

ALTERATIONS AND ADDITIONS

at: 149 CONDAMINE STREET, BALGOWLAH

for: PROJECT GUIDES

Architect: ARCHICODE

Prepared By:

NB Consulting Engineers
STRUCTURAL • CIVIL • STORMWATER • REMEDIAL
A.C.N. 076 121 616 A.B.N. 24 076 121 616

Sydney: Ph: (02) 9984 7000

Unit 11, 1 Vuko Place, Warriewood NSW 2102

Gold Coast: Ph: (07) 5631 4744

Suite 1, 30B Griffith Street, Coolangatta QLD 4225

E : nb@nbconsulting.com.au W : www.nbconsulting.com.au

The copyright of these drawings remains with Northern Beaches Consulting Engineers Pty Ltd. Trading as NB Consulting Engineers

DRAWING SCHEDULE:

GENERAL NOTES

S01 A SHEET 1

S02 A SHEET 2

FOOTINGS

S10 B PLAN & DETAILS

DECK FRAMING

S30 B PLAN

S35 B DETAILS SHEET 1

ISSUED FOR D.A.
SUBMISSION ONLY
NOT FOR
CONSTRUCTION

IF IN DOUBT ASK

2408070

REV. B - 25.07.2025

NB Consulting Engineers

REGULATED DESIGN RECORD				
Project Address: 149 CONDAMINE STREET BALGOWLAH				
Project Title: ENGINEERING DRAWINGS				
Consent No: -		Body Corporate Reg No: SP 46248		
Drawing Title: GENERAL NOTES I		Drawing No: S01		
Rev	Date dd.mm.yy	Description	DP Full Name	Reg No
A	10.07.2025	ISSUE FOR DA	DAVID HUNTER	0000752

GENERAL NOTES: 06.03.2025

BUILDING CLASSIFICATION - BC

- BC1. Upon assessment, it has been determined that the Design and Building Practioners Act does not apply to the classes of structures contained in these works as they are not of class 2, 3 or 9a.
- BC2. Although the DBPA is not applicable to these works, NB Consulting Engineers shall be provided with any other consultants drawings/specifications for review to ensure that there are no conflicts with the works that are contained in these subsequent drawings.
- BC3. Examples of other consultants (but not limited to) are: stormwater, flood and remedial Where not carried out by NB Consulting Engineers: arborist, heritage, mechanical, electrical, HVAC, fire services, coastal, Sydney water sewer report and geotechnical engineers.

GENERAL - GN

- GN1. All works in accordance with NCC. NB Consulting Engineers to be notified of any conflict in documentation.
- GN2. The drawings are to be read together with all Architects drawings and specifications.
- GN3. Dimensions shall not be obtained by scaling from the drawings. All setting out dimensions shall be verified and discrepancies shall be referred to the Engineer and Architect / Designer prior to commencement of work.
- GN4. Care is required during demolition and construction to ensure all elements are adequately supported and not overloaded. Contact NB Consulting Engineers if in doubt.
- GN5. Design, materials and workmanship are to be in accordance with current standards and statutory authority regulations except where varied by these documents.
- GN6. Design imposed actions (live loads) are in accordance with AS 1170.1-2002.

SITE DETAILS - SD

- SD1. Please refer to the details below. All engineering in this project has been designed in accordance with the below.
- SD2. Any variations, ommission or additional information MUST be provided to NB Consulting Engineers for assessment and possible amendment of these drawings to achieve compliance with the current NCC, Australian Standards and/or engineering principles.

SD4. BEARING MATERIAL

GEOTECHNICAL REPORT	Not provided*		
FOUNDATION TYPE	Rock*		
FOUNDATION CLASSIFICATION	'A'*		
DESIGN BEARING CAPACITY	800 kPa*		
* Note: In the absence of a geotechnical report, the design criteria is assumed and MUST be verified prior to excavation.			
SD5. <u>ADDITIONAL PERMANENT ACTIONS</u>	<u>PERMANENT (kg/m²)</u>	<u>IMPOSED (kg/m²)</u>	
- GENERAL FLOOR	50	150	
- TILED FLOOR (TO 80mm SCREED)	100	150	
- SHEET ROOF	40	25	
- TILED ROOF	90	25	
- TILED BALCONY	100	200	

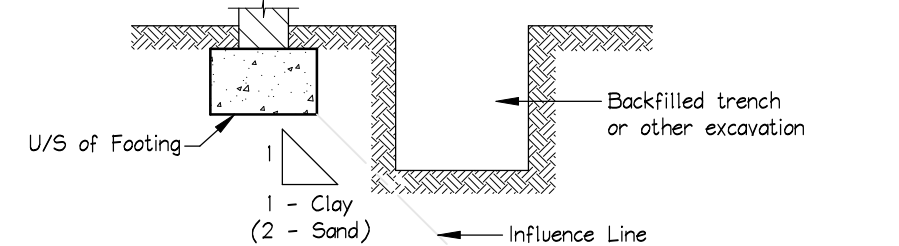
- SD6. Refer to architect / designer plan by Archicode for linings, setout, finishes and general arrangement.

ISSUED FOR D.A.
SUBMISSION ONLY
NOT FOR
CONSTRUCTION

IF IN DOUBT ASK

EXCAVATION - EX

- EX1. NOTICE PRIOR TO COMMENCEMENT. At least seven (7) days before commencement of any excavation or demolition works, the Builder or Client must give notice to the owner(s) of the adjoining property(s) and provide details of the proposed works. Further, the adjoining owner must be made aware of the potential risk of cracking during construction. The Builder or Client is responsible to rectify any damage which may occur at their own cost.
- EX2. It is our opinion that the adjoining property must be advised and acknowledge acceptance of the associated risk to their property. In all cases, the structural plans will require endorsement from a geotechnical engineer with respect to but not limited to the potential for differential settlement resulting from the works.
- EX3. Builder to ensure stability of existing structures in the vicinity of demolition and/or excavation works.
- EX4. UNLESS OTHERWISE APPROVED, excavations near new or existing footings shall not be within the footing influence line.
- EX5. The builder must immediately notify the structural and geotechnical engineer if, at any time, excavation inadvertently extends below influence line of neighbouring footings, or if excessive subsoil flows or signs of erosion are encountered during excavation.



- EX6. Where geotechnical engineer inspections are required, it is the builder's responsibility to notify the geotechnical engineer.

FOOTINGS - FT

- FT1. Please refer to SD4. Where geotechnical report is not provided, foundation strata is assumed for design purposes and shall be verified by a geotechnical engineer commissioned by the Client.
- FT2. Footings to be constructed and backfilled as soon as possible following excavation to avoid softening by rain or drying out by exposure.
- FT3. Footings must bear into undisturbed natural ground clear of organic material and into material as per SD4.
- FT4. If variable bearing strata (either to SD4 and/or between areas of the site) is encountered during excavation of footings, the geotechnical and structural engineer shall be contacted at that time for approval/review. All footings shall bear on similar materials unless otherwise noted.
- FT5. Foundation Preparation Table:

Foundation	Minimum Preparation
Sand	Trenches must be cleaned of all debris and hand compacted prior to placement of reinforcement.
Clay	Trenches must be cleaned of all debris. Soft spots to be removed until clay is achieved
Shale	Excavation must be cast or capped with plain concrete on the same day as excavation.
Sandstone	Scrape weathered surface to remove cleaved sandstone under footings.

- FT6. Future development of neighbouring properties may affect ground water conditions on this site. This may cause reactivity in the subgrade, putting the footing at risk of differential settlement. We recommend that, particularly in clay strata, agricultural drainage is installed to the upstream perimeter of the building outside the zone of influence of the footings. The agricultural drain must be installed below the fluctuating seasonal zone which shall be identified by geotechnical investigation.

SHORING - SH

- SH1. Where excavation occurs adjacent to existing structures and on property boundaries, shoring may be required.
- SH2. It is the responsibility of the builder/owner to engage a geotechnical engineer to provide recommendations on safe temporary batters. Should those batters not be achievable to construct the works, shoring will be required.
- SH3. All shoring designed by NB Consulting Engineers must be inspected by NB Consulting Engineers and the geotechnical engineer at the relevant stages (refer to EX5. and IN3).
- SH4. If NB Consulting Engineers is not engaged for shoring design, it must be designed and certified by an appropriately qualified consultant.
- SH5. Preparation for shoring to be in accordance with EX5.

CONCRETE - CO

- CO1. All workmanship and concrete shall be in accordance with AS1379-2007 & AS3600-2018.
- CO2. All concrete unless noted otherwise shall have: 80mm slump (at point of placement) 20mm max. aggregate size.
- CO3. Shrinkage reducing admixtures and/or water reducing agents if specified must be added to mix prior to pour. No extra water shall be added to the mix at any time.
- CO4. For clear concrete cover to reinforcement and concrete strength, refer to relevant plans.
- CO5. Above covers may require adjustment if fire rating is a requirement.
- CO6. Finished floor levels (FFL) to be confirmed with architect.
- CO7. Finishes, flashing & waterproof membranes to architects details.
- CO8. Sizes of concrete elements, as shown on plan, exclude thickness of applied finishes.
- CO9. All construction joint locations shall be approved by engineer.
- CO10. Beam depths include slab thickness.
- CO11. No holes or chases other than those shown on the structural drawings shall be made in concrete elements without the prior approval of NB Consulting Engineers.
- CO12. Where vertical slab/beam surfaces are formed against a masonry (or other) wall, provide 10mm styrene separation material.
- CO13. Any structural concrete slab that is designed in accordance with AS3600-2018 is susceptible to shrinkage. A certain level of cracking is therefore considered acceptable. If a crack free surface is necessary, then a proprietary topping system should be considered.
- CO14. Engineer shall be notified should the structural slab be intended to be polished so that extra cover, reinforcement and slab thickness (equivalent to the polishing depth) is allowed for.
- CO15. Curing of all concrete is to be achieved by keeping surfaces continuously wet for a period of three (3) days, followed by prevention of loss of moisture for seven (7) days and then gradual drying out. Approved spray on curing compounds may be used where no exposed floor finishes are proposed. Polythene sheeting or wet hessian may be used if protected from wind and traffic (including foot traffic).

REINFORCEMENT - RE

- RE1. Reinforcement specified is Grade D500 unless noted otherwise.
- RE2. Reinforcement is represented diagrammatically and is not necessarily shown in true projection.
- RE3. Unless noted otherwise on plan, reinforcement shall be placed in sequence so that the uppermost and lowermost reinforcement direction matches the smallest span for suspended slabs.
- RE4. Top reinforcement is to be continuous over supports.
- RE5. Bottom reinforcement to be lapped at supports.
- RE6. Welding of reinforcement shall no be permitted unless shown on the structural drawings.
- RE7. NB Consulting Engineers shall be notified for approval if pipes or conduits shall be placed within the zone of concrete cover to the reinforcement or where pipes/conduits will require the cutting or non placement of any reinforcement.
- RE8. All reinforcing bars and fabric shall comply with AS4671-2019.
- RE9. Reinforcement symbols:
N - Grade 500N deformed bar (D500) normal ductility
R - Grade 250N plain round bar (R250) normal ductility
SL - Grade 500L welded deformed ribbed mesh square (D500) low ductility
RL - Grade 500L welded deformed ribbed mesh rectangular (D500) low ductility
S - Pool Grade 250N deformed bar (D250) normal ductility
Note: The number immediately following these symbols is the number of millimetres in the bar diameter.
Therefore; 8N12-250 denotes: 8 bars
Grade 500N deformed bars
12mm nominal diameter bars
250mm spacing (centres)

REINFORCEMENT (CONT.) - RE

- RE10. Fabric reinforcement to be lapped by 2 complete squares unless noted otherwise.
- RE11. Laps in Bar Reinforcement Table:

Bar Size	Min. Lap (U.N.O.)
N12	500mm
N16	650mm
N20	800mm
N24	1000mm
N28	1150mm
N32	1300mm
N36	1500mm

- RE12. All reinforcement shall be firmly supported on bar chairs spaced at the maximum of 750mm centres both ways under bar or fabric reinforcement. Reinforcement shall be tied at alternate intersections.

FORMWORK AND BACKPROPPING - FW

- FW1. U.N.O. formwork design is the responsibility of the builder in accordance with AS3610
- FW2. Any significant additional loading such as pallets of bricks to be installed over supports under. To be confirmed by Structural Engineer.
- FW3. Formwork must be cleaned of all debris prior to the casting of concrete.
- FW4. Stripping/backpropping times for suspended slabs and retaining walls:

Action	Allowable time
Strip & backprop	When slab achieves 85% of F'c (14 days)
Full stripping	When slab achieves 95% of F'c (28 days)
Backfilling retaining walls	28 days or contact structural engineer

- Values in brackets are approximate times based on standard concrete mix. (refer CO1)
- FW5. The finished concrete should be a dense homogeneous mass, completely filling the formwork, thoroughly embedding the reinforcement and free of any stone pockets or voids. All concrete elements including slabs on ground and footings shall be compacted with mechanical vibrators.

PROPPING/BRACING - PR

- PR1. Propping and bracing is the responsibility of the builder to ensure that all structural elements during construction are continuously supported at all times.
- PR2. All propping/bracing shall be suitable for the application and installed in accordance with the manufacturer's specifications where applicable.
- PR3. Upon request by the builder, NB Consulting Engineers can provide guidance on propping and/or bracing. However, as per PR1, propping remains the responsibility of the builder.
- PR4. No brickwork or blockwork should be constructed or stored on suspended slabs until at least seven (7) days after pour. Between 7-28 days, walls over may be installed with adequate backpropping under. Storage of bricks or blocks to be located over permanent structure underneath and be subject to structural engineer approval.

BRICKWORK - BR

- BR1. All brickwork to conform and be constructed in accordance with AS3700-2018 with a min. compressive strength of 20 MPa and mortar class M3.
- BR2. Proprietary slip joint shall be used over all load bearing walls that support concrete slabs and placed on smooth brickwork or trowelled mortar finish. Non-load bearing walls shall have 10mm compressible material and ties to the slab soffit.
- BR3. Control joints to be placed at a maximum of 8m centres or in accordance with AS3700-2018.
- BR4. Exposure grade bricks to be used below damp proof course (DPC).
- BR5. Vertical control joint material where specified on plan between slabs and masonry walls shall be (U.N.O.):
10mm Spandex External
Bitumastic fibreboard internal
- BR6. Provide stainless steel wall ties below DPC to AS3700-2018. Provide galvanised wall ties above DPC to AS3700-2018.
- BR7. Extruded bricks are not suitable for standard brickwork retaining walls and shall not be used for this application.
- BR8. Where new works are supported by existing brickwork, builder is to ensure the structural adequacy of brickwork. Contact engineer if required.

Scale check - 100mm when printed to scale

A2

DOCUMENT CERTIFICATION					Architect:		Project:		Design:		Drawn:	
Date : 10.07.2025 Nick Crowle B.E. Civil (Structural) MIEAust (Associate NB Consulting Engineers) The copyright of this drawing remains with NB Consulting Engineers					ARCHICODE		ALTERATIONS & ADDITIONS 149 CONDAMINE STREET, BALGOWLAH		DV		LS	
10.07.2025 A ISSUE FOR DA SUBMISSION ONLY					Client:		Drawing Title:		Job No:		Drawing No:	
Date: Issue: Description: By: Review:					PROJECT GUIDES PTY LTD		GENERAL NOTES SHEET 1		2408070		S01	
											A	

NB Consulting Engineers

REGULATED DESIGN RECORD				
Project Address: 149 CONDOMINE STREET BALGOWLAH				
Project Title: ENGINEERING DRAWINGS				
Consent No: -		Body Corporate Reg No: SP 46248		
Drawing Title: GENERAL NOTES 2		Drawing No: S02		
Rev	Date dd.mm.yy	Description	DP Full Name	Reg No
A	10.07.2025	ISSUE FOR DA	DAVID HUNTER	0000752

BLOCKWORK - BL

- BL1. All blockwork to conform and be constructed in accordance with AS3700-2018 with a min. compressive strength of 15 MPa and mortar class M3.
- BL2. Where cores of hollow blocks are to be filled, properly compacted concrete with a strength of 20 MPa and slump of 230 shall be provided. The mix shall include max. 10mm aggregate.
- BL3. Control joints to be placed at a maximum of 8m centres or in accordance with AS3700-2018.
- BL4. Vertical control joint material where specified on plan between slabs and masonry walls shall be (U.N.O.):
 - 10mm Spandex External
 - Bitumastic Fibreboard internal
- BL5. Where block wall is retaining, allow 55mm cover from the outside face of the blockwork to the tension steel. Lap lengths in accordance with REll. table.
- BL6. Retaining walls or any reinforced and concrete core filled block walls to be of double 'U' block construction unless noted otherwise.
- BL7. Max. pour height for 140mm wide unrestrained blockwork is 1.5m; otherwise 2m.
- BL8. Contractor to use vibration to ensure that all cores are completely filled with concrete.

STEEL - ST

- ST1. All structural steelwork to be Grade 300 or greater.
- ST2. Design, fabrication and erection in accordance with AS4100-2020.
- ST3. Materials and workmanship shall comply with AS1250-1981, AS4100-2020 and specification for structural steel.
- ST4. Rolled steel sections including steel plates shall comply with AS3678-2016.
- ST5. Cold-formed steel sections shall be Grade 450 zinc coated in accordance with AS1538-1988.
- ST6. Welded and seamless steel hollow sections shall comply with AS1163-2016 and be Grade 250/350/450 as specified in the structural drawings.
- ST7. Bolt designation:

Mark	Grade	Tightening
4.6S	Grade 4.6	Snug tightened
8.8S	Grade 8.8	Snug tightened
8.8TB	Grade 8.8	Fully tightened to AISI11-1984 # acting as bearing joint
8.8TF	Grade 8.8	Fully tightened to AISI11-1984 # acting as friction joint

- ST8. Unless noted otherwise, all bolts shall be 4.6S
- ST9. Unless noted otherwise, minimum connection shall be 2M16 4.6S bolts, 10mm thick cleat plate, 6mm continuous fillet welds. Engineer to be contacted for verification.
- ST10. Load indicating washers shall be used in all fully tensioned joints (8.8TB & 8.8TF).
- ST11. All welding shall be carried out in accordance with AS1554.2-2021 and AS4100-2020.
- ST12. Unless noted otherwise all welds shall be category SP using E41XX electrodes. All butt welds shall be complete penetration butt welds category SP.
- ST13. Fabrication and erection tolerances for structural steelwork shall be in accordance with AS4100-2020.
- ST14. All specification, inspection and maintenance of steel coating systems to be the responsibility of the project manager (where there is no project manager, a nominated agent shall take responsibility which may be the owner or architect / designer) and in accordance with AS2312-2014 Part 1 and 2.
- ST15. As a guide, all protective coatings to be continually maintained in accordance with the required durability (years to first maintenance) specification from AS2312-2014 Parts 1 & 2. NB Consulting Engineers does not specify maintenance or warranty periods as this is the responsibility of the project manager.
- ST16. Workshop drawings shall be prepared and submitted to the engineer for review prior to fabrication commencement. It is not the responsibility of the engineer to check dimensions or setouts

STEEL (CONT.) - ST

ST17.NB Consulting Engineers does not warrant, certify or take responsibility for any specification, inspection and maintenance of steel coating systems. For guidance, please refer to below excerpt from ABCB Housing Provisions (2022) for Class 1 structures.

Environment	Location	Minimum protective coating		
		Option 1 (hot dip galvanising)	Option 2 (duplex system).	Option 3 (paint).
Low (mild steel corrosion rate 1.3 to 25 µm/year)	Typically remote inland areas or more than 1 km from sheltered bays	HDG75	-	ACL2, ACC2, IZSI, PUR2A
Medium (mild steel corrosion rate 25 to 50 µm/year)	Typically more than 1 km from breaking surf or aggressive industrial areas or more than 50 m from sheltered bays	HDG225	-	ACL3, ACC4, ACC5 IZSI, PUR3, PUR4
High (mild steel corrosion rate 50 to 80 µm/year)	Typically more than 200 m from breaking surf or aggressive industrial areas or within 50 m from sheltered bays	HDG450	HDGI50 (5 years) 4D (10-15 years) or HDG300 (10 years) 2D (5-10 years)	ACC6, IZS3, PUR5
Very High (mild steel corrosion rate 80 to 200 µm/year)	Typically extends from 0 m inland from breaking surf to 200 m inland from breaking surf , and within 200 m of aggressive industrial areas	HDG900	HDG300 (5 years) 5D (10-15 years) or HDG600 (10 years) 4D (5-10 years)	ACC6 (C5-M only), PUR5

TIMBER - TM

TM1. All workmanship and materials to be in accordance with ASI684.2-2021, ASI720.1 and AS3959-2018. All softwood to be min. grade F7 or MGP10 & hardwood min. FI4 unless noted otherwise.

TM2. Min. timber treatment/species shall be provided to the following hazard classes:

Application	Wetting	Hazard Class (softwood)	Hardwood Durability
Internal	Dry	H2	-
Ext. (above ground)	Periodic	H3	Class 2
Ext. (ground contact)	Severe	H4	Class 1
Ext. (ground/freshwater)	Extreme	H5	Class 1
Other	Contact Engineer		

- TM1. All timber shall be kiln dried and be below EMC of 15% at time of installation. Timber elements shall be protected from weather at all times of construction to maintain an EMC less than 15%. Do not use green timber.
- TM4. All joists, rafters & purlins to have blocking over supports and at maximum 3m centres.
- TM5. Roof trusses to be designed and certified by manufacturer to the relevant standards. Engineer to be provided with truss drawings to verify adequacy of structural design prior to installation of trusses.
- TM6. All holes for bolts to be exact size. Washers to be used under all heads and nuts in accordance with AS1720.1.
- TM7. Bolts to be minimum M16 4.6S. U.N.O.
- TM8. Treat all exposed cut ends with approved protective coating such as Resol by Protim or approved equivalent for correct hazard class.
- TM9. Nails/clouts/screws/bolts/nuts/washers shall be hot dip galvanised for untreated timber and stainless steel for treated timber.
- TM10. Continuous nailing shall not be used for timber connections.
- TM11. All exposed treated timbers to have an application of penetrating sealer to reduce warping and twist of the timber due to varying moisture content in service.
- TM12. All timber framing where not specified shall be in accordance with AS1684; including, but not limited to:
bracing, tiedowns, wall frames, etc.
- TM13. All external timber LVL members must be lined so as to not be exposed.
- TM14. All timber plates to brickwork shall be suitably preservative treated to H3 level (AS 1604).
- TM15. Provide double joist and/or blocking under all load bearing walls.
- TM16. Unless noted otherwise, provide adequate support under all load concentration points. Contact engineer if required.

COMPACTED FILL - CF

- CF1. Only to be used with approval of the engineer & certified by geotechnical engineer.
- CF2. Clean organic material, topsoil and any uncontrolled existing fill under proposed slabs/footings.
- CF3. Filling shall be granular material compacted in layers not more than 200mm to a minimum dry density ratio (AS1289.6.3.3-1997) of 98% standard maximum dry density.

PROPRIETARY PRODUCTS - PP

PPI. All proprietary products shall be in accordance with the manufacturer's specifications, any relevant Australian Standards and the current NCC.

PP2. If an alternative product is to be used, Structural Engineer must be provided with all relevant product information before giving approval.

INSPECTIONS BY ENGINEER - IN

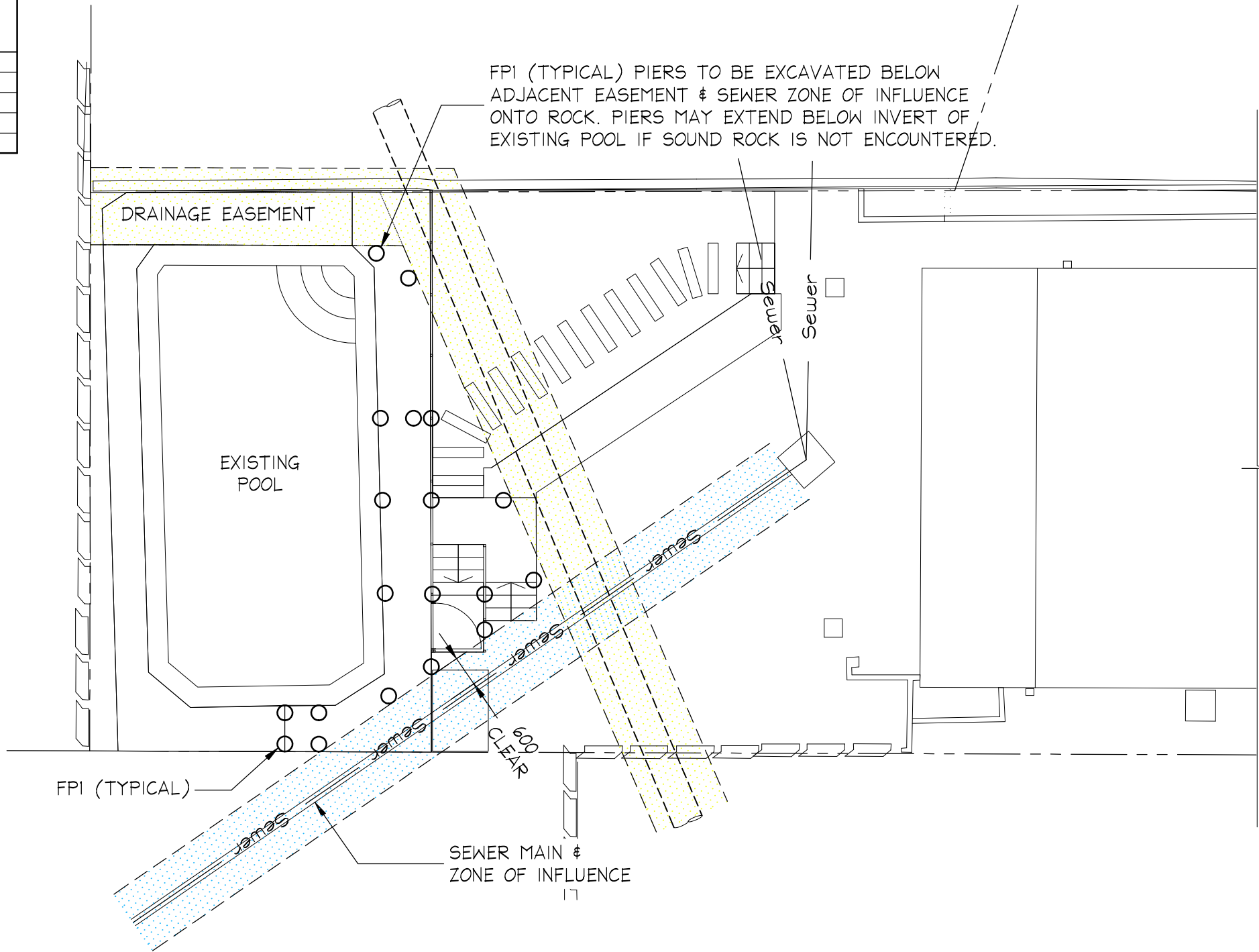
- IN1. NB Consulting Engineers to be advised when construction starts.
- IN2. NB Consulting Engineers are not engaged to supervise the works.
- IN3. The following (but not limited to) items shall be inspected:
 - Shoring and bracing prior to excavation
 - Any reinforcement prior to pouring concrete.
 - Timber/steel framing (incl. lintels) prior to cladding/lining/insulation.
 - Existing structure after soft demolition.
- IN4. The builder/owner is to contact NB Consulting Engineers at least 48 hours before any site inspection.
- IN5. Items that are not inspected by NB Consulting Engineers, or in accordance with these drawings will not be certified.

ISSUED FOR D.A.
SUBMISSION ONLY
NOT FOR
CONSTRUCTION

IF IN DOUBT ASK

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

REGULATED DESIGN RECORD				
Project Address: 149 CONDAMINE STREET BALGOWLAH				
Project Title: ENGINEERING DRAWINGS				
Consent No: -		Body Corporate Reg No: SP 46248		
Drawing Title: FOOTING PLAN		Drawing No: S10		
Rev	Date dd.mm.yy	Description	DP Full Name	Reg No
A	10.07.2025	ISSUE FOR DA	DAVID HUNTER	0000752



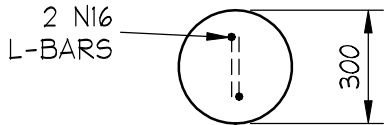
DECK FOOTING PLAN
SCALE = 1 : 100

NOTES:
CONCRETE STRENGTH
FOOTINGS:
f'c = 25 MPa, COVER = 50 mm

LEGEND:
FPI Ø300 PIER FOUNDED ONTO ROCK, REFER DETAIL

- PEG-OUT BY:
- AUSFLOW, 08/04/2025 (STORMWATER)
 - AUSFLOW, 10/10/2024 (SEWER)

- CONCRETE PIERS:
1. PIERS TO BE 300mm DIAMETER SOCKET INTO SOUND ROCK AS PER GEOTECHNICAL ENGINEERS DETAILS AND CERTIFICATION.
 2. FOR DEPTH LESS THAN 1200mm UN-REINFORCED.
 3. FOR DEPTH GREATER THAN 1200mm AND LESS THAN 1800mm. 2 N16 L-BARS.
 4. FOR DEPTH GREATER THAN 1800mm CONTACT ENGINEER.



TYPE 'FPI' FOOTING PIER SECTION
SCALE = 1 : 20

- NOTES:
1. THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION IF THE ISSUE DATE PRECEDES THE ISSUE DATE ON THE ARCHITECTURAL DRAWINGS.
 2. DO NOT SCALE FROM THIS DRAWING.
 3. ALL DIMENSIONS ARE TO BE VERIFIED ON SITE BY THE BUILDER BEFORE COMMENCING WITH ASSOCIATED WORK.
 4. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH THE GENERAL NOTES DRAWINGS.

FRAMING NOTE:
LIGHTWEIGHT DECK FRAMING ELEMENTS EXTENDING OVER THE DRAINAGE AND SEWER EASEMENT ARE READILY REMOVABLE IN THE EVENT ACCESS IS REQUIRED WITHIN THE PROPERTY BY DISASSEMBLY OF BEARERS AND JOISTS.



ISSUED FOR D.A. SUBMISSION ONLY
NOT FOR CONSTRUCTION

IF IN DOUBT ASK

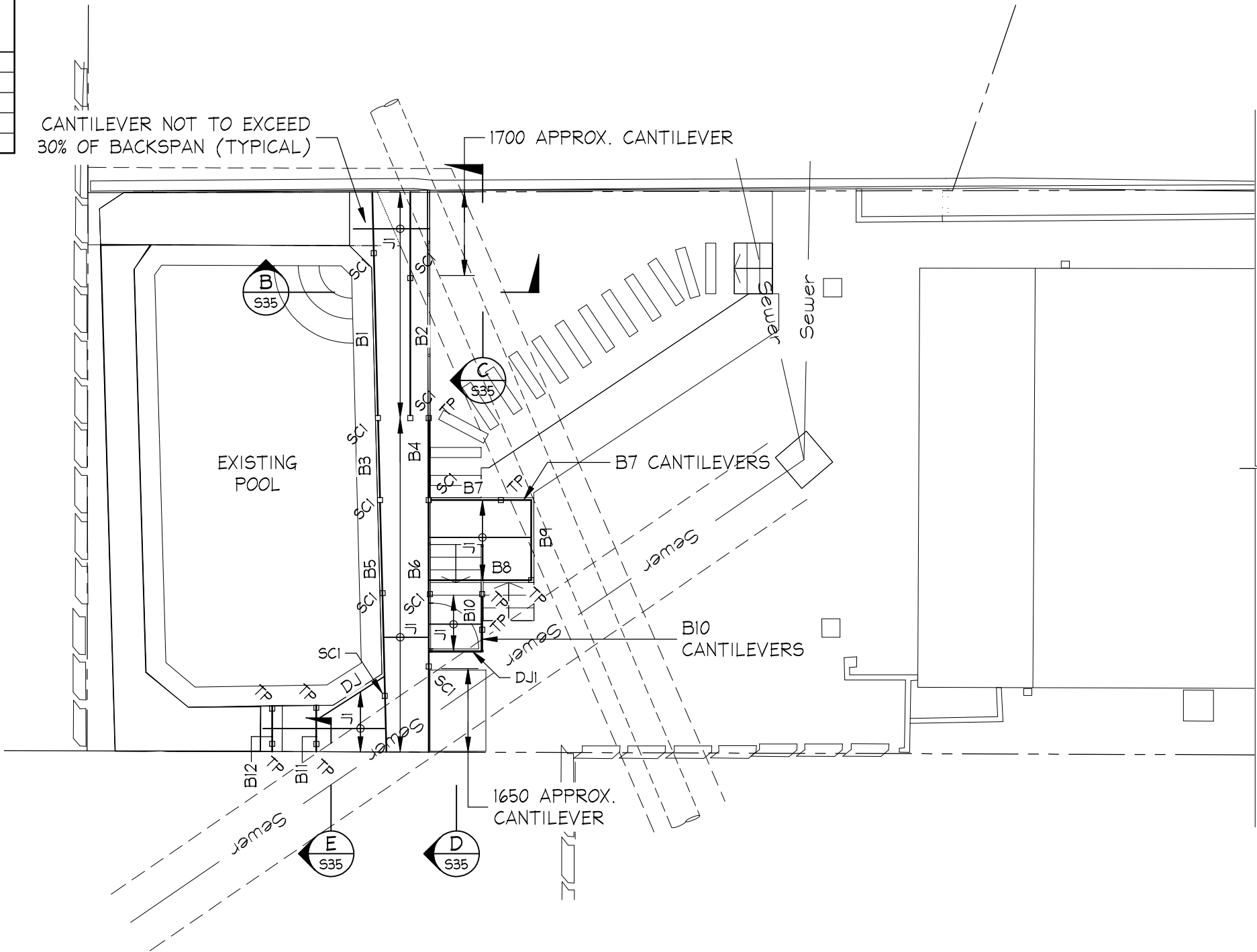
Scale check - 100mm when printed to scale

A2

																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					</
--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	----

NB Consulting Engineers

REGULATED DESIGN RECORD				
Project Address: 149 CONDAMINE STREET BALGOWLAH				
Project Title: ENGINEERING DRAWINGS				
Consent No: -		Body Corporate Reg No: SP 46248		
Drawing Title: FRAMING PLAN		Drawing No: S30		
Rev	Date dd.mm.yy	Description	DP Full Name	Reg No
A	10.07.2025	ISSUE FOR DA	DAVID HUNTER	0000752



DECK FRAMING PLAN
SCALE = 1 : 100

FRAMING NOTE:
LIGHTWEIGHT DECK FRAMING ELEMENTS EXTENDING OVER THE DRAINAGE AND SEWER EASEMENT ARE READILY REMOVABLE IN THE EVENT ACCESS IS REQUIRED WITHIN THE PROPERTY BY DISASSEMBLY OF BEARERS AND JOISTS.

MEMBER SCHEDULE (REFER TO GENERAL NOTES FOR STEELWORK CORROSION PROTECTION)		
MARK	MEMBER	REMARKS
DECK FRAMING		
TP	90x90 TIMBER POST (H4 TREATED)	POSTS
SC1	75x75x6.0 SHS POST	POSTS
JI	EXISTING or NEW 140x45 MGPI0 AT 450 CTS	JOISTS
DJ	DOUBLE JOISTS, GLUE AND SCREW LAMINATED	JOISTS
B1,B2	200 PFC	BEARER
B3,B4	2/140x45 MGPI0 (H3 TREATED)	BEARER
B5,B6	200 PFC	BEARER
B7-B12	2/140x45 MGPI0 (H3 TREATED)	BEARER

NOTES:
ALL STEELWORK CORROSION PROTECTION SHALL BE IN ACCORDANCE WITH REQUIREMENTS OF THE CURRENT NCC BUILDING CODE OF AUSTRALIA
A FINAL SPECIFICATION OF A PROPRIETARY TYPE COATING SYSTEM SHALL BE PREPARED TO EITHER:
AS/NZS 2312.1 - PART 1 - PAINT COATINGS
AS/NZS 2312.2 - PART 2 - HOT-DIP GALVANISING.
ALL STEELWORK INCLUDING FIXING BRACKETS, BOLTS, SCREWS, NAILS ETC IN CONTACT WITH TREATED PINE TO HAVE A SUITABLE COATING TO PREVENT CORROSION CAUSED BY CONTACT WITH TREATED PINE.
NOTE: NORTHERN BEACHES CONSULTING ENGINEERS CAN LEND ASSISTANCE TO THE PROJECT SPECIFIER ON STEELWORK PROTECTION BUT DO NOT WARRANT OR CERTIFY THE DURABILITY OF ANY STEELWORK BY PROPRIETARY PAINT COATING SYSTEMS OR HOT-DIPPED GALVANISING.

- NOTES:**
- THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION IF THE ISSUE DATE PRECEDES THE ISSUE DATE ON THE ARCHITECTURAL DRAWINGS.
 - DO NOT SCALE FROM THIS DRAWING.
 - ALL DIMENSIONS ARE TO BE VERIFIED ON SITE BY THE BUILDER BEFORE COMMENCING WITH ASSOCIATED WORK.
 - THIS DRAWING SHALL BE READ IN CONJUNCTION WITH THE GENERAL NOTES DRAWINGS.

Scale check - 100mm when printed to scale

A2

DOCUMENT CERTIFICATION				Architect:		Project:		Design:	Drawn:
Date : 10.07.2025 Nick Crowle B.E. Civil (Structural) MIEAust (Associate NB Consulting Engineers) The copyright of this drawing remains with NB Consulting Engineers				ARCHICODE		ALTERATIONS & ADDITIONS 149 CONDAMINE STREET, BALGOWLAH		DV	LS
25.07.2025 B FRAMING NOTE ADDED DV DH				Client:		Drawing Title:		Job No:	Drawing No:
10.07.2025 A ISSUE FOR DA SUBMISSION ONLY LS DH				PROJECT GUIDES PTY LTD		DECK FRAMING PLAN		2408070	S30
Date:	Issue:	Description:	By:	Review:					Issue:
									B

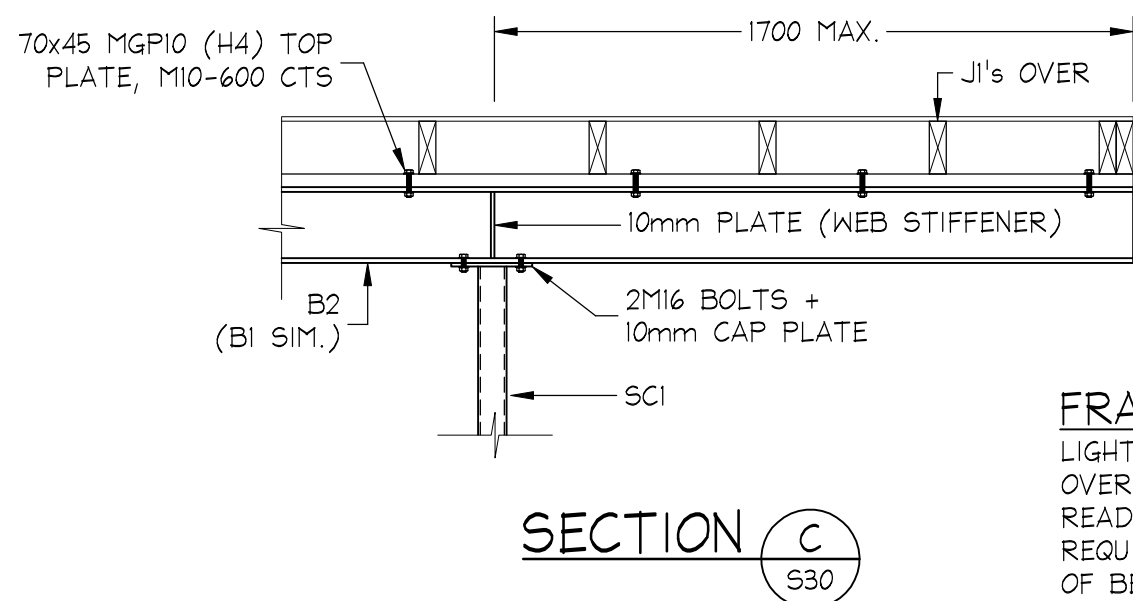
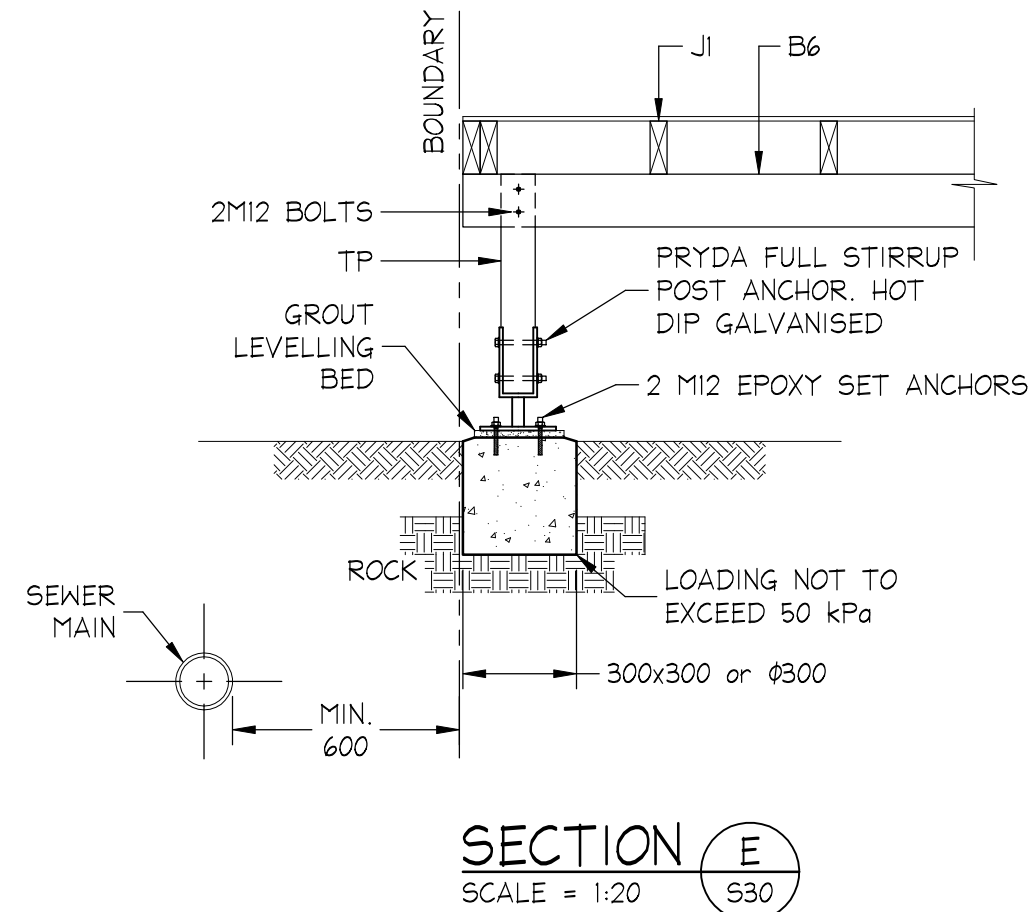
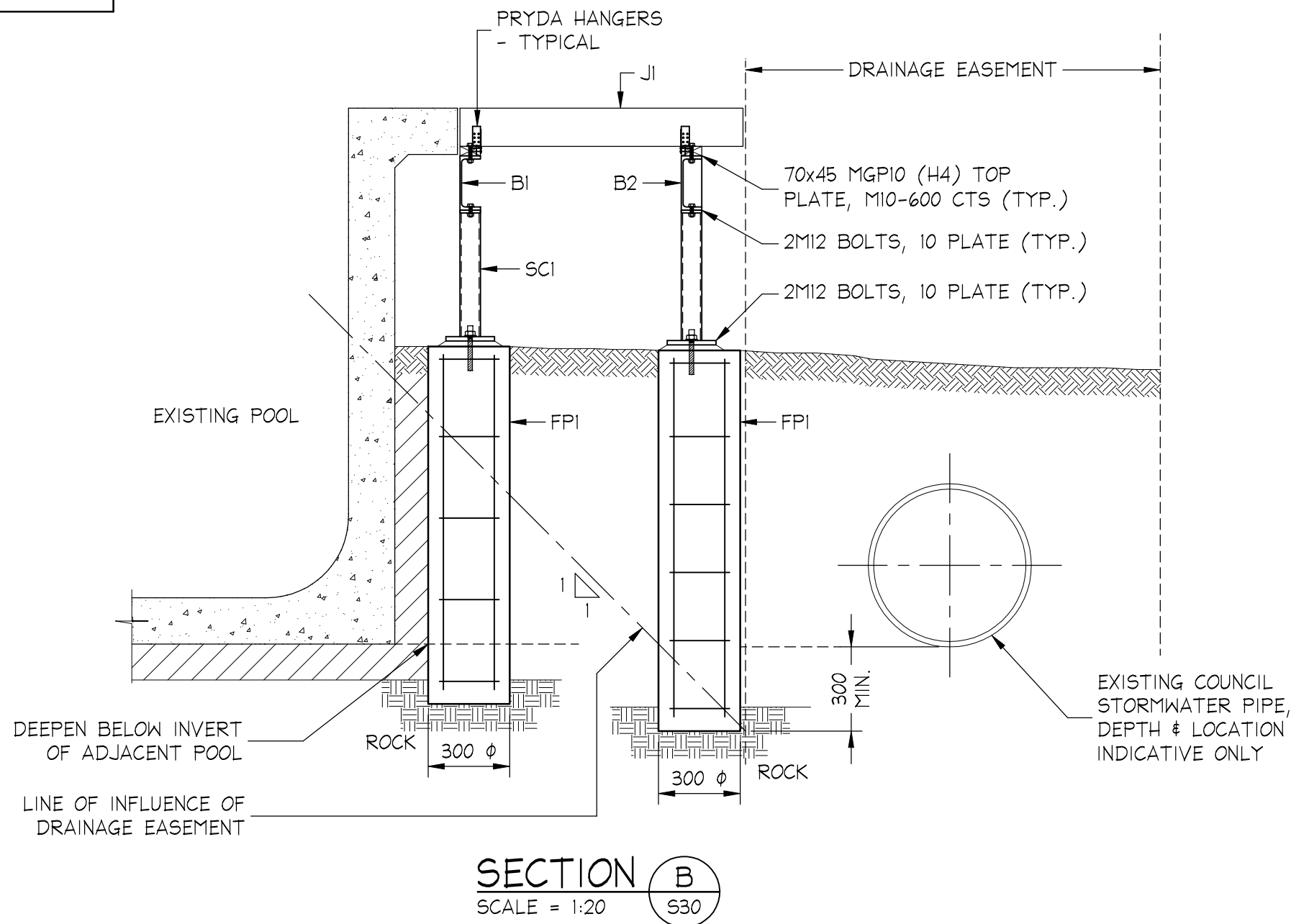


ISSUED FOR D.A.
SUBMISSION ONLY
NOT FOR
CONSTRUCTION

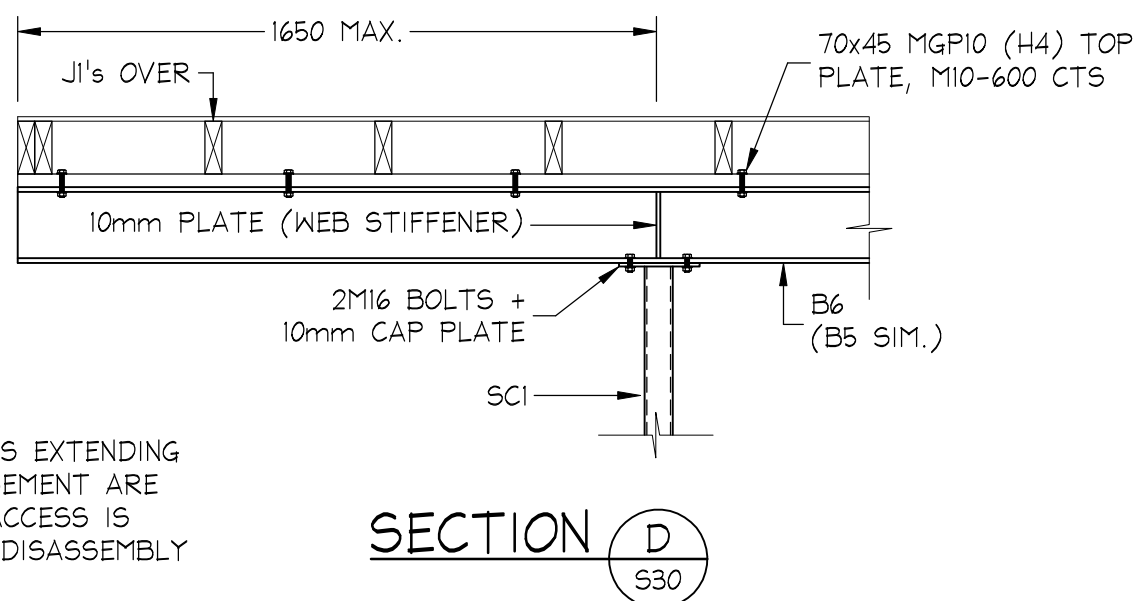
IF IN DOUBT ASK

NB Consulting Engineers

REGULATED DESIGN RECORD				
Project Address: 149 CONDOMINE STREET BALGOWLAH				
Project Title: ENGINEERING DRAWINGS				
Consent No: -		Body Corporate Reg No: SP 46248		
Drawing Title: FRAMING DETAILS		Drawing No: S35		
Rev	Date dd.mm.yy	Description	DP Full Name	Reg No
A	10.07.2025	ISSUE FOR DA	DAVID HUNTER	0000752



FRAMING NOTE:
LIGHTWEIGHT DECK FRAMING ELEMENTS EXTENDING OVER THE DRAINAGE AND SEWER EASEMENT ARE READILY REMOVABLE IN THE EVENT ACCESS IS REQUIRED WITHIN THE PROPERTY BY DISASSEMBLY OF BEARERS AND JOISTS.



- NOTES:**
1. THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION IF THE ISSUE DATE PRECEDES THE ISSUE DATE ON THE ARCHITECTURAL DRAWINGS.
 2. DO NOT SCALE FROM THIS DRAWING.
 3. ALL DIMENSIONS ARE TO BE VERIFIED ON SITE BY THE BUILDER BEFORE COMMENCING WITH ASSOCIATED WORK.
 4. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH THE GENERAL NOTES DRAWINGS.

Scale check - 100mm when printed to scale

ISSUED FOR D.A. SUBMISSION ONLY
NOT FOR CONSTRUCTION

IF IN DOUBT ASK

DOCUMENT CERTIFICATION				Architect:		Project:		Design:		Drawn:	
25.07.2025 B FRAMING NOTE ADDED DV DH				Client:		Drawing Title:		Job No:		Drawing No:	
10.07.2025 A ISSUE FOR DA SUBMISSION ONLY LS DH				PROJECT GUIDES PTY LTD		DECK FRAMING DETAILS SHEET 1		2408070		S35	
Date: Issue: Description: By: Review:				ALTERATIONS & ADDITIONS 149 CONDOMINE STREET, BALGOWLAH		2408070		S35		B	