

CONSTRUCTION CERTIFICATE NO. 200618/1

Issued under Part 6 of the Environmental Planning and Assessment Act 1979

APPLICANT

Name of person having benefit of the development consent: **Ros Petteno**
Address: **20 Avon Road, Pymble NSW 2073**
Contact Details: **Phone: 0420 959 064**

DEVELOPMENT CONSENT

Consent Authority/Local Government Area: **Ku-ring-gai Council**
Development Consent No & Date: **SSD 17424905 09/12/2022**
SSD 17424905-MOD 1 21/11/2023

PROPOSAL

Address of Development: **20 Avon Road, Pymble NSW 2073**
Lot No: **Lot 1**
DP No: **DP 69541**
Building Code of Australia (BCA) Classification: **Class 9b**
Applicable version of the BCA: **BCA 2022**
Type of Construction: **Type N/A**
Description of development: **The Grey House Precinct development involving demolition of existing structures and construction of a building to accommodate the following:**

- junior school classrooms (years 5 and 6);
- science, technology engineering and mathematics laboratories;
- health and wellbeing facilities (consulting rooms/wards);
- a dance academy;
- out-of-school-hours care;
- a new early learning centre for 90 children and 20 staff;
- outdoor learning spaces for existing students; and
- tree removal and associated landscaping works.

Scope of building works covered by this Certificate: **CC1 - Demolition, earthworks, foundations & in-ground services.**

Value of Construction Certificate (Incl GST): **\$51,332,394.30**
Plans and Specifications approved: **Schedule 1**
Fire Safety Schedule: **N/A**
Critical Stage Inspections: **See attached Notice**

Exclusions: **Nil**

Conditions (as per Sections 111 & 115-117 of the *Environmental Planning & Assessment (Development Certification & Fire Safety) Regulation 2021*):

PROJECT BUILDING SURVEYOR

Please contact **Chris Michaels** for any inquiries

CERTIFIER

Chris Michaels for and on behalf of
City Plan Services Pty Ltd

REGISTRATION NUMBER

BDC1974

That I, Chris Michaels as the certifier:

- a) *certify that the work if completed in accordance with the plans and specifications identified in Schedule 1 (with such modifications verified by the certifying authority as may be shown on that documentation) will comply with the requirements of the Environmental Planning & Assessment (Development Certification & Fire Safety) Regulation 2021 as referred to in Part 6 of the Environmental Planning and Assessment Act 1979; and*
- b) *am satisfied that, in the case where fire safety system plans and specifications have been provided, that such plans and specifications correctly identify both the performance requirements and the deemed-to-satisfy provisions of the Building Code of Australia.*

DATED THIS **08** **April** **2024**



Chris Michaels
Director

NB: Prior to the commencement of work Section 6.6 of the Environment Planning and Assessment Act 1979 must be satisfied.

SCHEDULE 1 APPROVED PLANS AND SPECIFICATIONS

1. Endorsed Architectural Plans

Plan Title	Prepared By	Drawing No / Ref	Revision	Date
GA Plan - Level 0	BVN	AR-B10-00-01	A	15/03/24
Demolition & Bulk Excavation Plan	BVN	AR-U10-XX-01	B	15/03/24

2. Endorsed Structural Plans

Plan Title	Prepared By	Drawing No / Ref	Revision	Date
Cover Sheet	TTW	S0000	02	15/03/24
Notes Sheet	TTW	S0001	02	15/03/24
Shoring Plan	TTW	S0501	02	15/03/24
3D - Shoring	TTW	S0502	02	15/03/24
Shoring Elevations & Sections - Sheet 1	TTW	S0511	03	18/03/24
Shoring Elevations & Sections - Sheet 2	TTW	S0512	03	18/03/24
Typical Soldier Pile Details	TTW	S0521	03	18/03/24
Footing Plan	TTW	S1001	03	18/03/24
Footing Sections & Details - Sheet 1	TTW	S1041	03	18/03/24
Slab on Ground OSD Elevations & Details - Sheet 1	TTW	S6010	02	15/03/24

3. Endorsed Civil Plans

Plan Title	Prepared By	Drawing No / Ref	Revision	Date
Cover Sheet, General Notes & Legends, Locality Plan & Drawing	TTW	C01	A	19/02/24
Erosion & Sediment Control Plan	TTW	C02	A	19/02/24
Erosion & Sediment Control Details	TTW	C03	A	19/02/24
Overall Stormwater Plan	TTW	C04	A	19/02/24
Level 00 Siteworks Plan	TTW	C05	A	19/02/24
Level 01 Siteworks Plan	TTW	C06	A	19/02/24

Plan Title	Prepared By	Drawing No / Ref	Revision	Date
Level 02 Siteworks Plan	TTW	C07	A	19/02/24
Bulk Earthworks	TTW	C13	A	19/02/24
Typical Details Sheet 1	TTW	C20	A	19/02/24
OSD Tank Details Sheet 1	TTW	C50	A	19/02/24

4. Endorsed Hydraulic plans

Plan Title	Prepared By	Drawing No / Ref	Revision	Date
Legend of Symbols and General Notes	JHA	HY-000-01	H	15/03/24
Hydraulic Early Works Plan	JHA	HY-100-00	H	15/03/24
Ground Floor Drainage Layout – Sheet 2	JHA	HY-200-01	H	15/03/24
Level 01 Drainage Layout – Sheet 1	JHA	HY-201-01	H	15/03/24
Ground Floor Water & Gas Layout – Sheet 2	JHA	HY-300-01	H	15/03/24
Level 01 Water & Gas Layout – Sheet 2	JHA	HY-301-01	H	15/03/24

5. Endorsed Specifications

Title	Prepared By	Reference	Revision	Date
Architectural Specification Demolition	BVN	Z-0201	Issue 3	13/06/23
Architectural Specification Earthwork	BVN	Z-0222	Issue 3	13/06/23
Architectural Specification Quality	BVN	Z-0160	Issue 3	13/06/23
Architectural Specification Site Preparation	BVN	Z-0221	Issue 3	13/06/23
Architectural Specification Service Trenching	BVN	Z-0223	Issue 3	13/06/23
Architectural Specification Quality	BVN	Z-0160	Issue 4	15/03/24
Concrete Specification	TTW	-	Rev 2	12/02/24
Structural Steel Specification	TTW	-	Rev 2	12/02/24
Civil Specification	TTW	211007	Rev. D	29/05/23
Hydraulic Services Specification	JHA Services	240031	-	15/03/24

Title	Prepared By	Reference	Revision	Date
Hydraulic Services Specification	Stantec Australia Pty Ltd	301350239	Rev 004	26/05/23

6. Other documents relied upon

Title	Prepared By	Reference	Date
CC Application Form	Ros Pettano	CFT-505652	25/03/24
Architectural Design Statement	BVN	SSD-1742490 5	22/03/24
Structural Design Certificate	TTW	211007	15/03/24
Hydraulic Services Design Certificate	JHA	240031	15/03/24
Long Service Levy Receipt	Long Service Corporation	L0000147340	27/03/24
Geotechnical Investigation Report	JK Geotechnics	REV 2 33775SCrpt2	21/04/26
Sydney Water Building Plan Assessment	Diego Montelvere & Sydney Water	1824388	13/02/24
Planning Agreement Not Required Email Confirmation	Willowtree Planning	-	23/02/24
Peer review of fire engineering brief questionnaire	Warringtonfire	20231127- SY230335 PR1.0	08/04/24
DA A1, A2, A3 - NSW Government Independent Planning Commission Letter	NSW Government Independent Planning Commission	SSD-17424905	19/05/23
DA B9 - Willowtree email correspondence confirming modified DA condition change process	Willowtree Planning	-	21/02/24
DA C7, C9 - Design Certificate Civil	TTW	211007	18/03/24
DA C10 - Section 7.12 Receipt	Ku-ring-gai Council	D000812320	05/03/24
DA C10 - Section 7.12 Contribution Statement	Ku-ring-gai Council	DC24-0094	27/02/24
DA D1 - Construction Commencement Notification	PPC	-	03/04/24
DA D1 - Notice of NOC	PPC	-	22/03/24
DA D4 - Dilapidation report - Gate 3 Survey	Waratah Property Inspections	W20379.PLC.GT3 .DLP	05/02/24
DA D4 - Dilapidation Report - Pathway Survey	Waratah Property Inspections	W20379.59P.DLP	15/01/24
DA D5 - Dilapidation Report - 59B Pymble Ave	Waratah Property Inspections	W20379.59B.DLP	15/01/24

Title	Prepared By	Reference	Date
DA D5, D6, D7 - Dilapidation Survey Report - 53 Pymble Ave	Waratah Property Inspections	W20379.53.DLP	04/03/24
DA D5, D6, D7 - Dilapidation Survey - 57 Pymble Ave	Waratah Property Inspections	W20379.57.DLP	04/03/24
DA D5, D6, D7 - Dilapidation Survey - 57A Pymble Ave	Waratah Property Inspections	W20379.57A.DLP	06/03/24
DA D5, D6, D7 - Dilapidation Survey - 59A Pymble Ave	Waratah Property Inspections	W20379.59A.DLP	04/03/24
DA D5, D6, D7 - Dilapidation Survey - 61 Pymble Ave	Waratah Property Inspections	W20379.61.DLP	04/03/24
DA D5, D6, D7 - Dilapidation Survey - 77 Pymble Ave	Waratah Property Inspections	W20379.77.DLP	04/03/24
DA D5, D6, D7 - Dilapidation Survey - 79 Pymble Ave	Waratah Property Inspections	W20379.79.DLP	04/03/24
DA D5, D6, D7 - Access Attempt Letter	Waratah Property Inspections	20379	12/03/24
DA D5, D6, D7 - Dilapidation Report Re Qualifications Experience Letter	Waratah Property Inspections	20379	12/03/24
DA D5, D6, D7 - Dilapidation Survey Report	Waratah Property Inspections	W20379.53.DLP	04/03/24
DA D8 - Community Consultative Committee Meeting Notes	Community Consultative Committee	-	14/11/23
DA D9 - Community Construction Communication Strategy	WSP	Final Rev	29/01/24
DA D9 - Planning Secretary Approval of Community Communication Strategy	Department of Planning, Housing & Infrastructure	SSD-17424905-PA06	09/02/24
DA D9 - Community Construction Communication Strategy	WSP	Rev Final	29/01/24
DA D10 - Email confirming no demolition of structures	Pier Property Corporation	-	23/02/24
DA 11 - WAE stormwater plan	TTW	01	08/04/24
DA D11 - Email re Stormwater Diversion Works	PPC	-	23/02/24

Title	Prepared By	Reference	Date
DA D11 - Installation Certificate Stormwater Drainage	Paul Anderson	-	08/02/22
DA D12 - Alternative Certification Process Approval	Department of Planning & Environment	SSD-SSD-17424905-PA-3	01/11/23
DA D12 - Ecologically Sustainability Development	Stantec Australia Pty Ltd	Rev 3	27/09/23
DA D15 - CEMP Approval document	Greg Hastie	-	08/04/24
DA D16 - CEMP Environmental Management Plans	Stephen Edwards Constructions	Rev B	15/03/24
DA D18 - Construction Traffic and Pedestrian Management Sub-Plan (CTPMSP)	The Traffic Planner	Revision 1.0	04/03/24
DA D18 - Construction Traffic Management Plan	The Traffic Planner	Revision 1.0	06/02/24
DA D18 - Email from Ku-ring-gai Council showing consultation for CTPMP	Joseph Piccoli - Ku-ring-gai Council	-	23/02/24
DA D18 - Email from Ku-ring-gai Council Traffic Engineer	Joseph Piccoli - Ku-ring-gai Council	-	23/02/24
DA D18 - Email from Ku-ring-gai Council Traffic Engineer	Joseph Piccoli - Ku-ring-gai Council	-	13/03/24
DA D19 - Construction Noise and Vibration Management Sub Plan (CNVMSP)	PWNA	240063-PLCGH-CNVMSP-R1	15/03/24
DA D20 - Waste Management Plan	Stephen Edwards Construction	647	15/03/24
DA D21 - Appendix 11 Environmental Management Plans Rev B	Stephen Edwards Construction	F106.11 20220511 Rev B	15/03/24
DA D21 - Consultation with Ku-ring-gai Council	Viola Yao - TTW	-	06/02/24
DA D21 - Consultation with Ku-ring-gai Council	Viola Yao - TTW	-	14/02/24
DA D21 - Consultation with Ku-ring-gai Council	Viola Yao - TTW	-	19/02/24

Title	Prepared By	Reference	Date
DA D22 - Biodiversity Management Sub-Plan (BMSP)	Ecological Consultants Australia Pty Ltd	-	26/02/24
DA D24 - Emergency Response Plan	Stephen Edwards Construction	Revision A	02/02/24
DA D26 & D27 Tax Invoice Biodiversity (BCF680)	NSW Government - Biodiversity Conservation Trust	1400000460	27/02/24
DA D26 - Receipt of payment Section 6.33 Certificate (BCF680)	NSW Government - Biodiversity Conservation Trust	SSD 17424905	06/03/24
DA D26 - Email acknowledgement of BCF payment	BCF Payments	-	21/02/24
DA D27 - Form 2 Charge Quote statement for BCF	NSW Government	Oct 2023	
DA D28 - Department approval of Pre-Clearing Vegetation Plan	NSW Government	SSD-17424905-PA-4	21/12/23
DA D28 Pre-clearing Vegetation Plan	Narla Environmental	Final V1.0	13/11/23
DA D30, D31 & D32 - Statement of Compliance	Toolijooa	-	01/02/24
DA D37 - Vegetation Management Plan	Mark Bury Consulting	-	19/01/24

City Plan Services Pty Ltd
 Reference: 200618/1
 Date: 08/04/2024
 Construction Certificate
 Chris Michaels
 Director
 BCC1294

GENERAL ARRANGEMENT LEGEND

GENERAL NOTE
 IF DISCREPANCIES ARE FOUND, THEY ARE TO BE BROUGHT TO THE ATTENTION OF THE PRINCIPAL CONTRACTOR AND / OR ARCHITECT FOR COORDINATION PRIOR TO CONSTRUCTION ON SITE.

DRAWING TO BE READ IN CONJUNCTION WITH:

- A10 SERIES - LOCATION PLAN
- B10 SERIES - GENERAL ARRANGEMENT PLANS
- B00 SERIES - SET-OUT AND WALL PROFILES
- B43 SERIES - FACADE, EXTERNAL WALLS AND CLADDING
- B47 SERIES - PERFORMANCE
- B82 SERIES - WALL TYPES
- B83 SERIES - REFLECTED CEILING PLANS
- B80 SERIES - FINISHES
- C10 SERIES - GENERAL ELEVATIONS
- C10 SERIES - GENERAL SECTIONS

ARCHITECTURAL SCHEDULE OF FINISHES & COMPONENTS

- ARCHITECTURAL SPECIFICATION
- STRUCTURAL ENGINEER'S DOCUMENTATION
- SERVICES CONSULTANT'S DOCUMENTATION

FRISKI / SMOKE PROTECTION KEY

- SMOKE SEPARATION
- FR L120120120
- FR L 000000

NOTE
 DASHED LINES ARE INDICATIVE OF EXTENT OF WALL FINISHES AND LINING SYSTEM AND SHOULD BE READ IN CONJUNCTION WITH LMS-#00 CODES.
 REFER TO AR-114-KX-01 - ARCHITECTURAL FINISHES & COMPONENTS SCHEDULE (1)-SHEET, FOR MORE INFORMATION

BVN
 ARCHITECTS REGISTRATION BOARD /
 NOMINATED ARCHITECTS

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 SYDNEY NSW 2050
 TEL: (02) 9557 5533
 FAX: (02) 9557 5533
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NOTE
 CONTRACTOR TO CHECK AND VERIFY ALL DIMENSIONS ON SITE PRIOR TO COMMENCEMENT OF WORK. ANY VARIATIONS FROM DRAWINGS AND TO BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR COORDINATION PRIOR TO CONSTRUCTION ON SITE.

ISSUE DATE	FOR	CRKD	
1	20/07/21	For Information	JMB
2	09/09/21	SPEC CD Issue	JMB
3	11/09/21	For Information	JMB
4	23/09/21	SPEC CD Issue	JMB
5	08/09/21	100% CD Issue	JMB
6	11/10/21	SPEC Documentation	JMB
7	01/11/21	Start Documentation	JMB
8	12/11/21	For Information	JMB
9	28/11/21	Start Documentation	JMB
10	09/12/21	For Information	JMB
11	21/12/21	For Tender	JMB
12	03/01/22	For Tender	JMB
13	28/02/22	For Coordination	JMB
14	04/03/22	For Tender	JMB
15	13/03/22	Revised Tender	JMB
16	20/03/22	Revised Tender BAFO	JMB
17	03/04/22	CONSTRUCTION CERTIFICATE 1	JMB

CONTRACTOR	STANTEC - FIRE ENGINEERING, ESD	TEL 1-866-782-6832
CONTRACTOR	TTW - CIVIL STRUCTURE, FACADE	TEL 02 9439 7288
CONTRACTOR	OCULUS - LANDSCAPE ARCHITECT	TEL 02 9557 5533
CONTRACTOR	STEVE WATSON AND PARTNERS - BCA	TEL 02 9929 6974
CONTRACTOR	JHA ENGINEERS - HYDRAULICS	TEL 02 9437 1500
MANAGING CONTRACTOR	STEPHEN EDWARDS CONSTRUCTIONS	TEL 02 9891 3099
PROJECT MANAGER	PIER PROPERTY CORPORATION	TEL 02 9249 0400
CLIENT	PYMBLE LADIES COLLEGE	CLIENT NUMBER
PROJECT	PYMBLE LADIES COLLEGE GREY HOUSE PRECINCT	BVN PROJECT NUMBER
PROJECT	2010018	DRAWING KEY

PROJECT MANAGER
 PIER PROPERTY CORPORATION
 TEL 02 9249 0400
 CLIENT

PYMBLE LADIES COLLEGE
 CLIENT NUMBER

PROJECT
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PROJECT

PYMBLE LADIES COLLEGE
 GREY HOUSE PRECINCT
 BVN PROJECT NUMBER

2010018
 DRAWING KEY

TRUE NORTH PROJECT NORTH

GRAPHIC SCALE
 0 2000 6000
 SCALE @ A4

1:100 DO NOT SCALE
 STATUS

DRAWING

GA PLAN - LEVEL 0

AR-B10-00-01



City Plan Services Pty Ltd
 Reference: 200518/1
 Date: 08/04/2024
 Construction Certificate
 Chris Michaels
 Director
 BCC1574

- DEMOLITION LEGEND**
- EXISTING TREES
 - ▭ EXISTING BUILDINGS
 - DEMOLITION
 - - - SITE BOUNDARY
 - NEW BUILDING LINE
- NOTE**
- REFER TO CIVIL AND SERVICES CONSULTANTS DOCUMENTATION FOR EXTENT OF IN-GROUND SERVICES DEMOLITION.
 - REFER TO CIVIL DOCUMENTATION FOR EXTENT OF BULK EXCAVATION.

BVN
 ARCHITECTS REGISTRATION BOARD /
 NOMINATED ARCHITECTS

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 www.bvn.com.au

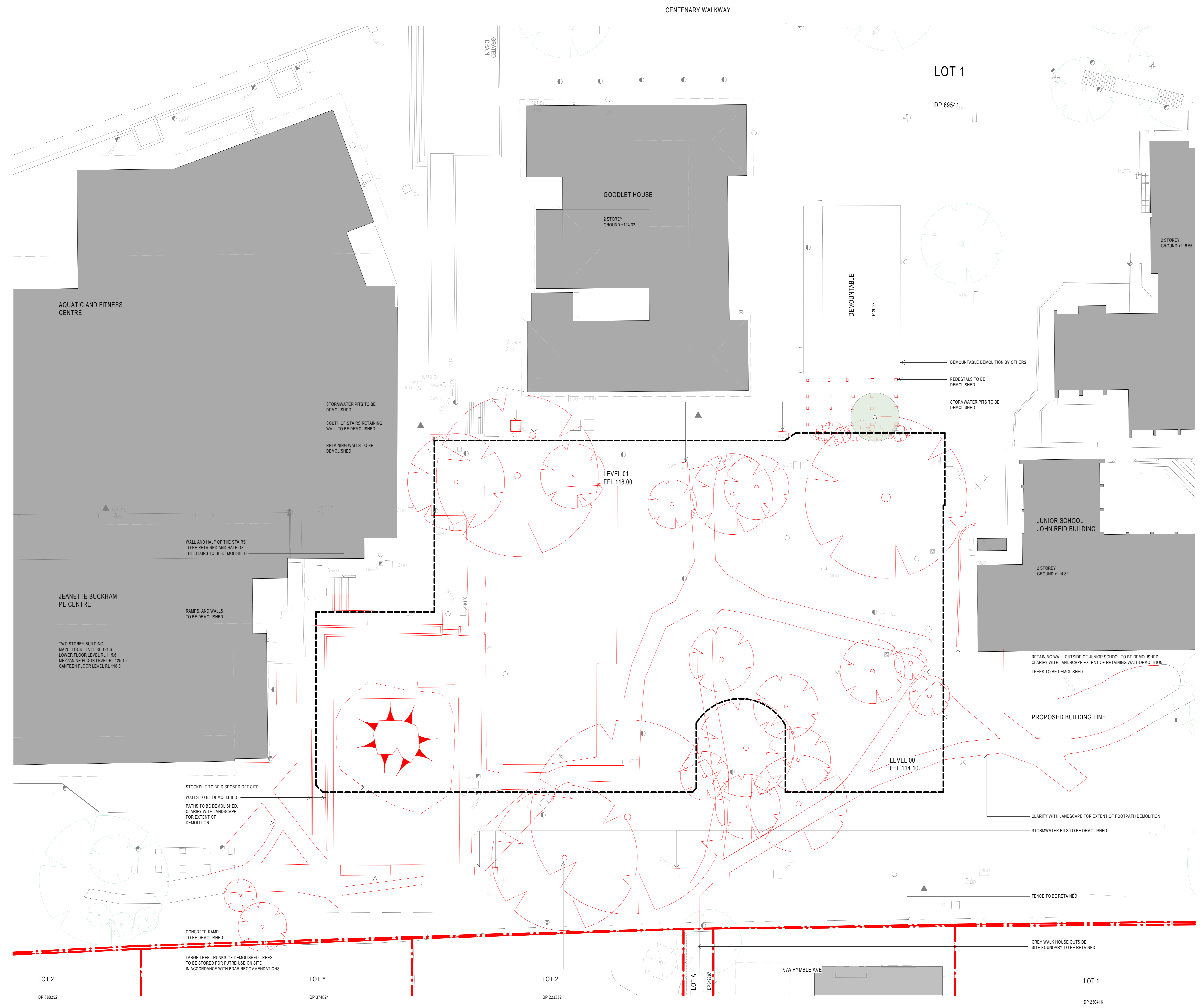
INTELLECTUAL PROPERTY

CONTRACTOR'S ARCHITECTURE BY LIMITED LIABILITY COMPANY
 OWNED BY THE COMPANY CONTRACTOR. THIS DOCUMENT MAY
 ONLY BE USED FOR THE PURPOSES SPECIFIED AND NOT FOR
 ANY OTHER PURPOSES. THE CONTRACTOR ACCEPTS THE
 LIABILITY FOR ANY AND ALL DAMAGES AND LOSSES
 ARISING FROM THE USE OF THIS DOCUMENT. THE
 CONTRACTOR'S ARCHITECTURE BY LIMITED LIABILITY
 COMPANY IS NOT RESPONSIBLE FOR ANY DAMAGES
 ARISING FROM THE USE OF THIS DOCUMENT.

NOTE

CONTRACTOR TO CHECK AND VERIFY ALL DIMENSIONS ON SITE PRIOR
 TO COMMENCEMENT OF WORK. ANY VARIATIONS AND DEVIATIONS
 AND TOLERANCES ARE TO BE ADVISED TO THE ARCHITECT
 IMMEDIATELY UPON IDENTIFICATION. DOCUMENT FORM A TO THE END OF THE DRAWINGS

ISSUE	DATE	FOR	CHKD
1	08/04/24	For Tender	
2	08/04/24	For Tender	
3	08/04/24	For Tender	
A	08/04/24	FOR	
B	15/04/24	CONSTRUCTION	



CONSULTANT

STANTEC - FIRE ENGINEERING, ESD
 TEL 1-866-782-6832

CONSULTANT

TTW - CIVIL STRUCTURE, FACADE
 TEL 02 9459 7288

CONSULTANT

OCULUS - LANDSCAPE ARCHITECT
 02 9557 5533

CONSULTANT

STEVE WATSON AND PARTNERS - BCA
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CONSULTANT

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 02 9437 1000

MANAGING CONTRACTOR

STEPHEN EDWARDS CONSTRUCTION
 02 8851 3099

PROJECT MANAGER

PIER PROPERTY CORPORATION
 TEL 02 9249 0400
 CLIENT

CLIENT

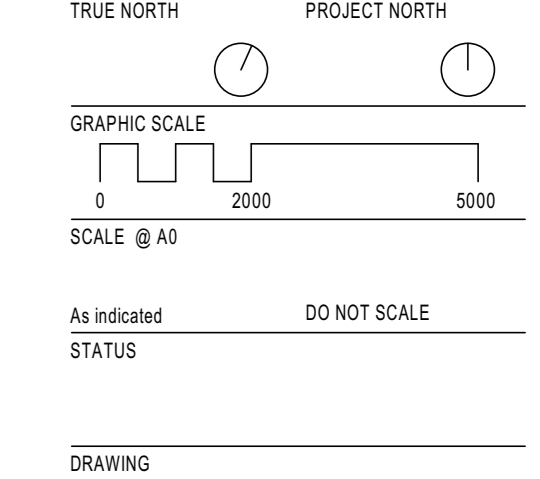
PYMBLE LADIES COLLEGE
 CLIENT NUMBER

PROJECT

PYMBLE LADIES COLLEGE
 GREY HOUSE PRECINCT
 BVN PROJECT NUMBER

PROJECT NUMBER

2010018
 DRAWING KEY



DEMOLITION & BULK EXCAVATION PLAN

ISSUE

AR-U10-XX-01 B

NOTES

GENERAL NOTES

- These drawings are for structural purposes only and are to be read in conjunction with the specification, architectural drawings, other contract documents and the requirements of the relevant authorities.
- Verify all setting out dimensions with the Architect.
- Do not obtain dimensions by scaling the structural elements.
- Should any ambiguity, error, omission, discrepancy, inconsistency or other fault exist or seem to exist in the contract documents, immediately notify in writing to the Superintendent.
- Maintain the structure in a stable condition during construction. Temporary bracing/shoring shall be provided by the contractor to keep the structure and excavations stable at all times, ensuring that no part of the documented structure becomes overstressed. For all temporary batters obtain geotechnical engineer's recommendations.
- All workmanship and materials shall be in accordance with the requirements of current Standards Australia codes and the bylaws, ordinances or other requirements of the relevant building authorities.
- All proprietary items are to be installed and fixed in accordance with the manufacturers specifications and instructions.
- All work is to be carried out in accordance with all Workcover requirements and occupational health and safety act regulations.
- Construction using these drawings shall not commence until a Construction Certificate is issued by the Principal Certifying Authority.

DESIGN LOADS:

Floor loads :
Wind Loads :
Earthquake Loads :

Ve = 48
Region = A2
Terrain Category = 3
Design Category = II
Site Sub-category = Sa
Hazard Factor Z = 0.08
Probability Factor $\lambda_p = 1.3$
Impermeability Level = 3
Ductility $\mu = 1$

SAFETY IN DESIGN

TTW (NSW) Pty Ltd operates under Safe Work Australia's Code of Conduct for the Safe Design of Structures.
These drawings shall be read in conjunction with the Taylor Thomson Whitting Transfer of Information Letter and Structural Risk and Solutions Register. Under the Code of Conduct it is the Client's responsibility to provide a copy of the Structural Risk and Solutions Register to the Principal Contractor. It is the Principal Contractor's responsibility to review the hazards and risks identified during the design process to ensure a safe workplace is maintained for the construction, maintenance and eventual demolition of the structure.

PILING NOTES

- Piles are to be designed in accordance with AS2159 by the contractor for the axial loads and moments listed in the piling schedule and all requirements of the specification.
- The pile design and installation shall follow the recommendations outlined in the geotechnical report No. Ref. 33775SCrpt2 prepared by JK Geotechnics. Any additional geotechnical investigation work deemed necessary shall be at the contractor's expense.
- Pile spacing and pile cap design is based on 800 diameter grout injected auger piles. Alternative pile systems may be used subject to approval. Any necessary re-design of pile caps to suit alternative systems shall be at the expense of the contractor. For single piles under columns the minimum pile diameter shall be 600mm.
- All piles or pile groups are to be centred under columns and walls UNO.
- Prior to commencing on site, the contractor must submit for approval:
 - pile type proposed
 - pile size(s), reinforcement details, founding depths and design certificate. The design certificate is to certify the pile design is in accordance with AS2159 for the loads listed in the piling schedule and is signed by a NER registered engineer experienced in the type of piling proposed.
 - a shop drawing setting out all pile locations from grid
- The contractor is to coordinate the location of all underground services and to be responsible for ensuring that these are either avoided or relocated as appropriate.
- The contractor shall provide a NER registered engineer to supervise the pile installation.
- At the satisfactory completion of the work the contractor shall provide an inspection certificate signed by a NER registered engineer.

FOOTING NOTES

- Foundations have been designed for:
 - Allowable Bearing Pressure - Class 4 and 5 - 800 kPa
 - Class 3 - 3500 kPa
- Allowable Side Shear - Class 4 and 5 - 80 kPa
- Class 3 - 350 kPa
- Reactivity Class - M to AS 2870
- Foundation material is to be inspected and approved by the geotechnical engineer before casting footings.
- Refer to geotechnical report No. Ref. 33775SCrpt2 dated 6 April 2021 by JK Geotechnics
- Locate all pipes, retaining walls and excavation outside a 1:2 (vertical:horizontal) zone of influence from the bottom edge of the footing.
- Where side shear is required to be developed, clean and roughen the sides of the excavation to the satisfaction of the geotechnical engineer.
- Footings shall be located centrally under walls and columns unless noted otherwise.
- Footings to be constructed and backfilled as soon as possible following excavation to avoid softening or drying out by exposure.
- Contractor is to allow for cost of geotechnical inspections and any required certification.

RETAINING WALL NOTES

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

SLAB ON GROUND NOTES

Refer to Geotechnical Report No. Ref. 33775SCrpt2 dated 6 April 2021 by JK Geotechnics for all subgrade and subbase/basecourse requirements and unless directed otherwise the following requirements apply:

- Strip all topsoil from the construction area and remove from the site.
- Before placing fill, proof roll exposed subgrade with 6 passes of a 10 tonne minimum roller to test subgrade and then remove soft spots (areas with more than 3mm movement under roller). Soft spots to be replaced with select fill as per table.

SELECT FILL

Sieve Aperture (mm) to AS1152	Percentage passed (by mass)
75.0	100
95.0	100 to 50
150	100
2.36	100 to 30
0.60	50 to 15
0.075	<25

- Plasticity index to be > or = 2% and < or = 15%
- Non dispersive (a rating of nil as defined by the "dispersion" test AS1289.3.8.1) Submit proposed sieves fill for Engineers approval.

- Compact fill areas and subgrade under buildings and pavements to minimum 98% standard maximum dry density in accordance with AS 1289.5.1.1. Compaction under buildings to extend 2m minimum beyond building footprint.
- All basecourse material to be crushed hard rock or crushed natural gravel capable of being compacted to an even stable surface and complying with the grading and properties listed in the tables below and compacted to minimum 98% modified standard dry density in accordance with AS 1289.5.2.1

NON-FREE DRAINING BASECOURSE

Sieve aperture (mm) to AS1152	Percentage passed (by mass)
26.5	100
19.0	95 to 100
9.5	95 to 100
4.75	60 to 90
2.36	28 to 60
0.425	10 to 28
0.075	2 to 10

- Plasticity Index: Not greater than 10%
- Liquid Limit: Not greater than 25%
- California Bearing Ratio: Not less than 25%
- Unbound rock: Not greater than 20%
- Non-dispersive (a rating of nil as defined by the dispersion test AS1289.3.8.1)
- Submit proposed basecourse for Engineers approval.

FREE DRAINING BASECOURSE

Sieve aperture (mm) to AS1152	Percentage passed (by mass)
9.50	100
6.70	95 to 98
4.75	58 to 78
2.36	37 to 50
1.38	22 to 30
0.425	10 to 17
0.075	2 to 10

- Plasticity Index: Not greater than 3%
- Liquid Limit: Not greater than 25%
- Coefficient of permeability: Not less than 0.1mm/sec
- Non-dispersive (a rating of nil as defined by the dispersion test AS1289.3.8.1)
- Submit proposed basecourse for Engineers approval.

- Place sand binding to areas where Concrete Underlays are required.

CONCRETE NOTES

EXPOSURE CLASSIFICATION : External - B1
Internal - A2

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

Location	fc MPa at 28 days	Specified Slump	Nominal Agg. size
Slabs on Ground	S32	80	20
Suspended Slabs and Bands	S40	80	20
Walls	S40	80	20
Footings	S32	80	20
Columns	S40	80	20
Piles and Shoring	BY OTHERS		
Stairs	S40	80	20

- Use Type 'GP' cement, unless otherwise specified.
- All concrete shall be subject to project assessment and testing to AS 1379.
- Consolidate by mechanical vibration. Cure all concrete surfaces as directed in the Specification.
- For all falls in slab, drip grooves, reglets, chamfers etc. refer to the architect's drawings and specifications.
- Unless shown on the drawings, the location of all construction joints shall be submitted to engineer for review.
- No holes or chases shall be made in the slab without the approval of the Engineer.
- Conduits and pipes are to be fixed to the underside of the top reinforcement layer.
- Slurry used to lubricate concrete pump lines is not to be used in any structural members.
- All slabs cast on ground require sand binding with a Concrete Underlay Certificate.
- ALT. indicates slab or band thickness.

FORMWORK

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

REINFORCEMENT NOTES

- Fix reinforcement as shown on drawings. The type and grade is indicated by a symbol as shown below. On drawings this is followed by a numeral which indicates the size in millimetres of the reinforcement.

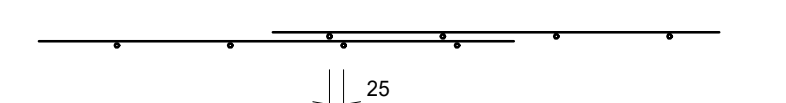
N	Hot rolled ribbed bar	grade D500N
R	Plain round bar	grade R250N
SL	Square mesh	grade 500L
RL	Rectangular mesh	grade 500L

- Provide bar supports or spacers to give the following concrete cover to all reinforcement unless otherwise noted on drawings.

Slab on Ground	Footings	Suspended Slabs	Footings Beams	Columns	Walls
- 50 top, 50 bottom, 50 sides.	- 50 top, 25 bottom, 30 sides.	- 40 when exposed to weather or ground.	- 50 bottom, 50 sides, refer to schedule for top to ties.	- 30 to ties and spirals.	- 30 generally.
					- 30 when cast directly in contact with ground.

- Cover to reinforcement ends to be 50 mm UNO.
- Provide N12-450 support bars to top reinforcement as required.
- Tension Lap UNO
- Maintain cover to all pipes, conduits, reglets, drip grooves etc.
- All cogs to be standard cogs unless noted otherwise.
- Fabric end and side laps are to be placed stictly in accordance with the manufacturers requirements to achieve a full tensile lap. Fabric shall be laid so that there is a maximum of 3 layers at all locations.

FABRIC LAPS



- Laps in reinforcement shall be made only where shown on the drawings unless otherwise approved. Refer to Reinforcement Lap table below. Gap between lapped bars to be no more than 3 bar diameters as per AS3601 clause 13.2

TENSION LAPS

BAR SIZE	32 MPa CONCRETE			
	TOP BARS IN BANDS AND BEAMS	HORIZONTAL BARS IN WALLS & TOP BARS IN SLABS > 330 THICK	ALL OTHER BARS	
N12	580	620	480	
N16	800	920	700	
N20	1130	1240	950	
N24	1460	1590	1230	
N28	1850	1940	1490	
N32	2250	2300	1780	
N36	2690	2700	2080	
N40	3130	3130	2420	

BAR SIZE	40 MPa CONCRETE			
	TOP BARS IN BANDS AND BEAMS	HORIZONTAL BARS IN WALLS & TOP BARS IN SLABS > 330 THICK	ALL OTHER BARS	
N12	580	590	480	
N16	770	870	670	
N20	1050	1150	890	
N24	1370	1440	1100	
N28	1720	1740	1340	
N32	2070	2070	1590	
N36	2420	2420	1870	
N40	2800	2800	2150	

BAR SIZE	50 MPa CONCRETE			
	TOP BARS IN BANDS AND BEAMS	HORIZONTAL BARS IN WALLS & TOP BARS IN SLABS > 330 THICK	ALL OTHER BARS	
N12	580	580	480	
N16	770	780	640	
N20	950	1040	800	
N24	1230	1290	990	
N28	1520	1550	1200	
N32	1850	1850	1430	
N36	2170	2170	1670	
N40	2500	2500	1930	

COMPRESSION LAPS

BAR SIZE	LAP
N16	640
N20	800
N24	960
N28	1120
N32	1280
N36	1440
N40	1600

REINFORCEMENT LEGEND

- Denotes the extent of area covered by bars.
- Denotes a change in bar shape and/or length.
- Indicates to repeat bars tagged that etc. LAY BARS IN DIRECTION INDICATED BY ARROW
- Bars shown staggered on plan are to be placed alternately.
- ALT. denotes bars of different length and/or shape to be laid alternately.
- Indicates 10 bars at 250 centres plus 3 bars placed one per space centrally over column.

ABBREVIATIONS USED ON DRAWINGS :

UNO	- Unless Noted Otherwise	EW	- Each Way
NSOP	- Not Shown On Plan	EF	- Each Face
NSDE	- Not Shown On Elevation	NF	- New Face
LV	- Bar Lengths Vary	FF	- Far Face
NTS	- Not To Scale		

POST-TENSIONED CONCRETE NOTES

GENERAL

- Submit all test certificates, theoretical extensions, calculations and shop drawings to the Superintendent as required by the specification prior to construction.
- All reactions from post-tensioning shall be supplied to the formwork contractor for formwork design.
- Stressing contractor is to pay particular attention to concrete compaction where ducts cross columns and all tendon anchors and ensure that pump lines are adequately chaired and restrained so as to be kept separate from tendons and reinforcement.
- Provide mesh over bands where band depth exceeds 350mm or as required by Workcover.
- Holes cored through post-tensioned slabs must be approved by the structural engineer in writing.

TENDONS

- All Strands shall be 7 wire ordinary strands with Class 2 relaxation in accordance with AS 4672.1 and AS 4672.2 unless noted otherwise.
- Bar shall be high-tensile alloy steel bars in accordance with AS 4672.1 and AS 4672.2 with a nominal tensile strength of 1030 MPa unless noted otherwise.
- Locate and fix tendons and reinforcement as shown on the contractors drawings and co-ordinate with cast in bolts, conduits and penetrations etc. Tendon profiles shall be parabolic unless noted otherwise.
- Ducting for slab tendons shall be galvanneal steel:
 - 70 x 19 for 5 x 12.7dia strand tendons
 - 50 x 19 for 5 x 15.2dia strand tendons
- Seal off all ducts and securely tape joints to prevent ingress of mortar during concreting.
- The performance of the post tensioning anchors is the responsibility of the stressing contractor and they shall provide any additional bursting reinforcement needed to meet the requirements of their post tensioning system.

TENSIONING AND GROUTING

- Tendons shall be stressed to jacking forces as per the contractors drawings.
- The first stage of stressing is for 25% of the jacking force to be applied between 15 and 38 hours after concrete placement ($f_{cr} = 9$ MPa minimum) followed by the remainder of the jacking force at $f_{cr} = 22$ MPa unless noted otherwise below. Each individual strand or bar shall be tensioned during the first stage unless noted otherwise.
- Records of net tendon elongation and other aspects of the tensioning operation required by the Specification shall be submitted to the Engineer and approved prior to cutting of tendons and grouting the ducts.
- All tendons to be grouted in accordance with the specification.
- Post-tensioning anchorage pockets shall be fully grouted with a polymer modified repair mortar. Minimum cover to any tendons or anchorage plate shall be as for the element in which they are located.
- Concrete test cylinders used for assessing strength for tensioning are to be site cured in similar conditions to the concrete element being stressed.

ANCHORAGE RECESS GROUTING

NOT EXPOSED TO WEATHER (INTERNAL)

Exposure Class A1 as per AS3600

- After final stressing and approval of extensions by the engineer, cut off strands to give 30mm minimum cover to ends of strands.
- Provide records of measured cover at each anchor recess for the engineer to inspect and provide the opportunity for the engineer to inspect recesses.
- Thoroughly clean anchorage pocket (use high pressure water jet if necessary) to remove all laitance, polystyrene etc.
- Prime all concrete surfaces with Nitobond EP or approved equivalent.
- Grout up recess with 3:1 Sand: Cement grout mix or 'Renderoc HB'. Infill is to be finished flush with surrounding concrete surface.
- The contractor shall provide records that demonstrate steps 3,4 & 5 have been satisfactorily completed at each anchor recess.

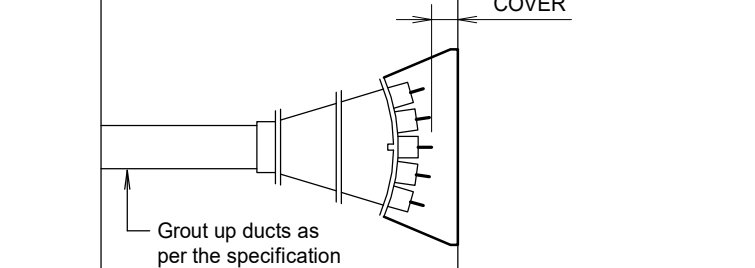
ANCHORAGE RECESS GROUTING EXPOSED TO WEATHER (EXTERNAL)

Exposure Class B1 as per AS3600 - Near Coastal/Industrial

Exposure Class B2 as per AS3600 - Within 1km of coastline

- After final stressing and approval of extensions by the engineer, cut off strands to give 30mm minimum cover to ends of strands.
- Provide records of measured cover at each anchor recess for the engineer to inspect and provide the opportunity for the engineer to inspect recesses.
- Thoroughly clean anchorage recess (use high pressure water jet if necessary) to remove all laitance, polystyrene etc.
- Prime all metal surfaces with Nitoprime Zincrich or approved equivalent.
- Prime all concrete surfaces with Nitobond EP or approved equivalent.
- Grout up recess with 'Renderoc HB40' - applied as per manufacturers instructions. Infill is to be finished flush with surrounding concrete surface to the Superintendents requirements. A test sample is to be submitted for approval and used for acceptance/rejection criteria.
- The contractor shall provide records that demonstrate steps 3,4,5 & 6 have been satisfactorily completed at each anchor recess.
- Alternative products may be used as follows:
 - SikaTop 110 in lieu of Nitoprime Zincrich and Nitobond EP
 - Sika MonoTop 615 in lieu of Renderoc HB40

POST TENSIONING LEGEND



- Set out and drill holes for soldiers.
- Install and plumb soldiers as detailed and backfill holes with 1:2 cement: sand mix.
- Excavate locally and place top row of anchors as specified.
- Place wedges on ground anchors to resist movement of wall.
- Excavate down to horizontal C/L.
- Place shotcrete wall as per the drawings.
- Stress the ground anchors to Design Loads after concrete is a minimum of 4 days old.
- Continue second stage as above.

ANCHOR FIXINGS TO POST TENSIONED SLABS

- Holes may clash with prestressing tendons at some locations so this can be accommodated by ONLY drilling bolt holes with standard MASONRY drill bits as they will not drill through steel should there be a clash (DIAMOND drill bits CANNOT be used as they will cut through tendons). Should a clash occur using a masonry drill and the tendon, then the hole should be relocated to avoid any further clash.
- This procedure applies for drilling either from the slab soffit or top surface.

MASONRY NOTES

- Temporary bracing shall be provided by the contractor to keep the masonry stable at all times.
- Masonry to be in accordance with AS 3700
- Masonry units shall comply with AS/NZS 4455 and as follows:

Type of masonry unit	Characteristic unconfined compressive strength (f_{cu})	Characteristic lateral modulus of rupture (f_{lt})
Clay & Calcium silicate	15 MPa	0.8 MPa
Concrete	15 MPa (hollow units) 10 MPa (solid or cored units)	0.8 MPa

- Mortar shall consist of the following:
 - M3 for general applications 1 part Type GP cement: 5 parts sand plus water thickener
 - M4 for elements in interior environments subject to saline wetting and drying below a damp-proof course or in contact with ground in aggressive soils; in severe marine environments, with ground in aggressive soils; in severe marine environments; in saline or contaminated water including tidal splash zones; and within 1km of an industry producing chemical pollutants.
- Masonry walls shown on the structural plans are load-bearing UNO. Non-loadbearing walls shall be approved from the concrete structure above with 20mm compressible fill. Masonry walls supporting slabs shall have a layer of mortar troweled smooth on top. Provide MET splayout to separate floor slabs and masonry. Provide Hercules HERCUSLIP COMPOSITE to separate roof slabs and masonry.
- Other than what is allowed in the specification on chasing or rebates may be made in masonry walls without written approval.
- The contractor shall provide records that demonstrate all masonry bed joint reinforcement, masonry ties and masonry wall stiffeners have been installed in accordance with the drawings and specification.
- All load bearing concrete masonry walls shall have all cores filled with grout UNO. Core filling grout shall be thoroughly compacted. Grout to be in accordance with AS2700 and as follows:

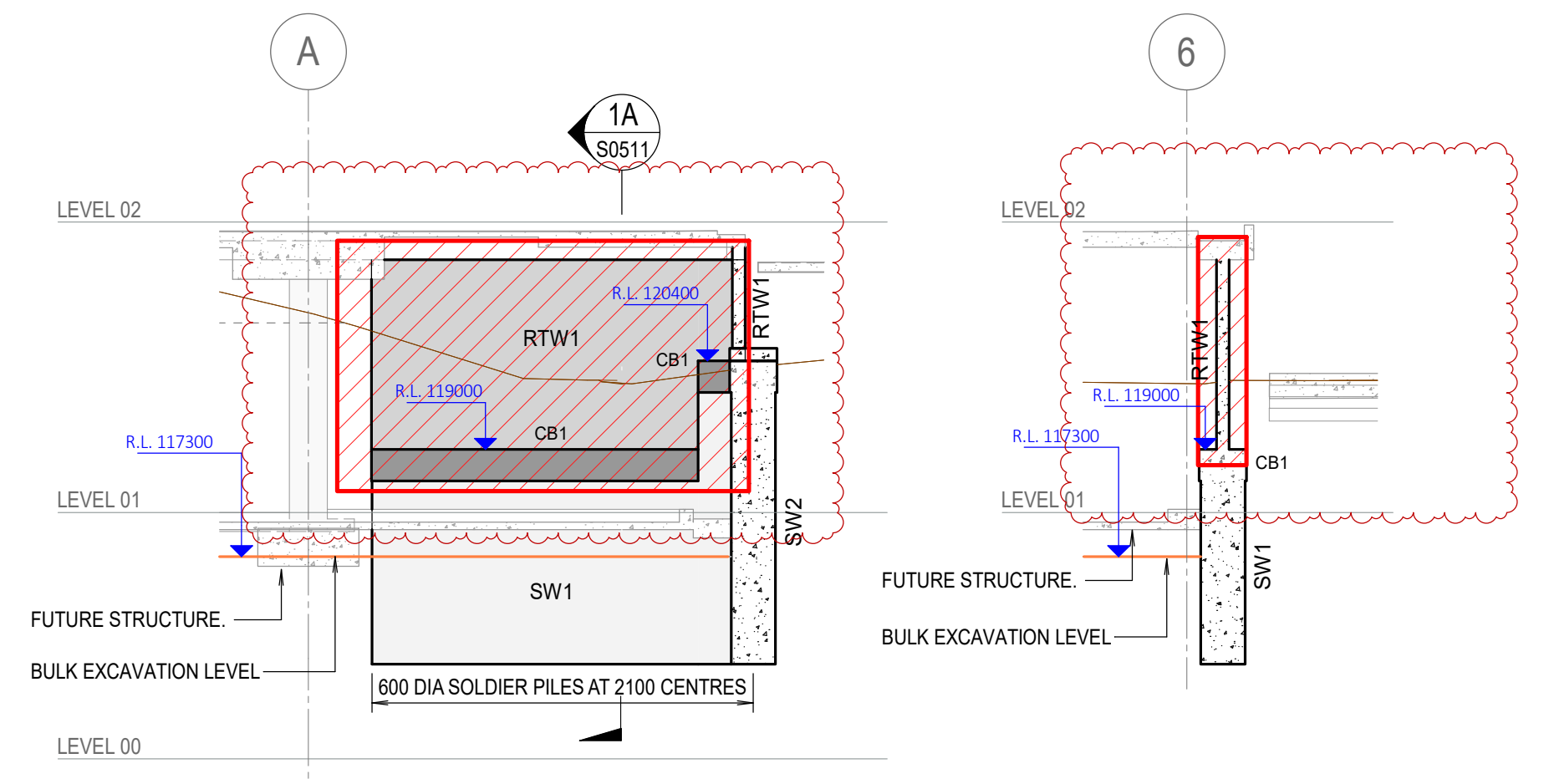
Location	fcg MPa	Specified Slump	Maximum Aggregate size
Grout	20	230	10mm

- All core filled blockwalls shall be constructed with "Double U" blocks
- The core filled blockwalls without openings shall be provided at the bottom of each core and shall be cleaned of mortar protrusions before grouting.
- All core filled block walls shall have all cores filled with grout UNO. Core filling grout to be in accordance with note 9.
- Provide bed joint reinforcement as follows:
 - MET galvanneal masonry ree where M3 mortar is used (supplied by DUNSTONE MAZE in NSW)
 - Ancon stainless steel where M4 mortar is used and located as follows:
 - 2 bed joints below and above head and sill flashings to openings
 - 2 bed joints below and above openings
 - 1 bed joint above bottom of wall
 - 1 second bed joint below top of wall

SHORING WALL NOTES

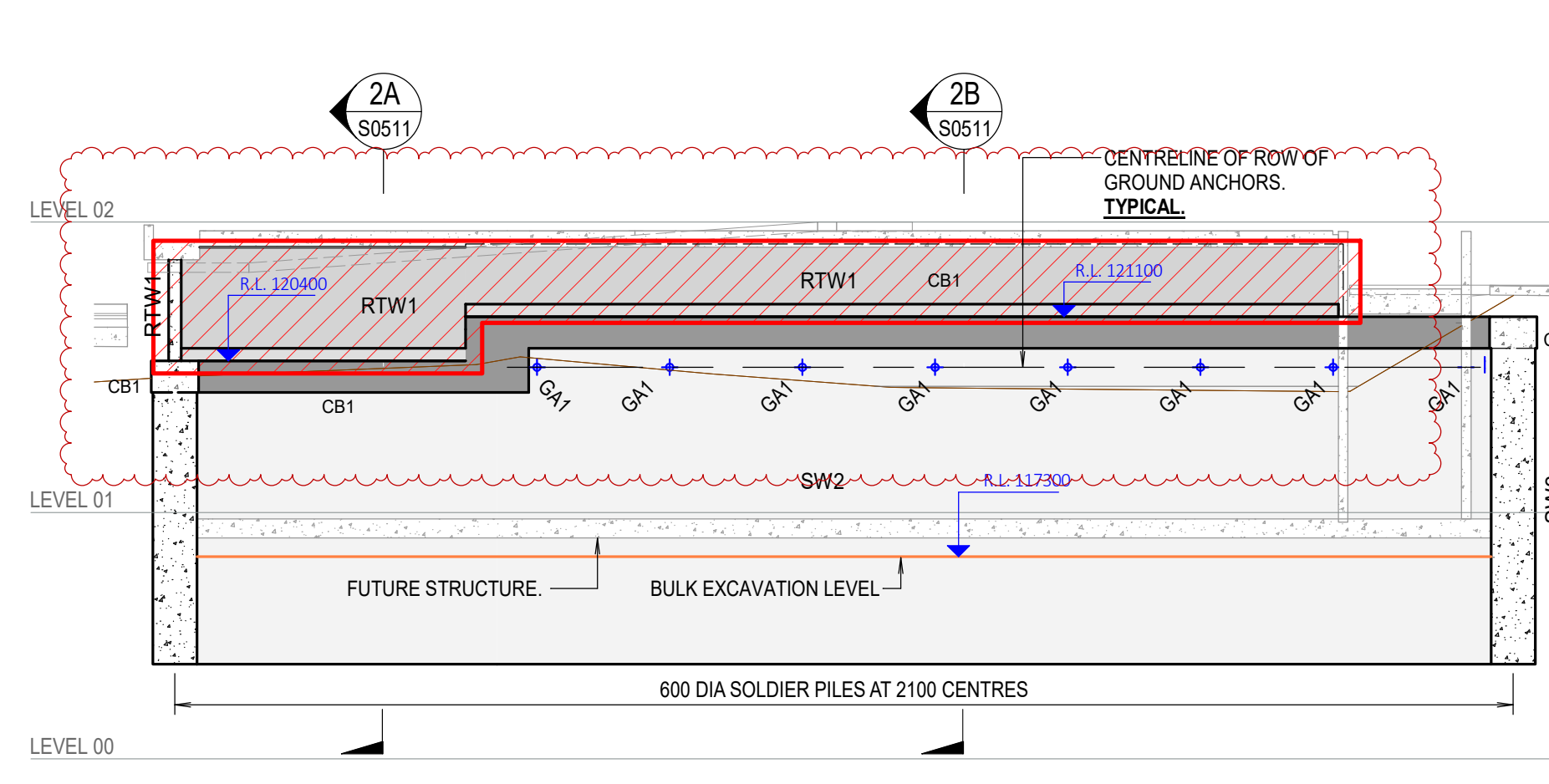
GROUND ANCHORS

- The design, supply, installation and tensioning of ground anchors, bolts and nails shall be carried out in compliance with the relevant Australian Standards and the Geotechnical Report.
- Anchor lengths and curing times shall be determined by the Geotechnical Engineer.
- Anchor, bolts and nail holes shall be thoroughly cleaned and the bond grout should be allowed to cure before post stressing.
- Grouting shall conform to the requirements of AS 3600 and The Concrete Institute of Australia's "Recommended Practice 25 - Grouting of Prestressing Ducts 2007".
- For post stressing loads refer to the Geotech Report.
- Records of all anchor extension and test loadings are to be submitted to the Geotechnical Engineer for review.
- Modifications to the arrangement shown on the drawings will require recalculation of the required working loads and shall be notified to the Geotechnical Engineer for approval.
- Safe Working load shown is the force required after all losses of prestress, including draw in.
- All anchors, bolts and nails shall be located so as to avoid all services and pits etc. The contractor is to determine the location of all services etc prior to installation of anchors.
- Any variation in location or inclination of anchors, nails and bolts shall be submitted to the Geotechnical Engineer for approval.
- For ratio of



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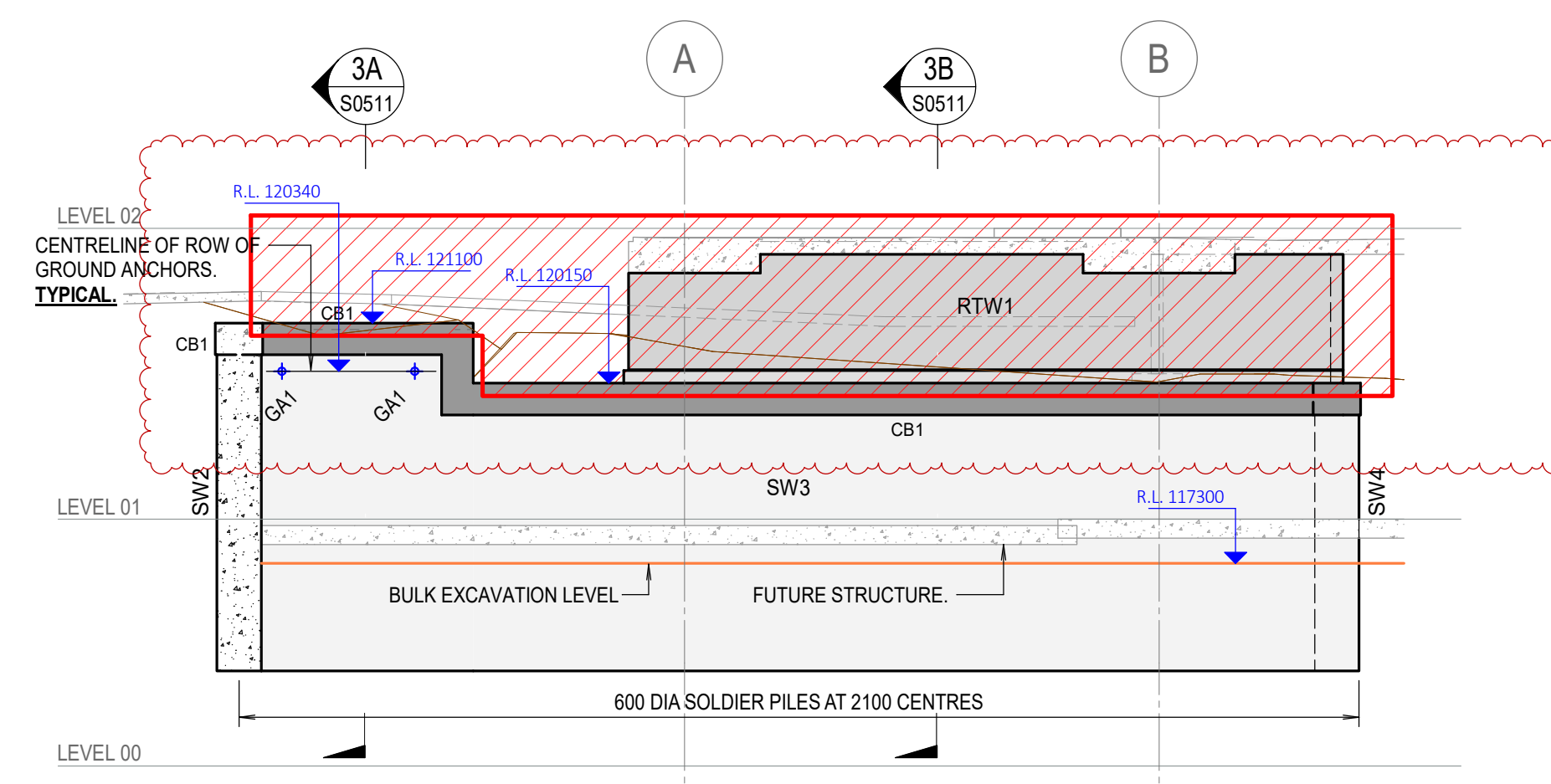
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S0501



SW2 - ELEVATION
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SECTION 2A
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S0501

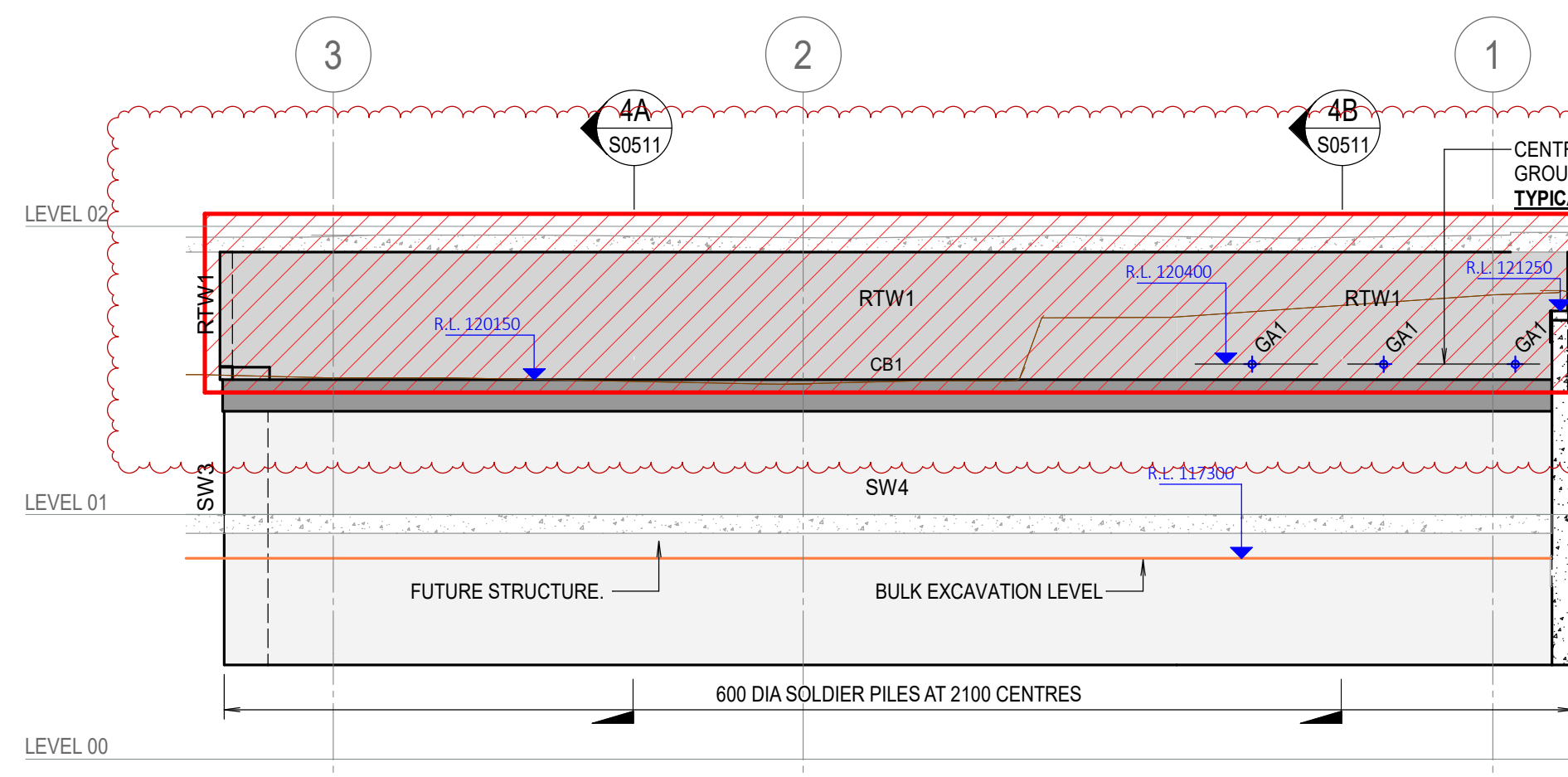
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S0501



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SECTION 3A
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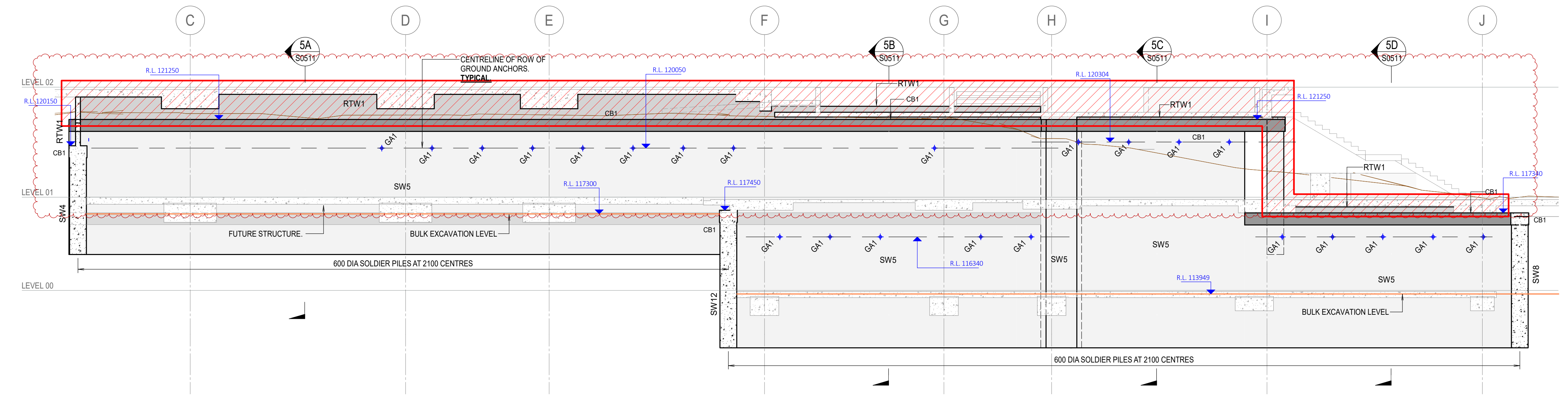
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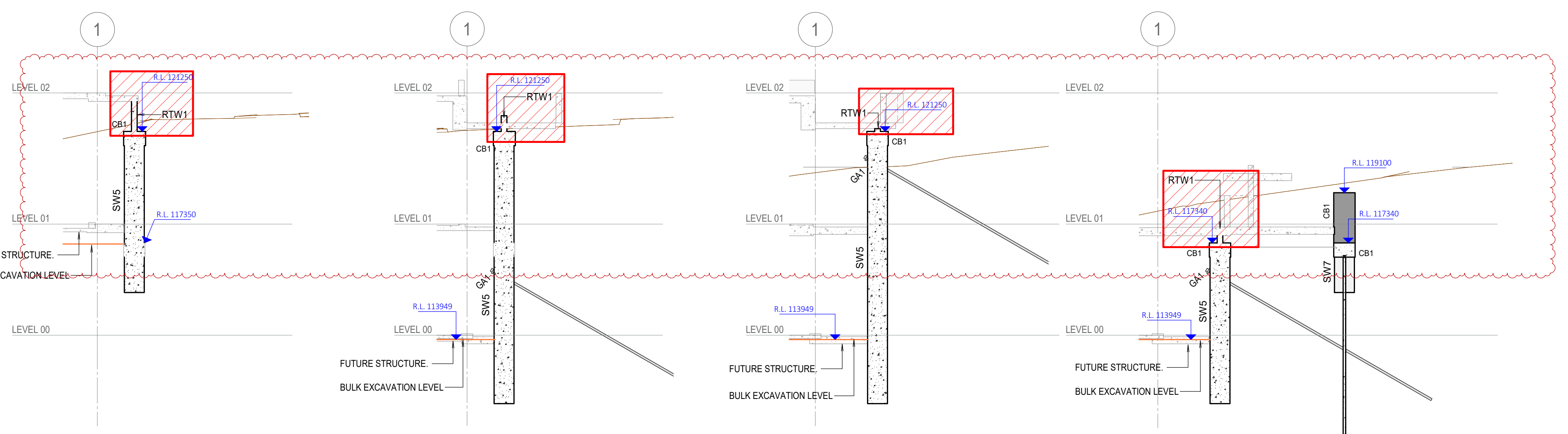
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Scale: 1:100

TEMPORARY GROUND ANCHOR SCHEDULE				
MARK	ANCHOR INSTALLATION ANGLE	GROUND ANCHOR FREE LENGTH	GROUND ANCHOR BOND LENGTH	GROUND ANCHOR FORCE
GA1	30.00°	6000	3000	0.00 kN

NOTES:
1. REFER TO NOTES SHEET S0001 FOR PILING AND GROUND ANCHORING DESIGN REQUIREMENTS.



SECTION 5A
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S0501

SECTION 5B
Scale: 1:100
S0501

SECTION 5C
Scale: 1:100
S0501

SECTION 5D
Scale: 1:100
S0501

DENOTES SCOPE OMITTED FROM CC1

Rev	Description	Eng	Draft	Date
03	REVISED AS NOTED	HN	EMC	18.03.24
02	ISSUED FOR CC1	HN	EMC	15.03.24
01	ISSUED FOR CC1	HN	EMC	19.02.24

Project
**PYMBLE LADIES COLLEGE
 GREY HOUSE PRECINCT**

Sheet Subject
**SHORING ELEVATIONS &
 SECTIONS - SHEET 1**

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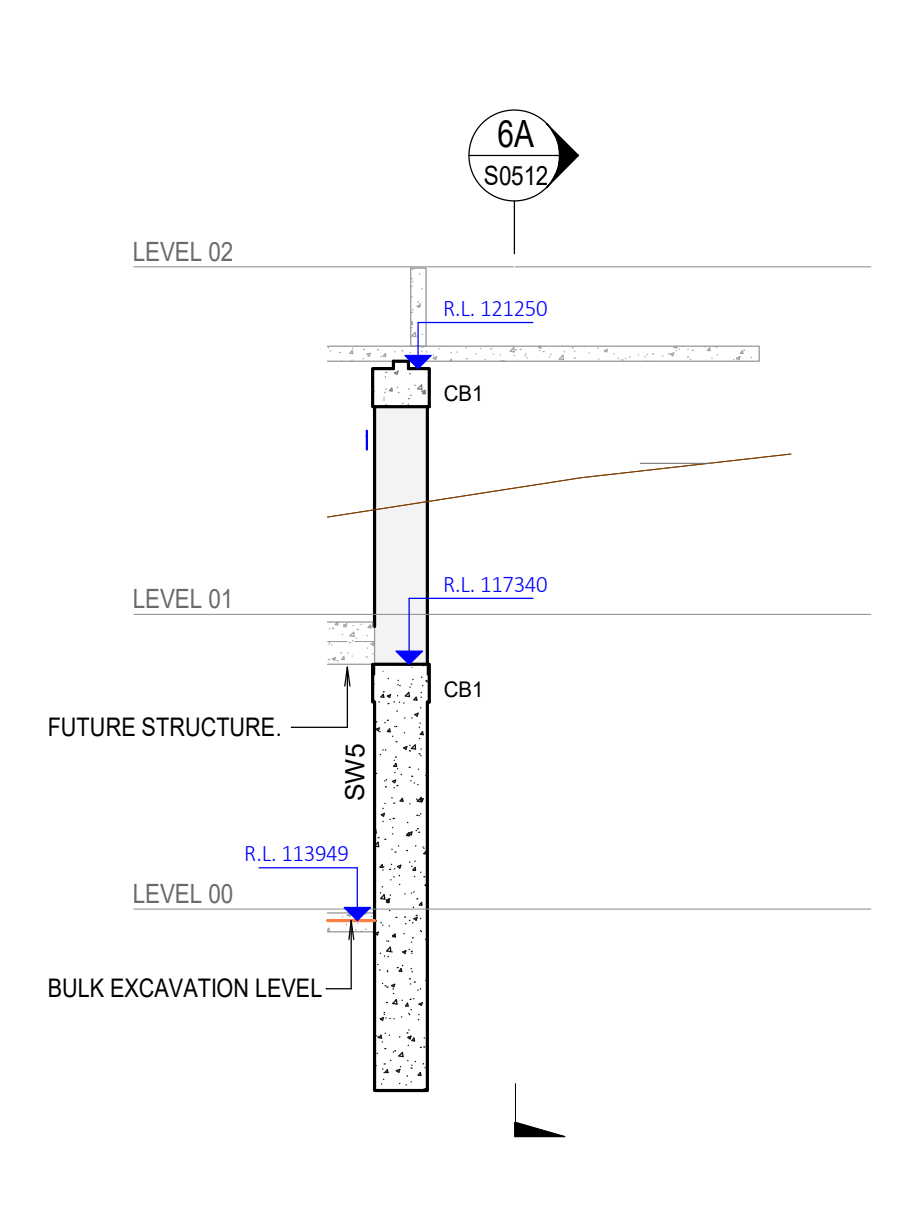
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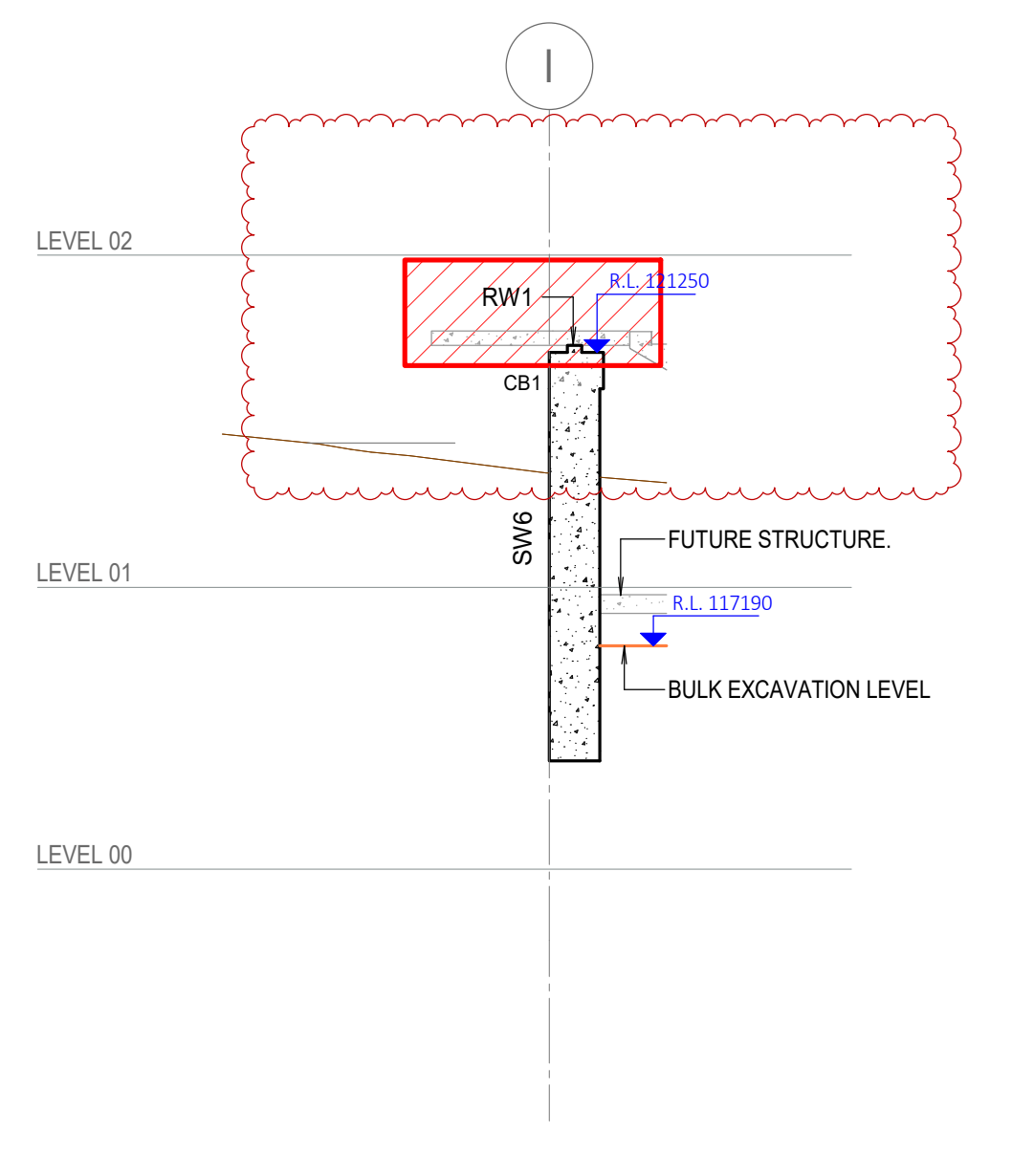
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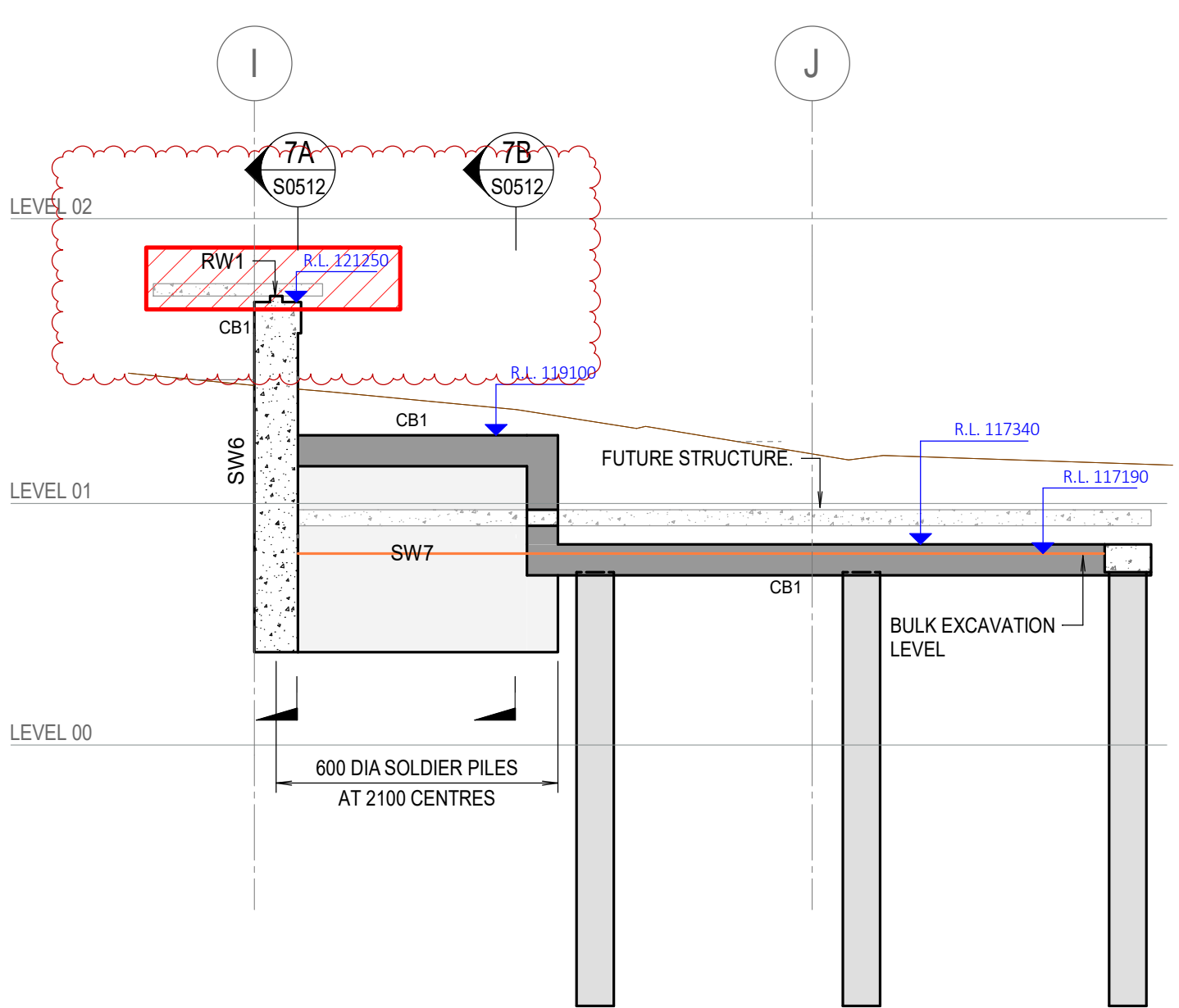
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 Date: 08/04/2024
 Construction Certificate
 Chris Michaels
 Director
 BDC1974



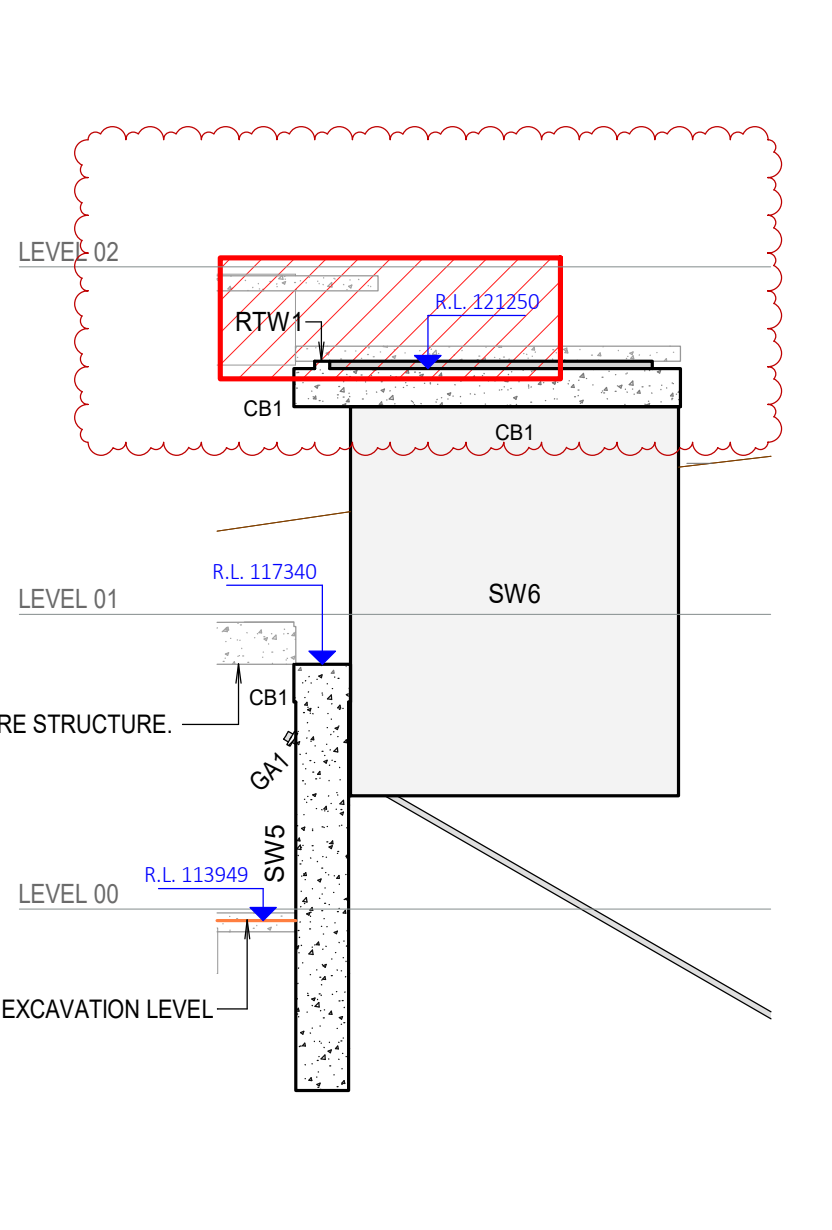
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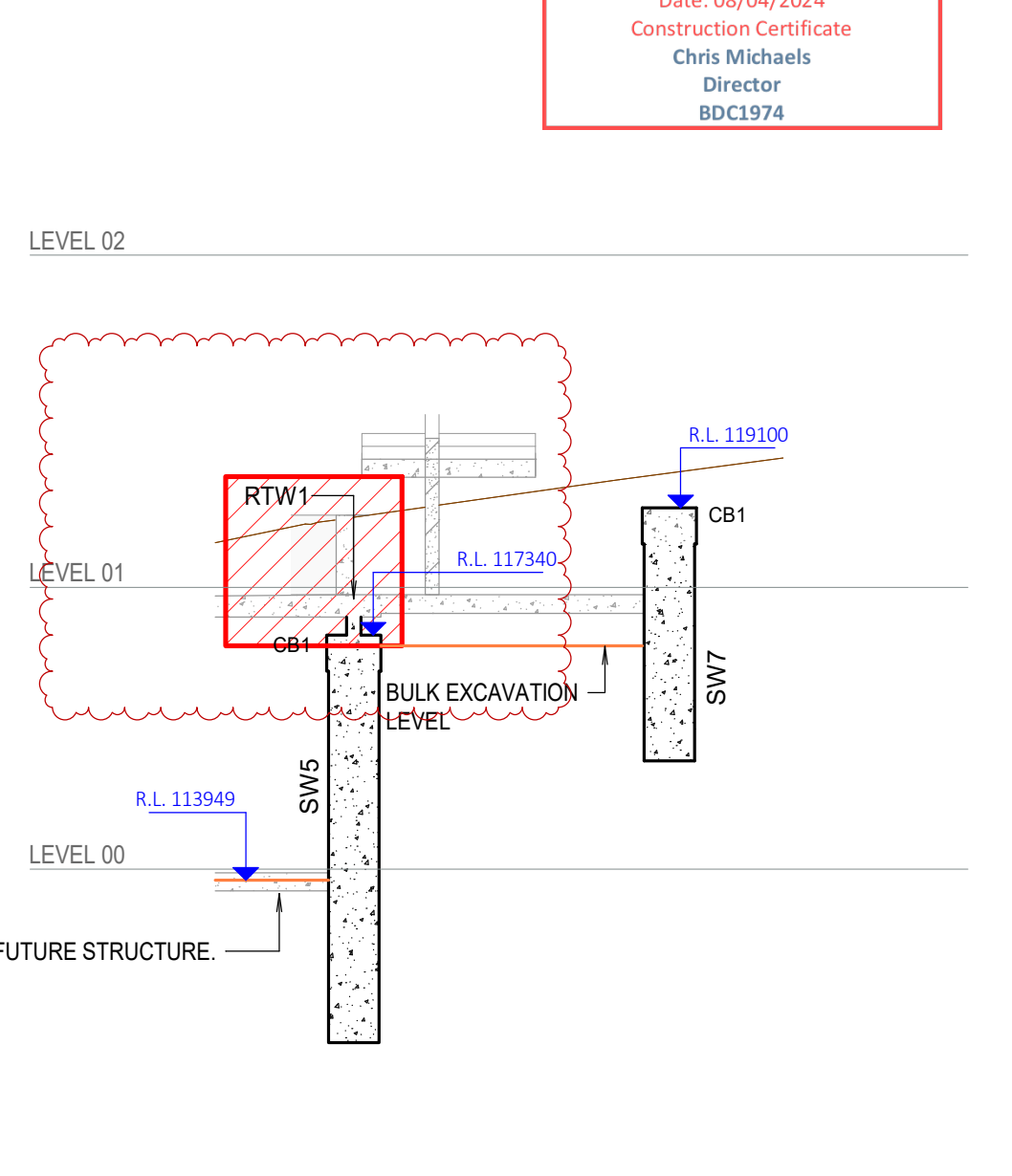
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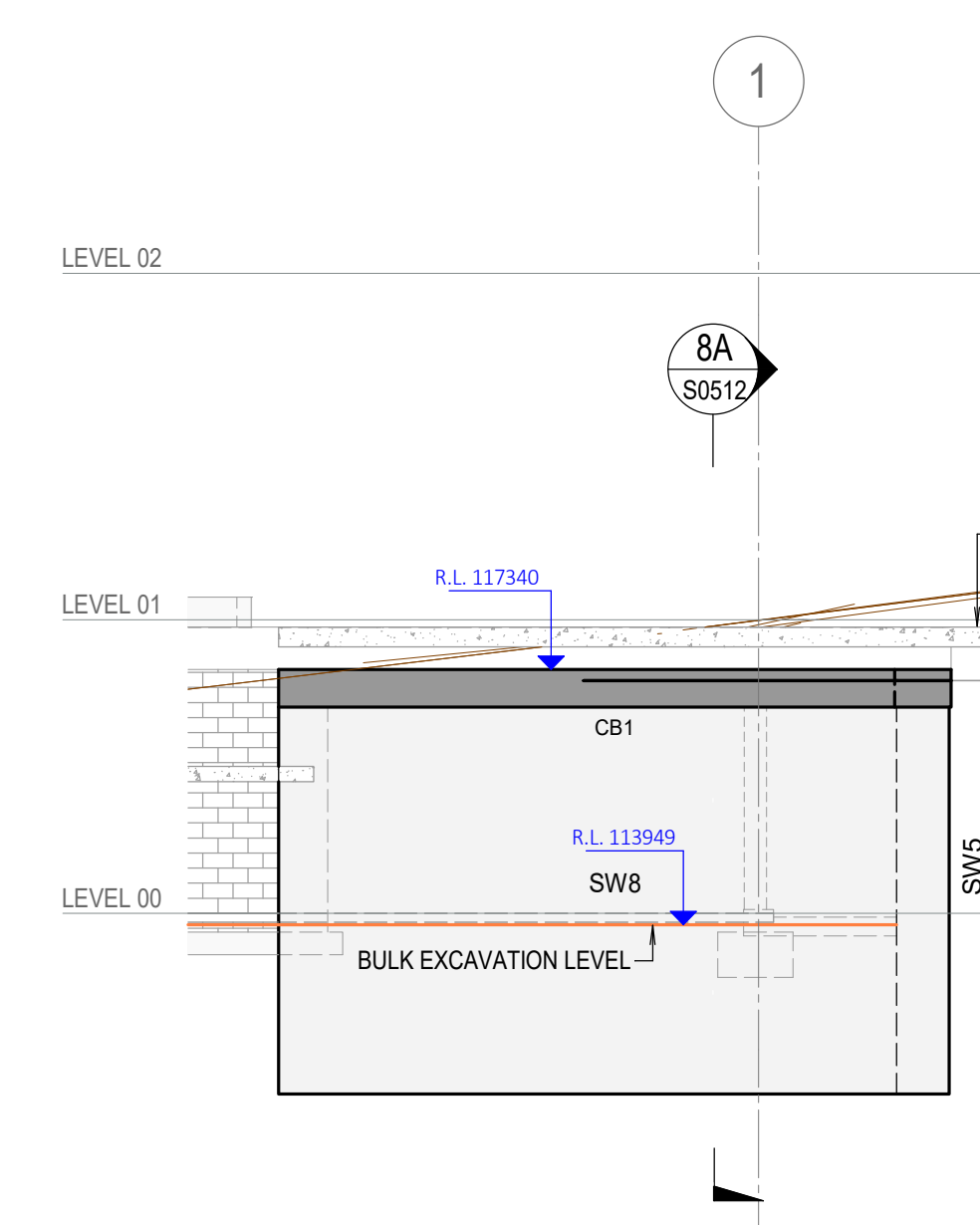


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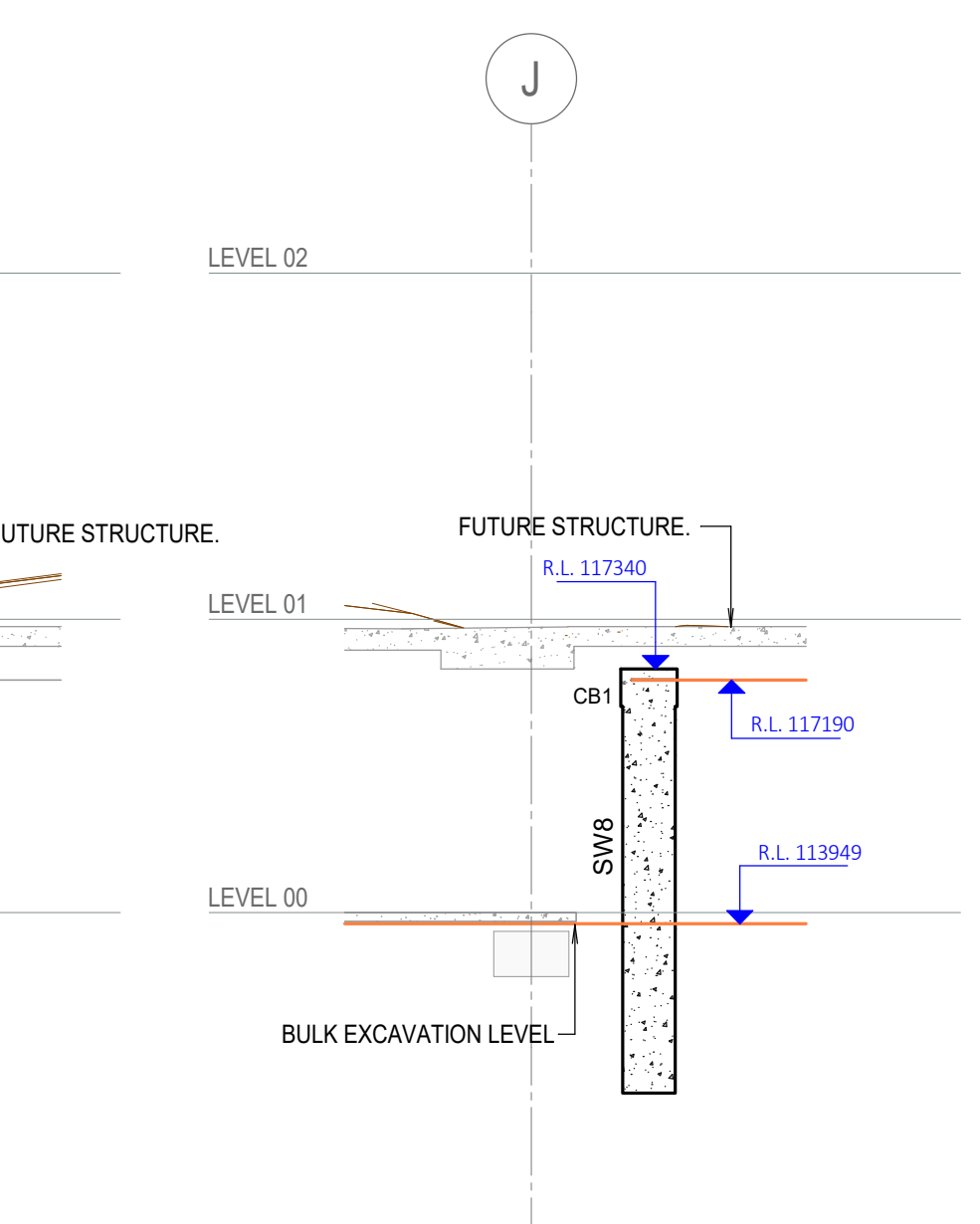


SECTION 7B
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SECTION NO LONGER IN USE



SW8 - ELEVATION
 Scale: 1:100



SECTION 8A
 Scale: 1:100

ELEVATION NO LONGER IN USE

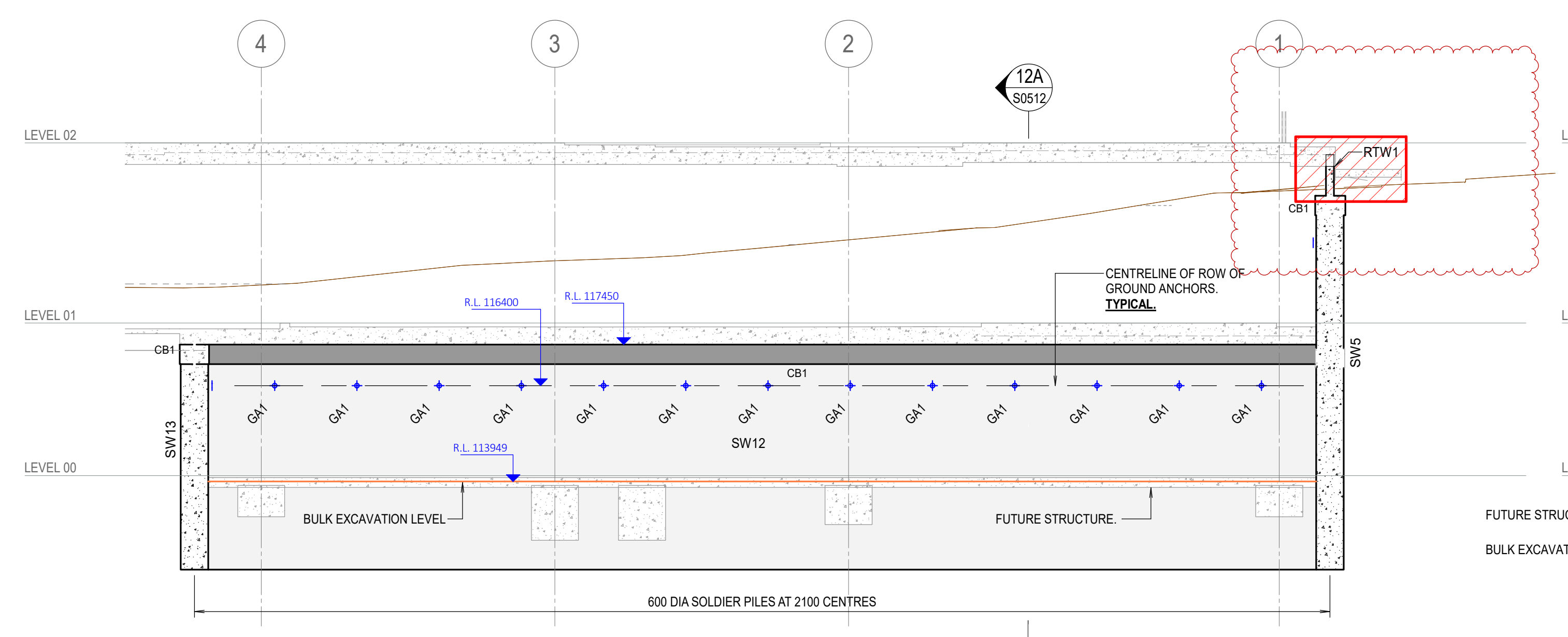
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ELEVATION NO LONGER IN USE

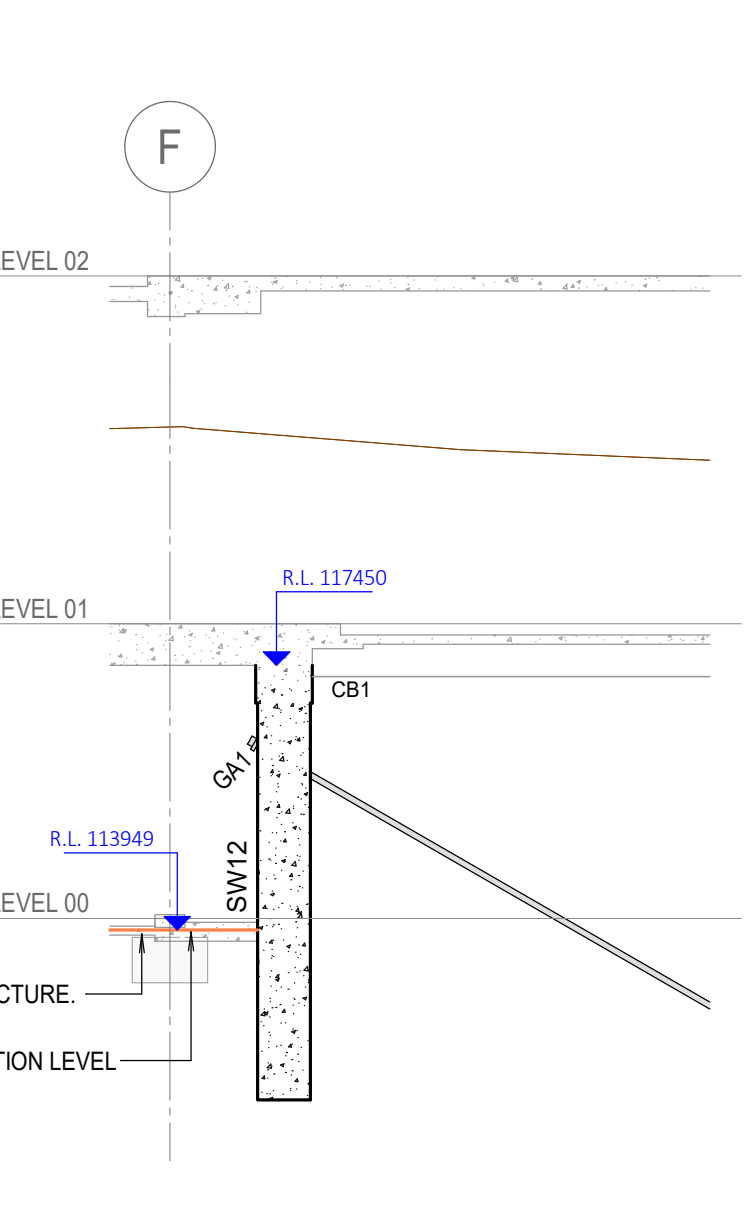
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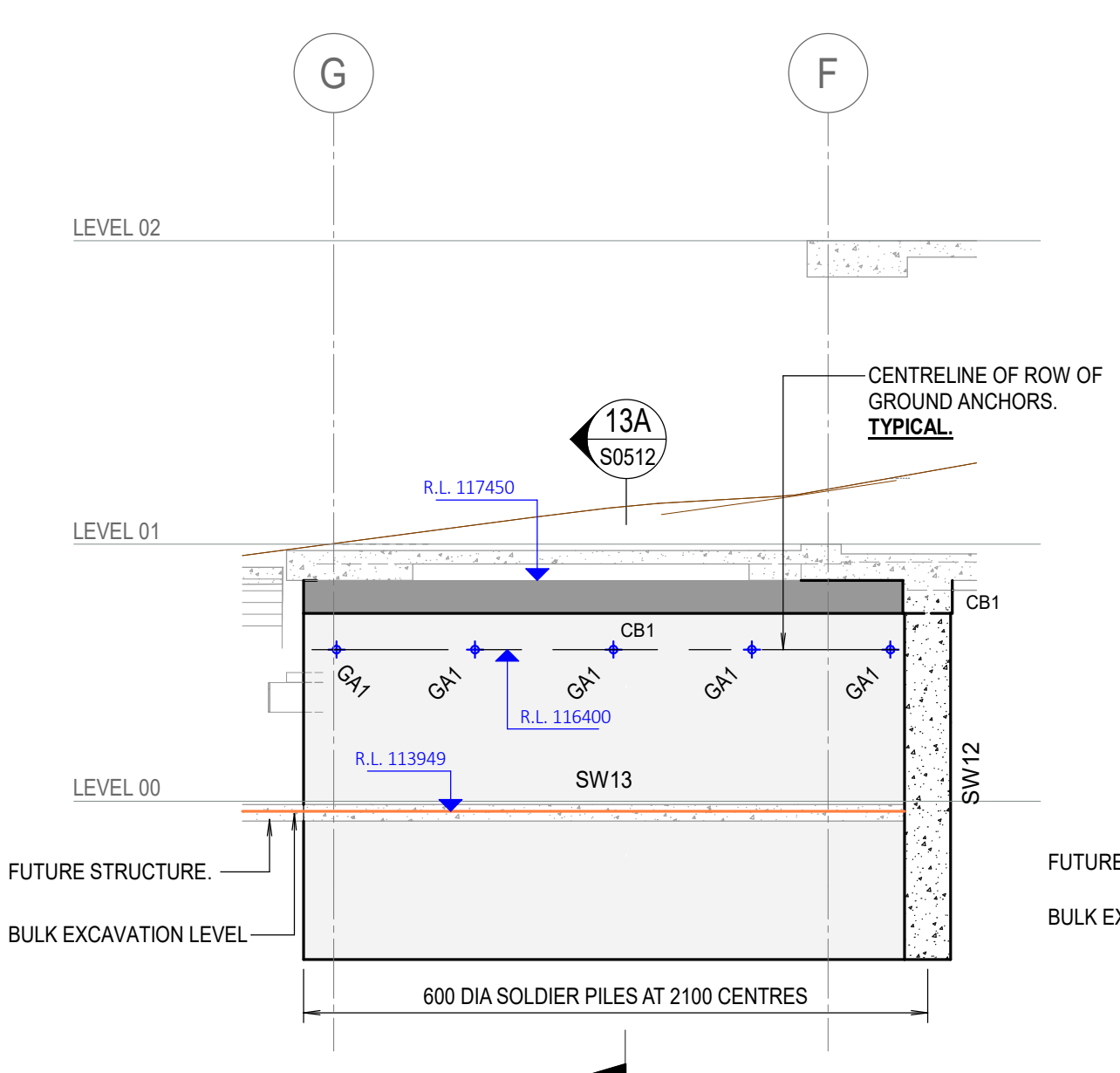
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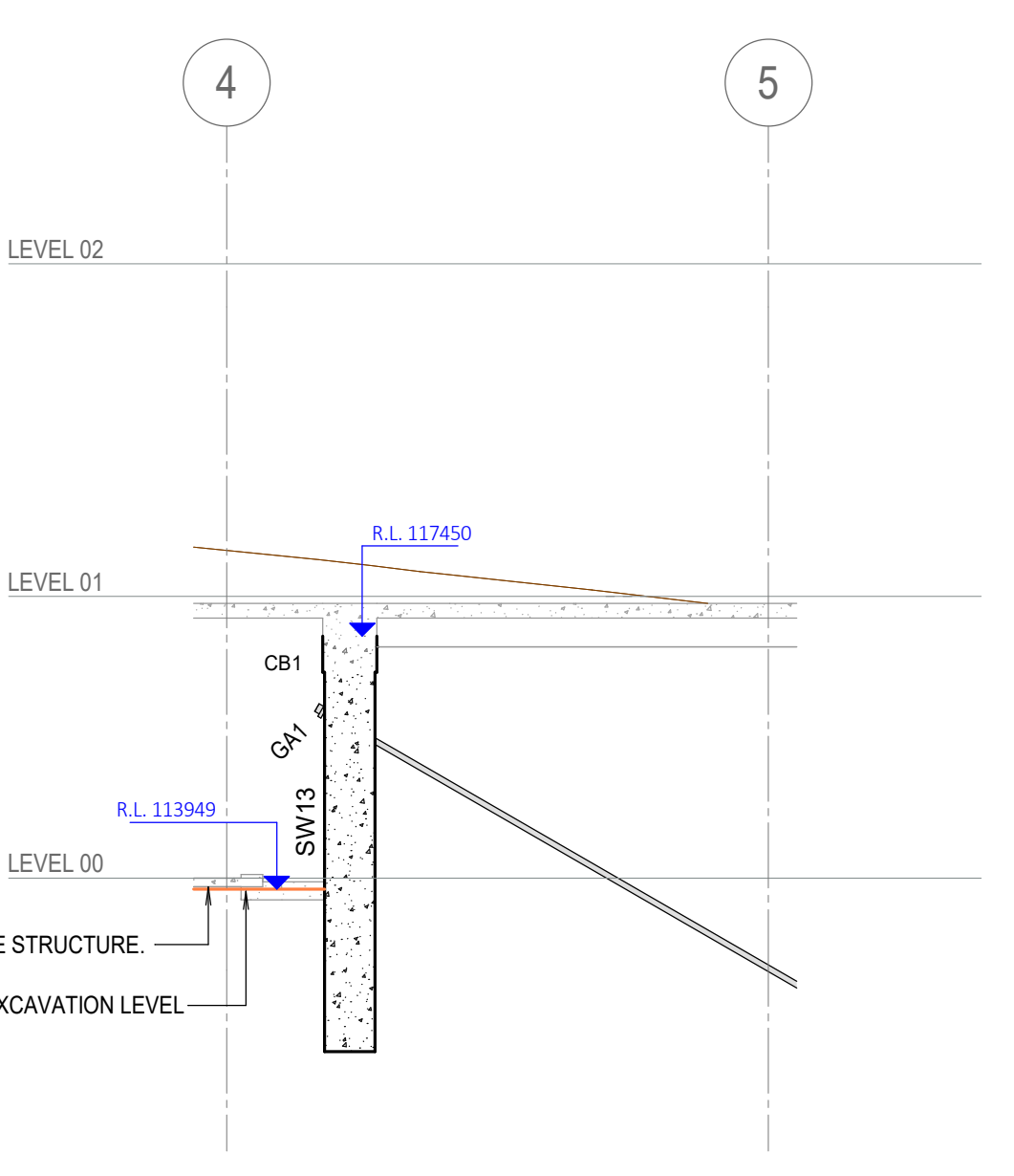
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SECTION 12A
 Scale: 1:100



SW13 - ELEVATION
 Scale: 1:100



SECTION 13A
 Scale: 1:100

TEMPORARY GROUND ANCHOR SCHEDULE				
MARK	ANCHOR INSTALLATION ANGLE	GROUND ANCHOR FREE LENGTH	GROUND ANCHOR BOND LENGTH	GROUND ANCHOR FORCE
GA1	30.00°	6000	3000	0.00 kN

NOTES:
 1. REFER TO NOTES SHEET S0001 FOR PILING AND GROUND ANCHORING DESIGN REQUIREMENTS.

REDACTED DENOTES SCOPE OMITTED FROM CC1

Project
PYMBLE LADIES COLLEGE GREY HOUSE PRECINCT

Sheet Subject
SHORING ELEVATIONS & SECTIONS - SHEET 2

03	REVISED AS NOTED	HN	EMC	18.03.24
02	ISSUED FOR CC1	HN	EMC	15.03.24
01	ISSUED FOR CC1	HN	EMC	19.02.24

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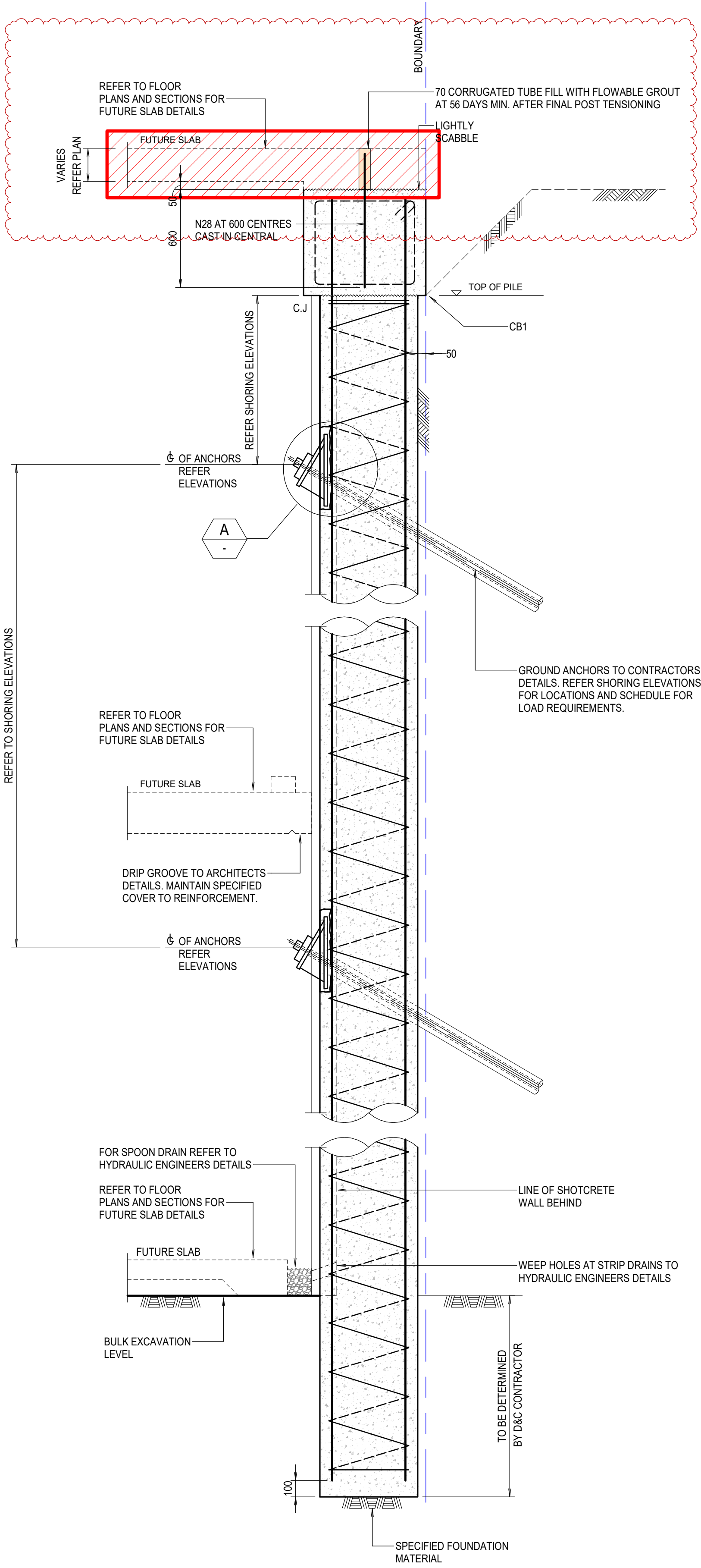
TTW Structural
 Civil
 Traffic
 Façade

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 Authorised: HN

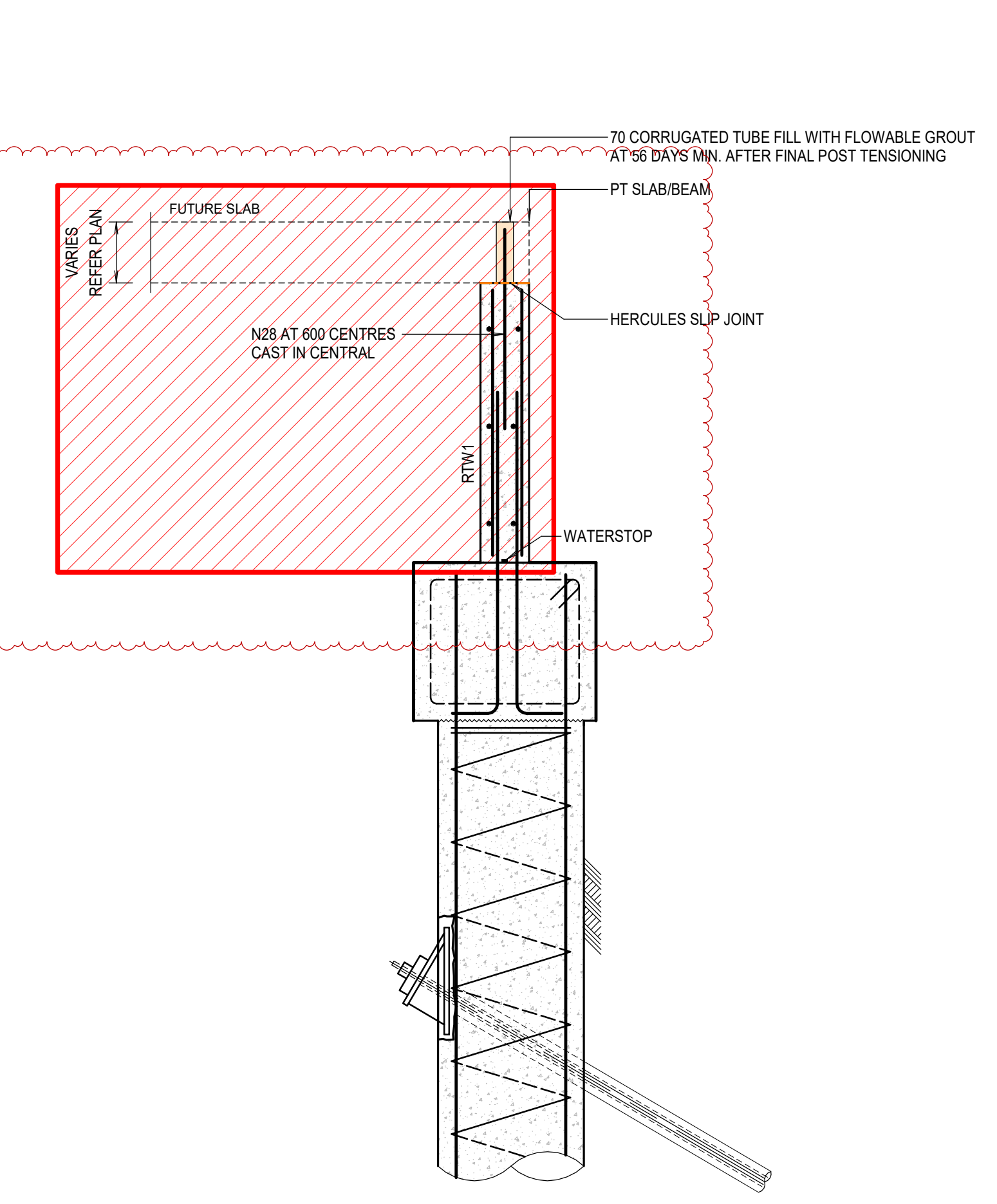
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 Revision: 03

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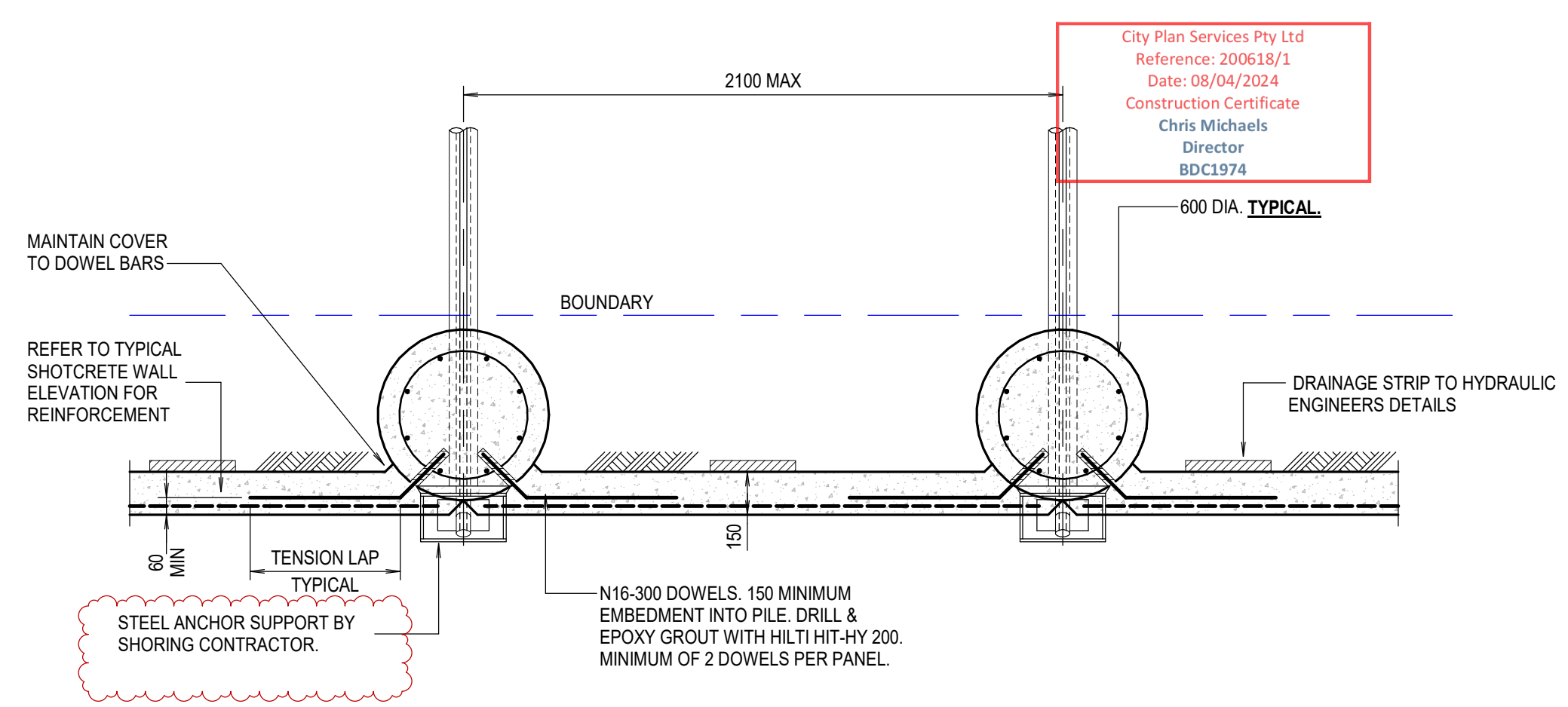


TYPICAL SOLDIER PILE SECTION WITH SLAB ON CAPPING BEAM - SHOTCRETE AT FRONT
 SCALE 1:20

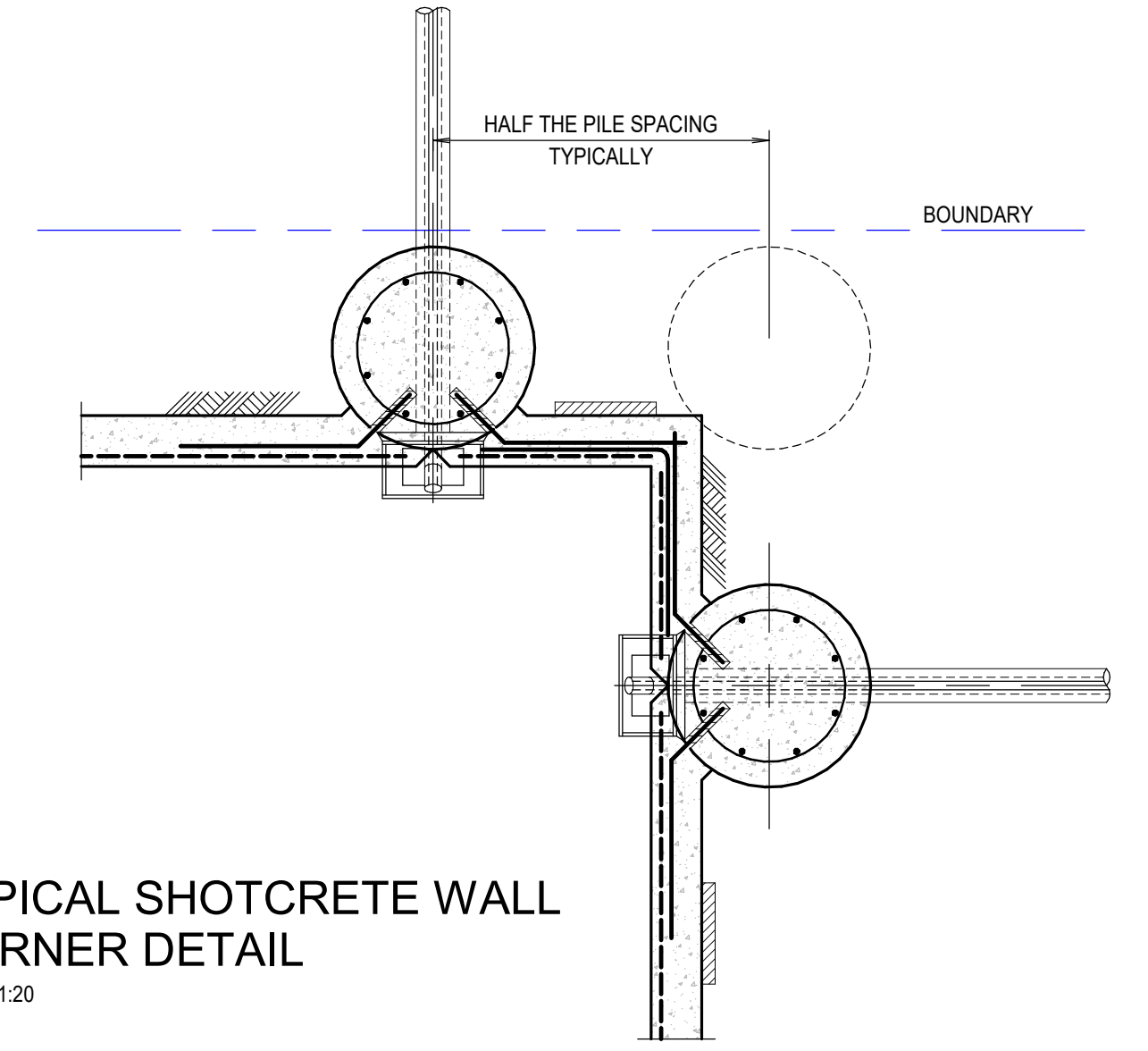
NOTES
 1. REFER TO NOTES SHEET S0001 FOR PILING AND GROUND ANCHORING DESIGN REQUIREMENTS.



TYPICAL SOLDIER PILE SECTION WITH SLAB ON RETAINING WALL - SHOTCRETE AT FRONT
 SCALE 1:20



TYPICAL SHOTCRETE WALL PLAN
 SCALE 1:20



TYPICAL SHOTCRETE WALL CORNER DETAIL
 SCALE 1:20

DENOTES SCOPE OMITTED FROM CC1

Rev	Description	Eng	Draft	Date
03	REVISED AS NOTED	HN	EMC	18.03.24
02	ISSUED FOR CC1	HN	EMC	15.03.24
01	ISSUED FOR CC1	HN	EMC	19.02.24

Project
PYMBLE LADIES COLLEGE GREY HOUSE PRECINCT

Sheet Subject
TYPICAL SOLDIER PILE DETAILS

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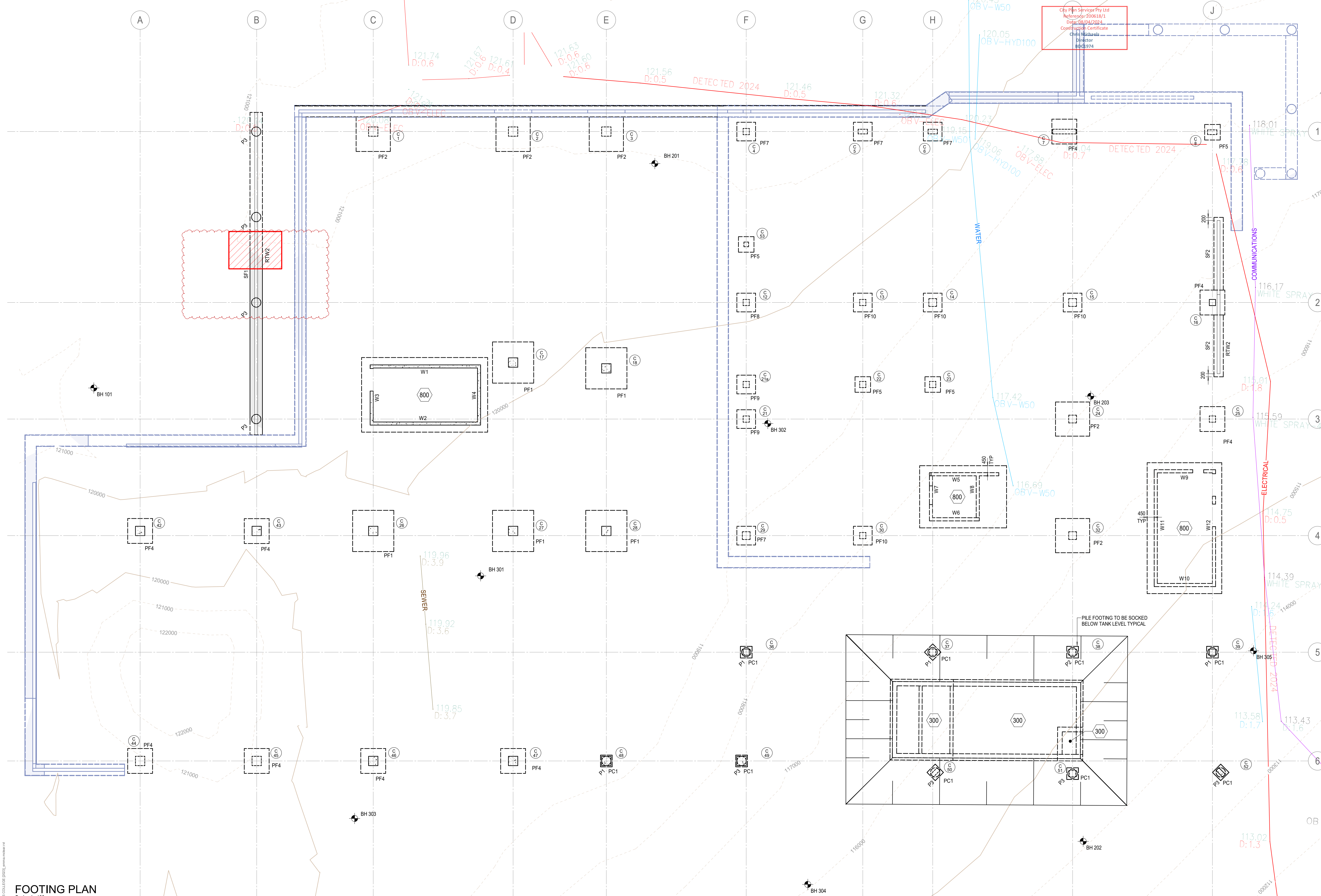
TTW Structural Civil Traffic Façade
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Scale	Drawn	Authorised
1:20	OE	HN

Job No	Drawing No	Revision
211007	S0521	03

PLAN LEGEND

[Symbol]	EXISTING STRUCTURE
[Symbol]	TO BE DEMOLISHED
[Symbol]	CONCRETE
[Symbol]	STEELWORK
[Symbol]	CONCRETE WALL
[Symbol]	REINFORCED CORE FILLED BLOCKWORK
[Symbol]	CORE FILLED BLOCKWORK
[Symbol]	PRECAST WALL / COLUMN
[Symbol]	LOADBEARING CONCRETE WALL W1 UNDER
[Symbol]	LOADBEARING MASONRY WALL BW1 UNDER
[Symbol]	SLAB CONSTRUCTION JOINT
[Symbol]	SLAB PERMANENT MOVEMENT JOINT
[Symbol]	SLAB TEMPORARY MOVEMENT JOINT
[Symbol]	SLAB SETDOWN
[Symbol]	SLAB STEP
[Symbol]	SLAB PENETRATION
[Symbol]	CAST-IN PIPE PENETRATION ZONE
[Symbol]	SLAB OR BAND THICKNESS
[Symbol]	CONCRETE COLUMN
[Symbol]	CONCRETE COLUMN UNDER ONLY
[Symbol]	CONCRETE COLUMN OVER ONLY
[Symbol]	STEEL COLUMN
[Symbol]	SPAN OF PERMANENT FORMWORK
[Symbol]	STUD RAIL



FOOTING PLAN
Scale: 1:100

- TOP OF FOOTINGS TO BE DETERMINED BY THE CONTRACTOR.
- REFER TO ARCHITECTURAL DRAWINGS FOR LOCATION AND SETOUT OF ALL COLUMNS AND WALLS.
- ALL LIFT PIT BASES AND WALLS BELOW GROUND LEVEL ARE TO HAVE XYPEX ADMIXTURE.
- ALLOW ADDITIONAL CLEARANCE TO TOP OF FOOTINGS FOR HYDRAULIC SERVICES WHERE REQUIRED.
- CONTRACTOR TO ALLOW FOR GEOTECHNICAL ENGINEER TO INSPECT AND CERTIFY THAT THE REQUIRED BEARING CAPACITIES HAVE BEEN ACHIEVED BEFORE CASTING FOOTINGS.
- BY JK GEOTECHNICS.
- SW1-SW10 DENOTES SHORING WALL. REFER TO DRAWINGS S1010 & S1011.
- SW1-SW10 DENOTES SHORING WALL. REFER TO DRAWINGS S1010 & S1011.

RETAINING WALL SCHEDULE

MARK	THICKNESS	TYPE	f _c (MPa)	REINFORCEMENT	
				VERTICAL	HORIZONTAL
RTW1	200	CONCRETE	40 MPa	N16-200 E.F.	N12-200 E.F.
RTW2	190	COREFILLED BLOCKWALL	40 MPa	N16-200 E.F.	N12-200 E.F.

PAD FOOTING SCHEDULE

MARK	LENGTH	WIDTH	DEPTH	f _c (MPa)	ABP (kPa)	REINFORCEMENT		
						BOTTOM	TOP	SIDE
PF1	2650	2650	1000	32	800	14N20 E.W.	14N20 E.W.	2N16
PF2	2200	2200	800	32	800	11N20 E.W.	11N20 E.W.	1N16
PF4	1600	1600	600	32	600	8N20 E.W.	8N20 E.W.	1N16
PF5	1000	1000	600	32	3500	5N16 E.W.	5N16 E.W.	1N16
PF7	1200	1200	800	32	800	6N20 E.W.	6N20 E.W.	1N16
PF8	1200	1200	1000	32	800	6N20 E.W.	6N20 E.W.	2N16
PF9	1200	1200	1400	32	800	8N20 E.W.	8N20 E.W.	3N16
PF10	1200	1200	600	32	3500	6N20 E.W.	6N20 E.W.	1N16

PILE SCHEDULE

MARK	DIAMETER	SOCKET INTO BEDROCK ABP OF	WORKING LOAD (KN)	ULTIMATE LOAD (KN)	No. OF PILES
P1	600	CLASS III	2180	2780	4
P2	600	CLASS III	2510	3210	1
P3	600	CLASS IV	375	500	14
TOTAL No. OF PILES					19

PILE CAP SCHEDULE

MARK	SIZE			REINFORCEMENT	
	LENGTH	WIDTH	DEPTH	LONG DIRECTION	SHORT DIRECTION
PC1	750	750	600	4N20	4N20

STRIP FOOTING SCHEDULE

MARK	WIDTH	DEPTH	f _c (MPa)	ABP (kPa)	REINFORCEMENT	
					LONG	SHORT
SF1	800	450	32	800 MIN	4N20 TOP & BOTTOM	R10-300 TIE
SF2	600	300	32			

NOTE:
 1. REFER TO DRAWING S1041 FOR DETAILS.
 NOTE: FULL DEPTH EMBED INTO MINIMUM OF 800 kPa BEDROCK, ALLOWABLE LATERAL RESISTANCE OF MINIMUM 200 kPa FOR CLASS 4.5 ROCK AND 300 kPa FOR CLASS III ROCK, THE PASSIVE RESISTANCE SHOULD BE IGNORED FOR FIRST 0.5m FOOTING DEPTH FOR CLASS 4.5 ROCK AND 0.3m FOR CLASS III ROCK. THE FINAL ROCK LEVEL TO BE CONFIRMED BY GEOTECHNICAL ENGINEER.

DENOTES SCOPE OMITTED FROM CC1

CONSTRUCTION CERTIFICATE

03	REVISED AS NOTED	HN	EMC	18.03.24
02	ISSUED FOR CC1	HN	EMC	15.03.24
01	ISSUED FOR CC1	HN	EMC	19.02.24

PROJECT
PYMBLE LADIES COLLEGE GREY HOUSE PRECINCT

Sheet Subject
FOOTING PLAN

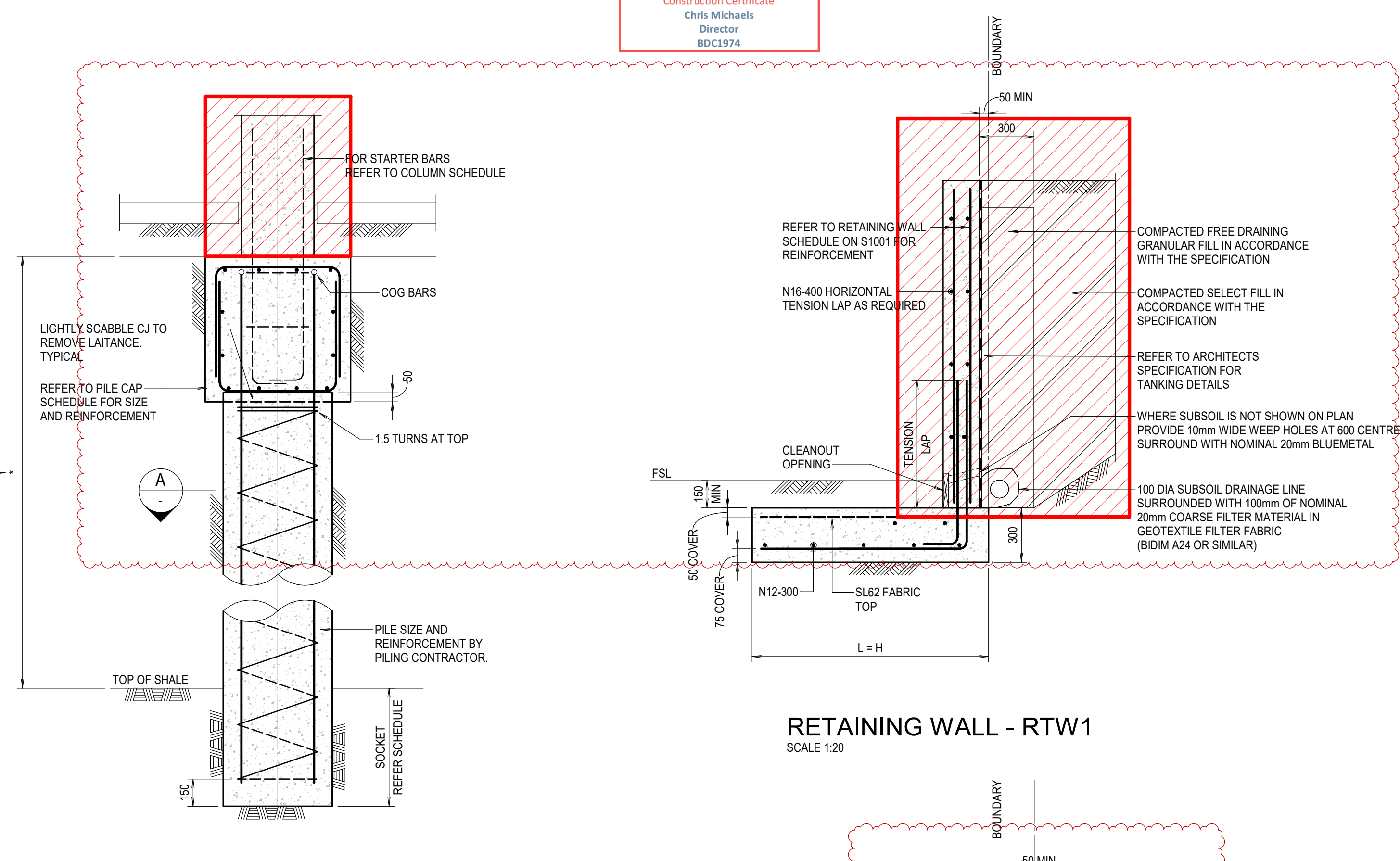
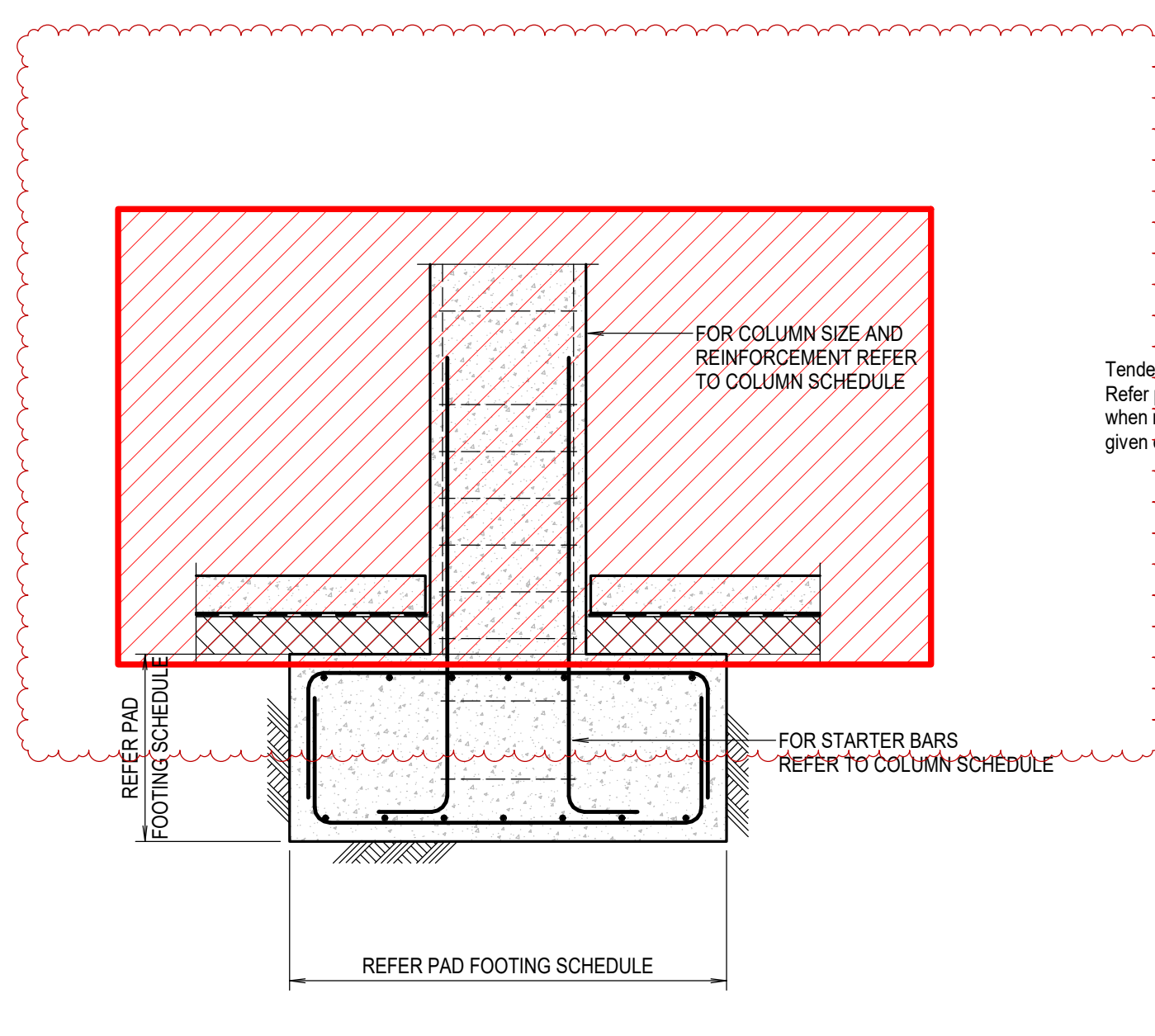
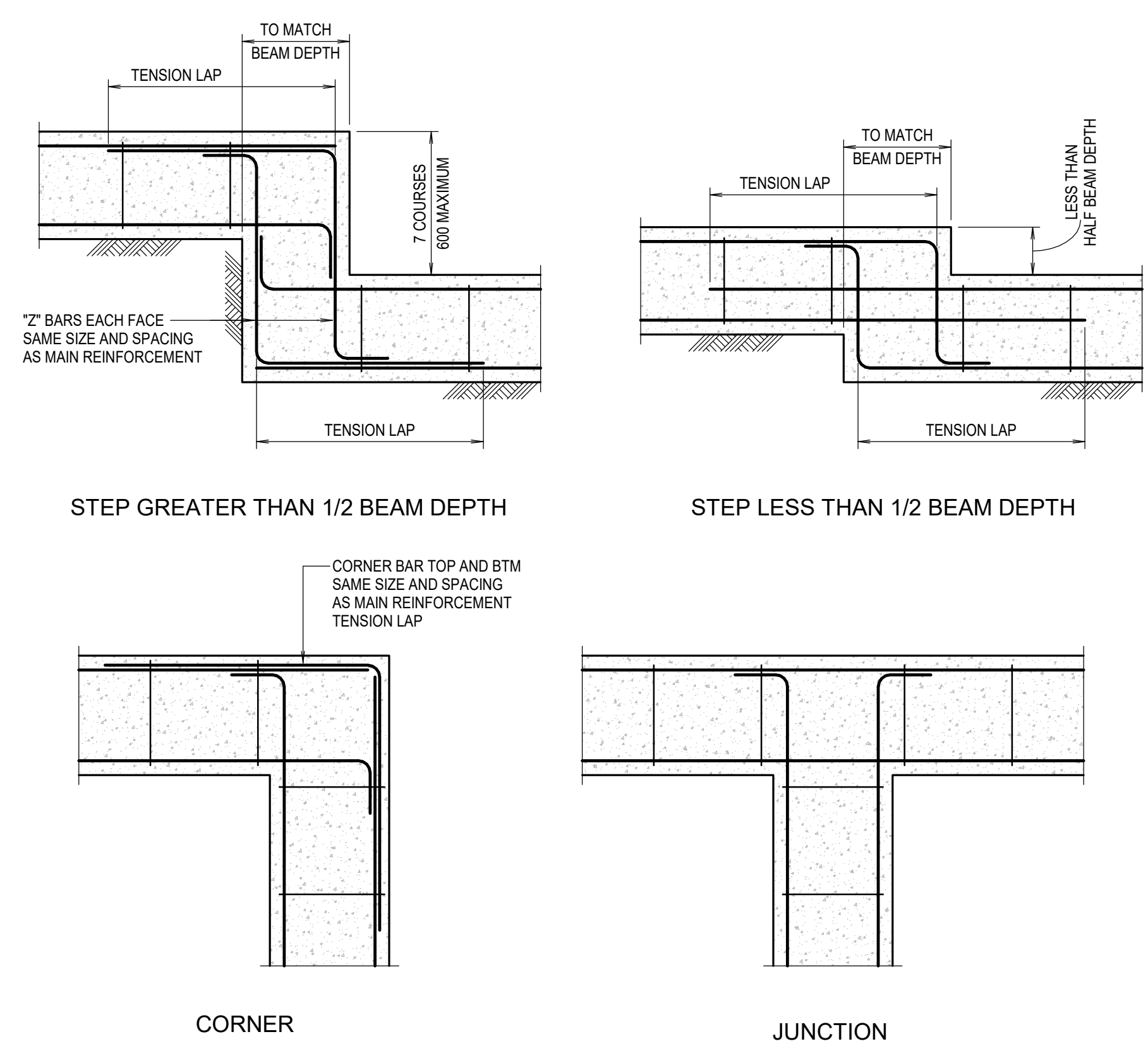
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Scale: B1
 As indicated
 Drawn: OW
 Authorised: HN

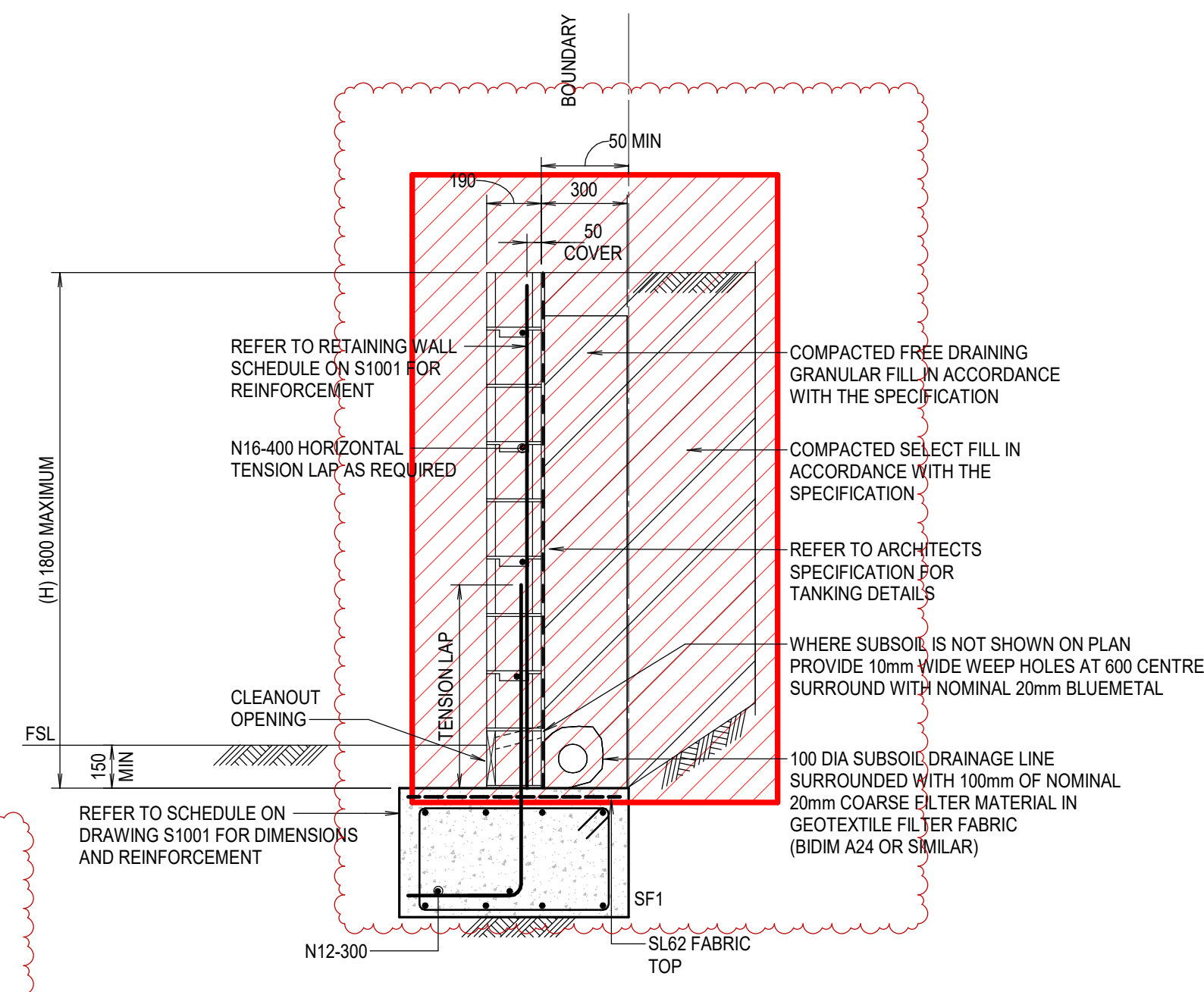
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 Drawing No: S1001
 Revision: 03

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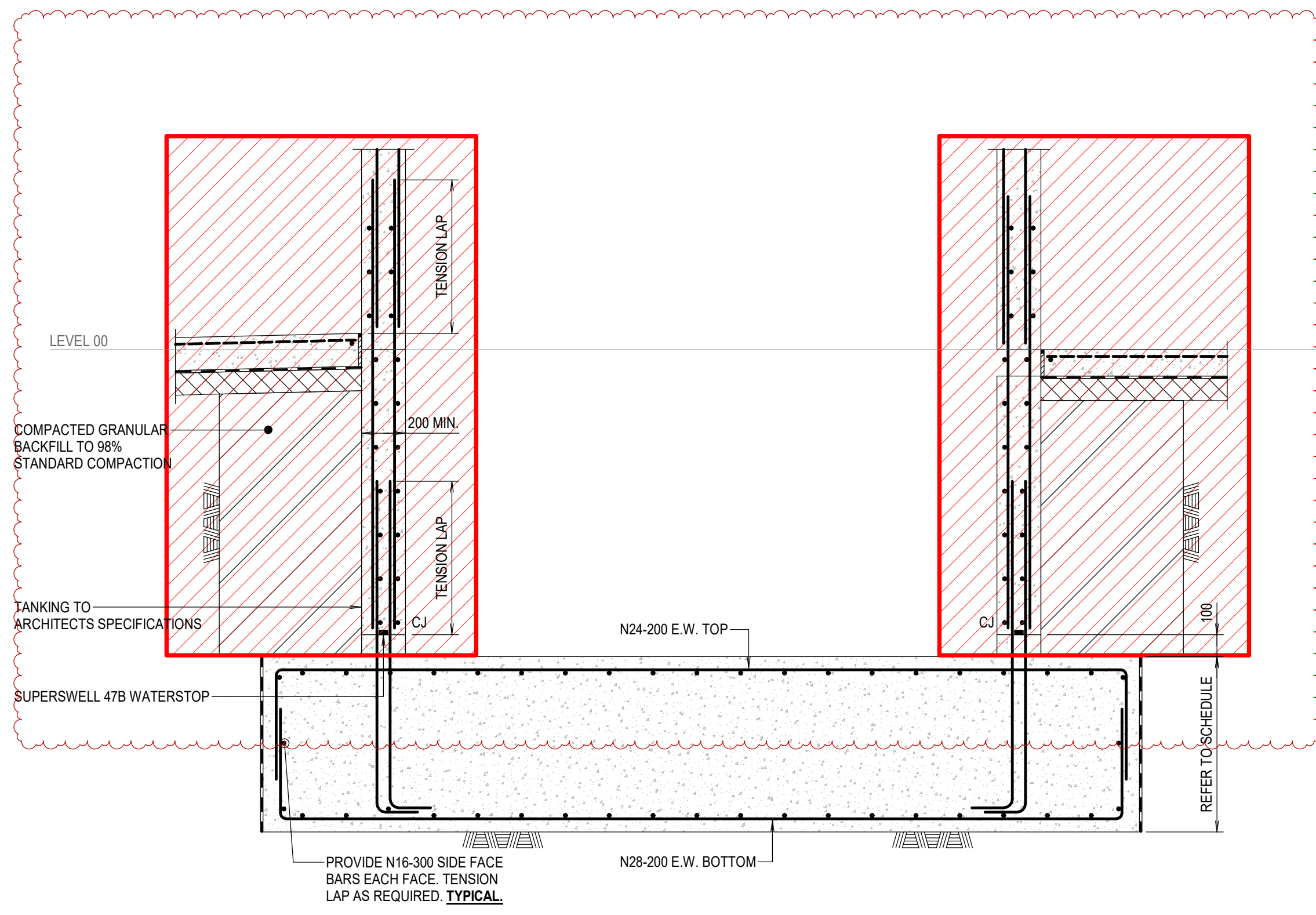




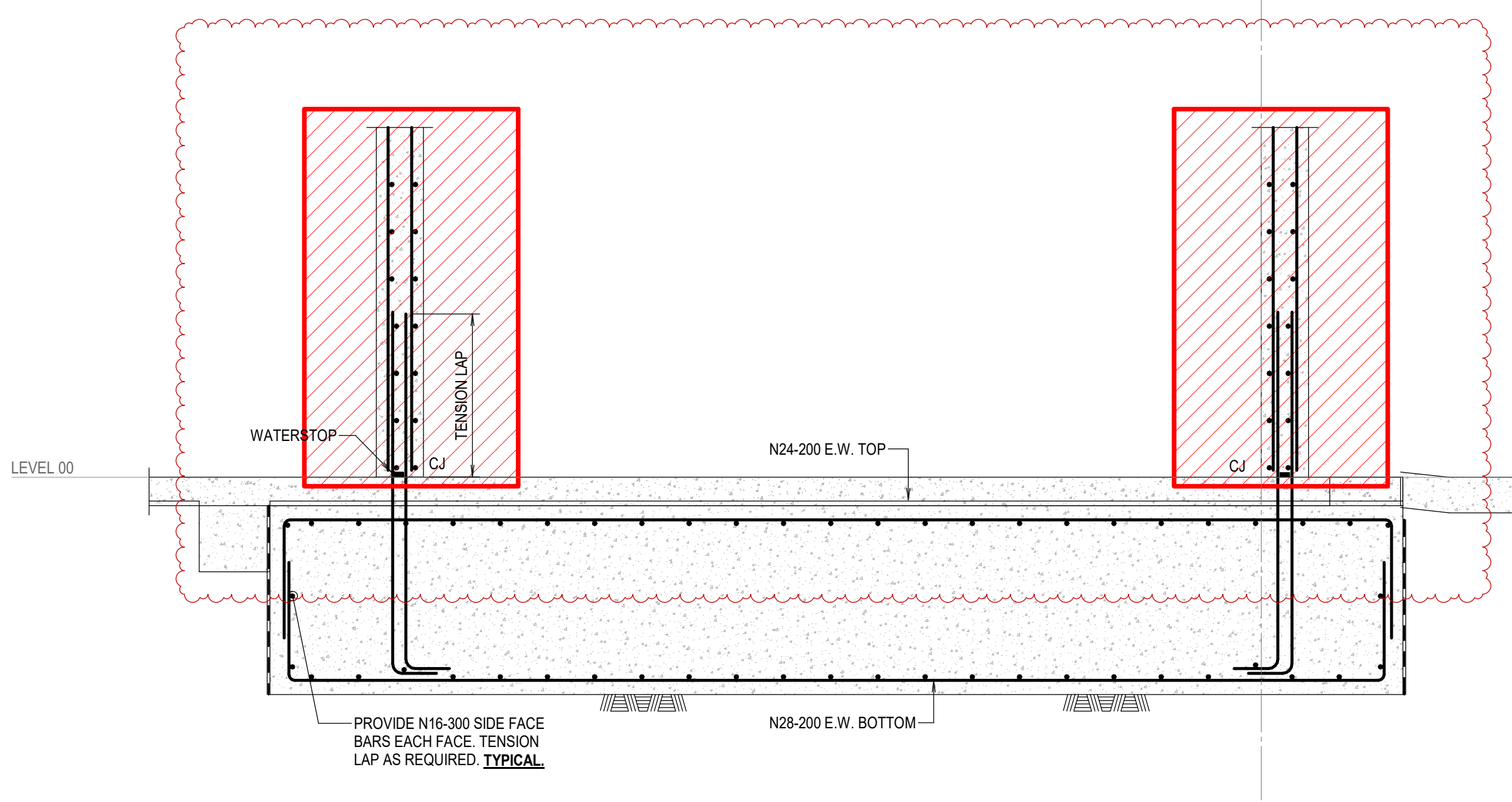
RETAINING WALL - RTW1
 SCALE 1:20



RETAINING WALL - RTW2
 SCALE 1:20



1. WATERPROOF ALL LIFT PIT WALLS AND BASES BELOW GROUND WITH XYPEX ADMIXTURE TO THE CONCRETE AT THE TIME OF BATCHING IN ACCORDANCE WITH MANUFACTURERS SPECIFICATION
2. ALL CONSTRUCTION JOINTS TO BE TREATED IN ACCORDANCE WITH MANUFACTURERS SPECIFICATION.



TYPICAL STAIR BASE DETAIL
 Scale: 1:20

DENOTES SCOPE OMITTED FROM CC1

03	REVISED AS NOTED	HN	EMC	18.03.24
02	ISSUED FOR CC1	HN	EMC	15.03.24
01	ISSUED FOR CC1	HN	EMC	19.02.24

Rev Description Eng Draft Date

Project
PYMBLE LADIES COLLEGE GREY HOUSE PRECINCT

Sheet Subject
FOOTING SECTIONS AND DETAILS - SHEET 1

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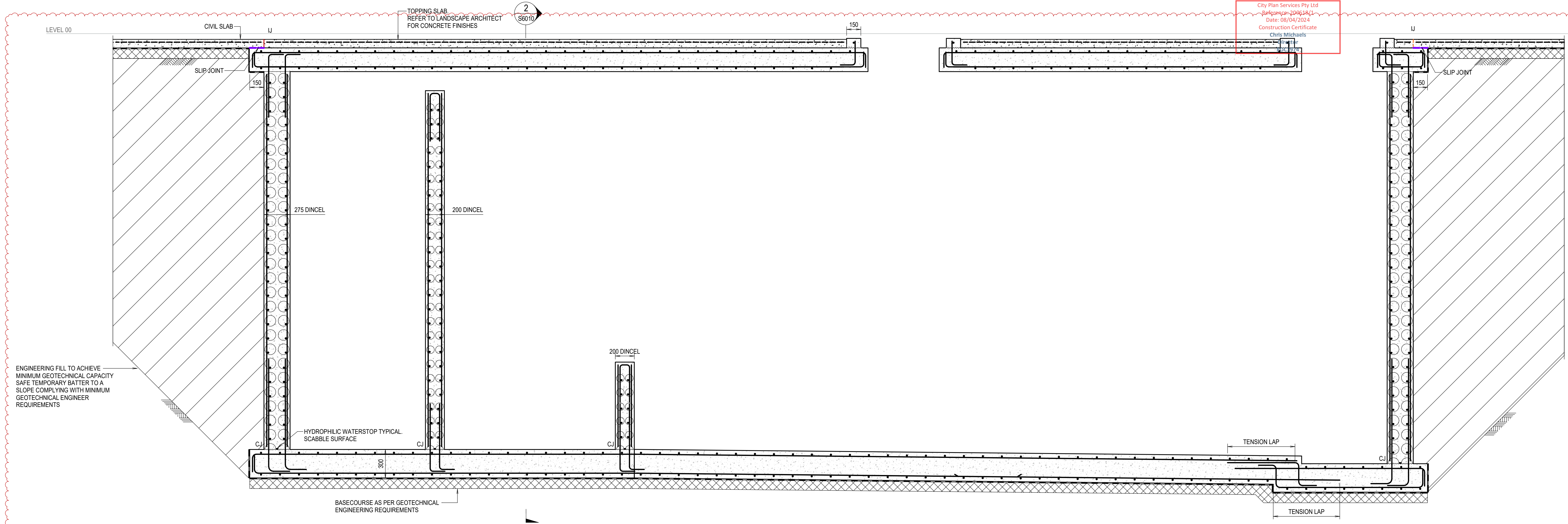
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Job No Drawing No Revision
 211007 S1041 03

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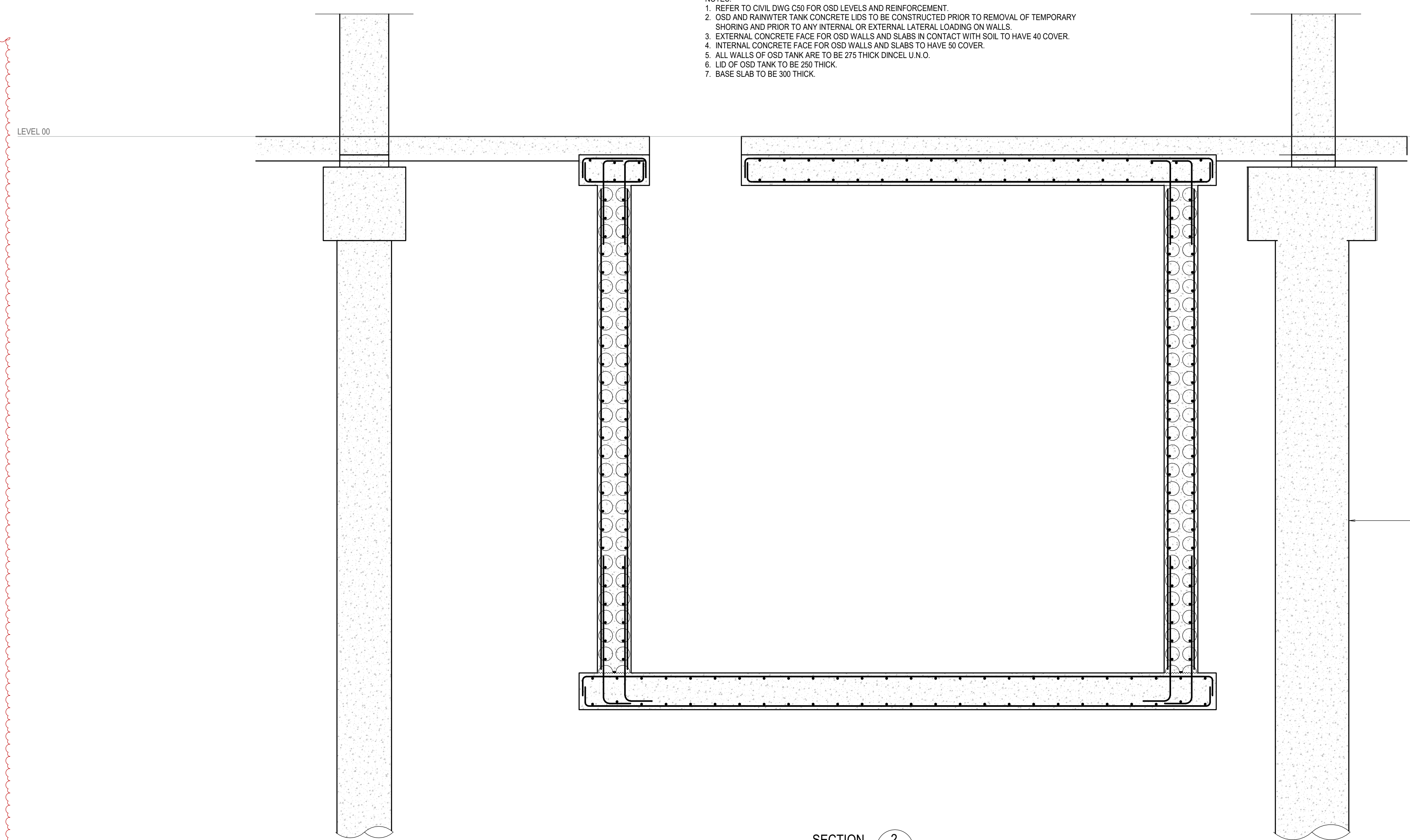
City Plan Services Pty Ltd
 244/245 Pitt Street Sydney NSW
 Date: 08/04/2024
 Construction Certificate
 Chris Michaels



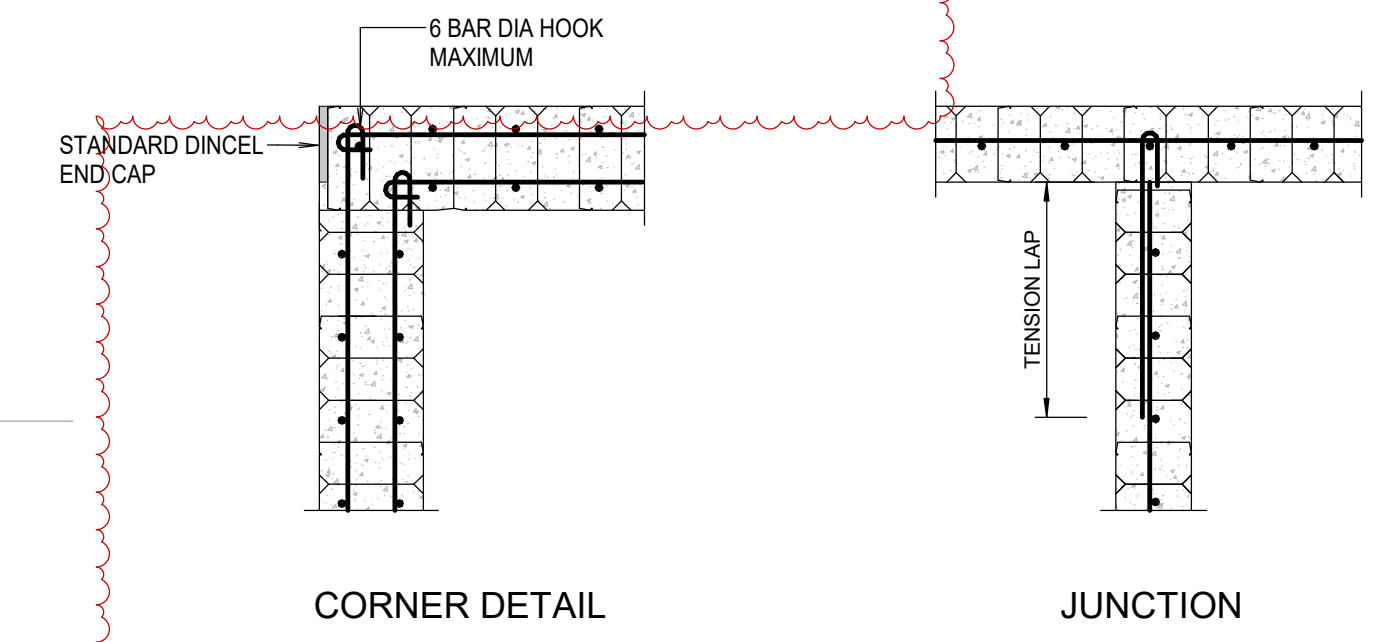
SECTION 1
 Scale 1:20 S5001

OSD TANK SECTION

- NOTES:
- REFER TO CIVIL DWG C50 FOR OSD LEVELS AND REINFORCEMENT.
 - OSD AND RAINWATER TANK CONCRETE LIDS TO BE CONSTRUCTED PRIOR TO REMOVAL OF TEMPORARY SHORING AND PRIOR TO ANY INTERNAL OR EXTERNAL LATERAL LOADING ON WALLS.
 - EXTERNAL CONCRETE FACE FOR OSD WALLS AND SLABS IN CONTACT WITH SOIL TO HAVE 40 COVER.
 - INTERNAL CONCRETE FACE FOR OSD WALLS AND SLABS IN CONTACT WITH SOIL TO HAVE 50 COVER.
 - ALL WALLS OF OSD TANK ARE TO BE 275 THICK DINCEL U.N.O.
 - LID OF OSD TANK TO BE 250 THICK.
 - BASE SLAB TO BE 300 THICK.



SECTION 2
 Scale 1:20 S6010



TYPICAL DINCEL WALL PLANS
 SCALE 1:20
 REINFORCEMENT IN DINCEL WALLS TO BE SECURED WITH DINCEL REINFORCEMENT CLIPS.

PILE FOOTING TO BE SOCKED BELOW TANK LEVEL TYPICAL

02	ISSUED FOR CC1	HN	EMC	15.03.24
01	ISSUED FOR CC1	HN	EMC	19.02.24

Rev Description Eng Draft Date

Project
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Sheet Subject
SLAB ON GROUND OSD ELEVATIONS AND DETAILS - SHEET 1

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 211007 S6010 02

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CONSTRUCTION CERTIFICATE