Proposed Concrete Slab to Support
Ice Making Factor at Friday Flat - Thredbo NSW

PRACTICAL ENGINEERING SOLUTIONS P/L

ACN 157 931 069

PRACTICALENGINEERS.COM.AU

STRUCTURAL DRAWING LIST

SHEET NO	TITLE
S01	COVER
S02	SPECIFICATIONS
S03	SLAB & FOOTING PLAN
S04	FOOTING SECTIONS
S05	RETAINING WALL DESIGN

Department of Planning
Housing and Infrastructure

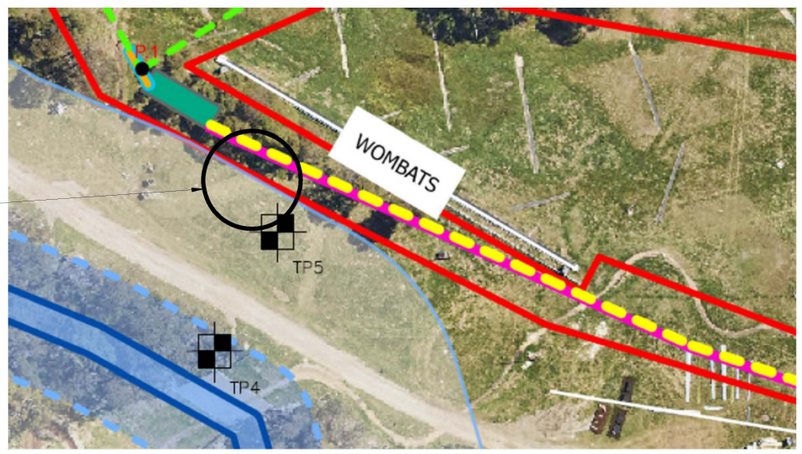
Issued under the Environmental Planning and Assessment Act 1979

Approved Application No 24/16834

Granted on the 9 April 2025

Signed Z Derbyshire

Sheet No 21 of 26



PROPOSED LOCATION

LOCALITY MAP - GEOTECH REPORT EXTRACT

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Drawing Name:

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Client:

KOSCIUSZKO THREDBO P/L
C/- RUSSELL NURIDIN
THREDBO NSW 2627

Structural Sheet No. S01 of 5

Scale:	NTS
Date:	06.11.2024
Drawing No:	2024 1018A COVER PAGE
Sheet Size:	A3
Designed:	O Boaru
Drawn:	A Sferle
Checked:	O Boaru

Approved:

Ovi Boaru MIEAust CPEng

ISSUE	DATE	AMENDMENT	INITIALS
-	-	-	-

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NOTES:

1. All workmanship and materials to conform with the latest edition of the building code of Australia and relevant Australian standards.

2. It is not implied or guaranteed that all structural designs and details shown in these plans are complete. The scope of the work has been determined by the Engineer based on the information supplied by the client or the clients consultants. The Engineer will provide further designs if required, but is not responsible for any associated cost where design details have not been specifically requested.

3. All dimensions on these plans should be checked on site by the builder and verified using Architectural plans and other contract documents. Discrepancies to be referred to the Architect or Engineer.

4. DO NOT SCALE FROM THESE DRAWINGS

5. The structural details shown in these plans are applicable to the Architectural plans and building elements by KT Py Ltd
   Architect indicated therein:
   Plans No. - KTI - SNOW PRO 260, Preliminary 03.04.2023
   Plan date - 03.04.2023
   Roof Structure - Steel Container Roof
   Wall Structure - Steel Container Wall
   Floor Structure - Concrete Slab

6. Reference to UNO = Unless Noted Otherwise & NA = Not Applicable.

7. Handrail construction to BCA requirements.

8. Where disturbed existing building must have bracing and tie-down investigated by the builder and referred to the Engineer for compliance checking. NA

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SITE CONDITIONS:

1. Stability/Vegetation - NA
2. Drainage - NA
3. Soil Type/profile - NA
4. AS2870 - 2011 site classification - Class 'P' See geotech report Ref 7604-R1-Rev1 Dated 26 September 2024 by AssestGeoEnviro
5. AS4055 - 2012 wind classification N3 50m/s (Vh,u).
6. AS1170.3 - 2003 Ultimate Ground Design 1 / 150 Snow Load AT Thredbo - 9.0 KPa

CONCRETE:

1. All concrete works to be in accordance with AS3600 2001

2. Concrete strength cover and durability details (refer AS3600)
   Footings - 32 MPa
   Internal Slab Garage -25MPa
   External Slab - 40 MPa (or 20MPa if weather proofed, ie tiling)
   Beams/Columns - NA

3. All reinforcement to be adequately supported on bar chairs in correct positions.

4. Concrete to be formed as required by AS3610 and compacted in accordance with AS3600 and AS3610 to achieve specified or relevant density durability and strength.

5. All reinforced fabric to be lapped one mesh panel plus 25mm and reinforcement bars lapped 40 bar diameters, UNO.

FOOTINGS:

1. Footings and slabs on ground designs conform with AS 2870-2011.

MASONRY:

1. All masonry (clay, stone and concrete) to comply with AS3700 2011. masonry code.

2. Masonry control joints to AS3700.

3. Core fill grout mix for hollow block fill to be 20 MPa.

TIMBER:

1. All timber construction to comply with Australian Framing Code AS1684.2 - 2010.
2. Bracing and tie down as shown on These Sheets comply with AS 1684.2-2010.
3. For external use, use Class 1 or Class 2 HW or Treated Timbers.

STEEL:

1. All steel construction to comply with AS4100 steel structures code and AISC Connection Details.

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Structural Sheet No. S02 of 5

Scale:	NTS
Date:	06.11.2024
Drawing No:	2024 1018A SPECIFICATIONS
Sheet Size:	A3
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Drawn:	A Sferle
Checked:	O Boaru

Approved:

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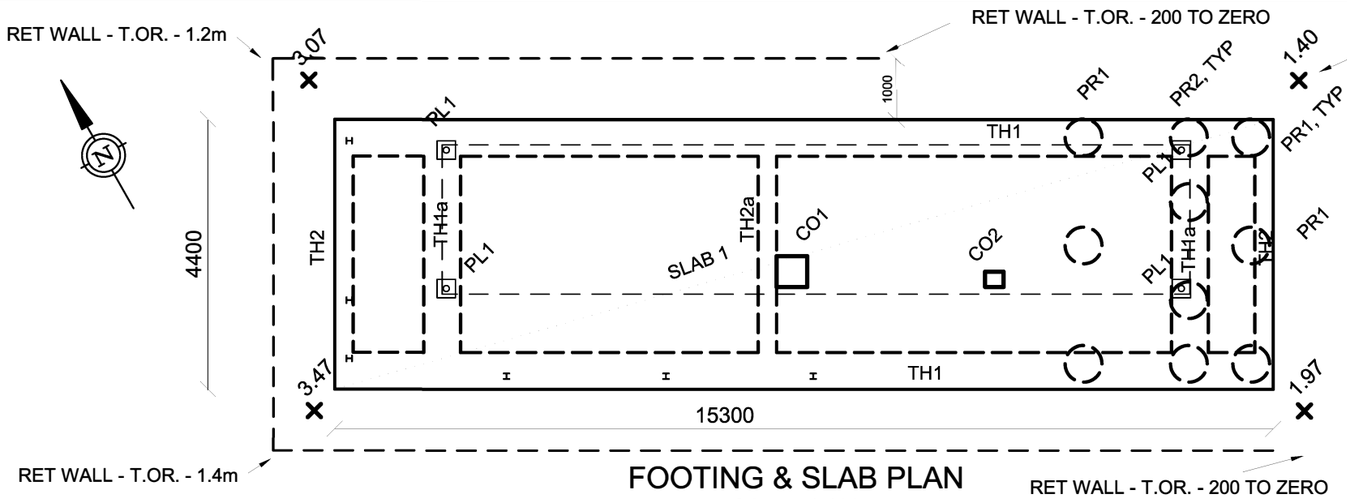
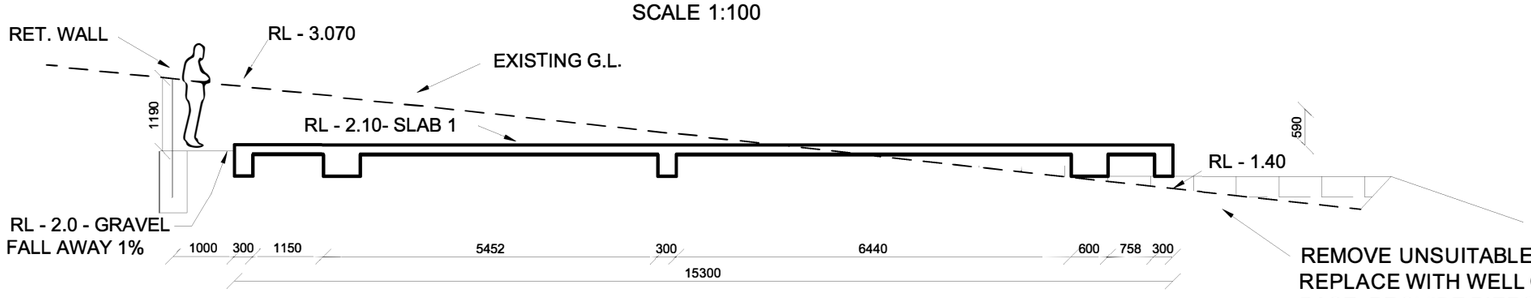


FOOTING & SLAB PLAN
SCALE 1:100

PIER NOTES & KEY :

* PIERS ARE REQUIRED AT FILL AND WHERE NATURAL DECOMPOSED GRANITE IS NOT ENCOUNTERED.
* PR1 - 450 Ø @ MAX 2 METERS CRS - SUPPORTING EDGE OF SLAB ONLY. PR1 CAN PE SCREW PILE WITH 20 KN BEARING CAPACITY. PLACE 4 N16 HORIZONTAL BARS x 800 LONG THROUGH CORE OF PIERS
* PR2 - 600 Ø x 1.4 M CRS SUPPORTING CONTAINER LOADS
* PIERS ARE TO 32 MPa AND EMBEDDED 400 mm INTO CLAYEY SAND. PR2 CAN BE REPLACED WITH SCREW PILE WITH 70 KN BEARING CAPACITY. PLACE 4 N16 BARS 800 LONG THROUGH CORE OF PIERS
* THIS REPORT IS BASED ON FINDINGS REPORT REF 7604-R1-REV1 DATED 26 SEPTEMBER 2024 BY ASSEST GEOENVIRO
* CO1 AND CO2 - CUT OUTS IN SLAB - PLACE 3 N12 RE-ENTRANT PARS AT CORNERS - x 800 LONG.
* PL1 - 20 THICK PLATES x - 300 x 300 WITH 4 N15 PREWELDED PRONGS (350 LONG & COGGED) AND CAST INTO FRESH CONCRETE AND PLACED AS LOCATING PINS FOR THE CONTAINERS AND WELDED TO CONTAINERS



NORTHERN CROSS SECTION
SCALE 1:100

REMOVE UNSUITABLE MATERIAL AND REPLACE WITH WELL COMPACTED ROAD BASE. PROVIDE PIERS AS PER NOTES WHERE FOOTINGS ARE NOT FOUNDED IN SOLID UNDISTURBED GROUND

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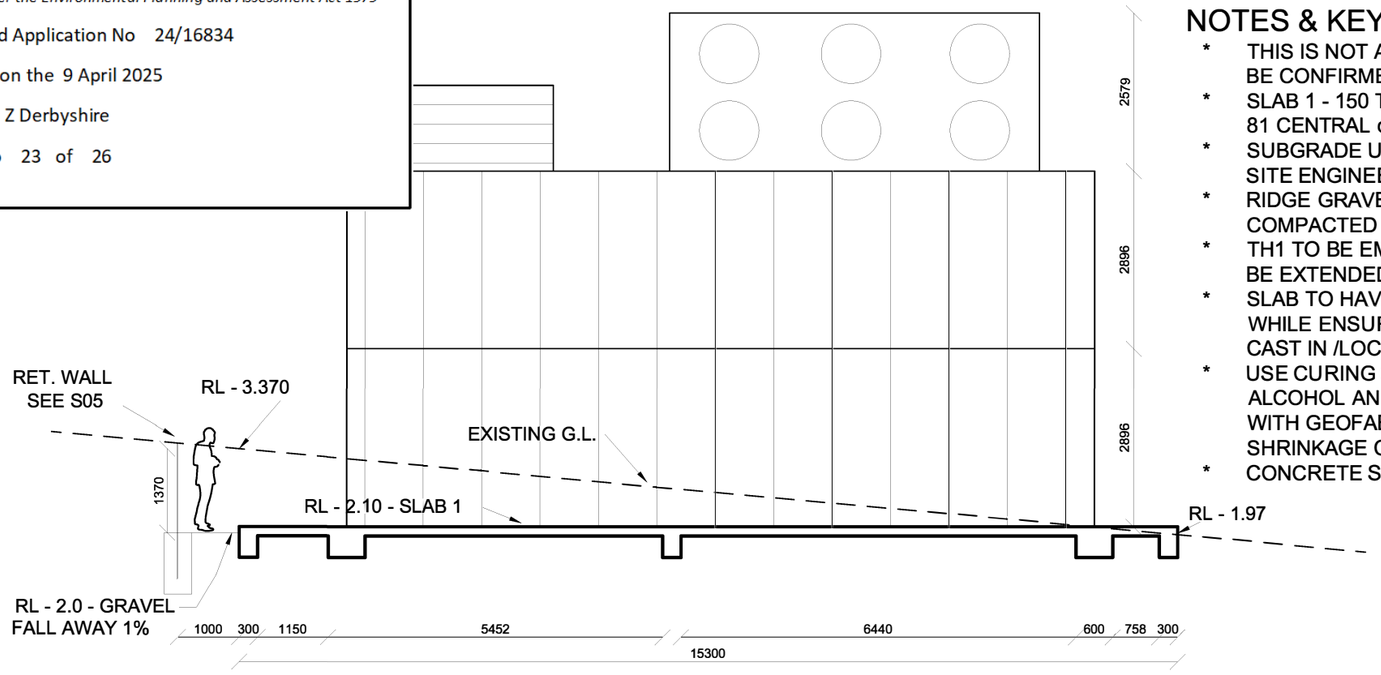
Sheet No 23 of 26

NOTES & KEY :

* THIS IS NOT A SURVEYING PLAN. FINAL DIMENSIONS AND LEVELS TO BE CONFIRMED ON SITE BY THE BUILDER
* SLAB 1 - 150 THICK - 40 MPa + XYPEX ADMIX & REINFORCED WITH SL 81 CENTRAL or WITH N12 @ 200 CRS EACH WAY
* SUBGRADE UNDER THICKENINGS TO BE 200 KPa AS ASSESSED BY SITE ENGINEER.
* RIDGE GRAVEL OR EQUIVALENT UNDER SLAB TO BE ROLLED AND COMPACTED TO CBR 20 AS NEEDED
* TH1 TO BE EMBEDDED MIN 200 mm INTO 200 KPA. DEPTH OF 600 TO BE EXTENDED AND ADJUSTED AS NEEDED
* SLAB TO HAVE MIN 0.5% CONSTANT FALL TOWARDS ALL EDGES WHILE ENSURING THE CONCRETE IS FLAT AROUND THE HOLD DOWN CAST IN /LOCATING PLATES PL1.
* USE CURING COMPOUND SUCH AS CONCURE A99 or ALIPHATIC ALCOHOL AND KEEPING SLAB MOIST FOR 7 DAYS AND COVERED WITH GEOFABRIC OR HAISSEN IS CRITICAL IN MINIMIZING SHRINKAGE CRACKS.
* CONCRETE SLABS WILL ALWAYS CRACK.



SOUTHERN CROSS SECTION
SCALE 1:100

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Structural Sheet No. S03 of 5

Scale:	1:100
Date:	06.11.2024
Drawing No:	2024 1018A SLAB PLAN
Sheet Size:	A3
Designed:	O Boaru
Drawn:	A Sferle
Checked:	O Boaru

Approved:

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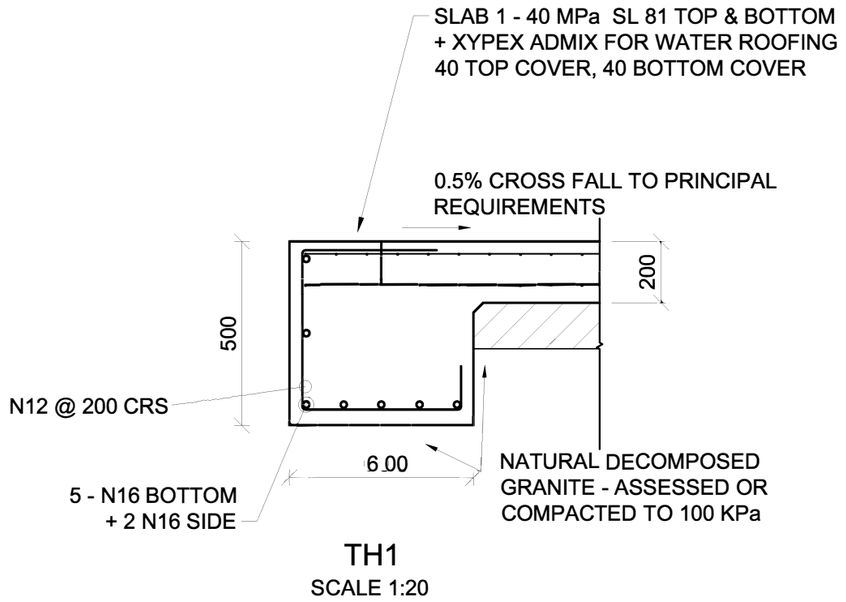
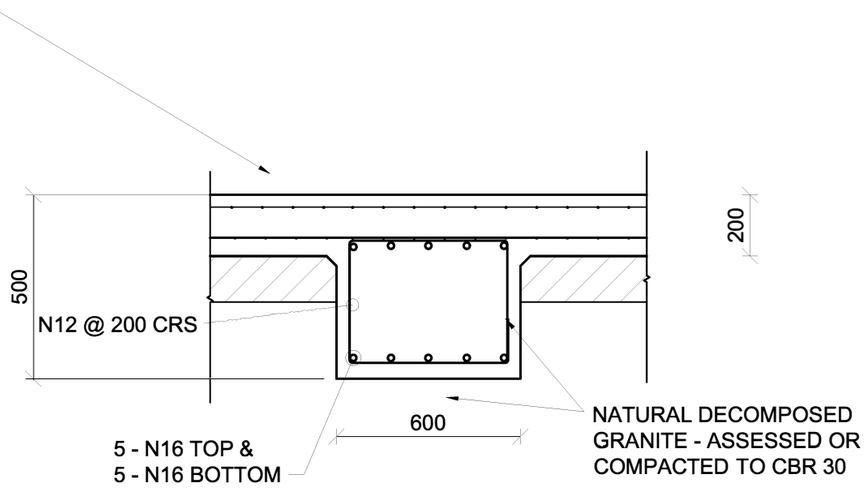
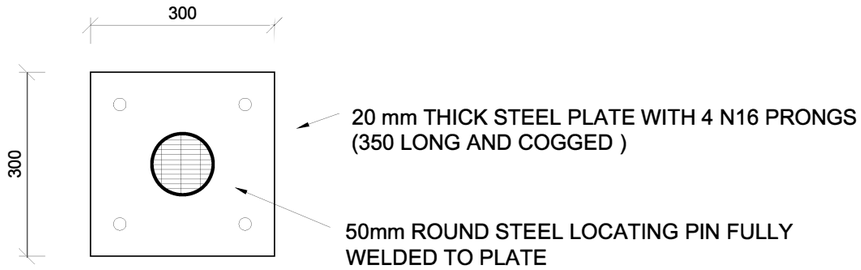


TH1
SCALE 1:20

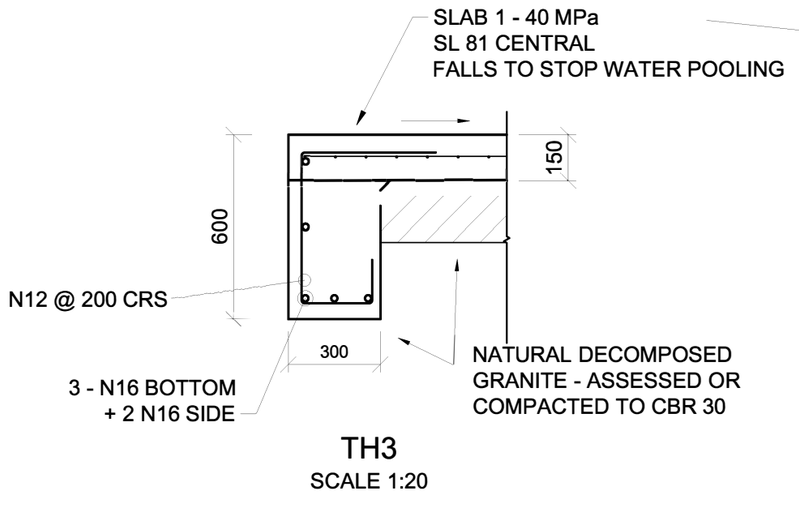


TH1a
SCALE 1:20

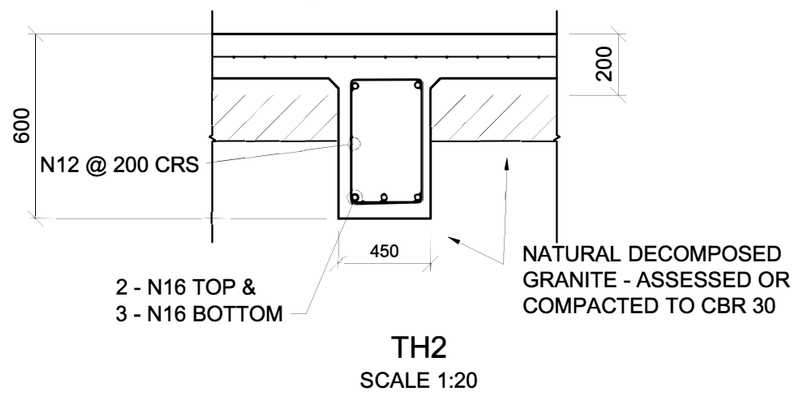


PL1
SCALE 1:10

IMPORTANT NOTE
TO CREATE A RAFT SLAB - PROVIDE L BARS AROUND ALL CORNERS - MIN LAP 40 BARS DIAMETER



TH3
SCALE 1:20



TH2
SCALE 1:20

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Structural Sheet No. S04 of 5

Scale:	1:20
Date:	06.11.2024
Drawing No:	2024 1018A SECTIONS
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Drawn:	A Sferle
Checked:	O Boaru

Approved:

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TABLE 1 - SURCHARGE 5 KPa								
100 x 85 x 4 BEAM	STEEL POST (BEAM)	WALL HEIGHT	HOLE SIZE	HOLE (H) DEPTH	2.4 SLEEPER	2.0 SLEEPER	1.8 SLEEPER	HOLE SIZE
SUITABLE	100 UC 14	600	300Ø	600	SUITABLE	SUITABLE	SUITABLE	300Ø
SUITABLE	100 UC 14	800	300Ø	800	SUITABLE	SUITABLE	SUITABLE	300Ø
SUITABLE	100 UC 14	1000	300Ø	1,000	SUITABLE	SUITABLE	SUITABLE	300Ø
SUITABLE	100 UC 14	1200	450Ø	1,200	SUITABLE	SUITABLE	SUITABLE	300Ø
SUITABLE	100 UC 14	1400	450Ø	1,400	SUITABLE	SUITABLE	SUITABLE	300Ø

NSW GOVERNMENT

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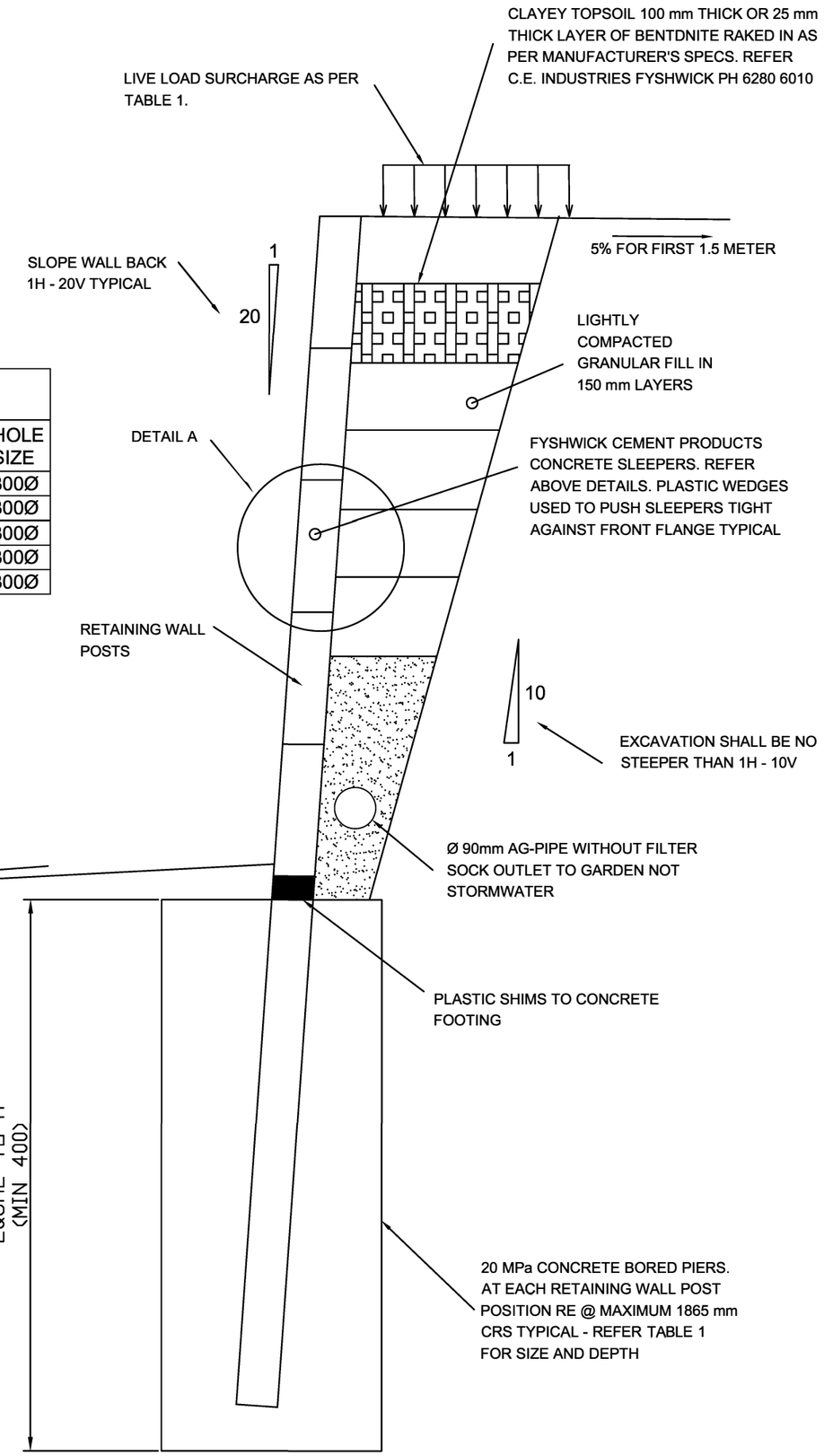
Sheet No 25 of 26



TYPICAL RETAINING WALL SECTION

SCALE NTS

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Structural Sheet No. S05 of 5

Scale:	1:20
Date:	06.11.2024
Drawing No:	2024 1018A RETAINING WALL
Sheet Size:	A3
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Drawn:	A Sferle
Checked:	O Boaru

Approved:

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