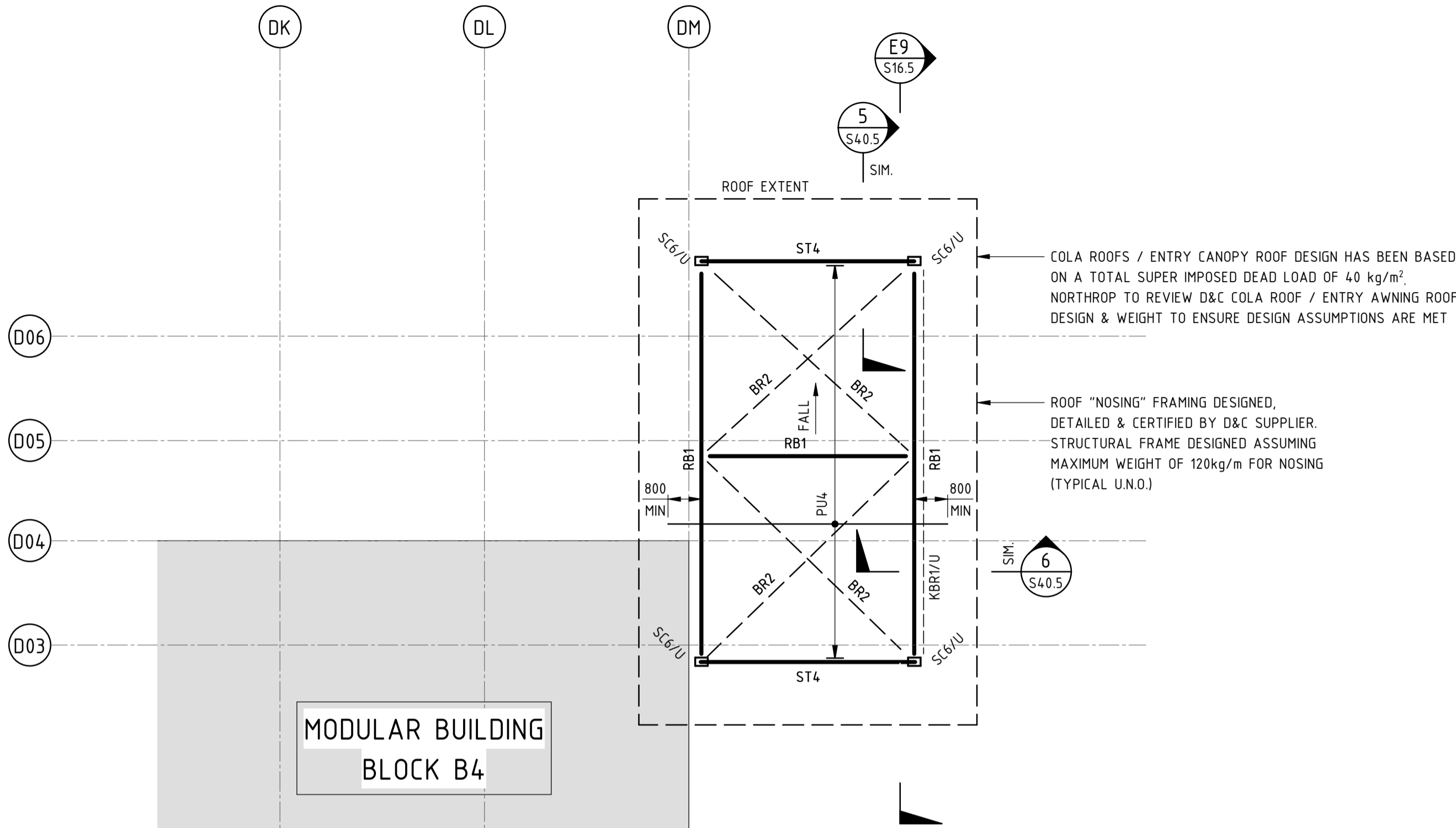


VERIFIER: PHIL O'HARA

JOB MANAGER: RORY DALE

DESIGNED: BRENDAN BLAKE

DRAWN: LIAM MCKEOUGH



COLA B4
ROOF FRAMING PLAN

- FLY BRACE RAFTERS AT EVERY SECOND PURLIN.
- LAP PURLINS 15% OF SPAN OVER RAFTERS (TYPICAL).
- COLA / ENTRY CANOPY CEILING JOISTS BY OTHERS NOT SHOWN FOR CLARITY.
- SUB-FRAMING OF TOP HATS & RAISED CEILING SUPPORTS BY OTHERS.
- ALL EXTERNAL STEELWORK TO BE GALVANISED.

COLUMN SCHEDULE		
MARK	SIZE	COMMENT(S)
CONCRETE		
CC1	450 DIAMETER	10-N16 VERTICAL BARS WITH N12 TIES-300 CTS
CC2	200 x 1600	N16 VERTICAL BARS-200 CTS WITH N12 TIES-300 CTS
CC3	450 x 1600	N16 VERTICAL BARS-200 CTS WITH N12 TIES-300 CTS
STEEL		
DC1	100 x 100 x 5.0 SHS	DOOR COLUMN
SC1	310 UC 96.8	
SC2	310 UB 32.0	
SC3	250 x 150 x 9.0 RHS	
SC4	101.6 DIAMETER x 3.2 CHS	
SC5	200 x 200 x 5.0 SHS	
SC6	300 x 200 x 6.0 RHS	
SC7	300 x 200 x 8.0 RHS	
STEEL MEMBER SCHEDULE		
MARK	SIZE	COMMENT(S)
BEAM		
CUB1	150 PFC	CURTAIN BEAM
DH1	310 UB 32.0	DOOR HEADER, LAID FLAT
LB1	150 UC 23.4	LIFT BEAM
WS1	200 x 150 x 5.0 RHS	SHOP WELD 400 WIDE 10 THICK PLATE TO TOP OF WALL STIFFENER
WS2	250 x 150 x 8.0 RHS	SHOP WELD 400 WIDE 10 THICK PLATE TO TOP OF WALL STIFFENER
WS3	150 x 150 x 5.0 SHS	SHOP WELD 75 x 75 x 5.0 EA AT 300 CTS
BRACING		
BR1	75 x 75 x 5 EA	ROOF BRACING
BR2	16 DIAMETER ROD + GRADE P TURNBUCKLE MIN SWL 1.0t	ROOF BRACING
KBR1	125 x 125 x 5.0 SHS	WALL K-BRACE
WB1	75 x 75 x 6.0 EA	WALL BRACING
WB2	16 DIAMETER ROD + GRADE P TURNBUCKLE MIN SWL 1.0t	WALL BRACING
PURLIN		
CJ1	SZ200 19-1200 CTS	CEILING JOIST, 2 ROWS BRIDGING AT THIRD POINTS
CJ2	SC150 15-1000 CTS	CEILING JOIST, 1 ROW BRIDGING AT MID POINTS
PU1	SZ200 24-1200 CTS	2 ROWS BRIDGING AT THIRD POINTS
PU2	SZ200 19-1200 CTS	2 ROWS BRIDGING AT THIRD POINTS
PU3	SZ200 15-1200 CTS	1 ROW BRIDGING AT MID POINTS
PU4	SZ200 19-2300 CTS	2 ROWS BRIDGING AT THIRD POINTS
PU5	SZ150 19-1200 CTS	
PU6	SC150 15-1000 CTS	1 ROW BRIDGING AT MID POINTS
RAFTER		
AB1	250 PFC	AWNING RAFTER
RB1	310 UB 32.0	
RB2	360 UB 44.7	
RB3	410 UB 53.7	
STRUT		
ST1	125 x 125 x 4.0 SHS	
ST2	200 x 200 x 5.0 SHS	
ST3	300 x 200 x 6.0 RHS	
ST4	200 x 100 x 4.0 RHS	

LEGEND

- I SC10

SC10

DENOTES STEEL COLUMN OVER
- I SC10U

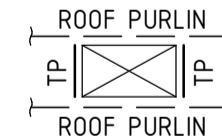
SC10U

DENOTES STEEL COLUMN UNDER
- I SC1

SC1

DENOTES STEEL COLUMN OVER & UNDER
- SP

DENOTES SPLICE PLATE, REFER TO DETAIL



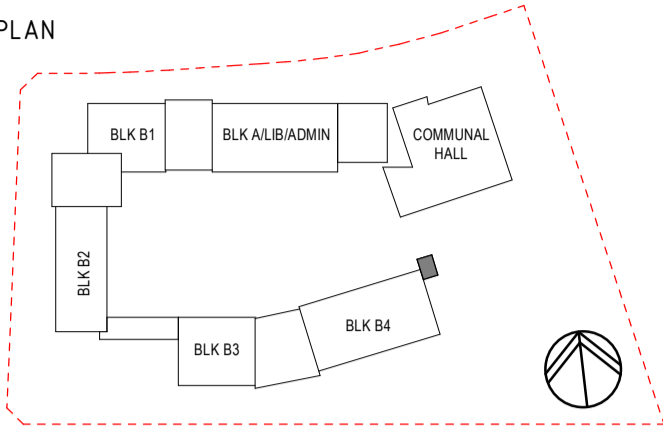
NOTE:
ALL TRIMMING PURLINS (TP) **EC20015**, SECTIONS CONNECTED WITH 100GPB AND 4M12 PURLIN BOLTS.

ALL ROOF PURLIN DESIGN ASSUMES:
PURLINS SUPPORT ROOF SHEETING ONLY
ROOF SHEETING IS TRIMDEK 0.48 BTM
FIBREGLOSS SHEETING IS AMPELITE 5-RIB SERIES 3360 OR HIGHER

INTERNAL SPANS ARE SHOWN IN SCHEDULE; END SPANS TO BE AT MAX 1600 CTS
ROOF SHEETING DETAILS TO BE CONFIRMED BY THE BUILDER / ARCHITECT PRIOR TO FABRICATION

DRAWINGS NOT TO BE USED FOR CONSTRUCTION UNLESS VERIFICATION SIGNATURE HAS BEEN ADDED. THE COPYRIGHT OF THIS DRAWING REMAINS WITH NORTHROP CONSULTING ENGINEERS PTY LTD. ALL SETOUT TO ARCHITECT'S DRAWINGS. DIMENSIONS TO BE VERIFIED WITH ARCHITECT AND BUILDER BEFORE COMMENCING SHOP DRAWINGS OR SITE WORK. NORTHROP ACCEPTS NO RESPONSIBILITY FOR THE USABILITY, COMPLETENESS OR SCALE OF DRAWINGS TRANSFERRED ELECTRONICALLY.

KEYPLAN



REV	DESCRIPTION	ISS'D	VER'D	APP'D	DATE
A	ISSUED FOR DDR	L.M		R.D	14.06.19
B	REVISED FOR DDR SUBMISSION	L.M		R.D	21.06.19
C	PROGRESS ISSUE	L.M		R.D	28.06.19
D	PROGRESS ISSUE	L.M		R.D	05.07.19
E	FINAL COORDINATION ISSUE	L.M		R.D	12.07.19
F	ISSUED FOR CONSTRUCTION	L.M	P.O'H	R.D	17.07.19

CLIENT

RICHARD CROOKES
CONSTRUCTIONS

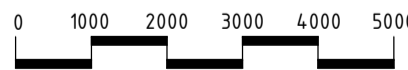
ARCHITECT

GROUP GSA



PROJECT
ALEX AVENUE PUBLIC SCHOOL

NORTHROP
Sydney
Level 11, 345 George Street, Sydney, N.S.W. 2000
Ph (02) 9241 4188 Email: sydney@northrop.com.au
ABN 81 094 433 100



DRAWING TITLE
**STRUCTURAL DRAWING
COLA B4 ROOF
FRAMING PLAN**

JOB NUMBER	DRAWING NUMBER	REVISION
S182535-01	S15.3	F
DRAWING SHEET SIZE = A1		

FOR CONSTRUCTION