

PROPOSED RECREATION AND TOURISM PRECINCT

TENCH AVE, PENRITH

GENERAL

- G1 STRUCTURAL DRAWINGS SHALL BE READ IN CONJUNCTION WITH THE SPECIFICATION, ARCHITECTURAL, CIVIL &
G2 RELEVANT ENGINEERING SERVICES DOCUMENTS AND WITH OTHER SUCH WRITTEN INSTRUCTIONS AS MAY BE ISSUED.
G3 ALL DIMENSIONS SHOWN SHALL BE VERIFIED ON SITE. ENGINEERS DRAWINGS MUST NOT BE SCALED.
G4 DURING CONSTRUCTION THE STRUCTURE SHALL BE MAINTAINED IN A STABLE CONDITION & NO PART SHALL
G5 BE OVERSTRESSED.
G6 ALL MATERIALS & WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS.
G7 UNLESS OTHERWISE NOTED ALL LEVELS ARE IN METRES & ALL DIMENSIONS ARE IN MILLIMETRES.
G8 U.N.O. DENOTES UNLESS NOTED OTHERWISE.
G9 THESE DRAWINGS ARE SIGNED SUBJECT TO A CERTIFICATE OF INSPECTION BEING ISSUED BY THIS OFFICE.
G10 ALL REINFORCEMENT SHALL BE INSPECTED BY THIS OFFICE PRIOR TO PLACING CONCRETE.
G11 BRITTLE FLOOR COVERING SUCH AS CERAMIC TILES SHOULD BE LAID USING AN APPROVED FLEXIBLE ADHESIVE
G12 SYSTEM TO CONTROL THE EFFECT OF SHRINKAGE CRACKING. A MINIMUM PERIOD OF THREE MONTHS DRYING OF
G13 THE CONCRETE IS USUALLY REQUIRED BEFORE THE PLACEMENT OF BRITTLE FLOOR COVERINGS.
G14 SUBTERRANEAN TERMITE PROTECTION IS TO BE PROVIDED IN ACCORDANCE WITH AS 3660.1 WITH ALL JOINTS
G15 ADEQUATELY TAPPED AND TAPED AT PENETRATIONS.

FOOTING:

- F1 FOUNDATION MATERIAL SHALL BE PROVIDED BY THE GEOTECHNICAL ENGINEER FOR SAFE BEARING CAPACITY BEFORE CONSTRUCTION OF THE FOOTINGS.
- F2 EXCAVATION SHALL CONTINUE UNTIL THE REQUIRED BEARING CAPACITY IS FOUND. THE OVER-EXCAVATION SHALL BE BACK-FILLED WITH A MASS CONCRETE MIX TO THE APPROVAL OF THE ENGINEER.
- F3 ALL WALLS AND COLUMNS SHALL BE CONCENTRIC WITH SUPPORTING FOOTING UNLESS NOTED OTHERWISE.
- F4 THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING EXCAVATIONS IN A STABLE CONDITION WITHOUT AFFECTING ADJACENT PROPERTIES OR SERVICES. WHERE REQUIRED, TEMPORARY SHORING SHALL BE PROVIDED TO THE SIDES OF FOOTING EXCAVATIONS.

SUBGRADE PREPARATION

- SP1 THE SITE SHALL BE EXCAVATED TO THE LEVELS SHOWN ON THE RELEVANT DRAWINGS.
- SP2 ALL TOPSOIL, ORGANIC AND DELETERIOUS MATERIAL IS TO BE STRIPPED FROM THE BUILDING SITE.
- SP3 ALL FILLINGS/HARD-CORE ETC. & SAND BLINDING UNDER SLABS SHOWN ON DRAWINGS SHALL BE PLACED IN LAYERS NOT EXCEEDING 150mm & COMPACTED TO 98% OF MAXIMUM DRY DENSITY IN ACCORDANCE WITH BS 1289 1:1 (DENOTED AS STRUCTURAL FILLING).
- SP4 ALL STRUCTURAL FILL TO BE APPROVED BY THE ENGINEER.
- SP5 THE OWNERS ATTENTION SHOULD BE DRAWN TO APPENDIX B OF BS 2870 "PERFORMANCE REQUIREMENTS AND FOUNDATION MAINTENANCE" ON COMPLETION OF THE JOB.
- SP6 EXCAVATION SHALL NOT EXTEND BELOW A LINE PINGED AT 45° FOR ALL AND 30° FOR SAND AND AWAY FROM THE NEAREST UNDERSIDE CORNER OF ANY EXISTING FOOTINGS.
- SP7 FILL MATERIAL BENEATH SLAB IS TO BE COMPACTED IN ACCORDANCE WITH BS 2870 & THE GEOTECHNICAL REPORT.
- SP8 THE SLAB IS TO BE ENTIRELY UNDERLAIN WITH A 0.2mm POLYETHYLENE VAPOUR BARRIER WITH ALL JOINTS ADEQUATELY LAPPED AND TAPED AT PENETRATIONS.

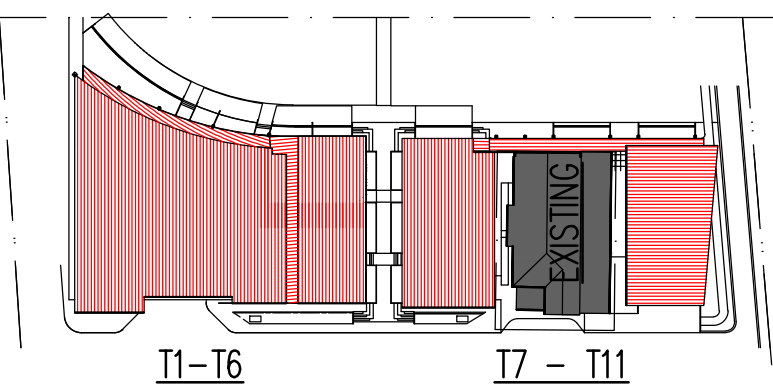
PILING




- P1 PILES AND PILING ARE IN ACCORDANCE WITH AS 2159.
- P2 THE CONTRACTOR SHALL INVESTIGATE THE PRESENCE OF ANY EXISTING SERVICES IN THE GROUND LIKELY TO BE AFFECTED BY THE PILING OPERATIONS.
- P3 THE CONTRACTOR IS RESPONSIBLE FOR THE SET OUT OF THE PILES. MAXIMUM ACCEPTABLE DEVIATION FROM CORRECT POSITION OF PILES IS 75mm. MAXIMUM ACCEPTABLE DEVIATION FROM VERTICAL ALIGNMENT IS 1 IN 100.
- P4 ALL PILES ARE TO BE BORED CAST IN PLACE.
- P5 ALL PILES ARE TO BE INSPECTED BY A QUALIFIED GEOTECHNICAL ENGINEER TO VERIFY DESIGN BEARING PRESSURES.
- P6 ALL PILES ARE TO BE INSPECTED BY A QUALIFIED STRUCTURAL ENGINEER TO VERIFY THE REINFORCEMENT.
- P7 ALL PILE BORINGS ARE TO BE INSPECTED TO ENSURE THEY ARE CLEANED AND FREE OF LOOSE MATERIAL AND WATER PRIOR TO POURING CONCRETE, WHICH SHOULD BE WITH MINIMAL DELAY AND ON THE SAME DAY AS BORING.
- P8 THE INSPECTION SHOULD ENSURE ADEQUATE ROUGHNESS IS ACHIEVED IN THE PILE SHAFT TO GUARANTEE SHAFT ADHESION, THE USE OF A ROUGHENING TOOL IS RECOMMENDED.
- P9 SOME GROUNDWATER SEEPAGE INTO PILES CAN BE EXPECTED. WATER SHOULD BE PUMPED FROM THE PILES IMMEDIATELY PRIOR TO POURING CONCRETE, TESTED TUBE TO BE USED IF DEPTH OF WATER EXCEEDS 1000mm.
- P10 OBSTRUCTIONS MAY BE EXPECTED WHEN DRILLING THROUGH EXISTING FILL.
- P11 CONCRETE COVER TO PILES TO BE 75mm.
- P12 CONCRETE STRENGTH TO BE 40 MPa U.N.O..
- P13 INFORMATION RELATING TO GROUND CONDITIONS HAS BEEN BASED ON THE GEOTECHNICAL ENGINEER'S REPORT.
- P14 THE CONTRACTOR SHOULD MAKE ALL NECESSARY SITE INVESTIGATIONS TO CONFIRM THE ACCURACY OR OTHERWISE OF THE GEOTECHNICAL REPORT.
- P15 ON COMPLETION OF PILING, A DRAWING PREPARED BY A REGISTERED SURVEYOR SHALL BE PRESENTING THE POSITION OF THE PILES RELATIVE TO THEIR NOMINATED POSITION AND THE LEVEL OF THE TOP OF THE PILES. THE DRAWING SHALL BE FORWARDED TO THE ENGINEER FOR APPROVAL BEFORE ANY FURTHER WORK ASSOCIATED WITH THE PILES COMMENCES.

DWG. NO.	DRAWING REGISTER (STRUCTURAL)
S0000	GENERAL NOTES SHEET 1 of 2
S0001	GENERAL NOTES SHEET 2 of 2
S0100	FOOTING PLAN - TENANCIES T1 TO T6
S0101	FOOTING PLAN - TENANCIES T7 TO T11
S0200	GROUND FLOOR SLAB PLAN - TENANCIES T1 TO T6
S0201	GROUND FLOOR SLAB PLAN - TENANCIES T7 TO T11
S0205	GROUND FLOOR SLAB AND FOOTING DETAILS
S0300	MEZZANINE PLAN AND DETAILS - TENANCIES T1 TO T6
S0400	STAIR DETAILS
S0500	ROOF STEELWORK MARKING PLAN - TENANCIES T1 TO T6
S0501	ROOF STEELWORK MARKING PLAN - TENANCIES T7 TO T11
S0502	AWNING STEELWORK MARKING PLANS
S0503	STEEL ELEVATIONS AND SECTIONS - TENANCIES T1 TO T6 - SHEET 1 OF 2
S0504	STEEL ELEVATIONS AND SECTIONS - TENANCIES T1 TO T6 - SHEET 2 OF 2
S0505	STEEL ELEVATIONS AND SECTIONS - T7 TO T11
S0510	STEELWORK DETAILS

ADJACENT PROPERTIES MUST BE NOTIFIED IN WRITING PRIOR TO TEMPORARY ANCHORS BEING INSTALLED. THIS MUST BE SUBMITTED IN WRITING TO THE ENGINEER

DRAWING MEASUREMENTS NOTE:
DO NOT TAKE MEASUREMENTS FROM STRUCTURAL DRAWINGS FOR SITE BUILDING SETTING OUT. USE ARCHITECTURAL SETOUT PLAN FOR BUILDING SETTING OUT.



												CLIENT				ARCHITECT				PROJECT				SHEET SUBJECT				CAD FILE							
												STIMSON & BAKER				 NOMINATED ARCHITECT - P F MORSON REGISTRATION NUMBER 0100 ACN 1 159 480 056, ABN 41 159 480 056 www.morsongroup.com (02) 9380 4946 PO Box 170, Potts Point, NSW 1335				 AUSTRALIAN CONSULTING ENGINEERS. PTY LTD - A.C.N. 084 059 941 SHOP 2/41 CONCORD RD NORTH STRATHFIELD NSW 2157 PH: (02) 9763 1600 FX: (02) 9763 1616 EMAIL: info@acoenzeng.com.au				PROPOSED RECREATION AND TOURISM PRECINCT TENCH AVE, PENRITH 				GENERAL NOTES SHEET 1 OF 3				LOT 3, DP 30354, TENCH AVE, PENRITH, NSW			
C ISSUED FOR C.C.												S.R.	A.J.B.	23.09.16			DATE		APR 2011	DESIGNED	A.J.B.	DESIGNED	S.R.	CHECKED	M.W.										
B ISSUED FOR CO-ORDINATION												S.R.	A.J.B.	02.09.16			SCALE @ B1		N.A.					160652											
A PRELIMINARY												S.R.	A.J.B.	25.06.16																					
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BRICKWORK AND BLOCKWORK

- B1 ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CURRENT SAA MASONARY CODE, AS 3700 EXCEPT WHERE VARIED BY THE CONTRACT DOCUMENTS.
- B2 ALL LOAD BEARING BRICKS SHALL BE LAID FROGS UP EXCEPT FOR THE TOP COURSE,WHICH SHALL BE LAID FROGS DOWN. WHEN SUPPORTING A CONCRETE SLAB OR BEAM BRICKWORK SHALL HAVE A LAYER OF MORTAR PLACED ON THE TOP AND TROWELLED SMOOTH, THE TOP 2 COURSES OF BRICKS SHALL BE LAID WITH REINFORCEMENT IN THE JOINTS.
- B3 WHERE WALLS ARE NON LOAD BEARING AT EITHER HORIZONTAL OR VERTICAL FACES THEY SHALL BE SEPERATED FROM THE CONCRETE BY 20mm THICK 'CANITE' OR EXPANDED POLYSTYRENE U.N.O.
- B4 NO HOLES OR CHASES SHALL BE CUT IN LOAD BEARING BRICKWORK OR BLOCKWORK WITHOUT THE PRIOR APPROVAL OF THE ENGINEER.
- B5 ALL CONCRETE BLOCK WALLS SHALL BE BUILT TO A GAUGE CONCRETE BLOCK SUCH THAT BLOCK-PLANS-JOINT DIMENSIONS ARE MULTIPLES OF 100mm USING STRETCHER BOND UNLESS SPECIFIED OTHERWISE.
- B6 CONCRETE BLOCKS SHALL BE GRADE 12 UNITS CONFORMING TO AS 2733
- B7 MORTAR SHALL BE FRESHLY PREPARED AND COMPOSED OF CEMENT: LIME:SAND IN THE RATIO OF 1:1:6 AND SHALL CONFORM TO AS3700.
- B8 CORES TO BE FILLED WHERE REQUIRED WITH CONCRETE OF STRENGTH $f'_c = 20$ MPa, 10mm MAX. AGGREGATE SIZE AND A MAX. SLUMP OF 230mm, IN LIFTS NOT MORE THAN 1200 mm HIGH.
- B9 CLEAN OUT OPENINGS ARE REQUIRED AT THE BASE OF ALL REINFORCED WALLS AND ABOVE HORIZONTAL CONSTRUCTION JOINTS.
- B10 REINFORCEMENT SHALL BE POSITIONED AS SHOWN AND HAVE A MINIMUM CONCRETE COVER OF 20mm U.N.O.
- B11 JOINT REINFORCEMENT SHALL BE IN ACCORDANCE WITH AS 3700.
- B12 VERTICAL CONTROL JOINTS IN BLOCK RETAINING WALLS AND BLOCK WALLS TO BE SPACED AS SHOWN OR AT 6000mm MAX. APART. VERTICAL CONTROL JOINTS IN BRICKWORK TO BE SPACED AT 5000mm MAX. APART.
- B13 A 300mm WIDE STRIP OF COARSE GRAINED MATERIAL IS TO BE PLACED BEHIND ALL RETAINING WALLS.
- B14 BRCK TIES TO COMPLY WITH AS3700 AND BE OF STAINLESS STEEL DUE TO REQUIRED EXPOSURE.
- B15 BED JOINT REINFORCEMENT M.E.T. GALVANISED MASONRY REINFORCEMENT (SUPPLIED BY DUNSTONE MAZE OR EQUAL) AT EVERY THIRD BED JOINT.
- B16 CLAY MASONRY BRICKS ARE OF SOLID TYPE AND HAVE A UNCONFINED COMPRESSIVE STRENGTH $f_{uc}=20$ MPa, SOLID TYPE.

CONCRETE

- C1 ALL CONCRETE, CONCRETE WORK AND REINFORCEMENT SHALL BE IN ACCORDANCE WITH THE SPECIFICATION.
- C2 REFER TO INDIVIDUAL CONCRETE DRAWINGS FOR CONCRETE QUALITY
- C3 ALL REINFORCEMENT TO BE AS FOLLOWS:
- | SYMBOL | TYPE |
|--------|--|
| R | STRUCTURAL GRADE PLAIN BARS TO AS/NZS 4671 (250 MPa) |
| SL, RL | FABRIC MESH TO AS/NZS 4671 (500 MPa) |
| N | HOT ROLLED DEFORMED BARS TO AS/NZS 4671 (500 MPa) |
- NOTE THE NUMBER FOLLOWING R OR N INDICATES THE BAR DIAMETER IN MILLIMETRES.
- C4 CLEAR COVER TO REINFORCEMENT (INCLUDING FITMENTS) SHALL BE AS FOLLOWS U.N.O. WHERE NOT SPECIFICALLY DESIGNATED COVER IS TO BE IN ACCORDANCE WITH AS3600.

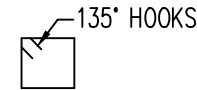
CONCRETE	CAST AGAINST FORMWORK		CAST AGAINST GROUND	
CHARACTERISTIC STRENGTH f'_c	NOT EXPOSED TO WATER	* EXPOSED TO WATER OR WEATHER	PROTECTED BY WATERPROOF MEMBRANE	NOT PROTECTED BY MEMBRANE
20	20	-	60	70
25	20	60	40	50
32	20	40	35	45
40	20	30	30	40
50	20	25	30	40

* ADD EXTRA 20mm COVER FOR COLUMNS (U.N.O.)

- C5 SIZES OF CONCRETE ELEMENTS DO NOT INCLUDE THICKNESS OF ANY APPLIED FINISHES.
- C6 BEAM DEPTHS ARE NOTED FIRST AND INCLUDE THE THICKNES OF THE SLAB IF ANY.
- C7 CONSTRUCTION JOINTS WHERE NOT SHOWN ON THE DRAWINGS SHALL BE LOCATED TO THE APPROVAL OF THE ENGINEER.
- C8 FORMS SHALL BE CHAMFERED FOR RE-ENTRANT ANGLES AND FILLETED FOR CORNERS. WHERE THESE WILL BE EXPOSED TO VIEW IN THE COMPLETED PROJECT THE FACE OF THE BEVEL IN EACH CASE SHALL BE 25mm WIDE U.N.O.
- C9 NO HOLES,CHASES OR EMBEDMENTS OF PIPES OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE MADE WITHOUT THE PRIOR APPROVAL OF THE ENGINEER.
- C10 DISTRIBUTION BARS TO MAIN REINFORCEMENT IN SLABS SHALL BE N12 AT 300mm CENTRES U.N.O.
- C11 NO REINFORCEMENT SPLICES SHALL BE MADE IN POSITIONS OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS WITHOUT THE PRIOR APPROVAL OF THE ENGINEER.
- C12 MINIMUM LAP FOR FABRICS SHALL BE TWO TRANSVERSE WIRES PLUS 25mm MINIMUM LAP LENGTHS FOR DEFORMED BARS INCLUDING DISTRIBUTION REINFORCEMENT SHALL BE AS FOLLOWS U.N.O.

BAR TYPE AND SIZE	VERTICAL BARS	HORIZONTAL BARS		90° COG LENGTH *	135° or 180° COG LENGTH *
		MORE THAN 300mm OF CONC. BELOW BAR	OTHER LOCATIONS		
12	450	550	450	170	70
16	700	800	700	200	70
20	1000	1250	1000	250	80
24	1200	1500	1200	300	95
28	1400	1750	1400	350	115
32	1550	1900	1550	400	130
36	1700	2150	1700	450	145

* COG LENGTH MEASURED FROM END OF BEND.

- C13 WELDING OF REINFORCEMENT IS NOT PERMITTED UNLESS SHOWN ON THE DRAWINGS OR APPROVED BY THE ENGINEER.
- C14 CLOSED FITMENTS U.N.O. SHALL HAVE CORNER SPLICES THUS: 
- C15 TOP AND BOTTOM REINFORCEMENT IN SLABS SHALL BE SUPPORTED ON APPROVED PLASTIC TIPPED CHAIRS,IN BOTH DIRECTIONS AT MAXIMUM CENTRES OF 600mm FOR 10mm DIA BARS, 900mm FOR 12mm AND 16mm DIA BARS, 1200mm FOR 20mm DIA BARS AND 750mm CENTRES FOR FABRIC.
- C16 ALL FORMWORK AND PROPS UNDER SUSPENDED CONCRETE WORK SHALL BE REMOVED BEFORE ANY BRICKWORK OR BLOCKWORK IS BUILT ABOVE.
- C17 THE MINIMUM CLEAR SPACING BETWEEN CONDUITS, CABLES, PIPES AND BARS SHALL BE AS REQUIRED BY AS 3600 BUT NOT LESS THAN THREE DIAMETERS HORIZONTALLY FOR HORIZONTAL CONDUITS ETC IN SLABS WALLS, AND FOOTINGS AND NOT LESS THAN ONE DIAMETER FOR ALL OTHER CONDUITS ETC.
- C18 TYPICAL REINFORCEMENT NOTATION :- 23N24-200.2
23.....DENOTES NUMBER OF BARS REQUIRED
N.....DENOTES GRADE OF REINFORCEMENT
24.....DENOTES BAR DIAMETER IN MILLIMETRES
200.....DENOTES BAR SPACINGS IN MILLIMETRES
.2DENOTES SECOND LAYER OF REINFORCEMENT LAID
TYPICAL ABBREVIATIONS :-
B.....DENOTES BARS IN BOTTOM
T.....DENOTES BARS IN TOP
ALTDENOTES BARS ALTERNATING
STAGDENOTES BARS STAGGERED
NF.....DENOTES BARS IN NEAR FACE
FF.....DENOTES BARS IN FAR FACE
EF.....DENOTES BARS IN EACH FACE
NSOP.....DENOTES NOT SHOWN ON PLAN
NSOE.....DENOTES NOT SHOWN ON ELEVATION
- C19 CONCRETE TO BE KEPT FREE OF SUPPORTING BRICKWORK BY 'SWAN' SLIDING JOINT OR EQUAL U.N.O.
- C20 VERTICAL FACES OF CONCRETE SHALL BE SEPERATED BY 12mm THICK 'CANITE' OR EXPANDING CORK U.N.O.
- C21 PLACING OF REINFORCEMENT SHALL BE CO-ORDINATED TO SUIT PLACING OF PRESTRESSING TENDONS.

STRUCTURAL STEEL WORKS

- S1 ALL MATERIALS, WORKMANSHIP, FABRICATION AND ERECTION SHALL COMPLY WITH THE REQUIREMENTS OF AS4100, AS1538, AS1554 AND THE SPECIFICATION.
- S2 UNLESS SHOWN OTHERWISE, ALL STEEL SHALL BE IN ACCORDANCE WITH AS1204 GRADE 300. ALL STEEL HOLLOW SECTIONS SHALL BE GRADE 350 U.N.O. AND SHALL BE IN ACCORDANCE WITH AS1663. ALL PRESSED METAL PURLINS AND GIRTS SHALL BE GRADE 450 STEEL IN ACCORDANCE WITH AS1538
- S3 UNLESS SHOWN OTHERWISE ON THE DRAWINGS, ALL CONNECTIONS SHALL BE IN ACCORDANCE WITH THE FOLLOWING MINIMUM REQUIREMENTS:
- (i) ALL WELDS SHALL BE 6MM CONTINUOUS FILLET WELDS ALL ROUND.
(ii) ALL BOLTS SHALL BE M20 – 8.8/S, WITH A MINIMUM OF 2 BOLTS PER CONNECTION.
PURLIN BOLTS TO BE M12 – 4.6/S WITH A MINIMUM OF 2 BOLTS PER PURLIN END.
(iii) ALL GUSSET AND CLEAT PLATES SHALL BE 10mm THICK. (U.N.O.)
(iv) ALL CAP PLATES SHALL BE 10 mm THICK. (U.N.O.)
(v) ALL BASE PLATES SHALL BE 10 mm THICK. (U.N.O.)
- S4 BOLT DESIGNATION:
4.6/S REFERS TO COMMERCIAL BOLTS OF STRENGTH GRADE 4.6 TO AS1111 TIGHTENED TO A SHUG TIGHT CONDITION.
8.8/S REFERS TO HIGH STRENGTH STRUCTURAL BOLTS OF GRADE 8.8 TO AS1252 TIGHTENED TO A SHUG TIGHT CONDITION.
8.8/TB REFERS TO HIGH STRENGTH STRUCTURAL BOLTS OF GRADE 8.8 TO AS1252 FULLY TENSIONED TO AS4100 AS A BEARING JOINT.
8.8/TF REFERS TO HIGH STRENGTH STRUCTURAL BOLTS OF GRADE 8.8 TO AS1252 FULLY TENSIONED TO AS4100 AS A FRICTION JOINT.
- S5 HIGH STRENGTH BOLTED JOINTS SHALL BE IN ACCORDANCE WITH AS1511. THE SPECIFIED BOLT TENSION SHALL BE OBTAINED BY USE OF THE 'PART TURN' METHOD OF TIGHTENING.
- S6 ALL WELDS SHALL BE SP (SPECIAL PURPOSE) IN ACCORDANCE WITH AS1554. ALL ELECTRODES SHALL BE CLASS E48. ALL BUTT WELDS SHALL BE FULL STRENGTH COMPLETE PENETRATION WELDS.
- S7 SUBSTITUTIONS FOR STEEL SECTIONS SHOWN ON DRAWINGS SHALL NOT BE MADE WITHOUT THE APPROVAL OF THE ENGINEER.
- S8 ALL STEELWORK BELOW GROUND OR FINISHED SURFACE LEVEL IS TO BE ENCASED IN 75mm MIN. CONCRETE ALL ROUND.
- S9 ALL STEELWORK, EXCEPT THAT WHICH IS TO BE CONCRETE ENCASED, FIRE SPRAYED OR CONTACT SURFACES OF FRICTION TYPE JOINTS, SHALL BE SURFACE CLEANED AND PAINTED IN ACCORDANCE WITH THE SPECIFICATION.
- S10 STEELWORK THAT IS CONCRETE ENCASED, FIRE SPRAYED OR FACING SURFACES OF FRICTION TYPE JOINTS SHALL BE LEFT UNPAINTED AND FREE FROM SCALE.
- S11 THE CONTRACTOR SHALL PROVIDE ALL CLEATS AND DRILL ALL HOLES NECESSARY FOR FIXING STEEL, TIMBER AND OTHER ELEMENTS TO STEEL WHETHER OR NOT DETAILED ON THE DRAWINGS.
- S12 THE FABRICATION AND ERECTION OF THE STRUCTURAL STEELWORK SHALL BE SUPERVISED BY QUALIFIED PERSONNEL EXPERIENCED IN SUCH SUPERVISION TO ENSURE THAT ALL REQUIREMENTS OF THE DESIGN ARE MET. DETAILS OF ERECTION SEQUENCE SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO COMMENCEMENT OF ERECTION.
- S13 COLUMNS AND MULLIONS SHALL HAVE THEIR BASE PLATES FULLY GROUTED IN ACCORDANCE WITH THE SPECIFICATIONS AFTER PLUMBING AND LEVELLING ON STEEL PACKERS.
- S14 THREE (3) SETS OF STEELWORK SHOP DETAIL DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO COMMENCEMENT OF ANY FABRICATION. THE CHECK SHALL NOT COVER LAYOUT AND MEMBER DIMENSIONS.
- S15 CONCRETE ENCASED STRUCTURAL STEELWORK TO BE ENCLOSED BY F41 MESH PLACED CLEAR OF STEELWORK, ENCASING TO PROVIDE 50mm MIN. COVER TO STEELWORK U.N.O. ON THE DRAWINGS. COVER TO MESH TO BE 20mm MIN. MAXIMUM AGGREGATE SIZE = 10mm, CONCRETE $f'_c = 20$ MPa.
- S16 UNLESS SPECIFIED OTHERWISE, STEELWORK SHALL BE PREPARED TO CLASS 2.5 FINISH IN ACCORDANCE WITH AS1627.4 AND GIVEN TWO (2) COATS OF ZINC PHOSPHATE TO A TOTAL DRY FILM THICKNESS OF 70 MICRONS.
- S17 ALL BUILT INTO MASONRY OR EXPOSED TO THE WEATHER STEEL WORK SHALL BE HOT DIPPED GALVANISED.
- S18 ALL STEEL WORK SHALL BE FIRE RATED IN ACCORDANCE WITH BCA REQUIREMENTS.

TIMBER NOTES

- T1 ALL TIMBER DESIGN AND CONSTRUCTION TO BE AS1720 U.N.O.
- T2 AS 1684 IS RELEVANT TO DOMESTIC CONSTRUCTION IN SHELTERED LOCATIONS.
- T3 SOFTWOOD MINIMUM GRADE F7 U.N.O. HARDWOOD MINIMUM GRADE F11 U.N.O.
- T4 EXTERNAL TIMBER TO BE EITHER HARDWOOD DURABILITY CLASS I OR II OR IMPREGNATED GRADE F7. PRESSURE TREATED TO AS1684 AND RE-DRILLED PRIOR TO USE. SUPPLEMENTARY TREATMENT SHALL BE APPLIED TO ALL CUT SURFACES. PROVIDE DOCUMENTATION.
- T5 ALL BOLTS IN TIMBER CONSTRUCTION TO BE MIN. M16 U.N.O. BOLT HOLES TO BE DRILLED EXACT SIZE. WASHERS UNDER HEADS AND NUTS TO BE AT LEAST 2.5 TIMES BOLT DIAMETER.
- T6 FINISHED TIMBER SIZES:
SEASONED SOFTWOOD +5,-0mm
UNSEASONED SOFTWOOD F7+3,-3mm
SEASONED HARDWOOD +2,-0mm
UNSEASONED HARDWOOD -3,-3mm
(SEE ALSO CLAUSE 1.6.2 IN AS 2082)
- T7 ALL TIMBER JOINTS AND NOTCHES TO BE 100mm MINIMUM FROM LOOSE KNOTS. SEVERE SLOPING GRAIN, GUM VEINS OR OTHER MINOR DEFECTS.
- T8 BLOCKING IS NOT REQUIRED FOR JOISTS SPANNING LESS THAN 3m. FOR JOISTS SPANNING GREATER THAN 3m AND LESS THAN 4.2m PROVIDE ONE ROW OF BLOCKING MID-SPAN. FOR JOISTS SPANNING GREATER THAN 4.2m AND UP TO 6.0m PROVIDE TWO ROWS OF BLOCKING AT 1/3 POINTS. FOR DEEP JOISTED FLOORS WHERE A CONTINUOUS TRIMMING JOIST IS NOT PROVIDED AT END OF JOISTS. BLOCKING IS REQUIRED AT 1800 MAXIMUM CENTERS. (REFER TO AS 1684)

EARTHQUAKE LOADING PARAMETERS

IMPORTANCE LEVEL	2
PROBABILITY OF EXCEEDANCE	1/500
LOCATION	SYDNEY
Z	0.08
SOIL CLASS	Ce
DESIGN WORKING LIFE OF STRUCTURE	50 YEARS
EARTHQUAKE DESIGN CATEGORY	II

WIND LOADING PARAMETERS

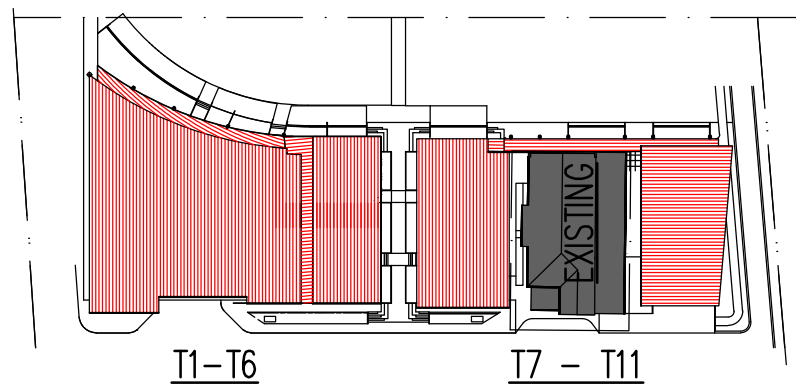
TERRAIN	2
REGION CLASSIFICATION	A2
REGIONAL WIND SPEED	45
AVERAGE RECURRENCE INTERVAL	500 YEARS
DESIGN WORKING LIFE OF STRUCTURE	50 YEARS

FIRE RATING DESIGN CRITERIA

RESIDENTIAL	90 MINUTES
COMMERCIAL	180 MINUTES
CAR PARK	120 MINUTES

NOTE:
SOIL CLASS FOR EARTHQUAKE DESIGN TO BE CONFIRMED BY GEOTECHNICAL CONSULTANT AND TO INFORM THE STRUCTURAL ENGINEER IF OTHERWISE.

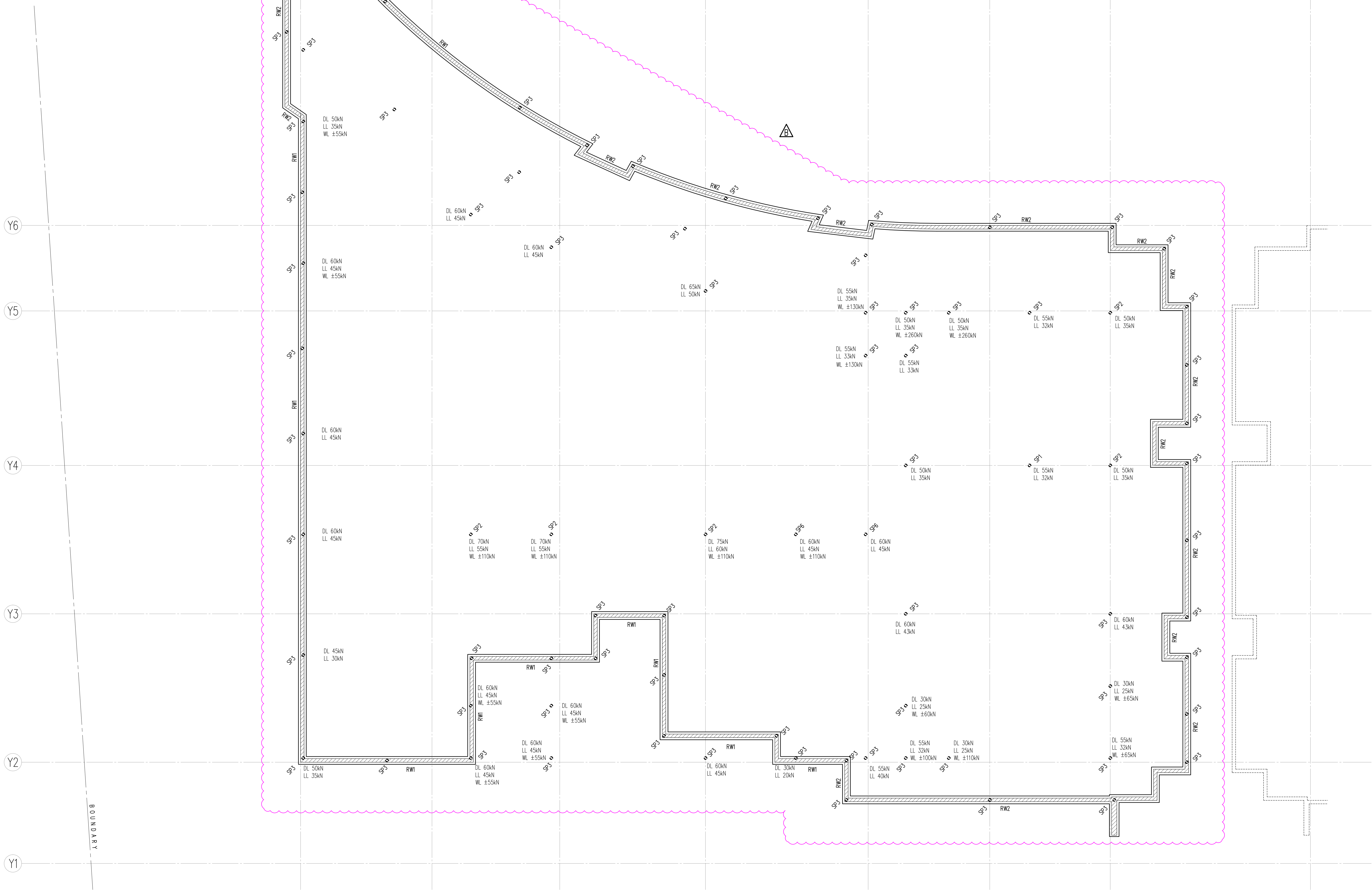
DRAWING MEASUREMENTS NOTE:
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KEY PLAN

B1											
CLIENT											
STIMSON & BAKER											
ARCHITECT											
											
NOMINATED ARCHITECT - P F MORSON REGISTRATION NUMBER 8100 ACN 159 480 056, ABN 41 159 480 056 www.morsongroup.com (02) 9380 4946 PO Box 170, Potts Point, NSW 1535											
											
PROJECT											
PROPOSED RECREATION AND TOURISM PRECINCT TENCH AVE, PENRITH											
SHEET SUBJECT											
GENERAL NOTES SHEET 2 OF 3											
CAD FILE LOT 3, DP 30354, TENCH AVE, PENRITH, NSW											
DATE APR 2011 DRAWN A.J.B. DESIGNED S.R. CHECKED M.W.											
SCALE @ B1 N.A. JOB No 160652											
ARCH. REF. N/A											
AUTHORISED A.S.H. DRG No S0001 REV C											
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FOOTING PLAN

SCALE 1:100

NOTES:

1. DRAWINGS TO BE READ IN CONJUNCTION WITH ARCHITECTURALS.
2. REFER TO ARCHITECTURAL DRAWINGS FOR ALL SETOUT, LEVELS, FALLS ETC.
3. DURING CONSTRUCTION, FOUNDATION MATERIAL HAS TO BE CHECKED AND VERIFIED BY GEOTECHNICAL ENGINEER TO ENSURE THE REQUIRED SAFE BEARING CAPACITY IS REACHED AS DESIGNED FOR.

LEGEND :

- DENOTES BLOCK WALL OVER
- DENOTES STEEL COLUMN OVER
- SP DENOTES SCREW PILE
- DL DENOTES DEAD LOAD
- LL DENOTES LIVE LOAD
- WL DENOTES WIND LOAD

FOR STRUCTURAL NOTES REFER TO DWGS S0000 & S0001

NOTES:

1. DRAWINGS TO BE READ IN CONJUNCTION WITH ARCHITECTURALS.
2. REFER TO ARCHITECTURAL DRAWINGS FOR ALL SETOUT, LEVELS.
3. DO NOT SCALE ANY DIMENSIONS FROM STRUCTURAL DRAWINGS FOR SETTING OUT PURPOSES.

REINFORCEMENT COVER SCHEDULE				
ELEMENT	COVER (mm)			EXPOSURE CLASSIFICATION
	TOP	BOTTOM	SIDES	
FOOTINGS	50mm	50mm	50mm	A1
SLAB ON GROUND	30mm	30mm	30mm	B1

CONCRETE QUALITY				
ELEMENT	SLUMP	AGGREGATE (MAX. SIZE)	CEMENT TYPE	f _c
FOOTINGS	80mm	20mm	A	25MPa
SLAB ON GROUND	80mm	20mm	A	25MPa

PAD FOOTING SCHEDULE		
MARK	SIZE (LxWxD mm)	REINFORCEMENT (LB & WB)
PF1	700 x 700 x 450	N16-200 BTM. E.W.

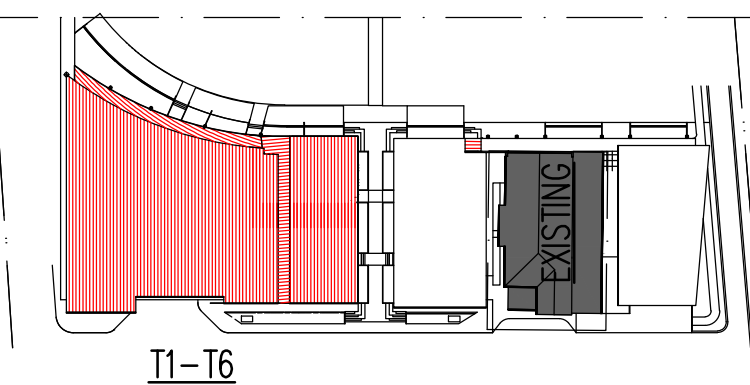
* GEOTECHNICAL ENGINEER TO CONFIRM THE SAFE BEARING CAPACITY OF THE FOUNDING MATERIAL PRIOR TO CONSTRUCTION.

NOTE:

EXISTING TOPSOIL TO BE REMOVED AND REPLACED WITH CONTROLLED FILL. NEW FILL TO BE COMPACTED TO 98% COMPACTION AND CERTIFIED BY A QUALIFIED GEOTECHNICAL ENGINEER.

NOTE:

- SCREW PILES TO BE DESIGNED BY OTHERS



KEY PLAN

No	AMENDMENT	ENG	DRAFT	DATE	No	AMENDMENT	ENG	DRAFT	DATE
B	ISSUED FOR C.C.	S.R.	A.J.B.	23.09.16					
A	ISSUED FOR CO-ORDINATION	S.R.	A.J.B.	02.09.16					

CLIENT	STIMSON & BAKER
--------	-----------------

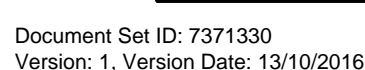
ARCHITECT	MORSON GROUP
NOMINATED ARCHITECT - P F MORSON	REGISTRATION NUMBER 8100
ACN 159 480 056, ABN 41 159 480 056	www.morsongroup.com
(02) 9380 4946	PO Box 170, Potts Point, NSW 1535

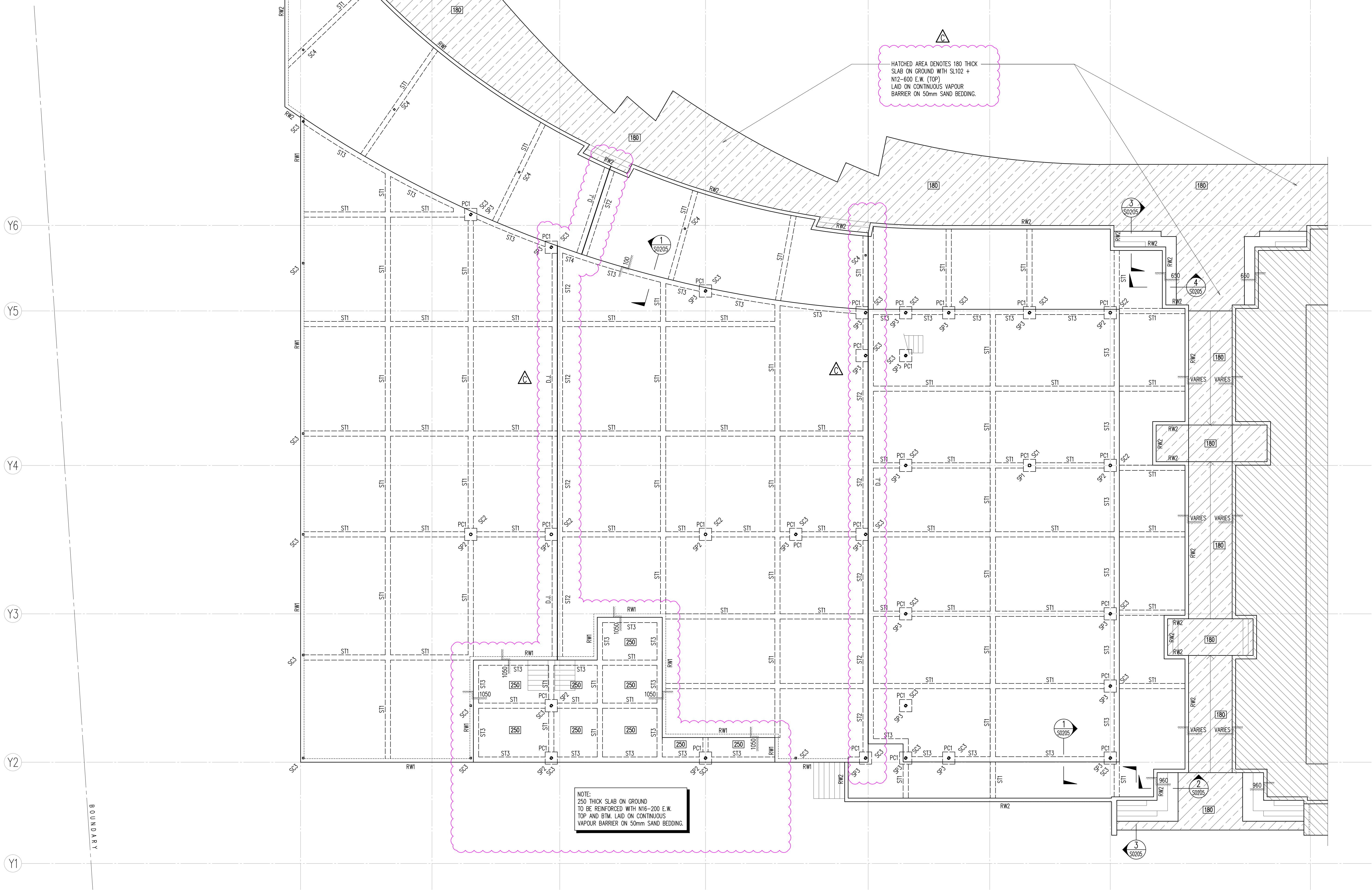
AUSTRALIAN CONSULTING ENGINEERS	PTY LTD - A.C.N. 084 059 941
SHOP 2-4/1 CONCORD RD NORTH STRATHFIELD NSW 2137	PH: (02) 9763 1500 FX: (02) 9763 1515
EMAIL: info@aceeng.com.au	

PROJECT	PROPOSED RECREATION AND TOURISM PRECINCT
TENCH AVE, PENRITH	

SHEET SUBJECT	FOOTING PLAN
TENANCIES T1 TO T6	

CAD FILE	LOT 3, DP 30354, TENCH AVE, PENRITH, NSW
DATE	AUG '16
DRAWN	A.J.B.
DESIGNED	S.R.
CHECKED	M.W.
SCALE @ BY	N.A.
JOB No	160652
AUTHORISED	A.S.H.
ENG No	S0100
REV	B





LEGEND :

	DENOTES BLOCK WALL OVER
	DENOTES STEEL COLUMN OVER
	DENOTES EXPANSION JOINT. REFER TO DETAIL
	DENOTES SAWN JOINT. REFER TO DETAIL
	DENOTES SCREW PILE
	DENOTES SLAB THICKENING - REFER S0205

FOR STRUCTURAL NOTES REFER TO DWGS S0000 & S0001

NOTES:

- DRAWINGS TO BE READ IN CONJUNCTION WITH ARCHITECTURALS.
- REFER TO ARCHITECTURAL DRAWINGS FOR ALL SETOUT, LEVELS.
- DO NOT SCALE ANY DIMENSIONS FROM STRUCTURAL DRAWINGS FOR SETTING OUT PURPOSES.

REINFORCEMENT COVER SCHEDULE				
ELEMENT	COVER (mm)			EXPOSURE CLASSIFICATION
	TOP	BOTTOM	SIDES	
FOOTINGS	50mm	50mm	50mm	A1
SLAB ON GROUND	30mm	30mm	30mm	B1

CONCRETE QUALITY				
ELEMENT	SLUMP	AGGREGATE (MAX. SIZE)	CEMENT TYPE	f _c
FOOTINGS	80mm	20mm	A	25MPa
SLAB ON GROUND	80mm	20mm	A	25MPa

PILE CAP SCHEDULE		
MARK	SIZE (LxWxD mm)	REINFORCEMENT (LB & WB)
PC1	700 x 700 x 400	N16-200 BTM. E.W.

* GEOTECHNICAL ENGINEER TO CONFIRM THE SAFE BEARING CAPACITY OF THE FOUNDING MATERIAL PRIOR TO CONSTRUCTION.

NOTE:

EXISTING TOPSOIL TO BE REMOVED AND REPLACED WITH CONTROLLED FILL. NEW FILL TO BE COMPACTED TO 98% COMPACTION AND CERTIFIED BY A QUALIFIED GEOTECHNICAL ENGINEER.

NOTE:

- SCREW PILES TO BE DESIGNED BY OTHERS

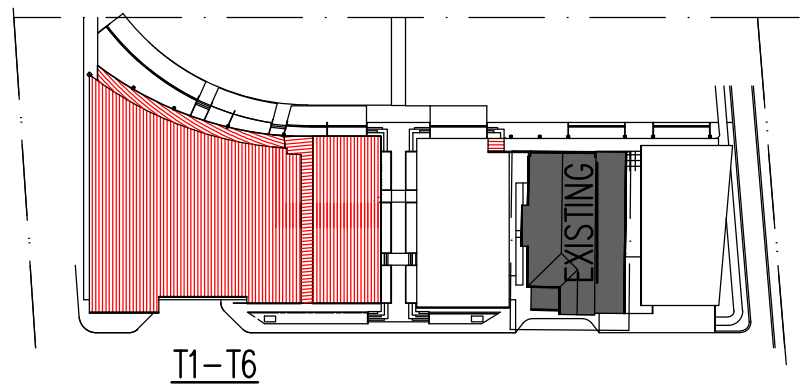
STEEL MEMBER SCHEDULE			
MARK	DESCRIPTION	SIZE	COMMENT
SC1	STEEL POST	150x150x6 SHS	
SC2	STEEL POST	125x125x5 SHS	
SC3	STEEL POST	100x100x5 SHS	
SC4	STEEL POST	89x89x4 SHS	

REVISION NOTES:

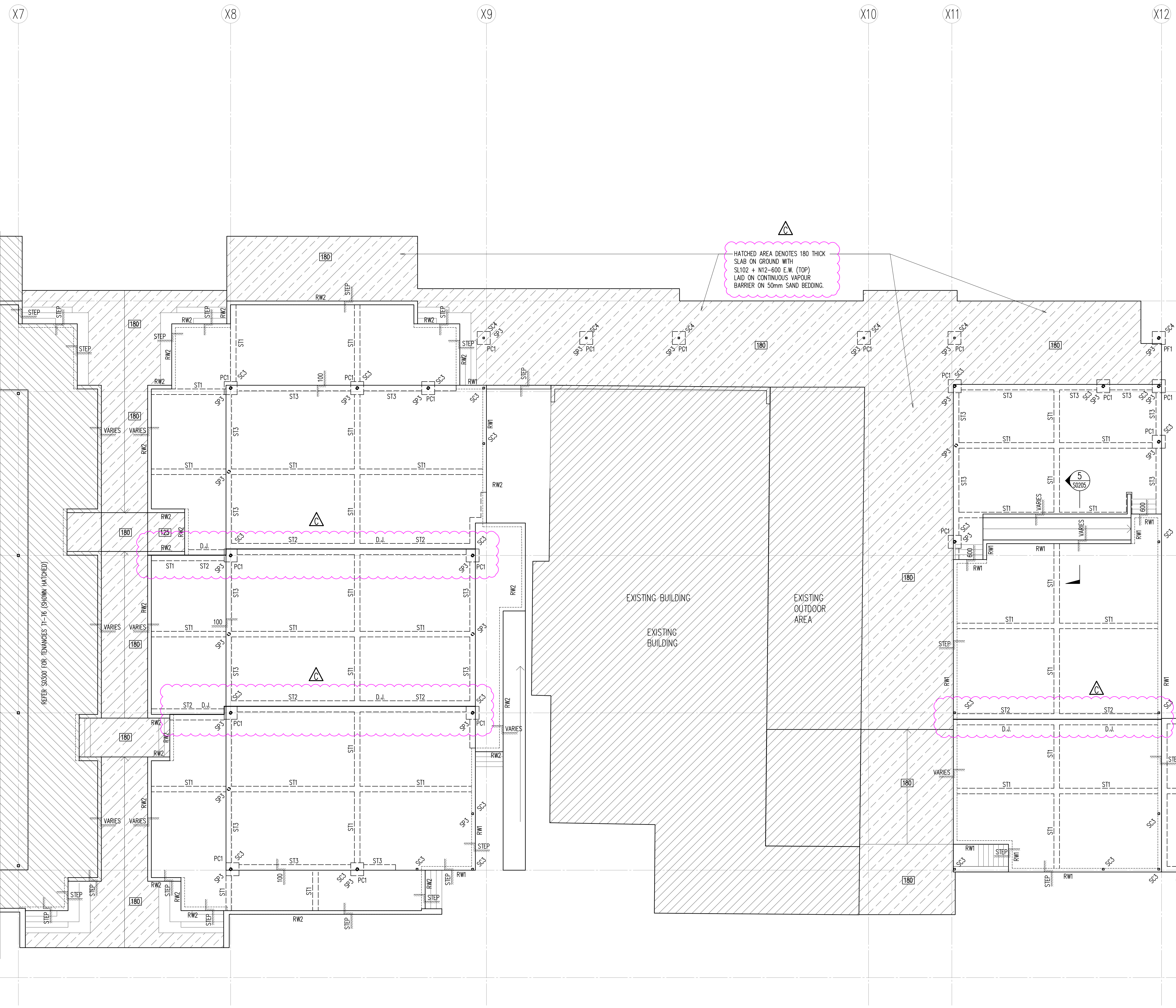
- THICKENINGS FOR S.O.G.
- 180 S.O.G.

GROUND FLOOR SLAB PLAN - 180 THICK SLAB ON GROUND U.N.O.

- SCALE 1:100
- NOTES:
- PROVIDE SL92 MESH TOP THROUGHOUT FOR ALL 180mm THICK SLAB ON GROUND U.N.O.
 - ALL SLAB ON GROUND TO BE LAID ON CONTINUOUS VAPOUR BARRIER AND 50mm SAND BEDDING.
 - REFER TO STORM WATER DRAINAGE DRAWINGS FOR LOCATION OF PUMP WELL AND SUMP PITS
 - REFER TO ARCHITECTURAL DRAWINGS FOR LEVELS, STEPS AND FOLDS.
 - "S.J." SAWN CONTROL JOINTS & "K.J." KEY JOINTS ARE INDICATIVE ONLY. BUILDER TO DECIDE ON SITE.
 - MESH SHALL BE LAPPED SUCH THAT THE TWO OUTERMOST WIRES OF ONE SHEET OVERLAP THE TWO OUTERMOST WIRES OF THE OTHER SHEET BY 25mm MINIMUM.



C ISSUED FOR C.C.											
B ISSUED FOR CO-ORDINATION											
A PRELIMINARY											
No	AMENDMENT	ENG	DRAFT	DATE	No	AMENDMENT	ENG	DRAFT	DATE	No	AMENDMENT
CLIENT: STIMSON & BAKER											
ARCHITECT: MORSON GROUP											
NOMINATED ARCHITECT - P F MORSON REGISTRATION NUMBER 8100 ACN 159 480 056, ABN 41 159 480 056 www.morsongroup.com (02) 9380 4946 PO Box 170, Potts Point, NSW 1535											
AUSTRALIAN CONSULTING ENGINEERS											
PROJECT: PROPOSED RECREATION AND TOURISM PRECINCT TENCH AVE, PENRITH											
SHEET SUBJECT: GROUND FLOOR SLAB PLAN TENANCIES T1 TO T6											
CAD FILE: LOT 3, DP 30354, TENCH AVE, PENRITH, NSW											
DATE: AUG '16											
SCALE: @ 1:1											
N.A.											
AUTHORISED: A.S.H.											
JOB No: 160652											
REV No: S0200											
REV: C											



LEGEND :

	DENOTES BLOCK WALL OVER
	DENOTES STEEL COLUMN OVER
	DENOTES EXPANSION JOINT. REFER TO DETAIL
	DENOTES SCREW PILE

FOR STRUCTURAL NOTES REFER TO DWGS S0000 & S0001

NOTES:

- DRAWINGS TO BE READ IN CONJUNCTION WITH ARCHITECTURALS.
- REFER TO ARCHITECTURAL DRAWINGS FOR ALL SETOUT, LEVELS.
- DO NOT SCALE ANY DIMENSIONS FROM STRUCTURAL DRAWINGS FOR SETTING OUT PURPOSES.

REINFORCEMENT COVER SCHEDULE				
ELEMENT	COVER (mm)			EXPOSURE CLASSIFICATION
	TOP	BOTTOM	SIDES	
FOOTINGS	50mm	50mm	50mm	A1
SLAB ON GROUND	30mm	30mm	30mm	B1

CONCRETE QUALITY				
ELEMENT	SLUMP	AGGREGATE (MAX. SIZE)	CEMENT TYPE	f _c
FOOTINGS	80mm	20mm	A	25MPa
SLAB ON GROUND	80mm	20mm	A	25MPa

PILE CAP SCHEDULE		
MARK	SIZE (LxWd mm)	REINFORCEMENT (LB & WB)
PC1	700 x 700 x 400	N16-200 BTM. E.W.

* GEOTECHNICAL ENGINEER TO CONFIRM THE SAFE BEARING CAPACITY OF THE FOUNDING MATERIAL PRIOR TO CONSTRUCTION.

NOTE:
EXISTING TOPSOIL TO BE REMOVED AND REPLACED WITH CONTROLLED FILL. NEW FILL TO BE COMPACTED TO 98% COMPACTION AND CERTIFIED BY A QUALIFIED GEOTECHNICAL ENGINEER.

NOTE:
- SCREW PILES TO BE DESIGNED BY OTHERS

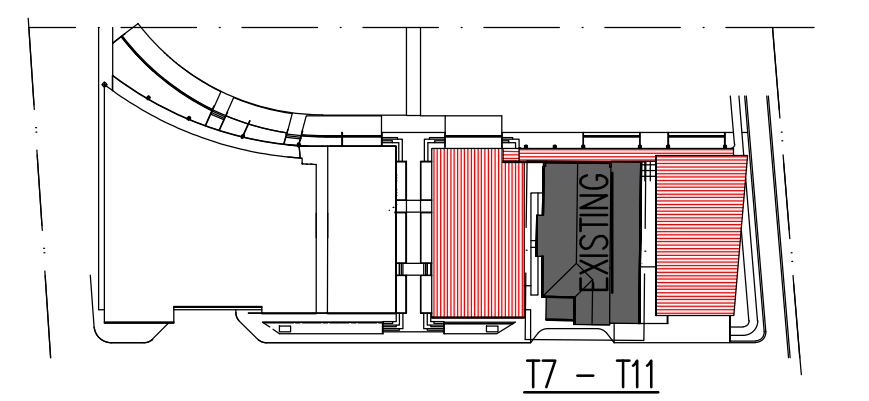
STEEL MEMBER SCHEDULE			
MARK	DESCRIPTION	SIZE	COMMENT
SC1	STEEL POST	150x150x6 SHS	
SC2	STEEL POST	125x125x5 SHS	
SC3	STEEL POST	100x100x5 SHS	
SC4	STEEL POST	89x89x4 SHS	

GROUND FLOOR SLAB PLAN – 180 THICK SLAB ON GROUND U.N.O.

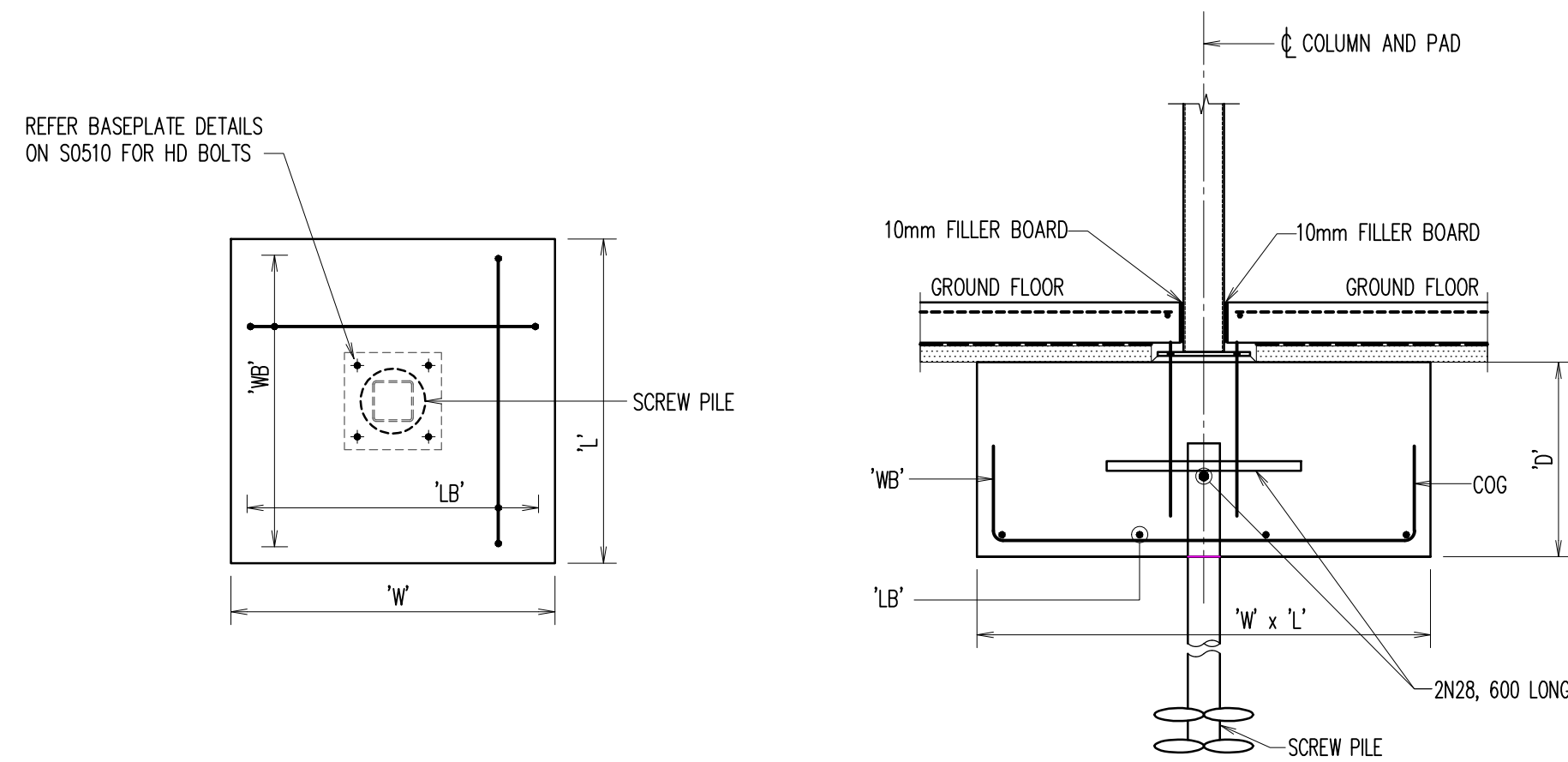
- SCALE 1:100
- NOTES:
- PROVIDE SL92 MESH TOP THROUGHOUT FOR ALL 180mm THICK SLAB ON GROUND U.N.O.
 - ALL SLAB ON GROUND TO BE LAID ON CONTINUOUS VAPOUR BARRIER AND 50mm SAND BEDDING.
 - REFER TO STORM WATER DRAINAGE DRAWINGS FOR LOCATION OF PUMP WELL AND SUMP PITS
 - REFER TO ARCHITECTURAL DRAWINGS FOR LEVELS, STEPS AND FOLDS.
 - "S.I." SAWN CONTROL JOINTS & "K.J." KEY JOINTS ARE INDICATIVE ONLY. BUILDER TO DECIDE ON SITE.
 - MESH SHALL BE LAPPED SUCH THAT THE TWO OUTERMOST WIRES OF ONE SHEET OVERLAP THE TWO OUTERMOST WIRES OF THE OTHER SHEET BY 25mm MINIMUM.

REVISION NOTES:

- THICKENINGS FOR S.O.G.
- 180 S.O.G.

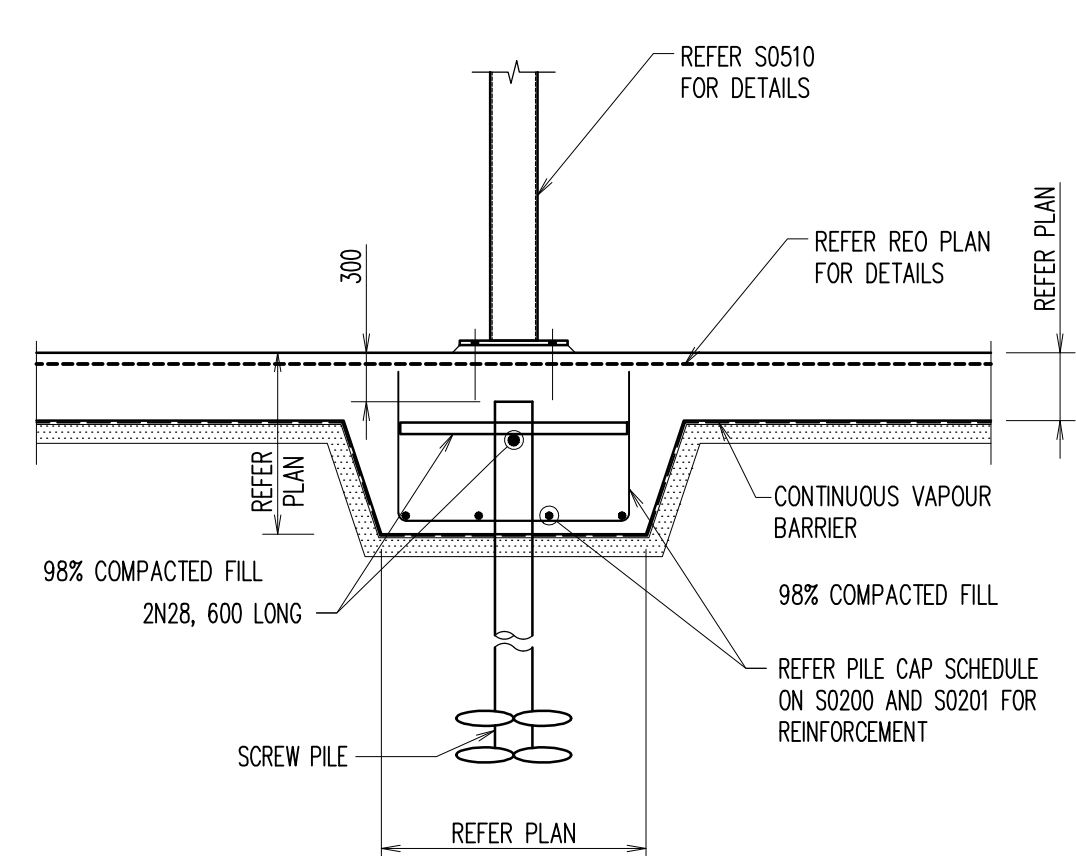


C ISSUED FOR C.C.										CLIENT STIMSON & BAKER										ARCHITECT MORSON GROUP										NOMINATED ARCHITECT - P F MORSON REGISTRATION NUMBER 8100 ACN 159 480 056, ABN 41 159 480 056 www.morsongroup.com (02) 9380 4946 PO Box 170, Potts Point, NSW 1535										AUSTRALIAN CONSULTING ENGINEERS PTY LTD ACN 059 946 1 SHOP 2-4/1 CONCORD RD NORTH STRATHFIELD NSW 2137 PH: (02) 9763 1500 FX: (02) 9763 1515 EMAIL: info@aceeng.com.au										PROJECT PROPOSED RECREATION AND TOURISM PRECINCT TENCH AVE, PENRITH										SHEET SUBJECT GROUND FLOOR SLAB PLAN TENANCIES T7 TO T11										CAD FILE LOT 3, DP 30354, TENCH AVE, PENRITH, NSW												DATE AUG '16												DRAWN A.J.B.												DESIGNED S.R.												CHECKED M.W.												JOB No 160652												ARCH. REF. N/A														AUTHORISED A.S.H.														REV S0201														C													
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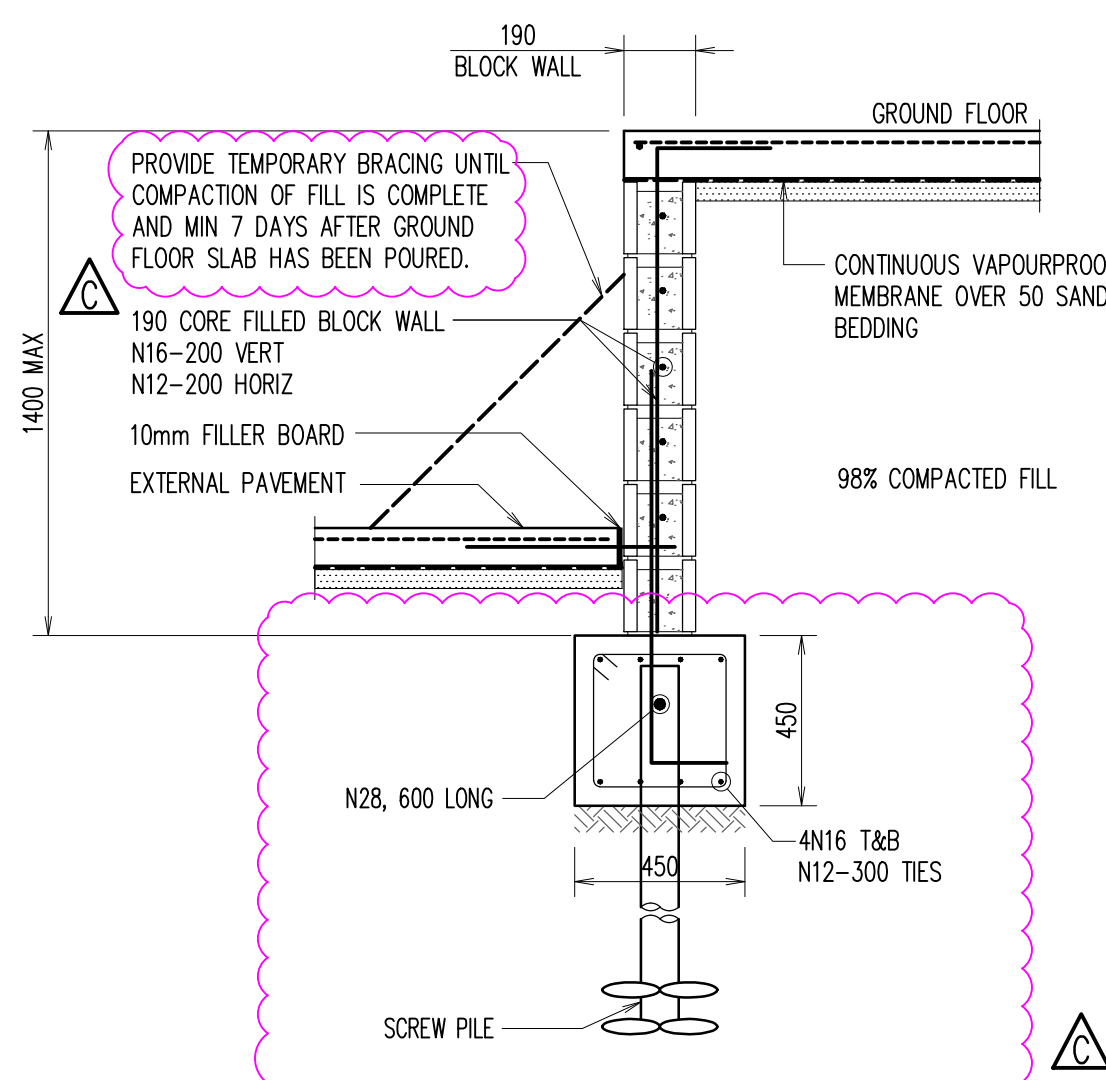


TYPICAL PAD FOOTING PLAN

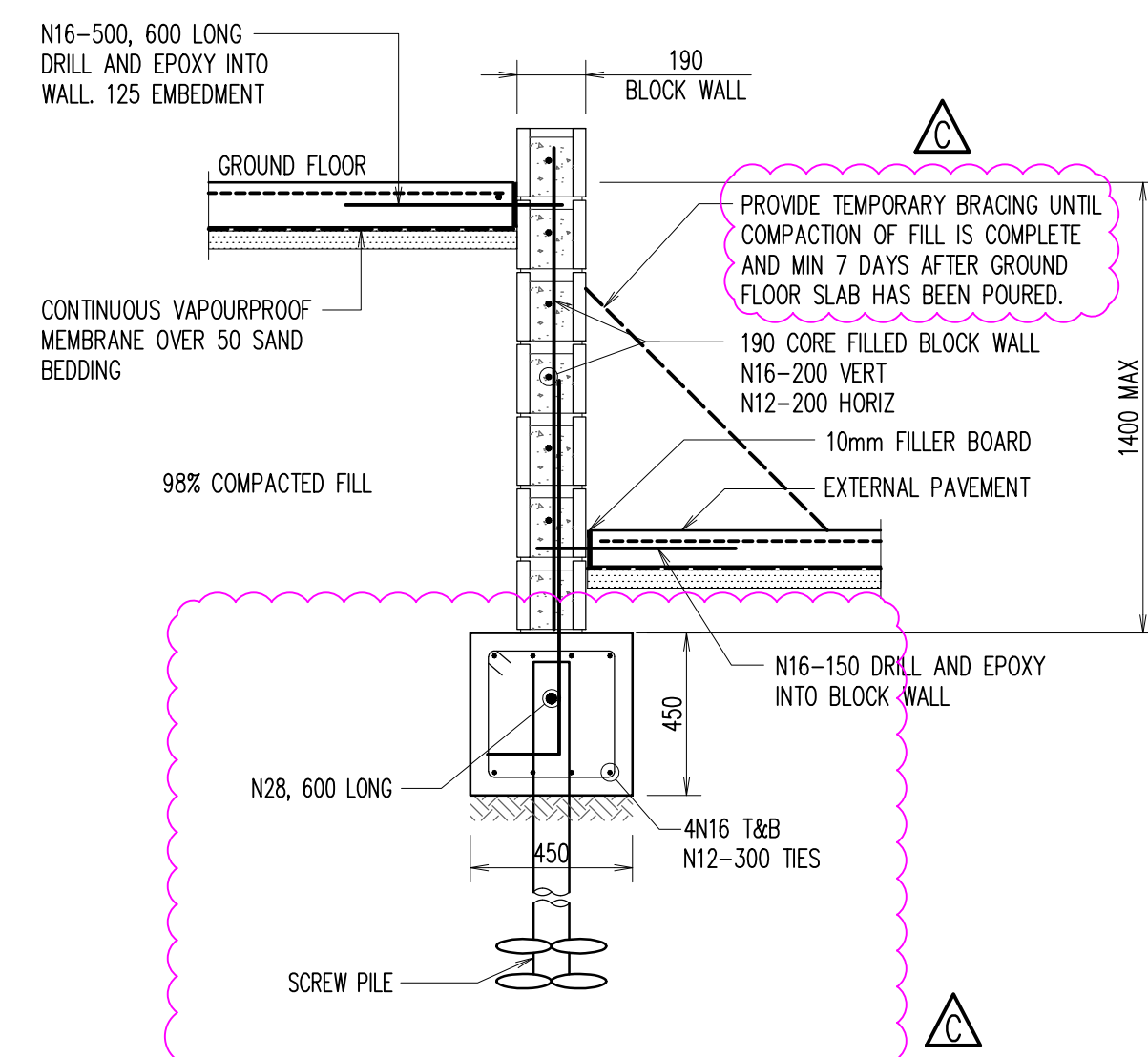
TYPICAL PAD FOOTING ELEVATION



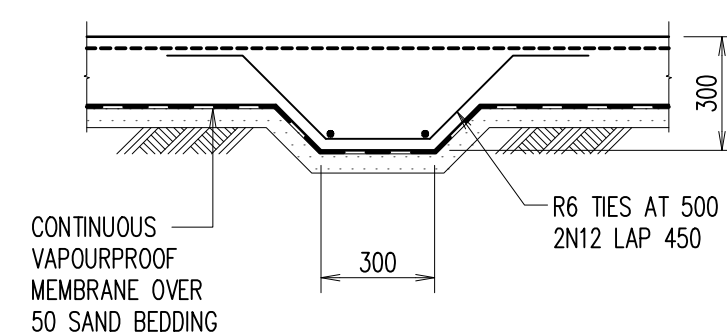
TYPICAL PILE CAP DETAIL



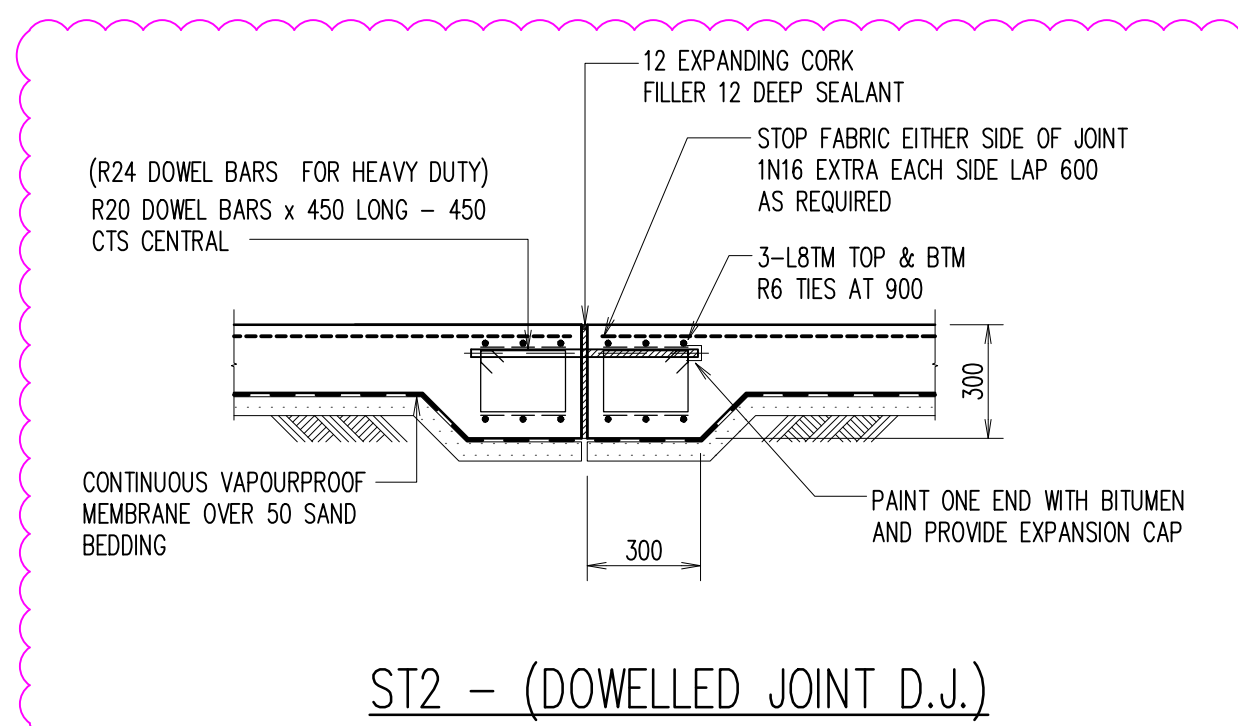
RETAINING WALL 'RW1' DETAIL



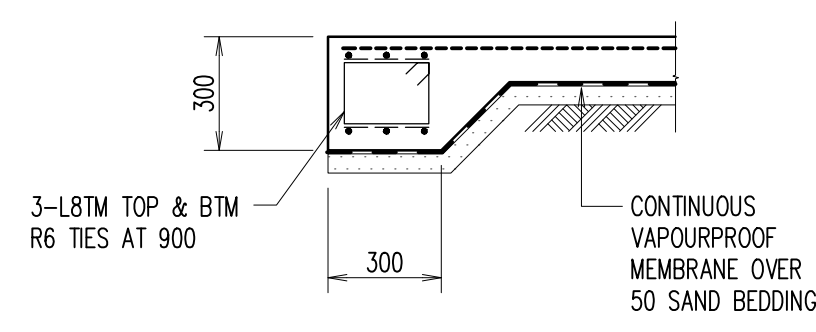
RETAINING WALL 'RW2' DETAIL



ST1



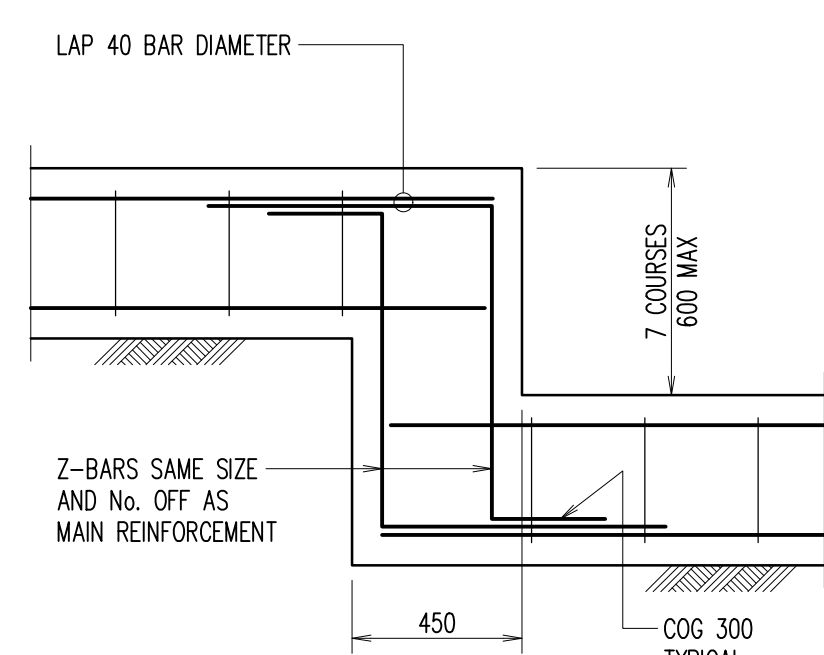
ST2 - (DOWELLED JOINT D.J.)



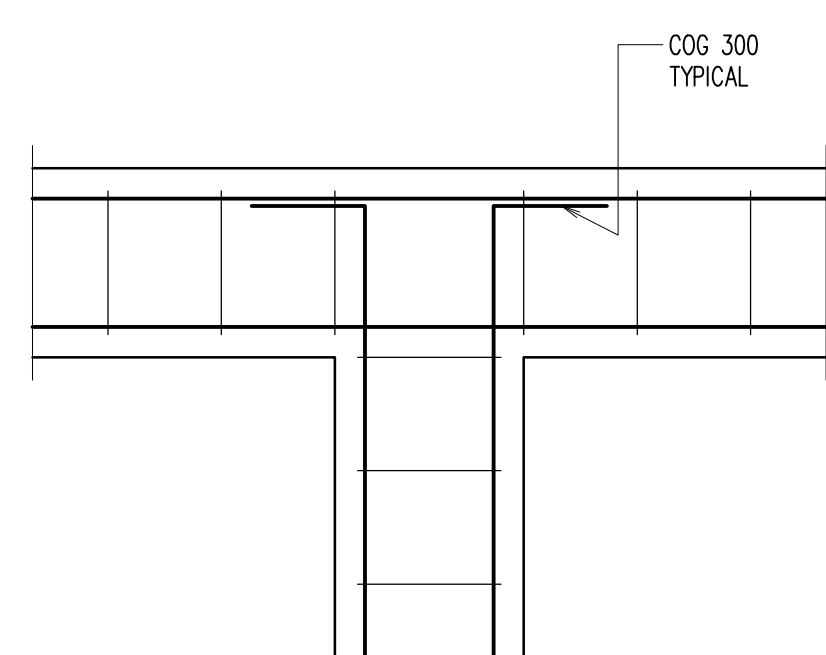
ST3

NOTE:

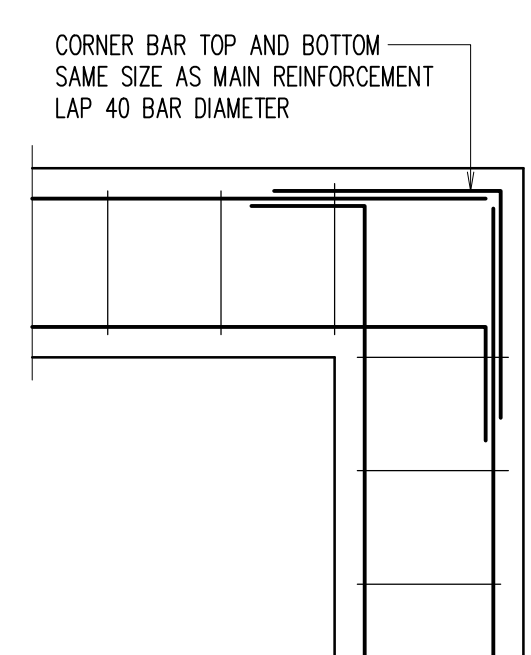
1. STRIP FOOTING TO BEAR ON NATURAL SOIL WITH MIN 200 kPa SOIL BEARING CAPACITY
2. SP UNDER STRIP FOOTING TO BE DESIGNED FOR DESIGN LOAD OF 400 kN



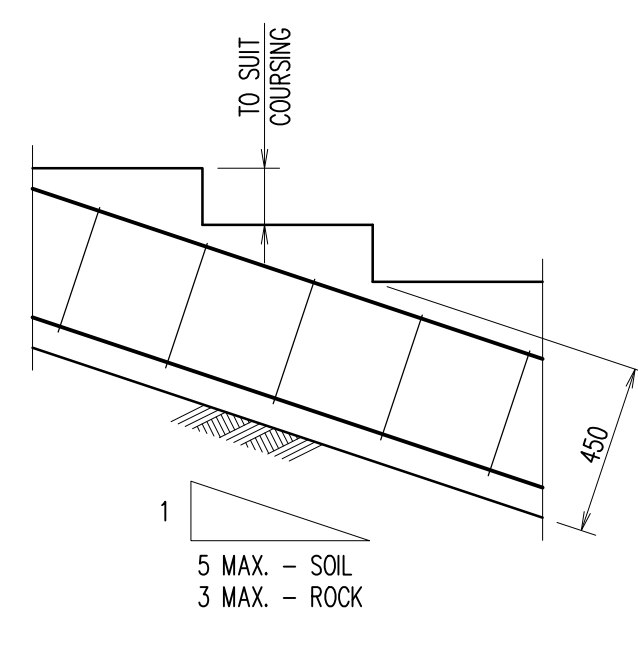
STEP



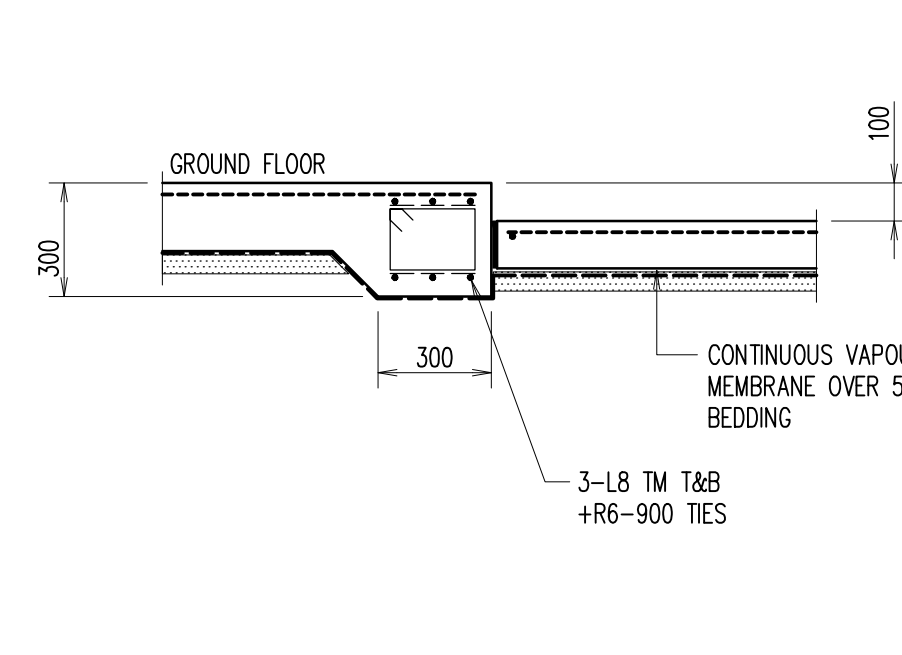
JUNCTION



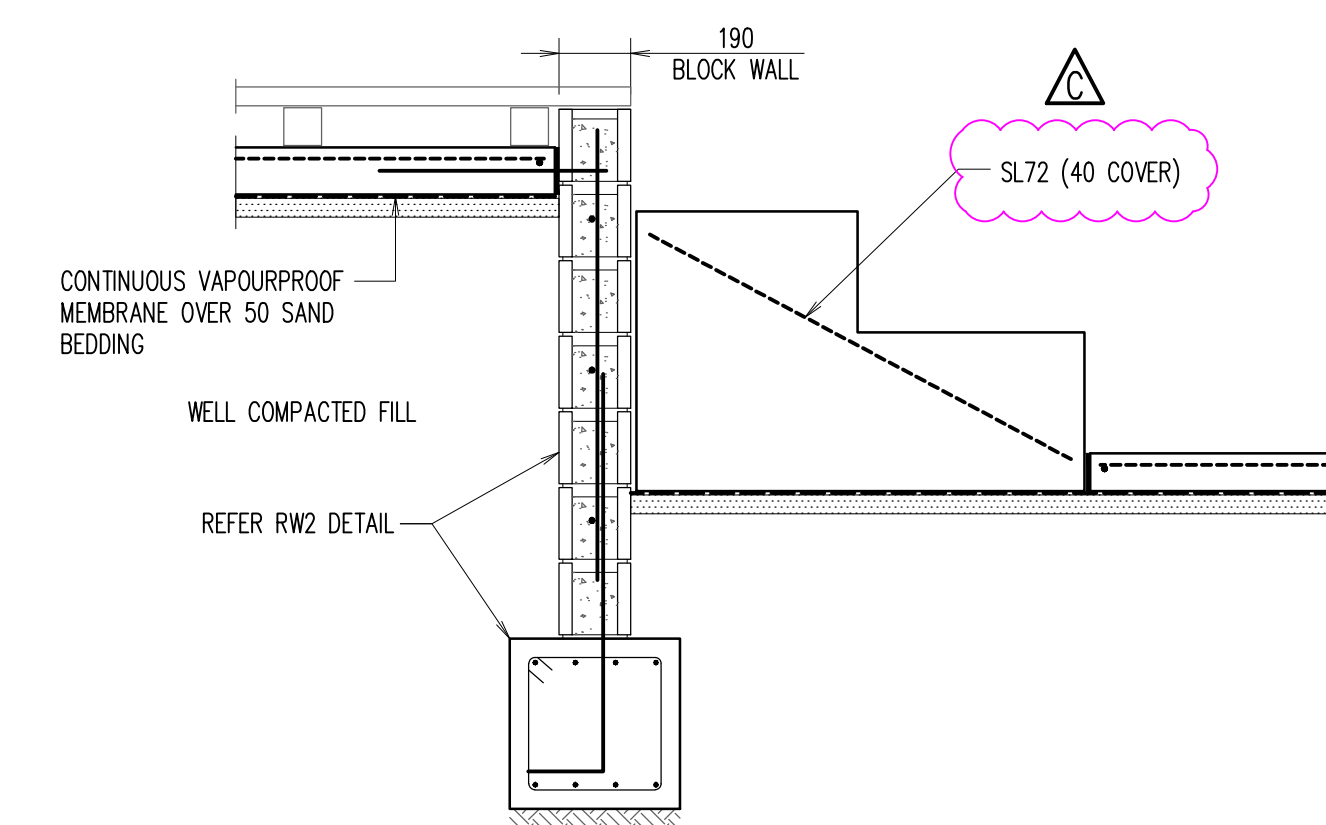
CORNER



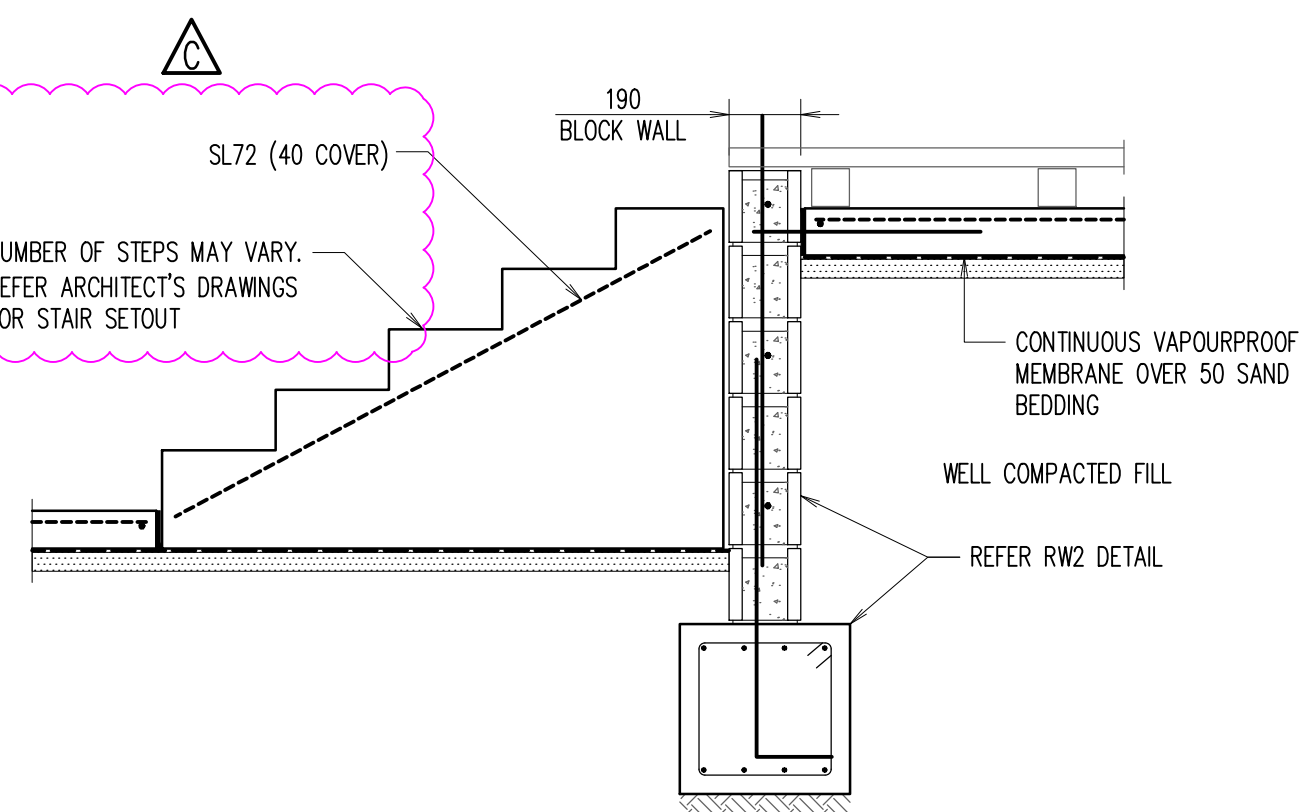
STEP - GENTLE SLOPES



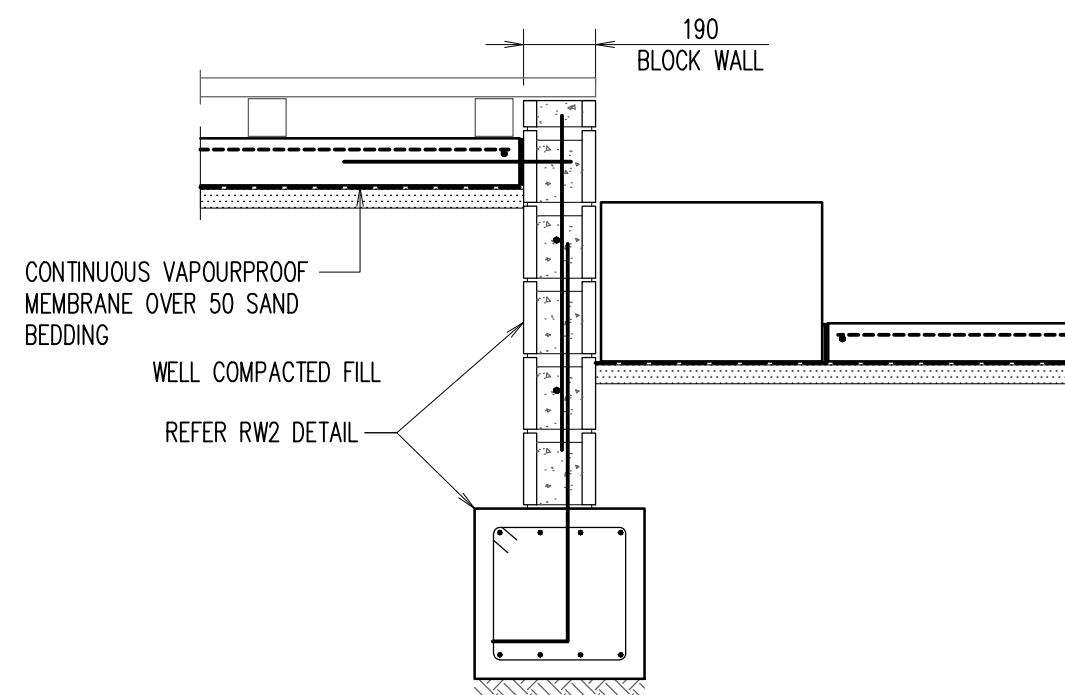
SECTION 1
SCALE 1:20



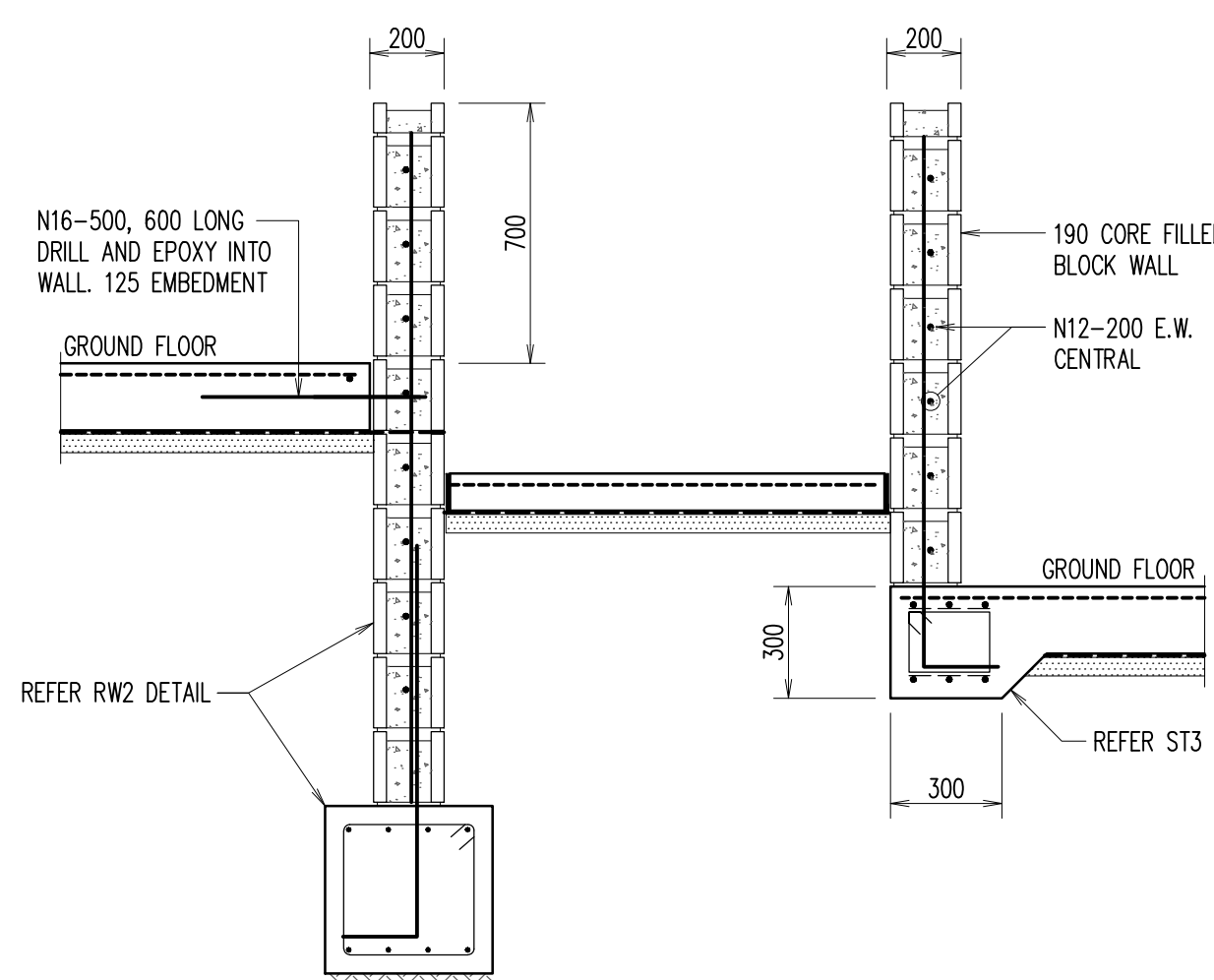
SECTION 2
SCALE 1:20



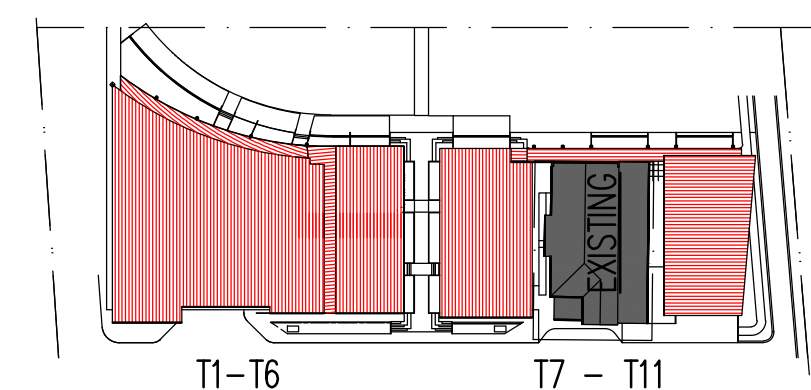
SECTION 3
SCALE 1:20



SECTION 4
SCALE 1:20



SECTION 5
SCALE 1:20



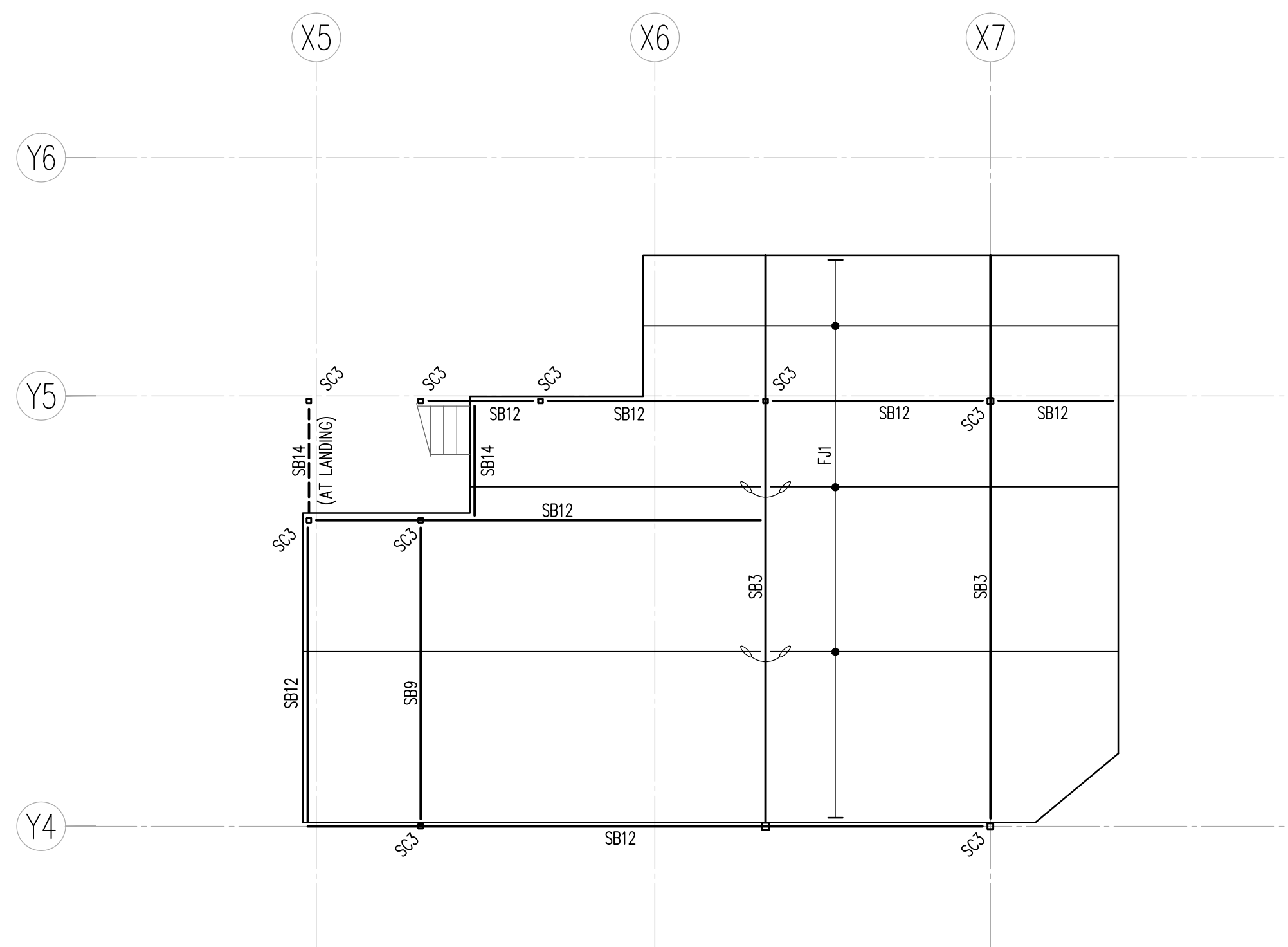
KEY PLAN

<p>CLIENT: STIMSON & BAKER</p>									
<p>ARCHITECT: MORSON GROUP</p>									
<p>NOMINATED ARCHITECT - P F MORSON REGISTRATION NUMBER 8100 ACN 159 480 056, ABN 41 159 480 056 www.morsongroup.com (02) 9380 4946 PO Box 170, Potts Point, NSW 1535</p>									
<p>PROJECT: PROPOSED RECREATION AND TOURISM PRECINCT TENCH AVE, PENRITH</p>									
<p>SHEET SUBJECT: GROUND FLOOR SLAB AND FOOTING DETAILS</p>									
<p>CAD FILE: LOT 3, DP 30354, TENCH AVE, PENRITH, NSW</p>									
<p>DATE: AUG '16, DRAWN: A.J.B., DESIGNED: S.R., CHECKED: M.W.</p>									
<p>SCALE: 0 BY: N.A., JOB No: 160652</p>									
<p>AUTHORISED: A.S.H., ENG No: S0205, REV: C</p>									

NOTES:

1. DRAWINGS TO BE READ IN CONJUNCTION WITH ARCHITECTURALS.
2. REFER TO ARCHITECTURAL DRAWINGS FOR ALL SETOUT, LEVELS.
3. DO NOT SCALE ANY DIMENSIONS FROM STRUCTURAL DRAWINGS FOR SETTING OUT PURPOSES.

MEMBERS SCHEDULE		
MARK	TYPE	SIZE
SB3	STEEL BEAM	530 UB 82
SB9	STEEL BEAM	380 PFC
SB12	STEEL BEAM	230 PFC
SB14	STEEL BEAM	200 PFC
FJ1	STEEL FLOOR JOIST	C20015 AT 500 CTRS
SC3	STEEL POST	100x100x5 SHS

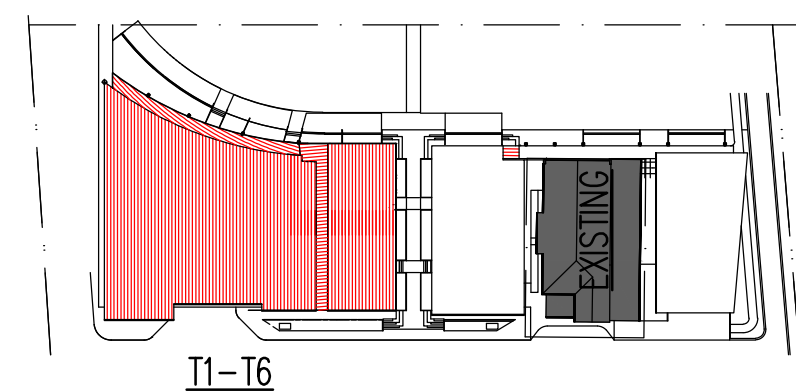


MEZZANINE FLOOR LAYOUT PLAN

SCALE 1:100

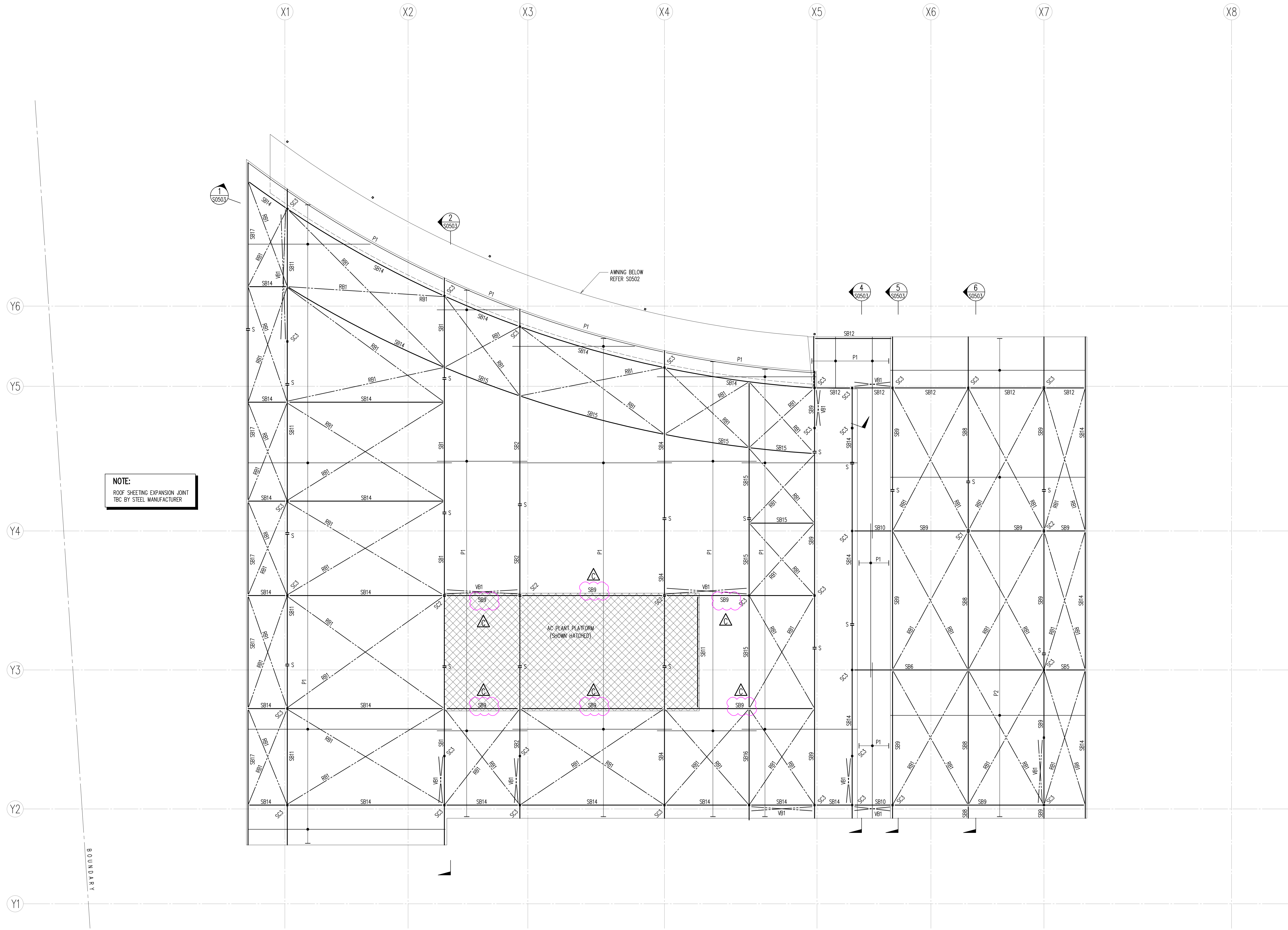
NOTES

1. DRAWINGS TO BE READ IN CONJUNCTION WITH ARCHITECTURALS.
2. REFER TO ARCHITECTURAL DRAWINGS FOR ALL SETOUT, LEVELS, FALLS ETC.
3. IF THERE ARE TIMBER WALL OVER, PROVIDE DOUBLE FLOOR JOISTS.



KEY PLAN

Attachment: Sep 23, 2016 - 8:13AM W:\2016\100000\STRUCTURAL\S0500.dwg



ROOF STEELWORK MARKING PLAN

SCALE 1:100

NOTES:

- DRAWINGS TO BE READ IN CONJUNCTION WITH ARCHITECTURALS.
- REFER TO ARCHITECTURAL DRAWINGS FOR ALL SETOUT, LEVELS, FALLS ETC.

LEGEND :

- S DENOTES BEAM SPLICE
WL DENOTES WIND LOAD (REFER PLAN FOR LOAD)

FOR STRUCTURAL NOTES REFER TO DRAWING S0000 TO S0002

NOTES:

- DRAWINGS TO BE READ IN CONJUNCTION WITH ARCHITECTURALS.
- REFER TO ARCHITECTURAL DRAWINGS FOR ALL SETOUT, LEVELS.
- DO NOT SCALE ANY DIMENSIONS FROM STRUCTURAL DRAWINGS FOR SETTING OUT PURPOSES.

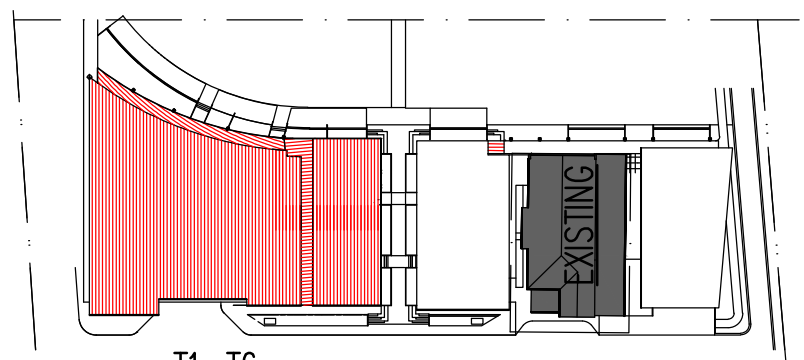
STRUCTURAL STEELWORK NOTES

- UNLESS NOTED OTHERWISE:
 - USE 10mm THICK GUSSET, FIN & END PLATES WELDED ALL ROUND.
 - ALL WELDS 6mm CONTINUOUS FILLET.
 - ALL BOLTS 20mm DIA.
 - ALL BOLTS GRADE 8.8/S, (INCLUDING PURLIN / GIRT BOLTS)
 - ALL BOLTS, INCLUDING HOLDING DOWN BOLTS ARE TO BE HOT DIP GALVANISED.
 - ALL FILLET WELDS TO BE CATEGORY GP.
 - ALL BUTT WELDS SHALL BE FULL PENETRATION, GRADE SP.
 - ALL CONNECTIONS TO HAVE A MINIMUM OF 2 BOLTS.
- BOLTING CATEGORIES ARE IDENTIFIED ON THE DRAWINGS IN THE FOLLOWING MANNER:
 - 4.8/S COMMERCIAL BOLTS OF GRADE 4.8 SNUG TIGHTENED.
 - 8.8/S HIGH STRENGTH BOLTS OF GRADE 8.8 SNUG TIGHTENED.
 - 8.8/TB HIGH STRENGTH BOLTS OF GRADE 8.8 FULLY TENSIONED TO A54100 AS A BEARING TYPE JOINT
 - 8.8/TF HIGH STRENGTH BOLTS OF GRADE 8.8 FULLY TENSIONED TO A54100 AS A FRICTION TYPE JOINT WITH FAYING SURFACES LEFT UNCOATED.
- CHP ALL WELDS FREE OF SLAG.
- CONTRACTOR IS TO CONFIRM WITH ARCHITECT AS TO WHERE EXPOSED WELDS ARE TO BE GROUND FLUSH / SMOOTH.
- PROVIDE TEMPORARY BRACING TO MAINTAIN STABILITY OF STEELWORK DURING CONSTRUCTION.
- DO NOT GROUT UNDER BASE PLATES UNTIL FIRST LEVEL STEELWORK IS PLUMB AND FIXED BY WELDING OR BOLTING.
- SUBMIT ALL SHOP DRAWINGS TO THE SUPERINTENDENT BEFORE COMMENCING FABRICATION.
- UNLESS NOTED OTHERWISE, THE FIXING OF PURLINS, GIRTS, BRIDGING, SHEETING AND ANY OTHER COMPONENT SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATION AND RECOMMENDATIONS.
- BRIDGING SHALL BE DESIGNED AND ERRECTED IN ACCORDANCE WITH THE MANUFACTURER'S REQUIREMENTS. ROD BRIDGING IS NOT ACCEPTABLE UNLESS APPROVED IN WRITING.
- PURLINS / GIRTS ARE TO BE SCREW FIXED TO THE SHEETING / CLADDING TO PROVIDE LATERAL RESTRAINT TO THE PURLINS IN ACCORDANCE WITH THE MANUFACTURER'S REQUIREMENTS.
- PROVIDE DOUBLE PURLINS AT EXPANSION JOINTS IN ROOF SHEETING.
- FOR BRIDGING MEMBERS TO PURLINS AT CURVED ROOF AREAS PROVIDE BRIDGING SUITABLE FOR CURVED ROOFS TO MANUFACTURER'S DETAILS.
- PURLIN / GIRT SIZES SHOWN ARE BASED ON THE DESIGN CHARTS BY BHP BUILDING PRODUCTS, INCLUDING RESTRAINT FROM ROOF SHEETING AND BRIDGING. THE MANUFACTURER SHOULD CONFIRM ANY ALTERNATIVE SYSTEMS USED ARE EQUIVALENT OR REDESIGN PURLINS / GIRTS TO PROVIDE AN EQUIVALENT SYSTEM.

STEEL MEMBER SCHEDULE

MARK	DESCRIPTION	SIZE	COMMENT
SB1	STEEL BEAM	610 UB 125	
SB2	STEEL BEAM	530 UB 92	
SB3	STEEL BEAM	530 UB 82	
SB4	STEEL BEAM	460 UB 82	
SB5	STEEL BEAM	460 UB 67	
SB6	STEEL BEAM	460 UB 67	CRANKED VERTICALLY
SB7	STEEL BEAM	410 UB 60	
SB8	STEEL BEAM	310 UB 40	
SB9	STEEL BEAM	380 PFC	
SB10	STEEL BEAM	380 PFC	CRANKED VERTICALLY
SB11	STEEL BEAM	250 PFC	
SB12	STEEL BEAM	230 PFC	
SB13	STEEL BEAM	230 PFC	CRANKED VERTICALLY
SB14	STEEL BEAM	200 PFC	
SB15	STEEL BEAM	180 PFC	
SB16	STEEL BEAM	150 PFC	
SB17	STEEL BEAM	150 PFC	
SC1	STEEL POST	150x150x6 SHS	
SC2	STEEL POST	125x125x5 SHS	
SC3	STEEL POST	100x100x5 SHS	
SC4	STEEL POST	89x89x4 SHS	
RB1	STEEL ROD BRACING	#20 ROD	
VB1	BRACING	50x5 EA	VERTICAL BRACING
P1	STEEL PURLIN	Z20015 @ 1000 CTRS	2 ROWS OF BRIDGING
P2	STEEL PURLIN	Z15015 @ 1000 CTRS	2 ROWS OF BRIDGING
P3	STEEL PURLIN	C20015 @ 1000 CTRS	2 ROWS OF BRIDGING

NOTE: LAP PURLINS AT BEAMS TO CREATE CONTINUOUS PURLIN MEMBERS



KEY PLAN

No	AMENDMENT	ENG	DRAFT	DATE	No	AMENDMENT	ENG	DRAFT	DATE
C	ISSUED FOR C.C.	S.R.	A.J.B.	23.09.16					
B	ISSUED FOR CO-ORDINATION	S.R.	A.J.B.	02.09.16					
A	ISSUED FOR CO-ORDINATION	S.R.	A.J.B.	25.08.16					

CLIENT	STIMSON & BAKER
--------	-----------------

ARCHITECT	MORSON GROUP
NOMINATED ARCHITECT - P F MORSON	REGISTRATION NUMBER 8100
ACN 159 480 056, ABN 41 159 480 056	www.morsongroup.com
(02) 9380 4946	PO Box 170, Potts Point, NSW 1535

PROJECT	PROPOSED RECREATION AND TOURISM PRECINCT
TENCH AVE, PENRITH	

SHEET SUBJECT	ROOF STEELWORK MARKING PLAN
TENANCIES T1 TO T6	

CAD FILE	LOT 3, DP 30354, TENCH AVE, PENRITH, NSW
DATE	AUG '16
DRAWN	A.J.B.
DESIGNED	S.R.
CHECKED	M.W.
SCALE @ B1	N.A.
JOB No	160652
ARCH. REF.	N/A
AUTHORISED	A.S.H.
ENG No	S0500
REV	C

S
—|—
WL

DENOTES BEAM SPLICE
DENOTES WIND LOAD (REFER PLAN FOR LOAD)

1. DRAWINGS TO BE READ IN CONJUNCTION WITH ARCHITECTURALS.
2. REFER TO ARCHITECTURAL DRAWINGS FOR ALL SETOUT, LEVELS.
3. DO NOT SCALE ANY DIMENSIONS FROM STRUCTURAL DRAWINGS FOR SETTING OUT PURPOSES.

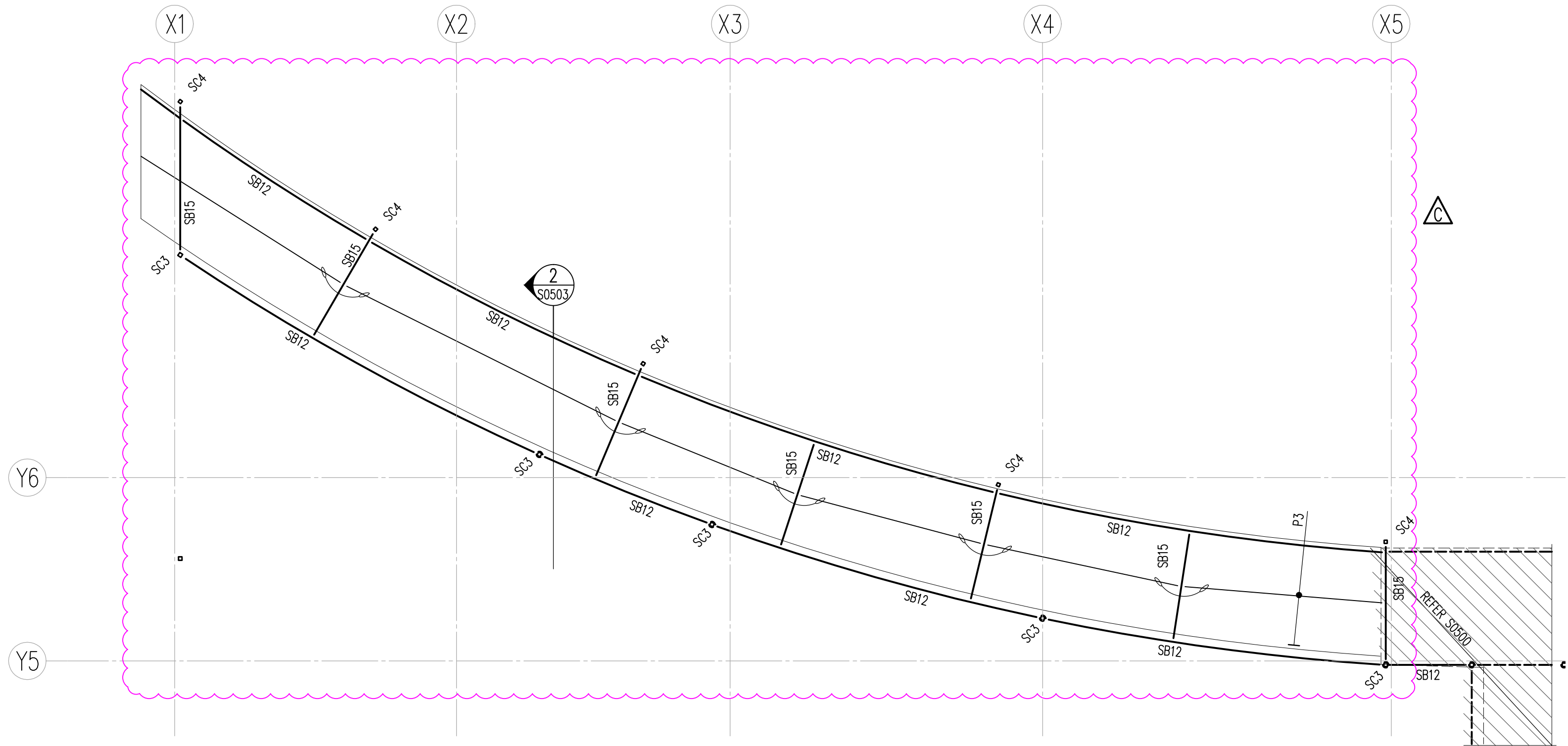
NOTE: LAP PURLINS AT BEAMS TO CREATE CONTINUOUS PURLIN MEMBERS



SCALE 1:100
NOTES:
1. DRAWINGS TO BE READ IN CONJUNCTION WITH ARCHITECTURALS.
2. REFER TO ARCHITECTURAL DRAWINGS FOR ALL SETOUT, LEVELS, FALLS ETC.

[illegible]

Awning.dwg Sep 23, 2016 - 8:13AM W:\2016\06052\STRUCTURAL\06052.dwg

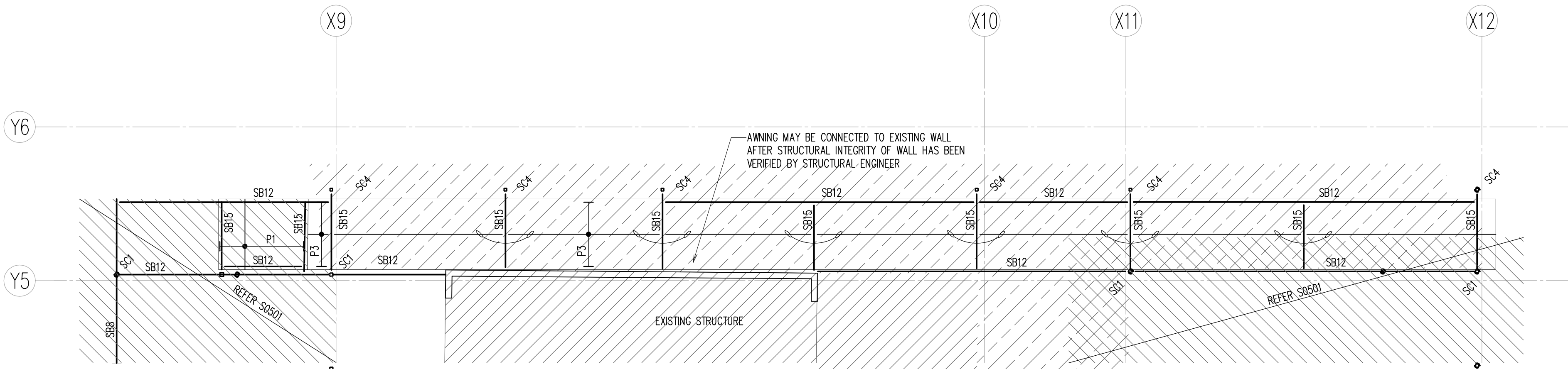


AWNING LAYOUT PLAN – TENANCIES T1–T6

SCALE 1:100

NOTES:

1. ALL FALLS AND LEVELS TO ARCHITECTS DETAILS.
2. STEEL ROOF DESIGN IS INDICATIVE SUBJECT TO CONTRACTOR PREPARING SHOP DRAWINGS & APPROVED BY ENGINEER.



AWNING LAYOUT PLAN – TENANCIES T7–T11

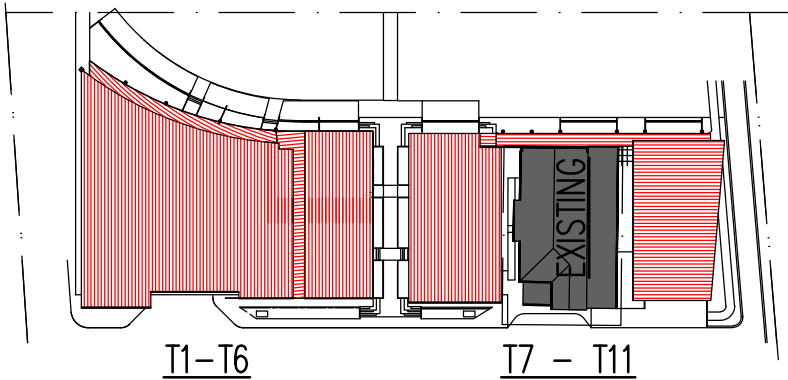
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NOTES:

1. ALL FALLS AND LEVELS TO ARCHITECTS DETAILS.
2. STEEL ROOF DESIGN IS INDICATIVE SUBJECT TO CONTRACTOR PREPARING SHOP DRAWINGS & APPROVED BY ENGINEER.

STEEL MEMBER SCHEDULE			
MARK	DESCRIPTION	SIZE	COMMENT
SB1	STEEL BEAM	610 UB 125	
SB2	STEEL BEAM	530 UB 92	
SB3	STEEL BEAM	530 UB 82	
SB4	STEEL BEAM	460 UB 82	
SB5	STEEL BEAM	460 UB 67	
SB6	STEEL BEAM	460 UB 67	CRANKED VERTICALLY
SB7	STEEL BEAM	410 UB 60	
SB8	STEEL BEAM	310 UB 40	
SB9	STEEL BEAM	380 PFC	
SB10	STEEL BEAM	380 PFC	CRANKED VERTICALLY
SB11	STEEL BEAM	250 PFC	
SB12	STEEL BEAM	230 PFC	
SB13	STEEL BEAM	230 PFC	CRANKED VERTICALLY
SB14	STEEL BEAM	200 PFC	
SB15	STEEL BEAM	180 PFC	
SB16	STEEL BEAM	150 PFC	
SB17	STEEL BEAM	150 PFC	
SC1	STEEL POST	150x150x6 SHS	
SC2	STEEL POST	125x125x5 SHS	
SC3	STEEL POST	100x100x5 SHS	
SC4	STEEL POST	89x89x4 SHS	
RB1	STEEL ROD BRACING	#20 ROD	
VB1	BRACING	50x5 EA	VERTICAL BRACING
P1	STEEL PURLIN	Z20015 @ 1000 CTRS	2 ROWS OF BRIDGING
P2	STEEL PURLIN	Z15015 @ 1000 CTRS	2 ROWS OF BRIDGING
P3	STEEL PURLIN	C20015 @ 1000 CTRS	2 ROWS OF BRIDGING

NOTE: LAP PURLINS AT BEAMS TO CREATE CONTINUOUS PURLIN MEMBERS



PRELIMINARY
FOR REVIEW

No	AMENDMENT	ENG	DRAFT	DATE	No	AMENDMENT	ENG	DRAFT	DATE
C	ISSUED FOR C.C.	S.R.	A.J.B.	23.09.16					
B	ISSUED FOR CO-ORDINATION	S.R.	A.J.B.	02.09.16					
A	PRELIMINARY	S.R.	A.J.B.	25.08.16					

CLIENT	STIMSON & BAKER
--------	-----------------

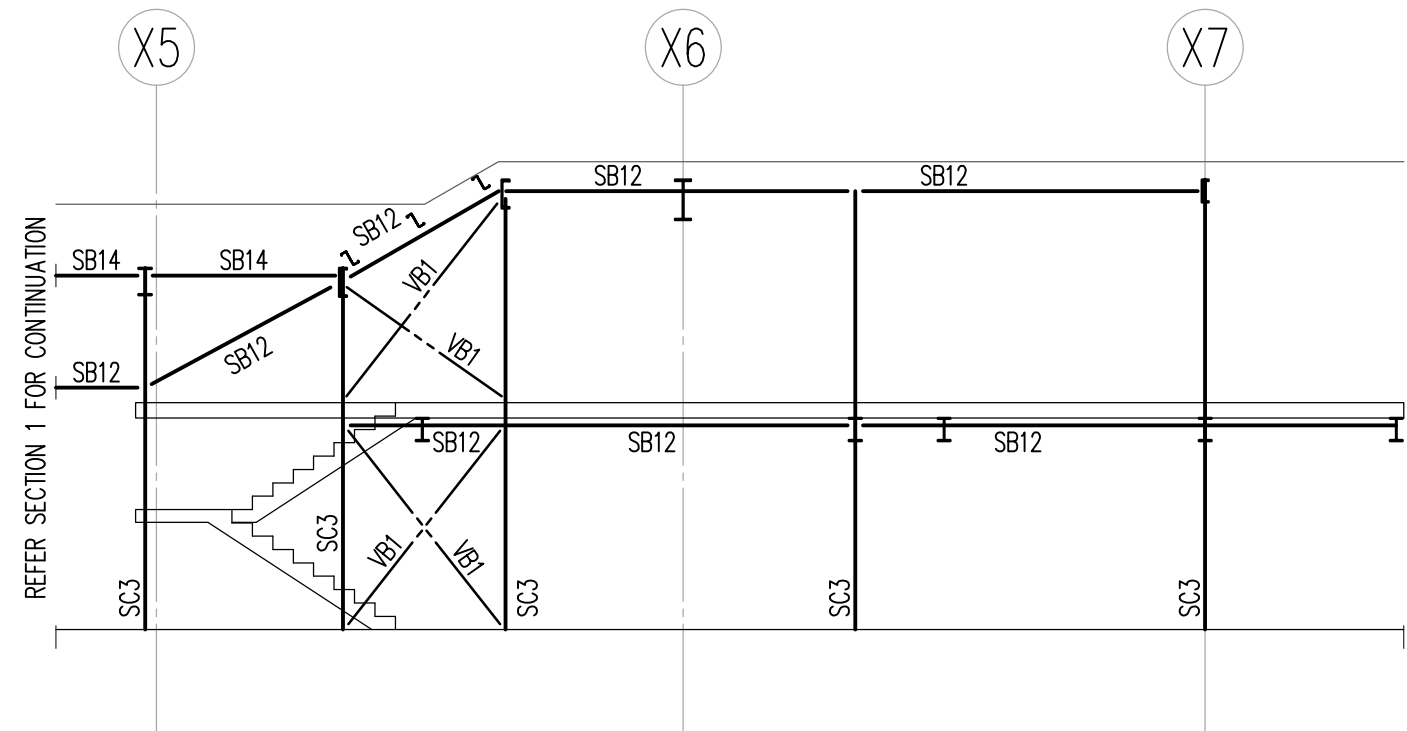
ARCHITECT	MORSON GROUP
NOMINATED ARCHITECT - P F MORSON	REGISTRATION NUMBER 8100
ACN 159 480 056, ABN 41 159 480 056	www.morsongroup.com
(02) 9380 4946	PO Box 170, Potts Point, NSW 1535

ARCHITECT	AUSTRALIAN CONSULTING ENGINEERS
PTY LTD - A.C.N. 084 059 941	SHOP 2-4/1 CONCORD RD NORTH STRATHFIELD NSW 2137
PH (02) 9763 1500 FX (02) 9763 1515	EMAIL: info@aceeng.com.au

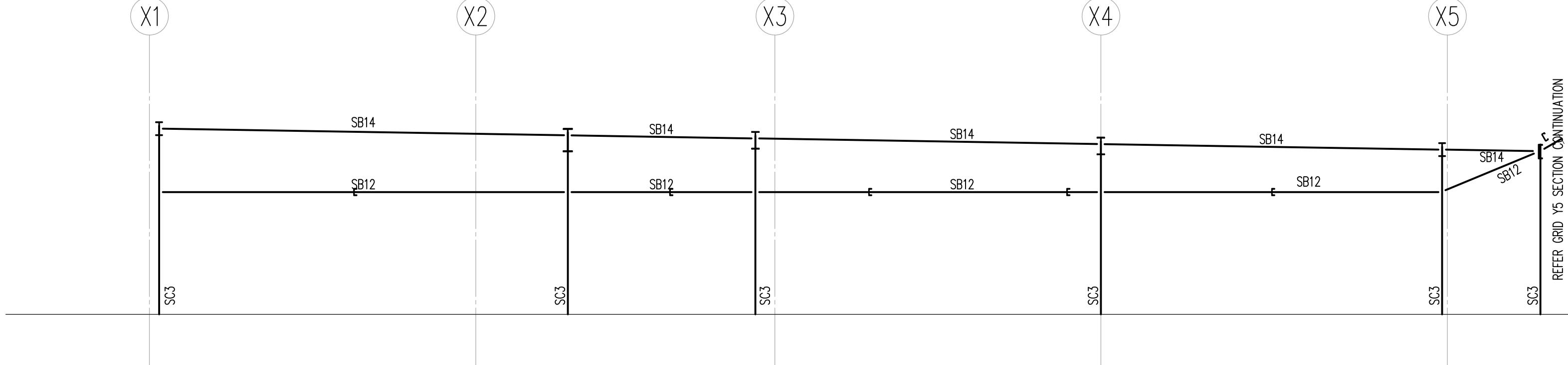
PROJECT	PROPOSED RECREATION AND TOURISM PRECINCT TENCH AVE, PENRITH
---------	--

SHEET SUBJECT	AWNING STEELWORK MARKING PLANS
ARCH. REF.	N/A

CAD FILE	LOT 3, DP 30354, TENCH AVE, PENRITH, NSW
DATE	AUG '16
SCALE @ BY	N.A.
AUTHORISED	A.S.H.
DESIGNED	A.J.B.
CHECKED	M.W.
JOB No	160652
ENG No	S0502
REV	C



GRID Y5 SECTION

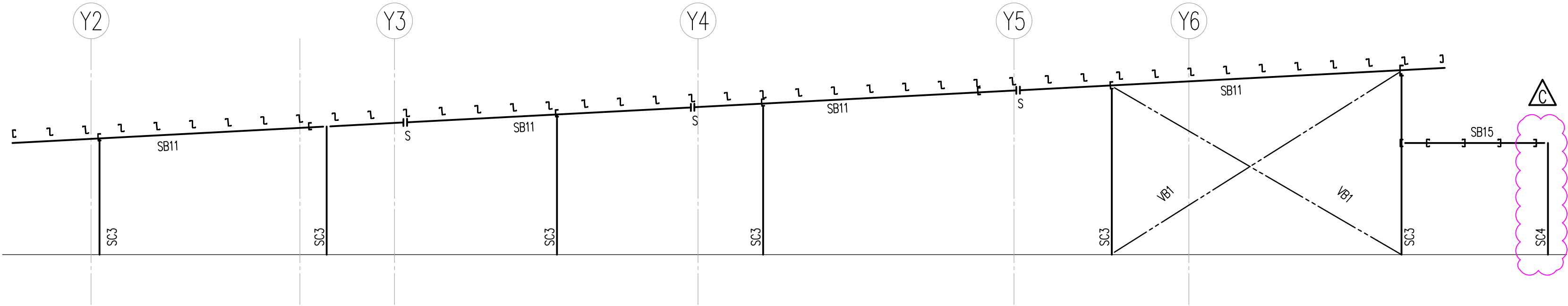


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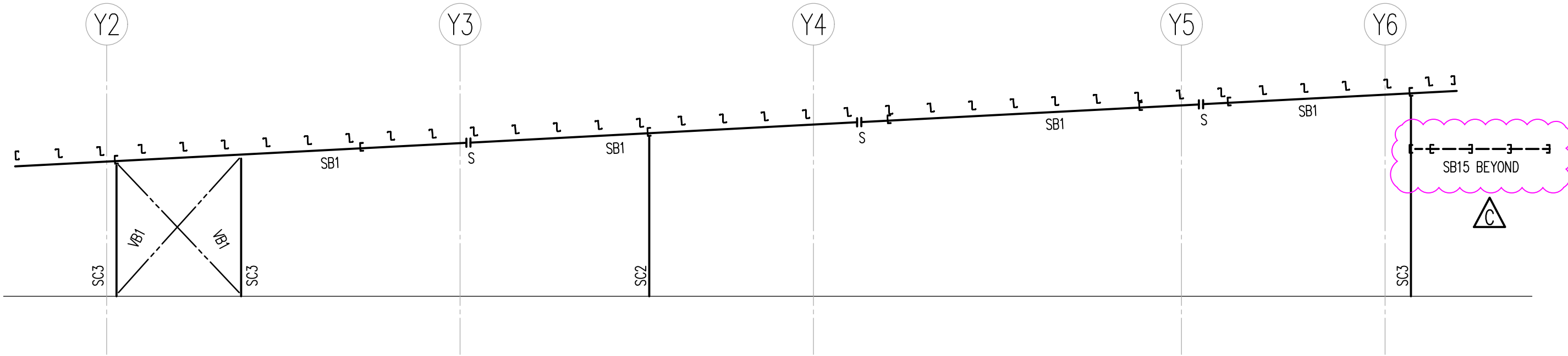
STEEL MEMBER SCHEDULE			
MARK	DESCRIPTION	SIZE	COMMENT
SB1	STEEL BEAM	610 UB 125	
SB2	STEEL BEAM	530 UB 92	
SB3	STEEL BEAM	530 UB 82	
SB4	STEEL BEAM	460 UB 82	
SB5	STEEL BEAM	460 UB 67	
SB6	STEEL BEAM	460 UB 67	CRANKED VERTICALLY
SB7	STEEL BEAM	410 UB 60	
SB8	STEEL BEAM	310 UB 40	
SB9	STEEL BEAM	380 PFC	
SB10	STEEL BEAM	380 PFC	CRANKED VERTICALLY
SB11	STEEL BEAM	250 PFC	
SB12	STEEL BEAM	230 PFC	
SB13	STEEL BEAM	230 PFC	CRANKED VERTICALLY
SB14	STEEL BEAM	200 PFC	
SB15	STEEL BEAM	180 PFC	
SB16	STEEL BEAM	150 PFC	
SB17	STEEL BEAM	150 PFC	

STEEL MEMBER SCHEDULE			
MARK	DESCRIPTION	SIZE	COMMENT
SC1	STEEL POST	150x150x6 SHS	
SC2	STEEL POST	125x125x5 SHS	
SC3	STEEL POST	100x100x5 SHS	
SC4	STEEL POST	89x89x4 SHS	
RB1	STEEL ROD BRACING	#20 ROD	
VB1	BRACING	50x5 EA	VERTICAL BRACING
P1	STEEL PURLIN	Z20015 @ 1000 CTRS	2 ROWS OF BRIDGING
P2	STEEL PURLIN	Z15015 @ 1000 CTRS	2 ROWS OF BRIDGING
P3	STEEL PURLIN	C20015 @ 1000 CTRS	2 ROWS OF BRIDGING

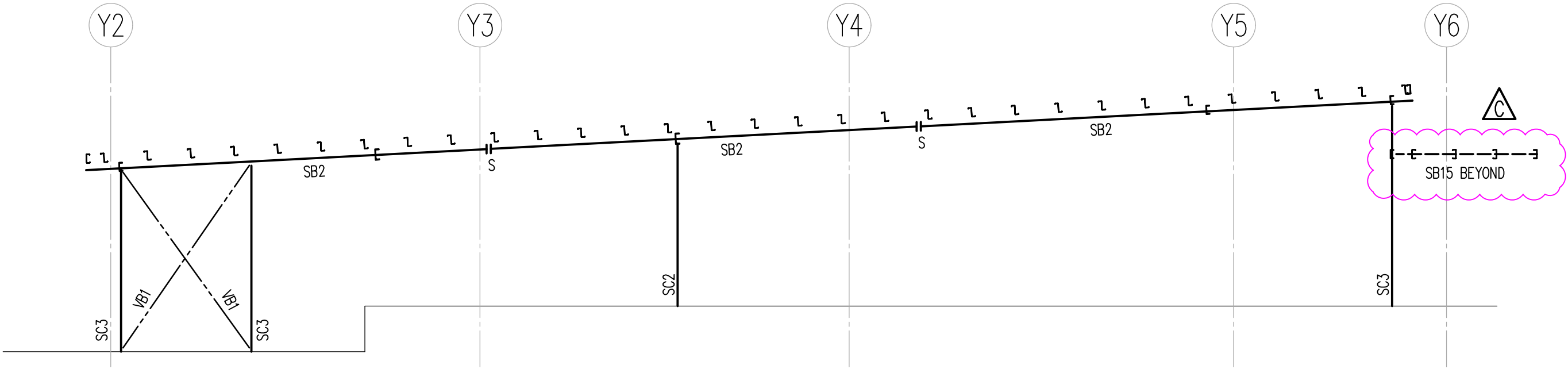
NOTE: LAP PURLINS AT BEAMS TO CREATE CONTINUOUS PURLIN MEMBERS



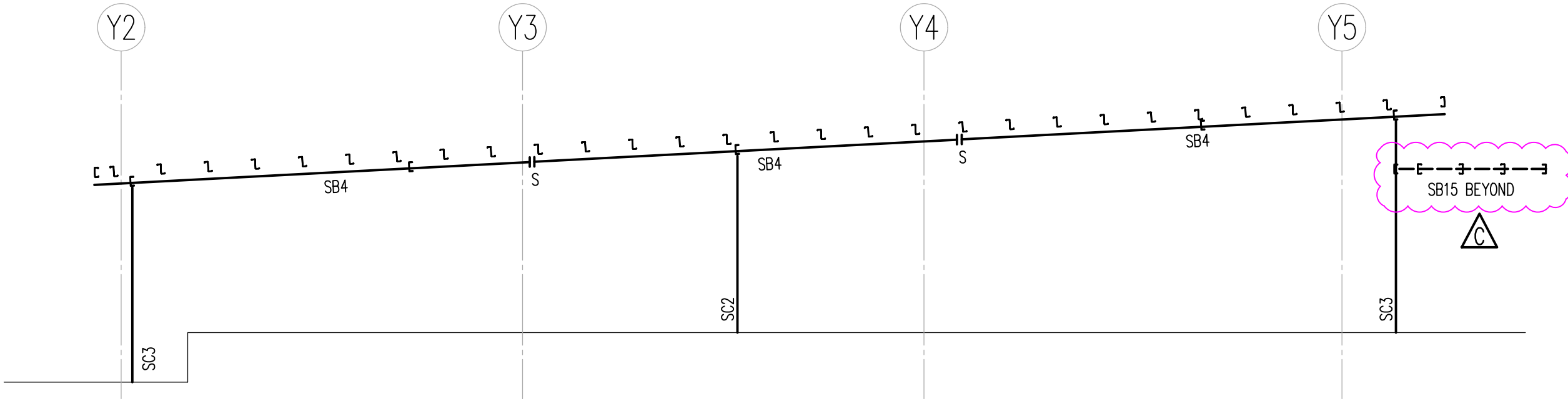
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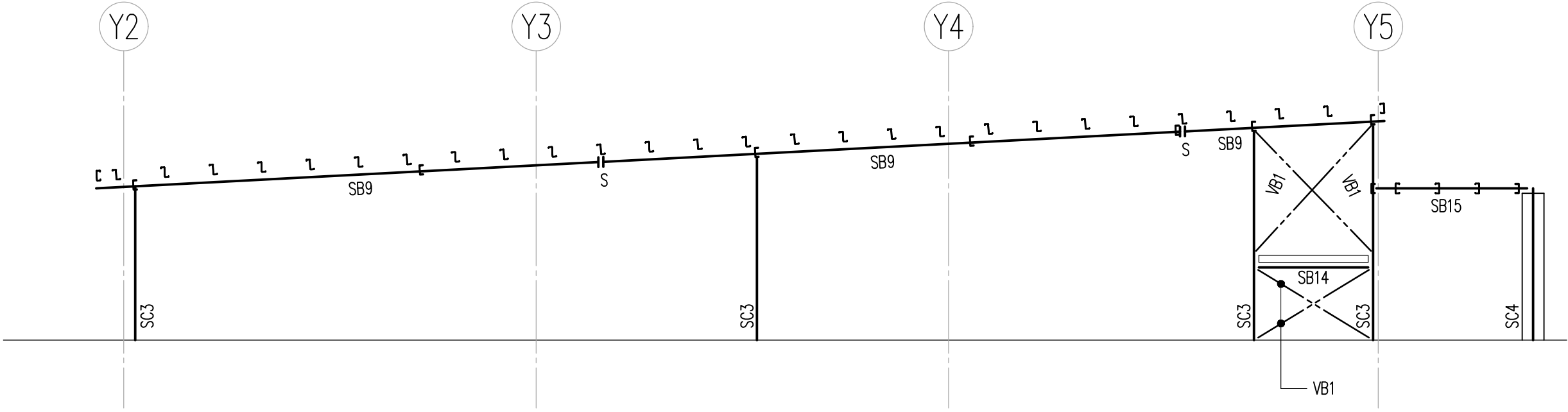
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SCALE 1:20



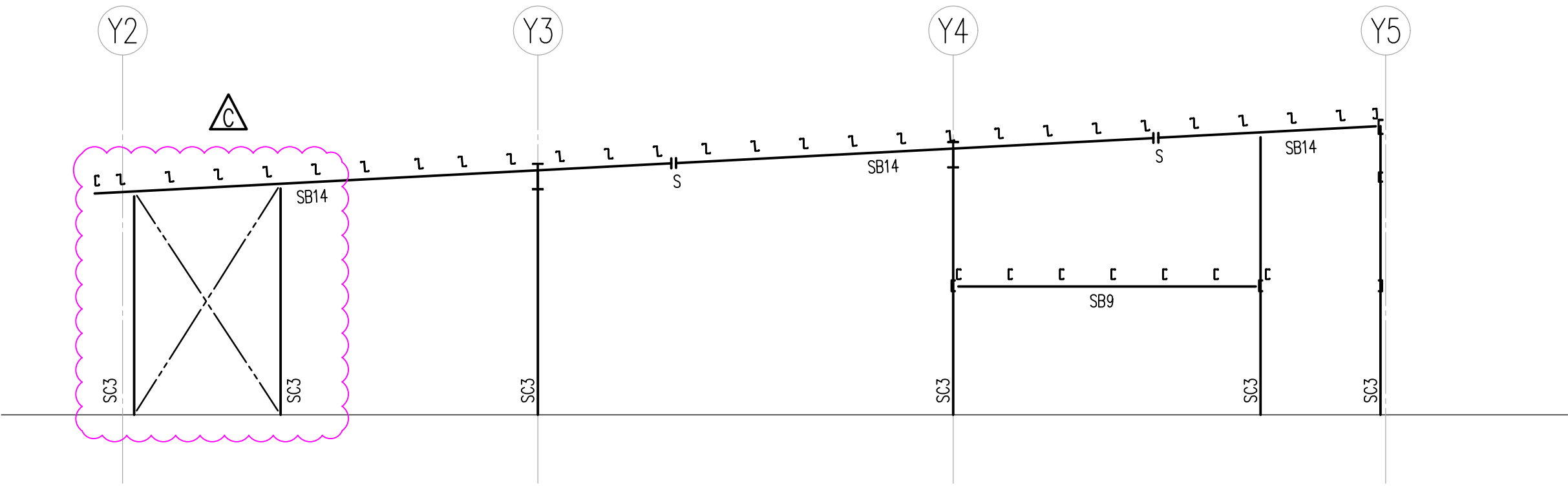
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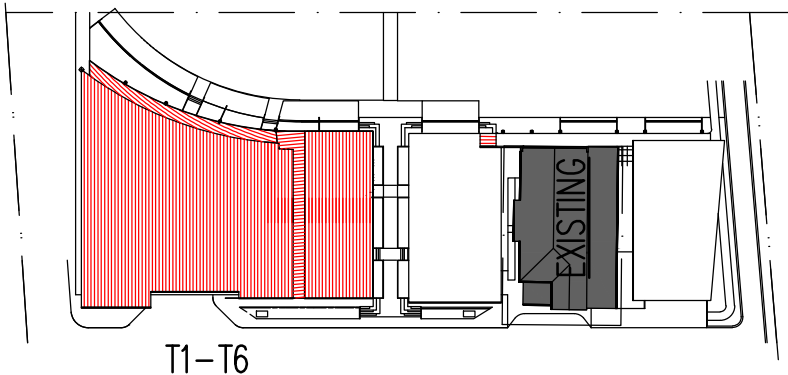
GRID X4 SECTION



GRID X5 SECTION



SECTION 4
SCALE 1:20



KEY PLAN

No	AMENDMENT	ENG	DRAFT	DATE	No	AMENDMENT	ENG	DRAFT	DATE
C	ISSUED FOR C.C.	S.R.	A.J.B.	23.09.16					
B	ISSUED FOR CO-ORDINATION	S.R.	A.J.B.	02.09.16					
A	PRELIMINARY	S.R.	A.J.B.	25.08.16					

CLIENT	STIMSON & BAKER
--------	-----------------

ARCHITECT

MORSON GROUP

NOMINATED ARCHITECT - P F MORSON
REGISTRATION NUMBER 8100
ACN 159 480 056, ABN 41 159 480 056
www.morsongroup.com
(02) 9380 4946
PO Box 170, Potts Point, NSW 1535

ENGINEERS

AUSTRALIAN CONSULTING ENGINEERS

PTTY LTD - A.C.N. 084 059 941
SHOP 2-4/1 CONCORD RD NORTH STRATHFIELD NSW 2137
PH: (02) 9763 1500 FX: (02) 9763 1515
EMAIL: info@aceeng.com.au

PROJECT

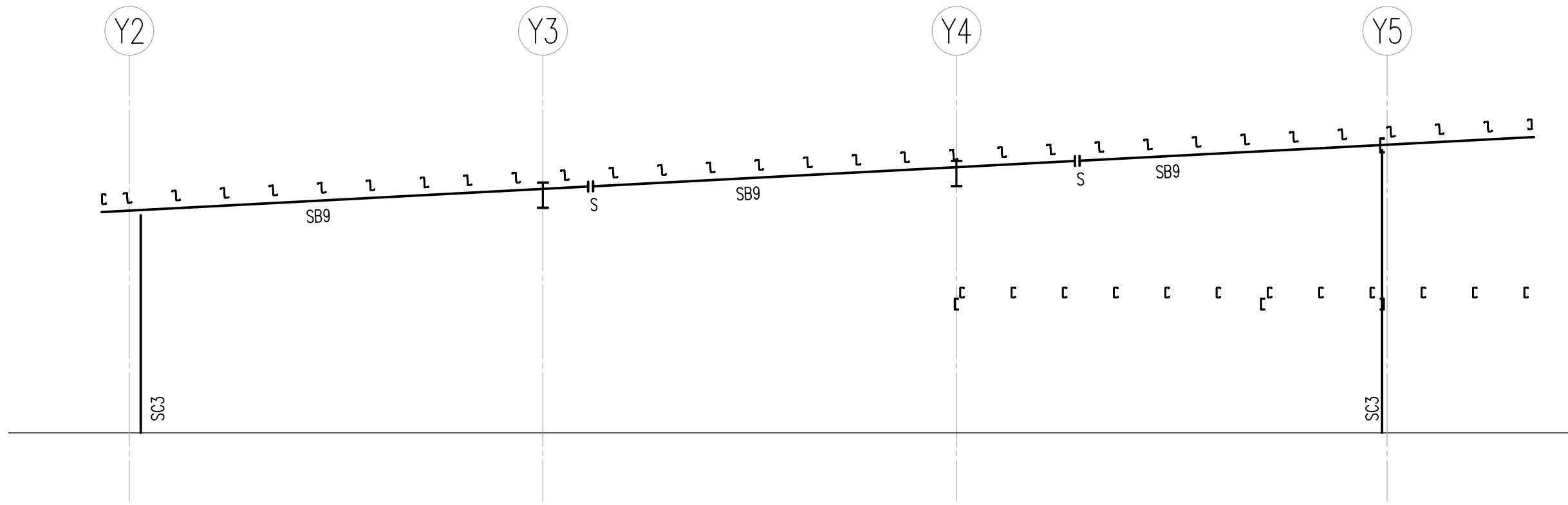
PROPOSED RECREATION AND TOURISM PRECINCT
TENCH AVE, PENRITH

SHEET SUBJECT

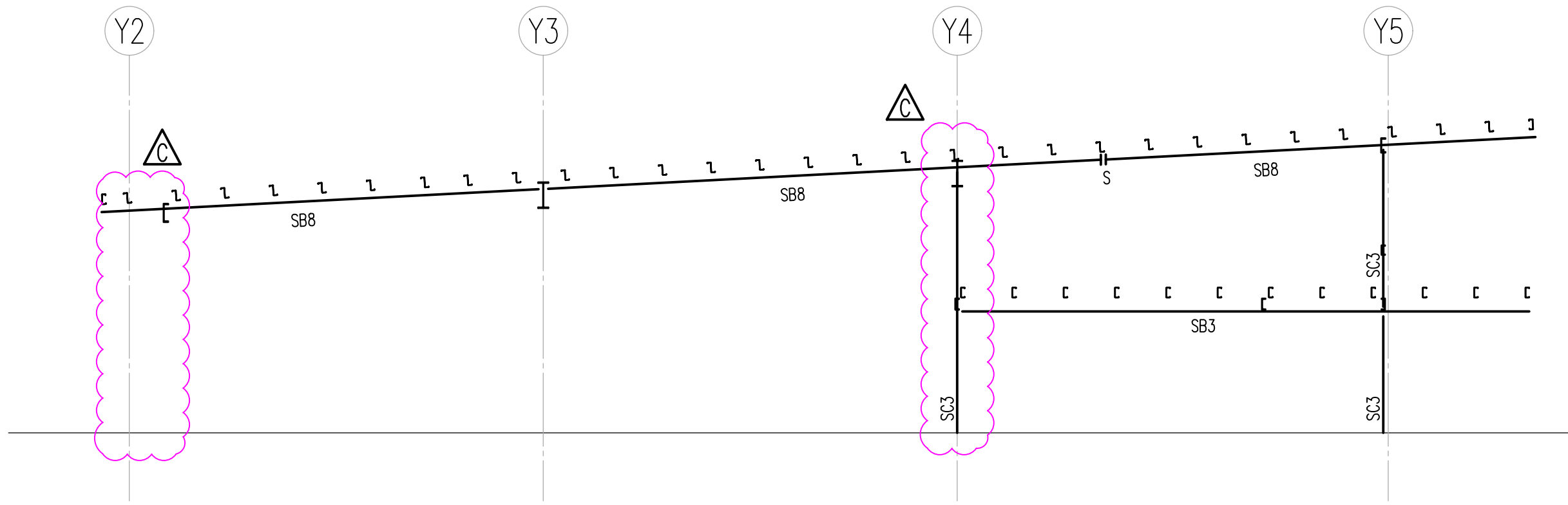
STEEL ELEVATIONS AND SECTIONS
TENANCIES T1 TO T6
SHEET 1 OF 2

ARCH. REF: N/A

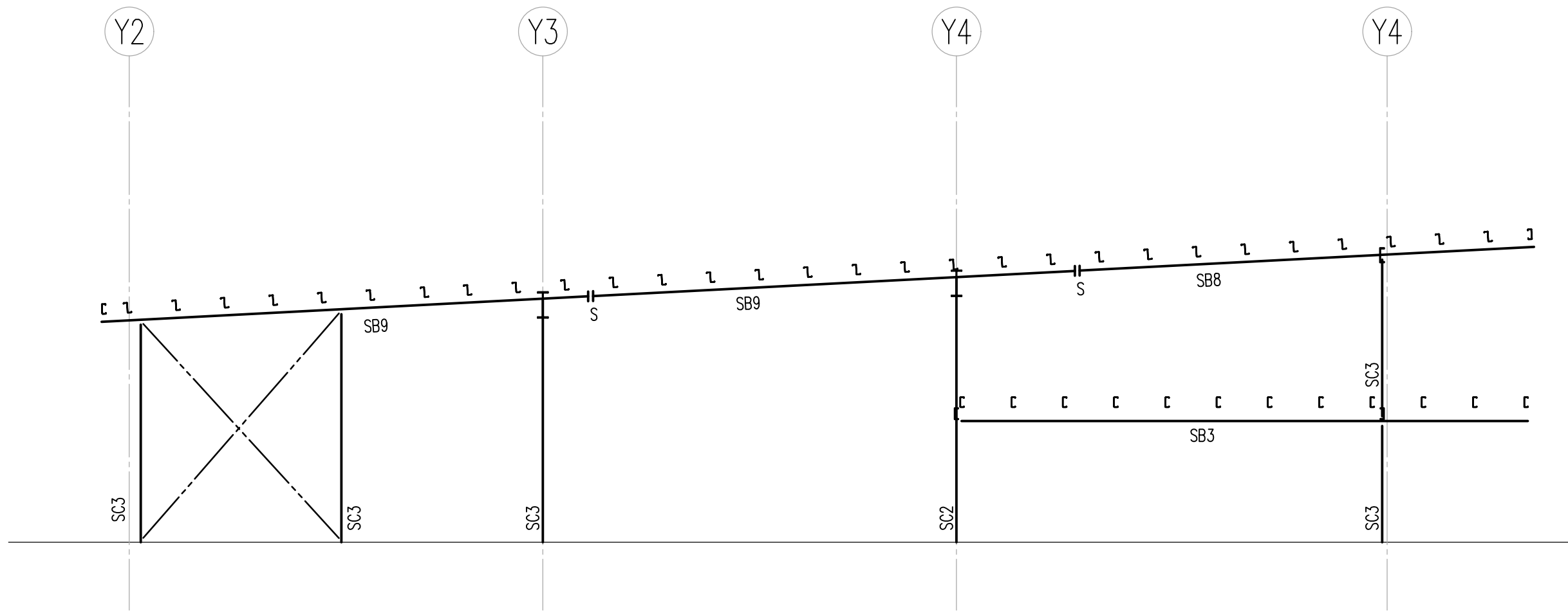
CAD FILE	LOT 3, DP 30354, TENCH AVE, PENRITH, NSW
DATE	AUG '16
DRAWN	A.J.B.
DESIGNED	S.R.
CHECKED	M.W.
SCALE @ B1	N.A.
JOB No	160652
AUTHORISED	A.S.H.
ENG No	S0503
REV	C



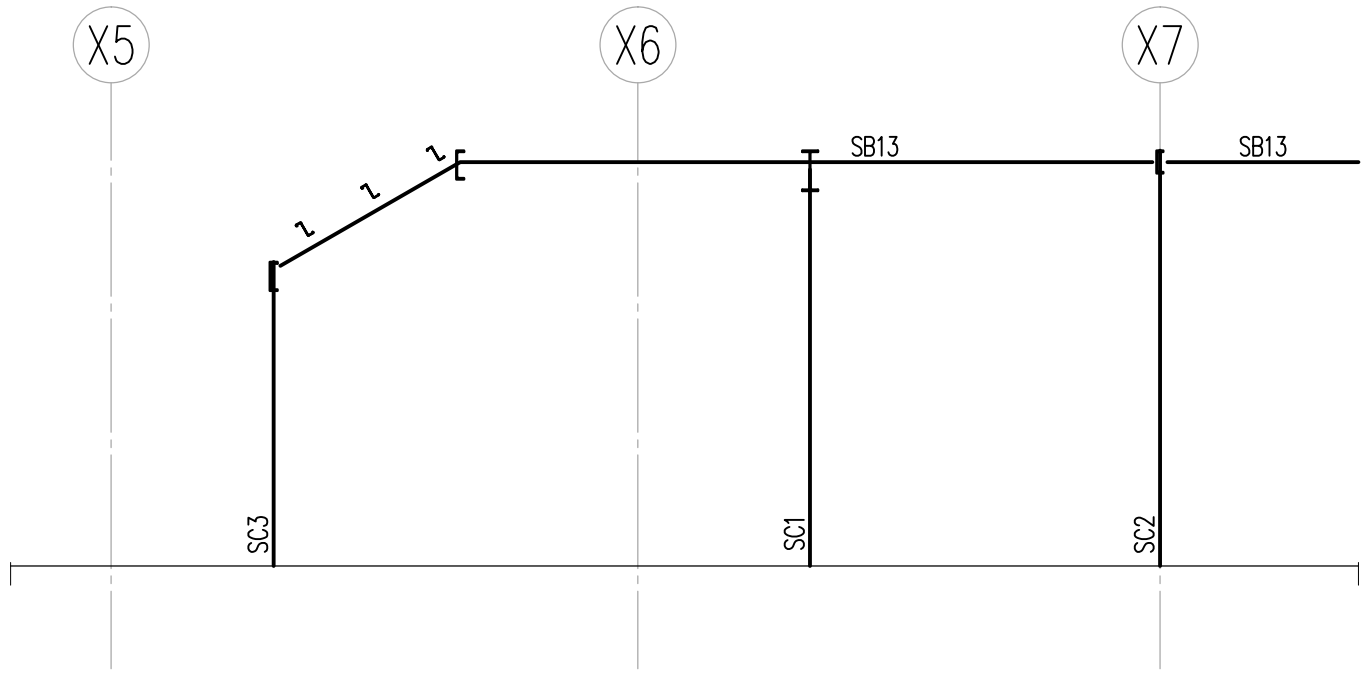
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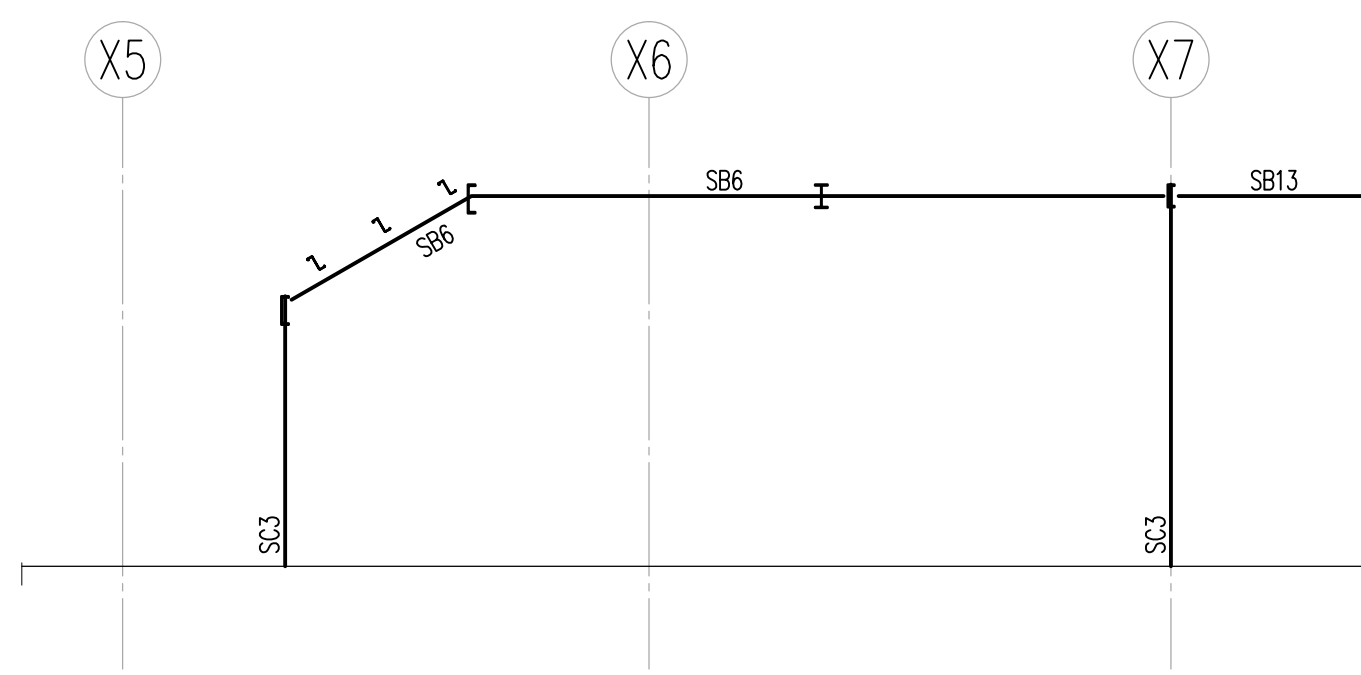
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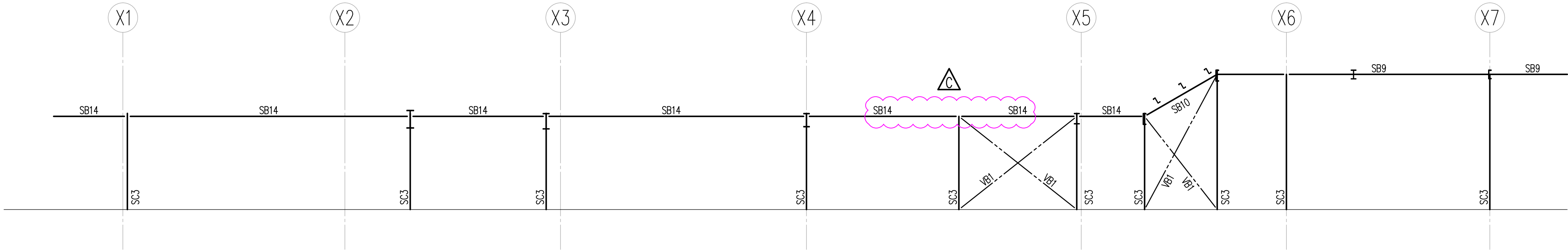
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GRID Y4 SECTION



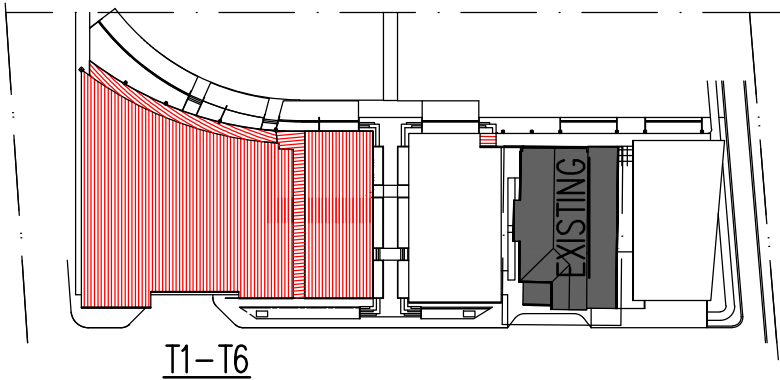
GRID Y3 SECTION



GRID Y2 SECTION

STEEL MEMBER SCHEDULE			
MARK	DESCRIPTION	SIZE	COMMENT
SB1	STEEL BEAM	610 UB 125	
SB2	STEEL BEAM	530 UB 92	
SB3	STEEL BEAM	530 UB 82	
SB4	STEEL BEAM	460 UB 82	
SB5	STEEL BEAM	460 UB 67	
SB6	STEEL BEAM	460 UB 67	CRANKED VERTICALLY
SB7	STEEL BEAM	410 UB 60	
SB8	STEEL BEAM	310 UB 40	
SB9	STEEL BEAM	380 PFC	
SB10	STEEL BEAM	380 PFC	CRANKED VERTICALLY
SB11	STEEL BEAM	250 PFC	
SB12	STEEL BEAM	230 PFC	
SB13	STEEL BEAM	230 PFC	CRANKED VERTICALLY
SB14	STEEL BEAM	200 PFC	
SB15	STEEL BEAM	180 PFC	
SB16	STEEL BEAM	150 PFC	
SB17	STEEL BEAM	150 PFC	
SC1	STEEL POST	150x150x6 SHS	
SC2	STEEL POST	125x125x5 SHS	
SC3	STEEL POST	100x100x5 SHS	
SC4	STEEL POST	89x89x4 SHS	
RB1	STEEL ROD BRACING	#20 ROD	
VB1	BRACING	50x5 EA	VERTICAL BRACING
P1	STEEL PURLIN	Z20015 @ 1000 CTRS	2 ROWS OF BRIDGING
P2	STEEL PURLIN	Z15015 @ 1000 CTRS	2 ROWS OF BRIDGING
P3	STEEL PURLIN	C20015 @ 1000 CTRS	2 ROWS OF BRIDGING

NOTE: LAP PURLINS AT BEAMS TO CREATE CONTINUOUS PURLIN MEMBERS



KEY PLAN

No	AMENDMENT	ENG	DRAFT	DATE	No	AMENDMENT	ENG	DRAFT	DATE
C	ISSUED FOR C.C.	S.R.	A.J.B.	23.09.16					
B	ISSUED FOR CO-ORDINATION	S.R.	A.J.B.	02.09.16					
A	PRELIMINARY	S.R.	A.J.B.	25.08.16					

CLIENT	STIMSON & BAKER
--------	-----------------

ARCHITECT

MORSON GROUP

NOMINATED ARCHITECT - P F MORSON
REGISTRATION NUMBER 8100
ACN 159 480 056, ABN 41 159 480 056
www.morsongroup.com
(02) 9380 4946
PO Box 170, Potts Point, NSW 1535

ENGINEERS

AUSTRALIAN CONSULTING ENGINEERS

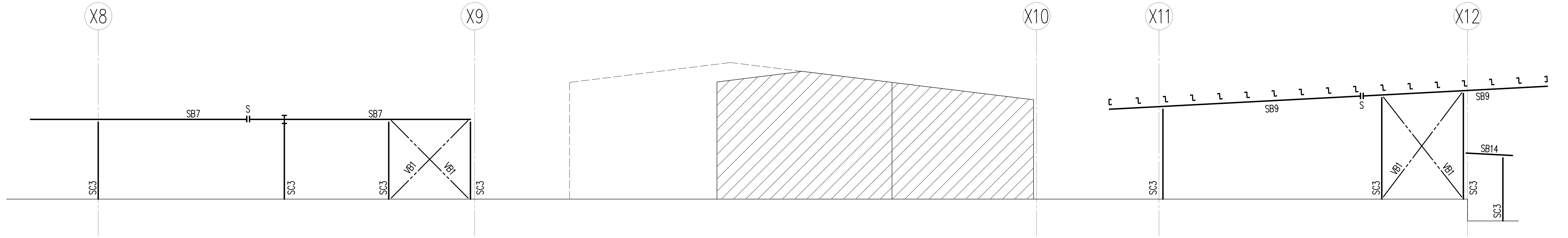
PTTY LTD - A.C.N. 084 059 941
SHOP 2/41 CONCORD RD NORTH STRATHFIELD NSW 2137
PH: (02) 9763 1500 FX: (02) 9763 1515
EMAIL: info@aceeng.com.au

PROJECT

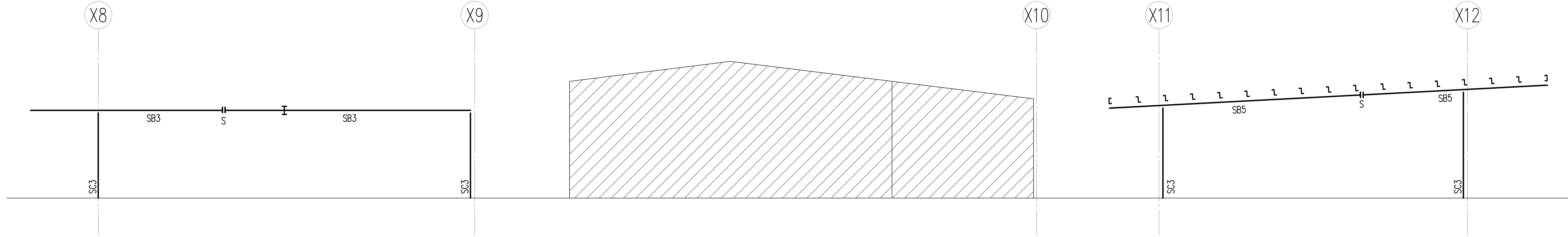
PROPOSED RECREATION AND TOURISM PRECINCT
TENCH AVE, PENRITH

ARCH. REF: N/A

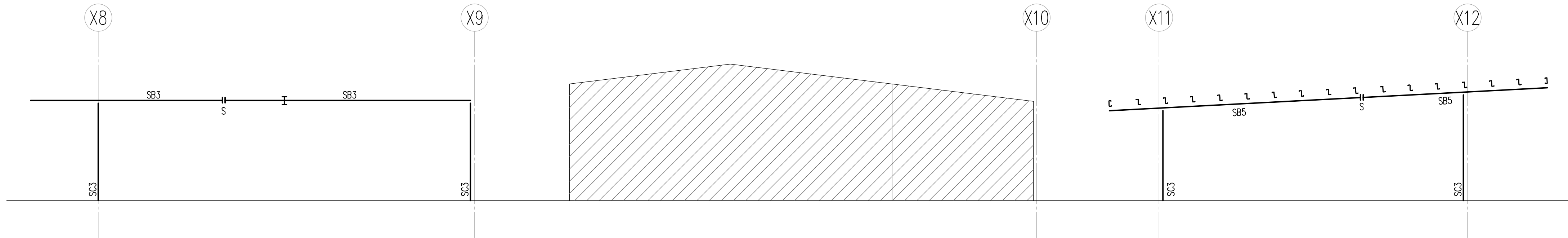
SHEET SUBJECT	STEEL ELEVATIONS AND SECTIONS TENANCIES T1 TO T6 SHEET 2 OF 2
CAD FILE	LOT 3, DP 30354, TENCH AVE, PENRITH, NSW
DATE	AUG '16
DRAWN	A.J.B.
DESIGNED	S.R.
CHECKED	M.W.
SCALE @ B1	N.A.
JOB No	160652
AUTHORISED	A.S.H.
ENG No	S0504
REV	C



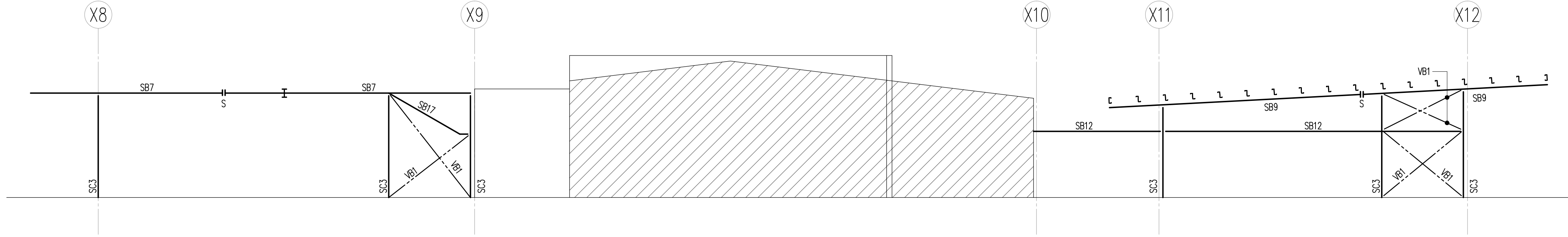
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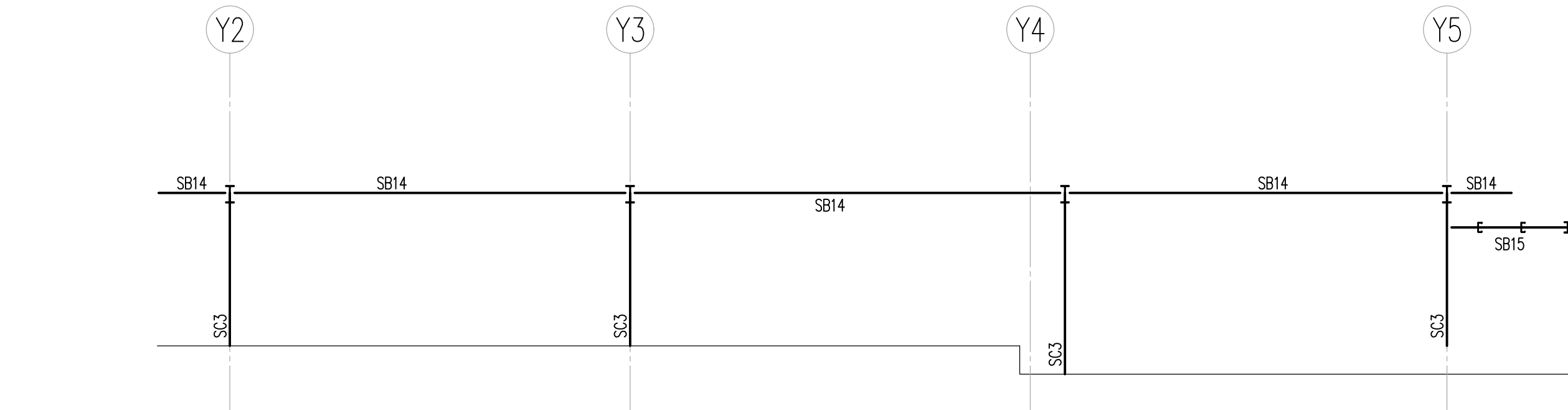
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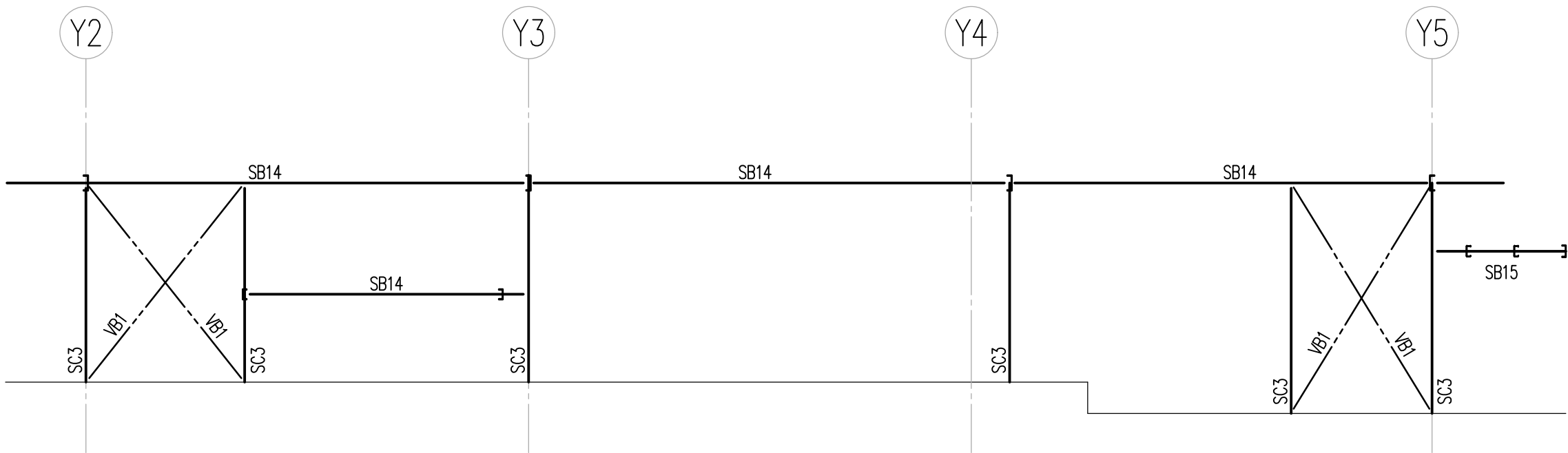
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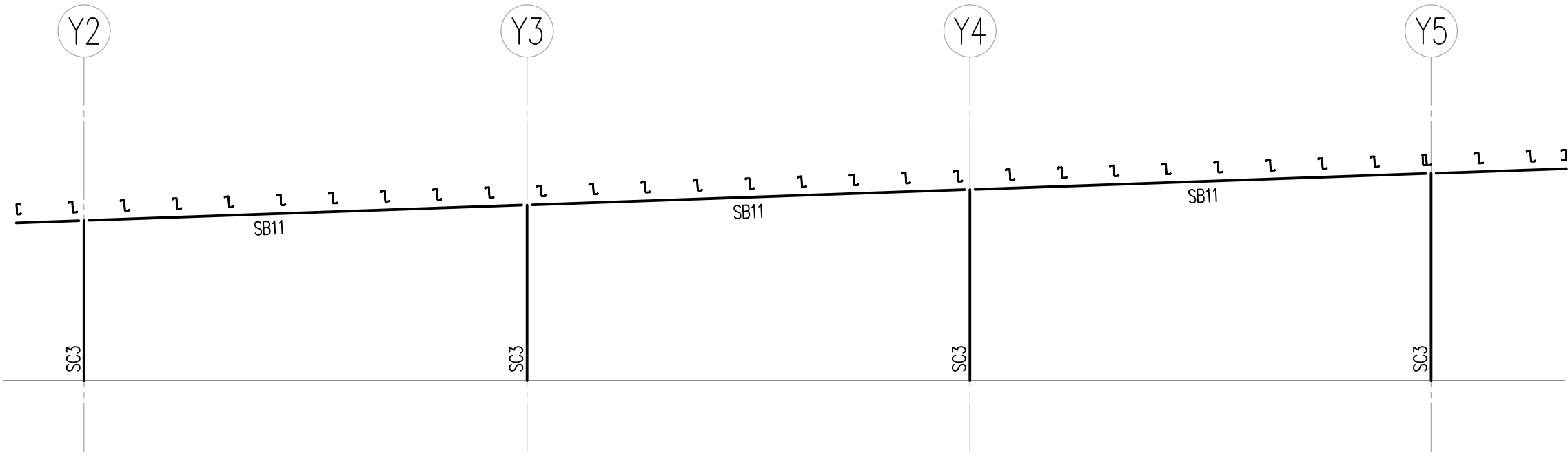
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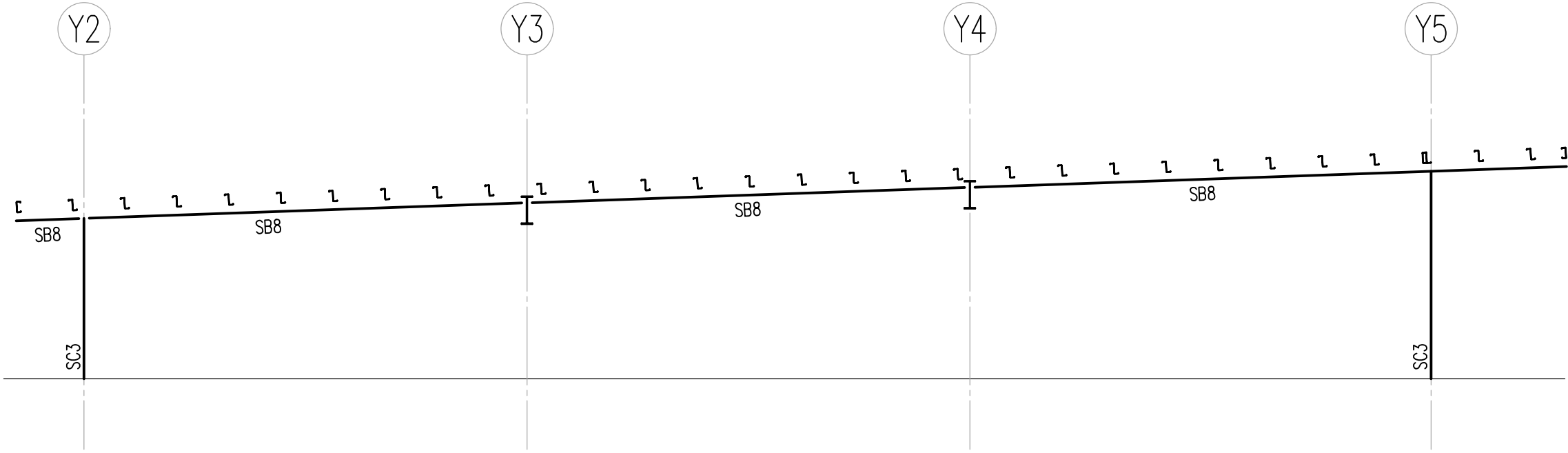
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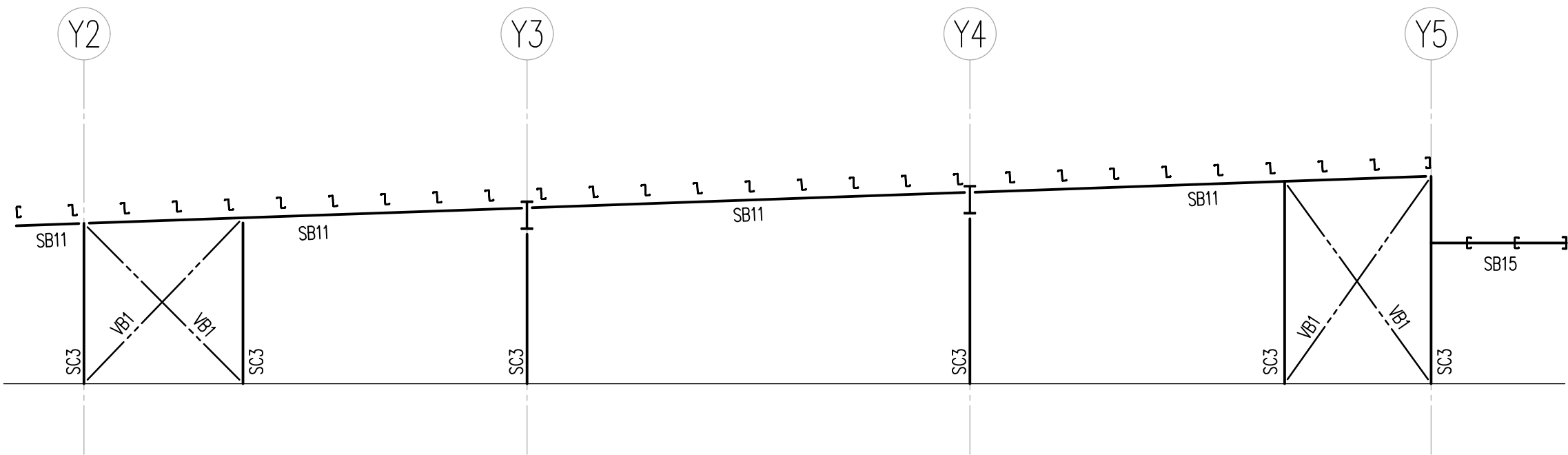
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GRID X8 SECTION



SECTION 1

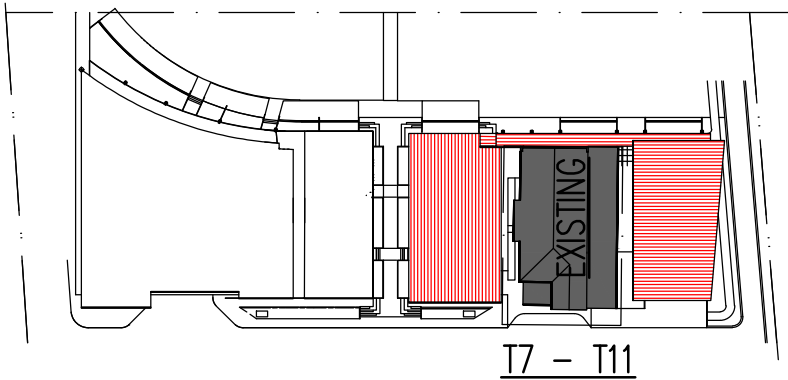


GRID X9 SECTION

STEEL MEMBER SCHEDULE			
MARK	DESCRIPTION	SIZE	COMMENT
SB1	STEEL BEAM	610 UB 125	
SB2	STEEL BEAM	530 UB 92	
SB3	STEEL BEAM	530 UB 82	
SB4	STEEL BEAM	460 UB 82	
SB5	STEEL BEAM	460 UB 67	
SB6	STEEL BEAM	460 UB 67	CRANKED VERTICALLY
SB7	STEEL BEAM	410 UB 60	
SB8	STEEL BEAM	310 UB 40	
SB9	STEEL BEAM	380 PFC	
SB10	STEEL BEAM	380 PFC	CRANKED VERTICALLY
SB11	STEEL BEAM	250 PFC	
SB12	STEEL BEAM	230 PFC	
SB13	STEEL BEAM	230 PFC	CRANKED VERTICALLY
SB14	STEEL BEAM	200 PFC	
SB15	STEEL BEAM	180 PFC	
SB16	STEEL BEAM	150 PFC	
SB17	STEEL BEAM	150 PFC	

STEEL MEMBER SCHEDULE			
MARK	DESCRIPTION	SIZE	COMMENT
SC1	STEEL POST	150x150x6 SHS	
SC2	STEEL POST	125x125x5 SHS	
SC3	STEEL POST	100x100x5 SHS	
SC4	STEEL POST	89x89x4 SHS	
RB1	BRACING	50x5 EA	
VB1	STEEL ROD BRACING	#20 ROD	VERTICAL BRACING
P1	STEEL PURLIN	Z20015 @ 1000 CTRS	2 ROWS OF BRIDGING
P2	STEEL PURLIN	Z15015 @ 1000 CTRS	2 ROWS OF BRIDGING
P3	STEEL PURLIN	C20015 @ 1000 CTRS	2 ROWS OF BRIDGING

NOTE: LAP PURLINS AT BEAMS TO CREATE CONTINUOUS PURLIN MEMBERS



KEY PLAN

No	AMENDMENT	ENG	DRAFT	DATE	No	AMENDMENT	ENG	DRAFT	DATE
C	ISSUED FOR C.C.	S.R.	A.J.B.	23.09.16					
B	ISSUED FOR CO-ORDINATION	S.R.	A.J.B.	02.09.16					
A	PRELIMINARY	S.R.	A.J.B.	25.08.16					

CLIENT	STIMSON & BAKER
--------	-----------------

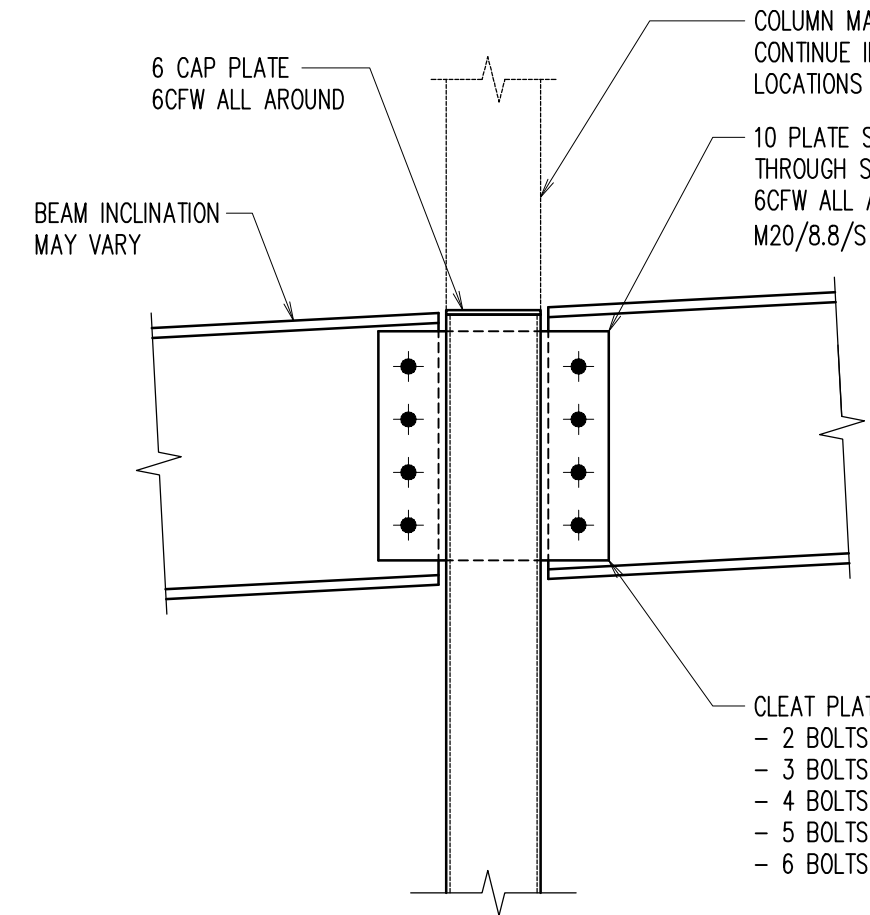
ARCHITECT	MORSON GROUP
NOMINATED ARCHITECT - P F MORSON	REGISTRATION NUMBER 8100
ACN 159 480 056, ABN 41 159 480 056	www.morsongroup.com
(02) 9380 4946	PO Box 170, Potts Point, NSW 1335

ENGINEERS	AUSTRALIAN CONSULTING ENGINEERS
P T Y L T D - A C N 0 8 6 0 5 9 9 4 1	SHOP 2-4/41 CONCORD RD NORTH STRATHFIELD NSW 2137
PH: (02) 9763 1500 FX: (02) 9763 1515	EMAIL: info@aceeng.com.au

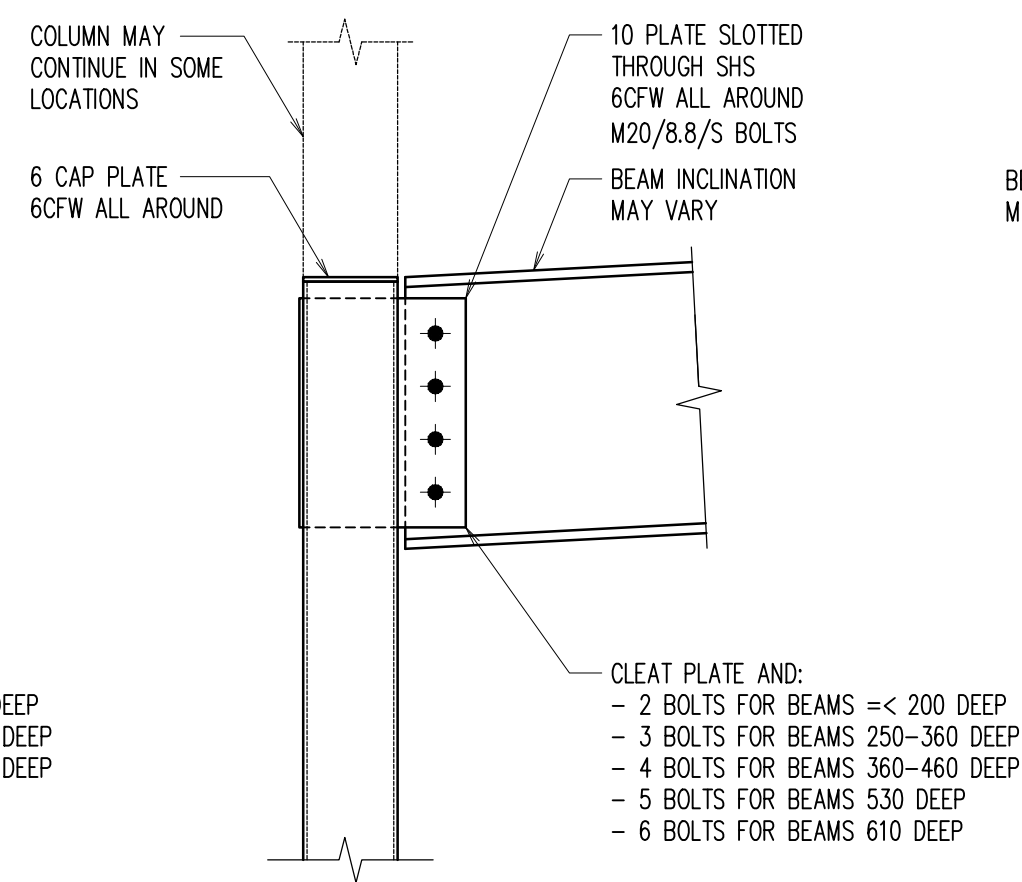
PROJECT	PROPOSED RECREATION AND TOURISM PRECINCT TENCH AVE, PENRITH
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SHEET SUBJECT	STEEL ELEVATIONS AND SECTIONS TENANCIES T7-T11
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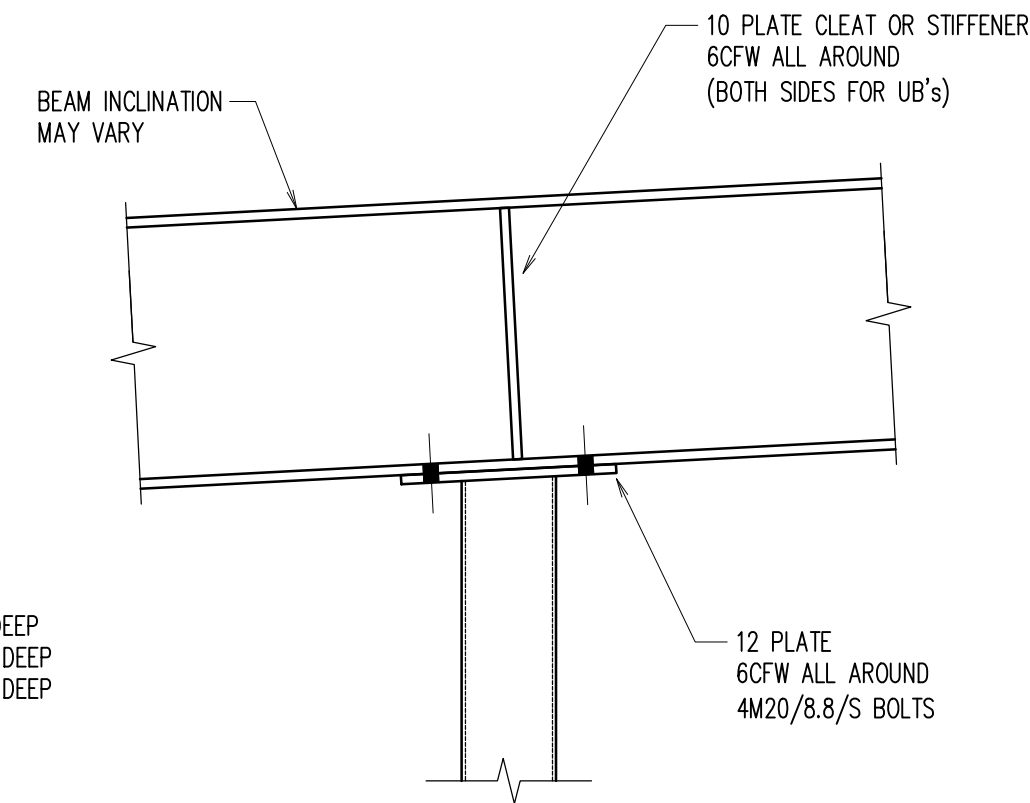
CAD FILE	LOT 3, DP 30354, TENCH AVE, PENRITH, NSW
DATE	AUG '16
DRAWN	A.J.B.
DESIGNED	S.R.
CHECKED	M.W.
SCALE @ B1	N.A.
JOB No	160652
AUTHORISED	A.S.H.
ENG No	S0505
REV	C



BEAM BOTH SIDES



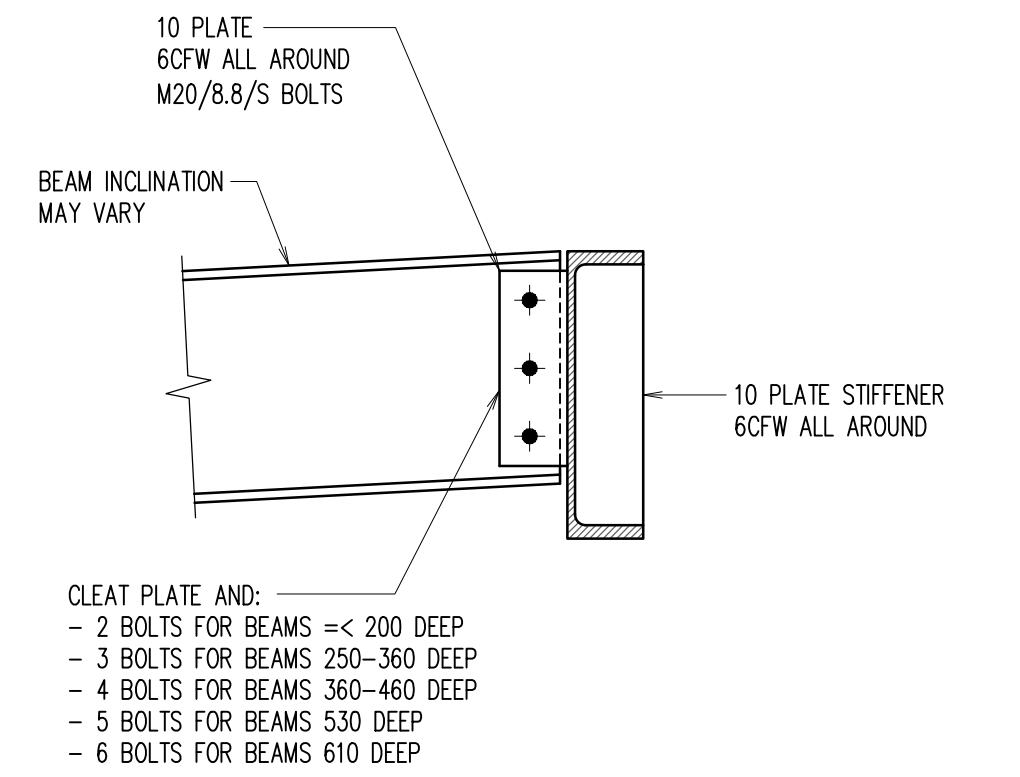
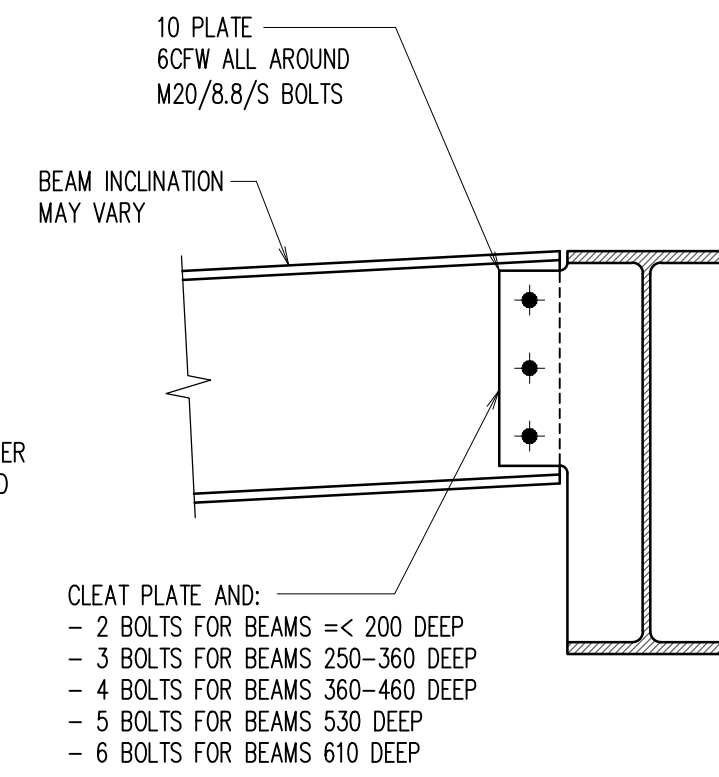
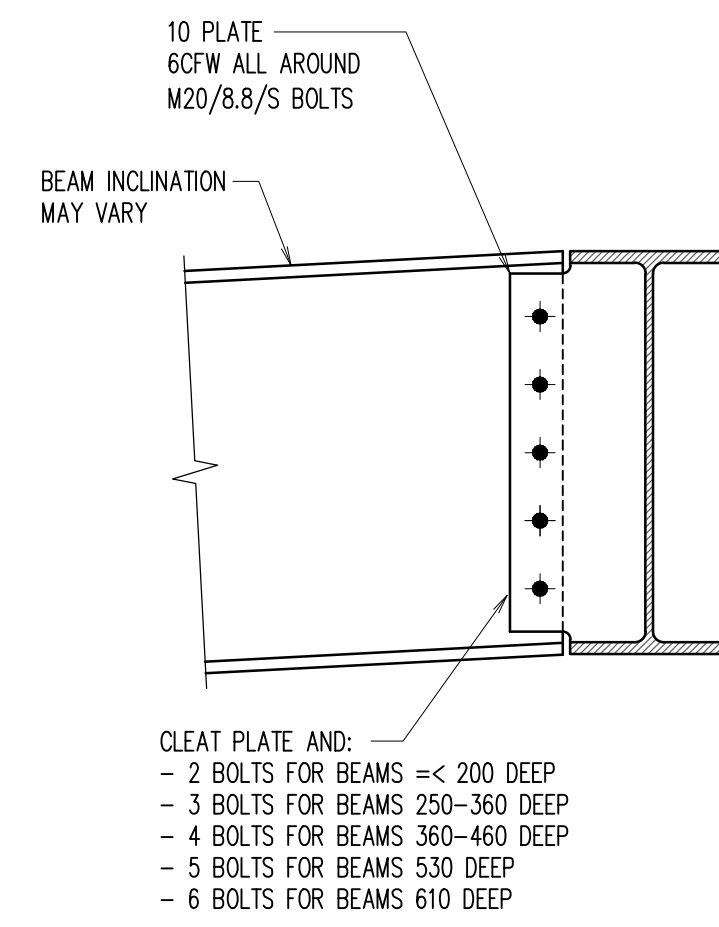
BEAM ONE SIDE ONLY



BEAM OVER COLUMN

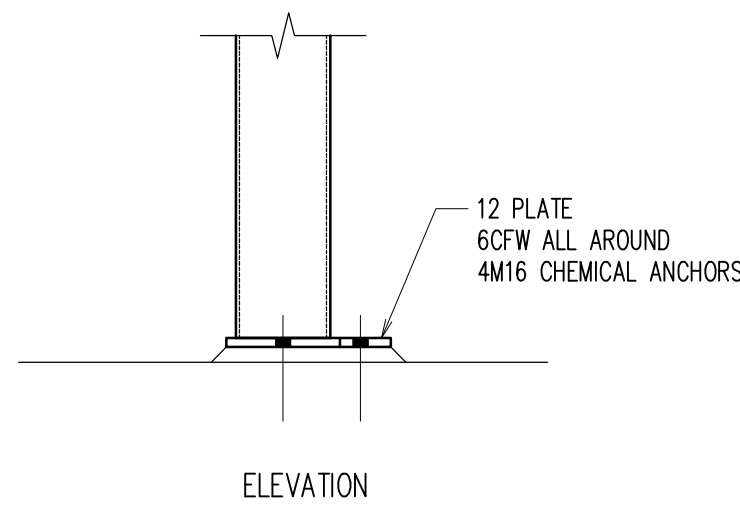
TYPICAL BEAM / COLUMN CONNECTIONS

REFER TO PLANS AND SECTIONS (DRAWINGS S0500 TO S0504) FOR MEMBER SIZES

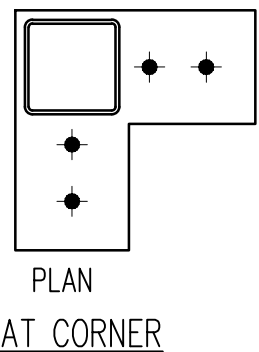


TYPICAL BEAM / BEAM CONNECTIONS

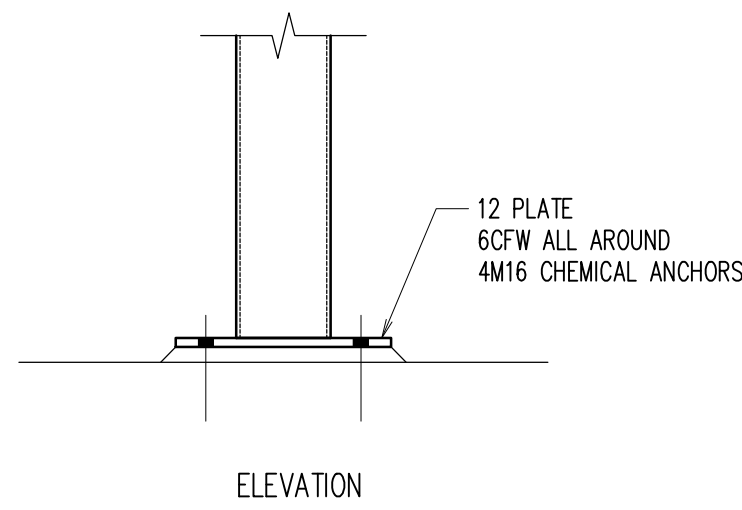
NOTE: BEAM CONNECTION SHOWN ONE SIDE ONLY.
CONNECTIONS MAY OCCUR ON BOTH SIDES OF BEAM



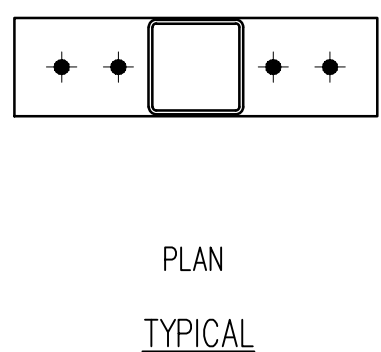
ELEVATION



PLAN
AT CORNER

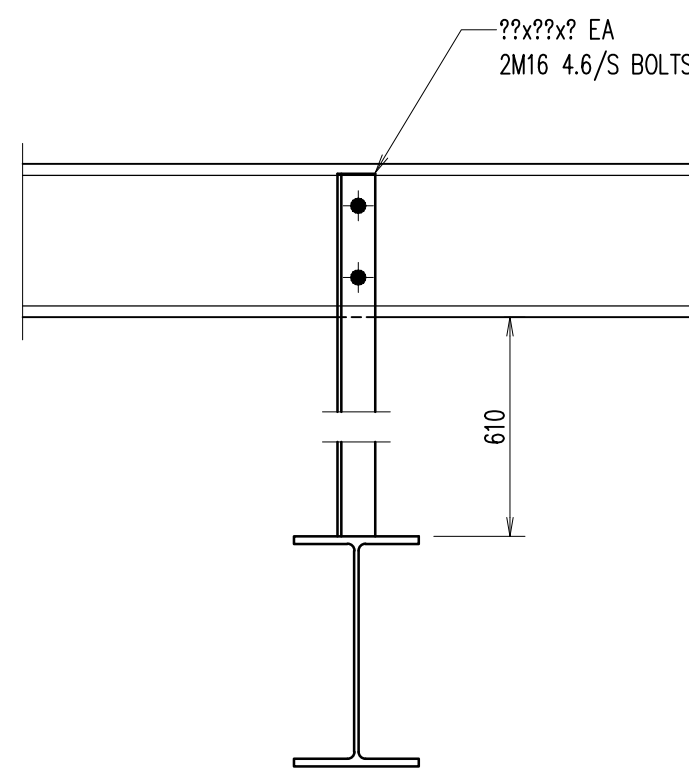
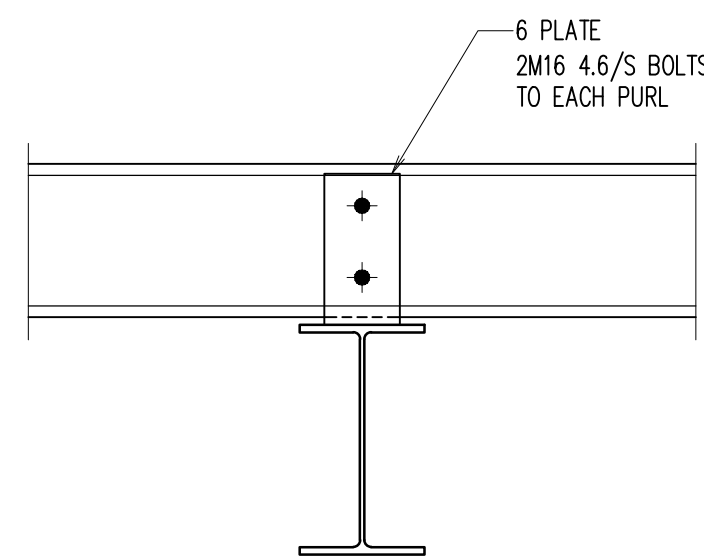


ELEVATION

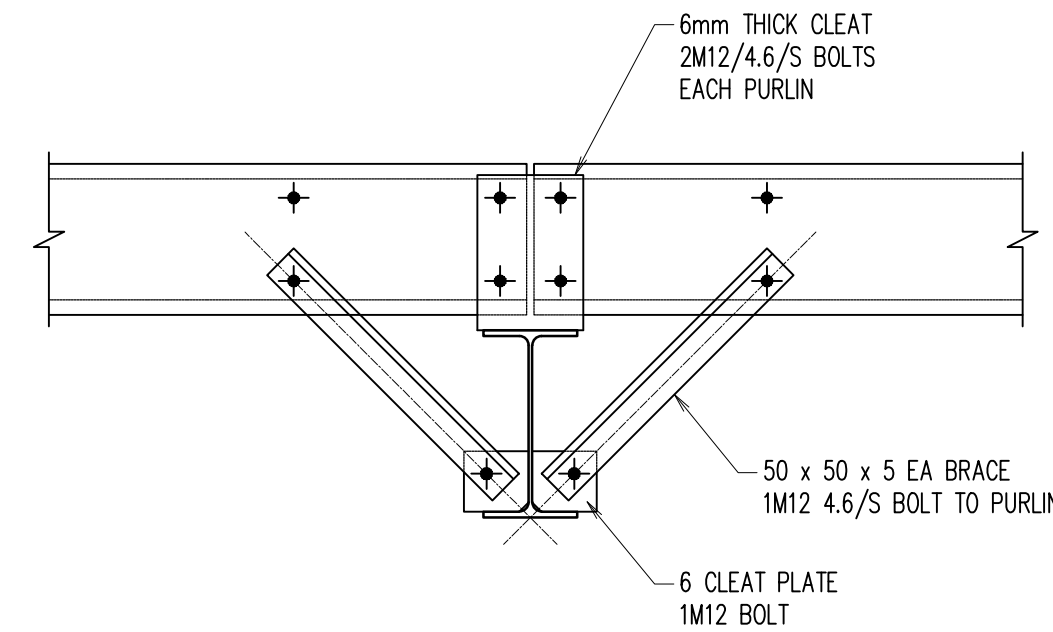


PLAN
TYPICAL

TYPICAL COLUMN BASEPLATE DETAILS

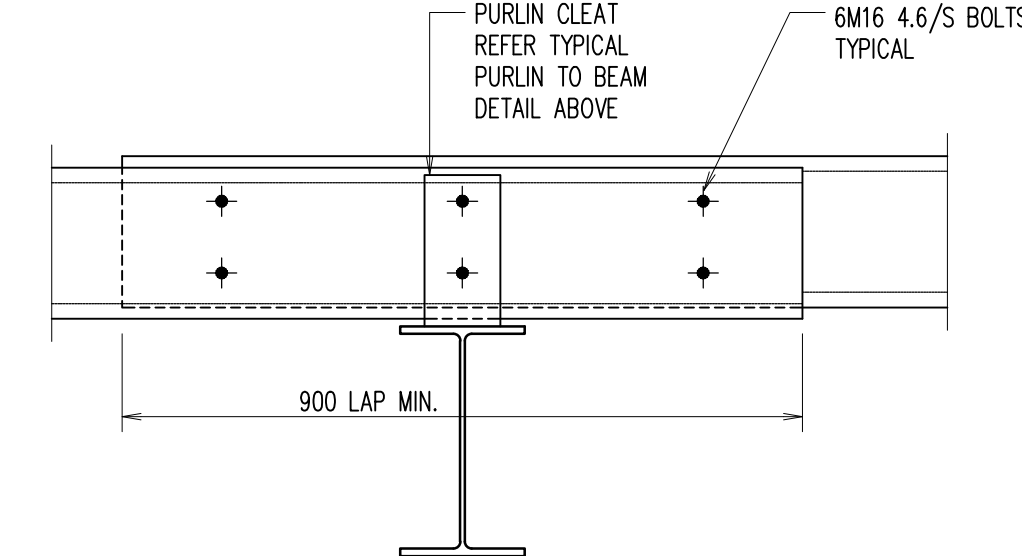


TYPICAL PURLIN TO BEAM DETAIL



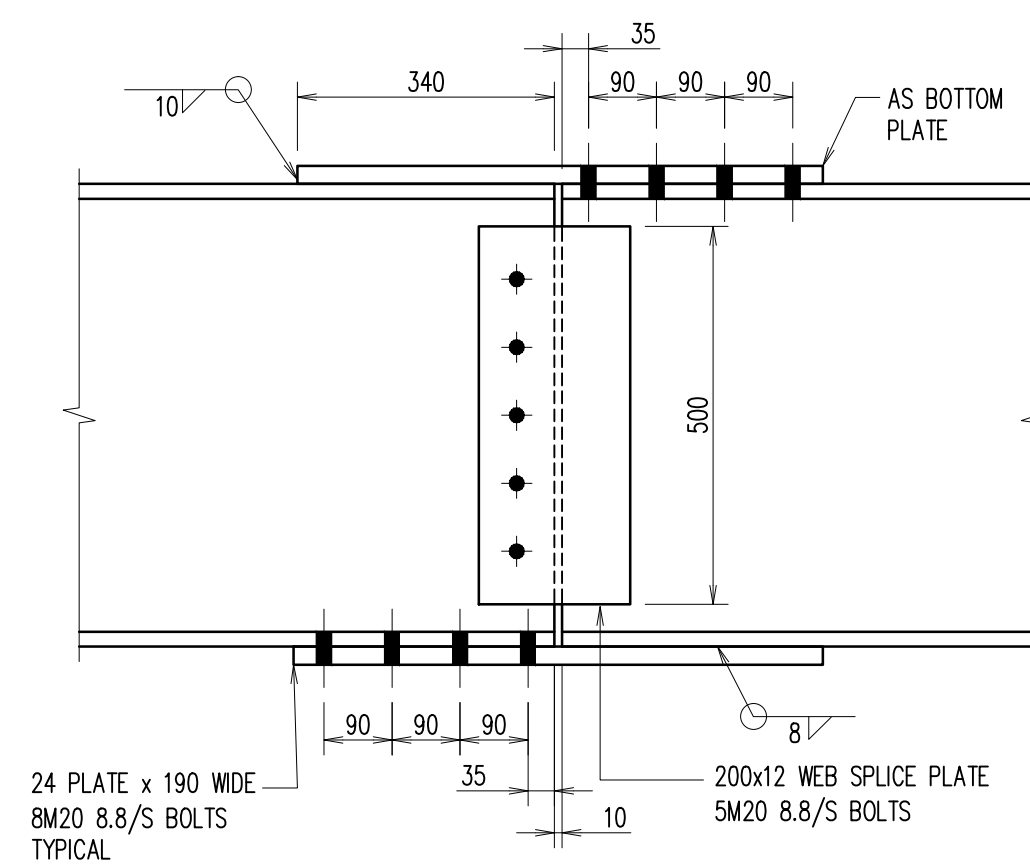
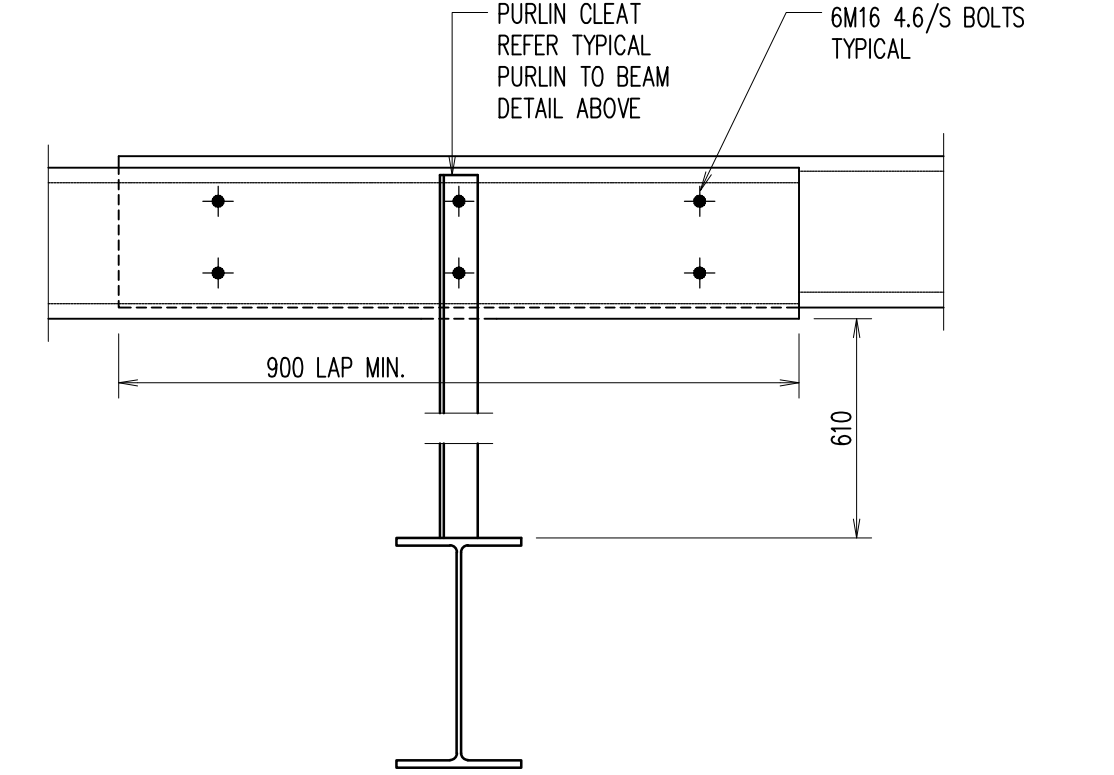
TYPICAL FLY BRACE

AT EVERY 5M OF MAIN STEEL BEAMS

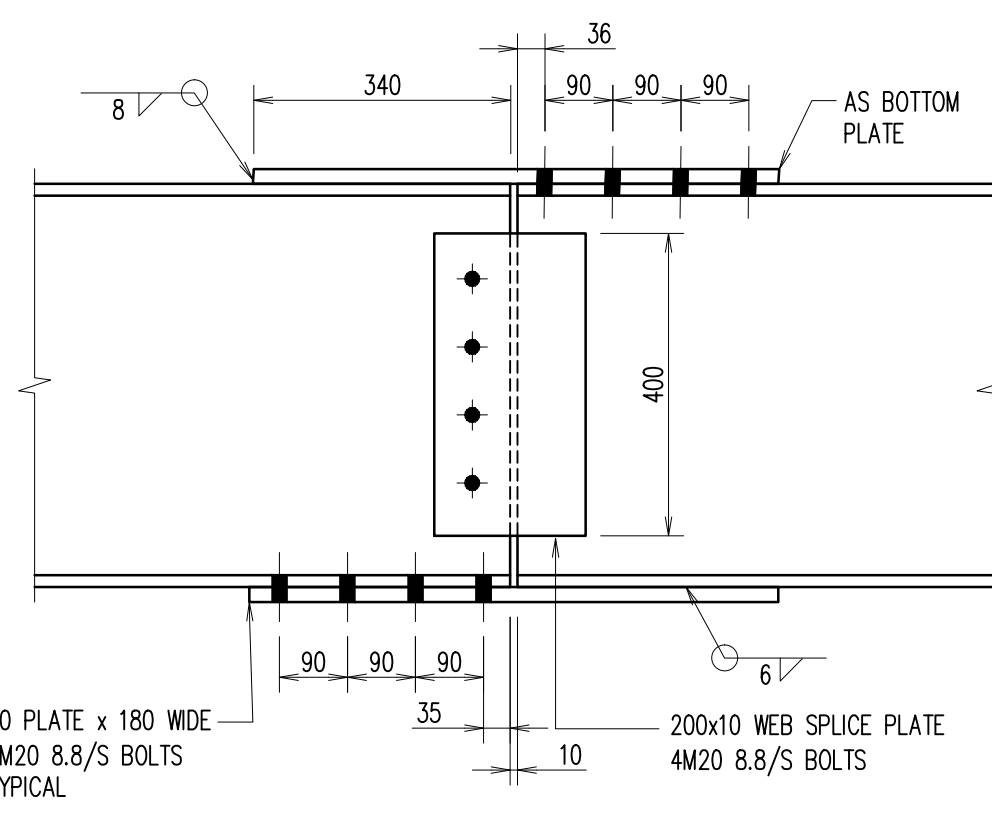


TYPICAL PURLIN LAP DETAILS

REFER TO MANUFACTURER FOR LAPPING DETAILS

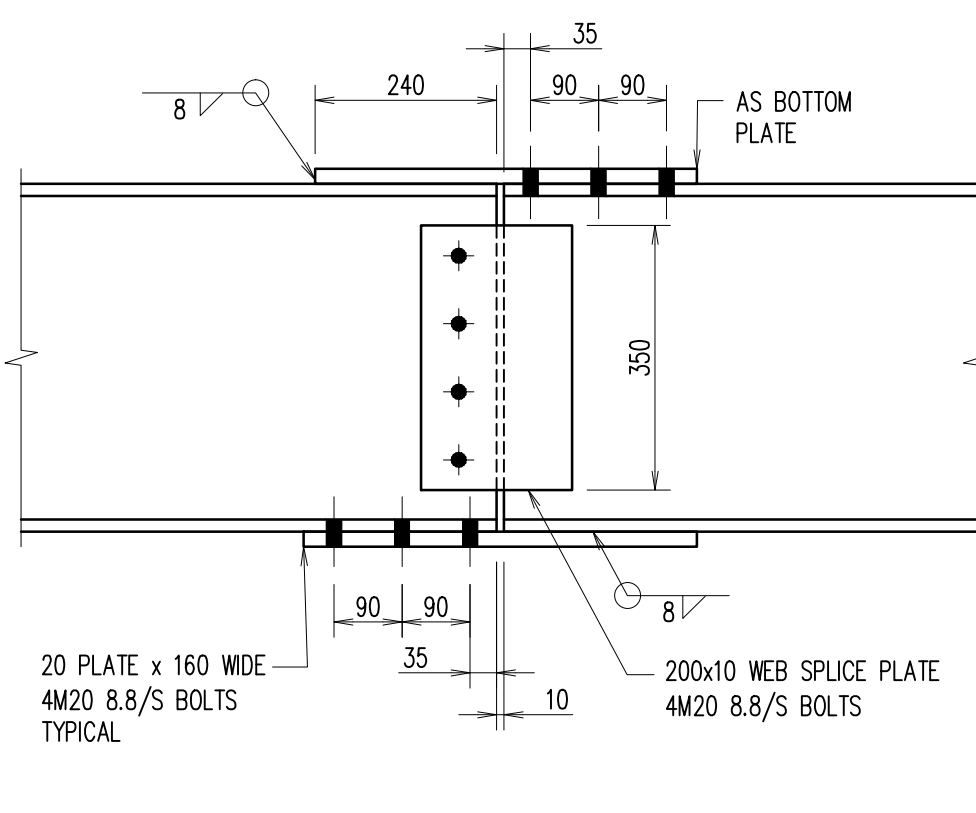


610 UB 125

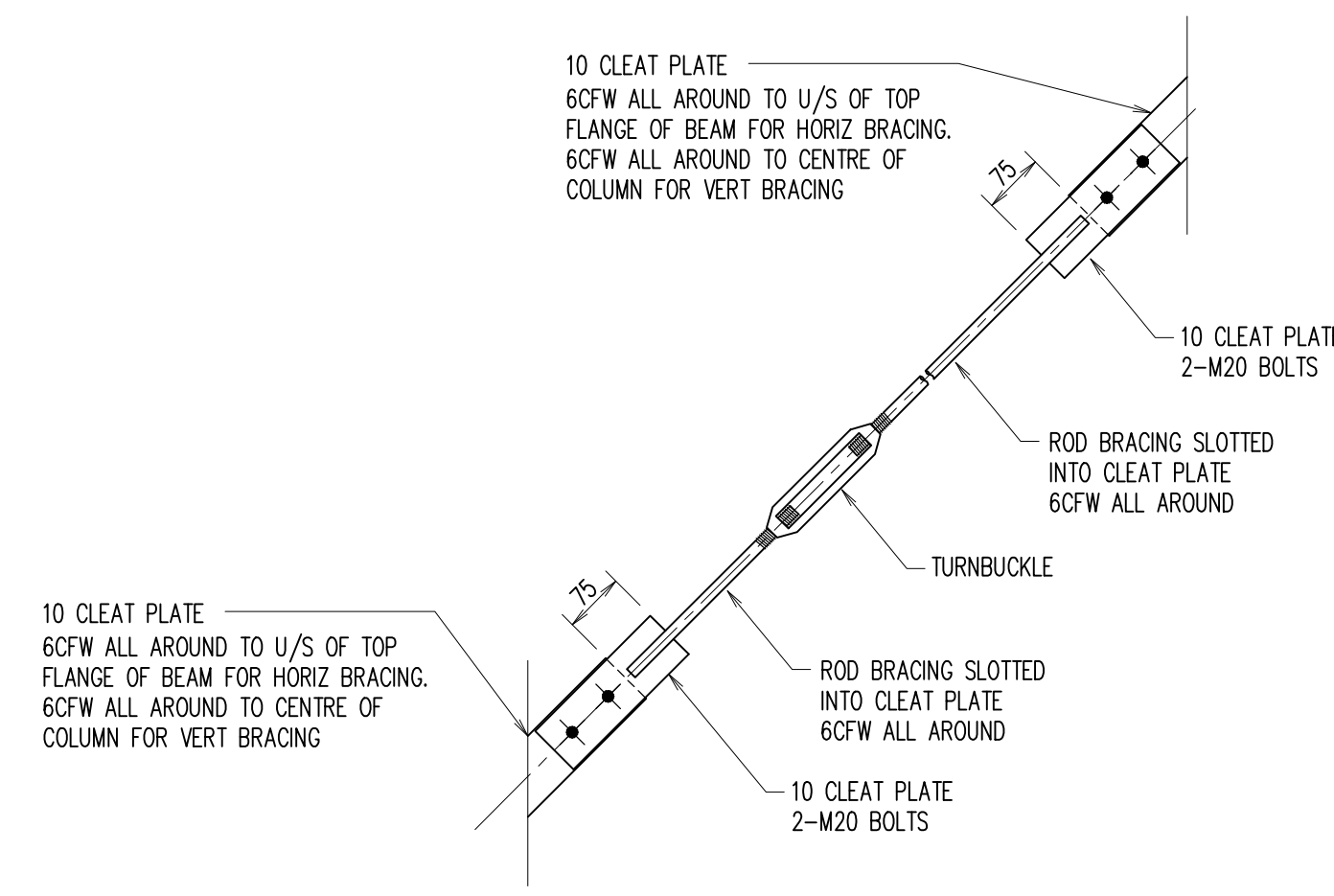


530 UB 92

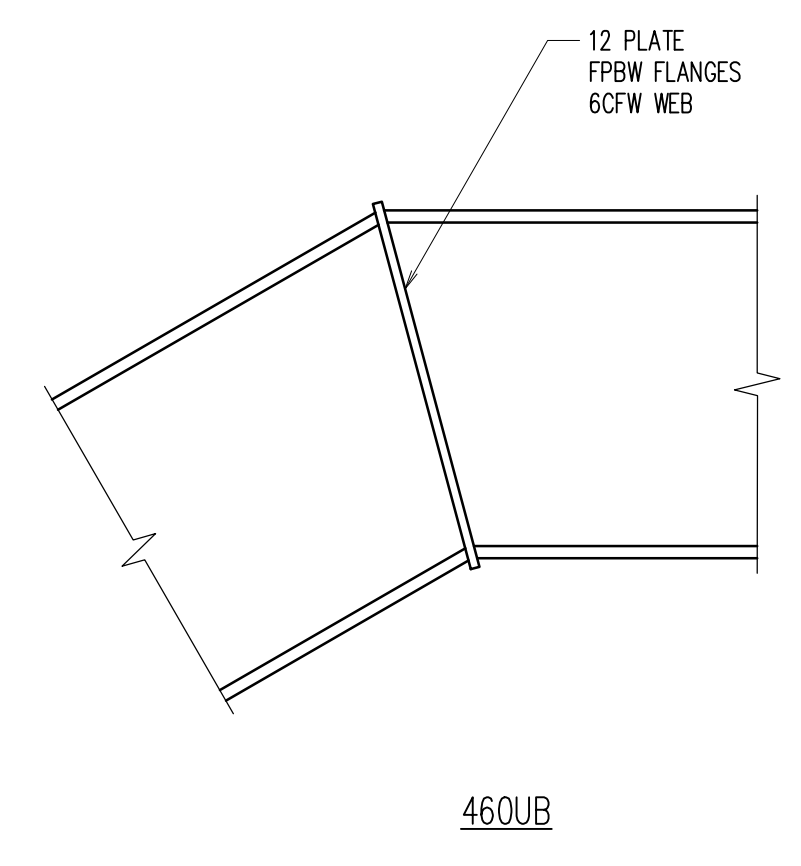
TYPICAL SPLICE DETAILS



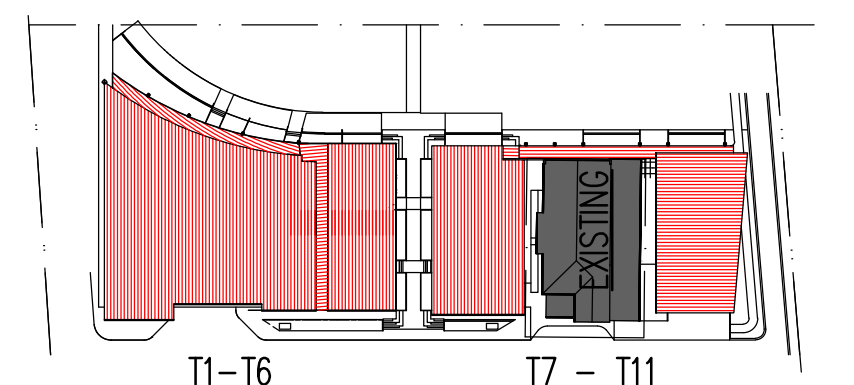
460 UB 82



TYPICAL BRACING CONNECTIONS



TYPICAL BEAM CRANK DETAIL



KEY PLAN

No	AMENDMENT	ENG	DRAFT	DATE	No	AMENDMENT	ENG	DRAFT	DATE
0	ISSUED FOR C.C.	S.R.	A.J.B.	23.09.16					
1	ISSUED FOR CO-ORDINATION	S.R.	A.J.B.	02.09.16					

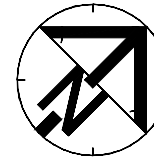
CLIENT
STIMSON & BAKER



NOMINATED ARCHITECT - P F MORSON
REGISTRATION NUMBER 8100
ACN 159 480 056, ABN 41 159 480 056
www.morsongroup.com
(02) 9380 4946
PO Box 170, Potts Point, NSW 1535



PROJECT
PROPOSED RECREATION AND
TOURISM PRECINCT
TENCH AVE, PENRITH



SHEET SUBJECT
STEELWORK DETAILS

ARCH. REF.
N/A

DATE	DRAWN	DESIGNED	CHECKED	M.W.
AUG '16	A.J.B.	S.R.		
SCALE @ B1	N.A.	JOB No	160652	
AUTHORISED	A.S.H.	ENG No	S0510	REV
				B