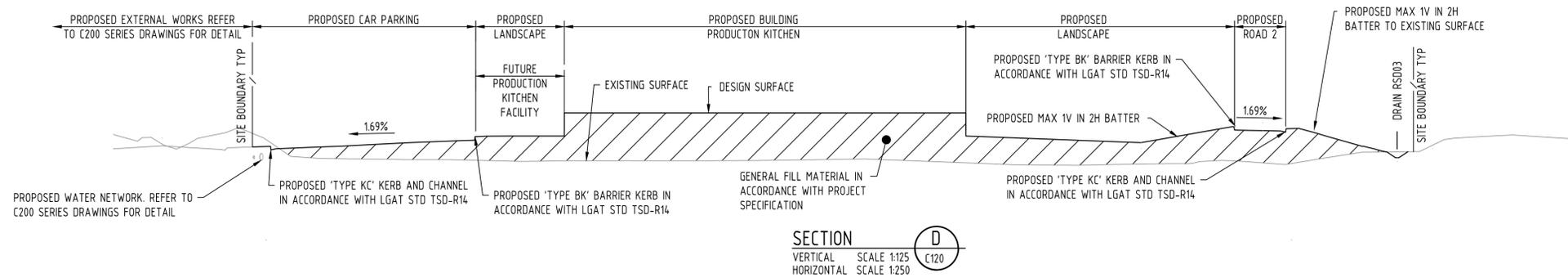
Discipline CIVIL		Status PRELIMINARY
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Title EARTHWORKS LAYOUT PLAN SHEET 4 OF 4	
Drawing No. C124	Revision 02

EARTHWORKS NOTES

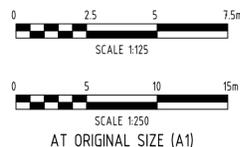
REFER DRG C101 FOR EARTHWORKS NOTES



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Drawing No. C125	Revision 02

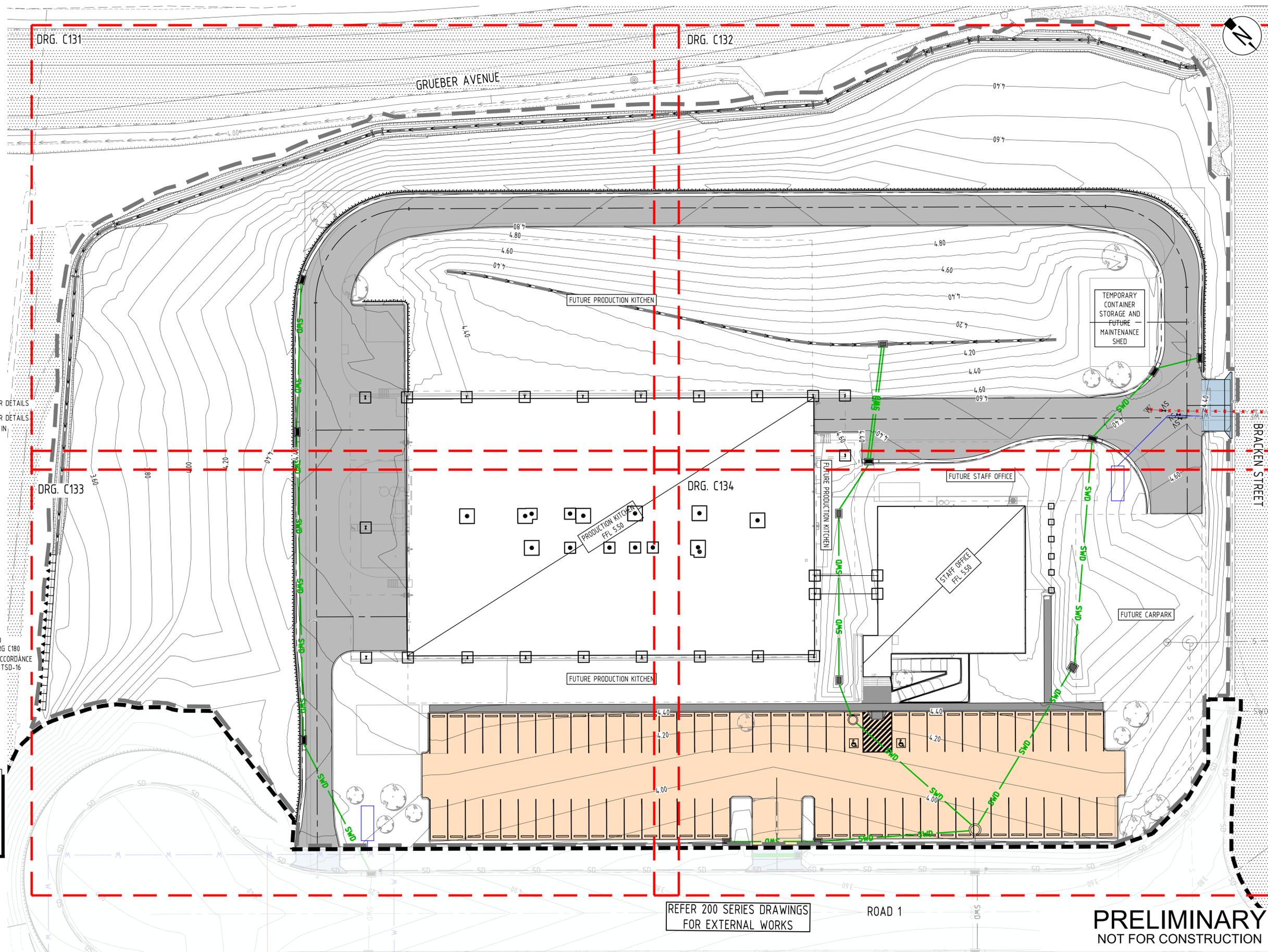
FULL SIZE ON ORIGINAL 0 10 20 30 40 50 60 70 80 90 100mm

LEGEND

- FINISHED SURFACE CONTOURS
- INDICATIVE SITE BOUNDARY
- EXISTING PROPERTY BOUNDARY
- EXISTING EASEMENT BOUNDARY
- EXISTING NOMINAL KERB LINE
- EXISTING EDGE OF BITUMEN
- EXISTING ROAD CENTERLINE
- EXISTING STORMWATER DRAINAGE
- EXISTING SEWER
- EXISTING WATER
- EXISTING WATER TO BE ABANDON
- EXISTING FIRE AND SPRINKLER MAIN
- EXISTING TELECOMMUNICATIONS
- EXISTING BATTER
- EXISTING FENCE
- EXISTING EARTHWORKS DRAIN
- LIMIT OF WORKS
- PROPOSED DISH DRAIN IN ACCORDANCE WITH IECA STD DRG TSD-R14
- PROPOSED LEVEL SPREADER IN ACCORDANCE WITH IECA STD DRG LS-01
- PROPOSED STORMWATER DRAINAGE
- PROPOSED SEP (SAG) TYPE 3. REFER IPWEA TAS STD TSD-SW09
- PROPOSED GRATED PIT IN ACCORDANCE WITH TSD-SW15 AND TSD-SW14
- PROPOSED SUBSOIL DRAINAGE
- PROPOSED SEWER. REFER C200 SERIES FOR DETAILS
- PROPOSED SEWER. REFER C200 SERIES FOR DETAILS
- PROPOSED 'TYPE KC' KERB AND CHANNEL IN ACCORDANCE WITH LGAT STD TSD-R14
- PROPOSED 'TYPE BK' BARRIER KERB IN ACCORDANCE WITH LGAT STD TSD-R14
- PROPOSED 'TYPE KC (V)' VEHICLE CROSSOVER KERB AND CHANNEL IN ACCORDANCE WITH LGAT STD TSD-R14
- STAGE BOUNDARY
- PROPOSED ROAD CENTRE LINE
- DRAINAGE STRUCTURE LABEL
- EXTERNAL CIVIL WORKS REFER C200 SERIES DRGS
- EXISTING ROAD
- EXISTING FOOTPATH
- PROPOSED FOOTPATH IN ACCORDANCE WITH LGAT STD TSD-R11
- PROPOSED RIGID PAVEMENT. REFER TO JOINTING PLAN ON DRG C180
- PROPOSED FLEXIBLE PAVEMENT. REFER TO PAVEMENT OVERALL LAYOUT PLAN ON DRG C180
- HEAVY DUTY DRIVEWAY CROSSOVER IN ACCORDANCE WITH LGAT STD TSD-R09 AND LGAT STD TSD-16
- ROADWORKS CHAINAGE
- PROPOSED BATTER
- PROPOSED TREE. REFER TO ARCHITECTURAL DRGS FOR DETAILS

NOTES

1. FOR ROADWORKS AND DRAINAGE NOTES REFER DRG No. C101
2. FOR ROADWORKS AND DRAINAGE AND DETAILS REFER DRG No. C135
3. FOR STORMWATER LONGITUDINAL SECTIONS AND DETAILS REFER DRG No. C140.

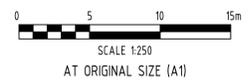


REFER 200 SERIES DRAWINGS FOR EXTERNAL WORKS

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Rev	Date	Description	By	Chk
02	05.12.24	ISSUED FOR PRELIMINARY TENDER	AB	SW
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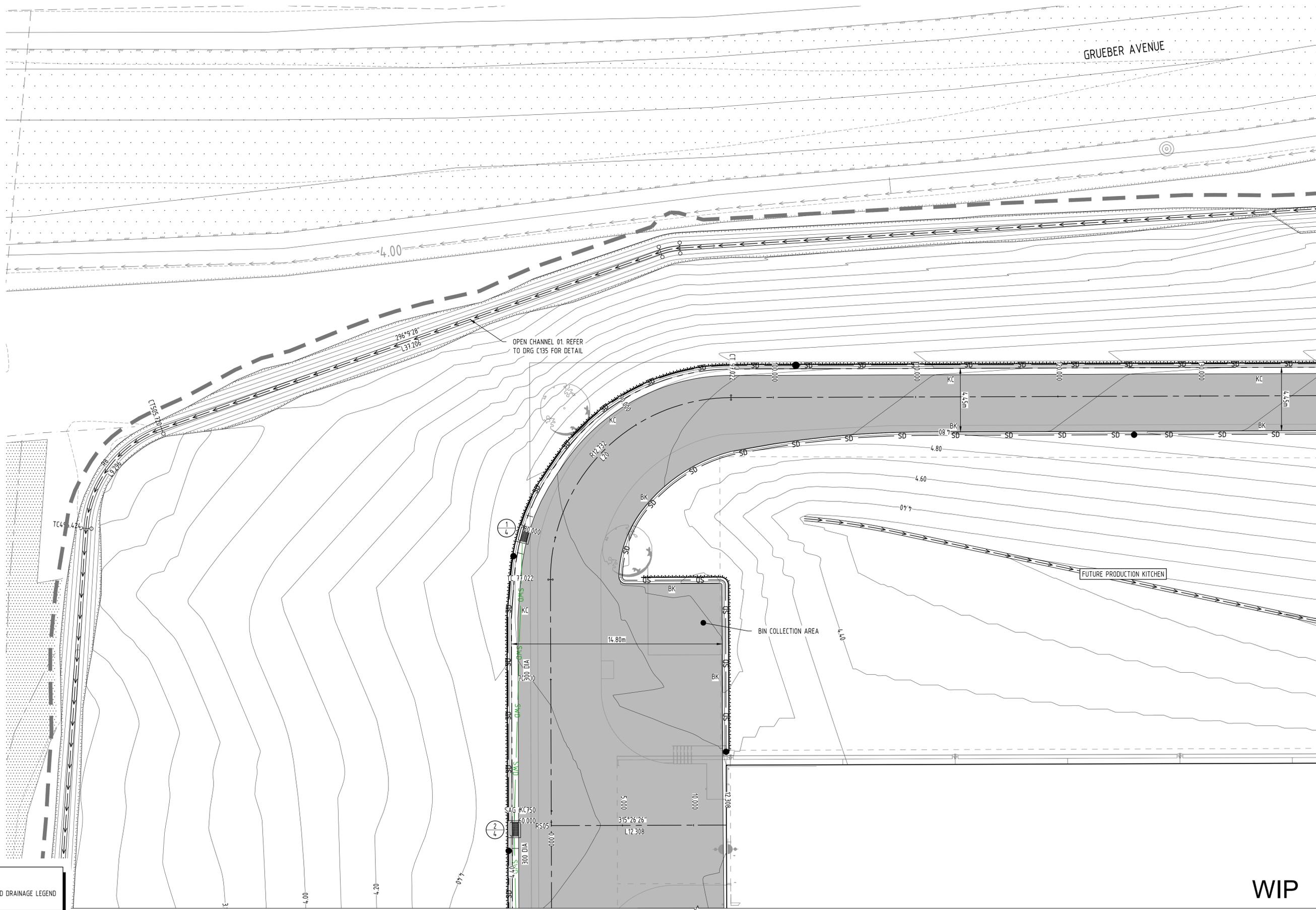
Client DEPARTMENT OF HEALTH TASMANIA	Discipline CIVIL	Status PRELIMINARY
Project Name HOSPITALS SOUTH PRODUCTION KITCHEN GRUEBER AVENUE CAMBRIDGE, TAS 7170	Designed By HD	Checked By MB
	Project No. 27536	Drawn By AB

Approved By SW	Scale at A1 1:250
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Title ROADWORK AND DRAINAGE OVERALL LAYOUT PLAN	Revision 02
Drawing No. C130	



GRUEBER AVENUE



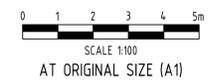
FOR CONTINUATION REFER DRG. C132

FOR CONTINUATION REFER DRG. C133

NOTE
FOR ROADWORKS AND DRAINAGE LEGEND
REFER DRG. C130

WIP

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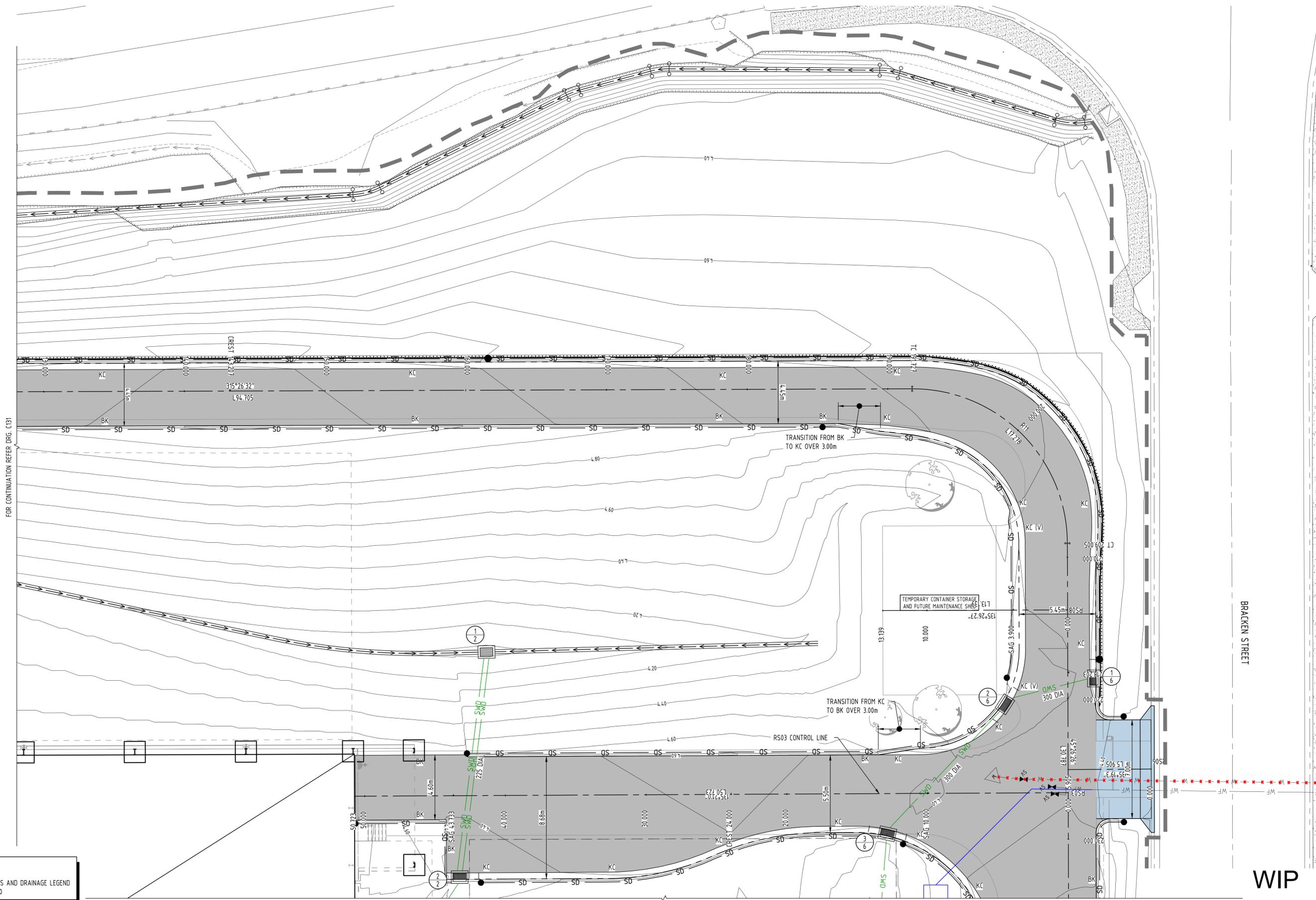
Project Name
HOSPITALS SOUTH PRODUCTION KITCHEN
GRUEBER AVENUE
CAMBRIDGE, TAS 7170

Discipline CIVIL	Designed By HD	Checked By MB	Status PRELIMINARY
Project No. 27536	Drawn By AB	Approved By SW	Scale at A1 1:125

Title
ROADWORK AND DRAINAGE
LAYOUT PLAN
SHEET 1 OF 4

Drawing No.
C131

Revision
02



FOR CONTINUATION REFER DRG. C131

FOR CONTINUATION REFER DRG. C134

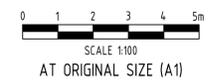
NOTE
FOR ROADWORKS AND DRAINAGE LEGEND
REFER DRG. C130

BRACKEN STREET

WIP

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Project Name
HOSPITALS SOUTH PRODUCTION KITCHEN
GRUEBER AVENUE
CAMBRIDGE, TAS 7170

Discipline
CIVIL

Designed By
HD

Checked By
MB

Project No.
27536

Drawn By
AB

Status
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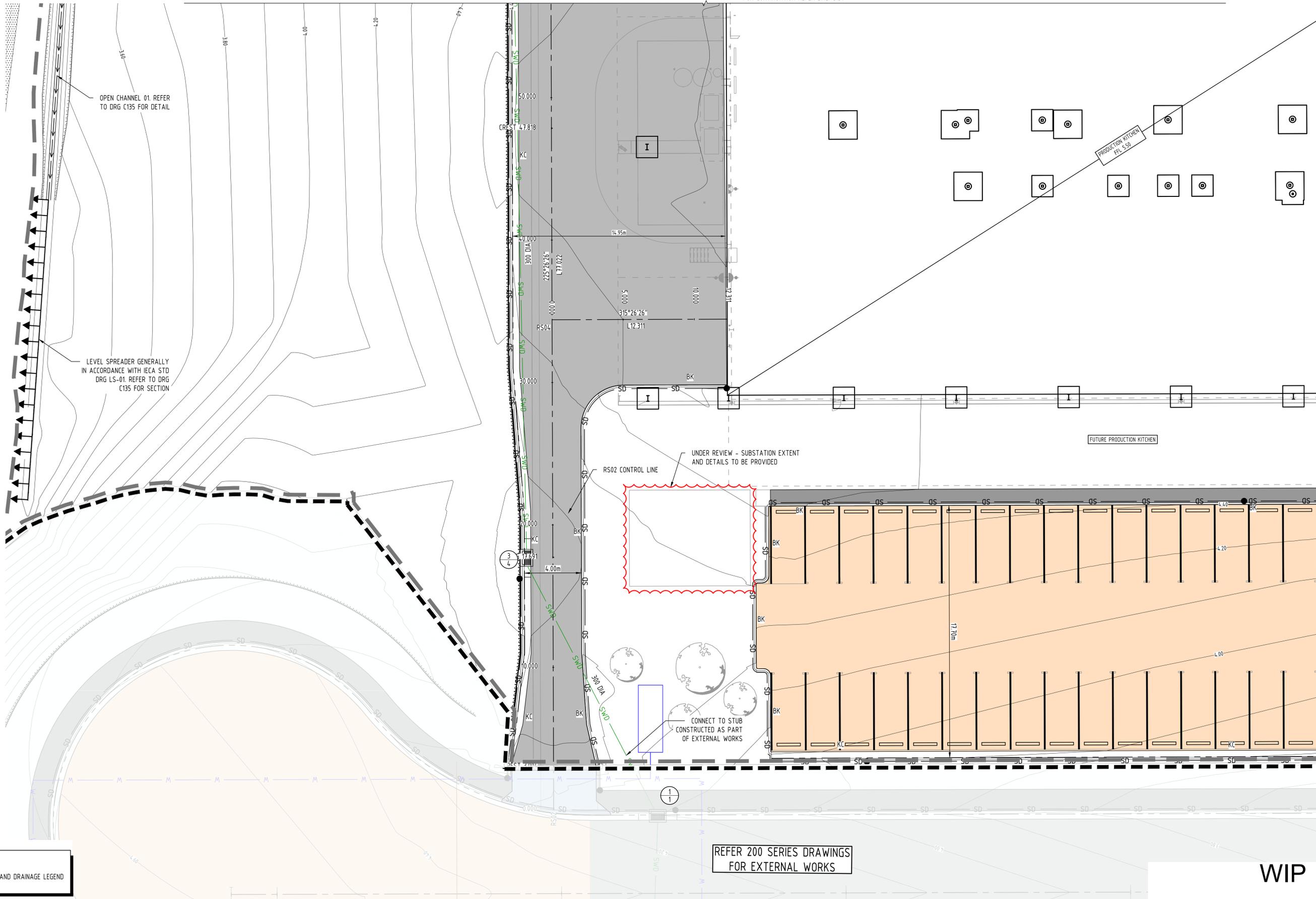
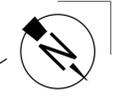
Approved By
SW

Scale at A1
1:125

Title
ROADWORK AND DRAINAGE
LAYOUT PLAN
SHEET 2 OF 4

Drawing No.
C132

Revision
02



OPEN CHANNEL 01 REFER TO DRG C135 FOR DETAIL

LEVEL SPREADER GENERALLY IN ACCORDANCE WITH IECA STD DRG LS-01. REFER TO DRG C135 FOR SECTION

PRODUCTION KITCHEN FPL 550

FUTURE PRODUCTION KITCHEN

UNDER REVIEW - SUBSTATION EXTENT AND DETAILS TO BE PROVIDED

CONNECT TO STUB CONSTRUCTED AS PART OF EXTERNAL WORKS

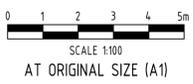
REFER 200 SERIES DRAWINGS FOR EXTERNAL WORKS

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NOTE FOR ROADWORKS AND DRAINAGE LEGEND REFER DRG. C130

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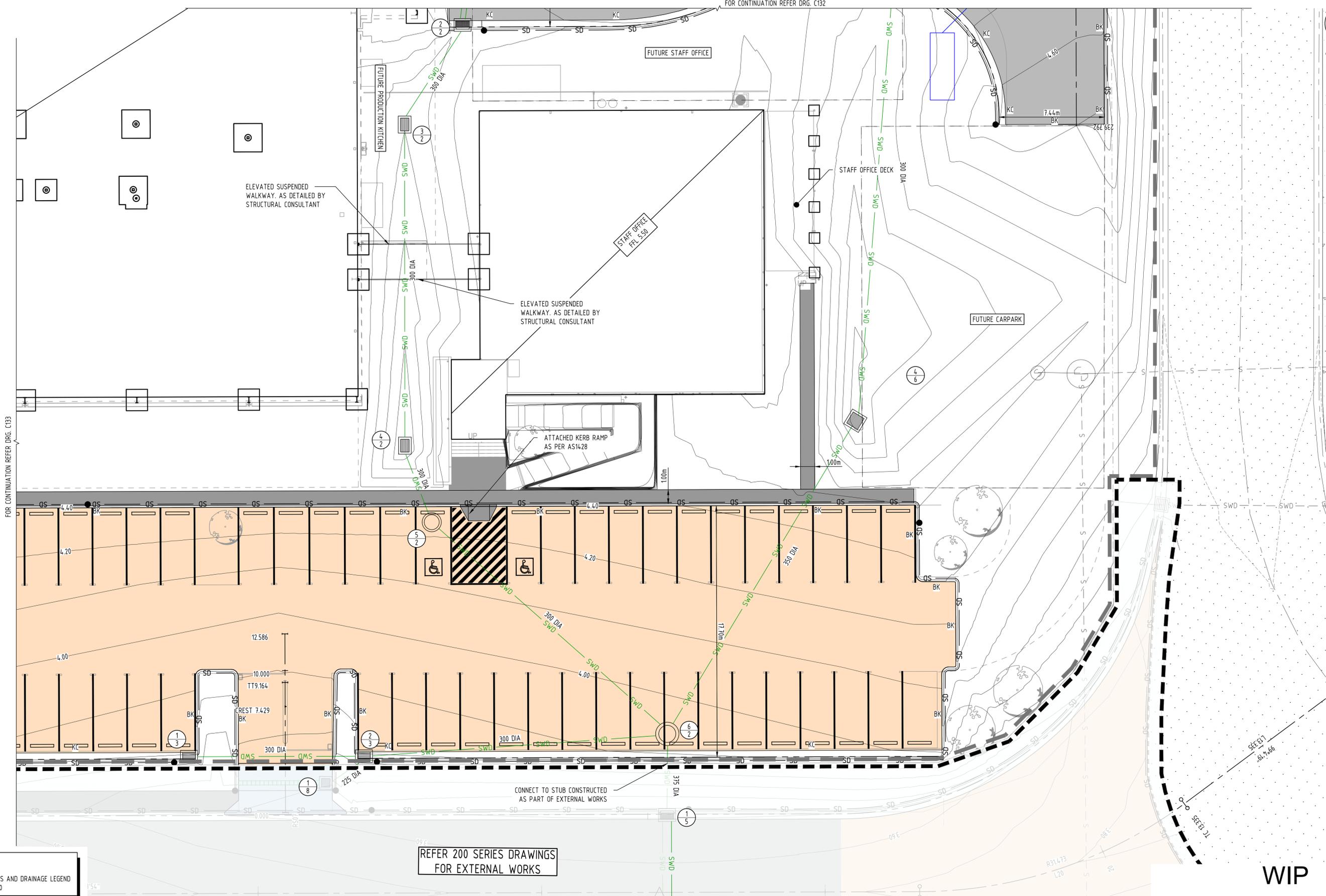
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GRUEBER AVENUE
CAMBRIDGE, TAS 7170

Discipline: CIVIL
Status: PRELIMINARY
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Checked By: MB
Project No: 27536
Drawn By: AB
Approved By: SW
Scale at A1: 1:125

Title: ROADWORK AND DRAINAGE LAYOUT PLAN SHEET 3 OF 4
Drawing No: C133
Revision: 02

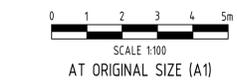
FOR CONTINUATION REFER DRG. C132



FOR CONTINUATION REFER DRG. C133

NOTE
FOR ROADWORKS AND DRAINAGE LEGEND
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REFER 200 SERIES DRAWINGS
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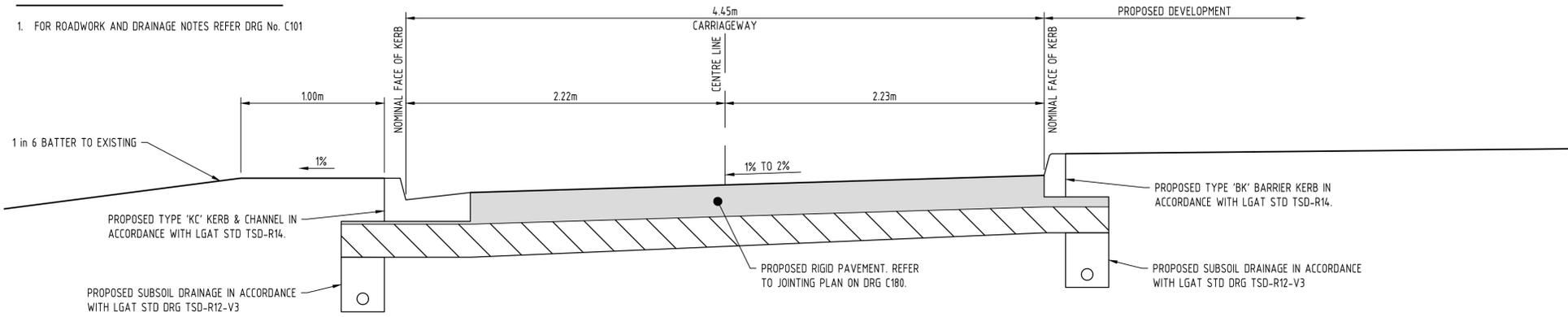
Client
DEPARTMENT OF HEALTH TASMANIA
Project Name
HOSPITALS SOUTH PRODUCTION KITCHEN
GRUEBER AVENUE
CAMBRIDGE, TAS 7170

Discipline
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Project No.
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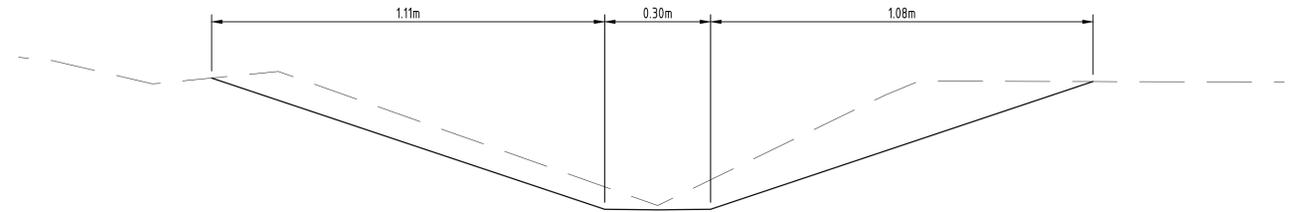
Title
ROADWORK AND DRAINAGE
LAYOUT PLAN
SHEET 4 OF 4
Drawing No.
C134
Revision
02

ROADWORKS AND DRAINAGE NOTES

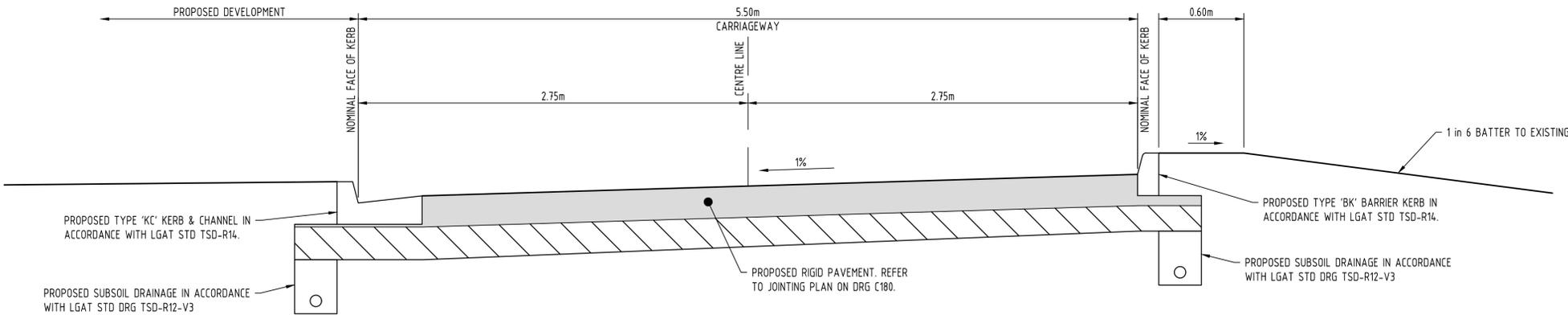
1. FOR ROADWORK AND DRAINAGE NOTES REFER DRG No. C101



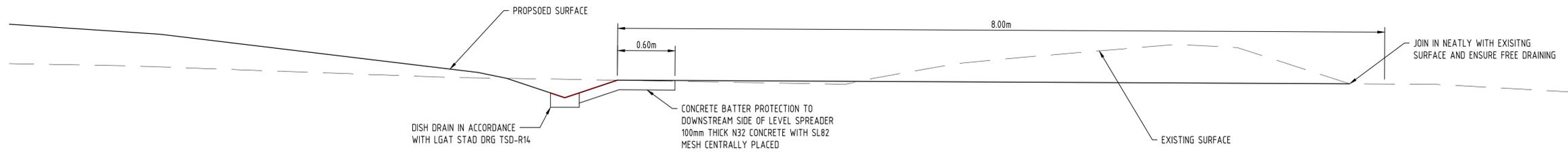
ROAD 2 TYPICAL SECTION
SCALE 1:20



OPEN CHANNEL 01
SCALE 1:20



ROAD 3 TYPICAL SECTION
SCALE 1:20

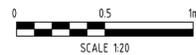


LEVEL SPREADER TYPICAL SECTION
SCALE 1:20

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SCALE 1:20
AT ORIGINAL SIZE (A1)

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Project Name: HOSPITALS SOUTH PRODUCTION KITCHEN
GRUEBER AVENUE
CAMBRIDGE, TAS 7170

Discipline: CIVIL	Status: PRELIMINARY
Designed By: HD	Checked By: MB
Project No: 27536	Drawn By: AB
Approved By: SW	Scale at A1: AS SHOWN

Title: ROADWORK AND DRAINAGE DETAILS	
Drawing No: C135	Revision: 02

HORIZONTAL CURVE DATA

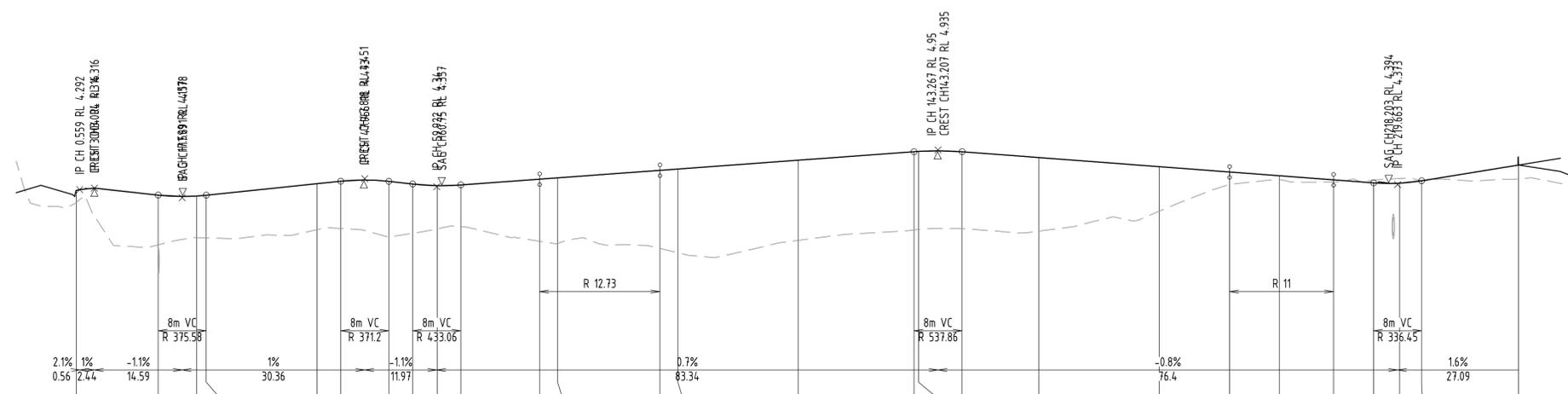
VERTICAL CURVE LENGTH (m)
 VERTICAL CURVE RADIUS (m)
 VERTICAL GEOMETRY GRADE (%)
 VERTICAL GEOMETRY LENGTH (m)

DATUM RL 0.600

DESIGN SURFACE LEVEL	4.280	4.201	4.185	4.199	4.390	4.431	4.428	4.384	4.358	4.369	4.465	4.487	4.921	4.926	4.920	4.824	4.673	4.584	4.522	4.454	4.403	4.399	4.438	4.700
DESIGN SURFACE LEVEL	4.280	4.201	4.185	4.199	4.390	4.431	4.428	4.384	4.358	4.369	4.465	4.487	4.921	4.926	4.920	4.824	4.673	4.584	4.522	4.454	4.403	4.399	4.438	4.700
EXISTING SURFACE LEVEL	4.081	3.376	3.496	3.491	3.627	3.647	3.506	3.568	3.641	3.675	3.434	3.399	3.623	3.632	3.643	3.602	3.932	4.377	4.456	4.449	4.449	4.476	4.440	4.471
CUT / FILL DEPTH	0.199	0.825	0.689	0.707	0.763	0.784	0.922	0.816	0.717	0.693	1.031	1.087	1.298	1.293	1.277	1.221	0.740	0.207	0.066	0.035	-0.046	-0.077	-0.001	0.229
CONTROL LINE CHAINAGE	0.000	13.599	20.000	21.599	40.000	43.556	51.956	55.922	60.000	63.922	77.022	80.000	139.267	140.000	147.267	160.000	180.000	191.727	200.000	209.005	215.663	220.000	223.663	239.792

A1 SCALE: H 1:500 V 1:50

LONGITUDINAL SECTION RS02



ALIGN-->RS02 HORIZONTAL POINTS								
PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	541902.604	5256413.877	4.280	225°26'26.48"			
	20.000	541888.353	5256399.844	4.185	225°26'26.48"			
	40.000	541874.103	5256385.812	4.390	225°26'26.48"			
	60.000	541859.852	5256371.779	4.358	225°26'26.48"			
TC	77.022	541847.724	5256359.835	4.465	225°26'26.48"			
	80.000	541845.378	5256358.012	4.487	238°50'31.62"			
IP 2	87.022	541838.651	5256350.901	4.538		R = 12.732	20.000	90°00'05.25"
CT	97.022	541829.718	5256359.974	4.611	315°26'31.73"			
	100.000	541827.628	5256362.096	4.633	315°26'31.73"			
	120.000	541813.596	5256376.347	4.780	315°26'31.73"			
	140.000	541799.563	5256390.598	4.926	315°26'31.73"			
	160.000	541785.531	5256404.848	4.824	315°26'31.73"			
	180.000	541771.498	5256419.099	4.673	315°26'31.73"			
TC	191.727	541763.270	5256427.455	4.584	315°26'31.73"			
	200.000	541760.112	5256434.892	4.522	358°32'05.56"			
IP 3	200.366	541755.553	5256435.293	4.519		R = 11.000	17.278	89°59'54.67"
CT	209.005	541763.390	5256443.011	4.454	45°26'26.39"			
	220.000	541771.224	5256450.725	4.399	45°26'26.39"			
IP 4	239.792	541785.326	5256464.612	4.700	45°26'26.39"			

ALIGN-->RS03 HORIZONTAL POINTS					
PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING
IP 1	0.000	541775.999	5256455.427	4.488	135°21'00.23"
	20.000	541790.055	5256441.199	4.488	135°21'00.23"
	40.000	541804.111	5256426.971	4.432	135°21'00.23"
IP 2	50.723	541811.646	5256419.343	4.500	135°21'00.23"

HORIZONTAL CURVE DATA

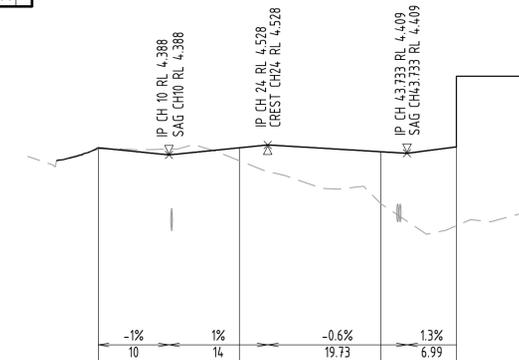
VERTICAL CURVE LENGTH (m)
 VERTICAL CURVE RADIUS (m)
 VERTICAL GEOMETRY GRADE (%)
 VERTICAL GEOMETRY LENGTH (m)

DATUM RL 1.000

DESIGN SURFACE LEVEL	4.488	4.488	4.432	4.500
DESIGN SURFACE LEVEL	4.488	4.488	4.432	4.500
EXISTING SURFACE LEVEL	4.465	4.304	3.700	3.385
CUT / FILL DEPTH	0.022	0.183	0.731	1.115
CONTROL LINE CHAINAGE	0.000	20.000	40.000	50.723

A1 SCALE: H 1:500 V 1:50

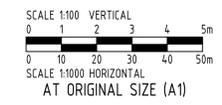
LONGITUDINAL SECTION RS03



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Project Name HOSPITALS SOUTH PRODUCTION KITCHEN GRUEBER AVENUE CAMBRIDGE, TAS 7170	Designed By HD	Checked By MB
	Project No. 27536	Drawn By AB
		Approved By SW
		Scale at A1 AS SHOWN

Title ROADWORK LONGITUDINAL SECTIONS SHEET 1 OF 2	
Drawing No. C136	Revision 02

HORIZONTAL CURVE DATA

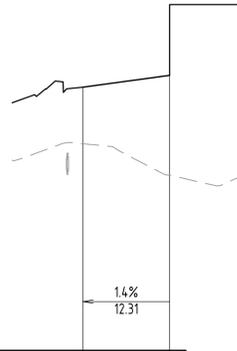
VERTICAL CURVE LENGTH (m)
 VERTICAL CURVE RADIUS (m)
 VERTICAL GEOMETRY GRADE (%)
 VERTICAL GEOMETRY LENGTH (m)

DATUM RL 0.600

DESIGN SURFACE LEVEL	4.332	4.500
DESIGN SURFACE LEVEL	4.332	4.500
EXISTING SURFACE LEVEL	3.533	3.086
CUT / FILL DEPTH	0.799	1.414
CONTROL LINE CHAINAGE	0.000	12.311

A1 SCALE: H 1:500 V 1:50

LONGITUDINAL SECTION RS04



HORIZONTAL CURVE DATA

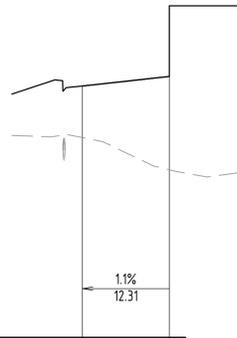
VERTICAL CURVE LENGTH (m)
 VERTICAL CURVE RADIUS (m)
 VERTICAL GEOMETRY GRADE (%)
 VERTICAL GEOMETRY LENGTH (m)

DATUM RL 0.800

DESIGN SURFACE LEVEL	4.364	4.500
DESIGN SURFACE LEVEL	4.364	4.500
EXISTING SURFACE LEVEL	3.636	3.180
CUT / FILL DEPTH	0.728	1.320
CONTROL LINE CHAINAGE	0.000	12.308

A1 SCALE: H 1:500 V 1:50

LONGITUDINAL SECTION RS05



HORIZONTAL CURVE DATA

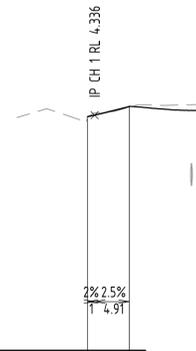
VERTICAL CURVE LENGTH (m)
 VERTICAL CURVE RADIUS (m)
 VERTICAL GEOMETRY GRADE (%)
 VERTICAL GEOMETRY LENGTH (m)

DATUM RL 1.000

DESIGN SURFACE LEVEL	4.316	4.457
DESIGN SURFACE LEVEL	4.316	4.461
EXISTING SURFACE LEVEL	4.315	4.448
CUT / FILL DEPTH	0.000	0.009
CONTROL LINE CHAINAGE	0.000	5.905

A1 SCALE: H 1:500 V 1:50

LONGITUDINAL SECTION RS06



HORIZONTAL CURVE DATA

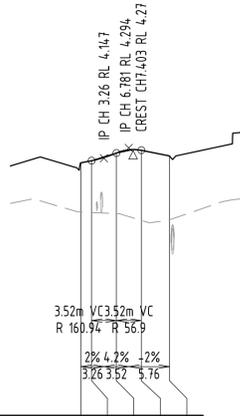
VERTICAL CURVE LENGTH (m)
 VERTICAL CURVE RADIUS (m)
 VERTICAL GEOMETRY GRADE (%)
 VERTICAL GEOMETRY LENGTH (m)

DATUM RL 0.500

DESIGN SURFACE LEVEL	4.081	4.111	4.220	4.259	4.179
DESIGN SURFACE LEVEL	4.081	4.111	4.220	4.259	4.179
EXISTING SURFACE LEVEL	3.386	3.379	3.363	3.268	3.276
CUT / FILL DEPTH	0.695	0.732	0.857	0.991	0.903
CONTROL LINE CHAINAGE	0.000	1.500	5.021	8.541	12.541

A1 SCALE: H 1:500 V 1:50

LONGITUDINAL SECTION RS07



PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING
IP 1	0.000	541878.089	5256389.737	4.332	315°26'26.49"
IP 2	12.311	541869.450	5256398.509	4.500	315°26'26.49"

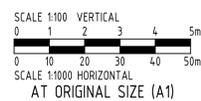
PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING
IP 1	0.000	541860.026	5256371.950	4.364	315°26'26.49"
IP 2	12.308	541851.390	5256380.720	4.500	315°26'26.49"

PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING
IP 1	0.000	541770.676	5256458.473	4.316	135°19'02.67"
IP 2	5.905	541774.828	5256454.274		135°19'02.67"

WIP

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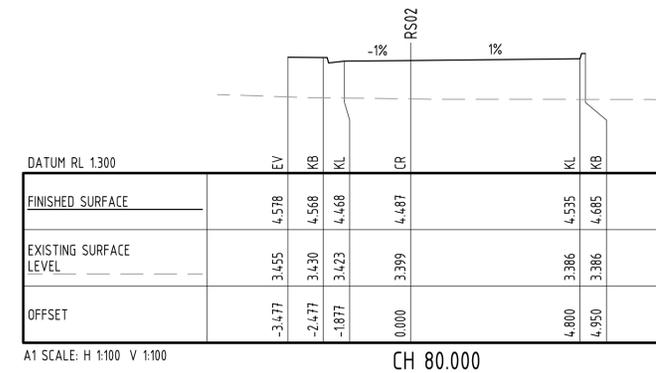
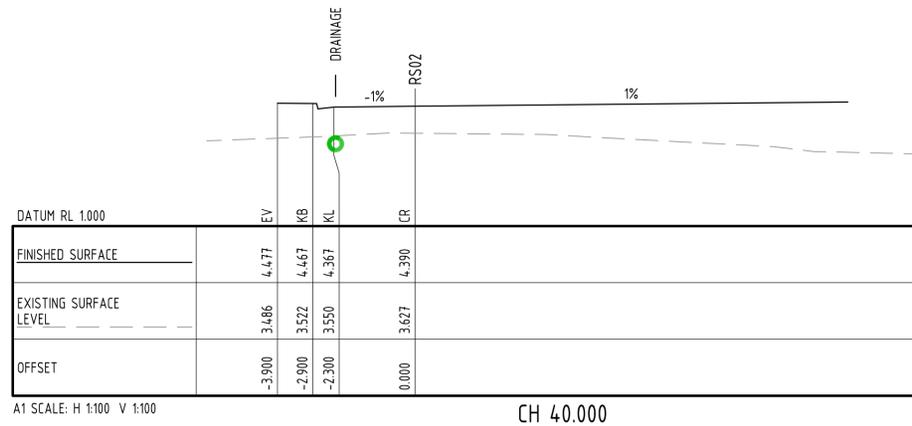
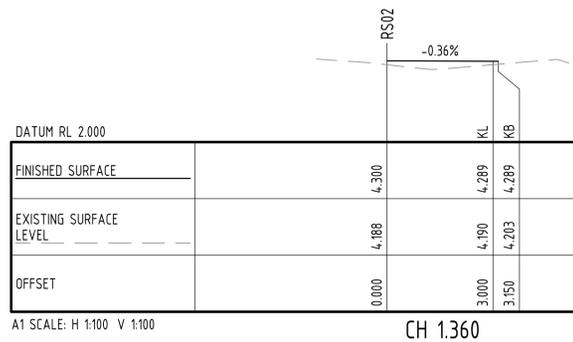
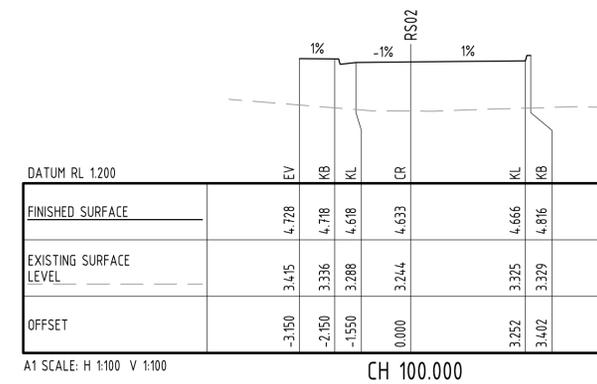
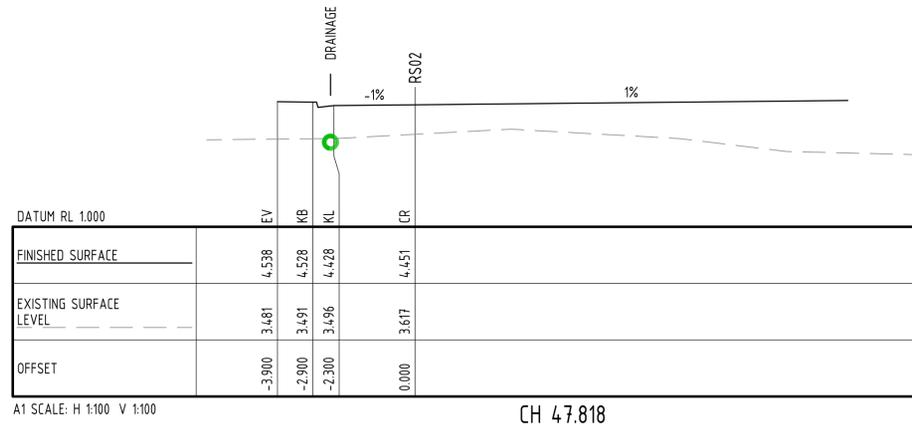
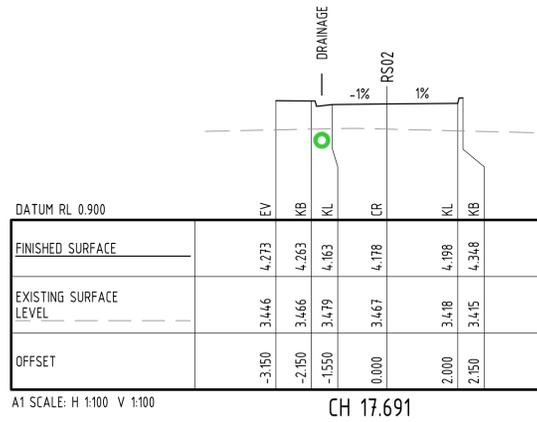
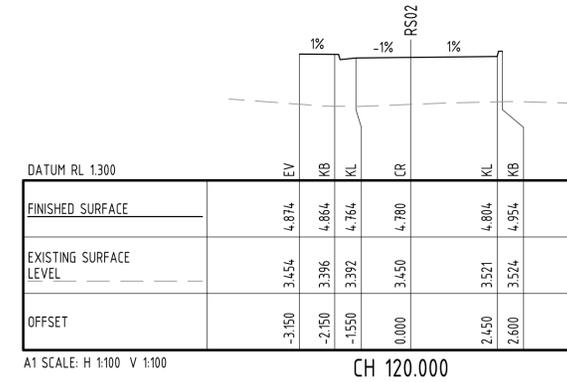
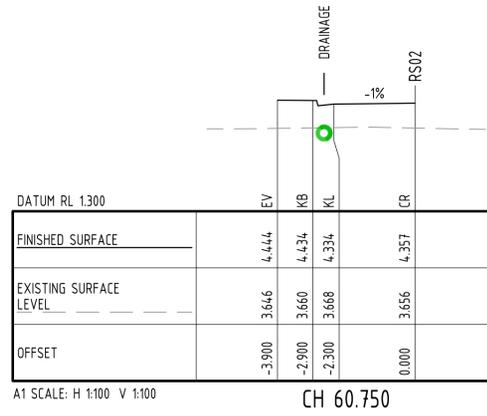
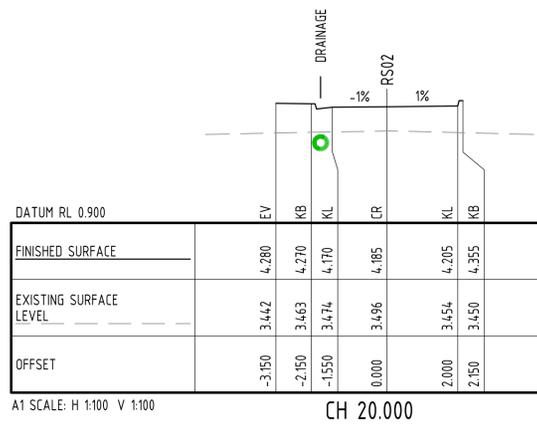


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 Environmental Management ISO 14001:2015

Client DEPARTMENT OF HEALTH TASMANIA	Discipline CIVIL	Status PRELIMINARY	Title ROADWORK LONGITUDINAL SECTIONS SHEET 2 OF 2
Project Name HOSPITALS SOUTH PRODUCTION KITCHEN GRUEBER AVENUE CAMBRIDGE, TAS 7170	Designed By HD	Checked By MB	Approved By SW
	Project No. 27536	Drawn By AB	Scale at A1 AS SHOWN
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LEGEND

- CL - CONTROL LINE
- FB - BACK OF FOOTPATH
- KB - BACK OF KERB
- KL - LIP OF KERB
- INT - INTERFACE
- EV - EDGE OF VERGE



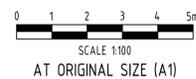
ROAD 2 CROSS SECTIONS

SCALE: HORIZONTAL - 1:100
VERTICAL - 1:100

PRELIMINARY
NOT FOR CONSTRUCTION

Rev	Date	Description	By	Chk
02	05.12.24	ISSUED FOR PRELIMINARY TENDER	AB	SW
01	23.09.24	50% DESIGN DEVELOPMENT ISSUE	DG	MB

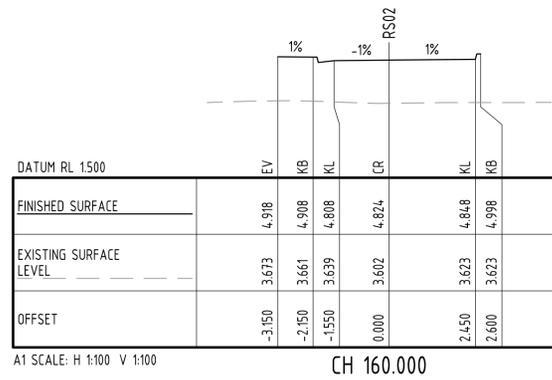
PRINT IN COLOUR



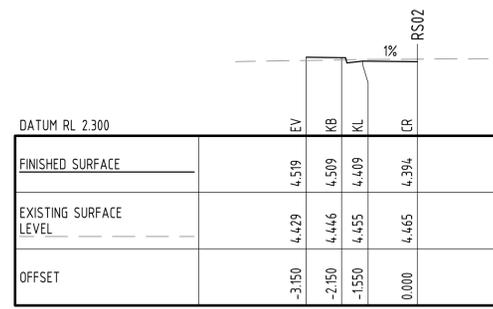
Client DEPARTMENT OF HEALTH TASMANIA	Discipline CIVIL	Status PRELIMINARY	Title ROADWORK
Project Name HOSPITALS SOUTH PRODUCTION KITCHEN GRUEBER AVENUE CAMBRIDGE, TAS 7170	Designed By HD	Checked By MB	Approved By SW
	Project No. 27536	Drawn By AB	Scale at A1 AS SHOWN
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			Revision 02

LEGEND

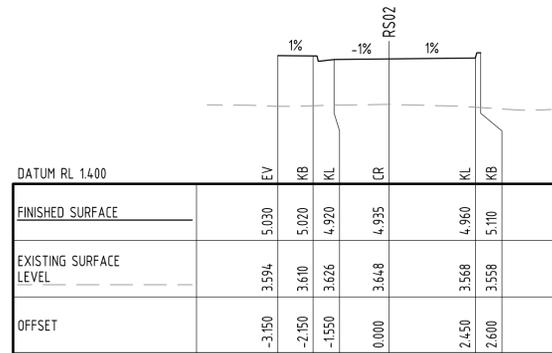
- CL - CONTROL LINE
- FB - BACK OF FOOTPATH
- KB - BACK OF KERB
- KL - LIP OF KERB
- INT - INTERFACE
- EV - EDGE OF VERGE



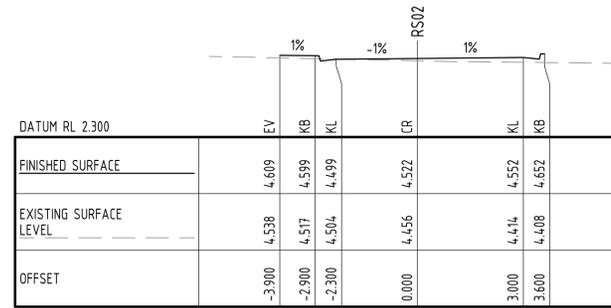
A1 SCALE: H 1:100 V 1:100 **CH 160.000**



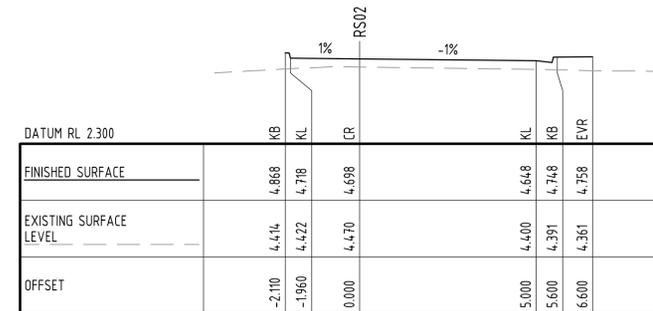
A1 SCALE: H 1:100 V 1:100 **CH 218.203**



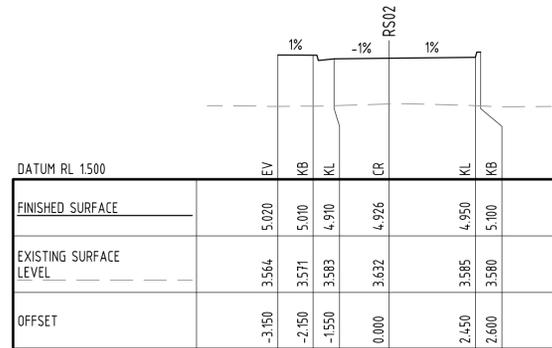
A1 SCALE: H 1:100 V 1:100 **CH 143.207**



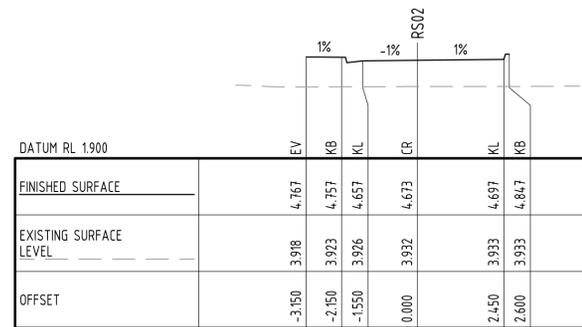
A1 SCALE: H 1:100 V 1:100 **CH 200.000**



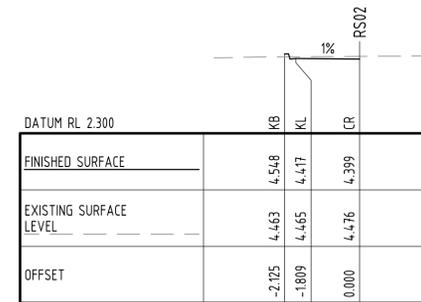
A1 SCALE: H 1:100 V 1:100 **CH 239.692**



A1 SCALE: H 1:100 V 1:100 **CH 140.000**



A1 SCALE: H 1:100 V 1:100 **CH 180.000**



A1 SCALE: H 1:100 V 1:100 **CH 220.000**

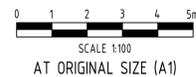
ROAD 2 CROSS SECTIONS

SCALE: HORIZONTAL - 1:100
VERTICAL - 1:100

PRELIMINARY
NOT FOR CONSTRUCTION

02	05.12.24	ISSUED FOR PRELIMINARY TENDER	AB	SW
01	23.09.24	50% DESIGN DEVELOPMENT ISSUE	DG	MB
Rev	Date	Description	By	Chk

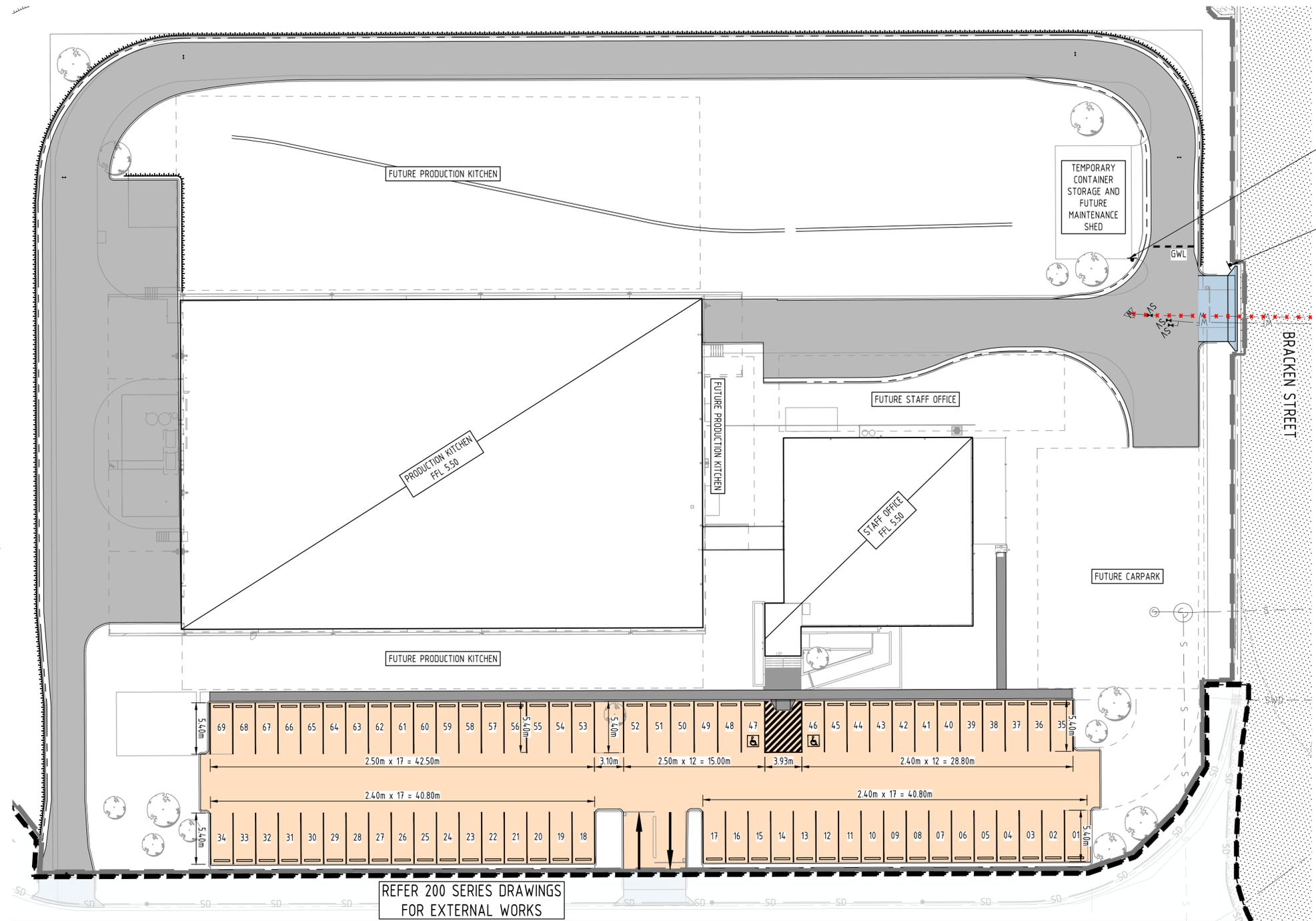
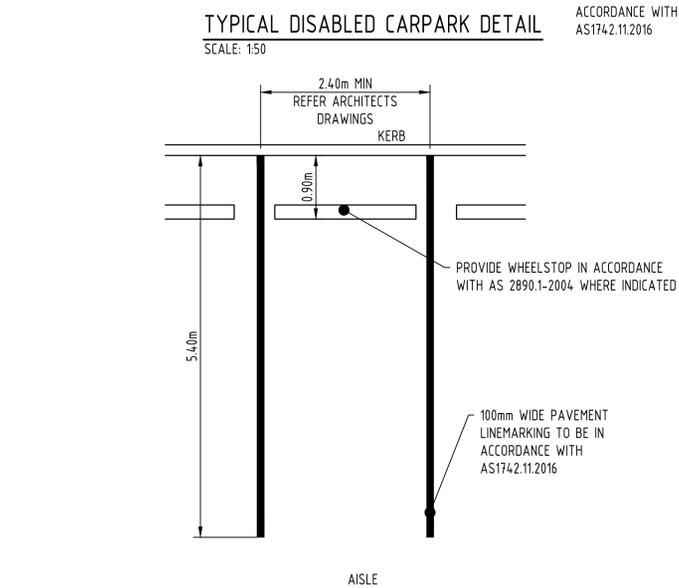
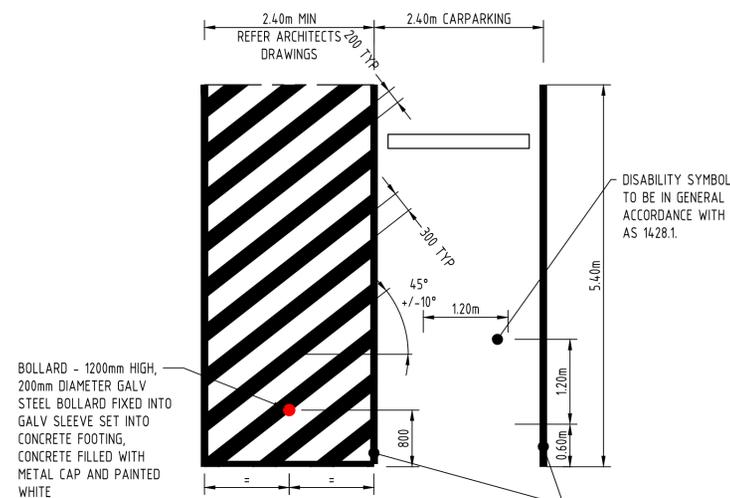
PRINT IN COLOUR



Client DEPARTMENT OF HEALTH TASMANIA	Discipline CIVIL	Status PRELIMINARY	Title ROADWORK
Project Name HOSPITALS SOUTH PRODUCTION KITCHEN	Designed By HD	Checked By MB	Approved By SW
GRUEBER AVENUE CAMBRIDGE, TAS 7170	Project No. 27536	Drawn By AB	Scale at A1 AS SHOWN
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			Revision 02

LEGEND

- EXISTING PROPERTY BOUNDARY
- EXISTING EASEMENT BOUNDARY
- EXISTING NOMINAL KERB LINE
- EXISTING EDGE OF BITUMEN
- EXISTING ROAD CENTERLINE
- EXISTING EDGE OF BUILDING EAVE
- PROPOSED NOMINAL KERB LINE
- PROPOSED ROAD CENTRE LINE
- [Pattern] EXISTING ROAD
- [Pattern] EXISTING FOOTPATH
- [Pattern] PROPOSED FOOTPATH IN ACCORDANCE WITH LGAT STD TSD-R11
- [Pattern] PROPOSED RIGID PAVEMENT. REFER TO JOINTING PLAN ON DRG C180
- [Pattern] PROPOSED FLEXIBLE PAVEMENT. REFER TO PAVEMENT OVERALL LAYOUT PLAN ON DRG C180
- [Pattern] HEAVY DUTY DRIVEWAY CROSSOVER IN ACCORDANCE WITH LGAT STD TSD-R09 AND LGAT STD TSD-16
- [Symbol] PROPOSED STREET SIGN



LINE MARKING LEGEND

- (DIMENSIONS IN MILLIMETRES)
(WHITE PAINT U.N.O)
1. STOP LINES (SL) [Symbol] 450
 2. GIVE WAY LINES (GWL) [Symbol] 450

ROAD PAVEMENTS MAY BE MARKED BY ONE OR MORE OF THE FOLLOWING MATERIALS:
 * PAINT - WITH OR WITHOUT GLASS BEADS EMBEDDED OR PREMIXED (SEE AS4049.3)
 * THERMOPLASTICS OR OTHER APPLIED IN-SITU PLASTIC MATERIALS - WITH OR WITHOUT REFLECTIVE PROPERTIES
 * PRE-CUT SHEETING - WITH OR WITHOUT REFLECTIVE PROPERTIES
 * RAISED PAVEMENT MARKERS - STUDS WHICH MAY BE RETROREFLECTIVE (RRPM) OR NON-RETROREFLECTIVE (NRPM) SET INTO THE ROADWAY OR ATTACHED TO THE ROAD SURFACE WITH ADHESIVES, LANE DIVIDERS OR PAVEMENT BARS.

REFER TO MUTCD MANUAL PART 2 AND AS1742.2 FOR FULL DETAILS OF PAVEMENT MARKING MATERIALS

NOTES:

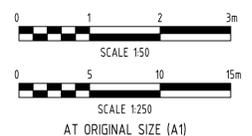
1. FOR SIGNAGE AND LINEMARKING GENERAL NOTES REFER DRG NO. C102
2. ALL DIMENSIONS ARE IN METERS.
3. REFER AS1742.3-2009 'MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES' FOR APPLICATION OF LINETYPES.
4. IF INDICATED ON THE DRAWINGS RRPMS ARE TO BE INSTALLED IN ACCORDANCE WITH THE MUTCD.



WIP

Rev	Date	Description	By	Chk
02	XX.11.24	90% DESIGN DEVELOPMENT ISSUE	AB	MB
01	23.09.24	50% DESIGN DEVELOPMENT ISSUE	DG	MB

PRINT IN COLOUR



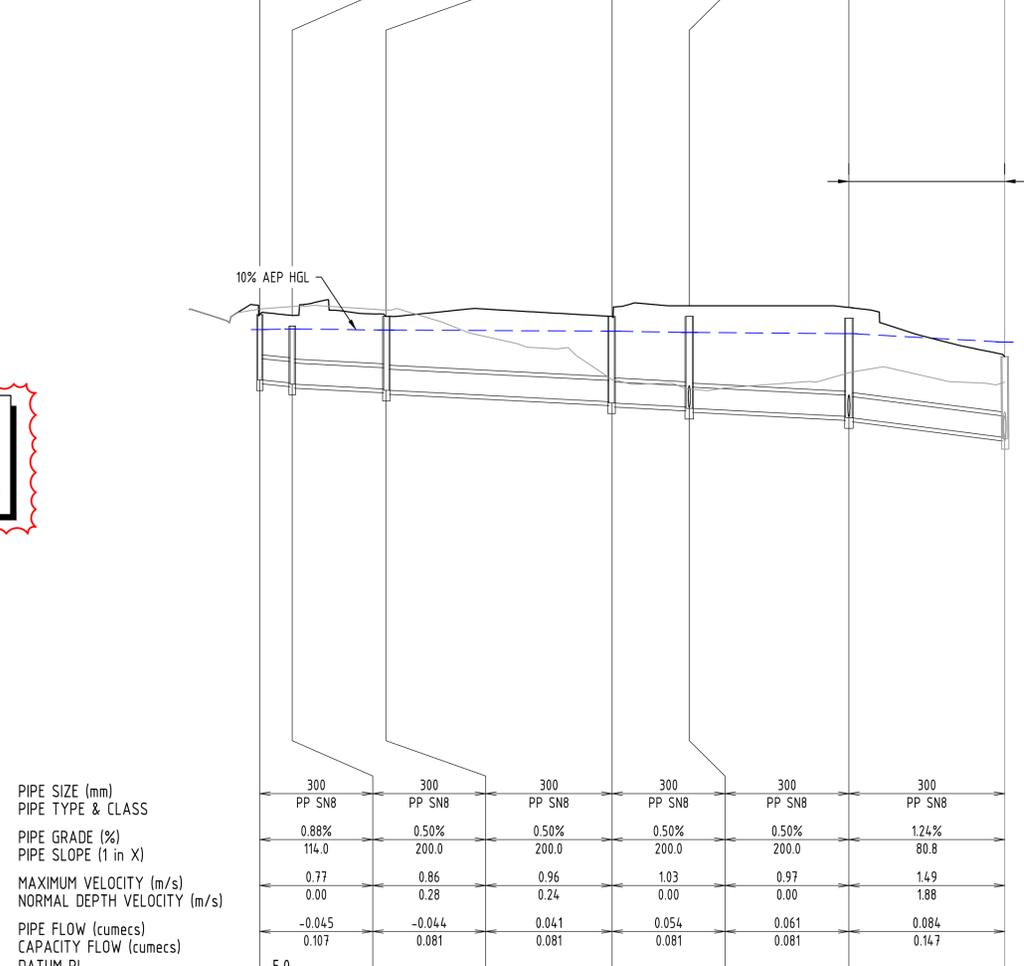
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Client DEPARTMENT OF HEALTH TASMANIA		Discipline CIVIL	Status WIP
Project Name HOSPITALS SOUTH PRODUCTION KITCHEN		Designed By MB	Checked By MB
Grueber Avenue Cambridge, TAS 7170		Project No. 27536	Drawn By AB
		Approved By SW	Scale at A1 1:250

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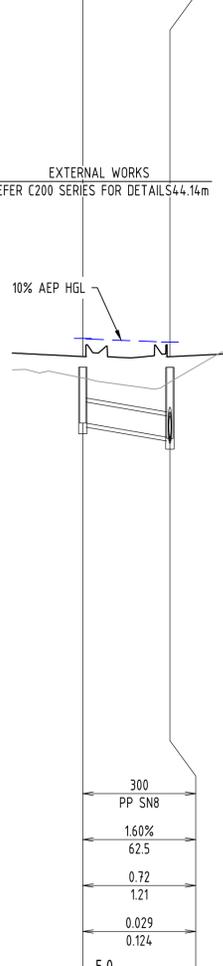
Title SIGNAGE AND LINEMARKING LAYOUT PLAN	
Drawing No. C141	Revision 02

STRUCTURE NAME	2-1	2-2	2-3	2-4	2-5	2-6	2-7
STRUCTURE DESCRIPTION	SIDE ENTRY PIT - TYPE 3 REFER TSD-SW09-V3	FIELD INLET (SAG) 600x600 REFER TSD-SW15-V3	SIDE ENTRY PIT - TYPE 3 REFER TSD-SW09-V3	SIDE ENTRY PIT - TYPE 3 REFER TSD-SW09-V3	FIELD INLET (SAG) GVP 900x600 REFER TSD-SW14-V3	FIELD INLET (SAG) TYPE 2B 900x600 REFER IPMEA STD DRG DS-050	FIELD INLET (SAG) GVP 900x600 REFER TSD-SW14-V3



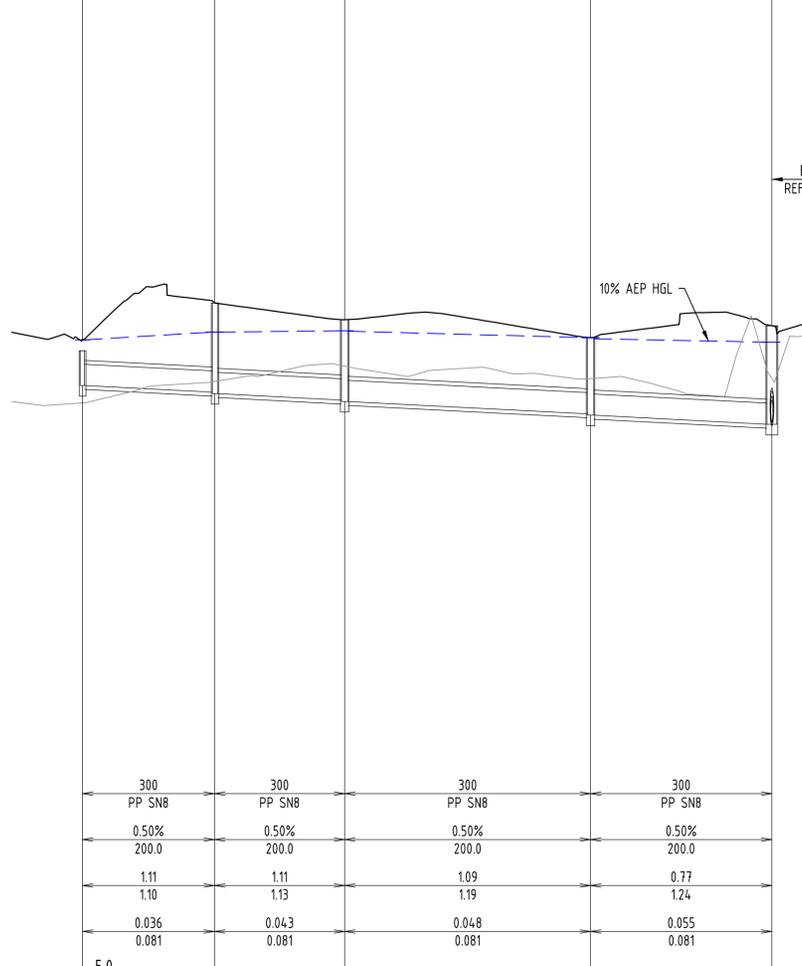
NOTE
NEW STORMWATER ALIGNMENT UNDER INVESTIGATION FOR EXTERNAL WORKS, DUE TO CAPACITY OF EXISTING SYSTEM

STRUCTURE NAME	3-1	2-7
STRUCTURE DESCRIPTION	FIELD INLET (SAG) GVP 900x600 REFER TSD-SW14-V3	FIELD INLET (SAG) GVP 900x600 REFER TSD-SW14-V3



HGL IN PIPE & WSE IN STRUCTURE	4.039	4.031	3.988	3.959
DESIGN (& EXISTING) SURFACE LEVEL	3.783 (3.400)	4.031 (3.400)	3.781 (3.422)	3.959 (3.422)
DEPTH OF INVERT BELOW DESIGN SURFACE LEVEL	0.942	0.942	1.138	1.158
INVERT LEVEL	2.840	2.840	2.643	2.623
CHAINAGE	0.000	12.339	12.339	22.624
SETOUT COORDINATES	E 54,860.878 N 5256459.951 RL 3.783	E 54,862.222 N 5256459.951 RL 3.781	E 54,862.222 N 5256459.951 RL 3.781	E 54,862.222 N 5256459.951 RL 3.781

STRUCTURE NAME	4-1	4-2	4-3	4-4	1-1
STRUCTURE DESCRIPTION	FIELD INLET (SAG) 600x600 REFER TSD-SW15-V3	SIDE ENTRY PIT - TYPE 3 REFER TSD-SW09-V3	SIDE ENTRY PIT - TYPE 3 REFER TSD-SW09-V3	SIDE ENTRY PIT - TYPE 3 REFER TSD-SW09-V3	SIDE ENTRY PIT - TYPE 5 REFER TSD-SW12-V3



HGL IN PIPE & WSE IN STRUCTURE	4.016	4.018	4.051	4.034	3.987
DESIGN (& EXISTING) SURFACE LEVEL	4.016 (3.127)	4.541 (3.432)	4.303 (3.648)	4.034 (3.471)	4.218 (3.473)
DEPTH OF INVERT BELOW DESIGN SURFACE LEVEL	0.643	1.261	1.136	1.098	1.370
INVERT LEVEL	3.373	3.279	3.167	2.973	2.847
CHAINAGE	18.711	-11.755	6.686	4.1527	25.692
SETOUT COORDINATES	E 54,832.872 N 5256370.092 RL 4.016	E 54,864.754 N 5256358.611 RL 4.541	E 54,860.685 N 5256371.546 RL 4.303	E 54,885.512 N 5256395.991 RL 4.051	E 54,897.434 N 5256416.685 RL 4.218

LINE 2 3 4

02	05.12.24	ISSUED FOR PRELIMINARY TENDER	AB	SW
01	23.09.24	50% DESIGN DEVELOPMENT ISSUE	DG	MB
Rev	Date	Description	By	Chk

WIP

SCALE 1:100 VERTICAL
SCALE 1:1000 HORIZONTAL
AT ORIGINAL SIZE (A1)

PRINT IN COLOUR

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Environmental Management ISO 14001:2015

Client
DEPARTMENT OF HEALTH TASMANIA

Project Name
HOSPITALS SOUTH PRODUCTION KITCHEN
GRUEBER AVENUE
CAMBRIDGE, TAS 7170

Discipline CIVIL	Designed By HD	Checked By MB	Status PRELIMINARY
Project No. 27536	Drawn By AB	Approved By SW	Scale at A1 AS SHOWN

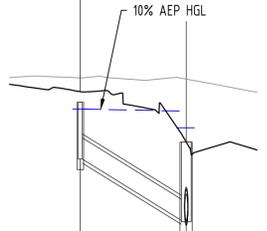
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Title
STORMWATER DRAINAGE
LONGITUDINAL SECTIONS
SHEET 1 OF 2

Drawing No.
C150

Revision
02

STRUCTURE NAME	8-1	5-1
STRUCTURE DESCRIPTION	FIELD INLET (SAG) 600x600 REFER TSD-SW16-V3	SIDE ENTRY PIT - TYPE 5 REFER TSD-SW12-V3



NOTE
NEW STORMWATER ALIGNMENT
UNDER INVESTIGATION FOR
EXTERNAL WORKS, DUE TO
CAPACITY OF EXISTING SYSTEM

PIPE SIZE (mm)	300
PIPE TYPE & CLASS	PP SN8
PIPE GRADE (%)	5.77%
PIPE SLOPE (1 in X)	17.3
MAXIMUM VELOCITY (m/s)	0.94
NORMAL DEPTH VELOCITY (m/s)	1.51
PIPE FLOW (cumecs)	0.050
CAPACITY FLOW (cumecs)	0.150
DATUM RL	-5.0

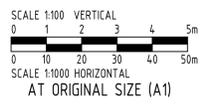
HGL IN PIPE & WSE IN STRUCTURE	4.016	3.898	3.752	3.748
DESIGN (& EXISTING) SURFACE LEVEL	4.262 (4.458)	3.548	(4.440)	
DEPTH OF INVERT BELOW DESIGN SURFACE LEVEL	0.953	1.106	1.726	
INVERT LEVEL	3.309	2.441	2.421	
CHAINAGE	0.000	15.034	15.034	
SETOUT COORDINATES	E: 54,8214,807 N: 5256484,672 RL: 4.262	E: 54,8229,311 N: 5256487,961 RL: 3.548		

LINE 8

WIP

02	05.12.24	ISSUED FOR PRELIMINARY TENDER	AB	SW
01	23.09.24	50% DESIGN DEVELOPMENT ISSUE	DG	MB
Rev	Date	Description	By	Chk

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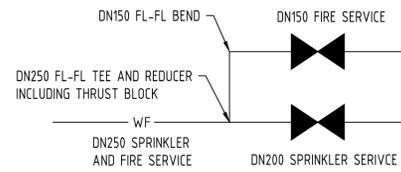
Client	DEPARTMENT OF HEALTH TASMANIA
Project Name	HOSPITALS SOUTH PRODUCTION KITCHEN GRUEBER AVENUE CAMBRIDGE, TAS 7170

Discipline	CIVIL	Status	PRELIMINARY
Designed By	HD	Checked By	MB
Project No.	27536	Drawn By	AB
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		Scale at A1	AS SHOWN

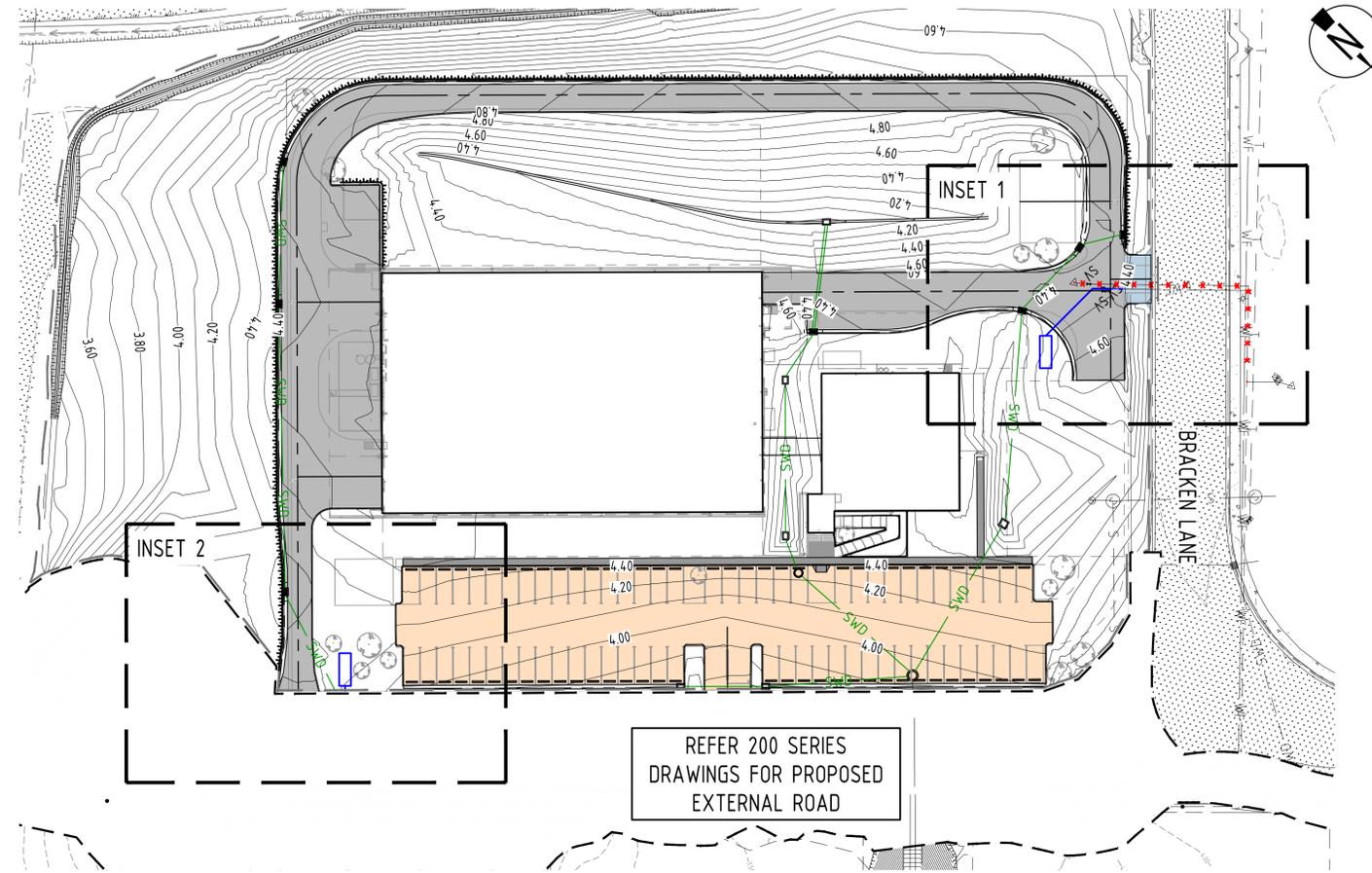
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Drawing No.	C151	Revision
		02

LEGEND

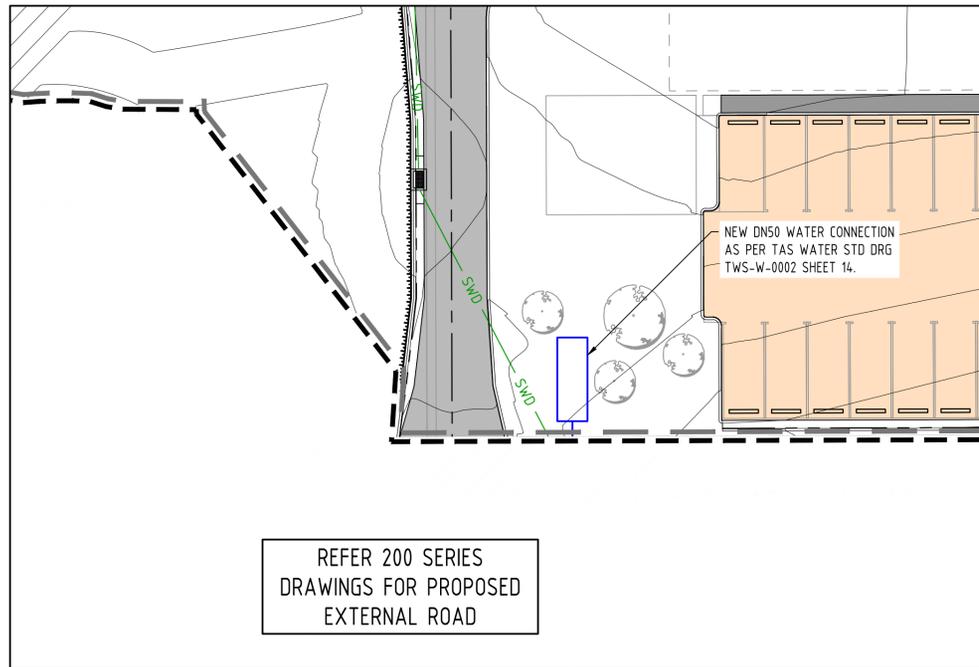
- EXISTING PROPERTY BOUNDARY
- - - EXISTING NOMINAL KERB LINE
- SWD --- EXISTING STORMWATER DRAINAGE
- S --- EXISTING SEWER
- W --- EXISTING WATER
- EXISTING FIRE AND SPRINKLER MAIN
- EXISTING TELECOMMUNICATIONS
- EXISTING BATTER
- EXISTING FENCE
- EXISTING EARTHWORKS DRAIN
- LIMIT OF WORKS
- SWD --- PROPOSED STORMWATER DRAINAGE
- EXISTING ROAD
- EXISTING FOOTPATH
- PROPOSED FOOTPATH IN ACCORDANCE WITH LGAT STD TSD-R11
- PROPOSED RIGID PAVEMENT. REFER TO JOINTING PLAN ON DRG C180
- PROPOSED FLEXIBLE PAVEMENT. REFER TO PAVEMENT OVERALL LAYOUT PLAN ON DRG C180
- HEAVY DUTY DRIVEWAY CROSSOVER IN ACCORDANCE WITH LGAT STD TSD-R09 AND LGAT STD TSD-16
- EXTERNAL CIVIL WORKS REFER C200 SERIES DRGS



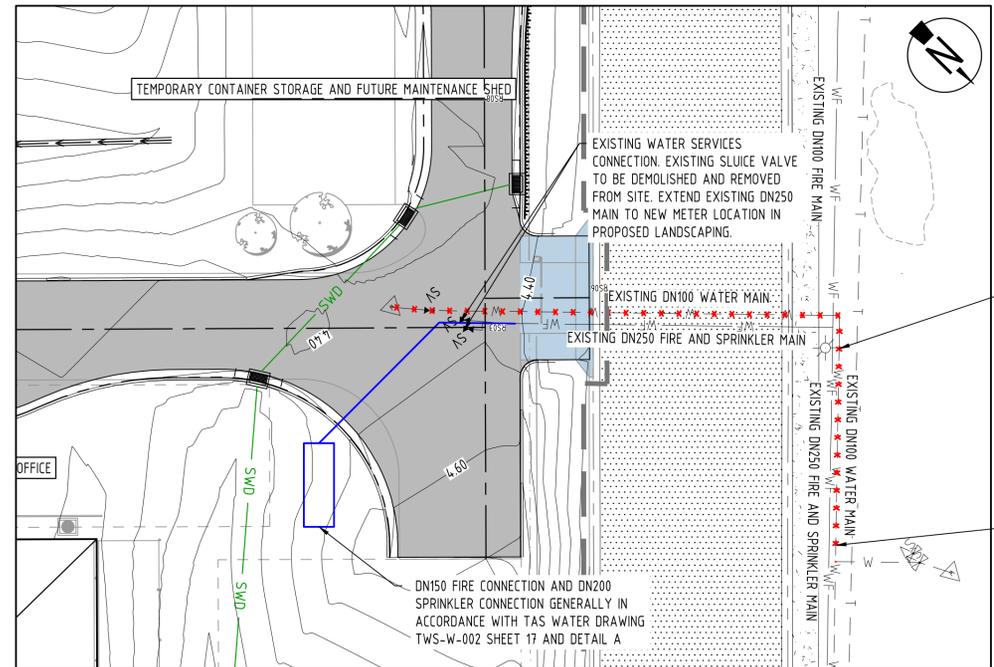
DETAIL A
SCALE 1:10



KEY PLAN
SCALE 1:500



INSET 2
SCALE 1:200



INSET 1
SCALE 1:200

NOTE:
FINAL LOCATION AND ARRANGEMENT OF METERS SUBJECT TO HYDRAULIC COORDINATION AND APPROVAL.

AS CONSTRUCTED / ADAC
CONTRACTOR TO ALLOW ALL COSTS FOR SURVEYOR TO GATHER AS CONSTRUCTED SURVEY INFORMATION AND PREPARE ADAC DATA IN ACCORDANCE WITH CURRENT TASWATER REQUIREMENTS, UNLESS OTHERWISE ADVISED BY ADG ENGINEERS.

CAUTION
EXISTING FIBRE OPTIC, ELECTRICAL & TELECOM CABLES MAY EXIST IN THE VICINITY OF REQUIRED WORKS. FOR ALL WORK WITHIN 2.5m OF MAJOR OPTIC CABLES, THE CONTRACTOR IS REQUIRED TO HAND DIG (POTHOLE) AND EXPOSE THE CABLE/CONDUIT. BEFORE WORK CAN COMMENCE, ON SITE LOCATION SHOULD BE SOUGHT FROM AN ACCREDITED PLANT LOCATOR.

CAUTION
THE LOCATION AND DEPTH OF EXISTING SERVICES AS SHOWN IS BASED ON INFORMATION OBTAINED FROM ARTHUR SURVEYORS DATED 28/08/24. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM THE ACTUAL LOCATION AND DEPTH OF EXISTING SERVICES PRIOR TO CARRYING OUT ANY EXCAVATION, TRENCHING OR TUNNELLING WORKS.

REFER 200 SERIES DRAWINGS FOR PROPOSED EXTERNAL ROAD

REDUNDANT LENGTH OF EXISTING DN100 MAIN TO BE GROUT FILLED AND ABANDONED

DISCONNECT AND CAP REDUNDANT LENGTH OF EXISTING DN100 WATER MAIN LIVE WORKS TO BE UNDERTAKEN UNDER HIAPL SUPERVISION

WIP

Rev	Date	Description	By	Chk
02	05.12.24	ISSUED FOR PRELIMINARY TENDER	AB	SW
01	23.09.24	50% DESIGN DEVELOPMENT ISSUE	DG	MB

0 2 4 6 8 10m
SCALE 1:200

0 10 20 30m
SCALE 1:500
AT ORIGINAL SIZE (A1)

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Client	DEPARTMENT OF HEALTH TASMANIA
Project Name	HOSPITALS SOUTH PRODUCTION KITCHEN
	GRUEBER AVENUE CAMBRIDGE, TAS 7170

Discipline	CIVIL
Designed By	HD
Checked By	MB
Project No.	27536
Drawn By	AB

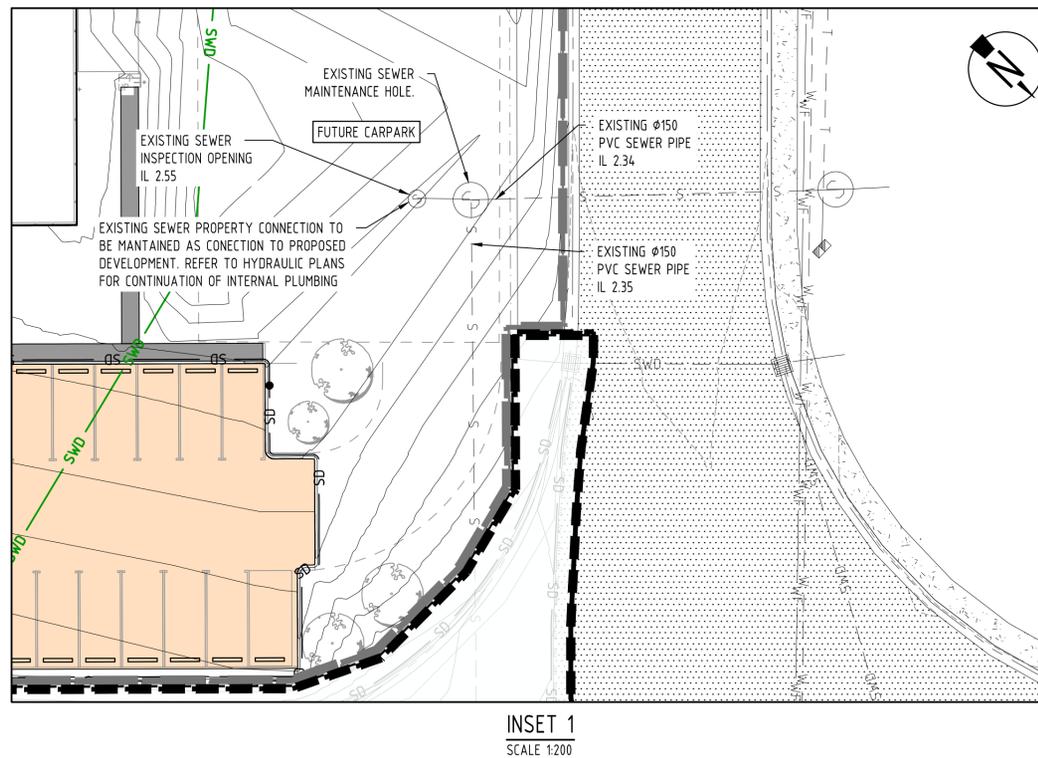
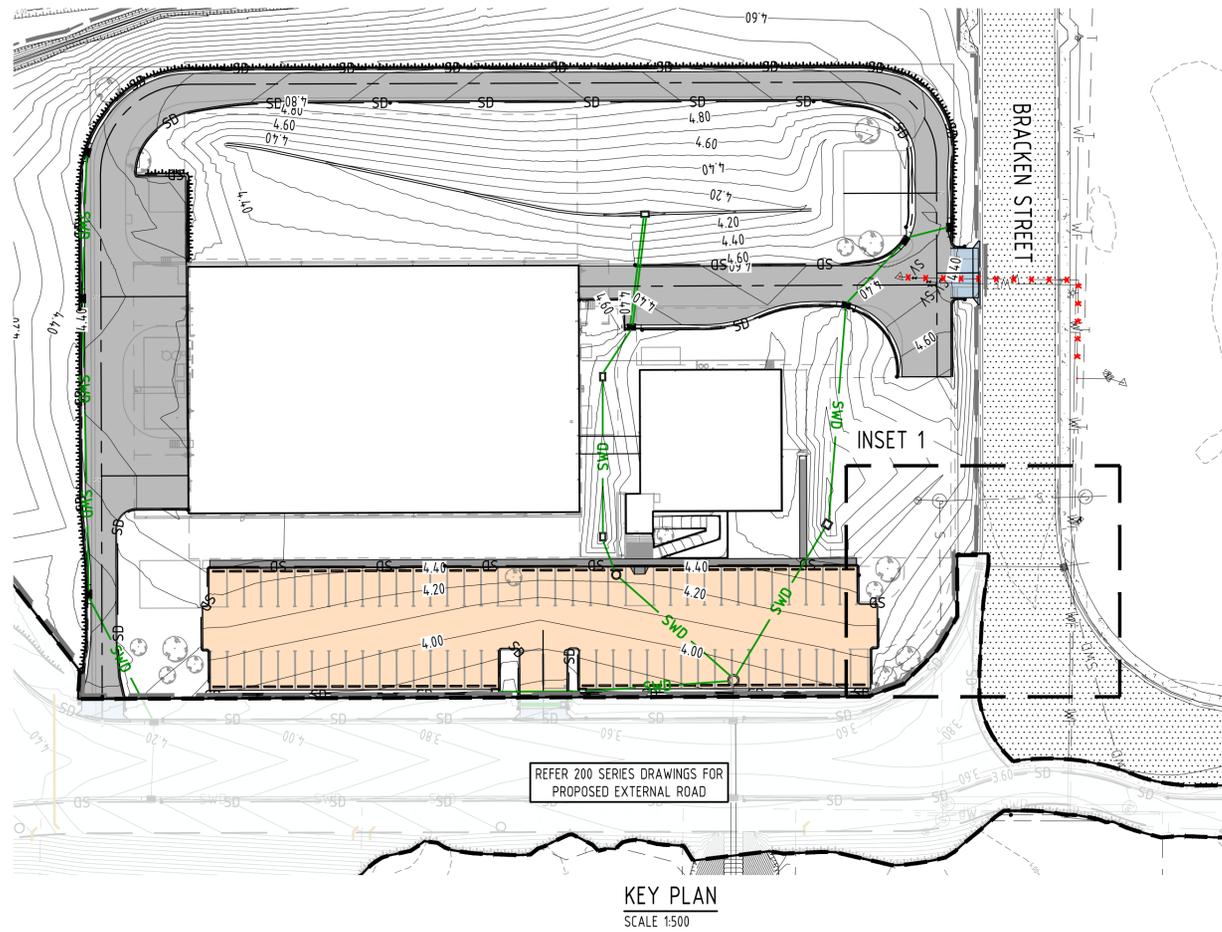
Status	PRELIMINARY
Approved By	SW
Scale at A1	AS SHOWN

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Title	WATER PROPERTY CONNECTION LAYOUT PLAN
Drawing No.	C160
Revision	02

LEGEND

- 12.0 FINISHED SURFACE CONTOURS
- EXISTING PROPERTY BOUNDARY
- EXISTING NOMINAL KERB LINE
- EXISTING EDGE OF BITUMEN
- EXISTING EDGE OF BUILDING
- SWD EXISTING STORMWATER DRAINAGE
- S EXISTING SEWER
- (S) EXISTING SEWER MANHOLE
- (S) EXISTING SEWER MAINTENANCE SHAFT
- W EXISTING WATER
- WF EXISTING FIRE AND SPRINKLER MAIN
- T EXISTING TELECOMMUNICATIONS
- EXISTING BATTER
- EXISTING FENCE
- LIMIT OF WORKS
- SWD PROPOSED STORMWATER DRAINAGE
- PROPOSED NOMINAL KERB LINE
- PROPOSED BATTER
- PROPOSED ROAD KERB
- PROPOSED SEP (SAG) TYPE 3. REFER IPWEA TAS STD TSD-SW09
- PROPOSED GRATED PIT IN ACCORDANCE WITH TSD-SW15 AND TSD-SW14
- PROPOSED TREE. REFER TO ARCHITECTURAL DRGS FOR DETAILS
- PROPOSED FOOTPATH IN ACCORDANCE WITH LGAT STD TSD-R11
- PROPOSED RIGID PAVEMENT. REFER TO JOINTING PLAN ON DRG C180
- PROPOSED FLEXIBLE PAVEMENT. REFER TO PAVEMENT OVERALL LAYOUT PLAN ON DRG C180
- HEAVY DUTY DRIVEWAY CROSSOVER IN ACCORDANCE WITH LGAT STD TSD-R09 AND LGAT STD TSD-16
- EXISTING ROAD
- EXISTING FOOTPATH



CAUTION
THE LOCATION AND DEPTH OF EXISTING SERVICES AS SHOWN IS BASED ON INFORMATION OBTAINED FROM ARTHUR SURVEYORS DATED 28/08/24. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM THE ACTUAL LOCATION AND DEPTH OF EXISTING SERVICES PRIOR TO CARRYING OUT ANY EXCAVATION, TRENCHING OR TUNNELLING WORKS.

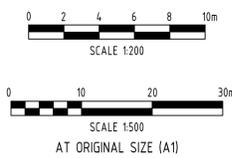
AS CONSTRUCTED / ADAC
CONTRACTOR TO ALLOW ALL COSTS FOR SURVEYOR TO GATHER AS CONSTRUCTED SURVEY INFORMATION AND PREPARE ADAC DATA IN ACCORDANCE WITH CURRENT TASWATER REQUIREMENTS, UNLESS OTHERWISE ADVISED BY ADG ENGINEERS.

NOTE:
INSPECTION SHAFTS & CLEAROUTS TO SURFACE IN TRAFFICABLE AREAS, TO BE INSTALLED IN ACCORDANCE WITH AS/NZS3500.2:4.2.2.

WIP

Rev	Date	Description	By	Chk
02	05.12.24	ISSUED FOR PRELIMINARY TENDER	AB	SW
01	23.09.24	50% DESIGN DEVELOPMENT ISSUE	DG	MB

PRINT IN COLOUR



Client: DEPARTMENT OF HEALTH TASMANIA
Project Name: HOSPITALS SOUTH PRODUCTION KITCHEN
GRUEBER AVENUE
CAMBRIDGE, TAS 7170

Discipline: CIVIL	Status: PRELIMINARY
Designed By: HD	Checked By: MB
Project No: 27536	Drawn By: AB
Approved By: SW	Scale at A1: AS SHOWN

Title: SEWER PROPERTY CONNECTION LAYOUT PLAN	Drawing No: C170	Revision: 02
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LEGEND

- STAGE BOUNDARY
- SJ SAWN JOINT
- DJ DOWEL JOINT
- ADJ ARMoured DOWEL JOINT
- ET EDGE THICKENING
- EXISTING ROAD
- PROPOSED FOOTPATH IN ACCORDANCE WITH LGAT STD TSD-R11
- PROPOSED CONCRETE RIGID PAVEMENT
- PROPOSED FLEXIBLE PAVEMENT
- PROPOSED DRIVEWAY CROSSOVER

NOTE

1. FOR ROADWORKS NOTES REFER DRG No. C101
2. FOR CONCRETE NOTES AND DETAILS REFER DRG No. C181

CONCRETE DETAILS

CONCRETE TYPE	CONCRETE	EDGE THICKENING	BASE	SUBGRADE	SUBGRADE CBR
HEAVY DUTY CONCRETE	220mm 40MPa CONCRETE SL92	-	150mm CBR45 FCR COMPACTED TO 98% MDD	150mm COMPACTED TO 98% SDD	10%

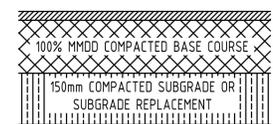
SUBGRADE CBR VALUE SHALL BE VERIFIED BY THE CONTRACTOR AND THE PAVEMENT DESIGN CONFIRMED BY THE ENGINEER PRIOR TO CONSTRUCTION.

FLEXIBLE PAVEMENT DETAILS

PAVEMENT TYPE	ASPHALT	BASE	SUBGRADE	SUBGRADE CBR
LIGHT DUTY FLEXIBLE PAVEMENT	40mm ASPHALT (L10 C170) AND PRIME (AMC00)	160mm DSG CLASS 1 COMPACTED TO 100% MDD	150mm COMPACTED TO 98% SDD	10%

PAVEMENT DESIGN IS BASED ON PRELIMINARY GEOTECHNICAL TESTING AND BASED ON SUBGRADE CBR OF 10%
SUBGRADE CBR VALUE SHALL BE VERIFIED BY THE CONTRACTOR AND THE PAVEMENT DESIGN CONFIRMED BY THE ENGINEER PRIOR TO CONSTRUCTION.

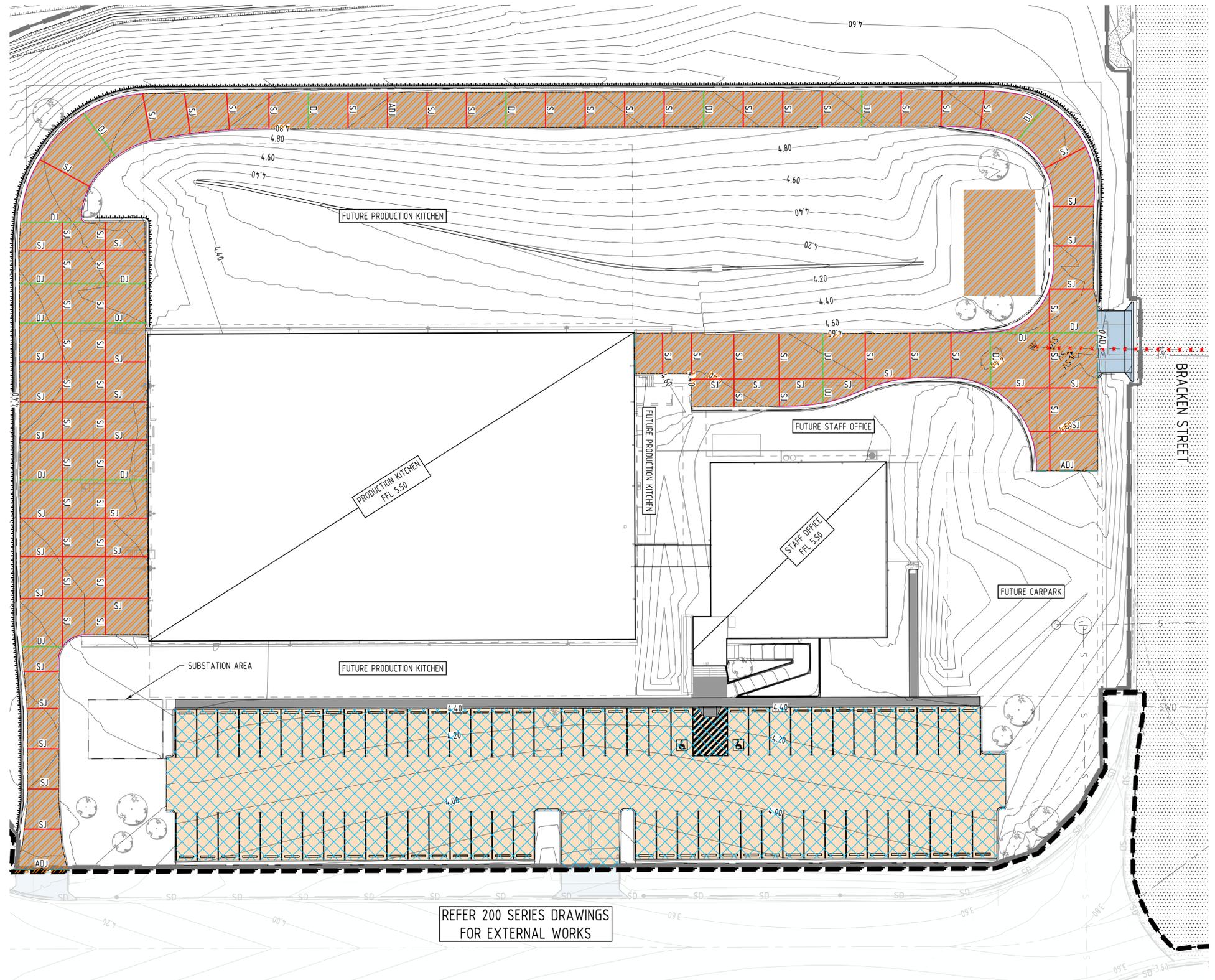
40mm ASPHALT (L10 C170) AND PRIME (AMC00)



FLEXIBLE PAVEMENT DETAIL
NTS



CONCRETE DETAIL
NTS



REFER 200 SERIES DRAWINGS FOR EXTERNAL WORKS

WIP

Rev	Date	Description	By	Chk
02	05.12.24	ISSUED FOR PRELIMINARY TENDER	AB	SW
01	23.09.24	50% DESIGN DEVELOPMENT ISSUE	DG	MB

Plot Date: 12/5/2024 5:39 PM File Name: \\ADG\LOCAL\PROJECTS\0001\27000\27536\01\DWG\100 SERIES - INTERNAL\27536_C180_PAVEMENT OVERALL LAYOUT PLAN.DWG



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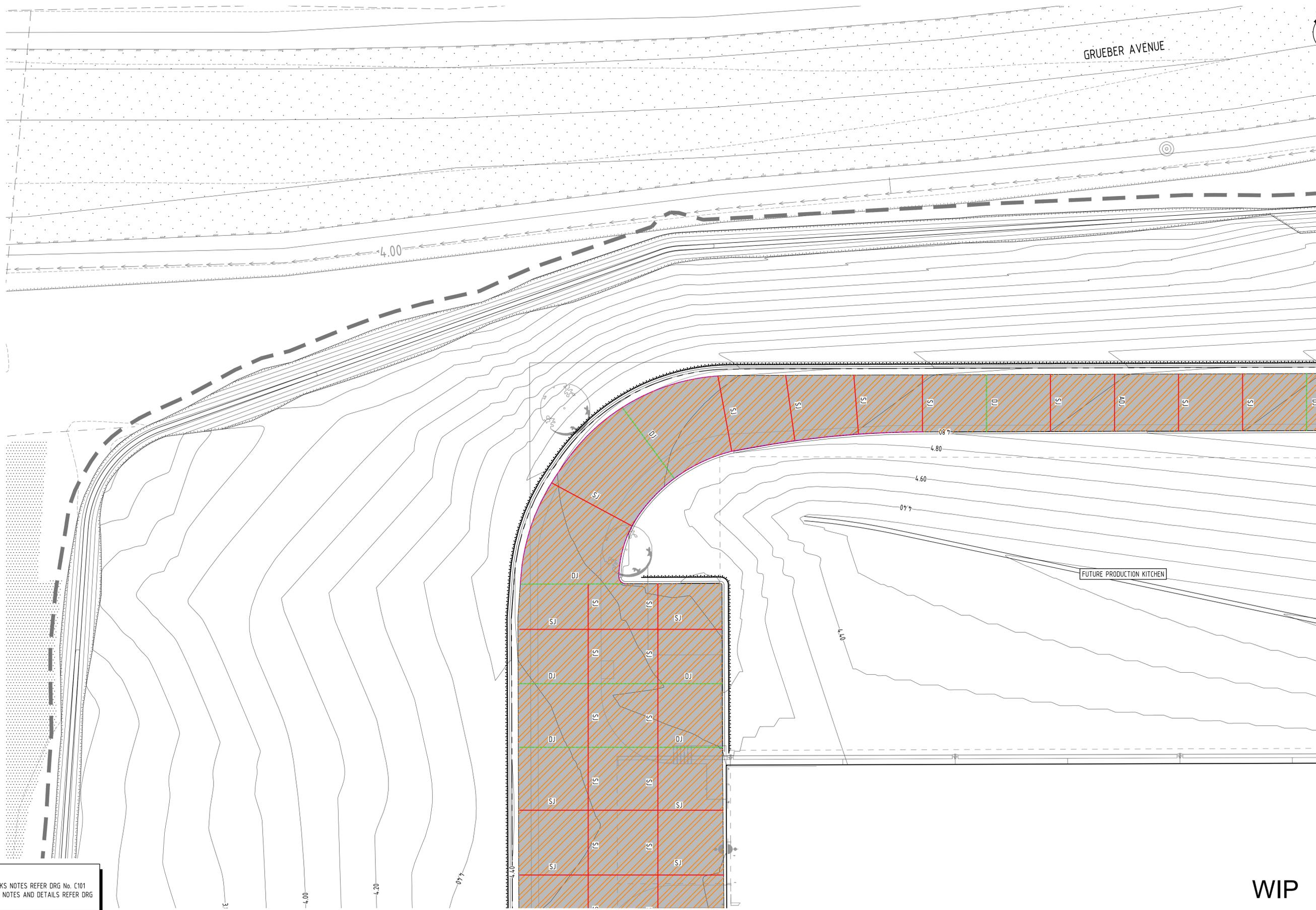
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Client DEPARTMENT OF HEALTH TASMANIA	Discipline CIVIL	Status PRELIMINARY	Title PAVEMENT OVERALL LAYOUT PLAN
Project Name HOSPITALS SOUTH PRODUCTION KITCHEN GRUEBER AVENUE CAMBRIDGE, TAS 7170	Designed By HD	Checked By MB	Approved By SW
	Project No. 27536	Drawn By AB	Scale at A1 1:250
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			Revision 02

FULL SIZE ON ORIGINAL 0 10 20 30 40 50 60 70 80 90 100mm



GRUEBER AVENUE



NOTE

1. FOR ROADWORKS NOTES REFER DRG No. C101
2. FOR CONCRETE NOTES AND DETAILS REFER DRG No. C181

WIP

Rev	Date	Description	By	Chk
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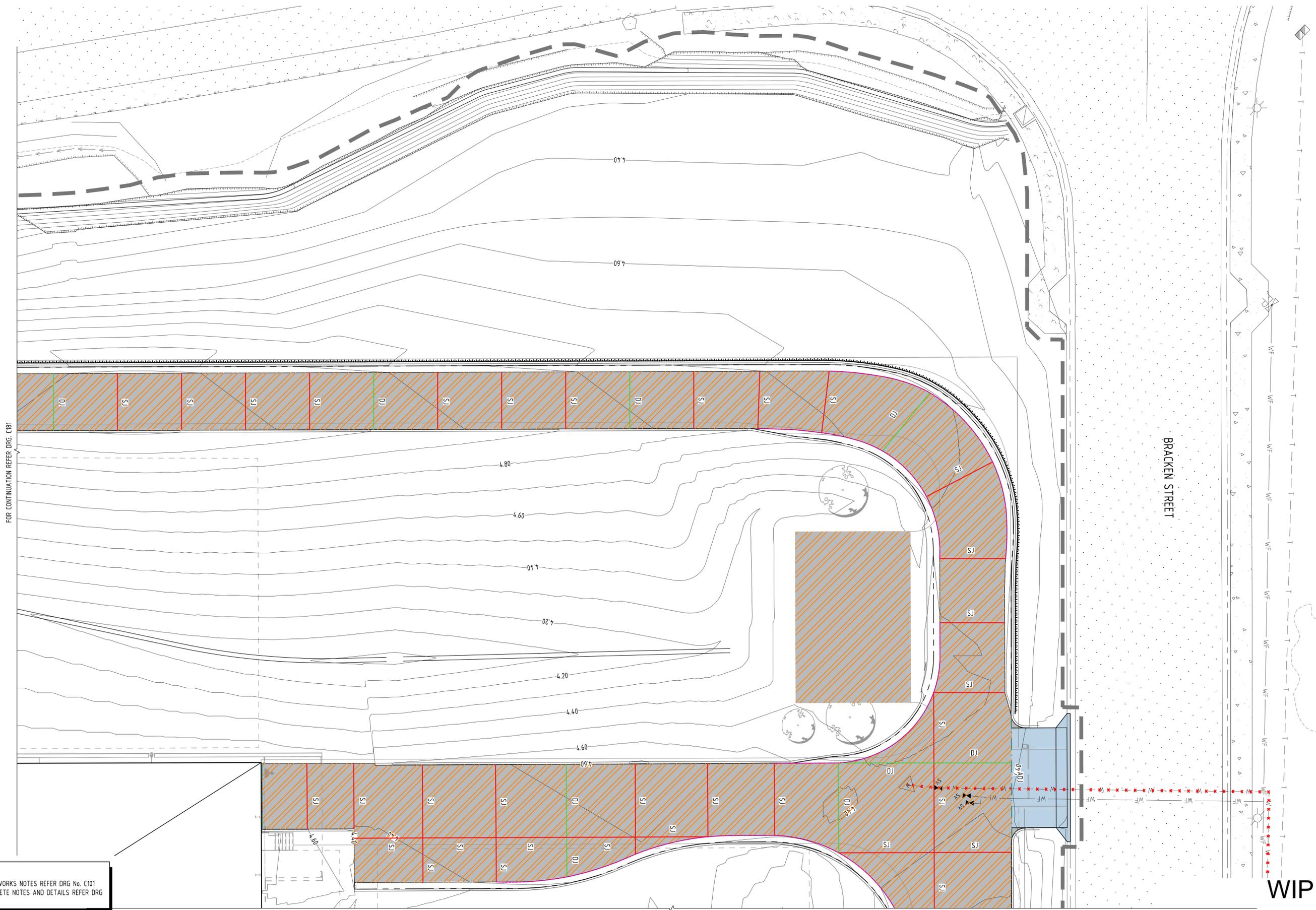
Client
DEPARTMENT OF HEALTH TASMANIA

Project Name
HOSPITALS SOUTH PRODUCTION KITCHEN
GRUEBER AVENUE
CAMBRIDGE, TAS 7170

Discipline CIVIL	Designed By HD	Checked By MB	Status PRELIMINARY
Project No. 27536	Drawn By AB	Approved By SW	Scale at A1 1:100

Title
PAVEMENT JOINTS LAYOUT PLAN
SHEET 1 OF 4

Drawing No. C181	Revision 01
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FOR CONTINUATION REFER DRG. C181

FOR CONTINUATION REFER DRG. C184

NOTE

- FOR ROADWORKS NOTES REFER DRG. No. C101
- FOR CONCRETE NOTES AND DETAILS REFER DRG. No. C181

Rev	Date	Description	By	Chk
01	05.12.24	ISSUED FOR PRELIMINARY TENDER	AB	SW

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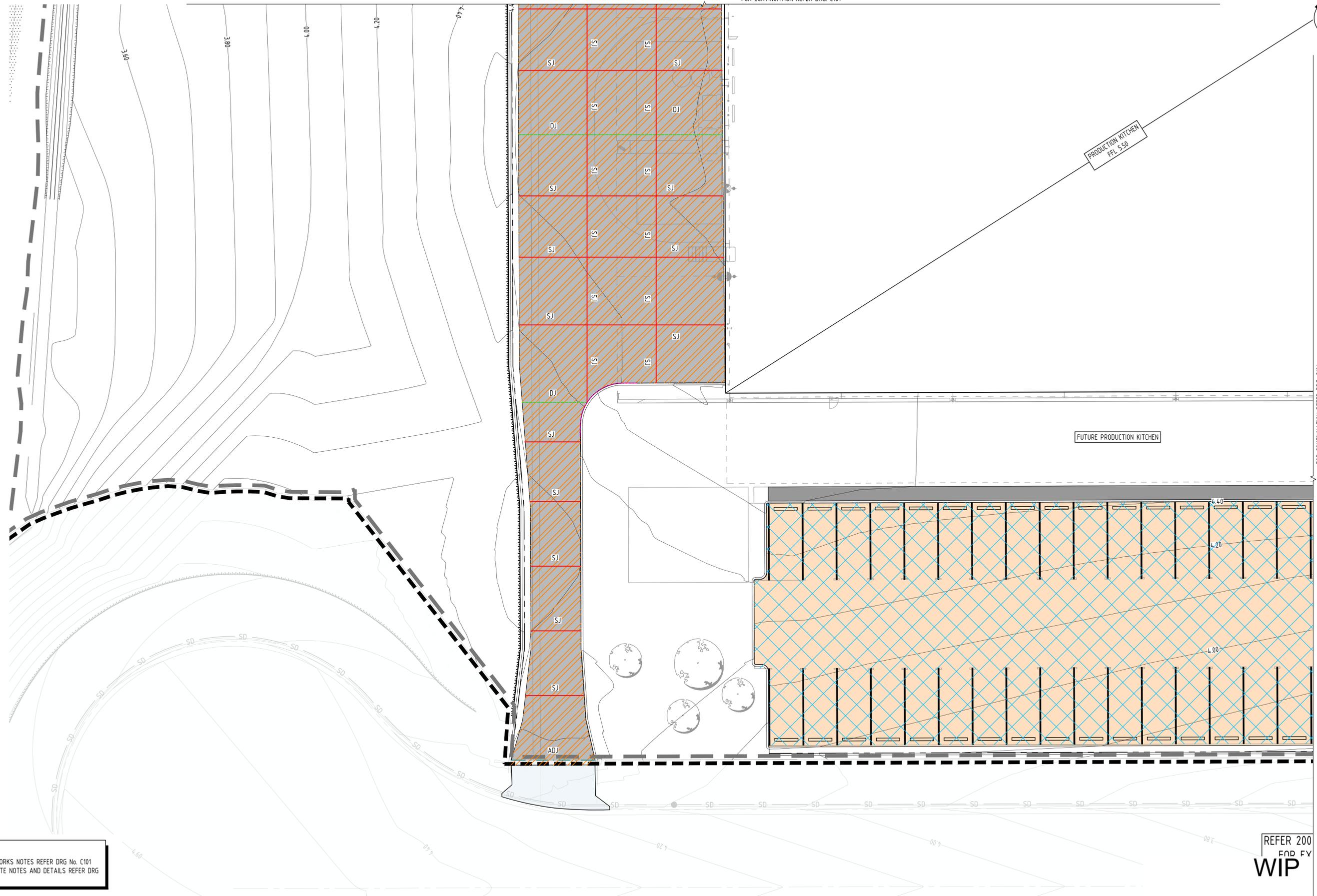
Project Name
HOSPITALS SOUTH PRODUCTION KITCHEN
GRUEBER AVENUE
CAMBRIDGE, TAS 7170

Discipline CIVIL		Status PRELIMINARY
Designed By HD	Checked By MB	Approved By SW
Project No. 27536	Drawn By AB	Scale at A1 1:100

Title
PAVEMENT JOINTS LAYOUT PLAN
SHEET 2 OF 4

Drawing No. C182	Revision 01
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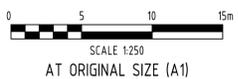
FOR CONTINUATION REFER DRG. C184

NOTE

- FOR ROADWORKS NOTES REFER DRG No. C101
- FOR CONCRETE NOTES AND DETAILS REFER DRG No. C181

REFER 200
END FY
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Client
DEPARTMENT OF HEALTH TASMANIA

Project Name
HOSPITALS SOUTH PRODUCTION KITCHEN
GRUEBER AVENUE
CAMBRIDGE, TAS 7170

Discipline CIVIL		Status PRELIMINARY	
Designed By HD	Checked By MB	Approved By SW	
Project No. 27536	Drawn By AB	Scale at A1 1:100	
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Title PAVEMENT JOINTS LAYOUT PLAN SHEET 3 OF 4		Drawing No. C183	Revision 01
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CONCRETE NOTES

- C1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS 3600 AND THE CONCRETE SPECIFICATION.
- C2. NO ADMIXTURES SHALL BE USED IN CONCRETE UNLESS APPROVED IN WRITING.
- C3. ALL REINFORCEMENT SHALL BE FIRMLY SUPPORTED ON REINFORCEMENT CHAIRS AT NOT GREATER THAN 1000mm CENTRES BOTH WAYS. BARS SHALL BE TIED AT ALTERNATE INTERSECTIONS. IN EXPOSURE CONDITIONS GREATER THAN B1 USE ONLY PLASTIC CHAIRS.
- C4. CONCRETE DIMENSIONS SHOWN DO NOT INCLUDE THICKNESSES OF APPLIED FINISHES.
- C5. NO HOLES, CHASES OR EMBEDMENT OF PIPES OTHER THAN THOSE SHOWN ON DRAWINGS SHALL BE MADE IN CONCRETE MEMBERS WITHOUT THE PRIOR WRITTEN APPROVAL OF THE ENGINEER.
- C6. CONSTRUCTION JOINTS WHERE NOT SHOWN SHALL BE LOCATED TO THE APPROVAL OF THE ENGINEER.
- C7. THE FINISHED CONCRETE SHALL BE A DENSE HOMOGENEOUS MASS, COMPLETELY FILLING THE FORMWORK THOROUGHLY EMBEDDING THE REINFORCEMENT AND FREE OF STONE POCKETS. ALL CONCRETE INCLUDING SLABS ON GROUND AND FOOTINGS SHALL BE COMPACTED THOROUGHLY.
- C8. CURING OF ALL CONCRETE SHALL BE ACHIEVED BY KEEPING SURFACES CONTINUOUSLY WET FOR A PERIOD OF 3 DAYS, AND PREVENTION OF LOSS OF MOISTURE FOR A TOTAL OF 7 DAYS FOLLOWED BY A GRADUAL DRYING OUT.
APPROVED SPRAYED ON CURING COMPOUNDS MAY BE USED WHERE NO FLOOR FINISHES ARE PROPOSED. ONLY WAX BASED AND CHLORINATED RUBBER CURING COMPOUNDS WILL BE ACCEPTED. SHEETING OR WET HESSIAN MAY BE USED IF PROTECTED FROM WIND AND TRAFFIC.
- C9. THE ENGINEER SHALL BE GIVEN A MINIMUM OF 24 HOURS NOTICE FOR REINFORCEMENT INSPECTION AND CONCRETE SHALL NOT BE ORDERED UNTIL FINAL APPROVAL IS OBTAINED.
- C10. REINFORCEMENT SYMBOLS - 17,N20,250.1
17 (NUMBER OF BARS IN GROUP)
N20 (BAR GRADE/TYPE AND DIAMETER)
250 (SPACING IN mm)
DENOTES LAYER BAR PLACED IN - 1 DENOTES BARS LAID FIRST
- 2 DENOTES BARS LAID SECOND
- 3 DENOTES BARS LAID THIRD
- 4 DENOTES BARS LAID LAST

S DENOTES GRADE 230 S HOT ROLLED DEFORMED BARS TO AS 1302.
N DENOTES GRADE 500 N BARS TO AS 1302 CLASS N
R DENOTES GRADE 230 R HOT ROLLED PLAIN BARS TO AS 1302
F DENOTES HARD-DRAWN PLAIN REINFORCING FABRIC TO AS 1304
W DENOTES HARD-DRAWN PLAIN WIRE TO AS 1304
N.S.O.P. DENOTES BARS NOT SHOWN ON PLAN.
THE FIGURE FOLLOWING THE FABRIC SYMBOL F IS THE REFERENCE NUMBER FOR FABRIC TO AS 1304.
- C11. REINFORCEMENT IS REPRESENTED DIAGRAMMATICALLY AND NOT NECESSARILY IN TRUE PROJECTION.
- C12. SPLICES IN REINFORCEMENT SHALL BE MADE ONLY IN POSITION SHOWN OR OTHERWISE APPROVED IN WRITING BY THE ENGINEER. LAPS SHALL BE AS SHOWN ON THE DRAWING.
- C13. WELDING OF REINFORCEMENT SHALL NOT BE PERMITTED UNLESS SHOWN ON THE STRUCTURAL DRAWINGS OR APPROVED BY THE ENGINEER. (AFTER WRITTEN REQUEST).
- C14. FABRIC SHALL BE LAPPED 2 TRANSVERSE WIRES PLUS 50mm OR 250mm WHICHEVER IS THE GREATER. BUNDLED BARS SHALL BE TIED TOGETHER AT 30 BAR DIAMETER CENTRES WITH 3 WRAPS OF TIE WIRE.
- C15. A BOND BREAKING MATERIAL SHALL BE PLACED BETWEEN CONTACTING SURFACES AT CONTRACTION JOINTS. REINFORCEMENT SHALL NOT BE CONTINUOUS THROUGH CONTRACTION JOINTS.
- C16. AT PENETRATIONS IN SLABS UNLESS OTHERWISE DETAILED REINFORCEMENT SHALL NOT BE CUT BUT SHALL BE GATHERED EQUALLY TO EACH SIDE OF PENETRATION AND EXTRA REINFORCEMENT PROVIDED BETWEEN THE PENETRATIONS AS DIRECTED BY THE ENGINEER.
- C17. ALL BARS IN TRIMMER BAR GROUPS SHALL BE THE SAME LENGTH. (ONE BAR ONLY IS GENERALLY SHOWN FULL LENGTH ON PLAN). SPACE BARS AT APPROXIMATELY 75 CENTRES.
- C18. CONCRETE GRADE AND COVER DETAILS.
REFER FOOTING PLANS, SLAB ON GROUND PLANS, FORMWORK PLANS, COLUMN SCHEDULE OR WALL ELEVATION DRAWINGS.

SLAB ON GROUND NOTES

- SG1. FOR DETAILS OF RL'S, DIMENSIONS AND SETOUT ETC. REFER LATEST ARCHITECT'S DRAWINGS.
ANY VARIATION TO THAT SHOWN ON ENGINEERS DRAWINGS TO BE NOTIFIED TO THE ENGINEER PRIOR TO THE COMMENCEMENT OF ANY WORKS.
- SG2. TYPICAL ON SLAB ON GROUND PLAN - INTERNAL SLAB EDGES TO BE TURNED DOWN ON TO FOOTINGS ALL AS PER DETAILED ON SECTIONS.
LOCAL TO PAD BASES AND FOOTINGS GREATER THAN 600mm WIDE PROVIDE NOMINAL 300mm WIDE DOWN TURN ONLY.
ALL OTHER LOCATIONS EDGE THICKENING AS NOTED ON PLAN AND SECTIONS.
DETAILS TYPICAL AT SLAB ON GROUND LOCATIONS.
- SG3. JOINTS IN FLOOR SLABS TO BE AS FOLLOWS...

	DENOTES SAWN JOINT
	DENOTES POUR DOWEL JOINT
	DENOTES ARMoured DOWEL JOINT

PROVIDE NOMINAL 10mm WIDE FLEXIBLE ISOLATION JOINT TYPICAL, LOCAL TO ALL SLAB ABUTMENTS WITH CONCRETE COLUMNS, CAVITY AND BLOCK WALLS.
JOINT TO BE FULL DEPTH FILLED WITH APPROVED COMPRESSIBLE FILLER ALL SEALED TO ARCHITECTS SPECIFICATION. U.N.O.
- SG4. TYPICAL SLAB ON GROUND

220	ALL SLAB ON GROUND UNLESS NOTED OTHERWISE ON PLAN TO BE 220mm THICK MINIMUM TYPICAL THROUGHOUT EXCEPT WHERE NOTES TO BE 200mm THICK.
-----	--

CONCRETE STRENGTH $f'c = 40 \text{ MPa}$ U.N.O
SLAB CAST ON APPROVED DAMP PROOF MEMBRANE ON 20mm SAND BLINDING ALL ON PREPARED SUB BASE.
(REFER SUBGRADE PREPARATION NOTES)
SLAB REINFORCED TYPICALLY THROUGHOUT AS FOLLOWS...

1 LAYER SL92 FABRIC TOP - MINIMUM 50mm COVER

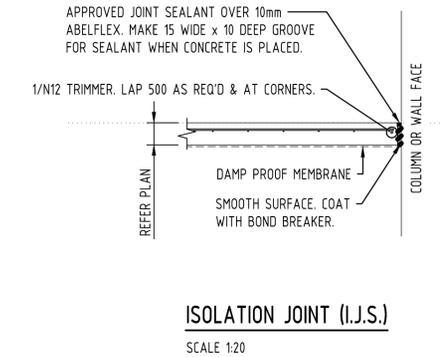
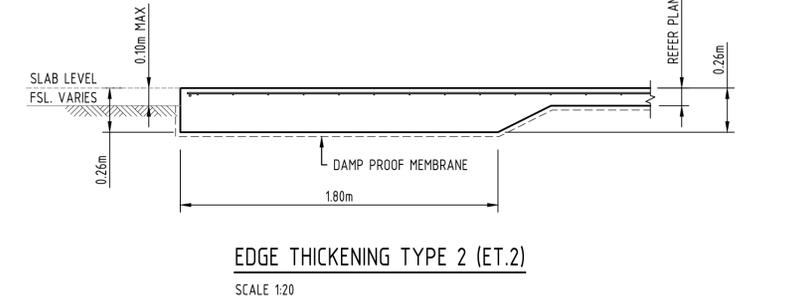
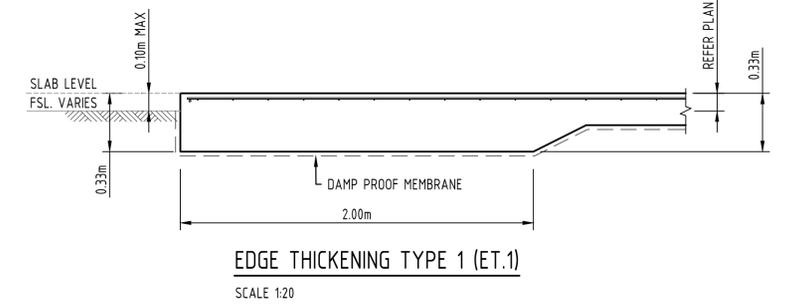
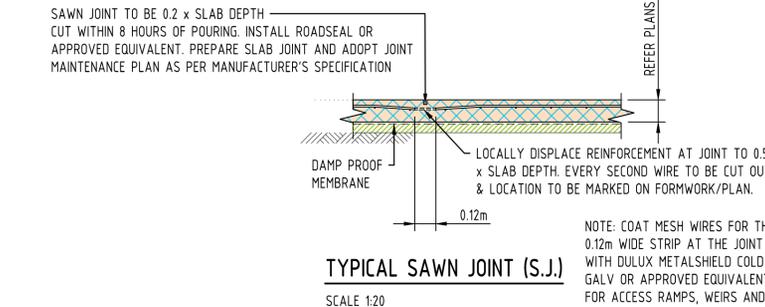
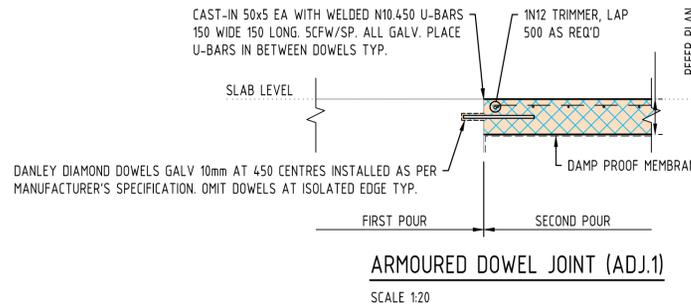
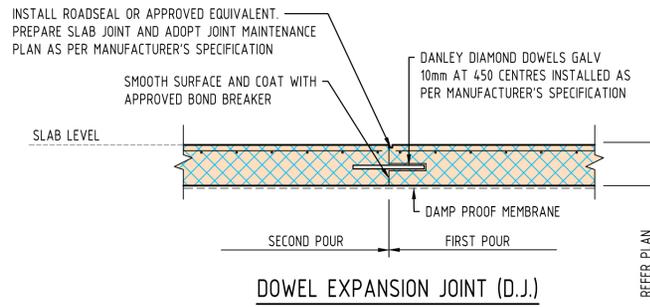
ALL FABRIC LAPPED 2 CROSS WIRES + 50mm TYPICAL.
PROVIDE 1M2 TRIMMER TIED TO UNDERSIDE OF FABRIC TO ALL EDGES AND SIDES OF SLABS INCLUDING EACH SIDE OF ALL JOINTS.
TRIMMERS LAPPED 450mm MINIMUM AND COGGED 300mm AT CORNERS AND ENDS.
- SG5. 100 DENOTES STEP IN TOP OF SLAB
- SG6. TRIMMER SCHEDULE

'W'	DENOTES 4.N12 x 1200 LONG TRIMMER BARS (2 EACH CORNER) AT 45° TO CORNERS OF COLUMNS NOTED. TRIMMER BARS NOT SHOWN ON PLAN.	
'X'	DENOTES 4.N12 x 1200 LONG TRIMMER BARS (2 EACH FACE) AT ALL RE-ENTRANT CORNERS. EXTEND MINIMUM 600mm PAST EDGE OF CORNER (INCLUDING DISTRIBUTION REINFORCEMENT). TRIMMER BARS NOT SHOWN ON PLAN.	
'Y'	DENOTES 2.N12 TRIMMER BARS AT 100mm CENTRES EACH SIDE OF PENETRATION. EXTEND MINIMUM 600mm PAST EACH CORNER. TRIMMER BARS NOT SHOWN ON PLAN.	
'Z'	DENOTES 2.N12 x 1200 LONG TRIMMER BARS AT 100mm CENTRES TO END OF JOINT IN SLAB. TRIMMER BARS NOT SHOWN ON PLAN.	

FIRST TRIMMER TO BE LOCATED TO HAVE 75mm COVER FROM SIDES OF PENETRATION OR VOID.

SUBGRADE PREPARATION

- SP1. THE SITE SHALL BE STRIPPED AND EXCAVATED TO THE LEVELS SHOWN ON THE RELEVANT DRAWINGS.
- SP2. THE SITE SHALL BE STRIPPED OF ALL VEGETATION AND ANY SOFT SPOTS. BACKFILL OR FILL UNDER SLABS OR FOOTINGS TO BE PLACED IN 250mm MAX LAYERS AND COMPACTED TO 98% DRY DENSITY RATIO (STANDARD COMPACTION) FOR COHESIVE MATERIALS OR 70% RELATIVE DENSITY FOR NON COHESIVE MATERIALS.
- SP3. ANY LOCAL "SOFT" ZONES ARE TO BE EXCAVATED AND COMPACTED TO ACHIEVE THE ABOVE AND MUST BE RETESTED BY GEOTECHNICAL ENGINEER.



NOTE
FOR PAVEMENT JOINTS LAYOUT PLAN REFER DRG No. C180

WIP

02	05.12.24	ISSUED FOR PRELIMINARY TENDER	AB	SW
01	23.09.24	50% DESIGN DEVELOPMENT ISSUE	DG	MB
Rev	Date	Description	By	Chk

SCALE 1:20
AT ORIGINAL SIZE (A1)

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Client DEPARTMENT OF HEALTH TASMANIA	
Project Name HOSPITALS SOUTH PRODUCTION KITCHEN GRUEBER AVENUE CAMBRIDGE, TAS 7170	

Discipline CIVIL	Status PRELIMINARY
Designed By HD	Checked By MB
Project No. 27536	Drawn By AB
Approved By SW	
Scale at A1 1:250	

Title PAVEMENT JOINTS NOTES AND DETAILS	
Drawing No. C185	Revision 02



SIDRA Traffic Modelling

Appendix B

MOVEMENT SUMMARY

Site: 101 [Grueber Avenue/ Bracken Street: Existing PM peak hour (Site Folder: General)]

2:00pm - 3:00pm
 Site Category: (None)
 Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h]	[HV veh/h]	[Total veh/h]	[HV %]				[Veh. veh]	[Dist m]				
South: Grueber Avenue														
2	T1	95	4	100	4.2	0.053	0.0	LOS A	0.0	0.1	0.01	0.01	0.01	59.9
3	R2	1	0	1	0.0	0.053	5.9	LOS A	0.0	0.1	0.01	0.01	0.01	58.1
Approach		96	4	101	4.2	0.053	0.1	NA	0.0	0.1	0.01	0.01	0.01	59.9
East: Bracken Street														
4	L2	1	0	1	0.0	0.012	6.1	LOS A	0.0	0.3	0.30	0.57	0.30	52.7
6	R2	10	0	11	0.0	0.012	6.6	LOS A	0.0	0.3	0.30	0.57	0.30	52.5
Approach		11	0	12	0.0	0.012	6.5	LOS A	0.0	0.3	0.30	0.57	0.30	52.5
North: Grueber Avenue														
7	L2	7	3	7	42.9	0.068	6.0	LOS A	0.0	0.0	0.00	0.03	0.00	56.1
8	T1	116	5	122	4.3	0.068	0.0	LOS A	0.0	0.0	0.00	0.03	0.00	59.8
Approach		123	8	129	6.5	0.068	0.4	NA	0.0	0.0	0.00	0.03	0.00	59.6
All Vehicles		230	12	242	5.2	0.068	0.5	NA	0.0	0.3	0.02	0.05	0.02	59.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.
 Minor Road Approach LOS values are based on average delay for all vehicle movements.
 NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
 Delay Model: SIDRA Standard (Geometric Delay is included).
 Queue Model: SIDRA Standard.
 Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
 HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Grueber Avenue/ Bracken Street: Post Development PM peak hour (Site Folder: General)]

2:00pm - 3:00pm
 Site Category: (None)
 Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h]	[HV veh/h]	[Total veh/h]	[HV %]				[Veh. veh]	[Dist m]				
South: Grueber Avenue														
2	T1	99	4	104	4.0	0.055	0.0	LOS A	0.0	0.1	0.01	0.01	0.01	59.9
3	R2	1	0	1	0.0	0.055	5.9	LOS A	0.0	0.1	0.01	0.01	0.01	58.1
Approach		100	4	105	4.0	0.055	0.1	NA	0.0	0.1	0.01	0.01	0.01	59.9
East: Bracken Street														
4	L2	1	0	1	0.0	0.045	6.1	LOS A	0.2	1.2	0.34	0.60	0.34	52.6
6	R2	37	3	39	8.1	0.045	6.9	LOS A	0.2	1.2	0.34	0.60	0.34	52.1
Approach		38	3	40	7.9	0.045	6.9	LOS A	0.2	1.2	0.34	0.60	0.34	52.1
North: Grueber Avenue														
7	L2	10	6	11	60.0	0.073	6.2	LOS A	0.0	0.0	0.00	0.04	0.00	55.3
8	T1	120	5	126	4.2	0.073	0.0	LOS A	0.0	0.0	0.00	0.04	0.00	59.8
Approach		130	11	137	8.5	0.073	0.5	NA	0.0	0.0	0.00	0.04	0.00	59.4
All Vehicles		268	18	282	6.7	0.073	1.2	NA	0.2	1.2	0.05	0.11	0.05	58.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.
 Minor Road Approach LOS values are based on average delay for all vehicle movements.
 NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
 Delay Model: SIDRA Standard (Geometric Delay is included).
 Queue Model: SIDRA Standard.
 Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
 HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

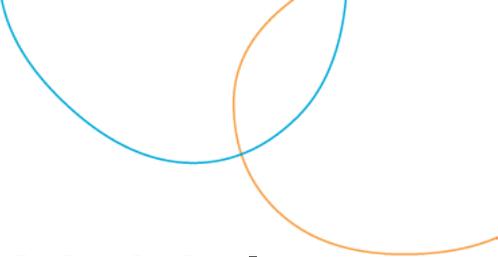
MOVEMENT SUMMARY

Site: 101 [Grueber Avenue/ Bracken Street: 10-years Post Development PM peak hour (Site Folder: General)]

2:00pm - 3:00pm
 Site Category: (None)
 Give-Way (Two-Way)

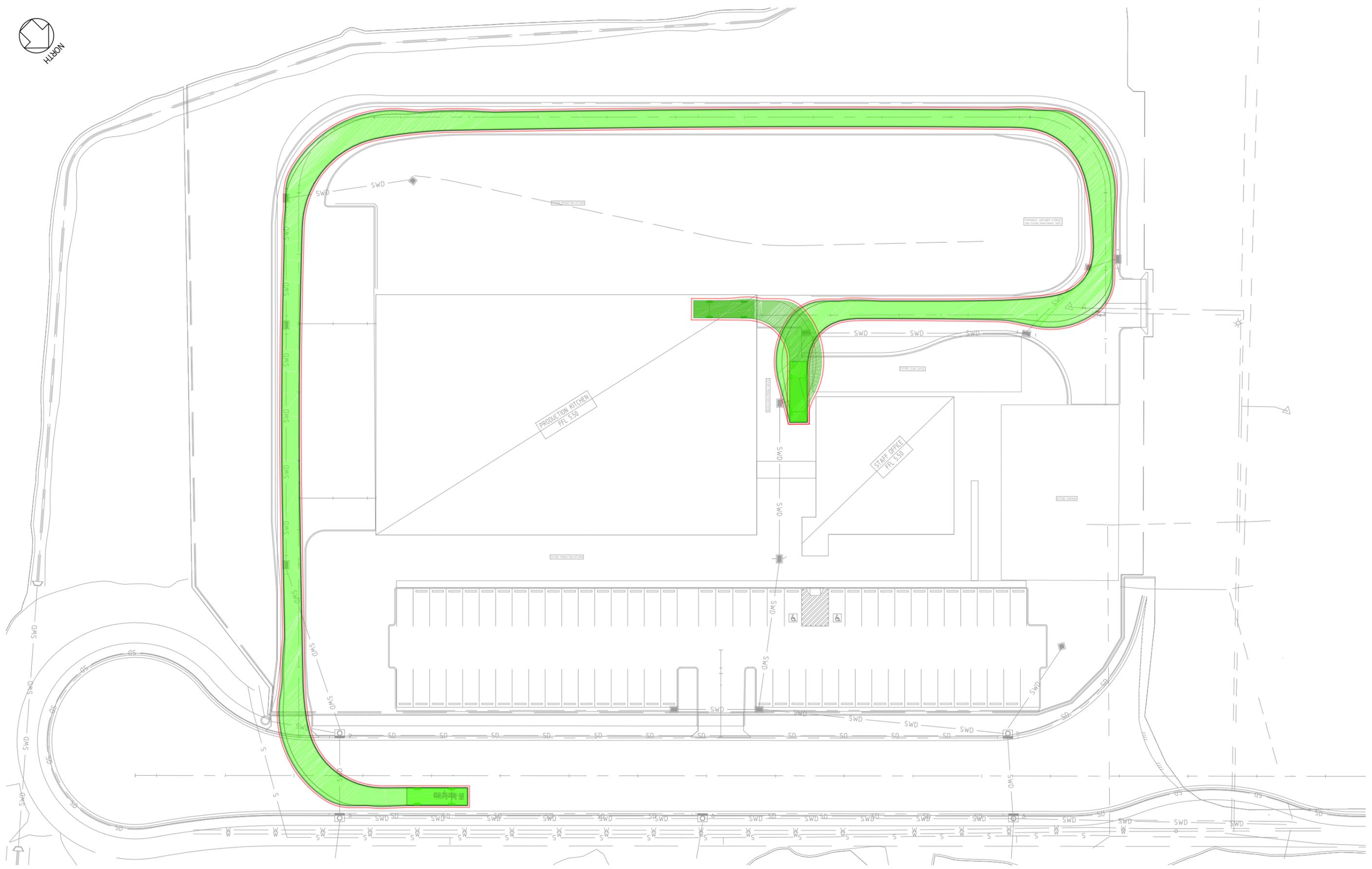
Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h]	[HV veh/h]	[Total veh/h]	[HV %]				[Veh. veh]	[Dist m]				
South: Grueber Avenue														
2	T1	120	5	126	4.2	0.066	0.0	LOS A	0.0	0.1	0.01	0.00	0.01	59.9
3	R2	1	0	1	0.0	0.066	6.1	LOS A	0.0	0.1	0.01	0.00	0.01	58.1
Approach		121	5	127	4.1	0.066	0.1	NA	0.0	0.1	0.01	0.00	0.01	59.9
East: Bracken Street														
4	L2	1	0	1	0.0	0.050	6.3	LOS A	0.2	1.3	0.38	0.62	0.38	52.4
6	R2	39	3	41	7.7	0.050	7.2	LOS A	0.2	1.3	0.38	0.62	0.38	51.9
Approach		40	3	42	7.5	0.050	7.2	LOS A	0.2	1.3	0.38	0.62	0.38	51.9
North: Grueber Avenue														
7	L2	12	7	13	58.3	0.090	6.2	LOS A	0.0	0.0	0.00	0.04	0.00	55.3
8	T1	147	6	155	4.1	0.090	0.0	LOS A	0.0	0.0	0.00	0.04	0.00	59.8
Approach		159	13	167	8.2	0.090	0.5	NA	0.0	0.0	0.00	0.04	0.00	59.4
All Vehicles		320	21	337	6.6	0.090	1.2	NA	0.2	1.3	0.05	0.10	0.05	58.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.
 Minor Road Approach LOS values are based on average delay for all vehicle movements.
 NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
 Delay Model: SIDRA Standard (Geometric Delay is included).
 Queue Model: SIDRA Standard.
 Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
 HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.



Civil Design Plans and Vehicle Swept Paths

Appendix C



DRAWING REVISION HISTORY					APPROVED	SCALE (PLOTTED FULL SIZE)	AS SHOWN	SHEET SIZE A3	CLIENT JAWS ARCHITECTS	DRAWING TITLE		
No.	DESCRIPTION	DRAWN	DESIGNED	REVIEWED						DATE	SWEPT PATH SKETCHES	
									PROJECT	HOSPITALS SOUTH PRODUCTION KITCHEN TIA		
									STATUS	PRELIMINARY		
									<small>© 2023 PITT & SHERRY (OPERATIONS) PTY LTD. THE DOCUMENT MAY ONLY BE USED FOR THE PURPOSE FOR WHICH IT WAS COMMISSIONED AND IN ACCORDANCE WITH THE TERMS OF ENGAGEMENT.</small>			
									DRAWING No.	P.23.1715-00-CIV-DRG-1001	REVISION	
									<small>Dec. 6. 24 - 15:06:15 Name: P.23.1715-00-CIV-DRG-1001.dwg</small>			



DRAWING REVISION HISTORY					APPROVED	SCALE (PLOTTED FULL SIZE)	AS SHOWN	SHEET SIZE A3	CLIENT JAWS ARCHITECTS	DRAWING TITLE	
No.	DESCRIPTION	DRAWN	DESIGNED	REVIEWED						DATE	ORIGINAL COPY ON FILE "e" SIGNED BY
										DATUMS: AHD / MGA	CLIENT No.
										DRAWING No. P.23.1715-00-CIV-DRG-1001	REVISION
										Dec. 6, 24 - 15:06:16 Name: P.23.1715-00-CIV-DRG-1001.dwg	

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DRAWING REVISION HISTORY					
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SIGNED
DATE

SCALE (PLOTTED FULL SIZE)	AS SHOWN	SHEET SIZE A3
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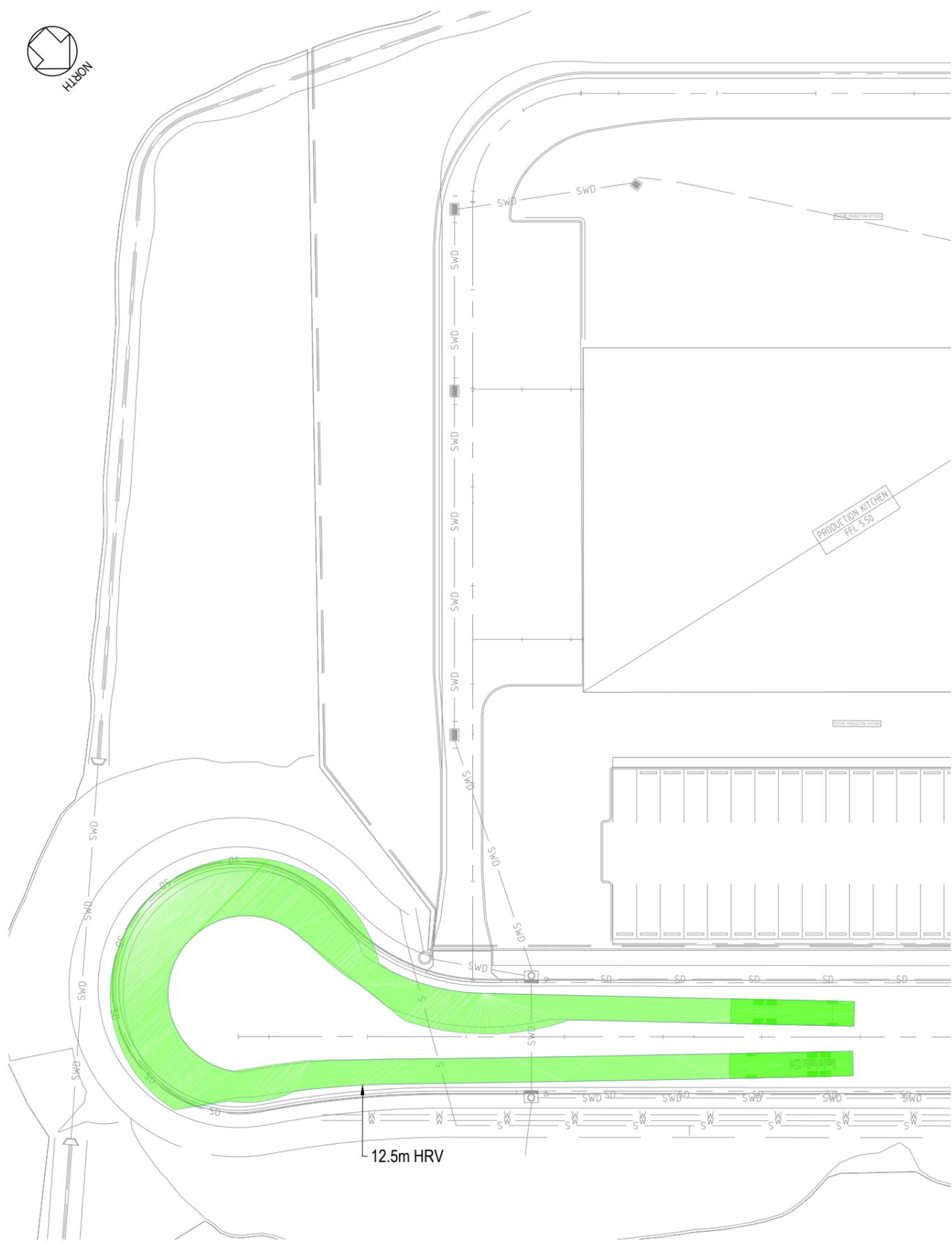


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CLIENT	JAWS ARCHITECTS
PROJECT	HOSPITALS SOUTH PRODUCTION KITCHEN TIA
STATUS	PRELIMINARY

DRAWING TITLE		SWEPT PATH SKETCHES	
DATUMS:	AHD / MGA	CLIENT No.	-
DRAWING No.	P.23.1715-00-CIV-DRG-1001	REVISION	-
Dec. 6. 24 - 15:06:17 Name: P.23.1715-00-CIV-DRG-1001.dwg			





DRAWING REVISION HISTORY					
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SIGNED
DATE

SCALE (PLOTTED FULL SIZE)	AS SHOWN	SHEET SIZE A3
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CLIENT	JAWS ARCHITECTS
PROJECT	HOSPITALS SOUTH PRODUCTION KITCHEN TIA
STATUS	PRELIMINARY

DRAWING TITLE		SWEPT PATH SKETCHES	
DATUMS:	AHD / MGA	CLIENT No.	
DRAWING No.	P.23.1715-00-CIV-DRG-1001	REVISION	
Dec. 6, 24 - 15:06:18 Name: P.23.1715-00-CIV-DRG-1001.dwg			





Hospital South Production Kitchen

Traffic Impact Assessment

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