

GENERAL NOTES

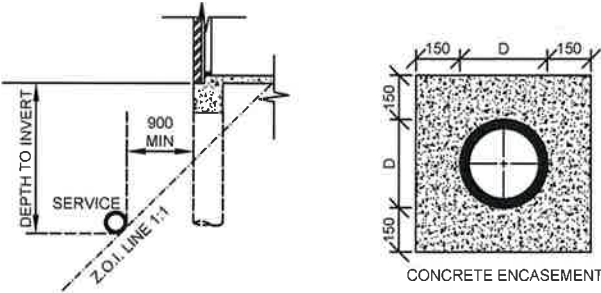
1. THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL ARCHITECTURAL AND OTHER CONSULTANTS DRAWINGS AND SPECIFICATIONS AND WITH SUCH OTHER WRITTEN INSTRUCTIONS MAY BE ISSUED DURING THE COURSE OF THE CONTRACT. ANY DISCREPANCY SHALL BE REFERRED TO THE ENGINEER BEFORE PROCEEDING WITH THE WORK. CONSTRUCTION FROM THESE DRAWINGS AND THEIR ASSOCIATED CONSULTANTS DRAWINGS IS NOT TO COMMENCE UNTIL APPROVED BY LOCAL AUTHORITY.
2. ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE RELEVANT AND CURRENT AUSTRALIAN STANDARDS AND WITH BY-LAWS AND ORDINANCES OF THE RELEVANT BUILDING EXCEPT WHERE VARIED BY THE PROJECT SPECIFICATION.
3. BUILDER SHALL BE RESPONSIBLE FOR MAINTAINING A STABLE CONDITION OF THE SITE WITHOUT ADVERSELY EFFECTING SURROUNDING PROPERTIES INCLUDING SERVICES. THIS INCLUDES ALL THE NECESSARY APPROVALS FOR SHORING AND ANCHORING SYSTEMS.
4. ALL DIMENSIONS SHOWN ON THE DRAWING SHALL BE VERIFIED BY THE BUILDER ON-SITE. ENGINEERS DRAWING SHALL NOT BE SCALED FOR DIMENSIONS.
5. UNLESS NOTED OTHERWISE ALL MEASUREMENT ARE IN MILLIMETERS (mm) AND ALL LEVELS ARE IN METERS (m).
6. ALL LOADING TAKEN INTO ACCOUNT IS IN ACCORDANCE WITH AS1170.1

DESIGN LOADING IN ACCORDANCE WITH AS1170.1	
DEAD LOAD (kPa)	
RESIDENTIAL FLOOR	1.5
SUSPENDED SLAB	2.5
ROOF	1.0
LIVE LOAD (kPa)	
RESIDENTIAL FLOOR	1.5
BALCONY	2.0
ROOF	0.25

7. ABBREVIATIONS:
- | | | | |
|-------|------------------------|-----|-----------------------|
| A/J | ARTICULATION JOINT | | |
| BTM | BOTTOM | | |
| CTS | CENTRES | CTC | CENTRE TO CENTRE |
| DIA | DIAMETER | | |
| FFL | FINISHED FLOOR LEVEL | FGL | FINISHED GARAGE LEVEL |
| MAX | MAXIMUM | MIN | MINIMUM |
| NSOP | NOT SHOWN ON PLAN | | |
| U.N.O | UNLESS NOTED OTHERWISE | | |

EXCAVATION

1. ALL EXCAVATION SHALL BE PERFORMED NEATLY TO THE LINES, LEVELS AND GRADES SPECIFIED IN THE ARCHITECT DRAWINGS.
2. ALL TOPSOIL AND VEGETATION SHALL BE STRIPPED FROM THE BUILDING PLATFORM PRIOR TO COMMENCEMENT OF EARTHWORKS.
3. VERTICAL OR NEAR-VERTICAL PERMANENT EXCAVATION WITHIN 2m OF BUILDING AND DEEPER THAN 0.6m IN MATERIAL OTHER THAN ROCK SHALL BE ADEQUATELY RETAINED OR BATTERED THE EFFECTS OF EXCAVATION ON DRAINAGE OR FOUNDATION DRYING SHALL BE CONSIDERED.
4. TEMPORARY EXCAVATION IN THE AREA OF THE FOOTING SHALL BE CARRIED OUT ONLY WHERE ADEQUATE SUPPORT FOR THE FOOTING SYSTEM IS MAINTAINED.
5. WHERE THERE EXISTS AN UNDERGROUND SERVICE TRENCH OR PIPE RUNNING PARALLEL TO THE FOOTING EDGE, THE FOOTING SHALL BE SUPPORTED ON MASS CONCRETE PIERS TAKEN BELOW THE ZONE OF INFLUENCE (Z.O.I.) LINE.
6. IN THE EVENT WHERE THE FOOTING EDGE IS LESS THAN 900mm AWAY FROM THE SERVICE, THE SERVICE SHALL BE CONCRETE ENCASED AS SHOWN.



7. THE LOCATION AND DEPTH TO THE INVERT OF THE UNDERGROUND SERVICE IS TAKEN FROM SEWER PEG OUT. THE FINAL EXTENT IS TO BE VERIFIED ON-SITE.
8. ALL PIERS TO BE CLEANED AND DE-WATERED PRIOR TO POURING OF CONCRETE.
9. IT IS THE RESPONSIBILITY OF THE BUILDER/SUBCONTRACTOR TO ENSURE CORRECT PIER SETOUT.

FOUNDATIONS

1. FOUNDATION HAVE BEEN DESIGNED IN ACCORDANCE WITH AS2870 FOR THE FOLLOWING BEARING PRESSURE.
- | ELEMENT | MIN CAPACITY (kPa) | TYPICAL STRATA |
|---------------|--------------------|-----------------|
| PAD & FOOTING | 150 | CONTROLLED FILL |
| PIERS | 600 | SHALE/ROCK |
2. FOUNDATION SHALL BE APPROVED BY THE GEOTECHNICAL ENGINEER FOR THIS BEARING PRESSURE BEFORE PLACING ANY MEMBRANE, REINFORCEMENT AND CONCRETE.
3. FOOTINGS SHALL BE LOCATED CENTRALLY UNDER WALLS AND COLUMNS U.N.O.
4. WHERE FOOTING ARE OVER-EXCAVATED FILL OVER-EXCAVATED AREAS WITH BLENDED CONCRETE GRADE SAME AS THE FOOTING TO A MINIMUM THICKNESS OF 50mm.
5. KEEP FOOTING CLEAN AND FREE OF LOOSE MATERIAL BEFORE INSPECTION, IMMEDIATELY PRIOR TO AND DURING POURING OF CONCRETE.
6. DO NOT EXCEED A RISE OF 100mm IN A RUN OF 300mm FOR THE LINE OF SLOPE BETWEEN ADJACENT FOOTINGS OR EXCAVATIONS.
7. DO NOT BACKFILL RETAINING WALLS (OTHER THEN CANTILEVER WALLS) UNTIL FLOOR CONSTRUCTION AT THE TOP AND BOTTOM IS COMPLETE. ENSURE FREE DRAINING BACKFILL AND DRAINAGE IS IN PLACE.
8. FOOTINGS ARE TO BE CONSTRUCTED AND BACKFILLED AS SOON AS POSSIBLE FOLLOWING EXCAVATION TO AVOID SOFTENING OR DRYING OUT FROM EXPOSURE.
9. TERMITE BARRIERS (CHEMICAL AND OTHER BARRIERS) MUST BE INSTALLED IN ACCORDANCE WITH BCA REQUIREMENTS.

CONTROLLED FILL

1. FILLING USED FOR THE SUPPORT OF A SLAB SHALL BE CONTROLLED FILL OR ROLLED FILL.
2. SAND FILL UP TO 0.8m DEEP THAT IS WELL COMPACTED BY VIBRATING PLATE OR VIBRATING ROLLER INLAYERS NO MORE THEN 0.3m THICK IS DEEMED TO BE CONTROLLED FILL.
3. FOR SAND FILL NOT CONTAINING GRAVEL-SIZED MATERIAL A BLOW COUNT OF 7 OR MORE PER 0.3m USING THE PENETROMETER TEST DESCRIBED IN AS1289.6.3.3 IS DEEMED TO SATISFY THIS REQUIREMENT.
4. NON-SAND FILL UP TO 0.4m DEEP THAT IS WELL COMPACTED BY A MECHANICAL ROLLER IN LAYERS NOT MORE THAN 0.15m THICK IS DEEMED TO BE CONTROLLED FILL. CLAY FILL SHALL BE MOIST DURING COMPACTION.
5. ROLLER FILL CONSISTS OF MATERIAL COMPACTED IN LAYERS BY REPEATED ROLLING WITH AN EXCAVATOR OR SIMILAR EQUIPMENT. THE DEPTH OF ROLLER FILL SHALL NOT EXCEED 0.6m COMPACTED IN LAYERS NOT MORE THAN 0.3m THICK FOR SAND MATERIAL OR 0.3m COMPACTED IN LAYERS MORE THAN 0.15m THICK FOR OTHER MATERIAL.

MASONRY

1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS3700 WITH AMENDMENTS AND OTHER RELEVANT CODES.
2. WALLS OF MASONRY EXTENSIONS, OR MASONRY VENEER EXTENSIONS, SHALL BE ARTICULATED AT THE JUNCTION WITH THE EXISTING BUILDING.
3. STRENGTHS OF BRICKS, CLASS OF BLOCKS AND TYPE OF MORTAR SHALL BE AS FOLLOWS:

TYPE	MORTAR COMPOSITION (C:L:S)	CHARACTERISTIC UNCONFINED COMPRESSIVE STRENGTH (MPa)
BLOCKWORK	1 : 1 : 0.5 + WATER THICKENER	15
BRICKWORK	1 : 1 : 0.8 + WATER THICKENER	20

4. TWO LAYERS OF APPROVED METAL BASED SLIP MATERIAL SHALL BE USED OVER ALL LOAD-BEARING WALLS THAT SUPPORT CONCRETE SLABS. NON LOAD-BEARING WALLS SHALL HAVE 10mm COMPRESSIBLE MATERIAL AND TIES TO THE SLAB SOFFIT.
5. GROUT FOR CORE FILLING SHALL HAVE MAX STRENGTH $P_c = 25MPa$ WITH A SLUMP OF 230mm, MAX AGGREGATION OF 10mm AND MIN CEMENT CONTENT OF $300 kg/m^3$ U.N.O. TESTING SHALL COMPLY WITH AS3600 FOR PROJECT ASSESSMENT.
6. MORTAR ADMIXTURE SHALL NOT BE USED WITHOUT THE WRITTEN APPROVAL OF THE ENGINEER.
7. ALL MASONRY WALLS AND PIERS SUPPORTING SLABS AND BEAMS SHALL HAVE A PRE-GREASED GALVANIZED STEEL SLIP JOINT BETWEEN CONCRETE SOFFIT AND THE TOP OF THE MASONRY ELEMENT U.N.O.
8. NO CHASES OR RECESSES ARE PERMITTED IN THE LOAD BEARING MASONRY WITHOUT APPROVAL OF THE ENGINEER.
9. NO BRICKWORK OR BLOCKWORK SHALL BE CONSTRUCTED ON SUSPENDED SLABS UNTIL ALL PROPPING HAS BEEN REMOVED FROM THE UNDERSIDE OF THE SLAB AND THE CONCRETE HAS THE SPECIFIED 28 DAY CYLINDER STRENGTH VERIFIED BY TEST.
10. 10mm WIDE ARTICULATION JOINTS TO BE PROVIDED AT MAX 6m CTS AS PER AS3700 AND AS4773 REQUIREMENTS U.N.O. PROVISIONS TO BE CO-ORDINATED WITH ARCHITECT.

CONCRETE

1. ALL WORKMANSHIP AND MATERIAL SHALL BE IN ACCORDANCE WITH AS3600.
2. CONCRETE SHALL BE SUPPLIED IN ACCORDANCE WITH AS1379.
- | CONCRETE QUALITY | | | | |
|-----------------------------|------------|-------------------------|-------------|-------------|
| ELEMENT | SLUMP (mm) | MAX AGGREGATE SIZE (mm) | CEMENT TYPE | f_c (MPa) |
| FOOTING & PIER ¹ | 80 | 20 | A | 25 |
| SLAB ON GROUND ¹ | 80 | 20 | A | 25 |
| SUSPENDED SLAB & COLUMN | 80 | 20 | A | 32 |
| CONCRETE BLOCKWALL | 200 | 6 | A | 20 |
| RETAINING WALL | 200 | 6 | A | 20 |
- ¹ 32MPa CONCRETE STRENGTH MUST BE USED IN SALINE ENVIRONMENTS.
3. CLEAR CONCRETE COVER TO ALL REINFORCEMENT SHALL BE AS FOLLOWS U.N.O.

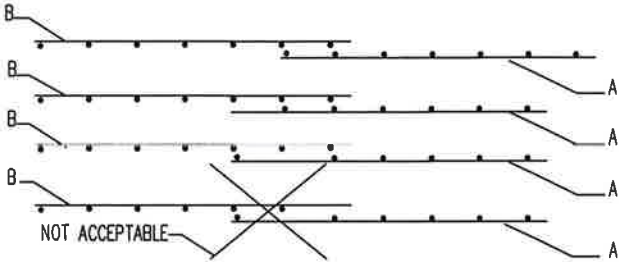
CONCRETE CLEAR COVER (mm)			
ELEMENT	CAST AGAINST FORMS COMPLYING WITH AS1509		CAST AGAINST FORMWORK/GROUND
	SHELTERED	EXPOSED TO WEATHER/WATER	
COLUMN & PEDESTAL	40	50	75
BEAM	25	40	65
FOOTING		65	75
SLAB & WALL	30	50	75

4. SIZES OF CONCRETE DO NOT INCLUDE THICKNESS OF APPLIED FINISHES.
5. CONSTRUCTION JOINTS WHERE NOT SHOWN SHALL BE LOCATED TO THE APPROVAL OF THE ENGINEER.
6. NO HOLES OR CHASES OTHER THAN THOSE ON THE STRUCTURAL DRAWNGS SHALL BE MADE IN CONCRETE MEMBERS WITHOUT APPROVAL OF THE ENGINEER.
7. CONCRETE CURING AND STRIPPING TO BE IN ACCORDANCE WITH RELEVANT SAI CODES. CONCRETE TO BE CURED A MINIMUM OF 7 DAYS.
8. CONCRETE SLABS TO BE VIBRATED.
9. FORMWORK TO BEAMS AND SLABS SPANNING GREATER THAN 5m SHALL BE PRECAMBERED UPWARDS BY 1/500 OF THE CLEAR SPAN IN EACH, U.N.O.
10. MIN. THREE-MONTHS DRYING OF THE CONCRETE IS REQUIRED BEFORE PLACEMENT OF BRITTLE SURFACES, OTHERWISE SL92 MESH OR EQUIVALENT MUST BE USED.

REINFORCEMENT

1. REINFORCEMENT IS REPRESENTED DIAGRAMMATICALLY, IT IS NOT NECESSARILY SHOWN IN TRUE PROJECTION.
2. SPLICES IN REINFORCEMENT SHALL BE MADE ONLY IN THE POSITION SHOWN. THE WRITTEN APPROVAL OF THE ENGINEER SHALL BE OBTAINED FOR ANY OTHER SPLICES WHERE LAP LENGTHS ARE NOT SHOWN AND SHALL SATISFY THE REQUIREMENT OF AS3600.
3. WELDING OF REINFORCEMENT WILL NOT BE PERMITTED UNLESS SHOWN ON THE STRUCTURAL DRAWINGS.
4. PIPES OR CONDUITS SHALL NOT BE PERMITTED UNLESS SHOWN ON THE STRUCTURAL DRAWING.
5. REINFORCEMENT SYMBOLS (AS PER AS1302);
- | | |
|----|-------------------------|
| N | 500N GRADE DEFORMED BAR |
| S | 250S GRADE DEFORMED BAR |
| R | 250R GRADE ROUND BAR |
| SL | 500L GRADE WIRE MESH |
- THE NUMBER FOLLOWING THESE SYMBOLS IS THE BAR DIAMETER IN mm
6. ALL WELDED MESH FABRIC SHALL BE SUPPLIED IN FLAT SHEETS AND SHALL COMPLY WITH CURRENT AS1304 AND AMENDMENTS.
7. THE CONTRACTOR SHALL NOTIFY THE ENGINEER 24 HOURS BEFORE REINFORCEMENT IS COMPLETED. THE CONTRACTOR SHALL ALLOW TWO HOURS FOR THE ENGINEER'S INSPECTION AFTER THE COMPLETION OF THE REINFORCEMENT.
8. CONCRETE SHALL NOT BE ORDERED UNTIL REINFORCEMENT IS APPROVED BY ENGINEER.

LAPPING OF MESH



TIMBER

1. ALL WORKMANSHIP AND MATERIAL SHALL BE IN ACCORDANCE WITH AS1694 AND AS1720.
2. THE MIN. SOFTWOOD GRADE SHALL BE F7 & MIN. HARDWOOD GRADE SHALL BE F11, U.N.O.
3. EXTERNAL TIMBER TO BE EITHER DURABILITY CLASS I OR II. SUPPLEMENTARY TREATMENT TO MANUFACTURER'S SPECIFICATION SHALL BE PROVIDED TO ALL CUT SURFACES TO ACHIEVE REQUIRED HAZARD LEVEL EXPOSURE CLASSIFICATION.
4. ALL BOLTS IN TIMBER CONSTRUCTION TO BE M16 4.6/S, U.N.O. WASHERS UNDER HEAD AND NUTS TO BE 2.5 TIMES BOLT DIA.
5. NO TIMBER BEAMS OR JOISTS TO BE NOTCHED UNLESS SPECIFIED BY ENGINEER.
6. ALL TIMBER JOINTS SHALL BE 100mm FROM LOOSE KNOTS, SEVERE SLOPING GRAIN, GUM VEINS OR OTHER MINOR DEFECTS.
7. BLOCKING SHALL BE PROVIDED FOR JOISTS DEPENDING ON THE SPAN. FOR JOISTS WITH DEPTH GREATER THAN 150mm WHERE A CONTINUOUS TRIMMING JOIST IS NOT PROVIDED AT END, BLOCKING IS REQUIRED AT MAX 1.8m CTS.
- | JOIST BLOCKING | | |
|----------------|----------|----------|
| SPAN RANGE (m) | QUANTITY | SPACING |
| < 3 | 0 | |
| 3 < 4.2 | 1 | MID-SPAN |
| 4.2 < 6 | 2 | 1/3 SPAN |
8. HOT-DIPPED GALVANIZED NAILS/SCREWS SHALL BE USED FOR ALL TIMBER CONNECTIONS.

STRUCTURAL STEEL

1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS4100, AS1538, AS1554 AND THE PRODUCT SPECIFICATION.
2. ALL STEEL SHALL BE GRADE 300 IN ACCORDANCE WITH AS3679. ALL HOLLOW SECTIONS SHALL BE GRADE 350 IN ACCORDANCE WITH AS1163, U.N.O.
3. ALL HIGH STRENGTH BOLTS ARE TO BE IN ACCORDANCE WITH AS1252. ALL COMMERCIAL BOLTS ARE TO BE IN ACCORDANCE WITH AS1511.
4. THE BOLT DESIGNATION SHALL BE AS FOLLOWS U.N.O.

BOLT DESIGNATION	
BOLT NAME	DESCRIPTION
4.6S	GRADE 4.6, SNUG TIGHTENED
8.8S	GRADE 8.8, SNUG TIGHTENED
8.8TB	GRADE 8.8, FULLY TIGHTENED ACTING AS A BEARING JOINT ¹
8.8TF	GRADE 8.8, FULLY TENSIONED ACTING AS A FRICTION JOINT ¹

¹ ALL FULLY TIGHTENED JOINTS ARE TO BE IN ACCORDANCE WITH AS1511

5. THE MIN. CONNECTION SHALL BE 2M20 8.8/S, 10mm GUSSET PLATES AND 8mm CONTINUOUS FILLET WELD, U.N.O.
6. ALL WELDING SHALL BE CATEGORY SP USING CLASS E41XX ELECTRODES. ALL BUTT WELDS SHALL BE CATEGORY SP COMPLETE PENETRATION.
7. ALL STRUCTURAL STEEL BEARING ON MASONRY TO BE BEDDED ON 20mm THICK AND FULL WIDTH NON-SHRINKABLE CEMENT MORTAR GROUT PAD, U.N.O.
8. GROUTING OF ANCHOR BOLT SLEEVES AND BASE PLATES SHALL BE COMPLETED USING HIGH STRENGTH NON-SHRINKABLE GROUT.
9. ALL STRUCTURAL STEEL SHALL BE HOT-DIPPED GALVANIZED, EXCEPT WHEN CONCRETE ENCASED, USED INTERNALLY OR NOTED OTHERWISE. IF WELDING IN-SITU IS REQUIRED ON GALVANIZED MATERIAL, THE AFFECTED AREA MUST BE PAINTED/COATED IN ACCORDANCE WITH AS4680.
10. ALL PURLIN BOLTS SHALL BE M12 4.6/S AND HAVE MINIMUM OF 2 BOLTS PER PURLIN END.
11. SUBSTITUTIONS FOR STEEL SECTIONS SHOWN ON DRAWINGS SHALL NOT BE MADE WITHOUT CONSENT OF THE ENGINEER.

No.	DESCRIPTION	APPROVED & DATE

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📞 9635 9890

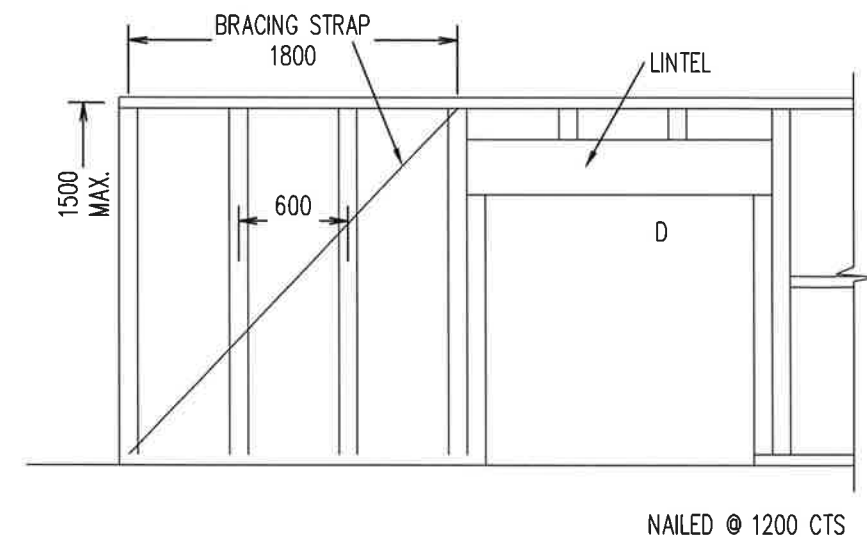
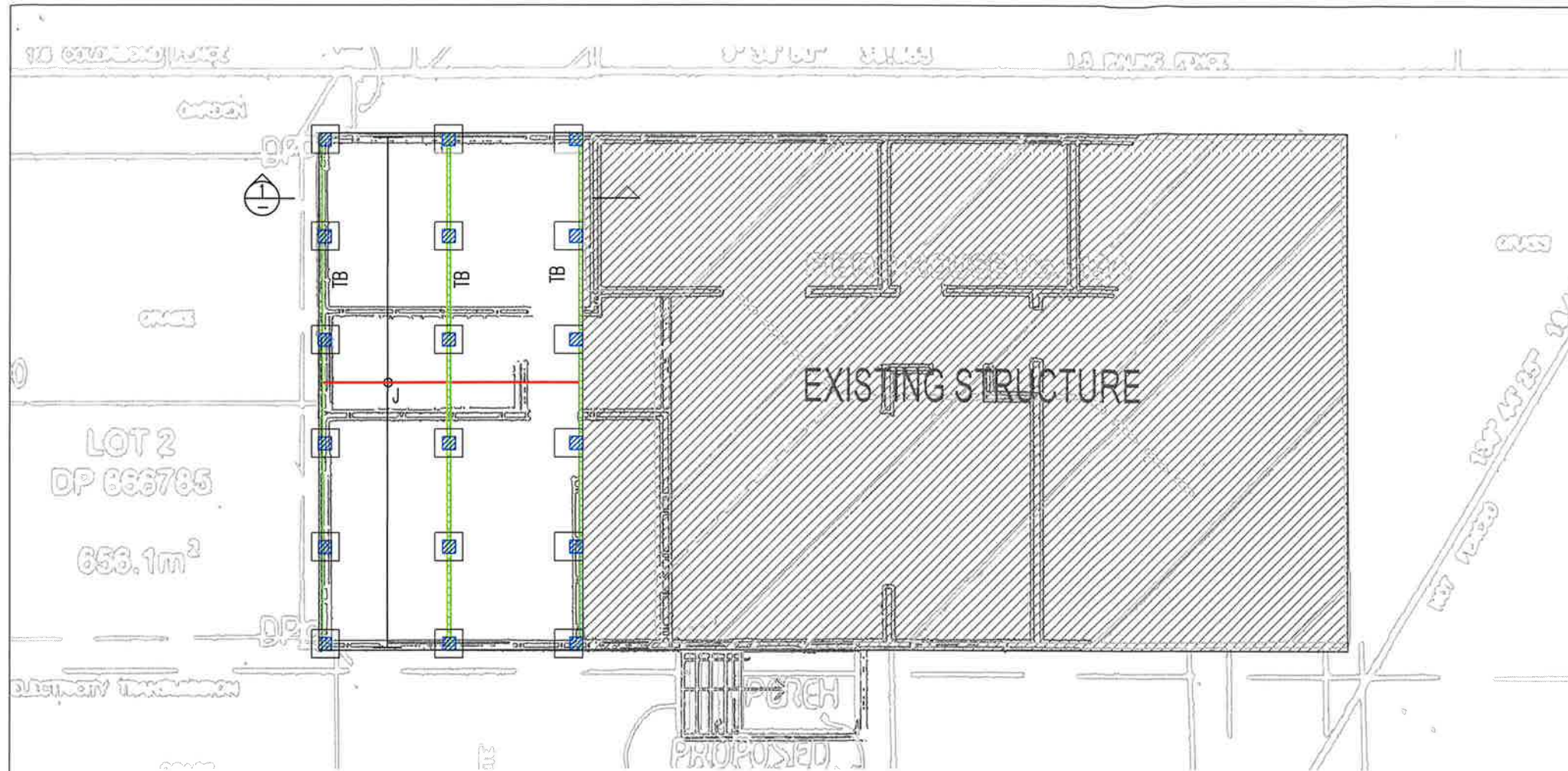


PROJECT LOCATION
113A GREENACRE ROAD, GREENACRE

LOCAL AUTHORITY/COUNCIL
STRATHFIELD

CHECKED	HN
DRAWN	SL
TYPE	EXTENSION
ISSUE STATUS	FOR-CLIENT
DATE OF ISSUE	19/10/2018

GENERAL NOTES			
DRAWING NUMBER	REVISION	SIZE	SHEET
157-S18	A	A3	1



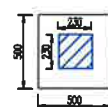
GROUND FLOOR PLAN

SCALE 1:100

NOTES

1. REFER TO SHEET 1 FOR GENERAL NOTES
2. DO NOT SCALE DRAWINGS
3. DOUBLE JOISTS UNDER LOAD BEARING WALLS U.N.O.
4. EXTENT AND LOCATION OF DROP EDGE BEAMS TO BE VERIFIED ON-SITE AFTER CUT AND FILL BENCHING LEVELS
5. CUT AND FILL LINE IS INDICATIVE, TO BE VERIFIED ON-SITE BY BUILDER
6. BUILDER TO ENSURE CORRECT PIER SETOUT
7. BUILDER RESPONSIBLE TO ENSURE NO DAMAGE OCCURS TO EXISTING SERVICES

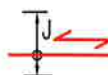
LEGEND



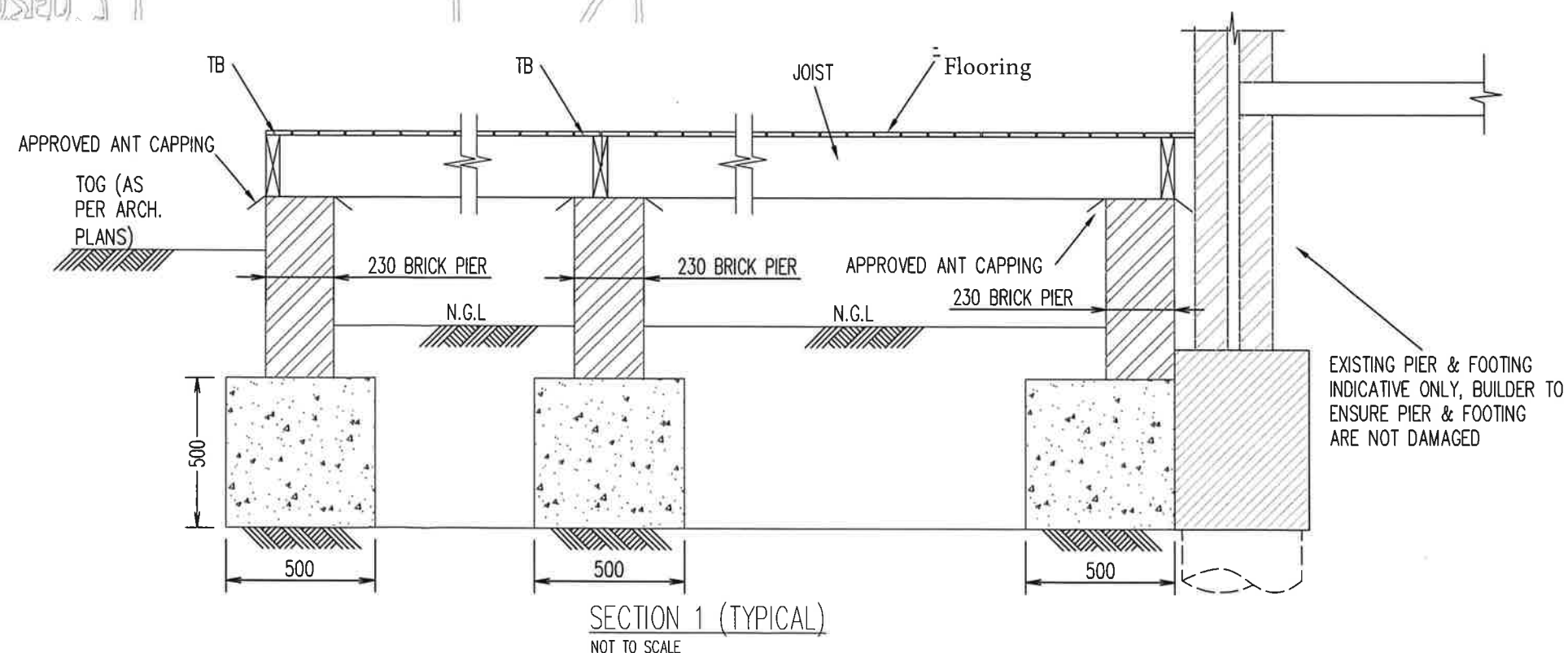
BRICK PIER ON MASS CONCRETE
PAD FOOTING

TB

HySPAN LVL - TIMBER BEAM
TB 150 x 63 HySPAN LVL



HySPAN LVL JOIST
SPAN DIRECTION ALONG RED LINE
J 90 x 35 HySPAN LVL @ 300 CTS



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FOOTING AND SLAB PLAN

DRAWING NUMBER
157-S18

REVISION
A
 SIZE
A3
 SHEET
2

7.Temp-FoundationBrickPier-R00