

PROPOSED RESIDENCE

LOT 322 NO. 40 SAMPHIRE DRIVE, CONNEWARRE

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Building Act 1993

Building Regulation 2018

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57733/20190194/0

ENDORSED PLAN

01 May 2019

				<div><div><div>Level 4, 469 La Trobe St Melbourne VIC 3000 03 8371 0100</div><div>Derrimut 03 8371 0100 Pakenham 03 8657 8300 Geelong 03 5221 8282 New South Wales 02 8355 1200 Queensland 07 3067 0800 South Australia 08 8165 0122</div><div>A.B.N. 31 106 481 252 www.intrax.com.au</div></div><div>Client: DESBO INDUSTRIES PTY LTD</div><div>Project: PROPOSED RESIDENCE LOT 322 NO. 40 SAMPHIRE DRIVE CONNEWARRE</div><div>Drawing: COVER SHEET</div></div>	<div>CONSTRUCTION ISSUE</div> <table><tr><td>Date: FEB.19</td><td>Engineer: J.W.</td><td>Drawn: L.Q.</td></tr><tr><td>Scale @ A3: AS SHOWN</td><td>Checked:</td><td>No. of Sheets: 23</td></tr><tr><td>Job No. 119605</td><td>Drawing No. S00</td><td>Rev. 02</td></tr></table>			Date: FEB.19	Engineer: J.W.	Drawn: L.Q.	Scale @ A3: AS SHOWN	Checked:	No. of Sheets: 23	Job No. 119605	Drawing No. S00	Rev. 02
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GENERAL NOTES

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GENERAL

- G1. THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL ARCHITECTURAL AND OTHER CONSULTANT'S DRAWINGS AND SPECIFICATIONS AND WITH SUCH OTHER WRITTEN INSTRUCTIONS AS MAY BE ISSUED DURING THE COURSE OF THE CONTRACT. ANY DISCREPANCY SHALL BE REFERRED TO THE ENGINEER OR ARCHITECT BEFORE PROCEEDING WITH THE WORK.
- G2. ALL DIMENSIONS ARE TO BE OBTAINED FROM THE ARCHITECT'S DRAWINGS OR FROM SITE. ENGINEER'S DRAWINGS MUST NOT BE SCALED.
- G3. DURING CONSTRUCTION THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE STRUCTURE IN A STABLE CONDITION AND ENSURING NO PART SHALL BE OVERSTRESSED UNDER CONSTRUCTION ACTIVITIES.
- G4. MATERIAL AND WORKMANSHIP ARE TO BE IN ACCORDANCE WITH THE RELEVANT SAA CODES EXCEPT WHERE VARIED BY THE PROJECT SPECIFICATION.
- G5. THE APPROVAL OF A SUBSTITUTION BY THE ENGINEER IS NOT AN AUTHORIZATION FOR AN EXTRA. ANY EXTRA INVOLVED MUST BE TAKEN UP WITH THE ARCHITECT BEFORE WORK COMMENCES.
- G6. THE STRUCTURAL WORK SHOWN ON THESE DRAWINGS HAS BEEN DESIGNED FOR THE FOLLOWING LIVE LOADS:-

AREA	LIVE LOAD
FLOOR	1.5 kPa
ROOF	0.25 kPa 'OR' (1.8/A + 0.12) WHICHEVER IS GREATER
BALCONY (IF APPLICABLE)	2.0 kPa

- G7. FOUNDATION MATERIAL TO BE APPROVED BEFORE POURING CONCRETE FOR A SAFE BEARING CAPACITY OF: 80kPa.....RAFT SLAB
100kPa.....STRIP FOOTING

STRUCTURAL STEELWORK

- S1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS 1250 AND/OR AS4100.
- S2. WELDING SHALL BE PERFORMED BY AN EXPERIENCED OPERATOR IN ACCORDANCE WITH AS 1554.
- S3. HIGH STRENGTH BOLTING SHALL BE IN ACCORDANCE WITH AS 1511.
- S4. TWO COPIES OF THE SHOP DETAIL DRAWINGS ARE TO BE SUBMITTED TO THE ENGINEERS AND APPROVAL OF SAME OBTAINED BEFORE COMMENCING FABRICATION. APPROVAL WILL NOT COVER DIMENSIONS OR LAYOUT.
- S5. THE CONTRACTOR SHALL PROVIDE AND LEAVE IN PLACE UNTIL PERMANENT BRACING ELEMENTS ARE CONSTRUCTED SUCH TEMPORARY BRACING AS IS NECESSARY TO STABILIZE THE STRUCTURE DURING ERECTION.
- S6. CAMBER TO STRUCTURAL STEEL ROOF BEAMS, TRUSSES, PORTALS, ETC., TO BE 2mm FOR EVERY 1M OR SPAN UNLESS OTHERWISE NOTED.
- S7. ALL CLEAT AND DRILLING FOR FIXING OF TIMBER MEMBERS, ETC., TO BE PROVIDED BY FABRICATOR.
- S8. EXCEPT WHERE OTHERWISE SHOWN CONNECTIONS SHALL HAVE 6mm CONTINUOUS FILLET WELDS, 2-M16 8.8/S BOLTS IN 1.5mm CLEARANCE HOLES AND 10mm THICK CLEAT PLATE.
- S9. CONCRETE ENCASED STEELWORK SHALL BE WRAPPED WITH SLAB FABRIC, UNLESS OTHERWISE SHOWN.
- S10. STEELWORK SHALL BE THOROUGHLY WIRE BRUSHED AND GIVEN ONE SHOP COAT OF APPROVED PRIMER EXCEPT THAT NONE SHALL BE APPLIED AT CONTACT SURFACES WHERE H.S. BOLTS USED.
- S11. ALL STEEL BEAMS AND LINTELS ARE TO HAVE 100mm MIN. END BEARING UP TO 1.0m & 150mm MIN. END BEARING OVER 1.0m, UNLESS OTHERWISE NOTED.
- S12. STEEL FRAMING MUST BE PROTECTED FROM CORROSION WHERE REQUIRED IN ACCORDANCE WITH BCA 2013 3.4.2.2

CONCRETE

- C1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS 3600.
- C2. CONCRETE COVER TO ALL REINFORCEMENT (FINISHES NOT INCLUDED).

ELEMENT	FORMED AND SHELTERED	FORMED AND EXPOSED	NO FORM WORK
SLABS AND WALLS	20mm	30mm	65mm
BEAMS	25mm	40mm	65mm
COLUMNS	40mm	50mm	75mm
FOOTINGS		65mm	75mm

- C3. CONCRETE SIZES SHOWN DO NOT INCLUDE FINISH AND MUST NOT BE REDUCED OR HOLED IN ANY WAY WITHOUT THE ENGINEER APPROVAL.
- C4. DEPTHS OF BEAMS ARE GIVEN FIRST AND INCLUDE SLAB THICKNESS.
- C5. CONSTRUCTION JOINTS WHERE NOT SHOWN SHALL BE PROPERLY FORMED AND LOCATED TO THE APPROVAL OF THE ENGINEER.
- C6. REINFORCEMENT IS SHOWN DIAGRAMMATICALLY AND NOT NECESSARILY IN TRUE PROJECTION.
- C7. SPLICES IN REINFORCEMENT SHALL BE MADE ONLY IN POSITIONS SHOWN. WELDING OF REINFORCEMENT WILL NOT BE PERMITTED UNLESS SHOWN ON THE STRUCTURAL DRAWINGS.
- C8. REINFORCEMENT SYMBOLS:-
L LOW DUCTILITY BARS TO AS 4671 : 2001
N NORMAL DUCTILITY BARS TO AS 4671 : 2001
E SEISMIC (EARTHQUAKE) DUCTILITY BAR TO AS 4671 : 2001
THE NUMBER FOLLOWING THE BAR SYMBOL IS THE NOMINAL BAR DIAMETER IN MILLIMETRES.
- C9. CAMBER TO BEAMS AND SLABS SHALL BE 2mm FOR EVERY 1M OF SPAN UNLESS OTHERWISE NOTED.
- C10. ALL CONCRETE SHALL BE GRADE 20MPa - 100mm SLUMP (U.N.O.)
- C11. ALL REINFORCEMENT SHALL BE SUPPORTED IN ITS CORRECT POSITION SO AS NOT TO BE DISPLACED DURING CONCRETING ON APPROVED BAR CHAIRS AT 1.0m MAX CRS BOTH WAYS. WHERE REQUIRED PROVIDE SUPPORT BARS N16 AT 1.0M MAX CRS.
- C12. CONCRETE TO BE KEPT FREE OF SUPPORTING BRICKWORK BY TWO LAYERS OF A SUITABLE MEMBRANE (MALTHOID, ETC.), OR AS DIRECTED BY THE ENGINEER. VERTICAL FACES OF CONCRETE TO BE KEPT FREE BY 10mm THICKNESS OF BITUMINOUS CANITE.
- C13. WHERE WALLS ARE NON-LOAD BEARING AT EITHER HORIZONTAL OR VERTICAL FACES THEY SHALL BE SEPARATED FROM CONCRETE OR BRICKWORK BY 10mm THICK CANITE.
- C14. ALL REINFORCEMENT FOR ANY ONE POUR SHALL BE COMPLETELY PLACED AND TIED PRIOR TO INSPECTION BY THE ENGINEER OR ARCHITECT. NO CONCRETE SHALL BE POURED UNTIL REINFORCEMENT HAS BEEN INSPECTED AND APPROVED.
- C15. WHERE SLABS AND BEAMS ARE TO SUPPORT BRICKWORK OVER, FORMWORK AND PROPS MUST BE REMOVED BEFORE COMMENCEMENT OF BRICKWORK.
- C16. TRENCH MESH IN BEAMS TO BE LAID CONTINUOUSLY WITH EACH LAYER BEING LAPPED FOR ITS FULL WIDTH AT INTERSECTIONS AND FOR A MINIMUM OF 500mm AT SPLICES. THE TRENCH MESH SHALL BE OVERLAPPED BY THE WIDTH OF THE FABRIC AT T & L JUNCTIONS.
- C17. AS A GENERAL POLICY, INTRAX DO NOT RECOMMEND THE USE OF POLISHED CONCRETE. THE OWNER SHOULD BE MADE AWARE BY THE BUILDING DESIGNER AND BUILDER THAT CONCRETE IS A NATURAL MATERIAL AND THE POSSIBILITY OF SURFACE CRACK FORMATION MAY OCCUR AND CANNOT BE GUARANTEED EITHER IN THE SHORT OR LONG TERM, WE HIGHLY RECOMMEND CURING THE SLAB USING AN APPROVED CURING SPRAYED MEMBRANE.

BRICKWORK

- B1. THE UNCONFINED COMPRESSIVE STRENGTH OF A BRICK UNIT TO BE MIN. OF 15MPa AND COMPRESSIVE STRENGTH OF MASONRY TO BE A MIN. OF 5.4 MPa
- B2. THE MORTAR MIX FOR BRICKWORK SHALL BE 1:1:6
- B3. FOR NON-LOAD BEARING WALLS SEE NOTE C13.
- B4. ARTICULATION (OR EXPANSION) JOINT SPACING MUST BE IN ACCORDANCE WITH AS4773.1 - 2010, AS4773.3 - 2010 & TECHNICAL NO 61 (AUG 2008) FOR ARTICULATED WALLING UNLESS NOTED OTHERWISE.
- B5. ALL WALL TIES MUST BE GALVANISED.

STRUCTURAL TIMBER

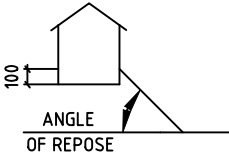
- T1. ALL TIMBER FRAMING IS TO BE IN ACCORDANCE WITH AS 1684-2010 RESIDENTIAL TIMBER FRAMED CONSTRUCTION.
- T2. ALL TIMBER STRESS GRADES NOMINATED SHALL BE IN ACCORDANCE WITH THE RELEVANT CODES AND MEANS THE STRUCTURAL QUALITY OF A TIMBER SECTION (REFER TO AS 1720).
- T3. TIMBER SHALL BE STORED AND HANDLED SO AS NOT TO BE DETRIMENTAL TO THEIR PERFORMANCE OR DAMAGE THEM. REFER APPENDIX I AS 1684-2:2010
- T4. ALL TIMBER SHALL BE DRY, IE: LESS THAN 15% MOISTURE CONTENT AT THE TIME OF CONSTRUCTION AND SHALL BE PROTECTED AND/OR TREATED AS NOTED.
- T5. ALL TIMBER BEAMS AND LINTELS ARE TO BEAR ON DOUBLE STUDS (ONE JAMB AND ONE BEARING STUD), UNLESS OTHERWISE NOTED.
- T6. BEAMS/STUDS HAVING MORE THAN 1 MEMBER TO BE NAIL LAMINATED TOGETHER IN ACCORDANCE WITH AS 1684-2010.

FRAMING

- F1. PROVIDE SOLID BLOCKING (45 WIDE x D-25 DEEP) SECURELY NAILED TO JOISTS/RAFTERS (D=DEPTH OF JOIST/RAFTER) AT 1800 MAX. CRS.
- F2. ALL EXTERNAL OR EXPOSED STEELWORK TO BE HOT DIP GALVANISED OR PAINTED TO ARCHITECTS DETAILS U.N.O.
- F3. WATERPROOFING TO ARCHITECTS DETAILS
- F4. ALL TIMBER FRAMING & BRACING NOT SHOWN TO COMPLY WITH AS1684 TIMBER FRAMING MANUAL.
- F5. ALL BRICKWORK LINTELS TO ARCHITECTS DETAILS. ALL BRICKWORK LINTELS TO COMPLY WITH F.3.3.3.5 OF B.C.A 2013 VOLUME 2.
- F6. ALL BEAMS/GIRDER & HIP TRUSSES TO BE SUPPORTED ON DOUBLE STUDS EACH END U.N.O.
- F7. ALL LINTELS TO BE SUPPORTED ON SINGLE STUD AND JAMB STUD U.N.O.
- F8. ALL TRUSSES & WALL FRAMES TO MANUFACTURES DESIGN & DETAILS.
- F9. TRUSS DIRECTION ASSUMED AS SHOWN (IF APPLICABLE). CONTACT THIS OFFICE IF DIFFERENT TRUSS LAYOUT IS USED SO LINTELS ETC CAN BE REDESIGNED (IF REQUIRED).
- F10. ALL TIMBER LINTELS TO BE DESIGNED BY THE TRUSS MANUFACTURER. TYPICAL U.N.O
- F11. BUILDER TO SUPPLY MANUFACTURERS TRUSS LAYOUT TO THIS OFFICE FOR APPROVAL PRIOR TO CONSTRUCTION. TRUSS DESIGN MUST BE IN ACCORDANCE WITH AS1720 AND AS1684. TRUSS FABRICATOR/BUILDER IS RESPONSIBLE FOR PROVIDING ADEQUATE ROOF/WALL BRACING TO ENSURE STABILITY OF THE STRUCTURE IN ACCORDANCE TO AS1684.
- F12. ALL INTERNAL WALLS TO BE NON-LOAD BEARING (TYPICAL) UNLESS HATCHED OTHERWISE ON PLANS.

FOOTING: ANGLE OF REPOSE

- A1. FOOTING MUST NOT UNDERMINE EXISTING FOOTING OR BE UNDERMINED BY PROPOSED EXCAVATION.
- A2. ENSURE ADEQUATE ANGLE OF REPOSE AT ALL TIMES (REFER DETAILS BELOW).
- A3. NOTIFY THIS OFFICE IF FOOTING UNDERMINE OCCURS.
- A4. PIPE DEPTH & LOCATION MUST BE CONFIRMED PRIOR TO CONSTRUCTION.



ANGLE OF REPOSE
30° MAX IN SAND
45° MAX IN CLAY
60° MAX IN ROCK

SITE DRAINAGE

- D1. AT THE TIME OF THE PREPARATION OF THIS DOCUMENT, IF THE DRAINAGE DESIGN WAS NOT PREPARED OR CERTIFIED BY THIS OFFICE THEN THE DRAINAGE SYSTEM MAY NEED TO BE DOCUMENTED BY A SUITABLY QUALIFIED PERSON TO COMPLY WITH AS2870-2011. THE DRAINAGE DESIGNER SHOULD ENSURE THAT THE ELEMENTS OF THE DRAINAGE SYSTEM DESIGN ARE CONSIDERED WITH RESPECT TO THE PROPOSED FOOTING SYSTEM. WE RECOMMEND THAT INTRAX CONSULTING ENGINEERS OR AN EQUIVALENT CERTIFIED PRACTITIONER, REVIEW ALL THE DOCUMENTATION TO ENSURE COMPLIANCE.
- D2. SITES SHOULD BE DRAINED SO THAT WATER CANNOT POND AGAINST OR NEAR THE HOUSE. THE GROUND IMMEDIATELY ADJACENT TO THE HOUSE SHOULD BE GRADED TO FALL 50mm OVER THE FIRST METRE. WHERE THIS IS IMPRACTICABLE (IE: ON SEVERAL SLOPING SITES) USE A.G. DRAINS ADJACENT TO FOOTINGS WHERE THE GROUND FALLS TOWARDS THE BUILDING.

INSPECTIONS

ALL STRUCTURAL WORK MUST BE INSPECTED AND APPROVED IN WRITING PRIOR TO ANY WORK PROCEEDING. 48 HOUR MIN. NOTICE IS REQUIRED FOR ALL INSPECTIONS.

OCCUPATIONAL, HEALTH AND SAFETY

- O1. FOR ALL WORKS CONDUCTED ON THIS PROJECT, THE BUILDER SHALL HAVE ALL APPROPRIATE AND SUFFICIENT SAFETY MEASURES AND PROCEDURES IN PLACE.
- O2. DEEP TRENCHES MAY EXIST ON THIS SITE. BUILDER TO ENSURE NECESSARY SAFETY MEASURES ARE TAKEN TO PREVENT FALL AND TRIPPING HAZARDS ARE ELIMINATED.
- O3. FOR LARGE SPAN BEAMS (≥ 6000mm), BUILDER TO ENSURE SEAT PLATES/ANGLES TO STEEL COLUMNS FOR MAJOR BEAMS AND LINTELS ARE INSTALLED FOR SAFER CONNECTION, BOLTING AND SITE WELDING.
- O4. ADEQUATE PROPPING MAY BE REQUIRED FOR ANY RETAINING/LOAD BEARING WALLS ON BOUNDARIES. TEMPORARY SHORING MAY BE REQUIRED.
- O5. PROVISIONS SHALL BE MADE FOR APPROPRIATE DISTANCE FOR ROOF BATTENS/RAFTERS TO PROVIDE A SAFE WORKING PLATFORM DURING ROOF INSTALLATION AND WORKING AT HEIGHTS.
- O6. BUILDER MAY NEED TO BE AWARE OF APPROPRIATE MEASURES TO DEAL WITH HAZARDOUS MATERIALS SUCH AS ASBESTOS WHICH STILL CAN BE FOUND IN SERVICE PITS.
- O7. IF A CRANE IS REQUIRED, THE BUILDER IS TO PROVIDE ADEQUATE SAFETY MEASURES FOR CRANE USAGE AROUND POWER LINES.
- O8. IF ANY DIGGING IS REQUIRED OUTSIDE OF SITE BOUNDARIES, INFORMATION REGARDING EXISTING COUNCIL ASSETS NEED TO BE SOUGHT FROM "DIAL BEFORE YOU DIG".
- O9. THE SAFETY CONCERNS AND HAZARDS IDENTIFIED ABOVE REPRESENT COMMONLY OCCURRING RISKS. THE LIST DOES NOT COVER THE FULL RANGE OF RISK AVOIDANCE MEASURES REQUIRED.

02	CONSTRUCTION ISSUE	05.04.19	
01	CONSTRUCTION ISSUE	08.03.19	
A	PRELIMINARY ISSUE	26.02.19	
Rev.	Remark/Comment	Date:	Appr.

TEMPLATE: RES1 & MD Melbourne Template V31.dwt

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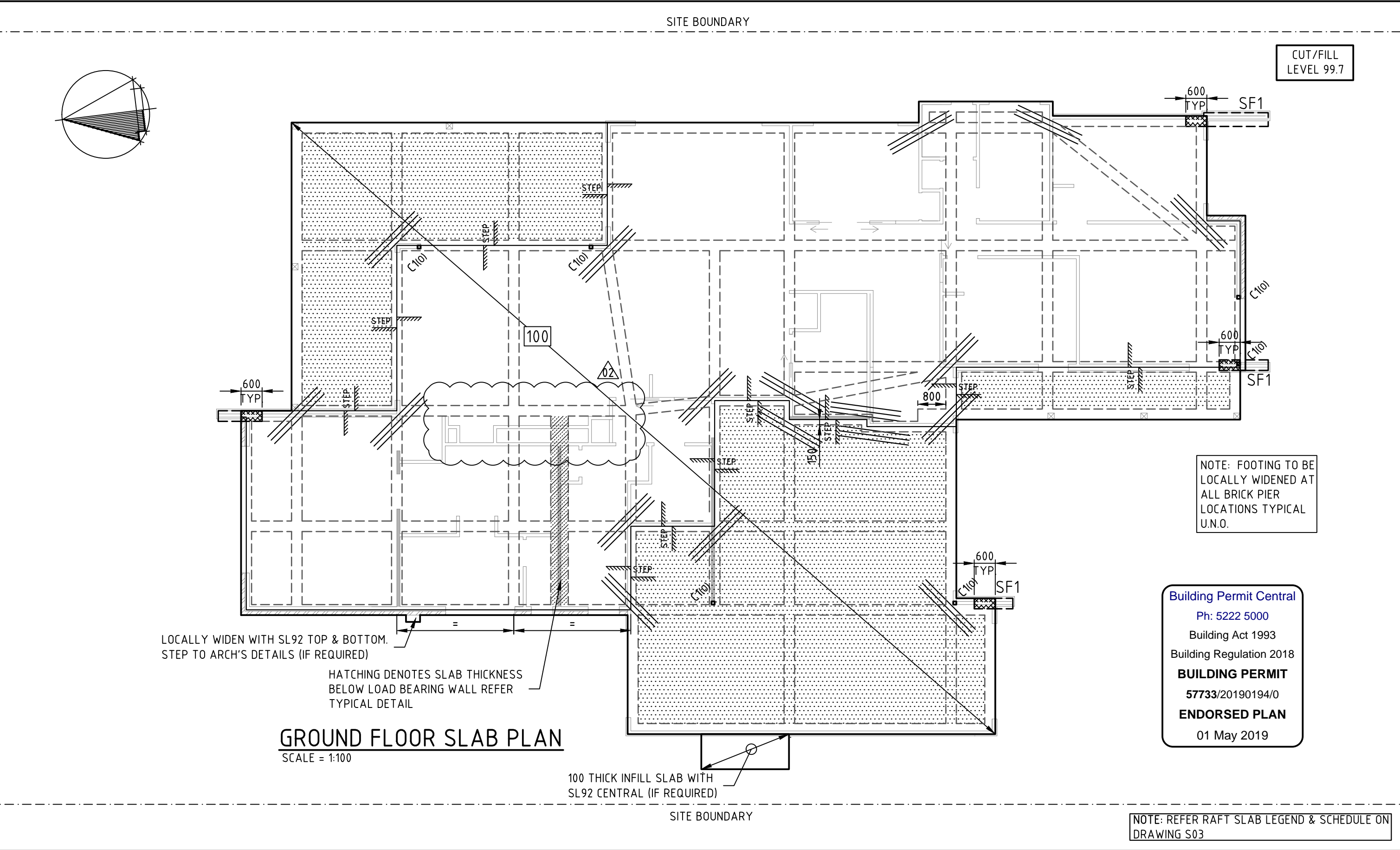
Client:
DESBO INDUSTRIES PTY LTD

Project:
PROPOSED RESIDENCE
LOT 322 NO. 40 SAMPHIRE DRIVE
CONNEWARRE

Drawing:
GENERAL NOTES

CONSTRUCTION ISSUE

Date: FEB.19	Engineer: J.W.	Drawn: L.Q.
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Job No. 119605	Drawing No. S01	Rev. 02



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Client: DESBO INDUSTRIES PTY LTD

Project: PROPOSED RESIDENCE
LOT 322 NO. 40 SAMPHIRE DRIVE
CONNEWARRE

Drawing: GROUND FLOOR SLAB PLAN

CONSTRUCTION ISSUE			
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		Rev.	02

LEGEND

- BRICKWORK OVER
- INTERNAL LOAD BEARING WALLS OVER
- TIMBER STUD WALLS OVER
- DENOTES SLAB SETDOWN
- C100

STEEL COLUMN OVER (REFER TO FRAMING PLAN)
- DENOTES 3-N12 CRACK CONTROL BARS 2000mm LONG TIED TO UNDERSIDE OF SLAB MESH.
- SF1

300 WIDE x 400 DEEP STRIP FOOTING FOUND 400mm MIN. INTO NATURAL SAND OR 100 MIN. INTO NATURAL CLAY WITH 3-L11TM TOP & BOTTOM TYPICAL

100

100 THICK CONCRETE RAFT SLAB, SL92 TOP WITH 30mm COVER ON 0.2mm POLYTHENE MEMBRANE (LAPPED 200 AND TAPED AT JOINTS) OVER 50mm COMPACTED PACKING SAND.

ALL SLAB BEAMS TO BE 400 DEEP x 300 WIDE TYPICAL WITH 3-L11TM BOTTOM U.N.O.

ALL BEAMS MUST BE FOUND 400 MIN. INTO NATURAL SAND OR 100 MIN. INTO NATURAL CLAY, PROVIDE 15MPa BLINDING CONCRETE IF REQUIRED TO ACHIEVE FOUNDING DEPTH.

NOTE: SITE RETAINING WALLS ON BOUNDARY IF REQUIRED BY OTHERS U.N.O.

NOTE: USE APPROPRIATE FLEXIBLE BEDDING MORTAR FOR BRITTLE COVERINGS WHERE BRITTLE AREA (EG. CERAMIC TILES) IS GREATER THAN 16m2. ALTERNATIVELY THE LAYING OF TILES (WITH FLEXIBLE ADHESIVE) SHOULD BE DELAYED FOR AT LEAST 90 DAYS.

NOTE: IF THIS FOOTING IS TO CONSTRUCTED 1.0m OR LESS AWAY FROM EXISTING FOOTING/ BUILDING THEN THIS OFFICE IS TO BE CONTACTED FOR FURTHER ADVICE.

REFER TO RECOMMENDATIONS & SITE INVESTIGATIONS:

COMPANY: INTRAX CONSULTING ENGINEERS PTY LTD
REF. No.: 119605
DATED: 08.01.2019
CLASS: M (AS2870-2011)

REFER TO ARCHITECTURAL WORKING DRAWINGS:

COMPANY: DESBO INDUSTRIES PTY LTD
REF. No.: 02118
DATED: 22.03.2019

REFER TO CIVIL/DRAINAGE DESIGN DRAWINGS:

COMPANY: INTRAX CONSULTING ENGINEERS PTY LTD
REF. No.: 119605
DATED: 05.04.2019

THE DESIGN SHOULD BE READ IN CONJUNCTION WITH THE DOCUMENTATION REFERENCED ABOVE.

NO EASEMENT INFORMATION NOTES:

- EASEMENT INFORMATION WAS NOT PROVIDED DURING THIS DESIGN;
- THIS OFFICE SHOULD BE CONTACTED WHEN EASEMENT INFORMATION IS AVAILABLE FOR FURTHER ADVICE.

PREPARATION OF SUB-BASE FOR SLABS ON GROUND

- P1. CLEAR AREA UNDER SLAB OF ALL TOP SOIL CONTAINING HUMUS AND VEGETABLE MATTER 100mm MIN.
- P2. PROVIDE FILL UNDER SLAB WHERE REQUIRED TO PRODUCE FINISHED LEVELS AS SHOWN ON PLANS.
- P3. FILLING USED IN THE CONSTRUCTION OF A SLAB, EXCEPT WHERE THE SLAB IS SUSPENDED, SHALL CONSIST OF CONTROLLED FILL OR ROLLED FILL AS FOLLOWS:
- (a) CONTROLLED FILL IS MATERIAL THAT HAS BEEN PLACED AND COMPACTED IN LAYERS BY COMPACTION EQUIPMENT WITHIN A DEFINED MOISTURE RANGE TO A DEFINED DENSITY REQUIREMENT. EXCEPT AS PROVIDED BELOW, CONTROLLED FILL SHALL BE PLACED IN ACCORDANCE WITH AS3798.
- SAND FILL UP TO 0.8 M DEEP, WELL COMPACTED IN NOT MORE THAN 0.3 M THICK LAYERS BY A VIBRATING PLATE OR VIBRATING ROLLER SHALL BE DEEMED TO COMPLY WITH THIS REQUIREMENT. A SATISFACTORY TEST FOR SAND FILL NOT CONTAINING GRAVEL SIZED MATERIAL IS THE ACHIEVEMENT OF A BLOW COUNT OF 7 OR MORE PER 0.3 M USING THE PENETROMETER TEST DESCRIBED IN AS1289.6.3.3. NON-SAND FILL UP TO 0.4 M DEEP, WELL COMPACTED IN NOT MORE THAN 0.15 M LAYERS BY A MECHANICAL ROLLER SHALL BE DEEMED TO COMPLY WITH THIS REQUIREMENT. CLAY FILL SHALL BE MOIST DURING COMPACTION.
- (b) ROLLED FILL CONSISTS OF MATERIAL COMPACTED IN LAYERS BY REPEATED ROLLING WITH AN EXCAVATOR. ROLLED FILL SHALL NOT EXCEED 0.6 M COMPACTED IN LAYERS NOT MORE THAN 0.3 M THICK FOR SAND MATERIAL OR 0.3 M COMPACTED IN LAYERS NOT MORE THAN 0.15 M THICK FOR OTHER MATERIAL.
- NOTE: THE DEPTHS OF FILL GIVEN IN THIS CLAUSE ARE THE DEPTHS MEASURED AFTER COMPACTION.
- P4. A 50mm MIN. BASE COURSE OF PACKING SAND SHALL BE SPREAD OVER THE SUB-BASE AND TO BE THOROUGHLY ROLLED AND COMPACTED TO A SMOOTH LEVEL SURFACE. THE SAND SHALL BE MOISTENED PRIOR TO THE PLACEMENT OF A 0.2mm POLYTHENE MEMBRANE IN 3600mm MIN. WIDE SHEETS LAPPED 150mm AND JOINED WITH 75mm WIDE PRESSURE SENSITIVE TAPE. THE TAPE SHALL BE LAID UNDER ALL SLABS AND WALLS IN CONTACT WITH THE GROUND.
- P5. THE TOTAL FILL BENEATH THE SLAB PANELS MUST NOT EXCEED 600mm, IE. THE SUM OF EXISTING FILL PLUS ANY NEW FILLING PLACED TOGETHER MUST NOT EXCEED 600mm MAX.

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RAFT SLAB SCHEDULE & LEGEND

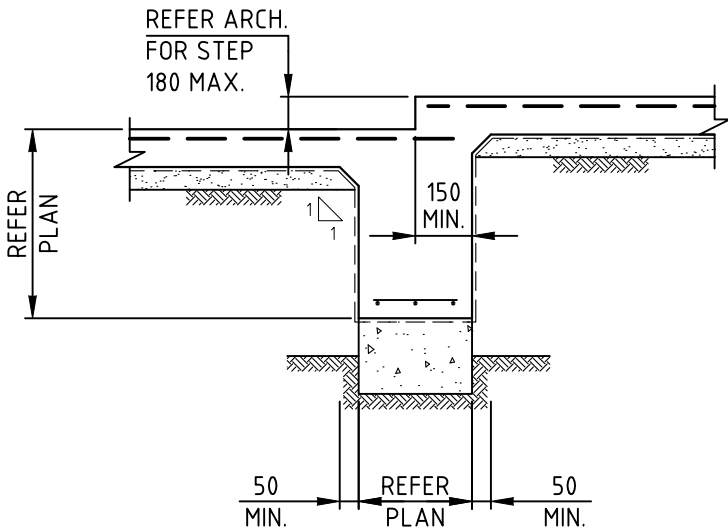
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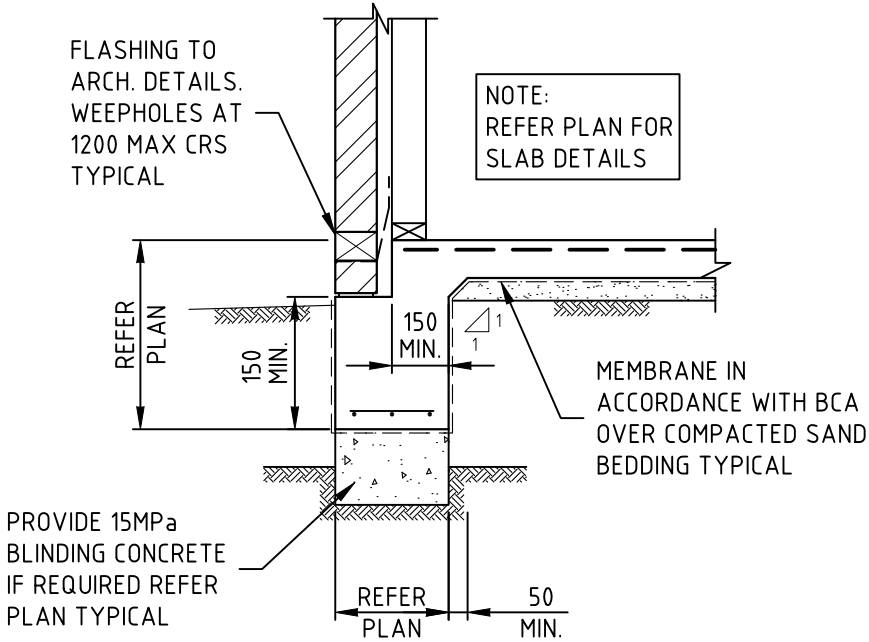
SLAB NOTES:

- 1.SLAB REINFORCEMENT TO BE LAPPED NOT LESS THAN 225mm OR 2 CROSS WIRES. SUPPORT MESH ON BAR CHAIRS AT 1000mm MAXIMUM SPACING IN BOTH DIRECTION.
- 2.BEAM/RIB REINFORCEMENT TO BE LAPPED AND TIED A MINIMUM OF 500mm AT SPLICES. LAP FULL BEAM WIDTH AT RIB INTERSECTIONS.
- 3.REINFORCEMENT SHALL BE FIXED IN POSITION BY BAR CHAIRS OR APPROVED SIMILAR.
- 4.THE CONCRETE SHALL BE TRANSPORTED, PLACED, VIBRATED AND CURED IN ACCORDANCE WITH GOOD BUILDING PRACTICE.

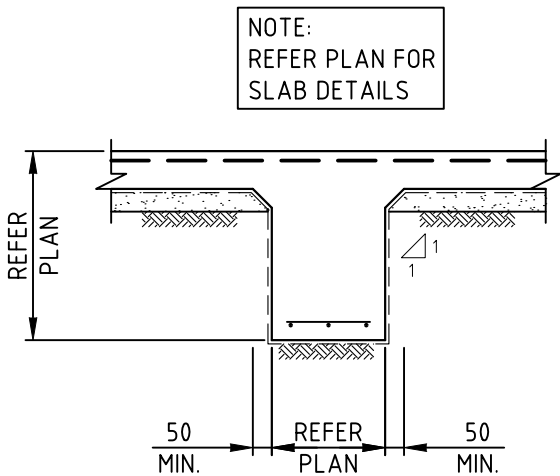
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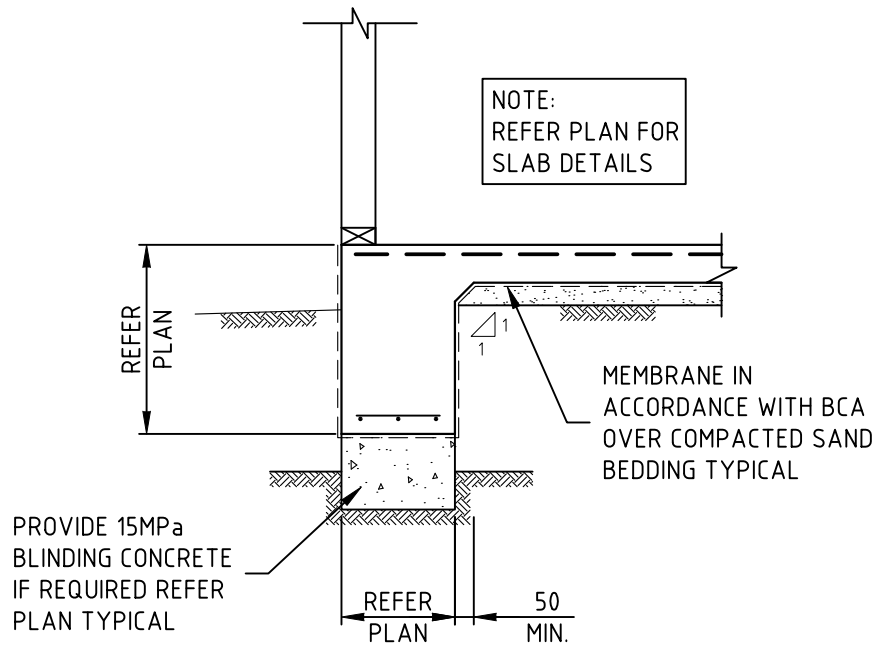
TYPICAL STEPDOWN AT
INTERNAL RIB DETAIL
SCALE = 1:20



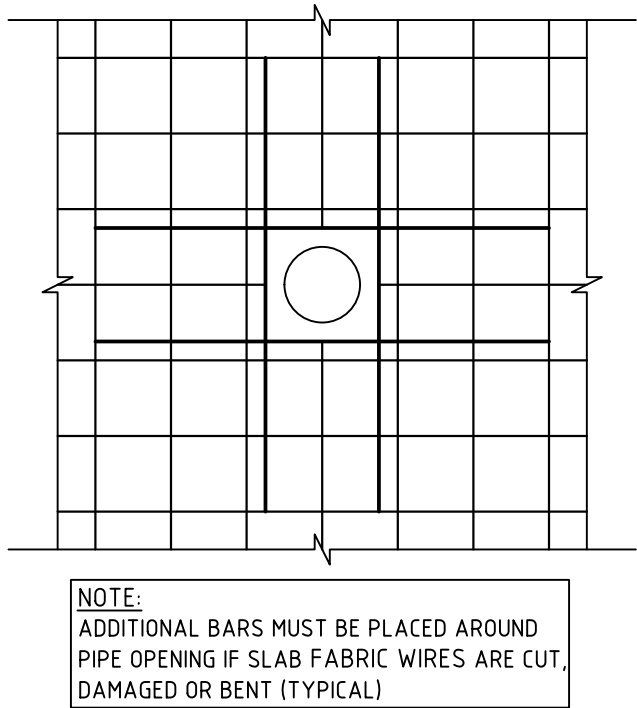
TYPICAL EXTERNAL RIB DETAIL
SCALE = 1:20



TYPICAL INTERNAL RIB DETAIL
SCALE = 1:20



TYPICAL EXTERNAL RIB DETAIL
SCALE = 1:20



TYPICAL PENETRATION AT
SLAB ON GROUND DETAIL
SCALE = NTS

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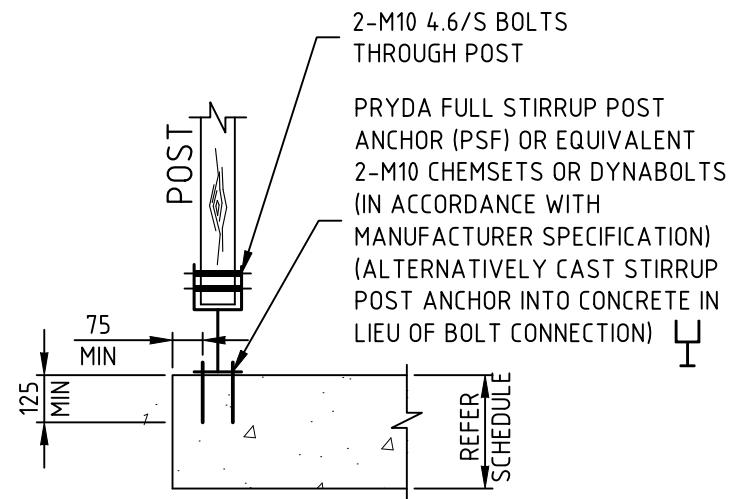
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FOOTING DETAILS - SHEET 1

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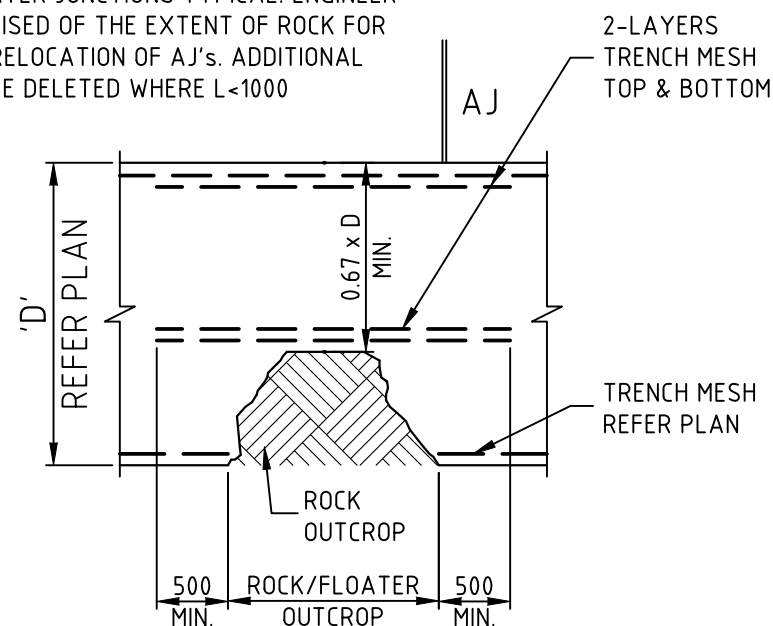
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TYPICAL TIMBER FULL STIRRUP POST ON CONCRETE SLAB/FOOTING DETAIL

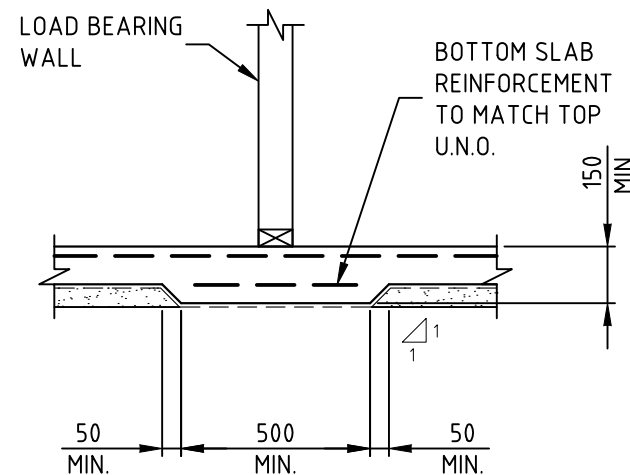
SCALE = 1:20

NOTE:
ARTICULATION JOINTS (AJ) TO BE LOCATED ON ROCK FLOATER JOCTIONS TYPICAL. ENGINEER TO BE ADVISED OF THE EXTENT OF ROCK FOR GENERAL RELOCATION OF AJ's. ADDITIONAL AJ's CAN BE DELETED WHERE $L < 1000$



DETAIL WHERE ROCK FLOATER 'LOCALLY' PROJECTS INTO FOOTING

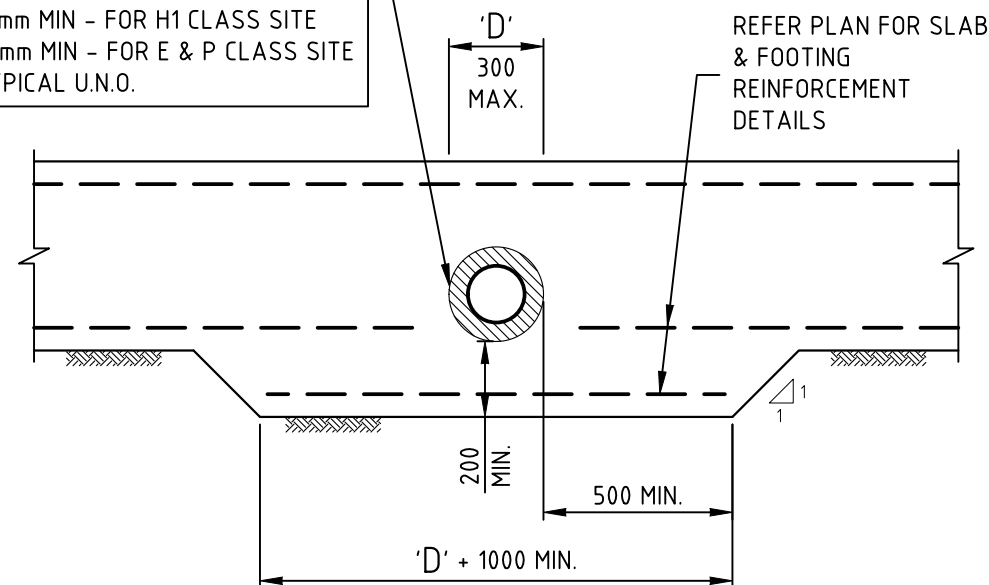
SCALE = NTS



TYPICAL LOAD BEARING WALL ON SLAB DETAIL

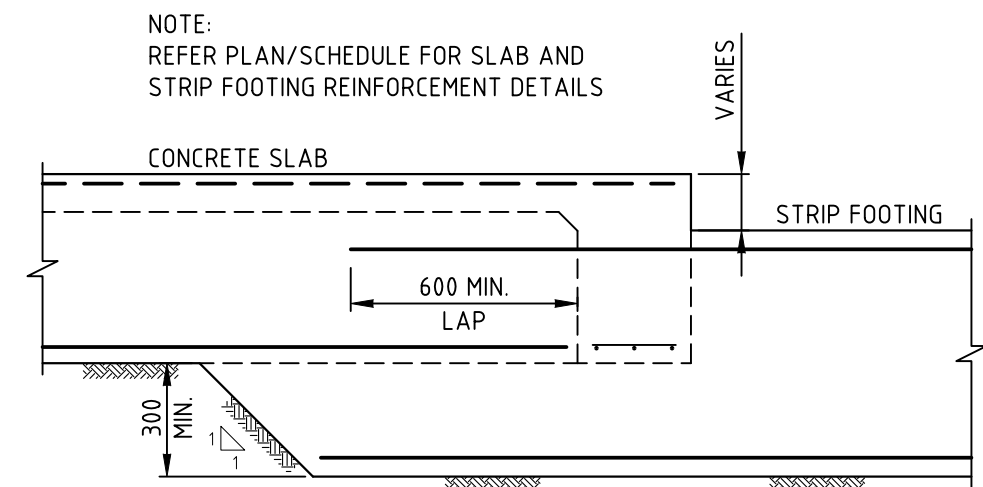
SCALE = 1:20

LAGGING THICKNESS:
25mm MIN - FOR H1 CLASS SITE
40mm MIN - FOR E & P CLASS SITE
TYPICAL U.N.O.



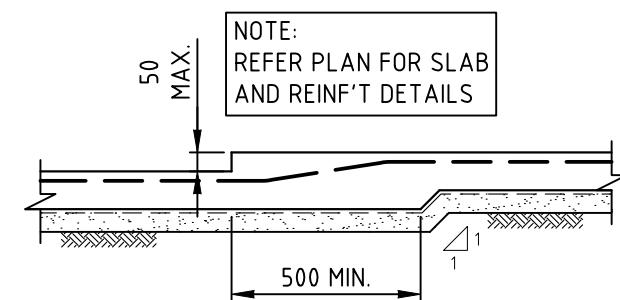
TYPICAL PENETRATION THROUGH FOOTING DETAIL

SCALE = 1:20



TYPICAL STRIP FOOTING TO SLAB EDGE BEAM CONNECTION DETAIL

SCALE = 1:20



TYPICAL RECESS / SETDOWN AT NO INTERNAL RIB DETAIL

SCALE = 1:20

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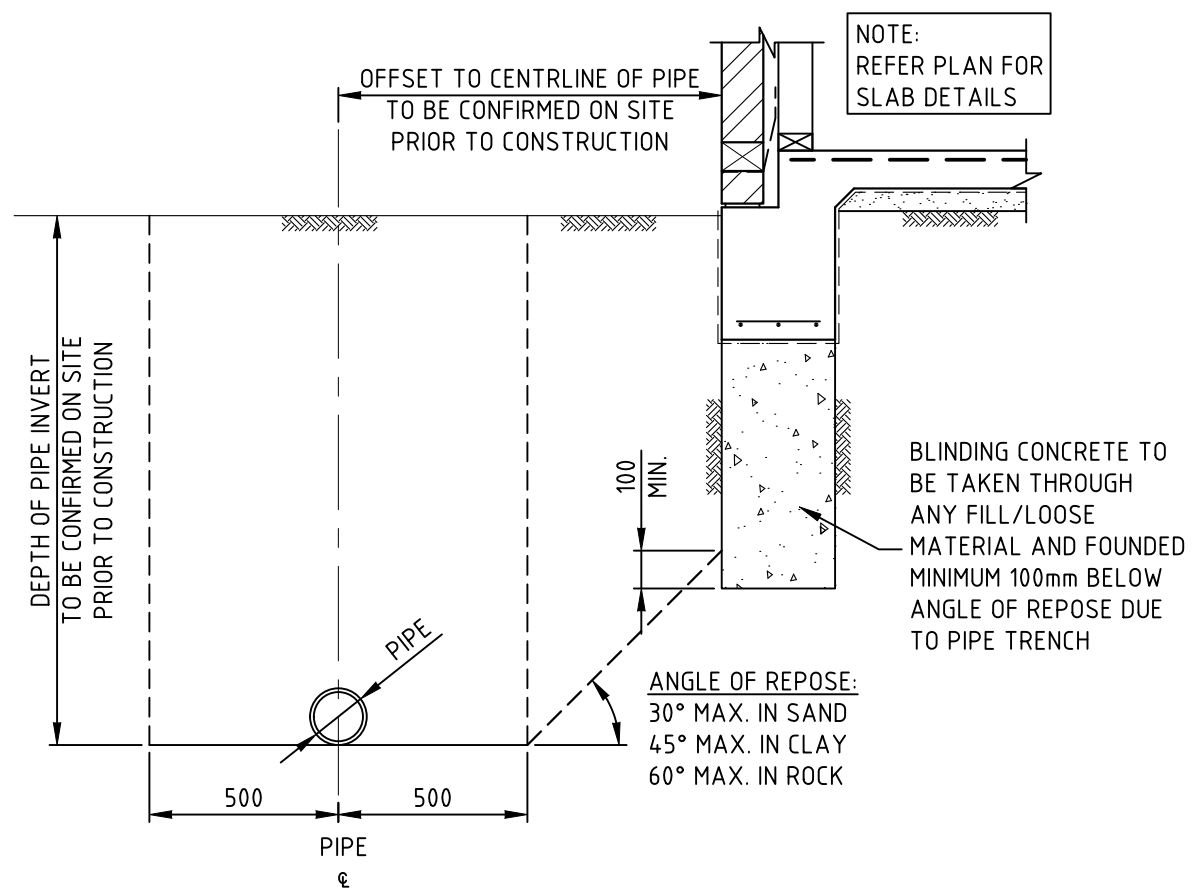
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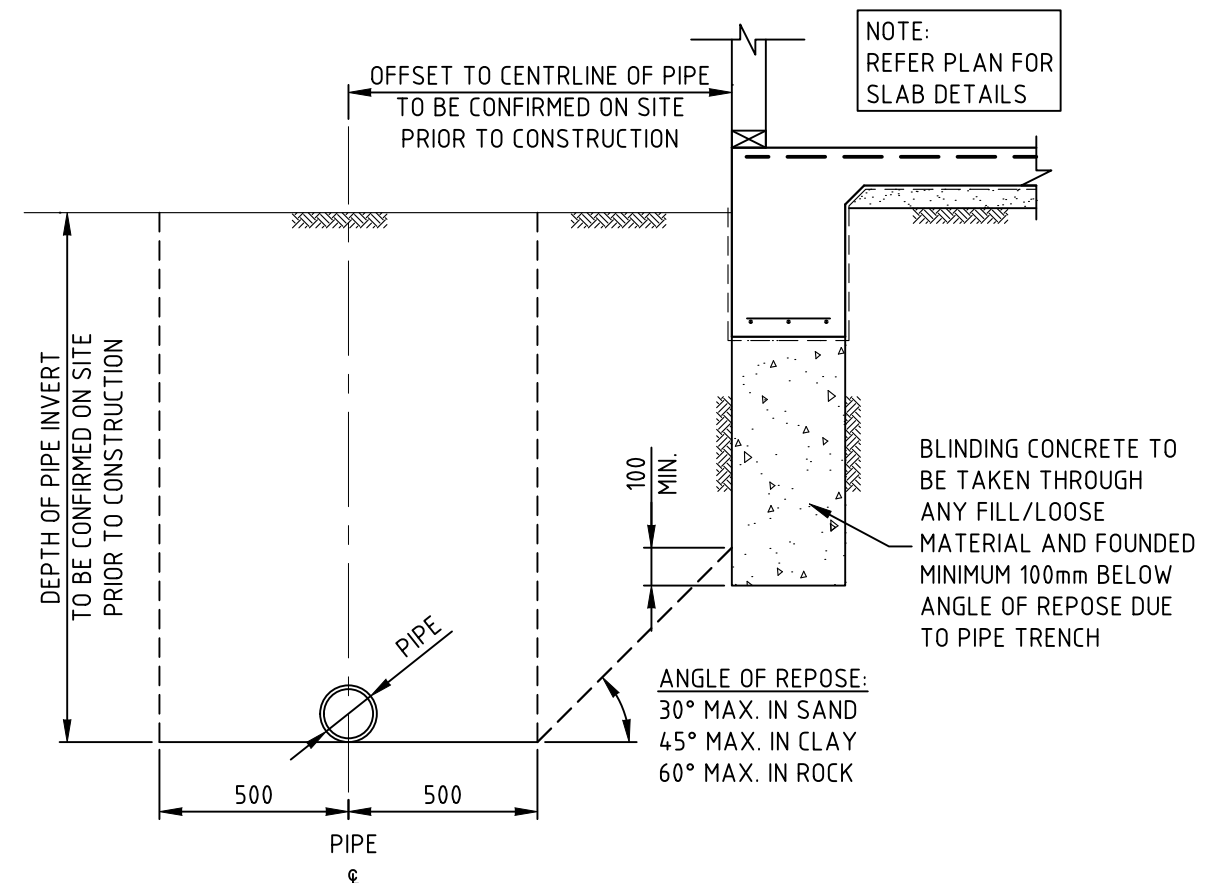
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**TYPICAL ANGLE OF REPOSE DETAIL
(IF REQUIRED)**

SCALE = 1:20



**TYPICAL ANGLE OF REPOSE DETAIL
(IF REQUIRED)**

SCALE = 1:20

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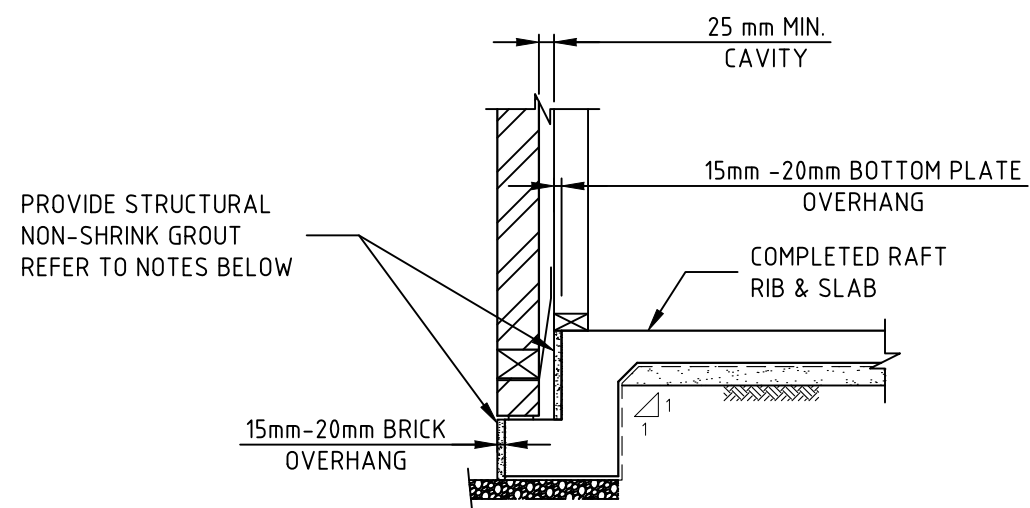
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TYPICAL BRICK & FRAME OVERHANG RECTIFICATION DETAIL TO EXTERNAL RIB (O/H 11mm-20mm)

SCALE = NTS

NOTES:

1. THE EDGES OF THE EXISTING CONCRETE SLAB ARE TO BE SCABBLED OR ACID WASHED AND THEN RINSED TO PROVIDE A COARSE SURFACE TO ACCEPT THE NON-SHRINK GROUT.
2. APPLY A BONDCRETE OR BONDIT PRODUCT TO THE EDGES OF THE CONCRETE SLAB TO RECEIVE THE NON-SHRINK GROUT, IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS.
3. WHILE THE SLURRY MIX IS STILL WET, PROVIDE HIGH-STRENGTH NON-SHRINK GROUT TO BENEATH OF THE OVERHANG. (SUCH AS LANKO 702 DURABED OR SIMILAR APPROVED) INSTALLED IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS. BENEATH THE OVERHANG THE THICKNESS OF THE GROUT MUST BE CONSISTENT WITH THE OVERHANG & GROUT MUST BE AT LEAST 150mm DEEP.
4. THE ABOVE DETAIL IS ONLY APPLICABLE FOR BRICK VENEER, (UP TO TWO STORIES RESIDENTIAL BUILDING) WITH NOMINAL FIXINGS TO THE SLAB, MAXIMUM OVERHANG LENGTH NOT TO EXCEEDING 20mm.
5. BOTTOM WALL PLATE TO BE FIXED TO CONCRETE SLAB IN ACCORDANCE WITH TIMBER FRAMING MANUAL.
6. IF ONE OF THE FOLLOWING CONDITION ARE MET TO THE OVERHANG, BUILDER SHOULD SUBMIT DETAILS TO INTRAX CONSULTING ENGINEERS, PRIOR COMMENCE ANY CONSTRUCTION WORKS.
 - BRACED WALL WITH SPECIFIED FIXING, OTHER THAN NOMINAL FIXING;
 - UNDER CONCENTRATED LOADS (DOUBLE/TRIPLE STUDS OR STEEL COLUMNS);
 - VOIDS ON SURFACE OF EXTERNAL RIBS (DUE TO POOR COMPACTION/VIBRATION);
 - LENGTH OF OVERHANG EXCEEDS 2000mm
 - TIMBER FRAMING WALL IS LESS THAN 90mm WIDE
 - TIMBER FRAMING WALL IS GREATER THAN 2700mm HIGH
 - WIND CLASSIFICATION OF N3 OR ABOVE

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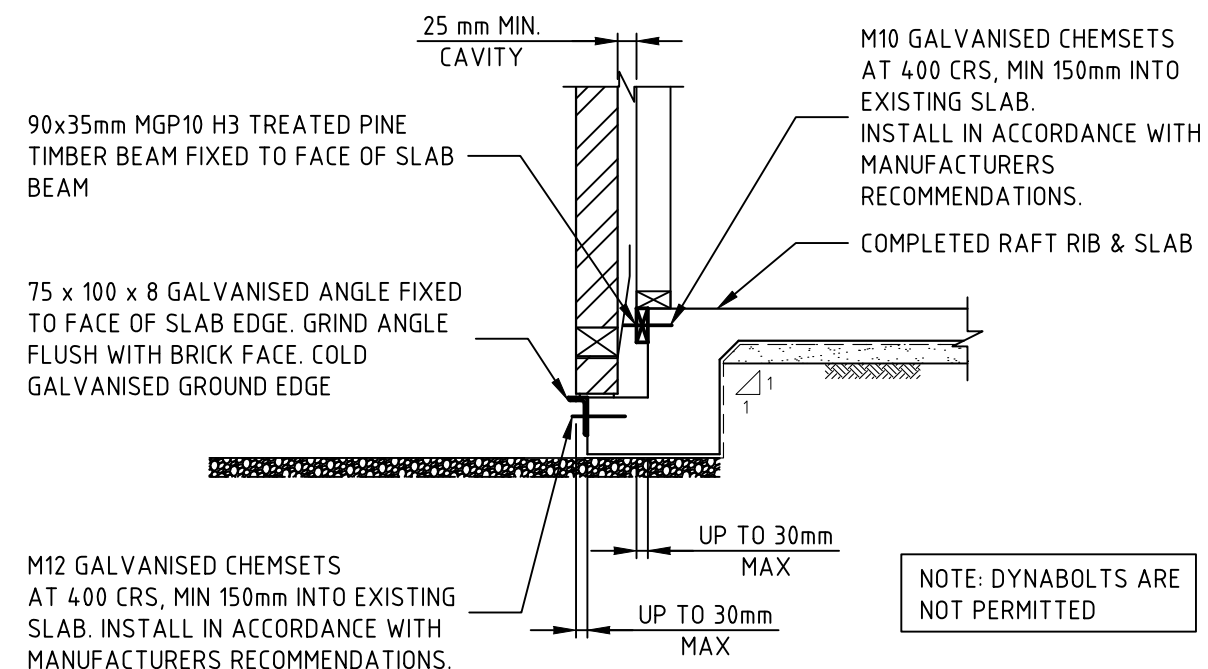
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TYPICAL BRICK & FRAME OVERHANG RECTIFICATION DETAIL TO EXTERNAL RIB (MAX O/H 30mm)

SCALE = N.T.S

NOTE: BOTTOM WALL PLATE TO BE FIXED TO CONCRETE SLAB IN ACCORDANCE WITH TIMBER FRAMING MANUAL

NOTE: REFER TO ENGINEERING DRAWINGS FOR EXISTING FOOTING SPECIFICATIONS. EXTERNAL RIB TO ACHIEVE MIN DIMENSIONS SPECIFIED . IF NOT, THIS OFFICE IS TO BE CONTACTED

NOTE: BRICK VENEER CAVITY WIDTH/WALL TIES TO BE AS PER BCA REQUIREMENTS

NOTE:
IF ONE OF THE FOLLOWING CONDITION ARE MET TO THE OVERHANG, BUILDER SHOULD SUBMIT DETAILS TO INTRAX CONSULTING ENGINEERS, PRIOR COMMENCE ANY CONSTRUCTION WORKS

- BRACED WALL WITH SPECIFIED FIXING, OTHER THAN NOMINAL FIXING ;
- UNDER CONCENTRATED LOADS (DOUBLE/TRIPLES STUDS OR STEEL COLUMN)
- VOIDS ON SURFACE OF EXTERNAL RIBS (DUE TO POOR COMPACTION/VIBRATION)
- LENGTH OF OVERHANG EXCEEDS 2000mm
- TIMBER FRAMING WALL IS LESS THAN 90mm WIDE
- TIMBER FRAMING WALL IS GREATER THAN 2700mm HIGH
- WIND CLASSIFICATION OF N3 OR ABOVE

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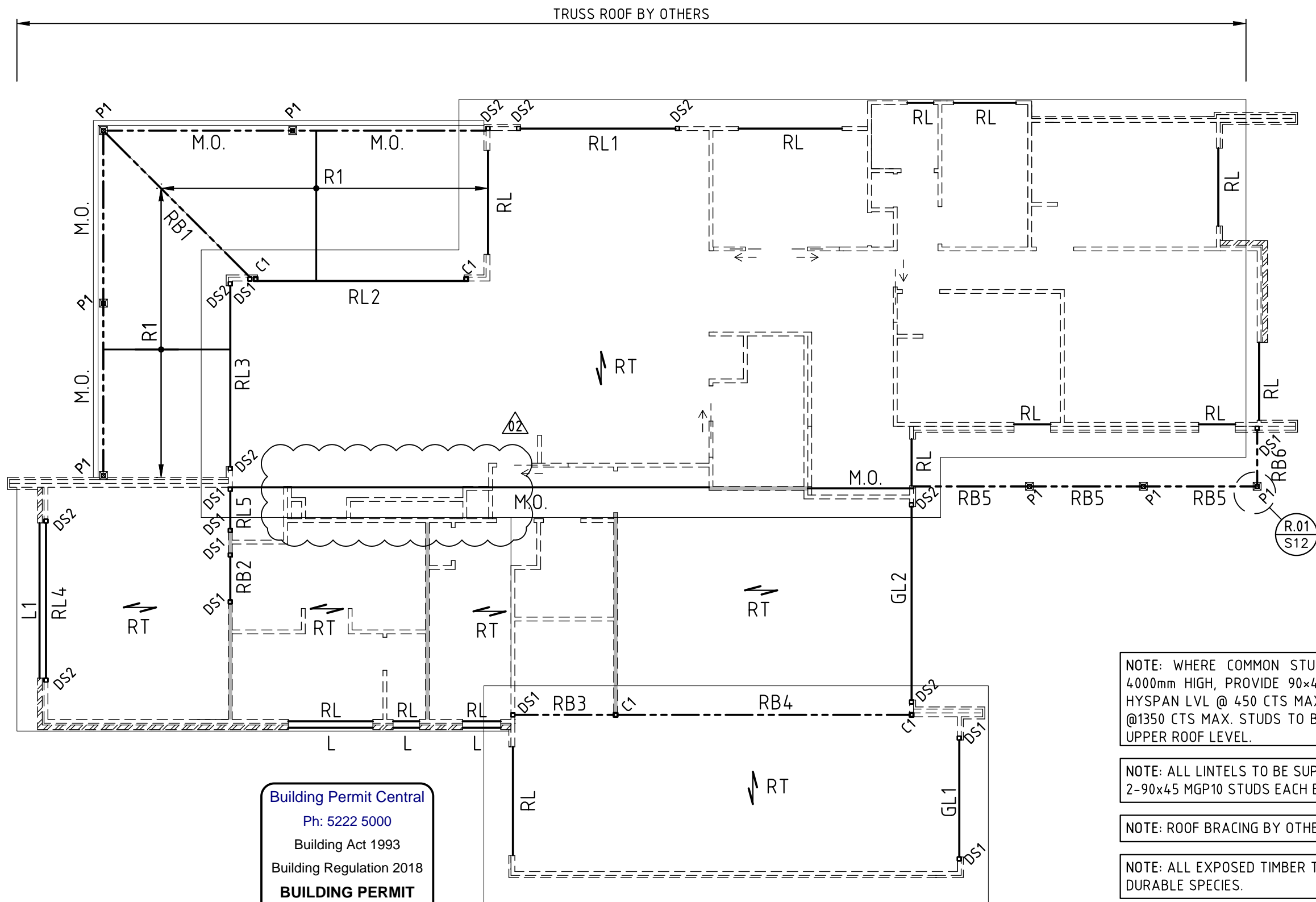
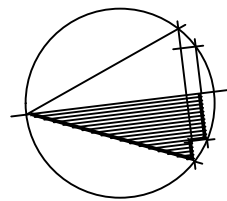
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Drawing:
FOOTING DETAILS - SHEET 4

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NOTE: WHERE COMMON STUD IS 3000mm TO 4000mm HIGH, PROVIDE 90x45 F17 KD HW OR HYSpan LVL @ 450 CTS MAX. WITH NOGGINGS @1350 CTS MAX. STUDS TO BE CONTINUOUS TO UPPER ROOF LEVEL.

NOTE: ALL LINTELS TO BE SUPPORTED BY 2-90x45 MGP10 STUDS EACH END, U.N.O

NOTE: ROOF BRACING BY OTHERS U.N.O.

NOTE: ALL EXPOSED TIMBER TO BE TREATED OR DURABLE SPECIES.

NOTE: REFER MEMBER SCHEDULE & LEGEND ON DRAWING S09

NOTE: ALL EXPOSED STEELWORK TO BE HOT DIPPED GALVANISED.

- LEGEND**
- BRICKWORK UNDER
 - TIMBER STUD WALLS UNDER
 - INTERNAL LOAD BEARING WALLS UNDER
 - DENOTES DIRECTION OF ROOF TRUSS BY OTHERS

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ROOF PLAN
SCALE = 1:100

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Drawing: ROOF PLAN

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Rev.			02

MEMBER SCHEDULE		
MARK	SECTION	REMARKS/CONNECTIONS
GL1	150×42 SMART LVL15	
GL2	2-300×42 SMART LVL15	NAIL LAMINATED
RL1	2-240×42 SMART LVL15	NAIL LAMINATED
RL2	200 PFC	
RL3	2-300×42 SMART LVL15	NAIL LAMINATED
RL4	2-200×42 SMART LVL15	NAIL LAMINATED
RL5	90×42 SMART LVL15	
RB1	2-240×42 SMART LVL15	NAIL LAMINATED H3 TREATED IF EXPOSED
RB2	90×42 SMART LVL15	
RB3	200×42 SMART LVL15	
RB4	230 PFC	
RB5	200×42 SMART LVL15	H3 TREATED IF EXPOSED
RB6	200×42 SMART LVL15	H3 TREATED IF EXPOSED
L1	150×100×10 UA	150 MIN END BEARING
R1	190×42 SMART LVL15	AT 600 MAX. CRS
C1	89×89×5.0 SHS (C350)	
L	REFER ANGLE LINTEL SCHEDULE	
RL	REFER TIMBER ROOF LINTEL SCHEDULE	
DSx	REFER TO TIMBER STUD SCHEDULE ON DETAIL PAGE	SAME APPLIES TO TSx/QSx/FSx
GT	GIRDER TRUSS	LOCATION TBC BY TRUSS MANUFACTURER
P1	185×185 F7 TREATED PINE POST	

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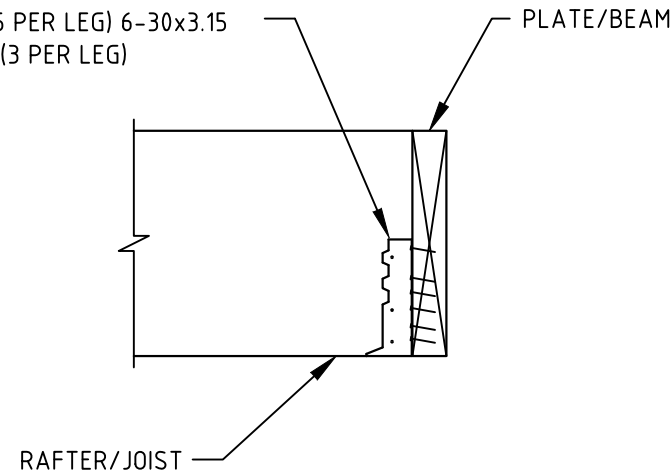
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Drawing:

FRAMING DETAILS - SHEET 1

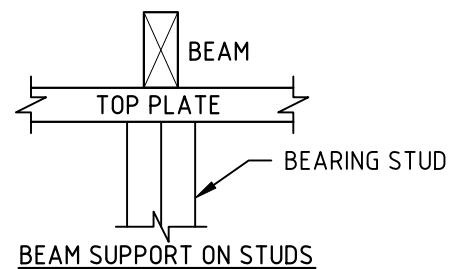
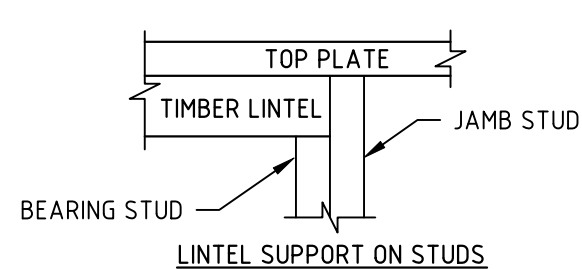
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Job No.	119605	Rev.
		02

1. AT DOUBLE JOIST TO DOUBLE JOIST
USE JOIST HANGER TO ONE JOIST AND
TRIP L GRIP FIXING TO SECOND JOIST
WITH 5 NAILS/LEG. (15 NAILS)
2. AT DOUBLE JOIST TO WALL PLATE
USE JOIST HANGER TO ONE JOIST AND
TRIP L GRIP FIXING TO SECOND JOIST
WITH 5 NAILS/LEG. (15 NAILS)
2-16Ø DYNABOLTS TO WALL
SPACE DYNABOLTS AT 80mm CRS AND
80mm EDGE DISTANCE

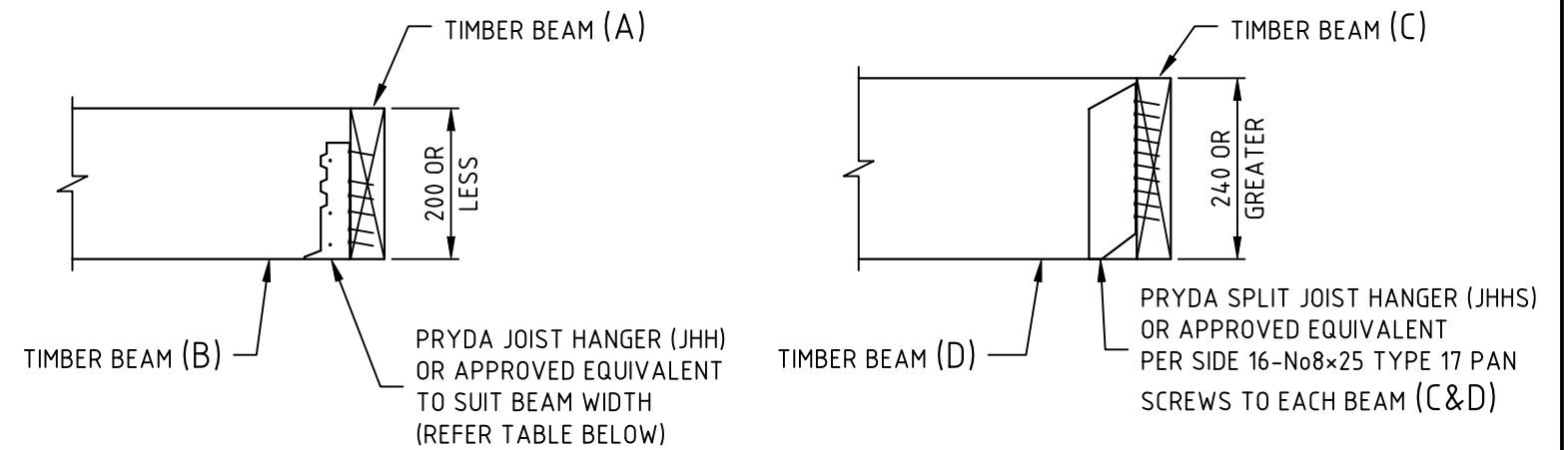


SCALE = 1:10

ALL STUDS SHALL BE NAIL LAMINATED IN ACCORDANCE WITH AS1684.2		DS1	DS2	DS3	DS4	TS1	TS2	TS3	QS1	QS2	FS1	FS2
		90x45	90x45	70x45	120x45	90x45	90x45	70x45	90x45	90x45	90x45	90x45
		MGP10	F17 KD HW	F17 KD HW	MGP10	MGP10	F17 KD HW	F17 KD HW	MGP10	F17 KD HW	MGP10	F17 KD HW
LINTEL	NO. OF BEARING STUD	1	1	1	1	1	1	1	2	2	2	2
	NO. OF JAMB STUD	1	1	1	1	2	2	2	2	2	3	3
BEAM	NO. OF BEARING STUD	2	2	2	2	3	3	3	4	4	5	5



TIMBER STUDS SCHEDULE



BEAM WIDTH (B)	BRACKET	FIXING
63	JHH65	20-No12×35 TYPE 17 HEX HEAD SCREWS TO BEAM (A) 16-No12×35 TYPE 17 HEX HEAD SCREWS TO BEAM (B)
70	JHH75	20-No12×35 TYPE 17 HEX HEAD SCREWS TO BEAM (A) 16-No12×35 TYPE 17 HEX HEAD SCREWS TO BEAM (B)
90	JHH100	24-No12×35 TYPE 12 HEX HEAD SCREWS TO BEAM (A) 18-No12×35 TYPE 12 HEX HEAD SCREWS TO BEAM (B)

ALTERNATIVE TIMBER BEAM TO TIMBER BEAM CONNECTIONS (FOR PORCH AND/OR ALFRESCO AREAS ONLY)

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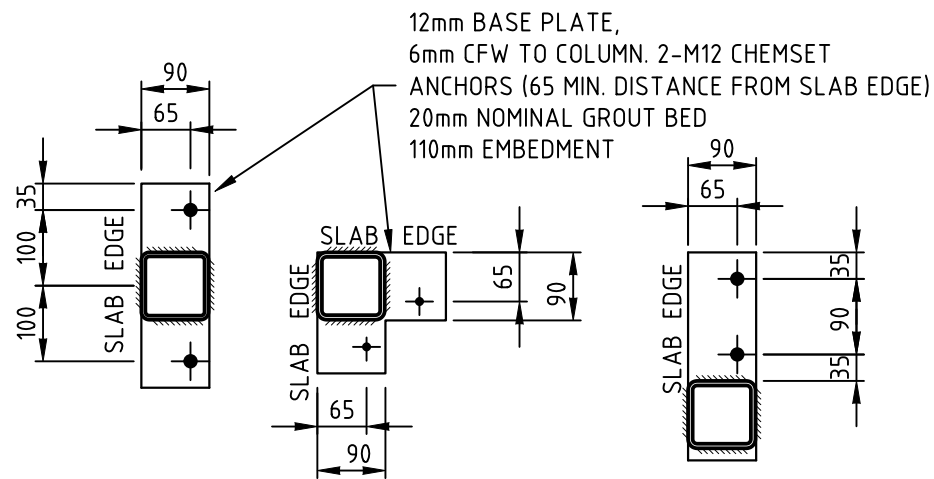
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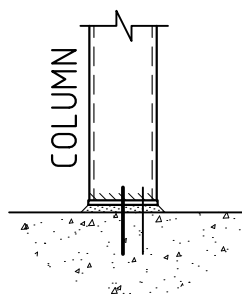
Drawing:
FRAMING DETAILS - SHEET 2

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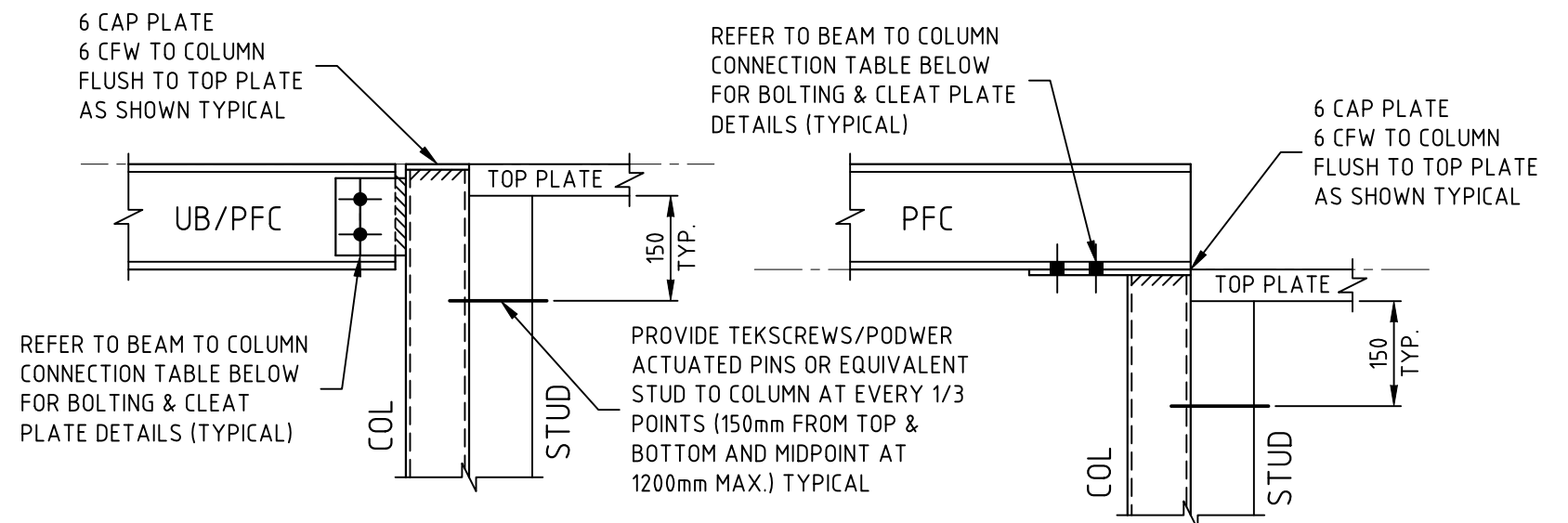
BASE PLATE PLAN
SCALE 1 : 10



NOTE:
FOR INTERNAL COLUMN BASE
PLATE BOLTS TO BE LOCATED ON
THE CENTER OF THE BASE PLATE

TYPICAL COLUMN BASE CONNECTION DETAILS

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BEAM TO COLUMN CONNECTION TABLE

MEMBER SIZE	BOLTS REQUIRED	CLEAT/CAP PLATE THICKNESS
UPTO 250UB/PFC	2-M16 4.6/S BOLTS	10mm
UPTO 360UB & 380PFC	3-M20 4.6/S BOLTS	10mm

NOTES:

- THIS TABLE IS APPLICABLE TO ALL STEEL BEAM TO COLUMN CONNECTION TYPICAL (U.N.O. ON DETAILS).
- ALL WELDING TO BE 6mm CFW TYPICAL (U.N.O. ON DETAILS).
- LEVEL OF TOP PLATES ARE INDICATIVE ONLY, NUMBER OF TOP PLATES MAY VARY.
- BUILDER/CONTRACTOR TO CONFIRM HEIGHT OF LINTEL & CLEAT PLATE TO SUIT WINDOW/DOOR OPENING.

TYPICAL STEEL BEAM TO STEEL COLUMN CONNECTION DETAIL & TABLE

SCALE = NTS

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Drawing:
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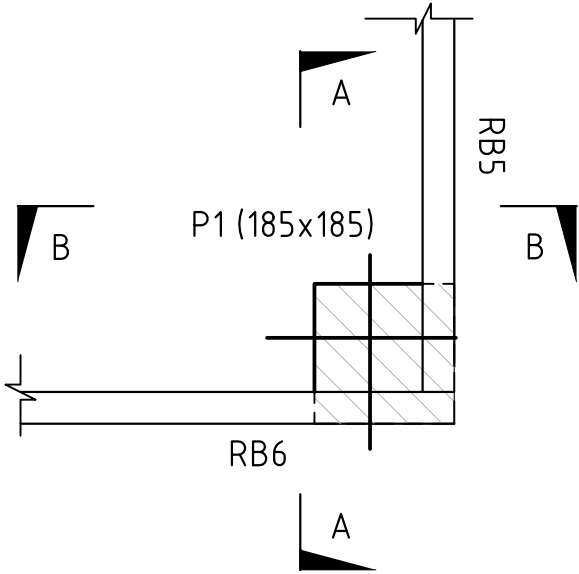
01 May 2019

TIMBER ROOF LINTEL SCHEDULE (RL)	
SPAN (mm)	SECTION
0 - 1200	120 x 45 F7 KD PINE
1201 - 1800	190 x 35 F7 KD PINE
1801 - 2400	2 - 190 x 35 F7 KD PINE
2401 - 3000	240 x 45 F17 KD HW OR 240 x 45 HYSPAN
3001 - 3600	2 - 240 x 45 F17 KD HW OR 2 - 240 x 45 HYSPAN

METAL ROOF-FOR MAXIMUM LOAD WIDTH OF 5.0m

ANGLE LINTEL TABLE (L)		
ANGLE LINTEL SPAN (mm)	BRICK HEIGHT	
	800mm MAX.	3200mm MAX.
0 - 900	100 x 100 x 6 EA	100 x 100 x 8 EA
901 - 1600	100 x 100 x 6 EA	100 x 100 x 10 EA
1601 - 2100	100 x 100 x 6 EA	150 x 100 x 10 UA
2101 - 2600	150 x 100 x 10 UA	150 x 100 x 10 UA + 50 x 10 EXT. PL
2601 - 3100	150 x 100 x 10 UA	150 x 100 x 12 UA + 75 x 12 EXT. PL
3101 - 3600	150 x 100 x 12 UA	N/A

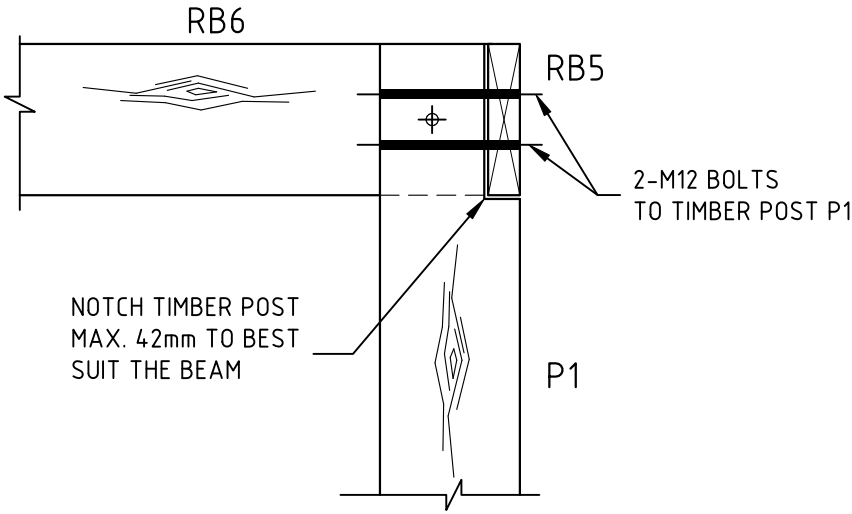
- NOTES:
- ANGLE LINTEL TO EACH MASONRY SKIN TYPICAL
 - SET ANGLES WITH LONG LEG VERTICAL TYPICAL U.N.O.
 - HOT DIP GALVANISED TO ALL EXPOSED ANGLE LINTELS TYPICAL



TIMBER POST P1 TO TIMBER BEAM
CONNECTION DETAIL
(PLAN VIEW)

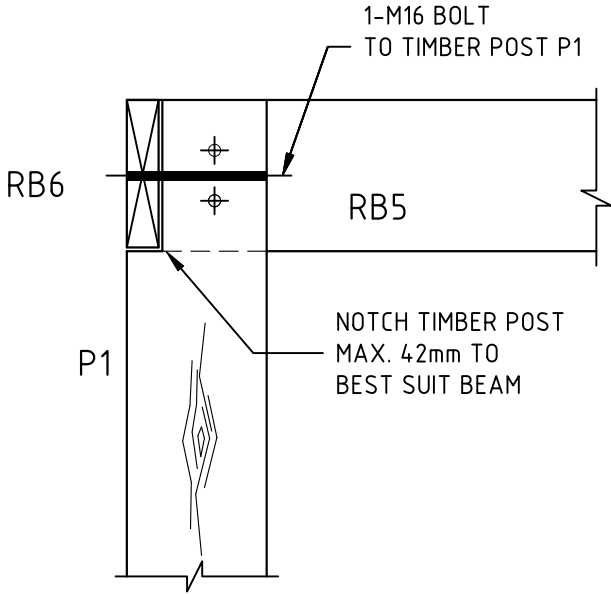
SCALE = 1:10

R.01
S08



ELEVATION B-B

SCALE = 1:10
d- DENOTES DIAMETER OF BOLT



ELEVATION A-A

SCALE = 1:10

Rev.	Remark/Comment	Date:	Appr.
02	CONSTRUCTION ISSUE	05.04.19	
01	CONSTRUCTION ISSUE	08.03.19	
A	PRELIMINARY ISSUE	26.02.19	

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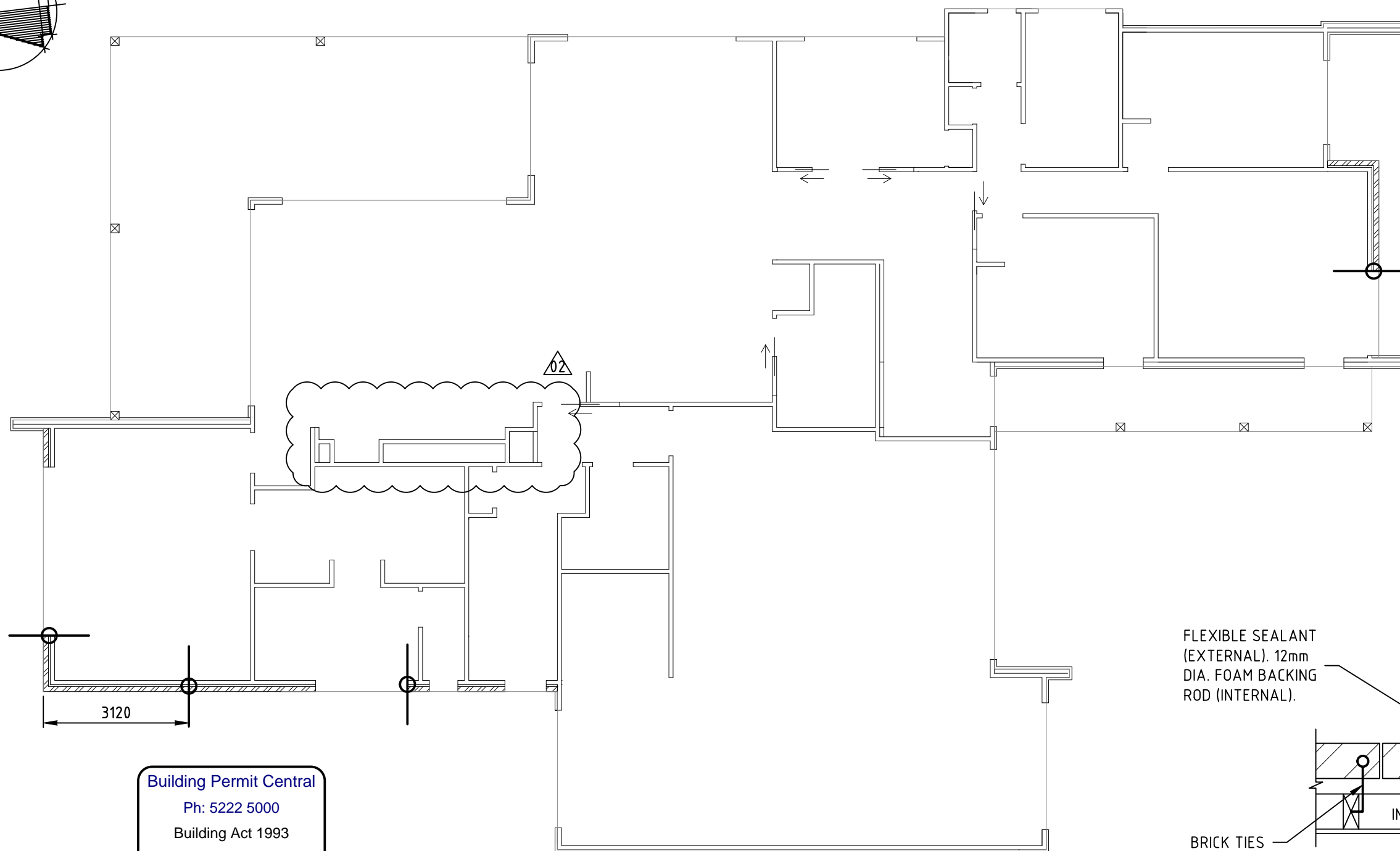
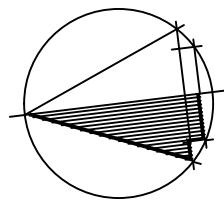
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Client:
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Project:
PROPOSED RESIDENCE
LOT 322 NO. 40 SAMPHIRE DRIVE
CONNEWARRE
Drawing:
FRAMING DETAILS - SHEET 4

CONSTRUCTION ISSUE

Date: FEB.19	Engineer: J.W.	Drawn: L.Q.
Scale @ A3: AS SHOWN	Checked:	No. of Sheets: 23
Job No. 119605	Drawing No. S12	Rev. 02



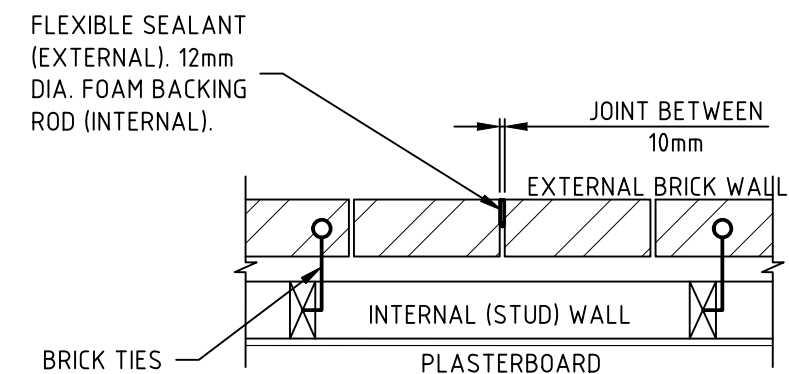
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Building Regulation 2018
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ENDORSED PLAN
01 May 2019

LEGEND

—○— ARTICULATION JOINT


ARTICULATION JOINT PLAN
SCALE = 1:100

NOTE:
ARTICULATION JOINT ON BOUNDARY WALL TO BE FIRE RATED
AS PER BCA REQUIREMENTS.




BRICK VENEER WALL
ARTICULATION JOINT DETAILS
SCALE: NTS

Rev.	Remark/Comment	Date:	Appr.
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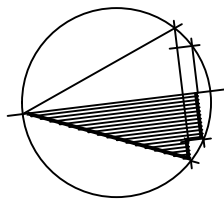
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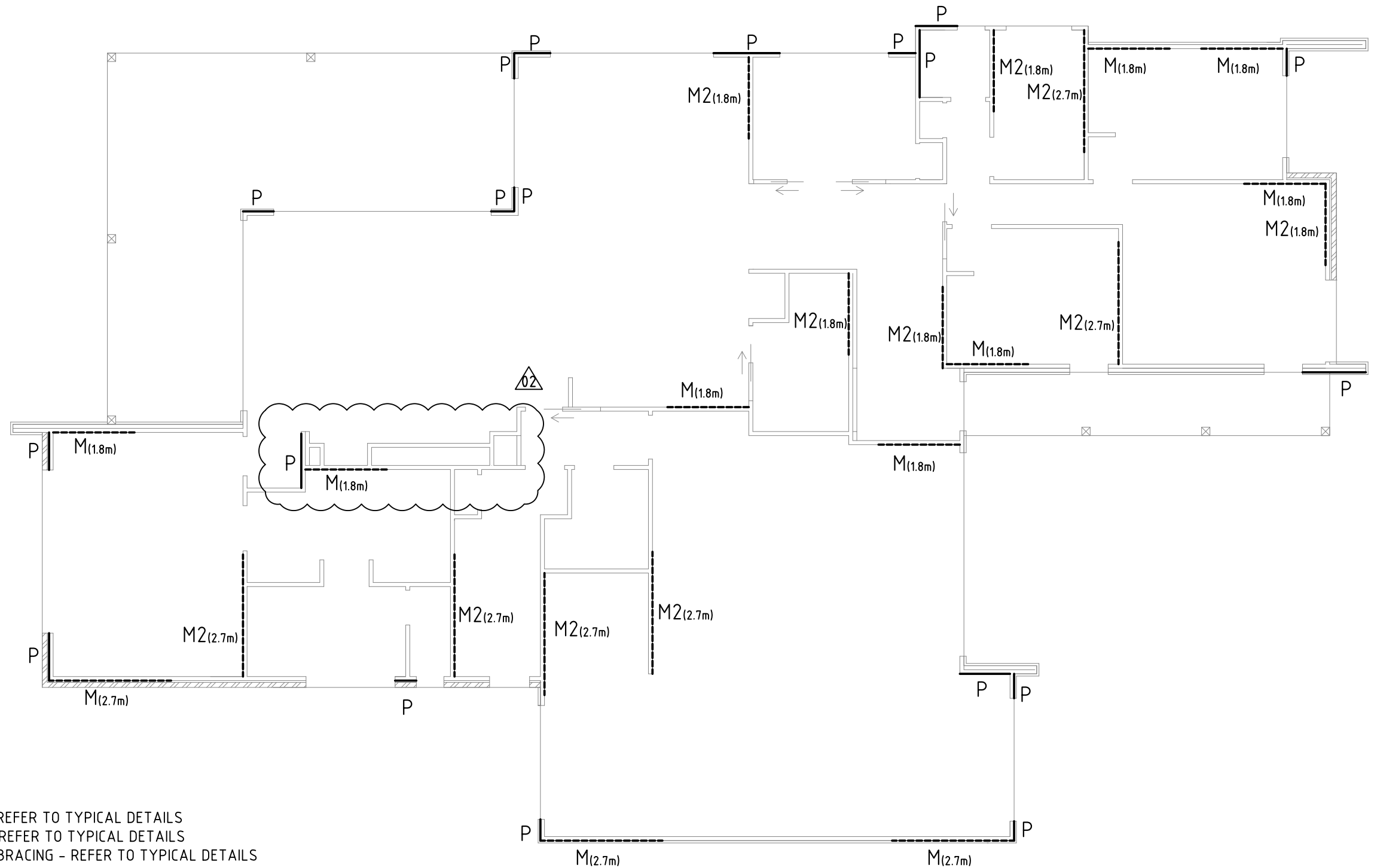
Project: PROPOSED RESIDENCE
LOT 322 NO. 40 SAMPHIRE DRIVE
CONNEWARRE

Drawing: ARTICULATION JOINT ELEVATIONS

CONSTRUCTION ISSUE			
Date:	FEB.19	Engineer: J.W.	Drawn: L.Q.
Scale @ A3:	AS SHOWN	Checked:	No. of Sheets: 23
Job No.	119605	Drawing No.	S13
Rev.			02



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01 May 2019



BRACING LEGEND

- M - 1.5kN/m CAPACITY BRACING - REFER TO TYPICAL DETAILS
M2 - 3.0kN/m CAPACITY BRACING - REFER TO TYPICAL DETAILS
P - 3.4kN/m CAPACITY PLYWOOD BRACING - REFER TO TYPICAL DETAILS

WIND RATING - N2

- MAXIMUM DESIGN GUST WIND SPEED FOR THIS SITE IS 40 M/S;
- WIND SPEED CALCULATION (VH) FOR USE IN ULTIMATE LIMIT STATE DESIGN ONLY, CALCULATED IN ACCORDANCE WITH THE LIMITATIONS AS IN AS 4055, SECTION 2.1.

ALTERNATIVE BRACING METHOD NOTE:

- OTHER EQUIVALENT CAPACITY BRACING METHOD IS PERMITTED IN LIEU OF SPECIFIED BRACING METHOD SHOWN ON DRAWINGS;
- INSTALLATION OF ALL BRACING UNITS MUST BE IN ACCORDANCE WITH THE RESIDENTIAL TIMBER FRAMED CONSTRUCTION MANUALS AS 1684.2-2010

BRACING PLAN

SCALE = 1:100

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LOT 322 NO. 40 SAMPHIRE DRIVE
CONNEWARRE
Drawing:
BRACING PLAN

CONSTRUCTION ISSUE

Date: FEB.19	Engineer: J.W.	Drawn: L.Q.
Scale @ A3: AS SHOWN	Checked:	No. of Sheets: 23
Job No. 119605	Drawing No. S14	Rev. 02

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TENSIONED GALVANISED METAL STRAPS
WITH MINIMUM THICKNESS OF 0.8mm AND
MINIMUM NET SECTION OF 15mm²
FIXED TO STUDS WITH 1-30x2.8Ø GALVANISED
FLAT-HEAD NAIL (OR EQUIVALENT)
FIXED PLATES WITH 3-30 x 2.8Ø GALVANISED
FLAT-HEAD NAILS (OR EQUIVALENT) (BEND
STRAPS OVER WALL PLATES AND NAIL)

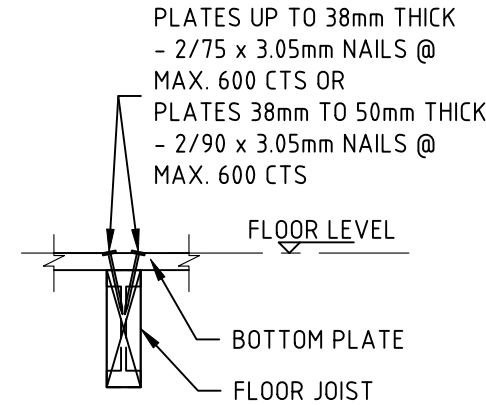
GALVANISED METAL ANGLE BRACE - (20x18x1.2mm)
2-30 x 2.8Ø NAILS TO EACH STUDS AND PLATES

NO END SPLITS ALLOWED;
DRILL IF NECESSARY.

30 x 0.8 GALV. STRAP
3-30 x 2.8Ø NAILS TO
EACH END OF STUD.
(TYPICAL)

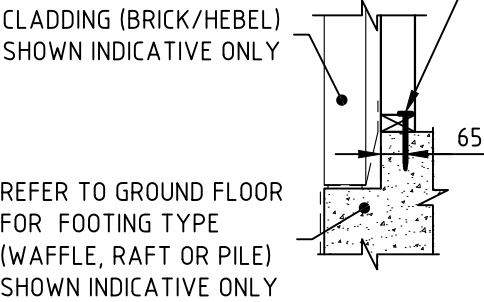
NOTE:
THE MAXIMUM DEPTH OF A
NOTCH OR SAW-CUT SHALL
NOT EXCEED 20mm.
SAW-CUTS STUDS SHALL
BE DESIGNED AS NOTCHED.

30 x 0.8 GALV. STRAP
3-30 x 2.8Ø NAILS TO
EACH END OF STUD.
(TYPICAL)

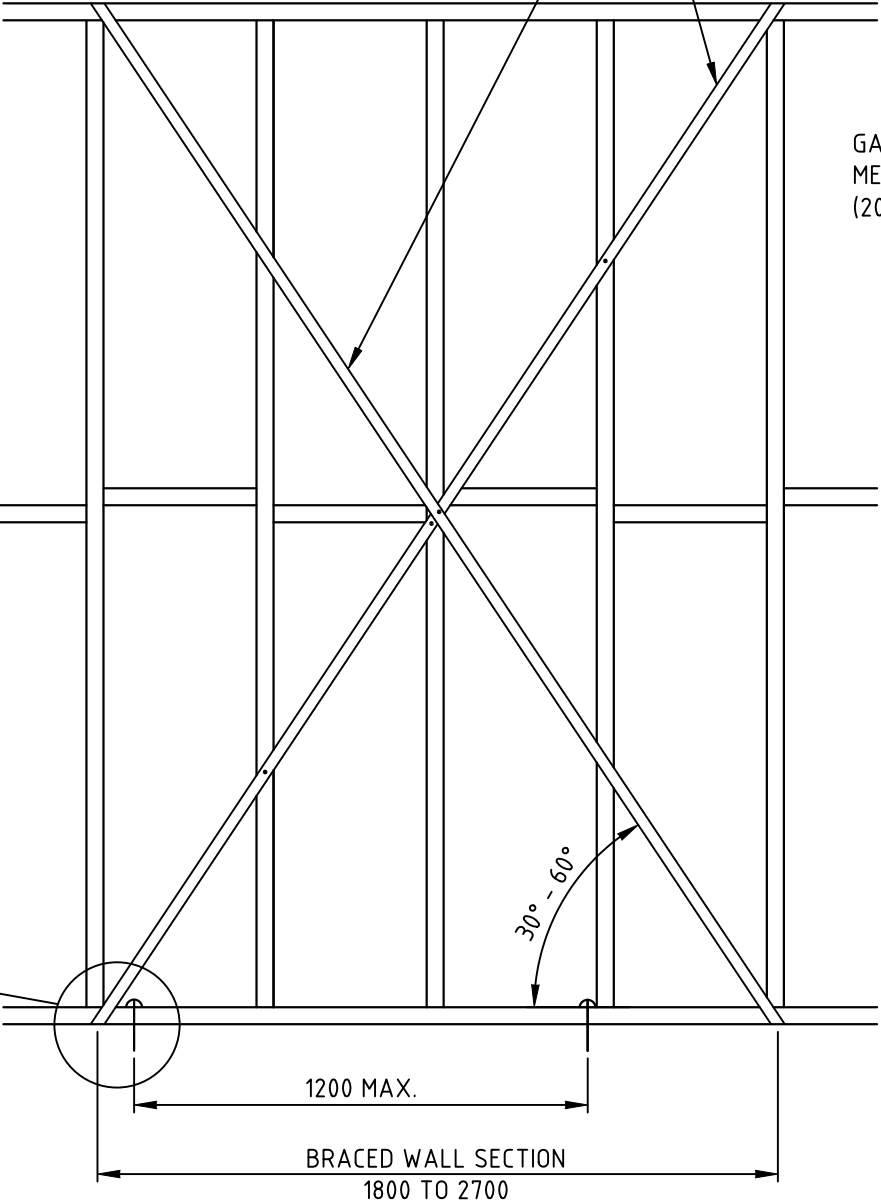


**BOTTOM WALL PLATE
TO FLOOR JOIST DETAIL**

FIX ONE 75MM MASONRY NAIL
(HAND-DRIVEN AT SLAB EDGE) OR
SCREW OR BOLT TO THE BOTTOM PLATE
AT MAXIMUM 1200mm CRS.
(IF PANEL WIDTH IS LESS THAN 1200mm,
NAIL TO BE AT EACH END OF PANEL)



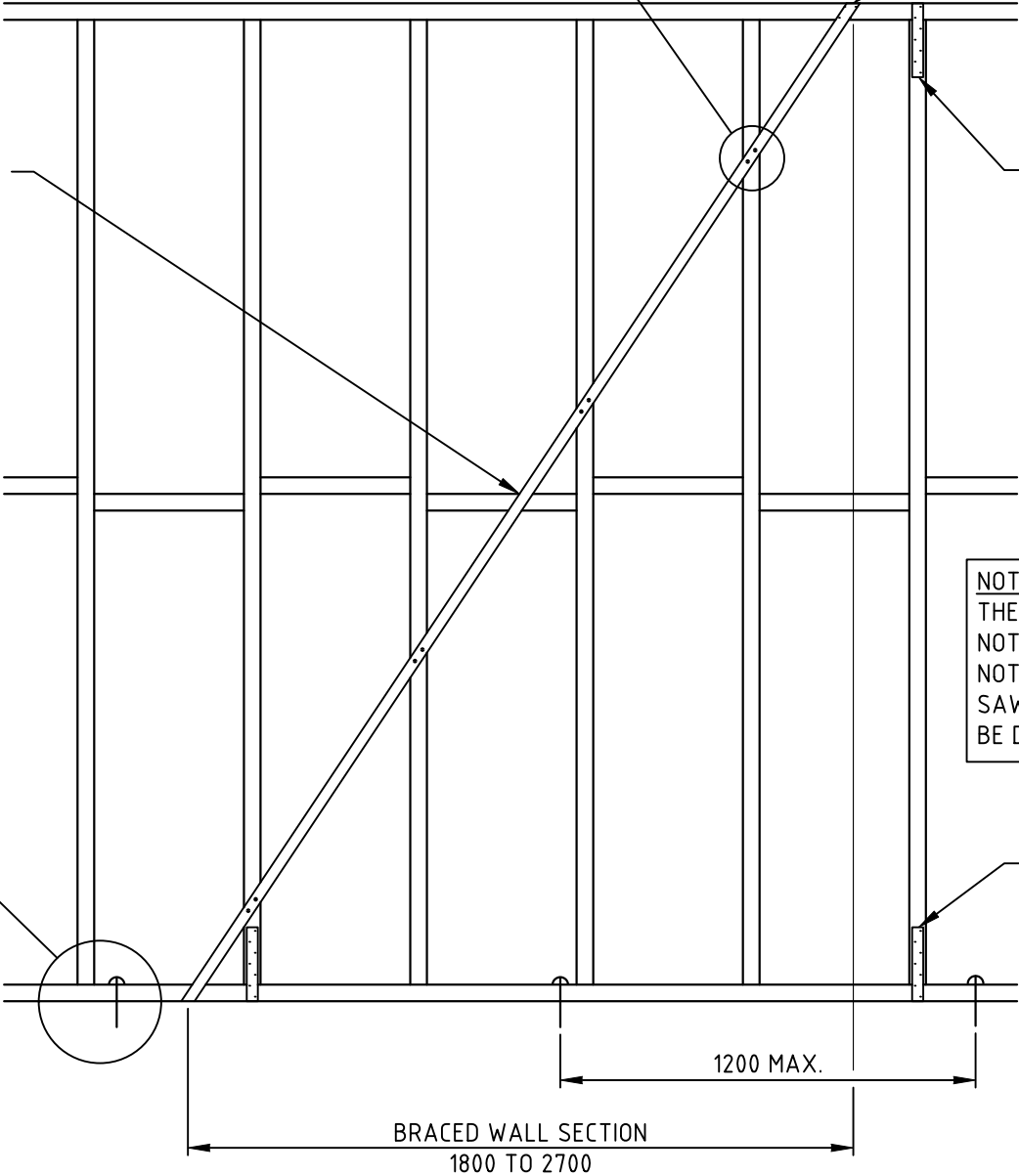
**BOTTOM WALL PLATE TO
CONCRETE SLAB FIXING DETAIL
DETAIL A-A**



**DOUBLE DIAGONAL METAL TENSION STRAPS
(BRACING CAPACITY -1.5 kN/m)**

SCALE: NTS DENOTED AS **M** ON PLAN
EQUIVALENT SPEEDBRACE CAN BE ADOPTED

OR



**DIAGONAL METAL ANGLE BRACES
(BRACING CAPACITY - 1.5 kN/m)**

SCALE: NTS DENOTED AS **M** ON PLAN

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LOT 322 NO. 40 SAMPHIRE DRIVE
CONNEWARRE
Drawing:
BRACING DETAILS - SHEET 1

CONSTRUCTION ISSUE

Date: FEB.19	Engineer: J.W.	Drawn: L.Q.
Scale @ A3: AS SHOWN	Checked:	No. of Sheets: 23
Job No. 119605	Drawing No. S15	Rev. 02

NOTES:

- PLYWOOD BUTT JOINTS SHALL BE AT A COMMON STUD WITH CLOUTS AT CRS. SHOWN.
- HORIZONTAL BUTT JOINTS TO BE FIXED TO NOGGING AT 150 CRS.
- ALLOW TO PACK OUT ADJACENT STUDS WITH CONTINUOUS STRIPS OF PLY TO RECEIVE WALL LINING.
- POWER FIX TOP PLATE AND END STUDS TO ADJACENT STEELWORK AT 600 CRS.

MINIMUM PLYWOOD THICKNESS (mm)

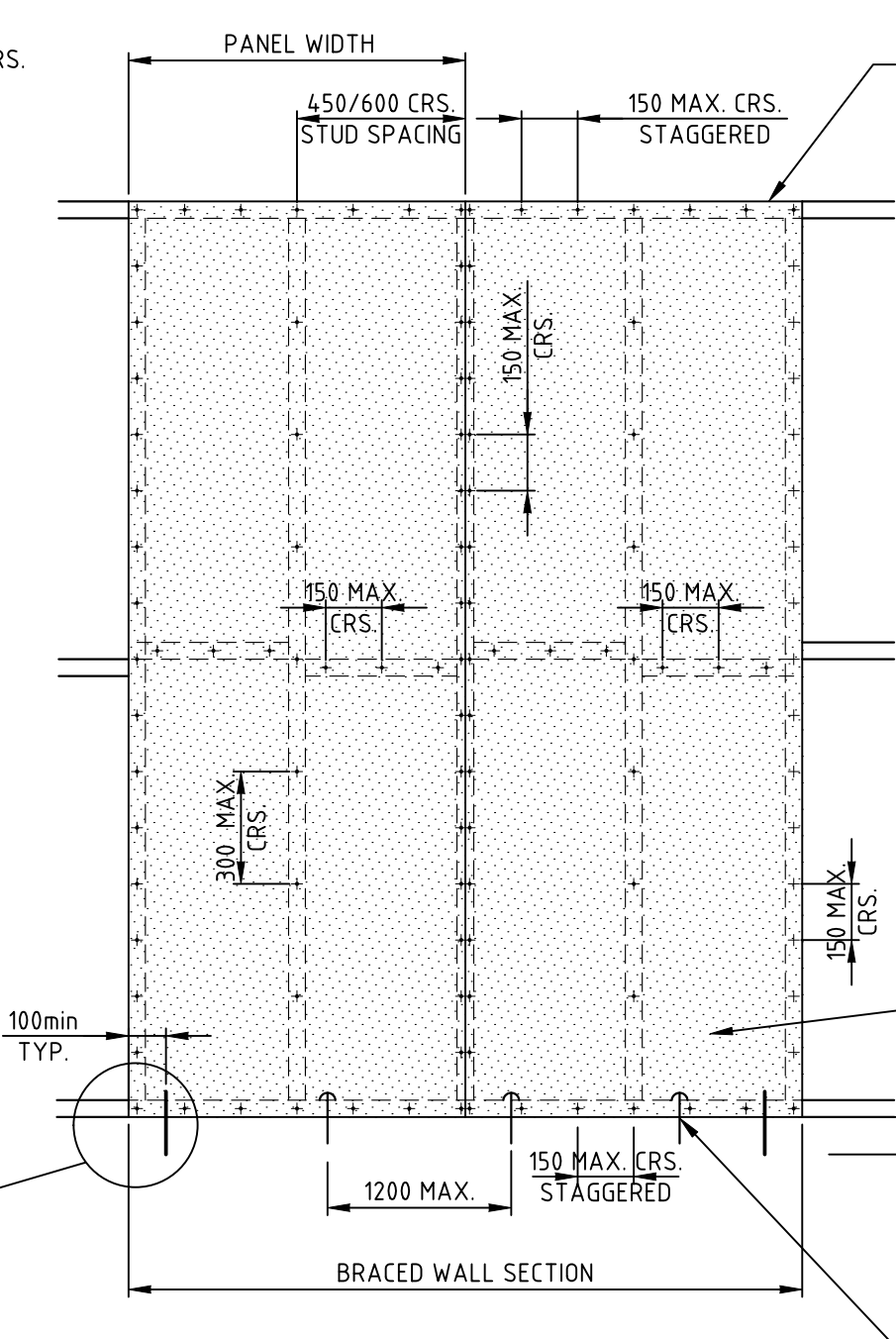
PLYWOOD STRESS GRADE	STUD SPACING (mm)	
	450 CRS	600 CRS
NO NOGGING (EXCEPT HORIZONTAL BUTT JOINTS)		
F8	7	9
F11	4.5	7
F14	4	6
F27	3	4.5
WITH ONE ROW OF NOGGING		
F8	7	7
F11	4.5	4.5
F14	4	4
F27	3	3

FIX ONE 75MM MASONRY NAIL (HAND-DRIVEN AT SLAB EDGE) OR SCREW OR BOLT TO THE BOTTOM PLATE AT MAXIMUM 1200mm CRS. (IF PANEL WIDTH IS LESS THAN 1200mm, NAIL TO BE AT EACH END OF PANEL)

CLADDING (BRICK/HEBEL) SHOWN INDICATIVE ONLY

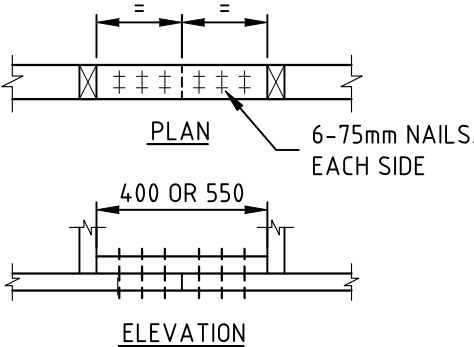
REFER TO GROUND FLOOR FOR FOOTING TYPE (WAFFLE, RAFT OR PILE) SHOWN INDICATIVE ONLY

BOTTOM WALL PLATE TO CONCRETE SLAB FIXING DETAIL (END FIXING)



PLYWOOD WALL BRACING
(BRACING CAPACITY - 3.4 kN/m)
SCALE: NTS
DENOTED AS P ON PLAN

WHERE TOP AND BOTTOM PLATES IN BRACED SECTIONS ARE NOT CONTINUOUS THEY MUST BE SPLICED AS PER DETAIL BELOW:

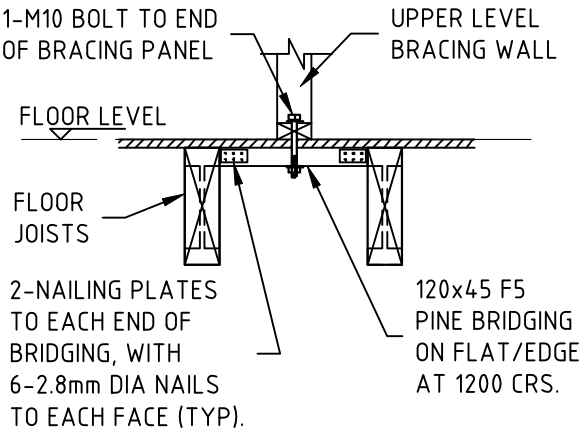
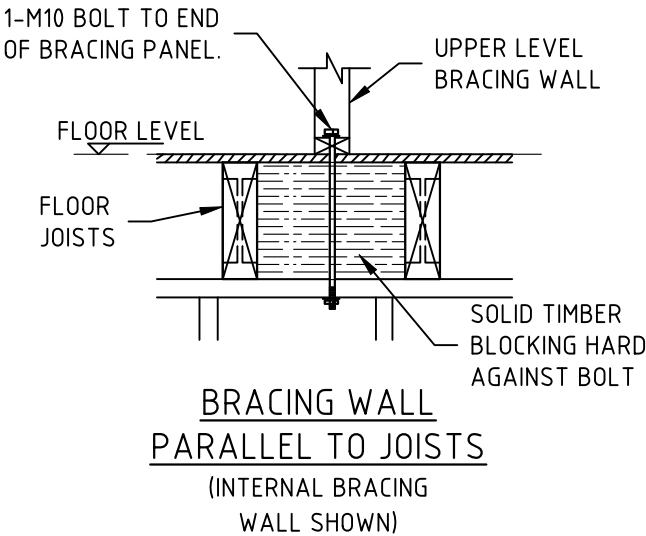


- NOTES:
- SPLICE PLATE MUST BE SAME SIZE & STRESS GRADE AS TOP & BOTTOM PLATES
 - WHERE TOP & BOTTOM PLATES IN BRACED SECTIONS ARE DISCONTINUED, THEY MUST BE SPLICED AS SHOWN IN THIS DETAIL

TYPICAL TOP & BOTTOM PLATE SPLICE DETAIL

FIXING TO TIMBER FRAME:
PAA APPROVED STRUCTURAL PLYWOOD FIXED WITH 2.8Ø x 30 GALV. FLATHEAD NAILS AT 150 CRS. TO TOP AND BTM. WALL PLATES. & NOGGINGS
150 CRS. TO STUDS AT VERT. EDGES.
300 CRS. TO INTERNAL STUDS.

INTERMEDIATE FIXING
FIX ONE 75MM MASONRY NAIL (HAND-DRIVEN AT SLAB EDGE) OR SCREW OR BOLT TO THE BOTTOM PLATE AT MAXIMUM 1200mm CRS.



BRACING WALL
PARALLEL TO JOISTS
(NO STUD WALL UNDER)

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CONNEWARRE
Drawing: BRACING DETAILS - SHEET 2

CONSTRUCTION ISSUE

Date: FEB.19	Engineer: J.W.	Drawn: L.Q.
Scale @ A3: AS SHOWN	Checked:	No. of Sheets: 23
Job No. 119605	Drawing No. S16	Rev. 02

GENERAL DRAINAGE NOTES

- THE CONTRACTOR SHALL ADEQUATELY DRAIN THE SITE DURING ALL STAGES OF CONSTRUCTION.
- CONTRACTOR SHALL VERIFY ALL LEVELS DIMENSIONS AND SERVICES PRIOR TO COMMENCEMENT OF WORK.
- ALL APPROPRIATE PERMITS SHALL BE OBTAINED AND FEES PAID FOR BY THE CONTRACTOR.
- ANY PAVEMENT OR FEATURES DAMAGED DURING THE COURSE OF THIS CONTRACT SHALL BE REINSTATED TO THEIR FORMER CONDITION.
- THE CONTRACTOR SHALL ARRANGE A SITE INSPECTION WITH THE CIVIL ENGINEERING SUPERVISING OFFICER PRIOR TO THE COMMENCEMENT OF WORK TO RECORD ANY DAMAGE TO EXISTING FEATURES.
- ALL EXISTING PIT COVERS, DOWNPIPE CONNECTIONS AND SIMILAR FEATURES IN CONSTRUCTION AREAS ARE TO BE ADJUSTED TO SUIT AS PART OF THIS CONTRACT.
- ALL CONCRETE PAVEMENT SHALL BE FINISHED WITH A NON SKID FLOAT, (NO BROOMED FINISH).
- BEFORE COMMENCEMENT OF WORK A TEMPORARY BENCH MARK IS TO BE ESTABLISHED BY THE CONTRACTOR IN A POSITION ON SITE SAFE FROM DISTURBANCE.
- ALL FILLING SHALL BE UNIFORMITY PLACED IN LAYERS NOT EXCEEDING 200mm LOOSE MEASUREMENT. EACH LAYER SHALL BE WITHIN 85% TO 115% OF OPTIMUM MOISTURE CONTENT AND BE PROPERLY COMPACTED, AS SPECIFIED, BASED ON THE STANDARD COMPACTION TEST AS OUTLINED IN AS 1289-1977.
- CRUSHED ROCK PAVEMENT COMPACTIONS SHALL BE TO 100% STANDARD MAXIMUM DRY DENSITY FOR BASE COARSE, AND 98% FOR SUB BASE COARSE.
- ANY SHORTFALL IN INDIGENOUS TOPSOIL REQUIRED TO BRING THE GARDEN AND GRASSED AREAS TO THE DESIGN LEVELS SHALL BE MADE UP WITH APPROVED IMPORTED TOPSOIL. NO ADDITIONAL PAYMENT WILL BE MADE FOR IMPORTED TOPSOIL.
- EXCAVATED MATERIAL SHALL BE STOCKPILED ON SITE AS DIRECTED BY THE SUPERINTENDENT. EXCESS TO BE REMOVED FROM SITE AT CONTRACTORS EXPENSE.
- TOPSOIL TO BE STRIPPED TO A DEPTH OF 150mm UNDER FILL AREAS AND ALL OTHER AREAS. THIS TOPSOIL SHALL BE STOCKPILED ON SITE AS DIRECTED BY SUPERINTENDENT . EXCESS SOIL TO BE STOCKPILED ON SITE AS DIRECTED BY THE SUPERINTENDENT, OR REMOVED FROM THE SITE AT THE CONTRACTORS EXPENSE, IF SO DIRECTED.
- ALL STORMWATER DRAINS SHALL BE BEDDED ON A MINIMUM OF 80mm COMPACTED THICKNESS 20 N.S. CLASS 3 FINE CRUSHED ROCK, IN SOIL BASED TRENCHES . INCREASE TO 200mm THICKNESS IN ROCK BASED TRENCHES.
- 100mm DIAMETER STORMWATER DRAINS SHALL BE LAID AT A MINIMUM GRADE OF 1:100, UNLESS OTHERWISE SHOWN.
- 150mm DIAMETER STORMWATER DRAINS SHALL BE LAID AT A MINIMUM GRADE OF 1:100, UNLESS OTHERWISE SHOWN.
- TRENCH EXCAVATIONS; WHERE ONE OR BOTH SIDES OF ANY TRENCH EXCEED 1.5 M IN DEPTH, THE CONTRACTOR SHALL ENSURE THAT THE PROVISIONS OF MINES ACT 1958 AND THE MINES (TRENCHES) REGULATIONS 1979 ARE COMPLIED WITH.
- TRENCHES TRAVERSING EXISTING OR PROPOSED PAVEMENTS INCLUDING ASPHALT AND CONCRETE SHALL BE BACKFILLED WITH "FIRST CLASS MATERIAL" AND COMPACTED, PAVEMENT SHALL BE REINSTATED TO THE SATISFACTION OF THE SUPERINTENDENT.
- ALL SURPLUS EXCAVATED MATERIAL SHALL BE REMOVED FROM SITE.
- FOOTPATHS, DRIVEWAYS, ROADWAYS, KERBS , R.O.W.'S OR EXISTING FEATURES DISTURBED, BROKEN OR AFFECTED BY THE WORKS ARE TO BE REINSTATED TO THE COMPLETE SATISFACTION OF THE CITY ENGINEER OR HIS REPRESENTATIVE.
- ALL CONCRETE TO BE SAW CUT AND BROKEN OUT TO THE NEAREST JOINT.
- ALL NATURE STRIPS AND LAWN AREAS OUTSIDE PRIVATE PROPERTY TO BE REINSTATED WITH TOP SOIL AND SEEDS.
- CONTRACTOR TO CONTACT LOCAL COUNCIL ENGINEERING DEPARTMENT AT LEAST 48 HOURS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION OF OUTFALL DRAINAGE TO ARRANGE FOR COUNCIL SUPERVISION AND INSPECTION IF REQUIRED BY COUNCIL.
- THE CONTRACTOR IS TO VERIFY ALL LOCATIONS AND DEPTH OF SERVICES WITH THE RELEVANT AUTHORITIES FOR THE CONSTRUCTION OF DRAINS AND SERVICES OUTSIDE THE PROPERTY BOUNDARY PRIOR TO THE COMMENCEMENT OF WORK, AND SHALL BE FULLY RESPONSIBLE FOR RECTIFICATION OF ANY DAMAGED SERVICE.
- ALL EXCESS TOPSOIL SHALL BE REMOVED OFF SITE AT THE CONTRACTOR'S EXPENSE.
- ALL ADDITIONAL FILL MATERIAL REQUIRED DUE TO OVER EXCAVATION OR A SHORTFALL OF SUITABLE EXCAVATED MATERIAL SHALL BE IMPORTED AT THE CONTRACTORS EXPENSE.
- AT THE TIME OF THE PREPARATION OF THE DRAINAGE DESIGN, IF THE LANDSCAPING DESIGN WAS NOT SUPPLIED TO THIS OFFICE, THEN THE DRAINAGE SYSTEM MAY BE SUBJECT TO CHANGE. THIS OFFICE OR A QUALIFIED PRACTITIONER SHALL REVIEW THE DRAINAGE DESIGN WHEN LANDSCAPING DESIGN IS FINALISED.

DRAINAGE NOTES:

- ALL SURFACE DRAINAGE WORKS SHALL BE INSTALLED IN ACCORDANCE WITH CLAUSE 5.6.3 DRAINAGE REQUIREMENTS OF AS 2870-2011, WHEREIN FOR BUILDINGS ON MODERATELY, HIGHLY AND REACTIVE SITES:
 - SURFACE DRAINAGE SHALL BE CONTROLLED THROUGHOUT CONSTRUCTION AND BE COMPLETED BY THE FINISH OF CONSTRUCTION.
 - THE BASE OF TRENCHES SHALL SLOPE AWAY FROM THE BUILDING.
 - WHERE PIPES PASS UNDER THE FOOTING SYSTEMS, CLAY PLUGS ARE ADOPTED TO PREVENT THE INGRESS OF WATER.
- FOR BUILDINGS ON HIGHLY AND REACTIVE SITES, DRAINER SHALL PROVIDE DRAINAGE ARTICULATION TO ALL STORMWATER, SANITARY PLUMBING DRAINS AND DISCHARGE PIPES IN ACCORDANCE WITH CLAUSE 5.6.4 PLUMBING REQUIREMENTS, WHEREIN FLEXIBLE JOINTS IMMEDIATELY OUTSIDE BUILDING AND COMMENCING WITHIN 1m OF THE BUILDING PERIMETER ARE REQUIRED TO ACCOMMODATE THE REQUIRED DIFFERENTIAL MOVEMENT BASE ON THE SOIL CLASSIFICATION, REFER TABLE 'MIN. REQUIREMENTS FOR EXPANSION AND ALLOWABLE IN FITTINGS.
- SURFACE WATER MUST BE DIVERTED AWAY FROM THE DWELLING AND GRADED AWAY FROM ALL FOUNDATIONS TO GIVE A SLOPE OF NOT LESS THAN 50mm OVER THE FIRST 1000mm FROM THE DWELLING.
- SUBSURFACE DRAINS TO REMOVE GROUND OR TABLE WATER SHALL BE DETAILED BY THE DESIGN ENGINEER. FURTHERMORE, DAMP-PROOF MEMBRANE IN ACCORDANCE WITH 5.3.3 SHALL BE INSTALLED FOR GROUNDWATER OR AGGRESSIVE SOILS.
- DRAINAGE DESIGN IS IN ACCORDANCE WITH AS3500.

MATERIALS

- PROPOSED 100ø & 150ø STORMWATER DRAINS SHALL BE FORMED OF UNPLASTICISED POLYVINYL CHLORIDE PIPES AND FITTINGS CLASS SH (SEWER CLASS) MANUFACTURED TO CONFORM TO AS.1260.
- PROPOSED 225 DIAMETER AND LARGER STORMWATER DRAINS SHALL BE FORMED OF FIBRE REINFORCED CONCRETE CLASS 2, RUBBER RING JOINTED PIPE MANUFACTURED TO CONFORM TO AS 4058. (CLASS 3 WHERE INDICATED). USE UPVC TO AS1260. (CLASS SH) WHERE SHOWN ON THE DRAWINGS.

SERVICE

- PRIOR TO THE COMMENCEMENT OF WORK THE CONTRACTOR SHALL LOCATE EXISTING SERVICES TO BE RETAINED WHERE PROPOSED SERVICES CROSS THEM, AND ASCERTAIN FOR HIMSELF THAT NO CLASHES OF SERVICES WILL OCCUR.
- WHERE PROPOSED SERVICES TRAVERSE EXISTING ASPHALT AND CONCRETE PAVEMENTS THE PAVEMENT IS TO BE SAW CUT TO FULL DEPTH OF PAVEMENT PRIOR TO EXCAVATION.
- TRENCHES TRAVERSING EXISTING OR PROPOSED PAVEMENTS INCLUDING ASPHALT AND CONCRETE SHALL BE BACKFILLED WITH CLASS 2 FINE CRUSHED ROCK AND COMPACTED ALL TO THE SATISFACTION OF THE SUPERINTENDENT.
- THE CONTRACTOR SHALL CO-ORDINATE THE LAYING OF ALL SERVICES TO AVOID CLASHES.
- LAY ALL SERVICES TO NOMINATED LEVELS WHERE GIVEN, OTHER SERVICES SHALL BE LAID TO COMPLY WITH MINIMUM COVER REQUIREMENTS.
- DIFFERENT PARALLEL SERVICES THAT ARE IN CLOSE PROXIMITY TO EACH OTHER MAY BE LAID IN A COMMON TRENCH, SUBJECT TO THE APPROVAL OF THE RELEVANT AUTHORITY AND THE SUPERINTENDENT.

SITE DRAINAGE REQUIREMENTS - CONSTRUCTION STAGE:

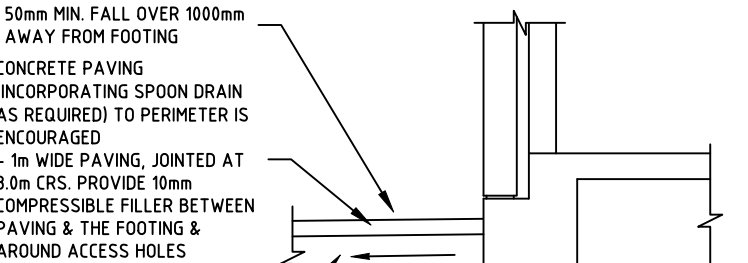
THE GEOTECHNICAL REPORT HAS RECOMMENDED THE USE OF A CERTAIN FOOTING THAT IS APPROPRIATE FOR THIS SITE. WHILE MAKING THIS RECOMMENDATION IT HAS BEEN ASSUMED THAT CERTAIN SITE DRAINAGE REQUIREMENTS AS PER AS2870-2011 & BCA HAS BEEN MET. DURING THE CONSTRUCTION OF THE FOOTING THE FOLLOWING SITE DRAINAGE REQUIREMENTS ARE LISTED AS BEING PART OF THE FINAL FOOTING DESIGN BY INTRAX CONSULTING ENGINEERS.

- MUST PREVENT WATER PONDING AGAINST OR NEAR THE FOOTING
- THE GROUND IN THE IMMEDIATE VICINITY OF THE PERIMETER FOOTING SHALL BE GRADED TO A FALL OF 50mm MIN. AWAY FROM THE FOOTING OVER A DISTANCE OF 1000mm (1:20) AND SHAPED TO PREVENT PONDING OF WATER (THIS INCLUDES THE GROUND UPHILL FROM THE FOOTING ON A CUT/FILL SITE) - WHERE FILLING IS PLACED ADJACENT TO THE BUILDING, THE FILLING SHALL BE COMPACTED AND GRADED TO ENSURE DRAINAGE OR WATER AWAY FROM THE BUILDING

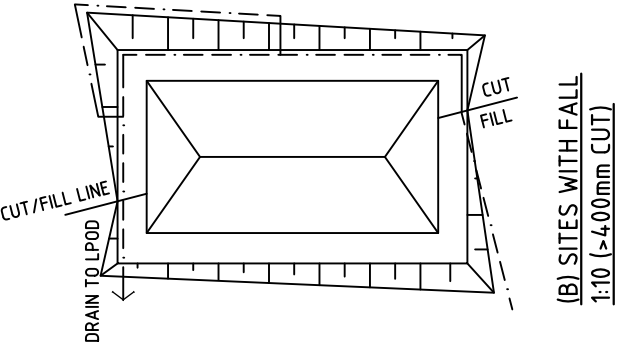
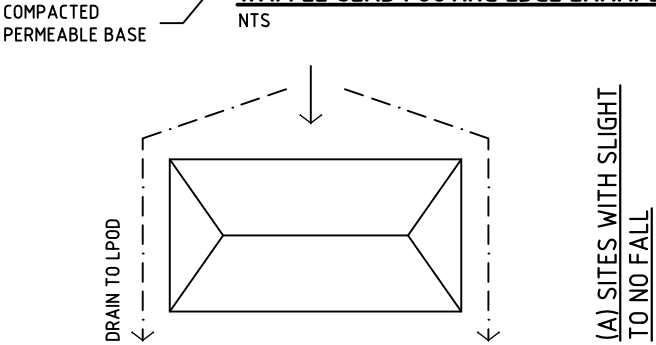
- ALL COLLECTED STORMWATER MUST BE DISCHARGED TO A LPOD
- SURFACE DRAINAGE OF THE SITE SHALL BE CONTROLLED FROM THE START OF THE SITE PREPARATION AND CONSTRUCTION; SURFACE DRAINAGE INCLUDES SURFACE WATER RUN-OFF AND BUILDING WATER (ROOF/FLOOR/CONCRETE) RUN-OFF:
 - ALL WATER RUN-OFF SHALL BE CONTROLLED AT ALL TIMES
 - USE TEMPORARY DOWNPIPES TO COLLECT WATER FROM THE ROOFED BUILDING FRAME;
 - WHEN SILT PITS ARE USED TO GATHER SURFACE WATER FROM AREAS ADJACENT TO THE FOOTINGS, THESE SILT PITS ARE TO BE AT LEAST 1000mm AWAY FROM THE FOOTING AND CONNECTED TO THE STORMWATER SYSTEM WITH SOLID PIPE;
 - STORMWATER DRAINS SHALL BE AT LEAST 90mm AND HAVE A MINIMUM FALL OF 1:100 AND 100mm COVER UNDER THE SOIL AND/OR PAVED AREAS;
 - INSPECTION OPENINGS SHOULD BE PROVIDED AT EACH PIPE CONNECTION POINT AND AT A NOMINAL SPACING OF 25m
 - AVOID UNDERMINING THE FOOTING WITH ANY TRENCHES OR PIPE OR PITS UNLESS THE FOOTING HAS BEEN DESIGNED TO ALLOW FOR SUCH SITUATION.
- SUB-SURFACE DRAINAGE IS REQUIRED TO REMOVE ANY UNWANTED GROUND WATER BY MEANS 90mm SLOTTED PIPE IN A 300mm WIDE TRENCH (MIN. FALL OF 1:100), BASE OF THE TRENCH IS FILLED WITH 10mm CRUSHED ROCK OR SIMILAR COVERING THE SLOTTED PIPE.
- AG DRAINS MUST BE INSTALLED AT THE BASE OF ALL SITE CUTS THAT EXCEED 400mm IN HEIGHT, ALONG THE HIGH SIDE OF A SLOPING SITE AND POSSIBLY ALONG THE LOW SIDE OF A SLOPING SITE ALONG THE BOUNDARY. TO BE CONNECTED TO STORMWATER SYSTEM VIA A SILT PIT.
- AG DRAINS TO BE LAID APPROX. 200mm INTO UNDISTURBED CLAY OR COMPACTED CLAY.
- AC CONDENSERS, HW OVERFLOW, WATER TANKS AND ADJOINING PROPERTIES ARE ALL POTENTIAL SOURCES OF UNWANTED WATER. THIS WATER MUST BE CONTROLLED AND DIRECTED TO THE LPOD. POSSIBLE WATER IMPACTING THE SITE FROM AN ADJOINING PROPERTY, ESPECIALLY IF THERE IS A FOOTING ON OR NEAR A BOUNDARY MUST BE ADDRESSED. LOCALISED FOOTING STRENGTHENING IS TO BE CONSIDERED DURING CONSTRUCTION ILO DRAINAGE THAT MAY JEOPARDISE THE FOOTINGS.
- GRATED DRAINS MAY BE UTILISED IN A PAVED AREA (E.G. DRIVERWAY/GARAGE INTERFACE) WHERE THE PAVING NECESSARILY SLOPES TOWARDS THE HOUSE OR GARAGE. SPOON DRAINS MAY ALSO BE USED IN CONJUNCTION WITH A PAVED SURFACE.
- THE GROUND BENEATH A TIMBER DECK MUST BE GRADED SO THAT THE AREA BENEATH THE DECK IS ABOVE THE ADJACENT FINISHED GROUND LEVEL TO PREVENT PONDING.
- ALL TRENCHES MUST BE DUG AT A SIMILAR GRADE AS THE PIPES THE TRENCHES HOUSE.
 - ALL TRENCHES MUST GENERALLY SLOPE AWAY FROM THE FOOTINGS
 - TRENCHES MUST BE 'CLAY PLUGGED' OR CONCRETED WHEN PASSING PERPENDICULARLY UNDER ANY PART OF THE FOOTING AND ON ANY SLOTTED PIPE SIDE OF A CONNECTION PIT
 - ALL TRENCHES WITHIN 1500mm OF ANY FOOTING MUST BE EFFECTIVELY SEALED FROM SURFACE WATER, WITH AT LEAST THE TOP 300mm OF THE TRENCH FILLED WITH LOCAL CLAY COMPACTED TO AN IMPERMEABLE TOP LAYER. APPROVED MOISTURE BARRIER USE WITH TRENCHES IS AN OPTION.
 - CONCRETE PAVING IS ADVISED OVER ANY TRENCHES WITHIN 1000mm OF ANY FOOTING.
- FLEXIBLE PLUMBING JOINTS ARE REQUIRED FOR H1/H2/E/P SITES TO ALLOW FOR EXPECTED VERTICAL GROUND MOVEMENTS (REFER GEOTECHNICAL REPORT). THE JOINTS MUST BE SET AT THE MIDWAY POINT WHEN INSTALLED & MUST ALSO INCORPORATE SWIVEL JOINTS IN THE SYSTEM
 - DRAINS EMERGING FROM UNDER THE FOOTING REQUIRE THE FLEXIBLE JOINT TO BE WITHIN 1000mm OF THE OUTSIDE OF THE PERIMETER FOOTING
 - INSTALLATION, LOCATION AND NUMBER OF JOINTS TO COMPLY WITH MANUFACTURER'S SPECS
- PLUMBING PENETRATING THE FOOTING MUST BE AVOIDED WHERE PRACTICABLE. IF UNAVOIDABLE THEN THE PIPE MUST PASS THROUGH THE MIDDLE THIRD OF THE FOOTING DEPTH AND LAGGING TO THE PIPE PROVIDED

MAINTENANCE:

- THE MAINTENANCE OF THE SITE AROUND A NEW HOME IS AN IMPORTANT FACTOR IN THE LONG-TERM PERFORMANCE OF THE FOOTING SYSTEM
- THE PRIMARY OBJECTIVE OF THIS MAINTENANCE IS TO MINIMISE THE VARIATION IN SOIL MOISTURE LEVELS AROUND THE FOOTING THAT COULD LEAD THE EXCESSIVE SOIL MOVEMENT AND POSSIBLE DISTRESS OF THE SUPERSTRUCTURE AND/OR FOOTING. WHEN THE SLAB FORMS PART OF THE TERMITE BARRIER SYSTEM FOR THE HOUSE, THEN IT IS ALSO NECESSARY TO MAINTAIN THE EFFECTIVENESS OF THAT BARRIER WITH APPROPRIATE MAINTENANCE ACTIVITIES.
- WHEN A CONCRETE SLAB-ON-GROUND IS USED AS PART OF THE TERMITE BARRIER SYSTEM AS OUTLINES IN AS3660.0, THEN IT CANNOT BE TOO HIGHLY STRESSED THAT REGULAR INSPECTION AND MAINTENANCE OF THE SLAB SURROUNDING BY A COMPETENT PROFESSIONAL IS REQUIRED TO ENSURE THAT ANY TERMITE INFESTATION IS DETECTED AND TREATED PROMPTLY.
- ONGOING MAINTENANCE AND INSPECTION ON A REGULAR BASIS IS A REQUIREMENT OF AS3660.1 AND OWNER SHOULD BE CLEARLY ADVISED IF THEIR RESPONSIBILITIES TO ENSURE THAT THEIR INVESTMENT IS PROPERLY PROTECTED.
- LEAKING TAPS, DOWNPIPES, SEWERS, GUTTERS AND DRAINAGE CAN ALSO AFFECT THE MOISTURE CONTENT OF THE SOIL AND THESE MUST BE INSPECTED REGULARLY TO ENSURE AGAINST DAMAGE TO THE FOOTINGS. SIMILARLY, GUTTERS, DOWNPIPE AND COLLECTION POINTS CAN GET BLOCKED WITH LEAVES AND OTHER DEBRIS, PREVENTING THE EFFECTIVE DRAINAGE OF STORMWATER AWAY FROM THE HOUSE. AGAIN, REGULAR INSPECTIONS AND MAINTENANCE SHOULD BE CARRIED OUT TO PREVENT BLOCKAGES.
- IT IS IMPORTANT FOR BUILDER TO MAKE THE HOMEOWNER AWARE OF THE MAINTENANCE ISSUES ASSOCIATED WITH ENSURING THE LONG-TERM PERFORMANCE OF THE FOOTING SYSTEM.



WAFFLE SLAB FOOTING EDGE EXAMPLE



SCHEMATIC SITE PLAN FOR SUB-SURFACE DRAINAGE


02	CONSTRUCTION ISSUE	05.04.19	
01	CONSTRUCTION ISSUE	08.03.19	
A	PRELIMINARY ISSUE	26.02.19	
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TEMPLATE: RES1 & MD Melbourne Template V31.dwt



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Project:
PROPOSED RESIDENCE
LOT 322 NO. 40 SAMPHIRE DRIVE
CONNEWARRE

Drawing:
DRAINAGE NOTES

Building Permit Central

Ph. 5222 5000

Building Act 1993

Building Regulation 2018

BUILDING PERMIT

57733/20190194/0

ENDORSED PLAN

01 May 2019

CONSTRUCTION ISSUE

Date: FEB.19 Engineer: J.W. Drawn: L.Q.

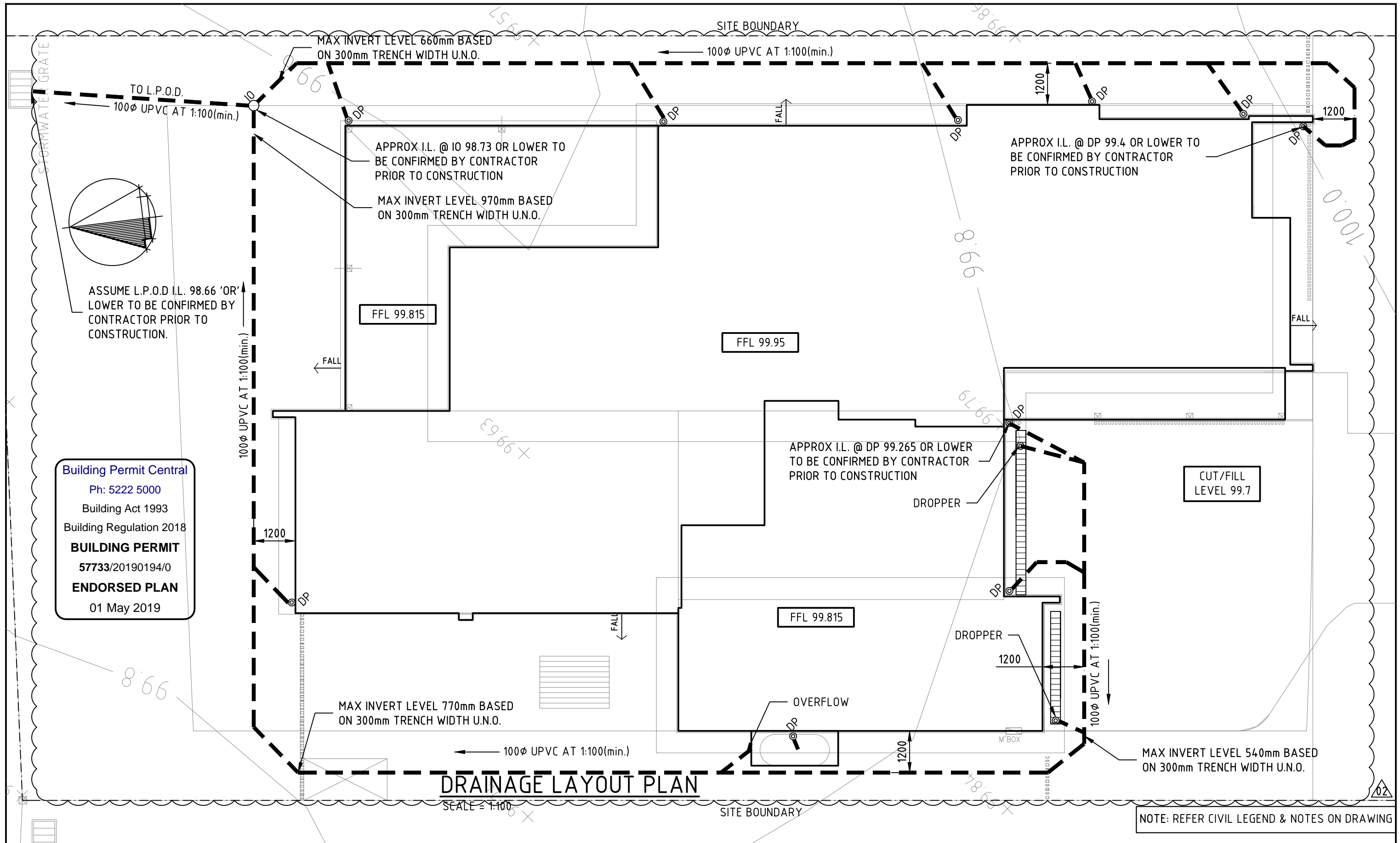
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Job No. Drawing No. Rev.

119605

S17

02



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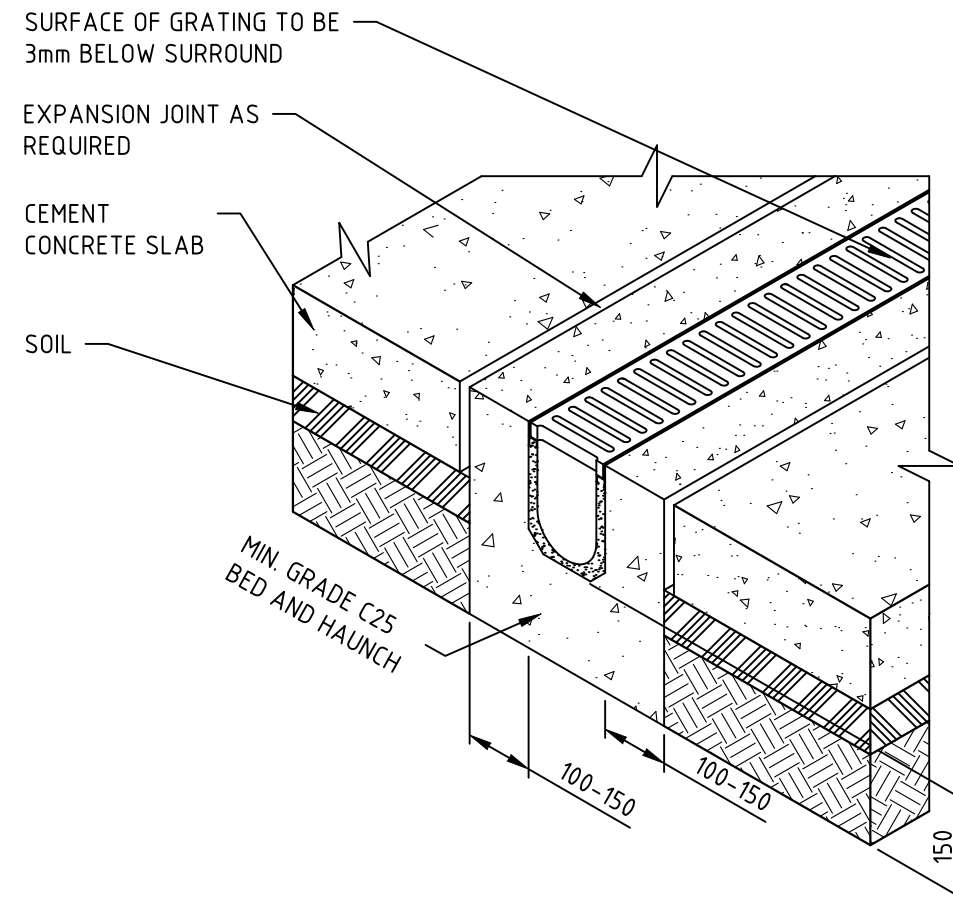
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Project: **PROPOSED RESIDENCE
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CONNEWARRE**

Drawing: **DRAINAGE LAYOUT PLAN**

CONSTRUCTION ISSUE			
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		Rev.	02

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01 May 2019



TYPICAL GRATED TRENCH INSTALLATION
NOT TO SCALE

LEGEND

	EXISTING LEVEL		PROPOSED STORMWATER DRAIN SEALED SYSTEM
	EXISTING SURFACE CONTOURS		PROPOSED STORMWATER DRAIN
	FINISHED FLOOR LEVEL		EXISTING STORMWATER/SEWER MAIN
	INVERT LEVEL		CLAY PLUG
	RETAINING WALL		EXPANSION JOINT
	PROPERTY BOUNDARY		100Ø DOWNPIPES
	EXISTING TREES		INSPECTION SHAFT
	FALL OF DRAINAGE PIPE DIRECTION		GRATED SILT PIT
	DIRECTION OF SURFACE RUNOFF MINIMUM 1:20 FALL AWAY FROM THE BUILDING TYPICAL U.N.O.		CAPPED RISER
	STRIP DRAIN		AGI-PIPE
	NATURAL SPOON DRAIN		
	GRATED TRENCH (STORMWATER)		

DOWNPIPE ADAPTER NOTES:

- DOWNPIPE ADAPTERS SHOULD INCLUDE INSPECTION OUTLETS TO ALLOW FOR INSPECTION AND MAINTENANCE;
- THIS OFFICE RECOMMENDS THE USE OF CASTEC DOWNPIPE ADAPTER WITH I.O. OR EQUIVALENT

NOTE:

MINIMUM FALL OF GROUND SURFACE AWAY FROM THE SLAB TO BE 1:20 (A MIN. DISTANCE 1000mm TYPICAL U.N.O.)

NOTES:

- STORMWATER TO BE CONNECTED TO EXISTING LEGAL POINT OF DISCHARGE (L.P.O.D) BY CONTRACTOR AND TO MEET COUNCIL'S REQUIREMENT;
- CONTRACTOR TO CONFIRM LOCATION AND DEPTH OF L.P.O.D. PRIOR TO CONSTRUCTION TO ENSURE DESIGN INTENT IS ACHIEVABLE

NOTE:

THE OFFICE MUST BE NOTIFIED IF ANY PROPOSED LANDSCAPING DESIGN HAS BEEN REVISED/CHANGED

MINIMUM REQUIREMENT FOR EXPANSION/FLEXI JOINTS (IF REQUIRED)

SITE CLASS	DESIGN Y _s MOVEMENT (mm)	MIN. EXPANSION JOINT CAPACITY REQUIREMENT	ALLOWABLE ROTATION
M	Y _s <40	MIN. 25mm LAGGING THROUGH FOOTING	NOT APPLICABLE

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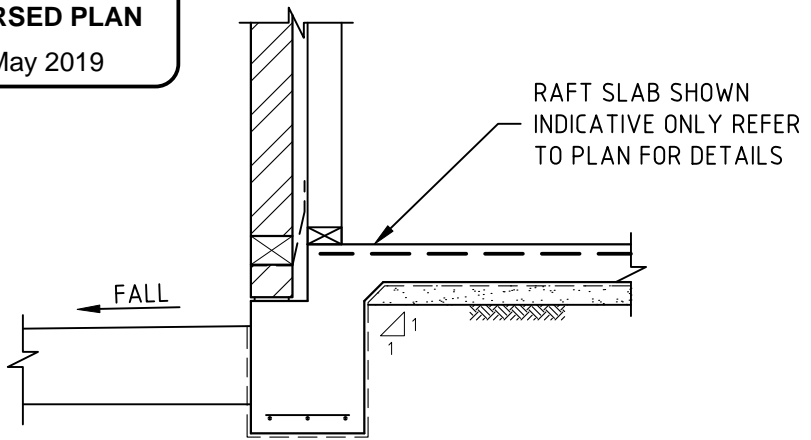
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Project:
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LOT 322 NO. 40 SAMPHIRE DRIVE
CONNEWARRE
Drawing:
DRAINAGE LEGEND

CONSTRUCTION ISSUE

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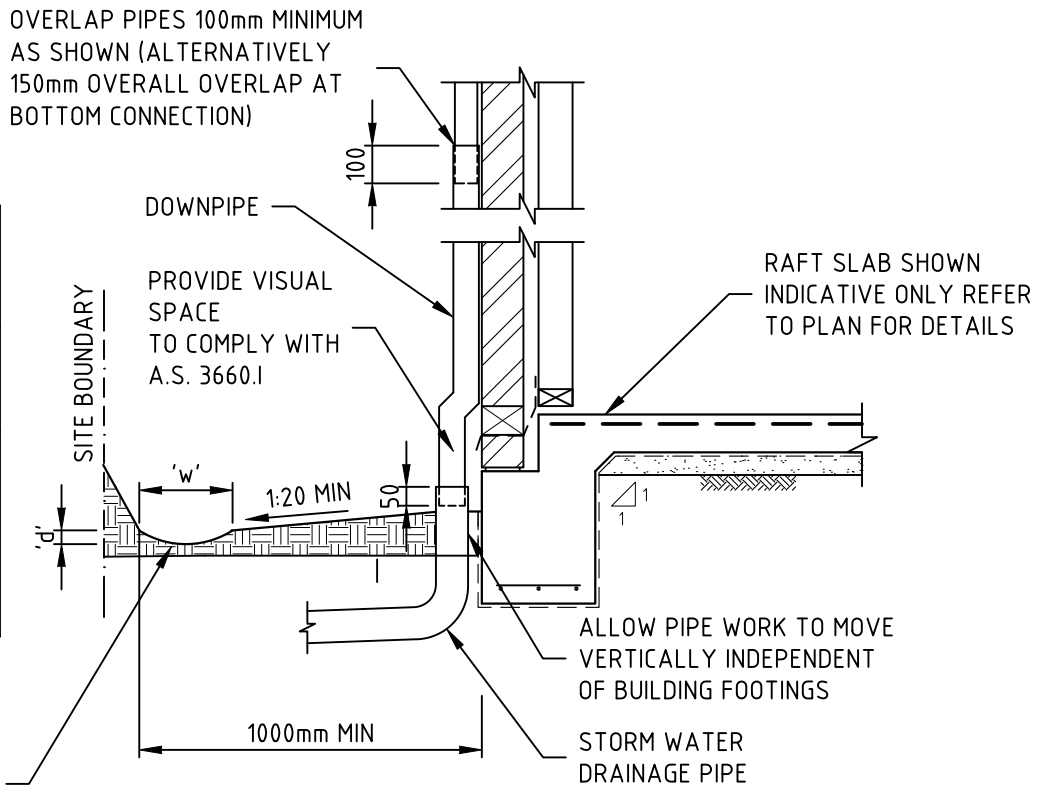
TYPICAL BENCHING DETAIL

SCALE = N.T.S.

1. PREVENT "OVERPOUR" OF CONCRETE BY LINING ANY COLLAPSED SIDES OF TRENCHES WITH FIBRE CEMENT SHEETING, FORMPLY, BOARDS OR COMPACTED SOIL BACKFILLING BEHIND VAPOUR BARRIER (OR DAMP-PROOF MEMBRANE) DURING POUR.
2. FALL "CUT" BENCHING AWAY FROM THE FOOTING.
3. TERMINATE VAPOUR BARRIER (OR DAMP-PROOF MEMBRANE) UNDER DPM OR "CUT" BENCHING.
4. PLACE DPM BETWEEN PAVING AND FOOTING.
5. MINIMUM EDGE EXPOSURE (E) OF 70mm MAY BE REQUIRED FOR TERMITE PROTECTION TO COMPLY WITH AS3660.1 AND IS REQUIRED ON "E" CLASS SITES TO COMPLY WITH THE SOUTH AUSTRALIA HOUSING CODE (THE GREATER THE EXPOSURE HOWEVER, THE GRATER THE OPPORTUNITY TO DRY OUT FROM THE OUTSIDE FACE).
6. THE DPM (VISCIOUS DAMP PROOF MEMBRANE AS USED BY BRICKLAYERS) SHOULD SIT ON THE 'CUT' BENCH LEVEL FOR A MINIMUM OF 75mm. IT SHOULD THEN EXTEND UP THE FACE OF THE FOOTING TO END AT THE TOP OF THE PAVEMENT.

NATURAL SWALE DRAIN GUIDELINE		
CUT DEPTH	SWALE DEPTH 'd'	SWALE WIDTH 'w'
< 400mm	100mm	300mm
400mm-800mm	150mm	400mm
> 800mm	200mm	400mm

NATURAL SWALE (SPOON) FORMED FOR SURFACE WATER RUN OFF AT 1:100 MIN. WITH COMPACTED CLAY OR SAND BASE (REFER TO TABLE FOR RECOMMENDED SWALE SIZE)



**TYPICAL DOWNPIPE & SWALE DRAIN
DETAIL (IF REQUIRED)**

SCALE = N.T.S.

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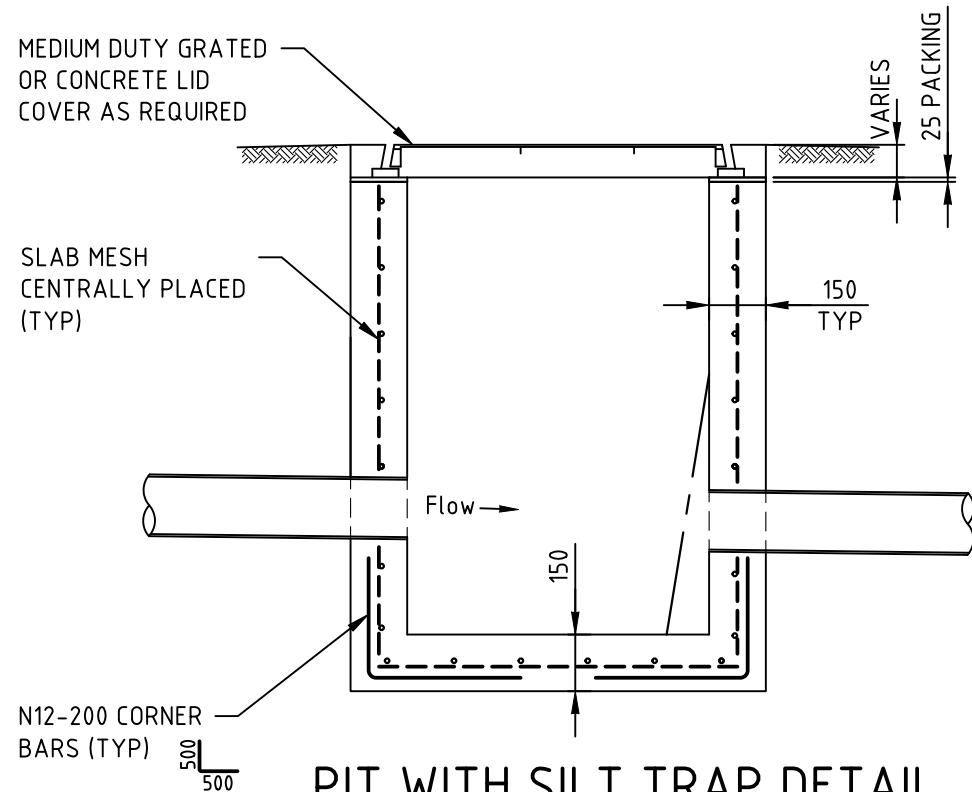
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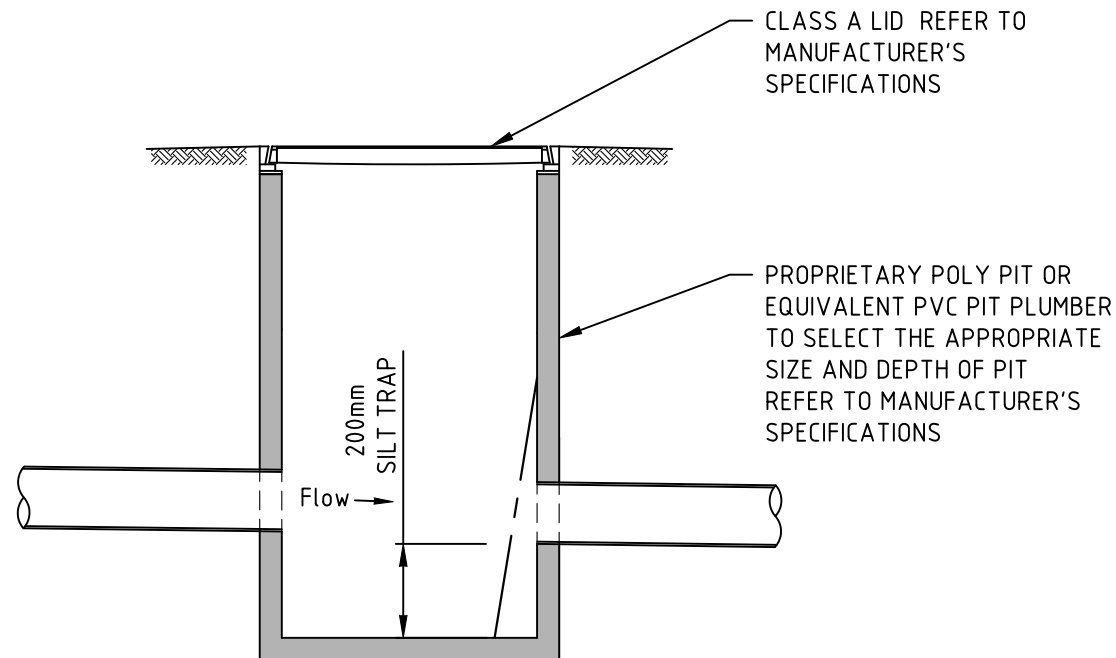
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DRAINAGE DETAILS - SHEET 1

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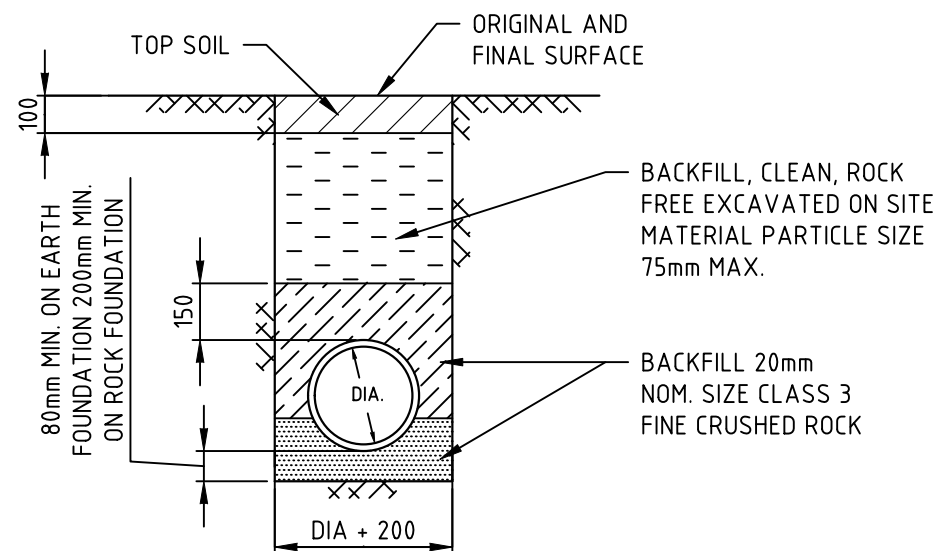
**PIT WITH SILT TRAP DETAIL
FOR TRAFFICABLE AREA
(IF REQUIRED)**

NOT TO SCALE



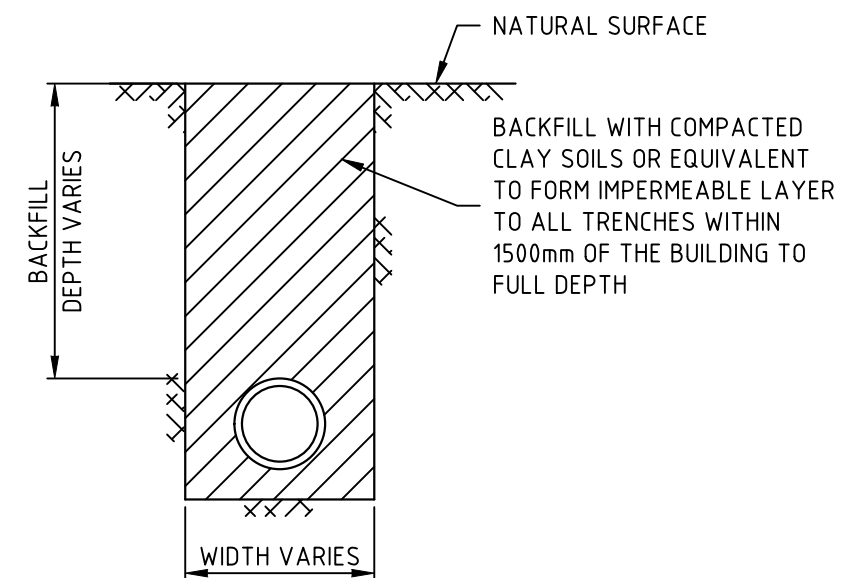
**PIT WITH SILT TRAP DETAIL
FOR NON-TRAFFICABLE AREA
(IF REQUIRED)**

NOT TO SCALE



**TRENCH CONDITIONS FOR DRAINAGE PIPE
INSTALLATION (NOT UNDER PAVEMENTS)**

SCALE = 1:20



TYPICAL CLAY PLUG DETAIL

SCALE = 1:20

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Drawing:
DRAINAGE DETAILS - SHEET 2

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CONNEWARRE

Drawing:
DRAINAGE DETAILS - SHEET 2

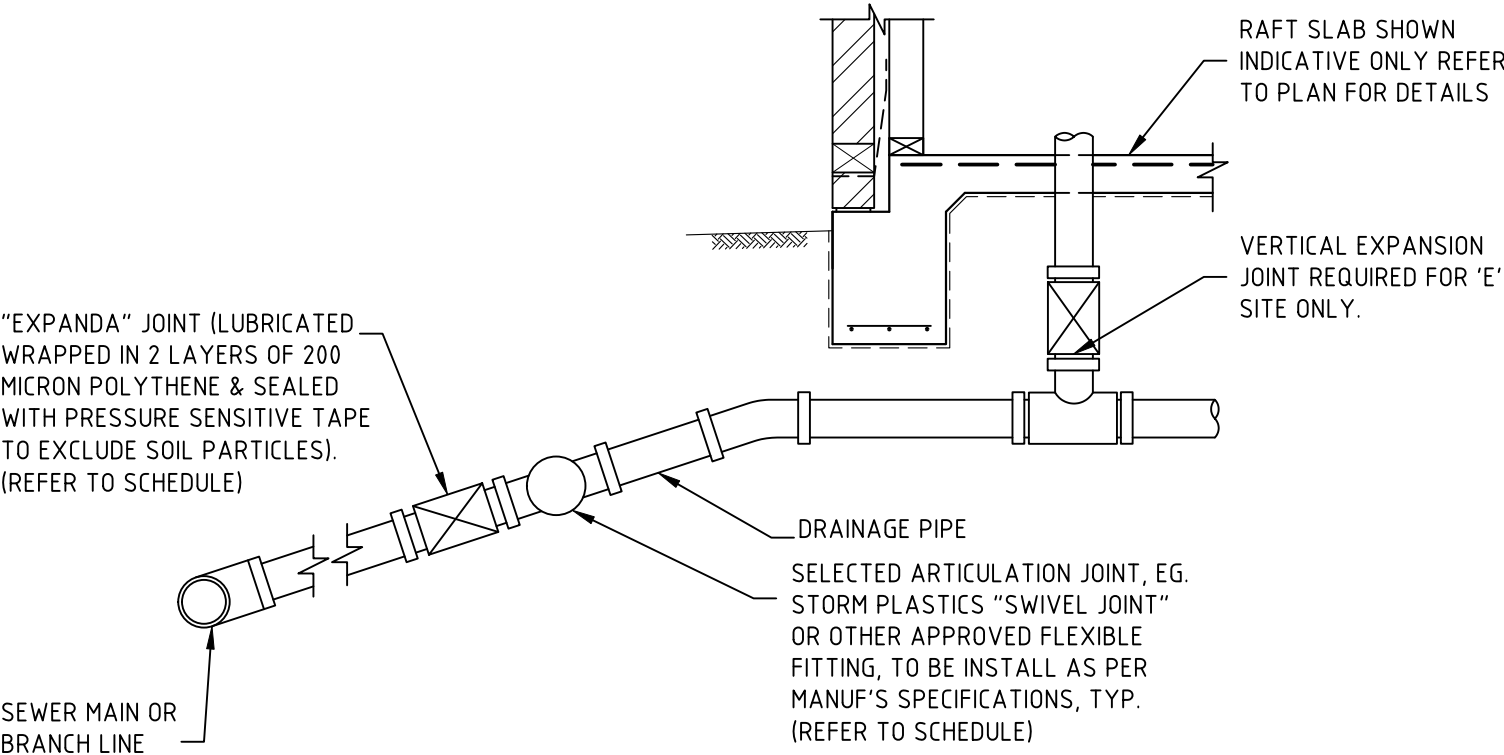
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MINIMUM REQUIREMENTS FOR SEWER ARTICULATION			
SITE CLASS	DESIGN Ys MOVEMENT (mm)	SEWER EXIT POINTS & ORG	
		SWIVEL	EXPANDER
M	Ys<40	0	0

NOTE:
EXPANDER REQUIRED ON ALL RISERS FOR (CLASS E, Ys >75mm
OR EQUIVALENT SITES

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TYPICAL UNDER WAFFLE
SLAB PIPE DETAIL
SCALE = 1:20

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Project:
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CONNEWARRE

Drawing:
DRAINAGE DETAILS - SHEET 3

CONSTRUCTION ISSUE		
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