DOC22/25544

Mick Cassel
Planning Secretary
Department of Planning, Industry and Environment
Locked Bag 5022
Parramatta NSW 2124

Attn: Shiraz Ahmed

18 January 2022

Dear Mr Ahmed,

New Warnervale Public School (SSD 9439): Structural Inspection Certificate in accordance with condition D21

I refer to the New Warnervale Public School approved on 1 May 2020.

In accordance with condition D21 of the Development Consent, the Department of Education would like to provide a copy of the Structural Inspection Certificate to the Planning Secretary as submitted to Central Coast Council, TfNSW and the Certifier.

Please refer to Attachment 1 for the Structural Inspection Certificate with an electronic set of final drawings, evidence of the Certifiers satisfaction and evidence of council submission.

The Department of Education therefore submits the above notification to the Planning Secretary for information.

Should you wish to discuss the above further please do not hesitate to contact the undersigned.

Yours sincerely,

David Wheeler
Senior Project Director
Schools Infrastructure NSW

Attachment 1

NSW Department of Education
259 George Street Sydney NSW 2000 GPO Box 33 Sydney NSW 2001 T 02 9273 9200
www.schoolinfrastructure.nsw.gov.au

BIRZULIS ASSOCIATES Pty Ltd
Consulting Structural + Civil Engineers
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583 Darling Street, Rozelle NSW 2039
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20 December 2021

Richard Crookes Constructions
Attention Mr Tim Hastings
hastingst@richardcrookes.com.au

STRUCTURAL COMPLIANCE / INSPECTION CERTIFICATE

PORTERS CREEK PUBLIC SCHOOL, WARNERVALE
(OUR REF. 7900)

In satisfaction of SSDA Condition 21, this is to certify that we have prepared structural drawings (refer to attached list) for the abovementioned project. The engineering design and detailing has been carried out in accordance with the relevant Australian Standards (as listed below), the requirements of the Building Code of Australia (2019, Vol 1), the Educational Facilities Standards & Guidelines (EFSG) The section 4.38 of the Environmental Planning and Assessment Act 1979 of the State Significant Development Application (SSDA), Local Council and NSW Government requirements

We have carried out visits of inspection of the structural components of the building works in progress. The works as inspected were found to be in accordance with our structural documentation and engineering advice and thus structurally adequate.

Australian Standards List

- AS/NZS 1170.0 inc amendment 1,3 and 4 (2002)
- AS/NZS 1170.1 inc amendments 1 and 2 (2002)
- AS/NZS 1170.2 inc amendments 1-5 (2011)
- AS 1170.4inc amendments 1 and 2 (2007)
- AS 2159 inc amendment 1 (2009)
- AS 1379 (2007)
- AS 2870 (2011)
- AS 3600 inc amendment 1 (2018)
- AS 3610 (1995)
- AS 3700 (2018) including Amendment 1
- AS 4100 (1998) including Amendment 1
- AS/NZS 4600 (2018)

DIRECTORS
B Fimmano B.E. (Hons), M.I.E. Aust., C.P.Eng.
M A Grogan B.E., M.Eng., M.I.E. Aust., C.P.Eng.
ASSOCIATE DIRECTOR
P W Grogan B.E. (Hons), M.E.(Struct), M.I.E. Aust., C.P.Eng.
CONSULTANT
A J Birzulis OAM, B.E., M.Eng. Sc., F.I.E. Aust., C.P.Eng.

This certificate shall not be construed as relieving any other party of their legal and contractual obligations or adherence to Australian Standards and the Building Code of Australia.

Yours faithfully

M GROGAN
Director

STRUCTURAL DRAWINGS SCHEDULE

DRAWING No.	DRAWING TITLE	REVISION
S-0-GE-01	COVER SHEET	A
S-0-GE-02	CONSTRUCTION NOTES	C
S-0-GE-03	CONSTRUCTION NOTES	A
S-0-GE-04	GENERAL NOTES	A
S-0-GE-10	TYPICAL FOOTING DETAILS	A
S-0-GE-11	TYPICAL FOOTING DETAILS	B
S-0-GE-20	TYPICAL COLUMN DETAILS	A
S-0-GE-30	TYPICAL WALL DETAILS	B
S-0-GE-31	TYPICAL WALL DETAILS	A
S-0-GE-40	TYPICAL STAIR DETAILS	B
S-0-GE-41	TYPICAL STAIR DETAILS	B
S-0-GE-42	TYPICAL STAIR DETAILS	B
S-0-GE-50	TYPICAL WAFFLE POD DETAILS	A
S-0-GE-51	TYPICAL POST TENSIONED CONCRETE DETAILS	A
S-0-GE-52	TYPICAL SLAB DETAILS	A
S-0-GE-60	STEEL DETAILS SHEET 1	A
S-0-GE-61	STEEL DETAILS SHEET 2	A
S-0-GE-62	STEEL DETAILS SHEET 3	A
S-0-GE-63	STEEL DETAILS SHEET 4	B
S-0-GE-70	COVERED WAY DETAILS	B
S-A-GF-01	ADMIN - GROUND FLOOR PLAN	C
S-A-RP-01	ADMIN - ROOF FRAMING PLAN	B
S-B-GF-01	HALL - GROUND FLOOR PLAN	C
S-B-RP-01	HALL - LOWER ROOF FRAMING PLAN	B
S-B-RP-02	HALL - UPPER ROOF FRAMING PLAN	C
S-B-RP-40	HALL - ROOF FRAMING SECTIONS	C
S-B-RP-41	HALL - ROOF FRAMING SECTIONS	B
S-B-RP-50	HALL - ROOF FRAMING DETAILS	B
S-B-RP-51	HALL - ROOF FRAMING DETAILS	B
S-B-RP-52	HALL - ROOF FRAMING DETAILS	A
S-B-RP-53	HALL - ROOF FRAMING DETAILS	A

S-B-RP-54	HALL - ROOF FRAMING DETAILS	A
S-C-GF-00	TEACHING SPACE OVERALL GROUND FLOOR PLAN	A
S-C-GF-01	C1 & C2 TEACHING SPACE - GROUND FLOOR PLAN	C
S-C-GF-02	C3 TEACHING SPACE - GROUND FLOOR PLAN	E
S-C-L1-00	TEACHING SPACE OVERALL LEVEL 1 PLAN	A
S-C-L1-01	C1 & C2 TEACHING SPACE - LEVEL 1 FLOOR PLAN	B
S-C-L1-02	C3 TEACHING SPACE - LEVEL 1 FLOOR PLAN	B
S-C-RP-00	TEACHING SPACE OVERALL ROOF PLAN	A
S-C-RP-01	C1 & C2 TEACHING SPACE - ROOF FRAMING PLAN	D
S-C-RP-02	C3 TEACHING SPACE - ROOF FRAMING PLAN	D
S-C-RP-03	C1 & C2 TEACHING SPACE - LOWER ROOF FRAMING PLAN	C
S-C-RP-40	TEACHING SPACE -ROOF FRAMING SECTIONS	B
S-C-RP-41	TEACHING SPACE -ROOF FRAMING SECTIONS	B
S-C-RP-50	TEACHING SPACE - ROOF FRAMING DETAILS	D
S-C-WF-01	TEACHING SPACE - GROUND WALL FRAMING PLAN	D
S-C-WF-02	TEACHING SPACE - LEVEL 1 WALL FRAMING PLAN	C
S-D-GF-01	LIBRARY - GROUND FLOOR PLAN	C
S-D-L1-01	LIBRARY - LEVEL 1 FLOOR PLAN	C
S-D-RP-01	LIBRARY - ROOF FRAMING PLAN	B
S-D-RP-40	LIBRARY - ROOF FRAMING SECTIONS	B
S-D-RP-41	LIBRARY - ROOF FRAMING SECTIONS	B
S-D-RP-50	LIBRARY - ROOF FRAMING DETAILS	B

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DOCUMENT REGISTER / TRANSMITTAL FORM

Project: PORTERS CREEK PUBLIC SCHOOL	Number: 7900	Sheet No. 1 of 3

To: Birzulis Associates Pty Ltd — Attention: Michael Grogan

To: NBRS Architecture — Attention: James Kim

To: Richard Crookes Constructions — Attention: Adrian Connell

To: Richard Crookes Constructions — Attention: Chris Hamilton

To: Richard Crookes Constructions — Attention: Dylan Cross

To: Richard Crookes Constructions — Attention: Michael Whyte

To: Richard Crookes Constructions — Attention: Nick Murray

To: Richard Crookes Constructions — Attention: Tim Hastings

To: Richard Crookes Constructions — Attention: Tony Bolton

Date of Issue

Day	20
Month	12
Year	21

No.	Title	Current Revision	Revision
S-0-GE-01	COVER SHEET	A	A
S-0-GE-02	CONSTRUCTION NOTES	C	C

Distribution List

P - PDF Format (.pdf) **D** - Drawing Format (.dwg)

Company :	**Richard Crookes Constructions**	P
Attention :	Tony Bolton	I

P - Prelim **T** - Tender **C** - Construction **I** - Information **AB** - As Builts
CI - Check In **BA** - Building Application **DA** - Development Application
SO - Sign Off **CC1** - Crown Certificate

Method of Issue	E

E - Email **O** - Online **Po** - Post Delivered **H** - Hand Delivered **P** - Print

Issued by: PG

No.	Title	Current Revision	Revision																			
S-0-GE-03	CONSTRUCTION NOTES	A	A																			
S-0-GE-04	GENERAL NOTES	A	A																			
S-0-GE-10	TYPICAL FOOTING DETAILS	A	A																			
S-0-GE-11	TYPICAL FOOTING DETAILS	B	B																			
S-0-GE-20	TYPICAL COLUMN DETAILS	A	A																			
S-0-GE-30	TYPICAL WALL DETAILS	B	B																			
S-0-GE-31	TYPICAL WALL DETAILS	A	A																			
S-0-GE-40	TYPICAL STAIR DETAILS	B	B																			
S-0-GE-41	TYPICAL STAIR DETAILS	B	B																			
S-0-GE-42	TYPICAL STAIR DETAILS	B	B																			
S-0-GE-50	TYPICAL WAFFLE POD DETAILS	A	A																			
S-0-GE-51	TYPICAL POST TENTIONED CONCRETE DETAILS	A	A																			
S-0-GE-52	TYPICAL SLAB DETAILS	A	A																			
S-0-GE-60	STEEL DETAILS SHEET 1	A	A																			
S-0-GE-61	STEEL DETAILS SHEET 2	A	A																			
S-0-GE-62	STEEL DETAILS SHEET 3	A	A																			
S-0-GE-63	STEEL DETAILS SHEET 4	B	B																			
S-0-GE-70	COVERED WAY DETAILS	B	B																			
S-A-GF-01	ADMIN - GROUND FLOOR PLAN	A	A																			
S-A-RP-01	ADMIN - ROOF FRAMING PLAN	A	A																			
S-B-GF-01	HALL - GROUND FLOOR PLAN	C	C																			
S-B-RP-01	HALL - LOWER ROOF FRAMING PLAN	B	B																			
S-B-RP-02	HALL - UPPER ROOF FRAMING PLAN	C	C																			
S-B-RP-40	HALL - ROOF FRAMING SECTIONS	A	A																			
S-B-RP-41	HALL - ROOF FRAMING SECTIONS	B	B																			
S-B-RP-50	HALL - ROOF FRAMING DETAILS	B	B																			
S-B-RP-51	HALL - ROOF FRAMING DETAILS	B	B																			
S-B-RP-52	HALL - ROOF FRAMING DETAILS	A	A																			
S-B-RP-53	HALL - ROOF FRAMING DETAILS	A	A																			
S-B-RP-54	HALL - ROOF FRAMING DETAILS	A	A																			
S-C-GF-00	TEACHING SPACE OVERALL GROUND FLOOR PLAN	A	A																			
S-C-GF-01	C1 & C2 TEACHING SPACE - GROUND FLOOR PLAN	C	C																			
S-C-GF-02	C3 TEACHING SPACE - GROUND FLOOR PLAN	E	E																			
S-C-L1-00	TEACHING SPACE OVERALL LEVEL 1 PLAN	A	A																			
S-C-L1-01	C1 & C2 TEACHING SPACE - LEVEL 1 FLOOR PLAN	C	C																			
S-C-L1-02	C3 TEACHING SPACE - LEVEL 1 FLOOR PLAN	C	C																			
S-C-RP-00	TEACHING SPACE OVERALL ROOF PLAN	A	A																			

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S-C-RP-01	C1 & C2 TEACHING SPACE - ROOF FRAMING PLAN	E	E																			
S-C-RP-02	C3 TEACHING SPACE - ROOF FRAMING PLAN	D	D																			
S-C-RP-03	C1 & C2 TEACHING SPACE - LOWER ROOF FRAMING PLAN	D	D																			
S-C-RP-40	TEACHING SPACE -ROOF FRAMING SECTIONS	B	B																			
S-C-RP-41	TEACHING SPACE -ROOF FRAMING SECTIONS	C	C																			
S-C-RP-50	TEACHING SPACE - ROOF FRAMING DETAILS	E	E																			
S-C-WF-01	TEACHING SPACE - GROUND WALL FRAMING PLAN	E	E																			
S-C-WF-02	TEACHING SPACE - LEVEL 1 WALL FRAMING PLAN	C	C																			
S-D-GF-01	LIBRARY - GROUND FLOOR PLAN	D	D																			
S-D-L1-01	LIBRARY - LEVEL 1 FLOOR PLAN	D	D																			
S-D-RP-01	LIBRARY - ROOF FRAMING PLAN	D	D																			
S-D-RP-40	LIBRARY - ROOF FRAMING SECTIONS	D	D																			
S-D-RP-41	LIBRARY - ROOF FRAMING SECTIONS	B	B																			
S-D-RP-50	LIBRARY - ROOF FRAMING DETAILS	C	C																			

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PORTERS CREEK PUBLIC SCHOOL

STRUCTURAL DRAWING SCHEDULE

DWG No.	TITLE	SCALE
S-0-GE-01	COVER SHEET	N/A
S-0-GE-02	CONSTRUCTION NOTES	N/A
S-0-GE-03	CONSTRUCTION NOTES	N/A
S-0-GE-04	GENERAL NOTES	AS NOTED
S-0-GE-10	TYPICAL FOOTING DETAILS	1:20
S-0-GE-11	TYPICAL FOOTING DETAILS	1:20
S-0-GE-20	TYPICAL COLUMN DETAILS	1:20
S-0-GE-30	TYPICAL WALL DETAILS	1:20
S-0-GE-40	TYPICAL STAIR DETAILS	1:20
S-0-GE-41	TYPICAL STAIR DETAILS	1:20
S-0-GE-42	TYPICAL STAIR DETAILS	1:20
S-0-GE-50	TYPICAL WAFFLE POD DETAILS	1:50, 1:20
S-0-GE-51	TYPICAL POST TENTIONED CONCRETE DETAILS	1:20
S-0-GE-52	TYPICAL SLAB DETAILS	1:20
S-0-GE-60	STEEL DETAILS SHEET 1	1:10
S-0-GE-61	STEEL DETAILS SHEET 2	1:10
S-0-GE-62	STEEL DETAILS SHEET 3	1:10
S-0-GE-63	STEEL DETAILS SHEET 4	1:10

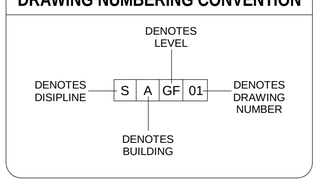
STRUCTURAL DRAWING SCHEDULE

DWG No.	TITLE	SCALE
S-0-GE-70	COVERED WAY DETAILS	1:100, 1:10
S-A-GF-01	ADMIN - GROUND FLOOR PLAN	1:100
S-A-RP-01	ADMIN - ROOF FRAMING PLAN	1:100
S-B-GF-01	HALL - GROUND FLOOR PLAN	1:100
S-B-RP-01	HALL - LOWER ROOF FRAMING PLAN	1:100
S-B-RP-02	HALL - UPPER ROOF FRAMING PLAN	1:100
S-B-RP-40	HALL - ROOF FRAMING SECTIONS	1:100
S-B-RP-41	HALL - ROOF FRAMING SECTIONS	1:100
S-B-RP-50	HALL - ROOF FRAMING DETAILS	1:10
S-B-RP-51	HALL - ROOF FRAMING DETAILS	1:10
S-B-RP-52	HALL - ROOF FRAMING DETAILS	1:10
S-B-RP-53	HALL - ROOF FRAMING DETAILS	1:10
S-B-RP-54	HALL - ROOF FRAMING DETAILS	1:10
S-C-GF-00	TEACHING SPACE OVERALL GROUND FLOOR PLAN	1:150
S-C-GF-01	C1 & C2 TEACHING SPACE - GROUND FLOOR PLAN	1:100
S-C-GF-02	C3 TEACHING SPACE - GROUND FLOOR PLAN	1:100
S-C-L1-00	TEACHING SPACE OVERALL LEVEL 1 PLAN	1:150
S-C-L1-01	C1 & C2 TEACHING SPACE - LEVEL 1 FLOOR PLAN	1:100
S-C-L1-02	C3 TEACHING SPACE - LEVEL 1 FLOOR PLAN	1:100
S-C-RP-00	TEACHING SPACE OVERALL ROOF PLAN	1:150
S-C-RP-01	C1 & C2 TEACHING SPACE - ROOF FRAMING PLAN	1:100
S-C-RP-02	C3 TEACHING SPACE - ROOF FRAMING PLAN	1:100

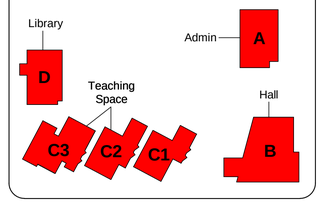
STRUCTURAL DRAWING SCHEDULE

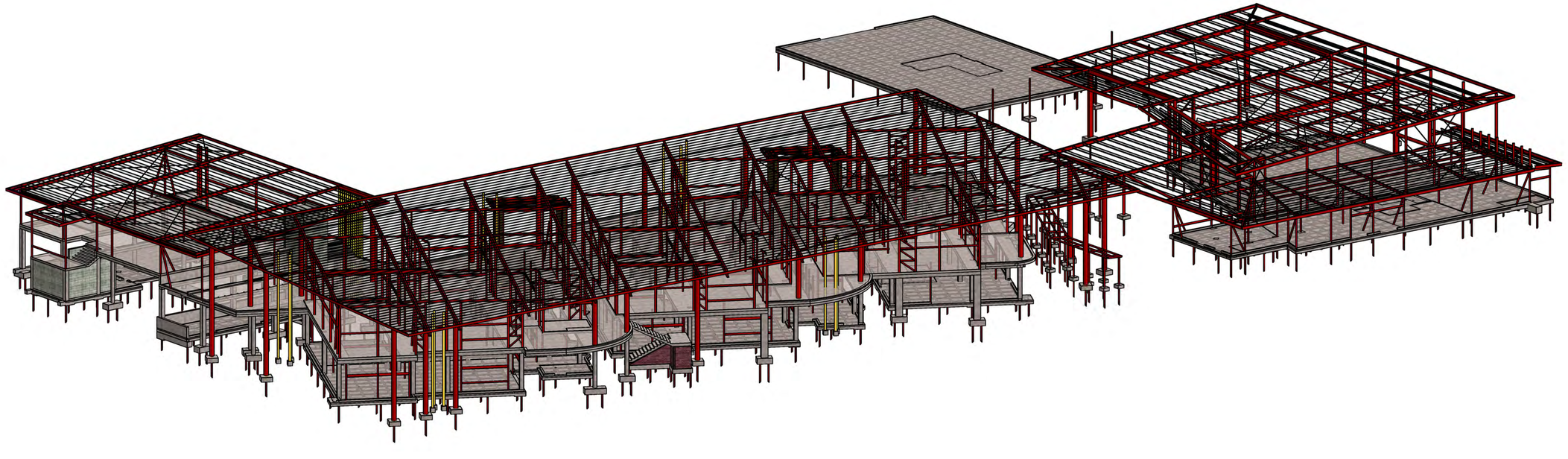
DWG No.	TITLE	SCALE
S-C-RP-03	C1 & C2 TEACHING SPACE - LOWER ROOF FRAMING PLAN	1:100
S-C-RP-40	TEACHING SPACE -ROOF FRAMING SECTIONS	1:100
S-C-RP-41	TEACHING SPACE -ROOF FRAMING SECTIONS	1:100
S-C-RP-50	TEACHING SPACE - ROOF FRAMING DETAILS	1:10
S-C-WF-01	TEACHING SPACE - GROUND WALL FRAMING PLAN	1:150
S-C-WF-02	TEACHING SPACE - LEVEL 1 WALL FRAMING PLAN	1:150
S-D-GF-01	LIBRARY - GROUND FLOOR PLAN	1:100
S-D-L1-01	LIBRARY - LEVEL 1 FLOOR PLAN	1:100
S-D-RP-01	LIBRARY - ROOF FRAMING PLAN	1:100
S-D-RP-40	LIBRARY - ROOF FRAMING SECTIONS	1:100
S-D-RP-41	LIBRARY - ROOF FRAMING SECTIONS	1:100
S-D-RP-50	LIBRARY - ROOF FRAMING DETAILS	1:10

DRAWING NUMBERING CONVENTION



KEY PLAN





PRINT IN COLOUR

ISSUE	DESCRIPTION	APPROVED	DATE
A	ISSUED FOR CONSTRUCTION		06.11.20
7	CC2 RESUBMISSION		30.10.20
6	CC2 ISSUE		16.10.20
5	ISSUED FOR INFORMATION		28.08.20
4	ISSUED FOR INFORMATION		21.08.20
3	RE-ISSUED FOR CC1		12.08.20
2	RE-ISSUED FOR CC1		07.08.20
1	CC1 ISSUE		24.07.20

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www.birzulisassociates.com

PROJECT
PORTERS CREEK PUBLIC SCHOOL
75 Warnervale Rd. Warnervale NSW 2259

TITLE
COVER SHEET

SCALES	DATE
N/A @ A1	JUNE 2020

DRAWN	DESIGN	VERIFIED	APPROVED
AB	TO		

This drawing is the copyright of Birzulis Associates P/L and may not be altered, reproduced or transmitted in any form or by any means in part or in whole without the written permission of Birzulis Associates Pty Ltd.
All levels and dimensions are to be checked and verified on site prior to the commencement of any work, making of shop drawings or fabrication of components. Do not scale drawings. Use figured Dimensions.

ISSUE	PROJECT No.	DRAWING No.
A	7900	S-0-GE-01

6/11/2020 4:39:04 PM

GENERAL

01. These structural drawings shall be read in conjunction with all architectural, Educational Facilities Standards and guidlines (EFSG) and other consultants drawings and specifications and with such other written instructions as may be issued during the course of the contract. Any discrepancy shall be referred to the Principal Contractor before proceeding with the work.

02. All materials and workmanship shall be in accordance with the relevant current Standards Australia Codes and with the Building Code of Australia.

03. All dimensions shown on these structural drawings shall be verified by the Contractor on site. These structural drawings shall not be scaled for dimensions.

04. The method of construction and the maintenance of safety during construction is the responsibility of the Contractor. If any structural element presents difficulty in respect of constructability or safety, the matter shall be referred to the Structural Engineer for resolution before proceeding with the work.

05. During construction the structure shall be maintained in a stable condition and no part shall be overstressed. The design, installation and maintenance of all temporary propping, bracing and shoring shall be provided by the Contractor to keep the works and excavations stable at all times. The cost of all such work shall be deemed to be included in the Contractors tender.

FOUNDATIONS

01. Strip footings and pad footings have been designed for an allowable bearing pressure intensity of 150 kPa bearing on Natural Stiff material.

02. Screw piles shall be in accordance with AS 2159 SAA piling Code. The contractor shall allow to have these designed, installed and certified by an experienced screw piling sub-contractor.

03. Screw piles shall be designed and installed based onthe recommendations provided in the geotechnical report and embedded into Sandstone with minimum allowable bearing pressure 1200 kPa.
All founding levels to be confirmed by screw piling sub-contractor.

04. The contractor shall obtain approval from the Principal Contractor of the foundation material before placing reinforcement or concrete.

05. Footings shall be located centrally under walls and columns unless noted otherwise.

06. Footings shall be constructed and backfilled as soon as possible following excavation to avoid softening or drying out of the foundation material.

07. The contractor shall arrange for a representative from Douglas Partners P/L (the geotechnical consultant) to be present at the time of drilling all of the bored piers to determine the actual founding levels. The cost of this shall be deemed to be included in the contractors tender.

DESIGN LOADS

01. The structural components detailed on these structural drawings have been designed in accordance with the relevant Standards Australia Code and the Building Code of Australia for the following loadings. Refer to architectural drawings for proposed floor usage. Refer to architectural drawings and other Consultants drawings for all super-imposed dead loads

02. Live Loads in accordance with AS1170.1-2002

Classrooms , Common Areas	- 3.0 kPa
Storage areas, Stage	- 7.5 kPa
Plant rooms	- 5.0 kPa min
Balconies	- 4.0 kPa
Roof	- 0.25 kPa
Stairs and landings, Corridors, Verandahs, Outdoor Learning	- 4.0 kPa
Library	- 7.5 kPa
Toilets	- 2.0 kPa
Hall	- 5.0 kPa

03. Wind Loads in accordance with AS 1170.2-2011

Region	- A2
Terrain Category	- 3
Reoccurrence Interval	- 1:1000 Ultimate
	- 1:25 Serviceability

04. Earthquake resistance in accordance with AS 1170.4-2007

Importance Level	- 3
Hazard factor	- 0.1
Sub-soil Class	- Ce
Probability Factor	- 1.3
Earthquake design category	- II
Structural ductility factor (u)	- 2

05. The following fire rate have been allowed for in the design:

One Story Building

Element (Load-Bearing)		F.R.L.
External Columns	Less than 1.5M	90/-/-
	1.5M to less than 3M	60/-/-
	3M or more	-/-/-
External Walls	Less than 1.5M	90/90/90
	1.5M to less than 3M	60/60/60
	3M or more	-/-/-
Common Walls and Fire Walls		90/90/90

Two Story Building

Element (load -Bearing)		F.R.L.
External Columns	Less than 18M	120/-/-
	18M or more	-/-/-
External Walls	Less than 1.5M	120/120/120
	1.5M to less than 3M	120/90/60
	3M to less than 9M	120/30/30
	9M to less than 18M	120/30/-
	18M or more	-/-/-
Common Walls and Fire Walls		120/120/120
Fire Resisting Lift & Stair Shafts		120/120/120
Other Internal Walls & Columns		120/-/-

06. Suspended concrete slabs have been allowed for F.R.L. at least 120/30/30 in the design.

CONCRETE

01. All workmanship and materials shall be in accordance with AS 3600 current edition with amendments, except where varied by the contract documents.

02. Concrete Quality: Class = Normal
Slump = 80mm
Maximum size of aggregate in structural concrete= 20mm U.N.O.
Cement Type = SL
Admixtures = nil, unless noted otherwise or approved in writing.

For concrete cast in contact with ground provide the following additional properties:
Minimum cement content = 330 kg/m³
Maximum water/cement ratio = 0.50

Concrete cement can be replaced by fly ash:
a). 20% by weight of cementitious content for conventional concrete structure.
b). 10% - 15% by weight of cementitious content for post-tentioned concrete structure.

Concrete shall have a characteristic compressive strength at 28 days (f'c) as shown in the following table, unless noted otherwise on the drawings :

ELEMENT	f'c MPa (28 days)
ISOLATED PAD FOOTINGS	25
INTEGRAL PAD FOOTINGS, STRIP FOOTINGS, FOOTING BEAMS	32
INTERNAL SUSPENDED SLABS, BEAMS & STAIRS	32
COLUMNS, WALLS	40
EXTERNAL CONCRETE, ALL OTHER CONCRETE U.N.O.	32

03. Project control testing shall be carried out in accordance with AS 3600.

04. Clear concrete cover in mm to the reinforcement shall be as follows (unless noted otherwise on the drawings) :

EXPOSURE CLASSIFI-CATION TO AS3600	CAST AGAINST FORMWORK		CAST AGAINST GROUND		
	INTERIOR	EXTERIOR	CONTACT WITH GROUND	PROTECTED BY MEMBRANE	NO MEMBRANE
A1.	20			30	
A2.		30	30		50
B1.		40			
B2.		45			

Exposure classification for interior concrete - **A2**
Exposure classification for exterior concrete - **B1**
All reinforcement shall be firmly supported on mild steel plastic tipped chairs, plastic chairs or concrete chairs at not greater than 1 metre centres both ways. Bars shall be tied at alternate intersections. In exposure conditions greater than B1 use only plastic chairs.

05. Concrete sizes shown do not include thicknesses of applied finishes.

06. Depths of beams are given first and include slab thicknesses.

07. For chamfers, drip grooves, reglets, etc., refer to Architects details, maintain cover to reinforcement at these details.

08. No holes, chases or embedment of pipes other than those shown on the structural drawings shall be made in concrete members without the prior written approval of the Principal Contractor.

09. Construction joints where not shown shall be located to the approval of the Principal Contractor.

10. The finished concrete shall be a dense homogeneous mass, completely filling the formwork thoroughly embedding the reinforcement and free of stone pockets. All concrete including slabs on ground and footings shall be compacted with mechanical vibrators.

11. Curing of all concrete is to be achieved by keeping surfaces continuously wet for a period of 7 days, and prevention of loss of moisture for a total of 14 days followed by a gradual drying out. Approved sprayed on curing compounds may be used where no floor finishes are proposed. Polythene sheeting or wet hessian may be used if protected from wind and traffic.

12. Construction support propping is to be left in place where needed to avoid overstressing the structure due to construction loading. No masonry or partition walls are to be constructed on suspended levels until all propping is removed and the member has absorbed its dead load deflection.

13. The Principal Contractor shall be given 48 hours notice for reinforcement inspection and concrete shall not be delivered until final approval obtained.

14. Conduits, pipes etc., shall only be located in the middle one third of slab depth and spaced at not less than 3 diameters. Pipes or conduits shall not be placed within the cover to the reinforcement.

15. Reinforcement symbols:
S Denotes Grade 230 S Hot Rolled Deformed Bars to AS 1302
N Denotes Grade 500 N Deformed Bars to AS 4671
R Denotes Grade 230 R Hot Rolled Plain Bars to AS 1302
SL,RL,L Denotes Grade 500 L Deformed Ribbed Welded Mesh to AS 4671
The figures following the symbol are the number of millimetres in the bar diameter. The figures following the mesh symbol SL,RL,L is the reference number for mesh to AS 4671.

16. Reinforcement is represented diagrammatically and not necessarily in true projection.

17. Splices in reinforcement shall be made only in positions shown or otherwise approved in writing by the Principal Contractor. Laps shall be in accordance with AS 3600 and not less than the development length for each bar.

18. Mesh reinforcement shall have splices made so that the overlap, measured between the outermost transverse wires of each sheet of mesh, is not less than the spacing of those wires plus 50mm.

19. Welding of reinforcement shall not be permitted unless shown on the structural drawings or approved by the Principal Contractor.

20. Joggles to bars shall be 1 bar diameter over a length of 12 bar diameters.

21. Bundled bars shall be tied together at 30 bar diameter centres with three wraps of tie wire.

22. Where transverse tie bars are not shown provide N12 at 400mm distribution bars unless noted otherwise. Splice distribution bars 500mm where necessary and provide 500mm splice length with main bars unless noted otherwise.

23. All dowels placed in joints in concrete slabs shall be placed within the following tolerances:

Level +/- 1 degree
Line +/- 1 degree
Position +/- 5mm

24. Sliding bearing strips supporting concrete slabs shall be composed of two layers of 0.4mm thick galvanised steel plate with an intermediate layer of grease (unless noted otherwise). The strips shall be the same width as the bearing surface.

PREPARATION FOR SLAB ON GROUND

01. Clear the area to be occupied by the building and its adjuncts. Break up and remove slabs, foundations, paving, etc found on the surface or within 300mm of the basecourse. Remove all topsoil and organic matter and grub out all roots and stumps. Remove all rubble remaining from excavations.

02. The subgrade material (natural ground below the excavations) shall be thoroughly compacted by proof rolling with a minimum of 6 passes of a 10 tonne dead weight roller. This proof rolling shall be inspected by the geotechnical engineering consultant, to determine the extent of replacement of any unsuitable material. The cost of these inspections shall be deemed to be included in the contractors tender.

03. Any soft, yielding, organic or other unsuitable material in the subgrade shall be removed for a depth of at least 300mm and holes so formed shall be filled with approved filling compacted in 150mm layers as specified below.

04. Bring all filling on to the site unless it can be provided from spoil recovered from the site. Filling shall be sound clean stable material, free of perishable material or any other material that will not form stable fill. The fill material shall be capable of consolidation so that it is firm and unyielding throughout its depth.

05. Place filling in layers not exceeding 200mm thick when measured loose. Bring filling to optimum moisture content (+/- 2%) by watering and compact each layer thoroughly and uniformly with a roller where practicable. Hand tamp in areas not accessible to a roller.

06. For the backfilling of localised excavations lightweight compaction equipment is to be used and filling placed in layers not exceeding 100mm thick when measured loose.

07. Consolidate each layer of filling to obtain a uniform density strictly between 98% & 102% of the standard maximum dry density of the material as determined by AS1289.5.1.1.

08. The basecourse layer (directly below the slab) shall consist of 100mm finished compacted thickness of crushed rock blinded with 20mm of sand.

09. The basecourse material shall be clean, tough, durable and free of any weathered or disintegrated stone, clay, organic matter or any other deleterious materials.

10. The crushed rock shall be compacted with approved equipment to obtain a uniform density of not less than 100% of the standard maximum dry density of the material as determined by AS1289.5.1.1.

11. Finish the basecourse to the following tolerances:
Variation from design level - 5mm
Variation from 3000mm straight edge - 5mm

12. All earthworks shall be carried out under Level 1 control as defined in AS. 3798.

13. The Contractor shall allow for testing at the rate of one test per 200 square metres of surface area for each of the following finished surfaces, with a minimum of three tests for each compacted layer:

-Subgrade
-Basecourse (at surface of crushed rock)

14. The contractor shall allow for testing at the rate of one test per 30 cubic metres for the filling, with a minimum of three tests for each compacted layer.

15. The location of all tests shall be to the approval of the Principal Contractor.

16. The Contractor shall obtain from a registered N.A.T.A. testing authority documented test evidence proving that the compaction figures as required for the materials specified herein have been obtained. The cost of such work shall be deemed to be included in the Contractors Tender.

CHEMICAL AND MASONRY ANCHORS

01. All anchors shall be subject to the approval of the Principal Contractor.

02. Chemical anchors shall consist of a threaded mild steel rod of the size nominated on the drawings embedded in and chemically bonded to the concrete. The chemicals used shall be such that they do not detrimentally affect the surrounding concrete. The rod shall be hot dip galvanised.

03. Masonry anchor sizes given on the structural drawings refer to the bolt diameter required.

04. All anchors shall be capable of developing a working load capacity in shear and tension of at least 80% of the maximum permissible values for the threaded rod or bolt size nominated.

05. All anchors shall be installed in strict accordance with the manufacturers recommendations.

06. Holes drilled for anchors shall not penetrate reinforcement in suspended concrete slabs, beams, columns and walls . Any holes which are found to clash with such reinforcement shall be relocated as necessary and the initial hole shall be patched to the approval of the Principal Contractor.

MASONRY FLEXIBLE ANCHORS

01. All anchors shall be subject to the approval of the Principal Contractor.

02. All anchors shall be manufactured from hot dip galvanised steel plate.

03. All anchors shall permit horizontal and vertical movement in the plane of the wall but shall resist movement in a perpendicular direction to the plane of the wall, unless noted otherwise.

04. The anchors shall have the following minimum lateral working load capacities to resist forces in a perpendicular direction to the plane of the wall:

- At vertical control joints : 0.30 kN
- All other anchors : 0.40 kN

STRUCTURAL STEEL

01. All workmanship and materials shall be in accordance with AS 4100 and AS 1554, except where varied by the contract documents.

02. Structural steel members shall be of the following grades unless noted otherwise on the drawings :

WB, WC, UB, UC, PFC, EA, UA	- Grade 300
RHS, SHS	- Grade 350
CHS with outside diameter equal to or exceeding 76mm	- Grade 350
CHS with diameter less than 76mm	- Grade 250
All other members	- Grade 250

03. The Contractor shall prepare workshop drawings and shall submit three copies of each drawing for review. Fabrication shall not commence until permission to use the relevant workshop drawings has been received. The contractor shall allow ten clear working days for this review of the workshop drawings.

04. Bolt Designation:

4.6/S	Denotes commercial bolts of grade 4.6 to AS 1111, snug tightened.
8.8/S	Denotes high strength structural bolts of grade 8.8 to AS 1252, snug tightened.
8.8/TB	Denotes high strength structural bolts of grade 8.8 to AS 1252, fully tensioned to AS 4100 as a bearing type joint.
8.8/TF	Denotes high strength structural bolts of grade 8.8 to AS 1252 fully tensioned to AS 4100 as a friction type joint with facing surfaces left uncoated.

05. Unless noted otherwise all bolts shall be M16 Grade 8.8/S. No connection shall have less than 2 bolts. All bolts, nuts and washers shall be hot dip galvanised.

06. /TB and /TF bolt categories shall be installed in accordance with Section 15 of AS 4100, using either the part-turn method or the direct-tension indicator method.

07. All welding shall be carried out in accordance with AS 1554.1. Electrodes shall be to either AS 1553, AS 1858, AS 2203 or AS 2717, as appropriate.

Unless noted otherwise, all fillet welds shall be 6mm continuous category SP using E48XX electrodes or equivalent. All butt welds shall be complete penetration butt welds category SP to AS 1554.1

The extent of non-destructive weld examination shall be as noted below. Radiographic or ultrasonic examination shall be to AS 1554.1, AS 2177.1 and AS 2207 as appropriate.

TYPE OF WELD AND CATEGORY	EXAMINATION METHOD	EXTENT (% OF TOTAL LENGTH OF WELD TYPE)
FILLET WELDS , GP + SP	VISUAL INSPECTION	100
BUTT WELDS, GP	VISUAL INSPECTION	100
BUTT WELDS, SP	VISUAL INSPECTION	100
	RADIOGRAPHIC OR ULTRASONIC INSPECTION	10

All exposed welds shall be ground smooth.

08. Unless noted otherwise all cleat plates shall be 10mm thick.

09. Provide seal plates to hollow sections, with "breather" holes if members are to be hot dip galvanised.

10. All steelwork shall be securely temporarily braced as necessary to stabilise the structure during erection.

11. The contractor shall provide all necessary trimming members and cleats and drill all holes necessary for fixing steel to steel and other elements to steel whether or not detailed on the drawings.

12. All beams and rafters shall be fabricated and erected with natural camber up.

13. All members shall be supplied in single lengths. Splices shall only be permitted in locations shown on the structural drawings.

14. Steelwork intended to be concrete encased shall be unpainted. Encasing concrete shall be grade N25 providing a cover adequate to suit fire rating or exposure conditions. Concrete encasement shall be centrally reinforced with 5mm wire to AS 4617 or 6mm structural grade bars to AS 4617 at 150mm pitch.

15. Structural steelwork shall have surfaces cleaned and treated in accordance with the Specification below unless noted otherwise :-

All external exposed steelwork and steelwork built into masonry shall be abrasive blast cleaned to a Class 3 finish in accordance with AS 1627 Part 4 and hot dip galvanised in accordance with AS 4680. The continuous average zinc coating mass shall be 600g/m² (550g/m² minimum).

All steelwork below finished floor level and finished ground level shall be abrasive blast cleaned to a Class 2.5 finish in accordance with AS 1627 Part 4 and painted with an epoxy paint complying with AS 2364 so that the minimum dry film thickness is 200 micrometres.

All other steelwork shall be abrasive blast cleaned to a Class 2.5 finish in accordance with AS 1627 Part 4 and painted with an inorganic zinc silicate paint complying with AS 2105 so that the minimum dry film thickness is 70 micrometres.

Refer to architectural drawings and specification for treatment of all steelwork that is fire rated.

PURLINS AND GIRTS

01. All purlins and girts shall be cold formed light gauge sections conforming to AS 4600 for design and for material properties.

02. The overall dimensions of purlins and girts shall not be less than the nominal size given. Both flanges shall be lipped.

03. All purlins and girts shall be of Grade 450 steel, zinc coated to a minimum 350 grams per square metre.

04. The purlin and girt marks refer to the size as detailed below:
- The letter denotes the profile type ("SC" or "SZ").
- The first three digits denote the nominal depth in millimetres.
- The last two digits denote the steel thickness in tenths of a millimetre.

MASONRY WALLS

01. All workmanship and materials shall be in accordance with AS 3700. Masonry units shall comply with AS 4455. Wall ties shall comply with AS 2699.

02. Walls shown on structural drawings are load-bearing walls, unless noted otherwise. Non load-bearing walls shall be separated from the concrete structure above them with a minimum 20mm thick approved compressible isolation material.

03. No masonry walls which are supported by the concrete structure shall be erected until the formwork has been removed.

04. Masonry walls supporting concrete slabs and beams shall be troweled smooth and separated at the bearing surfaces with the slip material specified in the concrete notes.

05. The minimum compressive strength of clay masonry bricks shall be 22 MPa. Clay masonry bricks shall have a Characteristic Expansion value not exceeding 0.8 mm/m.

06. Concrete masonry blocks shall be of a minimum compressive strength Grade 15 in accordance with AS 4455.

07. Mortar for structural concrete masonry walls shall consist of a 1 part of cement to 0.25 parts of hydrated lime to 3 parts well-graded sand. Mortar for structural brick masonry walls shall consist of 1 part cement to 1 part hydrated lime to 6 parts well-graded sand. All mortar shall conform to requirements of AS 3700. Mortar admixtures shall not be used without the written approval of the Principal Contractor.

08. No chases or recesses are permitted in load bearing and structural masonry without the written approval of the Principal Contractor.

09. All load bearing and structural masonry shall be laid on full beds of mortar and all perpends shall be solidly filled with mortar.

10. Provide vertical control joints at 8m maximum centres, and 5m maximum from corners in masonry walls, unless noted otherwise on the drawings. All masonry walls supporting or supported by concrete floors shall be provided with vertical joints to match any control joints in the concrete.

11. Reinforcement for concrete masonry block walls shall be securely tied in position. Provide 20mm grout cover to the reinforcement unless noted otherwise.

12. Core fill grout for concrete masonry blocks shall be in accordance with AS 3700 with a minimum characteristic compressive strength of 20 MPa. The grout shall have a slump of 230mm +/- 30mm and the maximum size of aggregate shall be 10mm. Grout shall have a minimum cement content of 300 kg/m3.

13. Concrete masonry walls which are to be grout filled shall have cores cleaned of all mortar protrusions and shall be filled with grout in lifts of not more than 1200mm in height. Core fill grout shall be thoroughly compacted in place by internal vibrators. All cores are to be filled without the formation of voids. Clean-out holes shall be provided in the back-filled side at the base of retaining walls.

14. Unless noted otherwise on the drawings, all masonry walls shall be tied to abutting steel and concrete columns with 38x1.6x300 long crimped galvanised steel straps at maximum 400mm centres vertically. Fix straps to steel columns with 2/No 12 self drilling steel fasteners. Fix straps to concrete columns with 2/"Hilti DBZ" masonry anchors. All fixings shall be installed in strict accordance with the manufacturers instructions. (Alternative fixings may be submitted for approval.)

15. Unless noted otherwise on the drawings all masonry walls shall be tied to adjacent parallel steel members with 38 x 1.6 crimped galvanised steel straps at maximum 400mm centres to both the top and bottom of the steel member. The crimped ends of the straps shall be embedded a minimum of 90mm into the mortar joints. Fix straps to steel members with 2/No.12 self drilling steel fasteners installed in strict accordance with the manufacturers recommendations. (Alternative fixings may be submitted for approval).

16. Do not backfill cantilever retaining walls until at least 14 days have elapsed after the completion of the grout filling of the walls unless otherwise approved by the Principal Contractor.

17. Do not backfill retaining walls (other than cantilever walls) until a minimum of seven days have elapsed from the time of completion of the floor construction at the top and bottom of the wall.

18. Backfill to retaining walls shall be a highly permeable granular material. Provide a subsoil drain at the base of the wall connected to the stormwater drainage system unless noted otherwise.

ISSUE	DESCRIPTION	APPROVED	DATE
C	FRL REVISED	MG	21.01.21
B	DRAWING REVISED	MG	13.11.20
A	ISSUED FOR CONSTRUCTION	MG	06.11.20
7	CC2 RESUBMISSION		30.10.20
6	CC2 ISSUE		16.10.20
5	ISSUED FOR INFORMATION		28.08.20
4	ISSUED FOR INFORMATION		21.08.20
3	RE-ISSUED FOR CC1		12.08.20
2	RE-ISSUED FOR CC1		07.08.20
1	CC1 ISSUE		24.07.20

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PROJECT
PORTERS CREEK PUBLIC SCHOOL
75 Warnervale Rd. Warnervale NSW 2259

TITLE
CONSTRUCTION NOTES

SCALES	DATE
N/A @ A1	JUNE 2020

DRAWN	DESIGN	VERIFIED	APPROVED
AB	TO		

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ISSUE	PROJECT No.	DRAWING No.
C	7900	S-0-GE-02

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STEEL WALL FRAMING

01. All design, materials and workmanship shall be in accordance with AS 4600 Cold Formed Steel Structures Code.

02. All materials used for framing shall be to the approval of the Principal Contractor.

03. Unless noted otherwise on the drawings all wall framing shall be designed and installed by the manufacturer in accordance with the Specification and the relevant Australian Standards.

04. All framing shall be designed to carry the live loads in accordance with AS 1170.1 and earthquake loads in accordance with AS 1170.4.

05. All framing shall be designed for wind loads in accordance with AS 1170.2 using the Wind Speeds for Region A2 and Terrain Category 3

06. All framing shall be designed to carry the dead load of all framing members, cladding, linings, folding doors, services etc. as shown on the Architect's and other Consultant's drawings.

07. All framing dimensions shall be obtained from the Architectural drawings.

08. All wall framing shall be designed as load-bearing to resist all lateral loads. Sufficient bracing shall be provided to resist the full wind load effects from both the walls and roof of the building in all directions.

09. In addition to other design loads all wall framing shall be designed to support the following loads:-
    - Up to two rows of 300mm wide shelves. Each row of shelves shall be capable of supporting a vertical load of 50 kg per metre length of the shelf.
    - Impact load of 2kN applied at the mid height of the wall.

10. In addition to the deflection limits specified in the relevant Australian Standards, wall framing shall be designed to achieve the following additional deflection limits:-

ELEMENT	MAXIMUM DEFLECTION
Supporting rendered masonry walls	Span/1000
Supporting brick masonry walls	Span/600
Supporting cladding	Span/360

11. The Contractor shall prepare workshop drawings for the wall framing and shall submit three copies of each drawing seven days prior to the commencement of fabrication.

12. The Contractor shall submit certification prepared by a qualified practicing structural engineer for the design and installation of all wall framing

STEEL ROOF FRAMING

01. All design, materials and workmanship shall be in accordance with AS 4600 Cold Formed Steel Structures Code.

02. All materials used for roof framing shall be to the approval of the Principal Contractor.

03. Unless noted otherwise on the drawings all roof framing shall be designed and installed by the manufacturer in accordance with the Specification and the relevant Australian Standards.

04. Trusses shall be installed at 600mm maximum centres.

05. The truss manufacturer shall provide any additional bracing he deems necessary. The cost of any additional bracing is to be included in the Contractor's tender.

06. Roof framing shall be designed to carry the live loads in accordance with AS 1170.1 and earthquake loads in accordance with AS 1170.4.

07. Roof framing shall be designed for wind loads in accordance with AS 1170.2 using the Wind Speeds for Region A2 and Terrain Category 3

08. Roof framing shall be designed to carry the dead load of all framing, roof cladding, ceiling linings, folding doors, services etc. as shown on the Architect's and other Consultant's drawings.

09. All truss dimensions shall be obtained from the Architectural drawings.

10. Trusses shall be cambered by an amount equal to the total long term deflection under dead load (with a maximum tolerance of +/- 3mm).

    The total amount of the camber shall not exceed the smaller of the following values:-

    - Truss span/1000
    - 15mm

11. The difference in camber between a girder truss and any adjacent truss (and any two adjacent standard trusses) shall not exceed 5mm.

12. In addition to the deflection limits specified in the relevant Australian Standards, roof framing shall be designed to achieve the following additional deflection limits:-

LOAD CASE	MAXIMUM DEFLECTION
Dead Load	Span/360
Live Load	Span/240
Wind Load	Span/150

13. The Contractor shall prepare workshop drawings for the roof trusses and roof framing and shall submit three copies of each drawing seven days prior to the commencement of fabrication.
14. The Contractor shall submit certification prepared by a qualified practicing structural engineer for the design and installation of all roof trusses and roof framing.

ISSUE	DESCRIPTION	APPROVED	DATE
A	ISSUED FOR CONSTRUCTION		06.11.20
7	CC2 RESUBMISSION		30.10.20
6	CC2 ISSUE		16.10.20
5	ISSUED FOR INFORMATION		28.08.20
4	ISSUED FOR INFORMATION		21.08.20
3	RE-ISSUED FOR CC1		12.08.20
2	RE-ISSUED FOR CC1		07.08.20
1	CC1 ISSUE		24.07.20

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PROJECT

PORTERS CREEK PUBLIC SCHOOL

75 Warnervale Rd. Warnervale NSW 2259

TITLE

CONSTRUCTION NOTES

SCALES	DATE
N/A @ A1	JUNE 2020

DRAWN	DESIGN	VERIFIED	APPROVED
AB	TO		

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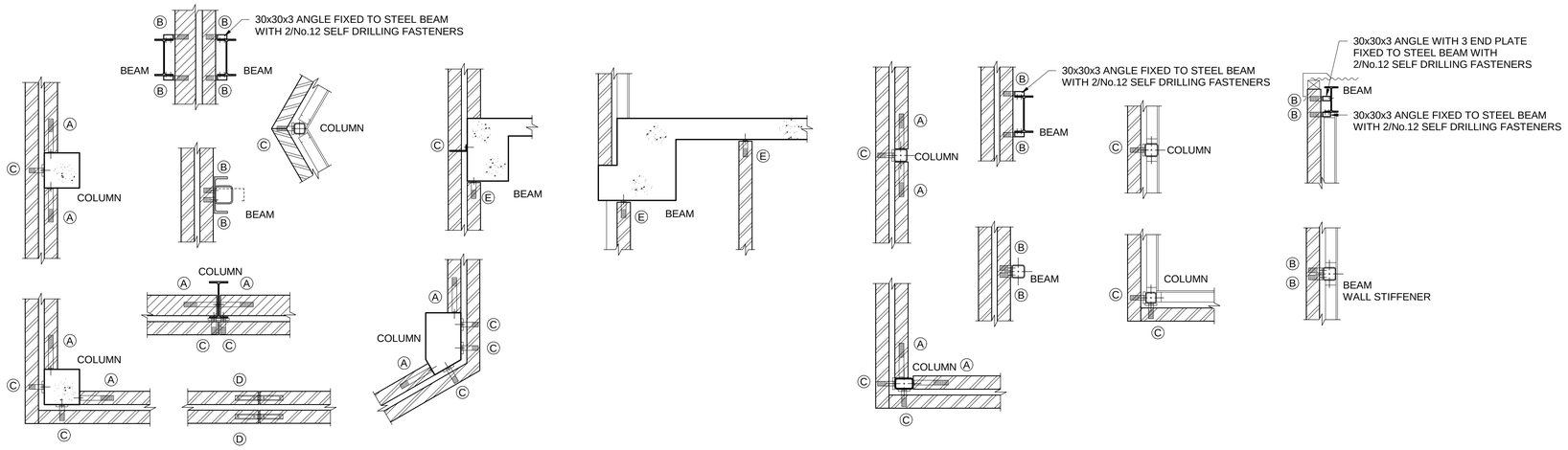
ISSUE	PROJECT No.	DRAWING No.
A	7900	S-0-GE-03

6/11/2020 4:59:05 PM



NOTES:

1. FIX STRAPS AND ANCHORS TO STEEL BEAMS WITH 2/No.12 SELF DRILLING STEEL FASTENERS. FIX STRAPS AND ANCHORS TO CONCRETE WITH 2/"HILTI BDZ" MASONRY ANCHORS. ALL FIXING SHALL BE INSTALLED IN STRICT ACCORDANCE THE MANUFACTURER'S RECOMMENDATIONS. (ALTERNATIVE FIXINGS MAY BE SUBMITTED FOR APPROVAL)
2. ALL EXPOSED JOINTS TO BE SEALED TO ARCHITECT'S SPECIFICATION.

Ⓐ 40x1.6 CRIMPED GALVANISED STEEL STRAPS AT MAXIMUM 400 cts. EMBED CRIMPED END OF STRAP A MINIMUM OF 300mm INTO MORTAR JOINT

Ⓑ 40x1.6 CRIMPED GALVANISED STEEL STRAPS AT MAXIMUM 400 cts. EMBED CRIMPED END OF STRAP A MINIMUM OF 120mm INTO MORTAR JOINT FOR BLOCKWORK. (90mm FOR BRICKWORK)

Ⓒ "MET 6-1" CAVITY EXPANSION TIES (WITH HEAVY DUTY ARM) AT MAXIMUM 400 cts.

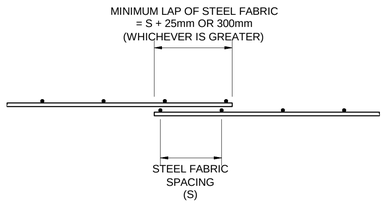
Ⓓ "MET 3-3" SLIDING EXPANSION TIES AT MAXIMUM 200 cts.

Ⓔ "MET 4-1" HEAD RESTRAINT TIES AT MAXIMUM 400 cts.

TYPICAL CONNECTION DETAILS OF MASONRY TO CONCRETE AND STEEL

SCALE 1:20

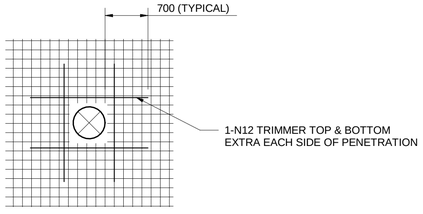
(USE AS REQUIRED)



TYPICAL LAP OF STEEL FABRIC REINFORCEMENT

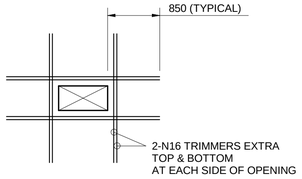
SCALE 1:10

(USE AS REQUIRED)



TYPICAL DETAIL FOR MESH REINFORCEMENT AT PENETRATION LESS THAN 200mm DIA.

(N.T.S.)



TYPICAL SLAB PENETRATION DETAIL U.N.O.

(N.T.S.)

CIRCULAR PENETRATION SIMILAR

CONCRETE TOPPING SLAB

AREAS OF CONCRETE TO BE TOPPED SHALL BE TREATED IN ACCORDANCE WITH THE FOLLOWING SPECIFICATION:-

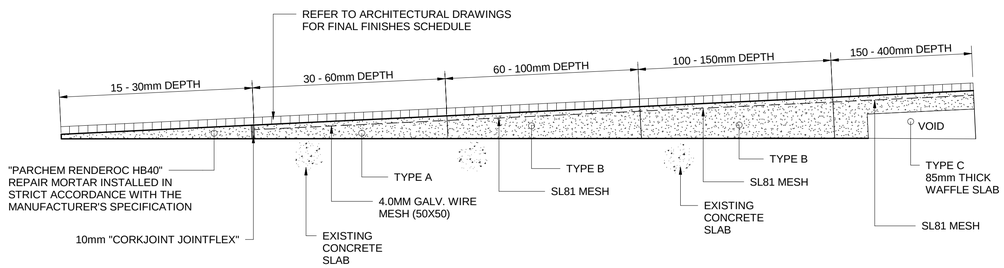
1. SCABBLE THE CONTACT SURFACES OF THE TOPPING AREA TO PROVIDE A MECHANICAL KEY.
2. THE CONTACT SURFACES OF THE TOPPING AREA SHALL BE CLEANED SO THAT ALL LOOSE OR SOFT MATERIAL, FREE WATER, FOREIGN MATTER AND LAITANCE ARE REMOVED.
3. THE CONTACT SURFACES OF THE TOPPING AREA SHALL BE THOROUGHLY SOAKED LEAVING NO FREE WATER AND THEN PRIMED WITH "PARCHEM NITOBOND EP" BONDING AGENT (TYPE A) OR "ARDEX" PRIMING SPECIFICATION. ALL PRODUCTS TO BE APPLIED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
4. WHILE THE BONDING AGENT IS STILL TACKY INSTALL THE CONCRETE TOPPING.
5. THE CONCRETE TOPPING SLAB SHALL BE APPLIED IN VARIOUS METHODS ACCORDING TO THE TOTAL THICKNESS OF THE TOPPING REQUIRED, AND IS AS FOLLOWS:-

NOTE THAT THE STRUCTURAL TOPPING THICKNESS DOES NOT INCLUDE THE FINAL ARCHITECTURAL TOPPING FINISH. ALL PRODUCTS TO BE INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURERS SPECIFICATIONS.

STRUCTURAL TOPPING THICKNESS	TOPPING REQUIRED	REINFORCEMENT REQUIRED
FEATHERED EDGE, UP TO 30mm	"PARCHEM RENDEROC HB40" REPAIR MORTAR	FOR T > 10mm, USE 2.8mm-7mm MIXED AGGREGATE
30mm UP TO 60mm	TYPE A	4.0mm GALV. WIRE MESH (50X50)
60mm UP TO 100mm	TYPE B	1 LAYER SL81 MESH
100mm UP TO 150mm	TYPE B	1 LAYER SL81 MESH
150mm UP TO 400mm	TYPE C	1 LAYER SL81 MESH

CONCRETE TOPPING

f'c=32Mpa AGGREGATE SIZE=10mm MAXIMUM SLUMP=80mm 25 COVER TO TOP



TYPICAL CONCRETE TOPPING SLAB/RAMP SECTION

(N.T.S.)

(USE AS REQUIRED)

NOTE:
PROVIDE SAWN JOINTS AT 3m MAXIMUM GRIDS TO A 1 /4 DEPTH OF TOPPING THICKNESS.
MAINTAIN 25 COVER TO REINFORCEMENT. SAWN JOINTS TO BE CARRIED OUT 12-24 HOURS FROM TIME OF POURING CONCRETE.

REFER TO ARCHITECTS DRAWINGS FOR LOCATIONS

STEEL LINTEL SCHEDULE

MAX OPENING SIZE	LINTEL SIZE	MIN. BEARING EACH END
950	50 x 10 FLAT (GALV.)	150mm
1500	90 x 90 x 8 ANGLE (GALV.)	150mm
1800	100 x 75 x 8 ANGLE (GALV.)	150mm
2400	150 x 90 x 8 ANGLE (GALV.)	230mm
3000	150 x 100 x 12 ANGLE (GALV.)	230mm

NOTE: LONG LEG UP FOR ANGLE LINTELS

COLUMN SCHEDULE OF TYPICAL MINIMUM REINFORCEMENT ANCHORAGE LENGTHS

BAR SIZE	SPLICE LENGTH	EMBEDMENT LENGTH	COG INTO FOOTING	COG INTO BEAM/SLAB
N16	600	700	300	500
N20	900	1000	600	700
N24	1100	1200	800	1000
N28	1400	1500	1100	1300
N32	1600	1850	1300	1600

SLAB REINFORCEMENT LAP & COG SCHEDULE

TAG	LAP LENGTH	COG LENGTH
N12	500	350
N16	750	500
N20	1000	500
N24	1250	500
USED IN ALL CASES U.N.O.		

BEAM REINFORCEMENT LAP & COG SCHEDULE

TAG	TOP BAR LAP LENGTH	BOTTOM BAR LAP LENGTH	COG
N12	600	450	250
N16	900	700	500
N20	1200	950	500
N24	1550	1200	500
N28	1950	1500	500
N32	2300	1800	500
N28	2600	2000	550

WALL REINFORCEMENT LAP SCHEDULE

BAR TAG	BAR LAP LENGTH	
	VERTICAL	HORIZONTAL
N12	650	650
N16	950	950
N20	1100	1100

ISSUE	DESCRIPTION	APPROVED	DATE
A	ISSUED FOR CONSTRUCTION		06.11.20
6	CC2 RESUBMISSION		30.10.20
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PROJECT

PORTERS CREEK PUBLIC SCHOOL

75 Warnervale Rd. Warnervale NSW 2259

TITLE

GENERAL NOTES

SCALES	DATE
AS NOTED @ A1	JUNE 2020

DRAWN	DESIGN	VERIFIED	APPROVED
AB	TO		

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ISSUE	PROJECT No.	DRAWING No.
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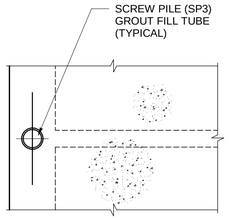
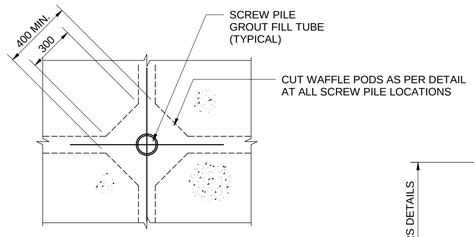
6/11/2020 4:59:07 PM



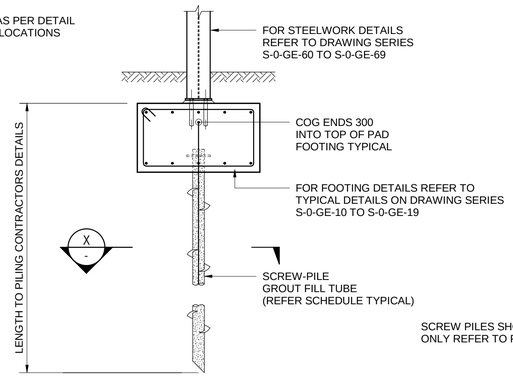
PLAN AT EDGE BEAM JUNCTION

PLAN



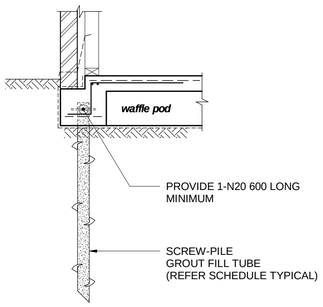
PLAN AT INTERNAL RIB JUNCTION

PLAN



SECTION X/-

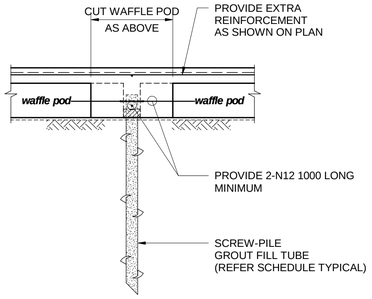
SCALE 1:20



SCREW PILE AT EDGE BEAM U.N.O.

SCALE 1: 10

REFER TO PLANS FOR LOCATIONS & SCHEDULE.
FINAL DESIGN AND CERTIFICATION BY SCREW PILE DESIGNER.
DESIGN LIFE = 50 YEARS.
DETAIL ALLOWS FOR PILE PLACEMENT TOLERANCE OF 75mm TO AS2159



SCREW PILE AT INTERNAL RIB U.N.O.

SCALE 1: 10

REFER TO PLANS FOR LOCATIONS & SCHEDULE.
FINAL DESIGN AND CERTIFICATION BY SCREW PILE DESIGNER.
DESIGN LIFE = 50 YEARS.
DETAIL ALLOWS FOR PILE PLACEMENT TOLERANCE OF 75mm TO AS2159

SCREW PILE AT PAD FOOTING U.N.O.

SCALE 1: 10

REFER TO PLANS FOR LOCATIONS & SCHEDULE.
FINAL DESIGN AND CERTIFICATION BY SCREW PILE DESIGNER.
DESIGN LIFE = 50 YEARS.
DETAIL ALLOWS FOR PILE PLACEMENT TOLERANCE OF 75mm TO AS2159

STEEL SCREW PILE FOOTING SYSTEM:

1. STEEL SCREW PILES SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH AS2159 PILING - DESIGN AND INSTALLATION, TO PROVIDE THE SAFE WORKING LOADS NOMINATED ON THE STRUCTURAL DRAWINGS.

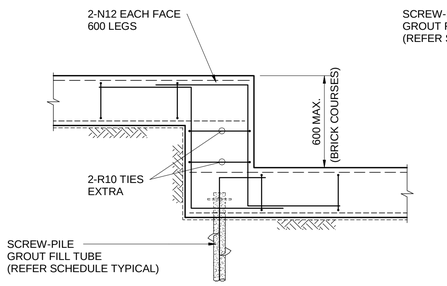
2. ALL DESIGN, DOCUMENTATION AND CERTIFICATION FOR THE STEEL SCREW PILES AND THE ASSOCIATED BEARING PLATES, ANCHORAGE REINFORCEMENT ETC. SHALL BE PROVIDED BY THE CONTRACTOR.

   STRUCTURAL CERTIFICATION SHALL BE PROVIDED BY THE CONTRACTOR FOR BOTH THE DESIGN AND INSTALLATION OF ALL OF THE STEEL SCREW PILES AND ASSOCIATED ELEMENTS.

3. THE CONTRACTOR SHALL DESIGN THE STEEL SCREW PILES TO PROVIDE A MINIMUM 50 YEAR DESIGN LIFE IN ACCORDANCE WITH AS2159 PILING - DESIGN AND INSTALLATION.

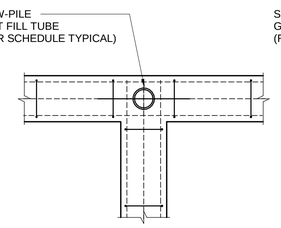
4. THE CONTRACTOR SHALL CONFIRM WHAT LEVEL AND TYPE OF CORROSION PROTECTION TO THE STEEL SCREW PILES WILL BE PROVIDED. IT SHOULD BE NOTED THAT ADDITIONAL GEOTECHNICAL TESTING MAY NEED TO BE CARRIED OUT TO DETERMINE THE REQUIRED EXPOSURE CLASSIFICATION FOR THE STEEL PILES IN ACCORDANCE WITH AS2159 PILING - DESIGN AND INSTALLATION.

5. THE CONTRACTOR SHALL CONFIRM WHAT LEVEL AND TYPE OF CAPACITY/INTEGRITY TESTING IN ACCORDANCE WITH AS2159 PILING - DESIGN AND INSTALLATION IS PROPOSED TO BE CARRIED OUT.



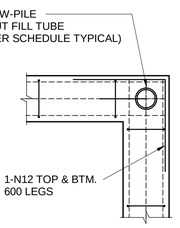
STEP DETAIL

SECTION



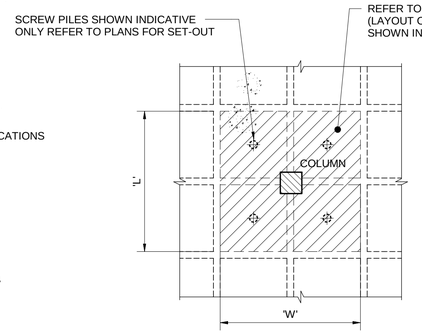
'T' JUNCTION

PLAN



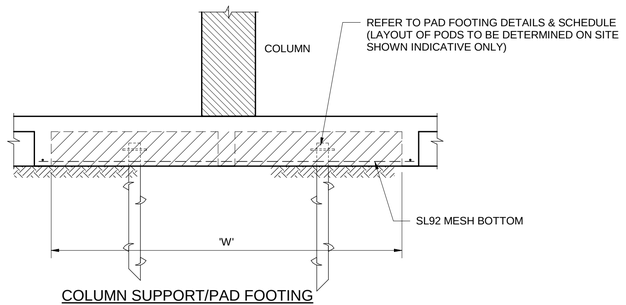
CORNER JUNCTION

PLAN



COLUMN SUPPORT/PAD FOOTING

PLAN



COLUMN SUPPORT/PAD FOOTING

SECTION

WAFFLE POD COLUMN SUPPORT DETAILS

SCALE 1:50

ISSUE	DESCRIPTION	APPROVED	DATE
A	ISSUED FOR CONSTRUCTION		06.11.20
6	CC2 RESUBMISSION		30.10.20
5	CC2 ISSUE		16.10.20
4	ISSUED FOR INFORMATION		28.08.20
3	ISSUED FOR INFORMATION		21.08.20
2	RE-ISSUED FOR CC1		07.08.20
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PROJECT

PORTERS CREEK PUBLIC SCHOOL

75 Warnervale Rd. Warnervale NSW 2259

TITLE

TYPICAL FOOTING DETAILS

SCALES	DATE
1:20 @ A1	JUNE 2020

DRAWN	DESIGN	VERIFIED	APPROVED
AB	TO		

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ISSUE	PROJECT No.	DRAWING No.
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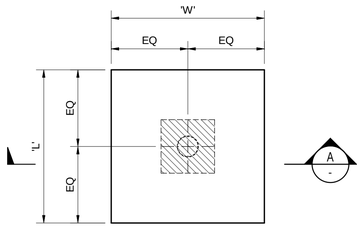
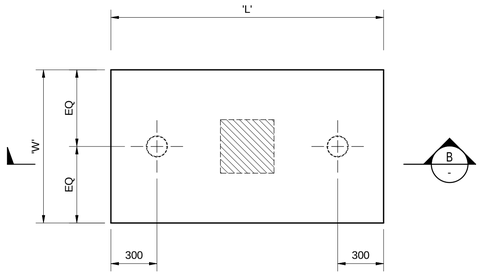
6/11/2020 4:39:07 PM



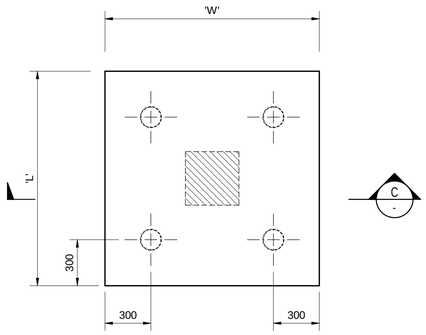
TYPICAL SINGLE SCREW PAD FOOTING

SCALE 1: 20



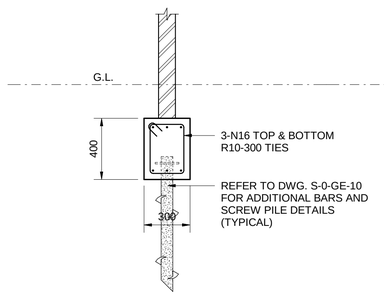
TYPICAL TWO SCREW PILE PAD FOOTING

SCALE 1: 20



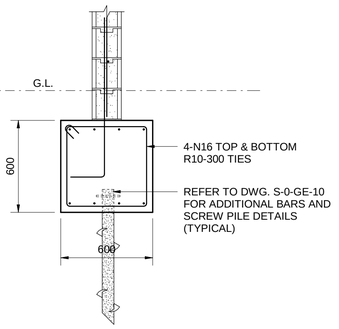
TYPICAL FOUR SCREW PILE PAD FOOTING

SCALE 1: 20



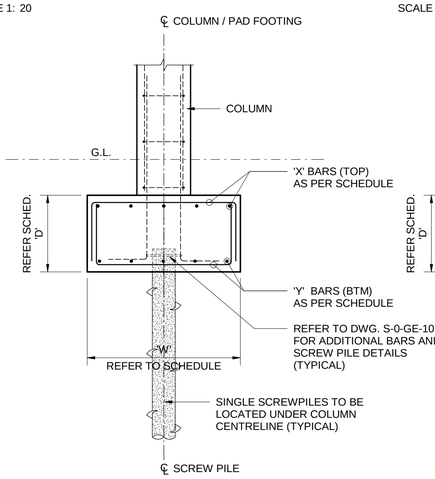
TYPICAL FB-A DETAIL

SCALE 1: 20



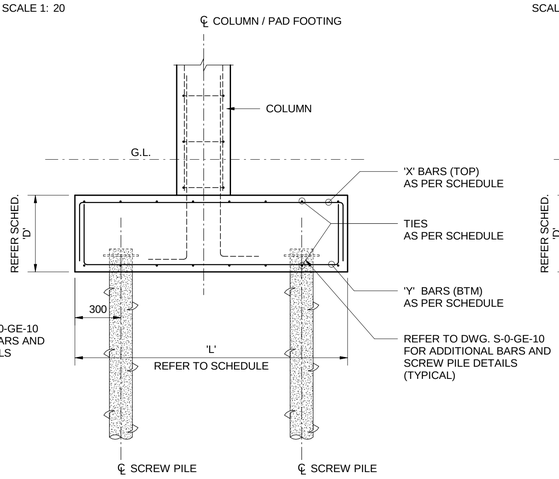
TYPICAL FB-B DETAIL

SCALE 1: 20



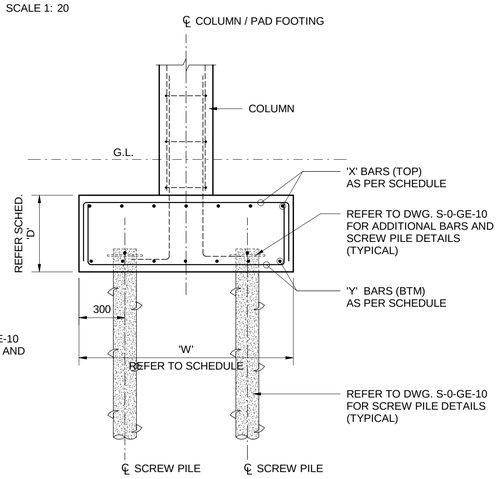
SECTION A

SCALE 1:20



SECTION B

SCALE 1:20



SECTION C

SCALE 1:20

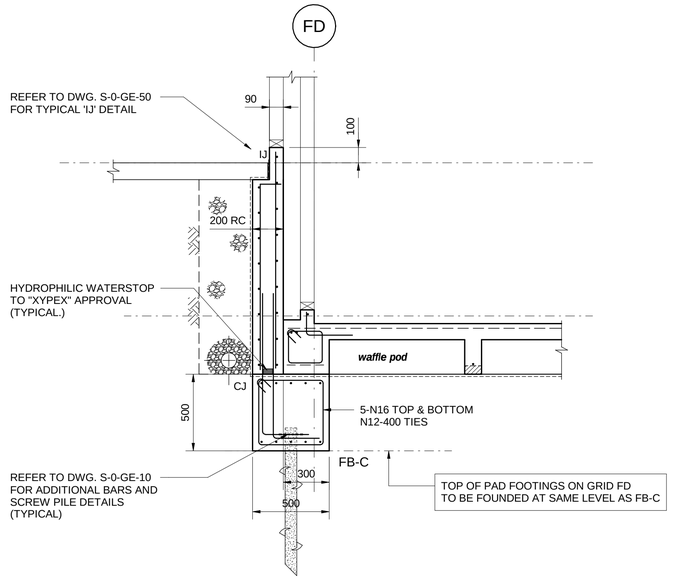
LOCALLY DISPLACE FOOTING BOTTOM REINFORCEMENT
AS REQUIRED TO AVOID CLASHES WITH SCREW PILES
(REFER TO SCREW PILING CONTRACTORS DETAILS)

TYPICAL PAD FOOTING DETAILS

SCALE 1: 20

THE CONTRACTOR SHALL ARRANGE FOR A REPRESENTATIVE FROM THE GEOTECHNICAL CONSULTANT TO BE PRESENT COMMENCEMENT DRILLING OF THE SCREW PILES TO BE DETERMINE THE ACTUAL LEVELS & CONFIRM BEARING MATERIALS. THE COST OF THIS SHALL BE DEEMED TO BE INCLUDED IN THE CONTRACTORS TENDER.

LOCALLY DISPLACE FOOTING BOTTOM REINFORCEMENT
AS REQUIRED TO AVOID CLASHES WITH SCREW PILES
(REFER TO SCREW PILING CONTRACTORS DETAILS)



TYPICAL FB-C DETAIL

SCALE 1: 20

ADMIN (A) PAD FOOTING SCHEDULE

TAG	SIZE (MIN.) L x W x D	REINFORCEMENT 'X' BARS	'Y' BARS	TIES	PILE TYPE	No. OF PILES
A-PF1	800 x 800 x 300	4-N16 U-BARS	4-N16 U-BARS	-	SP4	1

HALL (B) PAD FOOTING SCHEDULE

TAG	SIZE (MIN.) L x W x D	REINFORCEMENT 'X' BARS	'Y' BARS	TIES	PILE TYPE	No. OF PILES
B-PF1	1000 x 1000 x 400	5-N16 U-BARS	5-N16 U-BARS	-	SP8	1
B-PF2	800 x 800 x 300	4-N16 U-BARS	4-N16 U-BARS	-	SP4	1
B-PF3	400 x 400 x 400	4-N12 U-BARS	4-N12 U-BARS	-	-	-
B-PF4	1000 x 1000 x 400	5-N16 U-BARS	5-N16 U-BARS	-	SP10	1
B-PF5	600 x 600 x 300	3-N12 U-BARS	3-N12 U-BARS	-	SP3	1
B-PF6	600 x 600 x 300	3-N12 U-BARS	3-N12 U-BARS	-	SP5	1
B-PF7	not used					
B-PF8	2000 x 1000 x 400	5-N16 U-BARS	5-N16 U-BARS	N12-250 U-BARS	SP5	2
B-PF9	600 x 600 x 300	3-N12 U-BARS	3-N12 U-BARS	-	SP6	1
B-PF10	600 x 600 x 300	3-N12 U-BARS	3-N12 U-BARS	-	SP7	1

NOTE: PAD FOOTING SIZES GIVEN ARE MINIMUM SIZES.
PADS CAN BE MADE BIGGER TO SUIT WAFFLE POD BLOCK OUTS IF REQUIRED.
(EXTRA REINFORCEMENT SHOULD BE ADDED TO SUIT)

TEACHING SPACE (C) PAD FOOTING SCHEDULE

TAG	SIZE (MIN.) L x W x D	REINFORCEMENT 'X' BARS	'Y' BARS	TIES	PILE TYPE	No. OF PILES
C-PF1	1000 x 1000 x 400	5-N16 U-BARS	5-N16 U-BARS	-	SP18	1
C-PF2	1000 x 1000 x 400	5-N16 U-BARS	5-N16 U-BARS	-	SP12	1
C-PF3	1000 x 1000 x 400	5-N16 U-BARS	5-N16 U-BARS	-	SP14	1
C-PF4	1000 x 1000 x 400	5-N16 U-BARS	5-N16 U-BARS	-	SP16	1
C-PF5	2000 x 2000 x 500	10-N20 U-BARS	10-N20 U-BARS	-	SP13	4
C-PF6	2400 x 800 x 700	6-N24 U-BARS	6-N24 U-BARS	N12-300 TIES	SP16	2
C-PF7	1000 x 1000 x 400	5-N16 U-BARS	5-N16 U-BARS	-	SP15	1
C-PF8	1000 x 1000 x 400	5-N16 U-BARS	5-N16 U-BARS	-	SP17	1
C-PF9	1350 x 800 x 500	6-N16 U-BARS	6-N16 U-BARS	N12-250 TIES	SP5	2
C-PF10	1350 x 800 x 500	6-N16 U-BARS	6-N16 U-BARS	N12-250 TIES	SP7	2
C-PF11	1900 x 800 x 500	6-N20 U-BARS	6-N20 U-BARS	N12-250 TIES	SP11	2
C-PF12	1900 x 800 x 500	6-N20 U-BARS	6-N20 U-BARS	N12-250 TIES	SP12	2
C-PF13	1000 x 1000 x 400	5-N16 U-BARS	5-N16 U-BARS	-	SP5	1
C-PF14	400 x 400 x 400	4-N12 U-BARS	4-N12 U-BARS	-	-	-

NOTE: PAD FOOTING SIZES GIVEN ARE MINIMUM SIZES.
PADS CAN BE MADE BIGGER TO SUIT WAFFLE POD BLOCK OUTS IF REQUIRED.
(EXTRA REINFORCEMENT SHOULD BE ADDED TO SUIT)

COVERED WAY (CW) PAD FOOTING SCHEDULE

TAG	SIZE (MIN.) L x W x D	REINFORCEMENT 'X' BARS	'Y' BARS	PILE TYPE	No. OF PILES
CW-PF1	600 x 600 x 300	MASS CONCRETE	MASS CONCRETE	SP19	1

LIBRARY (D) PAD FOOTING SCHEDULE

TAG	SIZE (MIN.) L x W x D	REINFORCEMENT 'X' BARS	'Y' BARS	TIES	PILE TYPE	No. OF PILES
D-PF1	1600 x 800 x 500	4-N20 U-BARS	4-N20 U-BARS	N12-250 U-BARS	SP7	2
D-PF2	not used					
D-PF3	not used					
D-PF4	1000 x 1000 x 400	5-N16 U-BARS	5-N16 U-BARS	-	SP13	1
D-PF5	1000 x 1000 x 400	5-N16 U-BARS	5-N16 U-BARS	-	SP12	1
D-PF6	1000 x 1000 x 400	5-N16 U-BARS	5-N16 U-BARS	-	SP7	1
D-PF7	1000 x 1000 x 400	5-N16 U-BARS	5-N16 U-BARS	-	SP18	1
D-PF8	1000 x 1000 x 600	5-N16 U-BARS	5-N16 U-BARS	-	SP14	1
D-PF9	1350 x 800 x 500	6-N16 U-BARS	6-N16 U-BARS	N12-250 U-BARS	SP5	2
D-PF10	2100 x 800 x 700	6-N24 U-BARS	6-N24 U-BARS	N12-250 U-BARS	SP15	2
D-PF11	not used					
D-PF12	2000 x 2000 x 500	10-N20 U-BARS	10-N20 U-BARS	-	SP12	4
D-PF13	400 x 400 x 400	4-N12 U-BARS	4-N12 U-BARS	-	-	-

NOTE: PAD FOOTING SIZES GIVEN ARE MINIMUM SIZES.
PADS CAN BE MADE BIGGER TO SUIT WAFFLE POD BLOCK OUTS IF REQUIRED.
(EXTRA REINFORCEMENT SHOULD BE ADDED TO SUIT)

ISSUE	DESCRIPTION	APPROVED	DATE
B	DRAWING REVISED	TO	03.12.20
A	ISSUED FOR CONSTRUCTION	MG	06.11.20
7	CC2 RESUBMISSION		30.10.20
6	CC2 ISSUE		16.10.20
5	ISSUED FOR INFORMATION		28.08.20
4	ISSUED FOR INFORMATION		21.08.20
3	RE-ISSUED FOR CC1		12.08.20
2	RE-ISSUED FOR CC1		07.08.20
1	CC1 ISSUE		24.07.20

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PROJECT
PORTERS CREEK PUBLIC SCHOOL
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TITLE
TYPICAL FOOTING DETAILS

SCALES	DATE
1:20 @ A1	JUNE 2020

DRAWN	DESIGN	VERIFIED	APPROVED
AB	TO		

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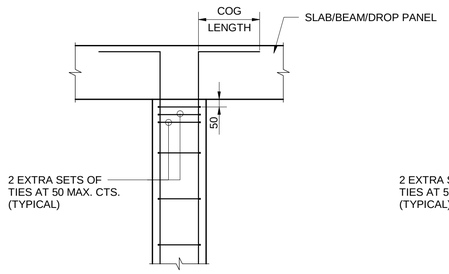
ISSUE	PROJECT No.	DRAWING No.
B	7900	S-0-GE-11

30/7/2020 8:43:45 PM

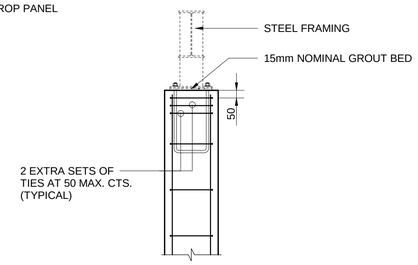
TYPICAL COLUMN SPLICE DETAILS (USE AS REQUIRED)

SCALE = 1:20



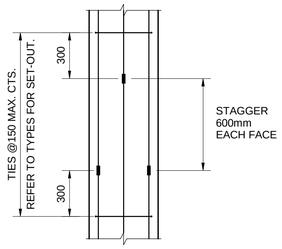
TOP OF COLUMN JUNCTION

DETAIL A - USE AS REQUIRED



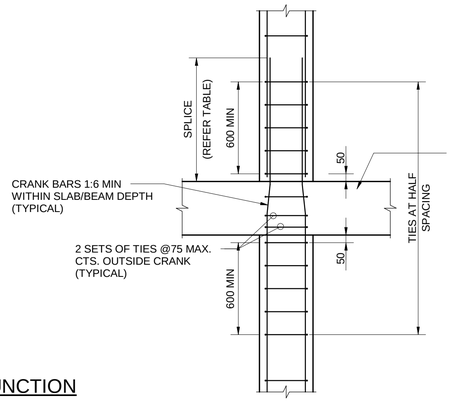
TOP OF COLUMN JUNCTION

DETAIL B - USE AS REQUIRED



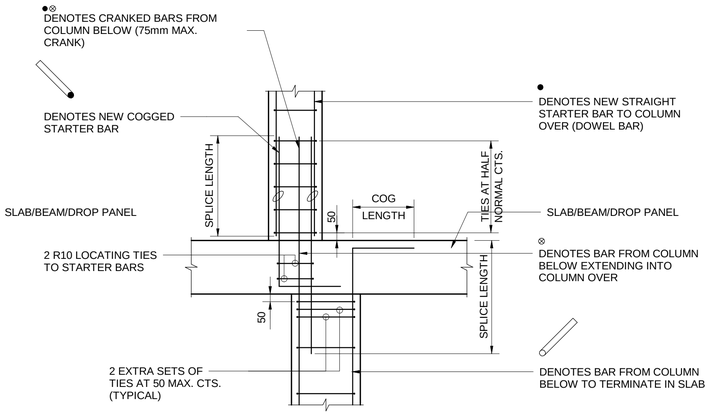
COLUMN REINFORCEMENT JUNCTION

DETAIL C - USE AS REQUIRED



FLOOR JUNCTION

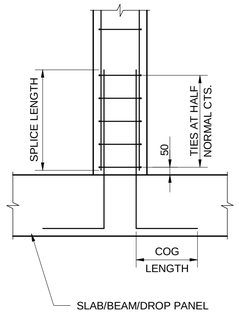
DETAIL D - USE AS REQUIRED



DIAGRAMTICAL TRANSITION (REFER TO COLUMN TRANSITION PLANS)

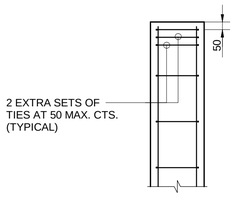
DETAIL E - USE AS REQUIRED

NOTES:
1. ALL STARTER BARS & DOWEL BARS TO BE THE SAME SIZE AS REINFORCEMENT IN COLUMN OVER U.N.O.



FOOTING/BEAM/DROP PANEL JUNCTION

DETAIL F - USE AS REQUIRED

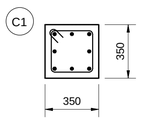


TOP OF COLUMN JUNCTION

DETAIL G - USE AS REQUIRED

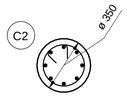
COLUMN TIE SECTIONS

SCALE = 1:20



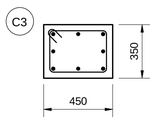
TIE TYPE 1

8 BARS
N12@300 TIES +
HOOKS AS SHOWN



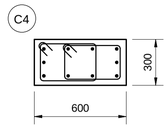
TIE TYPE 2

8 BARS
N12@300 TIES +
HOOKS AS SHOWN



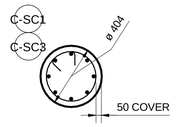
TIE TYPE 3

8 BARS
N12@300 TIES +
HOOKS AS SHOWN



TIE TYPE 4

10 BARS
N12@300 TIES +
HOOKS AS SHOWN



REFER TO TEACHING SPACE DRAWINGS FOR SCHEDULE AND TYPICAL DETAILS

TIE TYPE 5

8 BARS
N12@240 TIES +
HOOKS AS SHOWN

CONCRETE COLUMN SCHEDULE

MARK	SIZE	REINFORCEMENT	STRENGTH (MPa)
C1	350 x 350	8-N24, N12-300 TIES	40
C2	ϕ350	8-N24, N12-300 TIES	40
C3	350 x 450	8-N24, N12-300 TIES	40
C4	300 x 600	10-N20, N12-300 TIES	40

COLUMN SCHEDULE OF TYPICAL MINIMUM REINFORCEMENT ANCHORAGE LENGTHS

BAR SIZE	SPLICE LENGTH	EMBEDMENT LENGTH	COG INTO FOOTING	COG INTO BEAM/SLAB
N16	600	700	300	500
N20	900	1000	600	700
N24	1100	1200	800	1000
N28	1400	1500	1100	1300
N32	1600	1850	1300	1600

ISSUE	DESCRIPTION	APPROVED	DATE
A	ISSUED FOR CONSTRUCTION		06.11.20
6	CC2 RESUBMISSION		30.10.20
5	CC2 ISSUE		16.10.20
4	ISSUED FOR INFORMATION		28.08.20
3	ISSUED FOR INFORMATION		21.08.20
2	RE-ISSUED FOR CC1		07.08.20
1	CC1 ISSUE		24.07.20

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www.birzulisassociates.com

PROJECT
PORTERS CREEK PUBLIC SCHOOL
75 Warnervale Rd. Warnervale NSW 2259

TITLE
TYPICAL COLUMN DETAILS

SCALES	DATE
1:20 @ A1	JUNE 2020

DRAWN	DESIGN	VERIFIED	APPROVED
AB	TO		

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ISSUE	PROJECT No.	DRAWING No.
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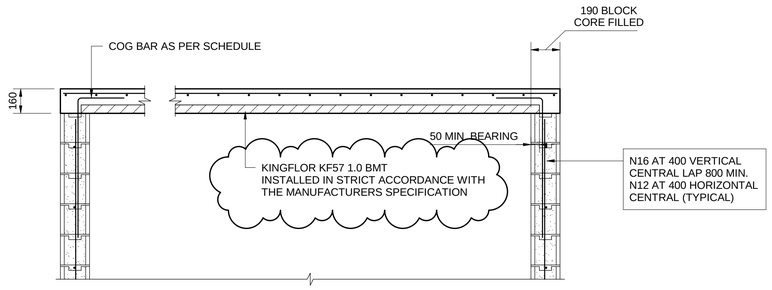
01/12/2021 4:59:10 PM

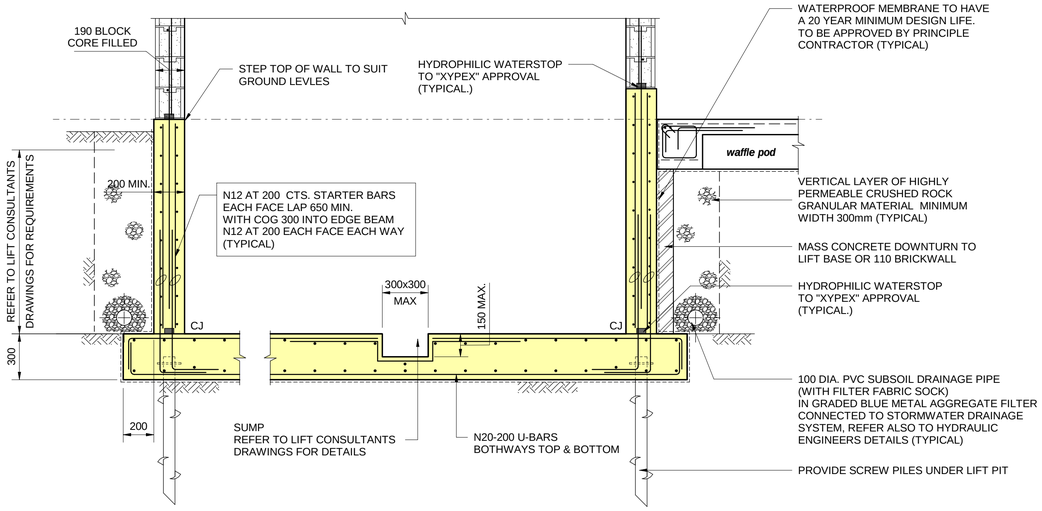


TYPICAL LIFT SHAFT LID DETAIL

N12@200 CTS. EACH WAY TOP, N12-300 BTM. EXTRA IN KINGFLOR SPAN DIRECTION
LIFTING EYE IF REQUIRED TO LIFT MANUFACTURERS SPECIFICATION
MAXIMUM SAFE WORKING LOAD = 2000Kg

WALL REINFORCEMENT LAP SCHEDULE

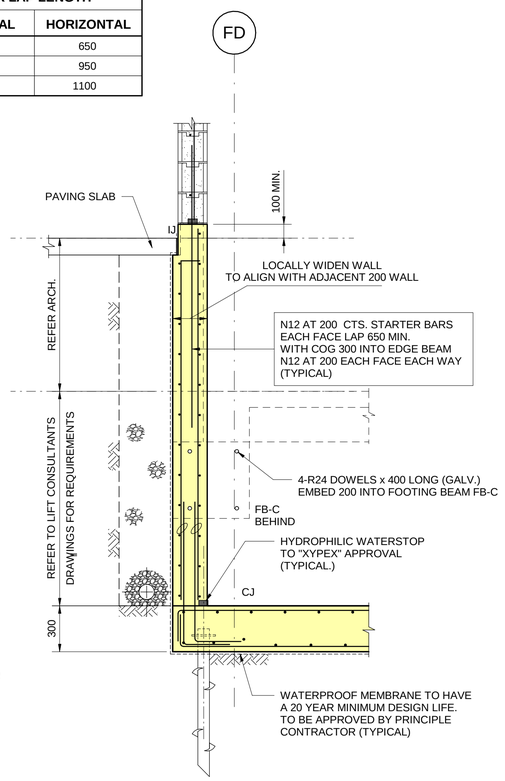
BAR TAG	BAR LAP LENGTH	
	VERTICAL	HORIZONTAL
N12	650	650
N16	950	950
N20	1100	1100



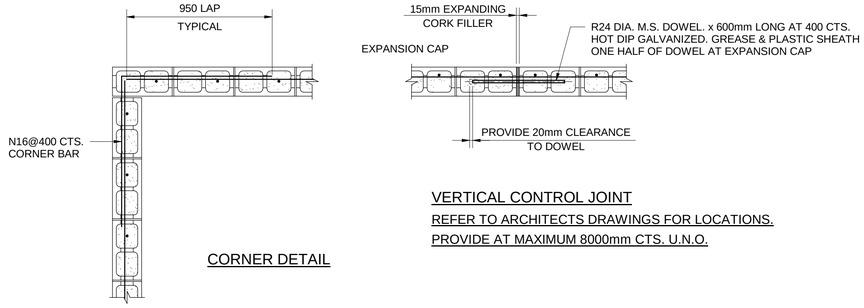
TYPICAL LIFT PIT BASE DETAIL

N20@200 EACH WAY TOP & BTM

WALLS & SLABS SHOWN THUS TO HAVE "XYPEX" ADDITIVE.
INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURERS
SPECIFICATION.



LIFT PIT WALL AT 200 RC RETAINING WALL

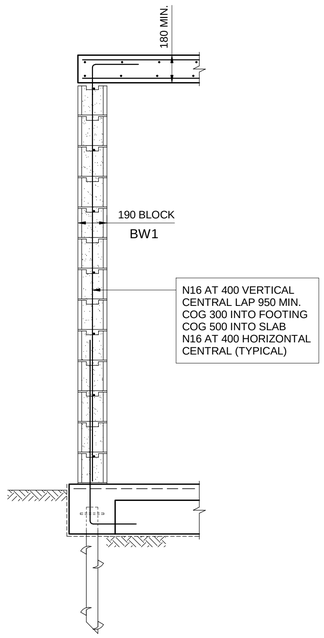


VERTICAL CONTROL JOINT
REFER TO ARCHITECTS DRAWINGS FOR LOCATIONS.
PROVIDE AT MAXIMUM 8000mm CTS. U.N.O.

CORNER DETAIL

TYPICAL REINFORCED BLOCK WALL JUNCTION DETAILS

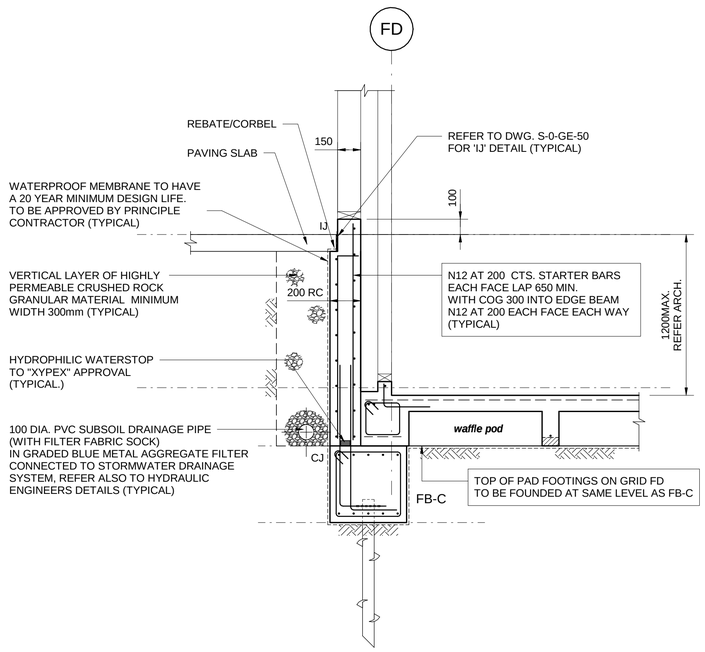
SCALE 1:20



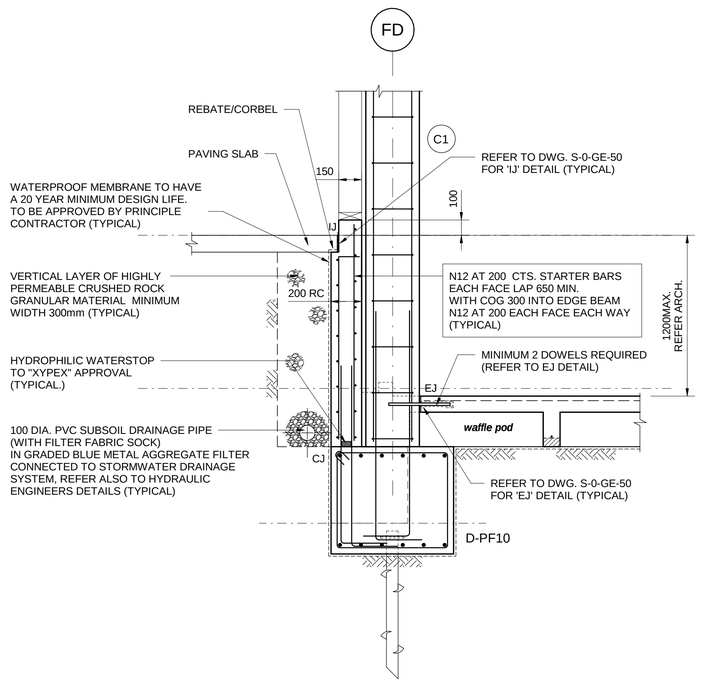
BW1 - 190 RC BLOCK WALL

BEAM REINFORCEMENT LAP & COG SCHEDULE

TAG	TOP BAR LAP LENGTH	BOTTOM BAR LAP LENGTH	COG
N12	600	450	250
N16	900	700	500
N20	1200	950	500
N24	1550	1200	500
N28	1950	1500	500
N32	2300	1800	500
N28	2600	2000	550



200 RC RETAINING WALL AT LIBRARY



200 RC RETAINING WALL & PAD FOOTING AT LIBRARY

ISSUE	DESCRIPTION	APPROVED	DATE
B	DRAWING REVISED	TO	03.12.20
A	ISSUED FOR CONSTRUCTION	MG	06.11.20
7	CC2 RESUBMISSION		30.10.20
6	CC2 ISSUE		16.10.20
5	ISSUED FOR INFORMATION		28.08.20
4	ISSUED FOR INFORMATION		21.08.20
3	RE-ISSUED FOR CC1		12.08.20
2	RE-ISSUED FOR CC1		07.08.20
1	CC1 ISSUE		24.07.20

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www.birzulisassociates.com

PROJECT
PORTERS CREEK PUBLIC SCHOOL
75 Warnervale Rd. Warnervale NSW 2259

TITLE
TYPICAL WALL DETAILS

SCALES	DATE
1:20 @ A1	JUNE 2020

DRAWN	DESIGN	VERIFIED	APPROVED
AB	TO		

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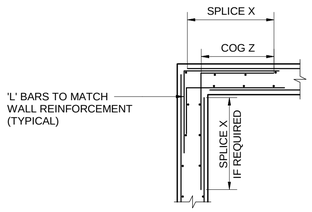
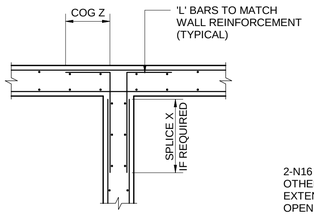
ISSUE	PROJECT No.	DRAWING No.
B	7900	S-0-GE-30

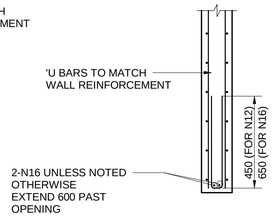
30/12/2020 3:41:45 PM



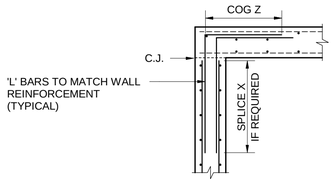
PLAN - CORNER JUNCTION



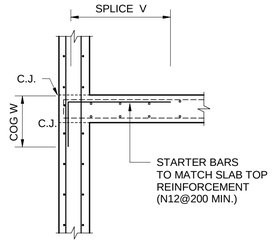
PLAN - 'T' JUNCTION

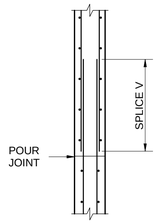


SECTION - TYPICAL DOOR HEAD
(WALL END & TOP DETAILS SIMILAR)
(PENETRATIONS IN WALL SIMILAR)



SECTION - WALL TO FLOOR SLAB





POUR JOINT

SCHEDULE OF SPLICE & COG LENGTHS FOR WALLS				
BAR SIZE	**SPLICE 'V'**	**COG 'W'**	**SPLICE 'X'**	**COG 'Z'**
N12	650	450	650	500
N16	950	750	950	750

WALL REINFORCEMENT LAP SCHEDULE

BAR TAG	**BAR LAP LENGTH**	
	VERTICAL	**HORIZONTAL**
N12	650	650
N16	950	950
N20	1100	1100

TYPICAL R.C. WALL DETAILS

SCALE 1:20

ISSUE	DESCRIPTION	APPROVED	DATE
A	ISSUED FOR CONSTRUCTION	PG	20.01.21

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61 2 9922 2344
nbrsarchitecture.com

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PROJECT
PORTERS CREEK PUBLIC SCHOOL
75 Warnervale Rd. Warnervale NSW 2259

TITLE
TYPICAL WALL DETAILS

SCALES	DATE
1:20 @ A1	01/19/21

DRAWN	DESIGN	VERIFIED	APPROVED
AB	PG		

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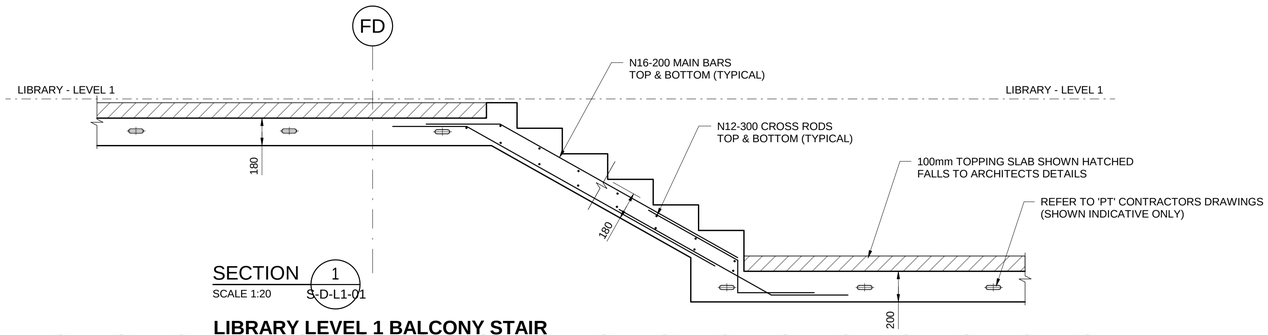
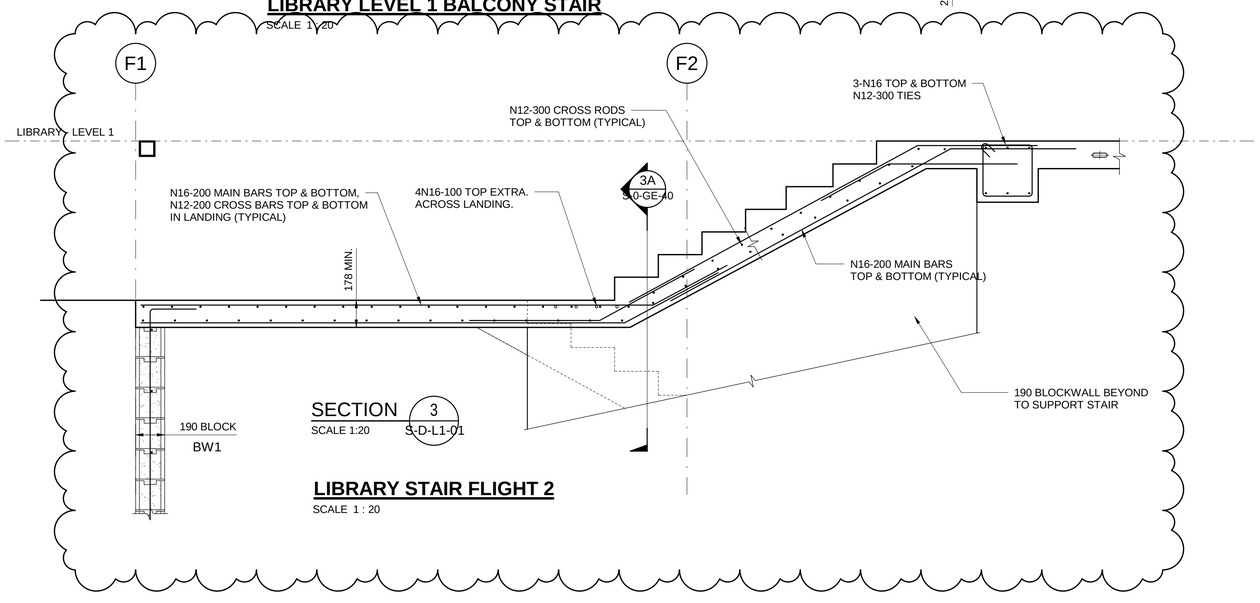
ISSUE	PROJECT No.	DRAWING No.
A	7900	S-0-GE-31

20/01/2021 2:45:48 PM



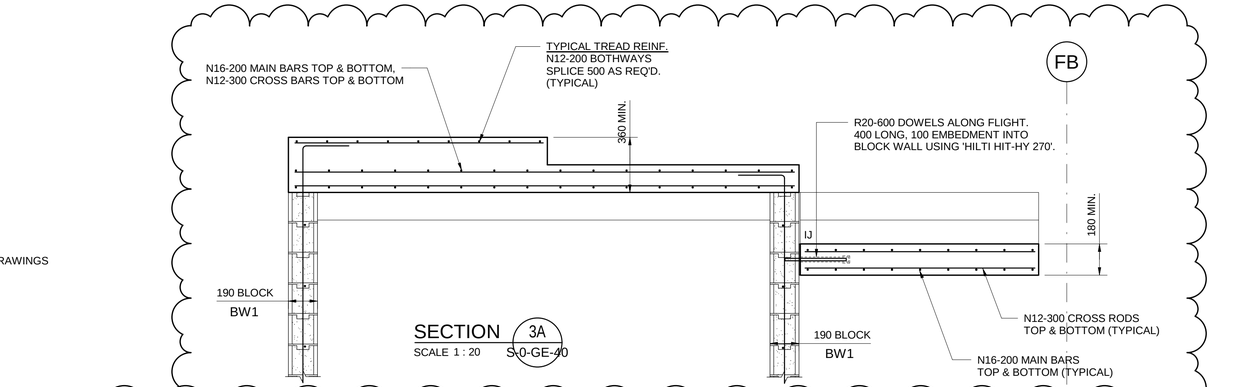
LIBRARY LEVEL 1 BALCONY STAIR

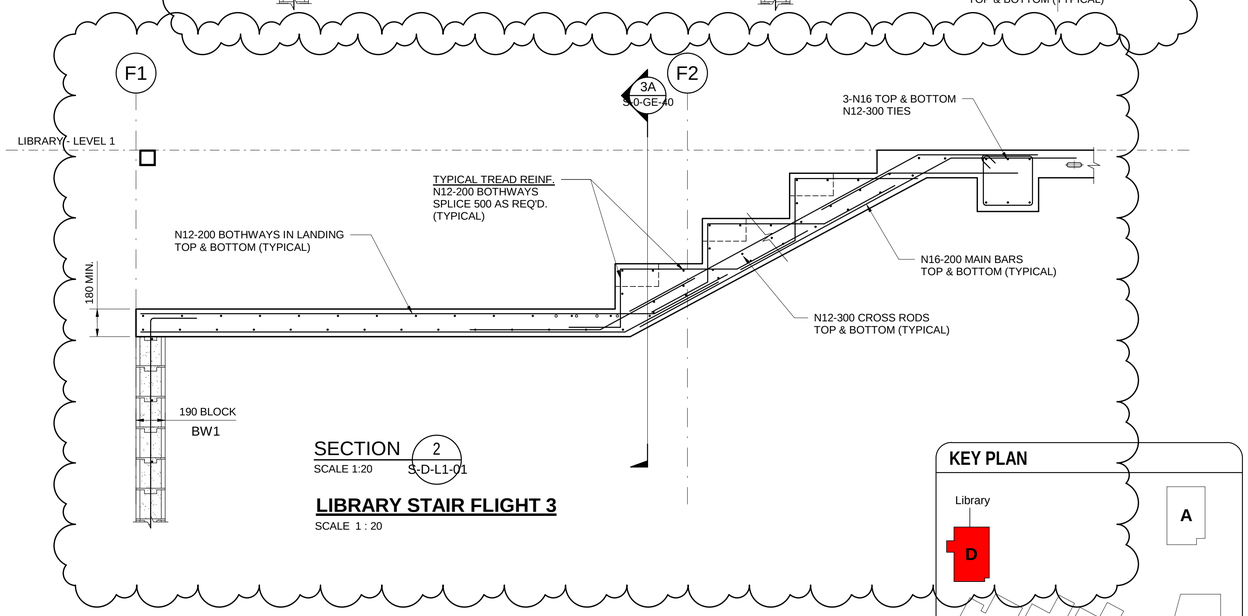
SCALE 1 : 20



LIBRARY STAIR FLIGHT 2

SCALE 1 : 20

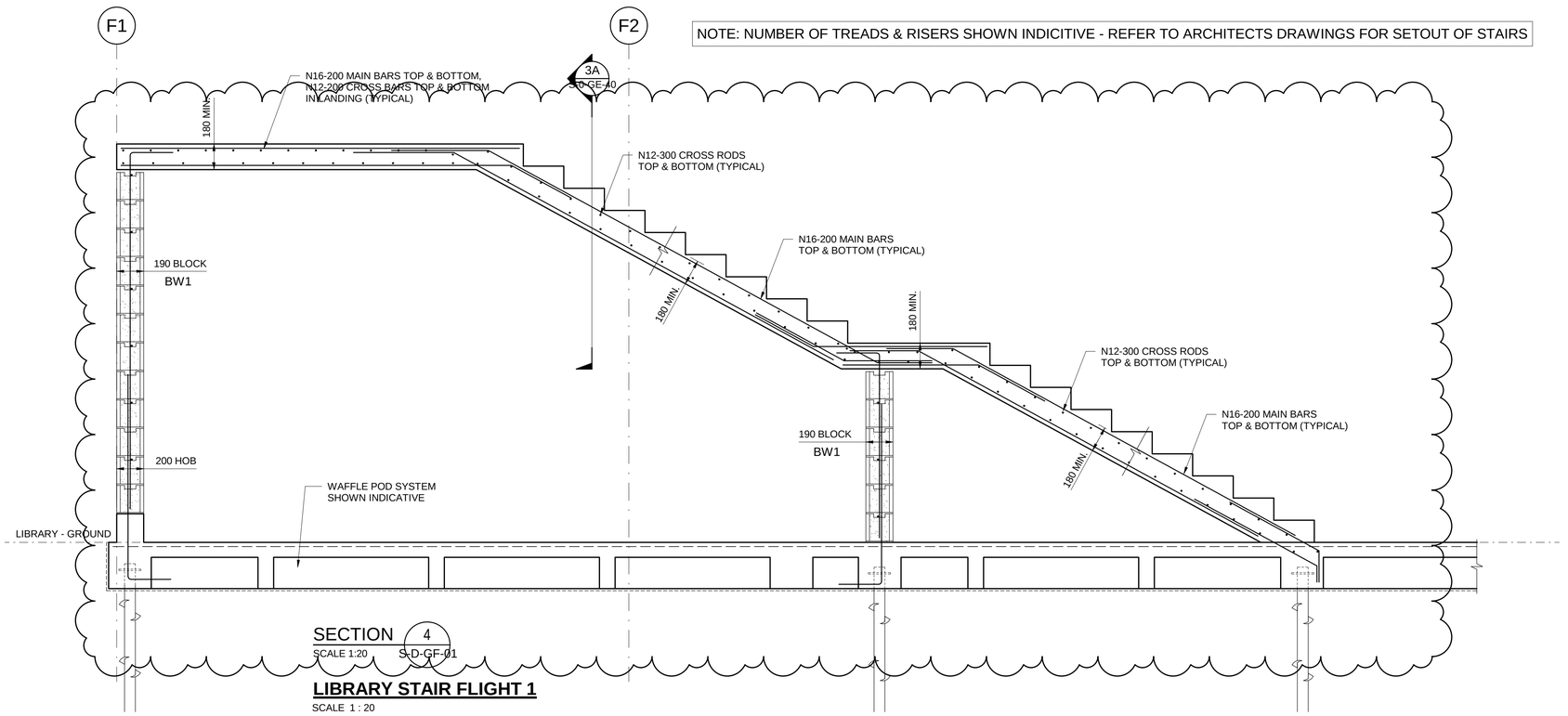




LIBRARY STAIR FLIGHT 3

SCALE 1 : 20

NOTE: NUMBER OF TREADS & RISERS SHOWN INDICITIVE - REFER TO ARCHITECTS DRAWINGS FOR SETOUT OF STAIRS



LIBRARY STAIR FLIGHT 1

SCALE 1 : 20

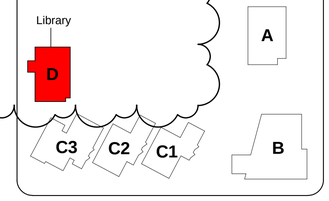
SLAB REINFORCEMENT LAP & COG SCHEDULE

TAG	LAP LENGTH	COG LENGTH
N12	500	350
N16	750	500
N20	1000	500
N24	1250	500
USED IN ALL CASES U.N.O.		

WALL REINFORCEMENT LAP SCHEDULE

BAR TAG	BAR LAP LENGTH	
	VERTICAL	HORIZONTAL
N12	650	650
N16	950	950
N20	1100	1100

KEY PLAN



ISSUE	DESCRIPTION	APPROVED	DATE
B	ARCHITECTS REVISIONS	MG	22.12.20
A	ISSUED FOR CONSTRUCTION	MG	06.11.20
7	CC2 RESUBMISSION		30.10.20
6	CC2 ISSUE		16.10.20
5	ISSUED FOR INFORMATION		28.08.20
4	ISSUED FOR INFORMATION		21.08.20
3	RE-ISSUED FOR CC1		12.08.20
2	RE-ISSUED FOR CC1		07.08.20
1	CC1 ISSUE		24.07.20

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61 2 9922 2344 nbrsarchitecture.com

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www.birzulisassociates.com

PROJECT
PORTERS CREEK PUBLIC SCHOOL
75 Warnervale Rd. Warnervale NSW 2259

TITLE
TYPICAL STAIR DETAILS

SCALES	DATE
1:20 @ A1	JUNE 2020

DRAWN	DESIGN	VERIFIED	APPROVED
AB	TO		

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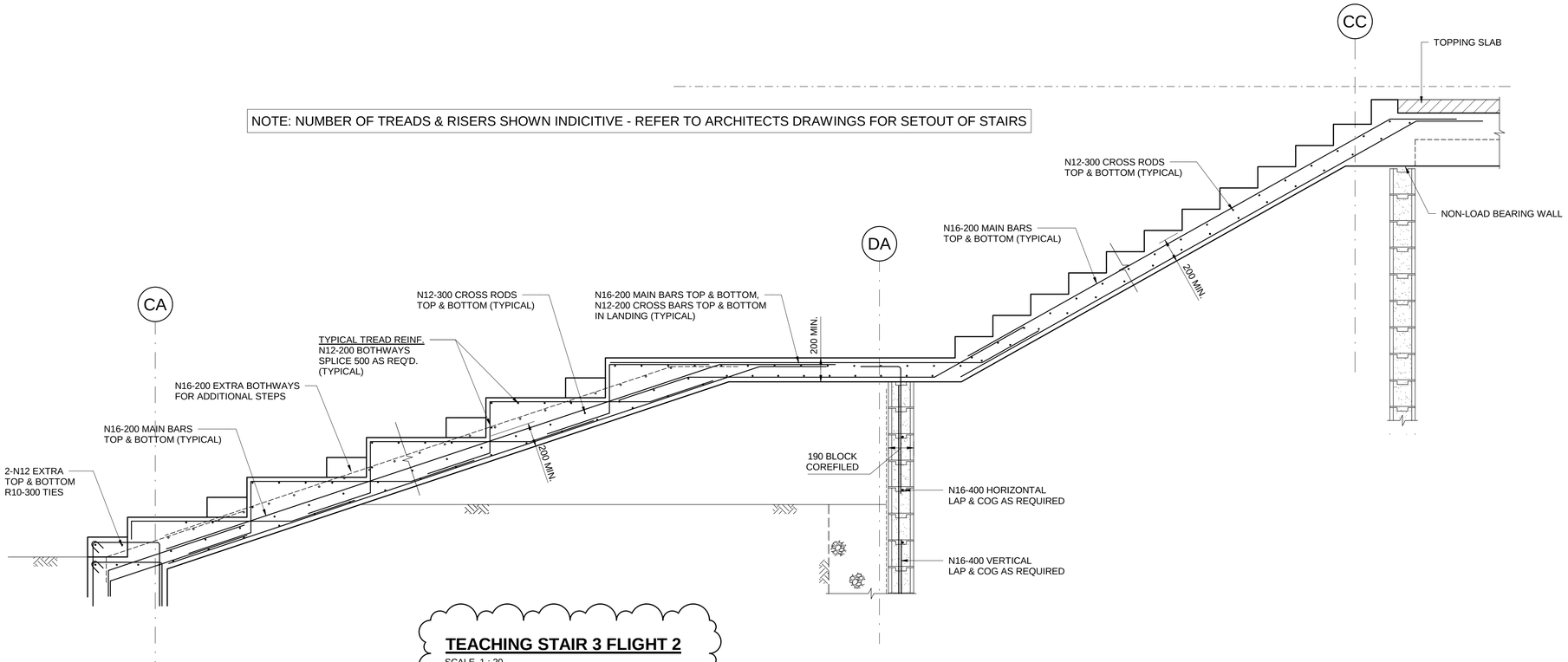
ISSUE	PROJECT No.	DRAWING No.
B	7900	S-0-GE-40

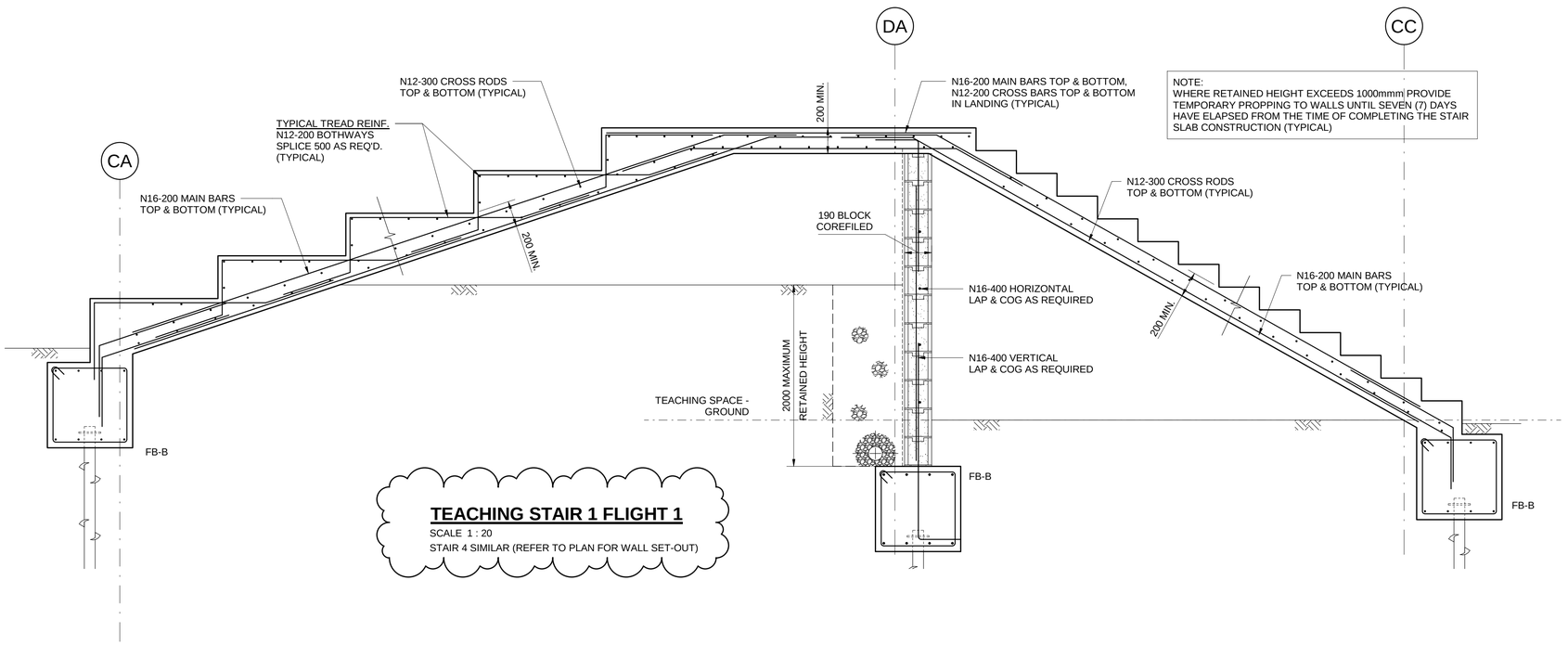
23/12/2020 10:05:53 AM

NOTE: NUMBER OF TREADS & RISERS SHOWN INDICITIVE - REFER TO ARCHITECTS DRAWINGS FOR SETOUT OF STAIRS



TEACHING STAIR 3 FLIGHT 2

SCALE 1 : 20
STAIR 4 SIMILAR (REFER TO PLAN FOR WALL SET-OUT)



NOTE:
WHERE RETAINED HEIGHT EXCEEDS 1000mmm PROVIDE TEMPORARY PROPPING TO WALLS UNTIL SEVEN (7) DAYS HAVE ELAPSED FROM THE TIME OF COMPLETING THE STAIR SLAB CONSTRUCTION (TYPICAL)

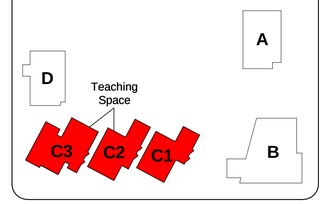
TEACHING STAIR 1 FLIGHT 1

SCALE 1 : 20
STAIR 4 SIMILAR (REFER TO PLAN FOR WALL SET-OUT)

SLAB REINFORCEMENT LAP & COG SCHEDULE

TAG	LAP LENGTH	COG LENGTH
N12	500	350
N16	750	500
N20	1000	500
N24	1250	500
USED IN ALL CASES U.N.O.		

KEY PLAN



ISSUE	DESCRIPTION	APPROVED	DATE
B	STAIR NAMES REVISED TO MATCH ARCHITECT	PG	03.02.21
A	ISSUED FOR CONSTRUCTION	MG	06.11.20
7	CC2 RESUBMISSION		30.10.20
6	CC2 ISSUE		16.10.20
5	ISSUED FOR INFORMATION		28.08.20
4	ISSUED FOR INFORMATION		21.08.20
3	RE-ISSUED FOR CC1		12.08.20
2	RE-ISSUED FOR CC1		07.08.20
1	CC1 ISSUE		24.07.20

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583 DARLING STREET, ROZELLE NSW 2039
tel: (02) 9555 7230 email : office@birzulisassociates.com
www.birzulisassociates.com

PROJECT
PORTERS CREEK PUBLIC SCHOOL
75 Warnervale Rd. Warnervale NSW 2259

TITLE
TYPICAL STAIR DETAILS

SCALES	DATE
1:20 @ A1	JUNE 2020

DRAWN	DESIGN	VERIFIED	APPROVED
AB	TO		

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ISSUE	PROJECT No.	DRAWING No.
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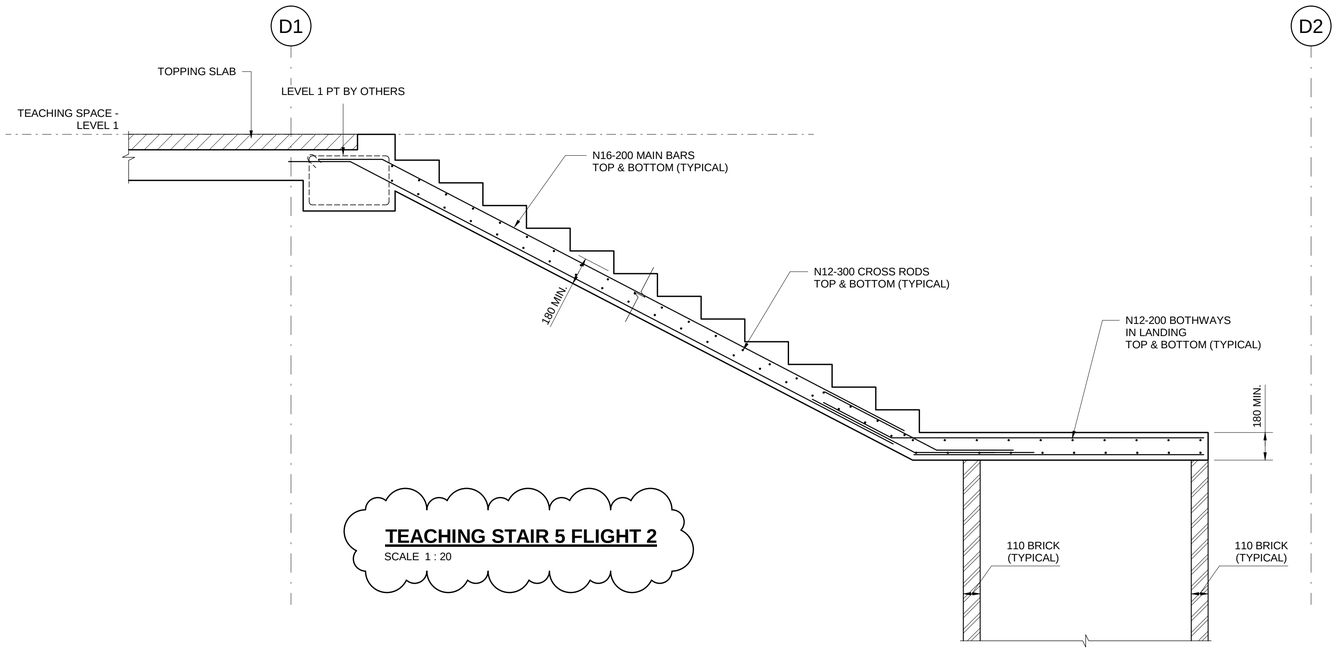
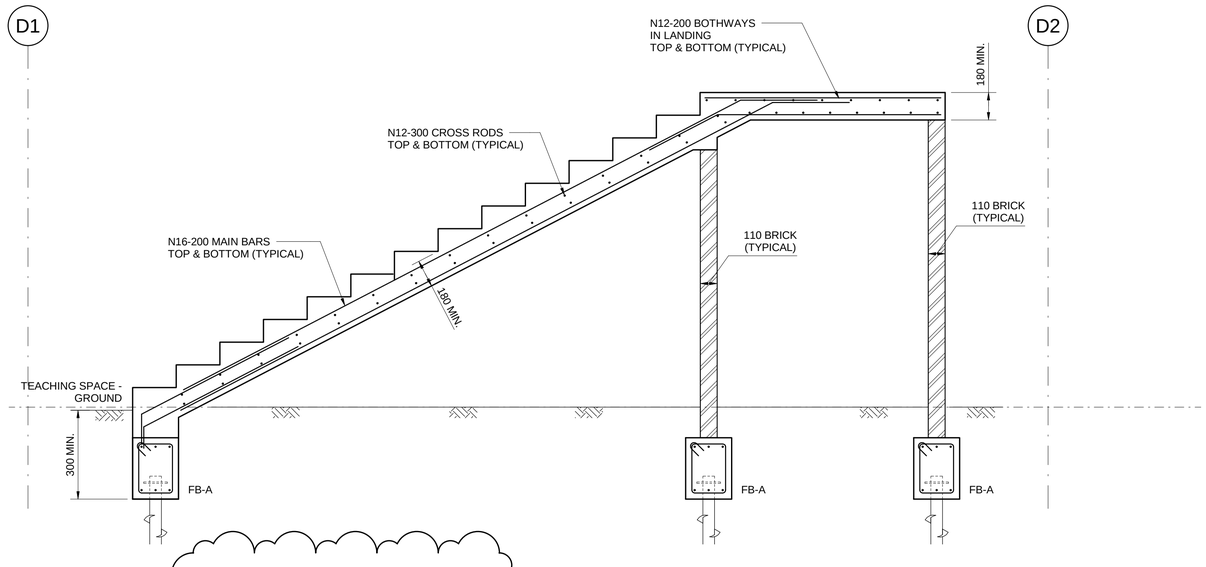
3/02/2021 3:32:57 PM



TEACHING STAIR 5 FLIGHT 2

SCALE 1 : 20

NOTE: NUMBER OF TREADS & RISERS SHOWN INDICITIVE - REFER TO ARCHITECTS DRAWINGS FOR SETOUT OF STAIRS



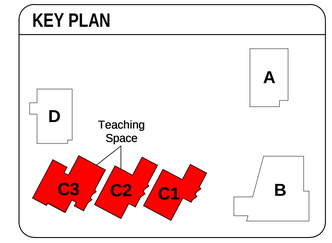
TEACHING STAIR 5 FLIGHT 1

SCALE 1 : 20

SLAB REINFORCEMENT LAP & COG SCHEDULE

TAG	LAP LENGTH	COG LENGTH
N12	500	350
N16	750	500
N20	1000	500
N24	1250	500
USED IN ALL CASES U.N.O.		

KEY PLAN



ISSUE	DESCRIPTION	APPROVED	DATE
B	STAIR NAMES REVISED TO MATCH ARCHITECT	PG	03.02.21
A	ISSUED FOR CONSTRUCTION	MG	06.11.20
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PROJECT
PORTERS CREEK PUBLIC SCHOOL
75 Warnervale Rd. Warnervale NSW 2259

TITLE
TYPICAL STAIR DETAILS

SCALES			DATE
1:20 @ A1			JUNE 2020
DRAWN	DESIGN	VERIFIED	APPROVED
AB	TO		

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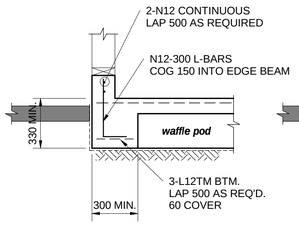
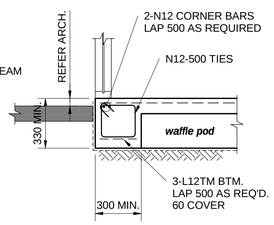
ISSUE	PROJECT No.	DRAWING No.
B	7900	S-0-GE-42

30/07/2021 3:50:59 PM

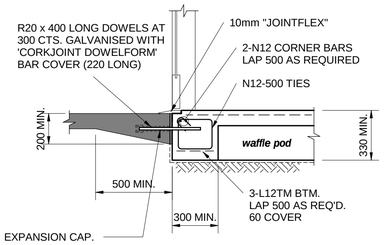
REFER TO ARCHITECTURAL DRAWINGS FOR ALL REBATE SIZES, HOB SIZES & LOCATIONS



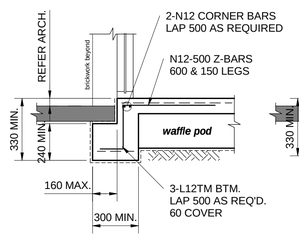
ADMIN. EDGE BEAM
WITH HOB



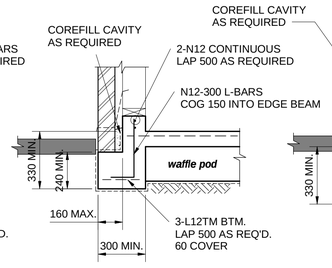
ADMIN EDGE BEAM
WITHOUT REBATE AT GLAZING



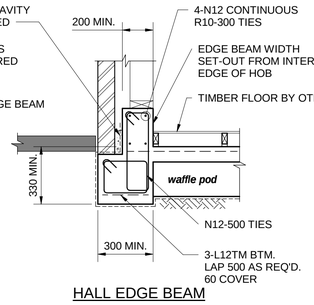
ADMIN EDGE BEAM
AT DOOR THRESHOLD



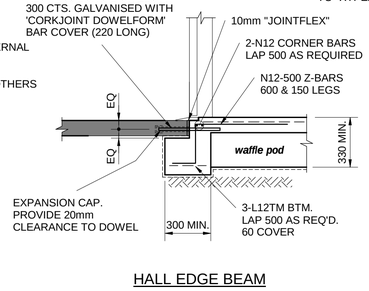
HALL EDGE BEAM
WITH REBATE AT GLAZING



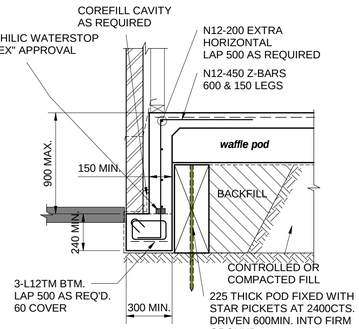
HALL EDGE BEAM
WITH REBATE & HOB



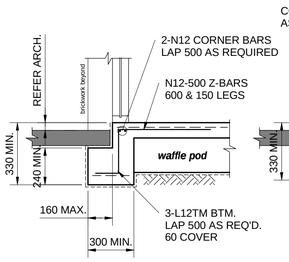
HALL EDGE BEAM
AT TIMBER FLOOR



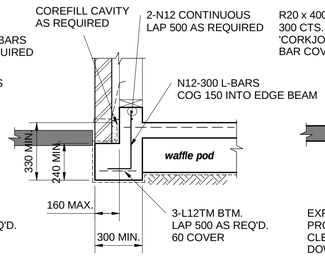
HALL EDGE BEAM
AT DOOR THRESHOLD



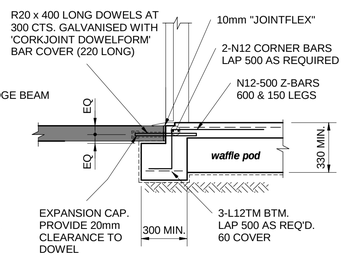
DEEPENED EDGE BEAM
WITH REBATE
(USE AS REQUIRED FOR ALL BUILDINGS)



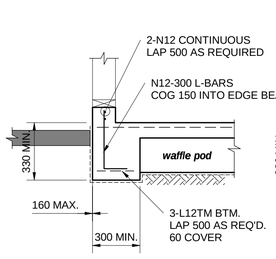
TEACHING EDGE BEAM
WITH REBATE AT GLAZING



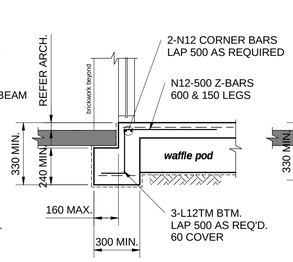
TEACHING EDGE BEAM
WITH REBATE & HOB



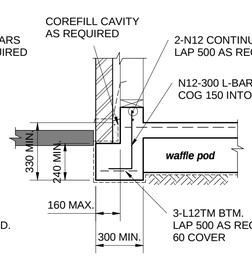
TEACHING EDGE BEAM
AT DOOR THRESHOLD



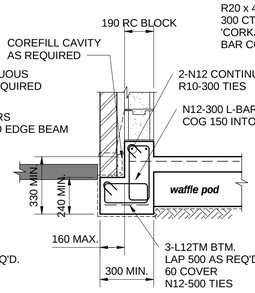
TEACHING EDGE BEAM
AT STUD WALL



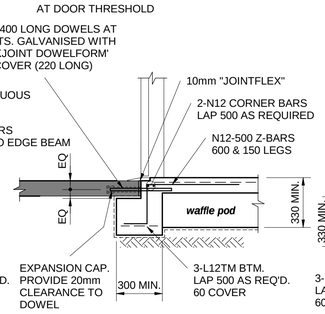
LIBRARY EDGE BEAM
WITH REBATE AT GLAZING



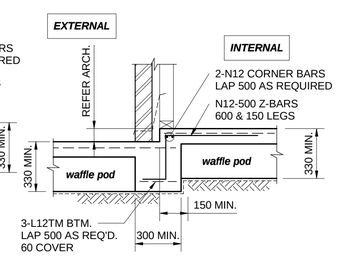
LIBRARY EDGE BEAM
WITH REBATE & HOB



LIBRARY EDGE BEAM
WITH REBATE & 190 HOB

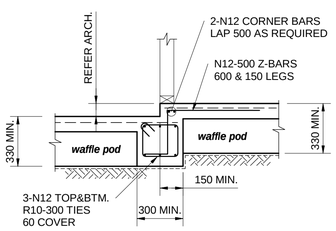


LIBRARY EDGE BEAM
AT DOOR THRESHOLD

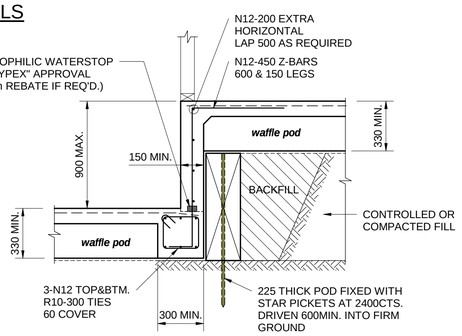


LIBRARY EDGE BEAM
INTERNAL TO EXTERNAL

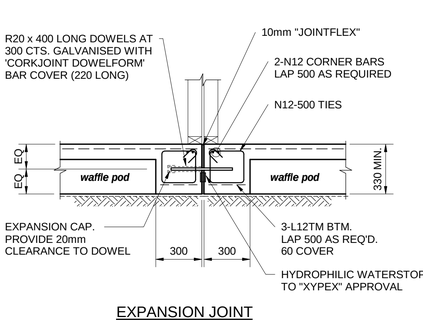
WAFFLE POD EXTERNAL RIB DETAILS



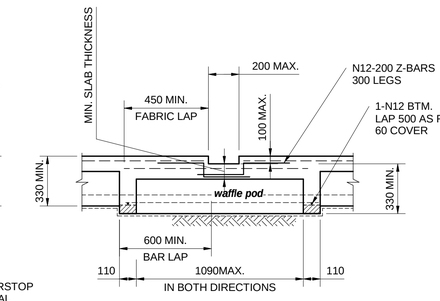
STEP DETAIL



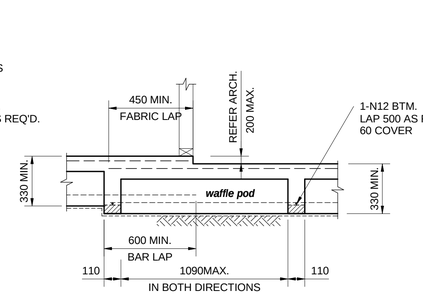
DEEPENED STEP DETAIL



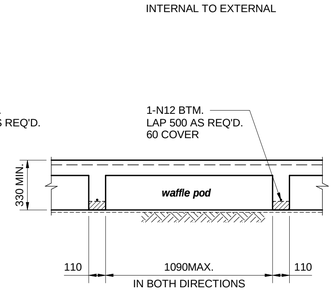
EXPANSION JOINT



RECESS DETAIL
USE FOR SLIDING DOOR TRACKS
USE AS REQUIRED REFER TO ARCHITECTURAL DRAWINGS FOR LOCATIONS



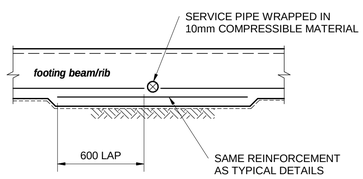
WET AREA STEP DETAIL



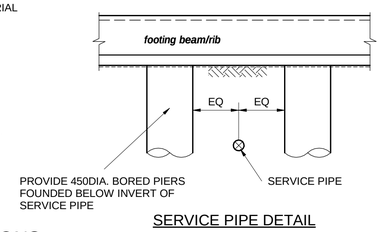
WAFFLE INTERNAL RIB DETAIL

WAFFLE POD INTERNAL RIB DETAILS

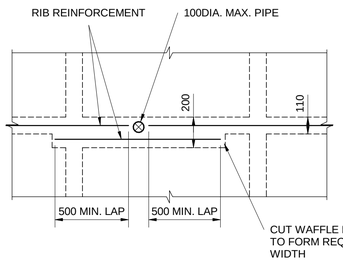
(USE AS REQUIRED FOR ALL BUILDINGS)



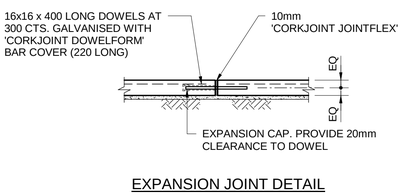
SERVICE PIPE DETAIL
ELEVATION



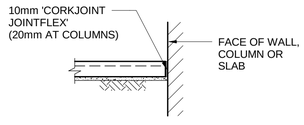
SERVICE PIPE DETAIL
ELEVATION



SERVICE PIPE DETAIL
PLAN



EXPANSION JOINT DETAIL
SHOWN THUS _EJ_

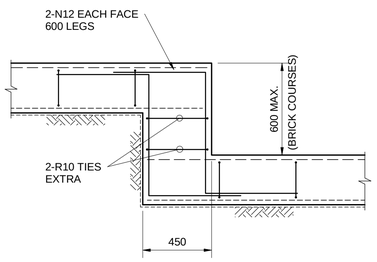


ISOLATION JOINT DETAIL
SHOWN THUS _IJ_

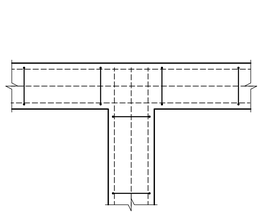
DRAWING NOTES:

1. REFER TO DRAWING S-0-GE-02 FOR "CONSTRUCTION NOTES"
2. REFER TO ARCHITECT'S DRAWINGS FOR SLAB FALLS AND CAST-IN REGLET DETAILS
3. ALL CONCRETE HOBS SHALL BE CAST INTEGRALLY WITH SLABS.
4. PENETRATIONS SMALLER THAN 200MM IN DIAMETER NOT SHOWN ON PLAN FOR CLARITY. REINFORCEMENT SHOWN SHALL BE DISPLACED TO THE SIDES OF THE PENETRATION AND **DO NOT CUT**. OBTAIN ENGINEER'S APPROVAL FOR PENETRATIONS NOT SHOWN ON STRUCTURAL DRAWING'S.
5. ALL SLAB AND BEAM PENETRATIONS TO BE TRIMMED WITH 2.N16 BARS PLACED TOP AND BOTTOM TO ALL SIDES (45MIN COVER). EXTEND TRIMMER BARS 600MIN PAST EACH INTERNAL FACE OF PENETRATION, TYPICAL UNLESS NOTED OTHERWISE (REFER TO PLAN FOR LOCATIONS).
6. ALL SLABS IN CONTACT WITH GROUND TO HAVE A WATERPROOFING MEMBRANE AS SPECIFIED. (MEMBRANES TO HAVE A 20 YEAR MINIMUM DESIGN LIFE)
7. WAFFLE PODS TO BE INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURERS SPECIFICATION, REFER TO DRAWING SERIES S-0-GE-50 TO S-0-GE-59 FOR TYPICAL DETAILS.
8. SCREW PILES NOT SHOWN FOR CLARITY, REFER TO DRAWING SERIES S-0-GE-10 TO S-0-GE-19 FOR TYPICAL DETAILS.

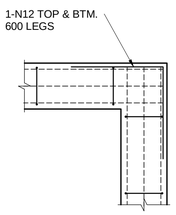
WAFFLE POD SERVICE PIPE JUNCTIONS



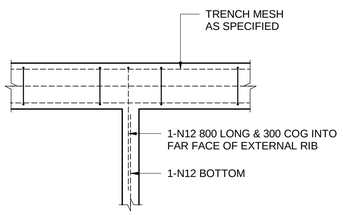
STEP DETAIL
SECTION



'T' JUNCTION
PLAN



CORNER JUNCTION
PLAN



'T' JUNCTION
PLAN

WAFFLE POD RIB BEAM JUNCTIONS

WAFFLE POD INTERNAL RIB BEAM JUNCTION

ISSUE	DESCRIPTION	APPROVED	DATE
A	ISSUED FOR CONSTRUCTION		06.11.20
7	CC2 RESUBMISSION		30.10.20
6	CC2 ISSUE		16.10.20
5	ISSUED FOR INFORMATION		28.08.20
4	ISSUED FOR INFORMATION		21.08.20
3	RE-ISSUED FOR CC1		12.08.20
2	RE-ISSUED FOR CC1		07.08.20
1	CC1 ISSUE		24.07.20

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tel: (02) 9555 7230 email : office@birzulisassociates.com
www.birzulisassociates.com

PROJECT
PORTERS CREEK PUBLIC SCHOOL
75 Warnervale Rd. Warnervale NSW 2259

TITLE
TYPICAL WAFFLE POD DETAILS

SCALES	DATE
1:50, 1:20 @ A1	JUNE 2020

DRAWN	DESIGN	VERIFIED	APPROVED
AB	TO		

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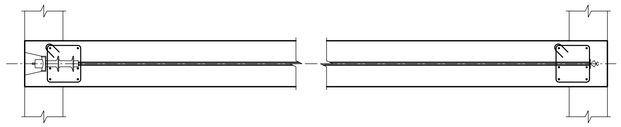
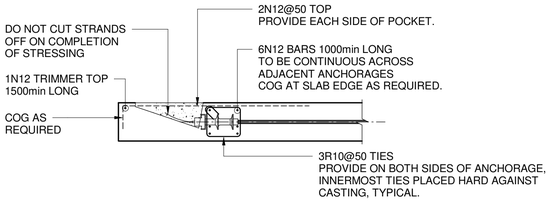
ISSUE	PROJECT No.	DRAWING No.
A	7900	S-0-GE-50

6/11/2020 4:49:15 PM

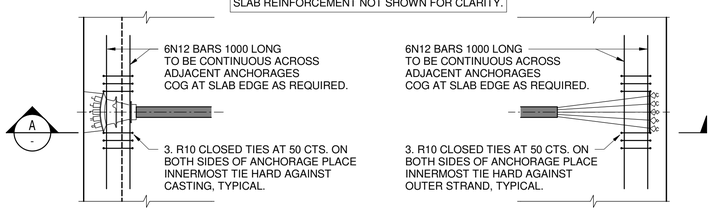


SECTION A
SCALE 1:20



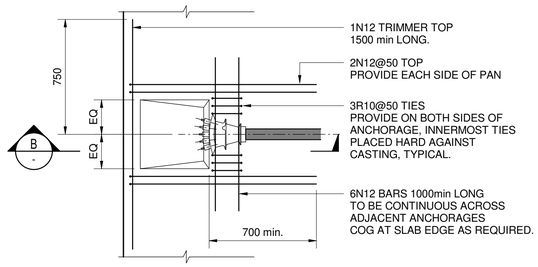
SECTION B
SCALE 1:20

NOTE:
SLAB REINFORCEMENT NOT SHOWN FOR CLARITY.

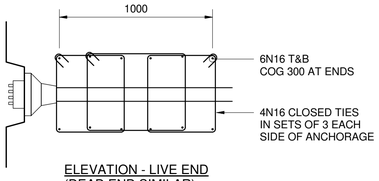


TYPICAL LIVE END
ANTI-BURST REINFORCEMENT
(plan)

TYPICAL DEAD END
ANTI-BURST REINFORCEMENT
(plan)

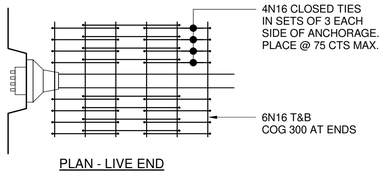


TYPICAL LIVE END ANCHORAGE
STRESSING POCKET DETAIL
(plan)



ELEVATION - LIVE END
(DEAD END SIMILAR)

ANCHORAGE FOR 15.2mm STRAND
BEAM POST-TENSIONING



PLAN - LIVE END
(DEAD END SIMILAR)

ANCHORAGE FOR 15.2mm STRAND
BEAM POST-TENSIONING

TYPICAL P.T. DETAILS FOR ALL LEVELS U.N.O.

NOTE:
ALL ANCHORAGES AND ANTI-BURST TO BE CONFIRMED BY THE 'PT' CONTRACTOR

TYPICAL PT DETAILS AS SHOWN ARE FOR 12.7mm STRAND ANCHORAGES
PROVIDE ADDITIONAL ANTI-BURST REINFORCEMENT FOR 15.2mm DIA. STRAND ANCHORAGES AS REQUIRED.

PT SLAB DESIGN BRIEF

This document outlines the structural criteria and the design parameters to be adopted for the structural design and construction of the suspended floor structures for

DESIGN LOADS (AS1170.1)

Superimposed Dead Loads

Refer to Architectal Drawings for applied floor finishes - 0.5 kPa minimum

Superimposed Live Loads

Category A1:	Residential (Self-contained dwellings)	- 1.5 kPa
	Balconies	- 2.0 kPa
Category C1:	Lounges, restaurants & cafes	- 2.0 kPa
	Classrooms	- 3.0 kPa
Category C3:	Corridors, Hallways and stairs etc	- 4.0 kPa
Category E:	General Storage	- 2.4 kPa/m height
	Plant Rooms	- 5.0 kPa

Refer to AS1170.1 for all corresponding minimum point load design actions.
Refer to AS1170.1 for any activity/occupancy not listed above.

OTHER DESIGN LOADS

Vibration Live Loads

Residential	- 0.5 kPa
Retail / Office	- 0.6 kPa

LEVEL OF PRESTRESS CRITERIA

Slabs (Internal)	- 1.4 - 1.8 MPa average. (3.5MPa max)
Slabs (External)	- 2.0 - 2.5 MPa (3.5 MPa max)
Beams	- 2.0 - 3.5 MPa (3.5 MPa max)

PT SLAB - DOCUMENTATION & CONSTRUCTION

01. Post-tensioning contractor to design and document all concrete floor structures nominated as post-tensioned slabs on the consulting structural engineer's drawings, including all conventional reinforcement in floor slabs and ramps, lift lobbies, beams, trimming reinforcement at penetrations, anti-burst reinforcement, top mesh reinforcement to all exposed post-tensioned slabs etc.

02. Conventional reinforcement nominated on the structural drawings prepared by Birzulis Associates for post-tensioned slabs and beams shall not be included in the design of post-tensioned slabs and shall not contribute to resisting the design action effects calculated by the post-tensioning Contractor unless approved by Birzulis Associates. The cost and installation of this conventional reinforcement shall be deemed to be included in the Contractor's tender.

03. Birzulis Associates will document horizontal elements for slabs on ground and all stair throats and mid-landings. Stair landings at floor level shall be included in the post-tensioning slab design unless noted otherwise on the drawings.

04. Birzulis Associates will provide profile drawings for all suspended floor structures, in CAD format, to the post-tensioning contractor.

05. Birzulis Associates will provide working loads for all columns and walls being transferred by the floor structure.

06. Birzulis Associates will provide additional slab in-plane working loads on structural plans to be taken out by the floor structure. Post-tensioning contractor to confirm whether the additional reinforcement specified by Birzulis Associates are sufficient.

07. A procedure for the review of the stressing documents needs to be discussed and agreed.

08. The post-tensioning contractor will be responsible for producing the final concrete profile drawings. Birzulis Associates drawings will not be updated to reflect any design changes.

PT SLAB - COLUMN STIFFNESS

Maximum allowable bending moments to be transferred into columns are as follows:
Exterior Columns - 10% of the gross column stiffness.
Interior Columns - 25% of the gross column stiffness.
100% gross column stiffness to be used when performing punching shear calculations.

SERVICEABILITY CRITERIA

Vertical deflections of beam and slabs:

TYPE	DEFLECTION TO BE CONSIDERED	DEFLECTION LIMIT
All Members UNO	Dead Load (Inc. self weight) + Live Load	Span / 250
Members supporting Face Masonry Walls	Deflection occuring after finish applied	Span / 1000
Members NOT supporting Face Masonry Walls	Deflection occuring after finish applied	Span / 500
Transfer Members	Dead Load (Inc. self weight)	Span / 1000

In addition to the above, floor total long term deflections are to be limited to the following requirements:
Floor deflection: ± 25mm maximum (Carpark areas typical)
Transfer Beams: ± 10mm maximum

Effects of long-term concrete shrinkage and creep shall be taken into account for all serviceability criteria in accordance with AS3600 or by other accepted professional principles and methodology e.g. AEM method, Eurocode 2; subject to approval.

Vibration - Acceptable Response Factors (assume footfall 2 Hz and 3 damping)

Occupancy Type:
Residential 1-2

Particular attention to be paid where vehicle vibration loads in parking areas influence adjacent apartments.

NOTES:

01. Deflection limitation for cantilevers for all member types is permissible to be twice that of the deflection limits stated above. E.g Span/180 for dead load deflection (incl self weight) but shall not exceed 25mm.

02. Further guidance can be obtained from AS3600 – Concrete Structures, Section 2.3

03. Further guidance can be obtained AS1170.0 – Structural Design Actions, Appendix C. This should be referenced for specific deflection criterias e.g. curtain walls/façade elements

04. Variations to the minimum serviceability criteria stated subject to approval.

05. Long-term effects of concrete creep and shrinkage shall be taken in account in accordance with AS3600 – Concrete Structures.

06. Refer to architectural drawings for non-load bearing walls, façade, topping slabs etc, to be allowed for in the design of the floor structure.

07. Durability and fire rating of the floor structure to comply with AS3600 as appropriate and the building code of the Australia.

08. No live end anchorages are permitted in columns unless otherwise approved.

09. Refer to architectural drawings for balustrade locations to avoid clashes with PT.

CERTIFICATION:

01. The post-tensioning contractor shall certify that their design and installation has been carried out with the performance based criteria outlined within this post-tensioning design brief, the post-tensioning specification, along with relevant Australian Standards and industry accepted best practice.

02. Post-tensioning contractor is required to carry out all inspections, including all conventional reinforcement indicated on their drawings, prior to pouring concrete.

03. Post-tensioning contractor to provide design and construction certification of the floor structures as required by Birzulis Associates.

04. Post-tensioning contractor to provide a copy of their current Professional Indemnity Insurance policy to the Main Contractor.

ISSUE	DESCRIPTION	APPROVED	DATE
A	ISSUED FOR CONSTRUCTION		06.11.20
4	CC2 RESUBMISSION		30.10.20
3	CC2 ISSUE		16.10.20
2	ISSUED FOR INFORMATION		28.08.20
1	ISSUED FOR INFORMATION		21.08.20

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www.birzulisassociates.com

PROJECT
PORTERS CREEK PUBLIC SCHOOL
75 Warnervale Rd. Warnervale NSW 2259

TITLE
TYPICAL POST TENTIONED CONCRETE DETAILS

SCALES		DATE
1:20 @ A1		JUNE 2020
DRAWN: AB	DESIGN: TO	VERIFIED:	APPROVED:

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ISSUE	PROJECT No.	DRAWING No.
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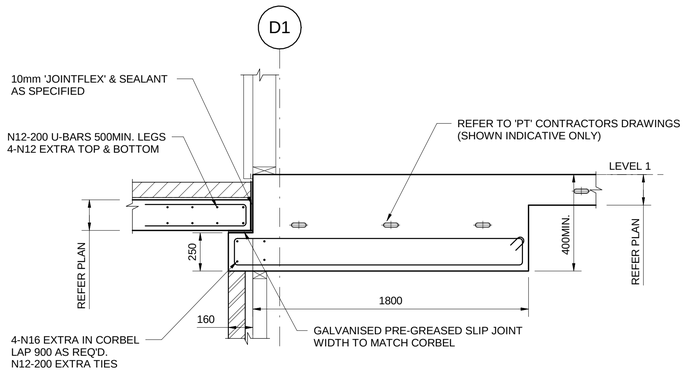
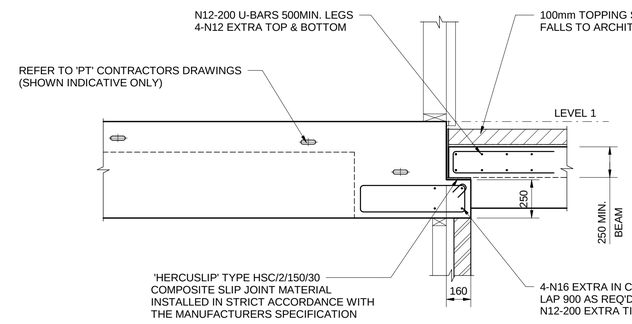
6/11/2020 4:59:17 PM



JOINT-TYPE A
DETAIL AT GRID D1 - BLOCK C2-C3 JOINT

SCALE 1:20

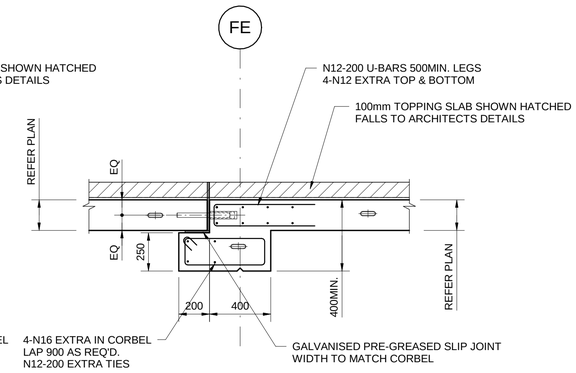
USE AS REQUIRED



JOINT-TYPE B
DETAIL AT WESTERN STAIR - BLOCK C2-C3 JOINT

SCALE 1:20

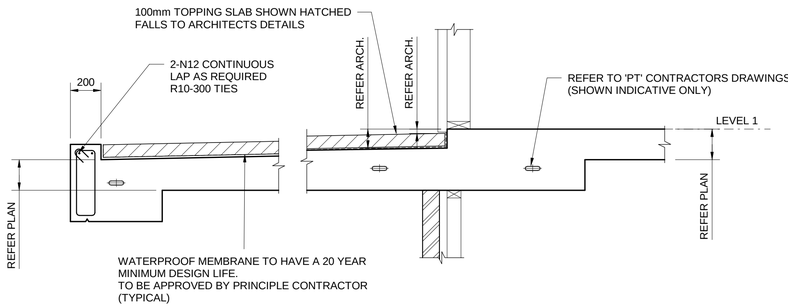
USE AS REQUIRED



JOINT-TYPE C
DETAIL AT GRID FE - BLOCK C3-D JOINT

SCALE 1:20

USE AS REQUIRED

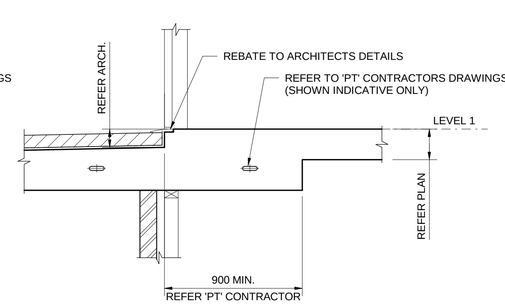


TYPICAL LEVEL 1 BALCONY DETAIL

SCALE 1:20

USE AS REQUIRED

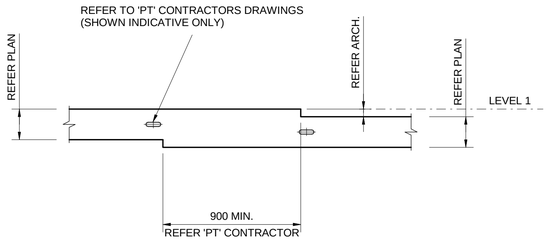
REFER TO ARCH. DETAILS FOR HOB SIZES & LOCATIONS



TYPICAL THRESHOLD AT 'PT' SLAB

SCALE 1:20

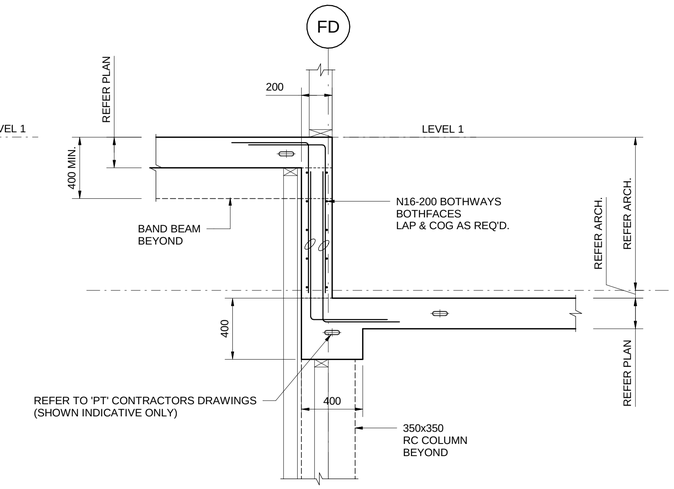
USE AS REQUIRED



TYPICAL SETDOWN/STEP DETAIL AT 'PT' SLAB

SCALE 1:20

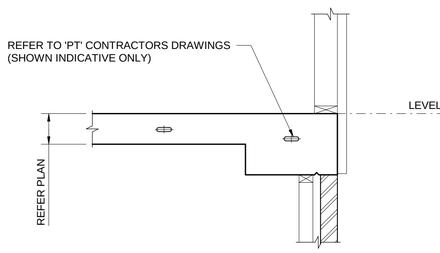
USE AS REQUIRED



FOLD DETAIL AT LIBRARY 'PT' SLAB

SCALE 1:20

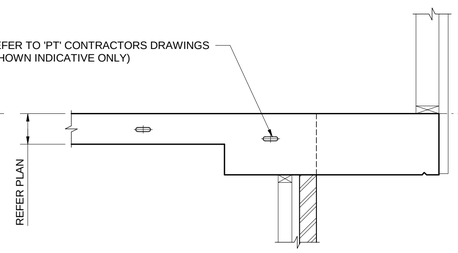
REFER TO ARCHITECTURAL DRAWINGS FOR ALL REBATE SIZES, HOB SIZES & LOCATIONS



TYPICAL DETAIL AT C1, C2 & C3 EDGE

SCALE 1:20

USE AS REQUIRED



TYPICAL DETAIL AT C1 CANTILEVER EDGE

SCALE 1:20

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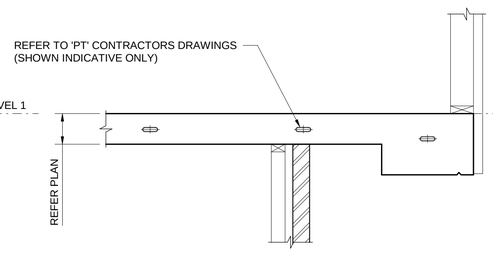

VARIATION AT C1 CANTILEVER EDGE

SCALE 1:20

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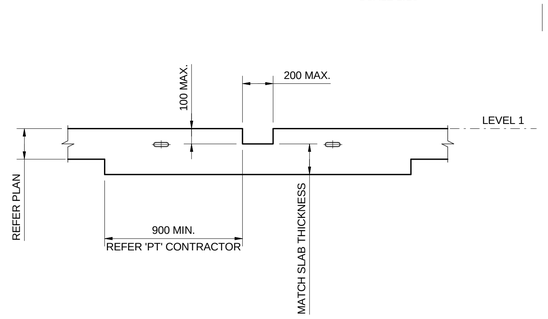

TYPICAL SLAB RECESS

SCALE 1:20

USE FOR SLIDING DOOR TRACKS

USE AS REQUIRED REFER TO ARCHITECTURAL DRAWINGS FOR LOCATIONS

ISSUE	DESCRIPTION	APPROVED	DATE
A	ISSUED FOR CONSTRUCTION		06.11.20
4	CC2 RESUBMISSION		30.10.20
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PROJECT

PORTERS CREEK PUBLIC SCHOOL

75 Warnervale Rd. Warnervale NSW 2259

TITLE

TYPICAL SLAB DETAILS

SCALES			DATE
1:20 @ A1			08/19/20
DRAWN	DESIGN	VERIFIED	APPROVED
AB	TO		

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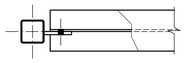
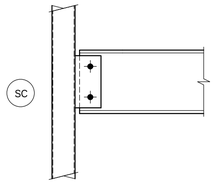


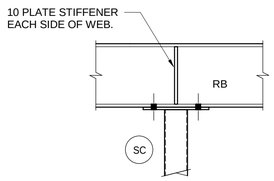
PLAN



FIN PLATE CONNECTION INTO SIDE OF SHS/CHS U.N.O.

(T - PLATE THICKNESS)

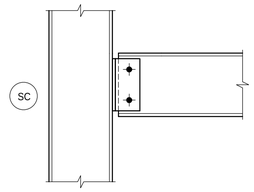
SHS FIN PLATE SCHEDULE		
BEAM SIZE	'T'	BOLTS
UP TO 250 UB	10	2M16 8.8/S
UP TO 360 UB	10	3M16 8.8/S
UP TO 410 UB	10	4M16 8.8/S
UP TO 460 UB	10	5M16 8.8/S
UP TO 530 UB	10	6M20 8.8/S
UP TO 610 UB	10	7M20 8.8/S



RB CONTINUOUS OVER COLUMN

(T - PLATE THICKNESS)

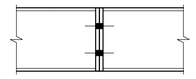
CAP PLATE SCHEDULE		
BEAM SIZE	'T'	BOLTS
UP TO 250 UB	10	4M16 8.8/S
UP TO 360 UB	10	4M16 8.8/S
UP TO 410 UB	10	4M16 8.8/S
UP TO 460 UB	10	4M16 8.8/S
UP TO 530 UB	10	4M20 8.8/S
UP TO 610 UB	10	4M20 8.8/S



FIN PLATE CONNECTION INTO SIDE OF UB / UC

(T - PLATE THICKNESS)

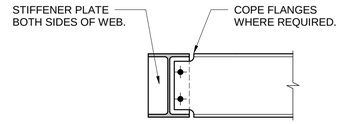
UB / UC FIN PLATE SCHEDULE		
BEAM SIZE	'T'	BOLTS
UP TO 250 UB	10	2M16 8.8/S
UP TO 360 UB	10	3M16 8.8/S
UP TO 410 UB	10	4M16 8.8/S
UP TO 460 UB	10	5M16 8.8/S
UP TO 530 UB	10	6M20 8.8/S
UP TO 610 UB	10	7M20 8.8/S



BEAM SPLICE CONNECTION U.N.O.

(REFER TO PLAN FOR LOCATIONS)

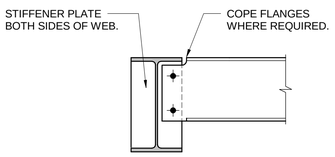
BEAM SPLICE SCHEDULE		
BEAM SIZE	'T'	BOLTS
UP TO 310 UB	20	4M20 8.8/TB
UP TO 410 UB	20	4M20 8.8/TB
UP TO 460 UB	20	6M20 8.8/TB
UP TO 530 UB	20	6M20 8.8/TB
UP TO 610 UB	20	8M20 8.8/TB



BEAM TO BEAM - SAME DEPTH U.N.O.

(REFER TO PLAN FOR LOCATIONS)

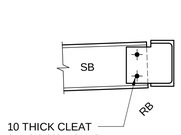
BEAM TO BEAM SCHEDULE		
BEAM SIZE	'T'	BOLTS
UP TO 250 UB	10	2M16 8.8/S
UP TO 360 UB	10	3M16 8.8/S
UP TO 410 UB	10	4M16 8.8/S
UP TO 460 UB	10	5M16 8.8/S
UP TO 530 UB	10	6M20 8.8/S
UP TO 610 UB	10	7M20 8.8/S



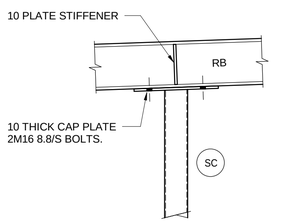
BEAM TO BEAM - DIFFERENT DEPTH U.N.O.

(REFER TO PLAN FOR LOCATIONS)

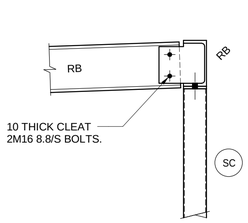
BEAM TO BEAM SCHEDULE		
BEAM SIZE	'T'	BOLTS
UP TO 250 UB	10	2M16 8.8/S
UP TO 360 UB	10	3M16 8.8/S
UP TO 410 UB	10	4M16 8.8/S
UP TO 460 UB	10	5M16 8.8/S
UP TO 530 UB	10	6M20 8.8/S
UP TO 610 UB	10	7M20 8.8/S



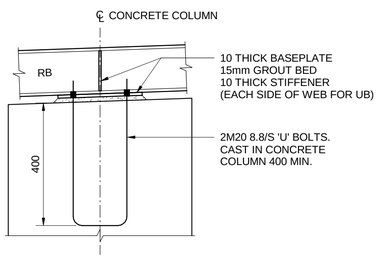
SB INTO RB



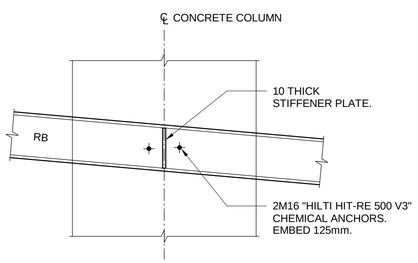
RB CONTINOUS OVER COLUMN



RB INTO RB



RB TO CONCRETE COLUMN



PFC TO CONCRETE COLUMN

ISSUE	DESCRIPTION	APPROVED	DATE
A	ISSUED FOR CONSTRUCTION		06.11.20
4	CC2 RESUBMISSION		30.10.20
3	CC2 ISSUE		16.10.20
2	ISSUED FOR INFORMATION		28.08.20
1	ISSUED FOR INFORMATION		21.08.20

ARCHITECT
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583 DARLING STREET, ROZELLE NSW 2039
tel: (02) 9555 7230 email : office@birzulisassociates.com
www.birzulisassociates.com

PROJECT

PORTERS CREEK PUBLIC SCHOOL

75 Warnervale Rd. Warnervale NSW 2259

TITLE

STEEL DETAILS SHEET 1

SCALES	DATE
1:10 @ A1	

DRAWN	DESIGN	VERIFIED	APPROVED
AB	TO		

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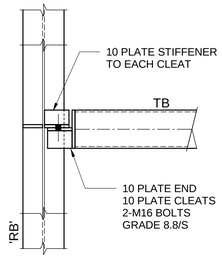
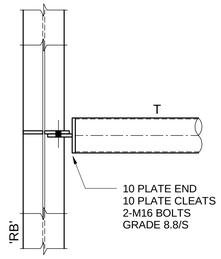
ISSUE	PROJECT No.	DRAWING No.
A	7900	S-0-GE-60

6/11/2020 4:49:19 PM



SECTION A
SCALE 1:10



SECTION B
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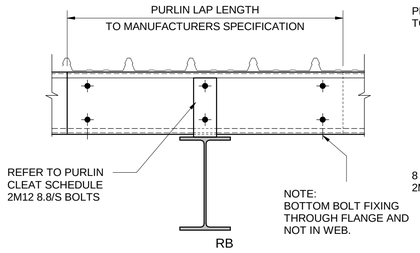
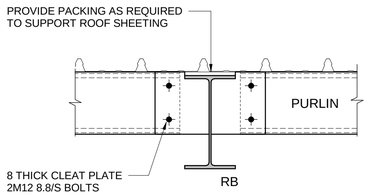


PURLIN TO 'RB' TOP CONNECTION



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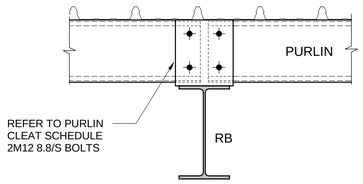


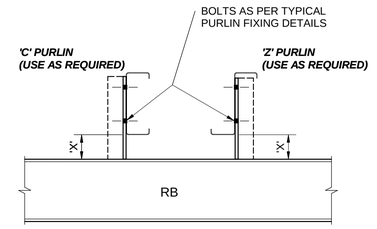
PURLIN TO 'RB' TOP CONNECTION

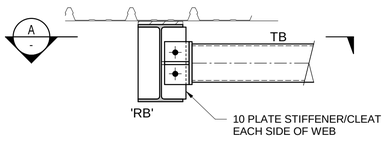
TYPICAL 'Z' PURLIN DETAILS

SCALE 1:10

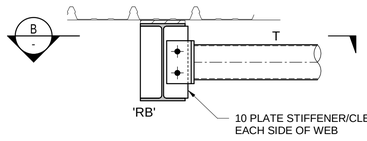
TYPICAL 'C' PURLIN DETAILS

SCALE 1:10



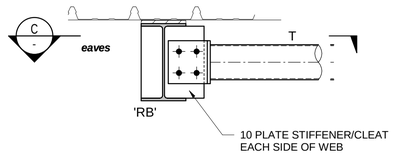


TB INTO RB

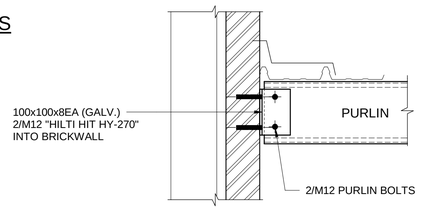


TYPICAL CONNECTION DETAILS FOR 'T' MEMBERS U.N.O.

SCALE 1:10



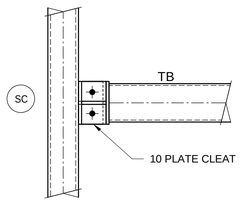
T AT EAVES



PURLIN TO BRICKWALL CONNECTION

PURLIN CLEAT SCHEDULE

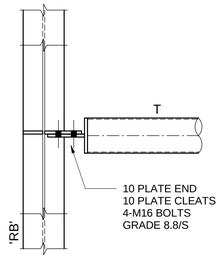
DIMENSION, X	MINIMUM CLEAT SIZES	
	AT PURLIN SPLICE	CONTINUOUS
UP T0 100	130 x 10 PLATE	75 x 10 PLATE
UP T0 150	130 x 12 PLATE	75 x 12 PLATE
OVER 150 UP T0 900	150 x 90 x 8 ANGLE	75 x 75 x 8 ANGLE



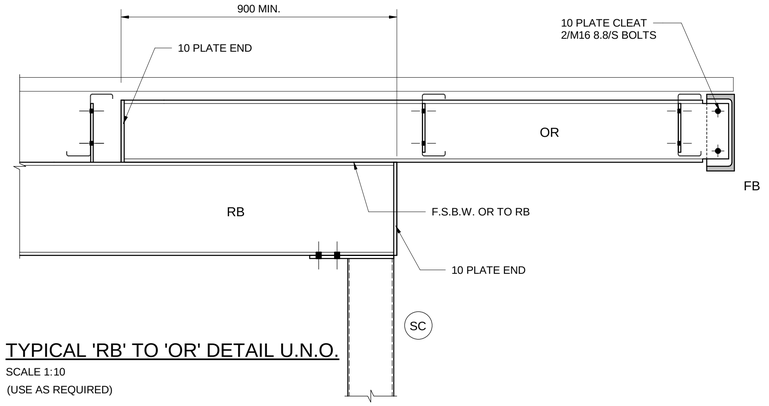
TB/WSB INTO SC

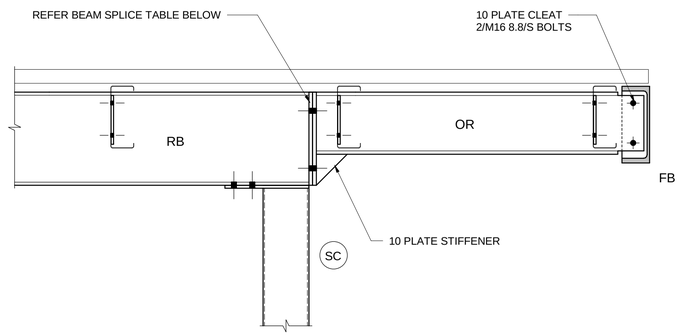
TYPICAL CONNECTION DETAILS FOR 'TB' MEMBERS U.N.O.

SCALE 1:10



SECTION C
SCALE 1:10

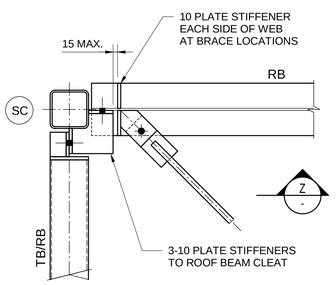


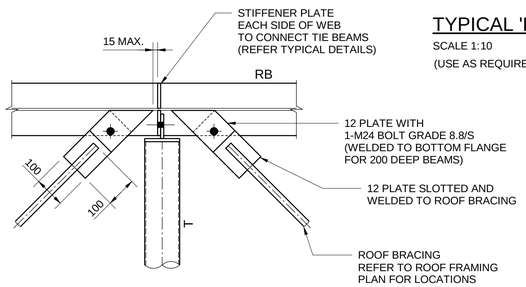


VARIATION 'RB' TO 'OR' DETAIL

SCALE 1:10

EXISTING CONCRETE





NOTE: BRACING TO MISS PURLINS

TYPICAL ROOF BRACING CONNECTION DETAILS

SCALE 1:10

(SHOWN 'BR' ON PLAN)

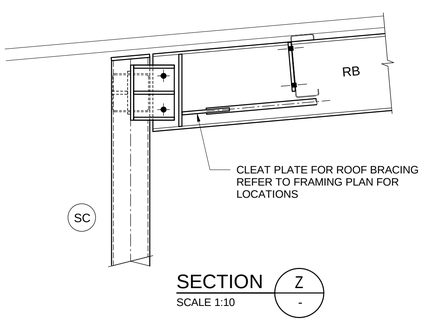
WALL BRACING SIMILAR 'WB'

TYPICAL 'RB' TO 'OR' DETAIL U.N.O.

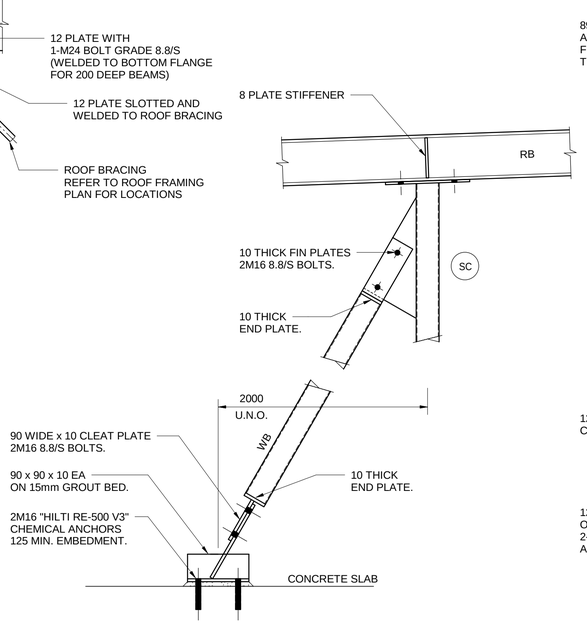
SCALE 1:10

(USE AS REQUIRED)

BEAM SPLICE SCHEDULE		
BEAM SIZE	'T'	BOLTS
UP TO 250 UB & UC	12	4M16 8.8/TB
UP TO 310 UB & UC	12	6M16 8.8/TB
UP TO 410 UB & UC	12	8M16 8.8/TB
UP TO 460 UB & UC	12	8M16 8.8/TB
UP TO 530 UB & UC	12	10M16 8.8/TB
UP TO 610 UB & UC	12	10M16 8.8/TB



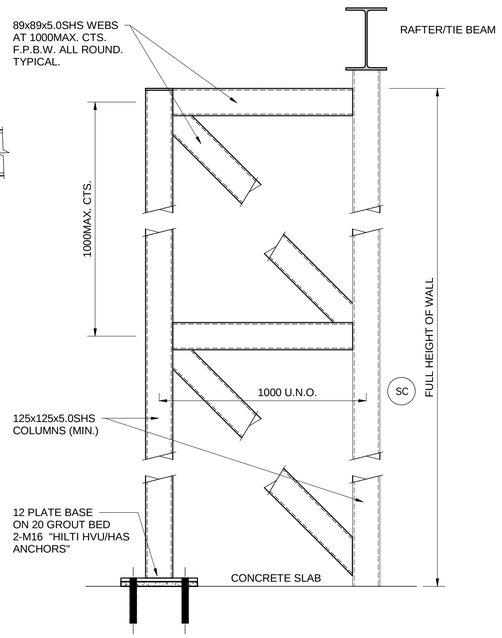
SECTION Z
SCALE 1:10



TYPICAL 'SHS' WALL BRACING DETAIL

SCALE 1:10

(SHOWN 'WB' ON PLAN)



TYPICAL WALL FRAME 'WF1' ELEVATION

SCALE 1:10

(SHOWN 'WF' ON PLAN)

ISSUE	DESCRIPTION	APPROVED	DATE
A	ISSUED FOR CONSTRUCTION		06.11.20
4	CC2 RESUBMISSION		30.10.20
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1	ISSUED FOR INFORMATION		21.08.20

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tel: (02) 9555 7230 email : office@birzulisassociates.com
www.birzulisassociates.com

PROJECT

PORTERS CREEK PUBLIC SCHOOL

75 Warnervale Rd. Warnervale NSW 2259

TITLE

STEEL DETAILS SHEET 2

SCALES	DATE
1:10 @ A1	06/04/20

DRAWN	DESIGN	VERIFIED	APPROVED
AB	TO		

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ISSUE	PROJECT No.	DRAWING No.
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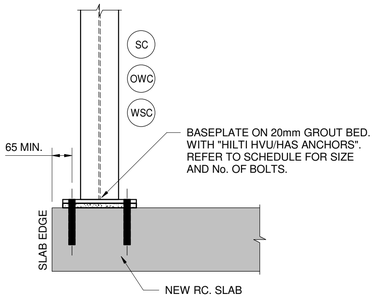
01/12/2020 4:59:21 PM

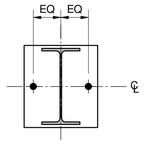


TYPICAL UB & UC BASEPLATE DETAILS U.N.O.

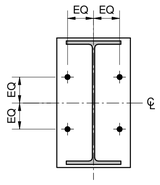
SCALE 1:10

CONFIRM SUITABILITY OF DETAILS ON SITE
MAINTAIN 70mm MIN. BOLT EDGE DISTANCE TO CONCRETE
ENSURE BOLTS DO NOT CLASH WITH 'PT' TENDONS (C.O.S. BEFORE DRILLING)

NOTE:
1. ALL ANCHOR BOLTS TO BE HOT DIPPED GALVANISED TO AS 1650.
2. ANCHOR BOLT TOLERANCES SHALL BE AS FOLLOWS:
   A. CENTRE TO CENTRE OF ANY TWO BOLTS ± 30mm
   B. CENTRE TO CENTRE OF ADJACENT BOLT GROUPS ± 25mm
   C. MAX ACCUMULATION OF ERRORS ALONG GRID ± 25mm
   D. MAX DEVIATION FROM CENTRE OF ANY BOLT GROUP ± 6mm
3. GROUT UNDER BASE PLATES TO BE FOSROC CONBEXTRA GP OR EQUIVALENT.



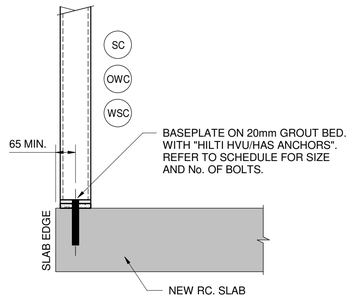
TYPE UB - UP TO 250 UB
THICKNESS - T



TYPE UB - 310 UB UP TO 530 UB
THICKNESS - T

UB BASEPLATE SCHEDULE		
SIZE	'T'	BOLTS
150 UB	16	2M16
180 UB	16	2M16
200 UB	20	2M20
250 UB	20	2M20
310 UB	20	4M20
360 UB	25	4M24
410 UB	25	4M24
460 UB	25	4M24
530 UB	25	4M24

UC BASEPLATE SCHEDULE		
SIZE	'T'	BOLTS
100 UC	12	2M16
150 UC	12	2M16
200 UC	16	2M20
250 UC	16	2M20



TYPICAL SHS & RHS BASEPLATE DETAILS U.N.O.

SCALE 1:10

CONFIRM SUITABILITY OF DETAILS ON SITE
MAINTAIN 70mm MIN. BOLT EDGE DISTANCE TO CONCRETE
ENSURE BOLTS DO NOT CLASH WITH 'PT' TENDONS (C.O.S. BEFORE DRILLING)

NOTE:
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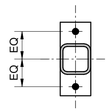
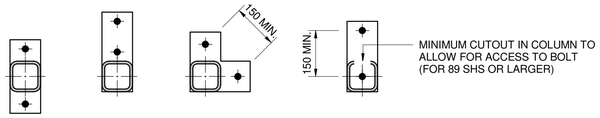
   B. CENTRE TO CENTRE OF ADJACENT BOLT GROUPS ± 25mm
   C. MAX ACCUMULATION OF ERRORS ALONG GRID ± 25mm
   D. MAX DEVIATION FROM CENTRE OF ANY BOLT GROUP ± 6mm
3. GROUT UNDER BASE PLATES TO BE FOSROC CONBEXTRA GP OR EQUIVALENT.



TYPE SHS
THICKNESS - T

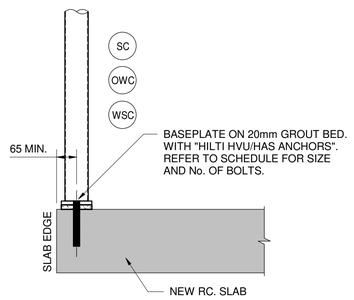
SHS BASEPLATE SCHEDULE		
SIZE	'T'	BOLTS
65 SHS	10	2M16
75 SHS	10	2M16
89 SHS	10	2M16
100 SHS	10	2M16
125 SHS	12	2M20
150 SHS	12	2M20
200 SHS	12	2M20
250 SHS	12	2M20

RHS BASEPLATE SCHEDULE		
SIZE	'T'	BOLTS
75 x 50 RHS	10	2M16
100 x 50 RHS	10	2M16
125 x 75 RHS	10	2M16
150 x 50 RHS	10	2M16
200 x 100 RHS	12	2M20
250 x 150 RHS	12	2M20



SHS BASEPLATE PLAN DETAILS

ENSURE BASEPLATE IS WITHIN WIDTH OF STUD FRAMING OVER.
BASEPLATE ORIENTATION AND SHAPE TO SUIT WALLS OVER.



TYPICAL CHS BASEPLATE DETAILS U.N.O.

SCALE 1:10

CONFIRM SUITABILITY OF DETAILS ON SITE
MAINTAIN 70mm MIN. BOLT EDGE DISTANCE TO CONCRETE
ENSURE BOLTS DO NOT CLASH WITH 'PT' TENDONS (C.O.S. BEFORE DRILLING)

NOTE:
1. ALL ANCHOR BOLTS TO BE HOT DIPPED GALVANISED TO AS 1650.
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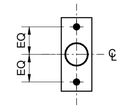
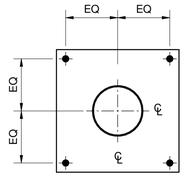
   C. MAX ACCUMULATION OF ERRORS ALONG GRID ± 25mm
   D. MAX DEVIATION FROM CENTRE OF ANY BOLT GROUP ± 6mm
3. GROUT UNDER BASE PLATES TO BE FOSROC CONBEXTRA GP OR EQUIVALENT.



TYPE CHS - 2 BOLTS
THICKNESS - T



TYPE CHS - 4 BOLTS
THICKNESS - T

CHS BASEPLATE SCHEDULE		
SIZE	'T'	BOLTS
78 CHS	10	2M16
89 CHS	10	2M16
102 CHS	10	2M16
111 CHS	10	2M16
114 CHS	12	2M20
140 CHS	12	2M20
165 CHS	12	4M20
168 CHS	12	4M20
219 CHS	16	4M20
273 CHS	16	4M20
323 CHS	16	4M20

ISSUE	DESCRIPTION	APPROVED	DATE
A	ISSUED FOR CONSTRUCTION		06.11.20
4	CC2 RESUBMISSION		30.10.20
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1	ISSUED FOR INFORMATION		21.08.20

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www.birzulisassociates.com

PROJECT
PORTERS CREEK PUBLIC SCHOOL
75 Warnervale Rd. Warnervale NSW 2259

TITLE
STEEL DETAILS SHEET 3

SCALES	DATE
1:10 @ A1	06/04/20

DRAWN	DESIGN	VERIFIED	APPROVED
AB	TO		

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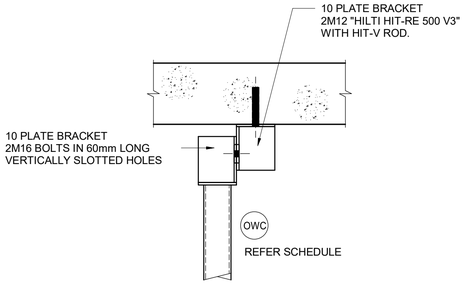
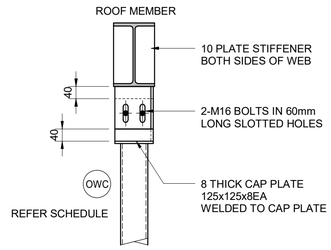
ISSUE	PROJECT No.	DRAWING No.
A	7900	S-0-GE-62

6/11/2020 4:59:22 PM

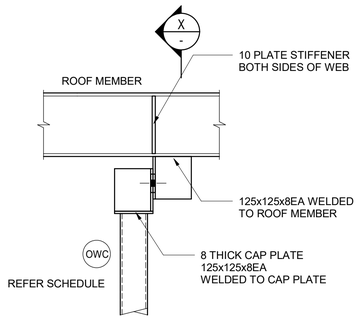


'OWC' & 'SDC' COLUMN TO SLAB DETAILS

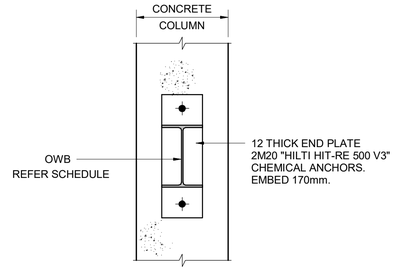
ANCHORS TO AVOID PT TENDONS



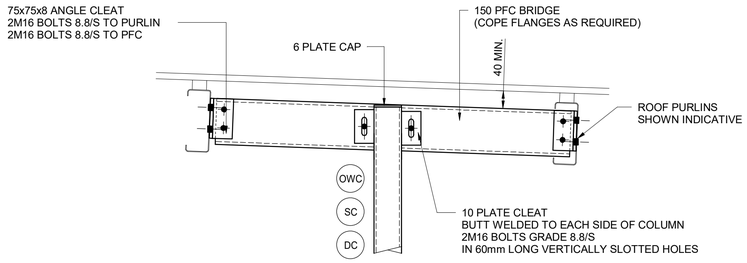
'OWC' & 'SDC' COLUMN TO RB DETAIL



'OWC' & 'SDC' COLUMN TO RB DETAIL

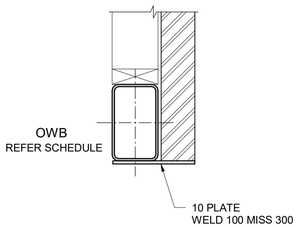


TYPICAL 'OWB' & 'SDC' TO CONCRETE COLUMN DETAIL

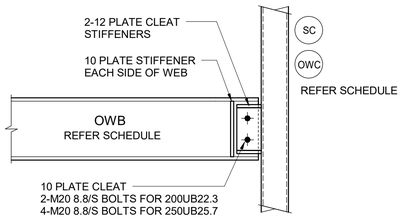


TYPICAL 'OWC' 'DC' & 'SC' COLUMN TOP DETAIL U.N.O.

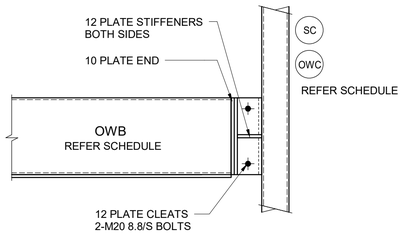
SECTION X/- SCALE 1:10



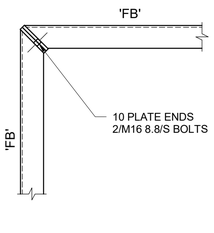
EXTERNAL OWB SECTION



'UB' END CONNECTION DETAIL



'RHS' END CONNECTION DETAIL



TYPICAL FASCIA CORNER DETAIL

TYPICAL OPERABLE WALL & SLIDING DOOR DETAILS

SCALE 1:10

CONFIRM SUITABILITY OF DETAILS ON SITE

OPERABLE WALL MEMBER SCHEDULE

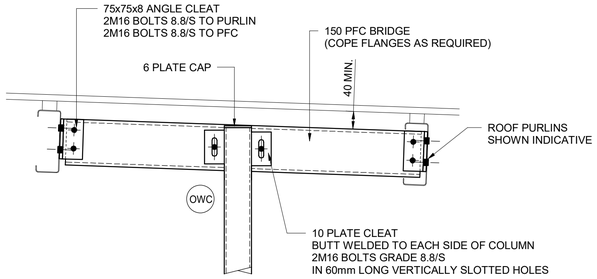
MEMBER	SPAN/HEIGHT	INTERNAL SIZE	EXTERNAL SUPPORTING BRICKWORK + STUD SIZE	EXTERNAL SUPPORTING CLADDING + STUD SIZE
OWB	SPAN UP TO 5000mm	200UB22.3	250x150x6.0RHS + 10 PLATE	250x150x6.0RHS
	SPAN UP TO 6000mm	250UB25.7	300x200x6.0RHS + 10 PLATE	250x150x8.0RHS
OWC	HEIGHT UP TO 4000mm	100x100x5.0 SHS	125x125x5.0 SHS	100x100x6.0 SHS
	HEIGHT UP TO 6000mm	125x125x5.0 SHS	-	150x150x5.0 SHS

NOTE:
WALL HEIGHT 3000mm MAX
WALL WEIGHT 0.5 kPa MAX

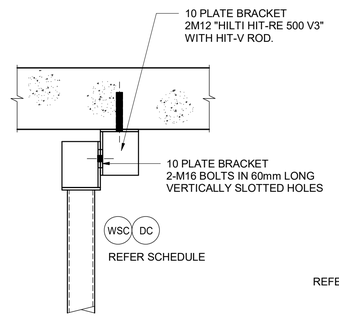
SLIDING DOOR MEMBER SCHEDULE

MEMBER	TAG	SIZE
DOOR BEAM	SDB	180UB18.1
DOOR COLUMN	SDC	125x125x5.0 SHS

NOTE:
WALL HEIGHT 4000mm MAX
WALL WEIGHT 0.5 kPa MAX

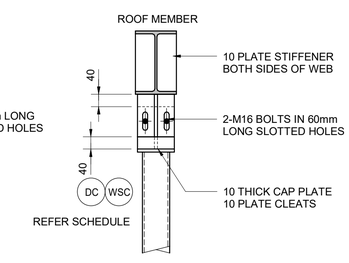


'WSC" TO PURLIN DETAIL



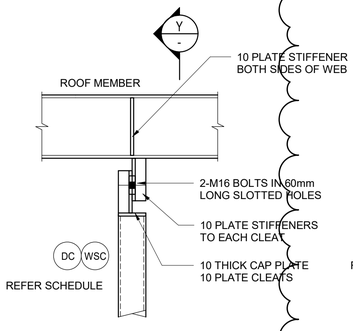
'WSC' COLUMN TO SLAB DETAILS

ANCHORS TO AVOID PT TENDONS

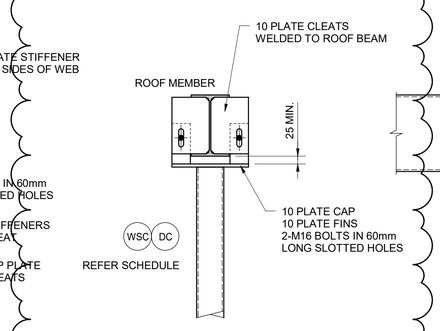


'WSC' COLUMN TO RB DETAIL

SECTION Y/- SCALE 1:10

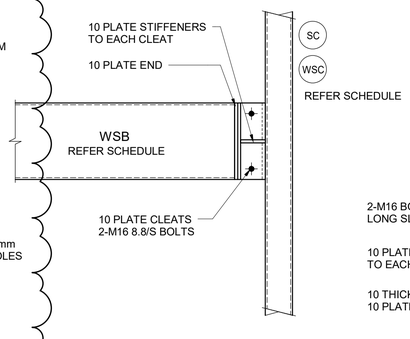


'WSC' COLUMN TO RB DETAIL

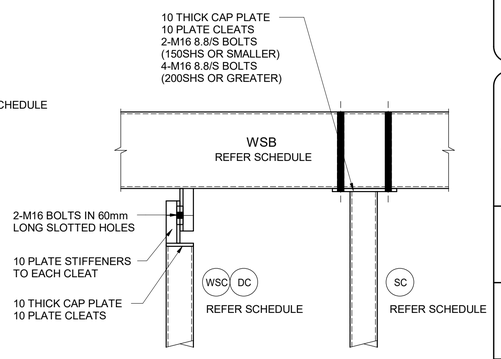


ALTERNATE 'WSC' COLUMN TO RB DETAIL

USE AS REQUIRED TO CONCEAL FIXING



'WSB' END CONNECTION DETAIL



'WSC/SC' TO WSB' DETAIL

TYPICAL WALL STIFFENER & DUMMY COLUMN DETAILS

SCALE 1:10

USE AS REQUIRED

ISSUE	DESCRIPTION	APPROVED	DATE
B	ALTERNATE 'WSC' COLUMN TO RB DETAIL ADDED	MG	18.03.21
A	ISSUED FOR CONSTRUCTION	MG	06.11.20
4	CC2 RESUBMISSION		30.10.20
3	CC2 ISSUE		16.10.20
2	ISSUED FOR INFORMATION		28.08.20
1	ISSUED FOR INFORMATION		21.08.20

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www.birzulisassociates.com

PROJECT

PORTERS CREEK PUBLIC SCHOOL

75 Warnervale Rd. Warnervale NSW 2259

TITLE

STEEL DETAILS SHEET 4

SCALES			DATE
1:10 @ A1			06/04/20
DRAWN	DESIGN	VERIFIED	APPROVED
AB	TO		

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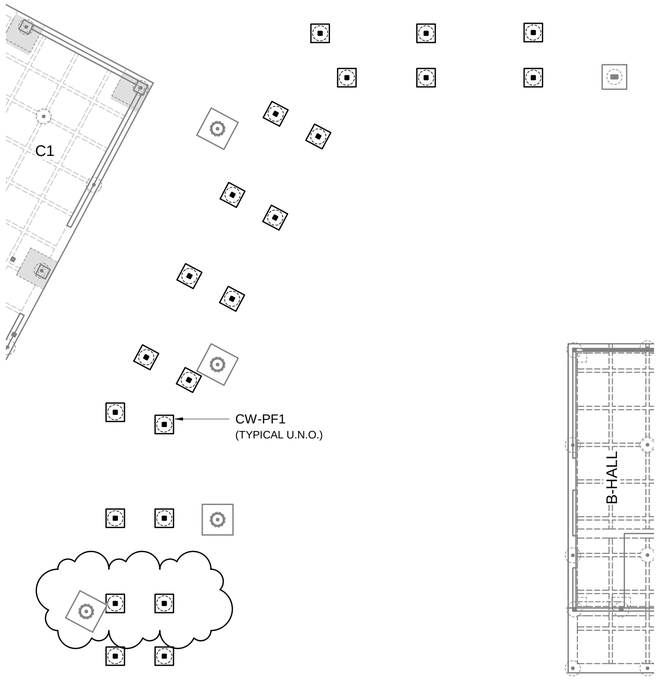
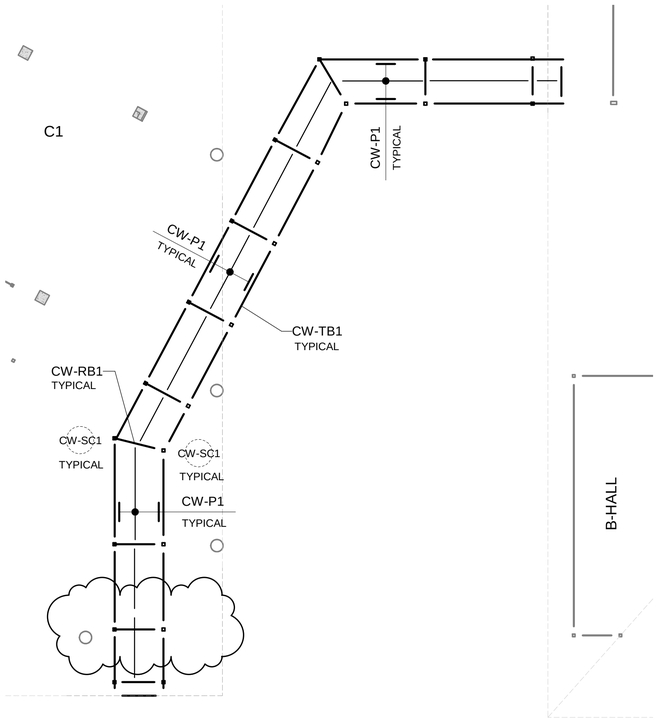
ISSUE	PROJECT No.	DRAWING No.
B	7900	S-0-GE-63

15/03/2021 11:32:09 AM



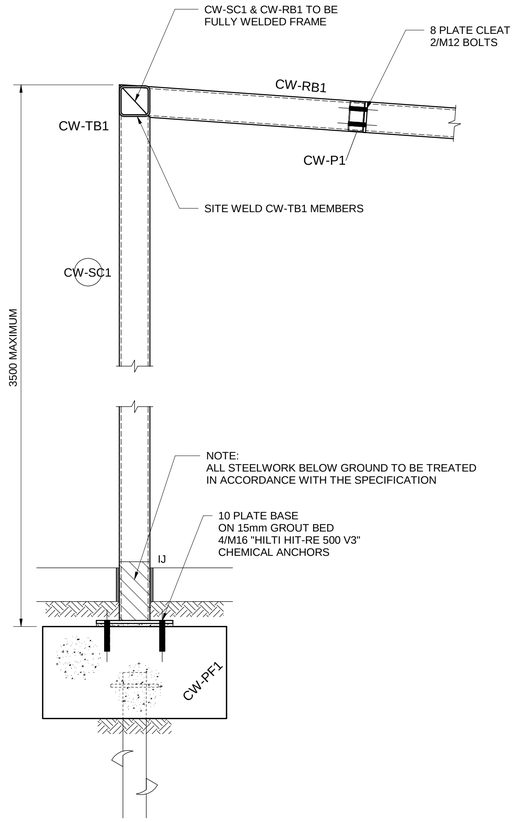
COVERED WAY FOOTING PLAN

SCALE 1 : 100



COVERED WAY ROOF FRAMING PLAN

SCALE 1 : 100



TYPICAL COVERED WAY DETAIL

SCALE 1 : 10

DRAWING NOTES:

REFER TO DRAWING S-0-GE-02 & 03 FOR 'CONSTRUCTION NOTES'

ALL STEELWORK FRAMING IS TO BE TREATED IN ACCORDANCE WITH THE SPECIFICATION ON DWG. S-0-GE-02.

PRIMARY STRUCTURAL STEEL FRAMING MEMBERS SHOWN ONLY.

THE STEELWORK FRAMING THAT IS TO BE WELDED ON SITE SHOULD BE LOCALLY PREPARED AND PAINTED IN ACCORDANCE WITH AS2312 SECTION 10.5 AND COATINGS SHALL BE AS SPECIFIED ON DWG. S-0-GE-02, SIMILAR TO ADJACENT STEELWORK.

REFER TO RELEVANT ARCHITECTURAL AND OTHER CONSULTANTS DRAWINGS FOR ANY SECONDARY STEEL FRAMING MEMBERS WHICH MAY BE REQUIRED.
(ie. GUTTERS, SUN HOODS, SUN SCREENS, WINDOW FRAMING, LOUVRES, ETC)

ALL TIMBER FRAMING IS TO BE IN STRICT ACCORDANCE WITH AS1684 & AS1720, NATIONAL TIMBER FRAMING CODE.

PURLIN BRIDGING TO BE FIXED TO TIE BEAMS & FASCIA MEMBERS WHERE REQUIRED.

PROVIDE Z20019 OR C20019 TRIMMER PURLINS BETWEEN MAIN ROOF PURLINS ALONG HIPS AND VALLEYS TO SUPPORT EDGE OF ROOF SHEETING.
FIX TO MAIN ROOF PURLINS WITH 100x100x4 FABRICATED ANGLE BRACKETS WITH 4/M12 PURLIN BOLTS. (TYPICAL) ALTERNATIVELY PROVIDE 75x75x1.6 FOLDED STEEL ANGLE LAID OVER ENDS OF PURLINS AND FIXED TO EACH PURLIN WITH 2-No.12 SELF DRILLING STEEL FASTENERS.

PROVIDE Z20019 OR C20019 TRIMMER PURLINS WHERE NECESSARY TO SUPPORT ROOF SHEETING, CEILING LININGS, ROOF VENTS, SKYLIGHTS, WINDCATCHERS etc. CONNECT TO MAIN ROOF PURLINS USING GENERAL PURPOSE BRACKETS AND 4/M12 PURLIN BOLTS AT EACH END.

LOCATE ROOF PURLINS TO SUIT ROOF SHEETING, CEILING LININGS etc. REFER TO ARCHITECTS DRAWINGS FOR TYPICAL DETAILS.

CONNECT ALL STEEL/CONCRETE COLUMNS AND STEEL/CONCRETE BEAMS TO ADJACENT BRICKWORK AS SPECIFIED ON DRAWING S-0-GE-04 TO PROVIDE LATERAL STABILITY. (ALSO REFER TYPICAL CONNECTION DETAILS) PROVIDE TEMPORARY BRACING TO STEELWORK IF REQUIRED UNTIL BRICKWORK HAS BEEN CONSTRUCTED.

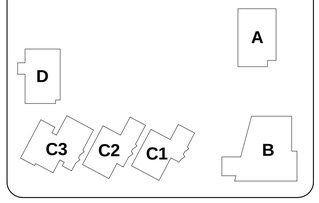
WALL FRAMING TO MANUFACTURERS DETAILS AND IN ACCORDANCE WITH THE SPECIFICATION.

TRUSSES TO MANUFACTURERS DETAILS AND IN ACCORDANCE WITH THE SPECIFICATION.

ALL EXTERNAL STEELWORK TO BE HOT DIP GALVANISED.

ALL EXTERNAL COLUMN BASEPLATES TO BE CONCEALED.

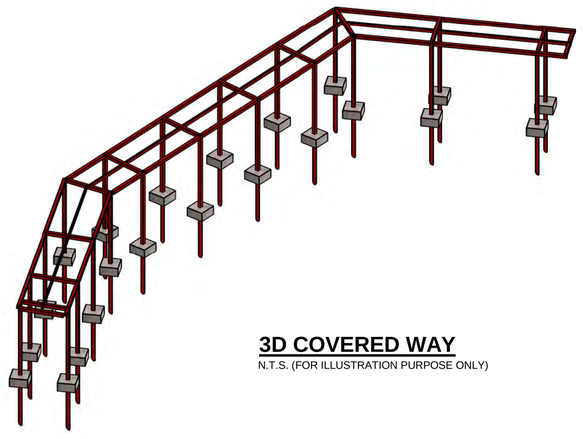
KEY PLAN



COVERED WAY (CW) PAD FOOTING SCHEDULE					
TAG	**SIZE (MIN.)** L x W x D	**REINFORCEMENT** 'X' BARS	'Y' BARS	**PILE TYPE**	**No. OF PILES**
CW-PF1	600 x 600 x 300	MASS CONCRETE	MASS CONCRETE	SP19	1

COVERED WAY (CW) ROOF FRAMING SCHEDULE			
ELEMENT	MARK	SIZE	COMMENTS
PURLINS	CW-P1	100x50x3.0RHS	AT 600MAX. CTS.
RAFTERS	CW-RB1	100x100x6.0SHS	FULLY WELDED FRAME WITH CW-SC1
COLUMNS	CW-SC1	100x100x6.0SHS	FULLY WELDED FRAME WITH CW-RB1
TIE BEAMS	CW-TB1	100x100x6.0SHS	

SCREW PILE SCHEDULE	
TAG	**WORKING LOAD** MINIMUM VERTICAL SAFE WORKING LOAD (kN) Compresion (+) / Tension (-)
SP1	50 kN
SP2	+50 / -10 kN
SP3	60 kN
SP4	+60 / -20 kN
SP5	100 kN
SP6	125 kN
SP7	150 kN
SP8	+150 / -50 kN
SP9	175 kN
SP10	200 kN
SP11	250 kN
SP12	300 kN
SP13	350 kN
SP14	400 kN
SP15	500 kN
SP16	550 kN
SP17	650 kN
SP18	800 kN
SP19	+25 / -10 kN



3D COVERED WAY

N.T.S. (FOR ILLUSTRATION PURPOSE ONLY)

PRINT IN COLOUR

ISSUE	DESCRIPTION	APPROVED	DATE
B	ARCHITECTS REVISIONS	MG	20.01.21
A	ISSUED FOR CONSTRUCTION	MG	06.11.20
1	CC2 RESUBMISSION		30.10.20

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PROJECT
PORTERS CREEK PUBLIC SCHOOL
75 Warnervale Rd. Warnervale NSW 2259

TITLE
COVERED WAY DETAILS

SCALES	DATE
1:100, 1:10 @ A1	10/28/20

DRAWN	DESIGN	VERIFIED	APPROVED
AB	TO		

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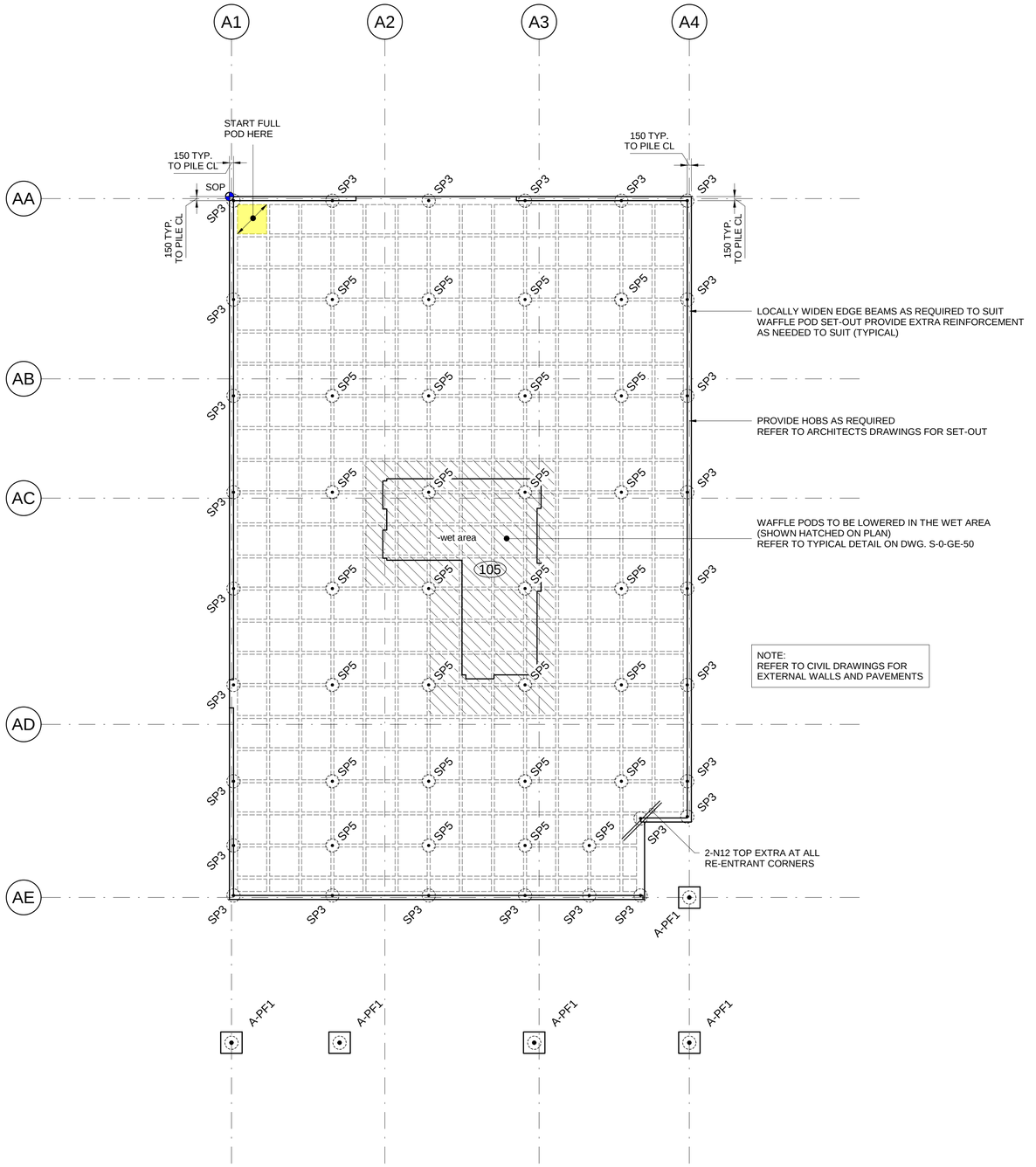
ISSUE	PROJECT No.	DRAWING No.
B	7900	S-0-GE-70

20/01/2021 2:45:54 PM



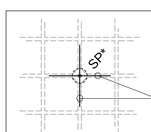
ADMIN - GROUND FLOOR PLAN

SCALE 1 : 100

330 THICK WAFFLE SLAB, SL92 MESH TOP

300min. WIDE EDGE BEAMS, 110 WIDE INTERNAL RIBS
LOCALLY WIDEN BEAMS/RIBS AT COLUMN LOCATIONS

DENOTES SLAB THICKNESS



PROVIDE 1-N12 TOP EXTRA (2000 LONG) BOTHWAYS OVER ALL INTERNAL SCREW PILES

EXTRA REINFORCEMENT

NOT SHOWN ON PLAN

PRINT IN COLOUR

SCREW PILE SCHEDULE	
TAG	**WORKING LOAD** MINIMUM VERTICAL SAFE WORKING LOAD (kN) Compresion (+) / Tension (-)
SP1	50 kN
SP2	+50 / -10 kN
SP3	60 kN
SP4	+60 / -20 kN
SP5	100 kN
SP6	125 kN
SP7	150 kN
SP8	+150 / -50 kN
SP9	175 kN
SP10	200 kN
SP11	250 kN
SP12	300 kN
SP13	350 kN
SP14	400 kN
SP15	500 kN
SP16	550 kN
SP17	650 kN
SP18	800 kN
SP19	+25 / -10 kN

ADMIN (A) PAD FOOTING SCHEDULE						
TAG	**SIZE (MIN.)** L x W x D	**REINFORCEMENT** 'X' BARS	'Y' BARS	TIES	**PILE TYPE**	**No. OF PILES**
A-PF1	800 x 800 x 300	4-N16 U-BARS	4-N16 U-BARS	-	SP4	1

STEEL SCREW PILE FOOTING SYSTEM:

1. STEEL SCREW PILES SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH AS2159 PILING - DESIGN AND INSTALLATION, TO PROVIDE THE SAFE WORKING LOADS NOMINATED ON THE STRUCTURAL DRAWINGS.
2. ALL DESIGN, DOCUMENTATION AND CERTIFICATION FOR THE STEEL SCREW PILES AND THE ASSOCIATED BEARING PLATES, ANCHORAGE REINFORCEMENT ETC. SHALL BE PROVIDED BY THE CONTRACTOR.

   STRUCTURAL CERTIFICATION SHALL BE PROVIDED BY THE CONTRACTOR FOR BOTH THE DESIGN AND INSTALLATION OF ALL OF THE STEEL SCREW PILES AND ASSOCIATED ELEMENTS.
3. THE CONTRACTOR SHALL DESIGN THE STEEL SCREW PILES TO PROVIDE A MINIMUM 50 YEAR DESIGN LIFE IN ACCORDANCE WITH AS2159 PILING - DESIGN AND INSTALLATION.
4. THE CONTRACTOR SHALL CONFIRM WHAT LEVEL AND TYPE OF CORROSION PROTECTION TO THE STEEL SCREW PILES WILL BE PROVIDED. IT SHOULD BE NOTED THAT ADDITIONAL GEOTECHNICAL TESTING MAY NEED TO BE CARRIED OUT TO DETERMINE THE REQUIRED EXPOSURE CLASSIFICATION FOR THE STEEL PILES IN ACCORDANCE WITH AS2159 PILING - DESIGN AND INSTALLATION.
5. THE CONTRACTOR SHALL CONFIRM WHAT LEVEL AND TYPE OF CAPACITY/INTEGRITY TESTING IN ACCORDANCE WITH AS2159 PILING - DESIGN AND INSTALLATION IS PROPOSED TO BE CARRIED OUT.

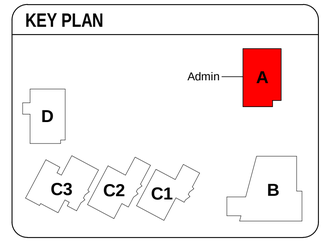
DRAWING NOTES:

1. REFER TO ARCHITECT'S DRAWINGS FOR SLAB FALLS AND CAST-IN REGLET DETAILS
2. ALL CONCRETE HOBS SHALL BE CAST INTEGRALLY WITH SLABS.
3. PENETRATIONS SMALLER THAN 200MM IN DIAMETER NOT SHOWN ON PLAN FOR CLARITY. REINFORCEMENT SHOWN SHALL BE DISPLACED TO THE SIDES OF THE PENETRATION AND **DO NOT CUT**. OBTAIN ENGINEER'S APPROVAL FOR PENETRATIONS NOT SHOWN ON STRUCTURAL DRAWING'S.
4. SCREW PILES TO BE DESIGNED AND INSTALLED IN ACCORDANCE WITH THE CONTRACTORS DETAILS.
5. ALL SLABS IN CONTACT WITH GROUND TO HAVE A WATERPROOFING MEMBRANE AS SPECIFIED BY THE ARCHITECT. (MEMBRANES TO HAVE A 20 YEAR MINIMUM DESIGN LIFE)
6. REFER TO DRAWING SERIES S-0-GE-02 TO S-0-GE-09 FOR 'CONSTRUCTION NOTES & GENERAL NOTES'.
7. REFER TO DRAWING SERIES S-0-GE-10 TO S-0-GE-19 FOR 'TYPICAL FOOTING DETAILS'.
8. REFER TO DRAWING SERIES S-0-GE-20 TO S-0-GE-29 FOR 'TYPICAL COLUMN DETAILS'.
9. REFER TO DRAWING SERIES S-0-GE-30 TO S-0-GE-39 FOR 'TYPICAL WALL DETAILS'.
10. REFER TO DRAWING SERIES S-0-GE-40 TO S-0-GE-49 FOR 'TYPICAL STAIR DETAILS'.
11. REFER TO DRAWING SERIES S-0-GE-50 TO S-0-GE-59 FOR 'TYPICAL CONCRETE DETAILS'.
12. REFER TO DRAWING SERIES S-0-GE-60 TO S-0-GE-69 FOR 'TYPICAL STEEL DETAILS'.

-wet area

DENOTES WET AREA, REFER TO ARCHITECTS DRAWINGS FOR SETDOWN DEPTHS. WAFFLE PODS TO BE LOWERED IN THIS AREA (SHOWN HATCHED ON PLAN)
REFER TO TYPICAL DETAIL ON DWG. S-0-GE-50

KEY PLAN



ISSUE	DESCRIPTION	APPROVED	DATE
A	ISSUED FOR CONSTRUCTION		05.11.20
7	CC2 RESUBMISSION		30.10.20
6	CC2 ISSUE		16.10.20
5	ISSUED FOR INFORMATION		28.08.20
4	ISSUED FOR INFORMATION		21.08.20
3	RE-ISSUED FOR CC1		12.08.20
2	RE-ISSUED FOR CC1		07.08.20
1	CC1 ISSUE		24.07.20

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PROJECT
PORTERS CREEK PUBLIC SCHOOL
75 Warnervale Rd. Warnervale NSW 2259

TITLE
ADMIN - GROUND FLOOR PLAN

SCALES	DATE
1:100 @ A1	JUNE 2020

DRAWN	DESIGN	VERIFIED	APPROVED
AB	TO		

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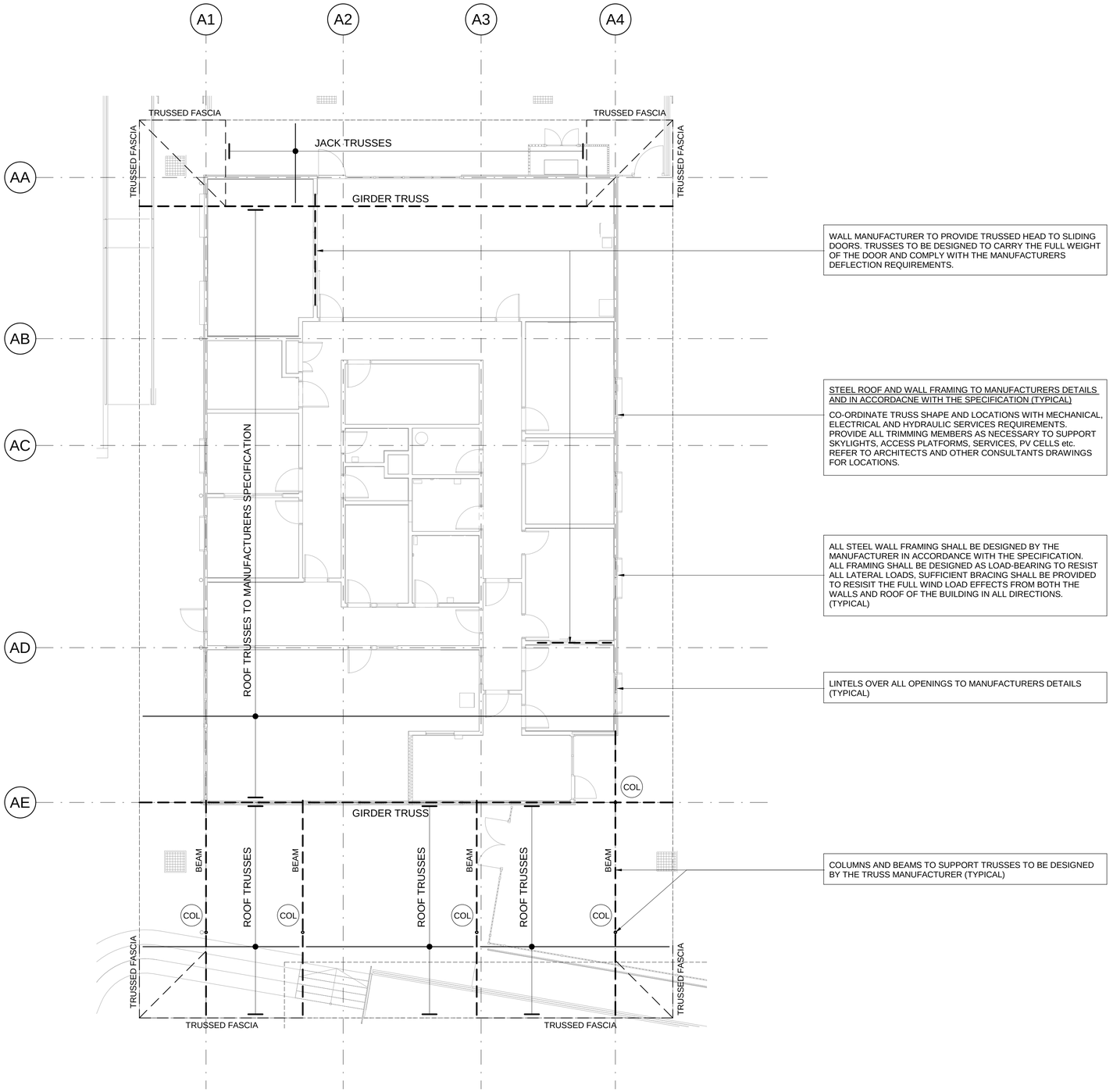
ISSUE	PROJECT No.	DRAWING No.
A	7900	S-A-GF-01

6/11/2020 4:59:23 PM



WALL MANUFACTURER TO PROVIDE TRUSSED HEAD TO SLIDING DOORS. TRUSSES TO BE DESIGNED TO CARRY THE FULL WEIGHT OF THE DOOR AND COMPLY WITH THE MANUFACTURERS DEFLECTION REQUIREMENTS.

STEEL ROOF AND WALL FRAMING TO MANUFACTURERS DETAILS AND IN ACCORDACNE WITH THE SPECIFICATION (TYPICAL)

CO-ORDINATE TRUSS SHAPE AND LOCATIONS WITH MECHANICAL, ELECTRICAL AND HYDRAULIC SERVICES REQUIREMENTS. PROVIDE ALL TRIMMING MEMBERS AS NECESSARY TO SUPPORT SKYLIGHTS, ACCESS PLATFORMS, SERVICES, PV CELLS etc. REFER TO ARCHITECTS AND OTHER CONSULTANTS DRAWINGS FOR LOCATIONS.

ALL STEEL WALL FRAMING SHALL BE DESIGNED BY THE MANUFACTURER IN ACCORDANCE WITH THE SPECIFICATION. ALL FRAMING SHALL BE DESIGNED AS LOAD-BEARING TO RESIST ALL LATERAL LOADS, SUFFICIENT BRACING SHALL BE PROVIDED TO RESISIT THE FULL WIND LOAD EFFECTS FROM BOTH THE WALLS AND ROOF OF THE BUILDING IN ALL DIRECTIONS. (TYPICAL)

LINTELS OVER ALL OPENINGS TO MANUFACTURERS DETAILS (TYPICAL)

COLUMNS AND BEAMS TO SUPPORT TRUSSES TO BE DESIGNED BY THE TRUSS MANUFACTURER (TYPICAL)

ADMIN - ROOF FRAMING PLAN

SCALE 1 : 100

DRAWING NOTES:

REFER TO DRAWING S-0-GE-02 & 03 FOR 'CONSTRUCTION NOTES'

ALL STEELWORK FRAMING IS TO BE TREATED IN ACCORDANCE WITH THE SPECIFICATION ON DWG. S-0-GE-02.

PRIMARY STRUCTURAL STEEL FRAMING MEMBERS SHOWN ONLY.

THE STEELWORK FRAMING THAT IS TO BE WELDED ON SITE SHOULD BE LOCALLY PREPARED AND PAINTED IN ACCORDANCE WITH AS2312 SECTION 10.5 AND COATINGS SHALL BE AS SPECIFIED ON DWG. S-0-GE-02, SIMILAR TO ADJACENT STEELWORK.

REFER TO RELEVANT ARCHITECTURAL AND OTHER CONSULTANTS DRAWINGS FOR ANY SECONDARY STEEL FRAMING MEMBERS WHICH MAY BE REQUIRED.
(ie. GUTTERS, SUN HOODS, SUN SCREENS, WINDOW FRAMING, LOUVRES, ETC)

ALL TIMBER FRAMING IS TO BE IN STRICT ACCORDANCE WITH AS1684 & AS1720, NATIONAL TIMBER FRAMING CODE.

PURLIN BRIDGING TO BE FIXED TO TIE BEAMS & FASCIA MEMBERS WHERE REQUIRED.

PROVIDE Z20019 OR C20019 TRIMMER PURLINS BETWEEN MAIN ROOF PURLINS ALONG HIPS AND VALLEYS TO SUPPORT EDGE OF ROOF SHEETING.
FIX TO MAIN ROOF PURLINS WITH 100x100x4 FABRICATED ANGLE BRACKETS WITH 4/M12 PURLIN BOLTS. (TYPICAL) ALTERNATIVELY PROVIDE 75x75x1.6 FOLDED STEEL ANGLE LAID OVER ENDS OF PURLINS AND FIXED TO EACH PURLIN WITH 2-No.12 SELF DRILLING STEEL FASTENERS.

PROVIDE Z20019 OR C20019 TRIMMER PURLINS WHERE NECESSARY TO SUPPORT ROOF SHEETING, CEILING LININGS, ROOF VENTS, SKYLIGHTS, WINDCATCHERS etc. CONNECT TO MAIN ROOF PURLINS USING GENERAL PURPOSE BRACKETS AND 4/M12 PURLIN BOLTS AT EACH END.

LOCATE ROOF PURLINS TO SUIT ROOF SHEETING, CEILING LININGS etc. REFER TO ARCHITECTS DRAWINGS FOR TYPICAL DETAILS.

CONNECT ALL STEEL/CONCRETE COLUMNS AND STEEL/CONCRETE BEAMS TO ADJACENT BRICKWORK AS SPECIFIED ON DRAWING S-0-GE-04 TO PROVIDE LATERAL STABILITY. (ALSO REFER TYPICAL CONNECTION DETAILS) PROVIDE TEMPORARY BRACING TO STEELWORK IF REQUIRED UNTIL BRICKWORK HAS BEEN CONSTRUCTED.

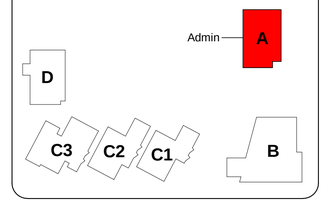
WALL FRAMING TO MANUFACTURERS DETAILS AND IN ACCORDANCE WITH THE SPECIFICATION.

TRUSSES TO MANUFACTURERS DETAILS AND IN ACCORDANCE WITH THE SPECIFICATION.

ALL EXTERNAL STEELWORK TO BE HOT DIP GALVANISED.

ALL EXTERNAL COLUMN BASEPLATES TO BE CONCEALED.

KEY PLAN



ISSUE	DESCRIPTION	APPROVED	DATE
A	ISSUED FOR CONSTRUCTION		06.11.20
4	CC2 RESUBMISSION		30.10.20
3	CC2 ISSUE		16.10.20
2	ISSUED FOR INFORMATION		28.08.20
1	ISSUED FOR INFORMATION		21.08.20

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PROJECT
PORTERS CREEK PUBLIC SCHOOL
75 Warnervale Rd. Warnervale NSW 2259

TITLE
ADMIN - ROOF FRAMING PLAN

SCALES	DATE
1:100 @ A1	JUNE 2020

DRAWN	DESIGN	VERIFIED	APPROVED
AB	TO		

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ISSUE	PROJECT No.	DRAWING No.
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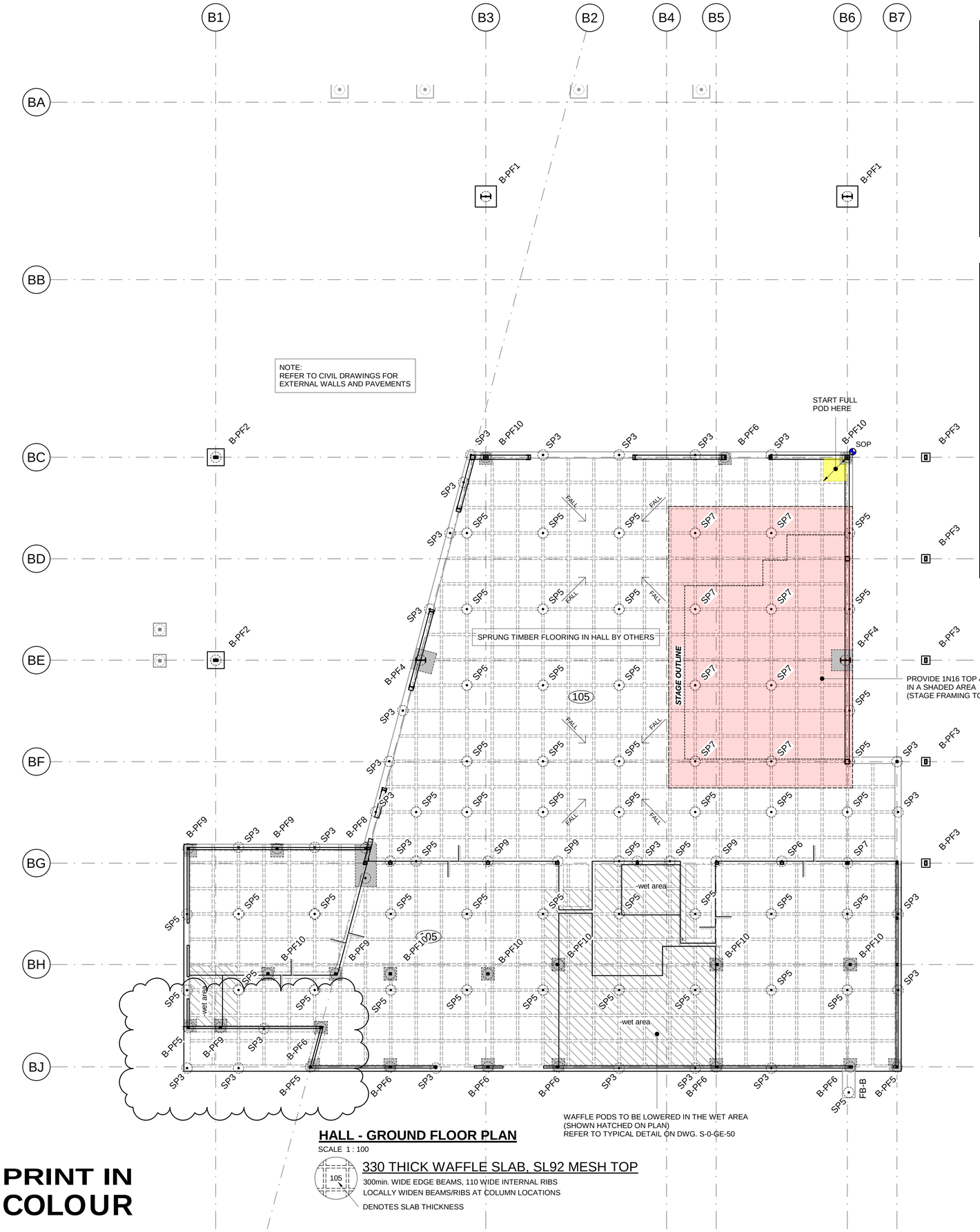


HALL - GROUND FLOOR PLAN

SCALE 1 : 100

105

330 THICK WAFFLE SLAB, SL92 MESH TOP

300min. WIDE EDGE BEAMS, 110 WIDE INTERNAL RIBS

LOCALLY WIDEN BEAMS/RIBS AT COLUMN LOCATIONS

DENOTES SLAB THICKNESS

PRINT IN COLOUR

HALL (B) PAD FOOTING SCHEDULE

TAG	SIZE (MIN.) L x W x D	REINFORCEMENT 'X' BARS	'Y' BARS	TIES	PILE TYPE	No. OF PILES
B-PF1	1000 x 1000 x 400	5-N16 U-BARS	5-N16 U-BARS	-	SP8	1
B-PF2	800 x 800 x 300	4-N16 U-BARS	4-N16 U-BARS	-	SP4	1
B-PF3	400 x 400 x 400	4-N12 U-BARS	4-N12 U-BARS	-	-	-
B-PF4	1000 x 1000 x 400	5-N16 U-BARS	5-N16 U-BARS	-	SP10	1
B-PF5	600 x 600 x 300	3-N12 U-BARS	3-N12 U-BARS	-	SP3	1
B-PF6	600 x 600 x 300	3-N12 U-BARS	3-N12 U-BARS	-	SP5	1
B-PF7	not used					
B-PF8	2000 x 1000 x 400	5-N16 U-BARS	5-N16 U-BARS	N12-250 U-BARS	SP5	2
B-PF9	600 x 600 x 300	3-N12 U-BARS	3-N12 U-BARS	-	SP6	1
B-PF10	600 x 600 x 300	3-N12 U-BARS	3-N12 U-BARS	-	SP7	1

NOTE: PAD FOOTING SIZES GIVEN ARE MINIMUM SIZES.
PADS CAN BE MADE BIGGER TO SUIT WAFFLE POD BLOCK OUTS IF REQUIRED.
(EXTRA REINFORCEMENT SHOULD BE ADDED TO SUIT)

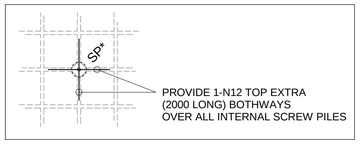
SCREW PILE SCHEDULE

TAG	WORKING LOAD MINIMUM VERTICAL SAFE WORKING LOAD (kN) Compresion (+) / Tension (-)
SP1	50 kN
SP2	+50 / -10 kN
SP3	60 kN
SP4	+60 / -20 kN
SP5	100 kN
SP6	125 kN
SP7	150 kN
SP8	+150 / -50 kN
SP9	175 kN
SP10	200 kN
SP11	250 kN
SP12	300 kN
SP13	350 kN
SP14	400 kN
SP15	500 kN
SP16	550 kN
SP17	650 kN
SP18	800 kN
SP19	+25 / -10 kN

STEEL SCREW PILE FOOTING SYSTEM:

1. STEEL SCREW PILES SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH AS2159 PILING - DESIGN AND INSTALLATION, TO PROVIDE THE SAFE WORKING LOADS NOMINATED ON THE STRUCTURAL DRAWINGS.
2. ALL DESIGN, DOCUMENTATION AND CERTIFICATION FOR THE STEEL SCREW PILES AND THE ASSOCIATED BEARING PLATES, ANCHORAGE REINFORCEMENT ETC. SHALL BE PROVIDED BY THE CONTRACTOR.

   STRUCTURAL CERTIFICATION SHALL BE PROVIDED BY THE CONTRACTOR FOR BOTH THE DESIGN AND INSTALLATION OF ALL OF THE STEEL SCREW PILES AND ASSOCIATED ELEMENTS.
3. THE CONTRACTOR SHALL DESIGN THE STEEL SCREW PILES TO PROVIDE A MINIMUM 50 YEAR DESIGN LIFE IN ACCORDANCE WITH AS2159 PILING - DESIGN AND INSTALLATION.
4. THE CONTRACTOR SHALL CONFIRM WHAT LEVEL AND TYPE OF CORROSION PROTECTION TO THE STEEL SCREW PILES WILL BE PROVIDED. IT SHOULD BE NOTED THAT ADDITIONAL GEOTECHNICAL TESTING MAY NEED TO BE CARRIED OUT TO DETERMINE THE REQUIRED EXPOSURE CLASSIFICATION FOR THE STEEL PILES IN ACCORDANCE WITH AS2159 PILING - DESIGN AND INSTALLATION.
5. THE CONTRACTOR SHALL CONFIRM WHAT LEVEL AND TYPE OF CAPACITY/INTEGRITY TESTING IN ACCORDANCE WITH AS2159 PILING - DESIGN AND INSTALLATION IS PROPOSED TO BE CARRIED OUT.



EXTRA REINFORCEMENT

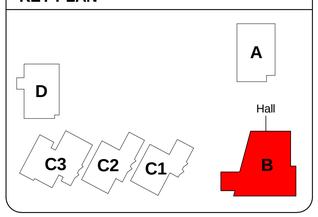
NOT SHOWN ON PLAN

DRAWING NOTES:

1. REFER TO ARCHITECT'S DRAWINGS FOR SLAB FALLS AND CAST-IN REGLET DETAILS
2. ALL CONCRETE HOBS SHALL BE CAST INTEGRALLY WITH SLABS.
3. PENETRATIONS SMALLER THAN 200MM IN DIAMETER NOT SHOWN ON PLAN FOR CLARITY. REINFORCEMENT SHOWN SHALL BE DISPLACED TO THE SIDES OF THE PENETRATION AND **DO NOT CUT**. OBTAIN ENGINEER'S APPROVAL FOR PENETRATIONS NOT SHOWN ON STRUCTURAL DRAWING'S.
4. SCREW PILES TO BE DESIGNED AND INSTALLED IN ACCORDANCE WITH THE CONTRACTORS DETAILS.
5. ALL SLABS IN CONTACT WITH GROUND TO HAVE A WATERPROOFING MEMBRANE AS SPECIFIED BY THE ARCHITECT. (MEMBRANES TO HAVE A 20 YEAR MINIMUM DESIGN LIFE)
6. REFER TO DRAWING SERIES S-0-GE-02 TO S-0-GE-09 FOR 'CONSTRUCTION NOTES & GENERAL NOTES'.
7. REFER TO DRAWING SERIES S-0-GE-10 TO S-0-GE-19 FOR 'TYPICAL FOOTING DETAILS'.
8. REFER TO DRAWING SERIES S-0-GE-20 TO S-0-GE-29 FOR 'TYPICAL COLUMN DETAILS'.
9. REFER TO DRAWING SERIES S-0-GE-30 TO S-0-GE-39 FOR 'TYPICAL WALL DETAILS'.
10. REFER TO DRAWING SERIES S-0-GE-40 TO S-0-GE-49 FOR 'TYPICAL STAIR DETAILS'.
11. REFER TO DRAWING SERIES S-0-GE-50 TO S-0-GE-59 FOR 'TYPICAL CONCRETE DETAILS'.
12. REFER TO DRAWING SERIES S-0-GE-60 TO S-0-GE-69 FOR 'TYPICAL STEEL DETAILS'.

-wet area — DENOTES WET AREA, REFER TO ARCHITECTS DRAWINGS FOR SETDOWN DEPTHS. WAFFLE PODS TO BE LOWERED IN THIS AREA (SHOWN HATCHED ON PLAN) REFER TO TYPICAL DETAIL ON DWG. S-0-GE-50

KEY PLAN



ISSUE	DESCRIPTION	APPROVED	DATE
C	PUMP ROOM SLAB ADDED	TO	09.12.20
B	DRAWING REVISED	MG	12.11.20
A	ISSUED FOR CONSTRUCTION	MG	06.11.20
7	CC2 RESUBMISSION		30.10.20
6	CC2 ISSUE		16.10.20
5	ISSUED FOR INFORMATION		28.08.20
4	ISSUED FOR INFORMATION		21.08.20
3	RE-ISSUED FOR CC1		12.08.20
2	RE-ISSUED FOR CC1		07.08.20
1	CC1 ISSUE		24.07.20

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PROJECT

PORTERS CREEK PUBLIC SCHOOL

75 Warnervale Rd. Warnervale NSW 2259

TITLE

HALL - GROUND FLOOR PLAN

SCALES	DATE
1:100 @ A1	JUNE 2020

DRAWN	DESIGN	VERIFIED	APPROVED
AB	TO		

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ISSUE	PROJECT No.	DRAWING No.
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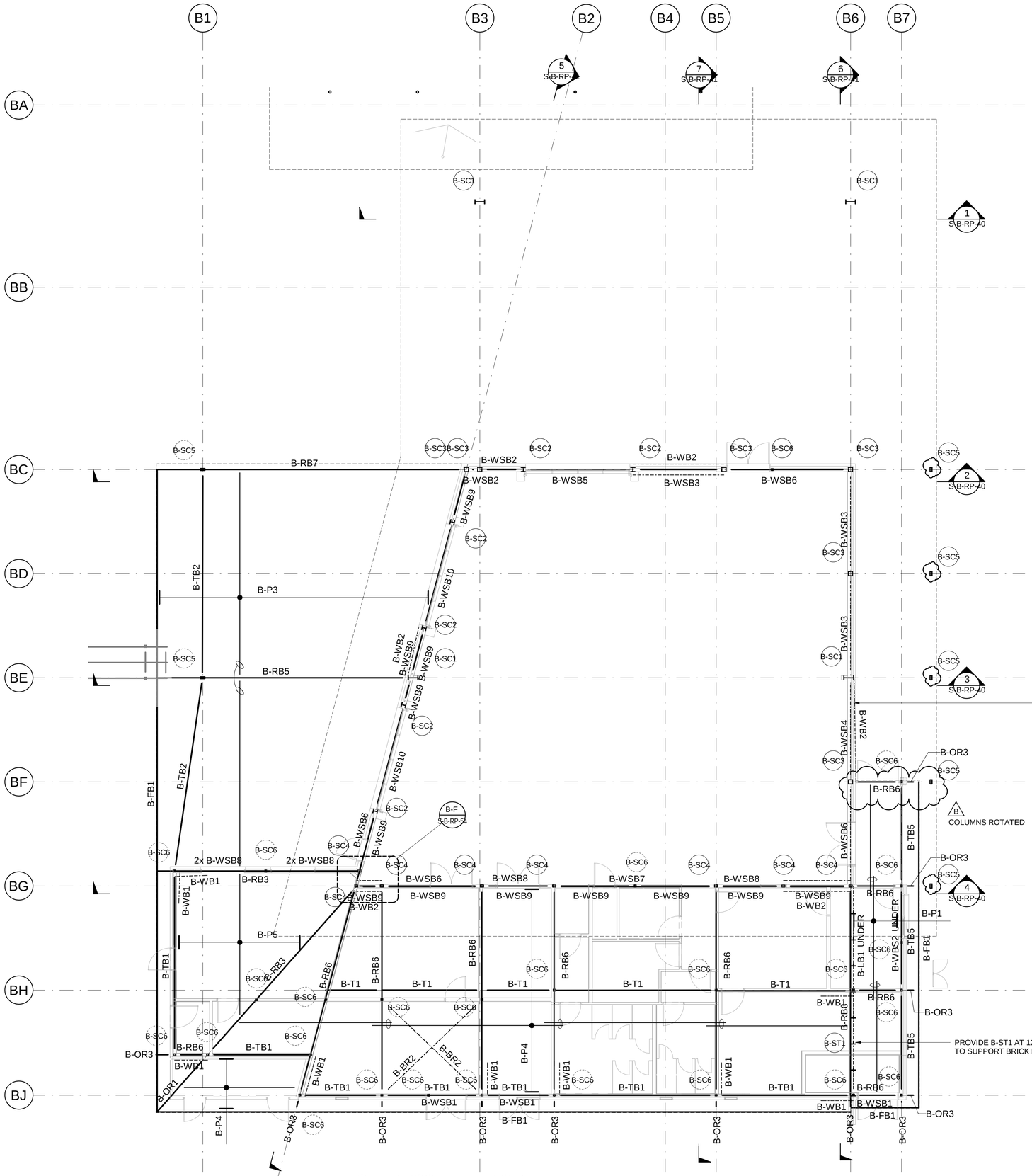

HALL - LOWER ROOF FRAMING PLAN

SCALE 1 : 100

HALL (B) ROOF FRAMING SCHEDULE

ELEMENT	MARK	SIZE	COMMENTS
ROOF BRACING	B-BR1	Ø20mm ROD	WITH TURNBUCKLE
	B-BR2	Ø16mm ROD	WITH TURNBUCKLE
FASCIAS	B-FB1	250PFC	
LINTELS	B-LB1	200UC46.2	
OUTRIGGERS	B-OR1	200UB29.8	
	B-OR2	200UC46.2	PRESET 15mm AT CANTILEVER
	B-OR3	200UB18.2	
	B-OR4	200UB22.3	
PURLINS	B-P1	Z20019	AT 1200MAX. CTS. LAP AT SUPPORTS
	B-P2	C20015	AT 1200MAX. CTS.
	B-P3	C20024	AT 900MAX. CTS.
	B-P4	Z15015	AT 1200MAX. CTS. LAP AT SUPPORTS
	B-P5	C20024	AT 1200MAX. CTS.
	B-P6	C20024	AT 600MAX. CTS.
RAFTERS	B-RB1	360UB50.7	
	B-RB2	530UB82	
	B-RB3	200UB22.3	
	B-RB4	460UB67.1	
	B-RB5	310UB32	
	B-RB6	200UB18.2	
	B-RB7	310UB40.4	
	B-RB8	200PFC	FIXED TO BRICK PARAPET WITH M12-300MAX. CTS. 'HILTI HIT HY170' ANCHORS
SUPPORT BEAMS	B-SB1	200UB25.4	FAN SUPPORT BEAM WITH 200kg MAX. WEIGHT AT MID-SPAN
COLUMNS	B-SC1	460UB74.6	
	B-SC2	200UC46.2	
	B-SC3	200x200x5.0SHS	
	B-SC4	150x100x6.0RHS	
	B-SC5	200x100x6.0RHS	
	B-SC6	89x89x6.0SHS	
	B-ST1	100 CT 23.1	AT 1200MAX. CTS.
TIE BEAMS	B-T1	Ø101.6x3.2CHS	
	B-T2	Ø101.6x3.2CHS	
	B-T3	200x200x5.0SHS	
	B-T4	200UB22.3	
	B-T5	150x150x5.0SHS	
	B-TB1	125x125x5.0SHS	
	B-TB2	150x150x5.0SHS	
	B-TB3	200x200x5.0SHS	
	B-TB4	530UB.82	
	B-TB5	100x100x4.0SHS	
UNDER PURLINS	B-UP1	C20015	AT 1200MAX. CTS.
	B-UP2	C20024	AT 1200MAX. CTS.
WALL BRACING	B-WB1	89x89x6.0SHS	
	B-WB2	Ø20mm ROD	WITH TURNBUCKLE
	B-WBS2	100x100x4.0SHS	
WALL STIFFENER BEAMS	B-WSB1	125x125x5.0SHS	
	B-WSB2	89x89x5.0SHS	
	B-WSB3	150x150x5.0SHS	
	B-WSB4	200x200x5.0SHS	
	B-WSB5	250x150x5.0RHS	WITH 10 PLATE CONTINUOUS TO SUPPORT BRICKWORK
	B-WSB6	200x200x5.0SHS	WITH 10 PLATE CONTINUOUS TO SUPPORT BRICKWORK
	B-WSB7	200x200x5.0SHS	WITH 10 PLATE CONTINUOUS TO SUPPORT BRICKWORK
	B-WSB8	150x150x5.0SHS	WITH 10 PLATE CONTINUOUS TO SUPPORT BRICKWORK
	B-WSB9	100x100x5.0SHS	
	B-WSB10	250x150x5.0RHS	WITH 10 PLATE CONTINUOUS TO SUPPORT BRICKWORK
	B-WSB11	100x100x6.0SHS	

ALL STEEL WALL FRAMING SHALL BE DESIGNED BY THE MANUFACTURER IN ACCORDANCE WITH THE SPECIFICATION. ALL FRAMING SHALL BE DESIGNED AS LOAD-BEARING TO RESIST ALL LATERAL LOADS, SUFFICIENT BRACING SHALL BE PROVIDED TO RESIST THE FULL WIND LOAD EFFECTS FROM BOTH THE WALLS AND ROOF OF THE BUILDING IN ALL DIRECTIONS. (TYPICAL)

NOTE FOR PURLINS:

PROVIDE 1 ROW OF BRIDGING WHEN SPAN OF PURLIN EXCEEDS 3000mm.
PROVIDE 2 ROWS OF BRIDGING WHEN SPAN OF PURLIN EXCEEDS 6000mm.
PROVIDE 3 ROWS OF BRIDGING WHEN SPAN OF PURLIN EXCEEDS 8000mm.
LAPPED PURLINS TO LAP MIN. 15% OF SPAN AS REQUIRED. (TYPICAL U.N.O.)

DRAWING NOTES:

REFER TO DRAWING S-0-GE-02 & 03 FOR 'CONSTRUCTION NOTES'

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PURLIN BRIDGING TO BE FIXED TO TIE BEAMS & FASCIA MEMBERS WHERE REQUIRED.

PROVIDE Z20019 OR C20019 TRIMMER PURLINS BETWEEN MAIN ROOF PURLINS ALONG HIPS AND VALLEYS TO SUPPORT EDGE OF ROOF SHEETING.
FIX TO MAIN ROOF PURLINS WITH 100x100x4 FABRICATED ANGLE BRACKETS WITH 4/M12 PURLIN BOLTS. (TYPICAL) ALTERNATIVELY PROVIDE 75x75x1.6 FOLDED STEEL ANGLE LAID OVER ENDS OF PURLINS AND FIXED TO EACH PURLIN WITH 2-No.12 SELF DRILLING STEEL FASTENERS.

PROVIDE Z20019 OR C20019 TRIMMER PURLINS WHERE NECESSARY TO SUPPORT ROOF SHEETING, CEILING LININGS, ROOF VENTS, SKYLIGHTS, WINDCATCHERS etc. CONNECT TO MAIN ROOF PURLINS USING GENERAL PURPOSE BRACKETS AND 4/M12 PURLIN BOLTS AT EACH END.

LOCATE ROOF PURLINS TO SUIT ROOF SHEETING, CEILING LININGS etc. REFER TO ARCHITECTS DRAWINGS FOR TYPICAL DETAILS.

CONNECT ALL STEEL/CONCRETE COLUMNS AND STEEL/CONCRETE BEAMS TO ADJACENT BRICKWORK AS SPECIFIED ON DRAWING S-0-GE-04 TO PROVIDE LATERAL STABILITY. (ALSO REFER TYPICAL CONNECTION DETAILS) PROVIDE TEMPORARY BRACING TO STEELWORK IF REQUIRED UNTIL BRICKWORK HAS BEEN CONSTRUCTED.

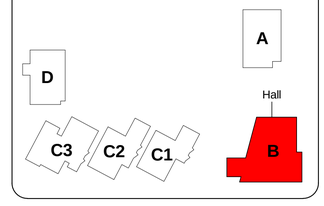
WALL FRAMING TO MANUFACTURERS DETAILS AND IN ACCORDANCE WITH THE SPECIFICATION.

TRUSSES TO MANUFACTURERS DETAILS AND IN ACCORDANCE WITH THE SPECIFICATION.

ALL EXTERNAL STEELWORK TO BE HOT DIP GALVANISED.

ALL EXTERNAL COLUMN BASEPLATES TO BE CONCEALED.

KEY PLAN



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B	DRAWING REVISED	MG	12.11.20
A	ISSUED FOR CONSTRUCTION	MG	06.11.20
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PROJECT
PORTERS CREEK PUBLIC SCHOOL
75 Warnervale Rd. Warnervale NSW 2259

TITLE
HALL - LOWER ROOF FRAMING PLAN

SCALES	DATE
1:100 @ A1	JUNE 2020

DRAWN	DESIGN	VERIFIED	APPROVED
AB	TO		

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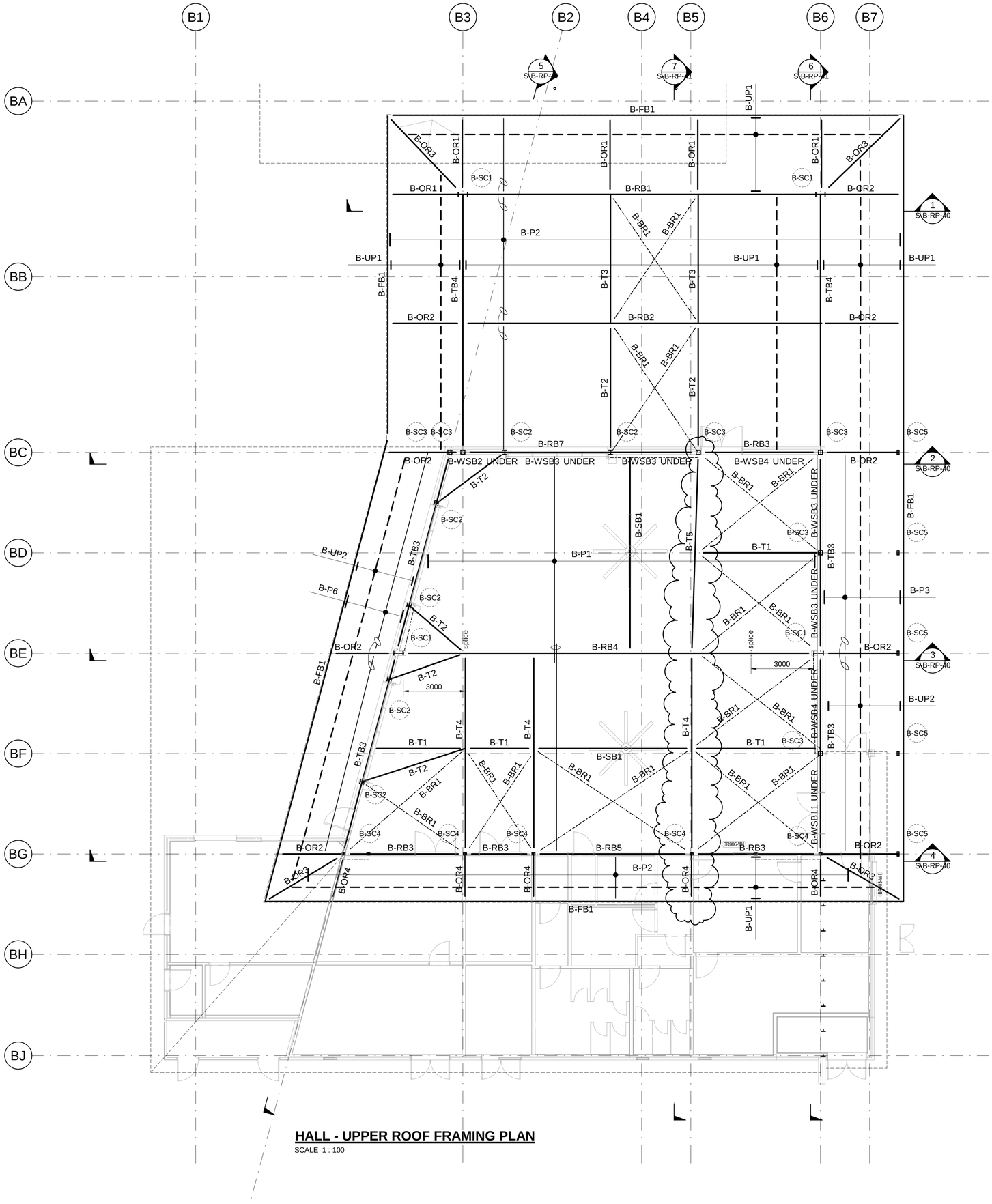
ISSUE	PROJECT No.	DRAWING No.
B	7900	S-B-RP-01

12/11/2020 12:10:18 PM



HALL - UPPER ROOF FRAMING PLAN

SCALE 1 : 100

HALL (B) ROOF FRAMING SCHEDULE

ELEMENT	MARK	SIZE	COMMENTS
ROOF BRACING	B-BR1	Ø20mm ROD	WITH TURNBUCKLE
	B-BR2	Ø16mm ROD	WITH TURNBUCKLE
FASCIAS	B-FB1	250PFC	
LINTELS	B-LB1	200UC46.2	
OUTRIGGERS	B-OR1	200UB29.8	
	B-OR2	200UC46.2	PRESET 15mm AT CANTILEVER
	B-OR3	200UB18.2	
	B-OR4	200UB22.3	
PURLINS	B-P1	Z20019	AT 1200MAX. CTS. LAP AT SUPPORTS
	B-P2	C20015	AT 1200MAX. CTS.
	B-P3	C20024	AT 900MAX. CTS.
	B-P4	Z15015	AT 1200MAX. CTS. LAP AT SUPPORTS
	B-P5	C20024	AT 1200MAX. CTS.
	B-P6	C20024	AT 600MAX. CTS.
RAFTERS	B-RB1	360UB50.7	
	B-RB2	530UB82	
	B-RB3	200UB22.3	
	B-RB4	460UB67.1	
	B-RB5	310UB32	
	B-RB6	200UB18.2	
	B-RB7	310UB40.4	
	B-RB8	200PFC	FIXED TO BRICK PARAPET WITH M12-300MAX. CTS. 'HILTI HIT HY170' ANCHORS
SUPPORT BEAMS	B-SB1	200UB25.4	FAN SUPPORT BEAM WITH 200kg MAX. WEIGHT AT MID-SPAN
COLUMNS	B-SC1	460UB74.6	
	B-SC2	200UC46.2	
	B-SC3	200x200x5.0SHS	
	B-SC4	150x100x6.0RHS	
	B-SC5	200x100x6.0RHS	
	B-SC6	89x89x6.0SHS	
	B-ST1	100 CT 23.1	AT 1200MAX. CTS.
TIE BEAMS	B-T1	Ø101.6x3.2CHS	
	B-T2	Ø101.6x3.2CHS	
	B-T3	200x200x5.0SHS	
	B-T4	200UB22.3	
	B-T5	150x150x5.0SHS	
	B-TB1	125x125x5.0SHS	
	B-TB2	150x150x5.0SHS	
	B-TB3	200x200x5.0SHS	
	B-TB4	530UB.82	
	B-TB5	100x100x4.0SHS	
UNDER PURLINS	B-UP1	C20015	AT 1200MAX. CTS.
	B-UP2	C20024	AT 1200MAX. CTS.
WALL BRACING	B-WB1	89x89x6.0SHS	
	B-WB2	Ø20mm ROD	WITH TURNBUCKLE
	B-WBS2	100x100x4.0SHS	
WALL STIFFENER BEAMS	B-WSB1	125x125x5.0SHS	
	B-WSB2	89x89x5.0SHS	
	B-WSB3	150x150x5.0SHS	
	B-WSB4	200x200x5.0SHS	
	B-WSB5	250x150x5.0RHS	WITH 10 PLATE CONTINUOUS TO SUPPORT BRICKWORK
	B-WSB6	200x200x5.0SHS	WITH 10 PLATE CONTINUOUS TO SUPPORT BRICKWORK
	B-WSB7	200x200x5.0SHS	WITH 10 PLATE CONTINUOUS TO SUPPORT BRICKWORK
	B-WSB8	150x150x5.0SHS	WITH 10 PLATE CONTINUOUS TO SUPPORT BRICKWORK
	B-WSB9	100x100x5.0SHS	
	B-WSB10	250x150x5.0RHS	WITH 10 PLATE CONTINUOUS TO SUPPORT BRICKWORK
	B-WSB11	100x100x6.0SHS	

NOTE FOR PURLINS:

PROVIDE 1 ROW OF BRIDGING WHEN SPAN OF PURLIN EXCEEDS 3000mm.
PROVIDE 2 ROWS OF BRIDGING WHEN SPAN OF PURLIN EXCEEDS 6000mm.
PROVIDE 3 ROWS OF BRIDGING WHEN SPAN OF PURLIN EXCEEDS 8000mm.
LAPPED PURLINS TO LAP MIN. 15% OF SPAN AS REQUIRED. (TYPICAL U.N.O.)

HEATER & PROJECTOR SUPPORT:

SUPPORT BEAMS FOR HEATER AND PROJECTORS TO FUTURE DETAIL.
REFER ARCHITECTS DRAWINGS FOR LOCATIONS.

DRAWING NOTES:

REFER TO DRAWING S-0-GE-02 & 03 FOR 'CONSTRUCTION NOTES'

ALL STEELWORK FRAMING IS TO BE TREATED IN ACCORDANCE WITH THE SPECIFICATION ON DWG. S-0-GE-02.

PRIMARY STRUCTURAL STEEL FRAMING MEMBERS SHOWN ONLY.

THE STEELWORK FRAMING THAT IS TO BE WELDED ON SITE SHOULD BE LOCALLY PREPARED AND PAINTED IN ACCORDANCE WITH AS2312 SECTION 10.5 AND COATINGS SHALL BE AS SPECIFIED ON DWG. S-0-GE-02, SIMILAR TO ADJACENT STEELWORK.

REFER TO RELEVANT ARCHITECTURAL AND OTHER CONSULTANTS DRAWINGS FOR ANY SECONDARY STEEL FRAMING MEMBERS WHICH MAY BE REQUIRED.
(ie. GUTTERS, SUN HOODS, SUN SCREENS, WINDOW FRAMING, LOUVRES, ETC)

ALL TIMBER FRAMING IS TO BE IN STRICT ACCORDANCE WITH AS1684 & AS1720, NATIONAL TIMBER FRAMING CODE.

PURLIN BRIDGING TO BE FIXED TO TIE BEAMS & FASCIA MEMBERS WHERE REQUIRED.

PROVIDE Z20019 OR C20019 TRIMMER PURLINS BETWEEN MAIN ROOF PURLINS ALONG HIPS AND VALLEYS TO SUPPORT EDGE OF ROOF SHEETING.
FIX TO MAIN ROOF PURLINS WITH 100x100x4 FABRICATED ANGLE BRACKETS WITH 4/M12 PURLIN BOLTS. (TYPICAL) ALTERNATIVELY PROVIDE 75x75x1.6 FOLDED STEEL ANGLE LAID OVER ENDS OF PURLINS AND FIXED TO EACH PURLIN WITH 2-No.12 SELF DRILLING STEEL FASTENERS.

PROVIDE Z20019 OR C20019 TRIMMER PURLINS WHERE NECESSARY TO SUPPORT ROOF SHEETING, CEILING LININGS, ROOF VENTS, SKYLIGHTS, WINDCATCHERS etc. CONNECT TO MAIN ROOF PURLINS USING GENERAL PURPOSE BRACKETS AND 4/M12 PURLIN BOLTS AT EACH END.

LOCATE ROOF PURLINS TO SUIT ROOF SHEETING, CEILING LININGS etc. REFER TO ARCHITECTS DRAWINGS FOR TYPICAL DETAILS.

CONNECT ALL STEEL/CONCRETE COLUMNS AND STEEL/CONCRETE BEAMS TO ADJACENT BRICKWORK AS SPECIFIED ON DRAWING S-0-GE-04 TO PROVIDE LATERAL STABILITY. (ALSO REFER TYPICAL CONNECTION DETAILS) PROVIDE TEMPORARY BRACING TO STEELWORK IF REQUIRED UNTIL BRICKWORK HAS BEEN CONSTRUCTED.

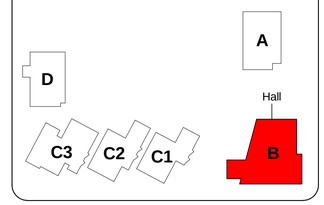
WALL FRAMING TO MANUFACTURERS DETAILS AND IN ACCORDANCE WITH THE SPECIFICATION.

TRUSSES TO MANUFACTURERS DETAILS AND IN ACCORDANCE WITH THE SPECIFICATION.

ALL EXTERNAL STEELWORK TO BE HOT DIP GALVANISED.

ALL EXTERNAL COLUMN BASEPLATES TO BE CONCEALED.

KEY PLAN



ISSUE	DESCRIPTION	APPROVED	DATE
C	B-T4, B-OR4 MOVED TO ALIGN WITH COLUMN	MG	14.12.20
B	DRAWING REVISED	MG	12.11.20
A	ISSUED FOR CONSTRUCTION	MG	06.11.20
4	CC2 RESUBMISSION		30.10.20
3	CC2 ISSUE		16.10.20
2	ISSUED FOR INFORMATION		28.08.20
1	ISSUED FOR INFORMATION		21.08.20

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PROJECT
PORTERS CREEK PUBLIC SCHOOL
75 Warnervale Rd. Warnervale NSW 2259

TITLE
HALL - UPPER ROOF FRAMING PLAN

SCALES	DATE
1:100 @ A1	08/18/20

DRAWN	DESIGN	VERIFIED	APPROVED
AB	TO		

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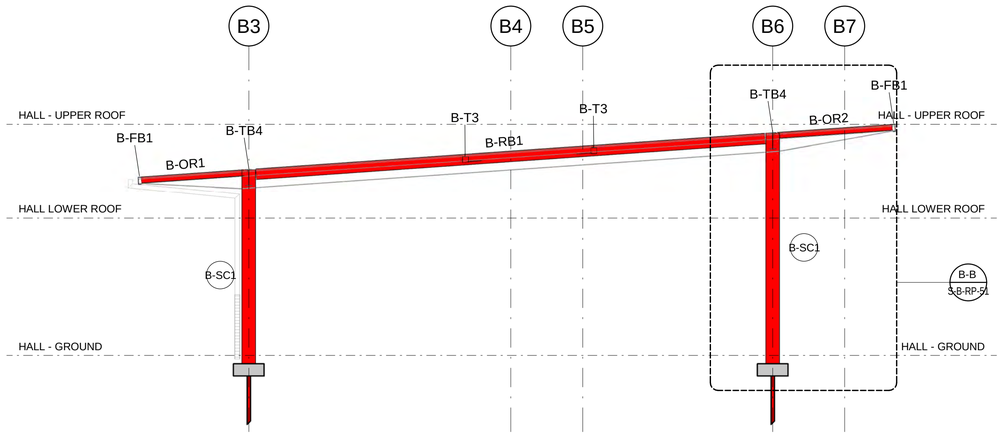
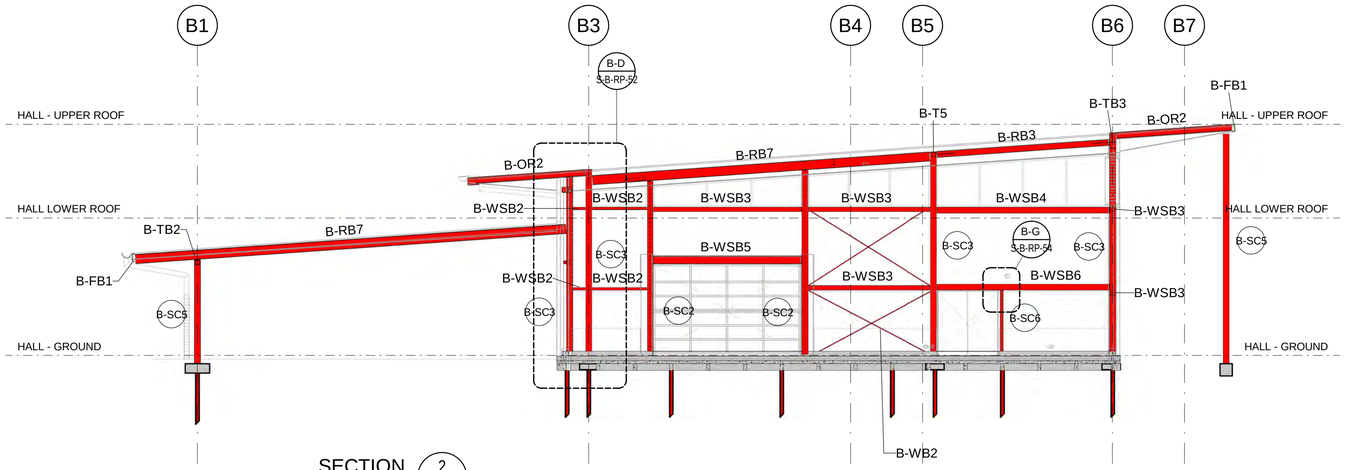
ISSUE	PROJECT No.	DRAWING No.
C	7900	S-B-RP-02

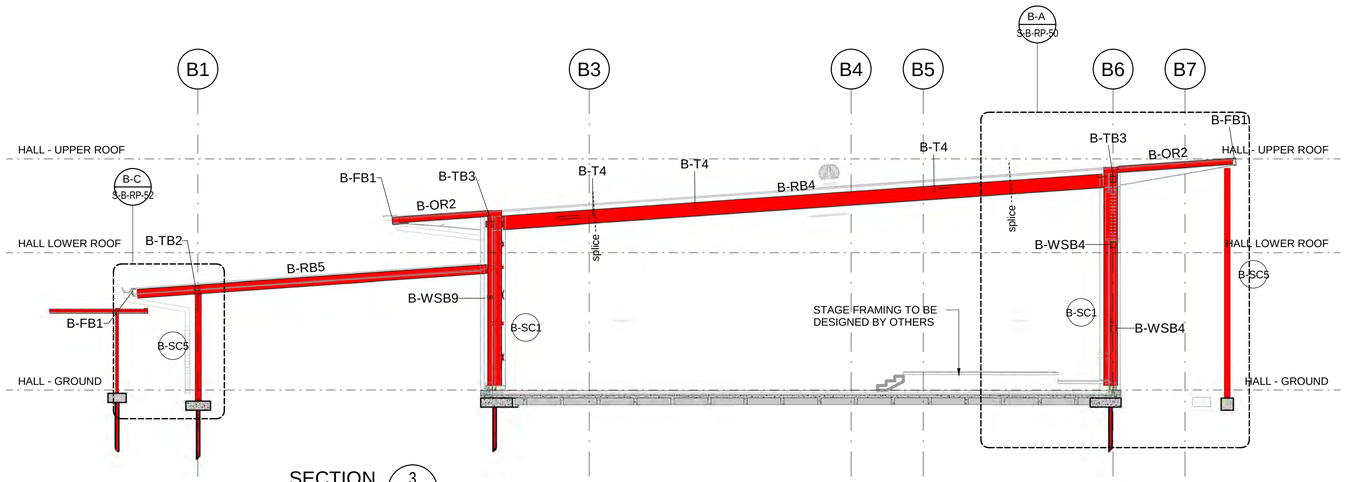
14/12/2020 1:59:12 PM



SECTION 1
SCALE 1 : 100



SECTION 2
SCALE 1 : 100 S-B-RP-01



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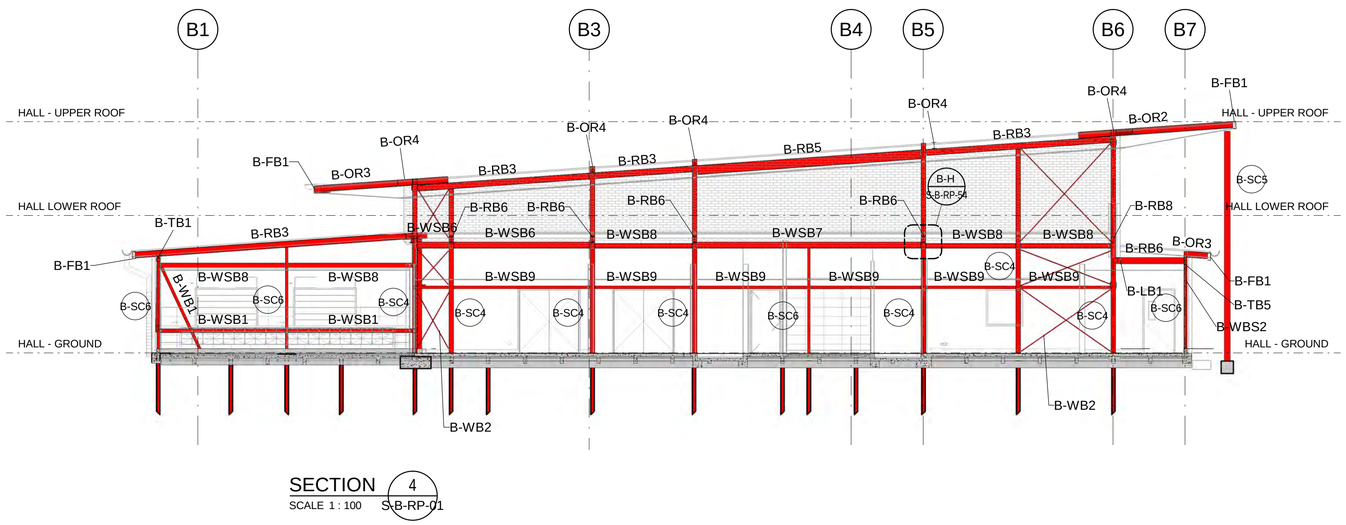
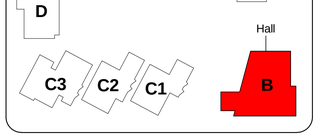
SCALE 1 : 100 S-B-RP-01



SECTION 4
SCALE 1 : 100 S-B-RP-01

PRINT IN COLOUR

KEY PLAN



ISSUE	DESCRIPTION	APPROVED	DATE
A	ISSUED FOR CONSTRUCTION		06.11.20
4	CC2 RESUBMISSION		30.10.20
3	CC2 ISSUE		16.10.20
2	ISSUED FOR INFORMATION		28.08.20
1	ISSUED FOR INFORMATION		21.08.20

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PROJECT
PORTERS CREEK PUBLIC SCHOOL
75 Warnervale Rd. Warnervale NSW 2259

TITLE
HALL - ROOF FRAMING SECTIONS

SCALES	DATE
1:100 @ A1	JUNE 2020

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AB	TO		

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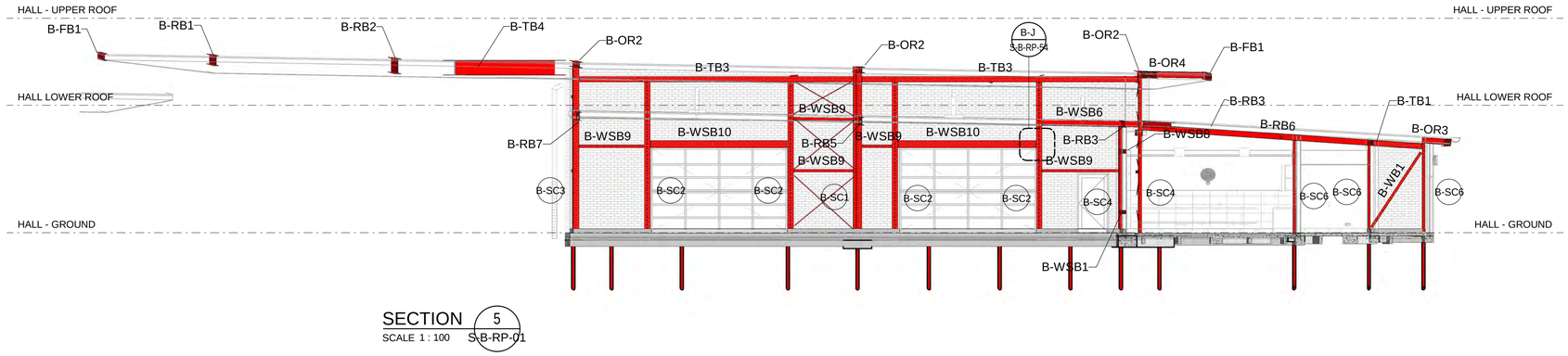
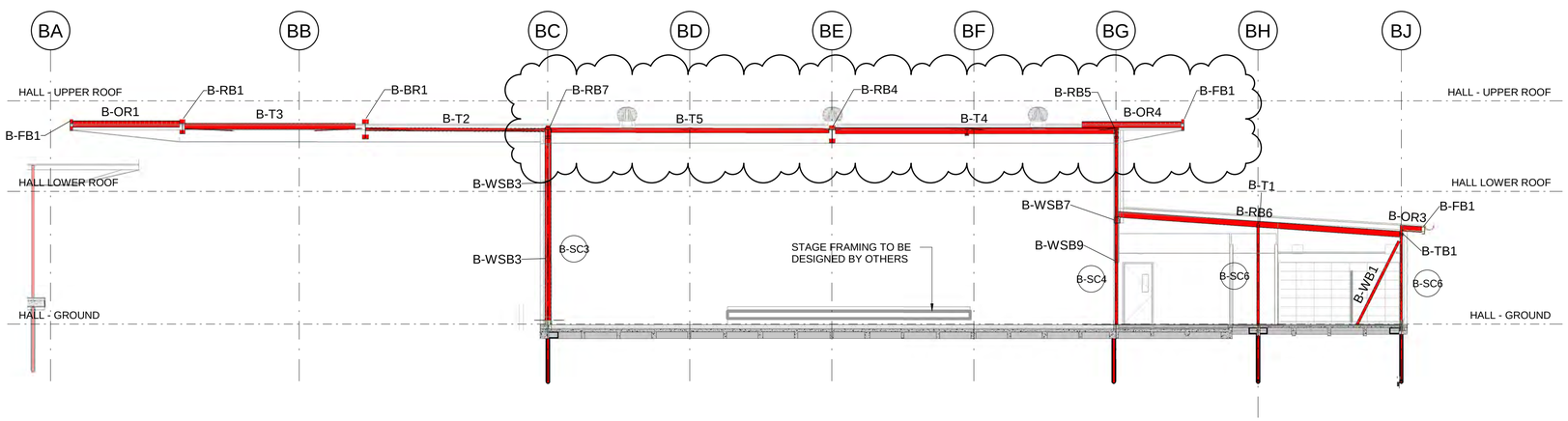
ISSUE	PROJECT No.	DRAWING No.
A	7900	S-B-RP-40

6/11/2020 4:59:54 PM



SECTION 5
SCALE 1 : 100 S-B-RP-01

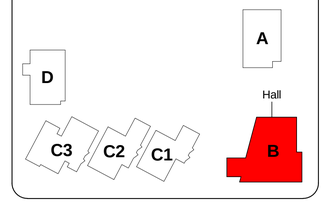
SECTION 6
SCALE 1 : 100 S-B-RP-01



SECTION 7
SCALE 1 : 100 S-B-RP-01

PRINT IN COLOUR

KEY PLAN



ISSUE	DESCRIPTION	APPROVED	DATE
B	B-T4, B-OR4 MOVED TO ALIGN WITH COLUMN	MG	14.12.20
A	ISSUED FOR CONSTRUCTION	MG	06.11.20
4	CC2 RESUBMISSION		30.10.20
3	CC2 ISSUE		16.10.20
2	ISSUED FOR INFORMATION		28.08.20
1	ISSUED FOR INFORMATION		21.08.20

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PROJECT
PORTERS CREEK PUBLIC SCHOOL
75 Warnervale Rd. Warnervale NSW 2259

TITLE
HALL - ROOF FRAMING SECTIONS

SCALES	DATE
1:100 @ A1	08/19/20

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AB	TO		

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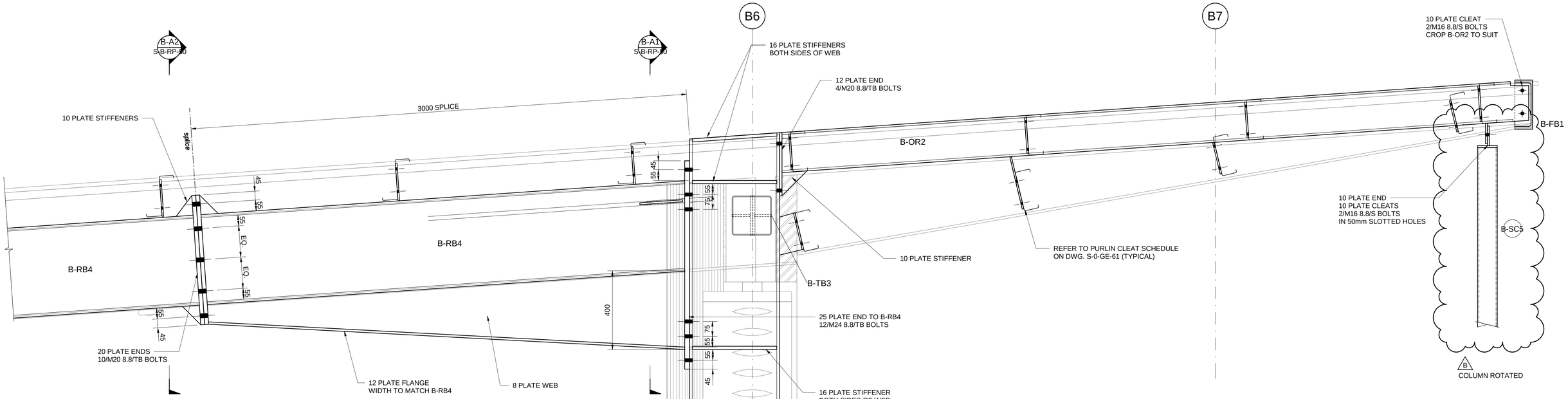
ISSUE	PROJECT No.	DRAWING No.
B	7900	S-B-RP-41

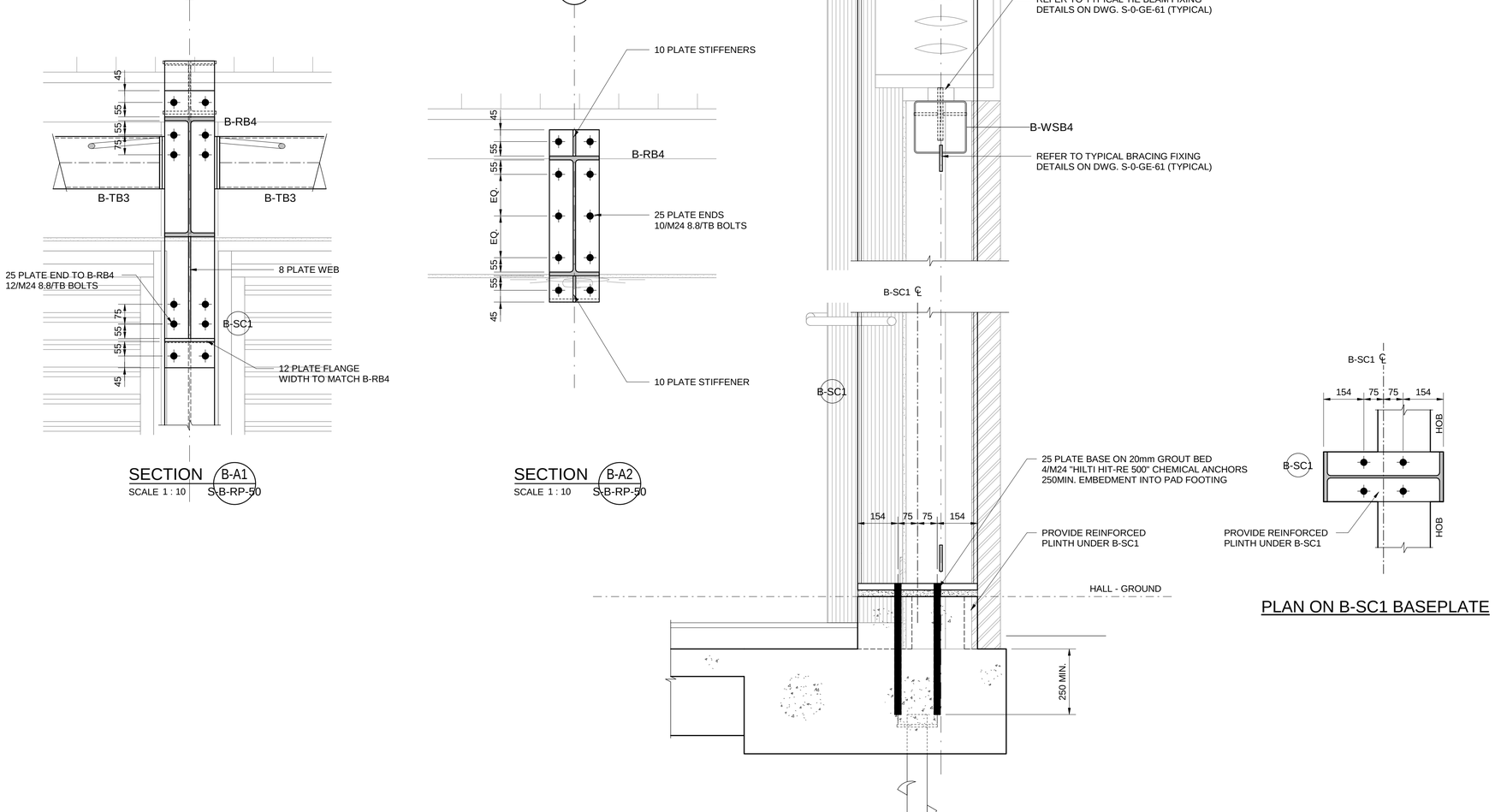
14/12/2020 1:09:14 PM



DETAIL B-A
SCALE 1 : 10 S-B-RP-50

TYPICAL HALL B-RB4 HAUNCH DETAIL
SCALE 1:10

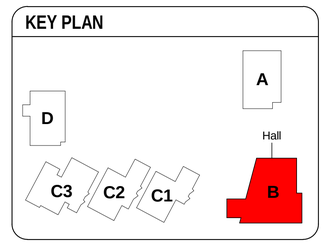
B-SC1 TO B-RB4 (USE AS REQUIRED)



SECTION B-A1
SCALE 1 : 10 S-B-RP-50

SECTION B-A2
SCALE 1 : 10 S-B-RP-50

PLAN ON B-SC1 BASEPLATE



ISSUE	DESCRIPTION	APPROVED	DATE
B	DRAWING REVISED	MG	12.11.20
A	ISSUED FOR CONSTRUCTION	MG	06.11.20
3	CC2 RESUBMISSION		30.10.20
2	CC2 ISSUE		16.10.20
1	ISSUED FOR INFORMATION		28.08.20

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PROJECT
PORTERS CREEK PUBLIC SCHOOL
75 Warnervale Rd. Warnervale NSW 2259

TITLE
HALL - ROOF FRAMING DETAILS

SCALES			DATE
1:10 @ A1			08/26/20
DRAWN	DESIGN	VERIFIED	APPROVED
AB	TO		

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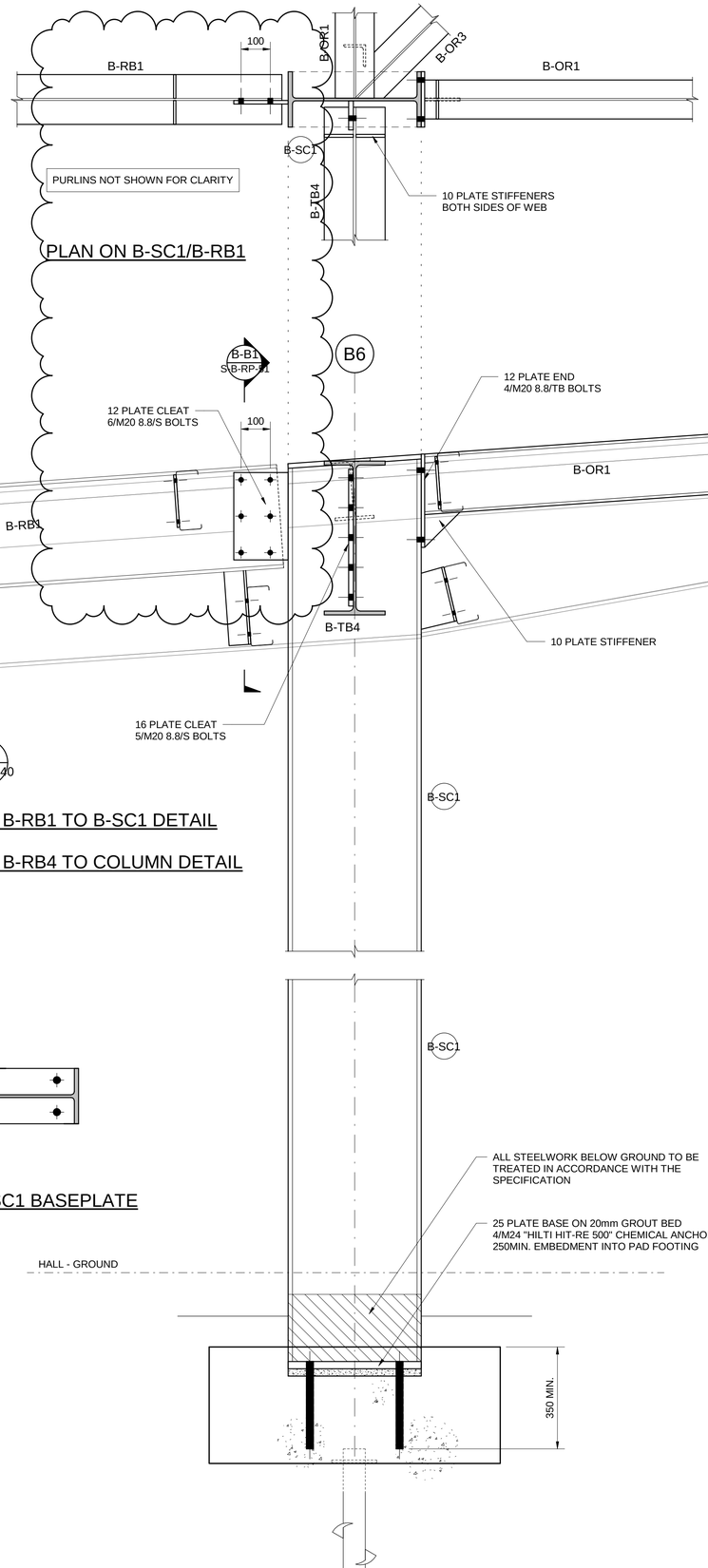
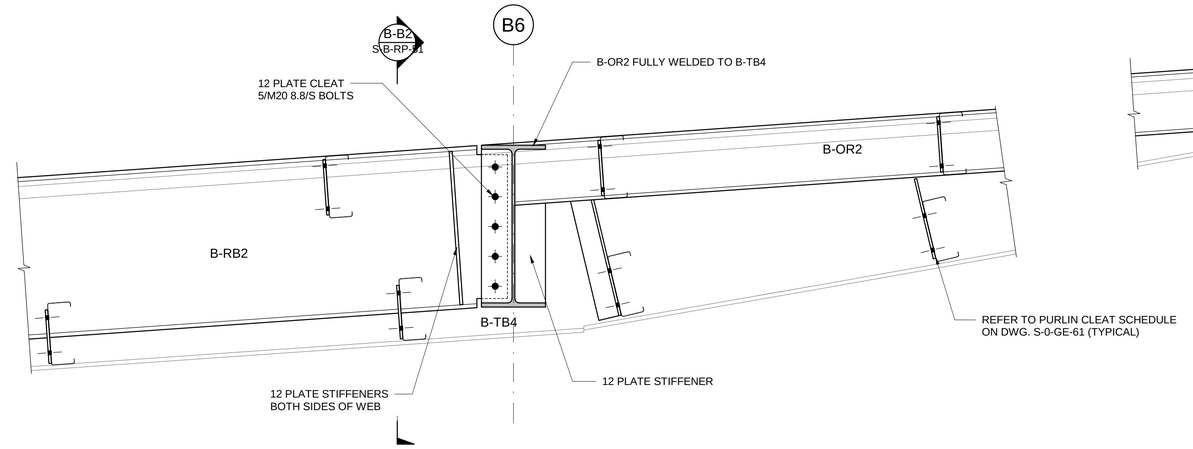
ISSUE	PROJECT No.	DRAWING No.
B	7900	S-B-RP-50

12/11/2020 12:10:57 PM

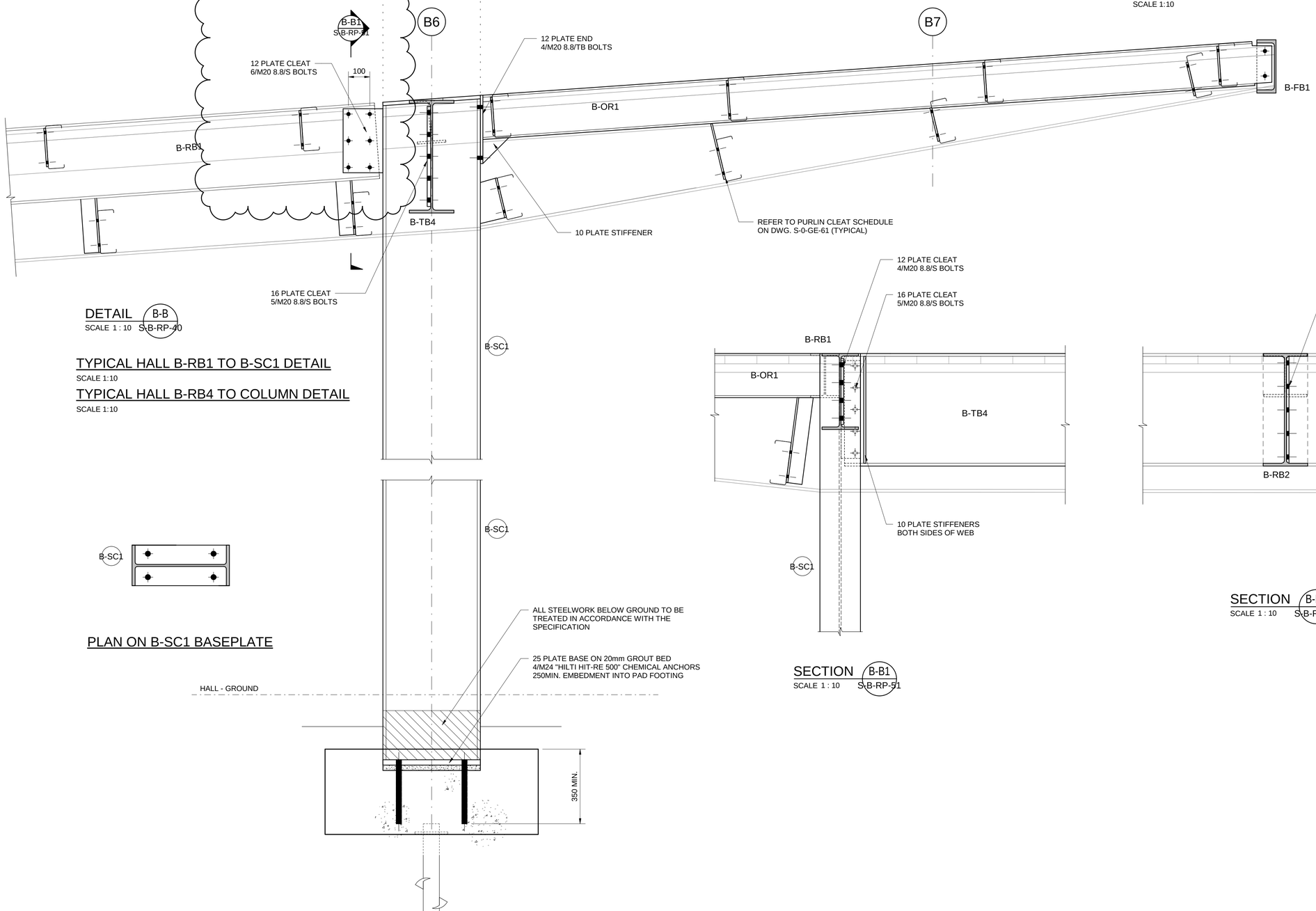


PLAN ON B-SC1/B-RB1



TYPICAL HALL B-RB2 TO B-TB4 DETAIL

SCALE 1:10



DETAIL B-B

SCALE 1 : 10 S-B-RP-40

TYPICAL HALL B-RB1 TO B-SC1 DETAIL

SCALE 1:10

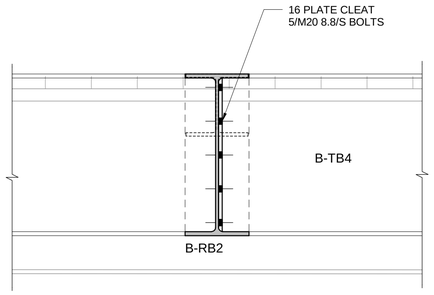
TYPICAL HALL B-RB4 TO COLUMN DETAIL

SCALE 1:10

PLAN ON B-SC1 BASEPLATE

SECTION B-B1

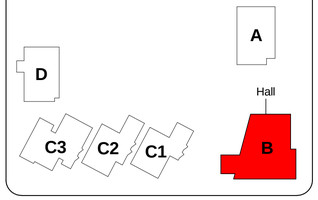
SCALE 1 : 10 S-B-RP-51



SECTION B-B2

SCALE 1 : 10 S-B-RP-51

KEY PLAN



ISSUE	DESCRIPTION	APPROVED	DATE
B	B-RB1 FIXING REVISED	MG	14.12.20
A	ISSUED FOR CONSTRUCTION	MG	06.11.20
2	CC2 RESUBMISSION		30.10.20
1	CC2 ISSUE		16.10.20

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PROJECT

PORTERS CREEK PUBLIC SCHOOL

75 Warnervale Rd. Warnervale NSW 2259

TITLE

HALL - ROOF FRAMING DETAILS

SCALES	DATE
1:10 @ A1	09/02/20

DRAWN	DESIGN	VERIFIED	APPROVED
AB	TO		

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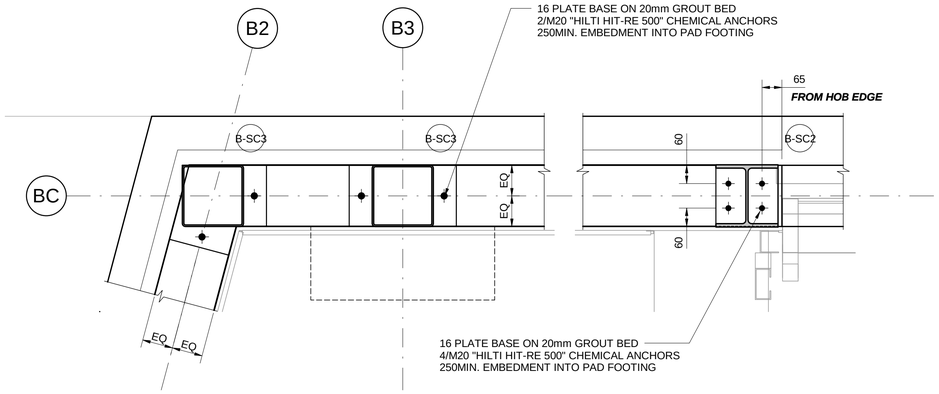
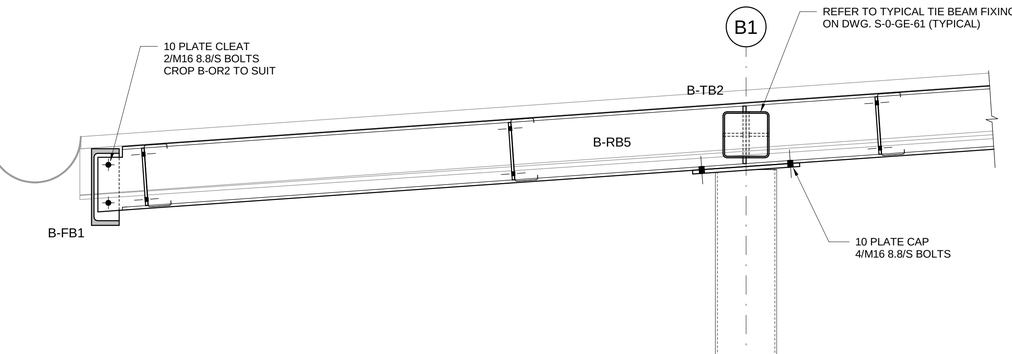
ISSUE	PROJECT No.	DRAWING No.
B	7900	S-B-RP-51

14.12.2020 1:09:15 PM

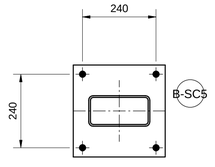


PLAN ON B-SC2 & B-SC3 BASEPLATES

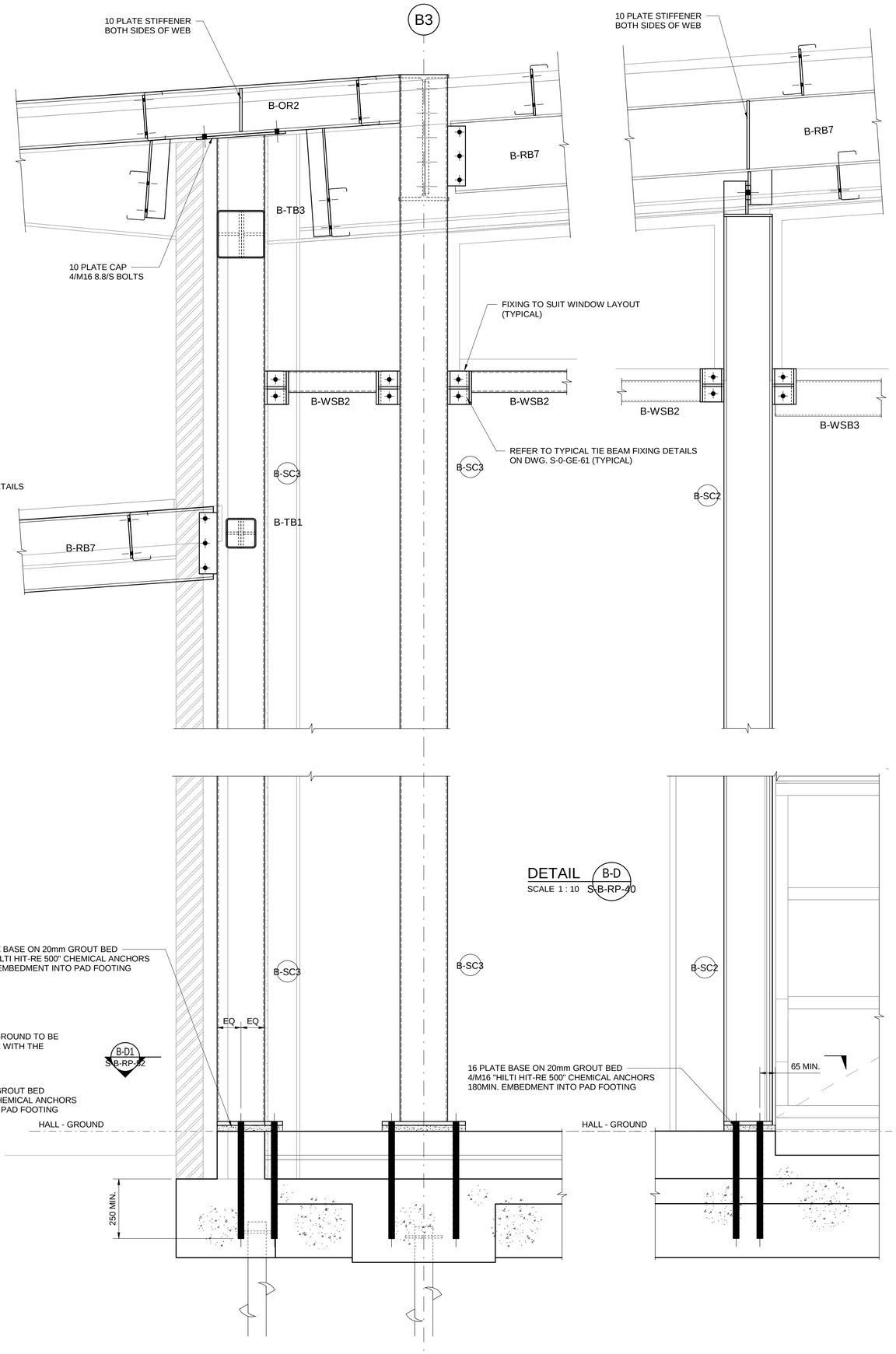
SECTION B-D1 S-B-RP-52
SCALE 1:10



DETAIL B-C
SCALE 1 : 10 S-B-RP-40

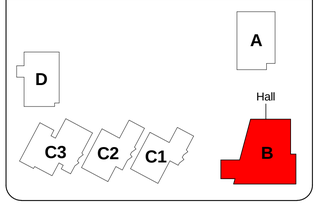


PLAN ON B-SC5 BASE PLATE



DETAIL B-D
SCALE 1 : 10 S-B-RP-40

KEY PLAN



ISSUE	DESCRIPTION	APPROVED	DATE
A	ISSUED FOR CONSTRUCTION		06.11.20
2	CC2 RESUBMISSION		30.10.20
1	CC2 ISSUE		16.10.20

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PROJECT
PORTERS CREEK PUBLIC SCHOOL
75 Warnervale Rd. Warnervale NSW 2259

TITLE
HALL - ROOF FRAMING DETAILS

SCALES	DATE
1:10 @ A1	09/03/20

DRAWN	DESIGN	VERIFIED	APPROVED
AB	TO		

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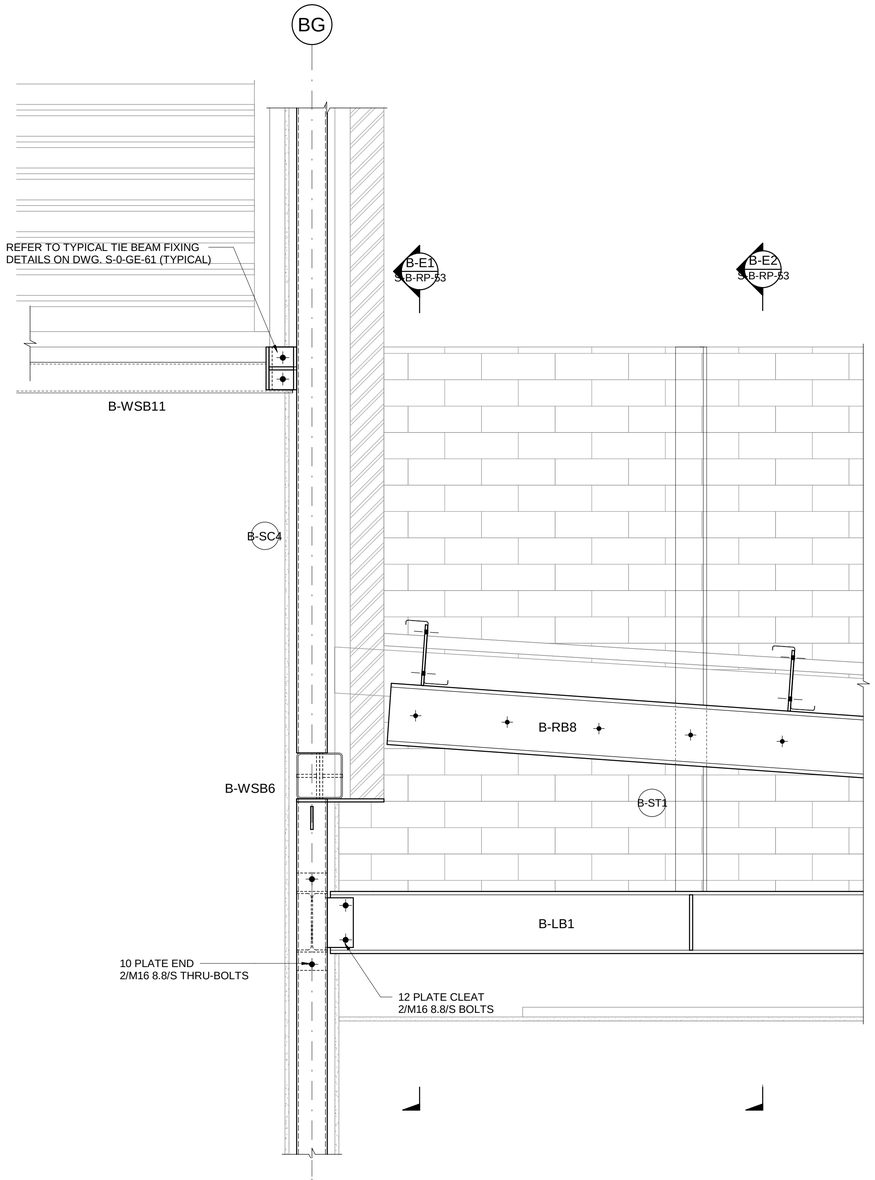
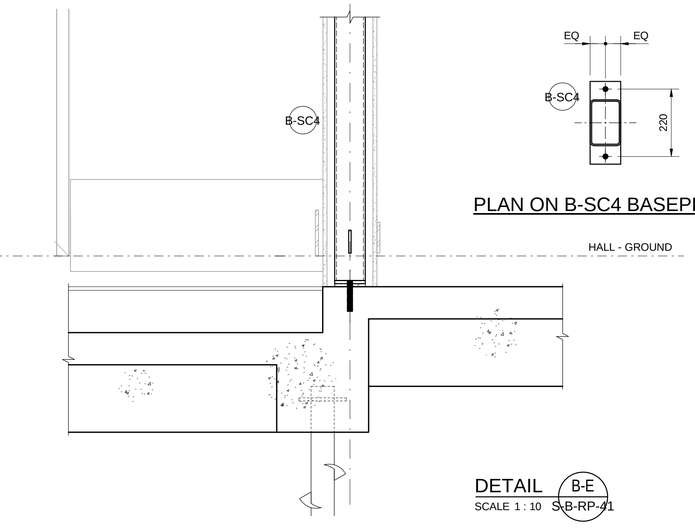
ISSUE	PROJECT No.	DRAWING No.
A	7900	S-B-RP-52

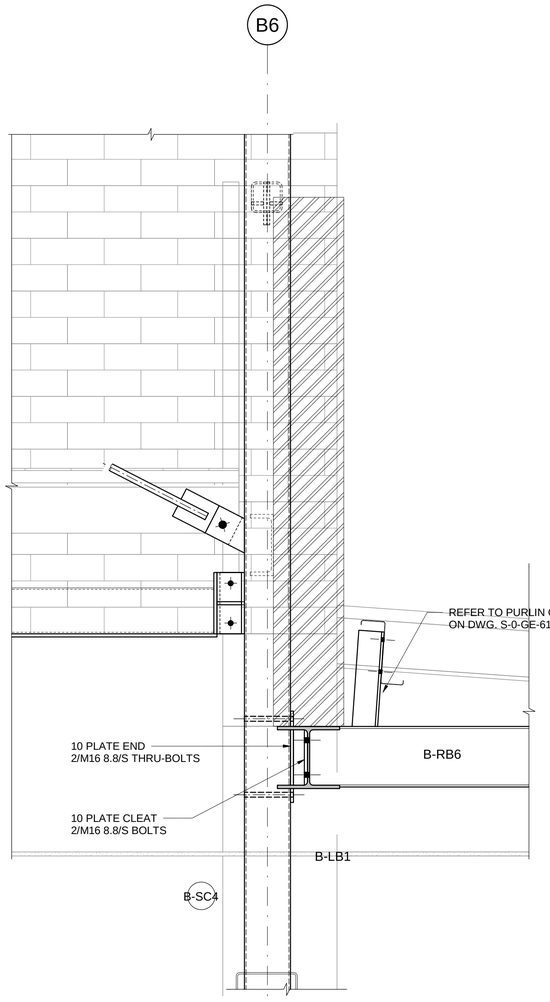
6/11/2020 5:00:04 PM



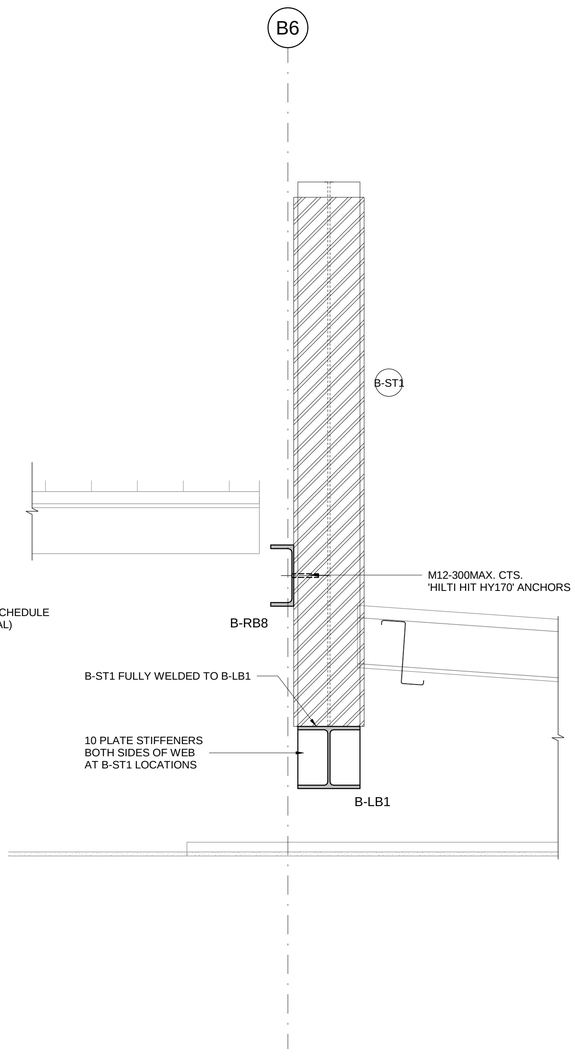


PLAN ON B-SC4 BASEPLATE

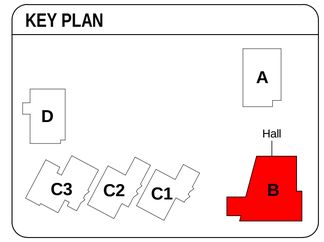
DETAIL B-E
SCALE 1 : 10 S-B-RP-41



SECTION B-E1
SCALE 1 : 10 S-B-RP-53



SECTION B-E2
SCALE 1 : 10 S-B-RP-53



ISSUE	DESCRIPTION	APPROVED	DATE
A	ISSUED FOR CONSTRUCTION		06.11.20
2	CC2 RESUBMISSION		30.10.20
1	CC2 ISSUE		16.10.20

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www.birzulisassociates.com

PROJECT
PORTERS CREEK PUBLIC SCHOOL
75 Warnervale Rd. Warnervale NSW 2259

TITLE
HALL - ROOF FRAMING DETAILS

SCALES	DATE
1:10 @ A1	09/03/20

DRAWN	DESIGN	VERIFIED	APPROVED
AB	TO		

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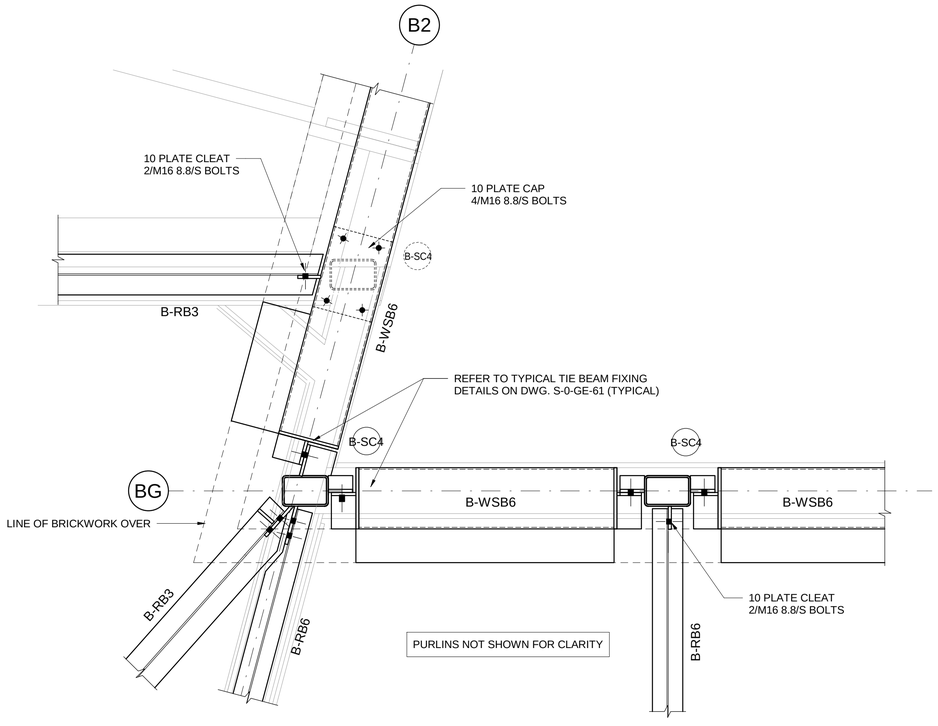
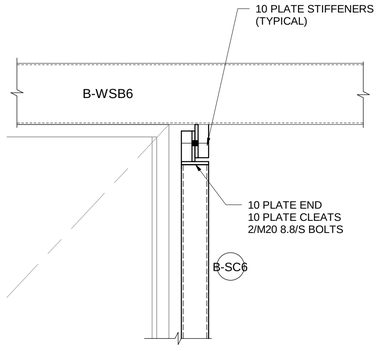
ISSUE	PROJECT No.	DRAWING No.
A	7900	S-B-RP-53

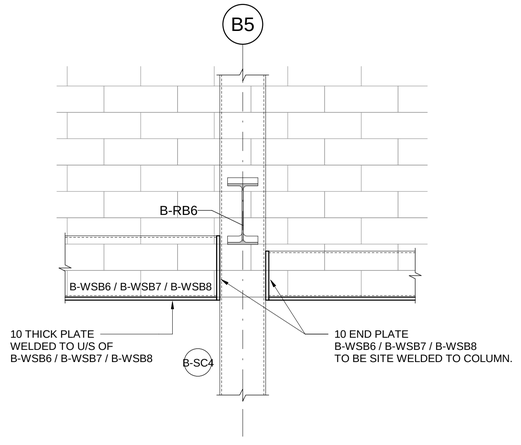
6/11/2020 5:00:05 PM



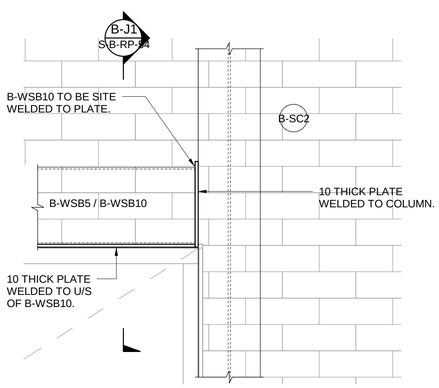
DETAIL B-F
SCALE 1 : 10 S-B-RP-01



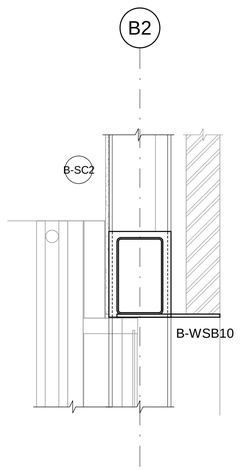
DETAIL B-G
SCALE 1 : 10 S-B-RP-40



DETAIL B-H
SCALE 1 : 10 S-B-RP-40

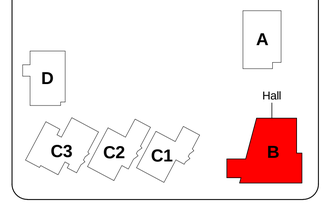


DETAIL B-J
SCALE 1 : 10 S-B-RP-01



DETAIL B-J1
SCALE 1 : 10 S-B-RP-54

KEY PLAN



ISSUE	DESCRIPTION	APPROVED	DATE
A	ISSUED FOR CONSTRUCTION		06.11.20
2	CC2 RESUBMISSION		30.10.20
1	CC2 ISSUE		16.10.20

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www.birzulisassociates.com

PROJECT
PORTERS CREEK PUBLIC SCHOOL
75 Warnervale Rd. Warnervale NSW 2259

TITLE
HALL - ROOF FRAMING DETAILS

SCALES	DATE
1:10 @ A1	09/03/20

DRAWN	DESIGN	VERIFIED	APPROVED
AB	TO		

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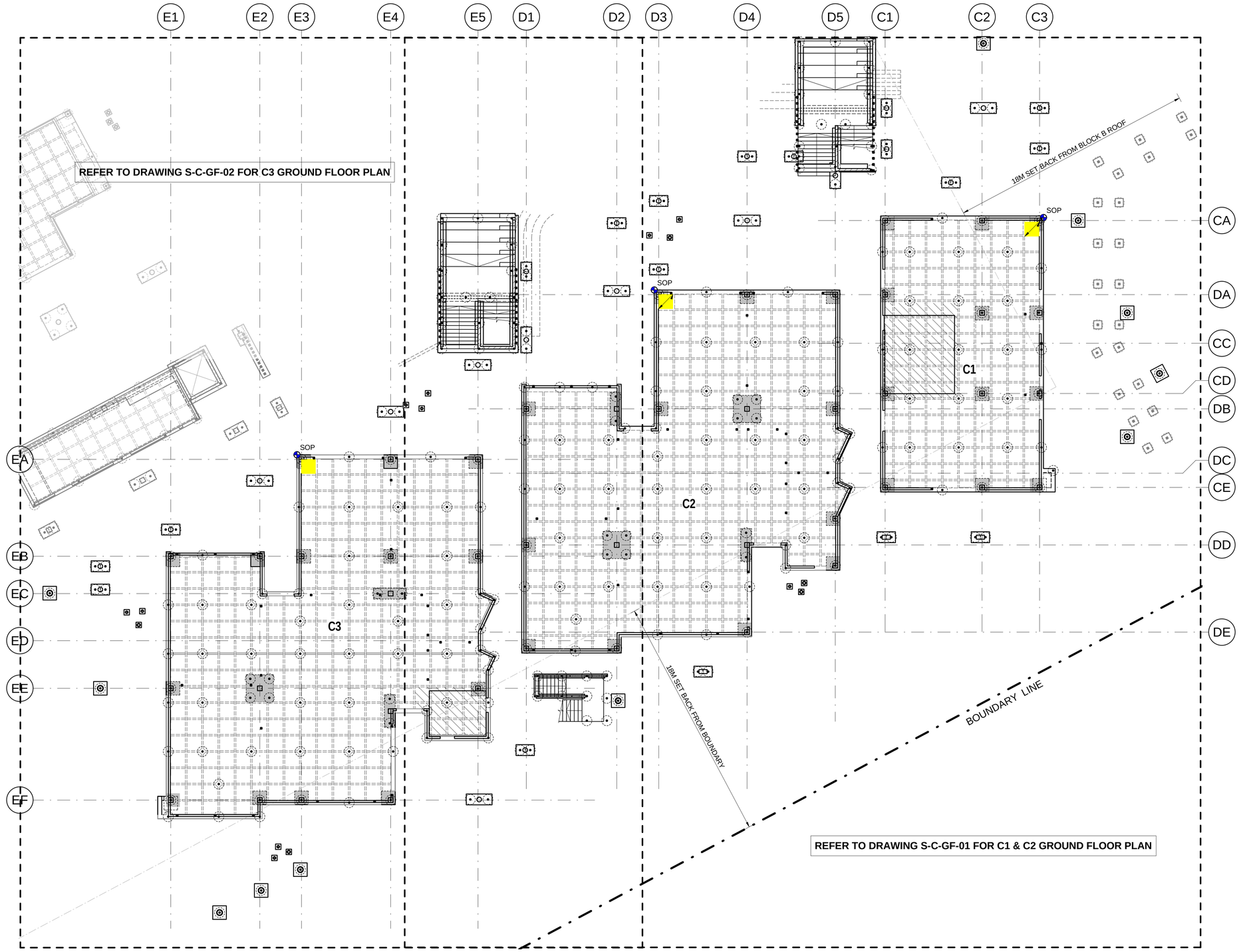
ISSUE	PROJECT No.	DRAWING No.
A	7900	S-B-RP-54

6/11/2020 5:00:09 PM

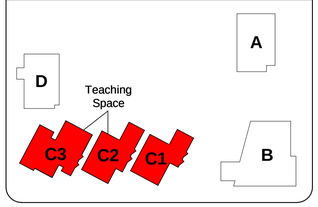


TEACHING SPACE - OVERALL GROUND FLOOR PLAN

SCALE 1 : 150

PRINT IN COLOUR

KEY PLAN



ISSUE	DESCRIPTION	APPROVED	DATE
A	ISSUED FOR CONSTRUCTION		06.11.20
3	CC2 RESUBMISSION		30.10.20
2	CC2 ISSUE		16.10.20
1	ISSUED FOR INFORMATION		28.08.20

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PROJECT
PORTERS CREEK PUBLIC SCHOOL
75 Warnervale Rd. Warnervale NSW 2259

TITLE
TEACHING SPACE OVERALL GROUND FLOOR PLAN

SCALES	DATE
1:150 @ A1	08/26/20

DRAWN	DESIGN	VERIFIED	APPROVED
AB	TO		

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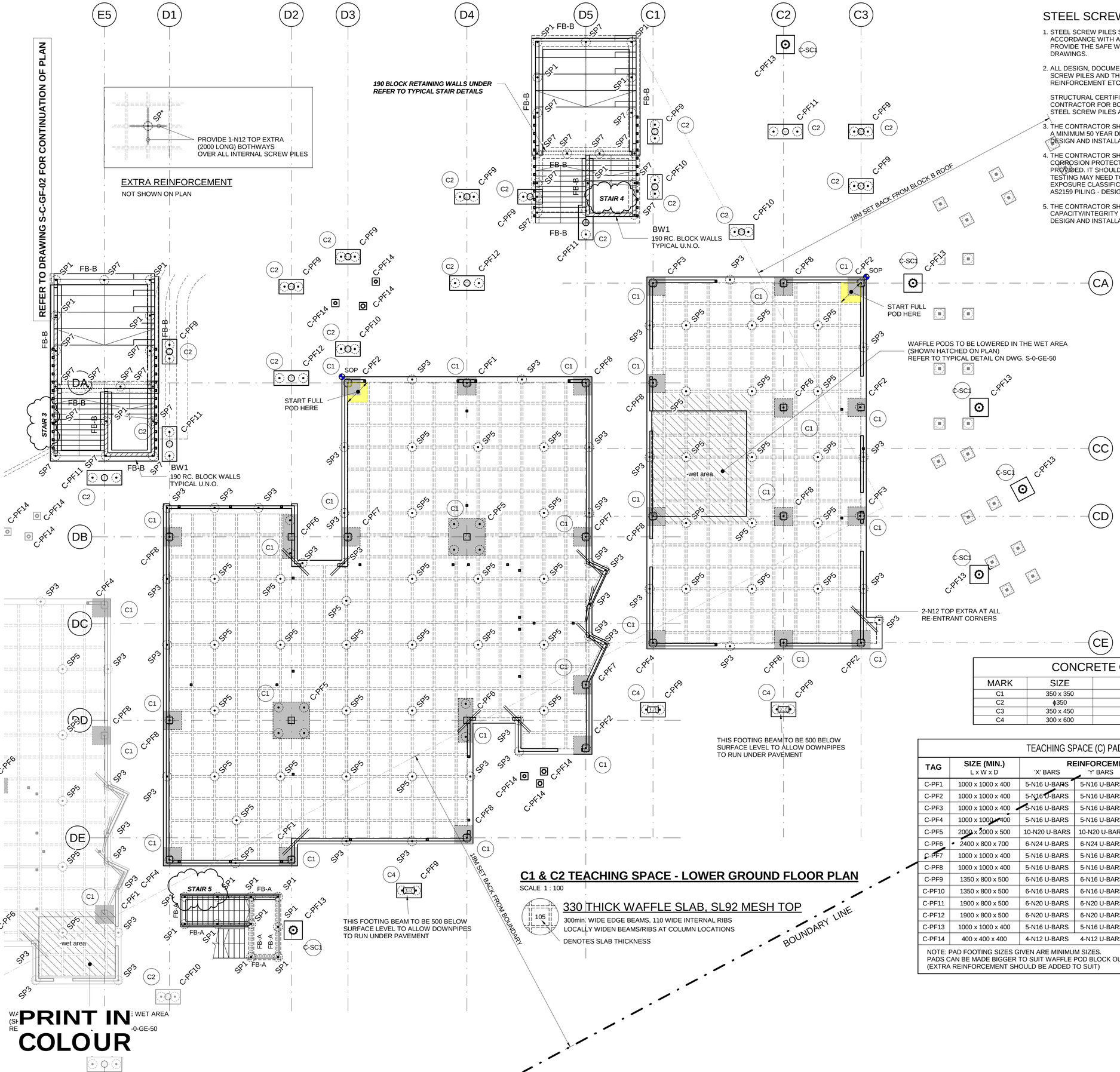
ISSUE	PROJECT No.	DRAWING No.
A	7900	S-C-GF-00

01/12/2020 5:00:11 PM



C1 & C2 TEACHING SPACE - LOWER GROUND FLOOR PLAN

SCALE 1 : 100

105 — DENOTES SLAB THICKNESS

330 THICK WAFFLE SLAB, SL92 MESH TOP

300min. WIDE EDGE BEAMS, 110 WIDE INTERNAL RIBS
LOCALLY WIDEN BEAMS/RIBS AT COLUMN LOCATIONS

PRINT IN COLOUR

WET AREA
-0-GE-50

STEEL SCREW PILE FOOTING SYSTEM:

1. STEEL SCREW PILES SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH AS2159 PILING - DESIGN AND INSTALLATION, TO PROVIDE THE SAFE WORKING LOADS NOMINATED ON THE STRUCTURAL DRAWINGS.
2. ALL DESIGN, DOCUMENTATION AND CERTIFICATION FOR THE STEEL SCREW PILES AND THE ASSOCIATED BEARING PLATES, ANCHORAGE REINFORCEMENT ETC. SHALL BE PROVIDED BY THE CONTRACTOR.

   STRUCTURAL CERTIFICATION SHALL BE PROVIDED BY THE CONTRACTOR FOR BOTH THE DESIGN AND INSTALLATION OF ALL OF THE STEEL SCREW PILES AND ASSOCIATED ELEMENTS.
3. THE CONTRACTOR SHALL DESIGN THE STEEL SCREW PILES TO PROVIDE A MINIMUM 50 YEAR DESIGN LIFE IN ACCORDANCE WITH AS2159 PILING - DESIGN AND INSTALLATION.
4. THE CONTRACTOR SHALL CONFIRM WHAT LEVEL AND TYPE OF CORROSION PROTECTION TO THE STEEL SCREW PILES WILL BE PROVIDED. IT SHOULD BE NOTED THAT ADDITIONAL GEOTECHNICAL TESTING MAY NEED TO BE CARRIED OUT TO DETERMINE THE REQUIRED EXPOSURE CLASSIFICATION FOR THE STEEL PILES IN ACCORDANCE WITH AS2159 PILING - DESIGN AND INSTALLATION.
5. THE CONTRACTOR SHALL CONFIRM WHAT LEVEL AND TYPE OF CAPACITY/INTEGRITY TESTING IN ACCORDANCE WITH AS2159 PILING - DESIGN AND INSTALLATION IS PROPOSED TO BE CARRIED OUT.

DRAWING NOTES:

1. REFER TO ARCHITECT'S DRAWINGS FOR SLAB FALLS AND CAST-IN REGLET DETAILS
2. ALL CONCRETE HOBS SHALL BE CAST INTEGRALLY WITH SLABS.
3. PENETRATIONS SMALLER THAN 200MM IN DIAMETER NOT SHOWN ON PLAN FOR CLARITY. REINFORCEMENT SHOWN SHALL BE DISPLACED TO THE SIDES OF THE PENETRATION AND **DO NOT CUT**. OBTAIN ENGINEER'S APPROVAL FOR PENETRATIONS NOT SHOWN ON STRUCTURAL DRAWING'S.
4. SCREW PILES TO BE DESIGNED AND INSTALLED IN ACCORDANCE WITH THE CONTRACTORS DETAILS.
5. ALL SLABS IN CONTACT WITH GROUND TO HAVE A WATERPROOFING MEMBRANE AS SPECIFIED BY THE ARCHITECT. (MEMBRANES TO HAVE A 20 YEAR MINIMUM DESIGN LIFE)
6. REFER TO DRAWING SERIES S-0-GE-02 TO S-0-GE-09 FOR 'CONSTRUCTION NOTES & GENERAL NOTES'.
7. REFER TO DRAWING SERIES S-0-GE-10 TO S-0-GE-19 FOR 'TYPICAL FOOTING DETAILS'.
8. REFER TO DRAWING SERIES S-0-GE-20 TO S-0-GE-29 FOR 'TYPICAL COLUMN DETAILS'.
9. REFER TO DRAWING SERIES S-0-GE-30 TO S-0-GE-39 FOR 'TYPICAL WALL DETAILS'.
10. REFER TO DRAWING SERIES S-0-GE-40 TO S-0-GE-49 FOR 'TYPICAL STAIR DETAILS'.
11. REFER TO DRAWING SERIES S-0-GE-50 TO S-0-GE-59 FOR 'TYPICAL CONCRETE DETAILS'.
12. REFER TO DRAWING SERIES S-0-GE-60 TO S-0-GE-69 FOR 'TYPICAL STEEL DETAILS'.

-wet area — DENOTES WET AREA, REFER TO ARCHITECTS DRAWINGS FOR SETDOWN DEPTHS. WAFFLE PODS TO BE LOWERED IN THIS AREA (SHOWN HATCHED ON PLAN) REFER TO TYPICAL DETAIL ON DWG. S-0-GE-50

SCREW PILE SCHEDULE

TAG	WORKING LOAD MINIMUM VERTICAL SAFE WORKING LOAD (kN) Compresion (+) / Tension (-)
SP1	50 kN
SP2	+50 / -10 kN
SP3	60 kN
SP4	+60 / -20 kN
SP5	100 kN
SP6	125 kN
SP7	150 kN
SP8	+150 / -50 kN
SP9	175 kN
SP10	200 kN
SP11	250 kN
SP12	300 kN
SP13	350 kN
SP14	400 kN
SP15	500 kN
SP16	550 kN
SP17	650 kN
SP18	800 kN
SP19	+25 / -10 kN

CONCRETE COLUMN SCHEDULE

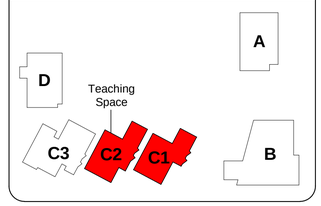
MARK	SIZE	REINFORCEMENT	STRENGTH (MPa)
C1	350 x 350	8-N24, N12-300 TIES	40
C2	ϕ350	8-N24, N12-300 TIES	40
C3	350 x 450	8-N24, N12-300 TIES	40
C4	300 x 600	10-N20, N12-300 TIES	40

TEACHING SPACE (C) PAD FOOTING SCHEDULE

TAG	SIZE (MIN.) L x W x D	REINFORCEMENT 'X' BARS	'Y' BARS	TIES	PILE TYPE	No. OF PILES
C-PF1	1000 x 1000 x 400	5-N16 U-BARS	5-N16 U-BARS	-	SP18	1
C-PF2	1000 x 1000 x 400	5-N16 U-BARS	5-N16 U-BARS	-	SP12	1
C-PF3	1000 x 1000 x 400	5-N16 U-BARS	5-N16 U-BARS	-	SP14	1
C-PF4	1000 x 1000 x 400	5-N16 U-BARS	5-N16 U-BARS	-	SP16	1
C-PF5	2000 x 2000 x 500	10-N20 U-BARS	10-N20 U-BARS	-	SP13	4
C-PF6	2400 x 800 x 700	6-N24 U-BARS	6-N24 U-BARS	N12-300 TIES	SP16	2
C-PF7	1000 x 1000 x 400	5-N16 U-BARS	5-N16 U-BARS	-	SP15	1
C-PF8	1000 x 1000 x 400	5-N16 U-BARS	5-N16 U-BARS	-	SP17	1
C-PF9	1350 x 800 x 500	6-N16 U-BARS	6-N16 U-BARS	N12-250 TIES	SP5	2
C-PF10	1350 x 800 x 500	6-N16 U-BARS	6-N16 U-BARS	N12-250 TIES	SP7	2
C-PF11	1900 x 800 x 500	6-N20 U-BARS	6-N20 U-BARS	N12-250 TIES	SP11	2
C-PF12	1900 x 800 x 500	6-N20 U-BARS	6-N20 U-BARS	N12-250 TIES	SP12	2
C-PF13	1000 x 1000 x 400	5-N16 U-BARS	5-N16 U-BARS	-	SP5	1
C-PF14	400 x 400 x 400	4-N12 U-BARS	4-N12 U-BARS	-	-	-

NOTE: PAD FOOTING SIZES GIVEN ARE MINIMUM SIZES.
PADS CAN BE MADE BIGGER TO SUIT WAFFLE POD BLOCK OUTS IF REQUIRED.
(EXTRA REINFORCEMENT SHOULD BE ADDED TO SUIT)

KEY PLAN



ISSUE	DESCRIPTION	APPROVED	DATE
C	STAIR NAMES REVISED TO MATCH ARCHITECT	PG	03.02.21
B	ARCHITECTS REVISIONS	MG	20.01.21
A	ISSUED FOR CONSTRUCTION	MG	06.11.20
8	CC2 RESUBMISSION		30.10.20
7	CC2 ISSUE		16.10.20
6	ISSUED FOR INFORMATION		28.08.20
5	ISSUED FOR INFORMATION		21.08.20
4	RE-ISSUED FOR CC1		12.08.20
3	RE-ISSUED FOR CC1		10.08.20
2	RE-ISSUED FOR CC1		07.08.20
1	CC1 ISSUE		24.07.20

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www.birzulisassociates.com

PROJECT
PORTERS CREEK PUBLIC SCHOOL
75 Warnervale Rd. Warnervale NSW 2259

TITLE
C1 & C2 TEACHING SPACE - GROUND FLOOR PLAN

SCALES	DATE
1:100 @ A1	JUNE 2020

DRAWN	DESIGN	VERIFIED	APPROVED
AB	TO		

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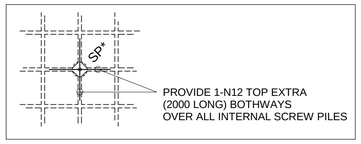
ISSUE	PROJECT No.	DRAWING No.
C	7900	S-C-GF-01

30/03/2021 3:03:03 PM



EXTRA REINFORCEMENT

NOT SHOWN ON PLAN

E1 E2 E3 E4 E5 D1 D2

DA DB DC DD DE EA EB EC ED EE EF

REFER TO DRAWING S-C-GF-01 FOR CONTINUATION OF PLAN

NOTE:
REFER TO CIVIL DRAWINGS FOR
EXTERNAL WALLS AND PAVEMENTS

NOTE:
REFER TO CIVIL DRAWINGS FOR
CONTINUATION OF RETAINING WALL

190 BLOCK RETAINING WALL UNDER
REFER TO TYPICAL STAIR DETAILS

STAIR 3

BW1
190 RC. BLOCK WALLS
TYPICAL U.N.O.

START FULL
POD HERE

SOP

-wet area

STAIR 5

WAFFLE PODS TO BE LOWERED IN THE WET AREA
(SHOWN HATCHED ON PLAN)
REFER TO TYPICAL DETAIL ON DWG. S-0-GE-50

18M SET BACK FROM BOUNDARY

BOUNDARY LINE

C3 TEACHING SPACE - LOWER GROUND FLOOR PLAN

SCALE 1 : 100

105 — 330 THICK WAFFLE SLAB, SL92 MESH TOP

300min. WIDE EDGE BEAMS, 110 WIDE INTERNAL RIBS
LOCALLY WIDEN BEAMS/RIBS AT COLUMN LOCATIONS

DENOTES SLAB THICKNESS

PRINT IN COLOUR

STEEL SCREW PILE FOOTING SYSTEM:

1. STEEL SCREW PILES SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH AS2159 PILING - DESIGN AND INSTALLATION, TO PROVIDE THE SAFE WORKING LOADS NOMINATED ON THE STRUCTURAL DRAWINGS.
2. ALL DESIGN, DOCUMENTATION AND CERTIFICATION FOR THE STEEL SCREW PILES AND THE ASSOCIATED BEARING PLATES, ANCHORAGE REINFORCEMENT ETC. SHALL BE PROVIDED BY THE CONTRACTOR.

   STRUCTURAL CERTIFICATION SHALL BE PROVIDED BY THE CONTRACTOR FOR BOTH THE DESIGN AND INSTALLATION OF ALL OF THE STEEL SCREW PILES AND ASSOCIATED ELEMENTS.
3. THE CONTRACTOR SHALL DESIGN THE STEEL SCREW PILES TO PROVIDE A MINIMUM 50 YEAR DESIGN LIFE IN ACCORDANCE WITH AS2159 PILING - DESIGN AND INSTALLATION.
4. THE CONTRACTOR SHALL CONFIRM WHAT LEVEL AND TYPE OF CORROSION PROTECTION TO THE STEEL SCREW PILES WILL BE PROVIDED. IT SHOULD BE NOTED THAT ADDITIONAL GEOTECHNICAL TESTING MAY NEED TO BE CARRIED OUT TO DETERMINE THE REQUIRED EXPOSURE CLASSIFICATION FOR THE STEEL PILES IN ACCORDANCE WITH AS2159 PILING - DESIGN AND INSTALLATION.
5. THE CONTRACTOR SHALL CONFIRM WHAT LEVEL AND TYPE OF CAPACITY/INTEGRITY TESTING IN ACCORDANCE WITH AS2159 PILING - DESIGN AND INSTALLATION IS PROPOSED TO BE CARRIED OUT.

DRAWING NOTES:

1. REFER TO ARCHITECT'S DRAWINGS FOR SLAB FALLS AND CAST-IN REGLET DETAILS
2. ALL CONCRETE HOBS SHALL BE CAST INTEGRALLY WITH SLABS.
3. PENETRATIONS SMALLER THAN 200MM IN DIAMETER NOT SHOWN ON PLAN FOR CLARITY. REINFORCEMENT SHOWN SHALL BE DISPLACED TO THE SIDES OF THE PENETRATION AND **DO NOT CUT**. OBTAIN ENGINEER'S APPROVAL FOR PENETRATIONS NOT SHOWN ON STRUCTURAL DRAWING'S.
4. SCREW PILES TO BE DESIGNED AND INSTALLED IN ACCORDANCE WITH THE CONTRACTORS DETAILS.
5. ALL SLABS IN CONTACT WITH GROUND TO HAVE A WATERPROOFING MEMBRANE AS SPECIFIED BY THE ARCHITECT. (MEMBRANES TO HAVE A 20 YEAR MINIMUM DESIGN LIFE)
6. REFER TO DRAWING SERIES S-0-GE-02 TO S-0-GE-09 FOR 'CONSTRUCTION NOTES & GENERAL NOTES'.
7. REFER TO DRAWING SERIES S-0-GE-10 TO S-0-GE-19 FOR 'TYPICAL FOOTING DETAILS'.
8. REFER TO DRAWING SERIES S-0-GE-20 TO S-0-GE-29 FOR 'TYPICAL COLUMN DETAILS'.
9. REFER TO DRAWING SERIES S-0-GE-30 TO S-0-GE-39 FOR 'TYPICAL WALL DETAILS'.
10. REFER TO DRAWING SERIES S-0-GE-40 TO S-0-GE-49 FOR 'TYPICAL STAIR DETAILS'.
11. REFER TO DRAWING SERIES S-0-GE-50 TO S-0-GE-59 FOR 'TYPICAL CONCRETE DETAILS'.
12. REFER TO DRAWING SERIES S-0-GE-60 TO S-0-GE-69 FOR 'TYPICAL STEEL DETAILS'.

-wet area — DENOTES WET AREA, REFER TO ARCHITECTS DRAWINGS FOR SETDOWN DEPTHS. WAFFLE PODS TO BE LOWERED IN THIS AREA (SHOWN HATCHED ON PLAN) REFER TO TYPICAL DETAIL ON DWG. S-0-GE-50

SCREW PILE SCHEDULE

TAG	WORKING LOAD MINIMUM VERTICAL SAFE WORKING LOAD (kN) Compresion (+) / Tension (-)
SP1	50 kN
SP2	+50 / -10 kN
SP3	60 kN
SP4	+60 / -20 kN
SP5	100 kN
SP6	125 kN
SP7	150 kN
SP8	+150 / -50 kN
SP9	175 kN
SP10	200 kN
SP11	250 kN
SP12	300 kN
SP13	350 kN
SP14	400 kN
SP15	500 kN
SP16	550 kN
SP17	650 kN
SP18	800 kN
SP19	+25 / -10 kN

NOTES FOR TEACHING SPACE (C3) SCREW PILES:

1. SCREW PILES 'SP1' TO 'SP7' CAN BE REPLACED BY 400x400 MASS CONCRETE BUCKET PIERS FOUNDED ON SANDSTONE WITH A MINIMUM ALLOWABLE BEARING PRESSURE OF 1000kPa.
2. ALL SCREW PILES CAN BE OMITTED IF FOOTING AND WAFFLE SLAB ARE DIRECTLY FOUNDED ON SANDSTONE WITH A MINIMUM ALLOWABLE BEARING PRESSURE OF 1000kPa.

CONCRETE COLUMN SCHEDULE

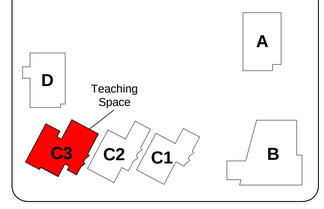
MARK	SIZE	REINFORCEMENT	STRENGTH (MPa)
C1	350 x 350	8-N24, N12-300 TIES	40
C2	ϕ350	8-N24, N12-300 TIES	40
C3	350 x 450	8-N24, N12-300 TIES	40
C4	300 x 600	10-N20, N12-300 TIES	40

TEACHING SPACE (C) PAD FOOTING SCHEDULE

TAG	SIZE (MIN.) L x W x D	REINFORCEMENT 'X' BARS	'Y' BARS	TIES	PILE TYPE	No. OF PILES
C-PF1	1000 x 1000 x 400	5-N16 U-BARS	5-N16 U-BARS	-	SP18	1
C-PF2	1000 x 1000 x 400	5-N16 U-BARS	5-N16 U-BARS	-	SP12	1
C-PF3	1000 x 1000 x 400	5-N16 U-BARS	5-N16 U-BARS	-	SP14	1
C-PF4	1000 x 1000 x 400	5-N16 U-BARS	5-N16 U-BARS	-	SP16	1
C-PF5	2000 x 2000 x 500	10-N20 U-BARS	10-N20 U-BARS	-	SP13	4
C-PF6	2400 x 800 x 700	6-N24 U-BARS	6-N24 U-BARS	N12-300 TIES	SP16	2
C-PF7	1000 x 1000 x 400	5-N16 U-BARS	5-N16 U-BARS	-	SP15	1
C-PF8	1000 x 1000 x 400	5-N16 U-BARS	5-N16 U-BARS	-	SP17	1
C-PF9	1350 x 800 x 500	6-N16 U-BARS	6-N16 U-BARS	N12-250 TIES	SP5	2
C-PF10	1350 x 800 x 500	6-N16 U-BARS	6-N16 U-BARS	N12-250 TIES	SP7	2
C-PF11	1900 x 800 x 500	6-N20 U-BARS	6-N20 U-BARS	N12-250 TIES	SP11	2
C-PF12	1900 x 800 x 500	6-N20 U-BARS	6-N20 U-BARS	N12-250 TIES	SP12	2
C-PF13	1000 x 1000 x 400	5-N16 U-BARS	5-N16 U-BARS	-	SP5	1
C-PF14	400 x 400 x 400	4-N12 U-BARS	4-N12 U-BARS	-	-	-

NOTE: PAD FOOTING SIZES GIVEN ARE MINIMUM SIZES.
PADS CAN BE MADE BIGGER TO SUIT WAFFLE POD BLOCK OUTS IF REQUIRED.
(EXTRA REINFORCEMENT SHOULD BE ADDED TO SUIT)

KEY PLAN



ISSUE	DESCRIPTION	APPROVED	DATE
E	STAIR NAMES REVISED TO MATCH ARCHITECT	PG	03.02.21
D	ARCHITECTS REVISIONS	MG	20.01.21
C	DRAWING REVISED	TO	03.12.20
B	ARCHITECTS REVISION	TO	24.11.20
A	ISSUED FOR CONSTRUCTION	MG	06.11.20
5	CC2 RESUBMISSION		30.10.20
4	CC2 ISSUE		16.10.20
3	ISSUED FOR INFORMATION		28.08.20
2	ISSUED FOR INFORMATION		21.08.20
1	RE-ISSUED FOR CC1		12.08.20

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PROJECT
PORTERS CREEK PUBLIC SCHOOL
75 Warnervale Rd. Warnervale NSW 2259

TITLE
C3 TEACHING SPACE - GROUND FLOOR PLAN

SCALES	DATE
1:100 @ A1	08/12/20

DRAWN	DESIGN	VERIFIED	APPROVED
AB	TO		

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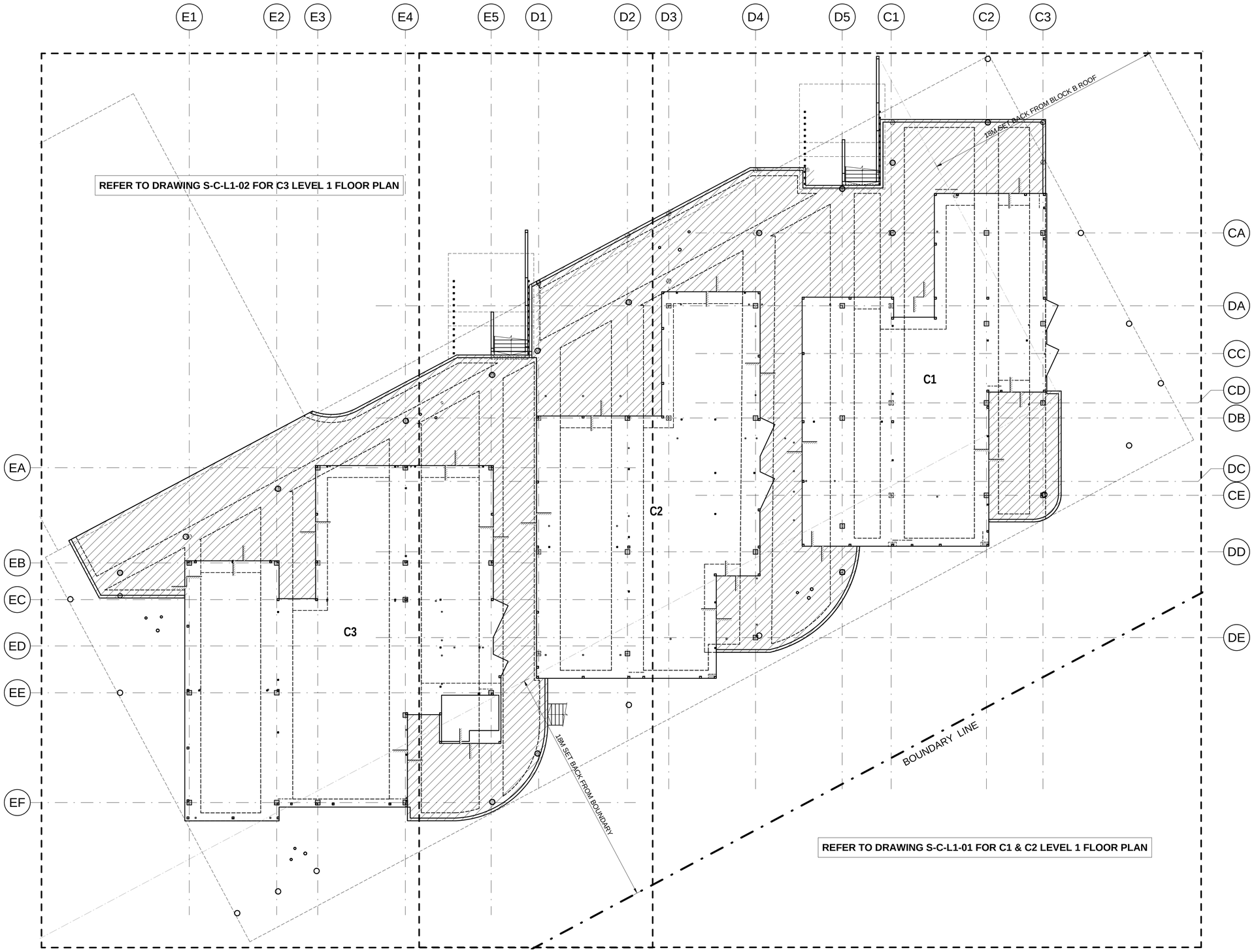
ISSUE	PROJECT No.	DRAWING No.
E	7900	S-C-GF-02

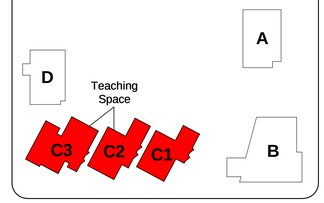
30/03/2021 3:03:03 PM



TEACHING SPACE - OVERALL LEVEL 1 PLAN

SCALE 1 : 150

KEY PLAN



ISSUE	DESCRIPTION	APPROVED	DATE
A	ISSUED FOR CONSTRUCTION		06.11.20
3	CC2 RESUBMISSION		30.10.20
2	CC2 ISSUE		16.10.20
1	ISSUED FOR INFORMATION		28.08.20

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PROJECT

PORTERS CREEK PUBLIC SCHOOL

75 Warnervale Rd. Warnervale NSW 2259

TITLE

TEACHING SPACE OVERALL LEVEL 1 PLAN

SCALES	DATE
1:150 @ A1	08/26/20

DRAWN	DESIGN	VERIFIED	APPROVED
AB	TO		

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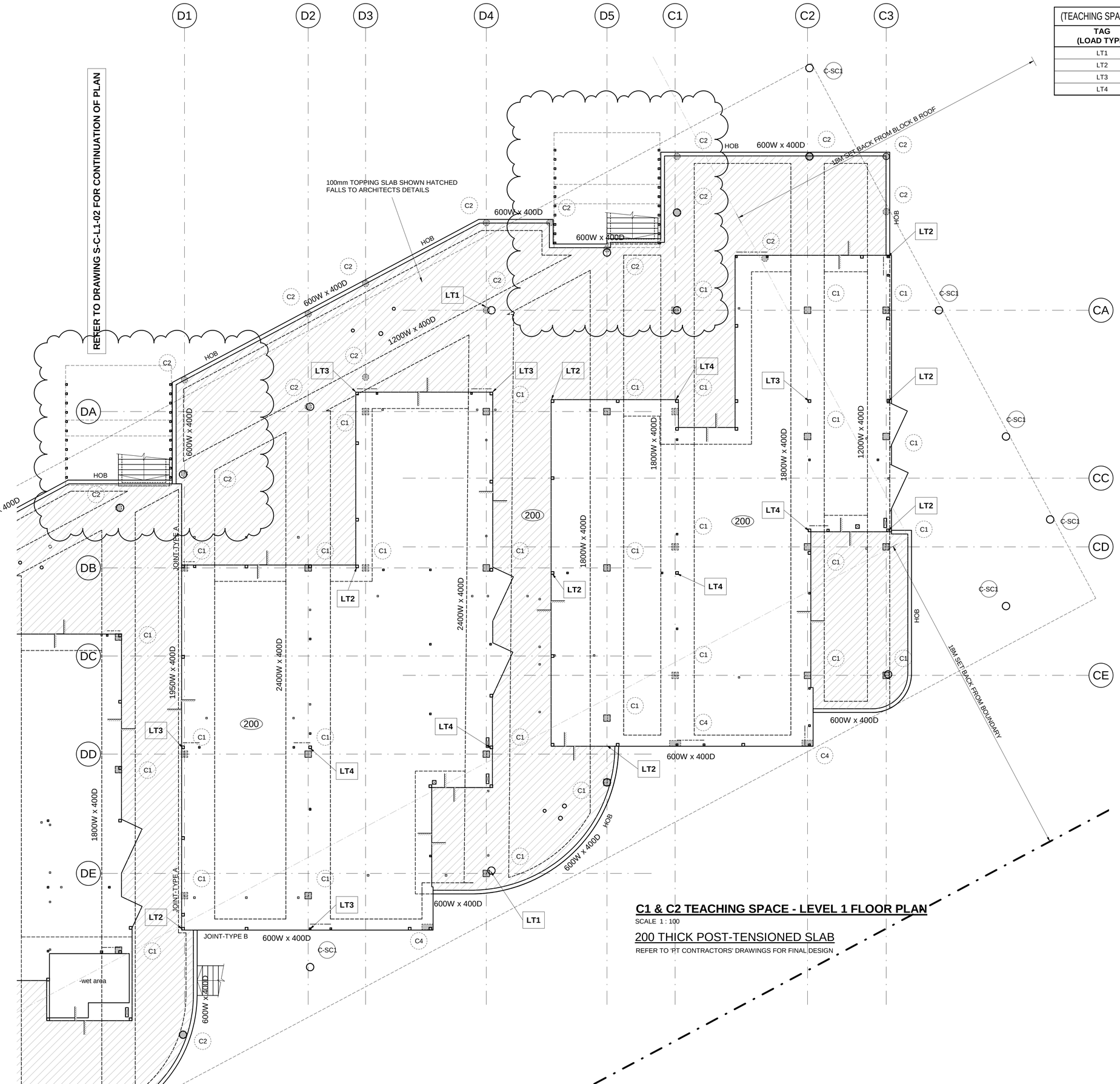
ISSUE	PROJECT No.	DRAWING No.
A	7900	S-C-L1-00

6/11/2020 5:00:21 PM



C1 & C2 TEACHING SPACE - LEVEL 1 FLOOR PLAN

SCALE 1 : 100

200 THICK POST-TENSIONED SLAB

REFER TO 'PT CONTRACTORS' DRAWINGS FOR FINAL DESIGN

(TEACHING SPACE) COLUMN TRANSFER LOAD SCHEDULE		
TAG (LOAD TYPE)	**G (kN)**	**Q (kN)**
LT1	45	15
LT2	20	11
LT3	25	15
LT4	30	20

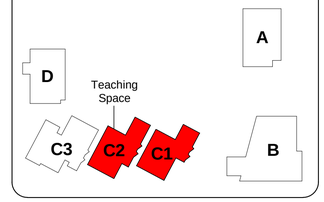
DRAWING NOTES:

1. REFER TO ARCHITECT'S DRAWINGS FOR SLAB FALLS AND CAST-IN REGLET DETAILS
2. ALL CONCRETE HOBS SHALL BE CAST INTEGRALLY WITH SLABS.
3. PROVIDE CLASS 2 FINISH TO ALL EXPOSED SOFFITS AND FACES.
4. PENETRATIONS SMALLER THAN 200MM IN DIAMETER NOT SHOWN ON PLAN FOR CLARITY. REINFORCEMENT SHOWN SHALL BE DISPLACED TO THE SIDES OF THE PENETRATION AND **DO NOT CUT**. OBTAIN ENGINEER'S APPROVAL FOR PENETRATIONS NOT SHOWN ON STRUCTURAL DRAWING'S.
5. SCREW PILES TO BE DESIGNED AND INSTALLED IN ACCORDANCE WITH THE CONTRACTORS DETAILS.
6. ALL SLABS IN CONTACT WITH GROUND TO HAVE A WATERPROOFING MEMBRANE AS SPECIFIED BY THE ARCHITECT. (MEMBRANES TO HAVE A 20 YEAR MINIMUM DESIGN LIFE)
7. REFER TO DRAWING SERIES S-0-GE-02 TO S-0-GE-09 FOR 'CONSTRUCTION NOTES & GENERAL NOTES'.
8. REFER TO DRAWING SERIES S-0-GE-10 TO S-0-GE-19 FOR 'TYPICAL FOOTING DETAILS'.
9. REFER TO DRAWING SERIES S-0-GE-20 TO S-0-GE-29 FOR 'TYPICAL COLUMN DETAILS'.
10. REFER TO DRAWING SERIES S-0-GE-30 TO S-0-GE-39 FOR 'TYPICAL WALL DETAILS'.
11. REFER TO DRAWING SERIES S-0-GE-40 TO S-0-GE-49 FOR 'TYPICAL STAIR DETAILS'.
12. REFER TO DRAWING SERIES S-0-GE-50 TO S-0-GE-59 FOR 'TYPICAL CONCRETE DETAILS'.
13. REFER TO DRAWING SERIES S-0-GE-60 TO S-0-GE-69 FOR 'TYPICAL STEEL DETAILS'.

-wet area — DENOTES WET AREA, REFER TO ARCHITECTS DRAWINGS FOR SETDOWN DEPTHS. WAFFLE PODS TO BE LOWERED IN THIS AREA (SHOWN HATCHED ON PLAN) REFER TO TYPICAL DETAIL ON DWG. S-0-GE-50

TYPICAL CONCRETE COLUMN & WALL DRAWING DEFINITION SCHEDULE U.N.O.	
SHOWN ON PLAN	DESCRIPTION
	LOAD BEARING CONCRETE OVER
	LOAD BEARING CONCRETE UNDER
	LOAD BEARING CONCRETE OVER & UNDER

KEY PLAN



ISSUE	DESCRIPTION	APPROVED	DATE
C	SLAB REVISED	MG	24.02.21
B	ARCHITECTS REVISIONS	MG	22.01.21
A	ISSUED FOR CONSTRUCTION	MG	06.11.20
4	CC2 RESUBMISSION		30.10.20
3	CC2 ISSUE		16.10.20
2	ISSUED FOR INFORMATION		28.08.20
1	ISSUED FOR INFORMATION		21.08.20

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PROJECT
PORTERS CREEK PUBLIC SCHOOL
75 Warnervale Rd. Warnervale NSW 2259

TITLE
C1 & C2 TEACHING SPACE - LEVEL 1 FLOOR PLAN

SCALES	DATE
1:100 @ A1	JUNE 2020

DRAWN	DESIGN	VERIFIED	APPROVED
AB	TO		

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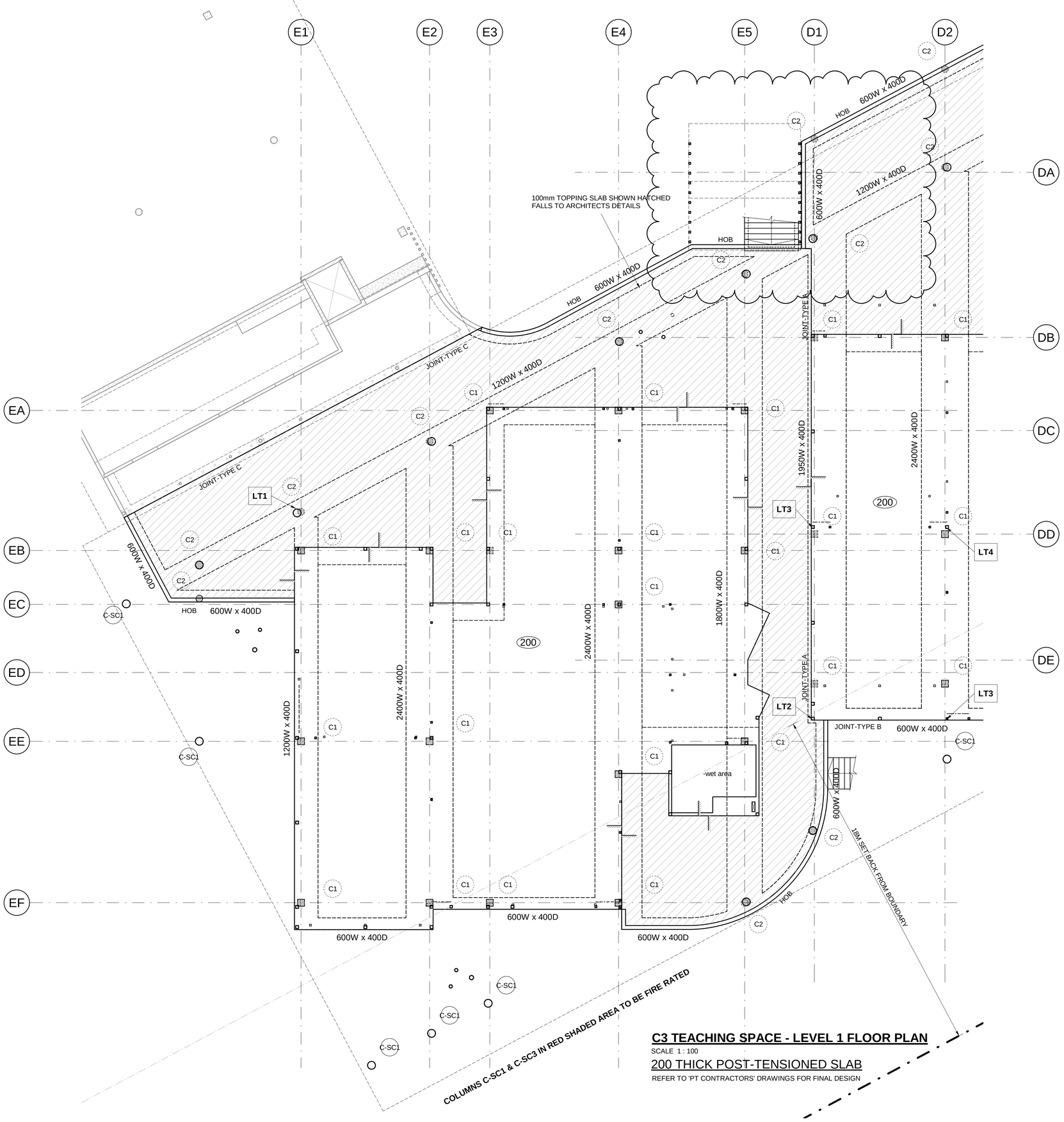
ISSUE	PROJECT No.	DRAWING No.
C	7900	S-C-L1-01

24/02/2021 2:51:54 PM



C3 TEACHING SPACE - LEVEL 1 FLOOR PLAN

SCALE 1 : 100

200 THICK POST-TENSIONED SLAB

REFER TO 'PT CONTRACTORS' DRAWINGS FOR FINAL DESIGN

REFER TO DRAWING S-C-L1-01 FOR CONTINUATION OF PLAN

(TEACHING SPACE) COLUMN TRANSFER LOAD SCHEDULE

TAG (LOAD TYPE)	G (kN)	Q (kN)
LT1	45	15
LT2	20	11
LT3	25	15
LT4	30	20

DRAWING NOTES:

1. REFER TO ARCHITECT'S DRAWINGS FOR SLAB FALLS AND CAST-IN REGLET DETAILS
2. ALL CONCRETE HOBS SHALL BE CAST INTEGRALLY WITH SLABS.
3. PROVIDE CLASS 2 FINISH TO ALL EXPOSED SOFFITS AND FACES.
4. PENETRATIONS SMALLER THAN 200MM IN DIAMETER NOT SHOWN ON PLAN FOR CLARITY. REINFORCEMENT SHOWN SHALL BE DISPLACED TO THE SIDES OF THE PENETRATION AND **DO NOT CUT**. OBTAIN ENGINEER'S APPROVAL FOR PENETRATIONS NOT SHOWN ON STRUCTURAL DRAWING'S.
5. SCREW PILES TO BE DESIGNED AND INSTALLED IN ACCORDANCE WITH THE CONTRACTORS DETAILS.
6. ALL SLABS IN CONTACT WITH GROUND TO HAVE A WATERPROOFING MEMBRANE AS SPECIFIED BY THE ARCHITECT. (MEMBRANES TO HAVE A 20 YEAR MINIMUM DESIGN LIFE)
7. REFER TO DRAWING SERIES S-0-GE-02 TO S-0-GE-09 FOR 'CONSTRUCTION NOTES & GENERAL NOTES'.
8. REFER TO DRAWING SERIES S-0-GE-10 TO S-0-GE-19 FOR 'TYPICAL FOOTING DETAILS'.
9. REFER TO DRAWING SERIES S-0-GE-20 TO S-0-GE-29 FOR 'TYPICAL COLUMN DETAILS'.
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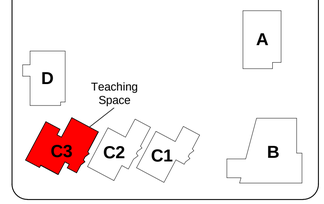
13. REFER TO DRAWING SERIES S-0-GE-60 TO S-0-GE-69 FOR 'TYPICAL STEEL DETAILS'.

-wet area — DENOTES WET AREA, REFER TO ARCHITECTS DRAWINGS FOR SETDOWN DEPTHS. WAFFLE PODS TO BE LOWERED IN THIS AREA (SHOWN HATCHED ON PLAN) REFER TO TYPICAL DETAIL ON DWG. S-0-GE-50

TYPICAL CONCRETE COLUMN & WALL DRAWING DEFINITION SCHEDULE U.N.O.

SHOWN ON PLAN	DESCRIPTION
	LOAD BEARING CONCRETE OVER
	LOAD BEARING CONCRETE UNDER
	LOAD BEARING CONCRETE OVER & UNDER

KEY PLAN



ISSUE	DESCRIPTION	APPROVED	DATE
C	SLAB REVISED	MG	24.02.21
B	ARCHITECTS REVISIONS	MG	22.01.21
A	ISSUED FOR CONSTRUCTION	MG	06.11.20
4	CC2 RESUBMISSION		30.10.20
3	CC2 ISSUE		16.10.20
2	ISSUED FOR INFORMATION		28.08.20
1	ISSUED FOR INFORMATION		21.08.20

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PROJECT
PORTERS CREEK PUBLIC SCHOOL
75 Warnervale Rd. Warnervale NSW 2259

TITLE
C3 TEACHING SPACE - LEVEL 1 FLOOR PLAN

SCALES	DATE
1:100 @ A1	08/12/20

DRAWN	DESIGN	VERIFIED	APPROVED
AB	TO		

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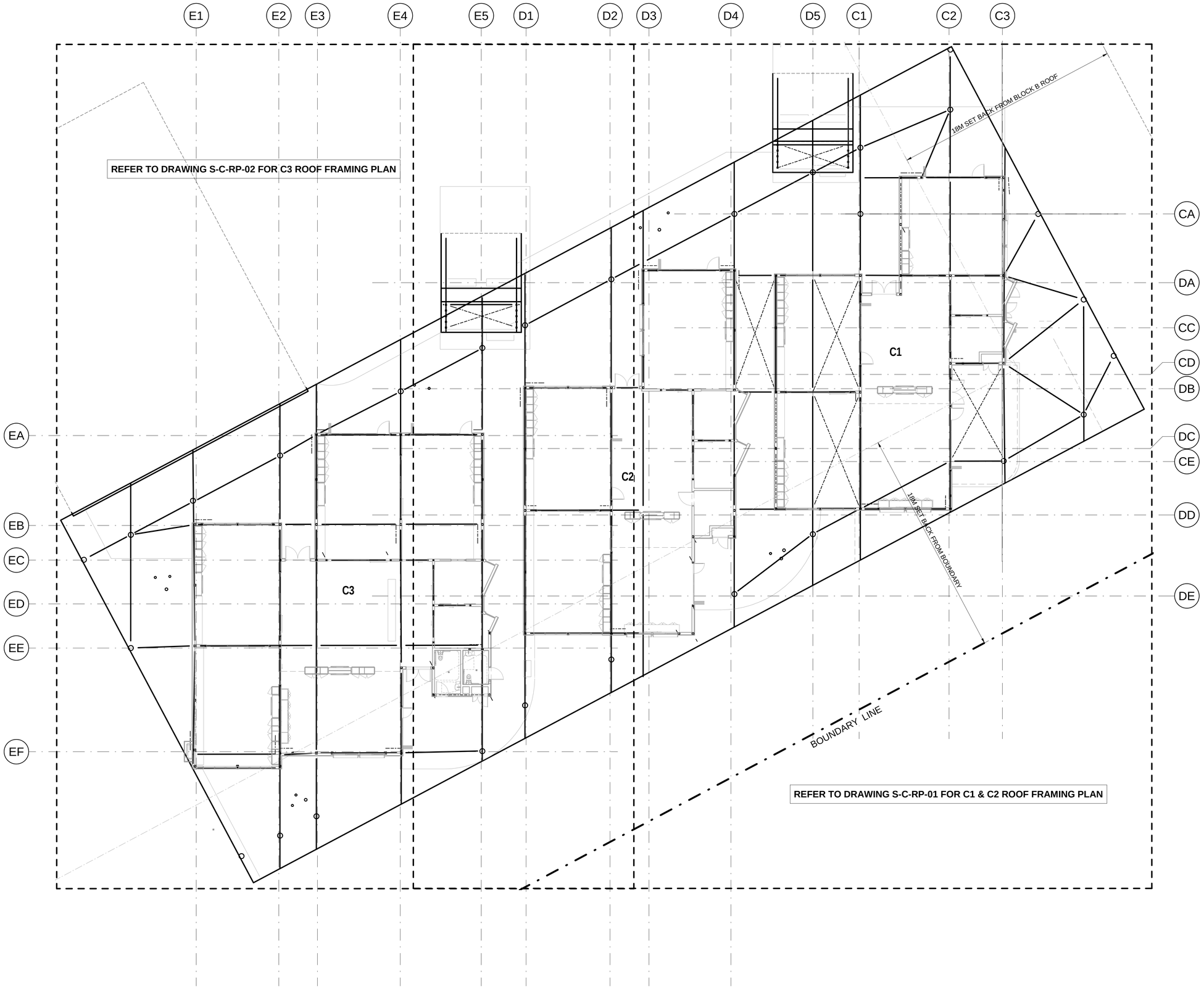
ISSUE	PROJECT No.	DRAWING No.
C	7900	S-C-L1-02

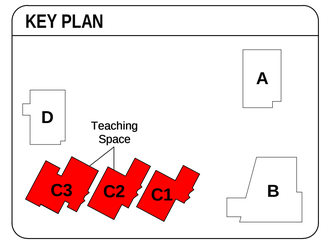
24/02/2021 2:03:55 PM



TEACHING SPACE OVERALL ROOF PLAN

SCALE 1 : 150

KEY PLAN



ISSUE	DESCRIPTION	APPROVED	DATE
A	ISSUED FOR CONSTRUCTION		06.11.20
3	CC2 RESUBMISSION		30.10.20
2	CC2 ISSUE		16.10.20
1	ISSUED FOR INFORMATION		28.08.20

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PROJECT
PORTERS CREEK PUBLIC SCHOOL
75 Warnervale Rd. Warnervale NSW 2259

TITLE
TEACHING SPACE OVERALL ROOF PLAN

SCALES	DATE
1:150 @ A1	08/26/20

DRAWN	DESIGN	VERIFIED	APPROVED
AB	TO		

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ISSUE	PROJECT No.	DRAWING No.
A	7900	S-C-RP-00

6/11/2020 5:00:27 PM

SUPERIMPOSED DEAD LOAD FOR TEACHING BLOCK SOLAR PANELS = 0.15kPa

NOTE FOR PURLINS:

PROVIDE 1 ROW OF BRIDGING WHEN SPAN OF PURLIN EXCEEDS 3000mm.
PROVIDE 2 ROWS OF BRIDGING WHEN SPAN OF PURLIN EXCEEDS 6000mm.
PROVIDE 3 ROWS OF BRIDGING WHEN SPAN OF PURLIN EXCEEDS 8000mm.
LAPPED PURLINS TO LAP MIN. 15% OF SPAN AS REQUIRED. (TYPICAL U.N.O.)

REFER TO DRAWINGS S-C-WF-01 & S-C-WF-02 FOR ADDITIONAL FRAMING

TRIM ROOF SHEETING BOTH SIDES OF EXPANSION JOINT AS PER THE TYPICAL NOTES ON THIS DRAWING

REFER TO DRAWINGS S-C-RP-03 FOR LOWER ROOF FRAMING

18M SET BACK FROM BLOCK B ROOF

NOTE:
COLUMNS SHOWN THUS TO BE FIRE RATED IN ACCORDANCE WITH THE ARCHITECTS SPECIFICATION (TYPICAL)

18M SET BACK FROM BOUNDARY

REFER TO DRAWING S-C-RP-02 FOR CONTINUATION OF PLAN

C1 & C2 TEACHING SPACE - ROOF FRAMING PLAN

SCALE 1 : 100

DRAWING NOTES:

REFER TO DRAWING S-0-GE-02 & 03 FOR 'CONSTRUCTION NOTES'

ALL STEELWORK FRAMING IS TO BE TREATED IN ACCORDANCE WITH THE SPECIFICATION ON DWG. S-0-GE-02.

PRIMARY STRUCTURAL STEEL FRAMING MEMBERS SHOWN ONLY.

THE STEELWORK FRAMING THAT IS TO BE WELDED ON SITE SHOULD BE LOCALLY PREPARED AND PAINTED IN ACCORDANCE WITH AS2312 SECTION 10.5 AND COATINGS SHALL BE AS SPECIFIED ON DWG. S-0-GE-02, SIMILAR TO ADJACENT STEELWORK.

REFER TO RELEVANT ARCHITECTURAL AND OTHER CONSULTANTS DRAWINGS FOR ANY SECONDARY STEEL FRAMING MEMBERS WHICH MAY BE REQUIRED.
(ie. GUTTERS, SUN HOODS, SUN SCREENS, WINDOW FRAMING, LOUVRES, ETC)

ALL TIMBER FRAMING IS TO BE IN STRICT ACCORDANCE WITH AS1684 & AS1720, NATIONAL TIMBER FRAMING CODE.

PURLIN BRIDGING TO BE FIXED TO TIE BEAMS & FASCIA MEMBERS WHERE REQUIRED.

PROVIDE Z20019 OR C20019 TRIMMER PURLINS BETWEEN MAIN ROOF PURLINS ALONG HIPS AND VALLEYS TO SUPPORT EDGE OF ROOF SHEETING. FIX TO MAIN ROOF PURLINS WITH 100x100x4 FABRICATED ANGLE BRACKETS WITH 4/M12 PURLIN BOLTS. (TYPICAL) ALTERNATIVELY PROVIDE 75x75x1.6 FOLDED STEEL ANGLE LAID OVER ENDS OF PURLINS AND FIXED TO EACH PURLIN WITH 2-No.12 SELF DRILLING STEEL FASTENERS.

PROVIDE Z20019 OR C20019 TRIMMER PURLINS WHERE NECESSARY TO SUPPORT ROOF SHEETING, CEILING LININGS, ROOF VENTS, SKYLIGHTS, WINDCATCHERS etc. CONNECT TO MAIN ROOF PURLINS USING GENERAL PURPOSE BRACKETS AND 4/M12 PURLIN BOLTS AT EACH END.

LOCATE ROOF PURLINS TO SUIT ROOF SHEETING, CEILING LININGS etc. REFER TO ARCHITECTS DRAWINGS FOR TYPICAL DETAILS.

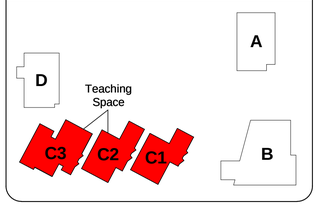
CONNECT ALL STEEL/CONCRETE COLUMNS AND STEEL/CONCRETE BEAMS TO ADJACENT BRICKWORK AS SPECIFIED ON DRAWING S-0-GE-04 TO PROVIDE LATERAL STABILITY. (ALSO REFER TYPICAL CONNECTION DETAILS) PROVIDE TEMPORARY BRACING TO STEELWORK IF REQUIRED UNTIL BRICKWORK HAS BEEN CONSTRUCTED.

WALL FRAMING TO MANUFACTURERS DETAILS AND IN ACCORDANCE WITH THE SPECIFICATION.

TRUSSES TO MANUFACTURERS DETAILS AND IN ACCORDANCE WITH THE SPECIFICATION.

ALL EXTERNAL STEELWORK TO BE HOT DIP GALVANISED.

KEY PLAN



TEACHING SPACE (C) ROOF FRAMING SCHEDULE

ELEMENT	MARK	SIZE	COMMENTS
ROOF BRACING	C-BR1	Ø24 ROD	WITH TURNBUCKLE
DUMMY COLUMNS	C-DC1	REFER TO ARCH. DRAWINGS	NON STRUCTURAL COLUMN
	C-DC2	REFER TO ARCH. DRAWINGS	NON STRUCTURAL COLUMN
	C-DC3	REFER TO ARCH. DRAWINGS	NON STRUCTURAL COLUMN
FASCIAS	C-FB1	200PFC	
	C-FB2	200UB18.2	
PURLINS	C-P1	Z20015	AT 1200MAX. CTS. LAP AT SUPPORTS
	C-P2	C15015	AT 1200MAX. CTS.
RAFTERS	C-RB1	360UB44.7	
	C-RB2	200UB18.2	
SUPPORT BEAMS	C-SB1	460UB67.1	
	C-SB2	360UB44.7	
COLUMNS	C-SC1	Ø406.4x6.4CHS	COREFILLED WITH 8-N16, N12-240 TIES (50 COVER)
	C-SC2	150x150x5.0SHS	
	C-SC3	Ø406.4x4.6CHS	COREFILLED WITH 8-N16, N12-240 TIES (50 COVER)
	C-SC4	100x100x9.0SHS	
	C-SC5	100x100x9.0SHS	FIRE RATED
	C-SC6	200x100x9.0RHS	FIRE RATED
TIE BEAMS	C-T1	Ø101.6x3.2CHS	
	C-TB1	150x150x5.0SHS	
WALL BRACING	C-WB1	100x100x5.0SHS	
WALL FRAME	C-WF1	125x125x5.0SHS COLUMNS, 89x89x5.0SHS WEBS	PROVIDE 89SHS WEBS AT 1000MAX. CTS.
	C-WF2	100x100x9.0SHS COLUMNS, 100x100x9.0SHS WEBS	PROVIDE 100SHS WEBS AT 1000MAX. CTS. (FIRE RATED)
WALL STIFFENER BEAMS	C-WSB1	125x125x5.0SHS	
	C-WSB2	150x150x5.0SHS	
	C-WSB3	100x100x5.0SHS	
	C-WSB4	125x125x4.0SHS	
	C-WSB5	200x100x6.0RHS	WITH 10 PLATE CONTINUOUS TO SUPPORT BRICKWORK/CLADDING
WALL STIFFENER COLUMNS	C-WSC1	100x100x8.0SHS	
	C-WSC2	150x150x5.0SHS	
	C-WSC3	100x100x9.0SHS	FIRE RATED

ISSUE	DESCRIPTION	APPROVED	DATE
E	FRAMING REVISED	MG	24.02.21
D	FRAMING REVISED	MG	18.02.21
C	PURLIN EXPANSION JOINT REVISED	TO	09.12.20
B	SB1 MEMBER REVISED	TO	07.12.20
A	ISSUED FOR CONSTRUCTION	MG	06.11.20
4	CC2 RESUBMISSION		30.10.20
3	CC2 ISSUE		16.10.20
2	ISSUED FOR INFORMATION		28.08.20
1	ISSUED FOR INFORMATION		21.08.20

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PROJECT
PORTERS CREEK PUBLIC SCHOOL
75 Warnervale Rd. Warnervale NSW 2259

TITLE
C1 & C2 TEACHING SPACE - ROOF FRAMING PLAN

SCALES	DATE
1:100 @ A1	JUNE 2020

DRAWN	DESIGN	VERIFIED	APPROVED
AB	TO		

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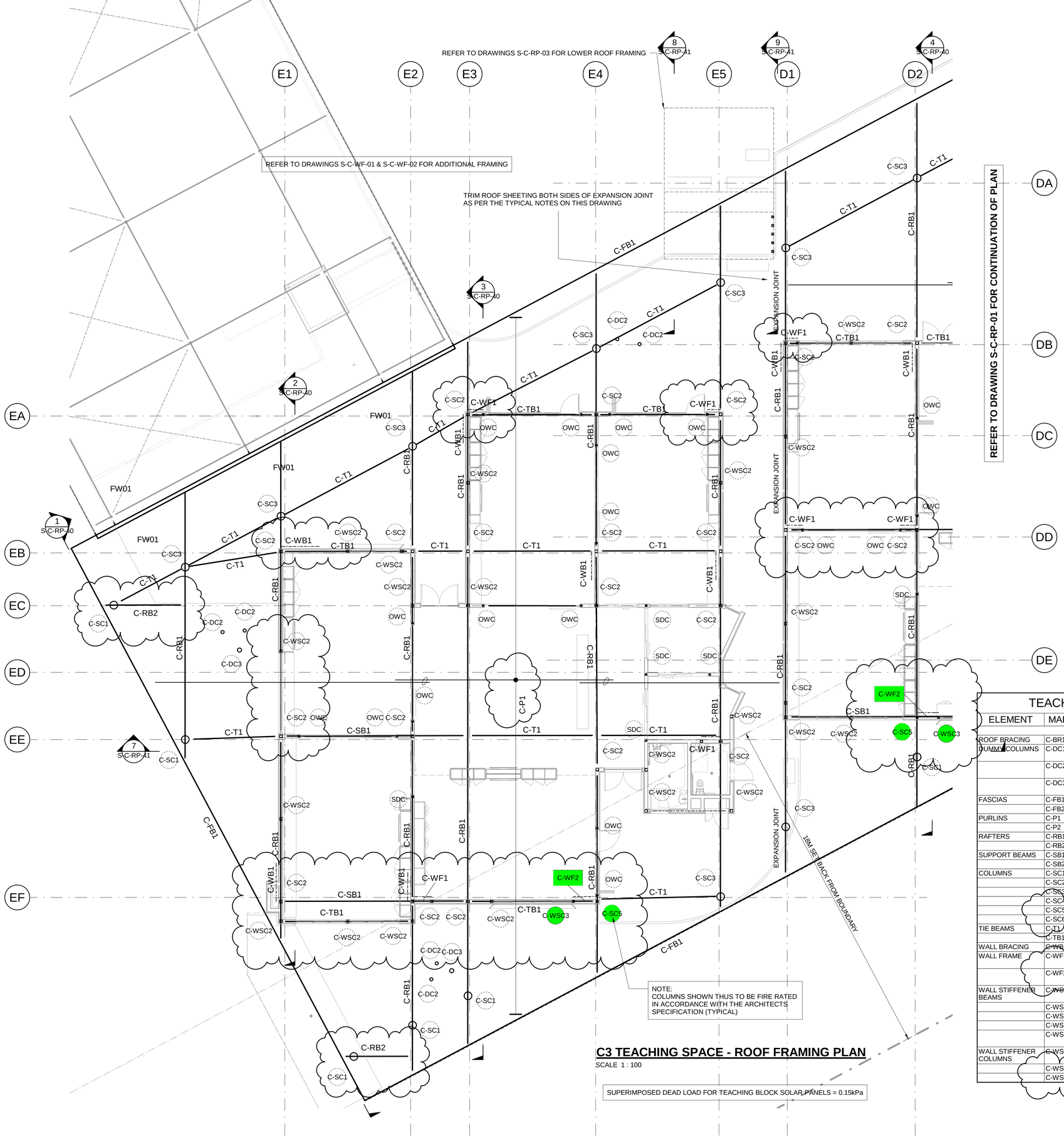
ISSUE	PROJECT No.	DRAWING No.
E	7900	S-C-RP-01

24/02/2021 2:01:56 PM



C3 TEACHING SPACE - ROOF FRAMING PLAN

SCALE 1 : 100

SUPERIMPOSED DEAD LOAD FOR TEACHING BLOCK SOLAR PANELS = 0.15kPa

DRAWING NOTES:

REFER TO DRAWING S-0-GE-02 & 03 FOR 'CONSTRUCTION NOTES'

ALL STEELWORK FRAMING IS TO BE TREATED IN ACCORDANCE WITH THE SPECIFICATION ON DWG. S-0-GE-02.

PRIMARY STRUCTURAL STEEL FRAMING MEMBERS SHOWN ONLY.

THE STEELWORK FRAMING THAT IS TO BE WELDED ON SITE SHOULD BE LOCALLY PREPARED AND PAINTED IN ACCORDANCE WITH AS2312 SECTION 10.5 AND COATINGS SHALL BE AS SPECIFIED ON DWG. S-0-GE-02, SIMILAR TO ADJACENT STEELWORK.

REFER TO RELEVANT ARCHITECTURAL AND OTHER CONSULTANTS DRAWINGS FOR ANY SECONDARY STEEL FRAMING MEMBERS WHICH MAY BE REQUIRED.
(ie. GUTTERS, SUN HOODS, SUN SCREENS, WINDOW FRAMING, LOUVRES, ETC)

ALL TIMBER FRAMING IS TO BE IN STRICT ACCORDANCE WITH AS1684 & AS1720, NATIONAL TIMBER FRAMING CODE.

PURLIN BRIDGING TO BE FIXED TO TIE BEAMS & FASCIA MEMBERS WHERE REQUIRED.

PROVIDE Z20019 OR C20019 TRIMMER PURLINS BETWEEN MAIN ROOF PURLINS ALONG HIPS AND VALLEYS TO SUPPORT EDGE OF ROOF SHEETING. FIX TO MAIN ROOF PURLINS WITH 100x100x4 FABRICATED ANGLE BRACKETS WITH 4/M12 PURLIN BOLTS. (TYPICAL) ALTERNATIVELY PROVIDE 75x75x1.6 FOLDED STEEL ANGLE LAID OVER ENDS OF PURLINS AND FIXED TO EACH PURLIN WITH 2-No.12 SELF DRILLING STEEL FASTENERS.

PROVIDE Z20019 OR C20019 TRIMMER PURLINS WHERE NECESSARY TO SUPPORT ROOF SHEETING, CEILING LININGS, ROOF VENTS, SKYLIGHTS, WINDCATCHERS etc. CONNECT TO MAIN ROOF PURLINS USING GENERAL PURPOSE BRACKETS AND 4/M12 PURLIN BOLTS AT EACH END.

LOCATE ROOF PURLINS TO SUIT ROOF SHEETING, CEILING LININGS etc. REFER TO ARCHITECTS DRAWINGS FOR TYPICAL DETAILS.

CONNECT ALL STEEL/CONCRETE COLUMNS AND STEEL/CONCRETE BEAMS TO ADJACENT BRICKWORK AS SPECIFIED ON DRAWING S-0-GE-04 TO PROVIDE LATERAL STABILITY. (ALSO REFER TYPICAL CONNECTION DETAILS) PROVIDE TEMPORARY BRACING TO STEELWORK IF REQUIRED UNTIL BRICKWORK HAS BEEN CONSTRUCTED.

WALL FRAMING TO MANUFACTURERS DETAILS AND IN ACCORDANCE WITH THE SPECIFICATION.

TRUSSES TO MANUFACTURERS DETAILS AND IN ACCORDANCE WITH THE SPECIFICATION.

ALL EXTERNAL STEELWORK TO BE HOT DIP GALVANISED.

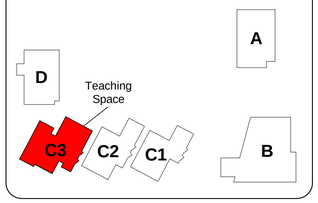
NOTE FOR PURLINS:

PROVIDE 1 ROW OF BRIDGING WHEN SPAN OF PURLIN EXCEEDS 3000mm.
PROVIDE 2 ROWS OF BRIDGING WHEN SPAN OF PURLIN EXCEEDS 6000mm.
PROVIDE 3 ROWS OF BRIDGING WHEN SPAN OF PURLIN EXCEEDS 8000mm.
LAPPED PURLINS TO LAP MIN. 15% OF SPAN AS REQUIRED. (TYPICAL U.N.O.)

TEACHING SPACE (C) ROOF FRAMING SCHEDULE

ELEMENT	MARK	SIZE	COMMENTS
ROOF BRACING	C-BR1	Ø24 ROD	WITH TURNBUCKLE
DUMMY COLUMNS	C-DC1	REFER TO ARCH. DRAWINGS	NON STRUCTURAL COLUMN
	C-DC2	REFER TO ARCH. DRAWINGS	NON STRUCTURAL COLUMN
	C-DC3	REFER TO ARCH. DRAWINGS	NON STRUCTURAL COLUMN
FASCIAS	C-FB1	200PFC	
	C-FB2	200UB18.2	
PURLINS	C-P1	Z20015	AT 1200MAX. CTS. LAP AT SUPPORTS
	C-P2	C15015	AT 1200MAX. CTS.
RAFTERS	C-RB1	360UB44.7	
	C-RB2	200UB18.2	
SUPPORT BEAMS	C-SB1	460UB67.1	
	C-SB2	360UB44.7	
COLUMNS	C-SC1	Ø406.4x6.4CHS	COREFILLED WITH 8-N16, N12-240 TIES (50 COVER)
	C-SC2	150x150x5.0SHS	
	C-SC3	Ø406.4x6.4CHS	COREFILLED WITH 8-N16, N12-240 TIES (50 COVER)
	C-SC4	100x100x9.0SHS	
	C-SC5	100x100x9.0SHS	FIRE RATED
	C-SC6	200x100x9.0RHS	FIRE RATED
TIE BEAMS	C-T1	Ø101.6x3.2CHS	
	C-TB1	150x150x5.0SHS	
WALL BRACING	C-WB1	100x100x5.0SHS	
WALL FRAME	C-WF1	125x125x5.0SHS COLUMNS, 89x89x5.0SHS WEBS	PROVIDE 89SHS WEBS AT 1000MAX CTS.
	C-WF2	100x100x9.0SHS COLUMNS, 100x100x9.0SHS WEBS	PROVIDE 100SHS WEBS AT 1000MAX. CTS. (FIRE RATED)
WALL STIFFENER BEAMS	C-WSB1	125x125x5.0SHS	
	C-WSB2	150x150x5.0SHS	
	C-WSB3	100x100x5.0SHS	
	C-WSB4	125x125x4.0SHS	
	C-WSB5	200x100x6.0RHS	WITH 10 PLATE CONTINUOUS TO SUPPORT BRICKWORK/CLADDING
WALL STIFFENER COLUMNS	C-WSC1	100x100x8.0SHS	
	C-WSC2	150x150x5.0SHS	
	C-WSC3	100x100x9.0SHS	FIRE RATED

KEY PLAN



ISSUE	DESCRIPTION	APPROVED	DATE
D	FRAMING REVISED	MG	18.02.21
C	PURLIN EXPANSION JOINT REVISED	TO	09.12.20
B	SB1 MEMBER REVISED	TO	07.12.20
A	ISSUED FOR CONSTRUCTION	MG	06.11.20
4	CC2 RESUBMISSION		30.10.20
3	CC2 ISSUE		16.10.20
2	ISSUED FOR INFORMATION		28.08.20
1	ISSUED FOR INFORMATION		21.08.20

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PROJECT
PORTERS CREEK PUBLIC SCHOOL
75 Warnervale Rd. Warnervale NSW 2259

TITLE
C3 TEACHING SPACE - ROOF FRAMING PLAN

SCALES	DATE
1:100 @ A1	08/19/20

DRAWN	DESIGN	VERIFIED	APPROVED
AB	TO		

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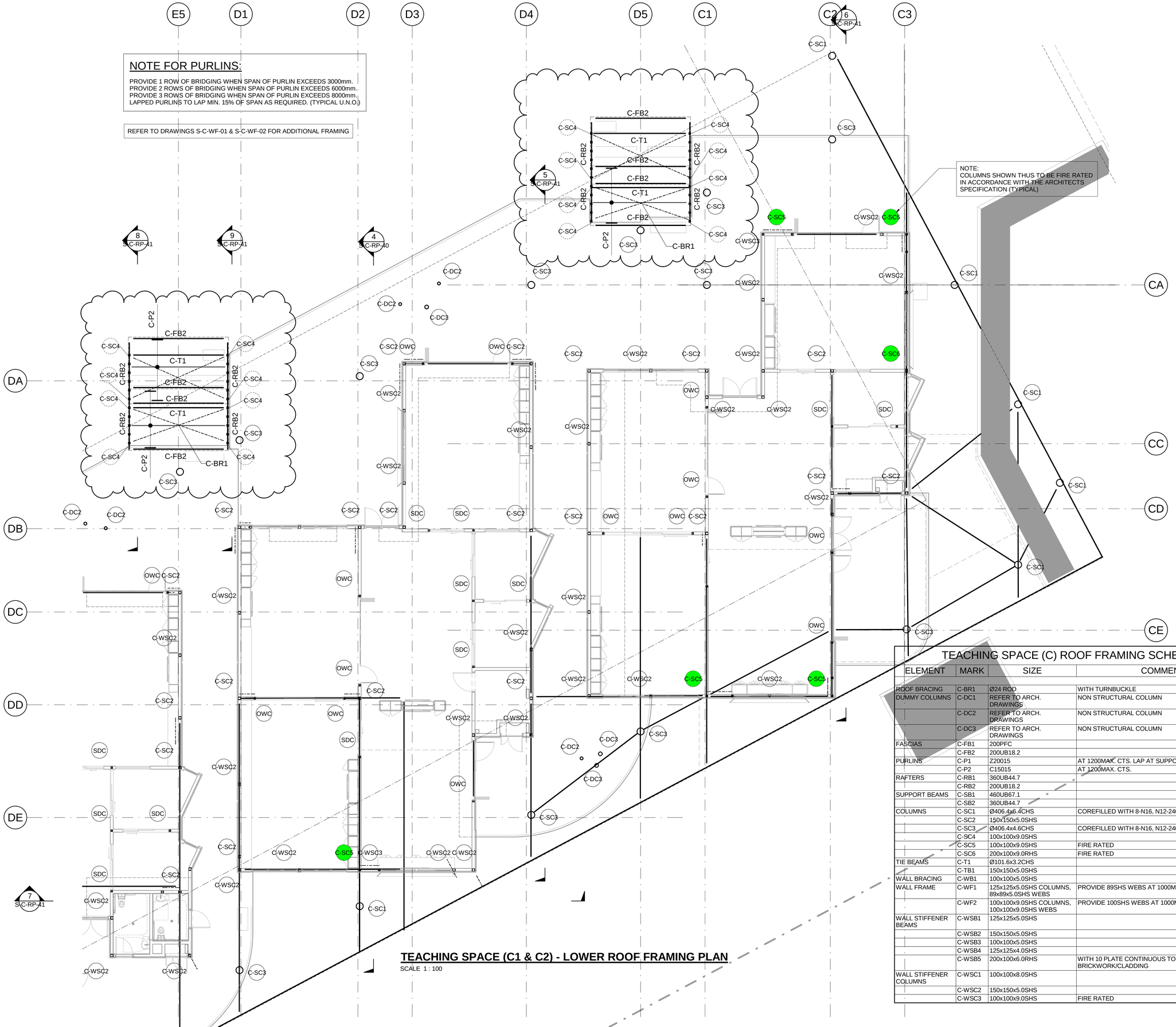
ISSUE	PROJECT No.	DRAWING No.
D	7900	S-C-RP-02

19/02/2021 1:41:25 PM



TEACHING SPACE (C1 & C2) - LOWER ROOF FRAMING PLAN

SCALE 1 : 100

DRAWING NOTES:

REFER TO DRAWING S-0-GE-02 & 03 FOR 'CONSTRUCTION NOTES'

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PROVIDE Z20019 OR C20019 TRIMMER PURLINS WHERE NECESSARY TO SUPPORT ROOF SHEETING, CEILING LININGS, ROOF VENTS, SKYLIGHTS, WINDCATCHERS etc. CONNECT TO MAIN ROOF PURLINS USING GENERAL PURPOSE BRACKETS AND 4/M12 PURLIN BOLTS AT EACH END.

LOCATE ROOF PURLINS TO SUIT ROOF SHEETING, CEILING LININGS etc. REFER TO ARCHITECTS DRAWINGS FOR TYPICAL DETAILS.

CONNECT ALL STEEL/CONCRETE COLUMNS AND STEEL/CONCRETE BEAMS TO ADJACENT BRICKWORK AS SPECIFIED ON DRAWING S-0-GE-04 TO PROVIDE LATERAL STABILITY. (ALSO REFER TYPICAL CONNECTION DETAILS) PROVIDE TEMPORARY BRACING TO STEELWORK IF REQUIRED UNTIL BRICKWORK HAS BEEN CONSTRUCTED.

WALL FRAMING TO MANUFACTURERS DETAILS AND IN ACCORDANCE WITH THE SPECIFICATION.

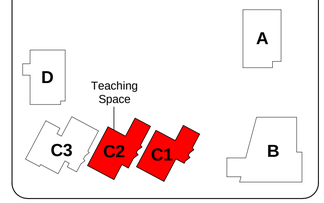
TRUSSES TO MANUFACTURERS DETAILS AND IN ACCORDANCE WITH THE SPECIFICATION.

ALL EXTERNAL STEELWORK TO BE HOT DIP GALVANISED.

TEACHING SPACE (C) ROOF FRAMING SCHEDULE

ELEMENT	MARK	SIZE	COMMENTS
ROOF BRACING	C-BR1	Ø24 ROD	WITH TURNBUCKLE
DUMMY COLUMNS	C-DC1	REFER TO ARCH. DRAWINGS	NON STRUCTURAL COLUMN
	C-DC2	REFER TO ARCH. DRAWINGS	NON STRUCTURAL COLUMN
	C-DC3	REFER TO ARCH. DRAWINGS	NON STRUCTURAL COLUMN
FASCIAS	C-FB1	200PFC	
	C-FB2	200UB18.2	
PURLINS	C-P1	Z20015	AT 1200MAX. CTS. LAP AT SUPPORTS
	C-P2	C15015	AT 1200MAX. CTS.
RAFTERS	C-RB1	360UB44.7	
	C-RB2	200UB18.2	
SUPPORT BEAMS	C-SB1	460UB67.1	
	C-SB2	360UB44.7	
COLUMNS	C-SC1	Ø406.4x6.4CHS	COREFILLED WITH 8-N16, N12-240 TIES (50 COVER)
	C-SC2	150x150x5.0SHS	
	C-SC3	Ø406.4x4.6CHS	COREFILLED WITH 8-N16, N12-240 TIES (50 COVER)
	C-SC4	100x100x9.0SHS	
	C-SC5	100x100x9.0SHS	FIRE RATED
	C-SC6	200x100x9.0RHS	FIRE RATED
TIE BEAMS	C-T1	Ø101.6x3.2CHS	
	C-TB1	150x150x5.0SHS	
WALL BRACING	C-WB1	100x100x5.0SHS	
WALL FRAME	C-WF1	125x125x5.0SHS COLUMNS, 89x89x5.0SHS WEBS	PROVIDE 89SHS WEBS AT 1000MAX. CTS.
	C-WF2	100x100x9.0SHS COLUMNS, 100x100x9.0SHS WEBS	PROVIDE 100SHS WEBS AT 1000MAX. CTS. (FIRE RATED)
WALL STIFFENER BEAMS	C-WSB1	125x125x5.0SHS	
	C-WSB2	150x150x5.0SHS	
	C-WSB3	100x100x5.0SHS	
	C-WSB4	125x125x4.0SHS	
	C-WSB5	200x100x6.0RHS	WITH 10 PLATE CONTINUOUS TO SUPPORT BRICKWORK/CLADDING
WALL STIFFENER COLUMNS	C-WSC1	100x100x8.0SHS	
	C-WSC2	150x150x5.0SHS	
	C-WSC3	100x100x9.0SHS	FIRE RATED

KEY PLAN



ISSUE	DESCRIPTION	APPROVED	DATE
D	FRAMING REVISED	MG	24.02.21
C	FRAMING REVISED	MG	18.02.21
B	FIRE RATED COLUMNS REVISED	MG	29.01.21
A	ISSUED FOR CONSTRUCTION	MG	06.11.20
2	CC2 RESUBMISSION		30.10.20
1	CC2 ISSUE		16.10.20

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PROJECT
PORTERS CREEK PUBLIC SCHOOL
75 Warnervale Rd. Warnervale NSW 2259

TITLE
C1 & C2 TEACHING SPACE - LOWER ROOF FRAMING PLAN

SCALES	DATE
1:100 @ A1	09/14/20

DRAWN	DESIGN	VERIFIED	APPROVED
AB	TO		

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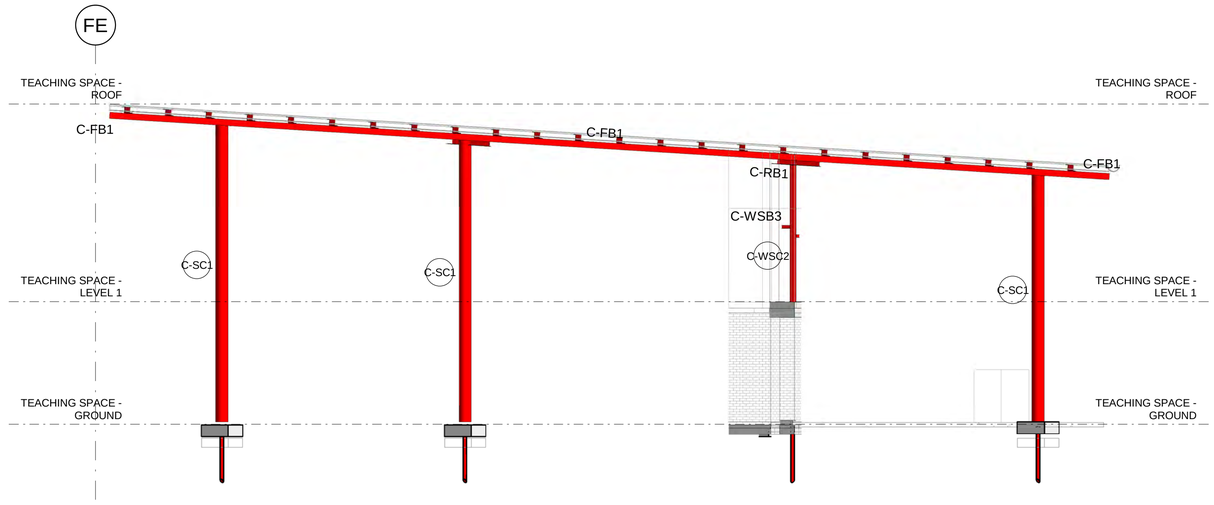
ISSUE	PROJECT No.	DRAWING No.
D	7900	S-C-RP-03

24/02/2021 2:01:16 PM



SECTION 1
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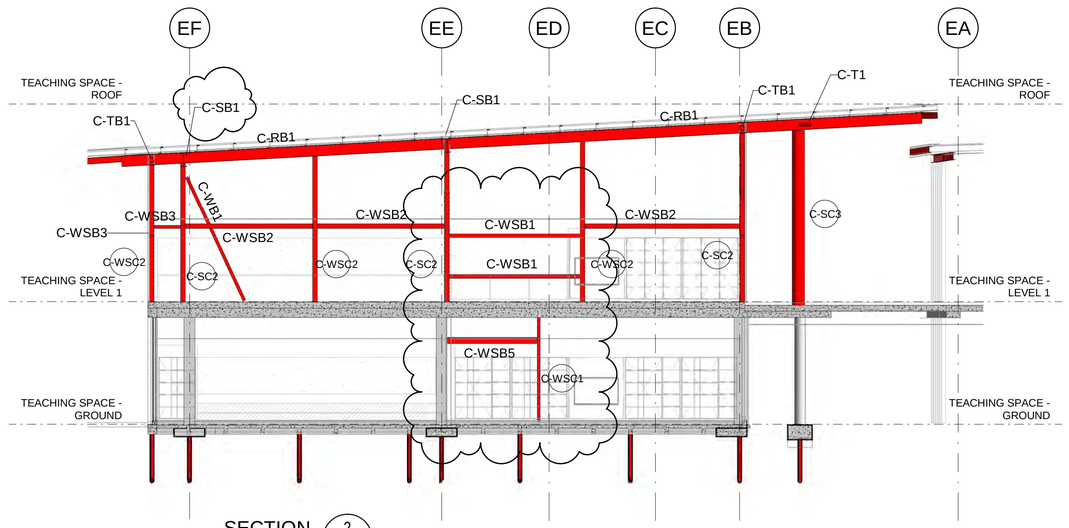

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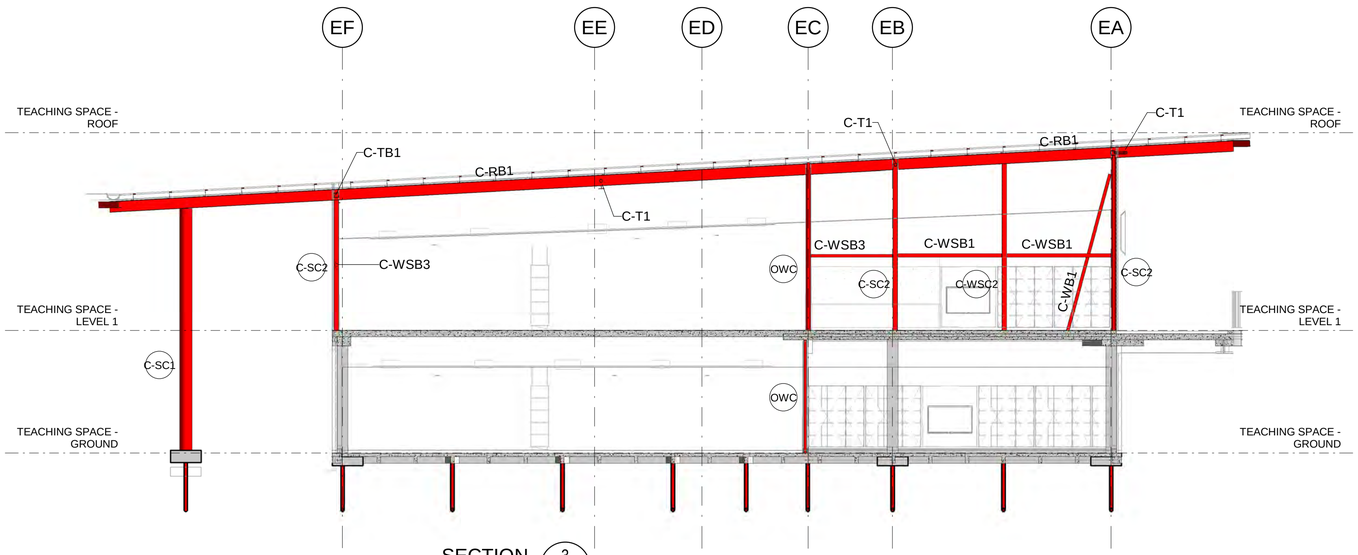

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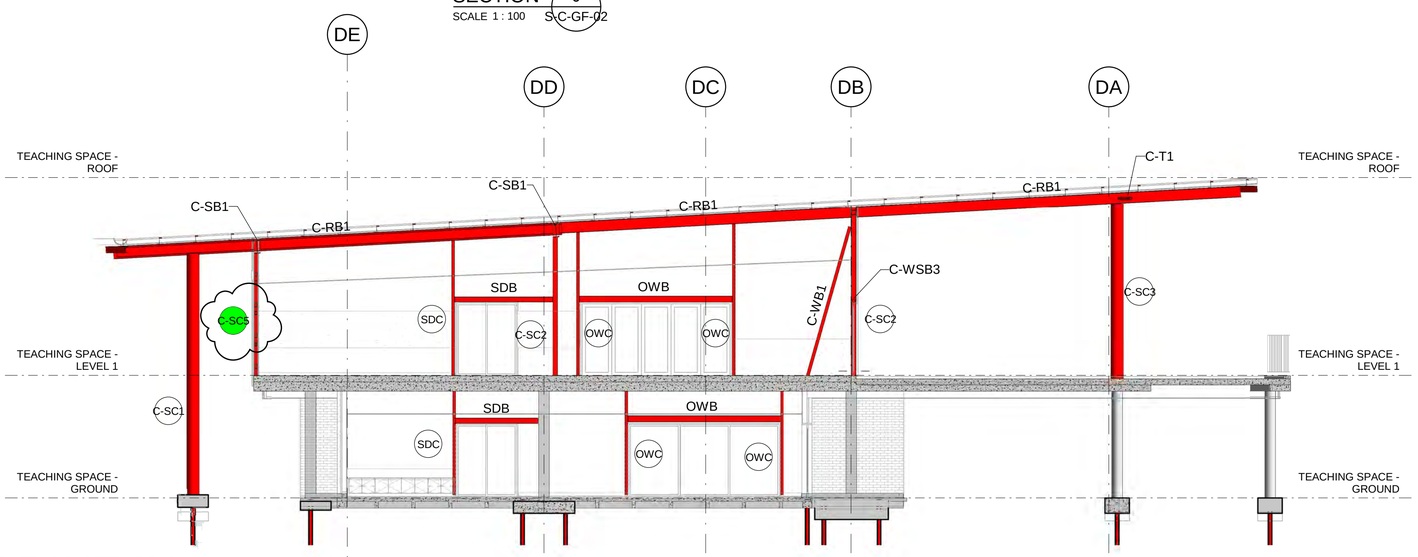
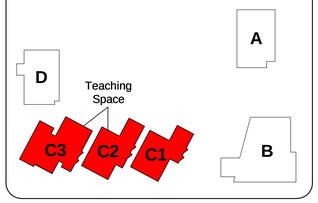


SECTION 4
SCALE 1 : 100 S-C-RP-01

PRINT IN COLOUR

KEY PLAN



ISSUE	DESCRIPTION	APPROVED	DATE
B	FRAMING REVISED	MG	18.02.21
A	ISSUED FOR CONSTRUCTION	MG	06.11.20
4	CC2 RESUBMISSION		30.10.20
3	CC2 ISSUE		16.10.20
2	ISSUED FOR INFORMATION		28.08.20
1	ISSUED FOR INFORMATION		21.08.20

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www.birzulisassociates.com

PROJECT
PORTERS CREEK PUBLIC SCHOOL
75 Warnervale Rd. Warnervale NSW 2259

TITLE
TEACHING SPACE -ROOF FRAMING SECTIONS

SCALES	DATE
1:100 @ A1	JUNE 2020

DRAWN	DESIGN	VERIFIED	APPROVED
AB	TO		

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ISSUE	PROJECT No.	DRAWING No.
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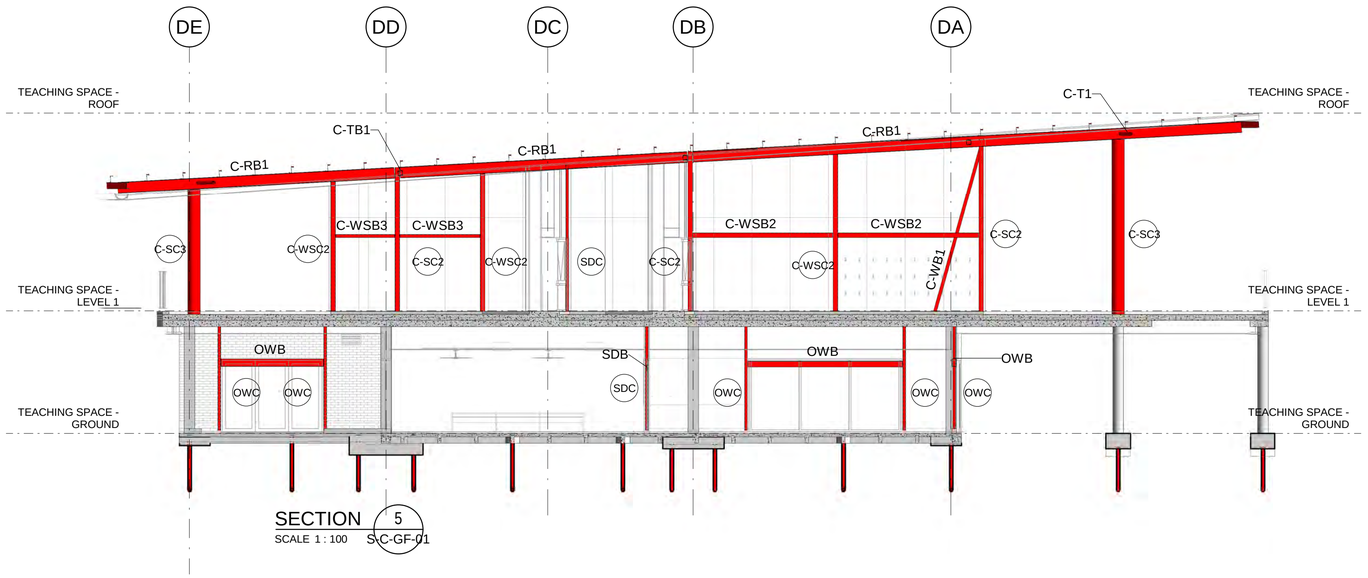
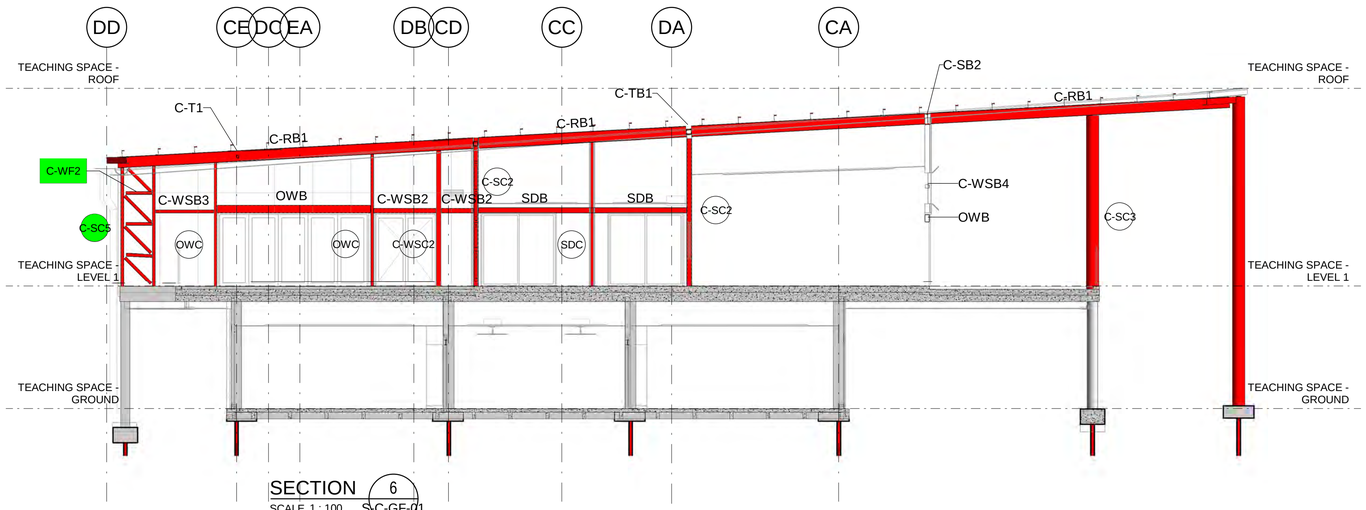
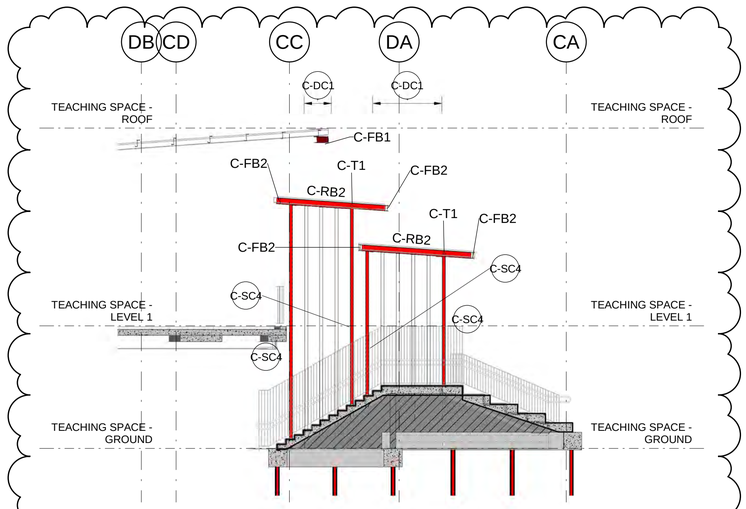
18/02/2021 1:41:29 PM



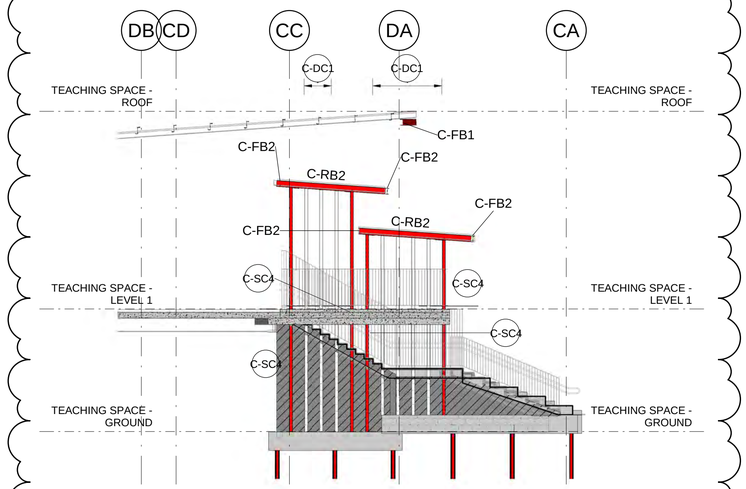
SECTION 5
SCALE 1 : 100 S-C-GF-01



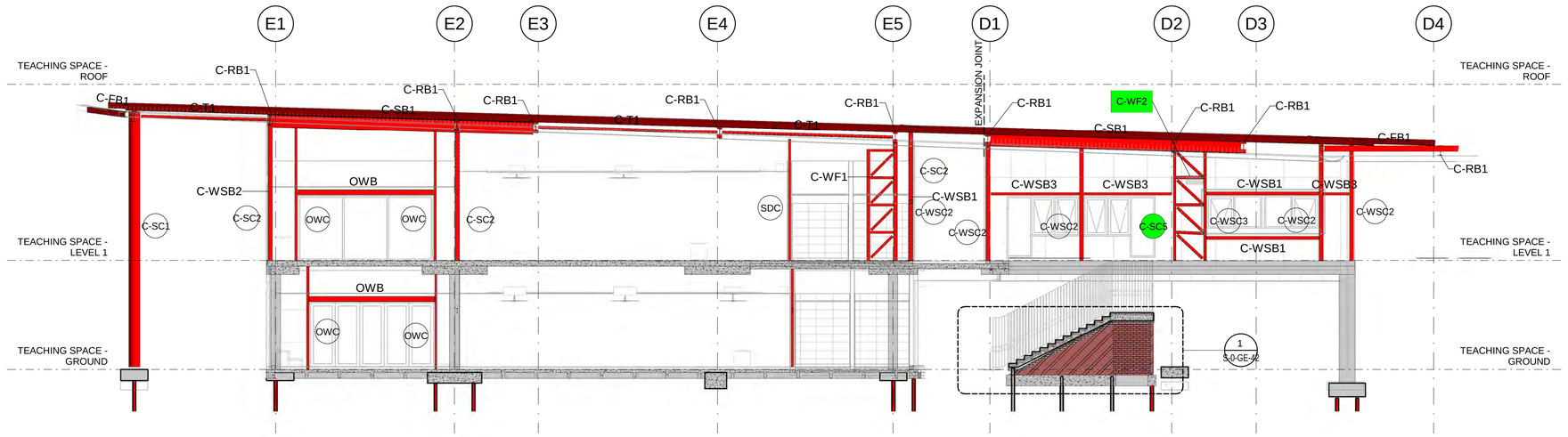
SECTION 6
SCALE 1 : 100 S-C-GF-01



SECTION 8
SCALE 1 : 100 S-C-RP-01



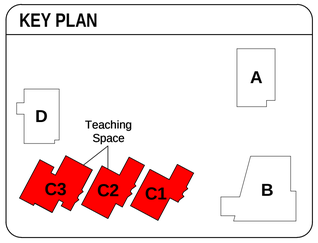
SECTION 9
SCALE 1 : 100 S-C-RP-01



SECTION 7
SCALE 1 : 100 S-C-RP-01

PRINT IN COLOUR

KEY PLAN



ISSUE	DESCRIPTION	APPROVED	DATE
C	FRAMING REVISED	MG	24.02.21
B	FRAMING REVISED	MG	18.02.21
A	ISSUED FOR CONSTRUCTION	MG	06.11.20
4	CC2 RESUBMISSION		30.10.20
3	CC2 ISSUE		16.10.20
2	ISSUED FOR INFORMATION		28.08.20
1	ISSUED FOR INFORMATION		21.08.20

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PROJECT
PORTERS CREEK PUBLIC SCHOOL
75 Warnervale Rd. Warnervale NSW 2259

TITLE
TEACHING SPACE -ROOF FRAMING SECTIONS

SCALES			DATE
1:100 @ A1			08/20/20
DRAWN	DESIGN	VERIFIED	APPROVED
AB	TO		

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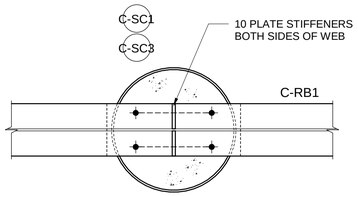
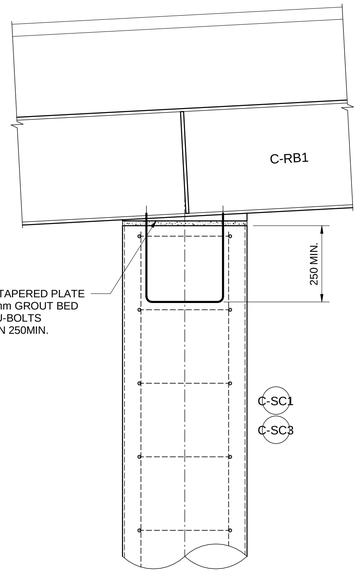
ISSUE	PROJECT No.	DRAWING No.
C	7900	S-C-RP-41

24/02/2021 2:03:59 PM

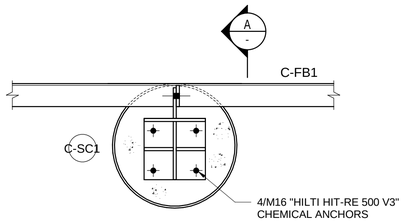


PLAN



C-SC1/C-SC3 RAFTER CAP DETAIL

SCALE 1:10



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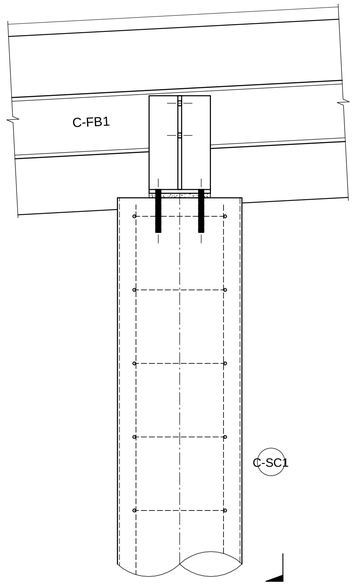
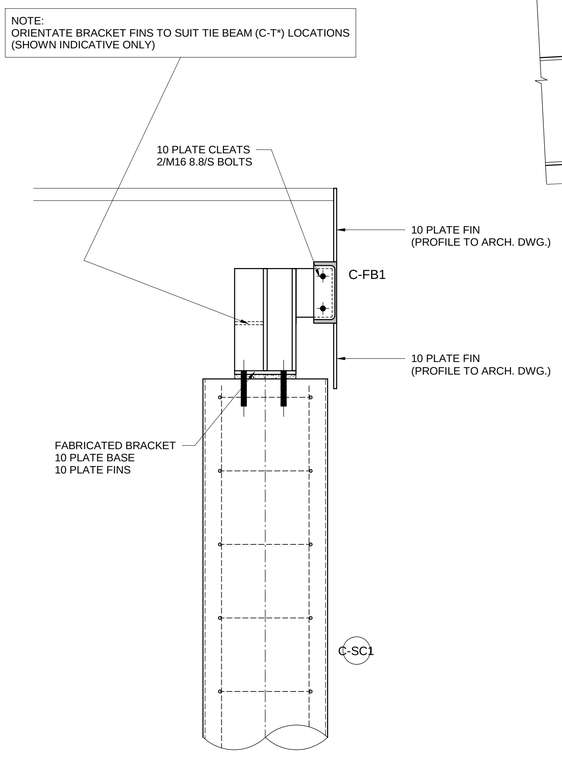


C-SC1 FASCIA CAP DETAIL

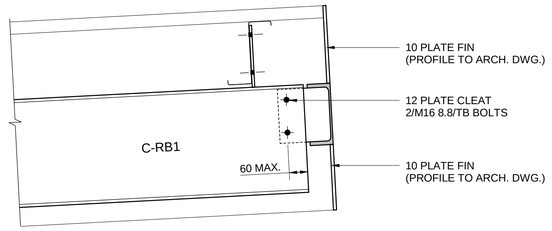
SCALE 1:10



SIDE VIEW

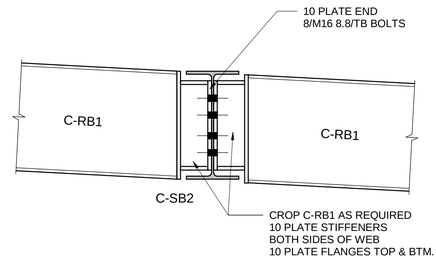
SECTION A

SCALE 1:10



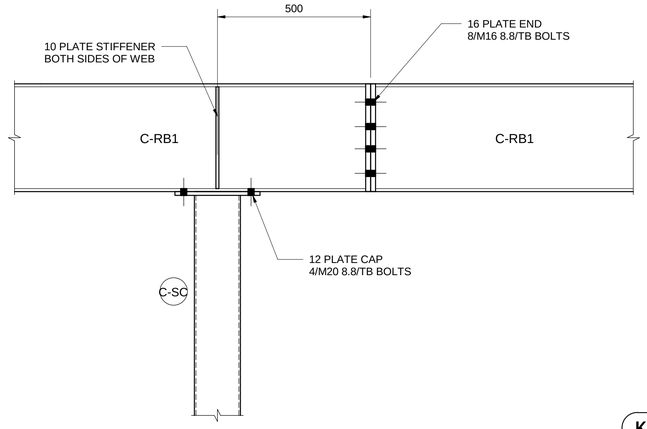
C-RB1 TO C-FB1DETAIL

SCALE 1:10



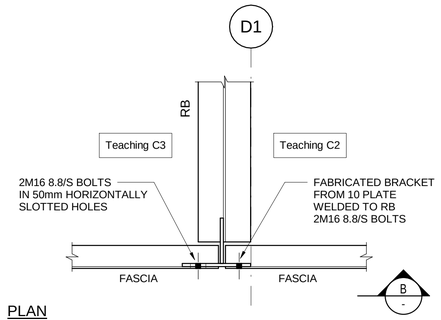
C-SB2 TO C-RB1 DETAIL

SCALE 1:10



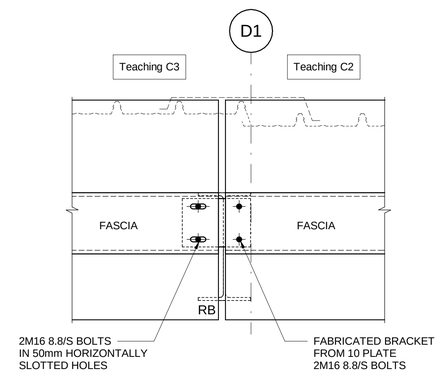
C-RB1 SPLICE DETAIL

SCALE 1:10



PLAN

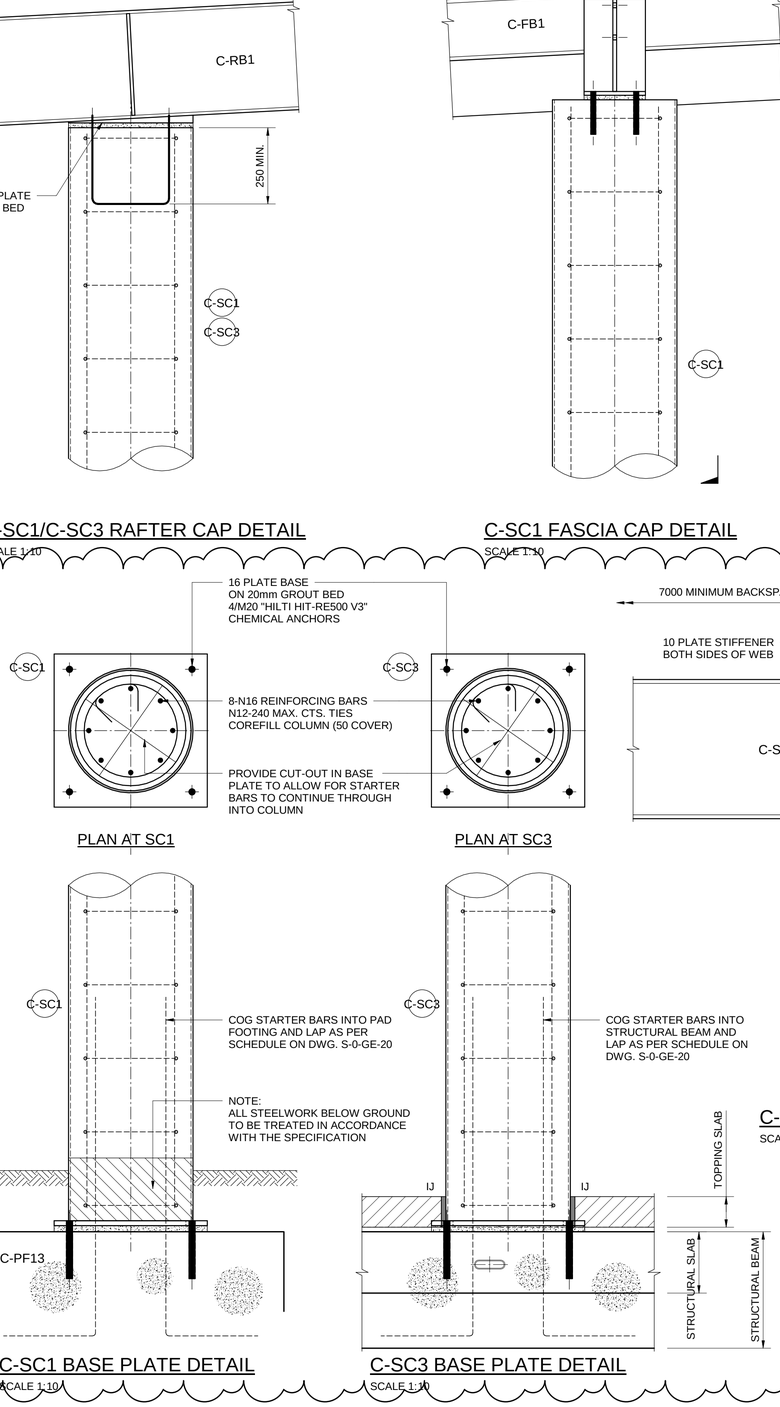
FASCIA EXPANSION JOINT IN TEACHERS BUILDING (GRID D1)



FASCIA EXPANSION JOINT IN TEACHERS BUILDING (GRID D1)

SECTION B

SCALE 1:10



PLAN AT SC1

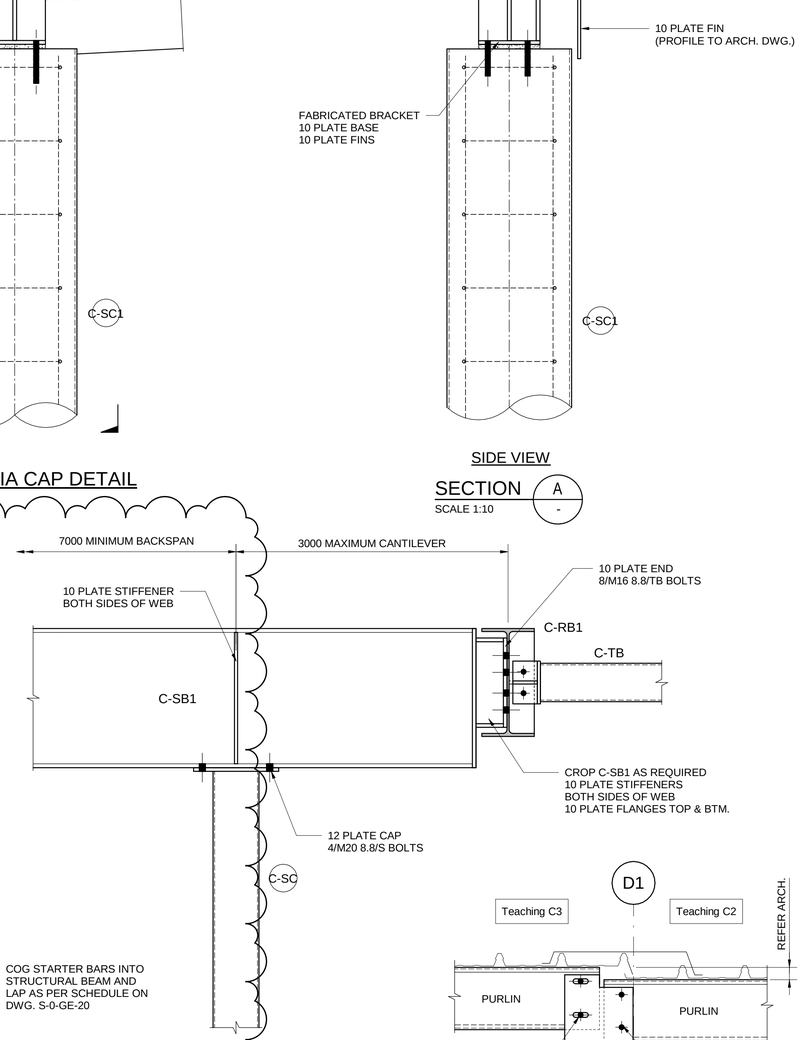
PLAN AT SC3

C-SC1 BASE PLATE DETAIL

SCALE 1:10

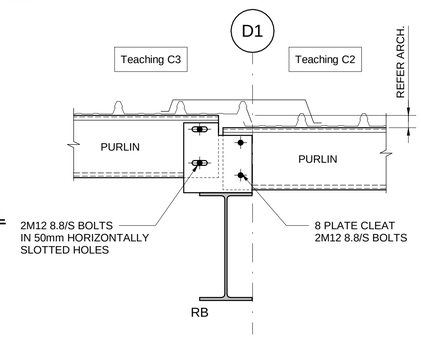
C-SC3 BASE PLATE DETAIL

SCALE 1:10



C-SB1 TO C-RB1 DETAIL

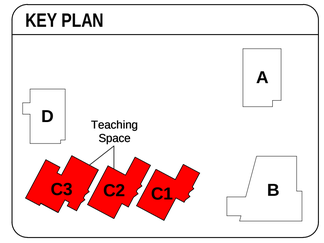
SCALE 1:10



PURLIN EXPANSION JOINT IN TEACHERS BUILDING (GRID D1)

NOTE:
PROVIDE TRIMMER PURLINS AS REQUIRED
EACH SIDE OF EXPANSION JOINT
(NOT SHOWN FOR CLARITY)

KEY PLAN



ISSUE	DESCRIPTION	APPROVED	DATE
E	COLUMN STARTER BARS ADDED	MG	25.02.21
D	PURLIN EXPANSION JOINT REVISED	TO	09.12.20
C	SB1 MEMBER REVISED	TO	07.12.20
B	FASCIA DETAIL REVISED TO SUIT ARCH. SC3 BASE DETAIL ADDED	TO	01.12.20
A	ISSUED FOR CONSTRUCTION	MG	06.11.20
2	CC2 RESUBMISSION		30.10.20
1	CC2 ISSUE		16.10.20

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PROJECT

PORTERS CREEK PUBLIC SCHOOL

75 Warnervale Rd. Warnervale NSW 2259

TITLE

TEACHING SPACE - ROOF FRAMING DETAILS

SCALES		DATE
1:10 @ A1		10/14/20
DRAWN: AB	DESIGN: TO	VERIFIED:	APPROVED:

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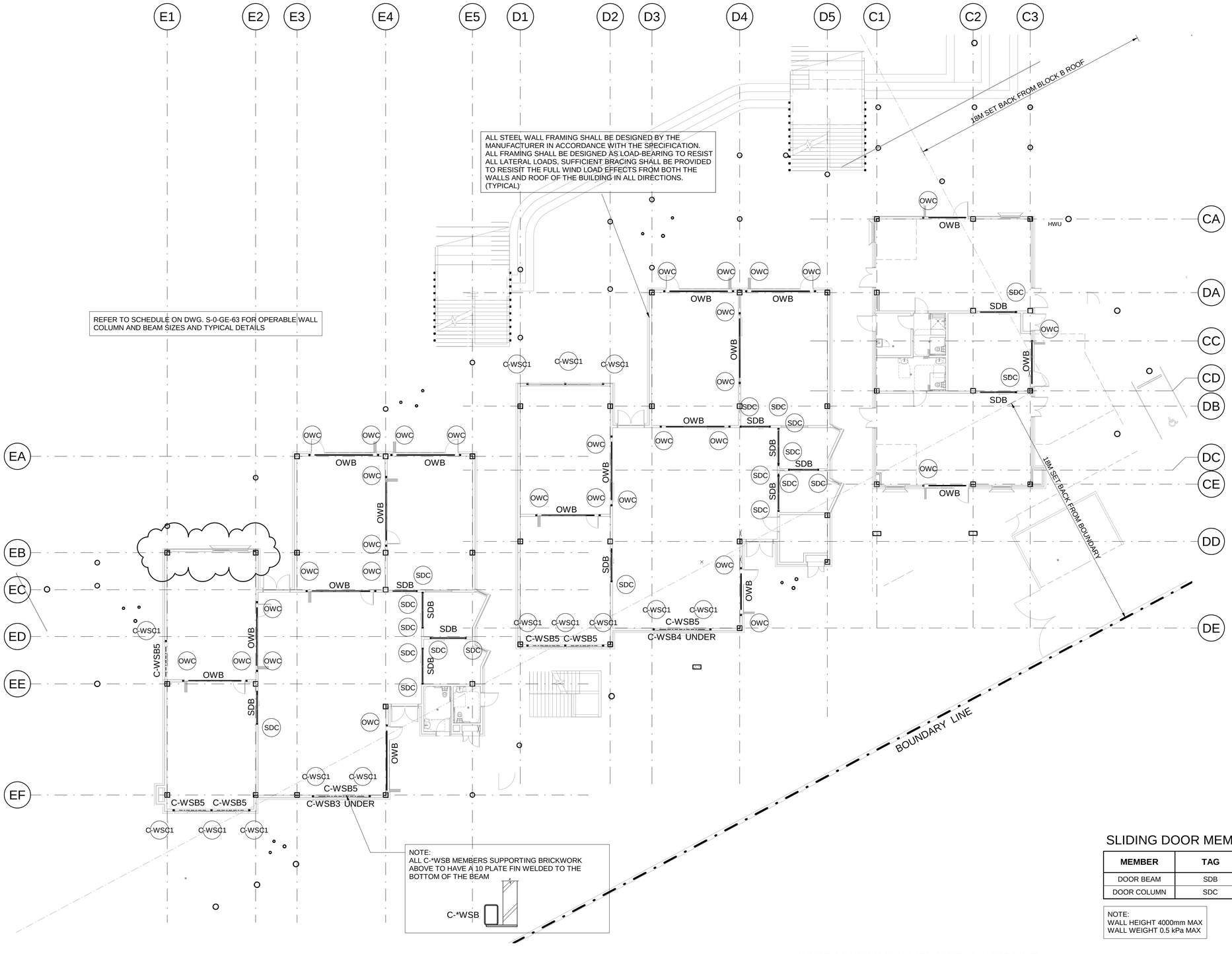
ISSUE	PROJECT No.	DRAWING No.
E	7900	S-C-RP-50

25/02/2021 8:51:29 AM



TEACHING SPACE - GROUND WALL FRAMING PLAN

SCALE 1 : 150

TEACHING SPACE (C) ROOF FRAMING SCHEDULE

ELEMENT	MARK	SIZE	COMMENTS
ROOF BRACING	C-BR1	Ø24 ROD	WITH TURNBUCKLE
DUMMY COLUMNS	C-DC1	REFER TO ARCH. DRAWINGS	NON STRUCTURAL COLUMN
	C-DC2	REFER TO ARCH. DRAWINGS	NON STRUCTURAL COLUMN
	C-DC3	REFER TO ARCH. DRAWINGS	NON STRUCTURAL COLUMN
FASCIAS	C-FB1	200PFC	
	C-FB2	200UB18.2	
PURLINS	C-P1	Z20015	AT 1200MAX. CTS. LAP AT SUPPORTS
	C-P2	C15015	AT 1200MAX. CTS.
RAFTERS	C-RB1	360UB44.7	
	C-RB2	200UB18.2	
SUPPORT BEAMS	C-SB1	460UB67.1	
	C-SB2	360UB44.7	
COLUMNS	C-SC1	Ø406.4x6.4CHS	COREFILLED WITH 8-N16, N12-240 TIES (50 COVER)
	C-SC2	150x150x5.0SHS	
	C-SC3	Ø406.4x4.6CHS	COREFILLED WITH 8-N16, N12-240 TIES (50 COVER)
	C-SC4	100x100x9.0SHS	
	C-SC5	100x100x9.0SHS	FIRE RATED
	C-SC6	200x100x9.0RHS	FIRE RATED
TIE BEAMS	C-T1	Ø101.6x3.2CHS	
	C-TB1	150x150x5.0SHS	
WALL BRACING	C-WB1	100x100x5.0SHS	
WALL FRAME	C-WF1	125x125x5.0SHS COLUMNS, 89x89x5.0SHS WEBS	PROVIDE 89SHS WEBS AT 1000MAX. CTS.
	C-WF2	100x100x9.0SHS COLUMNS, 100x100x9.0SHS WEBS	PROVIDE 100SHS WEBS AT 1000MAX. CTS. (FIRE RATED)
WALL STIFFENER BEAMS	C-WSB1	125x125x5.0SHS	
	C-WSB2	150x150x5.0SHS	
	C-WSB3	100x100x5.0SHS	
	C-WSB4	125x125x4.0SHS	
	C-WSB5	200x100x6.0RHS	WITH 10 PLATE CONTINUOUS TO SUPPORT BRICKWORK/CLADDING
WALL STIFFENER COLUMNS	C-WSC1	100x100x8.0SHS	
	C-WSC2	150x150x5.0SHS	
	C-WSC3	100x100x9.0SHS	FIRE RATED

SLIDING DOOR MEMBER SCHEDULE

MEMBER	TAG	SIZE
DOOR BEAM	SDB	180UB18.1
DOOR COLUMN	SDC	125x125x5.0 SHS

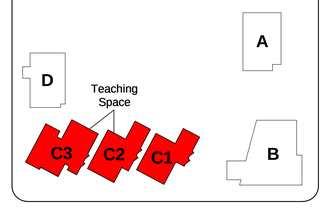
NOTE:
WALL HEIGHT 4000mm MAX
WALL WEIGHT 0.5 kPa MAX

OPERABLE WALL MEMBER SCHEDULE

MEMBER	SPAN/HEIGHT	INTERNAL SIZE	EXTERNAL SUPPORTING BRICKWORK + STUD SIZE	EXTERNAL SUPPORTING CLADDING + STUD SIZE
OWB	SPAN UP TO 5000mm	200UB22.3	250x150x6.0RHS + 10 PLATE	250x150x6.0RHS
	SPAN UP TO 6000mm	250UB25.7	300x200x6.0RHS + 10 PLATE	250x150x8.0RHS
OWC	HEIGHT UP TO 4000mm	100x100x5.0 SHS	125x125x5.0 SHS	100x100x6.0 SHS
	HEIGHT UP TO 6000mm	125x125x5.0 SHS	-	150x150x5.0 SHS

NOTE:
WALL HEIGHT 3000mm MAX
WALL WEIGHT 0.5 kPa MAX

KEY PLAN



ISSUE	DESCRIPTION	APPROVED	DATE
E	C-WSC1 REMOVED	MG	24.02.21
D	FRAMING REVISED	MG	18.02.21
C	ARCHITECTS REVISIONS	MG	20.01.21
B	ARCHITECTS REVISION	TO	24.11.20
A	ISSUED FOR CONSTRUCTION	MG	06.11.20
4	CC2 RESUBMISSION		30.10.20
3	CC2 ISSUE		16.10.20
2	ISSUED FOR INFORMATION		28.08.20
1	ISSUED FOR INFORMATION		21.08.20

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PROJECT
PORTERS CREEK PUBLIC SCHOOL
75 Warnervale Rd. Warnervale NSW 2259

TITLE
TEACHING SPACE - GROUND WALL FRAMING PLAN

SCALES	DATE
1:150 @ A1	08/19/20

DRAWN	DESIGN	VERIFIED	APPROVED
AB	TO		

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ISSUE	PROJECT No.	DRAWING No.
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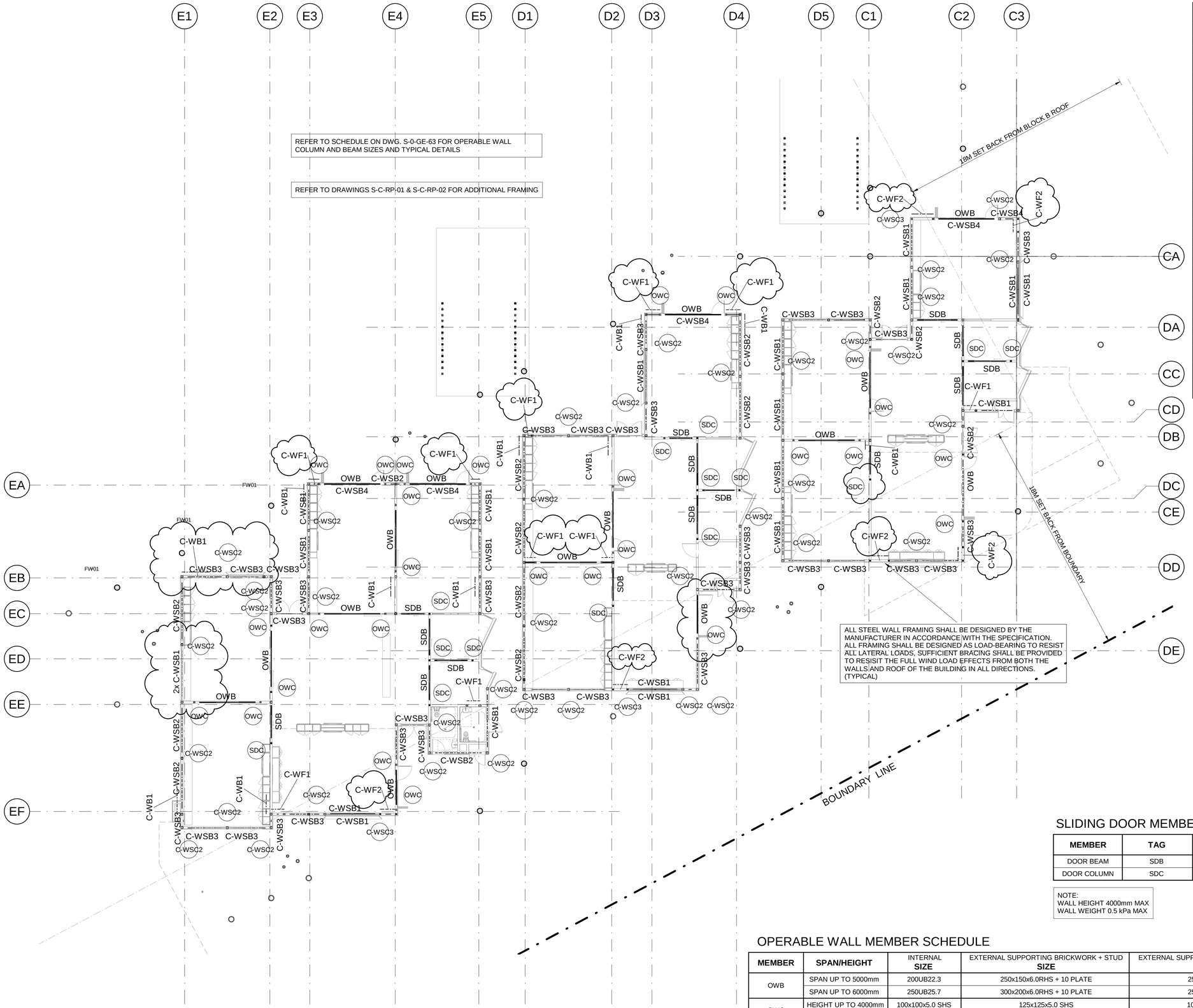
24/02/2021 3:02:20 PM



TEACHING SPACE - LEVEL 1 WALL FRAMING PLAN

SCALE 1 : 150

TEACHING SPACE (C) ROOF FRAMING SCHEDULE

ELEMENT	MARK	SIZE	COMMENTS
ROOF BRACING	C-BR1	Ø24 ROD	WITH TURNBUCKLE
DUMMY COLUMNS	C-DC1	REFER TO ARCH. DRAWINGS	NON STRUCTURAL COLUMN
	C-DC2	REFER TO ARCH. DRAWINGS	NON STRUCTURAL COLUMN
	C-DC3	REFER TO ARCH. DRAWINGS	NON STRUCTURAL COLUMN
FASCIAS	C-FB1	200PFC	
	C-FB2	200UB18.2	
PURLINS	C-P1	Z20015	AT 1200MAX. CTS. LAP AT SUPPORTS
	C-P2	C15015	AT 1200MAX. CTS.
RAFTERS	C-RB1	360UB44.7	
	C-RB2	200UB18.2	
SUPPORT BEAMS	C-SB1	460UB67.1	
	C-SB2	360UB44.7	
COLUMNS	C-SC1	Ø406.4x6.4CHS	COREFILLED WITH 8-N16, N12-240 TIES (50 COVER)
	C-SC2	150x150x5.0SHS	
	C-SC3	Ø406.4x4.6CHS	COREFILLED WITH 8-N16, N12-240 TIES (50 COVER)
	C-SC4	100x100x9.0SHS	
	C-SC5	100x100x9.0SHS	FIRE RATED
	C-SC6	200x100x9.0RHS	FIRE RATED
TIE BEAMS	C-T1	Ø100.6x3.2CHS	
	C-TB1	150x150x5.0SHS	
WALL BRACING	C-WB1	100x100x5.0SHS	
WALL FRAME	C-WF1	125x125x5.0SHS COLUMNS, 89x89x5.0SHS WEBS	PROVIDE 89SHS WEBS AT 1000MAX. CTS.
	C-WF2	100x100x9.0SHS COLUMNS, 100x100x9.0SHS WEBS	PROVIDE 100SHS WEBS AT 1000MAX. CTS. (FIRE RATED)
WALL STIFFENER BEAMS	C-WSB1	125x125x5.0SHS	
	C-WSB2	150x150x5.0SHS	
	C-WSB3	100x100x5.0SHS	
	C-WSB4	125x125x4.0SHS	
	C-WSB5	200x100x6.0RHS	WITH 10 PLATE CONTINUOUS TO SUPPORT BRICKWORK/CLADDING
WALL STIFFENER COLUMNS	C-WSC1	100x100x8.0SHS	
	C-WSC2	150x150x5.0SHS	
	C-WSC3	100x100x9.0SHS	FIRE RATED

SLIDING DOOR MEMBER SCHEDULE

MEMBER	TAG	SIZE
DOOR BEAM	SDB	180UB18.1
DOOR COLUMN	SDC	125x125x5.0 SHS

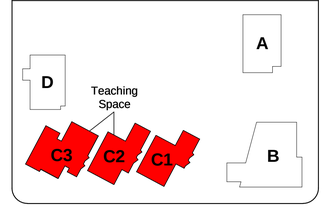
NOTE:
WALL HEIGHT 4000mm MAX
WALL WEIGHT 0.5 kPa MAX

OPERABLE WALL MEMBER SCHEDULE

MEMBER	SPAN/HEIGHT	INTERNAL SIZE	EXTERNAL SUPPORTING BRICKWORK + STUD SIZE	EXTERNAL SUPPORTING CLADDING + STUD SIZE
OWB	SPAN UP TO 5000mm	200UB22.3	250x150x6.0RHS + 10 PLATE	250x150x6.0RHS
	SPAN UP TO 6000mm	250UB25.7	300x200x6.0RHS + 10 PLATE	250x150x8.0RHS
OWC	HEIGHT UP TO 4000mm	100x100x5.0 SHS	125x125x5.0 SHS	100x100x6.0 SHS
	HEIGHT UP TO 6000mm	125x125x5.0 SHS	-	150x150x5.0 SHS

NOTE:
WALL HEIGHT 3000mm MAX
WALL WEIGHT 0.5 kPa MAX

KEY PLAN



ISSUE	DESCRIPTION	APPROVED	DATE
C	FRAMING REVISED	MG	18.02.21
B	ARCHITECTS REVISIONS	MG	20.01.21
A	ISSUED FOR CONSTRUCTION	MG	06.11.20
4	CC2 RESUBMISSION		30.10.20
3	CC2 ISSUE		16.10.20
2	ISSUED FOR INFORMATION		28.08.20
1	ISSUED FOR INFORMATION		21.08.20

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PROJECT
PORTERS CREEK PUBLIC SCHOOL
75 Warnervale Rd. Warnervale NSW 2259

TITLE
TEACHING SPACE - LEVEL 1 WALL FRAMING PLAN

SCALES	DATE
1:150 @ A1	08/19/20

DRAWN	DESIGN	VERIFIED	APPROVED
AB	TO		

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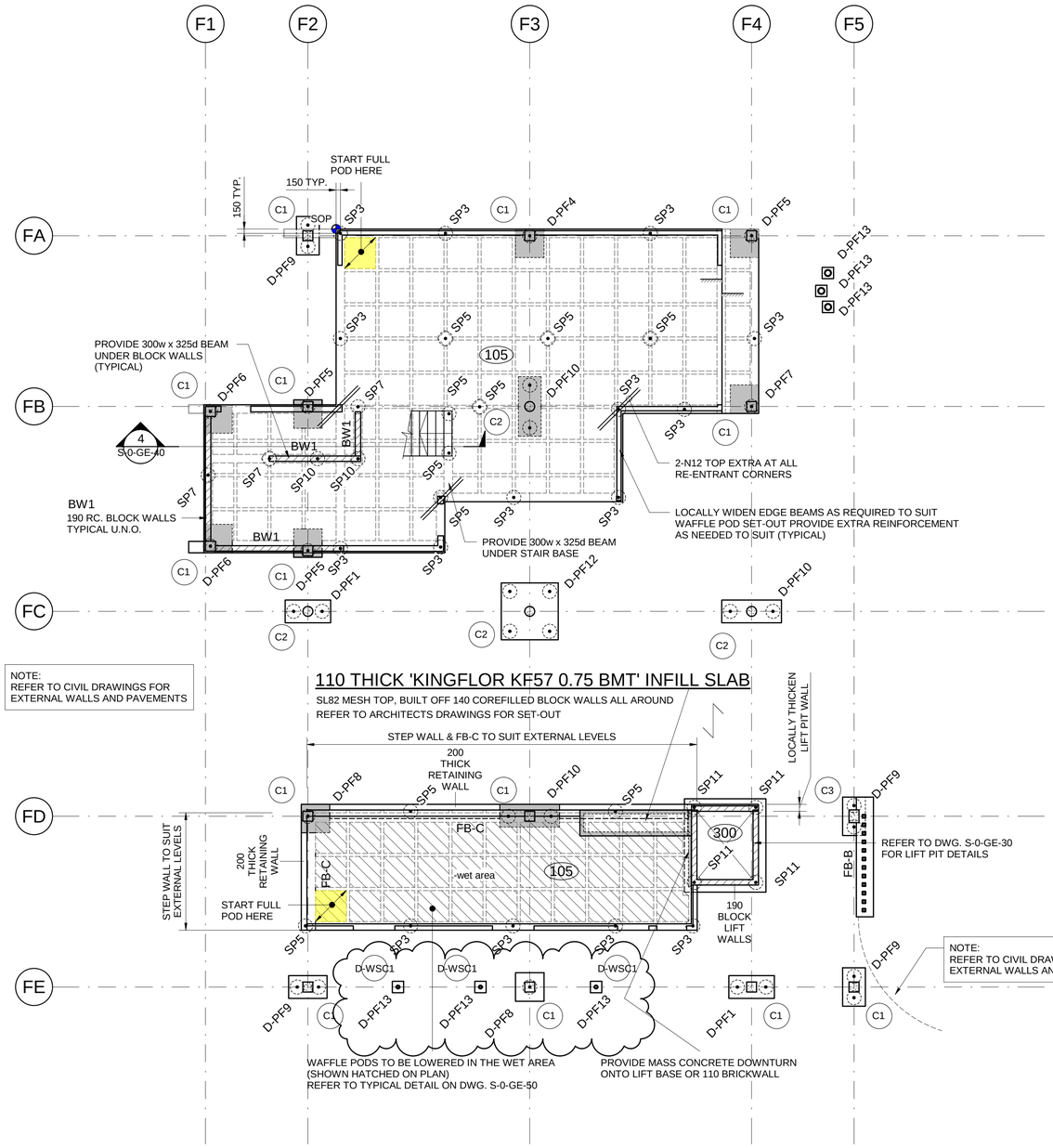
ISSUE	PROJECT No.	DRAWING No.
C	7900	S-C-WF-02

18/02/2021 2:55:58 PM

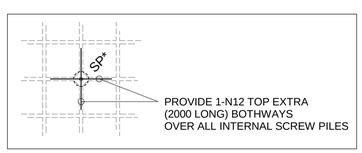


LIBRARY - LOWER GROUND FLOOR PLAN

SCALE 1 : 100

105 — 330 THICK WAFFLE SLAB, SL92 MESH TOP

300min. WIDE EDGE BEAMS, 110 WIDE INTERNAL RIBS
LOCALLY WIDEN BEAMS/RIBS AT COLUMN LOCATIONS
DENOTES SLAB THICKNESS



EXTRA REINFORCEMENT

NOT SHOWN ON PLAN

CONCRETE COLUMN SCHEDULE

MARK	SIZE	REINFORCEMENT	STRENGTH (MPa)
C1	350 x 350	8-N24, N12-300 TIES	40
C2	ϕ350	8-N24, N12-300 TIES	40
C3	350 x 450	8-N24, N12-300 TIES	40
C4	300 x 600	10-N20, N12-300 TIES	40

LIBRARY (D) PAD FOOTING SCHEDULE

TAG	SIZE (MIN.) L x W x D	REINFORCEMENT 'X' BARS	'Y' BARS	TIES	PILE TYPE	No. OF PILES
D-PF1	1600 x 800 x 500	4-N20 U-BARS	4-N20 U-BARS	N12-250 U-BARS	SP7	2
D-PF2	not used					
D-PF3	not used					
D-PF4	1000 x 1000 x 400	5-N16 U-BARS	5-N16 U-BARS	-	SP13	1
D-PF5	1000 x 1000 x 400	5-N16 U-BARS	5-N16 U-BARS	-	SP12	1
D-PF6	1000 x 1000 x 400	5-N16 U-BARS	5-N16 U-BARS	-	SP7	1
D-PF7	1000 x 1000 x 400	5-N16 U-BARS	5-N16 U-BARS	-	SP18	1
D-PF8	1000 x 1000 x 600	5-N16 U-BARS	5-N16 U-BARS	-	SP14	1
D-PF9	1350 x 800 x 500	6-N16 U-BARS	6-N16 U-BARS	N12-250 U-BARS	SP5	2
D-PF10	2100 x 800 x 700	6-N24 U-BARS	6-N24 U-BARS	N12-250 U-BARS	SP15	2
D-PF11	not used					
D-PF12	2000 x 2000 x 500	10-N20 U-BARS	10-N20 U-BARS	-	SP12	4
D-PF13	400 x 400 x 400	4-N12 U-BARS	4-N12 U-BARS	-	-	-

NOTE: PAD FOOTING SIZES GIVEN ARE MINIMUM SIZES.
PADS CAN BE MADE BIGGER TO SUIT WAFFLE POD BLOCK OUTS IF REQUIRED.
(EXTRA REINFORCEMENT SHOULD BE ADDED TO SUIT)

SCREW PILE SCHEDULE

TAG	WORKING LOAD MINIMUM VERTICAL SAFE WORKING LOAD (kN) Compresion (+) / Tension (-)
SP1	50 kN
SP2	+50 / -10 kN
SP3	60 kN
SP4	+60 / -20 kN
SP5	100 kN
SP6	125 kN
SP7	150 kN
SP8	+150 / -50 kN
SP9	175 kN
SP10	200 kN
SP11	250 kN
SP12	300 kN
SP13	350 kN
SP14	400 kN
SP15	500 kN
SP16	550 kN
SP17	650 kN
SP18	800 kN
SP19	+25 / -10 kN

STEEL SCREW PILE FOOTING SYSTEM:

1. STEEL SCREW PILES SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH AS2159 PILING - DESIGN AND INSTALLATION, TO PROVIDE THE SAFE WORKING LOADS NOMINATED ON THE STRUCTURAL DRAWINGS.
2. ALL DESIGN, DOCUMENTATION AND CERTIFICATION FOR THE STEEL SCREW PILES AND THE ASSOCIATED BEARING PLATES, ANCHORAGE REINFORCEMENT ETC. SHALL BE PROVIDED BY THE CONTRACTOR.

   STRUCTURAL CERTIFICATION SHALL BE PROVIDED BY THE CONTRACTOR FOR BOTH THE DESIGN AND INSTALLATION OF ALL OF THE STEEL SCREW PILES AND ASSOCIATED ELEMENTS.
3. THE CONTRACTOR SHALL DESIGN THE STEEL SCREW PILES TO PROVIDE A MINIMUM 50 YEAR DESIGN LIFE IN ACCORDANCE WITH AS2159 PILING - DESIGN AND INSTALLATION.
4. THE CONTRACTOR SHALL CONFIRM WHAT LEVEL AND TYPE OF CORROSION PROTECTION TO THE STEEL SCREW PILES WILL BE PROVIDED. IT SHOULD BE NOTED THAT ADDITIONAL GEOTECHNICAL TESTING MAY NEED TO BE CARRIED OUT TO DETERMINE THE REQUIRED EXPOSURE CLASSIFICATION FOR THE STEEL PILES IN ACCORDANCE WITH AS2159 PILING - DESIGN AND INSTALLATION.
5. THE CONTRACTOR SHALL CONFIRM WHAT LEVEL AND TYPE OF CAPACITY/INTEGRITY TESTING IN ACCORDANCE WITH AS2159 PILING - DESIGN AND INSTALLATION IS PROPOSED TO BE CARRIED OUT.

NOTES FOR LIBRARY (D) SCREW PILES:

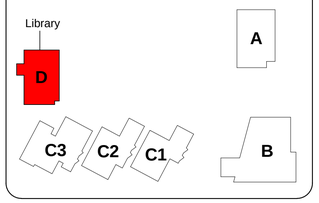
1. SCREW PILES 'SP1' TO 'SP7' CAN BE REPLACED BY 400x400 MASS CONCRETE BUCKET PIERS FOUNDED ON SANDSTONE WITH A MINIMUM ALLOWABLE BEARING PRESSURE OF 1000kPa.
2. ALL SCREW PILES CAN BE OMITTED IF FOOTING AND WAFFLE SLAB ARE DIRECTLY FOUNDED ON SANDSTONE WITH A MINIMUM ALLOWABLE BEARING PRESSURE OF 1000kPa.

DRAWING NOTES:

1. REFER TO ARCHITECT'S DRAWINGS FOR SLAB FALLS AND CAST-IN REGLET DETAILS
2. ALL CONCRETE HOBS SHALL BE CAST INTEGRALLY WITH SLABS.
3. PENETRATIONS SMALLER THAN 200MM IN DIAMETER NOT SHOWN ON PLAN FOR CLARITY. REINFORCEMENT SHOWN SHALL BE DISPLACED TO THE SIDES OF THE PENETRATION AND **DO NOT CUT**. OBTAIN ENGINEER'S APPROVAL FOR PENETRATIONS NOT SHOWN ON STRUCTURAL DRAWING'S.
4. SCREW PILES TO BE DESIGNED AND INSTALLED IN ACCORDANCE WITH THE CONTRACTORS DETAILS.
5. ALL SLABS IN CONTACT WITH GROUND TO HAVE A WATERPROOFING MEMBRANE AS SPECIFIED BY THE ARCHITECT. (MEMBRANES TO HAVE A 20 YEAR MINIMUM DESIGN LIFE)
6. REFER TO DRAWING SERIES S-0-GE-02 TO S-0-GE-09 FOR 'CONSTRUCTION NOTES & GENERAL NOTES'.
7. REFER TO DRAWING SERIES S-0-GE-10 TO S-0-GE-19 FOR 'TYPICAL FOOTING DETAILS'.
8. REFER TO DRAWING SERIES S-0-GE-20 TO S-0-GE-29 FOR 'TYPICAL COLUMN DETAILS'.
9. REFER TO DRAWING SERIES S-0-GE-30 TO S-0-GE-39 FOR 'TYPICAL WALL DETAILS'.
10. REFER TO DRAWING SERIES S-0-GE-40 TO S-0-GE-49 FOR 'TYPICAL STAIR DETAILS'.
11. REFER TO DRAWING SERIES S-0-GE-50 TO S-0-GE-59 FOR 'TYPICAL CONCRETE DETAILS'.
12. REFER TO DRAWING SERIES S-0-GE-60 TO S-0-GE-69 FOR 'TYPICAL STEEL DETAILS'.

-wet area — DENOTES WET AREA, REFER TO ARCHITECTS DRAWINGS FOR SETDOWN DEPTHS. WAFFLE PODS TO BE LOWERED IN THIS AREA (SHOWN HATCHED ON PLAN) REFER TO TYPICAL DETAIL ON DWG. S-0-GE-50

KEY PLAN



ISSUE	DESCRIPTION	APPROVED	DATE
D	FRAMING REVISED	MG	24.02.21
C	ARCHITECTS REVISIONS	MG	22.12.20
B	DRAWING REVISED	TO	03.12.20
A	ISSUED FOR CONSTRUCTION	MG	06.11.20
7	CC2 RESUBMISSION		30.10.20
6	CC2 ISSUE		16.10.20
5	ISSUED FOR INFORMATION		28.08.20
4	ISSUED FOR INFORMATION		21.08.20
3	RE-ISSUED FOR CC1		12.08.20
2	RE-ISSUED FOR CC1		07.08.20
1	CC1 ISSUE		24.07.20

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PROJECT
PORTERS CREEK PUBLIC SCHOOL
75 Warnervale Rd. Warnervale NSW 2259

TITLE
LIBRARY - GROUND FLOOR PLAN

SCALES	DATE
1:100 @ A1	JUNE 2020

DRAWN	DESIGN	VERIFIED	APPROVED
AB	TO		

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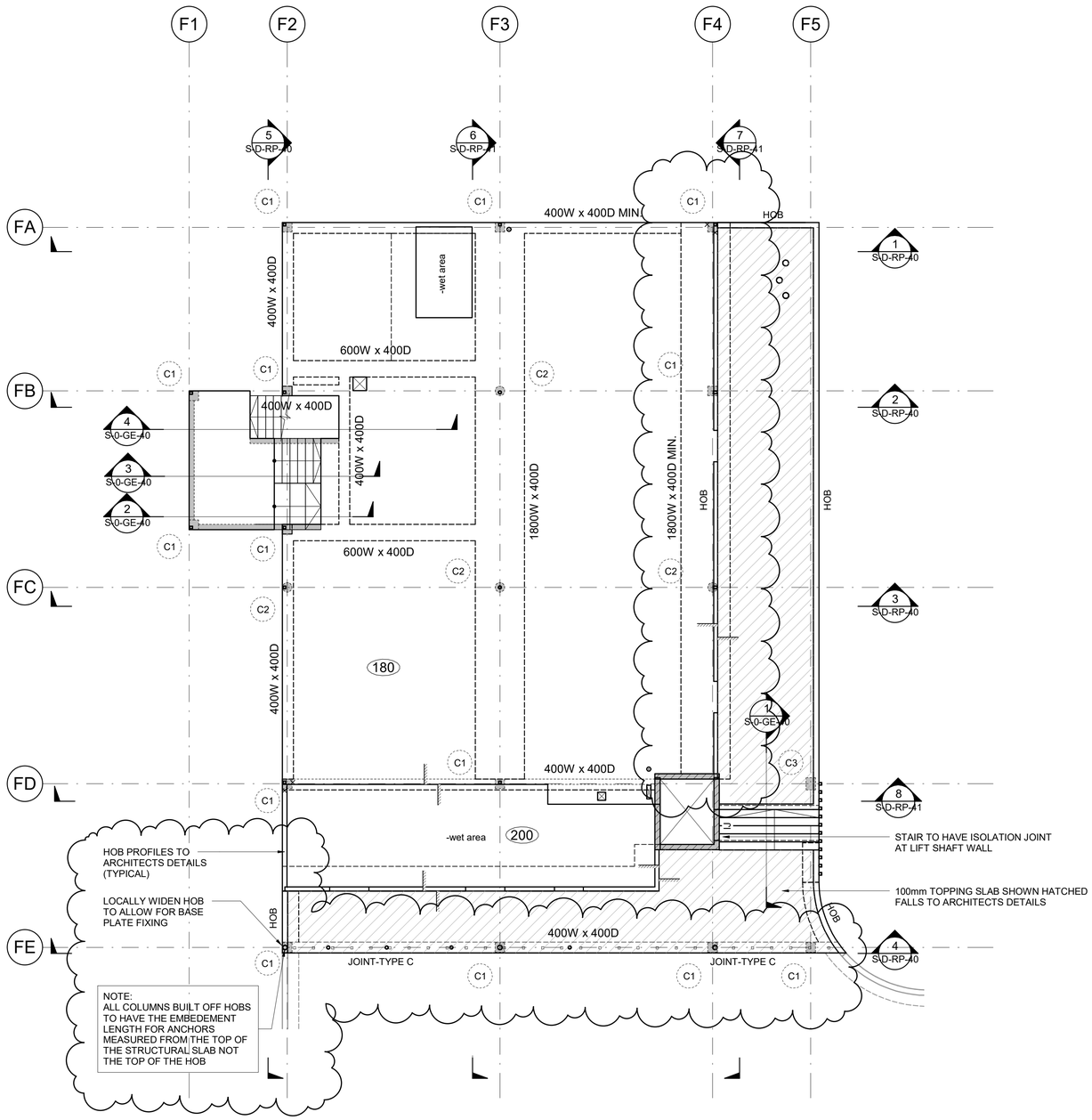
ISSUE	PROJECT No.	DRAWING No.
D	7900	S-D-GF-01

N

24/02/2021 1:21:37 PM



LIBRARY - LEVEL 1 FLOOR PLAN

SCALE 1 : 100

180 THICK POST-TENSIONED SLAB U.N.O.

REFER TO 'PT CONTRACTORS' DRAWINGS FOR FINAL DESIGN

CONCRETE COLUMN SCHEDULE			
MARK	SIZE	REINFORCEMENT	STRENGTH (MPa)
C1	350 x 350	8-N24, N12-300 TIES	40
C2	ϕ350	8-N24, N12-300 TIES	40
C3	350 x 450	8-N24, N12-300 TIES	40
C4	300 x 600	10-N20, N12-300 TIES	40

DRAWING NOTES:

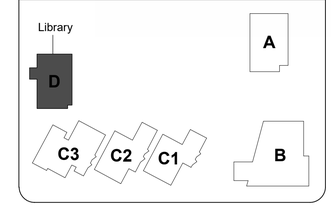
1. REFER TO ARCHITECT'S DRAWINGS FOR SLAB FALLS AND CAST-IN REGLET DETAILS
2. ALL CONCRETE HOBS SHALL BE CAST INTEGRALLY WITH SLABS.
3. PROVIDE CLASS 2 FINISH TO ALL EXPOSED SOFFITS AND FACES.
4. PENETRATIONS SMALLER THAN 200MM IN DIAMETER NOT SHOWN ON PLAN FOR CLARITY. REINFORCEMENT SHOWN SHALL BE DISPLACED TO THE SIDES OF THE PENETRATION AND **DO NOT CUT**. OBTAIN ENGINEER'S APPROVAL FOR PENETRATIONS NOT SHOWN ON STRUCTURAL DRAWING'S.
5. SCREW PILES TO BE DESIGNED AND INSTALLED IN ACCORDANCE WITH THE CONTRACTORS DETAILS.
6. ALL SLABS IN CONTACT WITH GROUND TO HAVE A WATERPROOFING MEMBRANE AS SPECIFIED BY THE ARCHITECT. (MEMBRANES TO HAVE A 20 YEAR MINIMUM DESIGN LIFE)
7. REFER TO DRAWING SERIES S-0-GE-02 TO S-0-GE-09 FOR 'CONSTRUCTION NOTES & GENERAL NOTES'.
8. REFER TO DRAWING SERIES S-0-GE-10 TO S-0-GE-19 FOR 'TYPICAL FOOTING DETAILS'.
9. REFER TO DRAWING SERIES S-0-GE-20 TO S-0-GE-29 FOR 'TYPICAL COLUMN DETAILS'.
10. REFER TO DRAWING SERIES S-0-GE-30 TO S-0-GE-39 FOR 'TYPICAL WALL DETAILS'.
11. REFER TO DRAWING SERIES S-0-GE-40 TO S-0-GE-49 FOR 'TYPICAL STAIR DETAILS'.
12. REFER TO DRAWING SERIES S-0-GE-50 TO S-0-GE-59 FOR 'TYPICAL CONCRETE DETAILS'.
13. REFER TO DRAWING SERIES S-0-GE-60 TO S-0-GE-69 FOR 'TYPICAL STEEL DETAILS'.

-wet area

DENOTES WET AREA, REFER TO ARCHITECTS DRAWINGS FOR SETDOWN DEPTHS. WAFFLE PODS TO BE LOWERED IN THIS AREA (SHOWN HATCHED ON PLAN) REFER TO TYPICAL DETAIL ON DWG. S-0-GE-50

TYPICAL CONCRETE COLUMN & WALL DRAWING DEFINITION SCHEDULE U.N.O.	
SHOWN ON PLAN	DESCRIPTION
	LOAD BEARING CONCRETE OVER
	LOAD BEARING CONCRETE UNDER
	LOAD BEARING CONCRETE OVER & UNDER

KEY PLAN



ISSUE	DESCRIPTION	APPROVED	DATE
D	HOB & D-WSC1 REVISED	MG	18.03.21
C	ARCHITECTS REVISIONS	MG	22.12.20
B	DRAWING REVISED	TO	03.12.20
A	ISSUED FOR CONSTRUCTION	MG	06.11.20
4	CC2 RESUBMISSION		30.10.20
3	CC2 ISSUE		16.10.20
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PROJECT
PORTERS CREEK PUBLIC SCHOOL
75 Warnervale Rd. Warnervale NSW 2259

TITLE
LIBRARY - LEVEL 1 FLOOR PLAN

SCALES	DATE
1:100 @ A1	JUNE 2020

DRAWN	DESIGN	VERIFIED	APPROVED
AB	TO		

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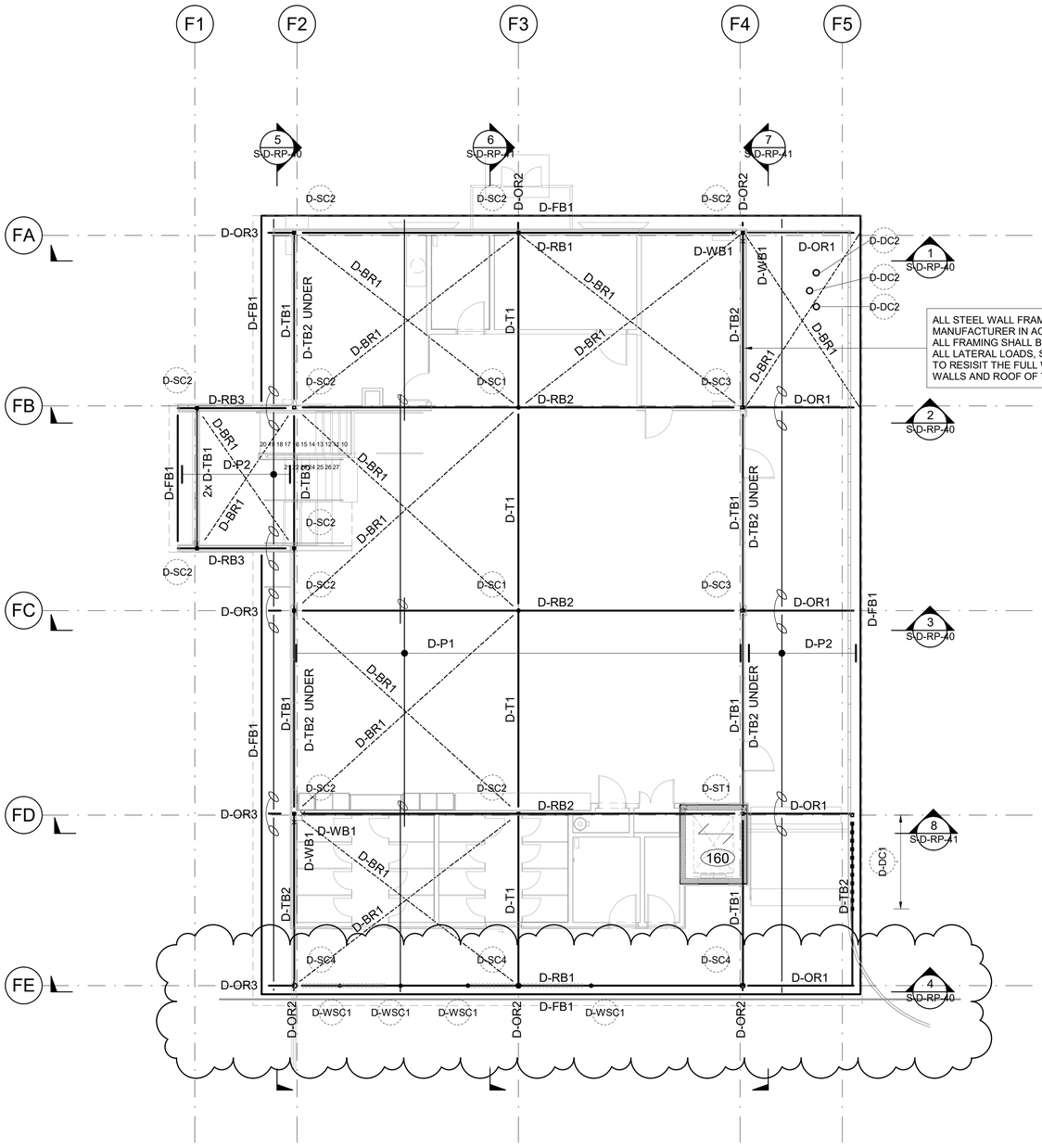
ISSUE	PROJECT No.	DRAWING No.
D	7900	S-D-L1-01

N

16/03/2021 11:02:10 AM



ALL STEEL WALL FRAMING SHALL BE DESIGNED BY THE MANUFACTURER IN ACCORDANCE WITH THE SPECIFICATION. ALL FRAMING SHALL BE DESIGNED AS LOAD-BEARING TO RESIST ALL LATERAL LOADS, SUFFICIENT BRACING SHALL BE PROVIDED TO RESISIT THE FULL WIND LOAD EFFECTS FROM BOTH THE WALLS AND ROOF OF THE BUILDING IN ALL DIRECTIONS. (TYPICAL)

LIBRARY (D) ROOF FRAMING SCHEDULE

ELEMENT	MARK	SIZE	COMMENTS
ROOF BRACING	D-BR1	Ø20 ROD	WITH TURNBUCKLE
DUMMY COLUMNS	D-DC1	REFER TO ARCH. DRAWINGS	NON STRUCTURAL COLUMN
	D-DC2	REFER TO ARCH. DRAWINGS	NON STRUCTURAL COLUMN
FASCIAS	D-FB1	200PFC	
OUTRIGGERS	D-OR1	200UC46.2	PRESET 15mm AT CANTILEVER
	D-OR2	200x100x5.0RHS	
	D-OR3	200UB18.2	
PURLINS	D-P1	Z20015	AT 1200MAX. CTS. LAP AT SUPPORTS
	D-P2	C20015	AT 1200MAX. CTS.
RAFTERS	D-RB1	250UB25.7	
	D-RB2	310UB40.4	
	D-RB3	200PFC	
COLUMNS	D-SC1	Ø114.3x3.6CHS	
	D-SC2	100x100x5.0SHS	
	D-SC3	150x100x5.0RHS	
	D-SC4	Ø168.3x4.8CHS	
	D-ST1	89x89x5.0SHS	
TIE BEAMS	D-T1	Ø114.3x3.6CHS	
	D-TB1	100x100x6.0SHS	
	D-TB2	150x150x5.0SHS	
	D-TB3	200x200x6.0SHS	
WALL BRACING	D-WB1	100x100x5.0SHS	
WALL STIFFENER COLUMNS	D-WSC1	Ø114.3x3.6CHS	

NOTE FOR PURLINS:

PROVIDE 1 ROW OF BRIDGING WHEN SPAN OF PURLIN EXCEEDS 3000mm.
PROVIDE 2 ROWS OF BRIDGING WHEN SPAN OF PURLIN EXCEEDS 6000mm.
PROVIDE 3 ROWS OF BRIDGING WHEN SPAN OF PURLIN EXCEEDS 8000mm.
LAPPED PURLINS TO LAP MIN. 15% OF SPAN AS REQUIRED. (TYPICAL U.N.O.)

DRAWING NOTES:

REFER TO DRAWING S-0-GE-02 & 03 FOR 'CONSTRUCTION NOTES'

ALL STEELWORK FRAMING IS TO BE TREATED IN ACCORDANCE WITH THE SPECIFICATION ON DWG. S-0-GE-02.

PRIMARY STRUCTURAL STEEL FRAMING MEMBERS SHOWN ONLY.

THE STEELWORK FRAMING THAT IS TO BE WELDED ON SITE SHOULD BE LOCALLY PREPARED AND PAINTED IN ACCORDANCE WITH AS2312 SECTION 10.5 AND COATINGS SHALL BE AS SPECIFIED ON DWG. S-0-GE-02, SIMILAR TO ADJACENT STEELWORK.

REFER TO RELEVANT ARCHITECTURAL AND OTHER CONSULTANTS DRAWINGS FOR ANY SECONDARY STEEL FRAMING MEMBERS WHICH MAY BE REQUIRED.
(ie. GUTTERS, SUN HOODS, SUN SCREENS, WINDOW FRAMING, LOUVRES, ETC)

ALL TIMBER FRAMING IS TO BE IN STRICT ACCORDANCE WITH AS1684 & AS1720, NATIONAL TIMBER FRAMING CODE.

PURLIN BRIDGING TO BE FIXED TO TIE BEAMS & FASCIA MEMBERS WHERE REQUIRED.

PROVIDE Z20019 OR C20019 TRIMMER PURLINS BETWEEN MAIN ROOF PURLINS ALONG HIPS AND VALLEYS TO SUPPORT EDGE OF ROOF SHEETING.
FIX TO MAIN ROOF PURLINS WITH 100x100x4 FABRICATED ANGLE BRACKETS WITH 4/M12 PURLIN BOLTS. (TYPICAL) ALTERNATIVELY PROVIDE 75x75x1.6 FOLDED STEEL ANGLE LAID OVER ENDS OF PURLINS AND FIXED TO EACH PURLIN WITH 2-No.12 SELF DRILLING STEEL FASTENERS.

PROVIDE Z20019 OR C20019 TRIMMER PURLINS WHERE NECESSARY TO SUPPORT ROOF SHEETING, CEILING LININGS, ROOF VENTS, SKYLIGHTS, WINDCATCHERS etc. CONNECT TO MAIN ROOF PURLINS USING GENERAL PURPOSE BRACKETS AND 4/M12 PURLIN BOLTS AT EACH END.

LOCATE ROOF PURLINS TO SUIT ROOF SHEETING, CEILING LININGS etc. REFER TO ARCHITECTS DRAWINGS FOR TYPICAL DETAILS.

CONNECT ALL STEEL/CONCRETE COLUMNS AND STEEL/CONCRETE BEAMS TO ADJACENT BRICKWORK AS SPECIFIED ON DRAWING S-0-GE-04 TO PROVIDE LATERAL STABILITY. (ALSO REFER TYPICAL CONNECTION DETAILS) PROVIDE TEMPORARY BRACING TO STEELWORK IF REQUIRED UNTIL BRICKWORK HAS BEEN CONSTRUCTED.

WALL FRAMING TO MANUFACTURERS DETAILS AND IN ACCORDANCE WITH THE SPECIFICATION.

TRUSSES TO MANUFACTURERS DETAILS AND IN ACCORDANCE WITH THE SPECIFICATION.

ALL EXTERNAL STEELWORK TO BE HOT DIP GALVANISED.

ALL EXTERNAL COLUMN BASEPLATES TO BE CONCEALED.

LIBRARY ROOF FRAMING PLAN

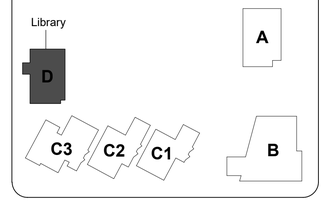
SCALE 1 : 100

160 THICK 'KINGFLOR KF57' LIFT SHAFT LID

N12@200 CTS. EACH WAY TOP, N12-300 BTM. EXTRA IN KINGFLOR SPAN DIRECTION
LIFTING EYE IF REQUIRED TO LIFT MANUFACTURERS SPECIFICATION
MAXIMUM SAFE WORKING LOAD = 2000Kg

PRINT IN COLOUR

KEY PLAN



ISSUE	DESCRIPTION	APPROVED	DATE
D	D-WSC1 COLUMNS REVISED	MG	18.03.21
C	FRAMING REVISED	MG	24.02.21
B	ARCHITECTS REVISIONS	MG	22.12.20
A	ISSUED FOR CONSTRUCTION	MG	06.11.20
4	CC2 RESUBMISSION		30.10.20
3	CC2 ISSUE		16.10.20
2	ISSUED FOR INFORMATION		28.08.20
1	ISSUED FOR INFORMATION		21.08.20

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PROJECT
PORTERS CREEK PUBLIC SCHOOL
75 Warnervale Rd. Warnervale NSW 2259

TITLE
LIBRARY - ROOF FRAMING PLAN

SCALES	DATE
1:100 @ A1	JUNE 2020

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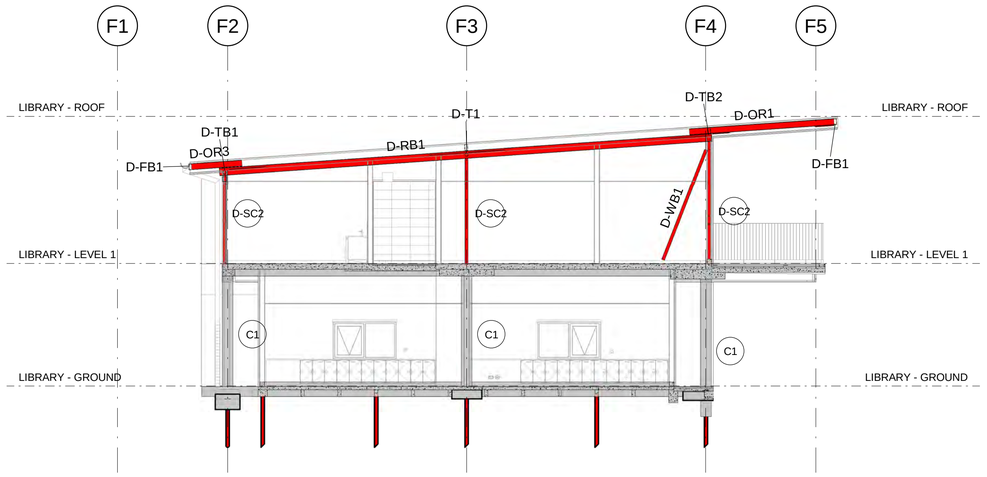
ISSUE	PROJECT No.	DRAWING No.
D	7900	S-D-RP-01

19/03/2021 11:02:18 AM



SECTION 1
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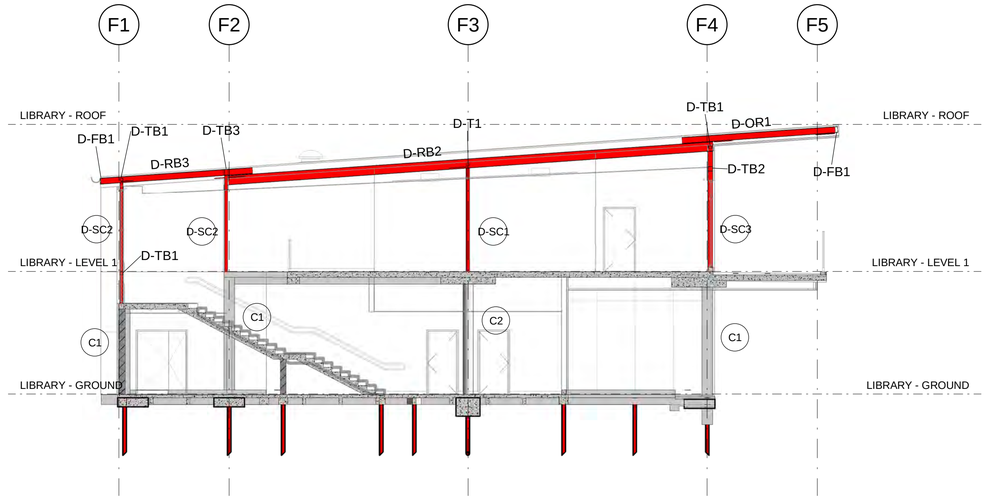

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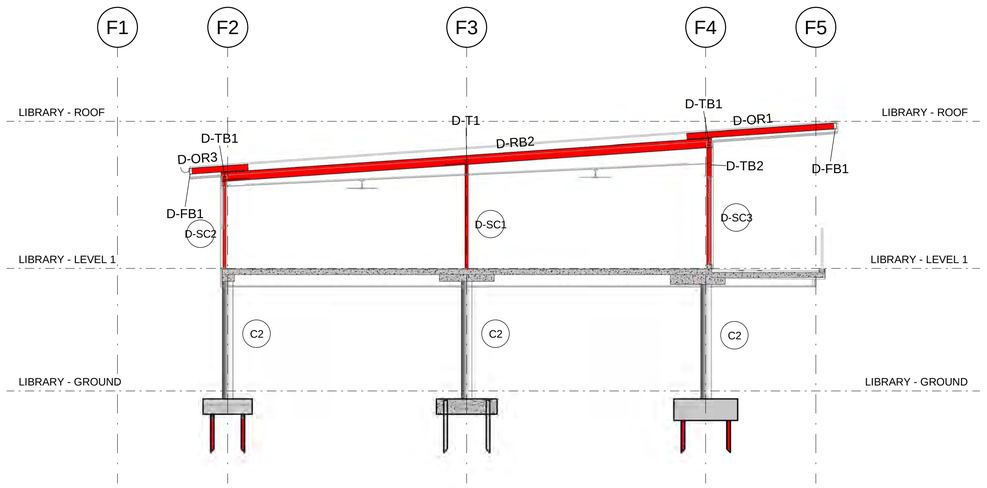

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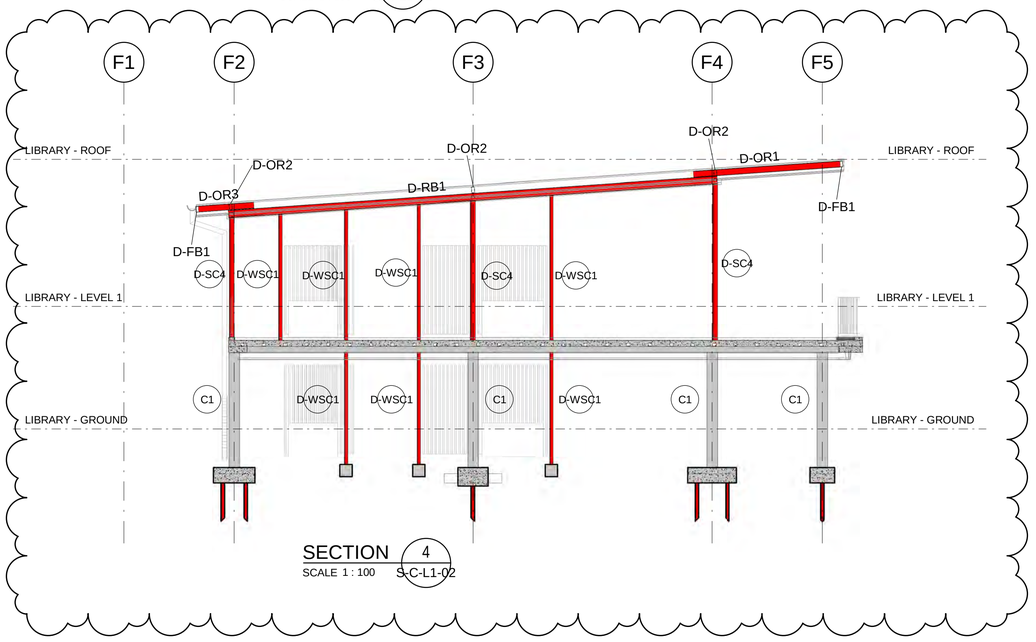

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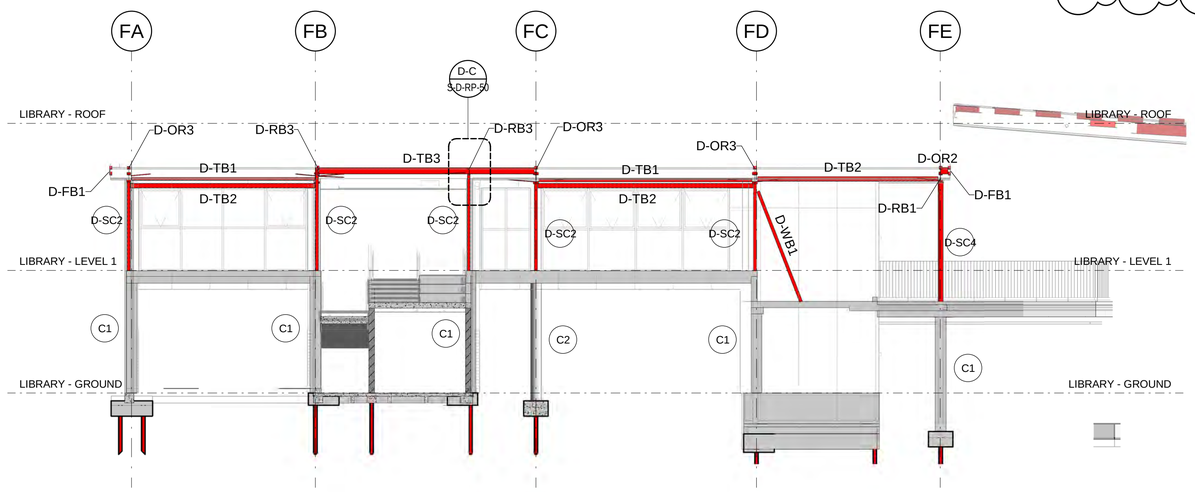
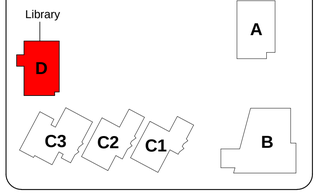


SECTION 5
SCALE 1 : 100 S-D-L1-01

PRINT IN COLOUR

KEY PLAN



ISSUE	DESCRIPTION	APPROVED	DATE
D	D-WSC1 COLUMNS REVISED	MG	18.03.21
C	FRAMING REVISED	MG	24.02.21
B	ARCHITECTS REVISIONS	MG	22.12.20
A	ISSUED FOR CONSTRUCTION	MG	06.11.20
4	CC2 RESUBMISSION		30.10.20
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PROJECT
PORTERS CREEK PUBLIC SCHOOL
75 Warnervale Rd. Warnervale NSW 2259

TITLE
LIBRARY - ROOF FRAMING SECTIONS

SCALES	DATE
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AB	TO		

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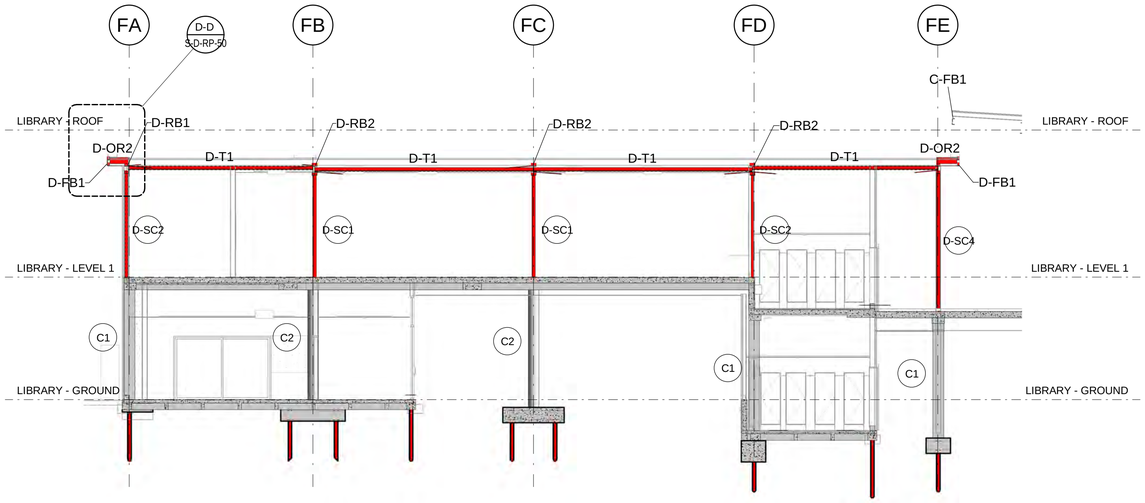
ISSUE	PROJECT No.	DRAWING No.
D	7900	S-D-RP-40

13/01/2022 8:27:00 AM



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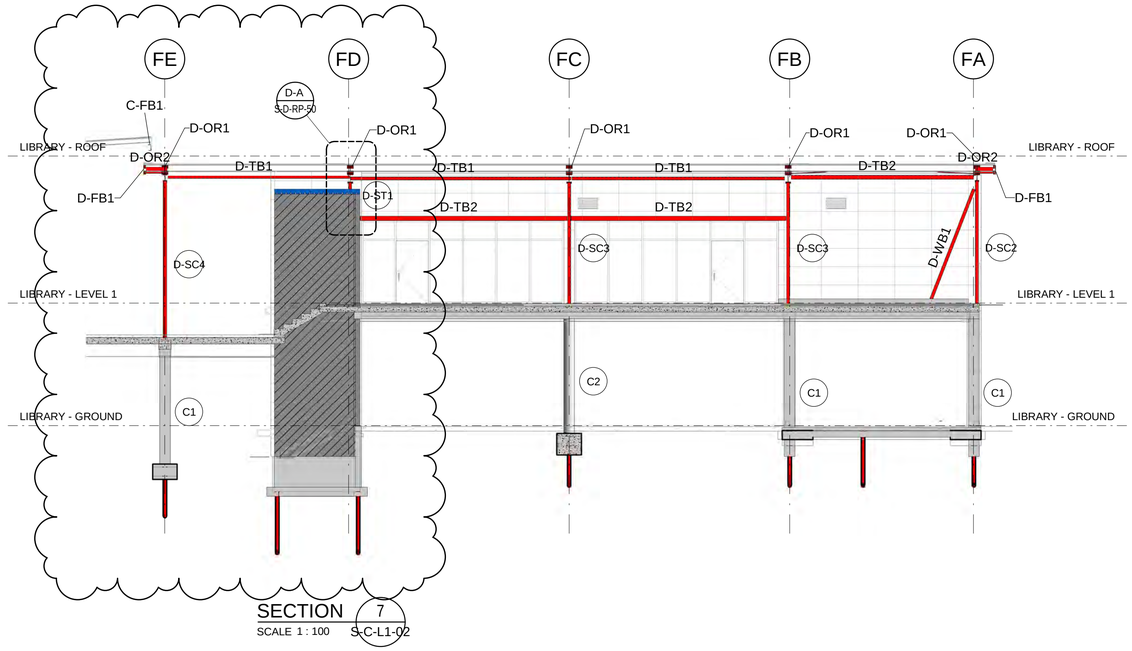

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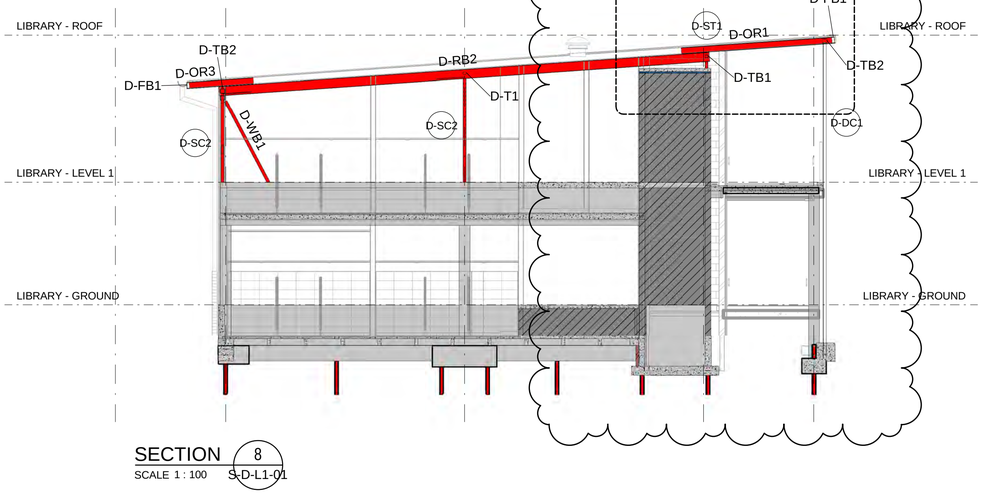
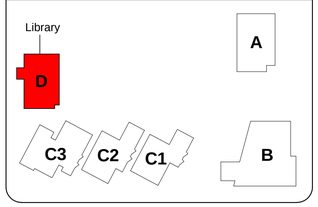


SECTION 8
SCALE 1 : 100 S-D-L1-01

PRINT IN COLOUR

KEY PLAN



ISSUE	DESCRIPTION	APPROVED	DATE
B	ARCHITECTS REVISIONS	MG	22.12.20
A	ISSUED FOR CONSTRUCTION	MG	06.11.20
4	CC2 RESUBMISSION		30.10.20
3	CC2 ISSUE		16.10.20
2	ISSUED FOR INFORMATION		28.08.20
1	ISSUED FOR INFORMATION		21.08.20

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NBRS ARCHITECTURE.
Sydney
61 2 9922 2344 nbrsarchitecture.com

BIRZULIS ASSOCIATES
CONSULTING STRUCTURAL & CIVIL ENGINEERS
583 DARLING STREET, ROZELLE NSW 2039
tel: (02) 9555 7230 email : office@birzulisassociates.com
www.birzulisassociates.com

PROJECT
PORTERS CREEK PUBLIC SCHOOL
75 Warnervale Rd. Warnervale NSW 2259

TITLE
LIBRARY - ROOF FRAMING SECTIONS

SCALES	DATE
1:100 @ A1	08/19/20

DRAWN	DESIGN	VERIFIED	APPROVED
AB	TO		

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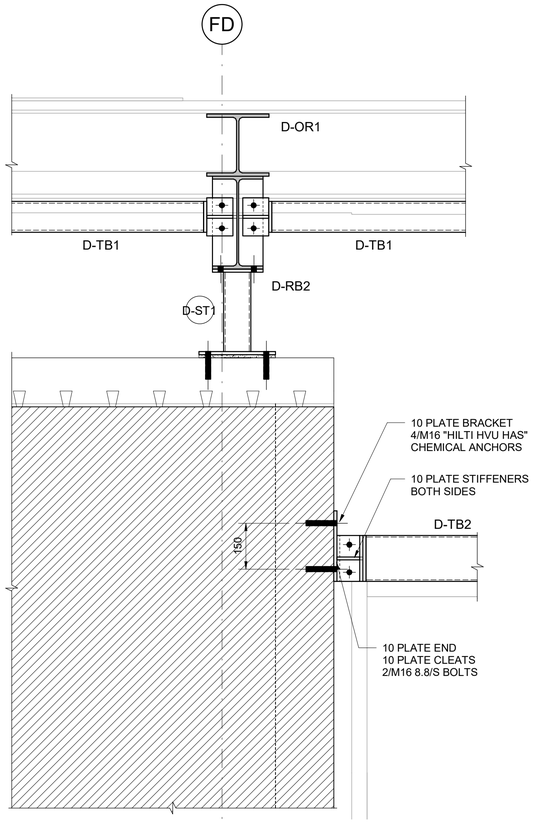
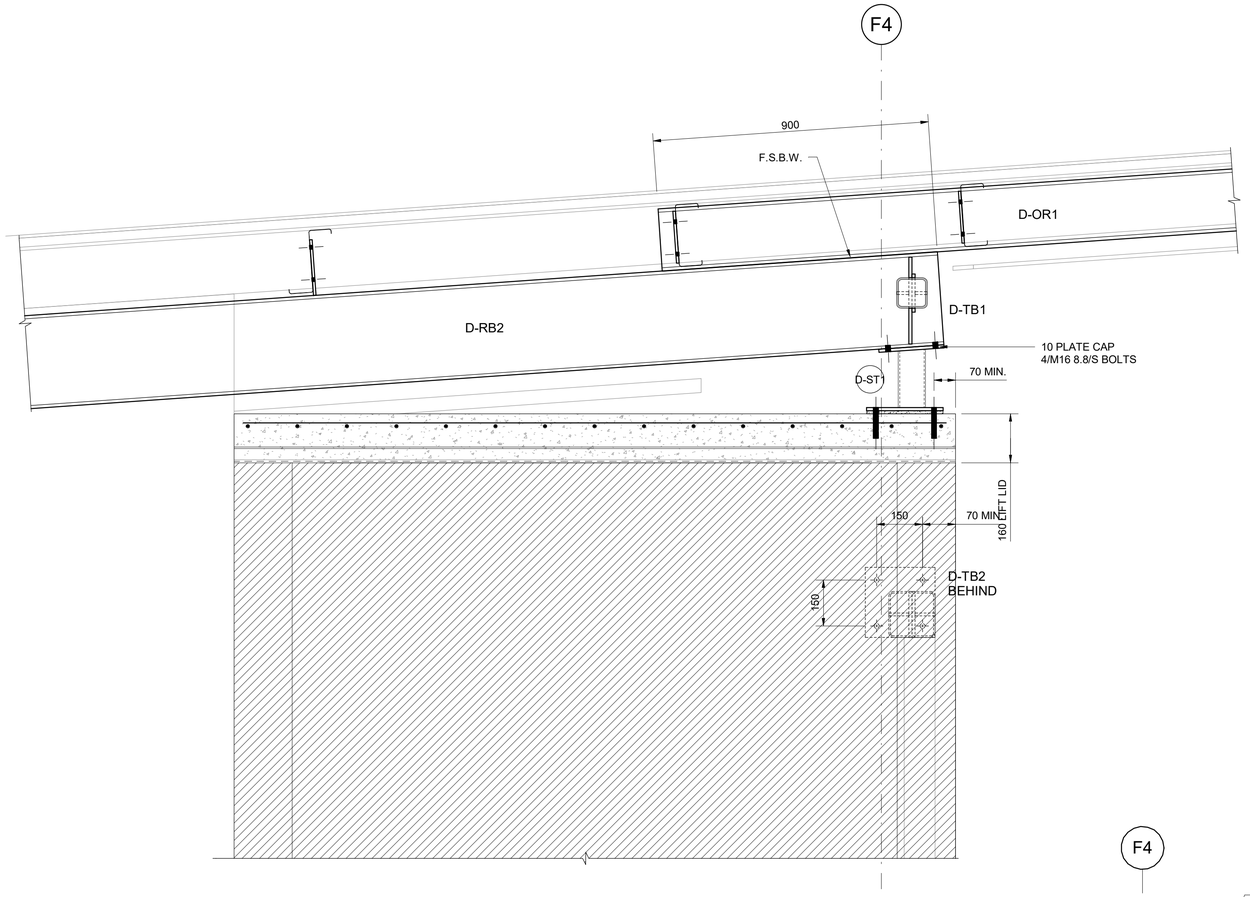
ISSUE	PROJECT No.	DRAWING No.
B	7900	S-D-RP-41

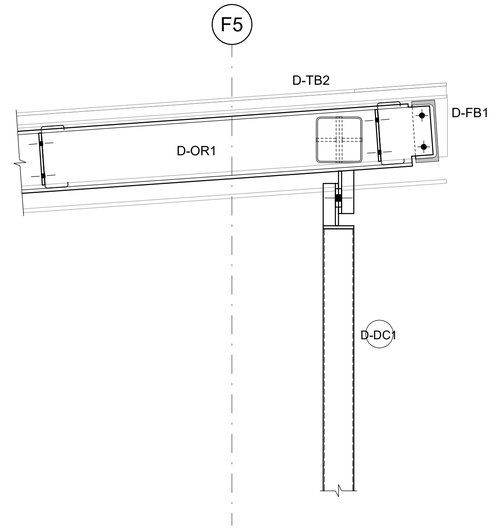
22/12/2020 10:05:55 AM

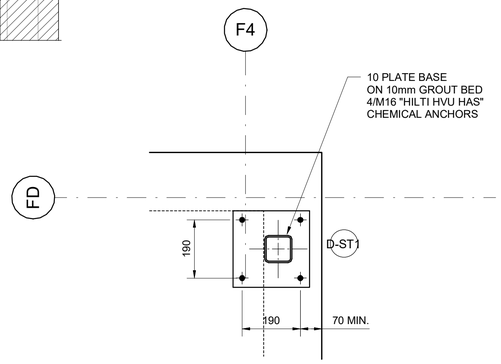


DETAIL D-A
SCALE 1 : 10 S-D-RP-41

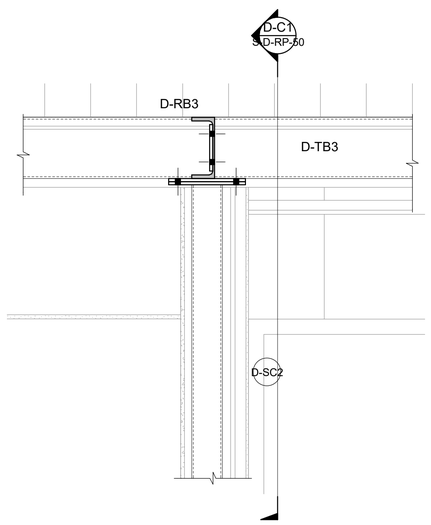


DETAIL D-B
SCALE 1 : 10 S-D-RP-41

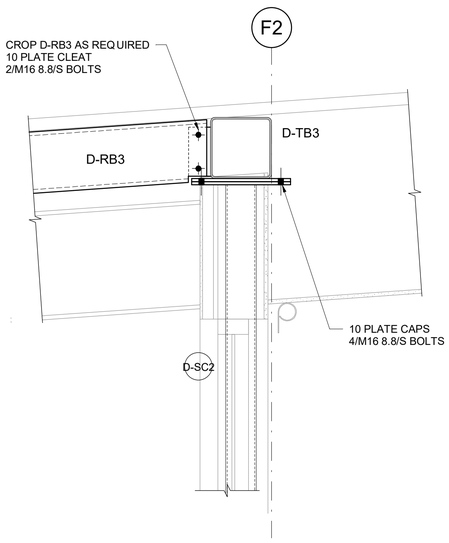




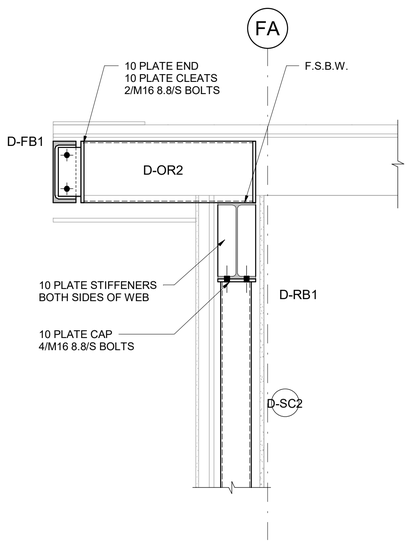
PLAN ON D-ST1 BASE PLATE



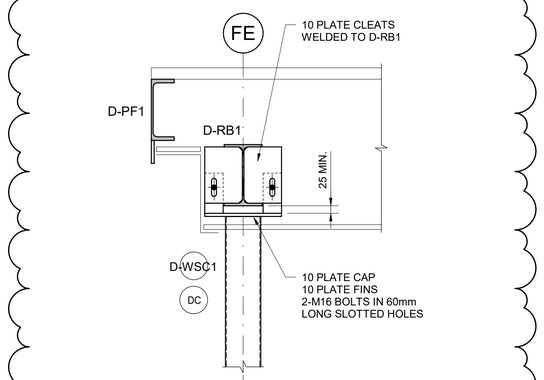
DETAIL D-C
SCALE 1 : 10 S-D-RP-40



SECTION D-C1
SCALE 1 : 10 S-D-RP-50



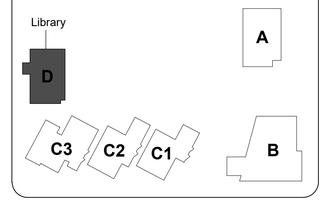
DETAIL D-D
SCALE 1 : 10 S-D-RP-41



TYPICAL D-WSC1 FIXING AT GRID FE
ALTERNATE DUMMY COLUMN FIXING DETAIL

SCALE 1:10
USE AS REQUIRED

KEY PLAN



ISSUE	DESCRIPTION	APPROVED	DATE
C	D-WSC1 FIXING ADDED AT GRID FE	MG	18.03.21
B	ARCHITECTS REVISIONS	MG	22.12.20
A	ISSUED FOR CONSTRUCTION	MG	06.11.20
2	CC2 RESUBMISSION		30.10.20
1	CC2 ISSUE		16.10.20

ARCHITECT
NBRS ARCHITECTURE.
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PROJECT
PORTERS CREEK PUBLIC SCHOOL
75 Warnervale Rd. Warnervale NSW 2259

TITLE
LIBRARY - ROOF FRAMING DETAILS

SCALES	DATE
1:10 @ A1	10/09/20

DRAWN	DESIGN	VERIFIED	APPROVED
AB	TO		

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ISSUE	PROJECT No.	DRAWING No.
C	7900	S-D-RP-50

19/03/2021 11:02:29 AM

Andrew Brooking BIRZULIS ASSOCIATES PTY LTD	Drawing 7900-S-D-RP-40_D TRANSMITTAL	8:35 AM BIRZULIS-TRANSMIT-000062
Sam Lyons RICHARD CROOKES CONSTRUCTIONS PTY LIMITED	Fwd: Drawing 7900-S-D-RP-40_D TRANSMITTAL	8:37 AM RCC-TRANSMIT-000758
Anthony Marelic METRO BUILDING CONSULTANCY	Re: Drawing 7900-S-D-RP-40_D GENERAL CORRESPONDENCE	9:11 AM METROBC-GCOR-000268
Tim Hastings RICHARD CROOKES CONSTRUCTIONS PTY LIMITED	Re: Drawing 7900-S-D-RP-40_D GENERAL CORRESPONDENCE	9:32 AM RCC-GCOR-006510
Anthony Marelic METRO BUILDING CONSULTANCY	Re: Drawing 7900-S-D-RP-40_D GENERAL CORRESPONDENCE	9:57 AM METROBC-GCOR-000270

1203 - Warnervale New Primary School
75 Warnervale Road
Warnervale
NSW 2259 Australia

MAIL TYPE	MAIL NUMBER	REFERENCE NUMBER
General Correspondence	MetroBC-GCOR-000270	Birzulis-TRANSMIT-000062

Re: Drawing 7900-S-D-RP-40_D

From	Anthony Marelic - Metro Building Consultancy
To (3)	Mr Sean Moore - Metro Building Consultancy (+2 more...)
Cc (2)	Mr Adrian Connell - Richard Crookes Constructions Pty Limited (+1 more...)
Sent	Thursday, 13 January 2022 9:57:28 AM AEDT (GMT +11:00)
Status	N/A

MESSAGE

Hi Tim

Condition D2.21 now satisfied.

Kind Regards,

Anthony Marelic
Senior Building Surveyor
Metro Building Consultancy
anthony@metrobc.com.au

P: (02) 9692 8477 | M: 0404 202 580 | W: metrobc.com.au
Suite 102, 12 Mount Street, North Sydney NSW 2060
PO Box 617, North Sydney NSW 2059

From: T Hastings
Sent: 13/01/2022 9:32:45 AM AEDT (GMT +11:00)
To: Anthony Marelic, Sean Moore, Sam Lyons
Cc: Adrian Connell, James Earl
Mail Number: RCC-GCOR-006510
Subject: Re: Drawing 7900-S-D-RP-40_D

Hi Anthony,

Confirming this condition requires submission to your satisfaction.

Please, when ready confirm your satisfaction so we can close this condition out.

Regards
Tim Hastings, Project Engineer

RICHARD CROOKES CONSTRUCTIONS

Direct 02 9902 4700 | Fax 02 9439 1114 | Mobile 0429 008 825
Level 3, 4 Broadcast Way, Artarmon NSW 2064

www.richardcrookes.com.au

From: A Marelic
Sent: 13/01/2022 9:11:18 AM AEDT (GMT +11:00)
To: Sean Moore, Sam Lyons
Cc: Tim Hastings
Mail Number: MetroBC-GCOR-000268
Subject: Re: Drawing 7900-S-D-RP-40_D

Thanks Sam

All structural plans now submitted.

Kind Regards,

Anthony Marelic
Senior Building Surveyor
Metro Building Consultancy
anthony@metrobc.com.au

P: (02) 9692 8477 | M: 0404 202 580 | W: metrobc.com.au
Suite 102, 12 Mount Street, North Sydney NSW 2060
PO Box 617, North Sydney NSW 2059

From: S Lyons
Sent: 13/01/2022 8:37:31 AM AEDT (GMT +11:00)
To: Anthony Marelic, Sean Moore
Cc: Tim Hastings
Mail Number: RCC-TRANSMIT-000758
Subject: Fwd: Drawing 7900-S-D-RP-40_D

Anthony,

Amended drawing, sorry for the stuff around.

Regards,

Sam Lyons,

RICHARD CROOKES
CONSTRUCTIONS

Direct 02 9902 4700 | Fax 02 9439 1114 | Mobile 0409 277 788
Level 3, 4 Broadcast Way, Artarmon NSW 2064

www.richardcrookes.com.au

From: A Brooking
Sent: 13/01/2022 8:35:05 AM AEDT (GMT +11:00)
To: Paul Grogan, Tim Hastings, Sam Lyons
Mail Number: Birzulis-TRANSMIT-000062
Subject: Drawing 7900-S-D-RP-40_D

Good Morning Tim,

I have just uploaded the correct PDF file for the above drawing (the CAD files is/was correct), I apologies for the confusion as had left the previous issue C drawing on Aconex last time when doing all the revisions.
So the register is correct with 7900-S-D-RP-40_D.

Kind Regards,

Andrew Brooking
Senior CAD Operator

BIRZULIS ASSOCIATES Pty Ltd
583 Darling Street
Rozelle NSW 2039
(02) 9555 7230
www.birzulisassociates.com

From:	Tim Hastings
To:	Nora Babik
Cc:	Anthony Soklaridis; Nicola Carcary; Adrian Connell
Subject:	FW: PCPS - D21 Structural Inspection Certificate
Date:	Monday, 17 January 2022 10:13:39 PM
Attachments:	image001.png image002.png PROJ7900_WPC_Structural SSDA C21 Certificate.pdf Drawings.zip

Hi Nora,

As per your follow up request regarding condition D21 please find attached.

I will respond to your aconex referring to this outlook corro to close out the thread.

Regards,

Tim Hastings, Project Engineer

RICHARD CROOKES
CONSTRUCTIONS

Direct 02 9902 4700 | Mobile 0429 008 825
Suite 1, Level 1, 118a Belford Street, Broadmeadow, NSW 2292

www.richardcrookes.com.au

Please consider the environment before printing this email

From: Sam Lyons <LyonsS@richardcrookes.com.au>
Sent: Friday, 14 January 2022 12:03 PM
To: Adam Mularczyk <Adam.Mularczyk@centralcoast.nsw.gov.au>; ask@centralcoast.nsw.gov.au
Cc: Tim Hastings <HastingsT@richardcrookes.com.au>
Subject: PCPS - D21 Structural Inspection Certificate

Hi Adam,

In order to close out SSD condition D21 see attached the structural inspection certificate and a set of the drawings.

D21. Prior to the commencement of occupation of the relevant parts of any new or refurbished buildings, a Structural Inspection Certificate or a Compliance Certificate must be submitted to the satisfaction of the Certifier. A copy of the Certificate with an electronic set of final drawings (contact approval authority for specific electronic format) must be submitted to the approval authority and the Council after:

(a) the site has been periodically inspected and the Certifier is satisfied that the structural works is deemed to comply with the final design drawings; and
(b) the drawings listed on the Inspection Certificate have been checked with those listed on the final Design Certificate/s.

Regards,

Sam Lyons, Site Engineer

RICHARD CROOKES
CONSTRUCTIONS

Direct 02 9902 4700 | Mobile 0409 277 788
Suite 1, Level 1, 118a Belford Street, Broadmeadow, NSW 2292

www.richardcrookes.com.au

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