Meander Valley Council
Working Together

PLANNING NOTICE

An application has been received for a Permit under s.57 of the Land Use Planning Approvals Act 1993:

APPLICANT:	**Meander Valley Council - PA\26\0064**
PROPERTY ADDRESS:	**54 Tip Road DELORAINE (CT: 130751/1)**
DEVELOPMENT:	**Recycling and Waste Disposal (Waste transfer station) – discretionary use, potentially contaminated land.**

The application can be inspected until **Tuesday, 21 October 2025**, at www.meander.tas.gov.au or at the Council Office, 26 Lyall Street, Westbury (during normal office hours).

Written representations may be made during this time addressed to the General Manager, PO Box 102, Westbury 7303, or by email to planning@mvc.tas.gov.au. Please include a contact phone number. Please note any representations lodged will be available for public viewing.

If you have any questions about this application please do not hesitate to contact Council's Planning Department on 6393 5320.

Dated at Westbury on 4 October 2025.

Craig Davies
ACTING GENERAL MANAGER

APPLICATION FORM

PLANNING PERMIT

Land Use Planning and Approvals Act 1993

Meander Valley Council
Working Together

- Application form & details MUST be completed **IN FULL**.
- Incomplete forms will not be accepted and may delay processing and issue of any Permits.

OFFICE USE ONLY

Property No: ☐☐☐☐☐ **Assessment No:** ☐☐ - ☐☐☐☐ - ☐☐☐☐

DA ☐☐☐☐☐☐ **PA** ☐☐☐☐☐☐ **PC** ☐☐☐☐☐☐

- Is your application the result of an illegal building work? ☐ Yes ☐ No
- Have you already received a Planning Review for this proposal? ☐ Yes ☐ No
- Is a new vehicle access or crossover required? ☐ Yes ☐ No

Indicate by ✓ box

PROPERTY DETAILS:

Address: 54 Tip Road

Certificate of Title: 130751/1

Suburb: Deloraine

Lot No:

Land area: ___ m^2 / ha

Present use of land/building: Landfill & Recycling Centre *(vacant, residential, rural, industrial, commercial or forestry)*

- Does the application involve Crown Land or Private access via a Crown Access Licence: ☐ Yes ☒ No
- Heritage Listed Property: ☐ Yes ☒ No

DETAILS OF USE OR DEVELOPMENT:

Indicate by ✓ box ☒ Building work ☐ Change of use ☐ Subdivision ☐ Demolition ☐ Forestry ☐ Other

Total cost of development *(inclusive of GST)*: $1,6m. *Includes total cost of building work, landscaping, road works and infrastructure*

Description of work: Construction of a transfer station at the Deloraine Waste Depot.

Use of building: Transfer Station (main use of proposed building – dwelling, garage, farm building, factory, office, shop)

New floor area: ___ m^2 New building height: ___ m

Materials: External walls: ___ Colour: ___

Roof cladding: ___ Colour: ___

Document Set ID: 2206529
Version: 1, Version Date: 10/09/2025

RESULT OF SEARCH

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980

SEARCH OF TORRENS TITLE

VOLUME	FOLIO
130751	1
EDITION	DATE OF ISSUE
1	07-May-1999

SEARCH DATE : 08-Sep-2025
SEARCH TIME : 04.33 PM

DESCRIPTION OF LAND

Parish of CALSTOCK, Land District of WESTMORLAND
Lot 1 on Diagram 130751
Derivation : Whole of lot 42040 granted to MEANDER VALLEY COUNCIL

SCHEDULE 1

MEANDER VALLEY COUNCIL

SCHEDULE 2

357/93 Land is limited in depth to 15 metres, excludes minerals and is subject to reservations relating to drains sewers and waterways in favour of the Crown

UNREGISTERED DEALINGS AND NOTATIONS

No unregistered dealings or other notations

Department of Natural Resources and Environment Tasmania
Document Set ID: 3208529
Version: 1, Version Date: 10/09/2025
www.thelist.tas.gov.au

OWNER: The Crown

FOLIO REFERENCE:

GRANTEE: Whole of Lot 42040 Granted to the the Meander Valley Council.

PLAN OF TITLE

LOCATION

LAND DISTRICT OF WESTMORLAND
PARISH OF CALSTOCK

FIRST SURVEY PLAN No. 20/10 L.O.

COMPILED BY OFFICE OF THE SURVEYOR-GENERAL

SCALE 1:2500 LENGTHS IN METRES

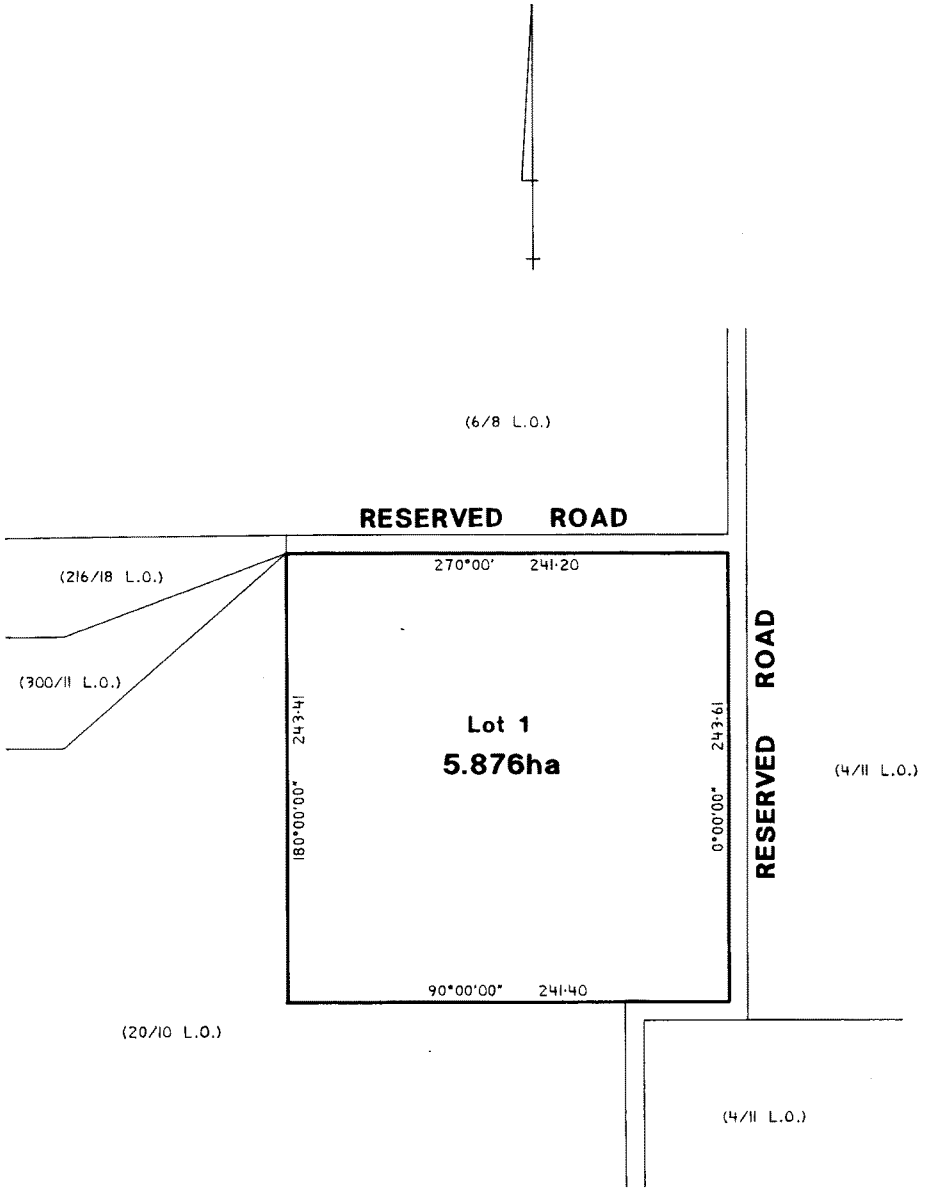
Registered Number

D130751

APPROVED - 7 MAY 1999

Recorder of Titles

MAPSHEET MUNICIPAL CODE No 121 (4639)	LAST UPI No 4501975	LAST PLAN No	ALL EXISTING SURVEY NUMBERS TO BE CROSS REFERENCED ON THIS PLAN



F052995

Department of Natural Resources and Environment Tasmania
Document Set ID: 3206529
Version: 1, Version Date: 10/09/2025
www.thelist.tas.gov.au

Meander Valley Council
Working Together

Reference:

29 September 2025

George Walker
Director 6ty°
PO Box 63
Riverside TAS 7250

Dear George

Supplementary Information – Waste Transfer Station at Deloraine Waste Depot. 54 Tip Road, Deloraine

Further to our discussion on information required for the Planning Application for the construction of a Waste Transfer Station (WTS) at the Deloraine Waste Depot (DWD), I have provided the following details regarding the proposed activities and operating hours associated with this development.

This information is provided to assist in the assessment of the planning application and to demonstrate the regulated nature of WTS operations

The site is managed by a Contractor on behalf of Council under Contract No. 249-2022/23. The Contract includes the ongoing management and operation of the DWD, as well as the establishment and operation of the WTS (referred to as Phase C of the Contract).

Operating Hours

Under this Contract phase, the public operating hours of both the DWD and the WTS—when the site is open to the public for the receipt of general waste and recyclables—will be:

- Seven days a week: 10:00 am to 5:00 pm
- Closed: Christmas Day and Good Friday

Operational activities by the Contractor, such as site management or internal waste handling, may occur outside of public opening hours, provided they comply with all applicable noise control regulations and other relevant requirements.

Staffing and Operating Conditions

The Contractor is required to always maintain adequate staffing levels during public operating hours to ensure:

- Safe operation of all facilities
- Full compliance with all relevant environmental and operational licenses

The WTS operation services provided under Contract No. 249-2022/23 and applicable to Deloraine WTS are as follows:

(i) Provision of Contractor personnel and Contractor equipment to operate, manage and maintain the operation of the resource recovery facilities, WTS and Re-Sale Shop at the Site.
(ii) Management of the Site to encourage and where necessary, assist Customers to actively separate loads into Recyclables, re-usable products and products that may have a re-sale value to improve the principal's waste diversion.
(iii) For the Mole Creek Site provide management of the WTS platform (concrete retaining wall with safety gates allowing vehicles and trailers to drop off waste directly into 2 x 25m3 skip bins). Activities include traffic control, inspection of loads, checking the capacity of the skip bins and ordering their emptying and returns when needed.
(iv) Provision of skip bins and suitable waste/recycling receptacles.
(v) Management of the bulk stockpile area.
(vi) Management of the marketing and sale of recovered materials and re-useable items.
(vii) Undertake housekeeping and quality control at the Site.
(viii) Landscaping maintenance including mowing of grass, weed control and maintenance of all trees, shrubs and garden beds within the Site.
(ix) Weed control.
(x) Litter control; and
(xi) Assisting the Principal (Council) to achieve its waste minimization strategy aims of diverting commercial and domestic waste otherwise intended for landfill ensuring this is collected, sorted, recycled and reused. Services provided under this contract must be delivered in a manner that maximises resource recovery principles including waste hierarchy, circular economy and promotes continuous improvement and in accordance with best practices guidelines.

The Contractor must ensure that the WTS is always operated and manned during opening hours of the WTS to cater for all small vehicles (cars/trailers) and light commercial vehicles in a safe and efficient manner at the Resource Recovery Centre site. The weighbridge will be operated by Contractor.

Please do not hesitate to contact John Chrispijn, Project Manager Waste Services on 6393 5300 or by email at john.chrispijn@mvc.tas.gov.au should you require any further information.

Yours sincerely

Linda Butler

Acting Director: Infrastructure Services

DELORAINE WASTE TRANSFER STATION

54 TIP RD DELORAINE TAS 7304

FOR

MEANDER VALLEY COUNCIL

WARNING: HISTORIC LANDFILL

THE DEVELOPMENT IS WITHIN A HISTORIC LANDFILL. THE CONTRACTOR SHOULD EXPECT ALL EARTHWORKS TO BE CONTAINED WITHIN MUNICIPAL WASTE, CONTAINING:

1. LEACHATE CONTAINED WITHIN WASTE MEDIUM.
2. LANDFILL GAS
3. HAZARDOUS SUBSTANCES

THE CONTRACTOR MUST UNDERTAKE THEIR OWN RISK ASSESSMENT AND PREPARE A SITE SPECIFIC MANAGEMENT PLAN FOR WORKING IN AN AROUND WASTE, WHICH CONSIDERS CONSTRUCTABILITY AND WORKER HEALTH AND SAFETY.

LOCALITY PLAN

SCALE - N.T.S

50% DESIGN - PLANNING SUBMISSION

REV	DATE	DESCRIPTION	DRN	CHK
B	26.09.25	50% DESIGN - PLANNING SUBMISSION	DM	MAW
A	24.06.25	30% DESIGN	DM	MAW

		DATE
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DESIGNED	DM	24.06.25
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APPROVED	MAW	24.06.25

DO NOTE SCALE
DIMENSIONS IN MILLIMETERS
DRAWING PRACTICES TO AS1100 - 1992
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PROJECT NAME
DELORAINE WASTE TRANSFER STATION

DRAWING TITLE
COVER PAGE

SCALE AT A3	DRAWING NUMBER	SHEET	DISCIPLINE	REVISION
N.T.S	2056 - 101	1 OF 1	CI	B

GENERAL NOTES:

1. READ THESE NOTES IN CONJUNCTION WITH OTHER ENGINEERING DRAWINGS, SPECIFICATIONS AND OTHER WRITTEN INSTRUCTIONS ISSUED FOR THIS PROJECT.
2. IN THE CASE OF DISCREPANCY BETWEEN DOCUMENTS, REFER TO SUPERINTENDENT FOR DIRECTION BEFORE PROCEEDING WITH WORKS.
3. DETAILS OF REQUIRED ON-SITE CHANGES TO BE SUBMITTED FOR APPROVAL BEFORE PROCEEDING. APPROVAL DOES NOT AUTHORISE A VARIATION TO THE CONTRACT.
4. WORKS TO BE UNDERTAKEN IN A SAFE MANNER IN ACCORDANCE WITH WORK HEALTH AND SAFETY ACT 2012 AND THE RELEVANT REGULATIONS AND CODES OF PRACTICE .
5. THE CONTRACTOR IS REMINDED OF THEIR RESPONSIBILITY FOR OCCUPATIONAL HEALTH AND SAFETY OF SITE PERSONNEL AND GENERAL PUBLIC IN ACCORDANCE WITH THE WORK HEALTH AND SAFETY ACT 2012, LEGISLATIVE REQUIREMENTS, ASSOCIATED REGULATIONS AND CODES OF PRACTICE, INDUSTRIAL AGREEMENTS AND ACCEPTED INDUSTRY PRACTICE.
6. **IPD CONSULTING HAS CONSIDERED THE HAZARDS AND ASSOCIATED RISKS WITH THE CONSTRUCTION, OPERATION, MAINTENANCE AND DEMOLITION OF THIS PROJECT AS REQUIRED BY THE WORKPLACE HEALTH AND SAFETY ACT. SEE SAFETY IN DESIGN ASSESSMENT FOR DETAILS. A NUMBER OF HAZARDS AND ASSOCIATED RISKS ARE NOT UNIQUE TO THIS PROJECT. THOSE RISKS ARE CONSIDERED GENERAL CONSTRUCTION RISKS AND ARE TO BE MANAGED BY THE CONTRACTOR THROUGH THE CONTRACTOR'S WORK HEALTH AND SAFETY PLAN.**
7. ALL LEVELS ARE TO AUSTRALIAN HEIGHT DATUM (A.H.D).
8. ALL CO-ORDINATES ARE TO **GDA94** MGA55.
9. DIMENSIONS FOR THE WORKS SHALL NOT BE OBTAINED BY SCALING THE DRAWINGS.
10. ANY SETTING OUT DIMENSIONS SHALL BE VERIFIED BY A LICENSED SURVEYOR BEFORE COMMENCEMENT OF WORKS.
11. WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED, IMPLIED OR ANY OTHER DIMENSION.
12. NOT ALL DETAILS ARE SHOWN ON DRAWINGS; CONTRACTOR TO REFER TO RELEVANT STANDARDS AND CODES AS LISTED ON THIS DRAWING SET.
13. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE REQUIREMENT OF THE CURRENT EDITIONS, INCLUDING AMENDMENTS, OF THE RELEVANT AUSTRALIAN STANDARDS AND AUSTRALIAN CODES OF PRACTICES.
14. ALL INSTALLATIONS SHALL BE IN ACCORDANCE WITH THE MANUFACTURERS REQUIREMENTS AND RECOMMENDATIONS.
15. OBTAIN NECESSARY PERMITS AND APPROVALS FROM RELEVANT AUTHORITIES PRIOR TO THE COMMENCEMENT OF WORKS. PROVIDE NOTICE TO RELEVANT AUTHORITIES PRIOR TO COMMENCING WORKS ON SITE.
16. THE CONTRACTOR IS RESPONSIBLE FOR DISPOSAL OF ANY SURPLUS MATERIAL ON SITE IN ACCORDANCE WITH LOCAL AUTHORITY REQUIREMENTS.
17. THE CONTRACTOR IS TO MAKE GOOD ANY DAMAGES TO EXISTING ELEMENTS AT THE COMPLETION OF THE WORKS.
18. BUILD, FABRICATE, CONSTRUCT AND PROCURE ONLY FROM DRAWINGS 'FOR CONSTRUCTION'.

AS CONSTRUCTED DRAWINGS:

1. THE CONTRACTOR WILL BE RESPONSIBLE FOR PRODUCING "AS CONSTRUCTED" DRAWINGS TO THE STANDARD REQUIRED BY MEANDER VALLEY COUNCIL. THE DRAWINGS SHALL BE CERTIFIED AS BEING CORRECT BY EITHER A CIVIL ENGINEER OR SURVEYOR.

EARTHWORKS:

1. THE CONTRACTOR SHALL ERECT AND MAINTAIN ALL SHORING, PLANKING AND STRUTTING, DEWATERING DEVICES, BARRICADES, SIGNS, LIGHTS ETC. NECESSARY TO KEEP WORKS IN A SAFE AND STABLE CONDITION AND FOR THE PROTECTION OF THE PUBLIC.
2. ALL AREAS SHOWN ON THE DRAWINGS TO BE CUT OR FILLED ARE TO BE STRIPPED OF TOPSOIL TO A DEPTH OF 200 mm. UPON COMPLETION OF THE BULK EARTHWORKS, THE TOPSOIL IS TO BE SPREAD TO A DEPTH OF 100 mm OVER THE AREA AND GRADED TO FINISHED LEVELS SHOWN ON THE DRAWINGS WITH A MINIMUM SLOPE OF 1 IN 200 FOR DRAINAGE. ANY LOCALISED PONDING SHALL BE RECTIFIED AS DIRECTED BY THE DESIGN ENGINEER.
3. ALL FILLING IS TO BE COMPACTED IN 150 mm EQUAL LAYERS TO MINIMUM 95% STANDARD DRY DENSITY (SDD) WITH APPROVED MATERIAL.
4. THE CONTRACTOR IS RESPONSIBLE FOR DISPOSAL OF SURPLUS TOP SOIL, CUT MATERIAL AND UNSUITABLE MATERIAL OFF SITE IN ACCORDANCE WITH LOCAL AUTHORITY REQUIREMENTS.

ROADS & FOOTPATHS:

1. GENERAL
   - 1.1. ALL ROADS TO BE IN ACCORDANCE WITH THE TASMANIAN SUBDIVISION GUIDELINES 2013, TASMANIAN STANDARD DRAWINGS VERSION 3, TASMANIAN MUNICIPAL STANDARD SPECIFICATIONS 2020 AND DEPARTMENT OF STATE GROWTH SPECIFICATIONS AND GUIDELINES.
   - 1.2. ANY DEPARTURES FROM THESE STANDARDS, SPECIFICATIONS AND GUIDELINES REQUIRES THE PRIOR WRITTEN APPROVAL OF THE SUPERINTENDENT AND THE COUNCILS ENGINEER.
2. BATTERS
   - 2.1. ALL BATTERS SHALL BE 1 IN 4 UNLESS NOTED OTHERWISE ON THESE DESIGN DRAWINGS.
3. KERB & CHANNEL
   - 3.1. ALL KERB AND CHANNEL, KERB ONLY, EDGE STRIPS, AND CONCRETE INVERTS TO BE 25 MPa CONCRETE WITH MINIMUM CEMENT CONTENT TO BE 280 kg/m^3 IN ACCORDANCE WITH TSD-R11-v3.
   - 3.2. ALL KERB AND CHANNEL CONSTRUCTION TO BE IN ACCORDANCE WITH PART 7 OF THE TASMANIAN MUNICIPAL STANDARD SPECIFICATIONS 2020.
4. PAVEMENT CONSTRUCTION
   - 4.1. PAVEMENT CONSTRUCTION TO BE IN ACCORDANCE WITH THESE DESIGN DRAWINGS, TASMANIAN SUBDIVISION GUIDELINES, STANDARD DRAWINGS VERSION 3 AND STANDARD SPECIFICATION 2020.
5. SEALING & ASPHALT
   - 5.1. ALL SEALING IS TO BE IN ACCORDANCE WITH THE DEPARTMENT OF STATE GROWTH ROAD SPECIFICATION R51 JUNE 2011.
   - 5.2. ALL PLACEMENT OF ASPHALT TO BE IN ACCORDANCE WITH THE DEPARTMENT OF STATE GROWTH ROAD SPECIFICATION R55 JUNE 2011.
6. FILLING & BACKFILLING
   - 6.1. FOR ALL FILLING AND BACKFILLING REQUIREMENTS, REFER EARTHWORKS NOTES.
7. DRAINAGE
   - 7.1. 100 mm DIAMETER AGRICULTURAL DRAINS TO BE MINIMUM CLASS 400 SN8 CONSTRUCTED BEHIND OR UNDER KERB AND CHANNEL, AS DIRECTED BY THE DESIGN ENGINEER OR AS SHOWN ON THE DESIGN DRAWINGS.
   - 7.2. ALL AGRICULTURAL DRAINS TO BE CONNECTED TO THE UNDERGROUND STORMWATER NETWORK.
8. INSPECTIONS & TESTING
   - 8.1. THE CONTRACTOR IS RESPONSIBLE FOR ORGANISING INSPECTIONS AND TESTING AS NOTED WITHIN THESE DESIGN DRAWINGS WITH THE SUPERINTENDENT AND COUNCILS ENGINEER WITH A MINIMUM 48 HOURS NOTICE.

SIGNAGE:

1. REFER TO THE CURRENT VERSION OF MUTCD (AS 1742) & AUSTROADS FOR SIGNAGE DETAILS.

STORMWATER:

1. GENERAL
   - 1.1. ALL STORMWATER WORKS TO BE IN ACCORDANCE WITH THE TASMANIAN SUBDIVISION GUIDELINES 2013, TASMANIAN STANDARD DRAWINGS VERSION 3 (LGAT), TASMANIAN STANDARD SPECIFICATIONS 2020 AND DEPARTMENT OF STATE GROWTH SPECIFICATIONS AND GUIDELINES.
   - 1.2. ANY DEPARTURES FROM THESE STANDARDS, SPECIFICATIONS AND GUIDELINES REQUIRES THE PRIOR WRITTEN APPROVAL OF THE SUPERINTENDENT AND THE COUNCILS ENGINEER.
2. TRENCHING AND BACKFILL
   - 2.1. ALL TRENCHES ARE TO BE EXCAVATED AND BACKFILLED IN ACCORDANCE WITH THESE DESIGN DRAWINGS AND THE TASMANIAN MUNICIPAL STANDARD DRAWINGS AND SPECIFICATIONS.
3. MANHOLES
   - 3.1. MANHOLES ARE TO BE 1050 I.D. PRECAST CONCRETE INSTALLED TO TASMANIAN STANDARD DRAWINGS (LGAT), GUIDELINES AND SPECIFICATIONS UNLESS NOTED OTHERWISE.
   - 3.2. ALL MANHOLES IN TRAFFICABLE AREAS ARE TO BE FITTED WITH HEAVY DUTY 'CLASS D' GATIC COVERS AND SURROUNDS.
   - 3.3. ALL MANHOLES IN NON-TRAFFICABLE AREAS ARE TO BE FITTED WITH MEDIUM DUTY 'CLASS B' GATIC COVERS AND SURROUNDS.
   - 3.4. BENCHING TO BE IN ACCORDANCE WITH TSD-SW03-v3.
4. INSPECTIONS & TESTING
   - 4.1. ALL STORMWATER WORKS SHALL BE VISUALLY INSPECTED BY THE COUNCILS ENGINEER PRIOR TO BACKFILLING INCLUDING BUT NOT LIMITED TO THE ITEMS OUTLINED IN THE TABLE BELOW.
   - 4.2. THE CONTRACTOR SHALL CCTV ALL PIPES INCLUDING JETTING AND FLUSHING OF MAINS. THE CCTV FOOTAGE AND REPORT SHALL BE SUBMITTED TO THE COUNCILS ENGINEER FOR APPROVAL.
   - 4.3. A MINIMUM 48 HOURS NOTICE MUST BE PROVIDED TO THE SUPERINTENDENT AND COUNCIL PRIOR TO INSPECTIONS & TESTING.
   - 4.4. ANY DISCREPANCIES FOUND MUST BE RECTIFIED BY THE CONTRACTOR AT THEIR OWN COST.

INSPECTIONS & TESTING SCHEDULE FOR COUNCIL INFRASTRUCTURE

NO.	TITLE	DESCRIPTION	CONTRACTOR	CERT. ENG.	COUNCIL	DATE
G1	PRE-START MEETING	A MEETING WITH COUNCILS REPRESENTATIVE, CONTRACTOR & CERTIFYING ENGINEER PRIOR TO COMMENCEMENT OF CONSTRUCTION.				
G2	PRACTICAL COMPLETION	A FINAL SITE INSPECTION WITH COUNCILS REPRESENTATIVE, CONTRACTOR & CERTIFYING ENGINEER.				
R1	SUB-GRADE PREPARATION	A VISUAL INSPECTION OF THE SUB-GRADE AND CBR TESTING IN VARIOUS LOCATIONS TO CONFIRM DESIGN CBR VALUE.				
R2	SUB-BASE PREPARATION	A VISUAL INSPECTION OF SUB-BASE PREPARATION INCLUDING KERB & CHANNEL.				
R3	BASE COURSE PREPARATION	A VISUAL INSPECTION OF BASE-COURSE PREPARATION.				
R4	FINAL TRIM PRIOR TO SEALING	A VISUAL PRE-SEAL INSPECTION.				
SW1	PIPEWORKS	A VISUAL INSPECTION TO CONFIRM INSTALLED PIPE AS REQUIRED.				
SW2	PIPE BEDDING	A VISUAL INSPECTION (WITH MEASUREMENT WHERE PRACTICAL) OF BEDDING MATERIAL AND DEPTH.				
SW3	TRENCH BACKFILL	A VISUAL INSPECTION OF TRENCHING BACKFILL IN TRAFFICABLE AND NON-TRAFFICABLE LOCATIONS AS APPLICABLE.				
SW5	MANHOLES & BENCHING	A VISUAL INSPECTION OF MANHOLES & BENCHING TO ENSURE COMPLIANCE.				
SW6	CCTV	CCTV AS DESCRIBED IN STORMWATER NOTE 5.2.				

50% DESIGN - PLANNING SUBMISSION

REV	DATE	DESCRIPTION	DRN	CHK
B	26.09.25	50% DESIGN - PLANNING SUBMISSION	DM	MAW
A	24.06.25	30% DESIGN	DM	MAW

		DATE
DRAWN	DM	24.06.25
CHECKED	TP	24.06.25
DESIGNED	DM	24.06.25
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APPROVED	MAW	24.06.25

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DRAWING PRACTICES TO AS1100 - 1992
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EMAIL. admin@ipdconsulting.com.au

PROJECT NAME
DELORAINE WASTE TRANSFER STATION

DRAWING TITLE
GENERAL NOTES

SCALE AT A3	DRAWING NUMBER	SHEET	DISCIPLINE	REVISION
N.T.S	2056 - 105	1 OF 2	CI	B

SITE OVERVIEW

SCALE - 1:1500

WARNING
BEWARE OF UNDERGROUND SERVICES
THE LOCATION OF UNDERGROUND SERVICES ARE APPROXIMATE ONLY AND THE EXACT POSITION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL SERVICES ARE SHOWN.

DIAL BEFORE YOU DIG www.1100.com.au
The Essential First Step.

0 15 30 45 60 75 METRES
SCALE 1:1,500

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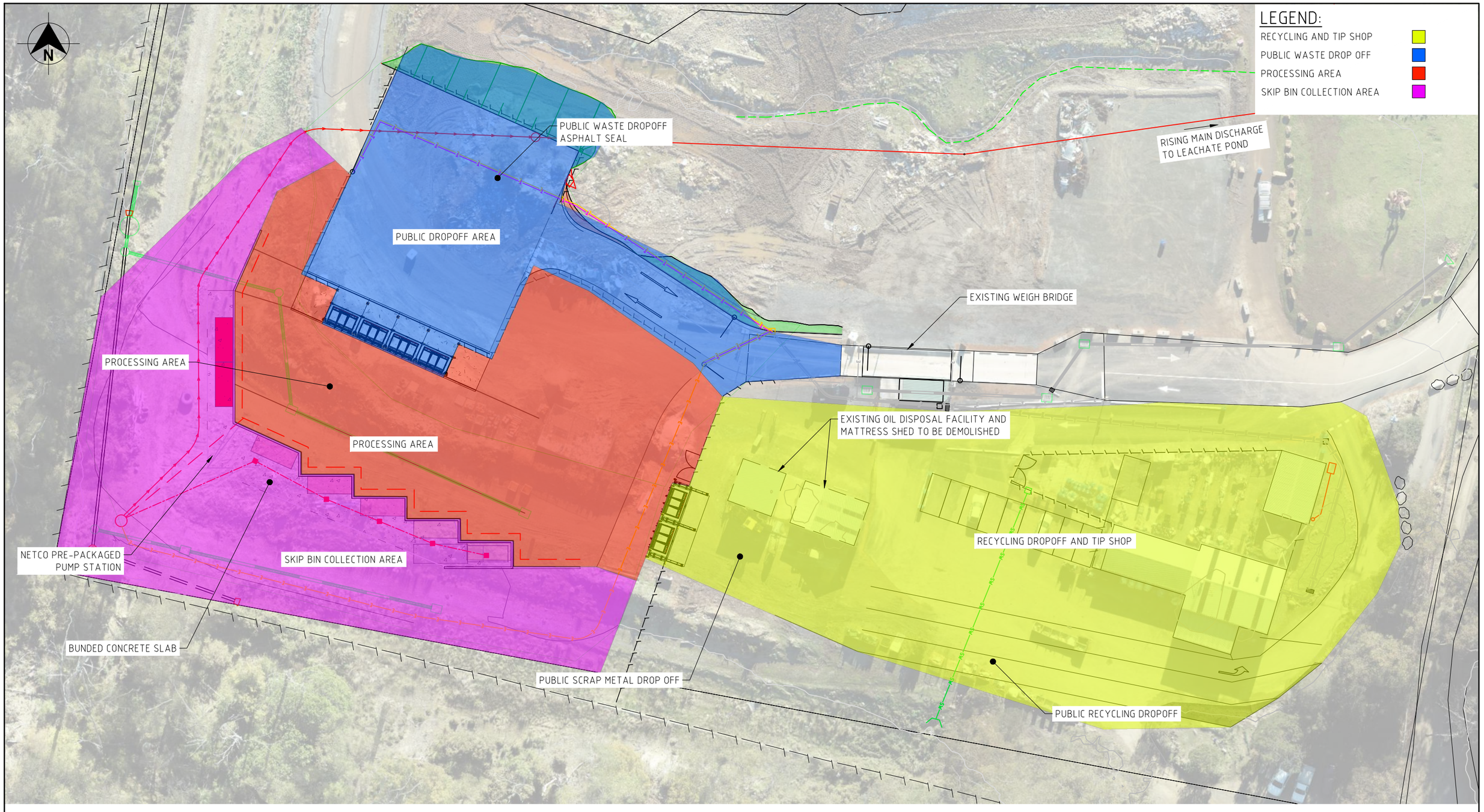
PROJECT NAME
DELORAINE WASTE TRANSFER STATION

DRAWING TITLE
SITE OVERVIEW PLAN

SCALE AT A3	DRAWING NUMBER	SHEET	DISCIPLINE	REVISION
A.S.	2056 - 110	2 OF 2	CI	B



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The Essential First Step.

WASTE TRANSFER STATION OVERVIEW

SCALE - 1:500

0 5 10 15 20 25 METRES
SCALE 1:500

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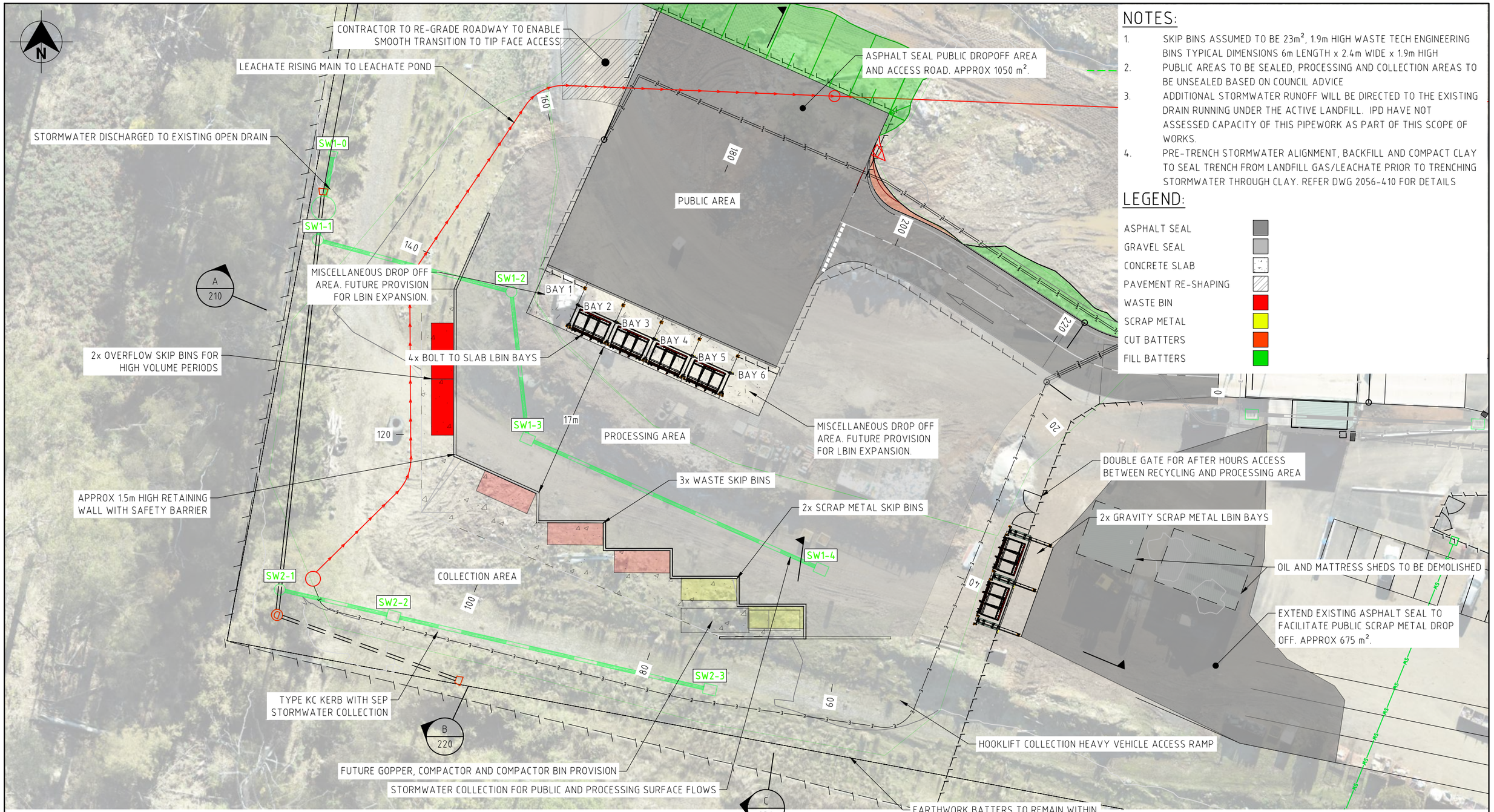
DRAWING TITLE
DEVELOPMENT OVERVIEW PLAN

SCALE AT A3	DRAWING NUMBER	SHEET	DISCIPLINE	REVISION
A.S.	2056 - 111	1 OF 1	CI	B



NOTES:

1. SKIP BINS ASSUMED TO BE 23m², 1.9m HIGH WASTE TECH ENGINEERING BINS TYPICAL DIMENSIONS 6m LENGTH x 2.4m WIDE x 1.9m HIGH
2. PUBLIC AREAS TO BE SEALED, PROCESSING AND COLLECTION AREAS TO BE UNSEALED BASED ON COUNCIL ADVICE
3. ADDITIONAL STORMWATER RUNOFF WILL BE DIRECTED TO THE EXISTING DRAIN RUNNING UNDER THE ACTIVE LANDFILL. IPD HAVE NOT ASSESSED CAPACITY OF THIS PIPEWORK AS PART OF THIS SCOPE OF WORKS.
4. PRE-TRENCH STORMWATER ALIGNMENT, BACKFILL AND COMPACT CLAY TO SEAL TRENCH FROM LANDFILL GAS/LEACHATE PRIOR TO TRENCHING STORMWATER THROUGH CLAY. REFER DWG 2056-410 FOR DETAILS

LEGEND:

- ASPHALT SEAL
- GRAVEL SEAL
- CONCRETE SLAB
- PAVEMENT RE-SHAPING
- WASTE BIN
- SCRAP METAL
- CUT BATTERS
- FILL BATTERS

WARNING
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0 4.0 8.0 12 16 20 METRES
SCALE 1:400

PLAN VIEW
SCALE - 1:400

50% DESIGN - PLANNING SUBMISSION

REV	DATE	DESCRIPTION	DRN	CHK
B	26.09.25	50% DESIGN - PLANNING SUBMISSION	DM	MAW
A	24.06.25	30% DESIGN	DM	MAW

		DATE
DRAWN	DM	24.06.25
CHECKED	TP	24.06.25
DESIGNED	DM	24.06.25
DESIGN APP.	TP	24.06.25
APPROVED	MAW	24.06.25

DO NOT SCALE
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EMAIL. admin@ipdconsulting.com.au

PROJECT NAME
DELORAINE WASTE TRANSFER STATION

DRAWING TITLE
PLAN VIEW

SCALE AT A3	DRAWING NUMBER	SHEET	DISCIPLINE	REVISION
A.S.	2056 - 120	1 OF 1	CI	B

NOTES:

1. STAGING OF EARTHWORKS TO ALLOW PUBLIC ACCESS TO EXISTING GREEN WASTE AND LANDFILL FACE DROP OFF AREA.
2. TEMPORARY GRAVEL ACCESS TRACK TO BE BE PROVIDED AS SHOWN WHILE BULK EARTHWORKS ARE COMPLETED.

LEGEND:

STAGE A EARTHWORKS

STAGE B EARTHWORKS

STAGE B EARTHWORKS

STAGE A EARTHWORKS - PUBLIC ACCESS TO LANDFILL

STAGE A EARTHWORKS

STAGE B EARTHWORKS - PUBLIC ACCESS TO LANDFILL

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EARTHWORKS STAGING PLAN

SCALE - 1:400

0 4.0 8.0 12 16 20 METRES
SCALE 1:400

50% DESIGN - PLANNING SUBMISSION

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		DATE
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PROJECT NAME
DELORAINE WASTE TRANSFER STATION

DRAWING TITLE
STAGING PLAN

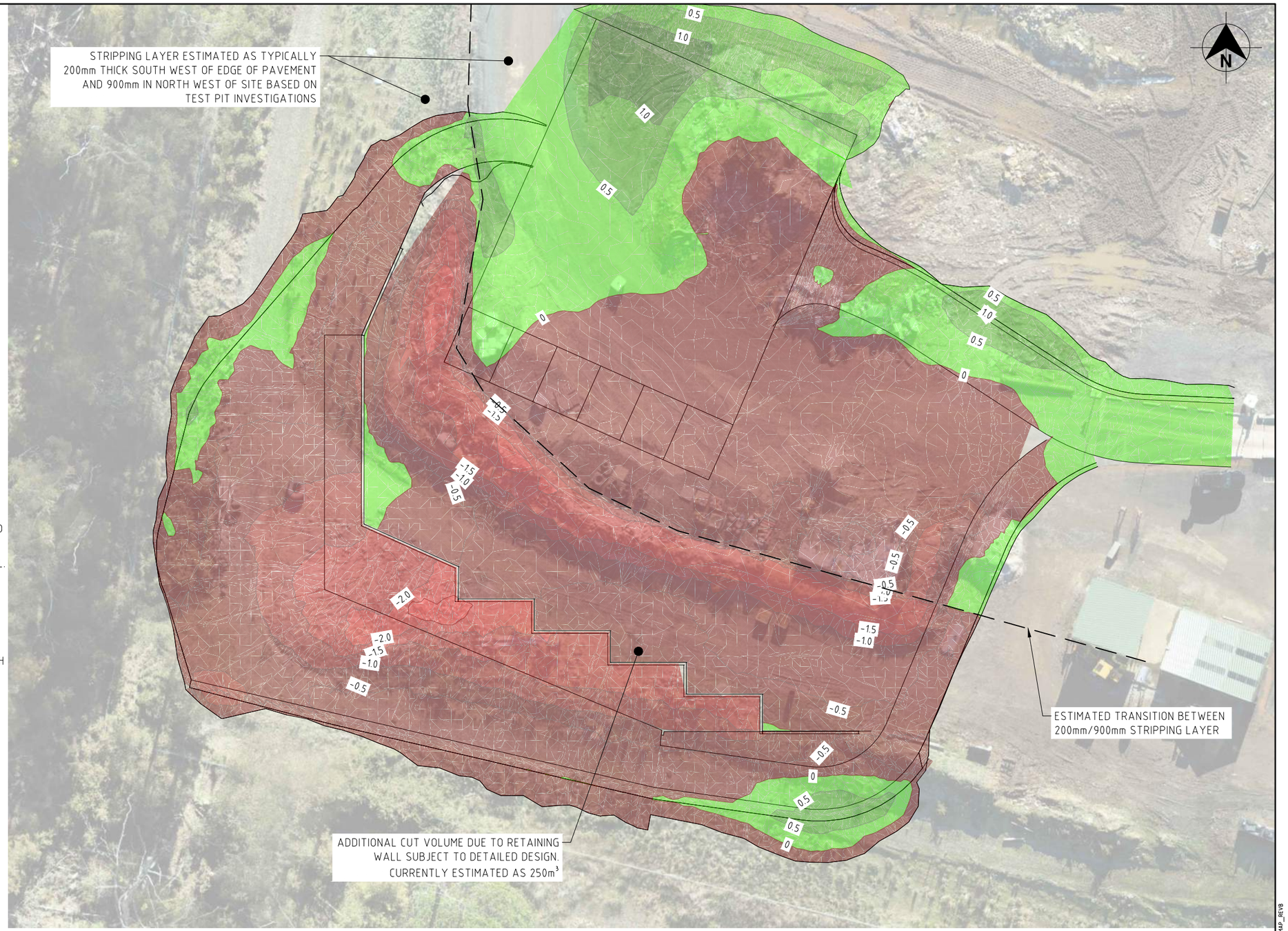
SCALE AT A3	DRAWING NUMBER	SHEET	DISCIPLINE	REVISION
A.S.	2056 - 130	1 OF 1	CI	B

Surface Analysis: Elevation Ranges

Number	Color	Minimum Elevation (m)	Maximum Elevation (m)
1		-3.000	-2.500
2		-2.500	-2.000
3		-2.000	-1.500
4		-1.500	-1.000
5		-1.000	-0.500
6		-0.500	0.000
7		0.000	0.500
8		0.500	1.000
9		1.000	1.500

NOTES:

1. CUT AND FILL ANALYSIS IS BETWEEN 2025 SAS SURVEY (STRIPPING ALLOWANCE VARIES 200-900mm BASED ON LOCATION) AND BASE OF CAPPING AND SHAPING LAYER (FSL -600mm). REFER DWG 2056-210 AND 2056-220 FOR DETAILS.
2. APPROX. CUT AND FILL AT CURRENT DESIGN STAGE: 2400m³, 500m³ FILL.
3. CUT VOLUME IS EXPECTED TO BE ENTIRELY WASTE, AND AS SUCH REQUIRES DISPOSAL INTO ON-SITE LANDFILL. TREATMENT OF WASTE AND RELOCATION IN ACCORDANCE WITH CEMP
4. CONTRACTOR TO IMPLEMENT SITE SPECIFIC MANAGEMENT PLAN FOR WORKING IN AND AROUND WASTE.
5. 3D CAD MODEL CAN BE PROVIDED TO THE CONTRACTOR TO ASSIST WITH FORMATION OF BULK EARTHWORKS



CUT AND FILL HEATMAP

SCALE - 1:400

WARNING

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0 4.0 8.0 12 16 20 METRES
SCALE 1:400

50% DESIGN - PLANNING SUBMISSION

REV	DATE	DESCRIPTION	DRN	CHK
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		DATE
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CHECKED	TP	24.06.25
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DO NOT SCALE
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PROJECT NAME
DELORAINE WASTE TRANSFER STATION

DRAWING TITLE
CUT AND FILL HEATMAP

SCALE AT A3	DRAWING NUMBER	SHEET	DISCIPLINE	REVISION
A.S.	2056 - 200	1 OF 1	CI	B

PLOTTED: 26.09.2025

I:\PROJECTS\2056 - MVC - DELORAINE WTS\03 - DESIGN\32 CAD\DRG\LBM - 80%\2056 - HEATMAP_REVB

LEGEND:

300mm THICK PAVEMENT

300mm THICK SHAPING LAYER

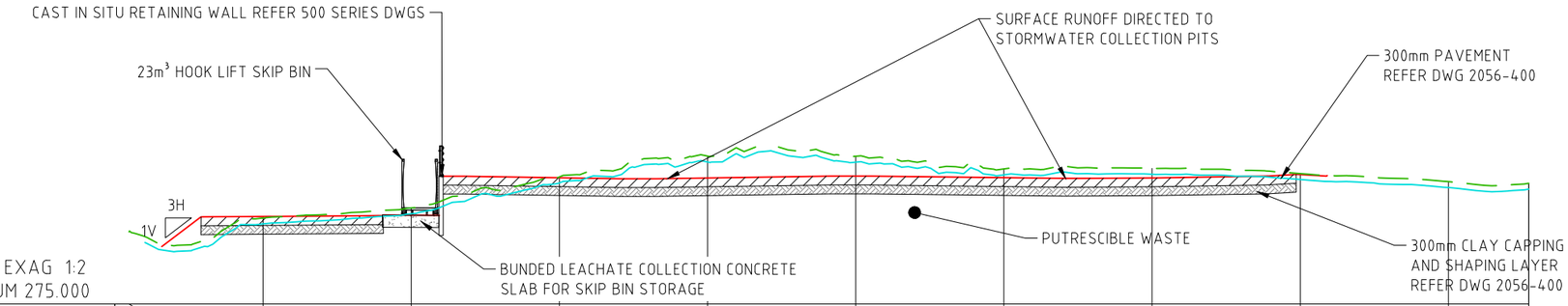
ESTIMATED PRUTRESCIBLE WASTE LAYER

FINISHED SURFACE LEVELS

EXISTING LEVELS

NOTES:

TOP OF WASTE LEVEL ESTIMATED FROM TEST PITS COMPLETED ON 26TH AUGST 2025. DEPTH OF COVER/TOPSOIL GENERALLY TAKEN AS 900mm FOR UPPER BENCH/PUBLIC AREA, 200mm ELSEWHERE. CUT AND FILL ESTIMATES AS PER DWG 2056-200



VERT EXAG 1:2
DATUM 275.000

DESIGN LEVELS	277.436	277.957	277.999	279.264	279.258	279.319	279.267	279.259	279.372	279.135	279.080
EXISTING LEVELS	277.436	277.905	278.247	279.290	279.996	279.989	279.564	279.581	279.406	279.135	279.080
DEPTH	0.000	0.052	-0.248	-0.026	-0.738	-0.670	-0.297	-0.322	-0.034	0.000	0.000
CHAINAGE	0.00	0.96	10.00	20.00	30.00	40.00	50.00	60.00	70.00	80.00	90.00	95.42

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0 2 4 6 8 10 METRES
SCALE 1:200

0 4.0 8.0 12 16 20 METRES
SCALE 1:400

SITE SECTION A

HORIZONTAL SCALE - 1:400
HORIZONTAL SCALE - 1:200

50% DESIGN - PLANNING SUBMISSION

REV	DATE	DESCRIPTION	DRN	CHK
B	26.09.25	50% DESIGN - PLANNING SUBMISSION	DM	MAW
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		DATE
DRAWN	DM	24.06.25
CHECKED	TP	24.06.25
DESIGNED	DM	24.06.25
DESIGN APP.	TP	24.06.25
APPROVED	MAW	24.06.25

DO NOTE SCALE
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PROJECT NAME
DELORAINE WASTE TRANSFER STATION

DRAWING TITLE
SITE SECTION A

SCALE AT A3	DRAWING NUMBER	SHEET	DISCIPLINE	REVISION
A.S.	2056 - 210	1 OF 3	CI	B

LEGEND:

300mm THICK PAVEMENT

300mm THICK SHAPING LAYER

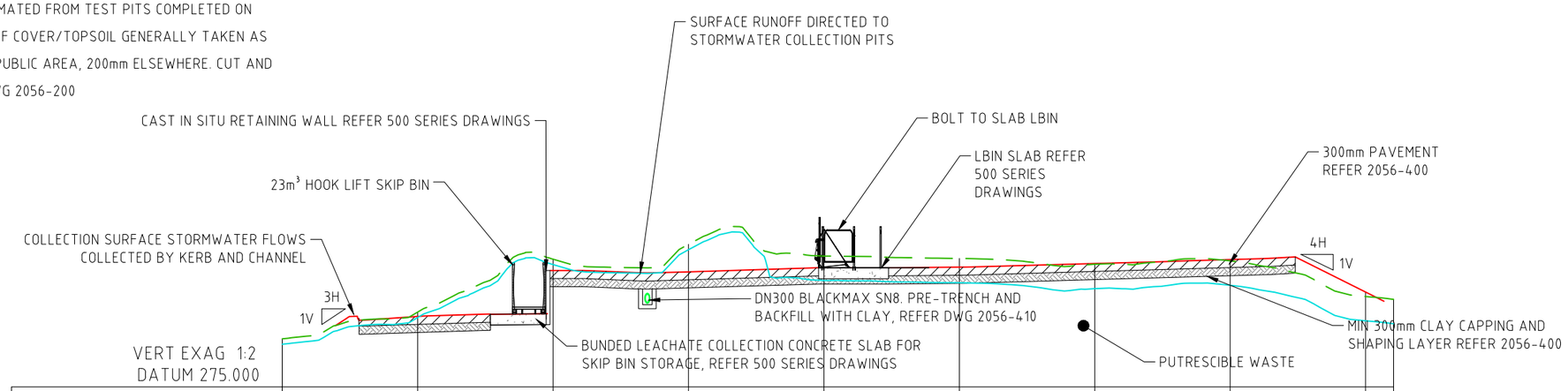
ESTIMATED PRUTRESCIBLE WASTE LAYER

FINISHED SURFACE LEVELS

EXISTING LEVELS

NOTES:

TOP OF WASTE LEVEL ESTIMATED FROM TEST PITS COMPLETED ON 26TH AUGST 2025. DEPTH OF COVER/TOPSOIL GENERALLY TAKEN AS 900mm FOR UPPER BENCH/PUBLIC AREA, 200mm ELSEWHERE. CUT AND FILL ESTIMATES AS PER DWG 2056-200



DESIGN LEVELS	276.776	277.602	279.300	279.248	279.400	279.422	279.555	279.701	278.503	278.219
EXISTING LEVELS	276.776	277.763	279.717	280.265	279.831	279.745	279.529	279.654	278.339	278.232
DEPTH	0.000	-0.161	-0.417	-1.017	-0.431	-0.324	0.025	0.048	0.164	-0.013
CHAINAGE	0.00	10.00	20.00	30.00	40.00	50.00	60.00	70.00	80.00	82.07

WARNING
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0 2 4 6 8 10 METRES
SCALE 1:200

0 4.0 8.0 12 16 20 METRES
SCALE 1:400

SITE SECTION B

HORIZONTAL SCALE - 1:400
HORIZONTAL SCALE - 1:200

50% DESIGN - PLANNING SUBMISSION

REV	DATE	DESCRIPTION	DRN	CHK
B	26.09.25	50% DESIGN - PLANNING SUBMISSION	DM	MAW
A	24.06.25	30% DESIGN	DM	MAW

		DATE
DRAWN	DM	24.06.25
CHECKED	TP	24.06.25
DESIGNED	DM	24.06.25
DESIGN APP.	TP	24.06.25
APPROVED	MAW	24.06.25

DO NOTE SCALE
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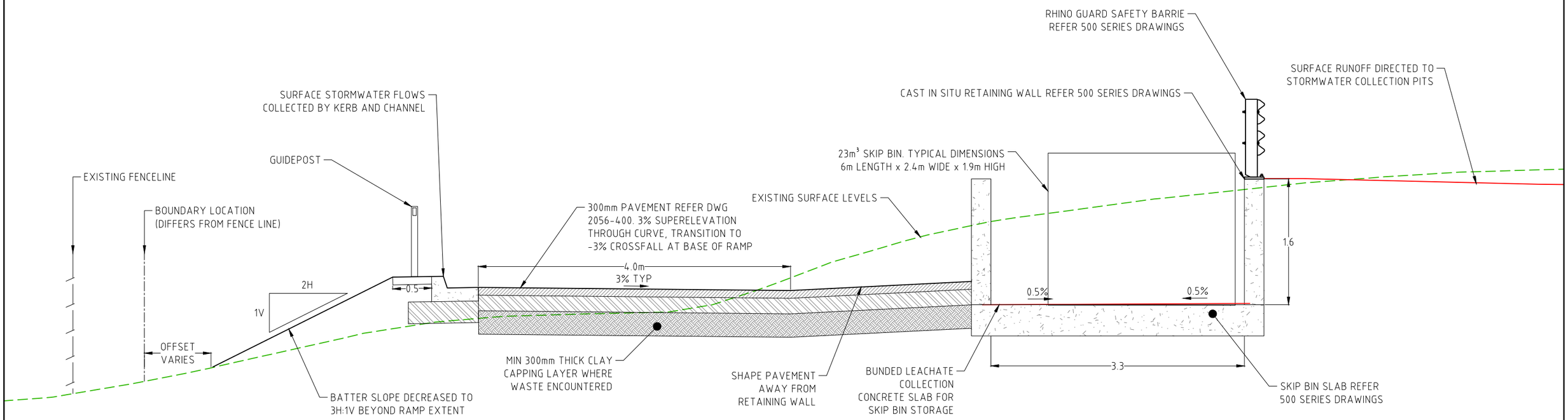
PROJECT NAME
DELORAINE WASTE TRANSFER STATION

DRAWING TITLE
SITE SECTION B

SCALE AT A3	DRAWING NUMBER	SHEET	DISCIPLINE	REVISION
A.S.	2056 - 220	2 OF 3	CI	B



RAMP TYPICAL SECTION

SCALE - 1:50

WARNING
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0 0.5 1 1.5 2 2.5 METRES
SCALE 1:50

50% DESIGN - PLANNING SUBMISSION

REV	DATE	DESCRIPTION	DRN	CHK
B	26.09.25	50% DESIGN - PLANNING SUBMISSION	DM	MAW
A	24.06.25	30% DESIGN	DM	MAW

		DATE
DRAWN	DM	24.06.25
CHECKED	TP	24.06.25
DESIGNED	DM	24.06.25
DESIGN APP.	TP	24.06.25
APPROVED	MAW	24.06.25

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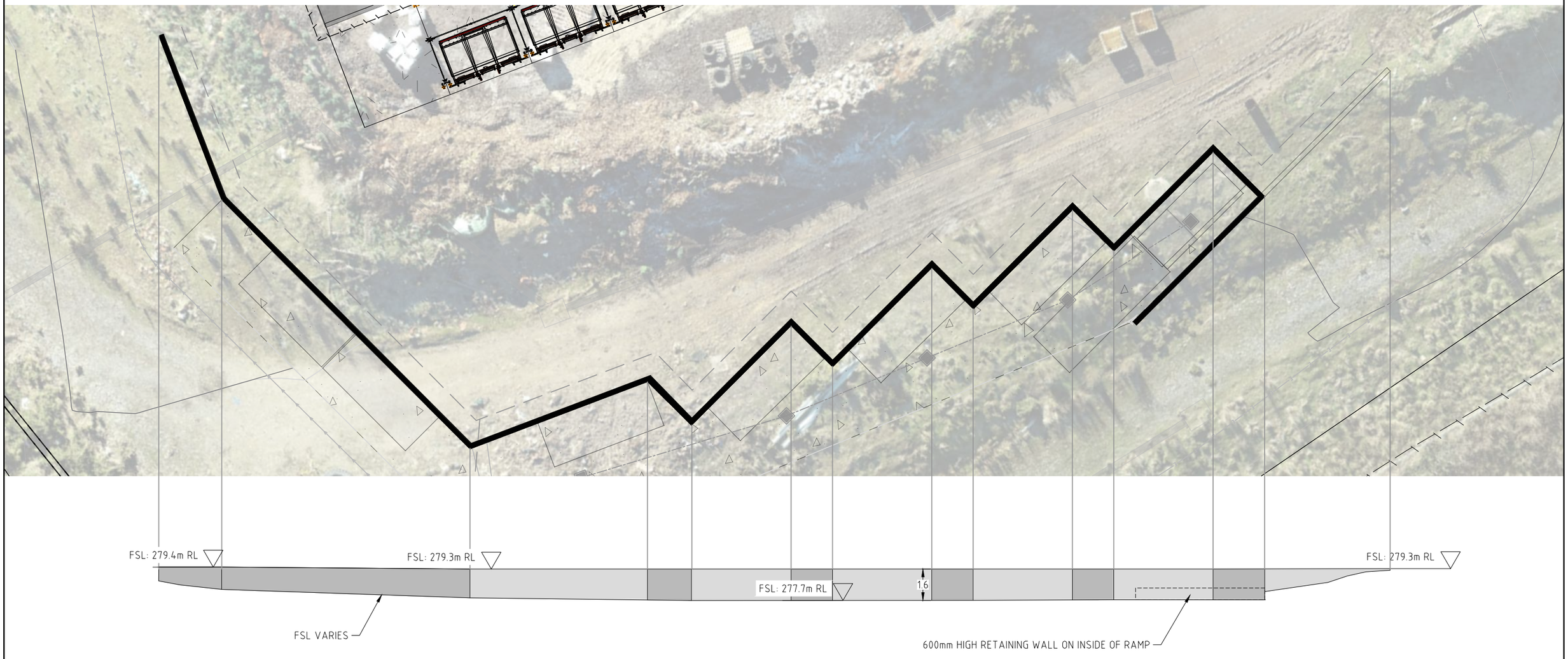
PROJECT NAME
DELORAINE WASTE TRANSFER STATION

DRAWING TITLE
SECTION C - TYPICAL RAMP SECTION

SCALE AT A3	DRAWING NUMBER	SHEET	DISCIPLINE	REVISION
A.S.	2056 - 230	3 OF 3	CI	B

NOTES:

1. THIS IS A GENERAL ELEVATION ONLY, FOR ALL STRUCTURAL AND CONSTRUCTION DETAILS, REFER 500 SERIES DRAWINGS



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RETAINING WALL SOUTH WEST ELEVATION

SCALE: 1:200

0 2 4 6 8 10 METRES
SCALE 1:200

50% DESIGN - PLANNING SUBMISSION

REV	DATE	DESCRIPTION	DRN	CHK
B	26.09.25	50% DESIGN - PLANNING SUBMISSION	DM	MAW
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		DATE
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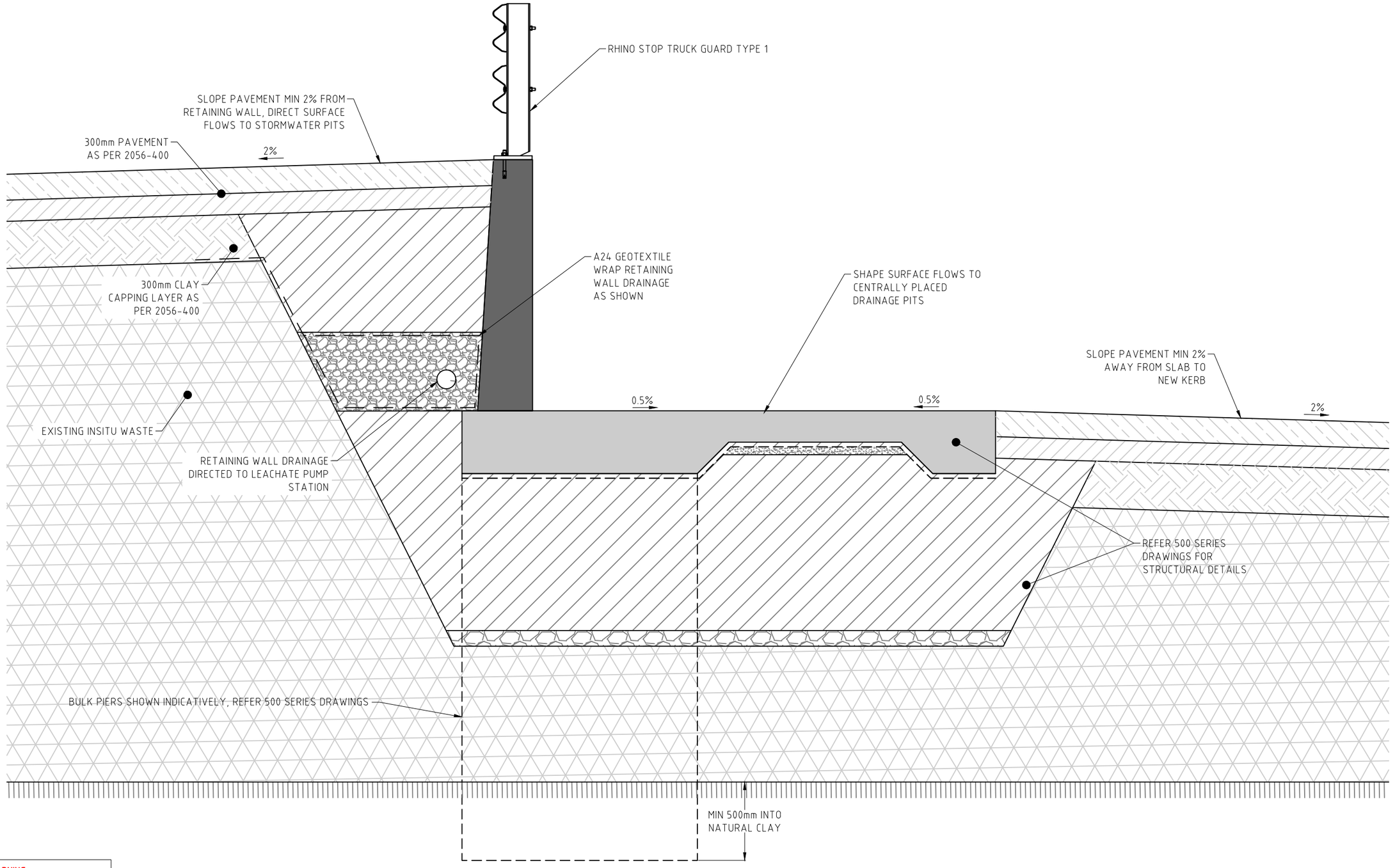
PROJECT NAME
DELORAINE WASTE TRANSFER STATION

DRAWING TITLE
RETAINING WALL ELEVATION

SCALE AT A3	DRAWING NUMBER	SHEET	DISCIPLINE	REVISION
A.S.	2056 - 240	1 OF 2	CI	B



RETAINING TYPICAL SECTION

SCALE 1:25

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0 0.25 0.5 0.75 1 1.25 METRES
SCALE 1:25

50% DESIGN - PLANNING SUBMISSION

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PROJECT NAME
DELORAINE WASTE TRANSFER STATION

DRAWING TITLE
RETAINING WALL TYPICAL SECTION

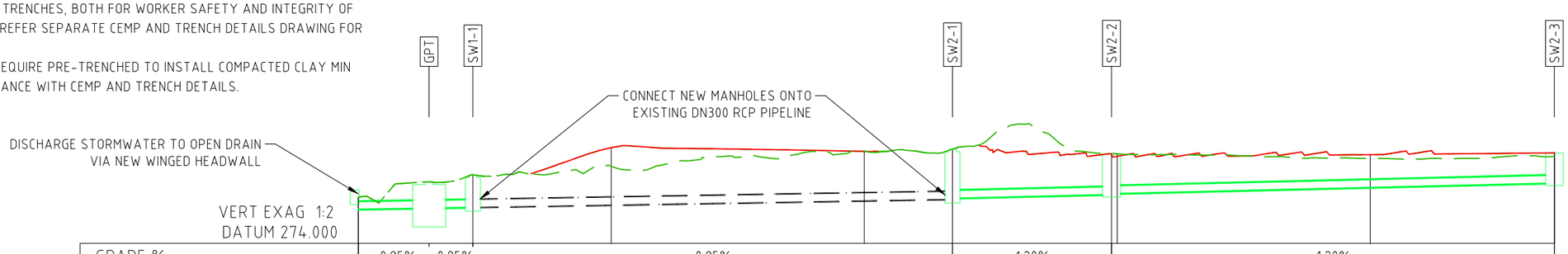
SCALE AT A3	DRAWING NUMBER	SHEET	DISCIPLINE	REVISION
A.S.	2056 - 250	2 OF 2	CI	B

PIT SCHEDULE FOR: Collection SW					
PIT NAME	PIT TYPE	SETOUT COORDS	PIT FIN RL	PIT DEPTH [m]	COVER TYPE
EX HW1	EXISTING DN300 WINGED HEADWALL	E: 472660.714 N: 5399652.299	276.360	???	???
EX HW2	EXISTING DN300 WINGED HEADWALL	E: 472646.343 N: 5399704.575	275.658	???	???
EX MH	EXISTING DN1050 MANHOE	E: 472641.409 N: 5399659.243	277.478	1.728	STANDARD
GPT	GROSS POLLUTANT TRAP	E: 472646.412 N: 5399703.069	276.431	1.629	STANDARD
SW1-0	DN300 WINGED HEADWALL	E: 472647.387 N: 5399708.581	276.131	???	???
SW1-1	DN1050 MANHOLE CLASS D LID	E: 472645.808 N: 5399699.660	276.710	1.283	STANDARD

PIT SCHEDULE FOR: Collection SW					
PIT NAME	PIT TYPE	SETOUT COORDS	PIT FIN RL	PIT DEPTH [m]	COVER TYPE
SW1-2	DN1050 MANHOLE CLASS D LID	E: 472666.662 N: 5399694.055	279.400	2.140	STANDARD
SW1-3	1200 x 900 mm GVP	E: 472668.412 N: 5399678.232	279.232	1.146	STANDARD
SW1-4	1200 x 900 mm GVP	E: 472700.033 N: 5399664.175	279.200	0.931	STANDARD
SW2-1	DN1050 MANHOLE CLASS D LID	E: 472641.706 N: 5399661.971	277.724	1.977	STANDARD
SW2-2	TYPE 1 SEP	E: 472653.951 N: 5399659.123	277.519	1.583	STANDARD
SW2-3	TYPE 1 SEP	E: 472688.054 N: 5399651.202	277.579	1.191	STANDARD

NOTES:

1. AS STORMWATER PIPEWORK IS REQUIRED TO BE CONSTRUCTED THROUGH HISTORIC LANDFILL, THE CONTRACTOR MUST TAKE ACTIONS TO LIMIT LEACHATE AND LANDFILL GAS INFILTRATION INTO TRENCHES, BOTH FOR WORKER SAFETY AND INTEGRITY OF NEW INFRASTRUCTURE. REFER SEPARATE CEMP AND TRENCH DETAILS DRAWING FOR DETAILS.
2. STORMWATER WORKS REQUIRE PRE-TRENCHED TO INSTALL COMPACTED CLAY MIN 300mm THICK IN ACCORDANCE WITH CEMP AND TRENCH DETAILS.



GRADE %		-0.85%	-0.85%	0.85%		1.20%	1.20%
PIPE DETAILS	DN300 BLACKMAX SN8	DN300 BLACKMAX SN8	DN300 BLACKMAX SN8	EX DN300 RCP TO REMAIN		DN300 BLACKMAX SN8	DN300 BLACKMAX SN8
FINISHED SURAFCE LEVEL	276.13	276.43	276.71	277.72		277.52	277.58
INVERT LEVEL	275.35	275.40	275.40 / 275.43	275.43	275.75	275.78	275.94 / 275.97	276.39
COVER	0.15	0.70	0.70 / 0.95	0.95	1.64	1.60	1.25 / 1.21	0.85
DEPTH TO INVERT	0.48	1.033	1.03 / 1.283	1.28	1.977	1.94	1.583 / 1.55	1.191
CHAINAGE	0.00	5.60	9.06	46.97		59.54	94.55
LENGTH		5.60m	3.46m	37.91m		12.57m	35.01m

STORMWATER PLAN AND PROFILE 1 OF 2

SCALE - 1:400

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0 2 4 6 8 10 METRES
SCALE 1:200

0 4.0 8.0 12 16 20 METRES
SCALE 1:400

50% DESIGN - PLANNING SUBMISSION

REV	DATE	DESCRIPTION	DRN	CHK
B	26.09.25	50% DESIGN - PLANNING SUBMISSION	DM	MAW
A	24.06.25	30% DESIGN	DM	MAW

		DATE
DRAWN	DM	24.06.25
CHECKED	TP	24.06.25
DESIGNED	DM	24.06.25
DESIGN APP.	TP	24.06.25
APPROVED	MAW	24.06.25

DO NOTE SCALE
DIMENSIONS IN MILLIMETERS
DRAWING PRACTICES TO AS1100 - 1992
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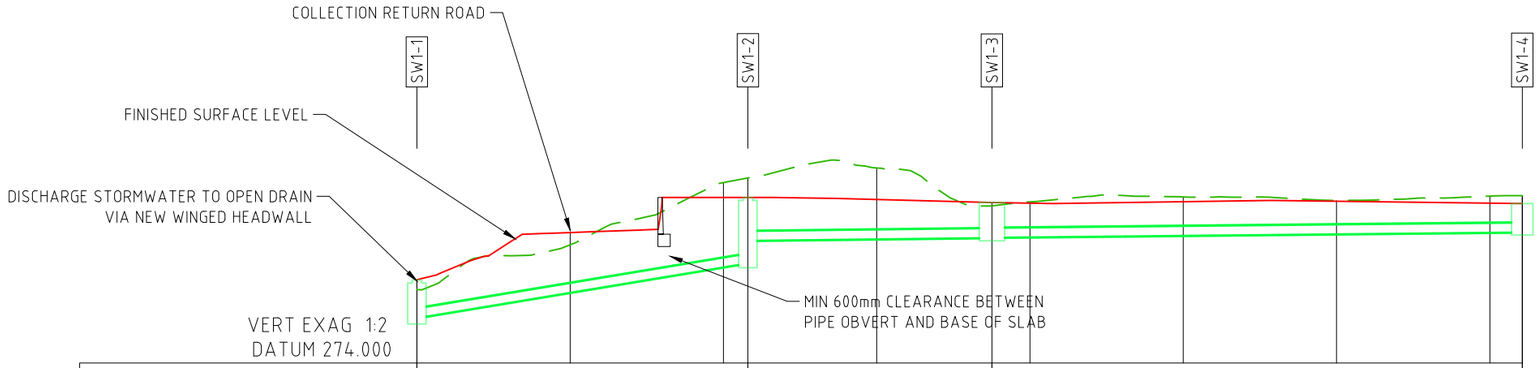
PROJECT NAME
DELORAINE WASTE TRANSFER STATION

DRAWING TITLE
STORMWATER PLAN AND PROFILE 1 OF 2

SCALE AT A3	DRAWING NUMBER	SHEET	DISCIPLINE	REVISION
A.S.	2056 - 260	1 OF 2	CI	B



GRADE %		8.27%		0.58%	0.50%
PIPE DETAILS		DN300 BLACKMAX SN8		DN300 BLACKMAX SN8	DN300 BLACKMAX SN8
FINISHED SURAFCE LEVEL	276.71	279.40		279.23	279.20
INVERT LEVEL	275.47	277.26	277.99	278.09	278.10	278.27
COVER	0.91	1.81	1.07	0.81	0.81	0.60
DEPTH TO INVERT	1.24	2.140	1.41	1.146	1.14	0.931
CHAINAGE	0.00	21.59		37.51		72.12
LENGTH		21.59m		15.92m		34.60m

WARNING
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0 2 4 6 8 10 METRES
SCALE 1:200

0 4.0 8.0 12 16 20 METRES
SCALE 1:400

STORMWATER PLAN AND PROFILE 2 OF 2

SCALE - 1:400

50% DESIGN - PLANNING SUBMISSION

REV	DATE	DESCRIPTION	DRN	CHK
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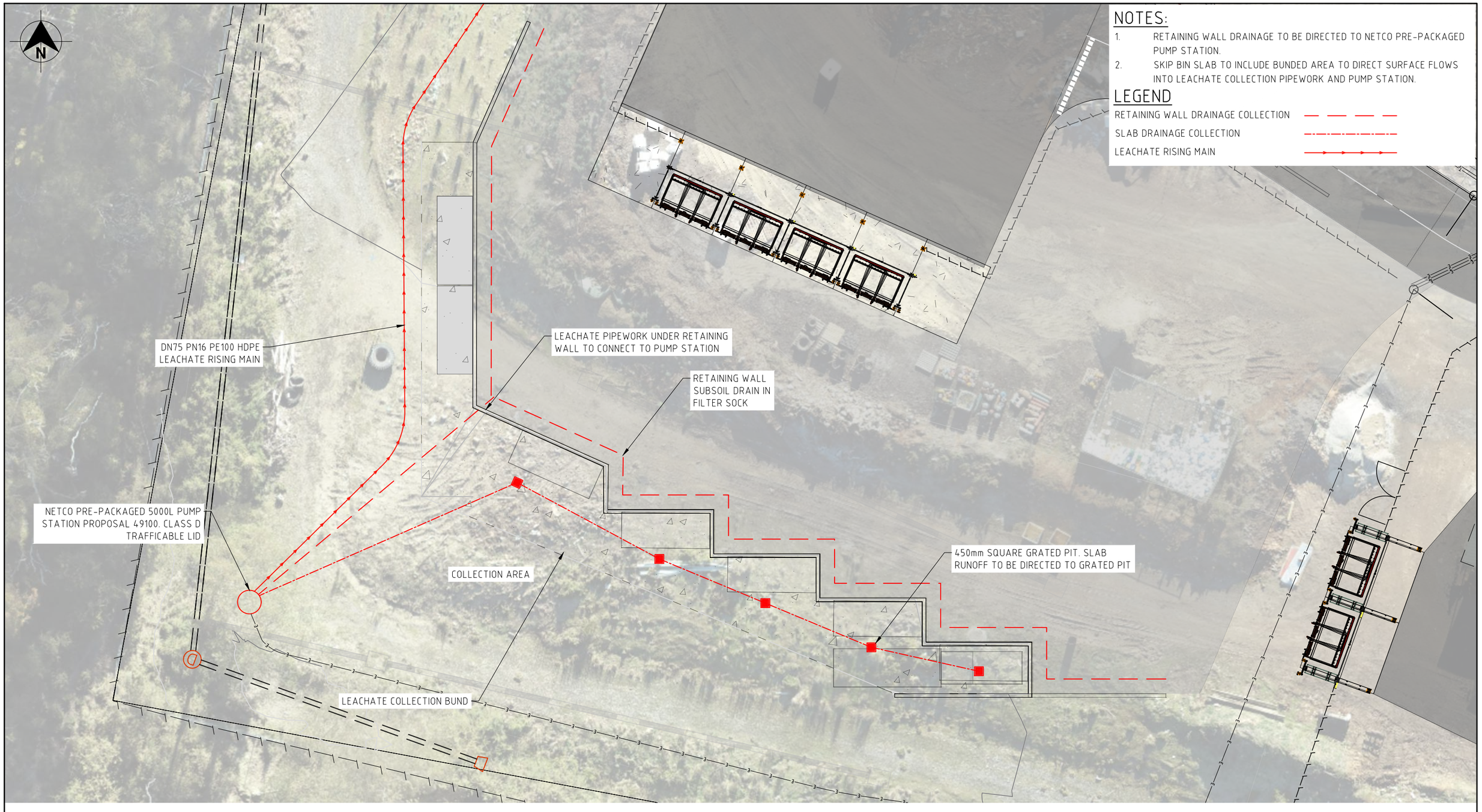
PROJECT NAME
DELORAINE WASTE TRANSFER STATION

DRAWING TITLE
STORMWATER PLAN AND PROFILE 2 OF 2

SCALE AT A3	DRAWING NUMBER	SHEET	DISCIPLINE	REVISION
A.S.	2056 - 261	2 OF 2	CI	B



NOTES:

1. RETAINING WALL DRAINAGE TO BE DIRECTED TO NETCO PRE-PACKAGED PUMP STATION.
2. SKIP BIN SLAB TO INCLUDE BUNDED AREA TO DIRECT SURFACE FLOWS INTO LEACHATE COLLECTION PIPEWORK AND PUMP STATION.

LEGEND

RETAINING WALL DRAINAGE COLLECTION

SLAB DRAINAGE COLLECTION

LEACHATE RISING MAIN

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LEACHATE COLLECTION PLAN VIEW

SCALE - 1:200

0 2 4 6 8 10 METRES
SCALE 1:200

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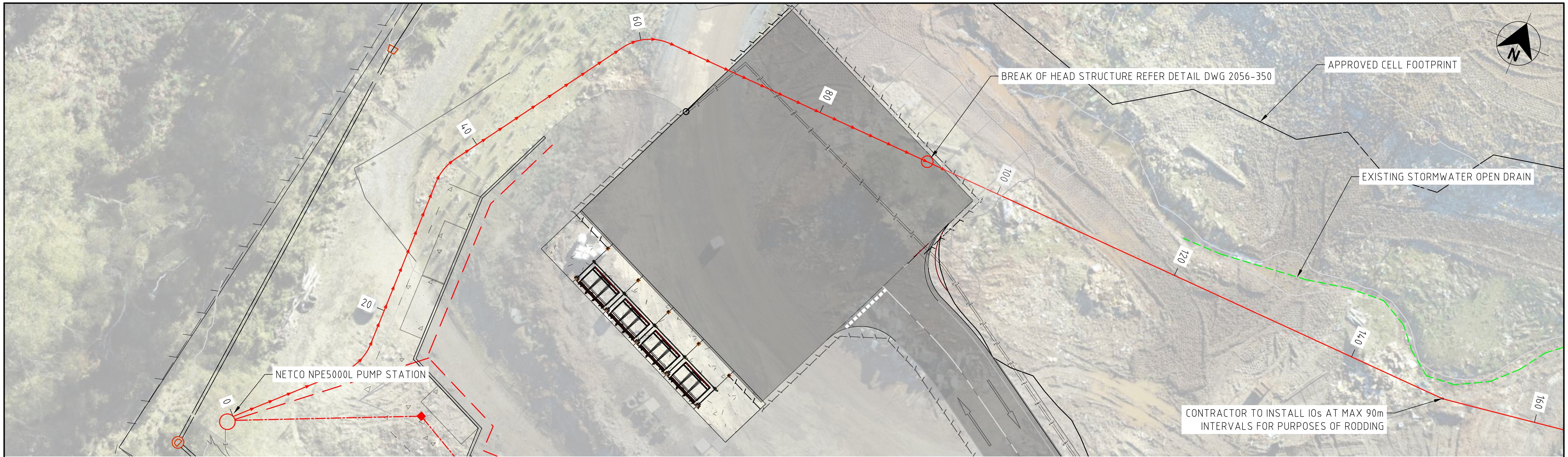
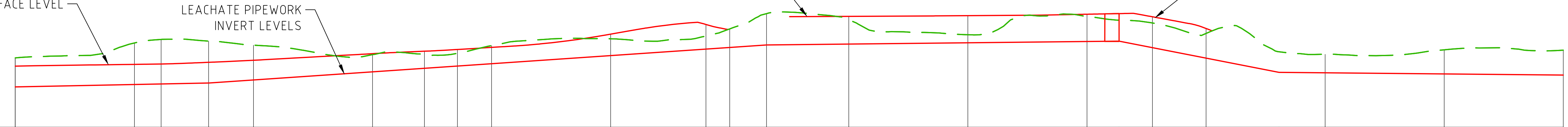
PROJECT NAME
DELORAINE WASTE TRANSFER STATION

DRAWING TITLE
LEACHATE COLLECTION LAYOUT PLAN

SCALE AT A3	DRAWING NUMBER	SHEET	DISCIPLINE	REVISION
A.S.	2056 - 300	1 OF 1	CI	B





PIPE GRADE %: 1.0% (CH 0.00–20.00); 3.4% (CH 20.00–63.09); 0.6% (CH 63.09–95.50); -9.8% (CH 95.50–~105); -0.5% (to CH 130.00)

PIPE DETAILS: DN75 PN16 PE100 HDPE (CH 0.00–95.50); DN180 PN10 PE100 HDPE (CH 95.50–130.00)

CHAINAGE	PIPE INVERT LEVEL	DESIGN LEVELS	DEPTH TO INVERT
0.00	277.573	276.697	-0.876
10.00	277.646	276.797	-0.849
12.25	277.662	276.819	-0.842
		276.839	
16.24	277.748	276.859	-0.889
20.00	277.835	276.987	-0.848
30.00	278.098	277.330	-0.769
34.36	278.200	277.479	-0.721
37.13	278.273	277.526	-0.700
		277.574	
40.00	278.362	277.672	-0.689
50.00	278.922	278.014	-0.907
58.00	279.327	278.288	-1.038
60.00	279.156	278.357	-0.799
63.09	279.768	278.376	-1.305
		278.463	
70.00	279.670	278.501	-1.169
80.00	279.702	278.557	-1.145
90.00	279.761	278.612	-1.149
95.50	279.653	278.352	-1.301
100.00	279.160	277.910	-1.250
110.00	278.123	277.291	-0.833
120.00	278.255	277.243	-1.012
130.00	278.316	277.195	-1.120

LEACHATE RISING MAIN PLAN AND PROFILE 1 OF 3

HORIZONTAL SCALE - 1:400
VERTICAL SCALE - 1:200

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0 2 4 6 8 10 METRES SCALE 1:200
0 4.0 8.0 12 16 20 METRES SCALE 1:400

50% DESIGN - PLANNING SUBMISSION

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A	24.06.25	30% DESIGN	DM	MAW

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APPROVED	MAW	24.06.25

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DIMENSIONS IN MILLIMETERS
DRAWING PRACTICES TO AS1100 - 1992

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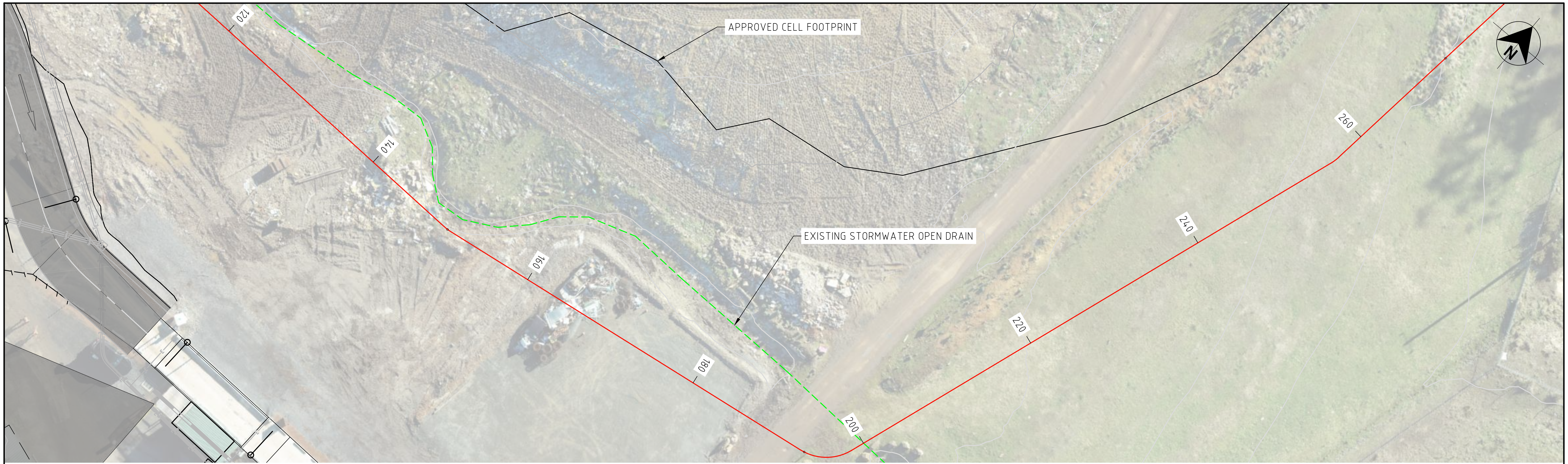
PROJECT NAME
DELORAINE WASTE TRANSFER STATION

DRAWING TITLE
LEACHATE RISING MAIN LONGSECTION 1 OF 3

SCALE AT A3	DRAWING NUMBER	SHEET	DISCIPLINE	REVISION
A.S.	2056 - 310	1 OF 3	CI	B



PIPE GRADE %: -0.5% (Ch 120.00 – 228.50); vertical curve (Ch 228.50 – 240.00); -11.3% (Ch 240.00 – 250.00)

PIPE DETAILS: DN180 PN10 PE100 HDPE

CHAINAGE	PIPE INVERT LEVEL	DESIGN LEVELS	DEPTH TO INVERT
120.00	278.255	277.243	-1.012
130.00	278.316	277.195	-1.120
140.00	278.333	277.148	-1.185
150.00	278.069	277.100	-0.969
150.24	278.086	277.099	-0.987
150.55	278.089	277.098	-0.991
		277.097	
160.00	278.289	277.052	-1.236
170.00	278.212	277.005	-1.207
180.00	278.983	276.957	-2.026
190.00	278.254	276.909	-1.345
193.32	278.336	276.894	-1.443
		276.882	
198.24	278.344	276.870	-1.474
200.00	278.277	276.862	-1.415
210.00	278.133	276.814	-1.319
220.00	277.966	276.766	-1.199
228.50	277.716	276.726	-0.990
230.00	277.673	276.707	-0.967
238.54	277.355	276.134	-1.221
240.00	277.268	275.968	-1.301
250.00	275.922	274.834	-1.088

LEACHATE RISING MAIN PLAN AND PROFILE 2 OF 3

HORIZONTAL SCALE - 1:400
VERTICAL SCALE - 1:200

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0 2 4 6 8 10 METRES SCALE 1:200
0 4.0 8.0 12 16 20 METRES SCALE 1:400

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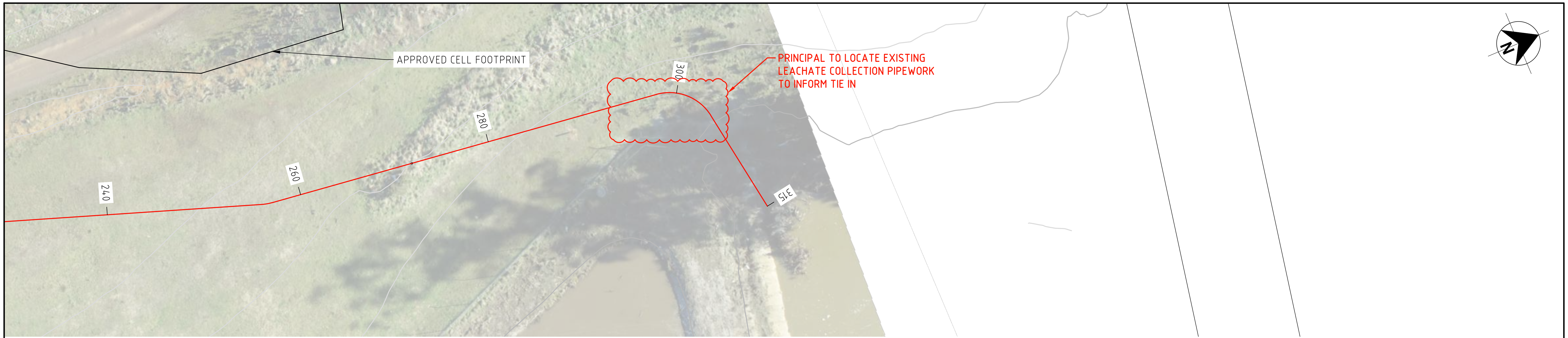
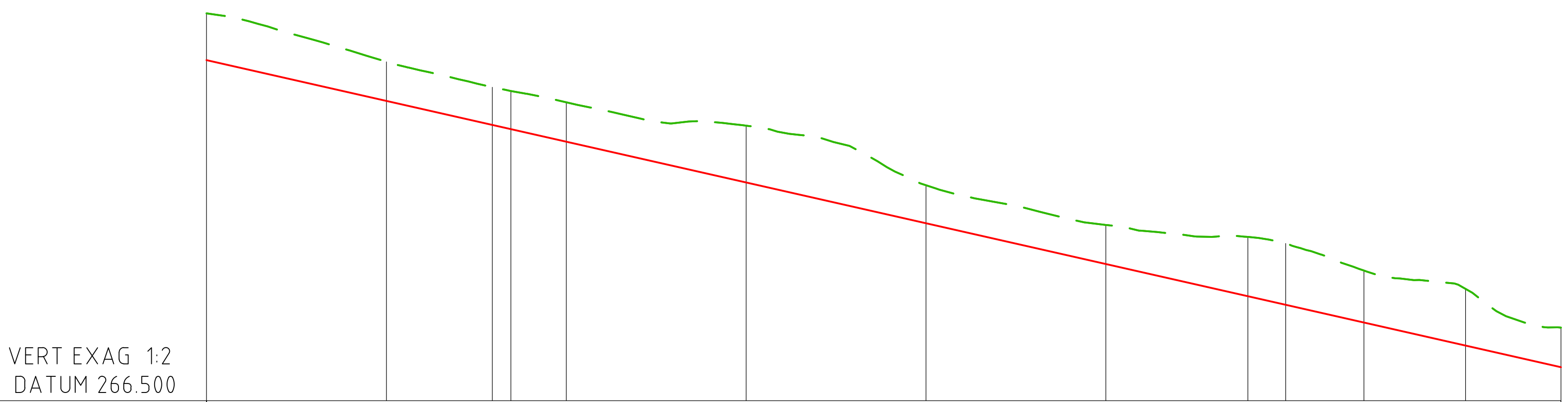
DELORAINE WASTE TRANSFER STATION

DRAWING TITLE
LEACHATE RISING MAIN LONGSECTION 2 OF 3

SCALE AT A3	DRAWING NUMBER	SHEET	DISCIPLINE	REVISION
A.S.	2056 - 311	2 OF 3	CI	B





PIPE GRADE %	-11.3%														
PIPE DETAILS	DN180 PN10 PE100 HDPE														
PIPE INVERT LEVEL	275.968	274.834	274.168	274.050		273.701	272.568	271.435	270.302	269.406	269.168		268.676	268.035	267.434
DESIGN LEVELS	277.268	275.922	275.215	275.160	275.112	274.796	274.147	272.491	271.385	271.055	270.873	270.692	270.121	269.608	268.532
DEPTH TO INVERT	1.301	1.088	1.047	1.062		1.094	1.579	1.056	1.084	1.649	1.705		1.445	1.573	1.098
CHAINAGE	240.00	250.00	255.88	256.92		260.00	270.00	280.00	290.00	297.90	300.00		304.35	310.00	315.31

LEACHATE RISING MAIN PLAN AND PROFILE 3 OF 3

HORIZONTAL SCALE - 1:400
VERTICAL SCALE - 1:200

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0 2 4 6 8 10 METRES SCALE 1:200

0 4.0 8.0 12 16 20 METRES SCALE 1:400

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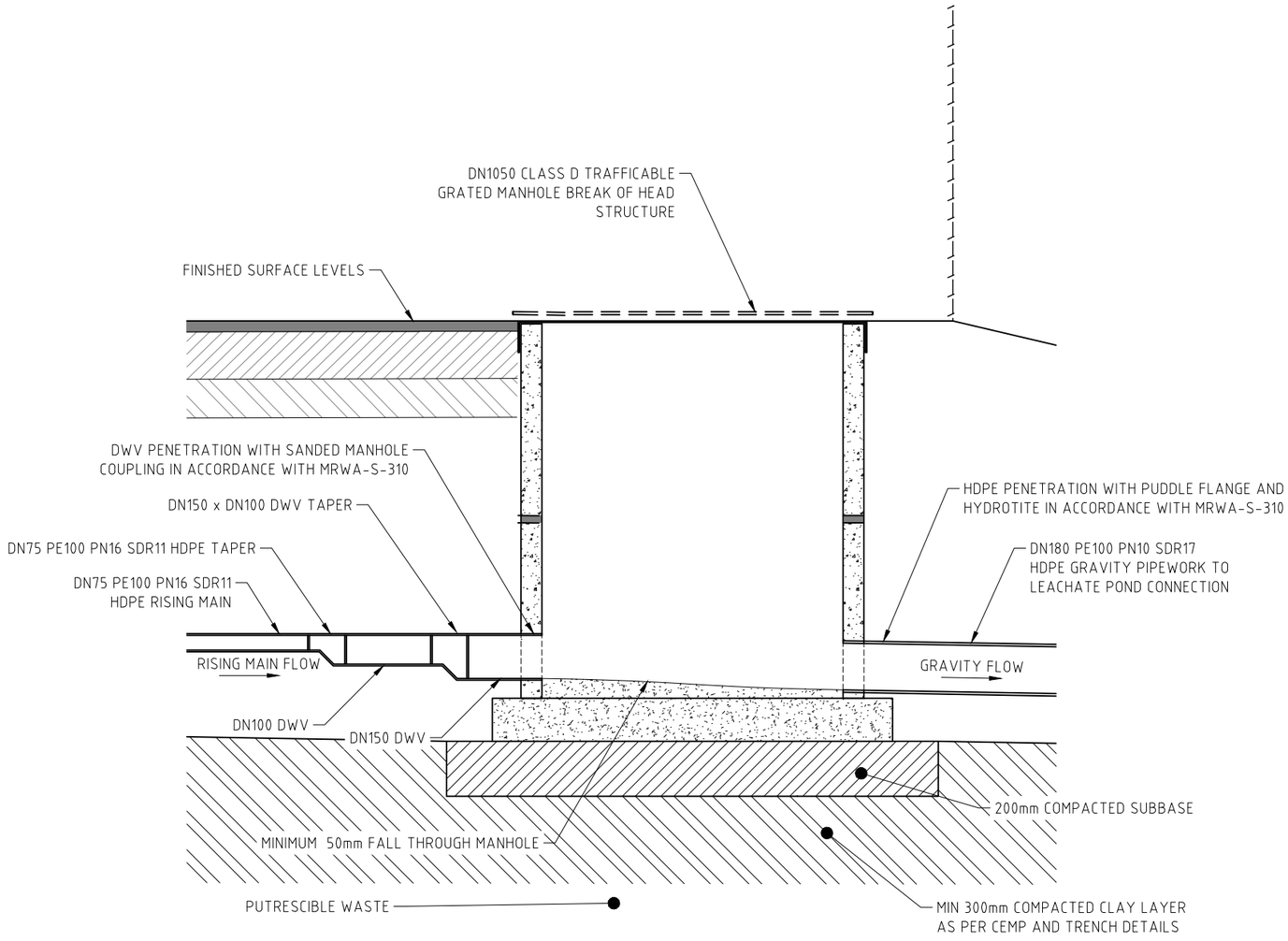
PROJECT NAME
DELORAINE WASTE TRANSFER STATION

DRAWING TITLE
LEACHATE RISING MAIN LONGSECTION 3 OF 3

SCALE AT A3	DRAWING NUMBER	SHEET	DISCIPLINE	REVISION
A.S.	2056 - 312	3 OF 3	CI	B



LEACHATE RISING MAIN BREAK OF HEAD STRUCTURE

SCALE: 1:20

DETAILS SUBJECT TO INVESTIGATION BY PRINCIPAL

LEACHATE GRAVITY MAIN DISCHARGE TO POND

SCALE: 1:20

50% DESIGN - PLANNING SUBMISSION

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PROJECT NAME
DELORAINE WASTE TRANSFER STATION

DRAWING TITLE
LEACHATE DETAILS

SCALE AT A3	DRAWING NUMBER	SHEET	DISCIPLINE	REVISION
A.S.	2056 - 320	1 OF 1	CI	B

LEGEND:

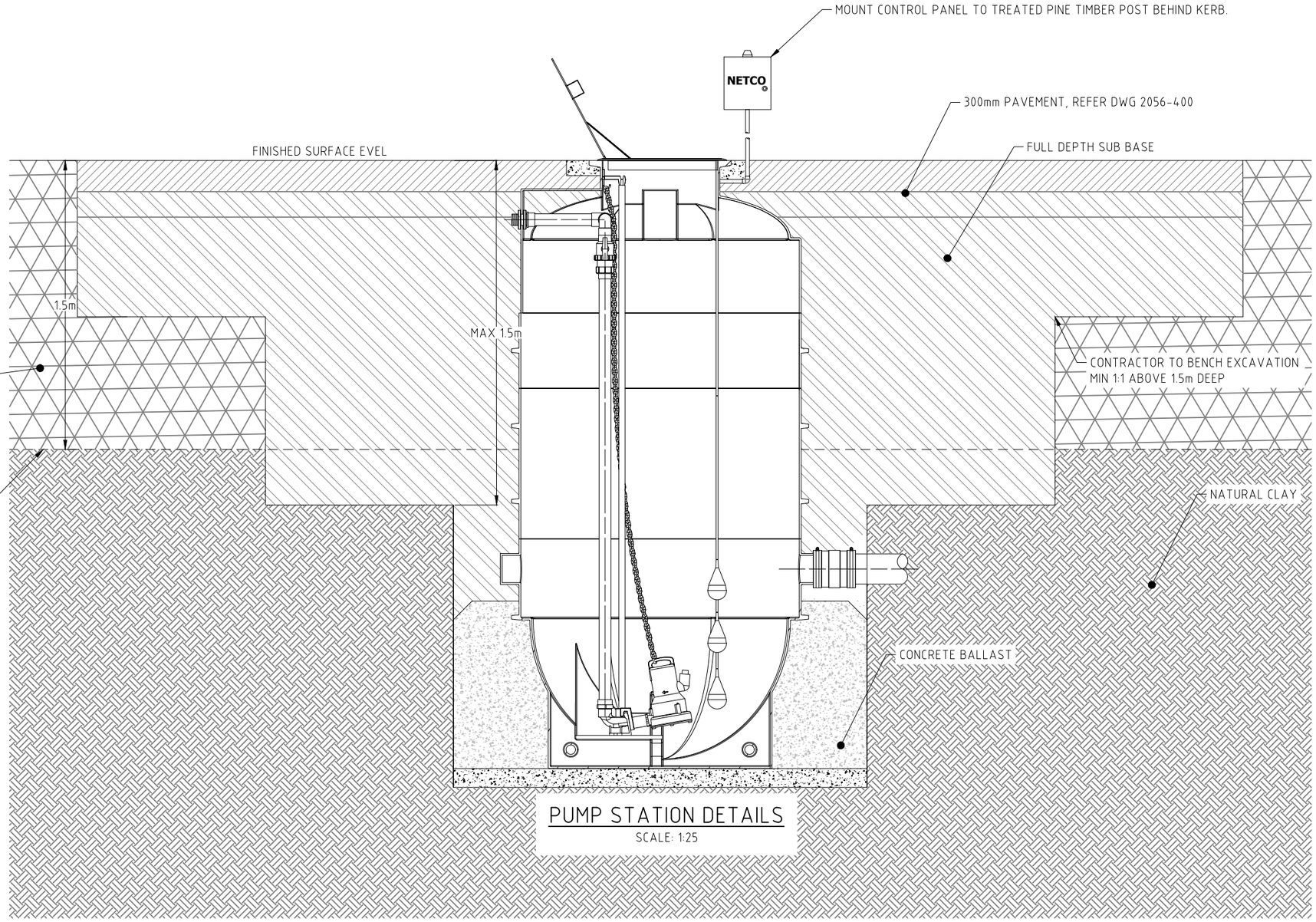
BASE LAYER

SUB-BASE LAYER

INSITU WASTE

SUB-BASE BACKFILL

REFER NETCO 5000 LITRE POLYETHYLENE PUMPING STATION DRAWING FOR CONSTRUCTION AND INSTALLATION DETAILS



PUMP STATION DETAILS

SCALE: 1:25

50% DESIGN - PLANNING SUBMISSION

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		DATE
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DESIGNED	DM	24.06.25
DESIGN APP.	TP	24.06.25
APPROVED	MAW	24.06.25

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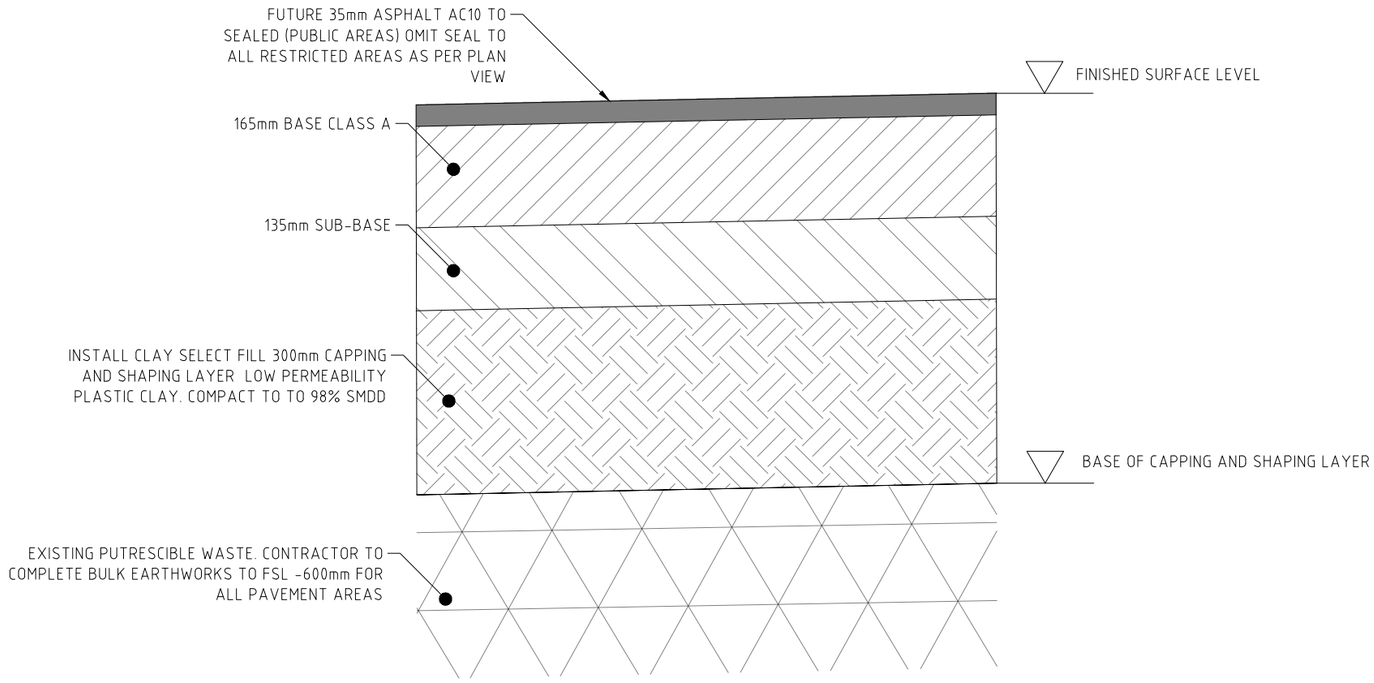
DRAWING TITLE
PUMP STATION DETAILS

SCALE AT A3	DRAWING NUMBER	SHEET	DISCIPLINE	REVISION
A.S.	2056 - 330	1 OF 1	CI	B

NOTES:

1. SUBGRADE TO BE INSPECTED AND APPROVED PRIOR TO CONSTRUCTION OF PAVEMENT
2. PAVEMENT BASED ON LGAT STANDARD DRAWING TSD-R06, MIN SUBGRADE CBR OF 4. GIVEN THE SITE IS FOUNDED ON WASTE, CBR TESTING IS NOT ACHIEVABLE, AND AS SUCH, TESTING IS PROPOSED TO BE COMPLETED BY PROOF ROLLING CAPPING AND SHAPING LAYER PRIOR TO CONSTRUCTION OF PAVEMENTS.
3. TREATMENT OF SOFT SPOTS TO BE AS DIRECTED BY DESIGN ENGINEER.
4. CAPPING AND SHAPING LAYER TO BE PROOF ROLLED TO SATISFACTION OF DESIGN ENGINEER PRIOR TO PAVEMENT CONSTRUCTION.
5. SEALING OF PUBLIC AREA TO BE DELAYED 12 MONTHS TO ALLOW ANY SETTLEMENT OF DISTURBED WASTE AREAS PRIOR TO SEALING BASED ON RECOMMENDATIONS OF GEOTECHNICAL ENGINEER.



PAVEMENT DETAILS

SCALE 1:10

50% DESIGN - PLANNING SUBMISSION

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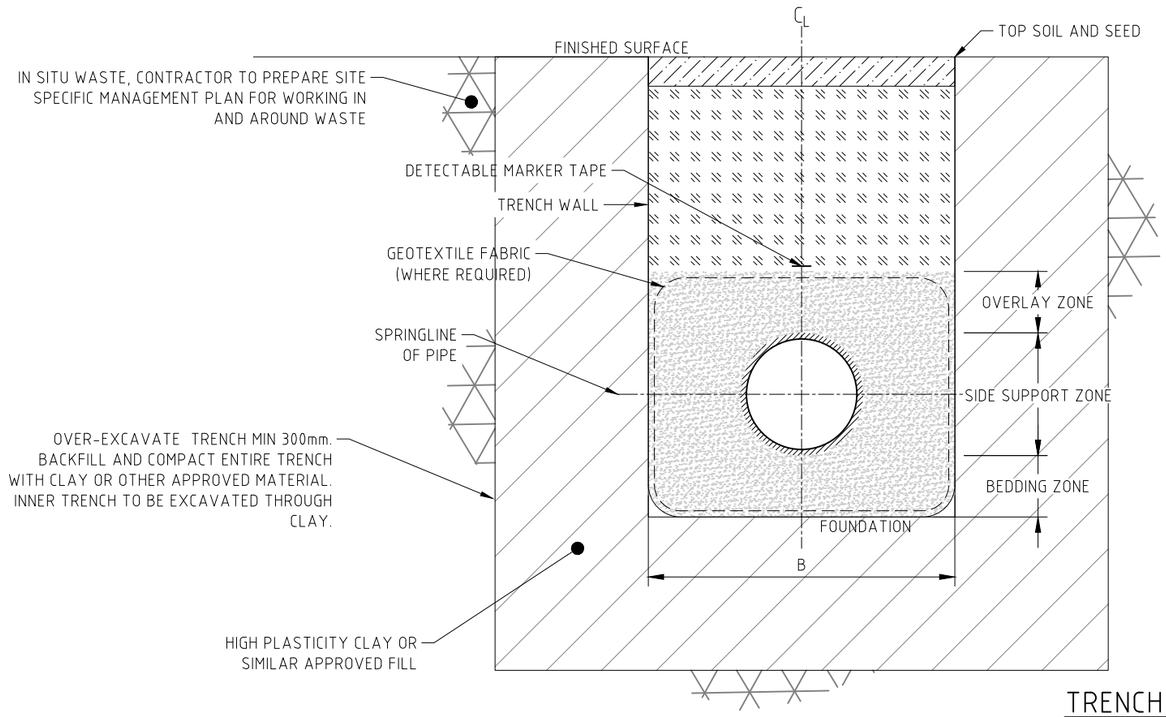
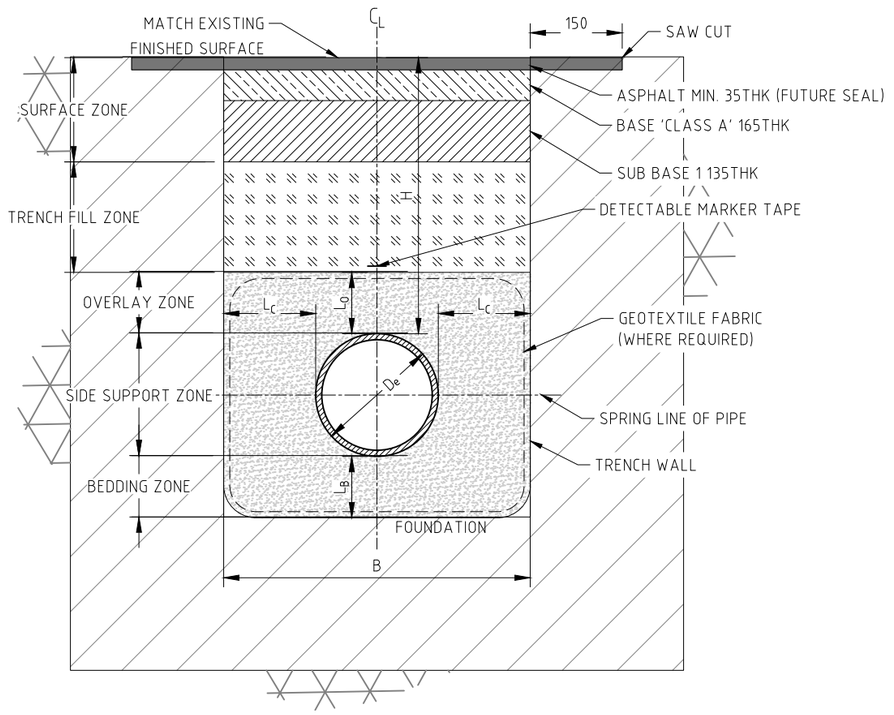
DRAWING TITLE
PAVEMENT DETAILS

SCALE AT A3	DRAWING NUMBER	SHEET	DISCIPLINE	REVISION
A.S.	2056 - 400	1 OF 1	CI	B





TRENCH DETAILS

SCALE - NTS

GENERAL PIPE WORK NOTES:

1. EMBEDMENT AND BACKFILL AS PER TABLE 1 UNLESS ALTERNATE APPROVED BY DESIGN ENGINEER.
2. DETECTABLE MARKER TAPE TO BE LAID ON TOP OF THE FIRST COMPACTED BACKFILL LAYER OVER ALL NON-METALLIC PIPELINES. DETECTABLE MARKER TAPE TO BE ATTACHED TO METAL SURFACE FITTINGS TO PROVIDE CONNECTION POINTS FOR LOCATING DEVICES.
3. MINIMUM TRENCH WIDTHS MAY BE VARIED ABOVE THE PIPE OVERLAY ZONE TO MEET WH&S REQUIREMENTS (I.E. TRENCHES GREATER THAN 1.5 m DEEP). EXCAVATIONS OVER 1.5 m MAY REQUIRE ADDITIONAL RISK ASSESSMENT.
4. MINIMUM WIDTH OF TRENCH IS THE WIDTH OF UNSUPPORTED TRENCH OR THE CLEAR WIDTH INSIDE A TRENCH SUPPORT SYSTEM.
5. SIDES OF TRENCH TO BE KEPT VERTICAL TO A MINIMUM OF 150mm ABOVE PIPE.
6. OVER EXCAVATION OF TRENCHES SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH THE REQUIREMENTS FOR THE EMBEDMENT ZONE.
7. GEOTEXTILE FABRIC TO SURROUND EMBEDMENT ZONE TO PREVENT THE MIGRATION OF FINES WHERE REQUIRED BY AS2566 OR AS DIRECTED BY THE DESIGN ENGINEER. GEOTEXTILE FABRIC TO COMPLY WITH THE REQUIREMENTS OF AS2566.
8. PIPES AND FITTINGS TO BE LAID, INSTALLED AND JOINTED IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS AND AS2566.
9. WHERE POSSIBLE HORIZONTAL AND VERTICAL SEPARATION FROM OTHER SERVICES SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF AS 2566 AND THE SERVICE OWNERS REQUIREMENTS.
10. CONFIRM ALL PIPE LENGTHS ON SITE PRIOR TO CUTTING OR FABRICATION.
11. PAVEMENT DEPTHS AND FINISHING SURFACE TO MATCH EXISTING.
12. CONTRACTOR SHALL NOT OPEN TRENCH MORE THAN 120 METRES AHEAD OF PIPE LAYERS., AND IN UNSOUND GROUND IT SHALL NOT BE OPENED FURTHER THAN APPROVED BY PRINCIPLE.
13. ALL TRENCH TYPES ARE TRAFFICABLE UNLESS OTHERWISE SHOWN.

MINIMUM COVER AND TRENCH DIMENSION

PIPE SIZE	BEDDING DEPTH (L_B)	OVERLAY(L_o)	SIDE SUPPORT(L_c)	TRENCH WIDTH (B)	MIN COVER (TRAFFICABLE)
DN300	100	150	150	650	600

TABLE 1 - TRENCH FILL MATERIALS AND COMPACTION REQUIREMENTS

TRENCH ZONE	TRAFFICABLE		NON-TRAFFICABLE	
	MATERIAL REQUIREMENT	MIN. COMPACTION REQUIREMENT	MATERIAL REQUIREMENT	MIN. COMPACTION REQUIREMENT
EMBEDMENT (OVERLAY, SIDE SUPPORT, BEDDING ZONE)	GRADED GRANULAR EMBEDMENT MATERIAL (7mm GRADED CRUSHED ROCK) COMPLYING WITH MRWA-S-202	COHESIONLESS MATERIAL (GRAVEL) - MIN. I_D 70%	GRADED GRANULAR EMBEDMENT MATERIAL (7mm GRADED CRUSHED ROCK) COMPLYING WITH MRWA-S-202	COHESIONLESS MATERIAL (GRAVEL) - MIN. I_D 60%
TRENCH FILL	GRADED GRANULAR EMBEDMENT MATERIAL (CRUSHED ROCK DUST) COMPLYING WITH MRWA-S-201 OR 20mm WELL GRADED CRUSHED ROCK.	COHESIONLESS MATERIAL (GRAVEL) - MIN. R_D 95%	GRADED GRANULAR EMBEDMENT MATERIAL (CRUSHED ROCK DUST) COMPLYING WITH MRWA-S-201 OR 20mm WELL GRADED CRUSHED ROCK.	COHESIONLESS MATERIAL (GRAVEL) - MIN. 95% R_D TOP 600mm 90% R_D
SURFACE ZONE	PAVEMENT REINSTATEMENT - MATERIALS COMPLYING WITH LGAT SPECIFICATIONS, PAVEMENT LAYER DEPTHS EQUAL TO EXISTING OR MINIMUM AS PER LGAT SPECIFICATIONS. 100mm TOPSOIL AND SEED TO NATURAL STRIP AREAS.	REFER LGAT DRAWING TSD-R06	PAVEMENT REINSTATEMENT - MATERIALS COMPLYING WITH LGAT SPECIFICATIONS, PAVEMENT LAYER DEPTHS EQUAL TO EXISTING OR MINIMUM AS PER LGAT SPECIFICATIONS. 100mm TOPSOIL AND SEED TO NATURAL STRIP AREAS.	REFER LGAT DRAWING TSD-R06

50% DESIGN - PLANNING SUBMISSION

REV	DATE	DESCRIPTION	DRN	CHK
B	26.09.25	50% DESIGN - PLANNING SUBMISSION	DM	MAW
A	24.06.25	30% DESIGN	DM	MAW

		DATE
DRAWN	DM	24.06.25
CHECKED	TP	24.06.25
DESIGNED	DM	24.06.25
DESIGN APP.	TP	24.06.25
APPROVED	MAW	24.06.25

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PROJECT NAME: DELORAINE WASTE TRANSFER STATION

DRAWING TITLE: TRENCH DETAILS

SCALE AT A3	DRAWING NUMBER	SHEET	DISCIPLINE	REVISION
A.S.	2056 - 410	1 OF 1	CI	B

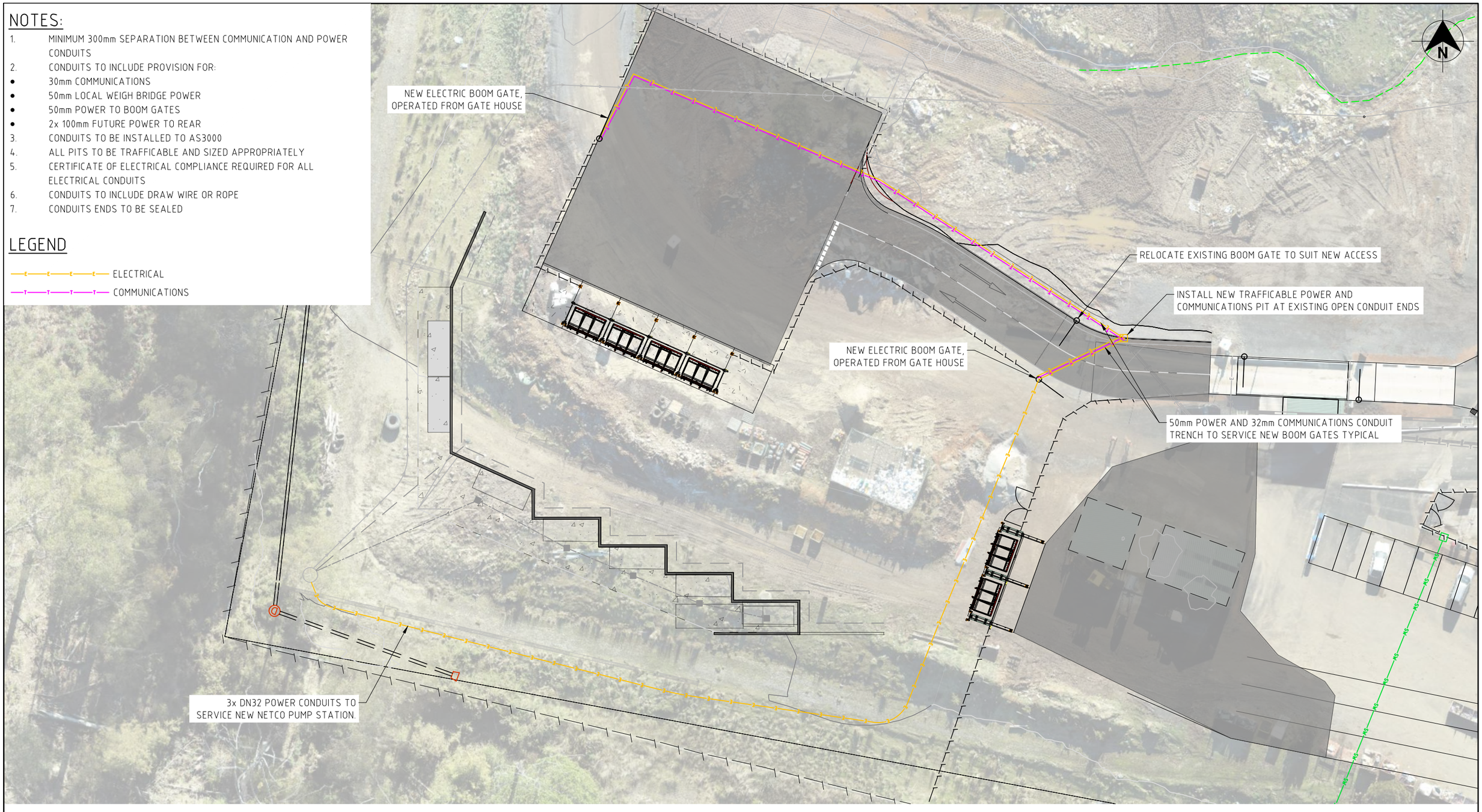
NOTES:

1. MINIMUM 300mm SEPARATION BETWEEN COMMUNICATION AND POWER CONDUITS
2. CONDUITS TO INCLUDE PROVISION FOR:
   - 30mm COMMUNICATIONS
   - 50mm LOCAL WEIGH BRIDGE POWER
   - 50mm POWER TO BOOM GATES
   - 2x 100mm FUTURE POWER TO REAR
3. CONDUITS TO BE INSTALLED TO AS3000
4. ALL PITS TO BE TRAFFICABLE AND SIZED APPROPRIATELY
5. CERTIFICATE OF ELECTRICAL COMPLIANCE REQUIRED FOR ALL ELECTRICAL CONDUITS
6. CONDUITS TO INCLUDE DRAW WIRE OR ROPE
7. CONDUITS ENDS TO BE SEALED

LEGEND

E ELECTRICAL

T COMMUNICATIONS



CONDUIT PLAN

SCALE - 1:400

WARNING
BEWARE OF UNDERGROUND SERVICES
THE LOCATION OF UNDERGROUND SERVICES ARE APPROXIMATE ONLY AND THE EXACT POSITION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL SERVICES ARE SHOWN.

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0 4.0 8.0 12 16 20 METRES
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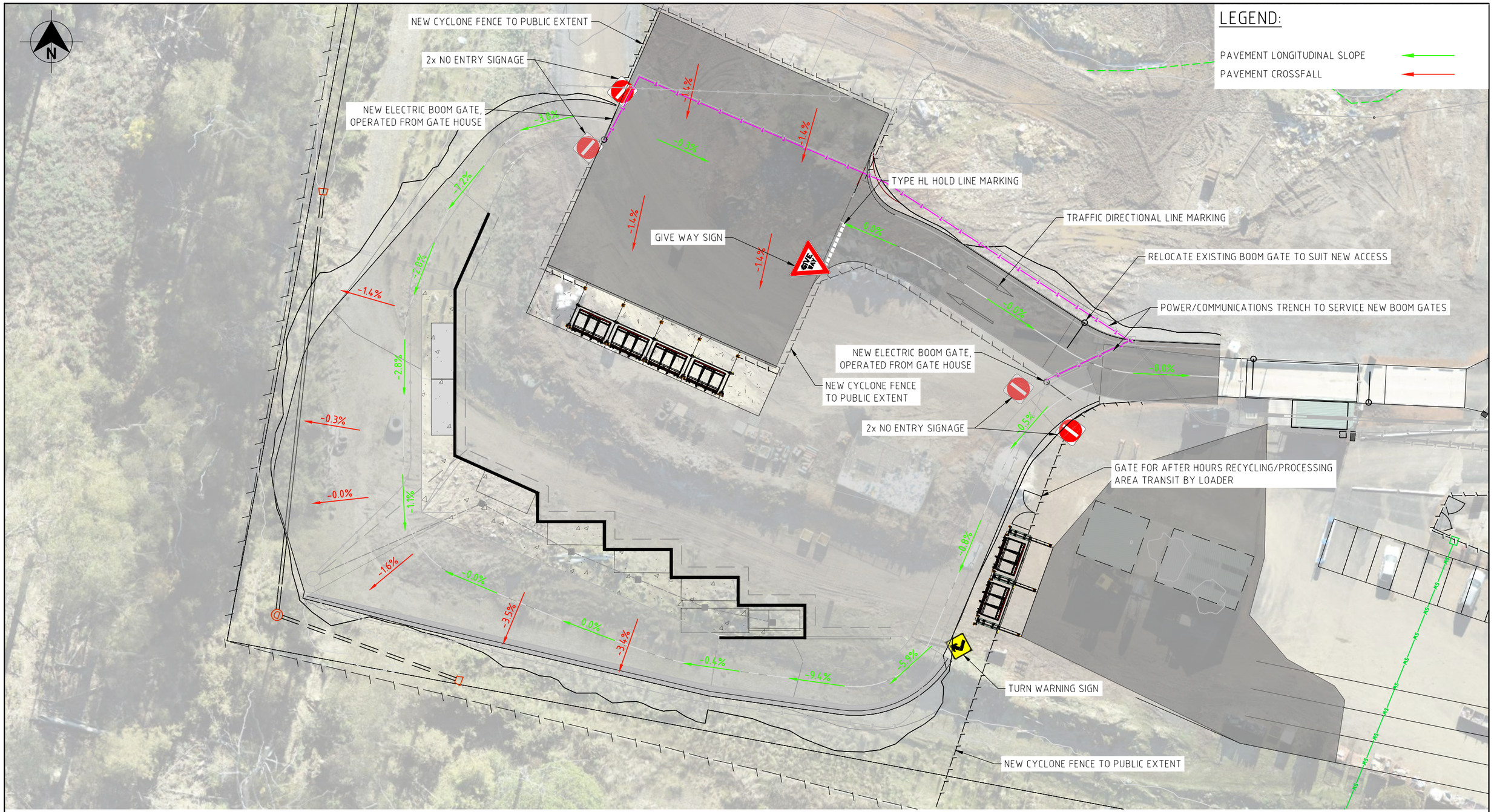
PROJECT NAME
DELORAINE WASTE TRANSFER STATION

DRAWING TITLE
CONDUIT PLAN

SCALE AT A3	DRAWING NUMBER	SHEET	DISCIPLINE	REVISION
A.S.	2056 - 420	1 OF 1	CI	B



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TRAFFIC AND PEDESTRIAN CONTROL FACILITIES
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PROJECT NAME
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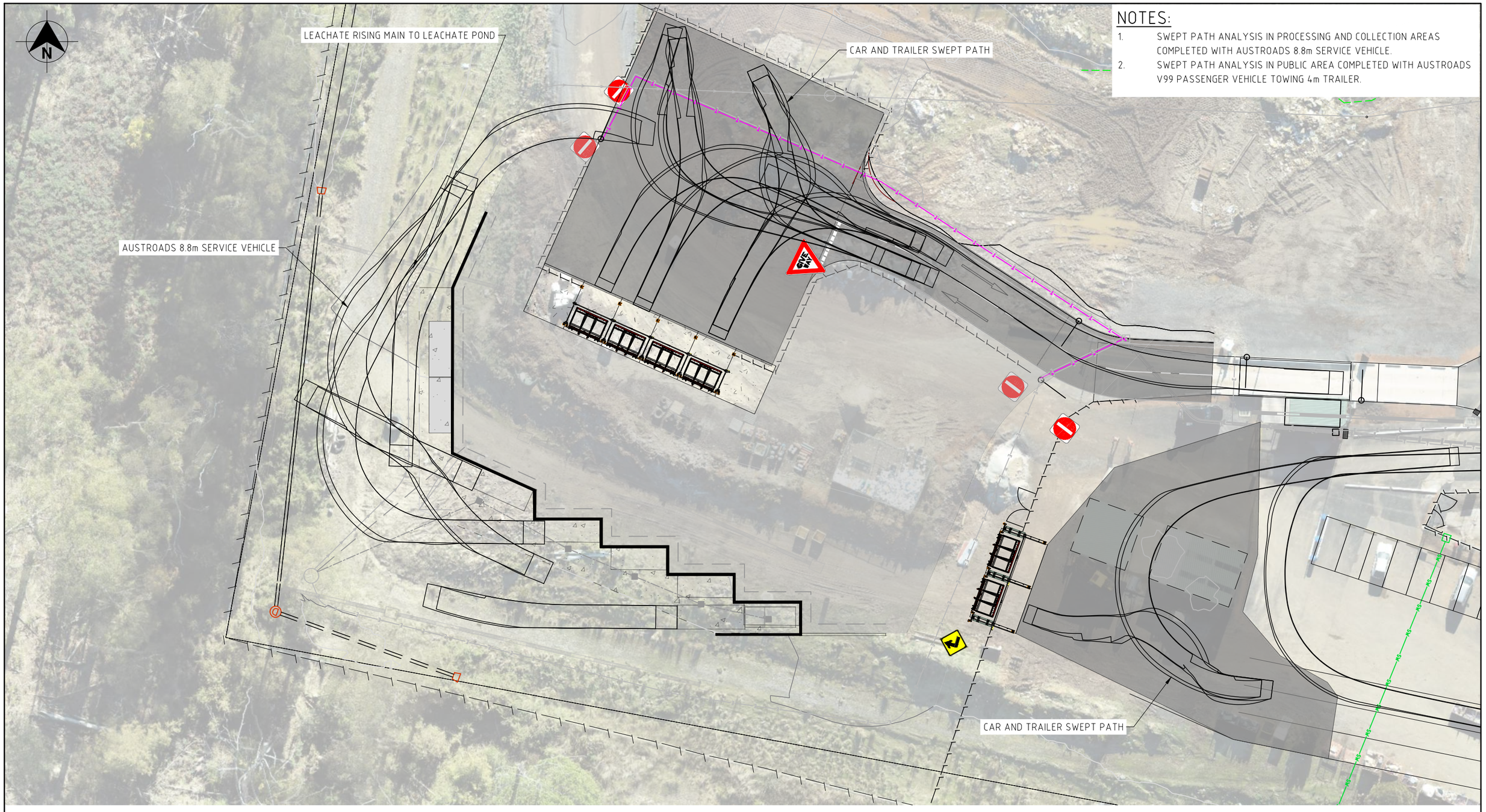
DRAWING TITLE
TRAFFIC FACILITIES PLAN

SCALE AT A3	DRAWING NUMBER	SHEET	DISCIPLINE	REVISION
A.S.	2056 - 430	1 OF 1	CI	B



NOTES:

1. SWEPT PATH ANALYSIS IN PROCESSING AND COLLECTION AREAS COMPLETED WITH AUSTROADS 8.8m SERVICE VEHICLE.
2. SWEPT PATH ANALYSIS IN PUBLIC AREA COMPLETED WITH AUSTROADS V99 PASSENGER VEHICLE TOWING 4m TRAILER.

WARNING
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SWEPT PATH ANALYSIS

SCALE - 1:400

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SCALE 1:400

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PROJECT NAME
DELORAINE WASTE TRANSFER STATION

DRAWING TITLE
SWEPT PATH PLAN

SCALE AT A3	DRAWING NUMBER	SHEET	DISCIPLINE	REVISION
A.S.	2056 - 440	1 OF 1	CI	B

GENERAL NOTES:

A. THESE DRAWINGS AND NOTES SHALL BE READ IN CONJUNCTION WITH ARCHITECTURAL, CIVIL, BUILDING SERVICES AND OTHER DISCIPLINES' DRAWINGS AND SPECIFICATIONS AND WITH ANY WRITTEN ENGINEER'S INSTRUCTIONS ISSUED DURING THE CONTRACT.
B. ANY DISCREPANCIES ARE TO BE REPORTED TO THE SUPERINTENDENT BEFORE PROCEEDING WITH THE WORK.
C. THESE GENERAL NOTES DO NOT HAVE PRECEDENCE OVER THE SPECIFICATION OR DRAWING NOTES.
D. ALL SET OUT DIMENSIONS ON THE DRAWINGS ARE TO BE VERIFIED BY THE CONTRACTOR ON SITE BEFORE COMMENCING WORK.
E. DO NOT SCALE FOR DIMENSIONS OFF THESE DRAWINGS.
F. UNLESS NOTED OTHERWISE, ALL DIMENSIONS SHOWN ARE IN MILLIMETRES WITH THE EXCEPTION OF SURVEY LEVELS, WHICH ARE IN METRES.
G. THE CONTRACTOR IS TO ENSURE THAT ANY PROFESSIONALS, TRADESMEN OR SUPPLIERS ENGAGED THROUGHOUT THE DURATION OF THE CONTRACT ARE ACCREDITED AND QUALIFIED FOR THEIR DUTY OF WORK AND CARRY ALL NECESSARY PERMITS REQUIRED BY ANY STATUTORY AUTHORITY.

DISCREPANCIES & ALLOWANCES NOTES:
A. STRUCTURAL ENGINEERING DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE ARCHITECTURAL DRAWINGS. ANY DISCREPANCIES ARE TO BE REFERRED TO THE DESIGNER FOR CLARIFICATION, AND FOR TENDERING PURPOSES TENDERERS ARE TO ALLOW FOR THE HIGHER COST ITEM.
B. REFER ARCH. DRAWINGS FOR ADDITIONAL STEELWORK / METALWORK NOT SHOWN ON STRUCTURAL DRAWINGS.
C. REFER ARCH. DRAWINGS FOR ADDITIONAL TIMBER FRAMING / LINTELS NOT SHOWN ON STRUCTURAL DRAWINGS.

DESIGN LOADING NOTES:
A. THE STRUCTURE HAS BEEN DESIGNED AND DETAILED IN ACCORDANCE WITH ALL RELEVANT AUSTRALIAN STANDARDS AND THE CURRENT NATIONAL CONSTRUCTION CODE OF AUSTRALIA.
B. THE STRUCTURE HAS BEEN DESIGNED FOR THE FLOOR LIVE AS DETAILED ON DRAWING S011, LOADING DIAGRAMS, IN THE ABSENCE OF SAID DRAWINGS REFER THE GENERAL BELOW ACCORDANCE WITH AS1170.1-2002 AND THE PROPOSED FLOOR USE:
VEHICLE LOAD: 10kPa
C. THE STRUCTURE HAS BEEN DESIGNED FOR ALL SELF WEIGHT AND APPLIED DEAD LOADS.
D. UNLESS OTHERWISE NOTED, A GENERAL 0.5kPA DEAD LOAD HAS BEEN ALLOWED FOR AS AN ALLOWANCE FOR FLOOR FINISHES AND FURNITURE ETC.
E. THE STRUCTURE HAS BEEN DESIGNED FOR WIND LOADS IN ACCORDANCE WITH AS1170.2-2021:
DESIGN GUST WIND SPEED:
- REFER 'WIND CLASSIFICATION SCHEDULE' ON DRAWINGS
- TERRAIN CATEGORY:
- REFER 'WIND CLASSIFICATION SCHEDULE' ON DRAWINGS

F. THE STRUCTURE HAS BEEN DESIGNED FOR SNOW LOADINGS IN ACCORDANCE WITH AS1170.3-2003
G. THE STRUCTURE HAS BEEN DESIGNED FOR EARTHQUAKE LOADINGS IN ACCORDANCE WITH AS1170.4-2024

SITE INSPECTIONS NOTES:
A. THE CONTRACTOR IS TO ENSURE SUPPLY THE BUILDING SURVEYORS START WORKS NOTICE TO THE ENGINEER PRIOR TO ARRANGING THE FIRST SITE INSPECTION.
B. THE CONTRACTOR SHALL ALWAYS GIVE THE ENGINEER A MINIMUM 48HOURSNOTICE PRIOR TO ALL REQUIRED INSPECTIONS.
C. THE ENGINEER RESERVES THE RIGHT TO CONDUCT INSPECTIONS IN A MANNER THAT WILL ALLOW ACCURATE REVIEW OF ONSITE WORKS, COST EFFECTIVENESS FOR THE CLIENT AND A TIMELY SERVICE. THIS MAY INCLUDE IN PERSON, VIA A REPRESENTATIVE, OR THROUGH ONLINE MEANS. ONLINE MEANS MAY INCLUDE VIDEO CALLS VIA MICROSOFT TEAMS, ZOOM, GOOGLE MEET OR APPLE FACETIME.
D. SITE INSPECTIONS ARE GENERALLY REQUIRED DURING CONSTRUCTION / HOLD POINTS BEFORE COMMENCEMENT OF WORK REFER THE BUILDING SURVEYORS CERTIFICATE OF LIKELY COMPLIANCE. INSPECTIONS ARE GENERALLY AS FOLLOWS;
- EXPOSED SUB-GRADE (INSPECTED BY THE PROJECT GEOTECHNICAL ENGINEER AND FORWARDED TO THE STRUCTURAL ENGINEER)
- FOUNDATION MATERIAL FOR FOOTING TRENCHES (INSPECTED BY THE PROJECT GEOTECHNICAL ENGINEER AND FORWARDED TO THE STRUCTURAL ENGINEER)
- FOOTING AND SLAB REINFORCEMENT (BY THE STRUCTURAL ENGINEER OR THE BUILDING SURVEYOR)
- STEEL AND TIMBER FRAMING (BY THE STRUCTURAL ENGINEER OR THE BUILDING SURVEYOR)
- WALL BRACING AND TIE DOWNS (BY THE STRUCTURAL ENGINEER OR THE BUILDING SURVEYOR)

SAFETY IN DESIGN:

GENERAL SAFETY IN DESIGN NOTES:
A. THE 'SAFETY IN DESIGN' RISK MITIGATION MEASURES FOR THIS PROJECT DO NOT ACCOUNT FOR ALL THE DESIGN, CONSTRUCTION, OPERATIONS, MAINTENANCE AND DEMOLITION ASSESSMENTS.
B. THEY DO NOT REDUCE OR LIMIT THE OBLIGATIONS OF THE CONTRACTOR, CONSTRUCTOR, USER, OPERATOR, MAINTAINER OR DEMOLISHER TO PERFORM THEIR OWN SAFETY RISK ASSESSMENTS.
C. CONSTRUCTION AND INSTALLATION SAFE WORK METHOD STATEMENTS ARE TO BE REVIEWED BY A QUALIFIED PERSON TO ELIMINATE AND MINIMISE INSTALLATION RISKS.

ABBREVIATIONS:

AG	AGRICULTURAL DRAIN PIPE	HT	HIGH-TENSILE STEEL
APPROX.	APPROXIMATE	HW	HARDWOOD
ARCH.	ARCHITECT / ARCHITECTURAL	ID	INTERNAL DIAMETER
AS	AUSTRALIAN STANDARD	INT.	INTERNAL
AVG	AVERAGE	LH	LEFT HAND
(B)	BEHIND or BOTTOM	LIGS	LIGATURES
BK	BRICK	LVL	LAMINATED VANEER LUMBER
BLDG	BUILDING	LONG.	LONGITUDINAL
BMT	BASE METAL THICKNESS	M/A	MASONRY ANCHOR
BTM	BOTTOM	MAN.	MANUFACTURER
BWK	BRICKWORK	MAX.	MAXIMUM
C.A.	CHEMSET ANCHORS	MIN.	MINIMUM
CEM.	CEMENT	MISC.	MISCELLANEOUS
CFW	CONTINUOUS FILLET WELD	MSRY	MASONRY
CHEM.	CHEMICAL	NEG.	NEGATIVE
CHS	CIRCULAR HOLLOW SECTION	NF	NEAR FACE
CL	CENTRE LINE	No.	NUMBER
CONC.	CONCRETE	NOM	NOMINAL
CONT.	CONTINUOUS	NS	NOMINAL SIZE
CRS	CENTRES	NTS	NOT TO SCALE
CSK	COUNTERSUNK	OA	OVERALL
CSK HD	COUNTERSUNK HEAD	OD	OUTSIDE DIAMETER
		OH	OVERHEAD
		OPP.	OPPOSITE
		PAR.	PARALLEL
		PC	PRECAST
CTR	CENTRE	PD	PLAN DETAIL
CYL.	CYLINDER	PFC	PARALLEL FLANGE CHANNEL
db	BAR DIA.	PL	PLATE
DET.	DETAIL	PLY	PLYWOOD
DIA.	DIAMETER	PT	POST TENSIONED
DIAG.	DIAGONAL	PREFAB.	PREFABRICATED
DIM.	DIMENSION	PRELIM.	PRELIMINARY
DIST.	DISTRIBUTION	QTY	QUANTITY
DL	DEAD LOAD	RAD.	RADIUS
DN	NOMINAL DIAMETER	RD	ROUND
DPC	DAMP PROOF COURSE	RECT.	RECTANGLE / RECTANGULAR
DWG	DRAWING	REF.	REFERENCE
e	EXISTING	REINF.	REINFORCEMENT
EA	EQUAL ANGLE	RHS	RECTANGULAR HOLLOW
ELEV.	ELEVATION	R.L.	REDUCED LEVEL
ESL	EXISTING SURFACE LEVEL	SEC.	SECTION
EST.	ESTIMATE	S	SEWER
EXP.	EXPANSION	SHS	SQUARE HOLLOW
EXT.	EXTERNAL	SL	SURFACE LEVEL
EXTG	EXISTING	SPEC.	SPECIFICATION
EW	EACH WAY	STD	STANDARD
(F)	IN FRONT	SQ	SQUARE
FF	FAR FACE	SW	STORMWATER
FFL	FINISHED FLOOR LEVEL	(T)	TOP
FL	FLAT	T.B.A.	TO BE ADVISED
FPBW	FULL PENETRATION BUTT WELD	TYP.	TYPICAL
FSBW	FULL STRENGTH BUTT WELD	UA	UNEQUAL ANGLE
FSL	FINISHED SURFACE LEVEL	UB	UNIVERSAL BEAM
FW	FLOOR WASTE	UC	UNIVERSAL COLUMN
GA	GENERAL ARRANGEMENT	U/G	UNDERGROUND
GALV.	GALVANISED	U.N.O.	UNLESS NOTED OTHERWISE
GR	GRADE	U/S	UNDERSIDE
GL	GLUE LAMINATED LUMBER	V	VERTICAL
H	HORIZONTAL	HD	HEAVY DUTY
		H.D.	HOLDING DOWN BOLTS
		HOZ	HORIZONTAL
		HS	HIGH STRENGTH

NOTATION:

BAJ	BRICK ARTICULATION JOINT	Ls	LINTEL - STEEL
BB	BOND BEAM	M	MULLION
BCJ	BLOCK CONTROL JOINT	OR	OUTRIGGER
Bol	BOLLARD	P	PURLIN
Br	BRACING	Pe	PEDESTAL
Bt	BATTEN	PF	PAD FOOTING
C	COLUMN	Pi	PILE
CB	CONCRETE BEAM	Pl	PLINTH
CJ	SLAB CONTROL / CONS. JOINT	R	RAFTER
DB	DECK BEAM	Rk	RAKER
DF	SLAB FALL THROUGH DOORWAY	RT	ROOF TRUSS
DH	DOOR HEAD	RW	RETAINING WALL FOOTING
DJ	DOOR JAM or DECK JOIST	SCJ	SAW CUT JOINT (1/4 D)
DP	DRILLED PIER	SF	STRIP FOOTING
DS	DOUBLE STUD	SR	SLAB REBATE
FB	FLOOR BEAM	St	STRUT or STUB
Fb	FLY BRACE	ST	SLAB THICKENING
FT	FLOOR TRUSS	T	TIE MEMBER
G	GIRT	Tr	STEEL TRUSS
FJ	FLOOR JOIST	UP	UNDER PIN
LBW	LOAD BEARING WALL	WP	WELD PLATE
		WPJ	WEAKENED PLANE JOINT
		Le	LEDGER
		Lt	LINTEL - TIMBER

SITE WORKS NOTES:

GENERAL SITE WORKS NOTES
1. DISCHARGE OF WATER ONTO GROUND SURFACE IS NOT PERMITTED.
2. SHOULD ANY SEEPAGE OR GROUNDWATER BE ENCOUNTERED ON SITE, IN FOOTING EXCAVATIONS OR SERVICE TRENCHES, IT IS RECOMMENDED THAT SUBSOIL DRAINS BE INSTALLED AND DISCHARGED TO THE STORMWATER DRAINAGE SYSTEM.
3. ANY SURFACE WATER RUNOFF FROM PAVED SURFACES SUCH AS DRIVEWAYS ETC. SHOULD BE COLLECTED AND DISCHARGED TO THE STORMWATER DRAINAGE SYSTEM.
4. CUTS & FILLS ON SITE SHOULD BE MINIMISED AND LIMITED TO LESS THAN 1.5m IN HEIGHT AND BATTERED AT AN ANGLE NO STEEPER THAN 1 VERT. TO 3 HOZ (1V:3H), OTHERWISE RETAIN WITH A WALL.
5. PROTECT ALL BATTER FACES WITH VEGETATION OR EROSION MATS.
6. MAINTAIN VEGETATION ON HILLS WHERE POSSIBLE.
7. INSTALL SURFACE WATER CUTOFF DRAINS AT CREST OF CUT / FILL BATTERS AND RETAINING WALLS AND DISCHARGE TO THE STORMWATER DRAINAGE SYSTEM.
8. THESE DRAWINGS SHOULD BE READ IN CONJUNCTION WITH RECOMMENDATIONS PROVIDED IN GEOTECH REPORT.
9. MITS REQUIRED BY ANY STATUTORY AUTHORITY.

SOIL AND WATER MANAGEMENT NOTES:

GENERAL SOIL AND WATER MANAGEMENT NOTES:
A. ALL WORKS ARE TO BE CARRIED OUT IN ACCORDANCE WITH 'SOIL & WATER MANAGEMENT ON BUILDING & CONSTRUCTION SITES' GUIDELINES AVAILABLE FROM NORTHERN RESOURCE MANAGEMENT (NRM), OR LOCAL EQUIVALENT.

SOIL EROSION CONTROL NOTES:
A. SOIL EROSION CONTROL TO BE IN ACCORDANCE WITH NRM GUIDELINES.
CONTRACTOR TO ALLOW TO;
1. LIMIT DISTURBANCE WHEN EXACTING BY PRESERVING VEGETATED AREAS AS MUCH AS POSSIBLE.
2. DIVERT UP-SLOPE WATER WHERE PRACTICAL.
3. INSTALL SEDIMENT FENCES DOWN SLOPE OF ALL DISTURBED LANDS TO FILTER LARGE PARTICLES PRIOR TO STORMWATER SYSTEM.
4. WASH EQUIPMENT IN DESIGNATED AREA THAT DOES NOT DRAIN TO STORMWATER SYSTEM.
5. PLACE STOCK PILES AWAY FROM ON-SITE DRAINAGE & UP-SLOPE FROM SEDIMENT FENCES.
6. LEAVE AND MAINTAIN VEGETATED FOOTPATH.
7. STORE ALL HARD WASTE & LITTER IN A DESIGNATED AREA THAT WILL PREVENT IT FROM BEING BLOWN AWAY & WASHED INTO THE STORMWATER SYSTEM.
8. RESTRICT VEHICLE MOVEMENT TO A STABILISED ACCESS.

NRM GUIDELINES NOTES:
A. CONTRACTOR TO COMPLETE ALL WORKS IN ACCORDANCE WITH NRM SOIL & WATER MANAGEMENT ON BUILDING& CONSTRUCTION SITE USING THE FOLLOWING FACT SHEETS;
- FACT SHEET 1: SOIL & WATER MANAGEMENT ON LARGE BUILDING & CONSTRUCTION SITES
- FACT SHEET 2: SOIL & WATER MANAGEMENT ON STANDARD BUILDING & CONSTRUCTION SITES
- FACT SHEET 3: SOIL & WATER MANAGEMENT PLANS
- FACT SHEET 4: DISPERSIVE SOILS - HIGH RISK OF TUNNEL EROSION

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PROJECT NAME
DELORAINE WASTE TRANSFER STATION

DRAWING TITLE
STRUCTURAL NOTES - SHEET 1 OF 2

SCALE AT A3	DRAWING NUMBER	SHEET	DISCIPLINE	REVISION
A.S.	2056 - 501	1 OF 2	ST	B

PLOTTED: 26.09.2025

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SOIL AND WATER MANAGEMENT NOTES CONT:

- FACT SHEET 5: MINIMISE SOIL DISTURBANCE
- FACT SHEET 6: PRESERVE VEGETATION
- FACT SHEET 7: DIVERT UP-SLOPE WATER
- FACT SHEET 8: EROSION CONTROL MATS & BLANKETS
- FACT SHEET 9: PROTECT SERVICE TRENCHES & STOCKPILES
- FACT SHEET 10: EARLY ROOF DRAINAGE CONNECTION
- FACT SHEET 11: SCOUR PROTECTION - STORMWATER PIPE OUTFALLS & CHECK DAMS
- FACT SHEET 12: STABILISED SITE ACCESS
- FACT SHEET 13: WHEEL WASH
- FACT SHEET 14: SEDIMENT FENCES & FIBRE ROLLS
- FACT SHEET 15: PROTECTION OF STORMWATER PITS
- FACT SHEET 16: MANAGE CONCRETE, BRICK & TILE CUTTING
- FACT SHEET 17: SEDIMENT BASINS
- FACT SHEET 18: DUST CONTROL
- FACT SHEET 19: SITE RE-VEGETATION

FOUNDATION NOTES:

GENERAL FOUNDATION NOTES:

A. REFER TO CSIRO BUILDING TECHNICAL FILE BTF18 'FOUNDATION MAINTENANCE AND FOOTING PERFORMANCE; A HOMEOWNERS GUIDE'. PLEASE USE THIS DOCUMENT AS A GUIDE TOMAINTENANCE REQUIREMENTS FOR THE PROPOSED STRUCTURE.
B. WE REFER YOU TO 'APPENDIX B: FOUNDATION PERFORMANCE AND MAINTENANCE' OF AS2870-2011FOR DETAILED INFORMATION ON FOUNDATION MAINTENANCE. WE NOTE THE FOLLOWING POINTS TAKEN FROM THIS APPENDIX:
   1. SOILS: ALL SOILS ARE AFFECTED BY WATER. SILTS AND SANDS ARE WEAKENED BY WATER. CLAYS SWELL AND SHRINK DUE TO CHANGE IN MOISTURE CONTENT. THIS PHENOMENON ADVERSELY IMPACTS FOUNDATIONS.
   2. FOUNDATION DESIGN: ENGINEERS DESIGN FOUNDATIONS FOR SOILS IN A MAINTAINED CONDITION. ENGINEERS DO NOT DESIGN FOR FOUNDATIONS FOR EXTREME CONDITIONS THAT COULD OCCUR SHOULD THE SITE NOT BE PROPERLY MAINTAINED; UNLESS INSTRUCTED OTHERWISE.
   3. PLUMBING: OWNERS SHOULD ALWAYS REPAIR PLUMBING LEAKS (WATER, SEWERAGE OR STORMWATER) IN AN URGENT MANNER.
   4. SITE DRAINAGE: GRADE THE SITE SO WATER DOES NOT POND AGAINST OR NEAR THE BUILDING. GROUND IMMEDIATELY ADJACENT A BUILDING SHOULD FALL AWAY FROM THE BUILDING AT A 1:50 MINIMUM SLOPE. SUB-FLOOR SPACE FOR A BUILDING WITH A SUSPENDED FLOOR SHOULD GRADE TO A DRAINED POINT TO PREVENT PONDING.

TREES AND LANDSCAPING NOTES:

1. WE REFER YOU TO 'APPENDIX B: FOUNDATION PERFORMANCE AND MAINTENANCE' OF AS2870-2011 FOR DETAILED INFORMATION ON FOUNDATION MAINTENANCE. WE NOTE THE FOLLOWING POINTS TAKEN FROM THIS APPENDIX:
   A. GARDEN LIMITATIONS: DEVELOPMENT OF GARDENS SHOULD NOT INTERFERE WITH DRAINAGE REQUIREMENTS OR SUB-FLOOR VENTILATION AND WEEPHOLE DRAINAGE. GARDEN BEDS ADJACENT BUILDINGS SHOULD BE AVOIDED. AVOID OVER WATERING OF GARDENS CLOSE TO BUILDING FOOTINGS.
   B. RESTRICTIONS ON TREES AND SHRUBS: PLANTING OF TREES SHOULD BE AVOIDED NEAR FOUNDATIONS OF BUILDINGS OR WITHIN CLOSE PROXIMITY TO NEIGHBORING BUILDINGS ON REACTIVE SITES. TO REDUCE, BUT NOT ELIMINATE THE POSSIBILITY OF DAMAGE, TREES SHOULD BE PLANTED IN ACCORDANCE WITH THE FOLLOWING SETBACKS;
      - 1.5 x MATURE HEIGHT FOR CLASS E SITES
      - 1 x MATURE HEIGHT FOR CLASS H1 & H2 SITES
      - 3/4 x MATURE HEIGHT FOR CLASS M SITES INCREASE THE ABOVE SETBACKS FOR ROWS OF TREES AS DIRECTED BE AN ENGINEER.
   C. TREE REMOVAL: REMOVAL OF TREES MAY CAUSE FOUNDATION PROBLEMS. FOR NEW DWELLINGS THAT REQUIRE TREES TO BE REMOVED, A PERIOD OF 12 MONTHS IS REQUIRED BETWEEN REMOVAL OF TREES AND COMMENCING CONSTRUCTION TO ALLOW THE SOILS TO RETURN TO THEIR NATURAL MOISTURE EQUILIBRIUM. SHOULD THE OWNER NEED TO CONSTRUCT THEIR BUILDING WITHIN A 12 MONTH PERIOD BETWEEN TREE REMOVAL AND CONSTRUCTION, REFER THIS MATTER TO2x4 ENGINEERING DESIGN FOR FURTHER DIRECTION. REMOVAL OF TREES AFTER CONSTRUCTION OR TREES CLOSE TO EXISTING DWELLINGS MAY CAUSE FOUNDATION PROBLEMS AND FURTHER DIRECTION FROM 2x4 ENGINEERING DESIGN IS REQUIRED.
   D. DESIGN OF FOOTINGS FOR TREES: SHOULD THE HOMEOWNER HAVE NO ALTERNATIVE AND REQUIRE THEIR FOOTINGS TO BE DESIGNED FOR TREES, CONTACT 2x4 ENGINEERING DESIGN FOR ADVICE.

CUT AND FILL NOTES:

1. CUTS AND FILLS ON SITE SHOULD BE MINIMISED AND LIMITED TO LESS THAN 1.5m IN HEIGHT AND BATTERED AT AN ANGLE NO STEEPER THAN 1 VERTICAL TO 3 HORIZONTAL.
2. MAINTAIN VEGETATION ON HILL SIDE AND RE-VEGETATE CUT AND FILL BATTERS.

SITE DRAINAGE NOTES:

1. PROVIDE SUB-SOIL DRAINS IN SERVICE TRENCHES AND FOOTINGS WHICH ENCOUNTER GROUND WATER. CONNECT TO COUNCIL STORM WATER SYSTEM.
2. SERVICE TRENCHES ARE TO RUN UP AND DOWN CONTOURS AS FAR AS PRACTICAL ON STEEP SITES.
3. REFER CIVIL ENGINEERS, HYDRAULIC ENGINEERS OR BUILDING DESIGNERS DRAWINGS FOR DETAILS.
4. SURFACE WATER TO BE DIRECTED AWAY FROM THE BUILDING DURING & AFTER CONSTRUCTION. ENSURE NO PONDING OF WATER OCCURS ADJACENT TO BUILDING.

UNIFORM FOUNDING MATERIAL NOTES:

1. ALL FOUNDATIONS ARE TO BE FOUNDED ON UNIFORM FOUNDING MATERIAL. INSTALL BULK PIERS OR BORED PIERS TO UNIFORM FOUNDING MATERIAL IF REQUIRED AS DIRECTED BY ENGINEER.

GEOTECHNICAL ENGINEERING NOTES:

1. CONTRACTORS ARE TO READ THE GEOTECHNICAL ENGINEERING REPORT AVAILABLE FROM THE CLIENT, PROJECT ARCHITECT OR 2x4 ENGINEERING DESIGN & ENSURE THEY COMPLY WITH ALL RECOMMENDATIONS &CONDITIONS MADE BY THE GEOTECHNICAL ENGINEER. 2x4 ENGINEERING DESIGN ACCEPT NO RESPONSIBILITY FOR FAILURE TO COMPLY WITH THESE CONDITIONS.

SLAB PREP NOTES:

GENERAL SLAB PREPARATION NOTES:

1. STRIP OFF EXISTING TOP SOIL, VEGETATION AND OTHER MATERIAL TO A MINIMUM DEPTH OF 150mm NOMINAL BELOW EXISTING SURFACE LEVEL.
2. PROOF ROLL EXPOSED SUB-GRADE AND CARRY OUT SUB-GRADE IMPROVEMENT WITH AN APPROVED EMBANKMENT MATERIAL IMPORTED OR STRIPPED FROM SITE AND PLACED AND TESTED IN ACCORDANCE WITH DSG SPEC R22 FOR EMBANKMENT MATERIAL.
3. FILL OVER SUB-GRADE TO UNDERSIDE OF SAND BLINDING WITH 150mm MAX. LAYERS OF COMPACTED BASE 'A' GRAVEL BACKFILL PLACED AND TESTED IN ACCORDANCE WITH DSG SPEC R40 FOR BASE CLASS 'A' MATERIAL.
4. POUR SLAB ON FORTECON AND 30mm MIN. SAND BLINDING.

REINF CONC NOTES:

1. GENERAL REINFORCED CONCRETE NOTES:
2. ALL CONCRETE WORK SHALL BE CARRIED OUT IN ACCORDANCE WITH AS2870 & AS3600 AND THE RELEVANT SPECIFICATIONS.
3. USE OF CALCIUM CHLORIDE IN CONCRETE IS NOT PERMITTED.
4. DURABILITY EXPOSURE CLASSIFICATIONS FOR SURFACES FOR MEMBERS ARE:
   - IN CONTACT WITH GROUND:A2
   - EXTERNAL ENVIRONMENT: B2
   - INTERNAL ENVIRONMENT: A1
5. CONCRETE COVER TO REINFORCEMENT AS NOTED BELOW AND ON THE DRAWINGS.
6. REINFORCEMENT NOTATION:
   - N HOT ROLLED GRADE 500 DEFORMED (RIBBED) BAR, DUCTILITY CLASS N TO AS4671
   - R STRUCTURAL GRADE 250 PLAIN BAR TO AS4671
   - W GRADE 500 HARD DRAWN WIRE TO AS4671
   - SL GRADE 500 HARD DRAWN WIRE SQUARE REINFORCING MESH, DUCTILITY CLASS L.
7. THE NUMBER FOLLOWING THE BAR SYMBOL IS THE NOMINAL BAR DIAMETER IN MILLIMETRES. REINFORCEMENT IS SHOWN DIAGRAMMATICALLY AND NOT NECESSARILY IN TRUE PROJECTION
8. REINFORCEMENT LAPS AND COGS ARE TO BE AS FOLLOWS (U.N.O.);

MINIMUM REINFORCEMENT LAPS			
MESH / BAR TYPE	GENERAL LAP	TOP OF BEAM LAP	MIN. BAR COG
SL	1 MESH SQUARE + 25mm		
RL	225mm ENDS, 125mm SIDES		
N12	500	650	200
N16	750	900	200
N20	900	1200	250
N24	1200	1500	300
N28	1400	1800	350
N32	1700	2100	400
N36	2000	2500	500

9. REINF. CRANKS ARE TO BE NO GREATER THAN 1 IN 6.
10. DO NOT WELD OR SITE BEND REINFORCEMENT UNLESS SHOWN ON THE DRAWINGS OR OTHERWISE APPROVED THE DESIGN ENGINEER.
11. REINFORCEMENT SHALL BE SUPPORTED ON APPROVED BAR CHAIRS, SPACERS OR SUPPORT BARS AT 800MAX. CRS EACH WAY FOR MESH AND 60 TIMES THE SMALLER BAR DIA. FOR BARS.
12. SIZES OF CONCRETE ELEMENTS DO NOT INCLUDE APPLIED FINISHES. BEAM DEPTHS INCLUDE SLAB THICKNESS.
13. PROVIDE DAMP PROOF MEMBRANE (0.2mm THICK APPROVED POLYTHENEMEMBRANE) TO UNDERSIDE OF SLABS ON GROUND IN ACCORDANCE WITH BCA F1.10. MEMBRANE LAPS SHALL BE 300mm MIN. AND TAPED WITH MIN. 50mm WIDE PRESSURE SENSITIVE WATERPROOF PAINT.
14. FORM CONSTRUCTION JOINTS IN CONCRETE ELEMENTS ONLY WHERE SHOWN ON THE DRAWINGS OR AS OTHERWISE APPROVED BY THE DESIGN ENGINEER. ALL CONCRETE INTERFACES TO CONSTRUCTION JOINT SHALL BE SCABBLED, CLEANED AND COATED WITH A CEMENT SLURRY IMMEDIATELY, PRIOR TO POURING CONCRETE.
15. ALL CONCRETE SHALL BE COMPACTED USING MECHANICAL VIBRATORS.
16. NO HOLES, CHASES OR EMBEDDED ITEMS OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE MADE IN CONCRETE ELEMENTS WITHOUT PRIOR APPROVAL OF THE DESIGN ENGINEER.
17. CURING OF CONCRETE SHALL COMMENCE A MIN. OF 2 HOURS AFTER CONCRETING IS FINISHED. CURING METHOD SHALL BE APPROVED BY THE DESIGN ENGINEER.
18. FORMWORK SHALL COMPLY WITH AS 3610 AND RELEVANT CONSTRUCTION SAFETY CODES. STRIPPING TIMES SHALL BE IN ACCORDANCE WITH TABLE 5.4.1 AND SHALL BE APPROVED BY THE DESIGN ENGINEER BEFORE PROCEEDING WITH THE WORK.
19. FINISHES TO UNFORMED SURFACES SHALL BE STEEL TROWELLED FINISH U.N.O.
20. FOR POLISHED CONC. FLOOR SLAB FINISHES, GRADE N32 CONC. AND SL92 SLAB MESH TO BE USED AS A MINIMUM.

CONC CHARACTERISTICS NOTES:

GENERAL CONCRETE CHARACTERISTICS NOTES:

1. CONCRETE CHARACTERISTICS SHALL GENERALLY BE SPECIFIED WITHIN THE SPECIFIC SCHEDULES. WHERE NO SPECIFIC SPECIFICATION IS PROVIDED THE FOLLOWING CONCRETE CHARACTERISTICS SHALL BE USED.

	CONC. GRADE	MAX. NOM. AGG. SIZE	MAX. SLUMP	REINF. COVER (U.N.O)
MASS CONC.	N15	20mm	80mm	-
STRIP FOOTINGS PADS & PIERS	N25	20mm	80mm	50mm
BLOCKWORK COREFILL	N15	10mm	200mm	25mm
SLABS ON GRADE	N32	20mm	80mm	30mm
SUSPENDED SLAB: INTERNAL	N40	20mm	80mm	20mm
SUSPENDED SLAB: EXTERNAL	N40	20mm	80mm	30mm
STAIRS AND LANDINGS	N40	20mm	80mm	30mm
FORMED CONC. WALLS	N32	20mm	80mm	40mm
PRECAST PANELS.	N40	20mm	80mm	20mm (INT.) 30mm (EXT.)

ALL CONCRETE TO CONTAIN PORTLAND CEMENT TYPE A (U.N.O.)

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PROJECT NAME
DELORAINE WASTE TRANSFER STATION

DRAWING TITLE
STRUCTURAL NOTES - SHEET 2 OF 2

SCALE AT A3	DRAWING NUMBER	SHEET	DISCIPLINE	REVISION
A.S.	2056 - 502	2 OF 2	ST	B

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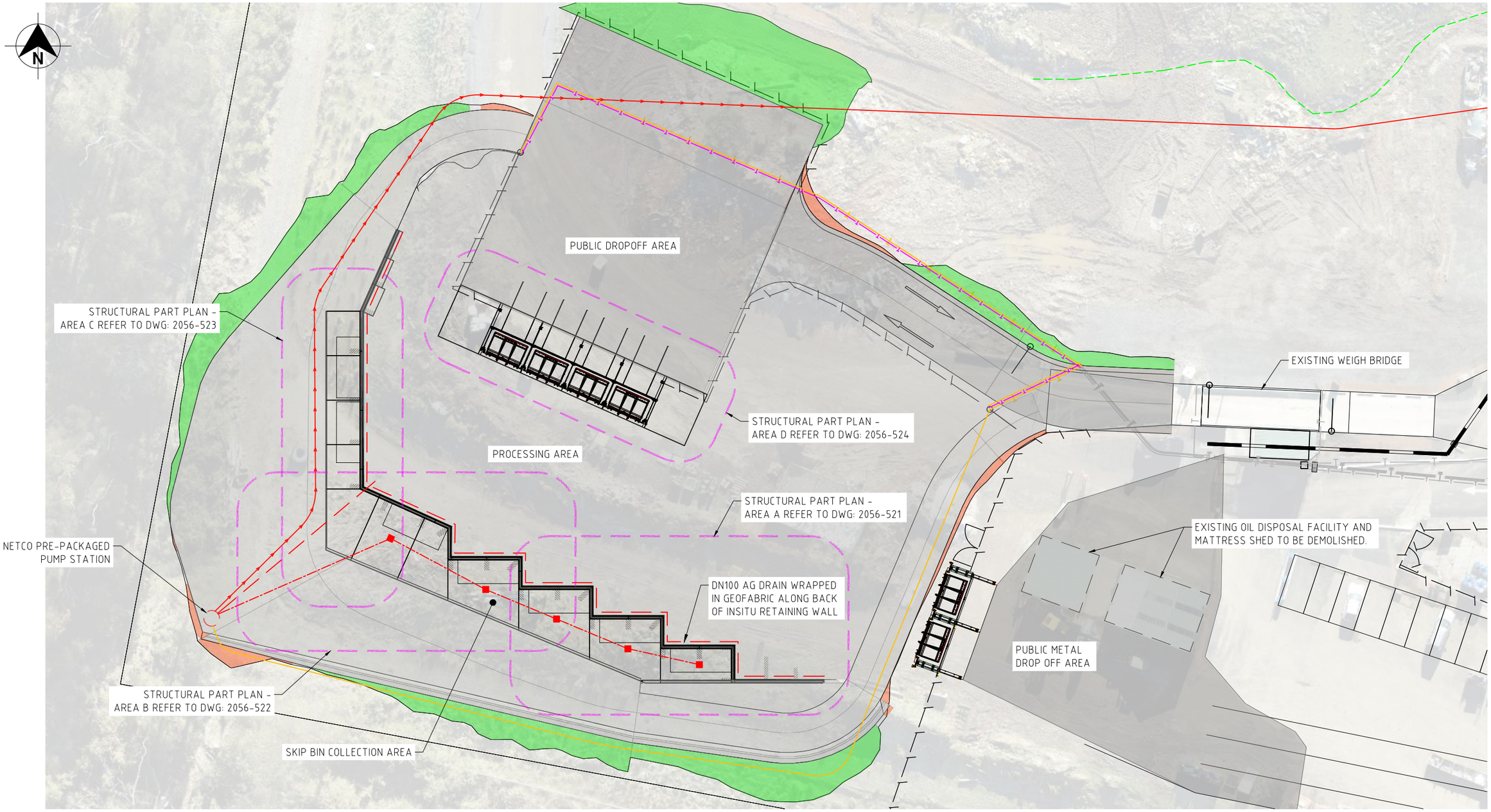

OVERALL STRUCTURAL WORKS PLAN

SCALE - 1:400

WARNING

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DELORAINE WASTE TRANSFER STATION

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OVERALL STRUCTURAL PLAN

SCALE AT A3	DRAWING NUMBER	SHEET	DISCIPLINE	REVISION
A.S.	2056 - 511	1 OF 1	ST	B

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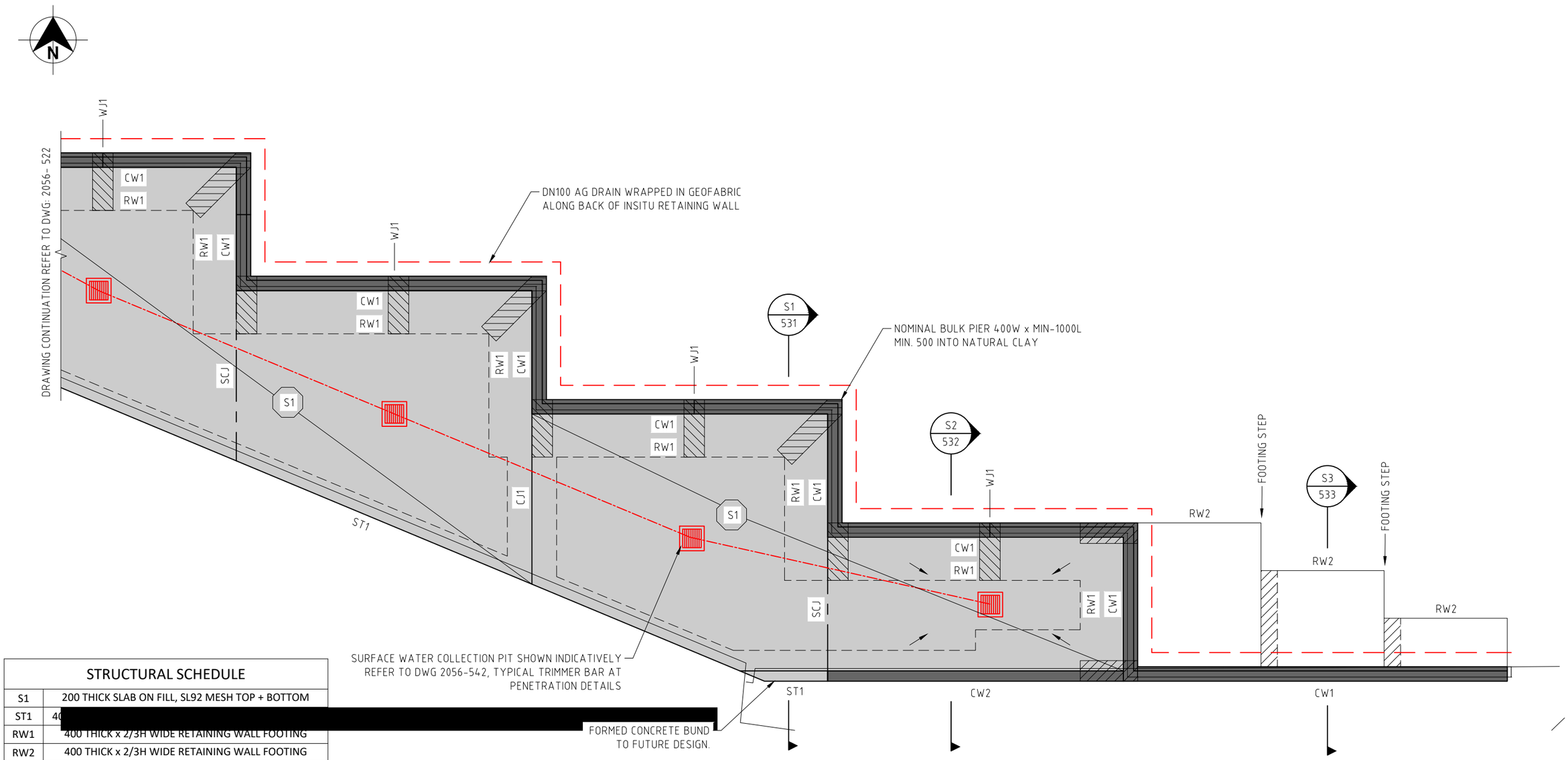

STRUCTURAL PART PLAN - AREA A

SCALE - 1:100

STRUCTURAL SCHEDULE	
S1	200 THICK SLAB ON FILL, SL92 MESH TOP + BOTTOM
ST1	40 [redacted]
RW1	400 THICK x 2/3H WIDE RETAINING WALL FOOTING
RW2	400 THICK x 2/3H WIDE RETAINING WALL FOOTING
CW1	250 - 350 (BASE) THICK SPLAYED INSITU WALL REFER SECTION FOR FURTHER DETAIL
CW2	250 THICK INSITU WALL
CJ1	CONSTRUCTION JOINT. REFER TO TYPICAL DETAILS
SCJ	SAW CUT JOINT. REFER TO TYPICAL DETAILS
EJ1	EXPANSION JOINT. REFER TO TYPICAL DETAILS
WJ1	WALL CONTROL JOINT, REFER TO TYPICAL DETAILS

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PROJECT NAME
DELORAINE WASTE TRANSFER STATION

DRAWING TITLE
LOCAL STRUCTURAL WORKS PLAN - SHEET 1

SCALE AT A3	DRAWING NUMBER	SHEET	DISCIPLINE	REVISION
A.S.	2056 - 521	1 OF 4	ST	B

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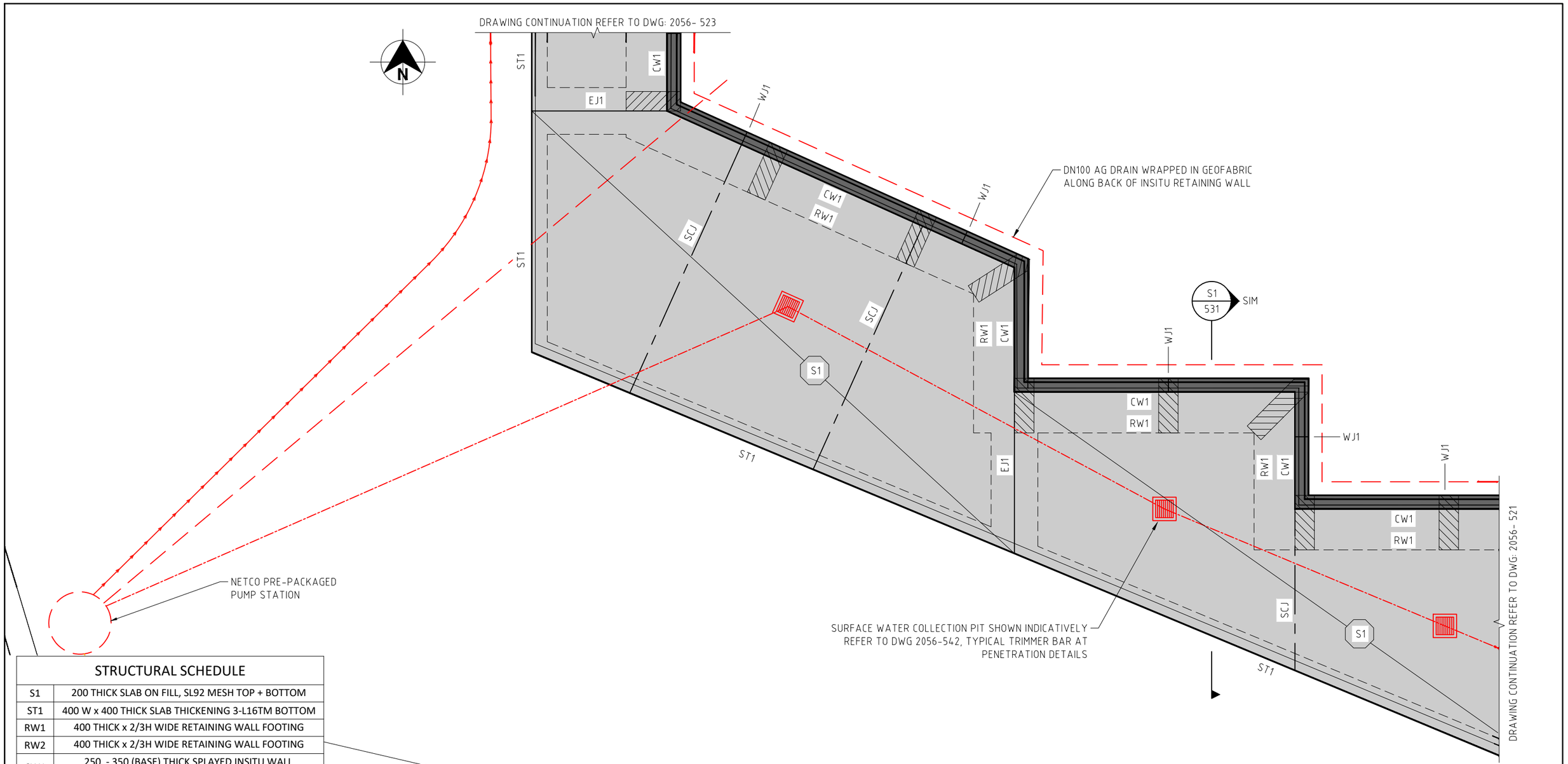

STRUCTURAL SCHEDULE	
S1	200 THICK SLAB ON FILL, SL92 MESH TOP + BOTTOM
ST1	400 W x 400 THICK SLAB THICKENING 3-L16TM BOTTOM
RW1	400 THICK x 2/3H WIDE RETAINING WALL FOOTING
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SCJ	SAW CUT JOINT. REFER TO TYPICAL DETAILS
EJ1	EXPANSION JOINT. REFER TO TYPICAL DETAILS
WJ1	WALL CONTROL JOINT, REFER TO TYPICAL DETAILS

STRUCTURAL PART PLAN - AREA B

SCALE - 1:100

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PROJECT NAME
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DRAWING TITLE
LOCAL STRUCTURAL WORKS PLAN - SHEET 2

SCALE AT A3	DRAWING NUMBER	SHEET	DISCIPLINE	REVISION
A.S.	2056 - 522	2 OF 4	ST	B

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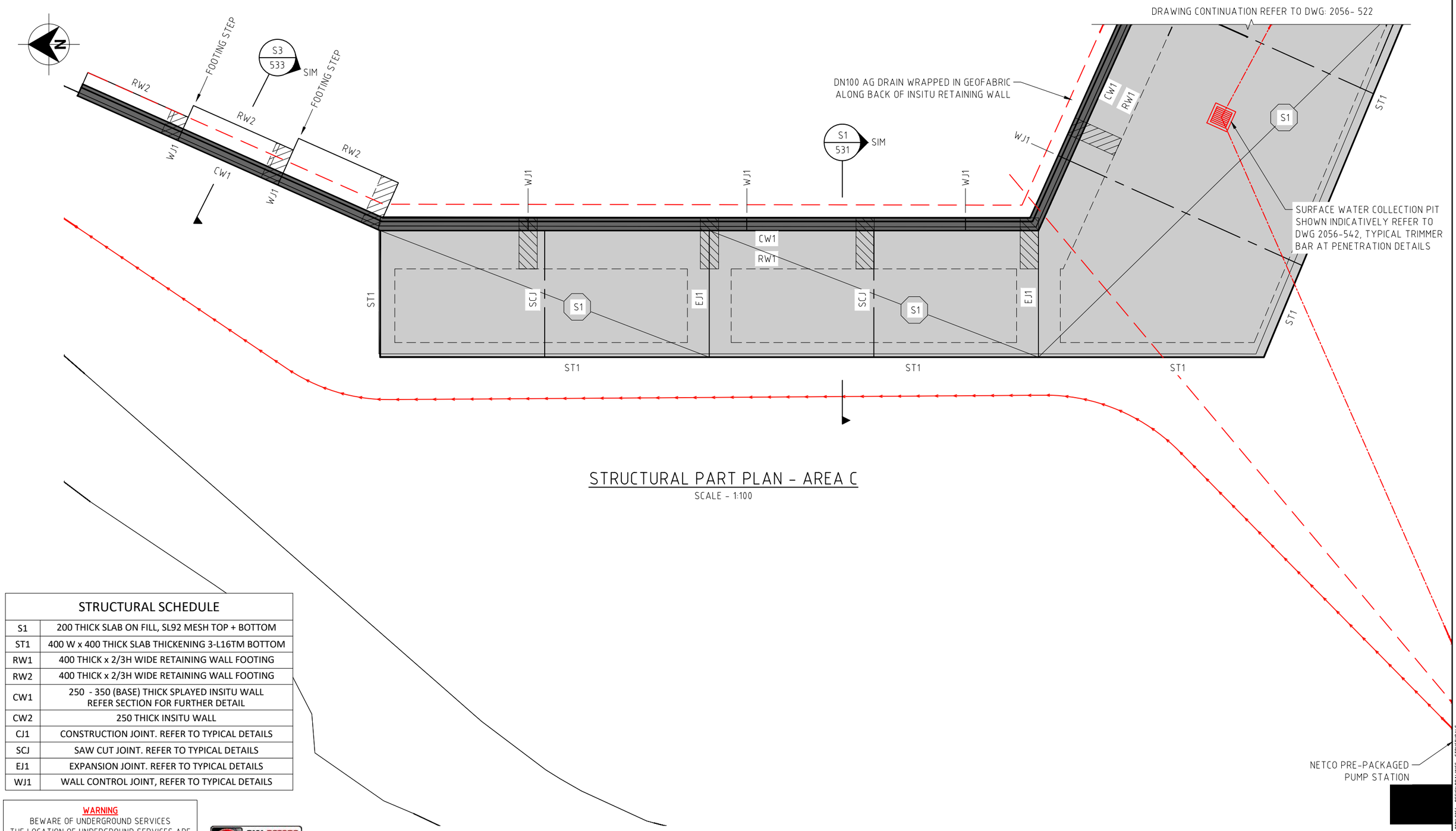

STRUCTURAL PART PLAN - AREA C

SCALE - 1:100

STRUCTURAL SCHEDULE	
S1	200 THICK SLAB ON FILL, SL92 MESH TOP + BOTTOM
ST1	400 W x 400 THICK SLAB THICKENING 3-L16TM BOTTOM
RW1	400 THICK x 2/3H WIDE RETAINING WALL FOOTING
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LOCAL STRUCTURAL WORKS PLAN - SHEET 3

SCALE AT A3	DRAWING NUMBER	SHEET	DISCIPLINE	REVISION
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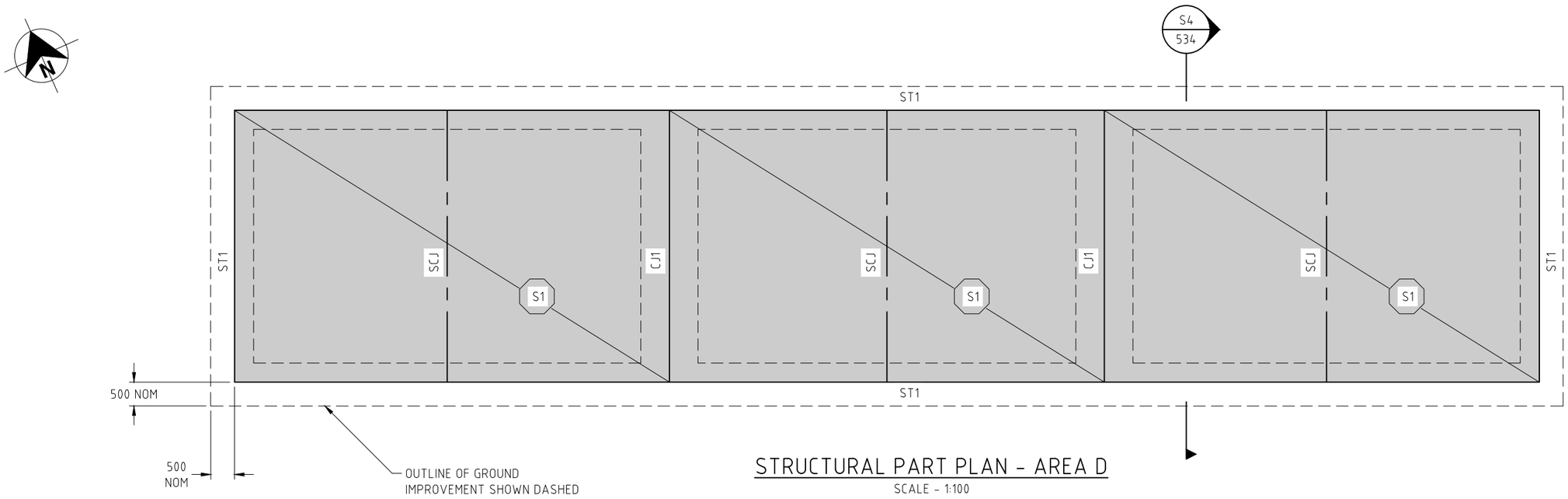

STRUCTURAL PART PLAN - AREA D

SCALE - 1:100

STRUCTURAL SCHEDULE	
S1	200 THICK SLAB ON FILL, SL92 MESH TOP + BOTTOM
ST1	400 W x 400 THICK SLAB THICKENING 3-L16TM BOTTOM
RW1	400 THICK x 2/3H WIDE RETAINING WALL FOOTING
RW2	400 THICK x 2/3H WIDE RETAINING WALL FOOTING
CW1	250 - 350 (BASE) THICK SPLAYED INSITU WALL REFER SECTION FOR FURTHER DETAIL
CW2	250 THICK INSITU WALL
CJ1	CONSTRUCTION JOINT. REFER TO TYPICAL DETAILS
SCJ	SAW CUT JOINT. REFER TO TYPICAL DETAILS
EJ1	EXPANSION JOINT. REFER TO TYPICAL DETAILS
WJ1	WALL CONTROL JOINT, REFER TO TYPICAL DETAILS

WARNING

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0 1 2 3 4 5 METRES
SCALE 1:100

50% DESIGN - PLANNING SUBMISSION

REV	DATE	DESCRIPTION	DRN	CHK
B	26.09.25	50% DESIGN - PLANNING SUBMISSION	CJ	MAW
A	30.07.25	30% DESIGN	CJ	MAW

		DATE
DRAWN	CJ	30.07.25
CHECKED	MW	30.07.25
DESIGNED	MP	30.07.25
DESIGN APP.	MW	30.07.25
APPROVED	MW	30.07.25

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PHONE. 0419 574 975
EMAIL. admin@ipdconsulting.com.au

PROJECT NAME
DELORAINE WASTE TRANSFER STATION

DRAWING TITLE
LOCAL STRUCTURAL WORKS PLAN - SHEET 4

SCALE AT A3	DRAWING NUMBER	SHEET	DISCIPLINE	REVISION
A.S.	2056 - 524	4 OF 4	ST	B

PLOTTED: 26.09.2025

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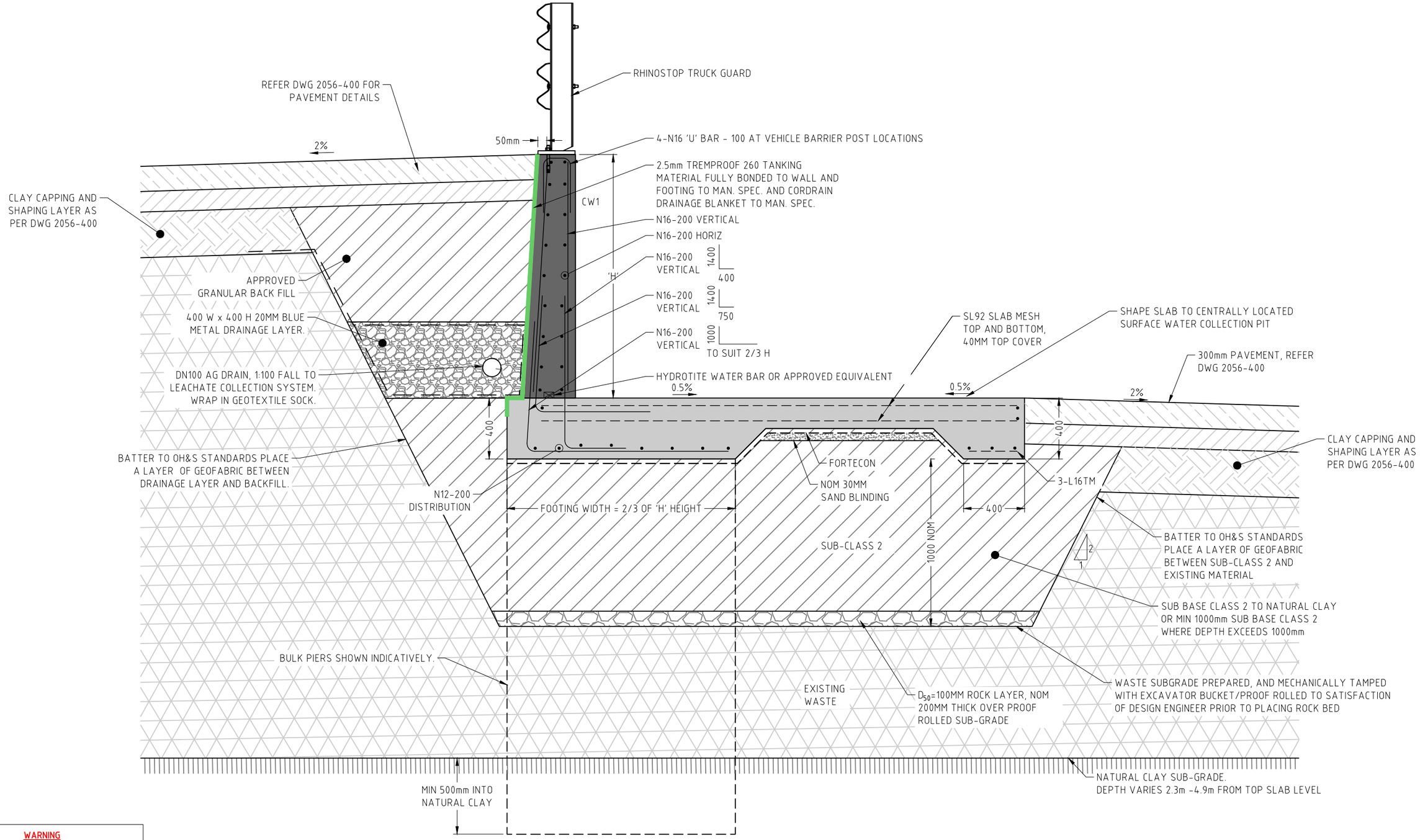

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0 0.25 0.5 0.75 1 1.25 METRES
SCALE 1:25

SECTION S1
SCALE 1:25 — 521

50% DESIGN - PLANNING SUBMISSION

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B	26.09.25	50% DESIGN - PLANNING SUBMISSION	CJ	MAW
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		DATE
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PROJECT NAME
DELORAINE WASTE TRANSFER STATION

DRAWING TITLE
SECTIONS & DETAILS - SHEET 1

SCALE AT A3	DRAWING NUMBER	SHEET	DISCIPLINE	REVISION
A.S.	2056 - 531	1 OF 4	ST	B

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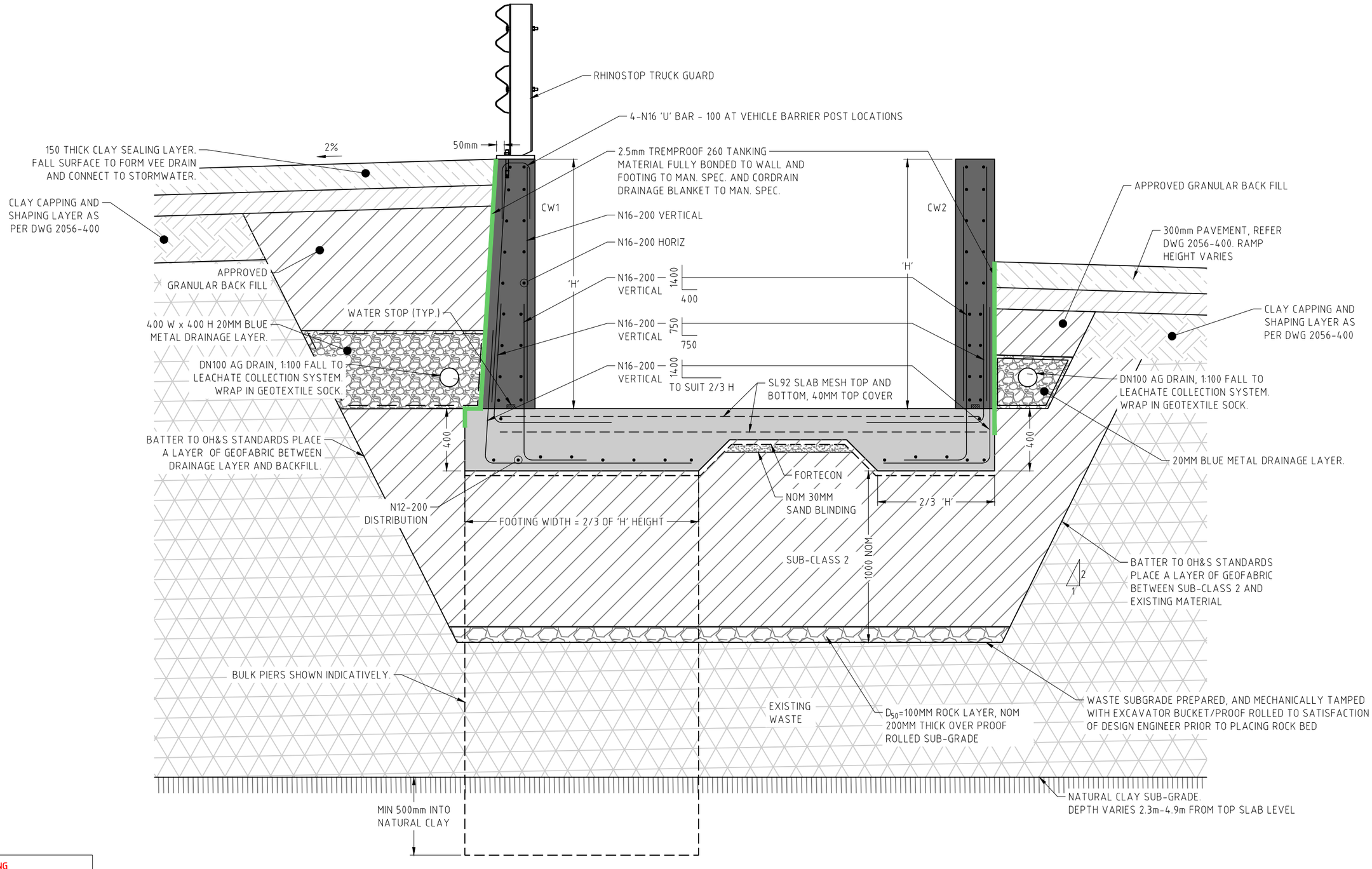
PLOTTED: 26.09.2025



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0 0.25 0.5 0.75 1 1.25 METRES
SCALE 1:25

SECTION S2
SCALE 1:25 521

50% DESIGN - PLANNING SUBMISSION

REV	DATE	DESCRIPTION	DRN	CHK
B	26.09.25	50% DESIGN - PLANNING SUBMISSION	CJ	MAW
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		DATE
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CHECKED	MW	30.07.25
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PROJECT NAME
DELORAINE WASTE TRANSFER STATION

DRAWING TITLE
SECTIONS & DETAILS - SHEET 2

SCALE AT A3	DRAWING NUMBER	SHEET	DISCIPLINE	REVISION
A.S.	2056 - 532	2 OF 4	ST	B

PLOTTED: 26.09.2025

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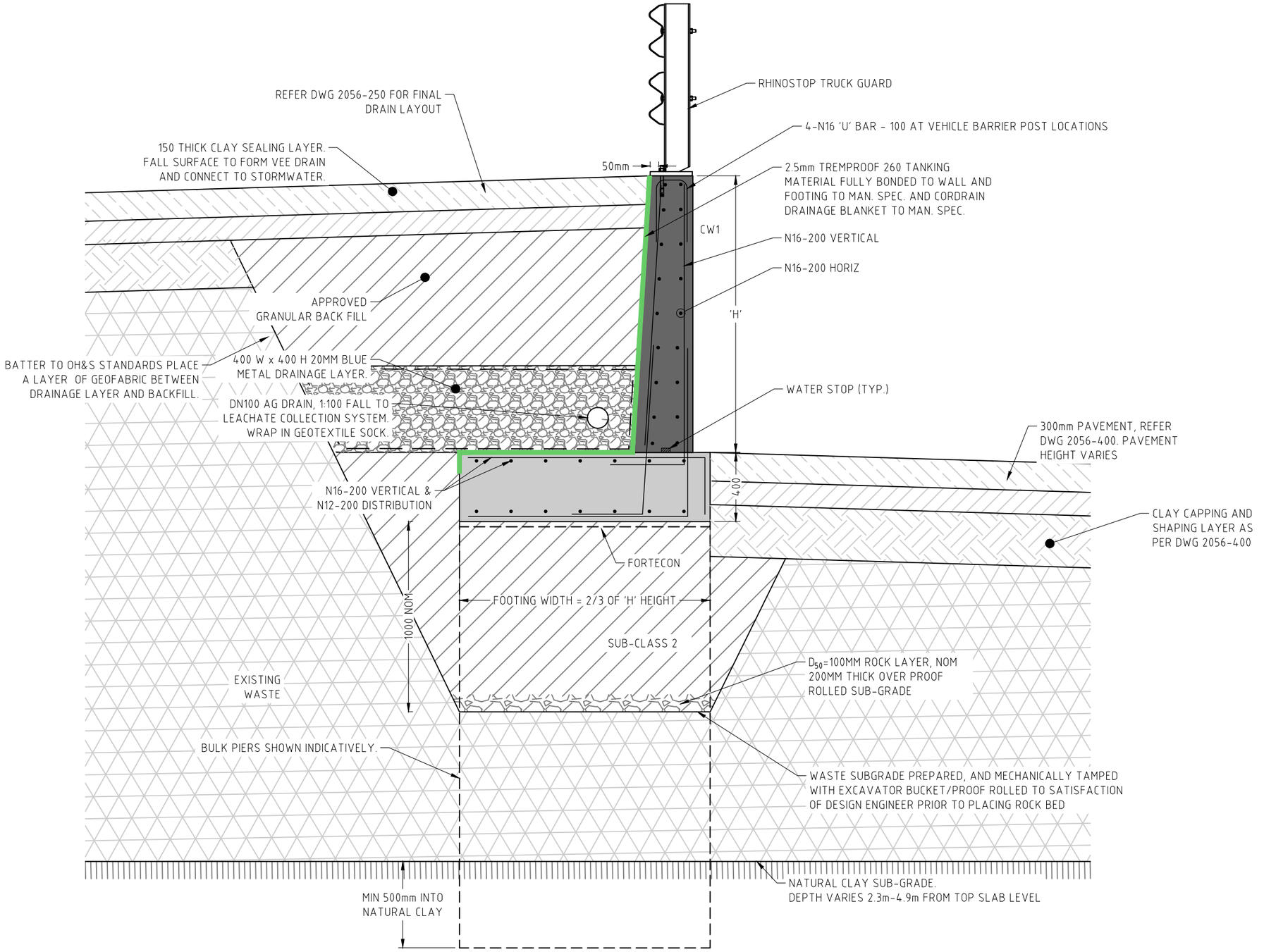

SECTION S3 / 521

SCALE 1:25

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SCALE 1:25

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PROJECT NAME
DELORAINE WASTE TRANSFER STATION

DRAWING TITLE
SECTIONS & DETAILS - SHEET 3

SCALE AT A3	DRAWING NUMBER	SHEET	DISCIPLINE	REVISION
A.S.	2056 - 533	3 OF 4	ST	B

PLOTTED: 26.09.2025

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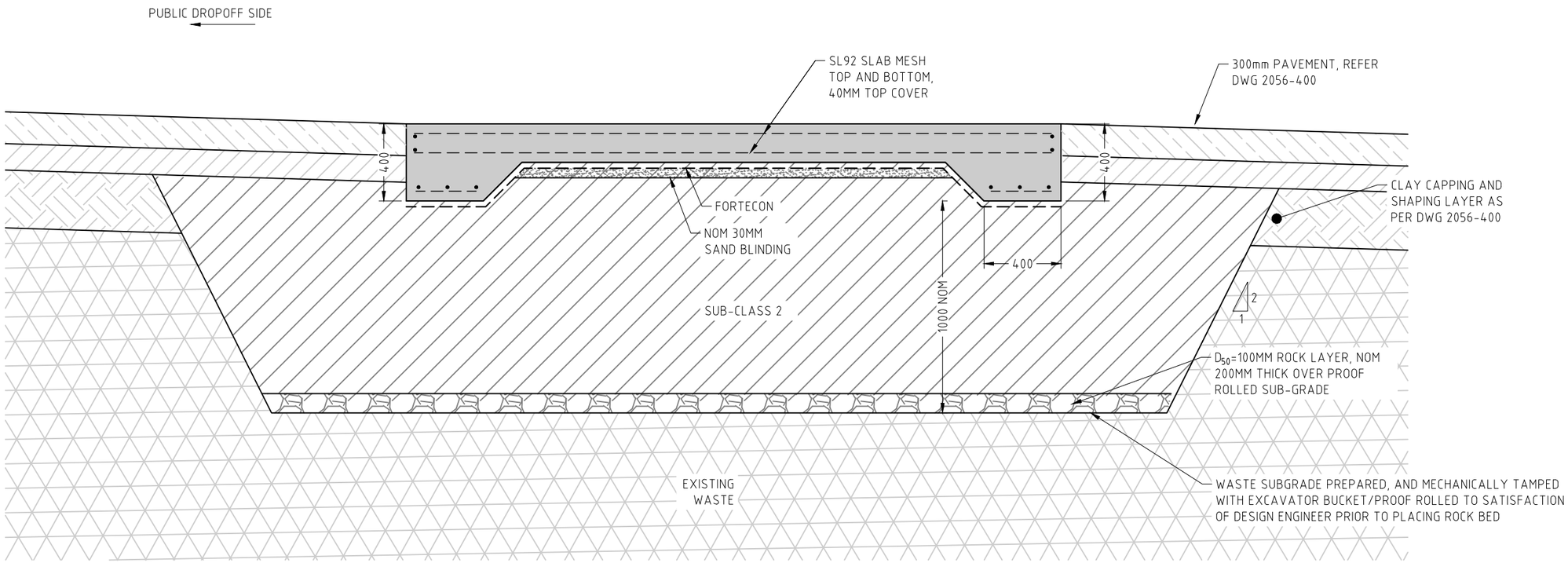

SECTION S4/524
SCALE 1:25

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SCALE 1:25

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PROJECT NAME
DELORAINE WASTE TRANSFER STATION

DRAWING TITLE
SECTIONS & DETAILS - SHEET 4

SCALE AT A3	DRAWING NUMBER	SHEET	DISCIPLINE	REVISION
A.S.	2056 - 534	4 OF 4	ST	B

PLOTTED: 26.09.2025

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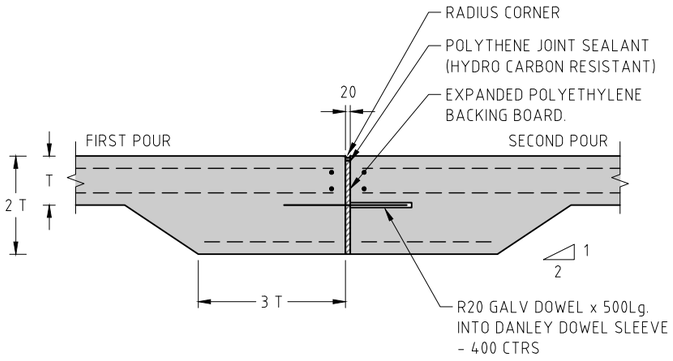
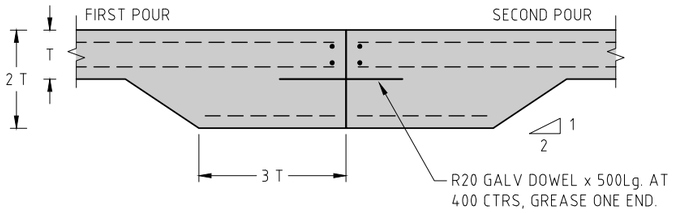


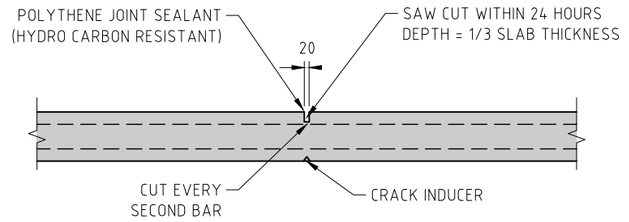
TYPICAL EXPANSION JOINT (EJ1) DETAIL

SCALE - 1:25



TYPICAL CONTROL JOINT (CJ1) DETAIL

SCALE - 1:25



TYPICAL SAW CUT JOINT (SCJ) DETAIL

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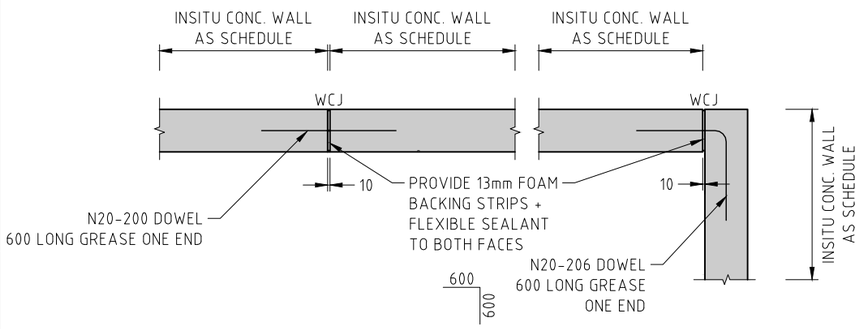

TYPICAL WALL CONTROL JOINT (WCJ) DETAIL

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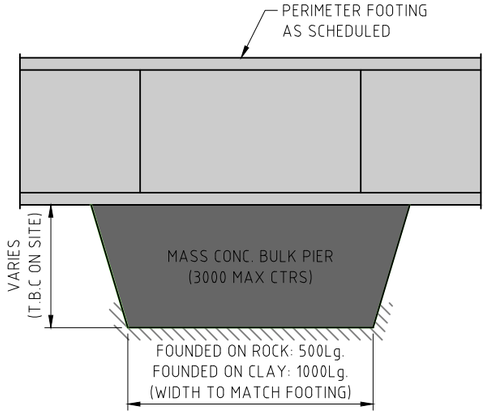

MASS CONCRETE BULK PIER DETAIL

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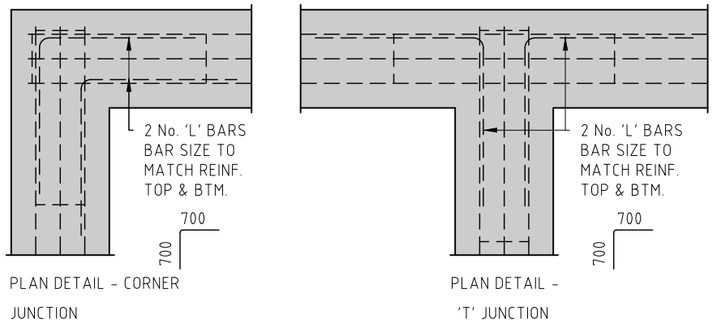

STRIP FOOTING/SLAB THICKENING/ 'T' JUNCTION REINF (TYP)

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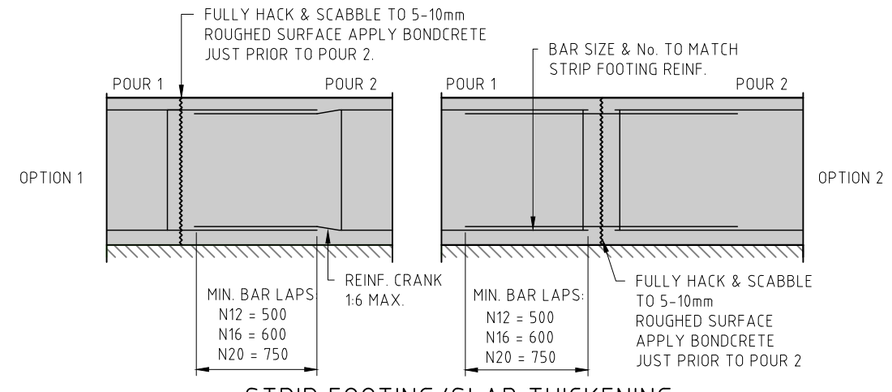
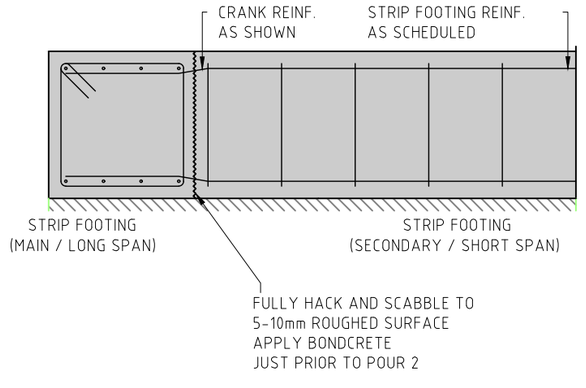
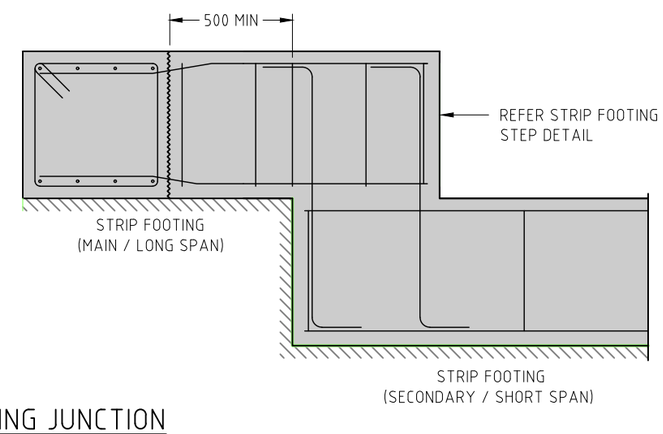


STRIP FOOTING/SLAB THICKENING POUR JOINING DETAIL

SCALE - 1:25





STRIP FOOTING JUNCTION

SCALE - 1:25

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0 0.25 0.5 0.75 1 1.25 METRES
SCALE 1:25

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PROJECT NAME
DELORAINE WASTE TRANSFER STATION

DRAWING TITLE
TYPICAL DETAILS - SHEET 1

SCALE AT A3	DRAWING NUMBER	SHEET	DISCIPLINE	REVISION
A.S.	2056 - 541	1 OF 2	ST	B

PLOTTED: 26.09.2025

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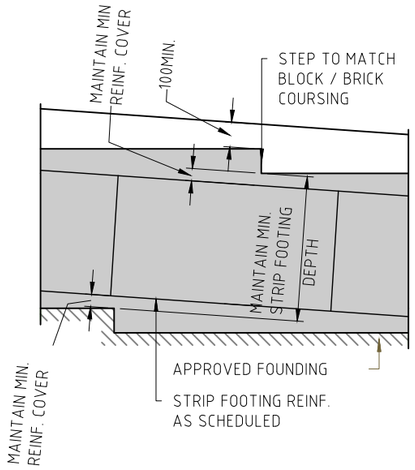
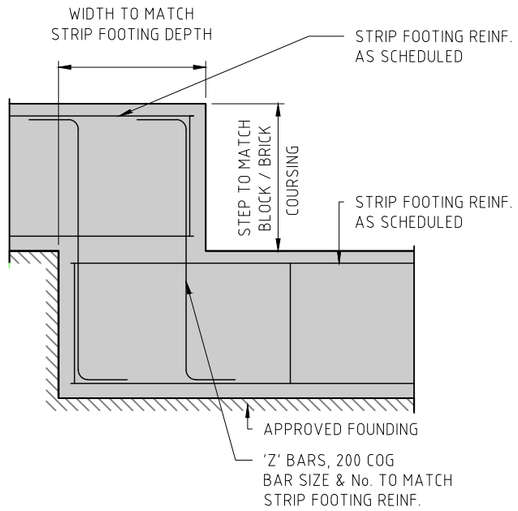


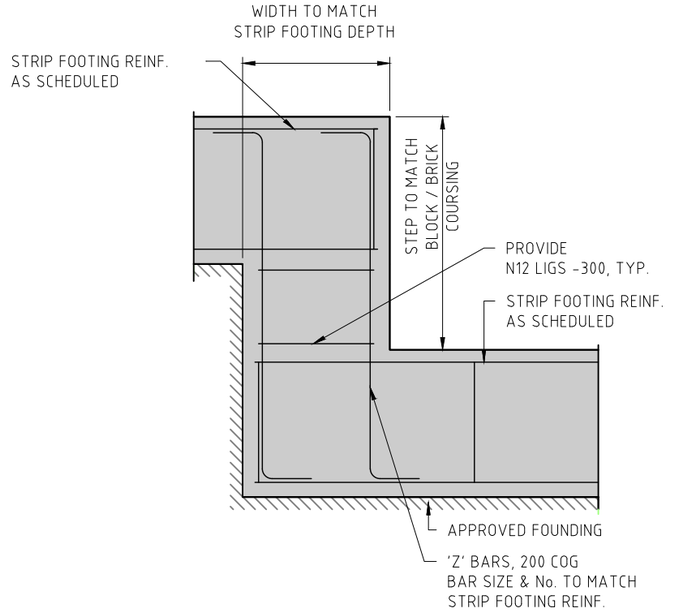
STRIP FOOTING STEP, SHALLOW STEP

SCALE - 1:25



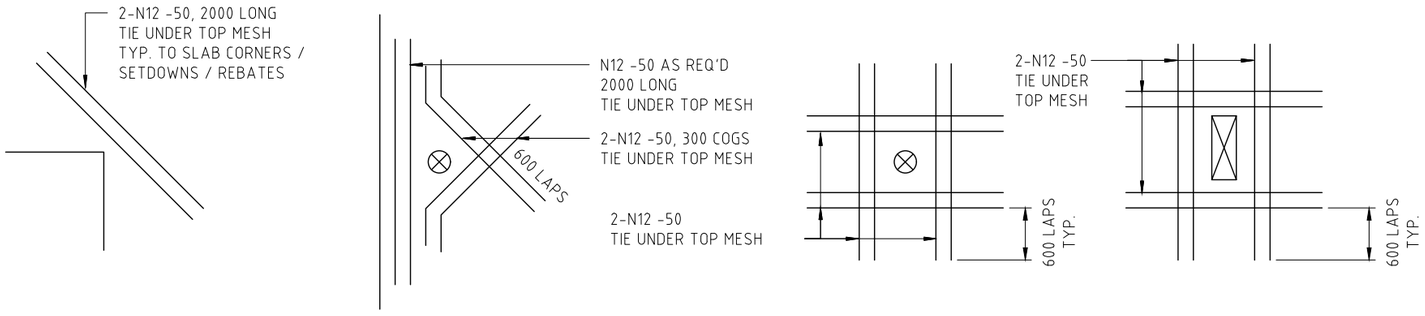
STRIP FOOTING STEP, DEEP STEP (600 MAX)

SCALE - 1:25



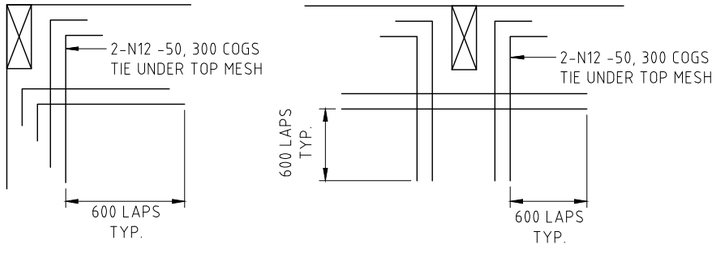
STRIP FOOTING STEP, DEEP STEP (2000 MAX)

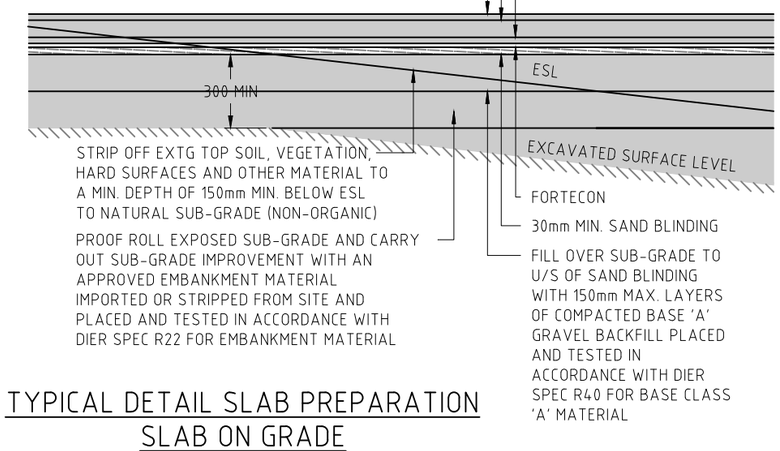
SCALE - 1:25



TYPICAL TRIMMER BARS AT PENETRATIONS/BLOCKOUTS/CORNERS ETC

SCALE - 1:25





TYPICAL DETAIL SLAB PREPARATION SLAB ON GRADE

SCALE - 1:25

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PROJECT NAME
DELORAINE WASTE TRANSFER STATION

DRAWING TITLE
TYPICAL DETAILS - SHEET 2

SCALE AT A3	DRAWING NUMBER	SHEET	DISCIPLINE	REVISION
A.S.	2056 - 542	2 OF 2	ST	B

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Deloraine Waste Transfer Station Phase 1 Environmental Site Assessment

Meander Valley Council

Report

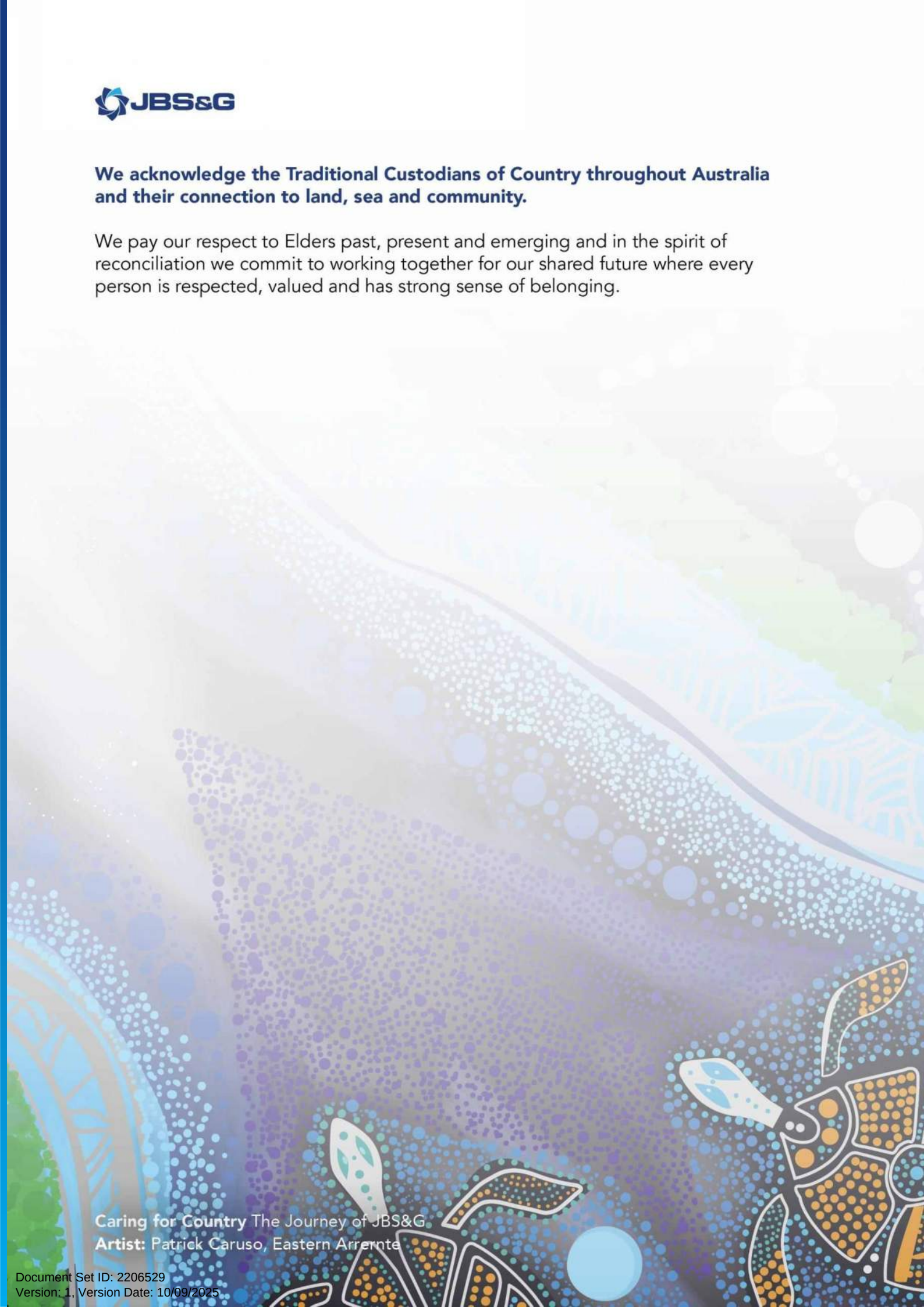
70536 | 170,440 (Rev0)

3 September 2025

Document Set ID: 2206529
Version: 1, Version Date: 10/09/2025

We acknowledge the Traditional Custodians of Country throughout Australia and their connection to land, sea and community.

We pay our respect to Elders past, present and emerging and in the spirit of reconciliation we commit to working together for our shared future where every person is respected, valued and has strong sense of belonging.



Document Set ID: 2206529
Version: 1, Version Date: 10/09/2025

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Version: 1, Version Date: 10/09/2025

List of Tables

List of Figures

Appendices

Document Set ID: 2206529
Version: 1, Version Date: 10/09/2025

Abbreviations

Term	Definition
AHD	Australian Height Datum
ANZG	Australian and New Zealand Guidelines (for fresh and marine waters)
AS	Australian Standards
ASC NEPM	National Environment Protection (Assessment of Site Contamination) Measure
BTEXN	Benzene, toluene, ethylbenzene, xylenes and naphthalene
COPC	Contaminant of Potential Concern
CSM	Conceptual Site Model
DQO	Data Quality Objective
ESA	Environmental Site Assessment
EV	Environmental Values
LEL	Lower Explosive Limit
mbgs	Metres below ground surface
PID	Photoionisation Detector
SPR	Source-Pathway-Receptor
EPA TAS	Environment Protection Authority Tasmania
TRH	Total Recoverable Hydrocarbons

Document Set ID: 2206529
Version: 1, Version Date: 10/09/2025

Executive Summary

JBS&G Australia Pty Ltd (JBS&G) was engaged by Meander Valley Council to complete a Phase 1 Environmental Site Assessment (ESA) at the Deloraine Waste Disposal (DWD) Site located at 54 Tip Rd, Deloraine, Tasmania (the site) to address the Potentially Contaminated Land Code within the Tasmanian Planning Scheme, for the development of a Waste Transfer Station in the southern part of the DWD site.

Waste was discovered in the proposed development area during initial investigations and historical aerial photos indicate that the initial landfilling area (1969-1993) was located beneath the proposed development. JBS&G completed a site inspection on 26 August 2025, during the site inspection five test pits were completed to assess the characteristics and thickness of the waste in the proposed development area, in addition to three test pits that were completed by IPD Consulting in October 2024.

Waste Classification

The waste beneath the proposed waste transfer station area has been observed to:

- be between 2.1 and 4.6 m in thickness, with the thickness increasing toward the central area.
- Soil beneath the waste was observed to be clay, with topsoil above the clay in some test pits. Clay appeared to be undisturbed natural.
- be domestic waste including plastic food wrappers, bottles, plastic bags and degraded putrescible waste.
- methane gas was measured between 4 and 35% of LEL that relatively quickly dissipated, indicating that degradation is occurring however the gas is unlikely trapped at high levels within the waste.

Based on the above the waste has been assessed to consistent with the permitted waste categories in the site EPN and is not a controlled waste. As such the waste excavated during the development of the waste transfer station can be disposed of in the active landfill cell, subject to the annual permitted volume is not exceeded.

Risk Assessment

Based on the observed waste the proposed excavation may pose an unacceptable risk to human health or the environment unless managed.

Potentially Contaminated Land Code

With regards to the PCLC C14.6 Development Standards for Building Works a Construction Environmental Management Plan is required including protection measures for:

- Landfill gas – explosion and exposure
- Unexpected finds – hazardous wastes such as asbestos and fuel/chemical drums.
- Capping of in-situ waste after excavation
- Excavation through the natural clay layer into underlying geology must be sealed.

With the CEMP in place during development the proposed excavation will not adversely impact human health or the environment.

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1. Introduction

JBS&G Australia Pty Ltd (JBS&G) was engaged by Meander Valley Council to complete a Phase 1 Environmental Site Assessment (ESA) at the Deloraine Waste Disposal (DWD) Site located at 54 Tip Rd, Deloraine, Tasmania (the site) to address the Potentially Contaminated Land Code within the Tasmanian Planning Scheme, for the development of a Waste Transfer Station in the southern part of the DWD site. The site and the location of site is shown in attached **Figure 1, Appendix A.**

1.1 Site Regulation

As an operational landfill the site is regulated by the Environment Protection Authority Tasmania (EPA TAS) as a Level 2 activity and an Environment Protection Notice (EPN) (No. 7216/3) is in place at the site. The EPN sets out permitted waste and operational management condition for the site. The waste permitted to be disposed of at the site include inert waste, clean fill, putrescible waste, green waste, medical sharps from non-commercial sources and sanitary waste from non-patient areas, commercial premises, age care facilities, geriatric and maternity wards, childcare centres restaurants and other public places. With specific conditions the site can also receive and store the controlled waste classes: tyres, batteries and waste oil.

The site cannot receive:

- controlled waste unless approved under the EPN conditions
- liquid waste
- untreated sanitary waste from patient areas and sanitary waste that is saturated with or contains free flowing blood or other body fluids and sanitary waste arising from chemotherapy treatment
- low level contaminated soil; and
- sewer sludge.

1.2 Proposed Development

The proposed development is shown in **Figure 1-1** below and include the construction of a public drop of areas with skip bins and processing area. The construction includes excavation mainly for the construction of a retaining wall in the southern end of the site to level the area for the skip bin collection area, and general improvements to the broader surface cover of the proposed transfer station area. The exact volume of material to be excavated has not yet been established.

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Figure 1-1 Proposed Development

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1.3 Objectives

The objectives of the Phase 1 ESA were to assess:

- Whether any potential site contamination presents a risk to workers involved in redevelopment of the site, or future users of the site, as a result of proposed excavation of the site.
- Whether any potential site contamination presents an environmental risk during excavation.
- Whether any specific remediation and/ or protection measures are required to ensure proposed excavation does not adversely impact human health or the environment.

1.4 Approach Under Regulatory Framework

This Phase 1 ESA was conducted by JBS&G following the assessment framework outlined in the National Environment Protection (Assessment of Site Contamination) Measure (ASC NEPM) 1999, as amended in 2013. The Tasmania government has adopted this ASC NEPM as State Policy, and it can be reasonably referenced as the standard set by the EPA.

1.5 Potentially Contaminated Land Code

The Tasmanian Planning Scheme PCLC is applicable to development (unless exempt) on all sites that have a history of potentially contaminating activities, including landfilling. The proposed development triggers the PCLC C14.6 Development Standards for Building Works – C14.6.1 Excavation works (**Table 1-1**).

Table 1-1 C14.6.1 Excavation works

Objective
That works involving excavation of potentially contaminated land, excluding on land subject to the Macquarie Point Development Corporation Act 2012, do not adversely impact on human health or the environment.
Acceptable Solution
A1 Excavation, excluding on land subject to the Macquarie Point Development Corporation Act 2012, must involve less than 250m^3 of site disturbance.
Performance Criteria
P1 Excavation, excluding on land subject to the Macquarie Point Development Corporation Act 2012, must not have an adverse impact on human health or the environment, having regard to: a) an environmental site assessment that demonstrates there is no evidence the land is contaminated; b) an environmental site assessment that demonstrates that the level of contamination does not present a risk to human health or the environment; or c) an environmental site assessment, including a plan to manage contamination and associated risk to human health and the environment, that includes: i. any specific remediation and protection measures required to be implemented before excavation commences; and ii. a statement that the excavation does not adversely impact on human health or the environment.

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2. Site Description and Environmental Setting

Table 2-1 Site Information

Item	Description
Site Name	Deloraine Waste Disposal Site
Address	54 Tip Rd, Deloraine, Tasmania
Certificate of Title	130751/1
Property Identification Number	1914365
Local Government Authority	Meander Valley Council
Zoning	20 Rural
Site Owner	Meander Valley Council
Site Area	5.87 ha
Current Use	Landfill
Former Use	Landfill
Proposed Use	Waste Transfer Station - Landfill

2.1 Land Zoning

The site is zoned as 'Rural' in the Tasmanian Planning Scheme – Meander Vally Local Provision Schedule and is surrounded by 'Rural' properties to the south, west to north, and 'Low Density Residential' use to the southeast to northeast. A map showing area zoning is shown in **Figure 2-1**.

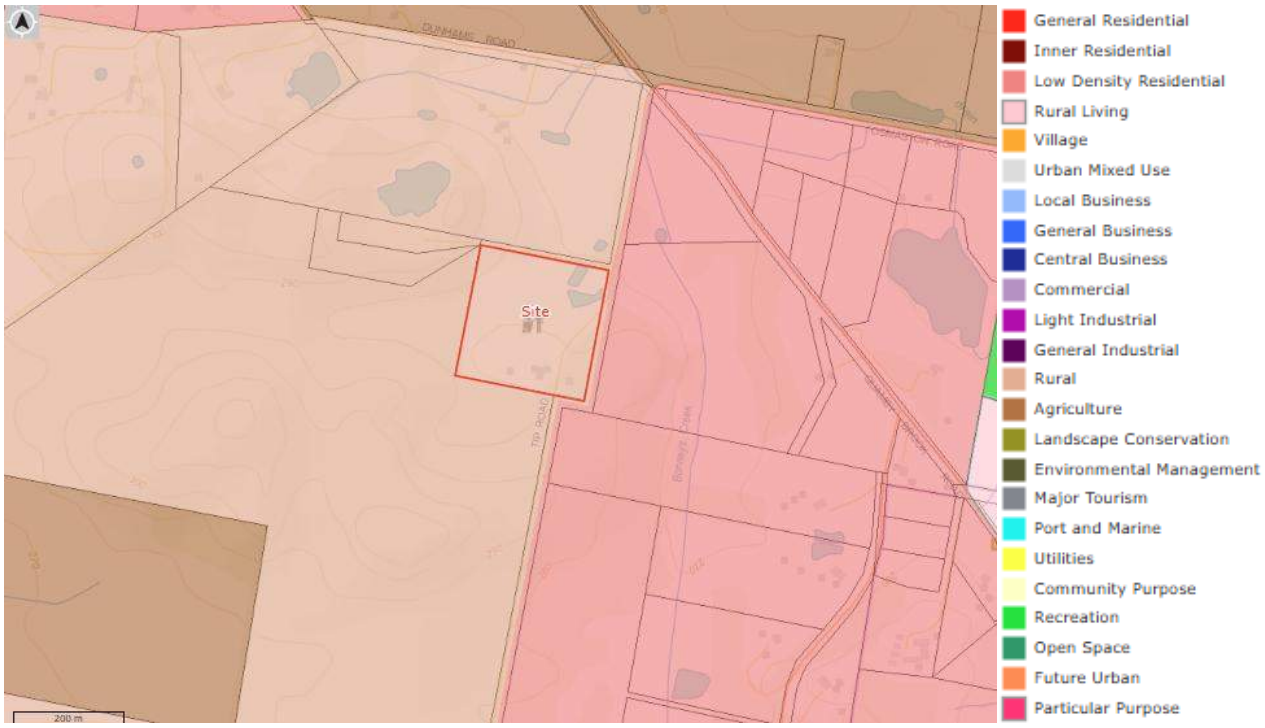

Figure 2-1 Area Zoning

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2.2 Land Use

The site is currently a landfill, with the active landfilling area in centre west of the site. The site's layout is shown in attached **Figure 2, Appendix A**. The surrounding land uses are as follows:

- **North**: Open space, agricultural. A quarry is located approximately 150 m to the northwest of the site.
- **East:** Open space/ low density residential
- **South**: Open space woodland.
- **West**: Open space woodland.

2.3 Site History

A review of site historical aerial photos (1965-2025) shows the site having a clearing in the area of the site entry and sheds in the 1965 image. Woodlands surrounding the site to the west and south and open paddocks with some trees to the north and east, the quarry to the northwest has begun operations. The use of the site cannot be determined from the image.
In the 1969 and 1975 a clear turning circle has been formed in the clearing and waste is present at the edges of the clearing, car wrecks can be seen scattered in the woodland next to the turning circle in the 1969 image. Between the 1975 and 1993 images only minor changes on site can be seen, with the area for waste disposal increasing slightly. Some capping may have occurred in the mid 1980's with the 1986 image appearing to have less visual evidence of waste.
In the 1993 image one of the current day sheds can be seen, the site also has a defined tip face in the southwestern corner of the site. Between 1993 and 1995 the southwestern area appears to have been capped, and the active tip face appears to have moved to along the central western boundary. In 1997 additional sheds have been erected. In 2004 the site has a layout similar to the current layout, with the leachate pond in the northeastern corner.

The surrounding area appears to have had very little change over the years with woodlands in the south and east and paddock to the north and west. Reviewed historical aerial photos has been included in **Appendix C.**

2.4 Tasmanian EPA Records

A review of Tasmanian EPA records relating to UPSS and regulated premises on the site and within 1 km of the site, was undertaken on 19 August 2025 (TheLIST, 2023)., No registered UPSS or EPA regulated premises were identified within 1 km of the site.

2.5 Topography and Hydrology

The local area topography around the site is shown in **Figure 2-2** below. The site is located at an elevation of approximately 280 mAHD and the regional topography sloping to the northeast, towards Bonney's Creek, located approximately 100 m to the northeast of the site leachate ponds.
Onsite surface water and the surrounding area is infiltrated onsite or collected in the site stormwater system.

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Figure 2-2 Local Topography and Hydrology

2.6 Geology

Based on the 1:25,000 scale local area geology map (access from The LIST, 2025) shown in **Figure 2-3**, the site is underlain by quartz-feldspar with pyroxene, hornblende and biotite phyric porphyry (Cqfpz) in the southeastern corner of the site, with mainly volcaniclastic conglomerate and sandstone with minor mudstone, in Tyndall Group, with sparse quartzite clasts and clasts of granite in places (Cdtc) or undifferentiated Cenozoic sequences, undifferentiated Quaternary sediments, holocene alluvial, lacustrine and littoral deposits (Qha) in other parts.

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Figure 2-3 Geology

2.7 Hydrogeology

There are five active groundwater monitoring wells (DT-B5 - DT-B9) onsite for the purpose of monitoring groundwater conditions up- and down-gradient of the landfill, locations shown in **Figure 4** below. Depth to groundwater in these wells varies. Groundwater levels in DT-B5 and DT-B6 fluctuates between 0.5 and 1.5 m below ground surface (mBGS). These wells are located just downgradient of the site leachate pond. The depth to groundwater in DT-B7 (upgradient of landfill) and DT-B9 (downgradient) is approximately 2.8 mBGS and in DT-B8 (upgradient of leachate pond) depth to water is 2.2 mBGS (P&S, 2024).

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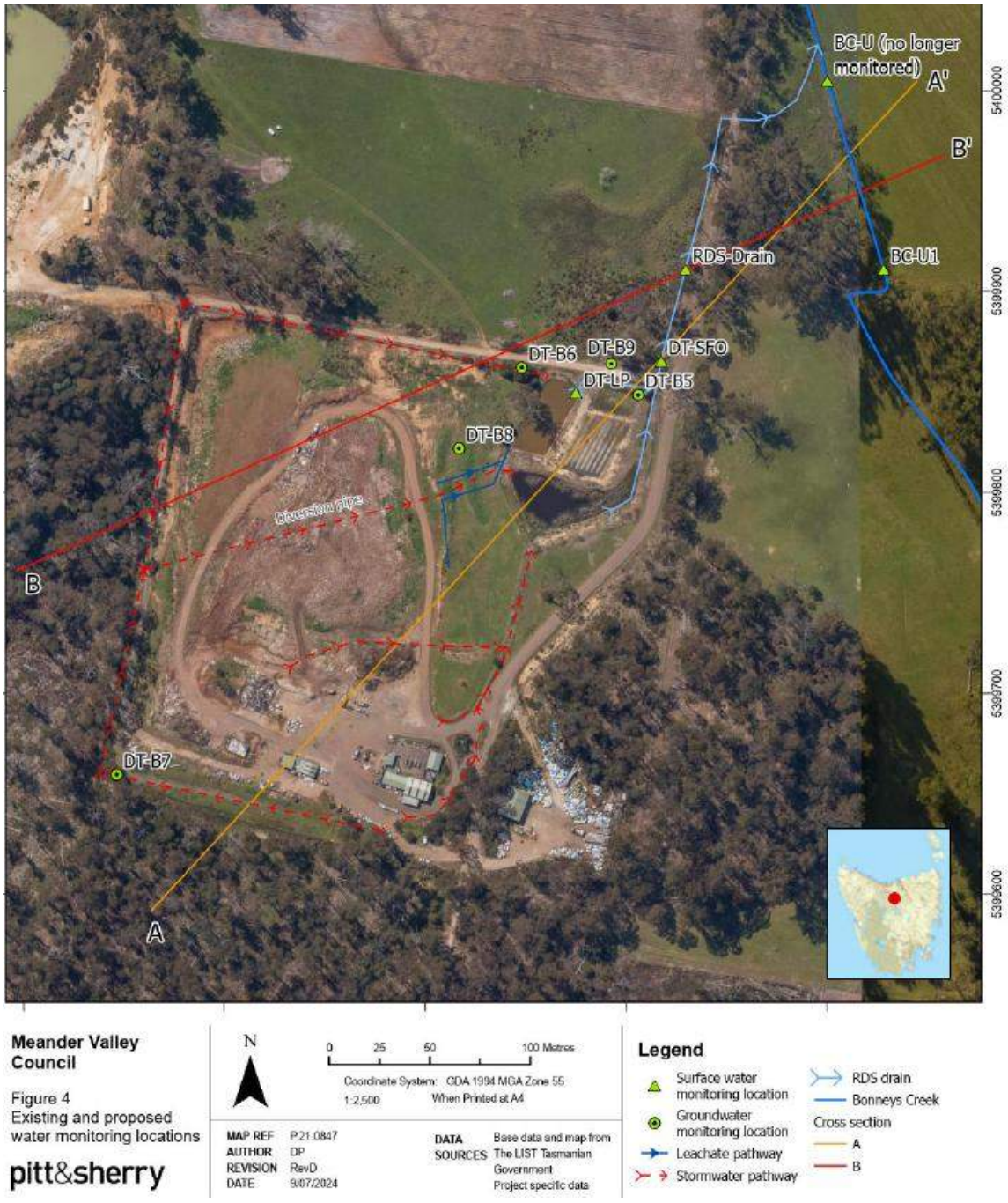

Figure 4 Location of Groundwater Monitroing Wells (P&S, 2024)

A search in the Groundwater Information Access Portal (GIAP) from the Department of Primary Industries, Parks, Water and Environment found 10 registered groundwater bore within 1 km of the site, the GIAP search is included in **Appendix B.** The closest bore is located approximately 400 m to the northeast of the site and is listed as functioning.

3. Preliminary Conceptual Site Model

A Conceptual Site Model (CSM) organises site information in a clear, methodical way to help understand site environmental issues and to identify data gaps. A CSM includes identifying land use, past and current

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potential contamination sources, contaminants of potential concern, potential receptors, and other site information available to simplify assessment planning and decisions. The CSM development is a dynamic process, and the model should be reviewed and refined during all stages of an assessment (NEPC, 2013).

A preliminary CSM was developed based on the site history and site environmental setting and is presented in **Section 3.1- Section 3.4**, and include a summary of potential contamination sources, pathways and receptors.

3.1 Identified Contaminating Industry/Activity

The site's useis categorised as a potential contaminating activity by:

- Australian Standards AS 4482.1-2005 within the defined category "Landfill sites" (AS 4482.1, 2005).
- EPA Tasmania published list within the category "Landfill sites, including on-site waste disposal and refuse pits".
- PCLC Table C14.2: "Landfill sites, including on-site waste disposal and refuse pits"

3.1.1 Contaminants of Potential Concern

The Contaminants of Potential Concern (COPC) identified to be associated with landfills were identified to include:

- Biological (E. coli and faecal coliforms)
- Cyanide
- Heavy metals (Al, As, Cd, Cr, Cu, Fe, Hg, Mn, Ni, Pb, Se and Zn)
- Hydrocarbons (TPH, benzene, toluene, ethylbenzene, xylenes and naphthalene (BTEXN) and PAH)
- Nutrients (NH3, NO3, NO2, TN, PO43- and TP)
- Polychlorinated biphenyl (PCB)
- Cations and anions (Cl-, Ca2+, SO42-, Na+, K+ and Mg2+)
- Per- and Polyfluoroalkyl Substances (PFAS); and
- Pesticides (OCP and OPP).

3.2 Potential Contamination Sources

3.2.1 Potential On-site Primary Sources of Contamination

- Buried waste in known landfill cells.
- Buried waste outside known landfill cells
- Above ground oil and fuel storage

3.2.2 Potential Off-site Primary Sources of Contamination

No potential off-site primary sources of contamination have been identified.

3.2.3 On and Off-site Secondary Source(s) of Contamination

- If contaminated, soil represent a secondary source of contamination.
- If contaminated, groundwater represents a secondary source of contamination.

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3.3 Potential Contamination Transport and Exposure Pathways

For the identified COPCs the following potential contamination exposure pathways exists:

- Direct contact (dust inhalation, ingestion and dermal contact) with waste.
- Migration of contamination from waste into groundwater.
- Migration of contaminated groundwater downgradient to groundwater and surface waters.
- Extraction of contaminated groundwater.
- Migration of vapours from primary or secondary contamination sources and subsequent inhalation of vapours.
- Migration of contaminated soil and sediments off-site. Soil leaving site during excavation or
- maintenance work.
- Plant Uptake.

3.4 Potential Receptors

3.4.1 On-Site Human Receptors

- On-site commercial workers, both outdoors and indoors.
- On-site subsurface workers, including services, maintenance and civil construction worker during development.

3.4.2 Off-Site Human Receptors

- Off-site commercial occupants, both outdoors and indoors (neighbouring properties).
- Off-site subsurface workers, including services, maintenance and development works (neighbouring properties).

3.4.3 Ecological Receptors

No significant flora has been identified at the site considering the use of the site as a landfill, fauna is likely to access the site however is unlikely to be exposed to contaminants for extended periods of time.

3.4.3.1 Aquatic Ecosystems

Bonney's Creek is located approximately 100 m to the northeast of the site leachate ponds and is identified to have a freshwater ecosystem.

3.4.4 Groundwater Use

No groundwater users were identified for the area immediately surrounding the site.

3.4.5 Utilities

Stormwater and leachate collection system are present onsite. No critical mains utilities have been identified onsite or in the vicinity of the site.

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4. Site Inspection & Test Pitting

JBS&G completed a site inspection on 26 August 2025, during the site inspection five test pits were completed to assess the characteristics and thickness of the waste in the proposed development area. A photo log and comments from the site inspecting is present in **Table 4-1** below**.** Field notes are included in **Appendix D**. All sampling locations shown in **Figure 2, Appendix A**.

Table 4-1 Site inspection photolog

Photo	Comment
	View to the southeast showing the proposed area for the waste transfer station.
	View to the northwest showing the current road to tip face and northern end of the proposed waste transfer station in the front.

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Photo	Comment
	View to the west showing the proposed waste transfer station public access location.
	View to the southwest showing the proposed waste transfer station public access location and processing area.
	View to the south showing the proposed waste transfer station public access location and processing area. The current waste oil disposal area and above ground storage of diesel seen to the left.

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Photo	Comment
	Test pit TP01 0.0-0.3 mbgs: Sandy Gravel with some waste mixed in. 0.3-2.9 mbgs: Waste, mainly plastic bags with domestic waste 2.9 -3.5 mbgs: Natural, light grey clay, medium plasticity, dry to moist. LEL methane readings: 0.5 mbgs: 10% LEL 1.0 mbgs: 15% LEL 2.0-3.0 mbgs: 35% LEL
	Test pit TP02 0.0-0.4 mbgs Sandy Gravel/Clay, light brown 0.4-4.5 mbgs Waste, mainly plastic bags with domestic waste, some metal and tires. Food packaging expiry dates in 1995. 4.5-4.9 mbgs Natural, light grey clay, medium plasticity, dry to moist. LEL methane readings: 1.5 mbgs: 5% LEL 2.5 mbgs: 6% LEL

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Photo	Comment
	Test pit TP03 0.0-0.4 mbgs Sandy Gravel, brown 0.4-1.0 mbgs Clayey Sand, brown. 1.0-4.5 mbgs Waste, mainly plastic bags with domestic waste, some metal. Water ingress at approximately 2.5 mbgs. 4.5-4.9 mbgs Natural, light grey clay, medium plasticity, dry to moist. LEL methane readings: 1.5 mbgs: 6% LEL 2.5 mbgs: 6% LEL
	Test pit TP04 0.0-0.4 mbgs Sandy Gravel with waste mixed in, brown 0.4-2.5 mbgs Waste, mainly plastic bags with domestic waste. 2.5-2.7 mbgs Natural, light grey clay, medium plasticity, dry to moist. Note: LEL reading was not collected due to rain affecting the meter, methane reading assumed to be similar to TP01.

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Photo	Comment
	Test pit TP05 0.0-0.5 mbgs Sandy Gravel, brown 0.5-3.7 mbgs Waste, mainly plastic bags with domestic waste, some metal and timber. LEL methane readings: 1.0 mbgs: 0% LEL 3.0 mbgs: 4% LEL
	View to the east, surface stormwater drain along southern site boundary.

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Photo	Comment
	View to the north, surface stormwater drain along western site boundary.

5. Conclusion

5.1 Waste classification

The waste beneath the proposed waste transfer station area has been observed to:

- be between 2.1 and 4.6 m in thickness, with the thickness increasing toward the central area.
- Soil beneath the waste was observed to be clay, with topsoil above the clay in some test pits. Clay appeared to be undisturbed natural.
- Be domestic waste including plastic food wrappers, bottles, plastic bags and degraded putrescible waste.
- Methane gas was measured between 4 and 35% of LEL that relatively quickly dissipated, indicating that degradation is occurring however the gas is unlikely trapped at high levels within the waste.

Based on the above the waste has been assessed to consistent with the permitted waste categories in the site EPN and is not a controlled waste. As such the waste excavated during the development of the waste transfer station can be disposed of in the active landfill cell, subject to the annual permitted volume is not exceeded.

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5.2 Risk Assessment

Based on the observed waste the proposed excavation may pose an unacceptable risk to human health or the environment unless managed. Table 5-1 below presents the hazards the waste creates, and controls proposed during excavation.

Table 5-1 Hazards and controls

Hazard	Control
Landfill gas - explosion	Landfill gas to be monitored using LEL meter during excavation. If methane levels exceed 5% LEL let excavation vent for 10 minutes and reassess methane levels.
Landfill gas – exposure (inhalation)	Replacement of lower permeability capping layer at completion Stand up wind of excavation where possible. If access to excavation and trenches is required: • Landfill gas to be monitored using LEL in trench/excavation prior to entry and continuous monitoring in excavation. • Workers to be trained in confined space entry ○
Hazardous waste – asbestos/fuel/chemicals/Biohazards - exposure	If unexpected potentially hazardous waste is discovered, stop work and isolate the area. Contact Principal Contractor and Environmental Consultant. Area to be assessed and cleared prior to work commencing. If oil/chemicals are leaked to the ground, use spill kit, or excavate impacted soil and stockpile on plastic liner or concrete hardstand. If handling waste PPE including gloves and dust mask to be worn.
Migration of waste – wind/runoff	Minimise stockpiling waste outside the active landfill cell. Cap waste that remain beneath the development area with an impermeable layer. Replacement of lower permeability capping layer at completion of excavation
Contamination leaching into environment if pathway through natural clay layer beneath the waste is created	Any excavation through the natural clay layer into underlying geology must be sealed.

5.3 Potentially Contaminated Land Code

With regards to the PCLC C14.6 Development Standards for Building Works a Construction Environmental Management Plan is required including protection measures for:

- Landfill gas – explosion and exposure

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- Unexpected finds – hazardous wastes such as asbestos and fuel/chemical drums.
- Capping of in-situ waste after excavation
- Excavation through the natural clay layer into underlying geology must be sealed.

With the CEMP in place during development the proposed excavation will not adversely impact human health or the environment.

6. Limitations

This report has been prepared for use by the client who has commissioned the works in accordance with the project brief only, and has been based in part on information obtained from the client and other parties. The report has been prepared specifically for the client for the purposes of the commission, and no warranties, express or implied, are offered to any third parties and no liability will be accepted for use or interpretation of this report by any third party.

The advice herein relates only to this project and all results conclusions and recommendations made should be reviewed by a competent person with experience in environmental investigations, before being used for any other purpose. This report should not be amended in any way without prior approval by JBS&G, or reproduced other than in full including all attachments as originally provided to the client by JBS&G.

Sampling and chemical analysis of environmental media is based on appropriate guidance documents made and approved by the relevant regulatory authorities. Conclusions arising from the review and assessment of environmental data are based on the sampling and analysis considered appropriate based on the regulatory requirements or agreed scope of work.

Limited sampling and laboratory analyses were undertaken as part of the investigations undertaken, as described herein. Conditions between sampling locations and media may vary, and this should be considered when extrapolating between sampling points. Chemical analytes are based on the information detailed in the site history. Further chemicals or categories of chemicals may exist at the site, which were not identified in the site history and which may not be expected at the site.

Changes to the conditions may occur subsequent to the investigations described herein, through natural processes or through the intentional or accidental addition of contaminants. The conclusions and recommendations reached in this report are based on the information obtained at the time of the investigations.

This report does not provide a complete assessment of the environmental status of the site, and it is limited to the scope defined herein. Should information become available regarding conditions at the site including previously unknown sources of contamination, JBS&G reserves the right to review the report in the context of the additional information.

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7. References

EPN 7216/3, Envormental protection Notice No. 7216/3, issued 12 June 2007

NEPC, 2013, *National Environment Protection (Assessment of Site Contamination) Measure.* National Environmental Protection Council (ASC NEPM).

P&S, 2024, *Groundwater Management Plan*, Deloraine Refuse Disposal Site, 54 Tip Rd, Deloraine, 10 September 2024.

EPA, 2024, Permit Part B, Permit Conditions – Environmental No. 11282, Issued 12 March 2024.

The LIST, 2025, https://www.thelist.tas.gov.au/app/content/home.Assessed on 18 Augus 2025.

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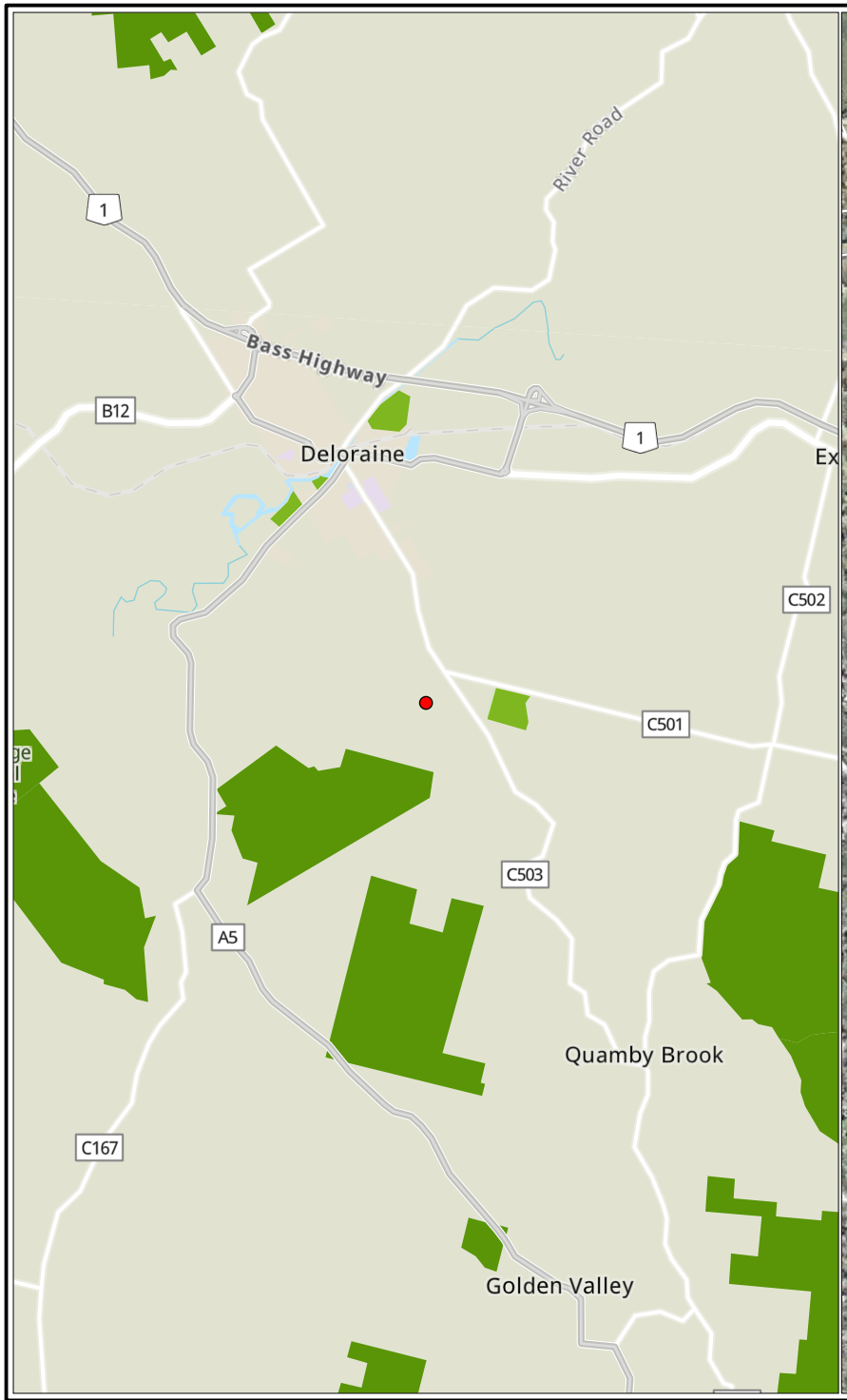
Appendix A Figures



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Appendix B Registered Groundwater Bore Search

Groundwater Feature Summary Report

Feature id	Feature type	Locality name	Easting	Northing	Datum	Coordinate accuracy (m)	Drilled date	Drilling company	Depth (m)	Initial yield (L/s)	SWL list (mBGL)	Last SWL date	Final TDS (mg/L)	Main aquifer geology	Last operating status	Last operating status date
2428	Bore	Deloraine	473228.000	5400043.000	GDA94	5000	19/08/1982	Gerald Spaulding Drillers Pty Ltd	30.50	0.75	3.7	19/08/1982		Cambrian	functioning	19/08/1982
2442	Bore	Deloraine	473537.000	5399610.000	GDA94	500	09/10/1982	G and G Drilling Pty Ltd	27.40	0.00				Cambrian	abandoned	09/10/1982
2443	Bore	Deloraine	473555.000	5399610.000	GDA94	500	09/10/1982	G and G Drilling Pty Ltd	42.70	0.50	18.3	09/10/1982		Ordovician	Unknown	09/10/1982
4693	Bore	Deloraine	473663.000	5399163.000	GDA94	500	14/11/1983	G and G Drilling Pty Ltd	48.80	0.51	24.4	14/11/1983		Cambrian	functioning	14/11/1983
4724	Bore	Quamby Brook	473613.000	5399183.000	GDA94	200	16/10/1985	Mono Pumps Australia Pty Ltd	36.60	0.76	6.1	16/10/1985		Cambrian	functioning	16/10/1985
15108	Bore	Deloraine	472835.000	5400765.000	GDA94	10	02/03/1995	Gerald Spaulding Drillers Pty Ltd	21.30	1.14	4.5	02/03/1995		Tertiary Basalt	functioning	13/03/2025
16648	Bore	Deloraine	472548.000	5400503.000	GDA94	200	01/05/2000	Lewis (Columbus)	39.70					Ordovician	Unknown	01/05/2000
16649	Bore	Deloraine	472498.000	5400330.000	GDA94	50	18/04/2000	Lewis (Columbus)	39.70					Ordovician	Unknown	18/04/2000
17275	Bore	Deloraine	472913.000	5400833.000	GDA94	500	07/11/1997	Lewis (Columbus)	42.70	1.51	7.6	07/11/1997		Tertiary Basalt	abandoned	07/11/1997
41403	Bore	Deloraine	472604.000	5400690.000	GDA94	25	01/05/2012	Gerald Spaulding Drillers Pty Ltd	30.00	2.53	6	01/05/2012	35	Tertiary Basalt	functioning	01/05/2012

Document Set ID: 2206529
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Document Set ID: 2206529
Version: 1, Version Date: 10/09/2025

Identification

Feature id: 2428 **Feature type:** Bore

Location

Locality: Deloraine
Easting: 473228.000 **Datum:** GDA94
Northing: 5400043.000 **Accuracy:** 5000
Ground level (m ASL):

Construction

Date drilled: 19/08/1982
Drilling company: Gerald Spaulding Drillers Pty Ltd
Depth (metres): 30.50
Initial yield (L/sec): 0.75
Initial EC (µS/cm):

Bore diameters

From (m)	To (m)	Diameter (mm)	Drilling technique
0.0	30.5	152.00	Air Percussion (Rotary air - R)

Casings

From (m)	To (m)	Inside diameter (mm)	Outside diameter (mm)	Material
0.0	30.5		152.00	unplasticised polyvinylchloride uPVC

Screens

From (m)	To (m)	Inlet type
NA		

Seals

From (m)	To (m)	Material type
NA		

Geological / Hydrogeological Information

Lithological Log

From (m)	To (m)	Lithological description
0.0	0.3	top soil
0.3	2.1	sticky clay
2.1	30.5	mudstone

Depth to water struck

Date	From (m)	To (m)	Cumulative yield
19/08/1982	6.7	30.5	0.75

Main aquifer geology: Cambrian
Final TDS (mg/L):

Document Set ID: 2206529
Version: 1, Version Date: 10/09/2025

Standing Water Levels

Standing water levels

Date	SWL (metres)
19/08/1982	3.70

Current status

Last recorded statuses

Type	Value	Date recorded
function	functioning	19/08/1982

Document Set ID: 2206529
Version: 1, Version Date: 10/09/2025

Identification

Feature id: 2442 **Feature type:** Bore

Location

Locality: Deloraine
Easting: 473537.000 **Datum:** GDA94
Northing: 5399610.000 **Accuracy:** 500
Ground level (m ASL):

Construction

Date drilled: 09/10/1982
Drilling company: G and G Drilling Pty Ltd
Depth (metres): 27.40
Initial yield (L/sec): 0.00
Initial EC (µS/cm):

Bore diameters

From (m)	To (m)	Diameter (mm)	Drilling technique
0.0	27.4	127.00	Air Percussion (Rotary air - R)

Casings

From (m)	To (m)	Inside diameter (mm)	Outside diameter (mm)	Material
NA				

Screens

From (m)	To (m)	Inlet type
NA		

Seals

From (m)	To (m)	Material type
NA		

Geological / Hydrogeological Information

Lithological Log

From (m)	To (m)	Lithological description
0.0	0.3	top soil
0.3	8.2	gravel and clay
8.2	16.8	clay
16.8	27.4	hard green rock

Depth to water struck

Date	From (m)	To (m)	Cumulative yield
NA			

Main aquifer geology: Cambrian
Final TDS (mg/L):

Document Set ID: 2206529
Version: 1, Version Date: 10/09/2025

Standing Water Levels

Standing water levels

Date	SWL (metres)
NA	

Current status

Last recorded statuses

Type	Value	Date recorded
function	abandoned	09/10/1982

Document Set ID: 2206529
Version: 1, Version Date: 10/09/2025

Identification

Feature id: 2443 **Feature type:** Bore

Location

Locality: Deloraine
Easting: 473555.000 **Datum:** GDA94
Northing: 5399610.000 **Accuracy:** 500
Ground level (m ASL):

Construction

Date drilled: 09/10/1982
Drilling company: G and G Drilling Pty Ltd
Depth (metres): 42.70
Initial yield (L/sec): 0.50
Initial EC (µS/cm):

Bore diameters

From (m)	To (m)	Diameter (mm)	Drilling technique
0.0	42.7	127.00	Air Percussion (Rotary air - R)

Casings

From (m)	To (m)	Inside diameter (mm)	Outside diameter (mm)	Material
0.0	42.7		102.00	unplasticised polyvinylchloride uPVC

Screens

From (m)	To (m)	Inlet type
NA		

Seals

From (m)	To (m)	Material type
NA		

Geological / Hydrogeological Information

Lithological Log

From (m)	To (m)	Lithological description
0.0	24.4	clay
24.4	30.5	quartz and oil shale
30.5	42.7	oil shale

Depth to water struck

Date	From (m)	To (m)	Cumulative yield
09/10/1982	30.5		
09/10/1982	36.6		0.50

Main aquifer geology: Ordovician
Final TDS (mg/L):

Document Set ID: 2206529
Version: 1, Version Date: 10/09/2025

Standing Water Levels

Standing water levels

Date	SWL (metres)
09/10/1982	18.30

Current status

Last recorded statuses

Type	Value	Date recorded
function	Unknown	09/10/1982

Document Set ID: 2206529
Version: 1, Version Date: 10/09/2025

Identification

Feature id: 4693 **Feature type:** Bore

Location

Locality: Deloraine
Easting: 473663.000 **Datum:** GDA94
Northing: 5399163.000 **Accuracy:** 500
Ground level (m ASL):

Construction

Date drilled: 14/11/1983
Drilling company: G and G Drilling Pty Ltd
Depth (metres): 48.80
Initial yield (L/sec): 0.51
Initial EC (µS/cm):

Bore diameters

From (m)	To (m)	Diameter (mm)	Drilling technique
0.0	48.8	140.00	Air Percussion (Rotary air - R)

Casings

From (m)	To (m)	Inside diameter (mm)	Outside diameter (mm)	Material
NA				

Screens

From (m)	To (m)	Inlet type
NA		

Seals

From (m)	To (m)	Material type
NA		

Geological / Hydrogeological Information

Lithological Log

From (m)	To (m)	Lithological description
0.0	16.8	clay
16.8	30.5	clay stone
30.5	48.8	ironstone

Depth to water struck

Date	From (m)	To (m)	Cumulative yield
14/11/1983	30.4	42.7	0.51

Main aquifer geology: Cambrian
Final TDS (mg/L):

Standing Water Levels

Standing water levels

Date	SWL (metres)
14/11/1983	24.40

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Version: 1, Version Date: 10/09/2025

Current status

Last recorded statuses

Type	Value	Date recorded
function	functioning	14/11/1983

Document Set ID: 2206529
Version: 1, Version Date: 10/09/2025

Identification

Feature id: 4724 **Feature type:** Bore

Location

Locality: Quamby Brook
Easting: 473613.000 **Datum:** GDA94
Northing: 5399183.000 **Accuracy:** 200
Ground level (m ASL):

Construction

Date drilled: 16/10/1985
Drilling company: Mono Pumps Australia Pty Ltd
Depth (metres): 36.60
Initial yield (L/sec): 0.76
Initial EC (µS/cm):

Bore diameters

From (m)	To (m)	Diameter (mm)	Drilling technique
0.0	36.6	203.00	Air Percussion (Rotary air - R)

Casings

From (m)	To (m)	Inside diameter (mm)	Outside diameter (mm)	Material
0.0	36.6		152.00	unplasticised polyvinylchloride uPVC

Screens

From (m)	To (m)	Inlet type
NA		

Seals

From (m)	To (m)	Material type
NA		

Geological / Hydrogeological Information

Lithological Log

From (m)	To (m)	Lithological description
0.0	0.6	top soil
0.6	2.4	clay
2.4	36.6	mudstone

Depth to water struck

Date	From (m)	To (m)	Cumulative yield
16/10/1985	25.9		
16/10/1985	33.5		0.76

Main aquifer geology: Cambrian
Final TDS (mg/L):

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Version: 1, Version Date: 10/09/2025

Standing Water Levels

Standing water levels

Date	SWL (metres)
16/10/1985	6.10

Current status

Last recorded statuses

Type	Value	Date recorded
function	functioning	16/10/1985

Document Set ID: 2206529
Version: 1, Version Date: 10/09/2025

Identification

Feature id: 15108 **Feature type:** Bore

Location

Locality: Deloraine
Easting: 472835.000 **Datum:** GDA94
Northing: 5400765.000 **Accuracy:** 10
Ground level (m ASL):

Construction

Date drilled: 02/03/1995
Drilling company: Gerald Spaulding Drillers Pty Ltd
Depth (metres): 21.30
Initial yield (L/sec): 1.14
Initial EC (µS/cm):

Bore diameters

From (m)	To (m)	Diameter (mm)	Drilling technique
0.0	21.3	190.00	Air Percussion (Rotary air - R)

Casings

From (m)	To (m)	Inside diameter (mm)	Outside diameter (mm)	Material
0.0	15.2	125.00	140.00	unplasticised polyvinylchloride uPVC

Screens

From (m)	To (m)	Inlet type
15.2	21.3	open hole

Seals

From (m)	To (m)	Material type
NA		

Geological / Hydrogeological Information

Lithological Log

From (m)	To (m)	Lithological description
0.0	3.1	clay
3.1	21.3	decomposed and broken basalt

Depth to water struck

Date	From (m)	To (m)	Cumulative yield
02/03/1995	15.2		1.14

Main aquifer geology: Tertiary Basalt
Final TDS (mg/L):

Standing Water Levels

Standing water levels

Date	SWL (metres)
02/03/1995	4.50

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Current status

Last recorded statuses

Type	Value	Date recorded
function	functioning	13/03/2025
purpose	household needs	13/03/2025

Document Set ID: 2206529
Version: 1, Version Date: 10/09/2025

Identification

Feature id: 16648 **Feature type:** Bore

Location

Locality: Deloraine
Easting: 472548.000 **Datum:** GDA94
Northing: 5400503.000 **Accuracy:** 200
Ground level (m ASL):

Construction

Date drilled: 01/05/2000
Drilling company: Lewis (Columbus)
Depth (metres): 39.70
Initial yield (L/sec):
Initial EC (µS/cm):

Bore diameters

From (m)	To (m)	Diameter (mm)	Drilling technique
0.0	39.7	165.00	Unknown

Casings

From (m)	To (m)	Inside diameter (mm)	Outside diameter (mm)	Material
0.0	39.7		127.00	unplasticised polyvinylchloride uPVC

Screens

From (m)	To (m)	Inlet type
NA		

Seals

From (m)	To (m)	Material type
NA		

Geological / Hydrogeological Information

Lithological Log

From (m)	To (m)	Lithological description
0.0	0.6	soil
0.6	12.2	hard clay
12.2	38.1	soft clay
38.1	39.7	basalt

Depth to water struck

Date	From (m)	To (m)	Cumulative yield
18/04/2000	19.8		1.89

Main aquifer geology: Ordovician
Final TDS (mg/L):

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Standing Water Levels

Standing water levels

Date	SWL (metres)
NA	

Current status

Last recorded statuses

Type	Value	Date recorded
function	Unknown	01/05/2000

Document Set ID: 2206529
Version: 1, Version Date: 10/09/2025

Identification

Feature id: 16649 **Feature type:** Bore

Location

Locality: Deloraine
Easting: 472498.000 **Datum:** GDA94
Northing: 5400330.000 **Accuracy:** 50
Ground level (m ASL):

Construction

Date drilled: 18/04/2000
Drilling company: Lewis (Columbus)
Depth (metres): 39.70
Initial yield (L/sec):
Initial EC (µS/cm):

Bore diameters

From (m)	To (m)	Diameter (mm)	Drilling technique
0.0	39.7	165.00	Air Percussion (Rotary air - R)

Casings

From (m)	To (m)	Inside diameter (mm)	Outside diameter (mm)	Material
NA				

Screens

From (m)	To (m)	Inlet type
NA		

Seals

From (m)	To (m)	Material type
NA		

Geological / Hydrogeological Information

Lithological Log

From (m)	To (m)	Lithological description
0.0	0.6	soil
0.6	39.7	dry clay and gravel

Depth to water struck

Date	From (m)	To (m)	Cumulative yield
NA			

Main aquifer geology: Ordovician
Final TDS (mg/L):

Standing Water Levels

Standing water levels

Date	SWL (metres)
NA	

Document Set ID: 2206529
Version: 1, Version Date: 10/09/2025

Current status

Last recorded statuses

Type	Value	Date recorded
function	Unknown	18/04/2000

Document Set ID: 2206529
Version: 1, Version Date: 10/09/2025

Identification

Feature id: 17275 **Feature type:** Bore

Location

Locality: Deloraine
Easting: 472913.000 **Datum:** GDA94
Northing: 5400833.000 **Accuracy:** 500
Ground level (m ASL):

Construction

Date drilled: 07/11/1997
Drilling company: Lewis (Columbus)
Depth (metres): 42.70
Initial yield (L/sec): 1.51
Initial EC (µS/cm):

Bore diameters

From (m)	To (m)	Diameter (mm)	Drilling technique
0.0	42.7	165.00	Air Percussion (Rotary air - R)

Casings

From (m)	To (m)	Inside diameter (mm)	Outside diameter (mm)	Material
NA				

Screens

From (m)	To (m)	Inlet type
NA		

Seals

From (m)	To (m)	Material type
NA		

Geological / Hydrogeological Information

Lithological Log

From (m)	To (m)	Lithological description
0.0	9.2	soil
9.2	18.3	light coloured clay
18.3	21.4	dark coloured clay
21.4	25.9	broken rock
25.9	42.7	basalt

Depth to water struck

Date	From (m)	To (m)	Cumulative yield
07/11/1997	21.3		1.51

Main aquifer geology: Tertiary Basalt
Final TDS (mg/L):

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Standing Water Levels

Standing water levels

Date	SWL (metres)
07/11/1997	7.60

Current status

Last recorded statuses

Type	Value	Date recorded
function	abandoned	07/11/1997

Document Set ID: 2206529
Version: 1, Version Date: 10/09/2025

Identification

Feature id: 41403 **Feature type:** Bore

Location

Locality: Deloraine
Easting: 472604.000 **Datum:** GDA94
Northing: 5400690.000 **Accuracy:** 25
Ground level (m ASL):

Construction

Date drilled: 01/05/2012
Drilling company: Gerald Spaulding Drillers Pty Ltd
Depth (metres): 30.00
Initial yield (L/sec): 2.53
Initial EC (µS/cm):

Bore diameters

From (m)	To (m)	Diameter (mm)	Drilling technique
0.0	6.0	220.00	Rotary (Rotary Mud)
6.0	30.0	178.00	Downhole Hammer (Rotary Hammer)

Casings

From (m)	To (m)	Inside diameter (mm)	Outside diameter (mm)	Material
0.0	1.0	200.00		unplasticised polyvinylchloride uPVC
0.0	18.0	125.00		unplasticised polyvinylchloride uPVC

Screens

From (m)	To (m)	Inlet type
18.0	30.0	slotted casing

Seals

From (m)	To (m)	Material type
5.0	6.0	bentonite clay

Geological / Hydrogeological Information

Lithological Log

From (m)	To (m)	Lithological description
0.0	1.0	Top soil
1.0	16.0	Clay
16.0	18.0	Clay with broken basalt
18.0	30.0	Decomposed basalt

Depth to water struck

Date	From (m)	To (m)	Cumulative yield
01/05/2012	18.0	30.0	2.53

Main aquifer geology: Tertiary Basalt

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Final TDS (mg/L): 35

Standing Water Levels

Standing water levels

Date	SWL (metres)
01/05/2012	
01/05/2012	6.00

Current status

Last recorded statuses

Type	Value	Date recorded
function	functioning	01/05/2012

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Appendix C Historical Aerial Photos

1965

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1975

1969 – Car wrecks visual

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1980

1986

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1993

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1997

1995 – Zoomed in

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2004

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Appendix D Field Documentation

Daily Field Report

Date 26/8/25

Project number 70536

Project name Deloraine Tip

Arrival time 9:00

Depart time 1400

Subcontractor(s) —

Site address Tip road Deloraine

Project manager MF

Completed by MF

Weather Rain

Purpose of visit Site inspection and testpitting

Notes (include sketch or attach site map/plan) Completion of 5 deep test pits in the area of the proposed retaining wall to assess waste thickness

Other forms completed (eg, bore logs, PID/XRF calibration forms)

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Document Set ID: 2206529
Version: 1, Version Date: 10/09/2025

JBS&G

Test Pit: TP01	Project No: 70536		
Borehole:	Client: MVC		
Well:	Project Name: Deloraine Tip		
	Site Address: Tip road		
Date: 26/8/25	Water Level Initial (m bgs):	Date:	Time:
Logged By: MF	Water Level Static (m bgs):	Date:	Time:
Contractor:	Surface Finish:		
Total Hole Depth (m bgs): 3.5	Casing Type:	Depth To (m bgs):	
Bore Diameter (mm) / Pit Dimension (m³):	Screen Type:	Depth To (m bgs):	
Method: Depth To (m bgs):	Backfill Type:	Depth To (m bgs):	
Method: Depth To (m bgs):	Backfill Type:	Depth To (m bgs):	
Method: Depth To (m bgs):	Backfill Type:	Depth To (m bgs):	

SUBSURFACE PROFILE				SAMPLE				WELL
Depth (m)	Lithologic Type	Lithologic Class	Lithologic Description Surface Description:	Sample ID	PID (ppm) LEL	Sample Type	Comments	Construction
1			Sandy gravel, with waste mixt Domestic waste mix		10 15 05/35			
2								
3			Natural Clay, light grey med plasticity, dry-moist					
			End of hole @ 3.5					

Method	Sample Type	Reference Level	Screen/Casing Type	Backfill Type	Well Finish	Pit Dimensions (m)	Well Development Details
HA - Hand Auger NDD - Non Destructive Drilling SFA - Solid Flight Auger HFA - Hollow Flight Auger PT - Push Tube AH - Air Hammer TP - Test Pit	D - Disturbed U - Undisturbed	AHD - Australian Height Datum TOC - Top of Casing GS - Ground Surface	Class 18 PVC (50mm) - PVC50	BK - Backfill BN - Bentonite 2SP - 2mm Graded Sand	RB - Roadbox MT - Monument SP - Standpipe	A: ..... B: ..... C:	

Lithologic Classification – All Soils			Coarse Grained Soils				Fine Grained Soils		All Soils					Surface	Rocks
Lithologic Type	Lithologic Class - Soil	Texture	Grading	Grain Size	Angularity	Density	Plasticity	Consistency	Colour	Structure	Moisture	Inclusions	Contamination	Surface Materials	Lithologic Class - Rocks
FILL (FL) NATURAL (NT)	GRAVEL (GW) GRAVEL (GP) Silty GRAVEL (GM) Clayey GRAVEL (GC) SAND (SW) SAND (SP) Silty SAND (SM) Clayey SAND (SC) SILT (ML) CLAY (CL) Organic SILT (OL) SILT (MH) CLAY (CH) Organic CLAY (OH) PEAT (Pt)	gravelly sandy silty clayey organic	poorly graded well graded	boulders cobbles coarse gravel medium gravel fine gravel coarse sand medium sand fine sand	very angular angular sub-angular sub-rounded rounded well rounded	very loose loose medium dense dense very dense	non-plastic low plasticity medium plasticity high plasticity	very soft soft firm stiff very stiff hard	white black grey red brown orange yellow green blue	homogeneous heterogeneous stratified laminated lens root holes occasional inter-bedded mottled	dry damp moist wet saturated	and (35-50%) some (20-35%) little (10-20%) trace (0-10%)	odour staining solid waste	CONCRETE (CC) BITUMINOUS CONCRETE (BC) TOPSOIL (TS) Surface Description bare ground grass lightly vegetated heavily vegetated paved sealed	LIMESTONE (LS) SANDSTONE (SS) MUDSTONE (MS) SHALE (SH) CONGLOMERATE (CG) PHYLLITE (PH) TUFF (TF) GRANITE (GR) DOLERITE (DL) BASALT (BS) COAL (CO) COLLUVIUM (CV)

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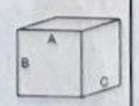
Document Set ID: 2206529
Version: 1, Version Date: 10/09/2025

JBS&G

	Test Pit: / Borehole: TP02 / Well:	Project No: 70536	
		Client: MVC	
		Project Name: Delorane Tip	
		Site Address: Tip Road	
Date: 26/8/25	Easting (MGA94):	Water Level Initial (m bgs):	Date: Time:
Logged By: MF	Northing (MGA94):	Water Level Static (m bgs):	Date: Time:
Contractor:	Zone/Area:	Surface Finish:	
Total Hole Depth (m bgs): 4.9	Reference Level:	Casing Type:	Depth To (m bgs):
Bore Diameter (mm) / Pit Dimension (m³):	Elevation (m):	Screen Type:	Depth To (m bgs):
Method: Depth To (m bgs):	Comment:	Backfill Type:	Depth To (m bgs):
Method: Depth To (m bgs):	Comment:	Backfill Type:	Depth To (m bgs):
Method: Depth To (m bgs):	Comment:	Backfill Type:	Depth To (m bgs):

SUBSURFACE PROFILE				SAMPLE				WELL
Depth (m)	Lithologic Type	Lithologic Class	Lithologic Description / Surface Description:	Sample ID	PID (ppm)	Sample Type	Comments	Construction
0			Sandy gravel					
			Waste Domestic					
1			Plastic bags					
				1.5	5			
2								
				2.5	6			
3								
			Natural Clay, light brown/grey					
4								
			Natural Clay brown/grey					
5			EOH 4.9 m					

Method	Sample Type	Reference Level	Screen/Casing Type	Backfill Type	Well Finish	Pit Dimensions (m)	Well Development Details
HA - Hand Auger NDD - Non Destructive Drilling SFA - Solid Flight Auger HFA - Hollow Flight Auger PT - Push Tube AH - Air Hammer TP - Test Pit	D - Disturbed U - Undisturbed	AHD - Australian Height Datum TOC - Top of Casing GS - Ground Surface	Class 18 PVC (50mm) - PVC50	BK - Backfill BN - Bentonite 2SP - 2mm Graded Sand	RB - Roadbox MT - Monument SP - Standpipe	A: ..... B: ..... C: ..... 	

Lithologic Classification – All Soils			Coarse Grained Soils				Fine Grained Soils		All Soils					Surface	Rocks
Lithologic Type	Lithologic Class - Soil	Texture	Grading	Grain Size	Angularity	Density	Plasticity	Consistency	Colour	Structure	Moisture	Inclusions	Contamination	Surface Materials	Lithologic Class - Rocks
FILL (FL) NATURAL (NT)	GRAVEL (GW) GRAVEL (GP) Silty GRAVEL (GM) Clayey GRAVEL (GC) SAND (SW) SAND (SP) Silty SAND (SM) Clayey SAND (SC) SILT (ML) CLAY (CL) Organic SILT (OL) SILT (MH) CLAY (CH) Organic CLAY (OH) PEAT (Pt)	gravelly sandy silty clayey organic	poorly graded well graded	boulders cobbles coarse gravel medium gravel fine gravel coarse sand medium sand fine sand	very angular angular sub-angular sub-rounded rounded well rounded	very loose loose medium dense dense very dense	non-plastic low plasticity medium plasticity high plasticity	very soft soft firm stiff very stiff hard	white black grey red brown orange yellow green blue	homogeneous heterogeneous stratified laminated lens root holes occasional inter-bedded mottled	dry damp moist wet saturated	and (35-50%) some (20-35%) little (10-20%) trace (0-10%)	odour staining solid waste	CONCRETE (CC) BITUMINOUS CONCRETE (BC) TOPSOIL (TS) Surface Description bare ground grass lightly vegetated heavily vegetated paved sealed	LIMESTONE (LS) SANDSTONE (SS) MUDSTONE (MS) SHALE (SH) CONGLOMERATE (CG) PHYLLITE (PH) TUFF (TF) GRANITE (GR) DOLERITE (DL) BASALT (BS) COAL (CO) COLLUVIUM (CV)

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Version: 1, Version Date: 10/09/2025

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	Test Pit: / Borehole: / Well: TP3	Project No: 70536	
		Client: MVC	
		Project Name: Deloraine TIP	
		Site Address: TIP Rd	
Date: 26/8/25	Easting (MGA94):	Water Level Initial (m bgs):	Date: Time:
Logged By: MF	Northing (MGA94):	Water Level Static (m bgs):	Date: Time:
Contractor:	Zone/Area:	Surface Finish:	
Total Hole Depth (m bgs): 4.9	Reference Level:	Casing Type:	Depth To (m bgs):
Bore Diameter (mm) / Pit Dimension (m³):	Elevation (m):	Screen Type:	Depth To (m bgs):
Method: Depth To (m bgs):	Comment:	Backfill Type:	Depth To (m bgs):
Method: Depth To (m bgs):	Comment:	Backfill Type:	Depth To (m bgs):
Method: Depth To (m bgs):	Comment:	Backfill Type:	Depth To (m bgs):

SUBSURFACE PROFILE				SAMPLE				WELL
Depth (m)	Lithologic Type	Lithologic Class	Lithologic Description / Surface Description:	Sample ID	PID (ppm)	Sample Type	Comments	Construction
1			Topsoil Clay/gravel with some waste Waste		6			
					6			
			Clay ? Waste					
			Natural 4.5 m clay, brown/grey					
			EOH 4.9					

Method	Sample Type	Reference Level	Screen/Casing Type	Backfill Type	Well Finish	Pit Dimensions (m)	Well Development Details
HA - Hand Auger NDD - Non Destructive Drilling SFA - Solid Flight Auger HFA - Hollow Flight Auger PT - Push Tube AH - Air Hammer TP - Test Pit	D - Disturbed U - Undisturbed	AHD - Australian Height Datum TOC - Top of Casing GS - Ground Surface	Class 18 PVC (50mm) - PVC50	BK - Backfill BN - Bentonite 2SP - 2mm Graded Sand	RB - Roadbox MT - Monument SP - Standpipe	A: ..... B: ..... C:	

Lithologic Classification – All Soils			Coarse Grained Soils				Fine Grained Soils		All Soils					Surface	Rocks
Lithologic Type	Lithologic Class - Soil	Texture	Grading	Grain Size	Angularity	Density	Plasticity	Consistency	Colour	Structure	Moisture	Inclusions	Contamination	Surface Materials	Lithologic Class - Rocks
FILL (FL) NATURAL (NT)	GRAVEL (GW) GRAVEL (GP) Silty GRAVEL (GM) Clayey GRAVEL (GC) SAND (SW) SAND (SP) Silty SAND (SM) Clayey SAND (SC) SILT (ML) CLAY (CL) Organic SILT (OL) SILT (MH) CLAY (CH) Organic CLAY (OH) PEAT (Pt)	gravelly sandy silty clayey organic	poorly graded well graded	boulders cobbles coarse gravel medium gravel fine gravel coarse sand medium sand fine sand	very angular angular sub-angular sub-rounded rounded well rounded	very loose loose medium dense dense very dense	non-plastic low plasticity medium plasticity high plasticity	very soft soft firm stiff very stiff hard	white black grey red brown orange yellow green blue	homogeneous heterogeneous stratified laminated lens root holes occasional inter-bedded mottled	dry damp moist wet saturated	and (35-50%) some (20-35%) little (10-20%) trace (0-10%)	odour staining solid waste	CONCRETE (CC) BITUMINOUS CONCRETE (BC) TOPSOIL (TS) Surface Description bare ground grass lightly vegetated heavily vegetated paved sealed	LIMESTONE (LS) SANDSTONE (SS) MUDSTONE (MS) SHALE (SH) CONGLOMERATE (CG) PHYLLITE (PH) TUFF (TF) GRANITE (GR) DOLERITE (DL) BASALT (BS) COAL (CO) COLLUVIUM (CV)

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	Test Pit: TP04 Borehole: Well:	Project No: 70536 Client: Meander Valley Council Project Name: Deloraine Tip PCLC Site Address: Tip Road	
Date: 26/8/25	Easting (MGA94):	Water Level Initial (m bgs):	Date: Time:
Logged By: MF	Northing (MGA94):	Water Level Static (m bgs):	Date: Time:
Contractor:	Zone/Area:	Surface Finish:	
Total Hole Depth (m bgs): 2.7	Reference Level:	Casing Type:	Depth To (m bgs):
Bore Diameter (mm) / Pit Dimension (m³):	Elevation (m):	Screen Type:	Depth To (m bgs):
Method: Depth To (m bgs):	Comment:	Backfill Type:	Depth To (m bgs):
Method: Depth To (m bgs):	Comment:	Backfill Type:	Depth To (m bgs):
Method: Depth To (m bgs):	Comment:	Backfill Type:	Depth To (m bgs):

SUBSURFACE PROFILE				SAMPLE				WELL
Depth (m)	Lithologic Type	Lithologic Class	Lithologic Description Surface Description:	Sample ID	PID (ppm)	Sample Type	Comments	Construction
1			Sandy gravel with some waste waste plastic bags		0		Vapour readings not taken as very close to TP01 and ~~the~~ rain was getting into LEL	
2								
3			Natural Clay @ 2.5m Light grey EOH @ 2.7					

Method	Sample Type	Reference Level	Screen/Casing Type	Backfill Type	Well Finish	Pit Dimensions (m)	Well Development Details
HA - Hand Auger NDD - Non Destructive Drilling SFA - Solid Flight Auger HFA - Hollow Flight Auger PT - Push Tube AH - Air Hammer TP - Test Pit	D - Disturbed U - Undisturbed	AHD - Australian Height Datum TOC - Top of Casing GS - Ground Surface	Class 18 PVC (50mm) - PVC50	BK - Backfill BN - Bentonite 2SP - 2mm Graded Sand	RB - Roadbox MT - Monument SP - Standpipe	A: ..... B: ..... C: ..... 	

Lithologic Classification – All Soils			Coarse Grained Soils				Fine Grained Soils		All Soils					Surface	Rocks
Lithologic Type	Lithologic Class - Soil	Texture	Grading	Grain Size	Angularity	Density	Plasticity	Consistency	Colour	Structure	Moisture	Inclusions	Contamination	Surface Materials	Lithologic Class - Rocks
FILL (FL) NATURAL (NT)	GRAVEL (GW) GRAVEL (GP) Silty GRAVEL (GM) Clayey GRAVEL (GC) SAND (SW) SAND (SP) Silty SAND (SM) Clayey SAND (SC) SILT (ML) CLAY (CL) Organic SILT (OL) SILT (MH) CLAY (CH) Organic CLAY (OH) PEAT (Pt)	gravelly sandy silty clayey organic	poorly graded well graded	boulders cobbles coarse gravel medium gravel fine gravel coarse sand medium sand fine sand	very angular angular sub-angular sub-rounded rounded well rounded	very loose loose medium dense dense very dense	non-plastic low plasticity medium plasticity high plasticity	very soft soft firm stiff very stiff hard	white black grey red brown orange yellow green blue	homogeneous heterogeneous stratified laminated lens root holes occasional inter-bedded mottled	dry damp moist wet saturated	and (35-50%) some (20-35%) little (10-20%) trace (0-10%)	odour staining solid waste	CONCRETE (CC) BITUMINOUS CONCRETE (BC) TOPSOIL (TS) Surface Description bare ground grass lightly vegetated heavily vegetated paved sealed	LIMESTONE (LS) SANDSTONE (SS) MUDSTONE (MS) SHALE (SH) CONGLOMERATE (CG) PHYLLITE (PH) TUFF (TF) GRANITE (GR) DOLERITE (DL) BASALT (BS) COAL (CO) COLLUVIUM (CV)

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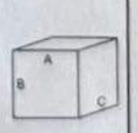
Test Pit: / Borehole: / Well: TP05		Project No: 70536	
		Client: MVC	
		Project Name: Deloraine Tip	
		Site Address: Tip Road	
Date: 28/8/25	Easting (MGA94):	Water Level Initial (m bgs):	Date: Time:
Logged By: MP	Northing (MGA94):	Water Level Static (m bgs):	Date: Time:
Contractor:	Zone/Area:	Surface Finish:	
Total Hole Depth (m bgs): 4.0	Reference Level:	Casing Type:	Depth To (m bgs):
Bore Diameter (mm) / Pit Dimension (m³):	Elevation (m):	Screen Type:	Depth To (m bgs):
Method: Depth To (m bgs):	Comment:	Backfill Type:	Depth To (m bgs):
Method: Depth To (m bgs):	Comment:	Backfill Type:	Depth To (m bgs):
Method: Depth To (m bgs):	Comment:	Backfill Type:	Depth To (m bgs):

SUBSURFACE PROFILE				SAMPLE				WELL
Depth (m)	Lithologic Type	Lithologic Class	Lithologic Description / Surface Description:	Sample ID	PID (ppm)	Sample Type	Comments	Construction
1			0.5 Cover gravel/mud Waste mix, domestic		0			
2								
3					4			
4			3.7 m Natural clay brown/grey					

Method	Sample Type	Reference Level	Screen/Casing Type	Backfill Type	Well Finish	Pit Dimensions (m)	Well Development Details
HA - Hand Auger NDD - Non Destructive Drilling SFA - Solid Flight Auger HFA - Hollow Flight Auger PT - Push Tube AH - Air Hammer TP - Test Pit	D - Disturbed U - Undisturbed	AHD - Australian Height Datum TOC - Top of Casing GS - Ground Surface	Class 18 PVC (50mm) - PVC50	BK - Backfill BN - Bentonite 2SP - 2mm Graded Sand	RB - Roadbox MT - Monument SP - Standpipe	A: ..... B: ..... C: ..... 	

Lithologic Classification – All Soils			Coarse Grained Soils				Fine Grained Soils		All Soils					Surface	Rocks
Lithologic Type	Lithologic Class - Soil	Texture	Grading	Grain Size	Angularity	Density	Plasticity	Consistency	Colour	Structure	Moisture	Inclusions	Contamination	Surface Materials	Lithologic Class - Rocks
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