

Albury Hospital Redevelopment Northeast Building REF DESIGN STATEMENT – CIVIL



Prepared for: Health Infrastructure
By: **enstruct** group pty ltd
Revision: D
February 2025

ISSUE AUTHORISATION

PROJECT: Albury Hospital Redevelopment Northeast Building
Project No: 6939

Rev	Date	Purpose of Issue / Nature of Revision	Prepared by	Reviewed by	Issue Authorise by
A	16/09/24	Draft REF	TAH		
B	10/01/25	Issue for REF	TAH	PAL	PAL
C	21/01/25	Issue for REF	TAH	PAL	PAL
D	20/02/25	Issue for REF	TAH	PAL	PAL

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Executive Summary

This report describes the civil engineering design to meet the requirements of the proposed Northeast Building at Albury Hospital Redevelopment, covering the following:

- Existing site conditions.
- Civil engineering requirements for the site.
- Road infrastructure
- Temporary car parking
- Stormwater treatment quality and quantity for the project.
- Design in accordance with HI requirements.

Typically, stormwater design seeks to replicate existing conditions on site with respect to stormwater flow and discharge.

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1 Introduction

1.1 The Albury Campus Redevelopment Northeast Building

The Albury Campus Redevelopment Northeast Building is a proposed new two-storey building located adjacent East Street. The building will accommodate hospital services during the hospital redevelopment.

The proposed activity comprises:

- Removal of hardstand of existing lower staff at-grade carpark (refer to traffic report for additional information).
- Make good the interface and include pedestrian movement works and line marking.
- Minor landscaping and paving works to building edge and interface to assist with accessibility and wayfinding.
- Construction of a new two storey building including Administration, Allied Health, Surgical Services, Cardiac Specialists and Pharmacy with link bridge to L02 corridor, which is the existing public entry level, adjacent existing surgical wards and operating theatres.
- Relocation of existing fire hydrant and some inground services diversions.
- Wayfinding and egress signage will be amended.
- Demolition of existing landscaping and pavement.
- Existing East Street vehicle entry and loading dock operation is maintained.
- Adjustment as required for pedestrian and entry lighting.
- Relocation of two existing demountables.
- The relocation to the eastern side of ED will also include temporary ED carparking.

2 Site Existing Conditions

2.1 Site Location

The proposed Northeast Building is located in the northeast corner of the existing hospital campus at 201 Borella Road, East Albury

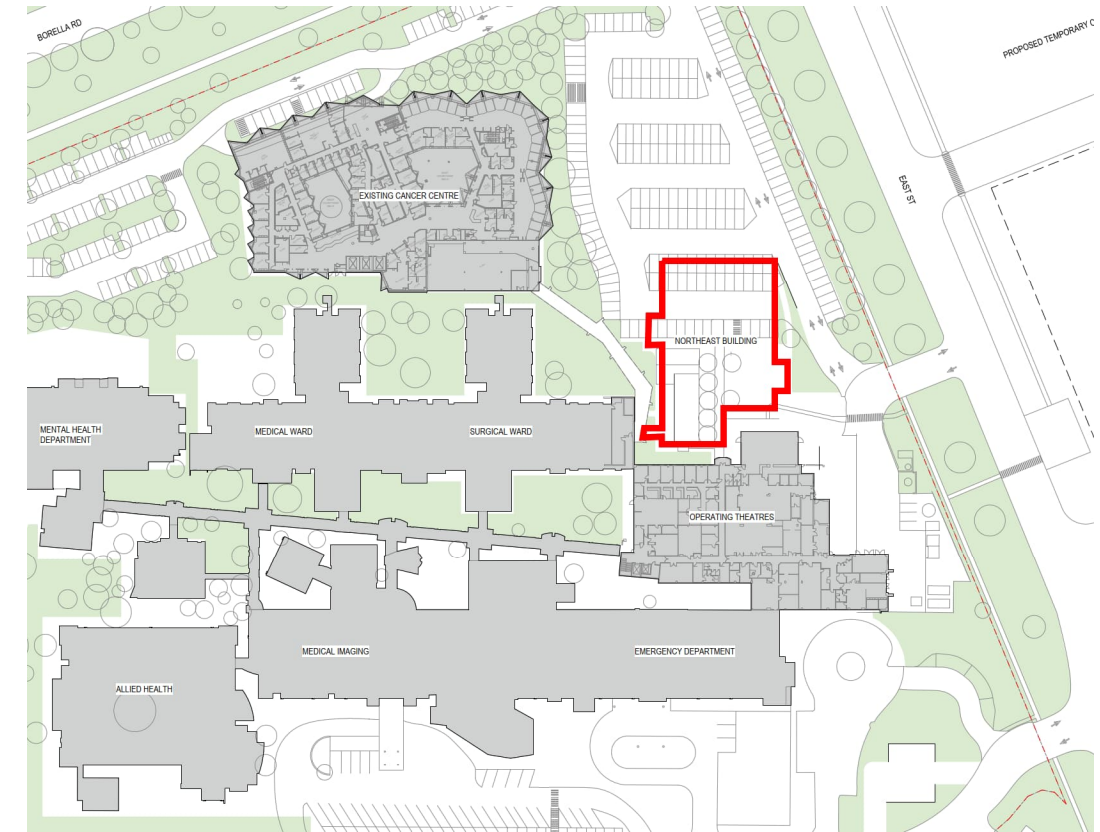


Figure 1 Albury Hospital Campus and Proposed Northeast Building

2.2 Site Description

The existing site of the proposed Northeast Building contains at grade car parking, as well as 2 demountable buildings built in 2019 and 2022. Access to the car park is via a driveway to the east of the site on East Street.

The site is drained through a series of pits and pipes to the north-east corner of the campus where the site stormwater discharges to an existing council stormwater pit. A 600mm diameter stormwater pipe traverses the site.

2.3 Site Topography

The site generally falls to the north, at approximately 4%. The high point is 171.30 mAHD in the south, falling to 169.30 mAHD.

2.4 Flooding

The Albury Hospital campus is not susceptible to flooding in all events including the PMF. The campus is not in a flood planning area.

3 Civil Design

3.1 Road Infrastructure

The existing entry from East Street and the internal road connecting to the car park will remain as part of the proposed works. Some of the at grade car park will be deleted as part of the site work. Changes to the car park layout will require some new kerb built into the existing pavement. No regrading of the existing car park or access driveway are proposed.

The proposed works also includes a temporary car park north west of the existing hospital buildings. This area is currently subject to informal car parking on an ad-hoc basis.



Figure 2 Temporary Northwest Car Park

3.2 Stormwater

3.2.1 Roof Levels

Gutters and downpipes will be designed by the Hydraulic Engineer. The roof drainage system of gutters, downpipes and associated pipework is to be designed in accordance with AS/NZS 3500.3 Plumbing and Drainage Part 3: Stormwater Drainage.

3.2.2 Surface Water

The majority of surface water from roads, footpaths, parking areas at ground level will be collected and conveyed via stormwater pits and pipes. The stormwater network is designed

for a 5% AEP (1 in 20-year) storm event. A drainage plan has been prepared showing the diversion of a 600mm diameter stormwater pipe.

The stormwater ultimately discharges to the Council stormwater system in the north east corner of the campus, via a detention basin. There is minimal changes to impervious areas and stormwater discharges, and therefore the works will not have a substantial impact on Council's stormwater system.

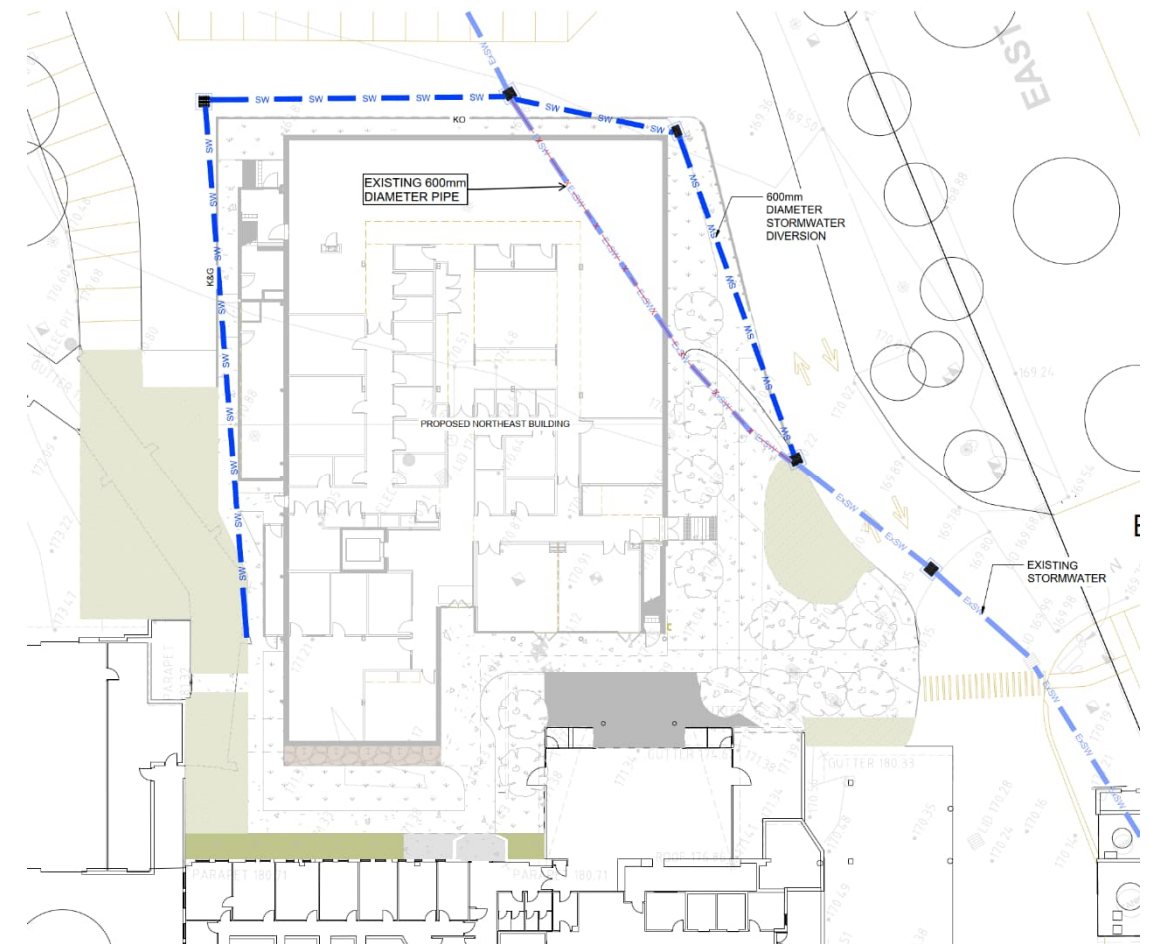


Figure 3 Stormwater Diversion

Surface water from the temporary car park is directed towards the existing stormwater network. Given the temporary nature of the car park, installing sub-surface drainage (pits and pipes) is not considered as necessary or appropriate. Existing stormwater pits in the adjacent access road provides a convenient stormwater discharge location.

3.2.3 Overland Flow

During a storm event larger than the 5% AEP storm event, or in the event there is a blockage or failure of the underground drainage network, stormwater will flow as overland flow from the Northeast Building site. Overland flows will generally be contained within the kerbs and discharge to the north, away from the proposed building.

3.3 Erosion and Sediment Control

The erosion and sediment control measures adopted for the development during the construction phase have been designed in accordance with Council guidelines and Soils and Construction – Managing Urban Stormwater – Landcom.

Erosion and sediment controls will be provided during the construction phase in accordance with Council guidelines. These control measures have been developed alongside consideration of the necessary earthworks associated with the development.

A sedimentation and erosion control plan has been prepared for the site works, and is provided in Appendix A. The plan includes measures such as: sediment fences surrounding disturbed areas to capture sediment runoff and a truck shaker tray at each point of access to the work area. The measures to be adopted are summarised in Table 1.

Final details of sediment and erosion control measures for the works will be implemented on site by the successful contractor who will be provided with these drawings. The contractor will take into account the site works staging including the preferred site access points, site shed locations and temporary stockpile locations in developing and implementing these requirements but will be ultimately responsible for managing temporary stormwater and sediment and erosion control during construction.

Table 1 Sedimentation control measures

Measure	Location	Purpose
Sediment Fence	Near site boundary along the downstream side of the site.	To prevent sediment leaving the site with stormwater runoff. Stormwater will pass through the fence but the fence will trap the sediment.
Shaker Grid and Wash Down	At construction exit from the site.	To remove ground materials from the construction vehicle wheels prior to the vehicle leaving the site and discharging material onto the public roadway.
Sand Bag Sediment Traps	Directly upstream of all stormwater kerb inlet structures located in close proximity of the site.	To prevent sediment discharged from the site from entering the stormwater inlet structure and contaminating the water course.
Inlet Sediment Trap	Around any stormwater surface inlet structures	To prevent sediment discharged from the site from entering the stormwater inlet structure and contaminating the water course.

Erosion and sediment control will also be further addressed during detailed design and construction of this phase and future development.

4 Civil Engineering Design Principles

All new works will utilise the HI systemised design approach and be designed in accordance with the following civil principles and parameters.

4.1 Design Standards

The civil design is in accordance with the latest revision of all relevant structural Australian Standards, relevant structural sections of the BCA and other statutory requirements.

In particular the civil design is in accordance with the following relevant Australian Standards:

- AS/NZS 3500.3 (2021) – Plumbing and Drainage Part 3: Stormwater Drainage
- AS 3600 (2018) – Concrete Structures
- AS 3700 (2011) – Masonry Code
- AS 4678 (2002) – Earth Retaining Structures
- AS 2890.1 (2004) - Parking facilities - Off-street car parking
- AS2890.2 (2018) - Off-street Commercial Vehicle Facilities
- Australian Rainfall and Runoff (ARR 2019)
- Managing Urban Stormwater: Soils and construction - Volume 1 4th edition (Landcom)

4.2 Stormwater design

All stormwater drainage is designed to comply with best practise as designated in Australian Rainfall and Runoff and the Australian Standards AS3500.

Element	Criteria
Pipe Class	Minimum Class 2
Design Loading	SM1600 – Traffic Loading T44, CAT16H – Construction Loading
Minimum Pipe Size	Private Property – 225mm Diameter min. Local Roads – 375mm Diameter min.
Maximum Spacing of Pits	Desirable – 70m Absolute – 120m
Pit Blockage Allowance	On-grade – 0.2 Sag – 0.5

Element	Criteria
Minimum Pipe Cover	600 mm
Design Storm	Minor - 5% AEP Major – 1% AEP
Minor Storm Pit Freeboard	Desirable – 150 mm Absolute – 100 mm
Design Freeboard	0.5m above trunk open drainage channel. 0.5m above PMF for habitable floors.
Allowable Flow Velocities	Max. 6.0m/s for 10% AEP Min. 0.6m/s in 2EY

4.3 Design Life

The civil works have been designed to provide adequate performance for a minimum period of 50 years with a typical maintenance system. Flexible pavements have a design life of 20-years, after which a mill and re-sheet may be required.

4.4 Pavement Design

The temporary northwest carpark has been designed as a temporary feature in use for approximately 3 years. The pavement is made up of a chip seal on pavement depth of 350mm compacted crushed rock (150mm DGB20 on 200mm DGS40).

Chip seal is a low cost finish that adds durability to the car park surface. This is considered appropriate for a three year design life with little or no pavement maintenance over the period.

APPENDIX A

Northeast Building and
Temporary Northwest Car Park
Civil Engineering REF Drawings
enstruct 2025

enstruct

CIVIL ENGINEERING WORKS

ALBURY WODONGA REGIONAL HOSPITAL PROJECT

NORTHEAST BUILDING REF

201 BORELLA ROAD, ALBURY, NSW 2640

CIVIL ENGINEERING WORKS DRAWING LIST:

6939-CV-1001	NORTHEAST BUILDING REF COVER SHEET
6939-CV-1002	NORTHEAST BUILDING REF NOTES SHEET
6939-CV-1001	NORTHEAST BUILDING REF EROSION AND SEDIMENT CONTROL PLAN
6939-CV-1101	NORTHEAST BUILDING REF EROSION AND SEDIMENT CONTROL DETAILS
6939-CV-1301	NORTHEAST BUILDING REF SITEWORKS PLAN
6939-CV-2530	TEMPORARY CARPARK CIVIL WORKS PLAN

TO BE PRINTED IN FULL COLOUR

NOT FOR CONSTRUCTION

02	10/01/25	ISSUE FOR REF	BEJ	TAH	
01	16/09/24	ISSUE FOR REF	BEJ	TAH	
rev	date	description	drn	ch'k	

rev	date	description	drn	ch'k	



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project

ALBURY WODONGA
REGIONAL HOSPITAL
PROJECT

201 BORELLA ROAD, ALBURY, NSW
2640

drawing title

NORTHEAST BUILDING REF
COVER SHEET

status

FOR REF

scale at A1
NTS

drawn
BEJ

checked
TAH

approved
TAH

project no.
6939

sheet
AWH-ENS-CV-EW-NEB-1001

rev.
02

BOUNDARY AND EASEMENTS NOTE

The property boundary and easements locations shown on enstruct drawing's have been based from information received from Walpole Surveying.

Enstruct makes no guarantees that the boundary or easement information shown is correct, enstruct will accept no liabilities for boundary inaccuracies. The contractor/builder is advised to check/confirm all boundaries in relation to all proposed work prior to the commencement of construction. Boundary inaccuracies found are to be reported to the superintendent prior to construction starting.

BULK EARTHWORKS GENERAL NOTES

- All bulk earthworks setout from grid lines U.N.O.
- (i) All permanent batter max slope of 3(H) : 1(V) U.N.O.
(ii) All temporary batter max slope of 2(H) : 1(V) U.N.O.
Batters are not to exceed Geotechnic engineer specifications.
- Excavated material may be used as structural fill provided,
(i) it complies with the specification requirements for fill material,
(ii) the placement moisture content complies with the Geotechnical Consultants requirements, and allows filling to be placed and proffrolled in accordance with the specification. Where necessary the Contractor must moisture condition the excavated material to meet these requirements.
- Compact fill areas and subgrade to not less than:

Location	Standard dry density (AS 1289 5.1.1.)	Moisture (OMC)
Under building slabs on ground:	98%	±2%
Under roads and carparks:	98%	±2%
Landscaped areas:	95%	±2%

- Before placing fill, proof roll exposed subgrade with a 10 tonne minimum roller to test subgrade and then remove soft spots (areas with more than 3mm movement under roller).
Soft spots to be replaced with GRANULAR fill U.N.O.
- Contractor to provide proof roll compaction evidence for signoff.
- Contractor shall place safety barriers around excavations in accordance with relevant safety regulations.
- For interpretation of bulk earthworks foot print line shown on the bulk earthworks drawings refer to the bulk earthworks construction legend.
- Bulk earthwork drawings are not to be used for detailed excavation.
- Refer to Geotechnical Report prepared by -
Civil Test Pty Ltd 4230352-2-Preliminary

DBYD SERVICES NOTE

"Public Service Utility information shown on plan has been compiled from information received from Dial Before You Dig inquiry, reference Number **34114503**, which was obtained on 02/05/2023. Unless specifically shown otherwise, this location and depth of services shown on this plan have not been verified.

The location of services shown on this drawing have been plotted as accurately as possible from diagrams provided by service authorities and should be confirmed by site inspection."

RETAINING WALLS

- Drainage shall be provided as shown on the drainage drawings.
- Backfilling shall be carried out after grout or concrete has reached a minimum strength of 0.85 f_c. Backfilling shall be approved granular material compacted in layers not exceeding 200mm to 95% Standard compaction unless noted otherwise.
- Provide waterproofing to back of walls as specified or noted.
- Where retaining walls rely on connecting structural elements for stability, do not backfill against the wall unless it is adequately propped or the elements have been constructed and have sufficient strength to withstand the loads.
- For all temporary batters obtain geotechnical engineers recommendations.

SURVEY AND SERVICES INFORMATION

SURVEY

Origin of levels :
Datum of levels : A.H.D AUSTRALIAN HEIGHT DATUM
Coordinate system : MGA 2020
Survey prepared by : Walpole Surveying
Setout Points : CONTACT THE SURVEYOR

enstruct does not guarantee that the survey information shown on these drawings is accurate and will accept no liability for any inaccuracies in the survey information provided to us from any cause whatsoever.

UNDERGROUND SERVICES - WARNING

The locations of underground services shown on enstruct drawings have been plotted from diagrams provided by service authorities. This information has been prepared solely for the authorities own use and may not necessarily be updated or accurate.

The position of services as recorded by the authority at the time of installation may not reflect changes in the physical environment subsequent to installation.

enstruct does not guarantee that the services information shown on these drawings shows more than the presence or absence of services, and will accept no liability for inaccuracies in the services information shown from any cause whatsoever.

The Contractor must confirm the exact location and extent of services prior to construction and notify any conflict with the drawings immediately to the Engineer/Superintendent.

The contractor is to get approval from the relevant state survey department, to remove/adjust any survey mark. This includes but is not limited to; State Survey Marks (SSM), Permanent Marks (PM), cadastral reference marks or any other survey mark which is to be removed or adjusted in any way.

enstruct plans do not indicate the presence of any survey mark. The contractor is to undertake their own search.

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CONCRETE NOTES

EXPOSURE CLASSIFICATION : External :B2

CONCRETE

Place concrete of the following characteristic compressive strength f_c as defined in AS 1379.

Location	AS 1379 f _c MPa at 28 days	Specified Slump	Nominal Agg. Size
Kerbs	S20	80	20
Pavements	S32	80	20
Retaining wall footing	S40	80	20

- Use Type 'GP' cement, unless otherwise specified.
- All concrete shall be subject to project assessment and testing to AS 1379.
- Consolidate by mechanical vibration. Cure all concrete surfaces as directed in the Specification.
- For all falls in slab, drip grooves, reglets, chamfers etc. refer to Architects drawings and specifications.
- The location of all construction joints shall be submitted to Engineer for review.
- No holes or chases shall be made in the slab without the approval of the Engineer.
- Slurry used to lubricate concrete pump lines is not to be used in any concrete members.
- All building slabs cast on ground require sand blinding with a Concrete Underlay. Refer to structural drawings.

FORMWORK

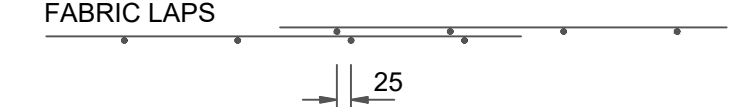
- The design, certification, construction and performance of the formwork, falsework and backpropping shall be the responsibility of the contractor. Proposed method of installation and removal of formwork is to be submitted to the superintendent for comment prior to work being carried out.

CONCRETE FINISHING NOTES

- All exposed concrete pavements are to be broomed finished.
- All edges of the concrete pavement including keyed and dowelled joints are to be finished with an edging tool.
- Concrete pavements with grades greater than 10 % shall be heavily broomed finished.
- Carborundum to be added to all stair treads and ramped crossings U.N.O.

CONCRETE REINFORCEMENT NOTES

- Fix reinforcement as shown on drawings. The type and grade is indicated by a symbol as shown below. On the drawings this is followed by a numeral which indicates the size in millimetres of the reinforcement.
N. Hot rolled ribbed bar grade D500N
R. Plain round bar grade R250N
S. Square mesh grade 500L
RL. Rectangular mesh grade 500L
- Provide bar supports or spacers to give the following concrete cover to all reinforcement unless otherwise noted on drawings.
Footings - 50 top, 50 bottom, 50 sides.
Walls - 30 generally,
- 30 when cast in forms but later exposed to weather or ground.
- ... when cast directly in contact with ground.
- Cover to reinforcement ends to be 50 mm u.n.o.
- Provide N12-450 support bars to top reinforcement as required, Lap 500 U.N.O.
- Maintain cover to all pipes, conduits, reglets, drip grooves etc
- All cogs to be standard cogs unless noted otherwise.
- Fabric end and side laps are to be placed strictly in accordance with the manufacturers requirements to achieve a full tensile lap. Fabric shall be laid so that there is a maximum of 3 layers at any location.



- Laps in reinforcement shall be made only where shown on the drawings unless otherwise approved. Lap lengths as per table below.

KERBING NOTES

Includes all kerbs, gutters, dish drains, crossings and edges.

- All kerbs, gutters, dish drains and crossings to be constructed on minimum 75mm granular basecourse compacted to minimum 98% modified maximum dry density in accordance with AS 1289 5.2.1.
- Expansion joints (EJ) to be formed from 10mm compressible cork filler board for the full depth of the section and out to profile. Expansion joints to be located at drainage pits, on tangent points of curves and elsewhere at 12m centres except for integral kerbs where the expansion joints are to match the joint locations in slabs.
- Weakened plane joints to be min 3mm wide and located at 3m centres except for integral kerbs where weakened plane joints are to match the joint locations in slabs.
- Broomed finished to all ramped and vehicular crossings, all other kerbing or dish drains to be steel float finished.
- In the replacement of kerbs - Existing road pavement is to be sawcut 900mm from: Lip of gutter, invert of kerb, or edge of dish drain. Upon completion of new kerbs, new basecourse and surface is to be laid 900mm wide to match existing materials and thicknesses.
- Existing allotment drainage pipes are to be built into the new kerb with a 100mm dia hole.
- Existing kerbs are to be completely removed where new kerbs are shown.

SITWORKS NOTES

- All basecourse material to comply with RMS specification No 3051 and compacted to minimum 98% modified dry density in accordance with AS 1289 5.2.1.
- All trench backfill material shall be compacted to the same density as the adjacent material.
- All service trenches under vehicular pavements shall be backfilled with an approved select material and compacted to a minimum 98% standard maximum dry density in accordance with AS 1289 5.1.1

GENERAL NOTES

- Contractor must verify all dimensions and existing levels on site prior to commencement of works. Any discrepancies to be reported to the Engineer
- Strip all topsoil from the construction area. All stripped topsoil shall be disposed of off-site unless directed otherwise.
- Make smooth connection with all existing works.
- Compact subgrade under buildings and pavements to minimum 98% standard maximum dry density in accordance with AS 1289 5.1.1. Compaction under buildings to extend 2m minimum beyond building footprint.
- All work on public property, property which is to become public property, or any work which is to come under the control of the Statutory Authority; the Contractor is to ensure that the drawings used for construction have been approved by all relevant authorities prior to commencement site.
- All work on public property, property which is to become public property, or any work which is to come under the control of the Statutory Authority is to be carried out in accordance with the requirements of the relevant Authority. The Contractor shall obtain these requirements from the Authority. Where the requirements of the Authority are different to the drawings and specifications, the requirements of the Authority shall be applicable.
- For all temporary batters refer to geotechnical recommendations.

REFERENCE DRAWINGS

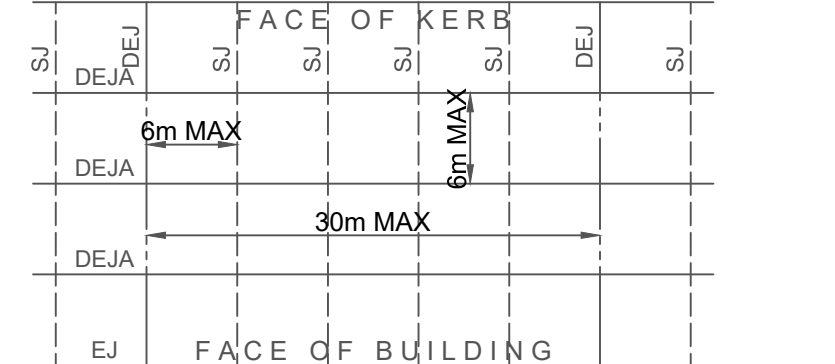
- These drawings have been based from, and to be read in conjunction with the following Consultants drawings. Any conflict to the drawings must be notified immediately to the Engineer.

Consultant	Dwg Title	Dwg No	Rev	Date
Hassell	Draft Concept Design			10/05/2024

JOINTING NOTES

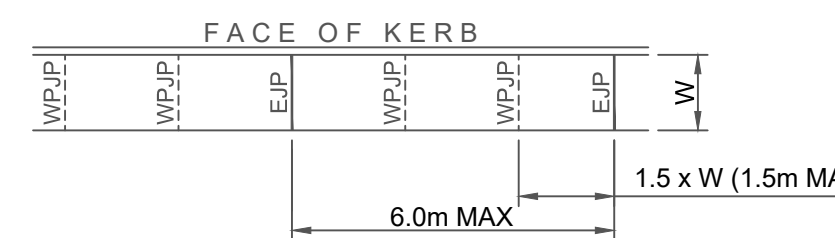
Vehicular Pavement Jointing

- All vehicular pavements to be jointed as shown on drawings.
- Keyed construction joints should generally be located at a maximum of 6m centres.
- Sawn joints should generally be located at a maximum of 6m centres or 1.5 x the spacing of keyed joints, where key joint spacing is less than 4m, with dowelled expansion joints at maximum of 30m centres.
- Provide 10mm wide full depth expansion joints between buildings and all concrete or unit pavers.
- The timing of the saw cut is to be confirmed by the contractor on site. Site conditions will determine how many hours after the concrete pour before the saw cuts are commenced. Refer to the specification for weather conditions and temperatures required.
- Vehicular pavement jointing as follows.



Pedestrian Footpath Jointing

- Expansion joints are to be located where possible at tangent points of curves and elsewhere at max 6.0m centres.
- Weakened plane joints are to be located at a max 1.5 x width of the pavement.
- Where possible joints should be located to match kerbing and / or adjacent pavement joints.
- All pedestrian footpath jointings as follows (uno).



CIVIL SAFETY IN DESIGN

enstruct (NSW) Pty Ltd operates under Safe Work Australia's code of Conduct for the Safe Design of Structures.

These drawings shall be read in conjunction with the enstruct Civil risk and Solutions Register.

Under the Code of Conduct it is the Client's responsibility to provide a copy of the Civil Risk and Solutions Register to the Principal Contractor.

It is the Principal Contractor's responsibility to review the hazards and risks identified during the design process to ensure a safe workplace is maintained for the construction, maintenance and eventual demolition of the civil infrastructure.

EROSION AND SEDIMENT CONTROL NOTES

- All work shall be generally carried out in accordance with
(A) Local authority requirements
(B) EPA - Pollution control manual for urban stormwater,
(C) LANDCOM NSW - Managing Urban Stormwater: Soils and Construction ("Blue Book").
- Erosion and sediment control **drawings and notes** are provided for the whole of the works. Should the Contractor stage these works then the design may be required to be modified. Variation to these details may require approval by the relevant authorities.
- The erosion and sediment control **plan** shall be implemented and adapted to meet the varying situations as work on site progresses.
- Maintain all erosion and sediment control devices to the satisfaction of the superintendent and the local authority.
- When stormwater pits are constructed prevent site runoff entering the pits unless silt fences are erected around pits.
- Minimise the area of site being disturbed at any one time.
- Protect all stockpiles of materials from scour and erosion. Do not stockpile loose material in roadways, near drainage pits or in watercourses.
- All soil and water control measures are to be put back in place at the end of each working day, and modified to best suit site conditions.
- Control water from upstream of the site such that it does not enter the disturbed site.
- All construction vehicles shall enter and exit the site via the temporary construction entry/exit.
- All vehicles leaving the site shall be cleaned and inspected before leaving.
- Maintain all stormwater pipes and pits clear of debris and sediment. Inspect stormwater system and clean out after each storm event.
- Clean out all erosion and sediment control devices after each storm event.

Sequence Of Works

- Prior to commencement of excavation the following soil management devices must be installed:
1.1. Construct silt fences below the site and across all potential runoff sites.
1.2. Construct temporary construction entry/exit and divert runoff to suitable control systems.
1.3. Construct measures to divert upstream clean flows into existing stormwater system.
1.4. Construct sedimentation traps/basin (if any) including outlet control and overflow; otherwise allocate a place for the runoff and temporary sediment storage.
1.5. Construct turf lined swales.
1.6. Provide sandbag sediment traps upstream of existing pits.
- Construct geotextile filter pit surround around all existing pits and proposed pits as they are constructed.
- On completion of pavement provide sand bag kerb inlet sediment traps around pits.
- Provide and maintain a strip of turf on both sides of all roads after the construction of kerbs.

WATER QUALITY TESTING REQUIREMENTS

Prior to discharge of site stormwater, groundwater and seepage water into council's stormwater system, contractors must undertake water quality tests in conjunction with a suitably qualified environment consultant outlining the following:

- Compliance with the criteria of the Australian and New Zealand Guidelines for Fresh and Marine Water Quality (2000)
- If required subject to the environmental consultants advice, provide remedial measures to improve the quality of water that is to be discharged into Councils storm water drainage system. This should include comments from a suitably qualified environmental consultant confirming the suitability of these remedial measures to manage the water discharged from the site into Councils storm water drainage system. Outlining the proposed, ongoing monitoring, contingency plans and validation program that will be in place to continually monitor the quality of water discharged from this site. This should outline the frequency of water quality testing that will be undertaken by a suitably qualified environmental consultant.

SAFETY IN DESIGN

Contractor to refer to the Civil Risk and Solutions Register.

EXISTING SERVICES

Contractor to be aware existing services are located within the site. Location of all services to be verified by the Contractor prior to commencing works. Contractor to confirm with relevant authority regarding measures to be taken to ensure services are protected or procedures are in place to demolish and/or relocate.

EXISTING STRUCTURES

Contractor to be aware existing structures may exist within the site. To prevent damage to existing structure(s) and/or personnel, site works to be carried out as far as practicable possible from existing structure(s).

EXISTING TREES

Contractor to be aware existing trees exist within the site which need to be protected. To prevent damage to trees and/or personnel, site works to be carried out as far as practicable possible from existing trees. Advice needs to be sought from Arborist and/or Landscape Architect on measures required to protect trees.

GROUNDWATER

Contractor to be aware ground water levels are close to existing surface level. Temporary de-watering may be required during construction works.

EXCAVATIONS

Deep excavations due to stormwater drainage works is required. Contractor to ensure safe working procedures are in place for works. All excavations to be fenced off and batters adequately supported to approval of Geotechnical Engineer.

GROUND CONDITIONS

Contractor to be aware of the site geotechnical conditions. Refer to geotechnical report by Civil Test Pty Ltd 4230352-2 Preliminary for details.

HAZARDOUS MATERIALS

Existing asbestos products & contaminated material may be present on site. Contractor to ensure all hazardous materials are identified prior to commencing works. Safe working practices as per relevant authority to be adopted and appropriate PPE to be used when handling all hazardous materials. Refer to geotechnical/environmental report by Civil Test Pty Ltd 4230352-2 Preliminary for details.

CONFINED SPACES

Contractor to be aware of potential hazards due to working in confined spaces such as stormwater pits, trenches and/or tanks. Contractor to provide safe working methods and use appropriate PPE when entering confined spaces.

MANUAL HANDLING

Contractor to be aware manual handling may be required during construction. Contractor to take appropriate measures to ensure manual handling procedures and assessments are in place prior to commencing works.

WATER POLLUTION

Contractor to ensure appropriate measures are taken to prevent pollutants from construction works contaminating the surrounding environment.

SITE ACCESS/EGRESS

Contractor to be aware site works occur in close proximity to footpaths and roadways. Contractor to erect appropriate barriers and signage to protect site personnel and public.

VEHICLE MOVEMENT

Contractor to supply and comply with traffic management plan and provide adequate site traffic control including a certified traffic marshal to supervise vehicle movements where necessary.

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rev	date	description	drm	ch/k	



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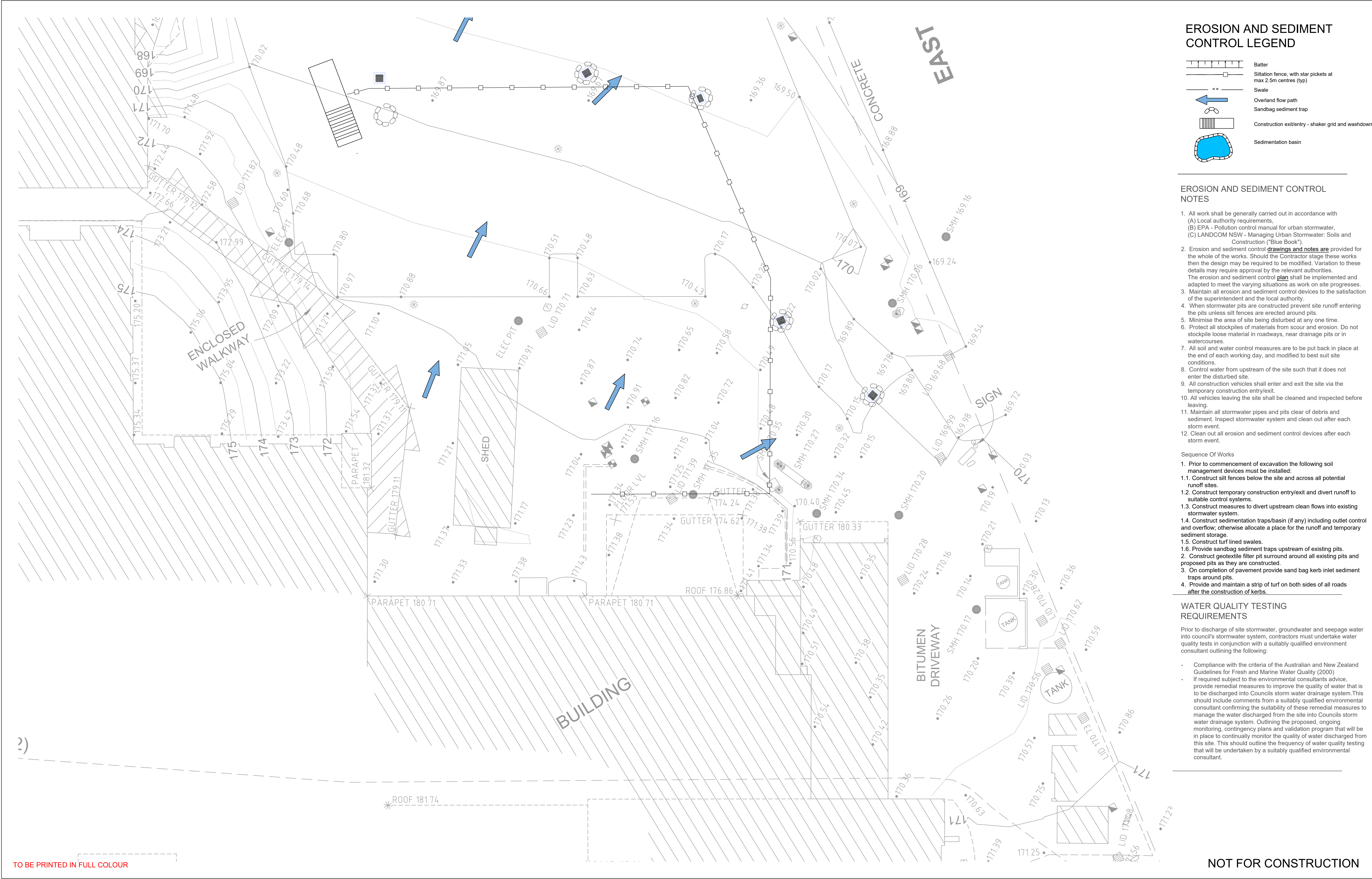
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6939	AWH-ENS-CV-EW-NEB-1002	02



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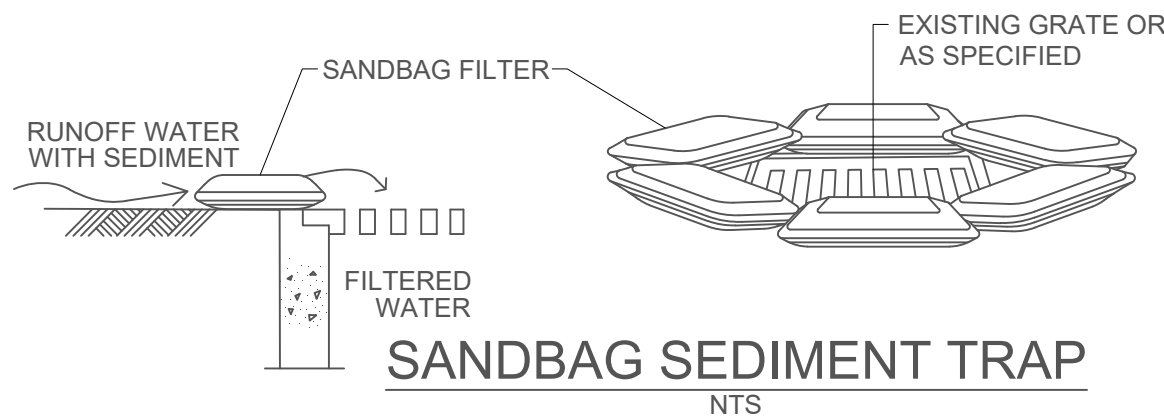
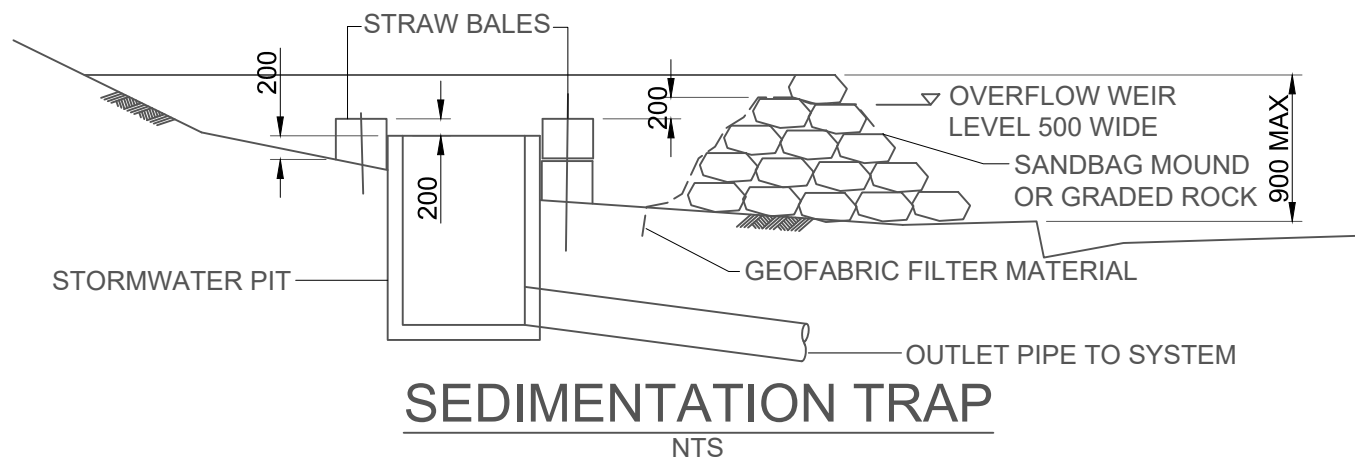
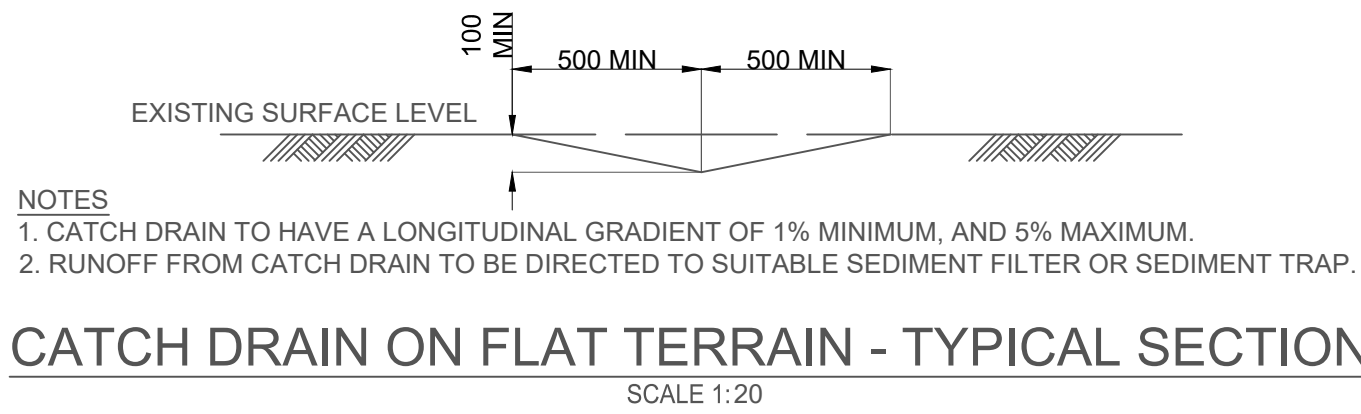
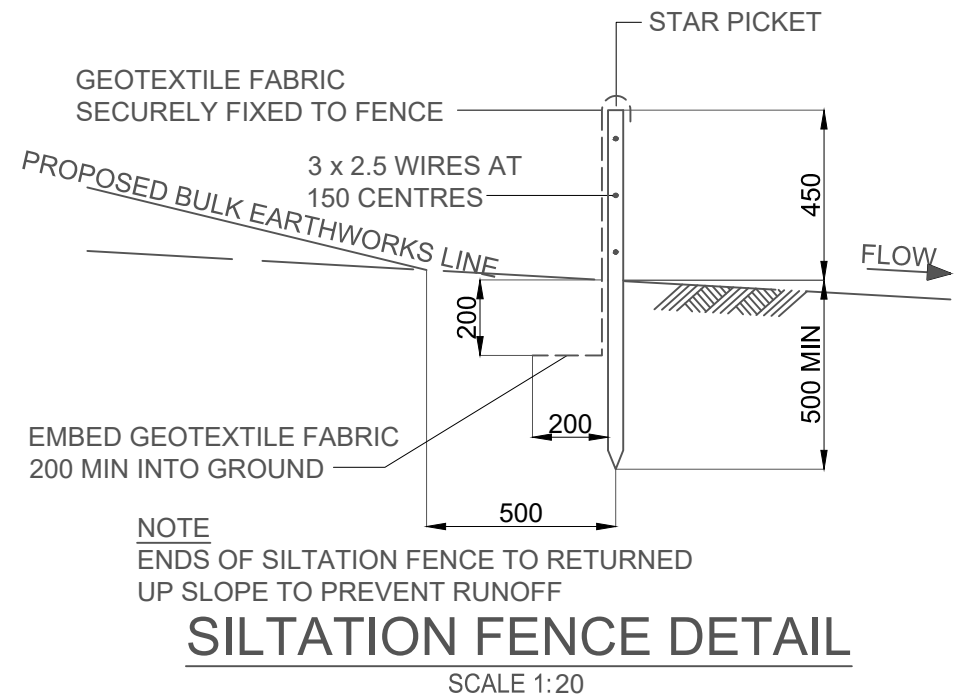
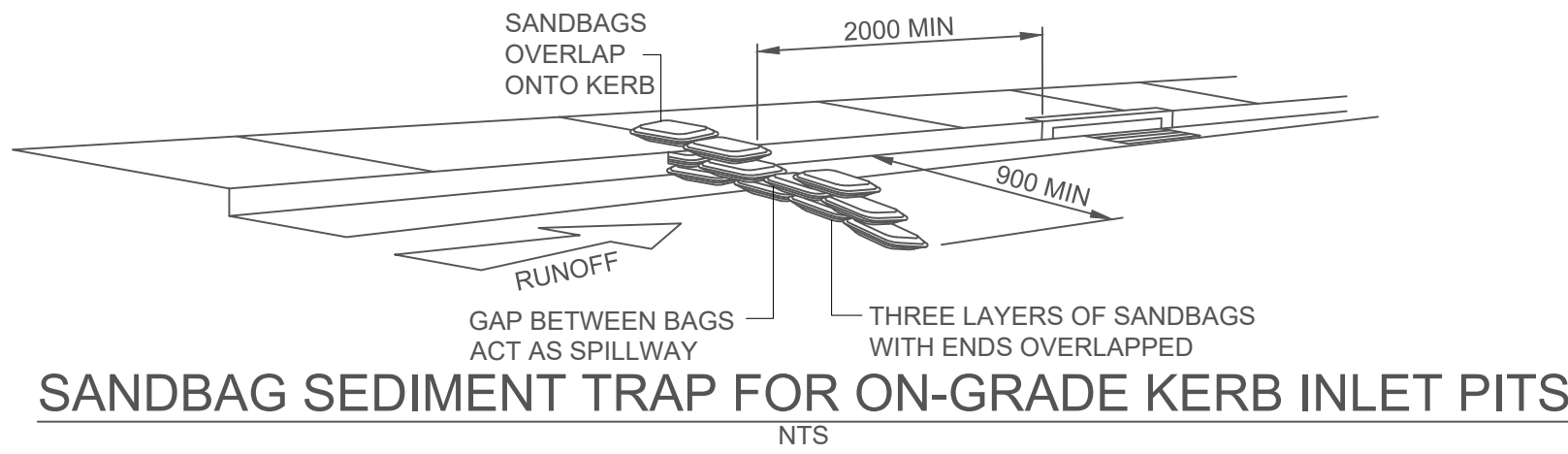
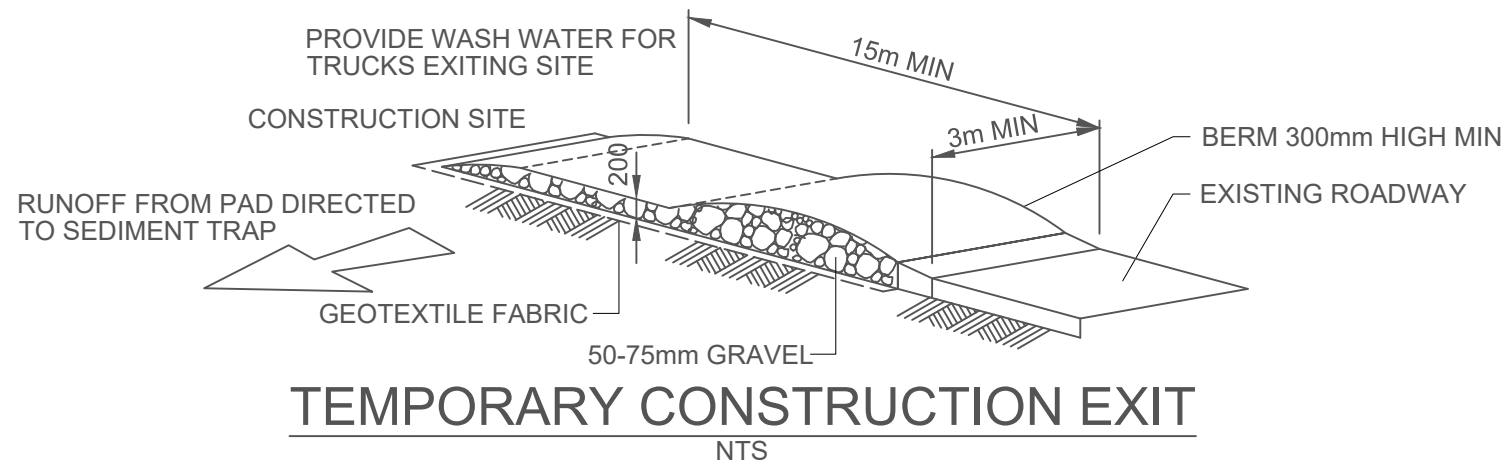
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2640

drawing title

**NORTHEAST BUILDING REF
EROSION AND SEDIMENT
CONTROL PLAN**

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TO BE PRINTED IN FULL COLOUR

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NORTHEAST BUILDING REF
EROSION AND SEDIMENT
CONTROL DETAILS SHEET

status

FOR REF

scale at A1
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drawn
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checked
TAH

approved
TAH

project no.
6939

sheet
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rev.
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04	21/01/25	ISSUE FOR REF	BEJ	TAH	
03	10/01/25	ISSUE FOR REF	BEJ	TAH	
02	20/12/24	ISSUE FOR DRAFT TENDER	SCO	TAH	
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NORTHEAST BUILDING REF
SITEWORKS SHEET

status

FOR REF

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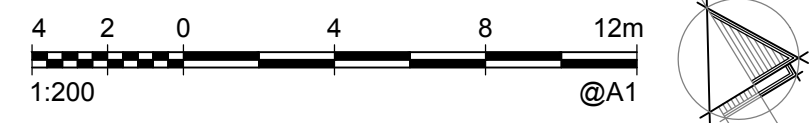
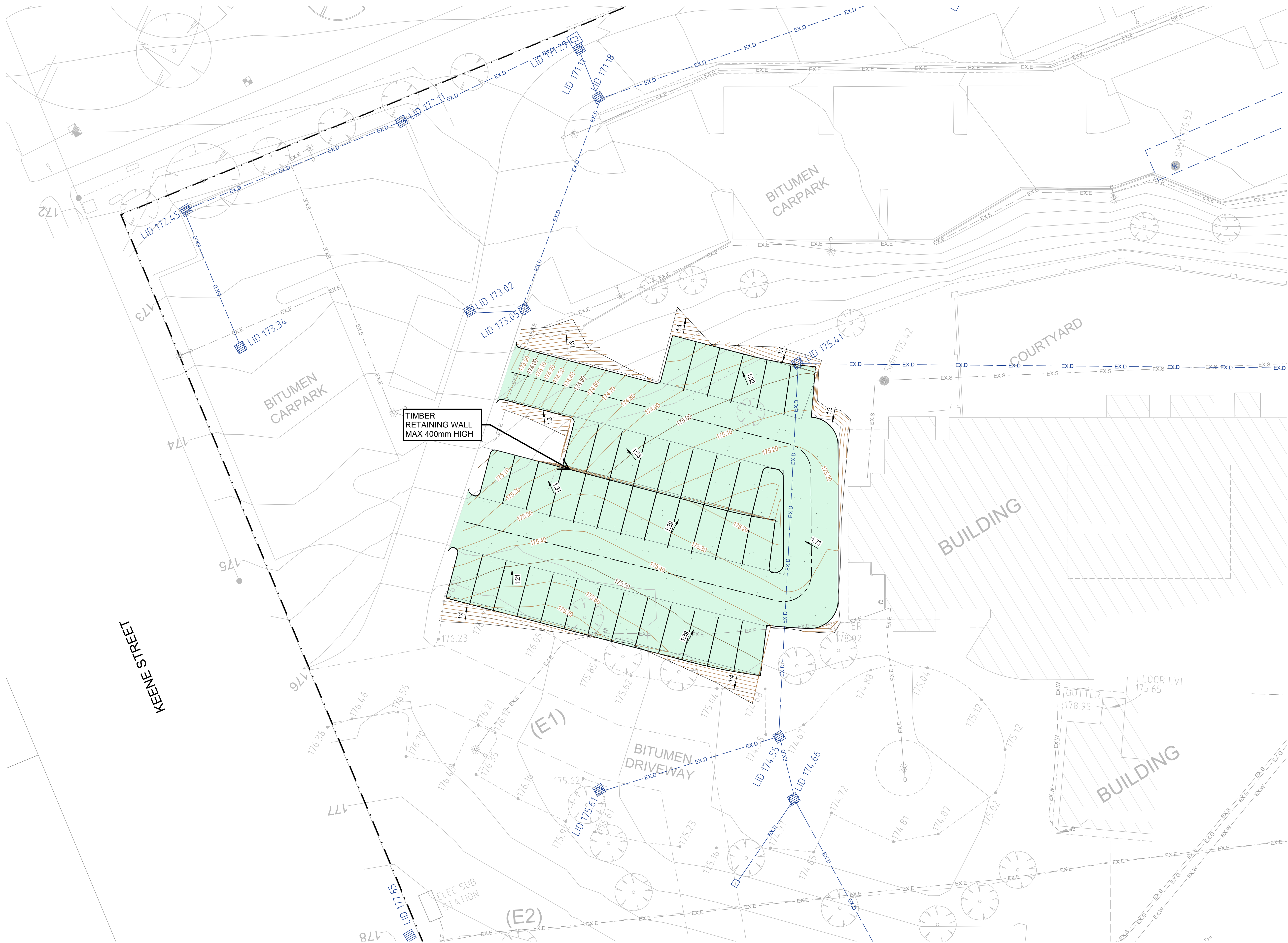
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AWH-ENS-CV-EW-NEB-1301

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NOTES:

- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL DRAWINGS AS REFERENCED ON 6939-CV-2001. FOR GENERAL NOTES REFER TO DRAWING 6939-CV-2002.
- ISOLATION JOINT TO BE PLACED AT INTERFACE OF ALL NEW PAVEMENTS AND STRUCTURES/EXISTING FOOTPATHS.
- PAVEMENTS TO FALL AWAY FROM BUILDING AT A MIN GRADE OF 1:???
- SAWCUT EXISTING PAVEMENT AND BLEND NEW PAVEMENT WITH EXISTING. REFER TO DETAIL ON DRAWING C035.

LEGEND

---	TITLE BOUNDARY
2250	STORMWATER DRAINAGE PIPE
GP	GRATED PIT
JP	JUNCTION PIT
SEP	SIDE ENTRY PIT
	TRENCH GRATE
AG	AG DRAIN
	PROPOSED SWALE
P01.01	PIT NUMBER REFERENCE
FO	FLUSH OUT
DP	DOWNPIPE
ES	EDGE STRIP TYPE ES
B1	BARRIER KERB TYPE B1
B2	BARRIER KERB AND CHANNEL TYPE B2
M2	MOUNTABLE KERB & CHANNEL TYPE M2
449.50	PROPOSED CONTOURS
444.50	EXISTING CONTOURS
x x x x x	ITEMS/SERVICES TO BE REMOVED
1:6	PROPOSED FALL
x P20.00	PROPOSED LEVEL
x EX20.00	EXISTING LEVEL
B	PROPOSED BOLLARD
S.C.J.	SAWCUT JOINT
E.J.	EXPANSION JOINT
RW	PROPOSED RETAINING WALL
WS	PROPOSED WHEEL STOP
	PROPOSED TACTILE GROUND SURFACE INDICATORS (TGSi)
	PRAM CROSSING WITH TGSi
	TEMPORARY CARPARK CHIP SEAL ON 150mm COMPACTED THICKNESS DGB20 ON 200mm COMPACTED THICKNESS DGS40



SERVICE CLASHES

CONTRACTOR TO REFER TO SERVICES DOCUMENTATION AND LIAISE WITH THE RELEVANT AUTHORITY TO MITIGATE ANY SERVICE CLASHES WITH THE PROPOSED WORKS.

WARNING

BEWARE OF UNDERGROUND SERVICES. THE LOCATION OF UNDERGROUND SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE BY CIVIL CONTRACTOR PRIOR TO CONSTRUCTION OF ANY CIVIL WORKS. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN.

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drawing title

TEMPORARY CARPARK
CIVIL WORKS PLAN

status

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6939	AWH-ENS-CV-EW-NEB-2530	01