

**SITE CLASSIFICATION REPORT**  
CERTIFICATE 2595164

**CLIENT** PARCEL DARCH PTY LTD  
**JOB ADDRESS** LOT 254 TRANQUAIR PWY DARCH  
**CLIENT JOB NO.**  
**OWNER**  
**STRUCTERRE JOB NO.** S1082652  
**DATE OF ASSESSMENT** 15/11/22

**SITE RECORD**

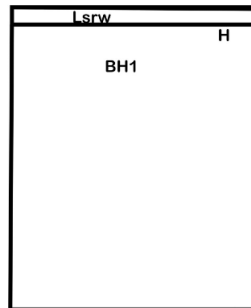


<b>SITE CLASSIFICATION</b>	<b>S - EQUIVALENT</b> <i>(in accordance with AS2870)</i>
<b>FOOTING DETAIL</b>	<b>CM3</b>
<b>SAND PAD</b>	<b>No sand pad required structurally</b>
<b>BUSHFIRE PRONE AREA</b>	<b>Not in a Bushfire Prone Area (see NOTE 2.)</b>
<b>CORROSION CLASSIFICATION</b>	<b>R1</b> <i>(Durability Class in accordance with AS3700)</i>
<b>WIND CLASSIFICATION</b>	<b>N1</b> <i>(in accordance with AS4055)</i>
<b>-TERRAIN CATEGORY</b>	<b>3</b>
<b>-TOPOGRAPHIC</b>	<b>T0</b>
<b>-SHIELDING</b>	<b>No Shielding</b>

## SOIL PROFILE

BOREHOLE 1: 0 - 1800 FILL sand with artificial material trace limestone gravel - grey; 1800 end of hole.

## APPROXIMATE BOREHOLE LOCATIONS



Tranquair Pwy

### NOTE 1 Explanatory Notes & Standard Recommendations

This site classification report must be read in conjunction with the applicable Explanatory Notes & Standard Recommendations. For A Class sites, refer to the Explanatory Notes and Standard Recommendations for Stable (A Class) Sites, version 1.0 July 2018. For S, M, H1, H2 & E Class sites, refer to the Explanatory Notes and Standard Recommendations for Reactive (S, M, H1, H2 & E Class) Sites version 1.0 July 2018. For Equivalent Class sites, refer to the Explanatory Notes and Standard Recommendations for Equivalent Class Sites, version 1.0 July 2018.

### NOTE 2 Bushfire - Prone Area

The Site may be situated in a bush fire prone area in accordance with the Department of Fire and Emergency Services (DFES) Bushfire Prone Area Map (Reference: <http://www.dfes.wa.gov.au/regulationandcompliance/bushfireproneareas/>) the current version at the time of this assessment. A Bushfire Attack Level (BAL) assessment may be required for this site, please confirm with the local authority. Should you require an assessment, please contact this Office.

## ADDITIONAL NOTES / REQUIREMENTS

### Site Condition

At the time of inspection the site was considered to be level and cleared. For specific levels of this site or topographical features, please refer to a professional site survey.

### Structerre Geotech Reference

The Site Classification is based on any remedial works being successfully completed as outlined in the Structerre Geotechnical Report J380185 dated 02/04/2021. The footing details are subject to the recommendations being completed to an acceptable level as outlined in this report, if applicable.

### Internal Thickenings

Internal thickenings are required for the proposed residence as specified on the recommended footing detail. Please provide a copy of the architectural drawings to this Office, so that the internal thickenings can be designed and drawn in accordance with AS2870.

### Internal Thickening Inspection

This detail is subject to a internal thickening layout inspection. It is recommended that an inspection be conducted by a representative from this Office prior to concrete pour.

-- END OF REPORT --

CERTIFICATE 2595164

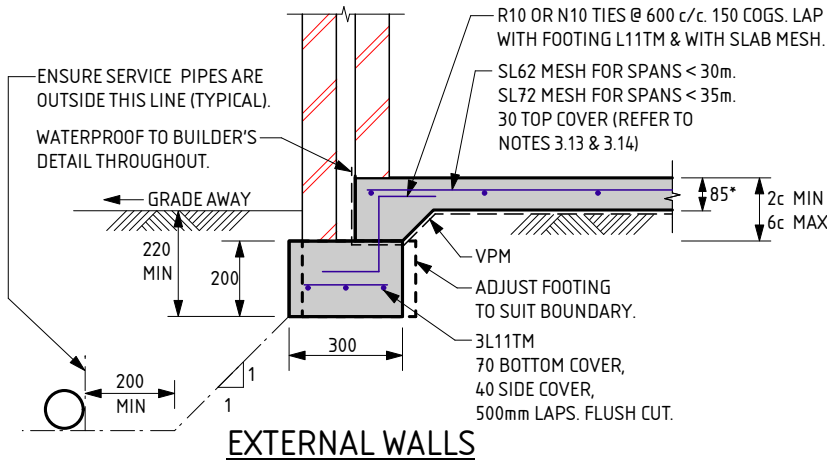
Issued Date: 16 November 2022

- 3 -

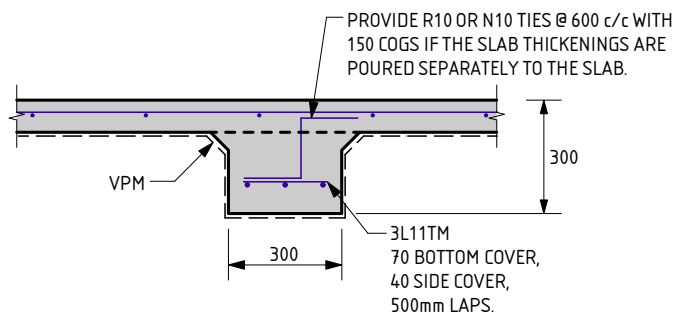
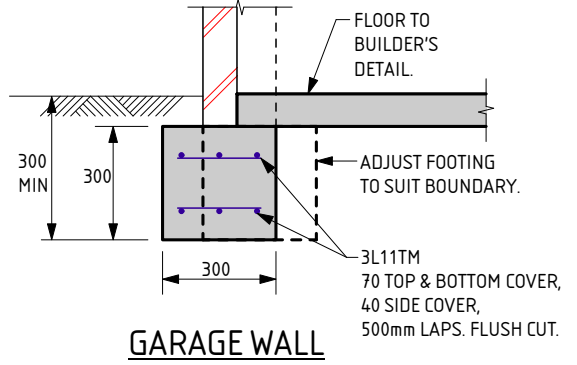
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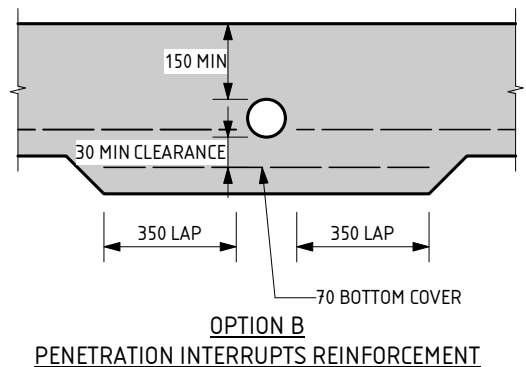
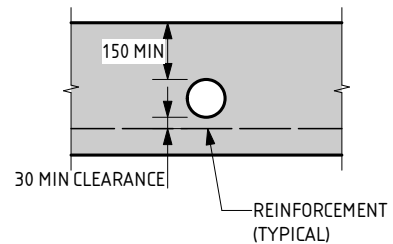
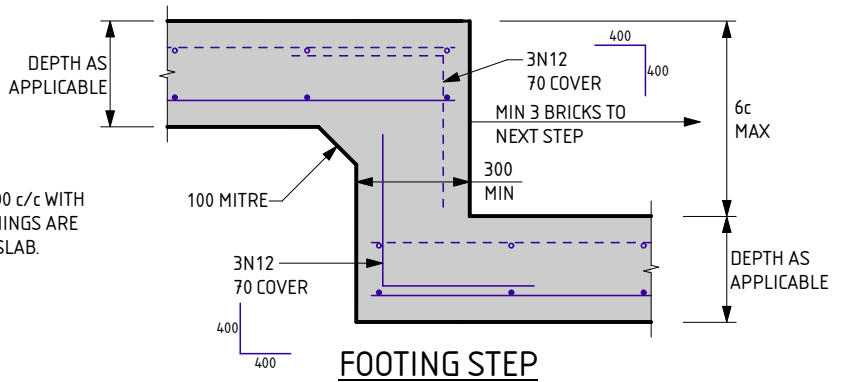
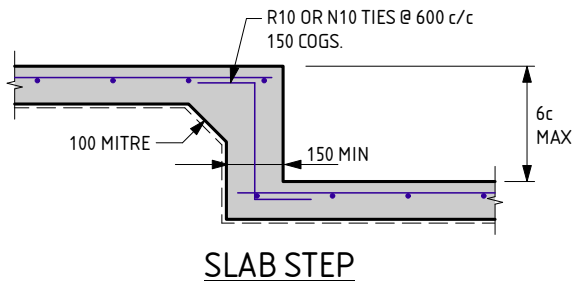
Gervase Purich  
Chief Executive Officer



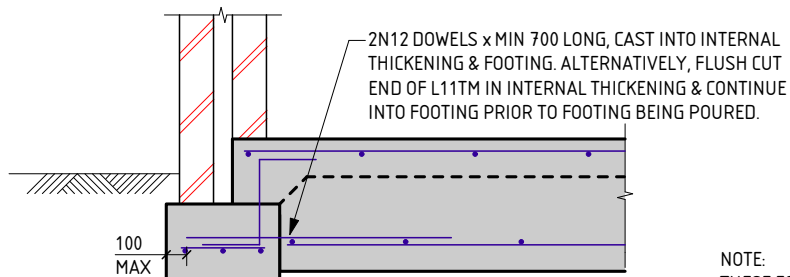
\* 100mm SLAB MAY BE INSTALLED INSTEAD OF 85mm.  
IF 100mm SLAB USED, MESH TO BE:  
SL62 MESH FOR SPANS < 25m.  
SL72 MESH FOR SPANS < 30m.  
SL82 MESH FOR SPANS < 35m.



REFER TO STRUCTERRE'S DRAWINGS FOR PLACEMENT OF INTERNAL THICKENINGS. LOCATIONS TO BE CONFIRMED ON SITE BY STRUCTERRE PRIOR TO CONCRETE POUR.



**SERVICE PIPE DIAGRAM**  
- MAXIMUM PENETRATION SIZE TO BE Ø150.



### EXTERNAL FOOTING TO INTERNAL THICKENING

THIS DETAIL IS EQUIVALENT TO  
STRUCTERRE FOOTING DETAIL C4.0

NOTE:  
THESE FOOTING DETAILS ARE TO BE READ IN CONJUNCTION WITH THE REACTIVE SITE NOTES.

THE APPROVED SIGNATURE ON THIS DETAIL ENDORSES ITS USE FOR SINGLE STOREY BUILDINGS ON BUILDING PLATFORMS WITH UP TO 11mm OF SURFACE MOVEMENT.  
DATE LAST MODIFIED - 20/09/18

**CM3**  
CAVITY MASONRY

**STRUCterre**  
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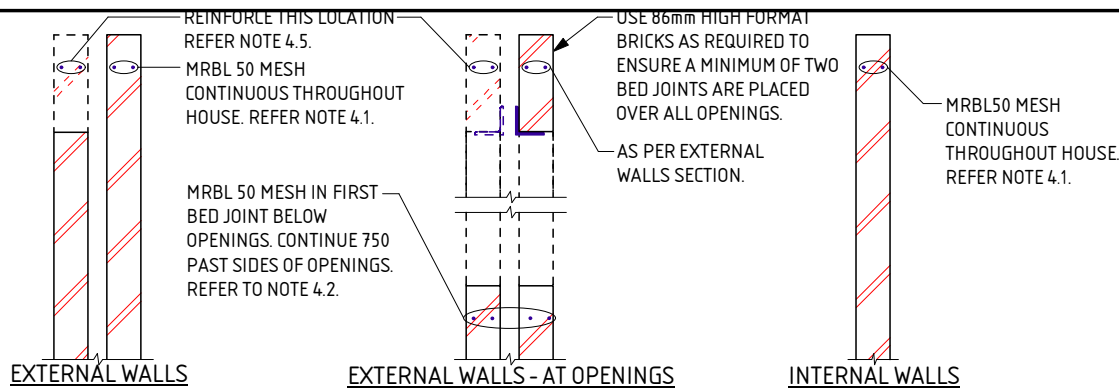
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LOT 254 TRANQUAIR PWY DARCH

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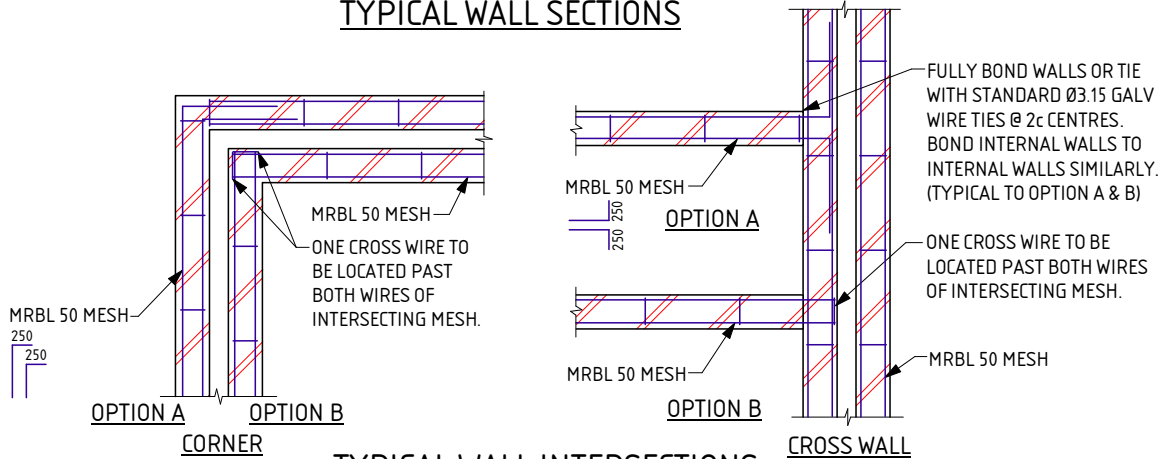
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APPROVED



**TYPICAL WALL SECTIONS**



**TYPICAL WALL INTERSECTIONS**

**REACTIVE SITE NOTES FOR CM1 - CM7**

THESE NOTES ARE TO BE READ IN CONJUNCTION WITH THE ATTACHED FOOTING DETAILS.

- 1.0 SITE CLASSIFICATION
  - 1.1 REFER TO ATTACHED CERTIFICATE OF INSPECTION FOR SITE CLASSIFICATION. THE SITE CLASSIFICATION NOTED, IS AS DEFINED IN AS2870 - RESIDENTIAL SLABS & FOOTINGS.
  - 1.2 THE SITE CLASSIFICATION HAS BEEN DETERMINED BY INVESTIGATION OF THE SITE, AS PER THE ATTACHED CERTIFICATE OF INSPECTION. REFER TO THE ATTACHED CERTIFICATE FOR ANY SPECIAL REQUIREMENTS.
- 2.0 EARTHWORKS
  - 2.1 SAND PAD IF APPLICABLE TO BE AS PER SITE INSPECTION REPORT.
  - 2.2 EARTHWORKS SHALL INCLUDE, BUT NOT BE LIMITED TO:
    - a) REMOVE ALL ORGANIC MATERIAL FROM THE PAD AREA.
    - b) REMOVE ALL RUBBISH AND DELETERIOUS FILL (SUCH AS CLAY FILL) FROM THE PAD AREA.
    - c) GRUB OUT ANY TREES WHERE NECESSARY AND ENSURE THE REMAINING HOLES ARE FILLED AND COMPACTED SATISFACTORILY WITH SAND.
    - d) NOTIFY THE ENGINEER OF ANY UNUSUAL FEATURES OR DISCREPANCIES WHICH MAY BECOME EVIDENT DURING EARTHWORKS, PRIOR TO PROCEEDING.
  - 2.3 ANY PREDOMINANT ROCK IN THE HOUSE PAD AREAS IS TO BE INSPECTED BY THE ENGINEER.
  - 2.4 ANY CUT TO THE SITE, OTHER THAN TOPSOIL STRIPPING, WILL REQUIRE THE PREPARED CUT BASE TO BE INSPECTED AND APPROVED BY THE ENGINEER.
  - 2.5 MAXIMUM SAND PAD DEPTH NOT TO EXCEED 150% OF MINIMUM PAD DEPTH OR 2000mm WITHOUT THE ENGINEER'S APPROVAL.
  - 2.6 IF APPLICABLE SAND FILL TO BE CLEAN WELL DRAINED, WITH MAX FINES (PARTICLES UP TO 0.075mm) CONTENT OF 5%. SAND TO BE COMPACTED TO A MIN 6 BLOWS/300mm FOR THE DEPTH OF THE PAD OR TO DISCRETION OF ENGINEER.
  - 2.7 COMPACTION TESTING TO BE PERFORMED BY STRUCTERRE.
- 3.0 FOOTINGS & SLABS
  - 3.1 FOOTINGS ARE TO BE PLACED DIRECTLY INTO SAND PAD OF SPECIFIED THICKNESS.
  - 3.2 ALL STORMWATER MUST BE DISCHARGED INTO COUNCIL DRAINS OR A MINIMUM OF 3m FOR S CLASS SITES, 4m FOR M CLASS SITES AND 5m FOR H1 & H2 CLASS SITES, AWAY FROM THE RESIDENCE AND/OR ADJACENT BUILDINGS INTO SOAKWELLS. IF THIS RESTRICTION CANNOT BE ACHIEVED REFER BACK TO THIS OFFICE FOR AN ALTERNATIVE DESIGN. WHERE THE SITE HAS BEEN CLASSIFIED AS AN 'EQUIVALENT' SITE CLASSIFICATION, REFER TO 'EXPLANATORY NOTES & STANDARD RECOMMENDATIONS - EQUIVALENT CLASS SITES' FOR STORMWATER DRAINAGE REQUIREMENTS UNLESS SPECIFIED OTHERWISE.
  - 3.3 EXCAVATIONS FOR ALL SERVICE PIPES NOT TO UNDERMINE FOOTINGS. IF UNDERMINING IS LIKELY TO OCCUR, CONTACT THE ENGINEER PRIOR TO PROCEEDING.
  - 3.4 WHERE PLUMBING PIPES PASS THROUGH FOOTINGS OR SLAB, SPECIFIED TOTAL THICKNESS OF ALL CONCRETE IS ALWAYS TO BE MAINTAINED.
  - 3.5 SETDOWN AT WET AREA TO ARCHITECTURAL REQUIREMENT (50mm MAX). MAINTAIN 85mm SLAB THICKNESS. FOLD MESH DOWN TO MAINTAIN COVER, PLACE DIAGONAL BARS AT RE-ENTRANT CORNER FOR STEPS OVER 30mm. BARS TO BE N12x 1200 LONG.
  - 3.6 REINFORCEMENT SHALL BE IN ACCORDANCE WITH THE FOLLOWING STANDARDS;
    - L INDICATES PLAIN OR DEFORMED WIRE R500L OR D500L TO AS/NZS 4671.
    - SL INDICATES DEFORMED SQUARE MESH D500L TO AS/NZS 4671.
    - N INDICATES DEFORMED BARS D500N TO AS/NZS 4671.
    - TM SUFFIX INDICATES TRENCH MESH USING DEFORMED BARS D500L TO AS/NZS 4671.
  - ALL STEELWORK TO BE TREATED IN ACCORDANCE WITH TABLE 3.4.4.4 "CORROSION PROTECTION" OF THE BUILDING CODE OF AUSTRALIA.
  - 3.7 LAP ALL MESH TWO TRANSVERSE WIRES PLUS 25mm OR TO MANUFACTURER'S SPECIFICATIONS.
  - 3.8 CONCRETE TO CONFORM WITH AS 3600.
  - 3.9 BLENDED CEMENT TO CONFORM WITH AS1317.
  - 3.10 ALL CONCRETE TO BE N20/20/100.
  - 3.11 FOR ISOLATED PAD FOOTINGS, REFER BACK TO ENGINEER.
  - 3.12 FOOTING POSITION UNDER BRICKWORK CAN BE ADJUSTED TO SUIT PARAPET WALLS.
  - 3.13 FOR SLAB SPANS > 35m REFER TO ENGINEER FOR MESH SIZE.
  - 3.14 IF THE LENGTH TO WIDTH RATIO OF THE GROUND SLAB OR ANY PART OF THE GROUND SLAB EXCEEDS 3:1, REFER BACK TO THIS OFFICE FOR MESH SIZE.
  - 3.15 IF POLISHED (OR HONED) CONCRETE FINISHES ARE DESIRED, THIS DESIGN SHOULD BE REFERRED BACK TO THIS OFFICE FOR CONSIDERATION, AS IT IS NOT THE INTENTION OF THESE DESIGNS FOR SUCH FINISHES.
  - 3.16 PLACE SLAB THICKENING (300 WIDE x 250 DEEP) UNDER INTERNAL WALLS (90 OR 110) HIGHER THAN 3.7m WHERE GREATER THAN 1m FROM INTERNAL THICKENING. PROVIDE SAME TRENCH MESH AS INTERNAL THICKENING DETAIL, WHERE REQUIRED.
  - 3.17 PIERCING THE VAPOUR BARRIER (VPM) USING LEVELLING PINS ON FREE DRAINING SAND PADS IS ALLOWABLE.
  - 3.18 CURE SLAB AS DETERMINED BY ENGINEER.
  - 3.19 THE SLAB IS CONSIDERED SUITABLE AS A PHYSICAL BARRIER AGAINST INGRESS OF TERMITES. IF THE FOOTING AND SLAB IS PLACED IN 2 POURS, THE PHYSICAL BARRIER ALSO INCLUDES THE FOOTING AND SLAB JOINTING.
  - 3.20 THE FOOTING DETAILS HAVE BEEN DESIGNED IN ACCORDANCE WITH AS3600 AND SECTION 4 OF AS2870.
- 4.0 MASONRY
  - 4.1 PLACE MRBL50 MESH IN TOP BED JOINT CONTINUOUS THROUGHOUT ALL BRICKWORK.
  - 4.2 REINFORCE BED JOINT BELOW WINDOW SILLS WITH MRBL50 MESH. CONTINUE 750 PAST SIDES OF OPENING.
  - 4.3 LAP 250 AT SPLICES AND AROUND CORNERS AND COG 250 INTO INTERSECTING WALLS. 20mm COVER TO ALL WIRES.
  - 4.4 ALL MESH IN EXTERNAL FACE OF EXTERNAL LEAF TO BE GALVANIZED TO AS/NZS 4680.
  - 4.5 WHEN BRICKWORK EXTENDS ABOVE OPENINGS TO EXTERNAL LEAF REINFORCE AS PER CLAUSE 4.1, 4.2 & 4.3.
  - 4.6 TYPICAL WALL SECTIONS ARE SHOWN FOR 28c INTERNAL CEILINGS. WHERE THERE ARE 3 OR MORE BED JOINTS OVER THE OPENING, REINFORCE BED JOINT OVER OPENING WITH MRBL50 MESH. CONTINUE 750 PAST SIDE OF OPENING.
  - 4.7 ALL PERPENDS TO BE FULLY MORTARED.
  - 4.8 A BRICK COURSE, AS REFERRED TO IN THIS DOCUMENT IS STANDARD 86mm HIGH.
  - 4.9 2L6 WIRES MAY BE USED AS AN ALTERNATIVE TO THE MRBL50 MESH. WHERE L6 WIRES ARE USED, ALL SPLICES AND COGS TO BE 500 LONG.
- 5.0 MAINTENANCE
  - 5.1 IT IS CONSIDERED THAT THIS DESIGN IS SUITABLE FOR THE FOUNDATION CONDITIONS TO BE ENCOUNTERED AND WILL ADEQUATELY CONTROL ANY CRACKING OF BRICKWORK AND CONCRETE, SUBJECT TO THE MAINTENANCE PROCEDURES BELOW BEING SATISFIED.
  - 5.2 BUILDER TO ENSURE THAT CLIENT BE INFORMED OF NECESSITY TO MAINTAIN DRAINS IN GOOD WORKING ORDER AT ALL TIMES.
  - 5.3 BUILDER TO ADVISE CLIENT TO CONSULT AN ENGINEER BEFORE PLANTING TREES OR SHRUBS WITHIN 2.5m, OR A DISTANCE EQUAL TO THE ANTICIPATED MAXIMUM HEIGHT OF THE TREE, OF THE BUILDING.
  - 5.4 SITE TO BE MAINTAINED AS PER CSIRO INFORMATION PAMPHLET BTF 18 & STRUCTERRE'S CLAY FACT SHEET.
  - 5.5 AS2870 AND 'CSIRO PAMPHLET BTF 18' COVER THE EXPECTED PERFORMANCE AND RESPONSIBILITIES OF ALL PARTIES WITH THE USE OF THESE DETAILS.
- 6.0 QUALITY CONTROL PROGRAM REQUIREMENTS
  - 6.1 WORKING SLAB DEPTH AS INDICATED ON THE DETAIL. SLAB DEPTH TOLERANCE ALLOWABLE -10mm, +15mm.
  - 6.2 WHERE DEPTH IS BELOW NOMINATED DEPTH, MAX AREA ALLOWED TO BE ≤ 5% OF THE TOTAL AREA.
  - 6.3 DEPTH TESTING LOCATIONS TO BE NO CLOSER THAN 1000mm APART.
  - 6.4 SLAB DEPTH IS TO BE PART OF A QUALITY CONTROL INSPECTION REGIME.
  - 6.5 SLAB AND FOOTING CAN BE POURED MONOLITHICALLY IF DESIRED.

DATE LAST MODIFIED - 21/09/21



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PROJECT : **LOT 254 TRANQUAIR PWY DARCH**

CLIENT : **PARCEL DARCH PTY LTD**

SCALE **1:20** APPROVED

DATE **16/11/22**



## EXPLANATORY NOTES & STANDARD RECOMMENDATIONS - EQUIVALENT CLASS SITES (Sheet 1 of 2)

### GENERAL

1. THE EXPLANATORY NOTES AND THE STANDARD RECOMMENDATIONS ARE TO BE READ IN CONJUNCTION WITH THE SITE CLASSIFICATION REPORT.
2. ALL REFERRED STANDARDS TO BE THE CURRENT VERSION AT THE TIME OF THE CONSTRUCTION.
3. THE PURPOSE OF THE SITE CLASSIFICATION REPORT IS TO CLASSIFY THE SITE IN ACCORDANCE WITH AS2870 "RESIDENTIAL SLABS AND FOOTING". IT IS NOT INTENDED FOR ANY OTHER PURPOSE, INCLUDING SOLE INFORMATION IN THE PROVISION OF A QUOTATION FOR SITE WORKS. IT IS RECOMMENDED OTHER PARTIES TO PERFORM THEIR OWN INVESTIGATION FOR QUOTATION PURPOSES.
4. THE SITE CLASSIFICATION REPORT WILL INCLUDE BUT IS NOT LIMITED TO:
  - a. THE SITE CLASSIFICATION IN ACCORDANCE WITH AS2870 "RESIDENTIAL SLABS AND FOOTING",
  - b. A WIND CLASSIFICATION IN ACCORDANCE WITH AS4055 "WIND LOADS FOR HOUSING",
  - c. A COASTAL CORROSION CLASSIFICATION,
  - d. ADDITIONAL EARTHWORK RECOMMENDATIONS WHERE APPLICABLE,
  - e. STANDARD FOOTING DESIGN FOR SINGLE STOREY SLAB ON GROUND CONSTRUCTION.
5. THE SITE CLASSIFICATION IS BASED ON THE SITE AS PRESENTED AT THE TIME OF THE ASSESSMENT. THE SITE CLASSIFICATION AND RECOMMENDATIONS INCLUDED IN THE REPORT ARE SUBJECT TO SATISFACTORY COMPLETION OF RECOMMENDED EARTHWORKS, (REFER NOTE 17) AS A MINIMUM. SHOULD CHANGES TO THE SITE OCCUR, OTHER THAN THE RECOMMENDATIONS INCLUDED IN THE SITE CLASSIFICATION REPORT, REFER BACK TO THIS OFFICE FOR REVIEW OF CLASSIFICATION AND FOOTING DESIGN.
6. ALL RECOMMENDATIONS GIVEN IN THE SITE CLASSIFICATION REPORT HAVE BEEN DETERMINED FROM THE INFORMATION THAT WAS AVAILABLE TO THIS OFFICE AT THE TIME OF INVESTIGATION. IF FURTHER INFORMATION RELATING TO THE SITE OR DEVELOPMENT BECOMES AVAILABLE, THESE RECOMMENDATIONS ARE SUBJECT TO CHANGE.
7. EQUIVALENT CLASS SITES ARE BASED ON DIFFERENTIAL SURFACE MOVEMENT ARISING FROM ISSUE OTHER THAN SHRINK-SWELL (REACTIVITY) ONLY. THESE MAY INCLUDE SETTLEMENT AND/OR CONSOLIDATION THAT MAY OCCUR AS A RESULT OF THE UNDERLYING GROUND CONDITIONS.
8. BOREHOLES EXCAVATED REVEAL THE SOIL PROFILE AT THE BOREHOLE LOCATION ONLY. FROM THIS, IT IS INFERRED THAT THESE ARE THE SOIL CONDITIONS OVER THE SITE. VARIATIONS CAN OCCUR WHICH MAY NOT HAVE BEEN DETECTED AT THE INVESTIGATION STAGE. ANY ANOMALIES SHOULD BE REFERRED BACK TO THIS OFFICE FOR A REASSESSMENT.
9. A NUMBER OF BOREHOLES ARE CONDUCTED ACROSS THE SITE TO DETERMINE THE SOIL PROFILES AND PROVIDE A REPRESENTATION OF THE GROUND CONDITIONS.
10. THIS REPORT IS FOR STRUCTERRE ONLY TO USE IN DESIGN. ANY DESIGN BY ANYONE ELSE FOR ANY STRUCTURE MUST BE SPECIFICALLY APPROVED BY STRUCTERRE. IF USED BY ANYONE ELSE FOR ANYTHING OTHER THAN A STRUCTERRE DESIGN OR STRUCTURE, STRUCTERRE TAKES NO RESPONSIBILITY.

### SAND PAD

11. THE RECOMMENDED FOOTING DESIGN IS ONLY TO BE USED IN CONJUNCTION WITH THE RECOMMENDED SAND PAD AND EARTHWORKS AS OUTLINED IN THE SITE CLASSIFICATION REPORT.
12. THE RECOMMENDATIONS FOR THE SAND PAD IS FOR STRUCTURAL PURPOSES ONLY, AND DOES NOT PROVIDE THE MINIMUM FINISHED PAD LEVEL IN RELATION TO FLOOD LEVELS OR DEPTH TO GROUNDWATER. SHOULD THE TEST BE LOCATED IN A LOW LYING OR FLOOD PRONE AREA, REFER TO THE LOCAL AUTHORITY FOR MINIMUM BUILDING HEIGHT.
13. IMPORTED FILL FOR USE AS A SAND PAD TO BE IN ACCORDANCE TO AS 3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS" WHICH INCLUDES BUT IS NOT LIMITED TO: BE FREE FROM ANY DELETERIOUS MATERIALS INCLUDING ORGANICS, (ROOTS, STUMPS, GRASSES, DECOMPOSED ORGANICS - PEAT, TIMBER, ETC), BUILDING RUBBLE, GLASS, PLASTICS OR WASTE MATERIAL. THE FINES CONTENT, (PERCENTAGE PASSING THE 0.075mm SIEVE) TO BE LESS THAN 5% BY MASS.
14. ON SAND SITES A SAND PAD IS NOT REQUIRED STRUCTURALLY, HOWEVER IF ROCK IS ENCOUNTERED, A MINIMUM 200mm SAND PAD BEYOND THE BASE OF FOOTING IS RECOMMENDED.
15. SAND PAD TO EXTEND BEYOND BUILDING AREA A MINIMUM OF 1.5 TIMES THE PAD DEPTH.
16. RECOMMENDED SAND PAD DEPTH IS ABOVE THE HIGHEST POINT, UNLESS OTHERWISE SPECIFIED.
17. IT IS REQUIRED THAT EARTHWORKS CONFIRM THAT THE MINIMUM DEPTH OF RECOMMENDED SAND PAD IS ACHIEVED.

### EARTHWORKS

18. RECOMMENDED EARTHWORKS TO BE CONDUCTED IN ACCORDANCE WITH AS3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS", AND TO INCLUDE BUT NOT BE LIMITED TO:
  - a. REMOVAL OF ALL VEGETATION, TOPSOILS, UNCONTROLLED FILLS AND OTHER DELETERIOUS MATERIALS FROM THE BUILDING AREA,
  - b. GRUBBING OUT OF ANY TREES ENSURING THE REMAINING HOLES ARE BACKFILLED WITH CLEAN COMPACTED SAND,
  - c. NOTIFYING THE ENGINEER OF ANY UNUSUAL FEATURE OR DISCREPANCY THAT MAY BECOME EVIDENT DURING EARTHWORKS, PRIOR TO PROCEEDING,
  - d. COMPACTING TO MEET THE REQUIREMENTS AS OUTLINED IN AS 3798 TABLE 5.1.
19. FILL MATERIAL (WHICH IS NOT ALWAYS APPARENT AT THE INITIAL INVESTIGATION STAGE) IS TO BE DEALT WITH AS FOLLOWS:
  - a. IF IT IS CERTIFIED BY OTHERS IT CAN REMAIN.
  - b. IF IT IS NOT CERTIFIED WILL REQUIRE REMOVAL DOWN TO NATURAL GROUND OR VERIFIED. ANY SAND CAN BE REUSED.
  - c. IF A PAD HAS ALREADY BEEN CONSTRUCTED, THE SITE CLASSIFICATION IS NOT CERTIFICATION OF THE PAD. CONTACT THIS OFFICE SHOULD A SAND PAD CERTIFICATION BE REQUIRED.
20. ANY ORGANIC MATTER OR ROOTS ENCOUNTERED, WHICH IS BEYOND WHAT IS NORMALLY CONSIDERED ACCEPTABLE IS TO BE REMOVED. THIS WILL NECESSITATE RAKING THE SITE TO REMOVE ORGANIC MATERIAL, TURNING THE SITE OVER AND RE-COMPACTING TO A MINIMUM.

### RETAINING WALLS

21. AN ASSESSMENT OF ANY EXISTING OR PROPOSED RETAINING WALLS HAS NOT BEEN CONDUCTED AS PART OF THIS SITE CLASSIFICATION REPORT.
22. IF THE PROPOSED BUILDING IS TO BE LOCATED CLOSER THAN THE HEIGHT OF THE RETAINING WALL, THIS MAY PLACE ADDITIONAL LOADS ON THE WALL THAT WERE NOT INITIALLY DESIGNED FOR. AN INSPECTION OF THE STRUCTURAL INTEGRITY OF THE RETAINING WALL WILL BE REQUIRED TO PROVIDE CERTIFICATION AND/OR RECOMMENDATIONS PRIOR TO ANY CONSTRUCTION. PLEASE REFER BACK TO THIS OFFICE FOR ASSISTANCE.  
STORMWATER DRAINAGE
23. UNLESS OTHERWISE SPECIFIED, ALL SOAKWELLS ARE TO BE LOCATED THE DEPTH OF THE SOAKWELL AWAY FROM THE BUILDING OR SETBACK A MINIMUM OF 1200mm, WHICHEVER IS GREATER, UNLESS SPECIFIED OTHERWISE. PLEASE REFER BACK TO THIS OFFICE IF THE SETBACK CANNOT BE ACHIEVED.

DOC# SS001 - 1.1.10 SCR EQUIVALENT V1.1 - AUGUST 2021



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CLIENT : PARCEL DARCH PTY LTD

SCALE 1:20

DATE 16/11/22

APPROVED

## EXPLANATORY NOTES & STANDARD RECOMMENDATIONS - EQUIVALENT CLASS SITES (Sheet 2 of 2)

### WIND CLASSIFICATION

24. WIND CLASSIFICATION IS GIVEN FOR THE EXPECTED CONDITION 5 YEARS HENCE. THIS CLASSIFICATION IS LIMITED TO BUILDINGS CLASSES 1 AND 10, WHICH HAVE THE FOLLOWING LIMITATION (AS PER AS4055):

- a. MAXIMUM DISTANCE FROM THE GROUND LEVEL TO THE UNDERSIDE OF EAVES SHALL NOT EXCEED 6.0m,
- b. MAXIMUM DISTANCE FROM GROUND LEVEL TO THE HIGHEST POINT OF THE ROOF, EXCLUDING CHIMNEYS, SHALL NOT EXCEED 8.5m,
- c. THE ROOF PITCH SHALL NOT EXCEED 35 °,
- d. THE WIDTH, EXCLUDING EAVES, SHALL NOT EXCEED 16.0m AND THE LENGTH SHALL NOT EXCEED 5x THE WIDTH.

IF THE BUILDING FALLS OUTSIDE OF THESE LIMITATIONS, THE STATED WIND CLASSIFICATION DOES NOT APPLY. REFER BACK TO THIS OFFICE FOR A REVISED WIND CLASSIFICATION.

### ENVIRONMENTAL

25. NO ENVIRONMENTAL ASSESSMENT OF THIS SITE HAS BEEN UNDERTAKEN. SHOULD AN ENVIRONMENTAL ASSESSMENT BE REQUIRED, PLEASE CONTACT THIS OFFICE.

### SEISMIC

26. RECOMMENDED FOOTING DETAILS ARE SUITABLE FOR SEISMIC CONDITIONS WITH AN EARTHQUAKE HAZARD FACTOR OF  $\leq 0.11$ . RECOMMENDED FOOTING DETAILS PROVIDED FOR SITES WITH AN EARTHQUAKE HAZARD FACTOR OF  $> 0.11$ , ARE NOT FOR CONSTRUCTION, BUT FOR COSTING PURPOSES ONLY. IT IS REQUIRED THAT A FULL SEISMIC DESIGN IS CONDUCTED.

### CORROSION CLASSIFICATION

27. THE CORROSION CLASSIFICATION HAS BEEN ASSESSED IN ACCORDANCE WITH AS3700.

DOC# SS001 - 1.1.10 SCR EQUIVALENT V1.1 - AUGUST 2021



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PROJECT :

LOT 254 TRANQUAIR PWY DARCH

CLIENT : PARCEL DARCH PTY LTD

SCALE 1:20

DATE 16/11/22

APPROVED

A handwritten signature in blue ink, appearing to be 'M. Darch', is written over the 'APPROVED' field.

**SITE CLASSIFICATION REPORT**  
CERTIFICATE 2595165

**CLIENT** PARCEL DARCH PTY LTD  
**JOB ADDRESS** LOT 255 TRANQUAIR PWY DARCH  
**CLIENT JOB NO.**  
**OWNER**  
**STRUCTERRE JOB NO.** S1082653  
**DATE OF ASSESSMENT** 15/11/22

**SITE RECORD**



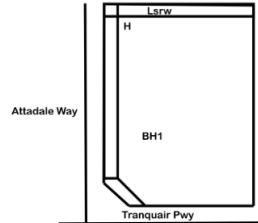
<b>SITE CLASSIFICATION</b>	<b>S - EQUIVALENT</b> <i>(in accordance with AS2870)</i>
<b>FOOTING DETAIL</b>	<b>CM3</b>
<b>SAND PAD</b>	<b>No sand pad required structurally</b>
<b>BUSHFIRE PRONE AREA</b>	<b>Not in a Bushfire Prone Area (see NOTE 2.)</b>
<b>CORROSION CLASSIFICATION</b>	<b>R1</b> <i>(Durability Class in accordance with AS3700)</i>
<b>WIND CLASSIFICATION</b>	<b>N1</b> <i>(in accordance with AS4055)</i>
-TERRAIN CATEGORY	3
-TOPOGRAPHIC	T0
-SHIELDING	Partial Shielding



## SOIL PROFILE

BOREHOLE 1: 0 - 1800 FILL sand with artificial material trace limestone gravel - grey; 1800 end of hole.

## APPROXIMATE BOREHOLE LOCATIONS



### NOTE 1 Explanatory Notes & Standard Recommendations

This site classification report must be read in conjunction with the applicable Explanatory Notes & Standard Recommendations. For A Class sites, refer to the Explanatory Notes and Standard Recommendations for Stable (A Class) Sites, version 1.0 July 2018. For S, M, H1, H2 & E Class sites, refer to the Explanatory Notes and Standard Recommendations for Reactive (S, M, H1, H2 & E Class) Sites version 1.0 July 2018. For Equivalent Class sites, refer to the Explanatory Notes and Standard Recommendations for Equivalent Class Sites, version 1.0 July 2018.

### NOTE 2 Bushfire - Prone Area

The Site may be situated in a bush fire prone area in accordance with the Department of Fire and Emergency Services (DFES) Bushfire Prone Area Map (Reference: <http://www.dfes.wa.gov.au/regulationandcompliance/bushfireproneareas/>) the current version at the time of this assessment. A Bushfire Attack Level (BAL) assessment may be required for this site, please confirm with the local authority. Should you require an assessment, please contact this Office.

## ADDITIONAL NOTES / REQUIREMENTS

### Site Condition

At the time of inspection the site was considered to be level and cleared. For specific levels of this site or topographical features, please refer to a professional site survey.

### Structerre Geotech Reference

The Site Classification is based on any remedial works being successfully completed as outlined in the Structerre Geotechnical Report J380185 dated 02/04/2021. The footing details are subject to the recommendations being completed to an acceptable level as outlined in this report, if applicable.

### Internal Thickenings


Internal thickenings are required for the proposed residence as specified on the recommended footing detail. Please provide a copy of the architectural drawings to this Office, so that the internal thickenings can be designed and drawn in accordance with AS2870.

### Internal Thickening Inspection

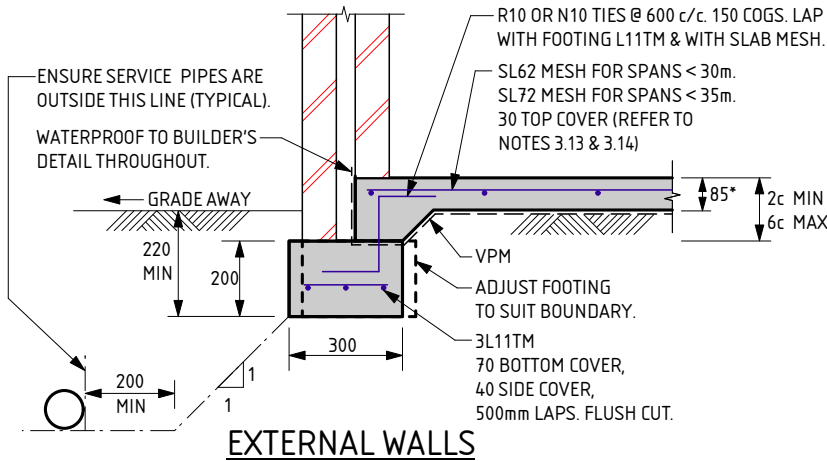
This detail is subject to a internal thickening layout inspection. It is recommended that an inspection be conducted by a representative from this Office prior to concrete pour.

-- END OF REPORT --

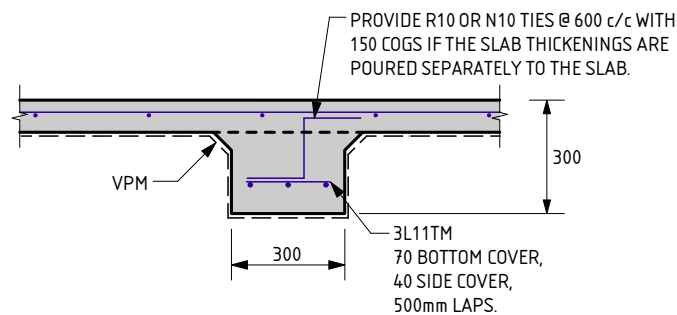
Signed:



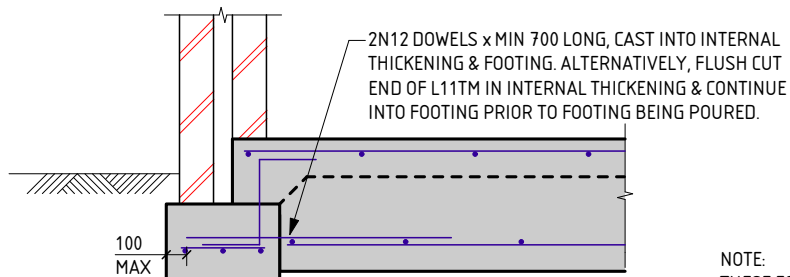
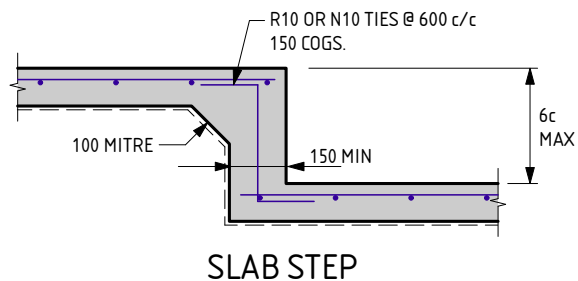
Gervase Purich  
Chief Executive Officer



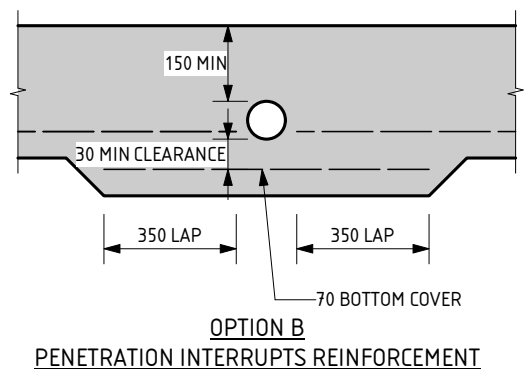
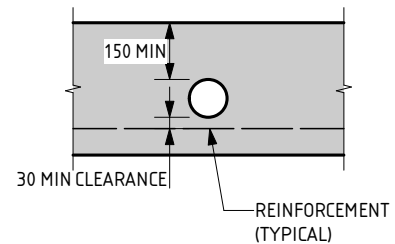
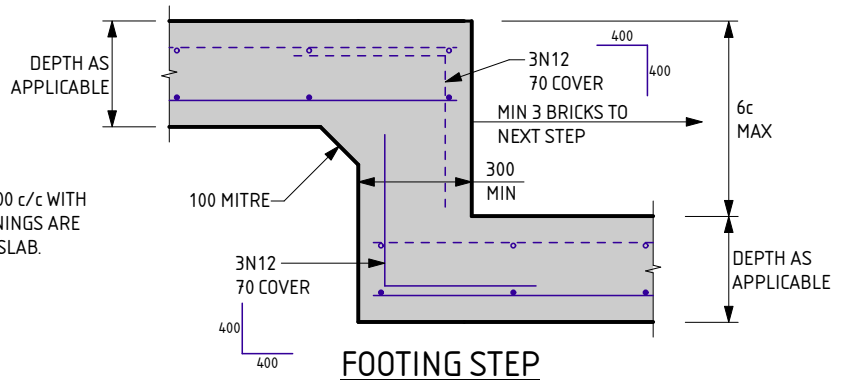
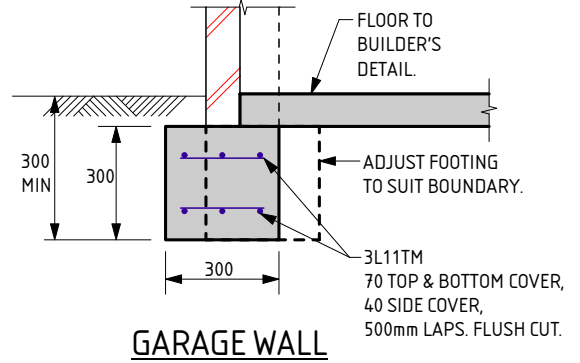
\* 100mm SLAB MAY BE INSTALLED INSTEAD OF 85mm.  
IF 100mm SLAB USED, MESH TO BE:  
SL62 MESH FOR SPANS < 25m.  
SL72 MESH FOR SPANS < 30m.  
SL82 MESH FOR SPANS < 35m.



REFER TO STRUCTERRE'S DRAWINGS FOR PLACEMENT OF INTERNAL THICKENINGS. LOCATIONS TO BE CONFIRMED ON SITE BY STRUCTERRE PRIOR TO CONCRETE POUR.



THIS DETAIL IS EQUIVALENT TO  
STRUCTERRE FOOTING DETAIL C4.0



### SERVICE PIPE DIAGRAM

- MAXIMUM PENETRATION SIZE TO BE Ø150.

NOTE:  
THESE FOOTING DETAILS ARE TO BE READ IN CONJUNCTION WITH THE REACTIVE SITE NOTES.

THE APPROVED SIGNATURE ON THIS DETAIL ENDORSES ITS USE FOR SINGLE STOREY BUILDINGS ON BUILDING PLATFORMS WITH UP TO 11mm OF SURFACE MOVEMENT.  
DATE LAST MODIFIED - 20/09/18

**CM3**  
CAVITY MASONRY

**STRUCterre**  
consulting engineers

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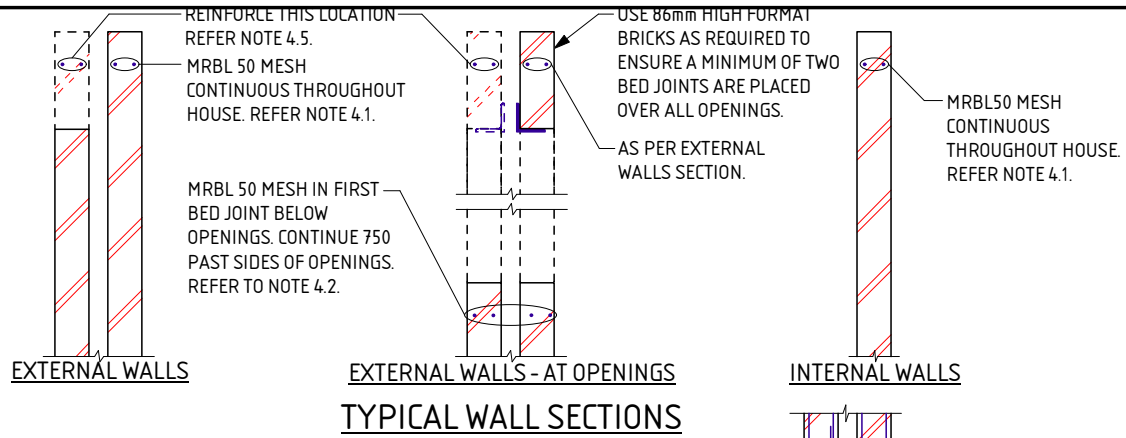
PROJECT:  
LOT 255 TRANQUAIR PWY DARCH

CLIENT: PARCEL DARCH PTY LTD

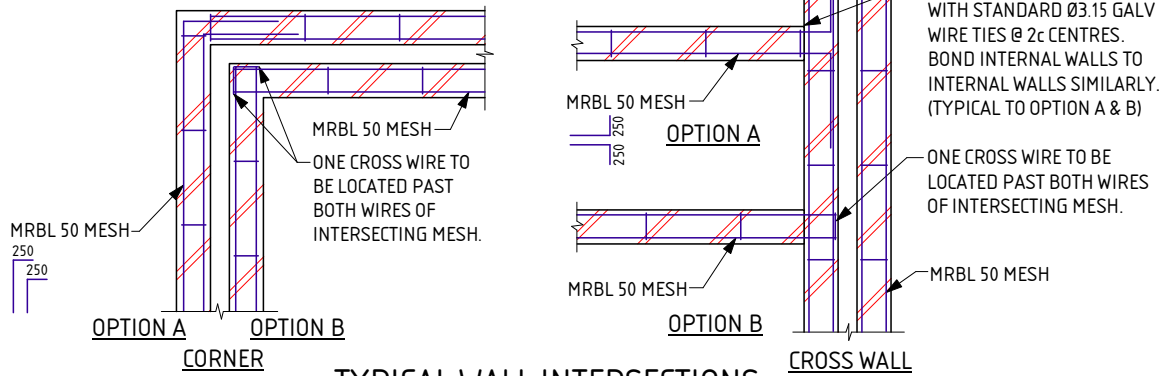
SCALE 1:20

DATE 16/11/22

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TYPICAL WALL SECTIONS



TYPICAL WALL INTERSECTIONS

REACTIVE SITE NOTES FOR CM1 - CM7

THESE NOTES ARE TO BE READ IN CONJUNCTION WITH THE ATTACHED FOOTING DETAILS.

1.0 SITE CLASSIFICATION

- 1.1 REFER TO ATTACHED CERTIFICATE OF INSPECTION FOR SITE CLASSIFICATION. THE SITE CLASSIFICATION NOTED, IS AS DEFINED IN AS2870 - RESIDENTIAL SLABS & FOOTINGS.
- 1.2 THE SITE CLASSIFICATION HAS BEEN DETERMINED BY INVESTIGATION OF THE SITE, AS PER THE ATTACHED CERTIFICATE OF INSPECTION. REFER TO THE ATTACHED CERTIFICATE FOR ANY SPECIAL REQUIREMENTS.

2.0 EARTHWORKS

- 2.1 SAND PAD IF APPLICABLE TO BE AS PER SITE INSPECTION REPORT.
- 2.2 EARTHWORKS SHALL INCLUDE, BUT NOT BE LIMITED TO:
  - a) REMOVE ALL ORGANIC MATERIAL FROM THE PAD AREA.
  - b) REMOVE ALL RUBBISH AND DELETERIOUS FILL (SUCH AS CLAY FILL) FROM THE PAD AREA.
  - c) GRUB OUT ANY TREES WHERE NECESSARY AND ENSURE THE REMAINING HOLES ARE FILLED AND COMPACTED SATISFACTORILY WITH SAND.
  - d) NOTIFY THE ENGINEER OF ANY UNUSUAL FEATURES OR DISCREPANCIES WHICH MAY BECOME EVIDENT DURING EARTHWORKS, PRIOR TO PROCEEDING.
- 2.3 ANY PREDOMINANT ROCK IN THE HOUSE PAD AREAS IS TO BE INSPECTED BY THE ENGINEER.
- 2.4 ANY CUT TO THE SITE, OTHER THAN TOPSOIL STRIPPING, WILL REQUIRE THE PREPARED CUT BASE TO BE INSPECTED AND APPROVED BY THE ENGINEER.
- 2.5 MAXIMUM SAND PAD DEPTH NOT TO EXCEED 150% OF MINIMUM PAD DEPTH OR 2000mm WITHOUT THE ENGINEER'S APPROVAL.
- 2.6 IF APPLICABLE SAND FILL TO BE CLEAN WELL DRAINED, WITH MAX FINES (PARTICLES UP TO 0.075mm) CONTENT OF 5%. SAND TO BE COMPACTED TO A MIN 6 BLOWS/300mm FOR THE DEPTH OF THE PAD OR TO DISCRETION OF ENGINEER.
- 2.7 COMPACTION TESTING TO BE PERFORMED BY STRUCTERRE.

3.0 FOOTINGS & SLABS

- 3.1 FOOTINGS ARE TO BE PLACED DIRECTLY INTO SAND PAD OF SPECIFIED THICKNESS.
- 3.2 ALL STORMWATER MUST BE DISCHARGED INTO COUNCIL DRAINS OR A MINIMUM OF 3m FOR S CLASS SITES, 4m FOR M CLASS SITES AND 5m FOR H1 & H2 CLASS SITES, AWAY FROM THE RESIDENCE AND/OR ADJACENT BUILDINGS INTO SOAKWELLS. IF THIS RESTRICTION CANNOT BE ACHIEVED REFER BACK TO THIS OFFICE FOR AN ALTERNATIVE DESIGN. WHERE THE SITE HAS BEEN CLASSIFIED AS AN 'EQUIVALENT' SITE CLASSIFICATION, REFER TO 'EXPLANATORY NOTES & STANDARD RECOMMENDATIONS - EQUIVALENT CLASS SITES' FOR STORMWATER DRAINAGE REQUIREMENTS UNLESS SPECIFIED OTHERWISE.
- 3.3 EXCAVATIONS FOR ALL SERVICE PIPES NOT TO UNDERMINE FOOTINGS. IF UNDERMINING IS LIKELY TO OCCUR, CONTACT THE ENGINEER PRIOR TO PROCEEDING.
- 3.4 WHERE PLUMBING PIPES PASS THROUGH FOOTINGS OR SLAB, SPECIFIED TOTAL THICKNESS OF ALL CONCRETE IS ALWAYS TO BE MAINTAINED.
- 3.5 SETDOWN AT WET AREA TO ARCHITECTURAL REQUIREMENT (50mm MAX). MAINTAIN 85mm SLAB THICKNESS. FOLD MESH DOWN TO MAINTAIN COVER, PLACE DIAGONAL BARS AT RE-ENTRANT CORNER FOR STEPS OVER 30mm. BARS TO BE N12x 1200 LONG.
- 3.6 REINFORCEMENT SHALL BE IN ACCORDANCE WITH THE FOLLOWING STANDARDS;
  - L INDICATES PLAIN OR DEFORMED WIRE R500L OR D500L TO AS/NZS 4671.
  - SL INDICATES DEFORMED SQUARE MESH D500L TO AS/NZS 4671.
  - N INDICATES DEFORMED BARS D500N TO AS/NZS 4671.
  - TM SUFFIX INDICATES TRENCH MESH USING DEFORMED BARS D500L TO AS/NZS 4671.
 ALL STEELWORK TO BE TREATED IN ACCORDANCE WITH TABLE 3.4.4.4 "CORROSION PROTECTION" OF THE BUILDING CODE OF AUSTRALIA.
- 3.7 LAP ALL MESH TWO TRANSVERSE WIRES PLUS 25mm OR TO MANUFACTURER'S SPECIFICATIONS.

3.8 CONCRETE TO CONFORM WITH AS 3600.

- 3.9 BLENDED CEMENT TO CONFORM WITH AS1317.
- 3.10 ALL CONCRETE TO BE N20/20/100.
- 3.11 FOR ISOLATED PAD FOOTINGS, REFER BACK TO ENGINEER.
- 3.12 FOOTING POSITION UNDER BRICKWORK CAN BE ADJUSTED TO SUIT PARAPET WALLS.
- 3.13 FOR SLAB SPANS > 35m REFER TO ENGINEER FOR MESH SIZE.
- 3.14 IF THE LENGTH TO WIDTH RATIO OF THE GROUND SLAB OR ANY PART OF THE GROUND SLAB EXCEEDS 3:1, REFER BACK TO THIS OFFICE FOR MESH SIZE.
- 3.15 IF POLISHED (OR HONED) CONCRETE FINISHES ARE DESIRED, THIS DESIGN SHOULD BE REFERRED BACK TO THIS OFFICE FOR CONSIDERATION, AS IT IS NOT THE INTENTION OF THESE DESIGNS FOR SUCH FINISHES.
- 3.16 PLACE SLAB THICKENING (300 WIDE x 250 DEEP) UNDER INTERNAL WALLS (90 OR 110) HIGHER THAN 3.7m WHERE GREATER THAN 1m FROM INTERNAL THICKENING. PROVIDE SAME TRENCH MESH AS INTERNAL THICKENING DETAIL, WHERE REQUIRED.
- 3.17 PIERCING THE VAPOUR BARRIER (VPM) USING LEVELLING PINS ON FREE DRAINING SAND PADS IS ALLOWABLE.
- 3.18 CURE SLAB AS DETERMINED BY ENGINEER.
- 3.19 THE SLAB IS CONSIDERED SUITABLE AS A PHYSICAL BARRIER AGAINST INGRESS OF TERMITES. IF THE FOOTING AND SLAB IS PLACED IN 2 POURS, THE PHYSICAL BARRIER ALSO INCLUDES THE FOOTING AND SLAB JOINT.
- 3.20 THE FOOTING DETAILS HAVE BEEN DESIGNED IN ACCORDANCE WITH AS3600 AND SECTION 4 OF AS2870.

4.0 MASONRY

- 4.1 PLACE MRBL50 MESH IN TOP BED JOINT CONTINUOUS THROUGHOUT ALL BRICKWORK.
- 4.2 REINFORCE BED JOINT BELOW WINDOW SILLS WITH MRBL50 MESH. CONTINUE 750 PAST SIDES OF OPENING.
- 4.3 LAP 250 AT SPLICES AND AROUND CORNERS AND COG 250 INTO INTERSECTING WALLS. 20mm COVER TO ALL WIRES.
- 4.4 ALL MESH IN EXTERNAL FACE OF EXTERNAL LEAF TO BE GALVANIZED TO AS/NZS 4680.
- 4.5 WHEN BRICKWORK EXTENDS ABOVE OPENINGS TO EXTERNAL LEAF REINFORCE AS PER CLAUSE 4.1, 4.2 & 4.3.
- 4.6 TYPICAL WALL SECTIONS ARE SHOWN FOR 28C INTERNAL CEILINGS. WHERE THERE ARE 3 OR MORE BED JOINTS OVER THE OPENING, REINFORCE BED JOINT OVER OPENING WITH MRBL50 MESH. CONTINUE 750 PAST SIDE OF OPENING.
- 4.7 ALL PERPENDS TO BE FULLY MORTARED.
- 4.8 A BRICK COURSE, AS REFERRED TO IN THIS DOCUMENT IS STANDARD 86mm HIGH.
- 4.9 2L6 WIRES MAY BE USED AS AN ALTERNATIVE TO THE MRBL50 MESH. WHERE L6 WIRES ARE USED, ALL SPLICES AND COGS TO BE 500 LONG.

5.0 MAINTENANCE

- 5.1 IT IS CONSIDERED THAT THIS DESIGN IS SUITABLE FOR THE FOUNDATION CONDITIONS TO BE ENCOUNTERED AND WILL ADEQUATELY CONTROL ANY CRACKING OF BRICKWORK AND CONCRETE, SUBJECT TO THE MAINTENANCE PROCEDURES BELOW BEING SATISFIED.
- 5.2 BUILDER TO ENSURE THAT CLIENT BE INFORMED OF NECESSITY TO MAINTAIN DRAINS IN GOOD WORKING ORDER AT ALL TIMES.
- 5.3 BUILDER TO ADVISE CLIENT TO CONSULT AN ENGINEER BEFORE PLANTING TREES OR SHRUBS WITHIN 2.5m, OR A DISTANCE EQUAL TO THE ANTICIPATED MAXIMUM HEIGHT OF THE TREE, OF THE BUILDING.
- 5.4 SITE TO BE MAINTAINED AS PER CSIRO INFORMATION PAMPHLET BTF 18 & STRUCTERRE'S CLAY FACT SHEET.
- 5.5 AS2870 AND 'CSIRO PAMPHLET BTF 18' COVER THE EXPECTED PERFORMANCE AND RESPONSIBILITIES OF ALL PARTIES WITH THE USE OF THESE DETAILS.

6.0 QUALITY CONTROL PROGRAM REQUIREMENTS

- 6.1 WORKING SLAB DEPTH AS INDICATED ON THE DETAIL. SLAB DEPTH TOLERANCE ALLOWABLE -10mm, +15mm.
- 6.2 WHERE DEPTH IS BELOW NOMINATED DEPTH, MAX AREA ALLOWED TO BE ≤ 5% OF THE TOTAL AREA.
- 6.3 DEPTH TESTING LOCATIONS TO BE NO CLOSER THAN 1000mm APART.
- 6.4 SLAB DEPTH IS TO BE PART OF A QUALITY CONTROL INSPECTION REGIME.
- 6.5 SLAB AND FOOTING CAN BE POURED MONOLITHICALLY IF DESIRED.

DATE LAST MODIFIED - 21/09/21



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PROJECT :  
LOT 255 TRANQUAIR PWY DARCH

CLIENT : PARCEL DARCH PTY LTD

SCALE 1:20

DATE 16/11/22

APPROVED

# EXPLANATORY NOTES & STANDARD RECOMMENDATIONS - EQUIVALENT CLASS SITES (Sheet 1 of 2)

## GENERAL

1. THE EXPLANATORY NOTES AND THE STANDARD RECOMMENDATIONS ARE TO BE READ IN CONJUNCTION WITH THE SITE CLASSIFICATION REPORT.
2. ALL REFERRED STANDARDS TO BE THE CURRENT VERSION AT THE TIME OF THE CONSTRUCTION.
3. THE PURPOSE OF THE SITE CLASSIFICATION REPORT IS TO CLASSIFY THE SITE IN ACCORDANCE WITH AS2870 "RESIDENTIAL SLABS AND FOOTING". IT IS NOT INTENDED FOR ANY OTHER PURPOSE, INCLUDING SOLE INFORMATION IN THE PROVISION OF A QUOTATION FOR SITE WORKS. IT IS RECOMMENDED OTHER PARTIES TO PERFORM THEIR OWN INVESTIGATION FOR QUOTATION PURPOSES.
4. THE SITE CLASSIFICATION REPORT WILL INCLUDE BUT IS NOT LIMITED TO:
  - a. THE SITE CLASSIFICATION IN ACCORDANCE WITH AS2870 "RESIDENTIAL SLABS AND FOOTING",
  - b. A WIND CLASSIFICATION IN ACCORDANCE WITH AS4055 "WIND LOADS FOR HOUSING",
  - c. A COASTAL CORROSION CLASSIFICATION,
  - d. ADDITIONAL EARTHWORK RECOMMENDATIONS WHERE APPLICABLE,
  - e. STANDARD FOOTING DESIGN FOR SINGLE STOREY SLAB ON GROUND CONSTRUCTION.
5. THE SITE CLASSIFICATION IS BASED ON THE SITE AS PRESENTED AT THE TIME OF THE ASSESSMENT. THE SITE CLASSIFICATION AND RECOMMENDATIONS INCLUDED IN THE REPORT ARE SUBJECT TO SATISFACTORY COMPLETION OF RECOMMENDED EARTHWORKS, (REFER NOTE 17) AS A MINIMUM. SHOULD CHANGES TO THE SITE OCCUR, OTHER THAN THE RECOMMENDATIONS INCLUDED IN THE SITE CLASSIFICATION REPORT, REFER BACK TO THIS OFFICE FOR REVIEW OF CLASSIFICATION AND FOOTING DESIGN.
6. ALL RECOMMENDATIONS GIVEN IN THE SITE CLASSIFICATION REPORT HAVE BEEN DETERMINED FROM THE INFORMATION THAT WAS AVAILABLE TO THIS OFFICE AT THE TIME OF INVESTIGATION. IF FURTHER INFORMATION RELATING TO THE SITE OR DEVELOPMENT BECOMES AVAILABLE, THESE RECOMMENDATIONS ARE SUBJECT TO CHANGE.
7. EQUIVALENT CLASS SITES ARE BASED ON DIFFERENTIAL SURFACE MOVEMENT ARISING FROM ISSUE OTHER THAN SHRINK-SWELL (REACTIVITY) ONLY. THESE MAY INCLUDE SETTLEMENT AND/OR CONSOLIDATION THAT MAY OCCUR AS A RESULT OF THE UNDERLYING GROUND CONDITIONS.
8. BOREHOLES EXCAVATED REVEAL THE SOIL PROFILE AT THE BOREHOLE LOCATION ONLY. FROM THIS, IT IS INFERRED THAT THESE ARE THE SOIL CONDITIONS OVER THE SITE. VARIATIONS CAN OCCUR WHICH MAY NOT HAVE BEEN DETECTED AT THE INVESTIGATION STAGE. ANY ANOMALIES SHOULD BE REFERRED BACK TO THIS OFFICE FOR A REASSESSMENT.
9. A NUMBER OF BOREHOLES ARE CONDUCTED ACROSS THE SITE TO DETERMINE THE SOIL PROFILES AND PROVIDE A REPRESENTATION OF THE GROUND CONDITIONS.
10. THIS REPORT IS FOR STRUCTERRE ONLY TO USE IN DESIGN. ANY DESIGN BY ANYONE ELSE FOR ANY STRUCTURE MUST BE SPECIFICALLY APPROVED BY STRUCTERRE. IF USED BY ANYONE ELSE FOR ANYTHING OTHER THAN A STRUCTERRE DESIGN OR STRUCTURE, STRUCTERRE TAKES NO RESPONSIBILITY.

## SAND PAD

11. THE RECOMMENDED FOOTING DESIGN IS ONLY TO BE USED IN CONJUNCTION WITH THE RECOMMENDED SAND PAD AND EARTHWORKS AS OUTLINED IN THE SITE CLASSIFICATION REPORT.
12. THE RECOMMENDATIONS FOR THE SAND PAD IS FOR STRUCTURAL PURPOSES ONLY, AND DOES NOT PROVIDE THE MINIMUM FINISHED PAD LEVEL IN RELATION TO FLOOD LEVELS OR DEPTH TO GROUNDWATER. SHOULD THE TEST BE LOCATED IN A LOW LYING OR FLOOD PRONE AREA, REFER TO THE LOCAL AUTHORITY FOR MINIMUM BUILDING HEIGHT.
13. IMPORTED FILL FOR USE AS A SAND PAD TO BE IN ACCORDANCE TO AS 3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS" WHICH INCLUDES BUT IS NOT LIMITED TO: BE FREE FROM ANY DELETERIOUS MATERIALS INCLUDING ORGANICS, (ROOTS, STUMPS, GRASSES, DECOMPOSED ORGANICS - PEAT, TIMBER, ETC), BUILDING RUBBLE, GLASS, PLASTICS OR WASTE MATERIAL. THE FINES CONTENT, (PERCENTAGE PASSING THE 0.075mm SIEVE) TO BE LESS THAN 5% BY MASS.
14. ON SAND SITES A SAND PAD IS NOT REQUIRED STRUCTURALLY, HOWEVER IF ROCK IS ENCOUNTERED, A MINIMUM 200mm SAND PAD BEYOND THE BASE OF FOOTING IS RECOMMENDED.
15. SAND PAD TO EXTEND BEYOND BUILDING AREA A MINIMUM OF 1.5 TIMES THE PAD DEPTH.
16. RECOMMENDED SAND PAD DEPTH IS ABOVE THE HIGHEST POINT, UNLESS OTHERWISE SPECIFIED.
17. IT IS REQUIRED THAT EARTHWORKS CONFIRM THAT THE MINIMUM DEPTH OF RECOMMENDED SAND PAD IS ACHIEVED.

## EARTHWORKS

18. RECOMMENDED EARTHWORKS TO BE CONDUCTED IN ACCORDANCE WITH AS3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS", AND TO INCLUDE BUT NOT BE LIMITED TO:
  - a. REMOVAL OF ALL VEGETATION, TOPSOILS, UNCONTROLLED FILLS AND OTHER DELETERIOUS MATERIALS FROM THE BUILDING AREA,
  - b. GRUBBING OUT OF ANY TREES ENSURING THE REMAINING HOLES ARE BACKFILLED WITH CLEAN COMPACTED SAND,
  - c. NOTIFYING THE ENGINEER OF ANY UNUSUAL FEATURE OR DISCREPANCY THAT MAY BECOME EVIDENT DURING EARTHWORKS, PRIOR TO PROCEEDING,
  - d. COMPACTING TO MEET THE REQUIREMENTS AS OUTLINED IN AS 3798 TABLE 5.1.
19. FILL MATERIAL (WHICH IS NOT ALWAYS APPARENT AT THE INITIAL INVESTIGATION STAGE) IS TO BE DEALT WITH AS FOLLOWS:
  - a. IF IT IS CERTIFIED BY OTHERS IT CAN REMAIN.
  - b. IF IT IS NOT CERTIFIED WILL REQUIRE REMOVAL DOWN TO NATURAL GROUND OR VERIFIED. ANY SAND CAN BE REUSED.
  - c. IF A PAD HAS ALREADY BEEN CONSTRUCTED, THE SITE CLASSIFICATION IS NOT CERTIFICATION OF THE PAD. CONTACT THIS OFFICE SHOULD A SAND PAD CERTIFICATION BE REQUIRED.
20. ANY ORGANIC MATTER OR ROOTS ENCOUNTERED, WHICH IS BEYOND WHAT IS NORMALLY CONSIDERED ACCEPTABLE IS TO BE REMOVED. THIS WILL NECESSITATE RAKING THE SITE TO REMOVE ORGANIC MATERIAL, TURNING THE SITE OVER AND RE-COMPACTING TO A MINIMUM.

## RETAINING WALLS

21. AN ASSESSMENT OF ANY EXISTING OR PROPOSED RETAINING WALLS HAS NOT BEEN CONDUCTED AS PART OF THIS SITE CLASSIFICATION REPORT.
22. IF THE PROPOSED BUILDING IS TO BE LOCATED CLOSER THAN THE HEIGHT OF THE RETAINING WALL, THIS MAY PLACE ADDITIONAL LOADS ON THE WALL THAT WERE NOT INITIALLY DESIGNED FOR. AN INSPECTION OF THE STRUCTURAL INTEGRITY OF THE RETAINING WALL WILL BE REQUIRED TO PROVIDE CERTIFICATION AND/OR RECOMMENDATIONS PRIOR TO ANY CONSTRUCTION. PLEASE REFER BACK TO THIS OFFICE FOR ASSISTANCE.  
STORMWATER DRAINAGE
23. UNLESS OTHERWISE SPECIFIED, ALL SOAKWELLS ARE TO BE LOCATED THE DEPTH OF THE SOAKWELL AWAY FROM THE BUILDING OR SETBACK A MINIMUM OF 1200mm, WHICHEVER IS GREATER, UNLESS SPECIFIED OTHERWISE. PLEASE REFER BACK TO THIS OFFICE IF THE SETBACK CANNOT BE ACHIEVED.

DOC# SS001 - 1.1.10 SCR EQUIVALENT V1.1 - AUGUST 2021



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PROJECT :  
LOT 255 TRANQUAIR PWY DARCH

CLIENT : PARCEL DARCH PTY LTD

SCALE 1:20

DATE 16/11/22

APPROVED

## EXPLANATORY NOTES & STANDARD RECOMMENDATIONS - EQUIVALENT CLASS SITES (Sheet 2 of 2)

### WIND CLASSIFICATION

24. WIND CLASSIFICATION IS GIVEN FOR THE EXPECTED CONDITION 5 YEARS HENCE. THIS CLASSIFICATION IS LIMITED TO BUILDINGS CLASSES 1 AND 10, WHICH HAVE THE FOLLOWING LIMITATION (AS PER AS4055):

- a. MAXIMUM DISTANCE FROM THE GROUND LEVEL TO THE UNDERSIDE OF EAVES SHALL NOT EXCEED 6.0m,
- b. MAXIMUM DISTANCE FROM GROUND LEVEL TO THE HIGHEST POINT OF THE ROOF, EXCLUDING CHIMNEYS, SHALL NOT EXCEED 8.5m,
- c. THE ROOF PITCH SHALL NOT EXCEED 35 °,
- d. THE WIDTH, EXCLUDING EAVES, SHALL NOT EXCEED 16.0m AND THE LENGTH SHALL NOT EXCEED 5x THE WIDTH.

IF THE BUILDING FALLS OUTSIDE OF THESE LIMITATIONS, THE STATED WIND CLASSIFICATION DOES NOT APPLY. REFER BACK TO THIS OFFICE FOR A REVISED WIND CLASSIFICATION.

### ENVIRONMENTAL

25. NO ENVIRONMENTAL ASSESSMENT OF THIS SITE HAS BEEN UNDERTAKEN. SHOULD AN ENVIRONMENTAL ASSESSMENT BE REQUIRED, PLEASE CONTACT THIS OFFICE.

### SEISMIC

26. RECOMMENDED FOOTING DETAILS ARE SUITABLE FOR SEISMIC CONDITIONS WITH AN EARTHQUAKE HAZARD FACTOR OF  $\leq 0.11$ . RECOMMENDED FOOTING DETAILS PROVIDED FOR SITES WITH AN EARTHQUAKE HAZARD FACTOR OF  $> 0.11$ , ARE NOT FOR CONSTRUCTION, BUT FOR COSTING PURPOSES ONLY. IT IS REQUIRED THAT A FULL SEISMIC DESIGN IS CONDUCTED.

### CORROSION CLASSIFICATION

27. THE CORROSION CLASSIFICATION HAS BEEN ASSESSED IN ACCORDANCE WITH AS3700.

DOC# SS001 - 1.1.10 SCR EQUIVALENT V1.1 - AUGUST 2021



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PROJECT :  
LOT 255 TRANQUAIR PWY DARCH

CLIENT : PARCEL DARCH PTY LTD

SCALE 1:20

DATE 16/11/22

APPROVED

A blue ink handwritten signature is written over the 'APPROVED' field.

**SITE CLASSIFICATION REPORT**  
CERTIFICATE 2595168

**CLIENT** PARCEL DARCH PTY LTD  
**JOB ADDRESS** LOT 256 ATTADALE AV DARCH  
**CLIENT JOB NO.**  
**OWNER**  
**STRUCTERRE JOB NO.** S1082655  
**DATE OF ASSESSMENT** 15/11/22

**SITE RECORD**

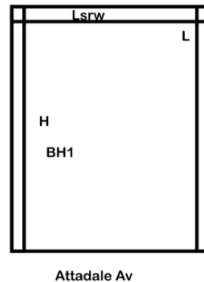


<b>SITE CLASSIFICATION</b>	<b>S - EQUIVALENT</b> <i>(in accordance with AS2870)</i>
<b>FOOTING DETAIL</b>	<b>CM3</b>
<b>SAND PAD</b>	<b>No sand pad required structurally</b>
<b>BUSHFIRE PRONE AREA</b>	<b>Not in a Bushfire Prone Area (see NOTE 2.)</b>
<b>CORROSION CLASSIFICATION</b>	<b>R1</b> <i>(Durability Class in accordance with AS3700)</i>
<b>WIND CLASSIFICATION</b>	<b>N1</b> <i>(in accordance with AS4055)</i>
-TERRAIN CATEGORY	3
-TOPOGRAPHIC	T0
-SHIELDING	Full Shielding

## SOIL PROFILE

BOREHOLE 1: 0 - 900 FILL sand with artificial material trace limestone gravel - grey; 900 hard ground refusal.

## APPROXIMATE BOREHOLE LOCATIONS



### NOTE 1 Explanatory Notes & Standard Recommendations

This site classification report must be read in conjunction with the applicable Explanatory Notes & Standard Recommendations. For A Class sites, refer to the Explanatory Notes and Standard Recommendations for Stable (A Class) Sites, version 1.0 July 2018. For S, M, H1, H2 & E Class sites, refer to the Explanatory Notes and Standard Recommendations for Reactive (S, M, H1, H2 & E Class) Sites version 1.0 July 2018. For Equivalent Class sites, refer to the Explanatory Notes and Standard Recommendations for Equivalent Class Sites, version 1.0 July 2018.

### NOTE 2 Bushfire - Prone Area

The Site may be situated in a bush fire prone area in accordance with the Department of Fire and Emergency Services (DFES) Bushfire Prone Area Map (Reference: <http://www.dfes.wa.gov.au/regulationandcompliance/bushfireproneareas/>) the current version at the time of this assessment. A Bushfire Attack Level (BAL) assessment may be required for this site, please confirm with the local authority. Should you require an assessment, please contact this Office.

## ADDITIONAL NOTES / REQUIREMENTS

### Site Condition

At the time of inspection the site was considered to be level and cleared. For specific levels of this site or topographical features, please refer to a professional site survey.

### Structerre Geotech Reference

The Site Classification is based on any remedial works being successfully completed as outlined in the Structerre Geotechnical Report J380185 dated 02/04/2021. The footing details are subject to the recommendations being completed to an acceptable level as outlined in this report, if applicable.

### Internal Thickenings

Internal thickenings are required for the proposed residence as specified on the recommended footing detail. Please provide a copy of the architectural drawings to this Office, so that the internal thickenings can be designed and drawn in accordance with AS2870.

### Internal Thickening Inspection

This detail is subject to a internal thickening layout inspection. It is recommended that an inspection be conducted by a representative from this Office prior to concrete pour.

-- END OF REPORT --



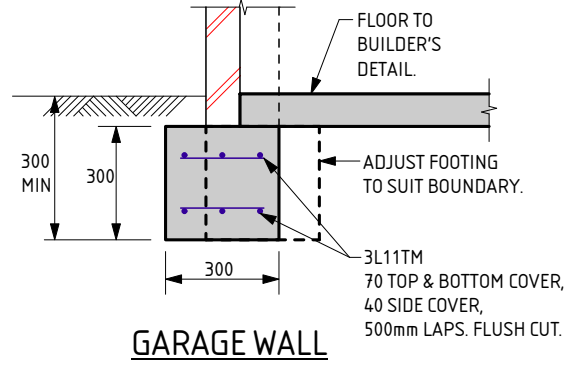
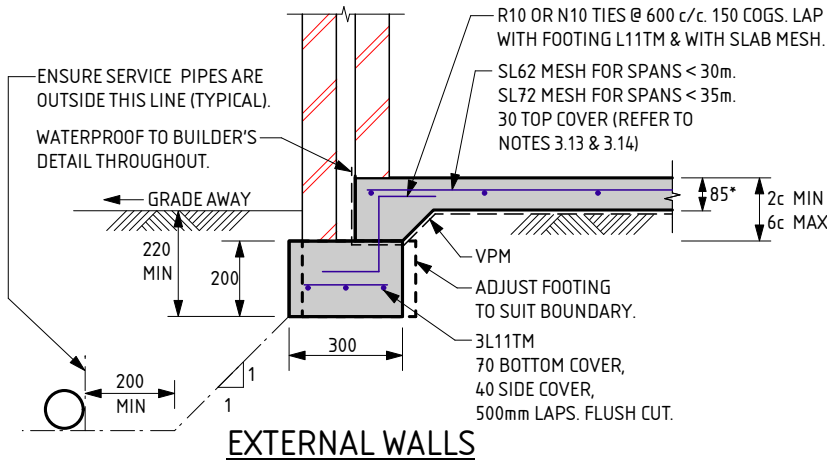
CERTIFICATE 2595168

Issued Date: 16 November 2022

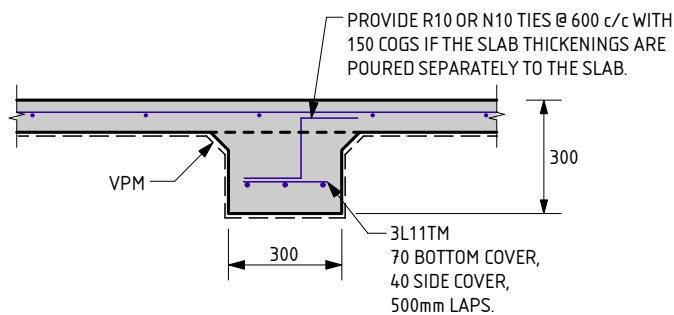
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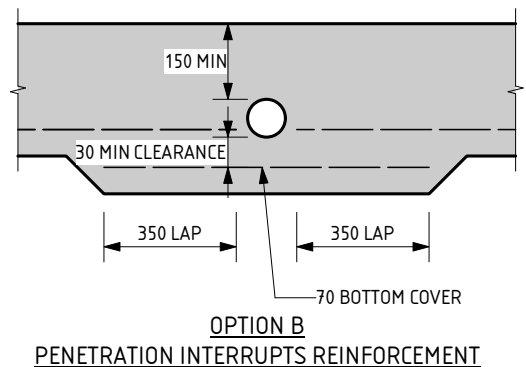
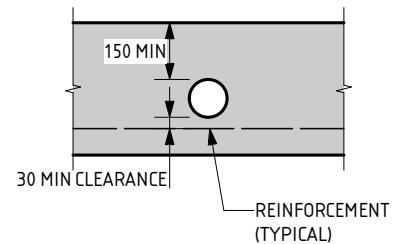
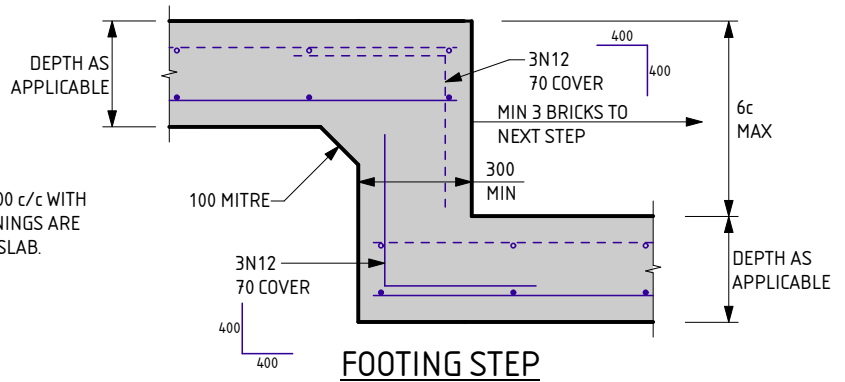
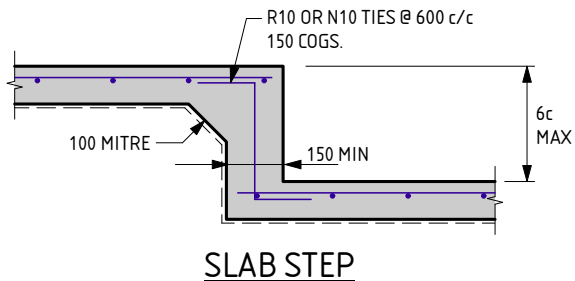
Gervase Purich  
Chief Executive Officer



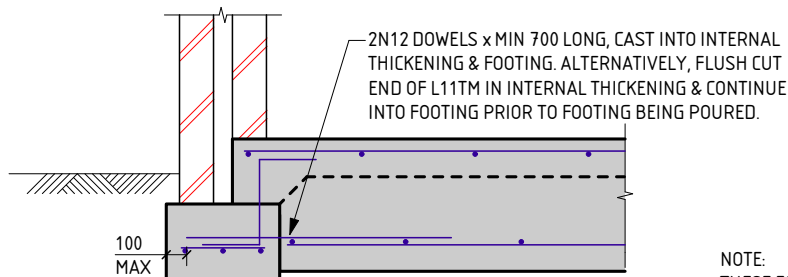
\* 100mm SLAB MAY BE INSTALLED INSTEAD OF 85mm.  
IF 100mm SLAB USED, MESH TO BE:  
SL62 MESH FOR SPANS < 25m.  
SL72 MESH FOR SPANS < 30m.  
SL82 MESH FOR SPANS < 35m.



REFER TO STRUCTERRE'S DRAWINGS FOR PLACEMENT OF INTERNAL THICKENINGS. LOCATIONS TO BE CONFIRMED ON SITE BY STRUCTERRE PRIOR TO CONCRETE POUR.



**SERVICE PIPE DIAGRAM**  
- MAXIMUM PENETRATION SIZE TO BE Ø150.



**EXTERNAL FOOTING TO INTERNAL THICKENING**

THIS DETAIL IS EQUIVALENT TO  
STRUCTERRE FOOTING DETAIL C4.0

NOTE:  
THESE FOOTING DETAILS ARE TO BE READ IN CONJUNCTION WITH THE REACTIVE SITE NOTES.

THE APPROVED SIGNATURE ON THIS DETAIL ENDORSES ITS USE FOR SINGLE STOREY BUILDINGS ON BUILDING PLATFORMS WITH UP TO 11mm OF SURFACE MOVEMENT.  
DATE LAST MODIFIED - 20/09/18

**CM3**  
CAVITY MASONRY

**STRUCterre**  
consulting engineers

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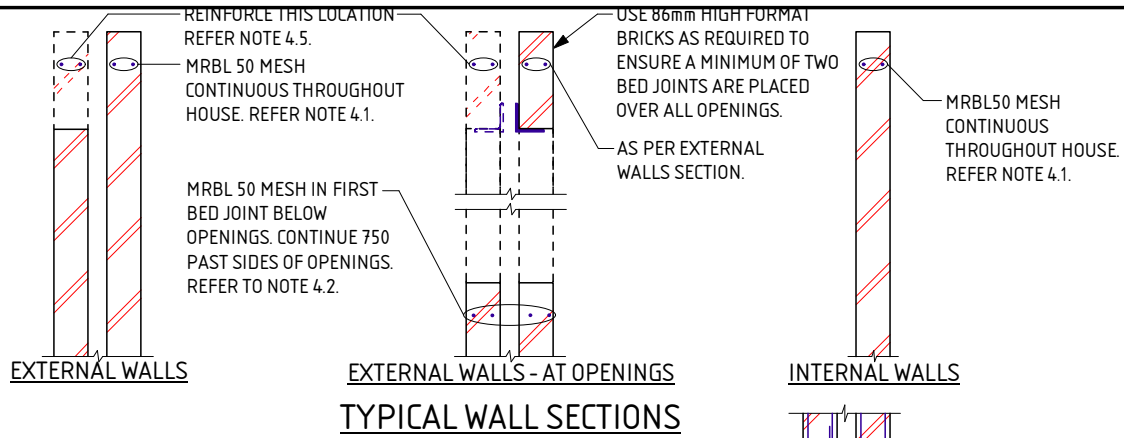
PROJECT:  
LOT 256 ATTADALE AV DARCH

CLIENT: PARCEL DARCH PTY LTD

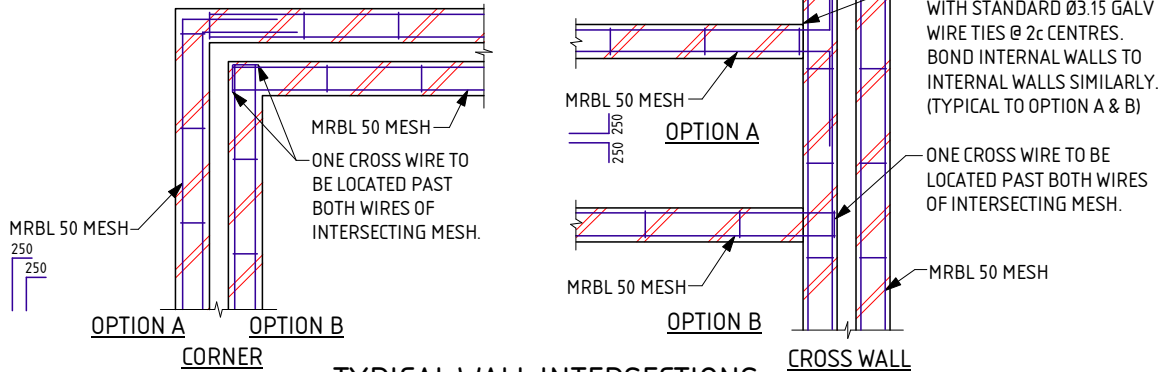
SCALE 1:20

DATE 16/11/22

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TYPICAL WALL SECTIONS



TYPICAL WALL INTERSECTIONS

REACTIVE SITE NOTES FOR CM1 - CM7

THESE NOTES ARE TO BE READ IN CONJUNCTION WITH THE ATTACHED FOOTING DETAILS.

1.0 SITE CLASSIFICATION

- 1.1 REFER TO ATTACHED CERTIFICATE OF INSPECTION FOR SITE CLASSIFICATION. THE SITE CLASSIFICATION NOTED, IS AS DEFINED IN AS2870 - RESIDENTIAL SLABS & FOOTINGS.
- 1.2 THE SITE CLASSIFICATION HAS BEEN DETERMINED BY INVESTIGATION OF THE SITE, AS PER THE ATTACHED CERTIFICATE OF INSPECTION. REFER TO THE ATTACHED CERTIFICATE FOR ANY SPECIAL REQUIREMENTS.

2.0 EARTHWORKS

- 2.1 SAND PAD IF APPLICABLE TO BE AS PER SITE INSPECTION REPORT.
- 2.2 EARTHWORKS SHALL INCLUDE, BUT NOT BE LIMITED TO:
  - a) REMOVE ALL ORGANIC MATERIAL FROM THE PAD AREA.
  - b) REMOVE ALL RUBBISH AND DELETERIOUS FILL (SUCH AS CLAY FILL) FROM THE PAD AREA.
  - c) GRUB OUT ANY TREES WHERE NECESSARY AND ENSURE THE REMAINING HOLES ARE FILLED AND COMPACTED SATISFACTORILY WITH SAND.
  - d) NOTIFY THE ENGINEER OF ANY UNUSUAL FEATURES OR DISCREPANCIES WHICH MAY BECOME EVIDENT DURING EARTHWORKS, PRIOR TO PROCEEDING.
- 2.3 ANY PREDOMINANT ROCK IN THE HOUSE PAD AREAS IS TO BE INSPECTED BY THE ENGINEER.
- 2.4 ANY CUT TO THE SITE, OTHER THAN TOPSOIL STRIPPING, WILL REQUIRE THE PREPARED CUT BASE TO BE INSPECTED AND APPROVED BY THE ENGINEER.
- 2.5 MAXIMUM SAND PAD DEPTH NOT TO EXCEED 150% OF MINIMUM PAD DEPTH OR 2000mm WITHOUT THE ENGINEER'S APPROVAL.
- 2.6 IF APPLICABLE SAND FILL TO BE CLEAN WELL DRAINED, WITH MAX FINES (PARTICLES UP TO 0.075mm) CONTENT OF 5%. SAND TO BE COMPACTED TO A MIN 6 BLOWS/300mm FOR THE DEPTH OF THE PAD OR TO DISCRETION OF ENGINEER.
- 2.7 COMPACTION TESTING TO BE PERFORMED BY STRUCTERRE.

3.0 FOOTINGS & SLABS

- 3.1 FOOTINGS ARE TO BE PLACED DIRECTLY INTO SAND PAD OF SPECIFIED THICKNESS.
- 3.2 ALL STORMWATER MUST BE DISCHARGED INTO COUNCIL DRAINS OR A MINIMUM OF 3m FOR S CLASS SITES, 4m FOR M CLASS SITES AND 5m FOR H1 & H2 CLASS SITES, AWAY FROM THE RESIDENCE AND/OR ADJACENT BUILDINGS INTO SOAKWELLS. IF THIS RESTRICTION CANNOT BE ACHIEVED REFER BACK TO THIS OFFICE FOR AN ALTERNATIVE DESIGN. WHERE THE SITE HAS BEEN CLASSIFIED AS AN 'EQUIVALENT' SITE CLASSIFICATION, REFER TO 'EXPLANATORY NOTES & STANDARD RECOMMENDATIONS - EQUIVALENT CLASS SITES' FOR STORMWATER DRAINAGE REQUIREMENTS UNLESS SPECIFIED OTHERWISE.
- 3.3 EXCAVATIONS FOR ALL SERVICE PIPES NOT TO UNDERMINE FOOTINGS. IF UNDERMINING IS LIKELY TO OCCUR, CONTACT THE ENGINEER PRIOR TO PROCEEDING.
- 3.4 WHERE PLUMBING PIPES PASS THROUGH FOOTINGS OR SLAB, SPECIFIED TOTAL THICKNESS OF ALL CONCRETE IS ALWAYS TO BE MAINTAINED.
- 3.5 SETDOWN AT WET AREA TO ARCHITECTURAL REQUIREMENT (50mm MAX). MAINTAIN 85mm SLAB THICKNESS. FOLD MESH DOWN TO MAINTAIN COVER, PLACE DIAGONAL BARS AT RE-ENTRANT CORNER FOR STEPS OVER 30mm. BARS TO BE N12x 1200 LONG.
- 3.6 REINFORCEMENT SHALL BE IN ACCORDANCE WITH THE FOLLOWING STANDARDS;
 

L	INDICATES PLAIN OR DEFORMED WIRE R500L OR D500L TO AS/NZS 4671.
SL	INDICATES DEFORMED SQUARE MESH D500L TO AS/NZS 4671.
N	INDICATES DEFORMED BARS D500N TO AS/NZS 4671.
TM SUFFIX	INDICATES TRENCH MESH USING DEFORMED BARS D500L TO AS/NZS 4671.

 ALL STEELWORK TO BE TREATED IN ACCORDANCE WITH TABLE 3.4.4.4 "CORROSION PROTECTION" OF THE BUILDING CODE OF AUSTRALIA.
- 3.7 LAP ALL MESH TWO TRANSVERSE WIRES PLUS 25mm OR TO MANUFACTURER'S SPECIFICATIONS.

3.8 CONCRETE TO CONFORM WITH AS 3600.

- 3.9 BLENDED CEMENT TO CONFORM WITH AS1317.
- 3.10 ALL CONCRETE TO BE N20/20/100.
- 3.11 FOR ISOLATED PAD FOOTINGS, REFER BACK TO ENGINEER.
- 3.12 FOOTING POSITION UNDER BRICKWORK CAN BE ADJUSTED TO SUIT PARAPET WALLS.
- 3.13 FOR SLAB SPANS > 35m REFER TO ENGINEER FOR MESH SIZE.
- 3.14 IF THE LENGTH TO WIDTH RATIO OF THE GROUND SLAB OR ANY PART OF THE GROUND SLAB EXCEEDS 3:1, REFER BACK TO THIS OFFICE FOR MESH SIZE.
- 3.15 IF POLISHED (OR HONED) CONCRETE FINISHES ARE DESIRED, THIS DESIGN SHOULD BE REFERRED BACK TO THIS OFFICE FOR CONSIDERATION, AS IT IS NOT THE INTENTION OF THESE DESIGNS FOR SUCH FINISHES.
- 3.16 PLACE SLAB THICKENING (300 WIDE x 250 DEEP) UNDER INTERNAL WALLS (90 OR 110) HIGHER THAN 3.7m WHERE GREATER THAN 1m FROM INTERNAL THICKENING. PROVIDE SAME TRENCH MESH AS INTERNAL THICKENING DETAIL, WHERE REQUIRED.
- 3.17 PIERCING THE VAPOUR BARRIER (VPM) USING LEVELLING PINS ON FREE DRAINING SAND PADS IS ALLOWABLE.
- 3.18 CURE SLAB AS DETERMINED BY ENGINEER.
- 3.19 THE SLAB IS CONSIDERED SUITABLE AS A PHYSICAL BARRIER AGAINST INGRESS OF TERMITES. IF THE FOOTING AND SLAB IS PLACED IN 2 POURS, THE PHYSICAL BARRIER ALSO INCLUDES THE FOOTING AND SLAB JOINTING.
- 3.20 THE FOOTING DETAILS HAVE BEEN DESIGNED IN ACCORDANCE WITH AS3600 AND SECTION 4 OF AS2870.

4.0 MASONRY

- 4.1 PLACE MRBL50 MESH IN TOP BED JOINT CONTINUOUS THROUGHOUT ALL BRICKWORK.
- 4.2 REINFORCE BED JOINT BELOW WINDOW SILLS WITH MRBL50 MESH. CONTINUE 750 PAST SIDES OF OPENING.
- 4.3 LAP 250 AT SPLICES AND AROUND CORNERS AND COG 250 INTO INTERSECTING WALLS. 20mm COVER TO ALL WIRES.
- 4.4 ALL MESH IN EXTERNAL FACE OF EXTERNAL LEAF TO BE GALVANIZED TO AS/NZS 4680.
- 4.5 WHEN BRICKWORK EXTENDS ABOVE OPENINGS TO EXTERNAL LEAF REINFORCE AS PER CLAUSE 4.1, 4.2 & 4.3.
- 4.6 TYPICAL WALL SECTIONS ARE SHOWN FOR 28C INTERNAL CEILINGS. WHERE THERE ARE 3 OR MORE BED JOINTS OVER THE OPENING, REINFORCE BED JOINT OVER OPENING WITH MRBL50 MESH. CONTINUE 750 PAST SIDE OF OPENING.
- 4.7 ALL PERPENDS TO BE FULLY MORTARED.
- 4.8 A BRICK COURSE, AS REFERRED TO IN THIS DOCUMENT IS STANDARD 86mm HIGH.
- 4.9 2L6 WIRES MAY BE USED AS AN ALTERNATIVE TO THE MRBL50 MESH. WHERE L6 WIRES ARE USED, ALL SPLICES AND COGS TO BE 500 LONG.

5.0 MAINTENANCE

- 5.1 IT IS CONSIDERED THAT THIS DESIGN IS SUITABLE FOR THE FOUNDATION CONDITIONS TO BE ENCOUNTERED AND WILL ADEQUATELY CONTROL ANY CRACKING OF BRICKWORK AND CONCRETE, SUBJECT TO THE MAINTENANCE PROCEDURES BELOW BEING SATISFIED.
- 5.2 BUILDER TO ENSURE THAT CLIENT BE INFORMED OF NECESSITY TO MAINTAIN DRAINS IN GOOD WORKING ORDER AT ALL TIMES.
- 5.3 BUILDER TO ADVISE CLIENT TO CONSULT AN ENGINEER BEFORE PLANTING TREES OR SHRUBS WITHIN 2.5m, OR A DISTANCE EQUAL TO THE ANTICIPATED MAXIMUM HEIGHT OF THE TREE, OF THE BUILDING.
- 5.4 SITE TO BE MAINTAINED AS PER CSIRO INFORMATION PAMPHLET BTF 18 & STRUCTERRE'S CLAY FACT SHEET.
- 5.5 AS2870 AND 'CSIRO PAMPHLET BTF 18' COVER THE EXPECTED PERFORMANCE AND RESPONSIBILITIES OF ALL PARTIES WITH THE USE OF THESE DETAILS.

6.0 QUALITY CONTROL PROGRAM REQUIREMENTS

- 6.1 WORKING SLAB DEPTH AS INDICATED ON THE DETAIL. SLAB DEPTH TOLERANCE ALLOWABLE -10mm, +15mm.
- 6.2 WHERE DEPTH IS BELOW NOMINATED DEPTH, MAX AREA ALLOWED TO BE ≤ 5% OF THE TOTAL AREA.
- 6.3 DEPTH TESTING LOCATIONS TO BE NO CLOSER THAN 1000mm APART.
- 6.4 SLAB DEPTH IS TO BE PART OF A QUALITY CONTROL INSPECTION REGIME.
- 6.5 SLAB AND FOOTING CAN BE POURED MONOLITHICALLY IF DESIRED.

DATE LAST MODIFIED - 21/09/21



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PROJECT : LOT 256 ATTADALE AV DARCH

CLIENT : PARCEL DARCH PTY LTD

SCALE 1:20

DATE 16/11/22

APPROVED

## EXPLANATORY NOTES & STANDARD RECOMMENDATIONS - EQUIVALENT CLASS SITES (Sheet 1 of 2)

### GENERAL

1. THE EXPLANATORY NOTES AND THE STANDARD RECOMMENDATIONS ARE TO BE READ IN CONJUNCTION WITH THE SITE CLASSIFICATION REPORT.
2. ALL REFERRED STANDARDS TO BE THE CURRENT VERSION AT THE TIME OF THE CONSTRUCTION.
3. THE PURPOSE OF THE SITE CLASSIFICATION REPORT IS TO CLASSIFY THE SITE IN ACCORDANCE WITH AS2870 "RESIDENTIAL SLABS AND FOOTING". IT IS NOT INTENDED FOR ANY OTHER PURPOSE, INCLUDING SOLE INFORMATION IN THE PROVISION OF A QUOTATION FOR SITE WORKS. IT IS RECOMMENDED OTHER PARTIES TO PERFORM THEIR OWN INVESTIGATION FOR QUOTATION PURPOSES.
4. THE SITE CLASSIFICATION REPORT WILL INCLUDE BUT IS NOT LIMITED TO:
  - a. THE SITE CLASSIFICATION IN ACCORDANCE WITH AS2870 "RESIDENTIAL SLABS AND FOOTING",
  - b. A WIND CLASSIFICATION IN ACCORDANCE WITH AS4055 "WIND LOADS FOR HOUSING",
  - c. A COASTAL CORROSION CLASSIFICATION,
  - d. ADDITIONAL EARTHWORK RECOMMENDATIONS WHERE APPLICABLE,
  - e. STANDARD FOOTING DESIGN FOR SINGLE STOREY SLAB ON GROUND CONSTRUCTION.
5. THE SITE CLASSIFICATION IS BASED ON THE SITE AS PRESENTED AT THE TIME OF THE ASSESSMENT. THE SITE CLASSIFICATION AND RECOMMENDATIONS INCLUDED IN THE REPORT ARE SUBJECT TO SATISFACTORY COMPLETION OF RECOMMENDED EARTHWORKS, (REFER NOTE 17) AS A MINIMUM. SHOULD CHANGES TO THE SITE OCCUR, OTHER THAN THE RECOMMENDATIONS INCLUDED IN THE SITE CLASSIFICATION REPORT, REFER BACK TO THIS OFFICE FOR REVIEW OF CLASSIFICATION AND FOOTING DESIGN.
6. ALL RECOMMENDATIONS GIVEN IN THE SITE CLASSIFICATION REPORT HAVE BEEN DETERMINED FROM THE INFORMATION THAT WAS AVAILABLE TO THIS OFFICE AT THE TIME OF INVESTIGATION. IF FURTHER INFORMATION RELATING TO THE SITE OR DEVELOPMENT BECOMES AVAILABLE, THESE RECOMMENDATIONS ARE SUBJECT TO CHANGE.
7. EQUIVALENT CLASS SITES ARE BASED ON DIFFERENTIAL SURFACE MOVEMENT ARISING FROM ISSUE OTHER THAN SHRINK-SWELL (REACTIVITY) ONLY. THESE MAY INCLUDE SETTLEMENT AND/OR CONSOLIDATION THAT MAY OCCUR AS A RESULT OF THE UNDERLYING GROUND CONDITIONS.
8. BOREHOLES EXCAVATED REVEAL THE SOIL PROFILE AT THE BOREHOLE LOCATION ONLY. FROM THIS, IT IS INFERRED THAT THESE ARE THE SOIL CONDITIONS OVER THE SITE. VARIATIONS CAN OCCUR WHICH MAY NOT HAVE BEEN DETECTED AT THE INVESTIGATION STAGE. ANY ANOMALIES SHOULD BE REFERRED BACK TO THIS OFFICE FOR A REASSESSMENT.
9. A NUMBER OF BOREHOLES ARE CONDUCTED ACROSS THE SITE TO DETERMINE THE SOIL PROFILES AND PROVIDE A REPRESENTATION OF THE GROUND CONDITIONS.
10. THIS REPORT IS FOR STRUCTERRE ONLY TO USE IN DESIGN. ANY DESIGN BY ANYONE ELSE FOR ANY STRUCTURE MUST BE SPECIFICALLY APPROVED BY STRUCTERRE. IF USED BY ANYONE ELSE FOR ANYTHING OTHER THAN A STRUCTERRE DESIGN OR STRUCTURE, STRUCTERRE TAKES NO RESPONSIBILITY.

### SAND PAD

11. THE RECOMMENDED FOOTING DESIGN IS ONLY TO BE USED IN CONJUNCTION WITH THE RECOMMENDED SAND PAD AND EARTHWORKS AS OUTLINED IN THE SITE CLASSIFICATION REPORT.
12. THE RECOMMENDATIONS FOR THE SAND PAD IS FOR STRUCTURAL PURPOSES ONLY, AND DOES NOT PROVIDE THE MINIMUM FINISHED PAD LEVEL IN RELATION TO FLOOD LEVELS OR DEPTH TO GROUNDWATER. SHOULD THE TEST BE LOCATED IN A LOW LYING OR FLOOD PRONE AREA, REFER TO THE LOCAL AUTHORITY FOR MINIMUM BUILDING HEIGHT.
13. IMPORTED FILL FOR USE AS A SAND PAD TO BE IN ACCORDANCE TO AS 3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS" WHICH INCLUDES BUT IS NOT LIMITED TO: BE FREE FROM ANY DELETERIOUS MATERIALS INCLUDING ORGANICS, (ROOTS, STUMPS, GRASSES, DECOMPOSED ORGANICS - PEAT, TIMBER, ETC), BUILDING RUBBLE, GLASS, PLASTICS OR WASTE MATERIAL. THE FINES CONTENT, (PERCENTAGE PASSING THE 0.075mm SIEVE) TO BE LESS THAN 5% BY MASS.
14. ON SAND SITES A SAND PAD IS NOT REQUIRED STRUCTURALLY, HOWEVER IF ROCK IS ENCOUNTERED, A MINIMUM 200mm SAND PAD BEYOND THE BASE OF FOOTING IS RECOMMENDED.
15. SAND PAD TO EXTEND BEYOND BUILDING AREA A MINIMUM OF 1.5 TIMES THE PAD DEPTH.
16. RECOMMENDED SAND PAD DEPTH IS ABOVE THE HIGHEST POINT, UNLESS OTHERWISE SPECIFIED.
17. IT IS REQUIRED THAT EARTHWORKS CONFIRM THAT THE MINIMUM DEPTH OF RECOMMENDED SAND PAD IS ACHIEVED.

### EARTHWORKS

18. RECOMMENDED EARTHWORKS TO BE CONDUCTED IN ACCORDANCE WITH AS3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS", AND TO INCLUDE BUT NOT BE LIMITED TO:
  - a. REMOVAL OF ALL VEGETATION, TOPSOILS, UNCONTROLLED FILLS AND OTHER DELETERIOUS MATERIALS FROM THE BUILDING AREA,
  - b. GRUBBING OUT OF ANY TREES ENSURING THE REMAINING HOLES ARE BACKFILLED WITH CLEAN COMPACTED SAND,
  - c. NOTIFYING THE ENGINEER OF ANY UNUSUAL FEATURE OR DISCREPANCY THAT MAY BECOME EVIDENT DURING EARTHWORKS, PRIOR TO PROCEEDING,
  - d. COMPACTING TO MEET THE REQUIREMENTS AS OUTLINED IN AS 3798 TABLE 5.1.
19. FILL MATERIAL (WHICH IS NOT ALWAYS APPARENT AT THE INITIAL INVESTIGATION STAGE) IS TO BE DEALT WITH AS FOLLOWS:
  - a. IF IT IS CERTIFIED BY OTHERS IT CAN REMAIN.
  - b. IF IT IS NOT CERTIFIED WILL REQUIRE REMOVAL DOWN TO NATURAL GROUND OR VERIFIED. ANY SAND CAN BE REUSED.
  - c. IF A PAD HAS ALREADY BEEN CONSTRUCTED, THE SITE CLASSIFICATION IS NOT CERTIFICATION OF THE PAD. CONTACT THIS OFFICE SHOULD A SAND PAD CERTIFICATION BE REQUIRED.
20. ANY ORGANIC MATTER OR ROOTS ENCOUNTERED, WHICH IS BEYOND WHAT IS NORMALLY CONSIDERED ACCEPTABLE IS TO BE REMOVED. THIS WILL NECESSITATE RAKING THE SITE TO REMOVE ORGANIC MATERIAL, TURNING THE SITE OVER AND RE-COMPACTING TO A MINIMUM.

### RETAINING WALLS

21. AN ASSESSMENT OF ANY EXISTING OR PROPOSED RETAINING WALLS HAS NOT BEEN CONDUCTED AS PART OF THIS SITE CLASSIFICATION REPORT.
22. IF THE PROPOSED BUILDING IS TO BE LOCATED CLOSER THAN THE HEIGHT OF THE RETAINING WALL, THIS MAY PLACE ADDITIONAL LOADS ON THE WALL THAT WERE NOT INITIALLY DESIGNED FOR. AN INSPECTION OF THE STRUCTURAL INTEGRITY OF THE RETAINING WALL WILL BE REQUIRED TO PROVIDE CERTIFICATION AND/OR RECOMMENDATIONS PRIOR TO ANY CONSTRUCTION. PLEASE REFER BACK TO THIS OFFICE FOR ASSISTANCE.  
STORMWATER DRAINAGE
23. UNLESS OTHERWISE SPECIFIED, ALL SOAKWELLS ARE TO BE LOCATED THE DEPTH OF THE SOAKWELL AWAY FROM THE BUILDING OR SETBACK A MINIMUM OF 1200mm, WHICHEVER IS GREATER, UNLESS SPECIFIED OTHERWISE. PLEASE REFER BACK TO THIS OFFICE IF THE SETBACK CANNOT BE ACHIEVED.

DOC# SS001 - 1.1.10 SCR EQUIVALENT V1.1 - AUGUST 2021



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PROJECT :  
LOT 256 ATTADALE AV DARCH

CLIENT : PARCEL DARCH PTY LTD

SCALE 1:20

DATE 16/11/22

APPROVED

## EXPLANATORY NOTES & STANDARD RECOMMENDATIONS - EQUIVALENT CLASS SITES (Sheet 2 of 2)

### WIND CLASSIFICATION

24. WIND CLASSIFICATION IS GIVEN FOR THE EXPECTED CONDITION 5 YEARS HENCE. THIS CLASSIFICATION IS LIMITED TO BUILDINGS CLASSES 1 AND 10, WHICH HAVE THE FOLLOWING LIMITATION (AS PER AS4055):

- a. MAXIMUM DISTANCE FROM THE GROUND LEVEL TO THE UNDERSIDE OF EAVES SHALL NOT EXCEED 6.0m,
- b. MAXIMUM DISTANCE FROM GROUND LEVEL TO THE HIGHEST POINT OF THE ROOF, EXCLUDING CHIMNEYS, SHALL NOT EXCEED 8.5m,
- c. THE ROOF PITCH SHALL NOT EXCEED 35 °,
- d. THE WIDTH, EXCLUDING EAVES, SHALL NOT EXCEED 16.0m AND THE LENGTH SHALL NOT EXCEED 5x THE WIDTH.

IF THE BUILDING FALLS OUTSIDE OF THESE LIMITATIONS, THE STATED WIND CLASSIFICATION DOES NOT APPLY. REFER BACK TO THIS OFFICE FOR A REVISED WIND CLASSIFICATION.

### ENVIRONMENTAL

25. NO ENVIRONMENTAL ASSESSMENT OF THIS SITE HAS BEEN UNDERTAKEN. SHOULD AN ENVIRONMENTAL ASSESSMENT BE REQUIRED, PLEASE CONTACT THIS OFFICE.

### SEISMIC

26. RECOMMENDED FOOTING DETAILS ARE SUITABLE FOR SEISMIC CONDITIONS WITH AN EARTHQUAKE HAZARD FACTOR OF  $\leq 0.11$ . RECOMMENDED FOOTING DETAILS PROVIDED FOR SITES WITH AN EARTHQUAKE HAZARD FACTOR OF  $> 0.11$ , ARE NOT FOR CONSTRUCTION, BUT FOR COSTING PURPOSES ONLY. IT IS REQUIRED THAT A FULL SEISMIC DESIGN IS CONDUCTED.

### CORROSION CLASSIFICATION

27. THE CORROSION CLASSIFICATION HAS BEEN ASSESSED IN ACCORDANCE WITH AS3700.

DOC# SS001 - 1.1.10 SCR EQUIVALENT V1.1 - AUGUST 2021



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PROJECT :  
LOT 256 ATTADALE AV DARCH

CLIENT : PARCEL DARCH PTY LTD

SCALE 1:20

DATE 16/11/22

APPROVED

A blue ink handwritten signature is written over the 'APPROVED' field.

**SITE CLASSIFICATION REPORT**  
CERTIFICATE 2595169

**CLIENT** PARCEL DARCH PTY LTD  
**JOB ADDRESS** LOT 257 ATTADALE AV DARCH  
**CLIENT JOB NO.**  
**OWNER**  
**STRUCTERRE JOB NO.** S1082656  
**DATE OF ASSESSMENT** 15/11/22

**SITE RECORD**

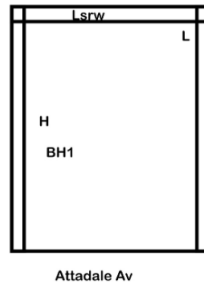


<b>SITE CLASSIFICATION</b>	<b>S - EQUIVALENT</b> <i>(in accordance with AS2870)</i>
<b>FOOTING DETAIL</b>	<b>CM3</b>
<b>SAND PAD</b>	<b>No sand pad required structurally</b>
<b>BUSHFIRE PRONE AREA</b>	<b>Not in a Bushfire Prone Area (see NOTE 2.)</b>
<b>CORROSION CLASSIFICATION</b>	<b>R1</b> <i>(Durability Class in accordance with AS3700)</i>
<b>WIND CLASSIFICATION</b>	<b>N1</b> <i>(in accordance with AS4055)</i>
<b>-TERRAIN CATEGORY</b>	<b>3</b>
<b>-TOPOGRAPHIC</b>	<b>T0</b>
<b>-SHIELDING</b>	<b>Full Shielding</b>

## SOIL PROFILE

BOREHOLE 1: 0 - 900 FILL sand with artificial material trace limestone gravel - grey; 900 hard ground refusal.

## APPROXIMATE BOREHOLE LOCATIONS



### NOTE 1 Explanatory Notes & Standard Recommendations

This site classification report must be read in conjunction with the applicable Explanatory Notes & Standard Recommendations. For A Class sites, refer to the Explanatory Notes and Standard Recommendations for Stable (A Class) Sites, version 1.0 July 2018. For S, M, H1, H2 & E Class sites, refer to the Explanatory Notes and Standard Recommendations for Reactive (S, M, H1, H2 & E Class) Sites version 1.0 July 2018. For Equivalent Class sites, refer to the Explanatory Notes and Standard Recommendations for Equivalent Class Sites, version 1.0 July 2018.

### NOTE 2 Bushfire - Prone Area

The Site may be situated in a bush fire prone area in accordance with the Department of Fire and Emergency Services (DFES) Bushfire Prone Area Map (Reference: <http://www.dfes.wa.gov.au/regulationandcompliance/bushfireproneareas/>) the current version at the time of this assessment. A Bushfire Attack Level (BAL) assessment may be required for this site, please confirm with the local authority. Should you require an assessment, please contact this Office.

## ADDITIONAL NOTES / REQUIREMENTS

### Site Condition

At the time of inspection the site was considered to be level and cleared. For specific levels of this site or topographical features, please refer to a professional site survey.

### Structerre Geotech Reference

The Site Classification is based on any remedial works being successfully completed as outlined in the Structerre Geotechnical Report J380185 dated 02/04/2021. The footing details are subject to the recommendations being completed to an acceptable level as outlined in this report, if applicable.

### Internal Thickenings

Internal thickenings are required for the proposed residence as specified on the recommended footing detail. Please provide a copy of the architectural drawings to this Office, so that the internal thickenings can be designed and drawn in accordance with AS2870.

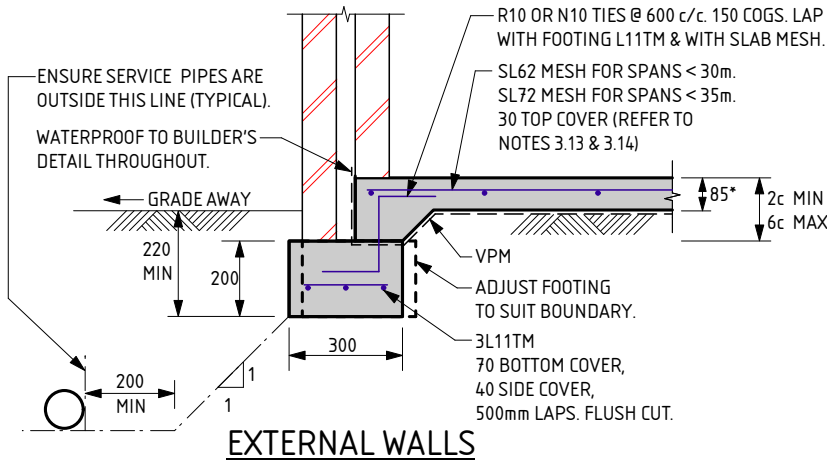
### Internal Thickening Inspection

This detail is subject to a internal thickening layout inspection. It is recommended that an inspection be conducted by a representative from this Office prior to concrete pour.

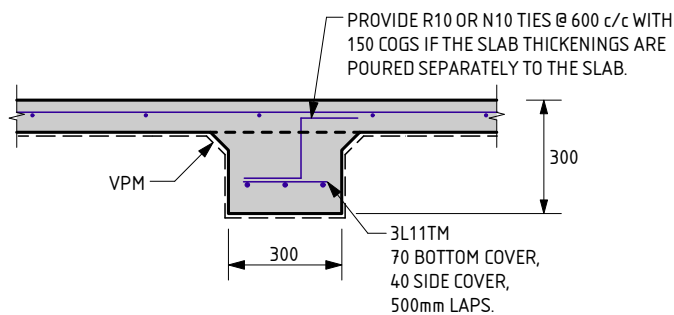
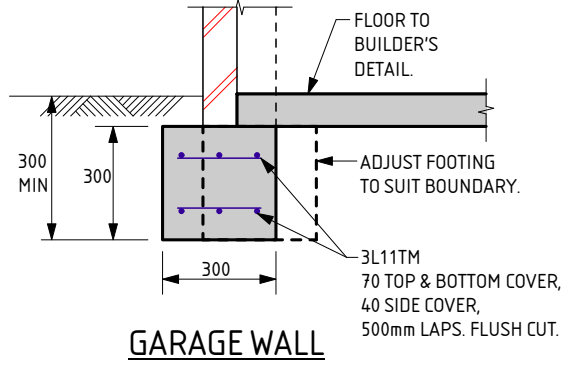
-- END OF REPORT --

Signed:   
Gervase Purich  
Chief Executive Officer

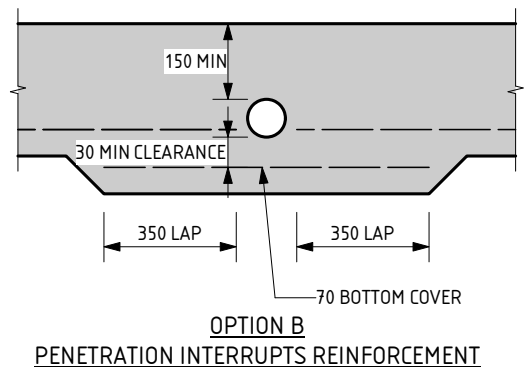
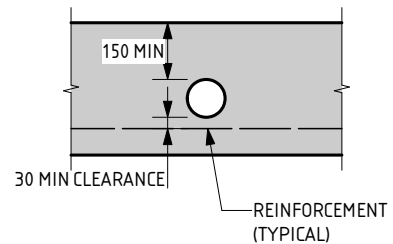
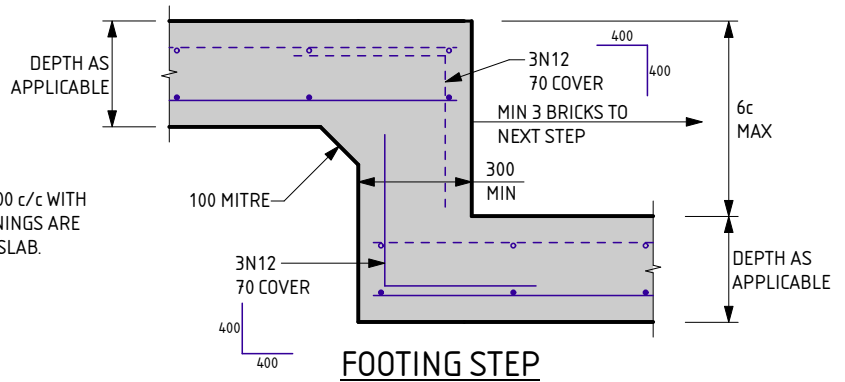
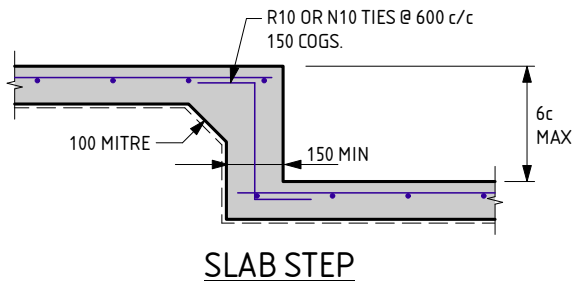




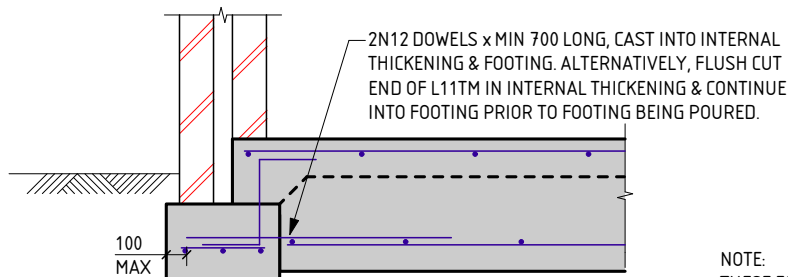
\* 100mm SLAB MAY BE INSTALLED INSTEAD OF 85mm.  
IF 100mm SLAB USED, MESH TO BE:  
SL62 MESH FOR SPANS < 25m.  
SL72 MESH FOR SPANS < 30m.  
SL82 MESH FOR SPANS < 35m.



REFER TO STRUCTERRE'S DRAWINGS FOR PLACEMENT OF INTERNAL THICKENINGS. LOCATIONS TO BE CONFIRMED ON SITE BY STRUCTERRE PRIOR TO CONCRETE POUR.



**SERVICE PIPE DIAGRAM**  
- MAXIMUM PENETRATION SIZE TO BE Ø150.



### EXTERNAL FOOTING TO INTERNAL THICKENING

THIS DETAIL IS EQUIVALENT TO  
STRUCTERRE FOOTING DETAIL C4.0

NOTE:  
THESE FOOTING DETAILS ARE TO BE READ IN CONJUNCTION WITH THE REACTIVE SITE NOTES.

THE APPROVED SIGNATURE ON THIS DETAIL ENDORSES ITS USE FOR SINGLE STOREY BUILDINGS ON BUILDING PLATFORMS WITH UP TO 11mm OF SURFACE MOVEMENT.  
DATE LAST MODIFIED - 20/09/18

**CM3**  
CAVITY MASONRY

**STRUCterre**  
consulting engineers

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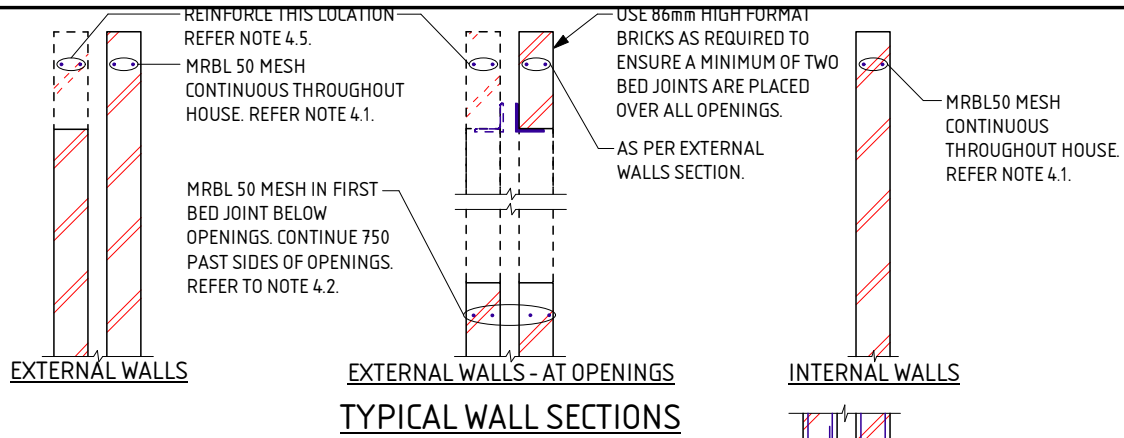
PROJECT:  
LOT 257 ATTADALE AV DARCH

CLIENT: PARCEL DARCH PTY LTD

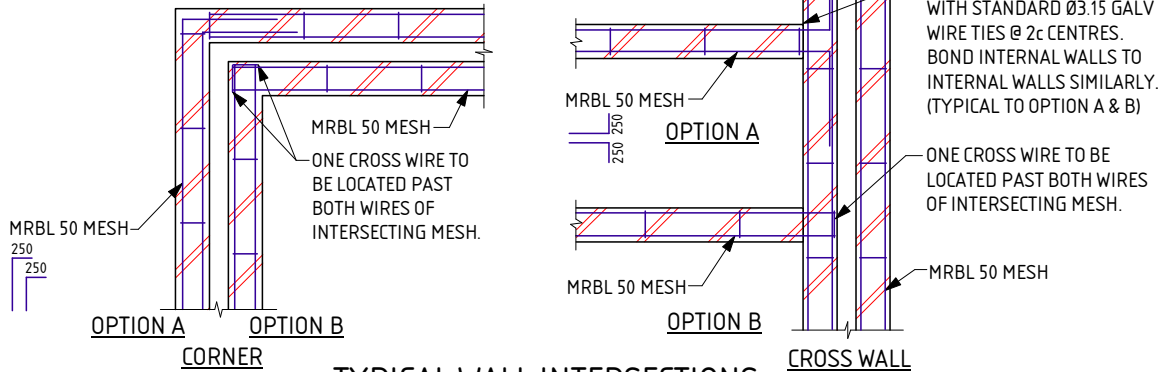
SCALE 1:20

DATE 16/11/22

APPROVED



**TYPICAL WALL SECTIONS**



**TYPICAL WALL INTERSECTIONS**

**REACTIVE SITE NOTES FOR CM1 - CM7**

THESE NOTES ARE TO BE READ IN CONJUNCTION WITH THE ATTACHED FOOTING DETAILS.

**1.0 SITE CLASSIFICATION**

- 1.1 REFER TO ATTACHED CERTIFICATE OF INSPECTION FOR SITE CLASSIFICATION. THE SITE CLASSIFICATION NOTED, IS AS DEFINED IN AS2870 - RESIDENTIAL SLABS & FOOTINGS.
- 1.2 THE SITE CLASSIFICATION HAS BEEN DETERMINED BY INVESTIGATION OF THE SITE, AS PER THE ATTACHED CERTIFICATE OF INSPECTION. REFER TO THE ATTACHED CERTIFICATE FOR ANY SPECIAL REQUIREMENTS.

**2.0 EARTHWORKS**

- 2.1 SAND PAD IF APPLICABLE TO BE AS PER SITE INSPECTION REPORT.
- 2.2 EARTHWORKS SHALL INCLUDE, BUT NOT BE LIMITED TO:
  - a) REMOVE ALL ORGANIC MATERIAL FROM THE PAD AREA.
  - b) REMOVE ALL RUBBISH AND DELETERIOUS FILL (SUCH AS CLAY FILL) FROM THE PAD AREA.
  - c) GRUB OUT ANY TREES WHERE NECESSARY AND ENSURE THE REMAINING HOLES ARE FILLED AND COMPACTED SATISFACTORILY WITH SAND.
  - d) NOTIFY THE ENGINEER OF ANY UNUSUAL FEATURES OR DISCREPANCIES WHICH MAY BECOME EVIDENT DURING EARTHWORKS, PRIOR TO PROCEEDING.
- 2.3 ANY PREDOMINANT ROCK IN THE HOUSE PAD AREAS IS TO BE INSPECTED BY THE ENGINEER.
- 2.4 ANY CUT TO THE SITE, OTHER THAN TOPSOIL STRIPPING, WILL REQUIRE THE PREPARED CUT BASE TO BE INSPECTED AND APPROVED BY THE ENGINEER.
- 2.5 MAXIMUM SAND PAD DEPTH NOT TO EXCEED 150% OF MINIMUM PAD DEPTH OR 2000mm WITHOUT THE ENGINEER'S APPROVAL.
- 2.6 IF APPLICABLE SAND FILL TO BE CLEAN WELL DRAINED, WITH MAX FINES (PARTICLES UP TO 0.075mm) CONTENT OF 5%. SAND TO BE COMPACTED TO A MIN 6 BLOWS/300mm FOR THE DEPTH OF THE PAD OR TO DISCRETION OF ENGINEER.
- 2.7 COMPACTION TESTING TO BE PERFORMED BY STRUCTERRE.

**3.0 FOOTINGS & SLABS**

- 3.1 FOOTINGS ARE TO BE PLACED DIRECTLY INTO SAND PAD OF SPECIFIED THICKNESS.
- 3.2 ALL STORMWATER MUST BE DISCHARGED INTO COUNCIL DRAINS OR A MINIMUM OF 3m FOR S CLASS SITES, 4m FOR M CLASS SITES AND 5m FOR H1 & H2 CLASS SITES, AWAY FROM THE RESIDENCE AND/OR ADJACENT BUILDINGS INTO SOAKWELLS. IF THIS RESTRICTION CANNOT BE ACHIEVED REFER BACK TO THIS OFFICE FOR AN ALTERNATIVE DESIGN. WHERE THE SITE HAS BEEN CLASSIFIED AS AN 'EQUIVALENT' SITE CLASSIFICATION, REFER TO 'EXPLANATORY NOTES & STANDARD RECOMMENDATIONS - EQUIVALENT CLASS SITES' FOR STORMWATER DRAINAGE REQUIREMENTS UNLESS SPECIFIED OTHERWISE.
- 3.3 EXCAVATIONS FOR ALL SERVICE PIPES NOT TO UNDERMINE FOOTINGS. IF UNDERMINING IS LIKELY TO OCCUR, CONTACT THE ENGINEER PRIOR TO PROCEEDING.
- 3.4 WHERE PLUMBING PIPES PASS THROUGH FOOTINGS OR SLAB, SPECIFIED TOTAL THICKNESS OF ALL CONCRETE IS ALWAYS TO BE MAINTAINED.
- 3.5 SETDOWN AT WET AREA TO ARCHITECTURAL REQUIREMENT (50mm MAX). MAINTAIN 85mm SLAB THICKNESS. FOLD MESH DOWN TO MAINTAIN COVER, PLACE DIAGONAL BARS AT RE-ENTRANT CORNER FOR STEPS OVER 30mm. BARS TO BE N12x 1200 LONG.
- 3.6 REINFORCEMENT SHALL BE IN ACCORDANCE WITH THE FOLLOWING STANDARDS;
 

L	INDICATES PLAIN OR DEFORMED WIRE R500L OR D500L TO AS/NZS 4671.
SL	INDICATES DEFORMED SQUARE MESH D500L TO AS/NZS 4671.
N	INDICATES DEFORMED BARS D500N TO AS/NZS 4671.
TM SUFFIX	INDICATES TRENCH MESH USING DEFORMED BARS D500L TO AS/NZS 4671.

 ALL STEELWORK TO BE TREATED IN ACCORDANCE WITH TABLE 3.4.4.4 "CORROSION PROTECTION" OF THE BUILDING CODE OF AUSTRALIA.
- 3.7 LAP ALL MESH TWO TRANSVERSE WIRES PLUS 25mm OR TO MANUFACTURER'S SPECIFICATIONS.

**3.8 CONCRETE TO CONFORM WITH AS 3600.**

- 3.9 BLENDED CEMENT TO CONFORM WITH AS1317.
- 3.10 ALL CONCRETE TO BE N20/20/100.
- 3.11 FOR ISOLATED PAD FOOTINGS, REFER BACK TO ENGINEER.
- 3.12 FOOTING POSITION UNDER BRICKWORK CAN BE ADJUSTED TO SUIT PARAPET WALLS.
- 3.13 FOR SLAB SPANS > 35m REFER TO ENGINEER FOR MESH SIZE.
- 3.14 IF THE LENGTH TO WIDTH RATIO OF THE GROUND SLAB OR ANY PART OF THE GROUND SLAB EXCEEDS 3:1, REFER BACK TO THIS OFFICE FOR MESH SIZE.
- 3.15 IF POLISHED (OR HONED) CONCRETE FINISHES ARE DESIRED, THIS DESIGN SHOULD BE REFERRED BACK TO THIS OFFICE FOR CONSIDERATION, AS IT IS NOT THE INTENTION OF THESE DESIGNS FOR SUCH FINISHES.
- 3.16 PLACE SLAB THICKENING (300 WIDE x 250 DEEP) UNDER INTERNAL WALLS (90 OR 110) HIGHER THAN 3.7m WHERE GREATER THAN 1m FROM INTERNAL THICKENING. PROVIDE SAME TRENCH MESH AS INTERNAL THICKENING DETAIL, WHERE REQUIRED.
- 3.17 PIERCING THE VAPOUR BARRIER (VPM) USING LEVELLING PINS ON FREE DRAINING SAND PADS IS ALLOWABLE.
- 3.18 CURE SLAB AS DETERMINED BY ENGINEER.
- 3.19 THE SLAB IS CONSIDERED SUITABLE AS A PHYSICAL BARRIER AGAINST INGRESS OF TERMITES. IF THE FOOTING AND SLAB IS PLACED IN 2 POURS, THE PHYSICAL BARRIER ALSO INCLUDES THE FOOTING AND SLAB JOINT.
- 3.20 THE FOOTING DETAILS HAVE BEEN DESIGNED IN ACCORDANCE WITH AS3600 AND SECTION 4 OF AS2870.

**4.0 MASONRY**

- 4.1 PLACE MRBL50 MESH IN TOP BED JOINT CONTINUOUS THROUGHOUT ALL BRICKWORK.
- 4.2 REINFORCE BED JOINT BELOW WINDOW SILLS WITH MRBL50 MESH. CONTINUE 750 PAST SIDES OF OPENING.
- 4.3 LAP 250 AT SPLICES AND AROUND CORNERS AND COG 250 INTO INTERSECTING WALLS. 20mm COVER TO ALL WIRES.
- 4.4 ALL MESH IN EXTERNAL FACE OF EXTERNAL LEAF TO BE GALVANIZED TO AS/NZS 4680.
- 4.5 WHEN BRICKWORK EXTENDS ABOVE OPENINGS TO EXTERNAL LEAF REINFORCE AS PER CLAUSE 4.1, 4.2 & 4.3.
- 4.6 TYPICAL WALL SECTIONS ARE SHOWN FOR 28C INTERNAL CEILINGS. WHERE THERE ARE 3 OR MORE BED JOINTS OVER THE OPENING, REINFORCE BED JOINT OVER OPENING WITH MRBL50 MESH. CONTINUE 750 PAST SIDE OF OPENING.
- 4.7 ALL PERPENDS TO BE FULLY MORTARED.
- 4.8 A BRICK COURSE, AS REFERRED TO IN THIS DOCUMENT IS STANDARD 86mm HIGH.
- 4.9 2L6 WIRES MAY BE USED AS AN ALTERNATIVE TO THE MRBL50 MESH. WHERE L6 WIRES ARE USED, ALL SPLICES AND COGS TO BE 500 LONG.

**5.0 MAINTENANCE**

- 5.1 IT IS CONSIDERED THAT THIS DESIGN IS SUITABLE FOR THE FOUNDATION CONDITIONS TO BE ENCOUNTERED AND WILL ADEQUATELY CONTROL ANY CRACKING OF BRICKWORK AND CONCRETE, SUBJECT TO THE MAINTENANCE PROCEDURES BELOW BEING SATISFIED.
- 5.2 BUILDER TO ENSURE THAT CLIENT BE INFORMED OF NECESSITY TO MAINTAIN DRAINS IN GOOD WORKING ORDER AT ALL TIMES.
- 5.3 BUILDER TO ADVISE CLIENT TO CONSULT AN ENGINEER BEFORE PLANTING TREES OR SHRUBS WITHIN 2.5m, OR A DISTANCE EQUAL TO THE ANTICIPATED MAXIMUM HEIGHT OF THE TREE, OF THE BUILDING.
- 5.4 SITE TO BE MAINTAINED AS PER CSIRO INFORMATION PAMPHLET BTF 18 & STRUCTERRE'S CLAY FACT SHEET.
- 5.5 AS2870 AND 'CSIRO PAMPHLET BTF 18' COVER THE EXPECTED PERFORMANCE AND RESPONSIBILITIES OF ALL PARTIES WITH THE USE OF THESE DETAILS.

**6.0 QUALITY CONTROL PROGRAM REQUIREMENTS**

- 6.1 WORKING SLAB DEPTH AS INDICATED ON THE DETAIL. SLAB DEPTH TOLERANCE ALLOWABLE -10mm, +15mm.
- 6.2 WHERE DEPTH IS BELOW NOMINATED DEPTH, MAX AREA ALLOWED TO BE ≤ 5% OF THE TOTAL AREA.
- 6.3 DEPTH TESTING LOCATIONS TO BE NO CLOSER THAN 1000mm APART.
- 6.4 SLAB DEPTH IS TO BE PART OF A QUALITY CONTROL INSPECTION REGIME.
- 6.5 SLAB AND FOOTING CAN BE POURED MONOLITHICALLY IF DESIRED.

DATE LAST MODIFIED - 21/09/21



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PROJECT :  
**LOT 257 ATTADALE AV DARCH**

CLIENT : **PARCEL DARCH PTY LTD**

SCALE **1:20**

DATE **16/11/22**

APPROVED

## EXPLANATORY NOTES & STANDARD RECOMMENDATIONS - EQUIVALENT CLASS SITES (Sheet 1 of 2)

### GENERAL

1. THE EXPLANATORY NOTES AND THE STANDARD RECOMMENDATIONS ARE TO BE READ IN CONJUNCTION WITH THE SITE CLASSIFICATION REPORT.
2. ALL REFERRED STANDARDS TO BE THE CURRENT VERSION AT THE TIME OF THE CONSTRUCTION.
3. THE PURPOSE OF THE SITE CLASSIFICATION REPORT IS TO CLASSIFY THE SITE IN ACCORDANCE WITH AS2870 "RESIDENTIAL SLABS AND FOOTING". IT IS NOT INTENDED FOR ANY OTHER PURPOSE, INCLUDING SOLE INFORMATION IN THE PROVISION OF A QUOTATION FOR SITE WORKS. IT IS RECOMMENDED OTHER PARTIES TO PERFORM THEIR OWN INVESTIGATION FOR QUOTATION PURPOSES.
4. THE SITE CLASSIFICATION REPORT WILL INCLUDE BUT IS NOT LIMITED TO:
  - a. THE SITE CLASSIFICATION IN ACCORDANCE WITH AS2870 "RESIDENTIAL SLABS AND FOOTING",
  - b. A WIND CLASSIFICATION IN ACCORDANCE WITH AS4055 "WIND LOADS FOR HOUSING",
  - c. A COASTAL CORROSION CLASSIFICATION,
  - d. ADDITIONAL EARTHWORK RECOMMENDATIONS WHERE APPLICABLE,
  - e. STANDARD FOOTING DESIGN FOR SINGLE STOREY SLAB ON GROUND CONSTRUCTION.
5. THE SITE CLASSIFICATION IS BASED ON THE SITE AS PRESENTED AT THE TIME OF THE ASSESSMENT. THE SITE CLASSIFICATION AND RECOMMENDATIONS INCLUDED IN THE REPORT ARE SUBJECT TO SATISFACTORY COMPLETION OF RECOMMENDED EARTHWORKS, (REFER NOTE 17) AS A MINIMUM. SHOULD CHANGES TO THE SITE OCCUR, OTHER THAN THE RECOMMENDATIONS INCLUDED IN THE SITE CLASSIFICATION REPORT, REFER BACK TO THIS OFFICE FOR REVIEW OF CLASSIFICATION AND FOOTING DESIGN.
6. ALL RECOMMENDATIONS GIVEN IN THE SITE CLASSIFICATION REPORT HAVE BEEN DETERMINED FROM THE INFORMATION THAT WAS AVAILABLE TO THIS OFFICE AT THE TIME OF INVESTIGATION. IF FURTHER INFORMATION RELATING TO THE SITE OR DEVELOPMENT BECOMES AVAILABLE, THESE RECOMMENDATIONS ARE SUBJECT TO CHANGE.
7. EQUIVALENT CLASS SITES ARE BASED ON DIFFERENTIAL SURFACE MOVEMENT ARISING FROM ISSUE OTHER THAN SHRINK-SWELL (REACTIVITY) ONLY. THESE MAY INCLUDE SETTLEMENT AND/OR CONSOLIDATION THAT MAY OCCUR AS A RESULT OF THE UNDERLYING GROUND CONDITIONS.
8. BOREHOLES EXCAVATED REVEAL THE SOIL PROFILE AT THE BOREHOLE LOCATION ONLY. FROM THIS, IT IS INFERRED THAT THESE ARE THE SOIL CONDITIONS OVER THE SITE. VARIATIONS CAN OCCUR WHICH MAY NOT HAVE BEEN DETECTED AT THE INVESTIGATION STAGE. ANY ANOMALIES SHOULD BE REFERRED BACK TO THIS OFFICE FOR A REASSESSMENT.
9. A NUMBER OF BOREHOLES ARE CONDUCTED ACROSS THE SITE TO DETERMINE THE SOIL PROFILES AND PROVIDE A REPRESENTATION OF THE GROUND CONDITIONS.
10. THIS REPORT IS FOR STRUCTERRE ONLY TO USE IN DESIGN. ANY DESIGN BY ANYONE ELSE FOR ANY STRUCTURE MUST BE SPECIFICALLY APPROVED BY STRUCTERRE. IF USED BY ANYONE ELSE FOR ANYTHING OTHER THAN A STRUCTERRE DESIGN OR STRUCTURE, STRUCTERRE TAKES NO RESPONSIBILITY.

### SAND PAD

11. THE RECOMMENDED FOOTING DESIGN IS ONLY TO BE USED IN CONJUNCTION WITH THE RECOMMENDED SAND PAD AND EARTHWORKS AS OUTLINED IN THE SITE CLASSIFICATION REPORT.
12. THE RECOMMENDATIONS FOR THE SAND PAD IS FOR STRUCTURAL PURPOSES ONLY, AND DOES NOT PROVIDE THE MINIMUM FINISHED PAD LEVEL IN RELATION TO FLOOD LEVELS OR DEPTH TO GROUNDWATER. SHOULD THE TEST BE LOCATED IN A LOW LYING OR FLOOD PRONE AREA, REFER TO THE LOCAL AUTHORITY FOR MINIMUM BUILDING HEIGHT.
13. IMPORTED FILL FOR USE AS A SAND PAD TO BE IN ACCORDANCE TO AS 3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS" WHICH INCLUDES BUT IS NOT LIMITED TO: BE FREE FROM ANY DELETERIOUS MATERIALS INCLUDING ORGANICS, (ROOTS, STUMPS, GRASSES, DECOMPOSED ORGANICS - PEAT, TIMBER, ETC), BUILDING RUBBLE, GLASS, PLASTICS OR WASTE MATERIAL. THE FINES CONTENT, (PERCENTAGE PASSING THE 0.075mm SIEVE) TO BE LESS THAN 5% BY MASS.
14. ON SAND SITES A SAND PAD IS NOT REQUIRED STRUCTURALLY, HOWEVER IF ROCK IS ENCOUNTERED, A MINIMUM 200mm SAND PAD BEYOND THE BASE OF FOOTING IS RECOMMENDED.
15. SAND PAD TO EXTEND BEYOND BUILDING AREA A MINIMUM OF 1.5 TIMES THE PAD DEPTH.
16. RECOMMENDED SAND PAD DEPTH IS ABOVE THE HIGHEST POINT, UNLESS OTHERWISE SPECIFIED.
17. IT IS REQUIRED THAT EARTHWORKS CONFIRM THAT THE MINIMUM DEPTH OF RECOMMENDED SAND PAD IS ACHIEVED.

### EARTHWORKS

18. RECOMMENDED EARTHWORKS TO BE CONDUCTED IN ACCORDANCE WITH AS3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS", AND TO INCLUDE BUT NOT BE LIMITED TO:
  - a. REMOVAL OF ALL VEGETATION, TOPSOILS, UNCONTROLLED FILLS AND OTHER DELETERIOUS MATERIALS FROM THE BUILDING AREA,
  - b. GRUBBING OUT OF ANY TREES ENSURING THE REMAINING HOLES ARE BACKFILLED WITH CLEAN COMPACTED SAND,
  - c. NOTIFYING THE ENGINEER OF ANY UNUSUAL FEATURE OR DISCREPANCY THAT MAY BECOME EVIDENT DURING EARTHWORKS, PRIOR TO PROCEEDING,
  - d. COMPACTING TO MEET THE REQUIREMENTS AS OUTLINED IN AS 3798 TABLE 5.1.
19. FILL MATERIAL (WHICH IS NOT ALWAYS APPARENT AT THE INITIAL INVESTIGATION STAGE) IS TO BE DEALT WITH AS FOLLOWS:
  - a. IF IT IS CERTIFIED BY OTHERS IT CAN REMAIN.
  - b. IF IT IS NOT CERTIFIED WILL REQUIRE REMOVAL DOWN TO NATURAL GROUND OR VERIFIED. ANY SAND CAN BE REUSED.
  - c. IF A PAD HAS ALREADY BEEN CONSTRUCTED, THE SITE CLASSIFICATION IS NOT CERTIFICATION OF THE PAD. CONTACT THIS OFFICE SHOULD A SAND PAD CERTIFICATION BE REQUIRED.
20. ANY ORGANIC MATTER OR ROOTS ENCOUNTERED, WHICH IS BEYOND WHAT IS NORMALLY CONSIDERED ACCEPTABLE IS TO BE REMOVED. THIS WILL NECESSITATE RAKING THE SITE TO REMOVE ORGANIC MATERIAL, TURNING THE SITE OVER AND RE-COMPACTING TO A MINIMUM.

### RETAINING WALLS

21. AN ASSESSMENT OF ANY EXISTING OR PROPOSED RETAINING WALLS HAS NOT BEEN CONDUCTED AS PART OF THIS SITE CLASSIFICATION REPORT.
22. IF THE PROPOSED BUILDING IS TO BE LOCATED CLOSER THAN THE HEIGHT OF THE RETAINING WALL, THIS MAY PLACE ADDITIONAL LOADS ON THE WALL THAT WERE NOT INITIALLY DESIGNED FOR. AN INSPECTION OF THE STRUCTURAL INTEGRITY OF THE RETAINING WALL WILL BE REQUIRED TO PROVIDE CERTIFICATION AND/OR RECOMMENDATIONS PRIOR TO ANY CONSTRUCTION. PLEASE REFER BACK TO THIS OFFICE FOR ASSISTANCE.  
STORMWATER DRAINAGE
23. UNLESS OTHERWISE SPECIFIED, ALL SOAKWELLS ARE TO BE LOCATED THE DEPTH OF THE SOAKWELL AWAY FROM THE BUILDING OR SETBACK A MINIMUM OF 1200mm, WHICHEVER IS GREATER, UNLESS SPECIFIED OTHERWISE. PLEASE REFER BACK TO THIS OFFICE IF THE SETBACK CANNOT BE ACHIEVED.

DOC# SS001 - 1.1.10 SCR EQUIVALENT V1.1 - AUGUST 2021



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PROJECT :  
LOT 257 ATTADALE AV DARCH

CLIENT : PARCEL DARCH PTY LTD

SCALE 1:20

DATE 16/11/22

APPROVED

## EXPLANATORY NOTES & STANDARD RECOMMENDATIONS - EQUIVALENT CLASS SITES (Sheet 2 of 2)

### WIND CLASSIFICATION

24. WIND CLASSIFICATION IS GIVEN FOR THE EXPECTED CONDITION 5 YEARS HENCE. THIS CLASSIFICATION IS LIMITED TO BUILDINGS CLASSES 1 AND 10, WHICH HAVE THE FOLLOWING LIMITATION (AS PER AS4055):

- a. MAXIMUM DISTANCE FROM THE GROUND LEVEL TO THE UNDERSIDE OF EAVES SHALL NOT EXCEED 6.0m,
- b. MAXIMUM DISTANCE FROM GROUND LEVEL TO THE HIGHEST POINT OF THE ROOF, EXCLUDING CHIMNEYS, SHALL NOT EXCEED 8.5m,
- c. THE ROOF PITCH SHALL NOT EXCEED 35 °,
- d. THE WIDTH, EXCLUDING EAVES, SHALL NOT EXCEED 16.0m AND THE LENGTH SHALL NOT EXCEED 5x THE WIDTH.

IF THE BUILDING FALLS OUTSIDE OF THESE LIMITATIONS, THE STATED WIND CLASSIFICATION DOES NOT APPLY. REFER BACK TO THIS OFFICE FOR A REVISED WIND CLASSIFICATION.

### ENVIRONMENTAL

25. NO ENVIRONMENTAL ASSESSMENT OF THIS SITE HAS BEEN UNDERTAKEN. SHOULD AN ENVIRONMENTAL ASSESSMENT BE REQUIRED, PLEASE CONTACT THIS OFFICE.

### SEISMIC

26. RECOMMENDED FOOTING DETAILS ARE SUITABLE FOR SEISMIC CONDITIONS WITH AN EARTHQUAKE HAZARD FACTOR OF  $\leq 0.11$ . RECOMMENDED FOOTING DETAILS PROVIDED FOR SITES WITH AN EARTHQUAKE HAZARD FACTOR OF  $> 0.11$ , ARE NOT FOR CONSTRUCTION, BUT FOR COSTING PURPOSES ONLY. IT IS REQUIRED THAT A FULL SEISMIC DESIGN IS CONDUCTED.

### CORROSION CLASSIFICATION

27. THE CORROSION CLASSIFICATION HAS BEEN ASSESSED IN ACCORDANCE WITH AS3700.

DOC# SS001 - 1.1.10 SCR EQUIVALENT V1.1 - AUGUST 2021



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APPROVED

A blue ink handwritten signature is written over the 'APPROVED' field.

**SITE CLASSIFICATION REPORT**  
CERTIFICATE 2595170

**CLIENT** PARCEL DARCH PTY LTD  
**JOB ADDRESS** LOT 258 ATTADALE AV DARCH  
**CLIENT JOB NO.**  
**OWNER**  
**STRUCTERRE JOB NO.** S1082659  
**DATE OF ASSESSMENT** 15/11/22

**SITE RECORD**

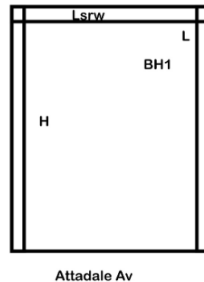


<b>SITE CLASSIFICATION</b>	<b>S - EQUIVALENT</b> <i>(in accordance with AS2870)</i>
<b>FOOTING DETAIL</b>	<b>CM3</b>
<b>SAND PAD</b>	<b>No sand pad required structurally</b>
<b>BUSHFIRE PRONE AREA</b>	<b>Not in a Bushfire Prone Area (see NOTE 2.)</b>
<b>CORROSION CLASSIFICATION</b>	<b>R1</b> <i>(Durability Class in accordance with AS3700)</i>
<b>WIND CLASSIFICATION</b>	<b>N1</b> <i>(in accordance with AS4055)</i>
-TERRAIN CATEGORY	3
-TOPOGRAPHIC	T0
-SHIELDING	Full Shielding

## SOIL PROFILE

BOREHOLE 1: 0 - 1100 FILL sand with artificial material trace limestone gravel - grey; 1100 hard ground refusal.

## APPROXIMATE BOREHOLE LOCATIONS



### NOTE 1 Explanatory Notes & Standard Recommendations

This site classification report must be read in conjunction with the applicable Explanatory Notes & Standard Recommendations. For A Class sites, refer to the Explanatory Notes and Standard Recommendations for Stable (A Class) Sites, version 1.0 July 2018. For S, M, H1, H2 & E Class sites, refer to the Explanatory Notes and Standard Recommendations for Reactive (S, M, H1, H2 & E Class) Sites version 1.0 July 2018. For Equivalent Class sites, refer to the Explanatory Notes and Standard Recommendations for Equivalent Class Sites, version 1.0 July 2018.

### NOTE 2 Bushfire - Prone Area

The Site may be situated in a bush fire prone area in accordance with the Department of Fire and Emergency Services (DFES) Bushfire Prone Area Map (Reference: <http://www.dfes.wa.gov.au/regulationandcompliance/bushfireproneareas/>) the current version at the time of this assessment. A Bushfire Attack Level (BAL) assessment may be required for this site, please confirm with the local authority. Should you require an assessment, please contact this Office.

## ADDITIONAL NOTES / REQUIREMENTS

### Site Condition

At the time of inspection the site was considered to be level and cleared. For specific levels of this site or topographical features, please refer to a professional site survey.

### Structerre Geotech Reference

The Site Classification is based on any remedial works being successfully completed as outlined in the Structerre Geotechnical Report J380185 dated 02/04/2021. The footing details are subject to the recommendations being completed to an acceptable level as outlined in this report, if applicable.

### Internal Thickenings

Internal thickenings are required for the proposed residence as specified on the recommended footing detail. Please provide a copy of the architectural drawings to this Office, so that the internal thickenings can be designed and drawn in accordance with AS2870.

### Internal Thickening Inspection


This detail is subject to a internal thickening layout inspection. It is recommended that an inspection be conducted by a representative from this Office prior to concrete pour.

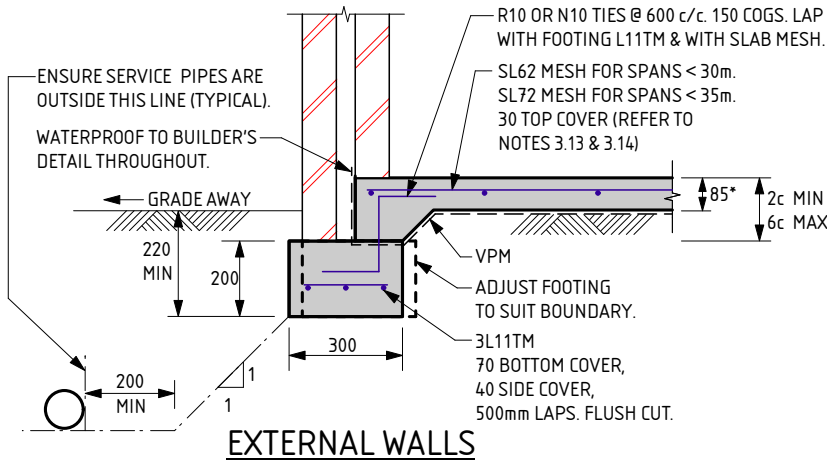
-- END OF REPORT --

CERTIFICATE 2595170

Issued Date: 16 November 2022

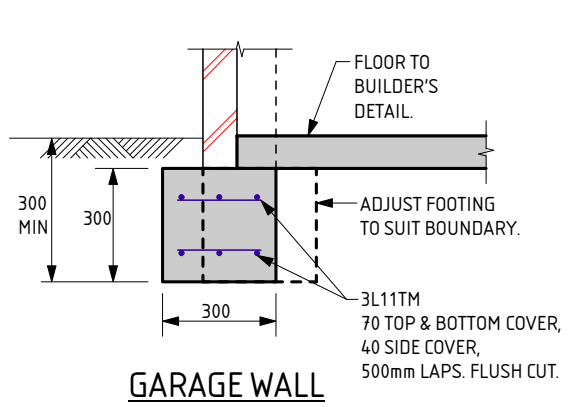
Signed:

  
Gervase Purich  
Chief Executive Officer

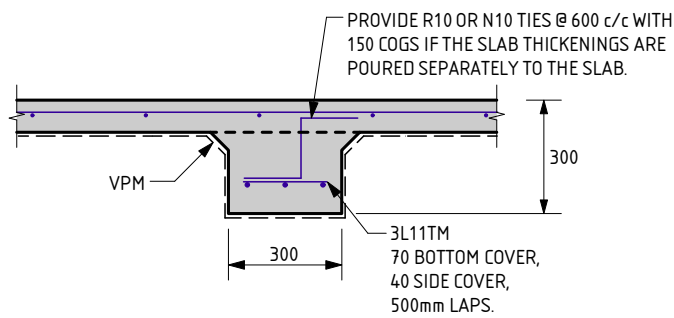


**EXTERNAL WALLS**

\* 100mm SLAB MAY BE INSTALLED INSTEAD OF 85mm.  
 IF 100mm SLAB USED, MESH TO BE:  
 SL62 MESH FOR SPANS < 25m.  
 SL72 MESH FOR SPANS < 30m.  
 SL82 MESH FOR SPANS < 35m.

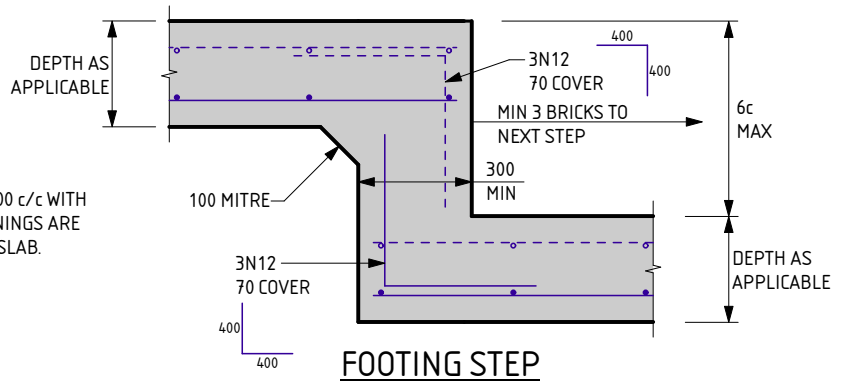


**GARAGE WALL**

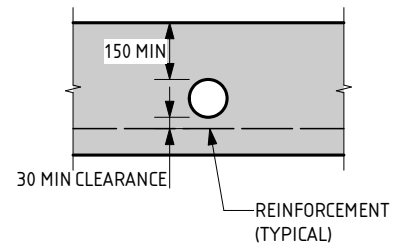


**INTERNAL THICKENING**

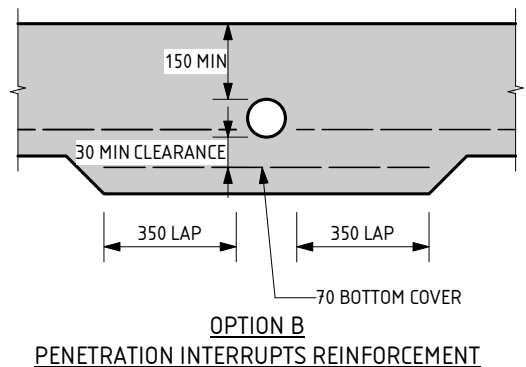
REFER TO STRUCTERRE'S DRAWINGS FOR PLACEMENT OF INTERNAL THICKENINGS. LOCATIONS TO BE CONFIRMED ON SITE BY STRUCTERRE PRIOR TO CONCRETE POUR.



**FOOTING STEP**



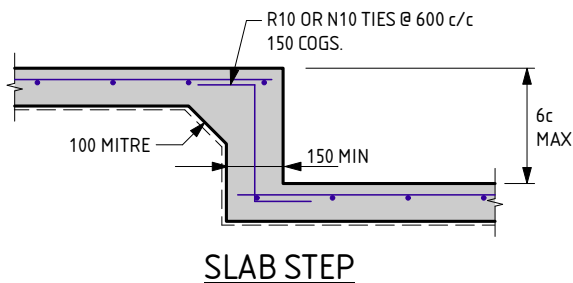
**OPTION A  
PENETRATION CLEAR OF REINFORCEMENT**



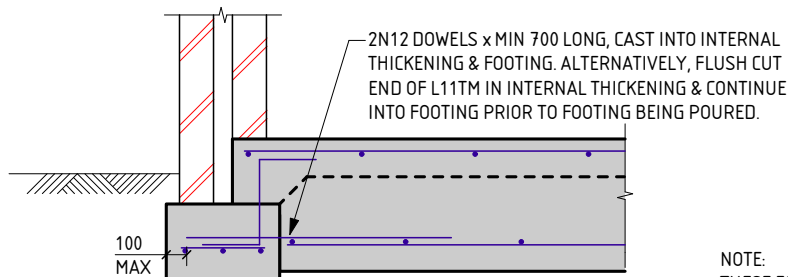
**OPTION B  
PENETRATION INTERRUPTS REINFORCEMENT**

**SERVICE PIPE DIAGRAM**

- MAXIMUM PENETRATION SIZE TO BE Ø150.



**SLAB STEP**



**EXTERNAL FOOTING TO INTERNAL THICKENING**

THIS DETAIL IS EQUIVALENT TO  
 STRUCTERRE FOOTING DETAIL C4.0

NOTE:  
 THESE FOOTING DETAILS ARE TO BE READ IN CONJUNCTION WITH THE REACTIVE SITE NOTES.

THE APPROVED SIGNATURE ON THIS DETAIL ENDORSES ITS USE FOR SINGLE STOREY BUILDINGS ON BUILDING PLATFORMS WITH UP TO 11mm OF SURFACE MOVEMENT.  
 DATE LAST MODIFIED - 20/09/18

**CM3**  
 CAVITY MASONRY



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PROJECT: LOT 258 ATTADALE AV DARCH

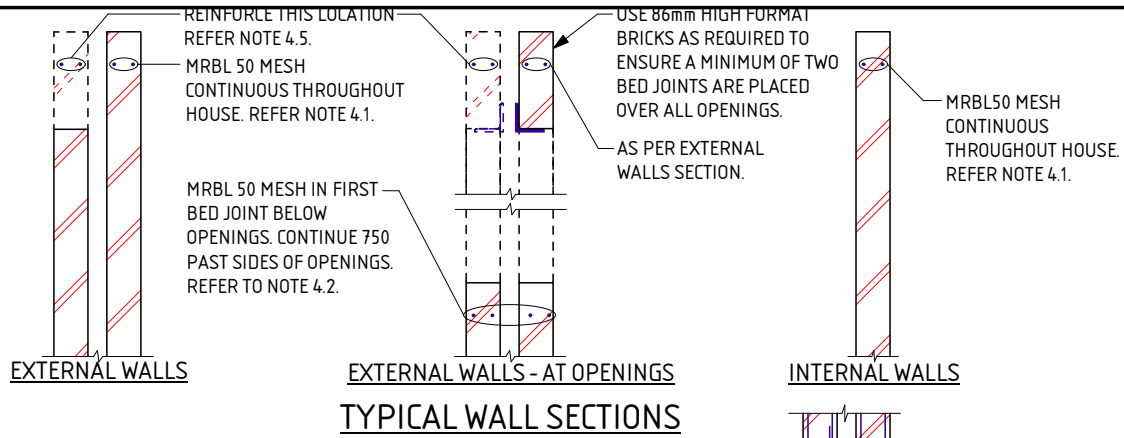
CLIENT: PARCEL DARCH PTY LTD

SCALE: 1:20

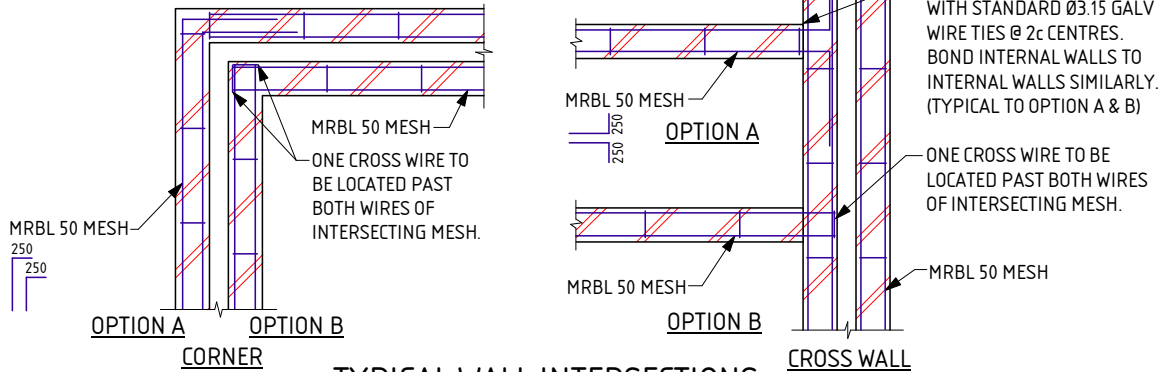
DATE: 16/11/22

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TYPICAL WALL SECTIONS



TYPICAL WALL INTERSECTIONS

REACTIVE SITE NOTES FOR CM1 - CM7

THESE NOTES ARE TO BE READ IN CONJUNCTION WITH THE ATTACHED FOOTING DETAILS.

1.0 SITE CLASSIFICATION

- 1.1 REFER TO ATTACHED CERTIFICATE OF INSPECTION FOR SITE CLASSIFICATION. THE SITE CLASSIFICATION NOTED, IS AS DEFINED IN AS2870 - RESIDENTIAL SLABS & FOOTINGS.
- 1.2 THE SITE CLASSIFICATION HAS BEEN DETERMINED BY INVESTIGATION OF THE SITE, AS PER THE ATTACHED CERTIFICATE OF INSPECTION. REFER TO THE ATTACHED CERTIFICATE FOR ANY SPECIAL REQUIREMENTS.

2.0 EARTHWORKS

- 2.1 SAND PAD IF APPLICABLE TO BE AS PER SITE INSPECTION REPORT.
- 2.2 EARTHWORKS SHALL INCLUDE, BUT NOT BE LIMITED TO:
  - a) REMOVE ALL ORGANIC MATERIAL FROM THE PAD AREA.
  - b) REMOVE ALL RUBBISH AND DELETERIOUS FILL (SUCH AS CLAY FILL) FROM THE PAD AREA.
  - c) GRUB OUT ANY TREES WHERE NECESSARY AND ENSURE THE REMAINING HOLES ARE FILLED AND COMPACTED SATISFACTORILY WITH SAND.
  - d) NOTIFY THE ENGINEER OF ANY UNUSUAL FEATURES OR DISCREPANCIES WHICH MAY BECOME EVIDENT DURING EARTHWORKS, PRIOR TO PROCEEDING.
- 2.3 ANY PREDOMINANT ROCK IN THE HOUSE PAD AREAS IS TO BE INSPECTED BY THE ENGINEER.
- 2.4 ANY CUT TO THE SITE, OTHER THAN TOPSOIL STRIPPING, WILL REQUIRE THE PREPARED CUT BASE TO BE INSPECTED AND APPROVED BY THE ENGINEER.
- 2.5 MAXIMUM SAND PAD DEPTH NOT TO EXCEED 150% OF MINIMUM PAD DEPTH OR 2000mm WITHOUT THE ENGINEER'S APPROVAL.
- 2.6 IF APPLICABLE SAND FILL TO BE CLEAN WELL DRAINED, WITH MAX FINES (PARTICLES UP TO 0.075mm) CONTENT OF 5%. SAND TO BE COMPACTED TO A MIN 6 BLOWS/300mm FOR THE DEPTH OF THE PAD OR TO DISCRETION OF ENGINEER.
- 2.7 COMPACTION TESTING TO BE PERFORMED BY STRUCTERRE.

3.0 FOOTINGS & SLABS

- 3.1 FOOTINGS ARE TO BE PLACED DIRECTLY INTO SAND PAD OF SPECIFIED THICKNESS.
- 3.2 ALL STORMWATER MUST BE DISCHARGED INTO COUNCIL DRAINS OR A MINIMUM OF 3m FOR S CLASS SITES, 4m FOR M CLASS SITES AND 5m FOR H1 & H2 CLASS SITES, AWAY FROM THE RESIDENCE AND/OR ADJACENT BUILDINGS INTO SOAKWELLS. IF THIS RESTRICTION CANNOT BE ACHIEVED REFER BACK TO THIS OFFICE FOR AN ALTERNATIVE DESIGN. WHERE THE SITE HAS BEEN CLASSIFIED AS AN 'EQUIVALENT' SITE CLASSIFICATION, REFER TO 'EXPLANATORY NOTES & STANDARD RECOMMENDATIONS - EQUIVALENT CLASS SITES' FOR STORMWATER DRAINAGE REQUIREMENTS UNLESS SPECIFIED OTHERWISE.
- 3.3 EXCAVATIONS FOR ALL SERVICE PIPES NOT TO UNDERMINE FOOTINGS. IF UNDERMINING IS LIKELY TO OCCUR, CONTACT THE ENGINEER PRIOR TO PROCEEDING.
- 3.4 WHERE PLUMBING PIPES PASS THROUGH FOOTINGS OR SLAB, SPECIFIED TOTAL THICKNESS OF ALL CONCRETE IS ALWAYS TO BE MAINTAINED.
- 3.5 SETDOWN AT WET AREA TO ARCHITECTURAL REQUIREMENT (50mm MAX). MAINTAIN 85mm SLAB THICKNESS. FOLD MESH DOWN TO MAINTAIN COVER, PLACE DIAGONAL BARS AT RE-ENTRANT CORNER FOR STEPS OVER 30mm. BARS TO BE N12x 1200 LONG.
- 3.6 REINFORCEMENT SHALL BE IN ACCORDANCE WITH THE FOLLOWING STANDARDS;
 

L	INDICATES PLAIN OR DEFORMED WIRE R500L OR D500L TO AS/NZS 4671.
SL	INDICATES DEFORMED SQUARE MESH D500L TO AS/NZS 4671.
N	INDICATES DEFORMED BARS D500N TO AS/NZS 4671.
TM SUFFIX	INDICATES TRENCH MESH USING DEFORMED BARS D500L TO AS/NZS 4671.

 ALL STEELWORK TO BE TREATED IN ACCORDANCE WITH TABLE 3.4.4.4 "CORROSION PROTECTION" OF THE BUILDING CODE OF AUSTRALIA.
- 3.7 LAP ALL MESH TWO TRANSVERSE WIRES PLUS 25mm OR TO MANUFACTURER'S SPECIFICATIONS.

3.8 CONCRETE TO CONFORM WITH AS 3600.

- 3.9 BLENDED CEMENT TO CONFORM WITH AS1317.
- 3.10 ALL CONCRETE TO BE N20/20/100.
- 3.11 FOR ISOLATED PAD FOOTINGS, REFER BACK TO ENGINEER.
- 3.12 FOOTING POSITION UNDER BRICKWORK CAN BE ADJUSTED TO SUIT PARAPET WALLS.
- 3.13 FOR SLAB SPANS > 35m REFER TO ENGINEER FOR MESH SIZE.
- 3.14 IF THE LENGTH TO WIDTH RATIO OF THE GROUND SLAB OR ANY PART OF THE GROUND SLAB EXCEEDS 3:1, REFER BACK TO THIS OFFICE FOR MESH SIZE.
- 3.15 IF POLISHED (OR HONED) CONCRETE FINISHES ARE DESIRED, THIS DESIGN SHOULD BE REFERRED BACK TO THIS OFFICE FOR CONSIDERATION, AS IT IS NOT THE INTENTION OF THESE DESIGNS FOR SUCH FINISHES.
- 3.16 PLACE SLAB THICKENING (300 WIDE x 250 DEEP) UNDER INTERNAL WALLS (90 OR 110) HIGHER THAN 3.7m WHERE GREATER THAN 1m FROM INTERNAL THICKENING. PROVIDE SAME TRENCH MESH AS INTERNAL THICKENING DETAIL, WHERE REQUIRED.
- 3.17 PIERCING THE VAPOUR BARRIER (VPM) USING LEVELLING PINS ON FREE DRAINING SAND PADS IS ALLOWABLE.
- 3.18 CURE SLAB AS DETERMINED BY ENGINEER.
- 3.19 THE SLAB IS CONSIDERED SUITABLE AS A PHYSICAL BARRIER AGAINST INGRESS OF TERMITES. IF THE FOOTING AND SLAB IS PLACED IN 2 POURS, THE PHYSICAL BARRIER ALSO INCLUDES THE FOOTING AND SLAB JOINTING.
- 3.20 THE FOOTING DETAILS HAVE BEEN DESIGNED IN ACCORDANCE WITH AS3600 AND SECTION 4 OF AS2870.

4.0 MASONRY

- 4.1 PLACE MRBL50 MESH IN TOP BED JOINT CONTINUOUS THROUGHOUT ALL BRICKWORK.
- 4.2 REINFORCE BED JOINT BELOW WINDOW SILLS WITH MRBL50 MESH. CONTINUE 750 PAST SIDES OF OPENING.
- 4.3 LAP 250 AT SPLICES AND AROUND CORNERS AND COG 250 INTO INTERSECTING WALLS. 20mm COVER TO ALL WIRES.
- 4.4 ALL MESH IN EXTERNAL FACE OF EXTERNAL LEAF TO BE GALVANIZED TO AS/NZS 4680.
- 4.5 WHEN BRICKWORK EXTENDS ABOVE OPENINGS TO EXTERNAL LEAF REINFORCE AS PER CLAUSE 4.1, 4.2 & 4.3.
- 4.6 TYPICAL WALL SECTIONS ARE SHOWN FOR 28C INTERNAL CEILINGS. WHERE THERE ARE 3 OR MORE BED JOINTS OVER THE OPENING, REINFORCE BED JOINT OVER OPENING WITH MRBL50 MESH. CONTINUE 750 PAST SIDE OF OPENING.
- 4.7 ALL PERPENDS TO BE FULLY MORTARED.
- 4.8 A BRICK COURSE, AS REFERRED TO IN THIS DOCUMENT IS STANDARD 86mm HIGH.
- 4.9 2L6 WIRES MAY BE USED AS AN ALTERNATIVE TO THE MRBL50 MESH. WHERE L6 WIRES ARE USED, ALL SPLICES AND COGS TO BE 500 LONG.

5.0 MAINTENANCE

- 5.1 IT IS CONSIDERED THAT THIS DESIGN IS SUITABLE FOR THE FOUNDATION CONDITIONS TO BE ENCOUNTERED AND WILL ADEQUATELY CONTROL ANY CRACKING OF BRICKWORK AND CONCRETE, SUBJECT TO THE MAINTENANCE PROCEDURES BELOW BEING SATISFIED.
- 5.2 BUILDER TO ENSURE THAT CLIENT BE INFORMED OF NECESSITY TO MAINTAIN DRAINS IN GOOD WORKING ORDER AT ALL TIMES.
- 5.3 BUILDER TO ADVISE CLIENT TO CONSULT AN ENGINEER BEFORE PLANTING TREES OR SHRUBS WITHIN 2.5m, OR A DISTANCE EQUAL TO THE ANTICIPATED MAXIMUM HEIGHT OF THE TREE, OF THE BUILDING.
- 5.4 SITE TO BE MAINTAINED AS PER CSIRO INFORMATION PAMPHLET BTF 18 & STRUCTERRE'S CLAY FACT SHEET.
- 5.5 AS2870 AND 'CSIRO PAMPHLET BTF 18' COVER THE EXPECTED PERFORMANCE AND RESPONSIBILITIES OF ALL PARTIES WITH THE USE OF THESE DETAILS.

6.0 QUALITY CONTROL PROGRAM REQUIREMENTS

- 6.1 WORKING SLAB DEPTH AS INDICATED ON THE DETAIL. SLAB DEPTH TOLERANCE ALLOWABLE -10mm, +15mm.
- 6.2 WHERE DEPTH IS BELOW NOMINATED DEPTH, MAX AREA ALLOWED TO BE ≤ 5% OF THE TOTAL AREA.
- 6.3 DEPTH TESTING LOCATIONS TO BE NO CLOSER THAN 1000mm APART.
- 6.4 SLAB DEPTH IS TO BE PART OF A QUALITY CONTROL INSPECTION REGIME.
- 6.5 SLAB AND FOOTING CAN BE POURED MONOLITHICALLY IF DESIRED.

DATE LAST MODIFIED - 21/09/21



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PROJECT :  
LOT 258 ATTADALE AV DARCH

CLIENT : PARCEL DARCH PTY LTD

SCALE 1:20

DATE 16/11/22

APPROVED

## EXPLANATORY NOTES & STANDARD RECOMMENDATIONS - EQUIVALENT CLASS SITES (Sheet 1 of 2)

### GENERAL

1. THE EXPLANATORY NOTES AND THE STANDARD RECOMMENDATIONS ARE TO BE READ IN CONJUNCTION WITH THE SITE CLASSIFICATION REPORT.
2. ALL REFERRED STANDARDS TO BE THE CURRENT VERSION AT THE TIME OF THE CONSTRUCTION.
3. THE PURPOSE OF THE SITE CLASSIFICATION REPORT IS TO CLASSIFY THE SITE IN ACCORDANCE WITH AS2870 "RESIDENTIAL SLABS AND FOOTING". IT IS NOT INTENDED FOR ANY OTHER PURPOSE, INCLUDING SOLE INFORMATION IN THE PROVISION OF A QUOTATION FOR SITE WORKS. IT IS RECOMMENDED OTHER PARTIES TO PERFORM THEIR OWN INVESTIGATION FOR QUOTATION PURPOSES.
4. THE SITE CLASSIFICATION REPORT WILL INCLUDE BUT IS NOT LIMITED TO:
  - a. THE SITE CLASSIFICATION IN ACCORDANCE WITH AS2870 "RESIDENTIAL SLABS AND FOOTING",
  - b. A WIND CLASSIFICATION IN ACCORDANCE WITH AS4055 "WIND LOADS FOR HOUSING",
  - c. A COASTAL CORROSION CLASSIFICATION,
  - d. ADDITIONAL EARTHWORK RECOMMENDATIONS WHERE APPLICABLE,
  - e. STANDARD FOOTING DESIGN FOR SINGLE STOREY SLAB ON GROUND CONSTRUCTION.
5. THE SITE CLASSIFICATION IS BASED ON THE SITE AS PRESENTED AT THE TIME OF THE ASSESSMENT. THE SITE CLASSIFICATION AND RECOMMENDATIONS INCLUDED IN THE REPORT ARE SUBJECT TO SATISFACTORY COMPLETION OF RECOMMENDED EARTHWORKS, (REFER NOTE 17) AS A MINIMUM. SHOULD CHANGES TO THE SITE OCCUR, OTHER THAN THE RECOMMENDATIONS INCLUDED IN THE SITE CLASSIFICATION REPORT, REFER BACK TO THIS OFFICE FOR REVIEW OF CLASSIFICATION AND FOOTING DESIGN.
6. ALL RECOMMENDATIONS GIVEN IN THE SITE CLASSIFICATION REPORT HAVE BEEN DETERMINED FROM THE INFORMATION THAT WAS AVAILABLE TO THIS OFFICE AT THE TIME OF INVESTIGATION. IF FURTHER INFORMATION RELATING TO THE SITE OR DEVELOPMENT BECOMES AVAILABLE, THESE RECOMMENDATIONS ARE SUBJECT TO CHANGE.
7. EQUIVALENT CLASS SITES ARE BASED ON DIFFERENTIAL SURFACE MOVEMENT ARISING FROM ISSUE OTHER THAN SHRINK-SWELL (REACTIVITY) ONLY. THESE MAY INCLUDE SETTLEMENT AND/OR CONSOLIDATION THAT MAY OCCUR AS A RESULT OF THE UNDERLYING GROUND CONDITIONS.
8. BOREHOLES EXCAVATED REVEAL THE SOIL PROFILE AT THE BOREHOLE LOCATION ONLY. FROM THIS, IT IS INFERRED THAT THESE ARE THE SOIL CONDITIONS OVER THE SITE. VARIATIONS CAN OCCUR WHICH MAY NOT HAVE BEEN DETECTED AT THE INVESTIGATION STAGE. ANY ANOMALIES SHOULD BE REFERRED BACK TO THIS OFFICE FOR A REASSESSMENT.
9. A NUMBER OF BOREHOLES ARE CONDUCTED ACROSS THE SITE TO DETERMINE THE SOIL PROFILES AND PROVIDE A REPRESENTATION OF THE GROUND CONDITIONS.
10. THIS REPORT IS FOR STRUCTERRE ONLY TO USE IN DESIGN. ANY DESIGN BY ANYONE ELSE FOR ANY STRUCTURE MUST BE SPECIFICALLY APPROVED BY STRUCTERRE. IF USED BY ANYONE ELSE FOR ANYTHING OTHER THAN A STRUCTERRE DESIGN OR STRUCTURE, STRUCTERRE TAKES NO RESPONSIBILITY.

### SAND PAD

11. THE RECOMMENDED FOOTING DESIGN IS ONLY TO BE USED IN CONJUNCTION WITH THE RECOMMENDED SAND PAD AND EARTHWORKS AS OUTLINED IN THE SITE CLASSIFICATION REPORT.
12. THE RECOMMENDATIONS FOR THE SAND PAD IS FOR STRUCTURAL PURPOSES ONLY, AND DOES NOT PROVIDE THE MINIMUM FINISHED PAD LEVEL IN RELATION TO FLOOD LEVELS OR DEPTH TO GROUNDWATER. SHOULD THE TEST BE LOCATED IN A LOW LYING OR FLOOD PRONE AREA, REFER TO THE LOCAL AUTHORITY FOR MINIMUM BUILDING HEIGHT.
13. IMPORTED FILL FOR USE AS A SAND PAD TO BE IN ACCORDANCE TO AS 3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS" WHICH INCLUDES BUT IS NOT LIMITED TO: BE FREE FROM ANY DELETERIOUS MATERIALS INCLUDING ORGANICS, (ROOTS, STUMPS, GRASSES, DECOMPOSED ORGANICS - PEAT, TIMBER, ETC), BUILDING RUBBLE, GLASS, PLASTICS OR WASTE MATERIAL. THE FINES CONTENT, (PERCENTAGE PASSING THE 0.075mm SIEVE) TO BE LESS THAN 5% BY MASS.
14. ON SAND SITES A SAND PAD IS NOT REQUIRED STRUCTURALLY, HOWEVER IF ROCK IS ENCOUNTERED, A MINIMUM 200mm SAND PAD BEYOND THE BASE OF FOOTING IS RECOMMENDED.
15. SAND PAD TO EXTEND BEYOND BUILDING AREA A MINIMUM OF 1.5 TIMES THE PAD DEPTH.
16. RECOMMENDED SAND PAD DEPTH IS ABOVE THE HIGHEST POINT, UNLESS OTHERWISE SPECIFIED.
17. IT IS REQUIRED THAT EARTHWORKS CONFIRM THAT THE MINIMUM DEPTH OF RECOMMENDED SAND PAD IS ACHIEVED.

### EARTHWORKS

18. RECOMMENDED EARTHWORKS TO BE CONDUCTED IN ACCORDANCE WITH AS3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS", AND TO INCLUDE BUT NOT BE LIMITED TO:
  - a. REMOVAL OF ALL VEGETATION, TOPSOILS, UNCONTROLLED FILLS AND OTHER DELETERIOUS MATERIALS FROM THE BUILDING AREA,
  - b. GRUBBING OUT OF ANY TREES ENSURING THE REMAINING HOLES ARE BACKFILLED WITH CLEAN COMPACTED SAND,
  - c. NOTIFYING THE ENGINEER OF ANY UNUSUAL FEATURE OR DISCREPANCY THAT MAY BECOME EVIDENT DURING EARTHWORKS, PRIOR TO PROCEEDING,
  - d. COMPACTING TO MEET THE REQUIREMENTS AS OUTLINED IN AS 3798 TABLE 5.1.
19. FILL MATERIAL (WHICH IS NOT ALWAYS APPARENT AT THE INITIAL INVESTIGATION STAGE) IS TO BE DEALT WITH AS FOLLOWS:
  - a. IF IT IS CERTIFIED BY OTHERS IT CAN REMAIN.
  - b. IF IT IS NOT CERTIFIED WILL REQUIRE REMOVAL DOWN TO NATURAL GROUND OR VERIFIED. ANY SAND CAN BE REUSED.
  - c. IF A PAD HAS ALREADY BEEN CONSTRUCTED, THE SITE CLASSIFICATION IS NOT CERTIFICATION OF THE PAD. CONTACT THIS OFFICE SHOULD A SAND PAD CERTIFICATION BE REQUIRED.
20. ANY ORGANIC MATTER OR ROOTS ENCOUNTERED, WHICH IS BEYOND WHAT IS NORMALLY CONSIDERED ACCEPTABLE IS TO BE REMOVED. THIS WILL NECESSITATE RAKING THE SITE TO REMOVE ORGANIC MATERIAL, TURNING THE SITE OVER AND RE-COMPACTING TO A MINIMUM.

### RETAINING WALLS

21. AN ASSESSMENT OF ANY EXISTING OR PROPOSED RETAINING WALLS HAS NOT BEEN CONDUCTED AS PART OF THIS SITE CLASSIFICATION REPORT.
22. IF THE PROPOSED BUILDING IS TO BE LOCATED CLOSER THAN THE HEIGHT OF THE RETAINING WALL, THIS MAY PLACE ADDITIONAL LOADS ON THE WALL THAT WERE NOT INITIALLY DESIGNED FOR. AN INSPECTION OF THE STRUCTURAL INTEGRITY OF THE RETAINING WALL WILL BE REQUIRED TO PROVIDE CERTIFICATION AND/OR RECOMMENDATIONS PRIOR TO ANY CONSTRUCTION. PLEASE REFER BACK TO THIS OFFICE FOR ASSISTANCE.  
STORMWATER DRAINAGE
23. UNLESS OTHERWISE SPECIFIED, ALL SOAKWELLS ARE TO BE LOCATED THE DEPTH OF THE SOAKWELL AWAY FROM THE BUILDING OR SETBACK A MINIMUM OF 1200mm, WHICHEVER IS GREATER, UNLESS SPECIFIED OTHERWISE. PLEASE REFER BACK TO THIS OFFICE IF THE SETBACK CANNOT BE ACHIEVED.

DOC# SS001 - 1.1.10 SCR EQUIVALENT V1.1 - AUGUST 2021



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PROJECT :  
LOT 258 ATTADALE AV DARCH

CLIENT : PARCEL DARCH PTY LTD

SCALE 1:20

DATE 16/11/22

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## EXPLANATORY NOTES & STANDARD RECOMMENDATIONS - EQUIVALENT CLASS SITES (Sheet 2 of 2)

### WIND CLASSIFICATION

24. WIND CLASSIFICATION IS GIVEN FOR THE EXPECTED CONDITION 5 YEARS HENCE. THIS CLASSIFICATION IS LIMITED TO BUILDINGS CLASSES 1 AND 10, WHICH HAVE THE FOLLOWING LIMITATION (AS PER AS4055):

- a. MAXIMUM DISTANCE FROM THE GROUND LEVEL TO THE UNDERSIDE OF EAVES SHALL NOT EXCEED 6.0m,
- b. MAXIMUM DISTANCE FROM GROUND LEVEL TO THE HIGHEST POINT OF THE ROOF, EXCLUDING CHIMNEYS, SHALL NOT EXCEED 8.5m,
- c. THE ROOF PITCH SHALL NOT EXCEED 35 °,
- d. THE WIDTH, EXCLUDING EAVES, SHALL NOT EXCEED 16.0m AND THE LENGTH SHALL NOT EXCEED 5x THE WIDTH.

IF THE BUILDING FALLS OUTSIDE OF THESE LIMITATIONS, THE STATED WIND CLASSIFICATION DOES NOT APPLY. REFER BACK TO THIS OFFICE FOR A REVISED WIND CLASSIFICATION.

### ENVIRONMENTAL

25. NO ENVIRONMENTAL ASSESSMENT OF THIS SITE HAS BEEN UNDERTAKEN. SHOULD AN ENVIRONMENTAL ASSESSMENT BE REQUIRED, PLEASE CONTACT THIS OFFICE.

### SEISMIC

26. RECOMMENDED FOOTING DETAILS ARE SUITABLE FOR SEISMIC CONDITIONS WITH AN EARTHQUAKE HAZARD FACTOR OF  $\leq 0.11$ . RECOMMENDED FOOTING DETAILS PROVIDED FOR SITES WITH AN EARTHQUAKE HAZARD FACTOR OF  $> 0.11$ , ARE NOT FOR CONSTRUCTION, BUT FOR COSTING PURPOSES ONLY. IT IS REQUIRED THAT A FULL SEISMIC DESIGN IS CONDUCTED.

### CORROSION CLASSIFICATION

27. THE CORROSION CLASSIFICATION HAS BEEN ASSESSED IN ACCORDANCE WITH AS3700.

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A blue ink handwritten signature is written over the 'APPROVED' field.

**SITE CLASSIFICATION REPORT**  
CERTIFICATE 2595172

**CLIENT** PARCEL DARCH PTY LTD  
**JOB ADDRESS** LOT 259 ATTADALE AV DARCH  
**CLIENT JOB NO.**  
**OWNER**  
**STRUCTERRE JOB NO.** S1082660  
**DATE OF ASSESSMENT** 15/11/22

**SITE RECORD**

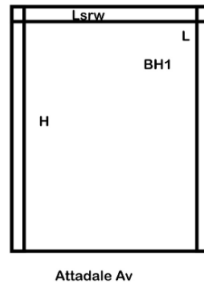


<b>SITE CLASSIFICATION</b>	<b>S - EQUIVALENT</b> <i>(in accordance with AS2870)</i>
<b>FOOTING DETAIL</b>	<b>CM3</b>
<b>SAND PAD</b>	<b>No sand pad required structurally</b>
<b>BUSHFIRE PRONE AREA</b>	<b>Not in a Bushfire Prone Area (see NOTE 2.)</b>
<b>CORROSION CLASSIFICATION</b>	<b>R1</b> <i>(Durability Class in accordance with AS3700)</i>
<b>WIND CLASSIFICATION</b>	<b>N1</b> <i>(in accordance with AS4055)</i>
<b>-TERRAIN CATEGORY</b>	<b>3</b>
<b>-TOPOGRAPHIC</b>	<b>T0</b>
<b>-SHIELDING</b>	<b>Full Shielding</b>

## SOIL PROFILE

BOREHOLE 1: 0 - 600 FILL sand with artificial material trace limestone gravel - grey; 600 hard ground refusal.

## APPROXIMATE BOREHOLE LOCATIONS



### NOTE 1 Explanatory Notes & Standard Recommendations

This site classification report must be read in conjunction with the applicable Explanatory Notes & Standard Recommendations. For A Class sites, refer to the Explanatory Notes and Standard Recommendations for Stable (A Class) Sites, version 1.0 July 2018. For S, M, H1, H2 & E Class sites, refer to the Explanatory Notes and Standard Recommendations for Reactive (S, M, H1, H2 & E Class) Sites version 1.0 July 2018. For Equivalent Class sites, refer to the Explanatory Notes and Standard Recommendations for Equivalent Class Sites, version 1.0 July 2018.

### NOTE 2 Bushfire - Prone Area

The Site may be situated in a bush fire prone area in accordance with the Department of Fire and Emergency Services (DFES) Bushfire Prone Area Map (Reference: <http://www.dfes.wa.gov.au/regulationandcompliance/bushfireproneareas/>) the current version at the time of this assessment. A Bushfire Attack Level (BAL) assessment may be required for this site, please confirm with the local authority. Should you require an assessment, please contact this Office.

## ADDITIONAL NOTES / REQUIREMENTS

### Site Condition

At the time of inspection the site was considered to be level and cleared. For specific levels of this site or topographical features, please refer to a professional site survey.

### Structerre Geotech Reference

The Site Classification is based on any remedial works being successfully completed as outlined in the Structerre Geotechnical Report J380185 dated 02/04/2021. The footing details are subject to the recommendations being completed to an acceptable level as outlined in this report, if applicable.

### Internal Thickenings

Internal thickenings are required for the proposed residence as specified on the recommended footing detail. Please provide a copy of the architectural drawings to this Office, so that the internal thickenings can be designed and drawn in accordance with AS2870.

### Internal Thickening Inspection

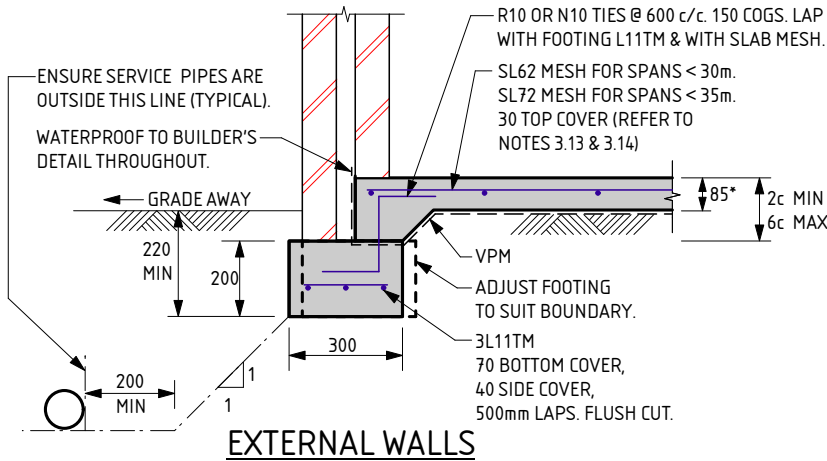
This detail is subject to a internal thickening layout inspection. It is recommended that an inspection be conducted by a representative from this Office prior to concrete pour.

-- END OF REPORT --

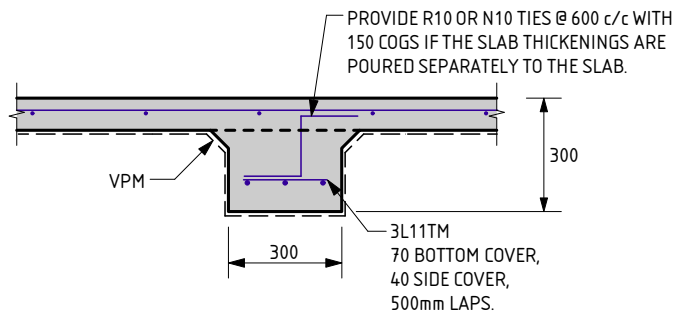
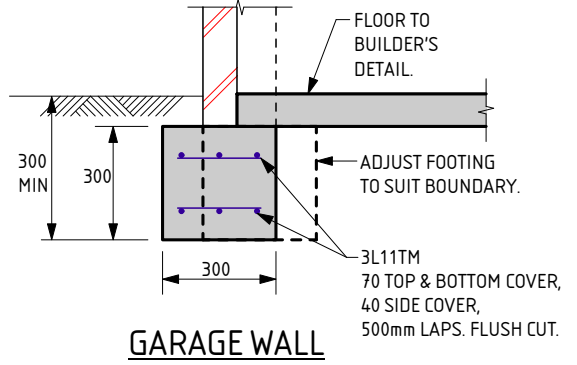
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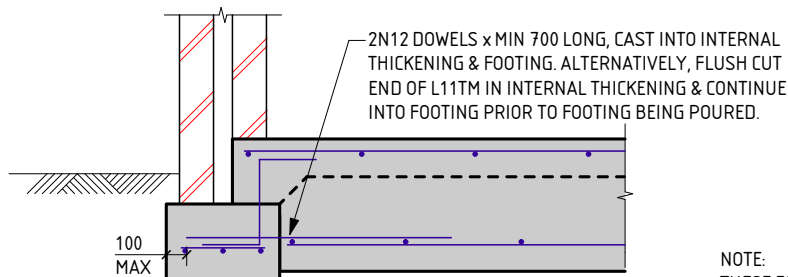
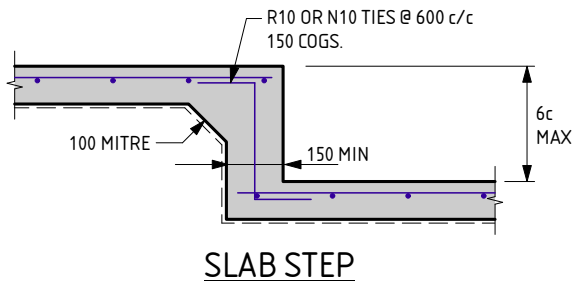
Gervase Purich  
Chief Executive Officer



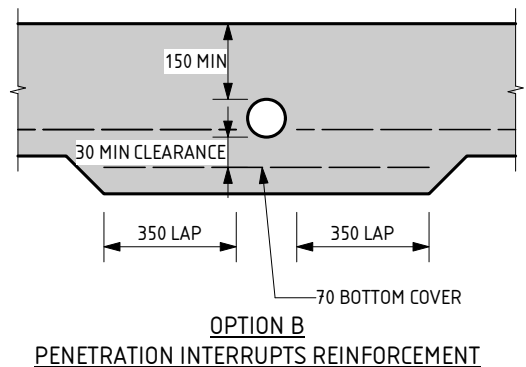
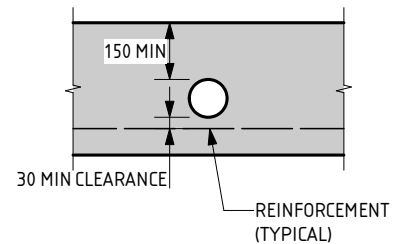
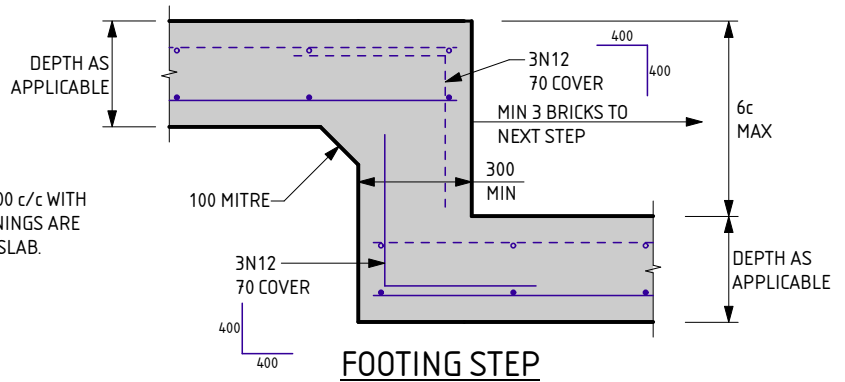
\* 100mm SLAB MAY BE INSTALLED INSTEAD OF 85mm.  
IF 100mm SLAB USED, MESH TO BE:  
SL62 MESH FOR SPANS < 25m.  
SL72 MESH FOR SPANS < 30m.  
SL82 MESH FOR SPANS < 35m.



REFER TO STRUCTERRE'S DRAWINGS FOR PLACEMENT OF INTERNAL THICKENINGS. LOCATIONS TO BE CONFIRMED ON SITE BY STRUCTERRE PRIOR TO CONCRETE POUR.



THIS DETAIL IS EQUIVALENT TO  
STRUCTERRE FOOTING DETAIL C4.0



### SERVICE PIPE DIAGRAM

- MAXIMUM PENETRATION SIZE TO BE Ø150.

NOTE:  
THESE FOOTING DETAILS ARE TO BE READ IN CONJUNCTION WITH THE REACTIVE SITE NOTES.

THE APPROVED SIGNATURE ON THIS DETAIL ENDORSES ITS USE FOR SINGLE STOREY BUILDINGS ON BUILDING PLATFORMS WITH UP TO 11mm OF SURFACE MOVEMENT.  
DATE LAST MODIFIED - 20/09/18

**CM3**  
CAVITY MASONRY

**STRUCterre**  
consulting engineers

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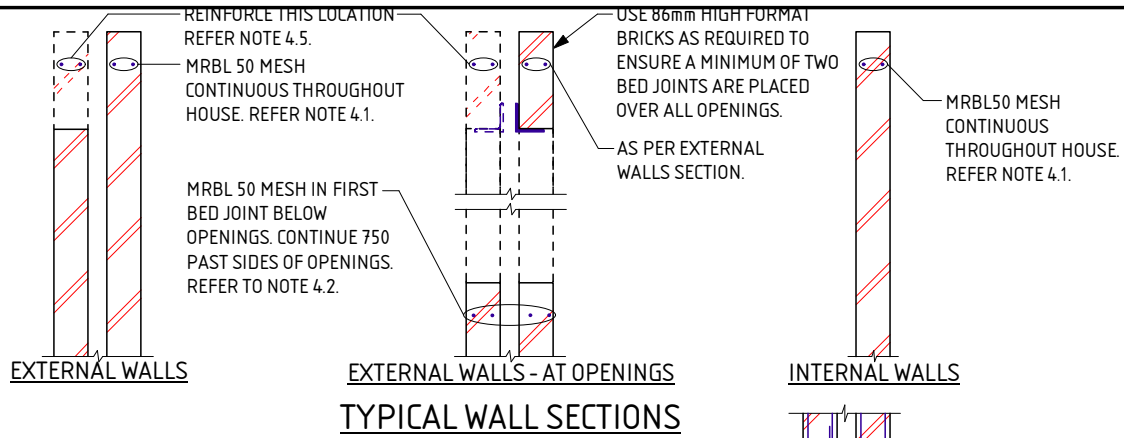
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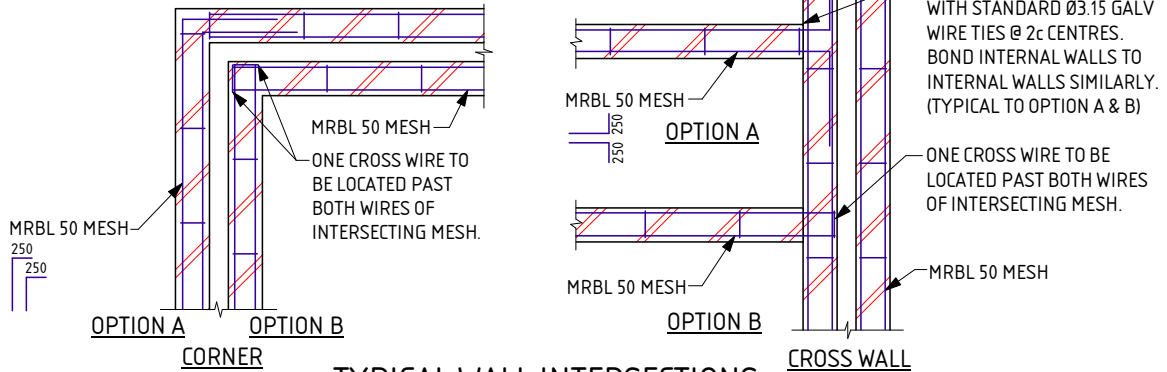
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TYPICAL WALL SECTIONS



TYPICAL WALL INTERSECTIONS

REACTIVE SITE NOTES FOR CM1 - CM7

THESE NOTES ARE TO BE READ IN CONJUNCTION WITH THE ATTACHED FOOTING DETAILS.

1.0 SITE CLASSIFICATION

- 1.1 REFER TO ATTACHED CERTIFICATE OF INSPECTION FOR SITE CLASSIFICATION. THE SITE CLASSIFICATION NOTED, IS AS DEFINED IN AS2870 - RESIDENTIAL SLABS & FOOTINGS.
- 1.2 THE SITE CLASSIFICATION HAS BEEN DETERMINED BY INVESTIGATION OF THE SITE, AS PER THE ATTACHED CERTIFICATE OF INSPECTION. REFER TO THE ATTACHED CERTIFICATE FOR ANY SPECIAL REQUIREMENTS.

2.0 EARTHWORKS

- 2.1 SAND PAD IF APPLICABLE TO BE AS PER SITE INSPECTION REPORT.
- 2.2 EARTHWORKS SHALL INCLUDE, BUT NOT BE LIMITED TO:
  - a) REMOVE ALL ORGANIC MATERIAL FROM THE PAD AREA.
  - b) REMOVE ALL RUBBISH AND DELETERIOUS FILL (SUCH AS CLAY FILL) FROM THE PAD AREA.
  - c) GRUB OUT ANY TREES WHERE NECESSARY AND ENSURE THE REMAINING HOLES ARE FILLED AND COMPACTED SATISFACTORILY WITH SAND.
  - d) NOTIFY THE ENGINEER OF ANY UNUSUAL FEATURES OR DISCREPANCIES WHICH MAY BECOME EVIDENT DURING EARTHWORKS, PRIOR TO PROCEEDING.
- 2.3 ANY PREDOMINANT ROCK IN THE HOUSE PAD AREAS IS TO BE INSPECTED BY THE ENGINEER.
- 2.4 ANY CUT TO THE SITE, OTHER THAN TOPSOIL STRIPPING, WILL REQUIRE THE PREPARED CUT BASE TO BE INSPECTED AND APPROVED BY THE ENGINEER.
- 2.5 MAXIMUM SAND PAD DEPTH NOT TO EXCEED 150% OF MINIMUM PAD DEPTH OR 2000mm WITHOUT THE ENGINEER'S APPROVAL.
- 2.6 IF APPLICABLE SAND FILL TO BE CLEAN WELL DRAINED, WITH MAX FINES (PARTICLES UP TO 0.075mm) CONTENT OF 5%. SAND TO BE COMPACTED TO A MIN 6 BLOWS/300mm FOR THE DEPTH OF THE PAD OR TO DISCRETION OF ENGINEER.
- 2.7 COMPACTION TESTING TO BE PERFORMED BY STRUCTERRE.

3.0 FOOTINGS & SLABS

- 3.1 FOOTINGS ARE TO BE PLACED DIRECTLY INTO SAND PAD OF SPECIFIED THICKNESS.
- 3.2 ALL STORMWATER MUST BE DISCHARGED INTO COUNCIL DRAINS OR A MINIMUM OF 3m FOR S CLASS SITES, 4m FOR M CLASS SITES AND 5m FOR H1 & H2 CLASS SITES, AWAY FROM THE RESIDENCE AND/OR ADJACENT BUILDINGS INTO SOAKWELLS. IF THIS RESTRICTION CANNOT BE ACHIEVED REFER BACK TO THIS OFFICE FOR AN ALTERNATIVE DESIGN. WHERE THE SITE HAS BEEN CLASSIFIED AS AN 'EQUIVALENT' SITE CLASSIFICATION, REFER TO 'EXPLANATORY NOTES & STANDARD RECOMMENDATIONS - EQUIVALENT CLASS SITES' FOR STORMWATER DRAINAGE REQUIREMENTS UNLESS SPECIFIED OTHERWISE.
- 3.3 EXCAVATIONS FOR ALL SERVICE PIPES NOT TO UNDERMINE FOOTINGS. IF UNDERMINING IS LIKELY TO OCCUR, CONTACT THE ENGINEER PRIOR TO PROCEEDING.
- 3.4 WHERE PLUMBING PIPES PASS THROUGH FOOTINGS OR SLAB, SPECIFIED TOTAL THICKNESS OF ALL CONCRETE IS ALWAYS TO BE MAINTAINED.
- 3.5 SETDOWN AT WET AREA TO ARCHITECTURAL REQUIREMENT (50mm MAX). MAINTAIN 85mm SLAB THICKNESS. FOLD MESH DOWN TO MAINTAIN COVER, PLACE DIAGONAL BARS AT RE-ENTRANT CORNER FOR STEPS OVER 30mm. BARS TO BE N12x 1200 LONG.
- 3.6 REINFORCEMENT SHALL BE IN ACCORDANCE WITH THE FOLLOWING STANDARDS;
  - L INDICATES PLAIN OR DEFORMED WIRE R500L OR D500L TO AS/NZS 4671.
  - SL INDICATES DEFORMED SQUARE MESH D500L TO AS/NZS 4671.
  - N INDICATES DEFORMED BARS D500N TO AS/NZS 4671.
  - TM SUFFIX INDICATES TRENCH MESH USING DEFORMED BARS D500L TO AS/NZS 4671.
 ALL STEELWORK TO BE TREATED IN ACCORDANCE WITH TABLE 3.4.4.4 "CORROSION PROTECTION" OF THE BUILDING CODE OF AUSTRALIA.
- 3.7 LAP ALL MESH TWO TRANSVERSE WIRES PLUS 25mm OR TO MANUFACTURER'S SPECIFICATIONS.

3.8 CONCRETE TO CONFORM WITH AS 3600.

- 3.9 BLENDED CEMENT TO CONFORM WITH AS1317.
- 3.10 ALL CONCRETE TO BE N20/20/100.
- 3.11 FOR ISOLATED PAD FOOTINGS, REFER BACK TO ENGINEER.
- 3.12 FOOTING POSITION UNDER BRICKWORK CAN BE ADJUSTED TO SUIT PARAPET WALLS.
- 3.13 FOR SLAB SPANS > 35m REFER TO ENGINEER FOR MESH SIZE.
- 3.14 IF THE LENGTH TO WIDTH RATIO OF THE GROUND SLAB OR ANY PART OF THE GROUND SLAB EXCEEDS 3:1, REFER BACK TO THIS OFFICE FOR MESH SIZE.
- 3.15 IF POLISHED (OR HONED) CONCRETE FINISHES ARE DESIRED, THIS DESIGN SHOULD BE REFERRED BACK TO THIS OFFICE FOR CONSIDERATION, AS IT IS NOT THE INTENTION OF THESE DESIGNS FOR SUCH FINISHES.
- 3.16 PLACE SLAB THICKENING (300 WIDE x 250 DEEP) UNDER INTERNAL WALLS (90 OR 110) HIGHER THAN 3.7m WHERE GREATER THAN 1m FROM INTERNAL THICKENING. PROVIDE SAME TRENCH MESH AS INTERNAL THICKENING DETAIL, WHERE REQUIRED.
- 3.17 PIERCING THE VAPOUR BARRIER (VPM) USING LEVELLING PINS ON FREE DRAINING SAND PADS IS ALLOWABLE.
- 3.18 CURE SLAB AS DETERMINED BY ENGINEER.
- 3.19 THE SLAB IS CONSIDERED SUITABLE AS A PHYSICAL BARRIER AGAINST INGRESS OF TERMITES. IF THE FOOTING AND SLAB IS PLACED IN 2 POURS, THE PHYSICAL BARRIER ALSO INCLUDES THE FOOTING AND SLAB JOINT.
- 3.20 THE FOOTING DETAILS HAVE BEEN DESIGNED IN ACCORDANCE WITH AS3600 AND SECTION 4 OF AS2870.

4.0 MASONRY

- 4.1 PLACE MRBL50 MESH IN TOP BED JOINT CONTINUOUS THROUGHOUT ALL BRICKWORK.
- 4.2 REINFORCE BED JOINT BELOW WINDOW SILLS WITH MRBL50 MESH. CONTINUE 750 PAST SIDES OF OPENING.
- 4.3 LAP 250 AT SPLICES AND AROUND CORNERS AND COG 250 INTO INTERSECTING WALLS. 20mm COVER TO ALL WIRES.
- 4.4 ALL MESH IN EXTERNAL FACE OF EXTERNAL LEAF TO BE GALVANIZED TO AS/NZS 4680.
- 4.5 WHEN BRICKWORK EXTENDS ABOVE OPENINGS TO EXTERNAL LEAF REINFORCE AS PER CLAUSE 4.1, 4.2 & 4.3.
- 4.6 TYPICAL WALL SECTIONS ARE SHOWN FOR 28C INTERNAL CEILINGS. WHERE THERE ARE 3 OR MORE BED JOINTS OVER THE OPENING, REINFORCE BED JOINT OVER OPENING WITH MRBL50 MESH. CONTINUE 750 PAST SIDE OF OPENING.
- 4.7 ALL PERPENDS TO BE FULLY MORTARED.
- 4.8 A BRICK COURSE, AS REFERRED TO IN THIS DOCUMENT IS STANDARD 86mm HIGH.
- 4.9 2L6 WIRES MAY BE USED AS AN ALTERNATIVE TO THE MRBL50 MESH. WHERE L6 WIRES ARE USED, ALL SPLICES AND COGS TO BE 500 LONG.

5.0 MAINTENANCE

- 5.1 IT IS CONSIDERED THAT THIS DESIGN IS SUITABLE FOR THE FOUNDATION CONDITIONS TO BE ENCOUNTERED AND WILL ADEQUATELY CONTROL ANY CRACKING OF BRICKWORK AND CONCRETE, SUBJECT TO THE MAINTENANCE PROCEDURES BELOW BEING SATISFIED.
- 5.2 BUILDER TO ENSURE THAT CLIENT BE INFORMED OF NECESSITY TO MAINTAIN DRAINS IN GOOD WORKING ORDER AT ALL TIMES.
- 5.3 BUILDER TO ADVISE CLIENT TO CONSULT AN ENGINEER BEFORE PLANTING TREES OR SHRUBS WITHIN 2.5m, OR A DISTANCE EQUAL TO THE ANTICIPATED MAXIMUM HEIGHT OF THE TREE, OF THE BUILDING.
- 5.4 SITE TO BE MAINTAINED AS PER CSIRO INFORMATION PAMPHLET BTF 18 & STRUCTERRE'S CLAY FACT SHEET.
- 5.5 AS2870 AND 'CSIRO PAMPHLET BTF 18' COVER THE EXPECTED PERFORMANCE AND RESPONSIBILITIES OF ALL PARTIES WITH THE USE OF THESE DETAILS.

6.0 QUALITY CONTROL PROGRAM REQUIREMENTS

- 6.1 WORKING SLAB DEPTH AS INDICATED ON THE DETAIL. SLAB DEPTH TOLERANCE ALLOWABLE -10mm, +15mm.
- 6.2 WHERE DEPTH IS BELOW NOMINATED DEPTH, MAX AREA ALLOWED TO BE ≤ 5% OF THE TOTAL AREA.
- 6.3 DEPTH TESTING LOCATIONS TO BE NO CLOSER THAN 1000mm APART.
- 6.4 SLAB DEPTH IS TO BE PART OF A QUALITY CONTROL INSPECTION REGIME.
- 6.5 SLAB AND FOOTING CAN BE Poured MONOLITHICALLY IF DESIRED.

DATE LAST MODIFIED - 21/09/21



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## EXPLANATORY NOTES & STANDARD RECOMMENDATIONS - EQUIVALENT CLASS SITES (Sheet 1 of 2)

### GENERAL

1. THE EXPLANATORY NOTES AND THE STANDARD RECOMMENDATIONS ARE TO BE READ IN CONJUNCTION WITH THE SITE CLASSIFICATION REPORT.
2. ALL REFERRED STANDARDS TO BE THE CURRENT VERSION AT THE TIME OF THE CONSTRUCTION.
3. THE PURPOSE OF THE SITE CLASSIFICATION REPORT IS TO CLASSIFY THE SITE IN ACCORDANCE WITH AS2870 "RESIDENTIAL SLABS AND FOOTING". IT IS NOT INTENDED FOR ANY OTHER PURPOSE, INCLUDING SOLE INFORMATION IN THE PROVISION OF A QUOTATION FOR SITE WORKS. IT IS RECOMMENDED OTHER PARTIES TO PERFORM THEIR OWN INVESTIGATION FOR QUOTATION PURPOSES.
4. THE SITE CLASSIFICATION REPORT WILL INCLUDE BUT IS NOT LIMITED TO:
  - a. THE SITE CLASSIFICATION IN ACCORDANCE WITH AS2870 "RESIDENTIAL SLABS AND FOOTING",
  - b. A WIND CLASSIFICATION IN ACCORDANCE WITH AS4055 "WIND LOADS FOR HOUSING",
  - c. A COASTAL CORROSION CLASSIFICATION,
  - d. ADDITIONAL EARTHWORK RECOMMENDATIONS WHERE APPLICABLE,
  - e. STANDARD FOOTING DESIGN FOR SINGLE STOREY SLAB ON GROUND CONSTRUCTION.
5. THE SITE CLASSIFICATION IS BASED ON THE SITE AS PRESENTED AT THE TIME OF THE ASSESSMENT. THE SITE CLASSIFICATION AND RECOMMENDATIONS INCLUDED IN THE REPORT ARE SUBJECT TO SATISFACTORY COMPLETION OF RECOMMENDED EARTHWORKS, (REFER NOTE 17) AS A MINIMUM. SHOULD CHANGES TO THE SITE OCCUR, OTHER THAN THE RECOMMENDATIONS INCLUDED IN THE SITE CLASSIFICATION REPORT, REFER BACK TO THIS OFFICE FOR REVIEW OF CLASSIFICATION AND FOOTING DESIGN.
6. ALL RECOMMENDATIONS GIVEN IN THE SITE CLASSIFICATION REPORT HAVE BEEN DETERMINED FROM THE INFORMATION THAT WAS AVAILABLE TO THIS OFFICE AT THE TIME OF INVESTIGATION. IF FURTHER INFORMATION RELATING TO THE SITE OR DEVELOPMENT BECOMES AVAILABLE, THESE RECOMMENDATIONS ARE SUBJECT TO CHANGE.
7. EQUIVALENT CLASS SITES ARE BASED ON DIFFERENTIAL SURFACE MOVEMENT ARISING FROM ISSUE OTHER THAN SHRINK-SWELL (REACTIVITY) ONLY. THESE MAY INCLUDE SETTLEMENT AND/OR CONSOLIDATION THAT MAY OCCUR AS A RESULT OF THE UNDERLYING GROUND CONDITIONS.
8. BOREHOLES EXCAVATED REVEAL THE SOIL PROFILE AT THE BOREHOLE LOCATION ONLY. FROM THIS, IT IS INFERRED THAT THESE ARE THE SOIL CONDITIONS OVER THE SITE. VARIATIONS CAN OCCUR WHICH MAY NOT HAVE BEEN DETECTED AT THE INVESTIGATION STAGE. ANY ANOMALIES SHOULD BE REFERRED BACK TO THIS OFFICE FOR A REASSESSMENT.
9. A NUMBER OF BOREHOLES ARE CONDUCTED ACROSS THE SITE TO DETERMINE THE SOIL PROFILES AND PROVIDE A REPRESENTATION OF THE GROUND CONDITIONS.
10. THIS REPORT IS FOR STRUCTERRE ONLY TO USE IN DESIGN. ANY DESIGN BY ANYONE ELSE FOR ANY STRUCTURE MUST BE SPECIFICALLY APPROVED BY STRUCTERRE. IF USED BY ANYONE ELSE FOR ANYTHING OTHER THAN A STRUCTERRE DESIGN OR STRUCTURE, STRUCTERRE TAKES NO RESPONSIBILITY.

### SAND PAD

11. THE RECOMMENDED FOOTING DESIGN IS ONLY TO BE USED IN CONJUNCTION WITH THE RECOMMENDED SAND PAD AND EARTHWORKS AS OUTLINED IN THE SITE CLASSIFICATION REPORT.
12. THE RECOMMENDATIONS FOR THE SAND PAD IS FOR STRUCTURAL PURPOSES ONLY, AND DOES NOT PROVIDE THE MINIMUM FINISHED PAD LEVEL IN RELATION TO FLOOD LEVELS OR DEPTH TO GROUNDWATER. SHOULD THE TEST BE LOCATED IN A LOW LYING OR FLOOD PRONE AREA, REFER TO THE LOCAL AUTHORITY FOR MINIMUM BUILDING HEIGHT.
13. IMPORTED FILL FOR USE AS A SAND PAD TO BE IN ACCORDANCE TO AS 3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS" WHICH INCLUDES BUT IS NOT LIMITED TO: BE FREE FROM ANY DELETERIOUS MATERIALS INCLUDING ORGANICS, (ROOTS, STUMPS, GRASSES, DECOMPOSED ORGANICS - PEAT, TIMBER, ETC), BUILDING RUBBLE, GLASS, PLASTICS OR WASTE MATERIAL. THE FINES CONTENT, (PERCENTAGE PASSING THE 0.075mm SIEVE) TO BE LESS THAN 5% BY MASS.
14. ON SAND SITES A SAND PAD IS NOT REQUIRED STRUCTURALLY, HOWEVER IF ROCK IS ENCOUNTERED, A MINIMUM 200mm SAND PAD BEYOND THE BASE OF FOOTING IS RECOMMENDED.
15. SAND PAD TO EXTEND BEYOND BUILDING AREA A MINIMUM OF 1.5 TIMES THE PAD DEPTH.
16. RECOMMENDED SAND PAD DEPTH IS ABOVE THE HIGHEST POINT, UNLESS OTHERWISE SPECIFIED.
17. IT IS REQUIRED THAT EARTHWORKS CONFIRM THAT THE MINIMUM DEPTH OF RECOMMENDED SAND PAD IS ACHIEVED.

### EARTHWORKS

18. RECOMMENDED EARTHWORKS TO BE CONDUCTED IN ACCORDANCE WITH AS3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS", AND TO INCLUDE BUT NOT BE LIMITED TO:
  - a. REMOVAL OF ALL VEGETATION, TOPSOILS, UNCONTROLLED FILLS AND OTHER DELETERIOUS MATERIALS FROM THE BUILDING AREA,
  - b. GRUBBING OUT OF ANY TREES ENSURING THE REMAINING HOLES ARE BACKFILLED WITH CLEAN COMPACTED SAND,
  - c. NOTIFYING THE ENGINEER OF ANY UNUSUAL FEATURE OR DISCREPANCY THAT MAY BECOME EVIDENT DURING EARTHWORKS, PRIOR TO PROCEEDING,
  - d. COMPACTING TO MEET THE REQUIREMENTS AS OUTLINED IN AS 3798 TABLE 5.1.
19. FILL MATERIAL (WHICH IS NOT ALWAYS APPARENT AT THE INITIAL INVESTIGATION STAGE) IS TO BE DEALT WITH AS FOLLOWS:
  - a. IF IT IS CERTIFIED BY OTHERS IT CAN REMAIN.
  - b. IF IT IS NOT CERTIFIED WILL REQUIRE REMOVAL DOWN TO NATURAL GROUND OR VERIFIED. ANY SAND CAN BE REUSED.
  - c. IF A PAD HAS ALREADY BEEN CONSTRUCTED, THE SITE CLASSIFICATION IS NOT CERTIFICATION OF THE PAD. CONTACT THIS OFFICE SHOULD A SAND PAD CERTIFICATION BE REQUIRED.
20. ANY ORGANIC MATTER OR ROOTS ENCOUNTERED, WHICH IS BEYOND WHAT IS NORMALLY CONSIDERED ACCEPTABLE IS TO BE REMOVED. THIS WILL NECESSITATE RAKING THE SITE TO REMOVE ORGANIC MATERIAL, TURNING THE SITE OVER AND RE-COMPACTING TO A MINIMUM.

### RETAINING WALLS

21. AN ASSESSMENT OF ANY EXISTING OR PROPOSED RETAINING WALLS HAS NOT BEEN CONDUCTED AS PART OF THIS SITE CLASSIFICATION REPORT.
22. IF THE PROPOSED BUILDING IS TO BE LOCATED CLOSER THAN THE HEIGHT OF THE RETAINING WALL, THIS MAY PLACE ADDITIONAL LOADS ON THE WALL THAT WERE NOT INITIALLY DESIGNED FOR. AN INSPECTION OF THE STRUCTURAL INTEGRITY OF THE RETAINING WALL WILL BE REQUIRED TO PROVIDE CERTIFICATION AND/OR RECOMMENDATIONS PRIOR TO ANY CONSTRUCTION. PLEASE REFER BACK TO THIS OFFICE FOR ASSISTANCE.  
STORMWATER DRAINAGE
23. UNLESS OTHERWISE SPECIFIED, ALL SOAKWELLS ARE TO BE LOCATED THE DEPTH OF THE SOAKWELL AWAY FROM THE BUILDING OR SETBACK A MINIMUM OF 1200mm, WHICHEVER IS GREATER, UNLESS SPECIFIED OTHERWISE. PLEASE REFER BACK TO THIS OFFICE IF THE SETBACK CANNOT BE ACHIEVED.

DOC# SS001 - 1.1.10 SCR EQUIVALENT V1.1 - AUGUST 2021



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PROJECT :  
LOT 259 ATTADALE AV DARCH

CLIENT : PARCEL DARCH PTY LTD

SCALE 1:20

DATE 16/11/22

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## EXPLANATORY NOTES & STANDARD RECOMMENDATIONS - EQUIVALENT CLASS SITES (Sheet 2 of 2)

### WIND CLASSIFICATION

24. WIND CLASSIFICATION IS GIVEN FOR THE EXPECTED CONDITION 5 YEARS HENCE. THIS CLASSIFICATION IS LIMITED TO BUILDINGS CLASSES 1 AND 10, WHICH HAVE THE FOLLOWING LIMITATION (AS PER AS4055):

- a. MAXIMUM DISTANCE FROM THE GROUND LEVEL TO THE UNDERSIDE OF EAVES SHALL NOT EXCEED 6.0m,
- b. MAXIMUM DISTANCE FROM GROUND LEVEL TO THE HIGHEST POINT OF THE ROOF, EXCLUDING CHIMNEYS, SHALL NOT EXCEED 8.5m,
- c. THE ROOF PITCH SHALL NOT EXCEED 35 °,
- d. THE WIDTH, EXCLUDING EAVES, SHALL NOT EXCEED 16.0m AND THE LENGTH SHALL NOT EXCEED 5x THE WIDTH.

IF THE BUILDING FALLS OUTSIDE OF THESE LIMITATIONS, THE STATED WIND CLASSIFICATION DOES NOT APPLY. REFER BACK TO THIS OFFICE FOR A REVISED WIND CLASSIFICATION.

### ENVIRONMENTAL

25. NO ENVIRONMENTAL ASSESSMENT OF THIS SITE HAS BEEN UNDERTAKEN. SHOULD AN ENVIRONMENTAL ASSESSMENT BE REQUIRED, PLEASE CONTACT THIS OFFICE.

### SEISMIC

26. RECOMMENDED FOOTING DETAILS ARE SUITABLE FOR SEISMIC CONDITIONS WITH AN EARTHQUAKE HAZARD FACTOR OF  $\leq 0.11$ . RECOMMENDED FOOTING DETAILS PROVIDED FOR SITES WITH AN EARTHQUAKE HAZARD FACTOR OF  $> 0.11$ , ARE NOT FOR CONSTRUCTION, BUT FOR COSTING PURPOSES ONLY. IT IS REQUIRED THAT A FULL SEISMIC DESIGN IS CONDUCTED.

### CORROSION CLASSIFICATION

27. THE CORROSION CLASSIFICATION HAS BEEN ASSESSED IN ACCORDANCE WITH AS3700.

DOC# SS001 - 1.1.10 SCR EQUIVALENT V1.1 - AUGUST 2021



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SCALE 1:20

DATE 16/11/22

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A blue ink handwritten signature is written over the 'APPROVED' field.

**SITE CLASSIFICATION REPORT**  
CERTIFICATE 2595173

**CLIENT** PARCEL DARCH PTY LTD  
**JOB ADDRESS** LOT 260 ATTADALE AV DARCH  
**CLIENT JOB NO.**  
**OWNER**  
**STRUCTERRE JOB NO.** S1082661  
**DATE OF ASSESSMENT** 15/11/22

**SITE RECORD**

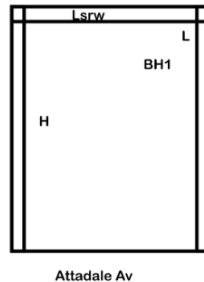


<b>SITE CLASSIFICATION</b>	<b>S - EQUIVALENT</b> <i>(in accordance with AS2870)</i>
<b>FOOTING DETAIL</b>	<b>CM3</b>
<b>SAND PAD</b>	<b>No sand pad required structurally</b>
<b>BUSHFIRE PRONE AREA</b>	<b>Not in a Bushfire Prone Area (see NOTE 2.)</b>
<b>CORROSION CLASSIFICATION</b>	<b>R1</b> <i>(Durability Class in accordance with AS3700)</i>
<b>WIND CLASSIFICATION</b>	<b>N1</b> <i>(in accordance with AS4055)</i>
-TERRAIN CATEGORY	3
-TOPOGRAPHIC	T0
-SHIELDING	Full Shielding

## SOIL PROFILE

BOREHOLE 1: 0 - 500 FILL sand with artificial material trace limestone gravel - grey; 500 hard ground refusal.

## APPROXIMATE BOREHOLE LOCATIONS



### NOTE 1 Explanatory Notes & Standard Recommendations

This site classification report must be read in conjunction with the applicable Explanatory Notes & Standard Recommendations. For A Class sites, refer to the Explanatory Notes and Standard Recommendations for Stable (A Class) Sites, version 1.0 July 2018. For S, M, H1, H2 & E Class sites, refer to the Explanatory Notes and Standard Recommendations for Reactive (S, M, H1, H2 & E Class) Sites version 1.0 July 2018. For Equivalent Class sites, refer to the Explanatory Notes and Standard Recommendations for Equivalent Class Sites, version 1.0 July 2018.

### NOTE 2 Bushfire - Prone Area

The Site may be situated in a bush fire prone area in accordance with the Department of Fire and Emergency Services (DFES) Bushfire Prone Area Map (Reference: <http://www.dfes.wa.gov.au/regulationandcompliance/bushfireproneareas/>) the current version at the time of this assessment. A Bushfire Attack Level (BAL) assessment may be required for this site, please confirm with the local authority. Should you require an assessment, please contact this Office.

## ADDITIONAL NOTES / REQUIREMENTS

### Site Condition

At the time of inspection the site was considered to be level and cleared. For specific levels of this site or topographical features, please refer to a professional site survey.

### Structerre Geotech Reference

The Site Classification is based on any remedial works being successfully completed as outlined in the Structerre Geotechnical Report J380185 dated 02/04/2021. The footing details are subject to the recommendations being completed to an acceptable level as outlined in this report, if applicable.

### Internal Thickenings


Internal thickenings are required for the proposed residence as specified on the recommended footing detail. Please provide a copy of the architectural drawings to this Office, so that the internal thickenings can be designed and drawn in accordance with AS2870.

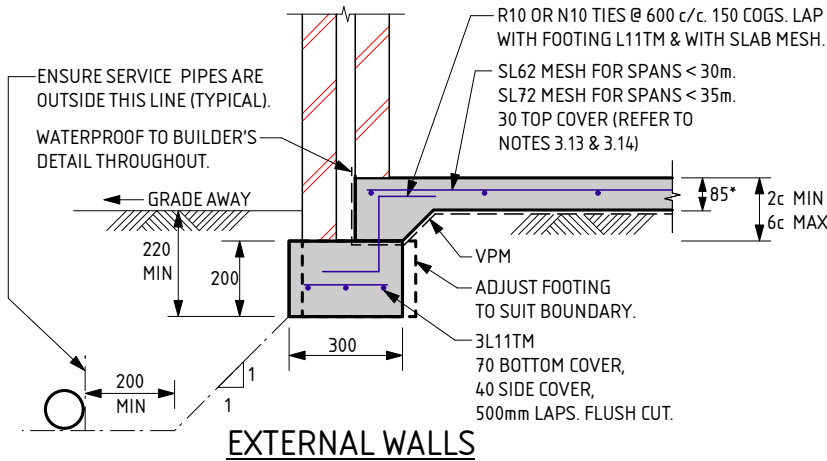
### Internal Thickening Inspection

This detail is subject to a internal thickening layout inspection. It is recommended that an inspection be conducted by a representative from this Office prior to concrete pour.

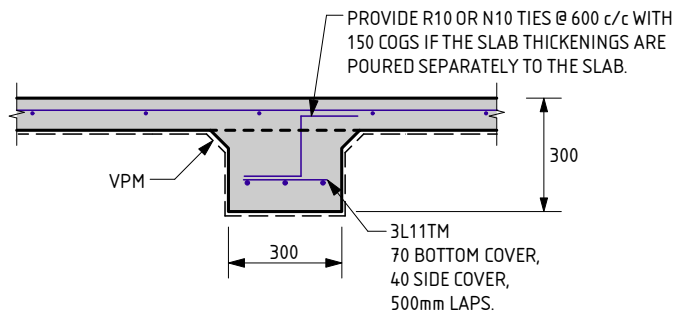
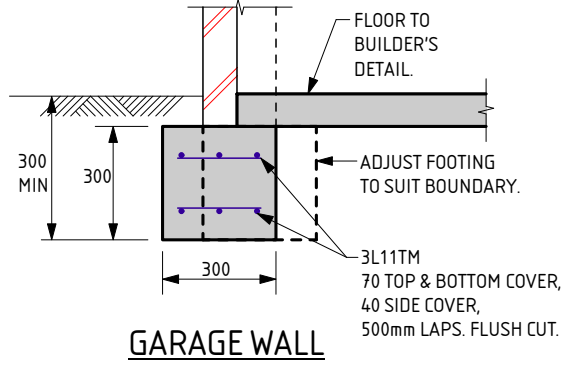
-- END OF REPORT --

Signed:

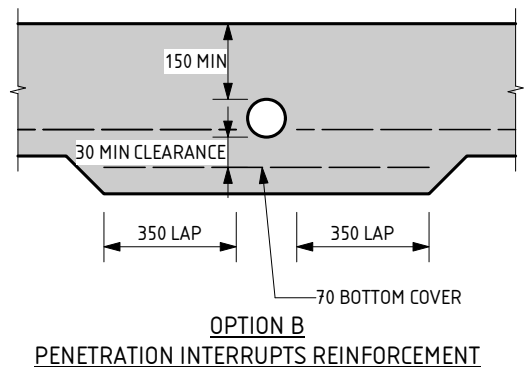
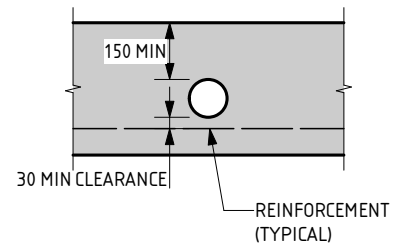
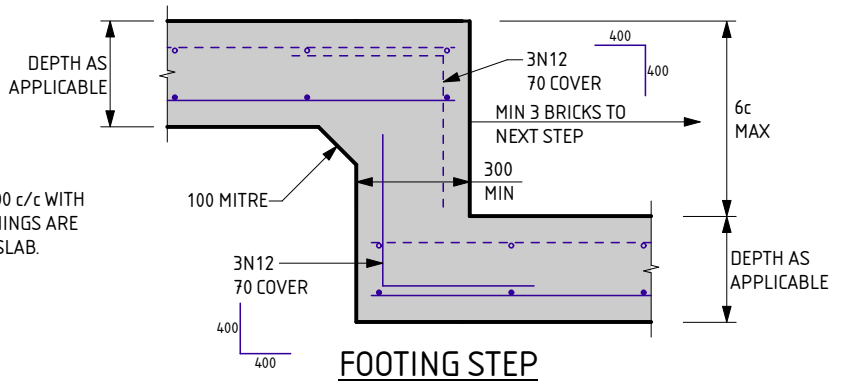
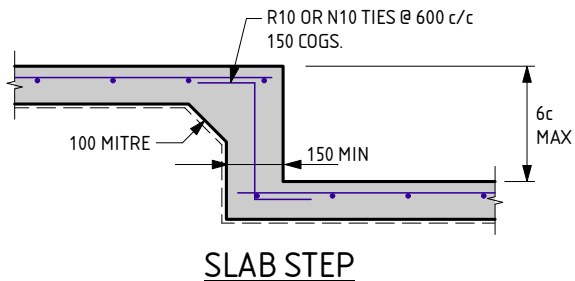
  
Gervase Purich  
Chief Executive Officer



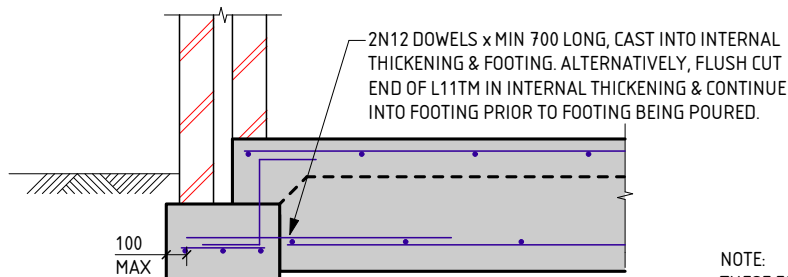
\* 100mm SLAB MAY BE INSTALLED INSTEAD OF 85mm.  
IF 100mm SLAB USED, MESH TO BE:  
SL62 MESH FOR SPANS < 25m.  
SL72 MESH FOR SPANS < 30m.  
SL82 MESH FOR SPANS < 35m.



REFER TO STRUCTERRE'S DRAWINGS FOR PLACEMENT OF INTERNAL THICKENINGS. LOCATIONS TO BE CONFIRMED ON SITE BY STRUCTERRE PRIOR TO CONCRETE POUR.



**SERVICE PIPE DIAGRAM**  
- MAXIMUM PENETRATION SIZE TO BE Ø150.



### EXTERNAL FOOTING TO INTERNAL THICKENING

THIS DETAIL IS EQUIVALENT TO  
STRUCTERRE FOOTING DETAIL C4.0

NOTE:  
THESE FOOTING DETAILS ARE TO BE READ IN CONJUNCTION WITH THE REACTIVE SITE NOTES.

THE APPROVED SIGNATURE ON THIS DETAIL ENDORSES ITS USE FOR SINGLE STOREY BUILDINGS ON BUILDING PLATFORMS WITH UP TO 11mm OF SURFACE MOVEMENT.  
DATE LAST MODIFIED - 20/09/18

**CM3**  
CAVITY MASONRY

**STRUCterre**  
consulting engineers

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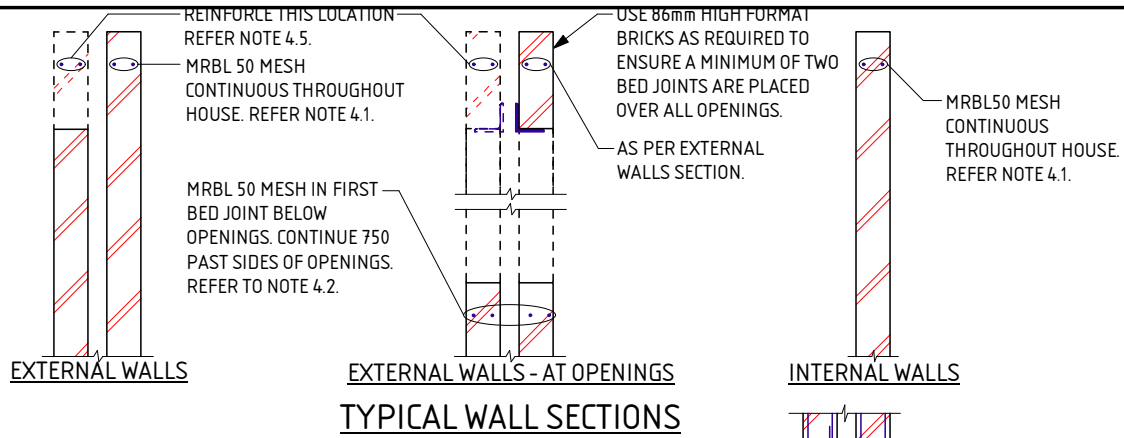
PROJECT:  
LOT 260 ATTADALE AV DARCH

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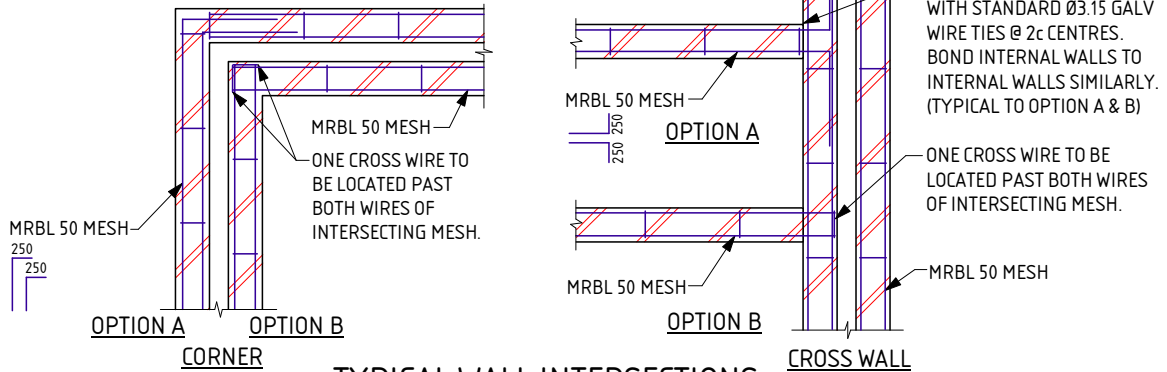
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DATE 16/11/22

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TYPICAL WALL SECTIONS



TYPICAL WALL INTERSECTIONS

REACTIVE SITE NOTES FOR CM1 - CM7

THESE NOTES ARE TO BE READ IN CONJUNCTION WITH THE ATTACHED FOOTING DETAILS.

1.0 SITE CLASSIFICATION

- 1.1 REFER TO ATTACHED CERTIFICATE OF INSPECTION FOR SITE CLASSIFICATION. THE SITE CLASSIFICATION NOTED, IS AS DEFINED IN AS2870 - RESIDENTIAL SLABS & FOOTINGS.
- 1.2 THE SITE CLASSIFICATION HAS BEEN DETERMINED BY INVESTIGATION OF THE SITE, AS PER THE ATTACHED CERTIFICATE OF INSPECTION. REFER TO THE ATTACHED CERTIFICATE FOR ANY SPECIAL REQUIREMENTS.

2.0 EARTHWORKS

- 2.1 SAND PAD IF APPLICABLE TO BE AS PER SITE INSPECTION REPORT.
- 2.2 EARTHWORKS SHALL INCLUDE, BUT NOT BE LIMITED TO:
  - a) REMOVE ALL ORGANIC MATERIAL FROM THE PAD AREA.
  - b) REMOVE ALL RUBBISH AND DELETERIOUS FILL (SUCH AS CLAY FILL) FROM THE PAD AREA.
  - c) GRUB OUT ANY TREES WHERE NECESSARY AND ENSURE THE REMAINING HOLES ARE FILLED AND COMPACTED SATISFACTORILY WITH SAND.
  - d) NOTIFY THE ENGINEER OF ANY UNUSUAL FEATURES OR DISCREPANCIES WHICH MAY BECOME EVIDENT DURING EARTHWORKS, PRIOR TO PROCEEDING.
- 2.3 ANY PREDOMINANT ROCK IN THE HOUSE PAD AREAS IS TO BE INSPECTED BY THE ENGINEER.
- 2.4 ANY CUT TO THE SITE, OTHER THAN TOPSOIL STRIPPING, WILL REQUIRE THE PREPARED CUT BASE TO BE INSPECTED AND APPROVED BY THE ENGINEER.
- 2.5 MAXIMUM SAND PAD DEPTH NOT TO EXCEED 150% OF MINIMUM PAD DEPTH OR 2000mm WITHOUT THE ENGINEER'S APPROVAL.
- 2.6 IF APPLICABLE SAND FILL TO BE CLEAN WELL DRAINED, WITH MAX FINES (PARTICLES UP TO 0.075mm) CONTENT OF 5%. SAND TO BE COMPACTED TO A MIN 6 BLOWS/300mm FOR THE DEPTH OF THE PAD OR TO DISCRETION OF ENGINEER.
- 2.7 COMPACTION TESTING TO BE PERFORMED BY STRUCTERRE.

3.0 FOOTINGS & SLABS

- 3.1 FOOTINGS ARE TO BE PLACED DIRECTLY INTO SAND PAD OF SPECIFIED THICKNESS.
- 3.2 ALL STORMWATER MUST BE DISCHARGED INTO COUNCIL DRAINS OR A MINIMUM OF 3m FOR S CLASS SITES, 4m FOR M CLASS SITES AND 5m FOR H1 & H2 CLASS SITES, AWAY FROM THE RESIDENCE AND/OR ADJACENT BUILDINGS INTO SOAKWELLS. IF THIS RESTRICTION CANNOT BE ACHIEVED REFER BACK TO THIS OFFICE FOR AN ALTERNATIVE DESIGN. WHERE THE SITE HAS BEEN CLASSIFIED AS AN 'EQUIVALENT' SITE CLASSIFICATION, REFER TO 'EXPLANATORY NOTES & STANDARD RECOMMENDATIONS - EQUIVALENT CLASS SITES' FOR STORMWATER DRAINAGE REQUIREMENTS UNLESS SPECIFIED OTHERWISE.
- 3.3 EXCAVATIONS FOR ALL SERVICE PIPES NOT TO UNDERMINE FOOTINGS. IF UNDERMINING IS LIKELY TO OCCUR, CONTACT THE ENGINEER PRIOR TO PROCEEDING.
- 3.4 WHERE PLUMBING PIPES PASS THROUGH FOOTINGS OR SLAB, SPECIFIED TOTAL THICKNESS OF ALL CONCRETE IS ALWAYS TO BE MAINTAINED.
- 3.5 SETDOWN AT WET AREA TO ARCHITECTURAL REQUIREMENT (50mm MAX). MAINTAIN 85mm SLAB THICKNESS. FOLD MESH DOWN TO MAINTAIN COVER, PLACE DIAGONAL BARS AT RE-ENTRANT CORNER FOR STEPS OVER 30mm. BARS TO BE N12x 1200 LONG.
- 3.6 REINFORCEMENT SHALL BE IN ACCORDANCE WITH THE FOLLOWING STANDARDS;
 

L	INDICATES PLAIN OR DEFORMED WIRE R500L OR D500L TO AS/NZS 4671.
SL	INDICATES DEFORMED SQUARE MESH D500L TO AS/NZS 4671.
N	INDICATES DEFORMED BARS D500N TO AS/NZS 4671.
TM SUFFIX	INDICATES TRENCH MESH USING DEFORMED BARS D500L TO AS/NZS 4671.

 ALL STEELWORK TO BE TREATED IN ACCORDANCE WITH TABLE 3.4.4.4 "CORROSION PROTECTION" OF THE BUILDING CODE OF AUSTRALIA.
- 3.7 LAP ALL MESH TWO TRANSVERSE WIRES PLUS 25mm OR TO MANUFACTURER'S SPECIFICATIONS.

3.8 CONCRETE TO CONFORM WITH AS 3600.

- 3.9 BLENDED CEMENT TO CONFORM WITH AS1317.
- 3.10 ALL CONCRETE TO BE N20/20/100.
- 3.11 FOR ISOLATED PAD FOOTINGS, REFER BACK TO ENGINEER.
- 3.12 FOOTING POSITION UNDER BRICKWORK CAN BE ADJUSTED TO SUIT PARAPET WALLS.
- 3.13 FOR SLAB SPANS > 35m REFER TO ENGINEER FOR MESH SIZE.
- 3.14 IF THE LENGTH TO WIDTH RATIO OF THE GROUND SLAB OR ANY PART OF THE GROUND SLAB EXCEEDS 3:1, REFER BACK TO THIS OFFICE FOR MESH SIZE.
- 3.15 IF POLISHED (OR HONED) CONCRETE FINISHES ARE DESIRED, THIS DESIGN SHOULD BE REFERRED BACK TO THIS OFFICE FOR CONSIDERATION, AS IT IS NOT THE INTENTION OF THESE DESIGNS FOR SUCH FINISHES.
- 3.16 PLACE SLAB THICKENING (300 WIDE x 250 DEEP) UNDER INTERNAL WALLS (90 OR 110) HIGHER THAN 3.7m WHERE GREATER THAN 1m FROM INTERNAL THICKENING. PROVIDE SAME TRENCH MESH AS INTERNAL THICKENING DETAIL, WHERE REQUIRED.
- 3.17 PIERCING THE VAPOUR BARRIER (VPM) USING LEVELLING PINS ON FREE DRAINING SAND PADS IS ALLOWABLE.
- 3.18 CURE SLAB AS DETERMINED BY ENGINEER.
- 3.19 THE SLAB IS CONSIDERED SUITABLE AS A PHYSICAL BARRIER AGAINST INGRESS OF TERMITES. IF THE FOOTING AND SLAB IS PLACED IN 2 POURS, THE PHYSICAL BARRIER ALSO INCLUDES THE FOOTING AND SLAB JOINT.
- 3.20 THE FOOTING DETAILS HAVE BEEN DESIGNED IN ACCORDANCE WITH AS3600 AND SECTION 4 OF AS2870.

4.0 MASONRY

- 4.1 PLACE MRBL50 MESH IN TOP BED JOINT CONTINUOUS THROUGHOUT ALL BRICKWORK.
- 4.2 REINFORCE BED JOINT BELOW WINDOW SILLS WITH MRBL50 MESH. CONTINUE 750 PAST SIDES OF OPENING.
- 4.3 LAP 250 AT SPLICES AND AROUND CORNERS AND COG 250 INTO INTERSECTING WALLS. 20mm COVER TO ALL WIRES.
- 4.4 ALL MESH IN EXTERNAL FACE OF EXTERNAL LEAF TO BE GALVANIZED TO AS/NZS 4680.
- 4.5 WHEN BRICKWORK EXTENDS ABOVE OPENINGS TO EXTERNAL LEAF REINFORCE AS PER CLAUSE 4.1, 4.2 & 4.3.
- 4.6 TYPICAL WALL SECTIONS ARE SHOWN FOR 28C INTERNAL CEILINGS. WHERE THERE ARE 3 OR MORE BED JOINTS OVER THE OPENING, REINFORCE BED JOINT OVER OPENING WITH MRBL50 MESH. CONTINUE 750 PAST SIDE OF OPENING.
- 4.7 ALL PERPENDS TO BE FULLY MORTARED.
- 4.8 A BRICK COURSE, AS REFERRED TO IN THIS DOCUMENT IS STANDARD 86mm HIGH.
- 4.9 2L6 WIRES MAY BE USED AS AN ALTERNATIVE TO THE MRBL50 MESH. WHERE L6 WIRES ARE USED, ALL SPLICES AND COGS TO BE 500 LONG.

5.0 MAINTENANCE

- 5.1 IT IS CONSIDERED THAT THIS DESIGN IS SUITABLE FOR THE FOUNDATION CONDITIONS TO BE ENCOUNTERED AND WILL ADEQUATELY CONTROL ANY CRACKING OF BRICKWORK AND CONCRETE, SUBJECT TO THE MAINTENANCE PROCEDURES BELOW BEING SATISFIED.
- 5.2 BUILDER TO ENSURE THAT CLIENT BE INFORMED OF NECESSITY TO MAINTAIN DRAINS IN GOOD WORKING ORDER AT ALL TIMES.
- 5.3 BUILDER TO ADVISE CLIENT TO CONSULT AN ENGINEER BEFORE PLANTING TREES OR SHRUBS WITHIN 2.5m, OR A DISTANCE EQUAL TO THE ANTICIPATED MAXIMUM HEIGHT OF THE TREE, OF THE BUILDING.
- 5.4 SITE TO BE MAINTAINED AS PER CSIRO INFORMATION PAMPHLET BTF 18 & STRUCTERRE'S CLAY FACT SHEET.
- 5.5 AS2870 AND 'CSIRO PAMPHLET BTF 18' COVER THE EXPECTED PERFORMANCE AND RESPONSIBILITIES OF ALL PARTIES WITH THE USE OF THESE DETAILS.

6.0 QUALITY CONTROL PROGRAM REQUIREMENTS

- 6.1 WORKING SLAB DEPTH AS INDICATED ON THE DETAIL. SLAB DEPTH TOLERANCE ALLOWABLE -10mm, +15mm.
- 6.2 WHERE DEPTH IS BELOW NOMINATED DEPTH, MAX AREA ALLOWED TO BE ≤ 5% OF THE TOTAL AREA.
- 6.3 DEPTH TESTING LOCATIONS TO BE NO CLOSER THAN 1000mm APART.
- 6.4 SLAB DEPTH IS TO BE PART OF A QUALITY CONTROL INSPECTION REGIME.
- 6.5 SLAB AND FOOTING CAN BE POURED MONOLITHICALLY IF DESIRED.

DATE LAST MODIFIED - 21/09/21



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PROJECT : LOT 260 ATTADALE AV DARCH

CLIENT : PARCEL DARCH PTY LTD

SCALE 1:20

DATE 16/11/22

APPROVED

## EXPLANATORY NOTES & STANDARD RECOMMENDATIONS - EQUIVALENT CLASS SITES (Sheet 1 of 2)

### GENERAL

1. THE EXPLANATORY NOTES AND THE STANDARD RECOMMENDATIONS ARE TO BE READ IN CONJUNCTION WITH THE SITE CLASSIFICATION REPORT.
2. ALL REFERRED STANDARDS TO BE THE CURRENT VERSION AT THE TIME OF THE CONSTRUCTION.
3. THE PURPOSE OF THE SITE CLASSIFICATION REPORT IS TO CLASSIFY THE SITE IN ACCORDANCE WITH AS2870 "RESIDENTIAL SLABS AND FOOTING". IT IS NOT INTENDED FOR ANY OTHER PURPOSE, INCLUDING SOLE INFORMATION IN THE PROVISION OF A QUOTATION FOR SITE WORKS. IT IS RECOMMENDED OTHER PARTIES TO PERFORM THEIR OWN INVESTIGATION FOR QUOTATION PURPOSES.
4. THE SITE CLASSIFICATION REPORT WILL INCLUDE BUT IS NOT LIMITED TO:
  - a. THE SITE CLASSIFICATION IN ACCORDANCE WITH AS2870 "RESIDENTIAL SLABS AND FOOTING",
  - b. A WIND CLASSIFICATION IN ACCORDANCE WITH AS4055 "WIND LOADS FOR HOUSING",
  - c. A COASTAL CORROSION CLASSIFICATION,
  - d. ADDITIONAL EARTHWORK RECOMMENDATIONS WHERE APPLICABLE,
  - e. STANDARD FOOTING DESIGN FOR SINGLE STOREY SLAB ON GROUND CONSTRUCTION.
5. THE SITE CLASSIFICATION IS BASED ON THE SITE AS PRESENTED AT THE TIME OF THE ASSESSMENT. THE SITE CLASSIFICATION AND RECOMMENDATIONS INCLUDED IN THE REPORT ARE SUBJECT TO SATISFACTORY COMPLETION OF RECOMMENDED EARTHWORKS, (REFER NOTE 17) AS A MINIMUM. SHOULD CHANGES TO THE SITE OCCUR, OTHER THAN THE RECOMMENDATIONS INCLUDED IN THE SITE CLASSIFICATION REPORT, REFER BACK TO THIS OFFICE FOR REVIEW OF CLASSIFICATION AND FOOTING DESIGN.
6. ALL RECOMMENDATIONS GIVEN IN THE SITE CLASSIFICATION REPORT HAVE BEEN DETERMINED FROM THE INFORMATION THAT WAS AVAILABLE TO THIS OFFICE AT THE TIME OF INVESTIGATION. IF FURTHER INFORMATION RELATING TO THE SITE OR DEVELOPMENT BECOMES AVAILABLE, THESE RECOMMENDATIONS ARE SUBJECT TO CHANGE.
7. EQUIVALENT CLASS SITES ARE BASED ON DIFFERENTIAL SURFACE MOVEMENT ARISING FROM ISSUE OTHER THAN SHRINK-SWELL (REACTIVITY) ONLY. THESE MAY INCLUDE SETTLEMENT AND/OR CONSOLIDATION THAT MAY OCCUR AS A RESULT OF THE UNDERLYING GROUND CONDITIONS.
8. BOREHOLES EXCAVATED REVEAL THE SOIL PROFILE AT THE BOREHOLE LOCATION ONLY. FROM THIS, IT IS INFERRED THAT THESE ARE THE SOIL CONDITIONS OVER THE SITE. VARIATIONS CAN OCCUR WHICH MAY NOT HAVE BEEN DETECTED AT THE INVESTIGATION STAGE. ANY ANOMALIES SHOULD BE REFERRED BACK TO THIS OFFICE FOR A REASSESSMENT.
9. A NUMBER OF BOREHOLES ARE CONDUCTED ACROSS THE SITE TO DETERMINE THE SOIL PROFILES AND PROVIDE A REPRESENTATION OF THE GROUND CONDITIONS.
10. THIS REPORT IS FOR STRUCTERRE ONLY TO USE IN DESIGN. ANY DESIGN BY ANYONE ELSE FOR ANY STRUCTURE MUST BE SPECIFICALLY APPROVED BY STRUCTERRE. IF USED BY ANYONE ELSE FOR ANYTHING OTHER THAN A STRUCTERRE DESIGN OR STRUCTURE, STRUCTERRE TAKES NO RESPONSIBILITY.

### SAND PAD

11. THE RECOMMENDED FOOTING DESIGN IS ONLY TO BE USED IN CONJUNCTION WITH THE RECOMMENDED SAND PAD AND EARTHWORKS AS OUTLINED IN THE SITE CLASSIFICATION REPORT.
12. THE RECOMMENDATIONS FOR THE SAND PAD IS FOR STRUCTURAL PURPOSES ONLY, AND DOES NOT PROVIDE THE MINIMUM FINISHED PAD LEVEL IN RELATION TO FLOOD LEVELS OR DEPTH TO GROUNDWATER. SHOULD THE TEST BE LOCATED IN A LOW LYING OR FLOOD PRONE AREA, REFER TO THE LOCAL AUTHORITY FOR MINIMUM BUILDING HEIGHT.
13. IMPORTED FILL FOR USE AS A SAND PAD TO BE IN ACCORDANCE TO AS 3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS" WHICH INCLUDES BUT IS NOT LIMITED TO: BE FREE FROM ANY DELETERIOUS MATERIALS INCLUDING ORGANICS, (ROOTS, STUMPS, GRASSES, DECOMPOSED ORGANICS - PEAT, TIMBER, ETC), BUILDING RUBBLE, GLASS, PLASTICS OR WASTE MATERIAL. THE FINES CONTENT, (PERCENTAGE PASSING THE 0.075mm SIEVE) TO BE LESS THAN 5% BY MASS.
14. ON SAND SITES A SAND PAD IS NOT REQUIRED STRUCTURALLY, HOWEVER IF ROCK IS ENCOUNTERED, A MINIMUM 200mm SAND PAD BEYOND THE BASE OF FOOTING IS RECOMMENDED.
15. SAND PAD TO EXTEND BEYOND BUILDING AREA A MINIMUM OF 1.5 TIMES THE PAD DEPTH.
16. RECOMMENDED SAND PAD DEPTH IS ABOVE THE HIGHEST POINT, UNLESS OTHERWISE SPECIFIED.
17. IT IS REQUIRED THAT EARTHWORKS CONFIRM THAT THE MINIMUM DEPTH OF RECOMMENDED SAND PAD IS ACHIEVED.

### EARTHWORKS

18. RECOMMENDED EARTHWORKS TO BE CONDUCTED IN ACCORDANCE WITH AS3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS", AND TO INCLUDE BUT NOT BE LIMITED TO:
  - a. REMOVAL OF ALL VEGETATION, TOPSOILS, UNCONTROLLED FILLS AND OTHER DELETERIOUS MATERIALS FROM THE BUILDING AREA,
  - b. GRUBBING OUT OF ANY TREES ENSURING THE REMAINING HOLES ARE BACKFILLED WITH CLEAN COMPACTED SAND,
  - c. NOTIFYING THE ENGINEER OF ANY UNUSUAL FEATURE OR DISCREPANCY THAT MAY BECOME EVIDENT DURING EARTHWORKS, PRIOR TO PROCEEDING,
  - d. COMPACTING TO MEET THE REQUIREMENTS AS OUTLINED IN AS 3798 TABLE 5.1.
19. FILL MATERIAL (WHICH IS NOT ALWAYS APPARENT AT THE INITIAL INVESTIGATION STAGE) IS TO BE DEALT WITH AS FOLLOWS:
  - a. IF IT IS CERTIFIED BY OTHERS IT CAN REMAIN.
  - b. IF IT IS NOT CERTIFIED WILL REQUIRE REMOVAL DOWN TO NATURAL GROUND OR VERIFIED. ANY SAND CAN BE REUSED.
  - c. IF A PAD HAS ALREADY BEEN CONSTRUCTED, THE SITE CLASSIFICATION IS NOT CERTIFICATION OF THE PAD. CONTACT THIS OFFICE SHOULD A SAND PAD CERTIFICATION BE REQUIRED.
20. ANY ORGANIC MATTER OR ROOTS ENCOUNTERED, WHICH IS BEYOND WHAT IS NORMALLY CONSIDERED ACCEPTABLE IS TO BE REMOVED. THIS WILL NECESSITATE RAKING THE SITE TO REMOVE ORGANIC MATERIAL, TURNING THE SITE OVER AND RE-COMPACTING TO A MINIMUM.

### RETAINING WALLS

21. AN ASSESSMENT OF ANY EXISTING OR PROPOSED RETAINING WALLS HAS NOT BEEN CONDUCTED AS PART OF THIS SITE CLASSIFICATION REPORT.
22. IF THE PROPOSED BUILDING IS TO BE LOCATED CLOSER THAN THE HEIGHT OF THE RETAINING WALL, THIS MAY PLACE ADDITIONAL LOADS ON THE WALL THAT WERE NOT INITIALLY DESIGNED FOR. AN INSPECTION OF THE STRUCTURAL INTEGRITY OF THE RETAINING WALL WILL BE REQUIRED TO PROVIDE CERTIFICATION AND/OR RECOMMENDATIONS PRIOR TO ANY CONSTRUCTION. PLEASE REFER BACK TO THIS OFFICE FOR ASSISTANCE.  
STORMWATER DRAINAGE
23. UNLESS OTHERWISE SPECIFIED, ALL SOAKWELLS ARE TO BE LOCATED THE DEPTH OF THE SOAKWELL AWAY FROM THE BUILDING OR SETBACK A MINIMUM OF 1200mm, WHICHEVER IS GREATER, UNLESS SPECIFIED OTHERWISE. PLEASE REFER BACK TO THIS OFFICE IF THE SETBACK CANNOT BE ACHIEVED.

DOC# SS001 - 1.1.10 SCR EQUIVALENT V1.1 - AUGUST 2021



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PROJECT :  
LOT 260 ATTADALE AV DARCH

CLIENT : PARCEL DARCH PTY LTD

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DATE 16/11/22

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## EXPLANATORY NOTES & STANDARD RECOMMENDATIONS - EQUIVALENT CLASS SITES (Sheet 2 of 2)

### WIND CLASSIFICATION

24. WIND CLASSIFICATION IS GIVEN FOR THE EXPECTED CONDITION 5 YEARS HENCE. THIS CLASSIFICATION IS LIMITED TO BUILDINGS CLASSES 1 AND 10, WHICH HAVE THE FOLLOWING LIMITATION (AS PER AS4055):

- a. MAXIMUM DISTANCE FROM THE GROUND LEVEL TO THE UNDERSIDE OF EAVES SHALL NOT EXCEED 6.0m,
- b. MAXIMUM DISTANCE FROM GROUND LEVEL TO THE HIGHEST POINT OF THE ROOF, EXCLUDING CHIMNEYS, SHALL NOT EXCEED 8.5m,
- c. THE ROOF PITCH SHALL NOT EXCEED 35 °,
- d. THE WIDTH, EXCLUDING EAVES, SHALL NOT EXCEED 16.0m AND THE LENGTH SHALL NOT EXCEED 5x THE WIDTH.

IF THE BUILDING FALLS OUTSIDE OF THESE LIMITATIONS, THE STATED WIND CLASSIFICATION DOES NOT APPLY. REFER BACK TO THIS OFFICE FOR A REVISED WIND CLASSIFICATION.

### ENVIRONMENTAL

25. NO ENVIRONMENTAL ASSESSMENT OF THIS SITE HAS BEEN UNDERTAKEN. SHOULD AN ENVIRONMENTAL ASSESSMENT BE REQUIRED, PLEASE CONTACT THIS OFFICE.

### SEISMIC

26. RECOMMENDED FOOTING DETAILS ARE SUITABLE FOR SEISMIC CONDITIONS WITH AN EARTHQUAKE HAZARD FACTOR OF  $\leq 0.11$ . RECOMMENDED FOOTING DETAILS PROVIDED FOR SITES WITH AN EARTHQUAKE HAZARD FACTOR OF  $> 0.11$ , ARE NOT FOR CONSTRUCTION, BUT FOR COSTING PURPOSES ONLY. IT IS REQUIRED THAT A FULL SEISMIC DESIGN IS CONDUCTED.

### CORROSION CLASSIFICATION

27. THE CORROSION CLASSIFICATION HAS BEEN ASSESSED IN ACCORDANCE WITH AS3700.

DOC# SS001 - 1.1.10 SCR EQUIVALENT V1.1 - AUGUST 2021



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SCALE 1:20

DATE 16/11/22

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A blue ink handwritten signature is written over the 'APPROVED' field.

**SITE CLASSIFICATION REPORT**  
CERTIFICATE 2595174

**CLIENT** PARCEL DARCH PTY LTD  
**JOB ADDRESS** LOT 261 ATTADALE AV DARCH  
**CLIENT JOB NO.**  
**OWNER**  
**STRUCTERRE JOB NO.** S1082662  
**DATE OF ASSESSMENT** 15/11/22

**SITE RECORD**

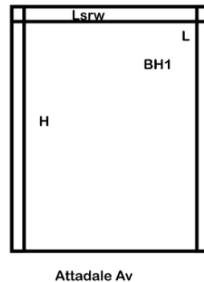


<b>SITE CLASSIFICATION</b>	<b>S - EQUIVALENT</b> <i>(in accordance with AS2870)</i>
<b>FOOTING DETAIL</b>	<b>CM3</b>
<b>SAND PAD</b>	<b>No sand pad required structurally</b>
<b>BUSHFIRE PRONE AREA</b>	<b>Not in a Bushfire Prone Area (see NOTE 2.)</b>
<b>CORROSION CLASSIFICATION</b>	<b>R1</b> <i>(Durability Class in accordance with AS3700)</i>
<b>WIND CLASSIFICATION</b>	<b>N1</b> <i>(in accordance with AS4055)</i>
<b>-TERRAIN CATEGORY</b>	<b>3</b>
<b>-TOPOGRAPHIC</b>	<b>T0</b>
<b>-SHIELDING</b>	<b>Full Shielding</b>

## SOIL PROFILE

BOREHOLE 1: 0 - 1800 FILL sand with artificial material trace limestone gravel - grey; 1800 end of hole.

## APPROXIMATE BOREHOLE LOCATIONS



### NOTE 1 Explanatory Notes & Standard Recommendations

This site classification report must be read in conjunction with the applicable Explanatory Notes & Standard Recommendations. For A Class sites, refer to the Explanatory Notes and Standard Recommendations for Stable (A Class) Sites, version 1.0 July 2018. For S, M, H1, H2 & E Class sites, refer to the Explanatory Notes and Standard Recommendations for Reactive (S, M, H1, H2 & E Class) Sites version 1.0 July 2018. For Equivalent Class sites, refer to the Explanatory Notes and Standard Recommendations for Equivalent Class Sites, version 1.0 July 2018.

### NOTE 2 Bushfire - Prone Area

The Site may be situated in a bush fire prone area in accordance with the Department of Fire and Emergency Services (DFES) Bushfire Prone Area Map (Reference: <http://www.dfes.wa.gov.au/regulationandcompliance/bushfireproneareas/>) the current version at the time of this assessment. A Bushfire Attack Level (BAL) assessment may be required for this site, please confirm with the local authority. Should you require an assessment, please contact this Office.

## ADDITIONAL NOTES / REQUIREMENTS

### Site Condition

At the time of inspection the site was considered to be level and cleared. For specific levels of this site or topographical features, please refer to a professional site survey.

### Structerre Geotech Reference

The Site Classification is based on any remedial works being successfully completed as outlined in the Structerre Geotechnical Report J380185 dated 02/04/2021. The footing details are subject to the recommendations being completed to an acceptable level as outlined in this report, if applicable.

### Internal Thickenings

Internal thickenings are required for the proposed residence as specified on the recommended footing detail. Please provide a copy of the architectural drawings to this Office, so that the internal thickenings can be designed and drawn in accordance with AS2870.

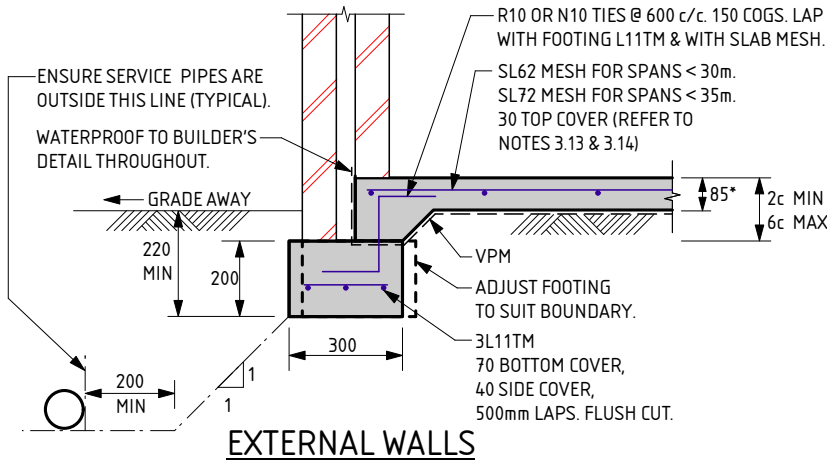
### Internal Thickening Inspection

This detail is subject to a internal thickening layout inspection. It is recommended that an inspection be conducted by a representative from this Office prior to concrete pour.

-- END OF REPORT --

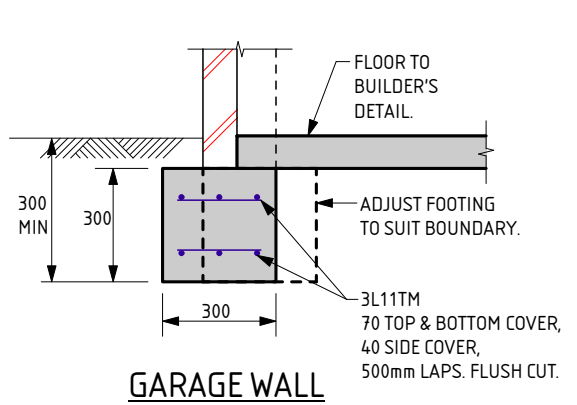
Signed:

  
Gervase Purich  
Chief Executive Officer

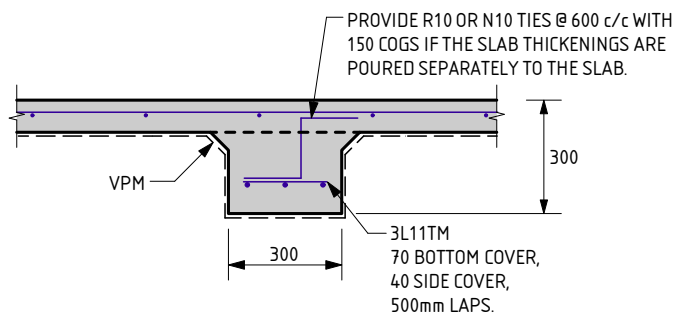


**EXTERNAL WALLS**

\* 100mm SLAB MAY BE INSTALLED INSTEAD OF 85mm.  
 IF 100mm SLAB USED, MESH TO BE:  
 SL62 MESH FOR SPANS < 25m.  
 SL72 MESH FOR SPANS < 30m.  
 SL82 MESH FOR SPANS < 35m.

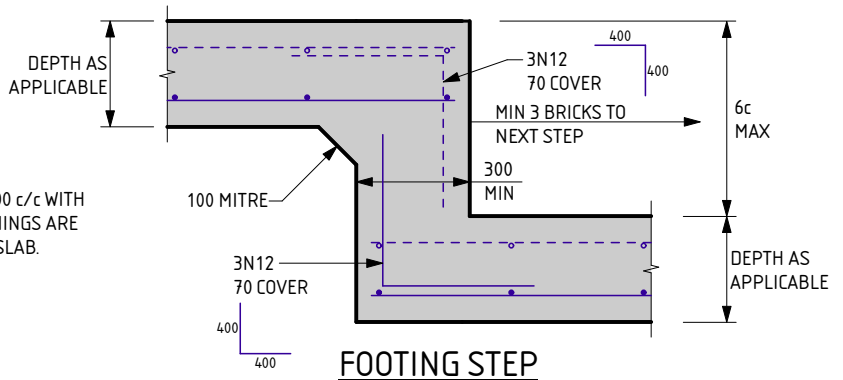


**GARAGE WALL**

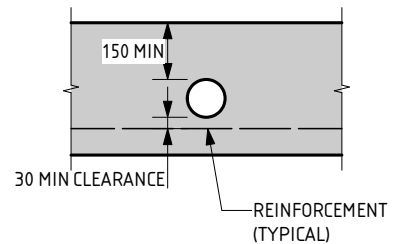


**INTERNAL THICKENING**

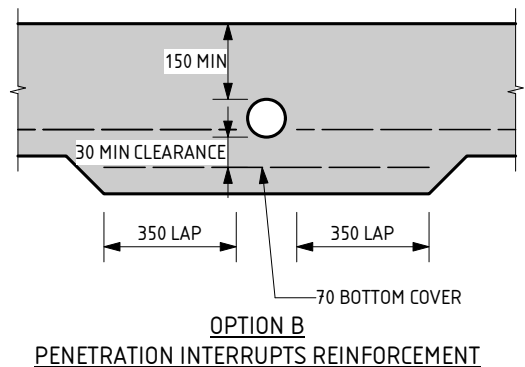
REFER TO STRUCTERRE'S DRAWINGS FOR PLACEMENT OF INTERNAL THICKENINGS. LOCATIONS TO BE CONFIRMED ON SITE BY STRUCTERRE PRIOR TO CONCRETE POUR.



**FOOTING STEP**



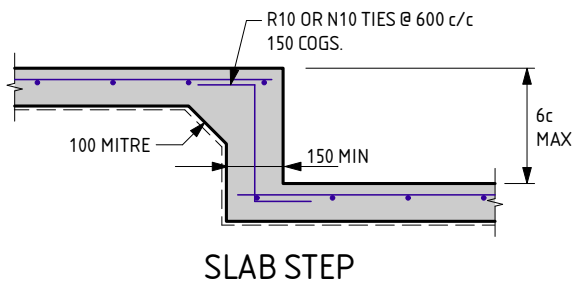
**OPTION A  
PENETRATION CLEAR OF REINFORCEMENT**



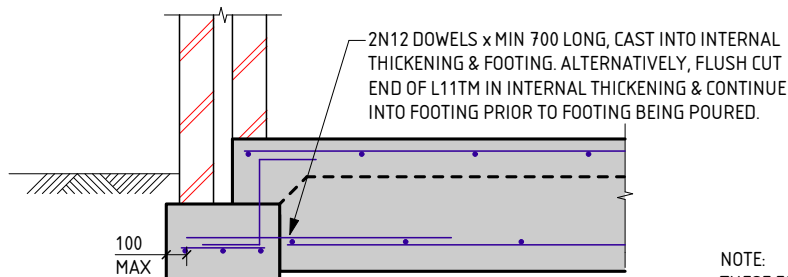
**OPTION B  
PENETRATION INTERRUPTS REINFORCEMENT**

**SERVICE PIPE DIAGRAM**

- MAXIMUM PENETRATION SIZE TO BE Ø150.



**SLAB STEP**



**EXTERNAL FOOTING TO INTERNAL THICKENING**

THIS DETAIL IS EQUIVALENT TO  
 STRUCTERRE FOOTING DETAIL C4.0

NOTE:  
 THESE FOOTING DETAILS ARE TO BE READ IN CONJUNCTION WITH THE REACTIVE SITE NOTES.

THE APPROVED SIGNATURE ON THIS DETAIL ENDORSES ITS USE FOR SINGLE STOREY BUILDINGS ON BUILDING PLATFORMS WITH UP TO 11mm OF SURFACE MOVEMENT.  
 DATE LAST MODIFIED - 20/09/18

**CM3**  
 CAVITY MASONRY



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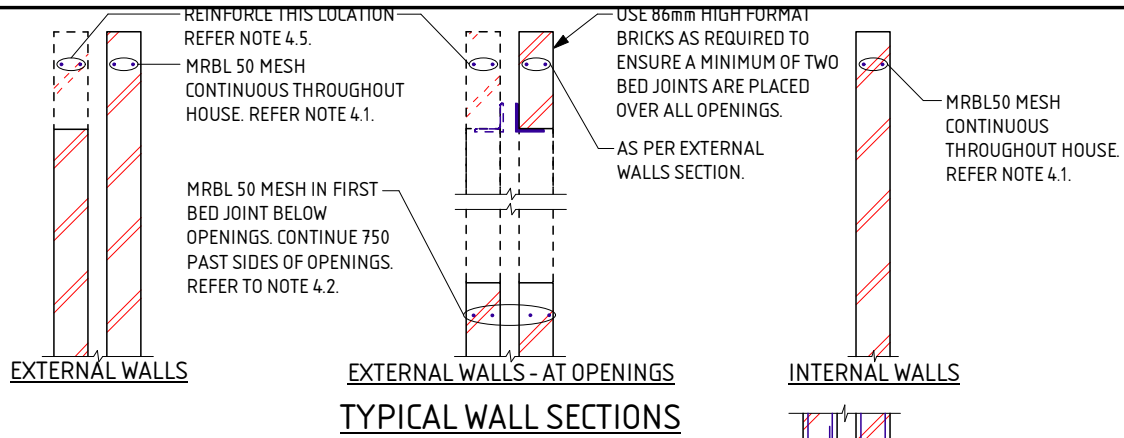
PROJECT: LOT 261 ATTADALE AV DARCH

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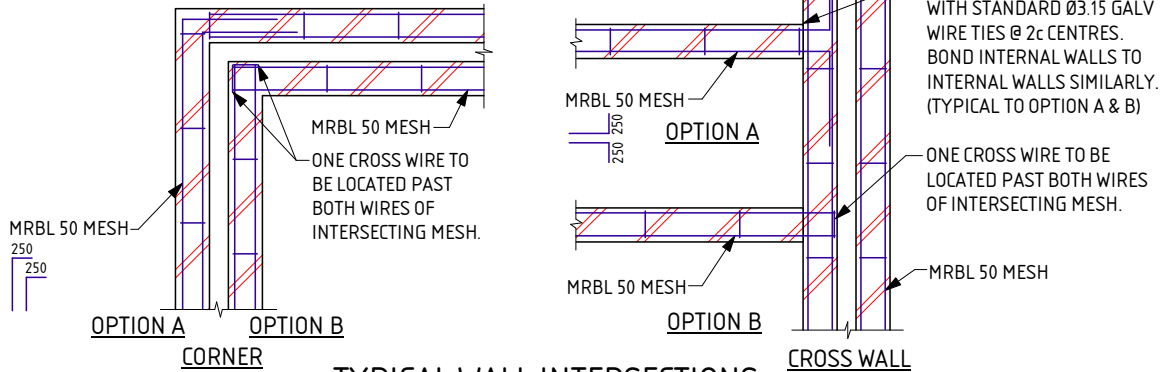
SCALE: 1:20

DATE: 16/11/22

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**TYPICAL WALL SECTIONS**



**TYPICAL WALL INTERSECTIONS**

**REACTIVE SITE NOTES FOR CM1 - CM7**

THESE NOTES ARE TO BE READ IN CONJUNCTION WITH THE ATTACHED FOOTING DETAILS.

**1.0 SITE CLASSIFICATION**

- 1.1 REFER TO ATTACHED CERTIFICATE OF INSPECTION FOR SITE CLASSIFICATION. THE SITE CLASSIFICATION NOTED, IS AS DEFINED IN AS2870 - RESIDENTIAL SLABS & FOOTINGS.
- 1.2 THE SITE CLASSIFICATION HAS BEEN DETERMINED BY INVESTIGATION OF THE SITE, AS PER THE ATTACHED CERTIFICATE OF INSPECTION. REFER TO THE ATTACHED CERTIFICATE FOR ANY SPECIAL REQUIREMENTS.

**2.0 EARTHWORKS**

- 2.1 SAND PAD IF APPLICABLE TO BE AS PER SITE INSPECTION REPORT.
- 2.2 EARTHWORKS SHALL INCLUDE, BUT NOT BE LIMITED TO:
  - a) REMOVE ALL ORGANIC MATERIAL FROM THE PAD AREA.
  - b) REMOVE ALL RUBBISH AND DELETERIOUS FILL (SUCH AS CLAY FILL) FROM THE PAD AREA.
  - c) GRUB OUT ANY TREES WHERE NECESSARY AND ENSURE THE REMAINING HOLES ARE FILLED AND COMPACTED SATISFACTORILY WITH SAND.
  - d) NOTIFY THE ENGINEER OF ANY UNUSUAL FEATURES OR DISCREPANCIES WHICH MAY BECOME EVIDENT DURING EARTHWORKS, PRIOR TO PROCEEDING.
- 2.3 ANY PREDOMINANT ROCK IN THE HOUSE PAD AREAS IS TO BE INSPECTED BY THE ENGINEER.
- 2.4 ANY CUT TO THE SITE, OTHER THAN TOPSOIL STRIPPING, WILL REQUIRE THE PREPARED CUT BASE TO BE INSPECTED AND APPROVED BY THE ENGINEER.
- 2.5 MAXIMUM SAND PAD DEPTH NOT TO EXCEED 150% OF MINIMUM PAD DEPTH OR 2000mm WITHOUT THE ENGINEER'S APPROVAL.
- 2.6 IF APPLICABLE SAND FILL TO BE CLEAN WELL DRAINED, WITH MAX FINES (PARTICLES UP TO 0.075mm) CONTENT OF 5%. SAND TO BE COMPACTED TO A MIN 6 BLOWS/300mm FOR THE DEPTH OF THE PAD OR TO DISCRETION OF ENGINEER.
- 2.7 COMPACTION TESTING TO BE PERFORMED BY STRUCTERRE.

**3.0 FOOTINGS & SLABS**

- 3.1 FOOTINGS ARE TO BE PLACED DIRECTLY INTO SAND PAD OF SPECIFIED THICKNESS.
- 3.2 ALL STORMWATER MUST BE DISCHARGED INTO COUNCIL DRAINS OR A MINIMUM OF 3m FOR S CLASS SITES, 4m FOR M CLASS SITES AND 5m FOR H1 & H2 CLASS SITES, AWAY FROM THE RESIDENCE AND/OR ADJACENT BUILDINGS INTO SOAKWELLS. IF THIS RESTRICTION CANNOT BE ACHIEVED REFER BACK TO THIS OFFICE FOR AN ALTERNATIVE DESIGN. WHERE THE SITE HAS BEEN CLASSIFIED AS AN 'EQUIVALENT' SITE CLASSIFICATION, REFER TO 'EXPLANATORY NOTES & STANDARD RECOMMENDATIONS - EQUIVALENT CLASS SITES' FOR STORMWATER DRAINAGE REQUIREMENTS UNLESS SPECIFIED OTHERWISE.
- 3.3 EXCAVATIONS FOR ALL SERVICE PIPES NOT TO UNDERMINE FOOTINGS. IF UNDERMINING IS LIKELY TO OCCUR, CONTACT THE ENGINEER PRIOR TO PROCEEDING.
- 3.4 WHERE PLUMBING PIPES PASS THROUGH FOOTINGS OR SLAB, SPECIFIED TOTAL THICKNESS OF ALL CONCRETE IS ALWAYS TO BE MAINTAINED.
- 3.5 SETDOWN AT WET AREA TO ARCHITECTURAL REQUIREMENT (50mm MAX). MAINTAIN 85mm SLAB THICKNESS. FOLD MESH DOWN TO MAINTAIN COVER, PLACE DIAGONAL BARS AT RE-ENTRANT CORNER FOR STEPS OVER 30mm. BARS TO BE N12x 1200 LONG.
- 3.6 REINFORCEMENT SHALL BE IN ACCORDANCE WITH THE FOLLOWING STANDARDS;
 

L	INDICATES PLAIN OR DEFORMED WIRE R500L OR D500L TO AS/NZS 4671.
SL	INDICATES DEFORMED SQUARE MESH D500L TO AS/NZS 4671.
N	INDICATES DEFORMED BARS D500N TO AS/NZS 4671.
TM SUFFIX	INDICATES TRENCH MESH USING DEFORMED BARS D500L TO AS/NZS 4671.

 ALL STEELWORK TO BE TREATED IN ACCORDANCE WITH TABLE 3.4.4.4 "CORROSION PROTECTION" OF THE BUILDING CODE OF AUSTRALIA.
- 3.7 LAP ALL MESH TWO TRANSVERSE WIRES PLUS 25mm OR TO MANUFACTURER'S SPECIFICATIONS.

**3.8 CONCRETE TO CONFORM WITH AS 3600.**

- 3.9 BLENDED CEMENT TO CONFORM WITH AS1317.
- 3.10 ALL CONCRETE TO BE N20/20/100.
- 3.11 FOR ISOLATED PAD FOOTINGS, REFER BACK TO ENGINEER.
- 3.12 FOOTING POSITION UNDER BRICKWORK CAN BE ADJUSTED TO SUIT PARAPET WALLS.
- 3.13 FOR SLAB SPANS > 35m REFER TO ENGINEER FOR MESH SIZE.
- 3.14 IF THE LENGTH TO WIDTH RATIO OF THE GROUND SLAB OR ANY PART OF THE GROUND SLAB EXCEEDS 3:1, REFER BACK TO THIS OFFICE FOR MESH SIZE.
- 3.15 IF POLISHED (OR HONED) CONCRETE FINISHES ARE DESIRED, THIS DESIGN SHOULD BE REFERRED BACK TO THIS OFFICE FOR CONSIDERATION, AS IT IS NOT THE INTENTION OF THESE DESIGNS FOR SUCH FINISHES.
- 3.16 PLACE SLAB THICKENING (300 WIDE x 250 DEEP) UNDER INTERNAL WALLS (90 OR 110) HIGHER THAN 3.7m WHERE GREATER THAN 1m FROM INTERNAL THICKENING. PROVIDE SAME TRENCH MESH AS INTERNAL THICKENING DETAIL, WHERE REQUIRED.
- 3.17 PIERCING THE VAPOUR BARRIER (VPM) USING LEVELLING PINS ON FREE DRAINING SAND PADS IS ALLOWABLE.
- 3.18 CURE SLAB AS DETERMINED BY ENGINEER.
- 3.19 THE SLAB IS CONSIDERED SUITABLE AS A PHYSICAL BARRIER AGAINST INGRESS OF TERMITES. IF THE FOOTING AND SLAB IS PLACED IN 2 POURS, THE PHYSICAL BARRIER ALSO INCLUDES THE FOOTING AND SLAB JOINTING.
- 3.20 THE FOOTING DETAILS HAVE BEEN DESIGNED IN ACCORDANCE WITH AS3600 AND SECTION 4 OF AS2870.

**4.0 MASONRY**

- 4.1 PLACE MRBL50 MESH IN TOP BED JOINT CONTINUOUS THROUGHOUT ALL BRICKWORK.
- 4.2 REINFORCE BED JOINT BELOW WINDOW SILLS WITH MRBL50 MESH. CONTINUE 750 PAST SIDES OF OPENING.
- 4.3 LAP 250 AT SPLICES AND AROUND CORNERS AND COG 250 INTO INTERSECTING WALLS. 20mm COVER TO ALL WIRES.
- 4.4 ALL MESH IN EXTERNAL FACE OF EXTERNAL LEAF TO BE GALVANIZED TO AS/NZS 4680.
- 4.5 WHEN BRICKWORK EXTENDS ABOVE OPENINGS TO EXTERNAL LEAF REINFORCE AS PER CLAUSE 4.1, 4.2 & 4.3.
- 4.6 TYPICAL WALL SECTIONS ARE SHOWN FOR 28C INTERNAL CEILINGS. WHERE THERE ARE 3 OR MORE BED JOINTS OVER THE OPENING, REINFORCE BED JOINT OVER OPENING WITH MRBL50 MESH. CONTINUE 750 PAST SIDE OF OPENING.
- 4.7 ALL PERPENDS TO BE FULLY MORTARED.
- 4.8 A BRICK COURSE, AS REFERRED TO IN THIS DOCUMENT IS STANDARD 86mm HIGH.
- 4.9 2L6 WIRES MAY BE USED AS AN ALTERNATIVE TO THE MRBL50 MESH. WHERE L6 WIRES ARE USED, ALL SPLICES AND COGS TO BE 500 LONG.

**5.0 MAINTENANCE**

- 5.1 IT IS CONSIDERED THAT THIS DESIGN IS SUITABLE FOR THE FOUNDATION CONDITIONS TO BE ENCOUNTERED AND WILL ADEQUATELY CONTROL ANY CRACKING OF BRICKWORK AND CONCRETE, SUBJECT TO THE MAINTENANCE PROCEDURES BELOW BEING SATISFIED.
- 5.2 BUILDER TO ENSURE THAT CLIENT BE INFORMED OF NECESSITY TO MAINTAIN DRAINS IN GOOD WORKING ORDER AT ALL TIMES.
- 5.3 BUILDER TO ADVISE CLIENT TO CONSULT AN ENGINEER BEFORE PLANTING TREES OR SHRUBS WITHIN 2.5m, OR A DISTANCE EQUAL TO THE ANTICIPATED MAXIMUM HEIGHT OF THE TREE, OF THE BUILDING.
- 5.4 SITE TO BE MAINTAINED AS PER CSIRO INFORMATION PAMPHLET BTF 18 & STRUCTERRE'S CLAY FACT SHEET.
- 5.5 AS2870 AND 'CSIRO PAMPHLET BTF 18' COVER THE EXPECTED PERFORMANCE AND RESPONSIBILITIES OF ALL PARTIES WITH THE USE OF THESE DETAILS.

**6.0 QUALITY CONTROL PROGRAM REQUIREMENTS**

- 6.1 WORKING SLAB DEPTH AS INDICATED ON THE DETAIL. SLAB DEPTH TOLERANCE ALLOWABLE -10mm, +15mm.
- 6.2 WHERE DEPTH IS BELOW NOMINATED DEPTH, MAX AREA ALLOWED TO BE ≤ 5% OF THE TOTAL AREA.
- 6.3 DEPTH TESTING LOCATIONS TO BE NO CLOSER THAN 1000mm APART.
- 6.4 SLAB DEPTH IS TO BE PART OF A QUALITY CONTROL INSPECTION REGIME.
- 6.5 SLAB AND FOOTING CAN BE POURED MONOLITHICALLY IF DESIRED.

DATE LAST MODIFIED - 21/09/21



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PROJECT :  
**LOT 261 ATTADALE AV DARCH**

CLIENT : **PARCEL DARCH PTY LTD**

SCALE **1:20**

DATE **16/11/22**

APPROVED

## EXPLANATORY NOTES & STANDARD RECOMMENDATIONS - EQUIVALENT CLASS SITES (Sheet 1 of 2)

### GENERAL

1. THE EXPLANATORY NOTES AND THE STANDARD RECOMMENDATIONS ARE TO BE READ IN CONJUNCTION WITH THE SITE CLASSIFICATION REPORT.
2. ALL REFERRED STANDARDS TO BE THE CURRENT VERSION AT THE TIME OF THE CONSTRUCTION.
3. THE PURPOSE OF THE SITE CLASSIFICATION REPORT IS TO CLASSIFY THE SITE IN ACCORDANCE WITH AS2870 "RESIDENTIAL SLABS AND FOOTING". IT IS NOT INTENDED FOR ANY OTHER PURPOSE, INCLUDING SOLE INFORMATION IN THE PROVISION OF A QUOTATION FOR SITE WORKS. IT IS RECOMMENDED OTHER PARTIES TO PERFORM THEIR OWN INVESTIGATION FOR QUOTATION PURPOSES.
4. THE SITE CLASSIFICATION REPORT WILL INCLUDE BUT IS NOT LIMITED TO:
  - a. THE SITE CLASSIFICATION IN ACCORDANCE WITH AS2870 "RESIDENTIAL SLABS AND FOOTING",
  - b. A WIND CLASSIFICATION IN ACCORDANCE WITH AS4055 "WIND LOADS FOR HOUSING",
  - c. A COASTAL CORROSION CLASSIFICATION,
  - d. ADDITIONAL EARTHWORK RECOMMENDATIONS WHERE APPLICABLE,
  - e. STANDARD FOOTING DESIGN FOR SINGLE STOREY SLAB ON GROUND CONSTRUCTION.
5. THE SITE CLASSIFICATION IS BASED ON THE SITE AS PRESENTED AT THE TIME OF THE ASSESSMENT. THE SITE CLASSIFICATION AND RECOMMENDATIONS INCLUDED IN THE REPORT ARE SUBJECT TO SATISFACTORY COMPLETION OF RECOMMENDED EARTHWORKS, (REFER NOTE 17) AS A MINIMUM. SHOULD CHANGES TO THE SITE OCCUR, OTHER THAN THE RECOMMENDATIONS INCLUDED IN THE SITE CLASSIFICATION REPORT, REFER BACK TO THIS OFFICE FOR REVIEW OF CLASSIFICATION AND FOOTING DESIGN.
6. ALL RECOMMENDATIONS GIVEN IN THE SITE CLASSIFICATION REPORT HAVE BEEN DETERMINED FROM THE INFORMATION THAT WAS AVAILABLE TO THIS OFFICE AT THE TIME OF INVESTIGATION. IF FURTHER INFORMATION RELATING TO THE SITE OR DEVELOPMENT BECOMES AVAILABLE, THESE RECOMMENDATIONS ARE SUBJECT TO CHANGE.
7. EQUIVALENT CLASS SITES ARE BASED ON DIFFERENTIAL SURFACE MOVEMENT ARISING FROM ISSUE OTHER THAN SHRINK-SWELL (REACTIVITY) ONLY. THESE MAY INCLUDE SETTLEMENT AND/OR CONSOLIDATION THAT MAY OCCUR AS A RESULT OF THE UNDERLYING GROUND CONDITIONS.
8. BOREHOLES EXCAVATED REVEAL THE SOIL PROFILE AT THE BOREHOLE LOCATION ONLY. FROM THIS, IT IS INFERRED THAT THESE ARE THE SOIL CONDITIONS OVER THE SITE. VARIATIONS CAN OCCUR WHICH MAY NOT HAVE BEEN DETECTED AT THE INVESTIGATION STAGE. ANY ANOMALIES SHOULD BE REFERRED BACK TO THIS OFFICE FOR A REASSESSMENT.
9. A NUMBER OF BOREHOLES ARE CONDUCTED ACROSS THE SITE TO DETERMINE THE SOIL PROFILES AND PROVIDE A REPRESENTATION OF THE GROUND CONDITIONS.
10. THIS REPORT IS FOR STRUCTERRE ONLY TO USE IN DESIGN. ANY DESIGN BY ANYONE ELSE FOR ANY STRUCTURE MUST BE SPECIFICALLY APPROVED BY STRUCTERRE. IF USED BY ANYONE ELSE FOR ANYTHING OTHER THAN A STRUCTERRE DESIGN OR STRUCTURE, STRUCTERRE TAKES NO RESPONSIBILITY.

### SAND PAD

11. THE RECOMMENDED FOOTING DESIGN IS ONLY TO BE USED IN CONJUNCTION WITH THE RECOMMENDED SAND PAD AND EARTHWORKS AS OUTLINED IN THE SITE CLASSIFICATION REPORT.
12. THE RECOMMENDATIONS FOR THE SAND PAD IS FOR STRUCTURAL PURPOSES ONLY, AND DOES NOT PROVIDE THE MINIMUM FINISHED PAD LEVEL IN RELATION TO FLOOD LEVELS OR DEPTH TO GROUNDWATER. SHOULD THE TEST BE LOCATED IN A LOW LYING OR FLOOD PRONE AREA, REFER TO THE LOCAL AUTHORITY FOR MINIMUM BUILDING HEIGHT.
13. IMPORTED FILL FOR USE AS A SAND PAD TO BE IN ACCORDANCE TO AS 3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS" WHICH INCLUDES BUT IS NOT LIMITED TO: BE FREE FROM ANY DELETERIOUS MATERIALS INCLUDING ORGANICS, (ROOTS, STUMPS, GRASSES, DECOMPOSED ORGANICS - PEAT, TIMBER, ETC), BUILDING RUBBLE, GLASS, PLASTICS OR WASTE MATERIAL. THE FINES CONTENT, (PERCENTAGE PASSING THE 0.075mm SIEVE) TO BE LESS THAN 5% BY MASS.
14. ON SAND SITES A SAND PAD IS NOT REQUIRED STRUCTURALLY, HOWEVER IF ROCK IS ENCOUNTERED, A MINIMUM 200mm SAND PAD BEYOND THE BASE OF FOOTING IS RECOMMENDED.
15. SAND PAD TO EXTEND BEYOND BUILDING AREA A MINIMUM OF 1.5 TIMES THE PAD DEPTH.
16. RECOMMENDED SAND PAD DEPTH IS ABOVE THE HIGHEST POINT, UNLESS OTHERWISE SPECIFIED.
17. IT IS REQUIRED THAT EARTHWORKS CONFIRM THAT THE MINIMUM DEPTH OF RECOMMENDED SAND PAD IS ACHIEVED.

### EARTHWORKS

18. RECOMMENDED EARTHWORKS TO BE CONDUCTED IN ACCORDANCE WITH AS3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS", AND TO INCLUDE BUT NOT BE LIMITED TO:
  - a. REMOVAL OF ALL VEGETATION, TOPSOILS, UNCONTROLLED FILLS AND OTHER DELETERIOUS MATERIALS FROM THE BUILDING AREA,
  - b. GRUBBING OUT OF ANY TREES ENSURING THE REMAINING HOLES ARE BACKFILLED WITH CLEAN COMPACTED SAND,
  - c. NOTIFYING THE ENGINEER OF ANY UNUSUAL FEATURE OR DISCREPANCY THAT MAY BECOME EVIDENT DURING EARTHWORKS, PRIOR TO PROCEEDING,
  - d. COMPACTING TO MEET THE REQUIREMENTS AS OUTLINED IN AS 3798 TABLE 5.1.
19. FILL MATERIAL (WHICH IS NOT ALWAYS APPARENT AT THE INITIAL INVESTIGATION STAGE) IS TO BE DEALT WITH AS FOLLOWS:
  - a. IF IT IS CERTIFIED BY OTHERS IT CAN REMAIN.
  - b. IF IT IS NOT CERTIFIED WILL REQUIRE REMOVAL DOWN TO NATURAL GROUND OR VERIFIED. ANY SAND CAN BE REUSED.
  - c. IF A PAD HAS ALREADY BEEN CONSTRUCTED, THE SITE CLASSIFICATION IS NOT CERTIFICATION OF THE PAD. CONTACT THIS OFFICE SHOULD A SAND PAD CERTIFICATION BE REQUIRED.
20. ANY ORGANIC MATTER OR ROOTS ENCOUNTERED, WHICH IS BEYOND WHAT IS NORMALLY CONSIDERED ACCEPTABLE IS TO BE REMOVED. THIS WILL NECESSITATE RAKING THE SITE TO REMOVE ORGANIC MATERIAL, TURNING THE SITE OVER AND RE-COMPACTING TO A MINIMUM.

### RETAINING WALLS

21. AN ASSESSMENT OF ANY EXISTING OR PROPOSED RETAINING WALLS HAS NOT BEEN CONDUCTED AS PART OF THIS SITE CLASSIFICATION REPORT.
22. IF THE PROPOSED BUILDING IS TO BE LOCATED CLOSER THAN THE HEIGHT OF THE RETAINING WALL, THIS MAY PLACE ADDITIONAL LOADS ON THE WALL THAT WERE NOT INITIALLY DESIGNED FOR. AN INSPECTION OF THE STRUCTURAL INTEGRITY OF THE RETAINING WALL WILL BE REQUIRED TO PROVIDE CERTIFICATION AND/OR RECOMMENDATIONS PRIOR TO ANY CONSTRUCTION. PLEASE REFER BACK TO THIS OFFICE FOR ASSISTANCE.  
STORMWATER DRAINAGE
23. UNLESS OTHERWISE SPECIFIED, ALL SOAKWELLS ARE TO BE LOCATED THE DEPTH OF THE SOAKWELL AWAY FROM THE BUILDING OR SETBACK A MINIMUM OF 1200mm, WHICHEVER IS GREATER, UNLESS SPECIFIED OTHERWISE. PLEASE REFER BACK TO THIS OFFICE IF THE SETBACK CANNOT BE ACHIEVED.

DOC# SS001 - 1.1.10 SCR EQUIVALENT V1.1 - AUGUST 2021



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PROJECT :  
LOT 261 ATTADALE AV DARCH

CLIENT : PARCEL DARCH PTY LTD

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DATE 16/11/22

## EXPLANATORY NOTES & STANDARD RECOMMENDATIONS - EQUIVALENT CLASS SITES (Sheet 2 of 2)

### WIND CLASSIFICATION

24. WIND CLASSIFICATION IS GIVEN FOR THE EXPECTED CONDITION 5 YEARS HENCE. THIS CLASSIFICATION IS LIMITED TO BUILDINGS CLASSES 1 AND 10, WHICH HAVE THE FOLLOWING LIMITATION (AS PER AS4055):

- a. MAXIMUM DISTANCE FROM THE GROUND LEVEL TO THE UNDERSIDE OF EAVES SHALL NOT EXCEED 6.0m,
- b. MAXIMUM DISTANCE FROM GROUND LEVEL TO THE HIGHEST POINT OF THE ROOF, EXCLUDING CHIMNEYS, SHALL NOT EXCEED 8.5m,
- c. THE ROOF PITCH SHALL NOT EXCEED 35 °,
- d. THE WIDTH, EXCLUDING EAVES, SHALL NOT EXCEED 16.0m AND THE LENGTH SHALL NOT EXCEED 5x THE WIDTH.

IF THE BUILDING FALLS OUTSIDE OF THESE LIMITATIONS, THE STATED WIND CLASSIFICATION DOES NOT APPLY. REFER BACK TO THIS OFFICE FOR A REVISED WIND CLASSIFICATION.

### ENVIRONMENTAL

25. NO ENVIRONMENTAL ASSESSMENT OF THIS SITE HAS BEEN UNDERTAKEN. SHOULD AN ENVIRONMENTAL ASSESSMENT BE REQUIRED, PLEASE CONTACT THIS OFFICE.

### SEISMIC

26. RECOMMENDED FOOTING DETAILS ARE SUITABLE FOR SEISMIC CONDITIONS WITH AN EARTHQUAKE HAZARD FACTOR OF  $\leq 0.11$ . RECOMMENDED FOOTING DETAILS PROVIDED FOR SITES WITH AN EARTHQUAKE HAZARD FACTOR OF  $> 0.11$ , ARE NOT FOR CONSTRUCTION, BUT FOR COSTING PURPOSES ONLY. IT IS REQUIRED THAT A FULL SEISMIC DESIGN IS CONDUCTED.

### CORROSION CLASSIFICATION

27. THE CORROSION CLASSIFICATION HAS BEEN ASSESSED IN ACCORDANCE WITH AS3700.

DOC# SS001 - 1.1.10 SCR EQUIVALENT V1.1 - AUGUST 2021



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SCALE 1:20

DATE 16/11/22

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A blue ink handwritten signature is written over the 'APPROVED' field.



**SITE CLASSIFICATION REPORT**  
CERTIFICATE 2595176

**CLIENT** PARCEL DARCH PTY LTD  
**JOB ADDRESS** LOT 264 ATTADALE AV DARCH  
**CLIENT JOB NO.**  
**OWNER**  
**STRUCTERRE JOB NO.** S1082665  
**DATE OF ASSESSMENT** 15/11/22

**SITE RECORD**

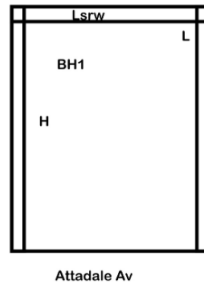


<b>SITE CLASSIFICATION</b>	<b>S - EQUIVALENT</b> (in accordance with AS2870)
<b>FOOTING DETAIL</b>	<b>CM3</b>
<b>SAND PAD</b>	<b>No sand pad required structurally</b>
<b>BUSHFIRE PRONE AREA</b>	<b>Not in a Bushfire Prone Area (see NOTE 2.)</b>
<b>CORROSION CLASSIFICATION</b>	<b>R1</b> (Durability Class in accordance with AS3700)
<b>WIND CLASSIFICATION</b>	<b>N1</b> (in accordance with AS4055)
-TERRAIN CATEGORY	3
-TOPOGRAPHIC	T0
-SHIELDING	Full Shielding

## SOIL PROFILE

BOREHOLE 1: 0 - 800 FILL sand with artificial material trace limestone gravel - grey; 800 hard ground refusal.

## APPROXIMATE BOREHOLE LOCATIONS



### NOTE 1 Explanatory Notes & Standard Recommendations

This site classification report must be read in conjunction with the applicable Explanatory Notes & Standard Recommendations. For A Class sites, refer to the Explanatory Notes and Standard Recommendations for Stable (A Class) Sites, version 1.0 July 2018. For S, M, H1, H2 & E Class sites, refer to the Explanatory Notes and Standard Recommendations for Reactive (S, M, H1, H2 & E Class) Sites version 1.0 July 2018. For Equivalent Class sites, refer to the Explanatory Notes and Standard Recommendations for Equivalent Class Sites, version 1.0 July 2018.

### NOTE 2 Bushfire - Prone Area

The Site may be situated in a bush fire prone area in accordance with the Department of Fire and Emergency Services (DFES) Bushfire Prone Area Map (Reference: <http://www.dfes.wa.gov.au/regulationandcompliance/bushfireproneareas/>) the current version at the time of this assessment. A Bushfire Attack Level (BAL) assessment may be required for this site, please confirm with the local authority. Should you require an assessment, please contact this Office.

## ADDITIONAL NOTES / REQUIREMENTS

### Site Condition

At the time of inspection the site was considered to be level and cleared. For specific levels of this site or topographical features, please refer to a professional site survey.

### Structerre Geotech Reference

The Site Classification is based on any remedial works being successfully completed as outlined in the Structerre Geotechnical Report J380185 dated 02/04/2021. The footing details are subject to the recommendations being completed to an acceptable level as outlined in this report, if applicable.

### Internal Thickenings

Internal thickenings are required for the proposed residence as specified on the recommended footing detail. Please provide a copy of the architectural drawings to this Office, so that the internal thickenings can be designed and drawn in accordance with AS2870.

### Internal Thickening Inspection

This detail is subject to a internal thickening layout inspection. It is recommended that an inspection be conducted by a representative from this Office prior to concrete pour.

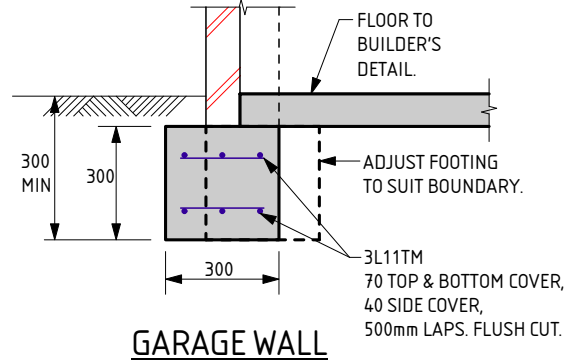
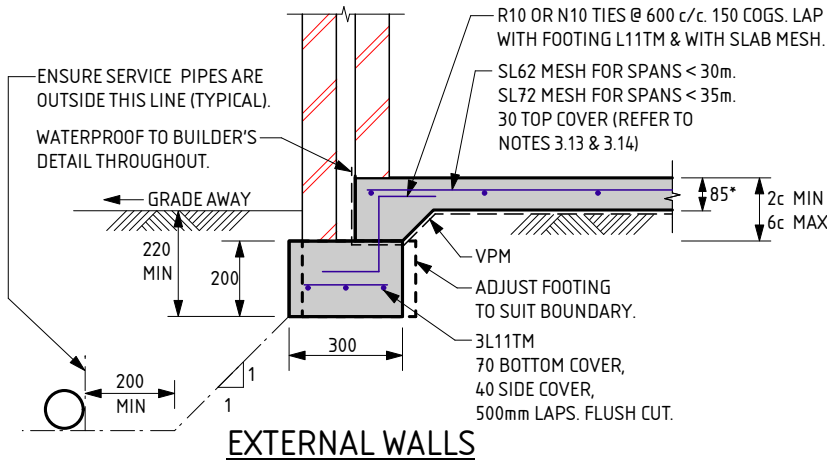
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Signed:

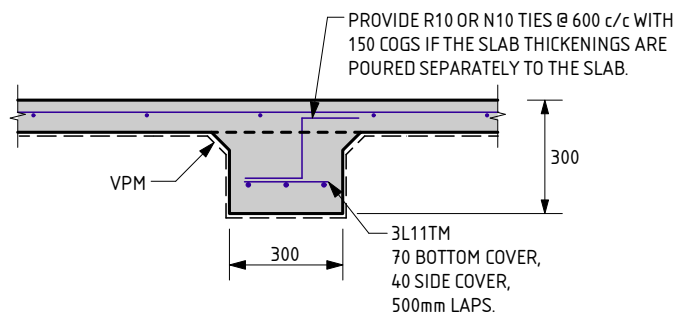
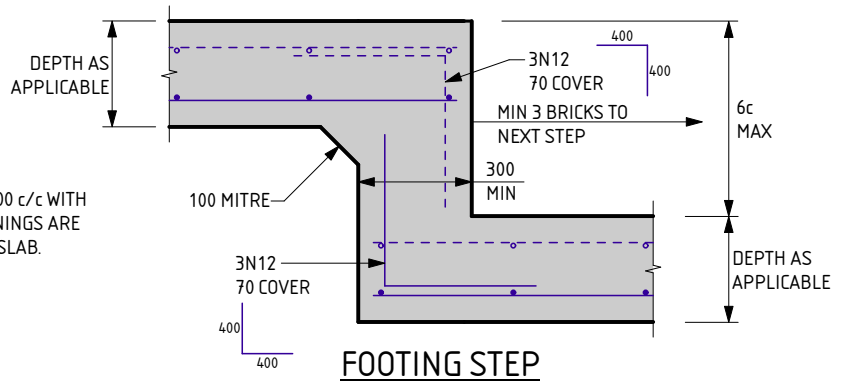


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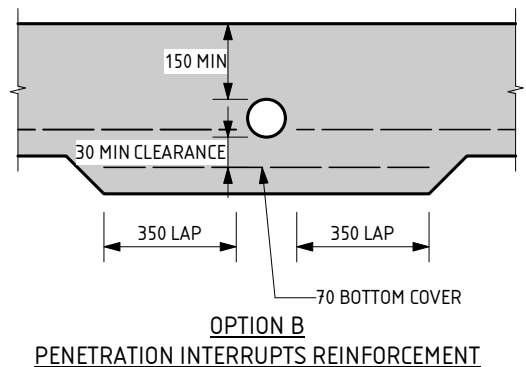
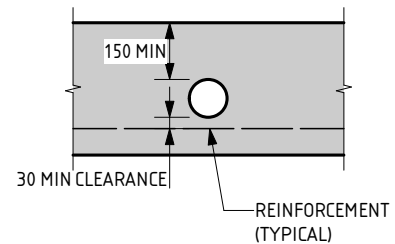
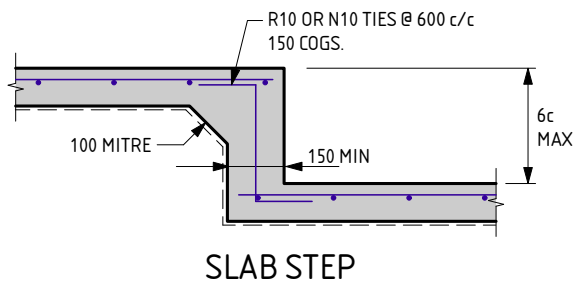
Gervase Purich  
Chief Executive Officer



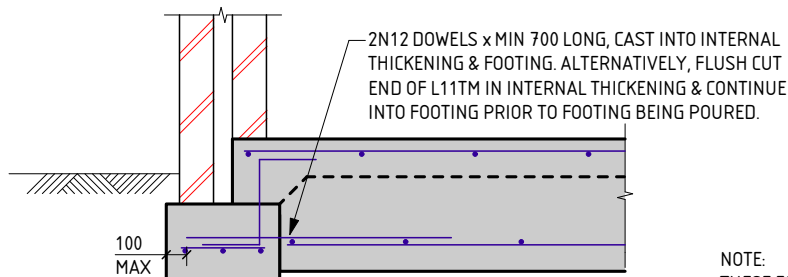
\* 100mm SLAB MAY BE INSTALLED INSTEAD OF 85mm.  
IF 100mm SLAB USED, MESH TO BE:  
SL62 MESH FOR SPANS < 25m.  
SL72 MESH FOR SPANS < 30m.  
SL82 MESH FOR SPANS < 35m.



REFER TO STRUCterre'S DRAWINGS FOR PLACEMENT OF INTERNAL THICKENINGS. LOCATIONS TO BE CONFIRMED ON SITE BY STRUCterre PRIOR TO CONCRETE POUR.



**SERVICE PIPE DIAGRAM**  
- MAXIMUM PENETRATION SIZE TO BE Ø150.



THIS DETAIL IS EQUIVALENT TO  
STRUCterre FOOTING DETAIL C4.0

NOTE:  
THESE FOOTING DETAILS ARE TO BE READ IN CONJUNCTION WITH THE REACTIVE SITE NOTES.

THE APPROVED SIGNATURE ON THIS DETAIL ENDORSES ITS USE FOR SINGLE STOREY BUILDINGS ON BUILDING PLATFORMS WITH UP TO 11mm OF SURFACE MOVEMENT.  
DATE LAST MODIFIED - 20/09/18

**CM3**  
CAVITY MASONRY

**STRUCterre**  
consulting engineers

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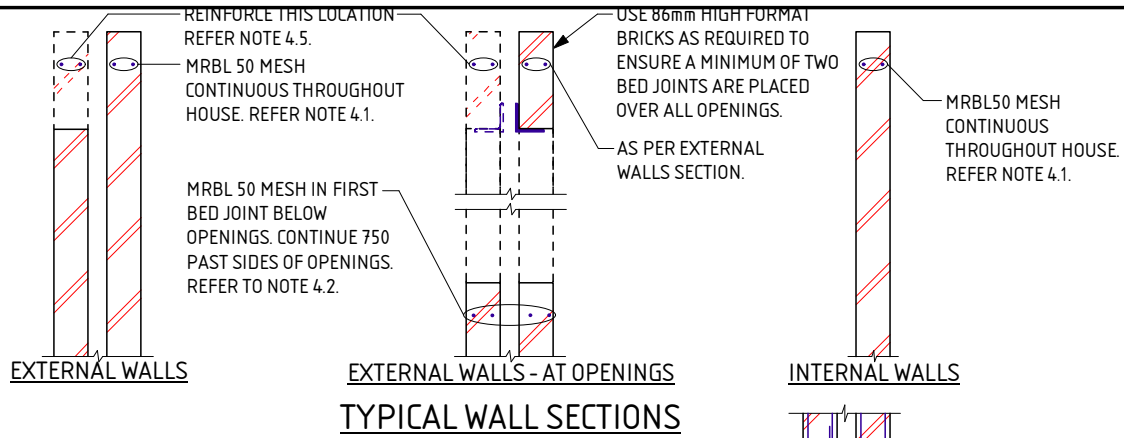
PROJECT:  
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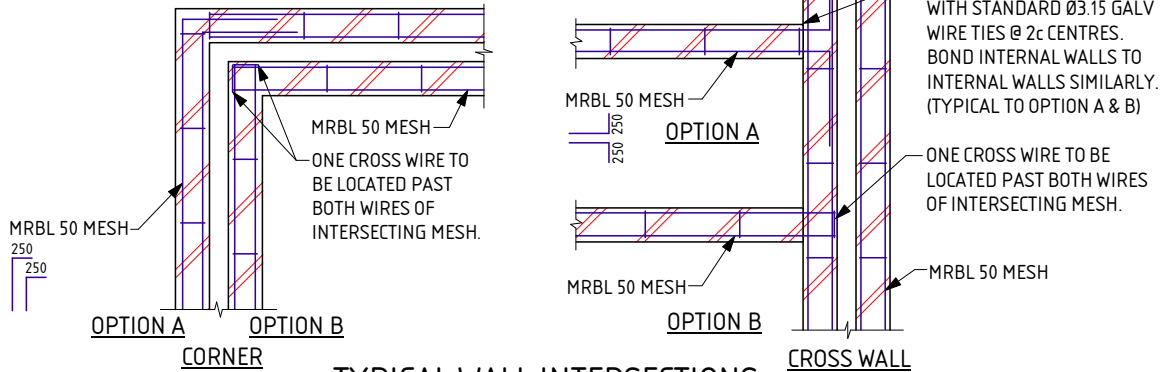
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TYPICAL WALL SECTIONS



TYPICAL WALL INTERSECTIONS

REACTIVE SITE NOTES FOR CM1 - CM7

THESE NOTES ARE TO BE READ IN CONJUNCTION WITH THE ATTACHED FOOTING DETAILS.

1.0 SITE CLASSIFICATION

- 1.1 REFER TO ATTACHED CERTIFICATE OF INSPECTION FOR SITE CLASSIFICATION. THE SITE CLASSIFICATION NOTED, IS AS DEFINED IN AS2870 - RESIDENTIAL SLABS & FOOTINGS.
- 1.2 THE SITE CLASSIFICATION HAS BEEN DETERMINED BY INVESTIGATION OF THE SITE, AS PER THE ATTACHED CERTIFICATE OF INSPECTION. REFER TO THE ATTACHED CERTIFICATE FOR ANY SPECIAL REQUIREMENTS.

2.0 EARTHWORKS

- 2.1 SAND PAD IF APPLICABLE TO BE AS PER SITE INSPECTION REPORT.
- 2.2 EARTHWORKS SHALL INCLUDE, BUT NOT BE LIMITED TO:
  - a) REMOVE ALL ORGANIC MATERIAL FROM THE PAD AREA.
  - b) REMOVE ALL RUBBISH AND DELETERIOUS FILL (SUCH AS CLAY FILL) FROM THE PAD AREA.
  - c) GRUB OUT ANY TREES WHERE NECESSARY AND ENSURE THE REMAINING HOLES ARE FILLED AND COMPACTED SATISFACTORILY WITH SAND.
  - d) NOTIFY THE ENGINEER OF ANY UNUSUAL FEATURES OR DISCREPANCIES WHICH MAY BECOME EVIDENT DURING EARTHWORKS, PRIOR TO PROCEEDING.
- 2.3 ANY PREDOMINANT ROCK IN THE HOUSE PAD AREAS IS TO BE INSPECTED BY THE ENGINEER.
- 2.4 ANY CUT TO THE SITE, OTHER THAN TOPSOIL STRIPPING, WILL REQUIRE THE PREPARED CUT BASE TO BE INSPECTED AND APPROVED BY THE ENGINEER.
- 2.5 MAXIMUM SAND PAD DEPTH NOT TO EXCEED 150% OF MINIMUM PAD DEPTH OR 2000mm WITHOUT THE ENGINEER'S APPROVAL.
- 2.6 IF APPLICABLE SAND FILL TO BE CLEAN WELL DRAINED, WITH MAX FINES (PARTICLES UP TO 0.075mm) CONTENT OF 5%. SAND TO BE COMPACTED TO A MIN 6 BLOWS/300mm FOR THE DEPTH OF THE PAD OR TO DISCRETION OF ENGINEER.
- 2.7 COMPACTION TESTING TO BE PERFORMED BY STRUCTERRE.

3.0 FOOTINGS & SLABS

- 3.1 FOOTINGS ARE TO BE PLACED DIRECTLY INTO SAND PAD OF SPECIFIED THICKNESS.
- 3.2 ALL STORMWATER MUST BE DISCHARGED INTO COUNCIL DRAINS OR A MINIMUM OF 3m FOR S CLASS SITES, 4m FOR M CLASS SITES AND 5m FOR H1 & H2 CLASS SITES, AWAY FROM THE RESIDENCE AND/OR ADJACENT BUILDINGS INTO SOAKWELLS. IF THIS RESTRICTION CANNOT BE ACHIEVED REFER BACK TO THIS OFFICE FOR AN ALTERNATIVE DESIGN. WHERE THE SITE HAS BEEN CLASSIFIED AS AN 'EQUIVALENT' SITE CLASSIFICATION, REFER TO 'EXPLANATORY NOTES & STANDARD RECOMMENDATIONS - EQUIVALENT CLASS SITES' FOR STORMWATER DRAINAGE REQUIREMENTS UNLESS SPECIFIED OTHERWISE.
- 3.3 EXCAVATIONS FOR ALL SERVICE PIPES NOT TO UNDERMINE FOOTINGS. IF UNDERMINING IS LIKELY TO OCCUR, CONTACT THE ENGINEER PRIOR TO PROCEEDING.
- 3.4 WHERE PLUMBING PIPES PASS THROUGH FOOTINGS OR SLAB, SPECIFIED TOTAL THICKNESS OF ALL CONCRETE IS ALWAYS TO BE MAINTAINED.
- 3.5 SETDOWN AT WET AREA TO ARCHITECTURAL REQUIREMENT (50mm MAX). MAINTAIN 85mm SLAB THICKNESS. FOLD MESH DOWN TO MAINTAIN COVER, PLACE DIAGONAL BARS AT RE-ENTRANT CORNER FOR STEPS OVER 30mm. BARS TO BE N12x 1200 LONG.
- 3.6 REINFORCEMENT SHALL BE IN ACCORDANCE WITH THE FOLLOWING STANDARDS;
 

L	INDICATES PLAIN OR DEFORMED WIRE R500L OR D500L TO AS/NZS 4671.
SL	INDICATES DEFORMED SQUARE MESH D500L TO AS/NZS 4671.
N	INDICATES DEFORMED BARS D500N TO AS/NZS 4671.
TM SUFFIX	INDICATES TRENCH MESH USING DEFORMED BARS D500L TO AS/NZS 4671.

 ALL STEELWORK TO BE TREATED IN ACCORDANCE WITH TABLE 3.4.4.4 "CORROSION PROTECTION" OF THE BUILDING CODE OF AUSTRALIA.
- 3.7 LAP ALL MESH TWO TRANSVERSE WIRES PLUS 25mm OR TO MANUFACTURER'S SPECIFICATIONS.

3.8 CONCRETE TO CONFORM WITH AS 3600.

- 3.9 BLENDED CEMENT TO CONFORM WITH AS1317.
- 3.10 ALL CONCRETE TO BE N20/20/100.
- 3.11 FOR ISOLATED PAD FOOTINGS, REFER BACK TO ENGINEER.
- 3.12 FOOTING POSITION UNDER BRICKWORK CAN BE ADJUSTED TO SUIT PARAPET WALLS.
- 3.13 FOR SLAB SPANS > 35m REFER TO ENGINEER FOR MESH SIZE.
- 3.14 IF THE LENGTH TO WIDTH RATIO OF THE GROUND SLAB OR ANY PART OF THE GROUND SLAB EXCEEDS 3:1, REFER BACK TO THIS OFFICE FOR MESH SIZE.
- 3.15 IF POLISHED (OR HONED) CONCRETE FINISHES ARE DESIRED, THIS DESIGN SHOULD BE REFERRED BACK TO THIS OFFICE FOR CONSIDERATION, AS IT IS NOT THE INTENTION OF THESE DESIGNS FOR SUCH FINISHES.
- 3.16 PLACE SLAB THICKENING (300 WIDE x 250 DEEP) UNDER INTERNAL WALLS (90 OR 110) HIGHER THAN 3.7m WHERE GREATER THAN 1m FROM INTERNAL THICKENING. PROVIDE SAME TRENCH MESH AS INTERNAL THICKENING DETAIL, WHERE REQUIRED.
- 3.17 PIERCING THE VAPOUR BARRIER (VPM) USING LEVELLING PINS ON FREE DRAINING SAND PADS IS ALLOWABLE.
- 3.18 CURE SLAB AS DETERMINED BY ENGINEER.
- 3.19 THE SLAB IS CONSIDERED SUITABLE AS A PHYSICAL BARRIER AGAINST INGRESS OF TERMITES. IF THE FOOTING AND SLAB IS PLACED IN 2 POURS, THE PHYSICAL BARRIER ALSO INCLUDES THE FOOTING AND SLAB JOINTING.
- 3.20 THE FOOTING DETAILS HAVE BEEN DESIGNED IN ACCORDANCE WITH AS3600 AND SECTION 4 OF AS2870.

4.0 MASONRY

- 4.1 PLACE MRBL50 MESH IN TOP BED JOINT CONTINUOUS THROUGHOUT ALL BRICKWORK.
- 4.2 REINFORCE BED JOINT BELOW WINDOW SILLS WITH MRBL50 MESH. CONTINUE 750 PAST SIDES OF OPENING.
- 4.3 LAP 250 AT SPLICES AND AROUND CORNERS AND COG 250 INTO INTERSECTING WALLS. 20mm COVER TO ALL WIRES.
- 4.4 ALL MESH IN EXTERNAL FACE OF EXTERNAL LEAF TO BE GALVANIZED TO AS/NZS 4680.
- 4.5 WHEN BRICKWORK EXTENDS ABOVE OPENINGS TO EXTERNAL LEAF REINFORCE AS PER CLAUSE 4.1, 4.2 & 4.3.
- 4.6 TYPICAL WALL SECTIONS ARE SHOWN FOR 28C INTERNAL CEILINGS. WHERE THERE ARE 3 OR MORE BED JOINTS OVER THE OPENING, REINFORCE BED JOINT OVER OPENING WITH MRBL50 MESH. CONTINUE 750 PAST SIDE OF OPENING.
- 4.7 ALL PERPENDS TO BE FULLY MORTARED.
- 4.8 A BRICK COURSE, AS REFERRED TO IN THIS DOCUMENT IS STANDARD 86mm HIGH.
- 4.9 2L6 WIRES MAY BE USED AS AN ALTERNATIVE TO THE MRBL50 MESH. WHERE L6 WIRES ARE USED, ALL SPLICES AND COGS TO BE 500 LONG.

5.0 MAINTENANCE

- 5.1 IT IS CONSIDERED THAT THIS DESIGN IS SUITABLE FOR THE FOUNDATION CONDITIONS TO BE ENCOUNTERED AND WILL ADEQUATELY CONTROL ANY CRACKING OF BRICKWORK AND CONCRETE, SUBJECT TO THE MAINTENANCE PROCEDURES BELOW BEING SATISFIED.
- 5.2 BUILDER TO ENSURE THAT CLIENT BE INFORMED OF NECESSITY TO MAINTAIN DRAINS IN GOOD WORKING ORDER AT ALL TIMES.
- 5.3 BUILDER TO ADVISE CLIENT TO CONSULT AN ENGINEER BEFORE PLANTING TREES OR SHRUBS WITHIN 2.5m, OR A DISTANCE EQUAL TO THE ANTICIPATED MAXIMUM HEIGHT OF THE TREE, OF THE BUILDING.
- 5.4 SITE TO BE MAINTAINED AS PER CSIRO INFORMATION PAMPHLET BTF 18 & STRUCTERRE'S CLAY FACT SHEET.
- 5.5 AS2870 AND 'CSIRO PAMPHLET BTF 18' COVER THE EXPECTED PERFORMANCE AND RESPONSIBILITIES OF ALL PARTIES WITH THE USE OF THESE DETAILS.

6.0 QUALITY CONTROL PROGRAM REQUIREMENTS

- 6.1 WORKING SLAB DEPTH AS INDICATED ON THE DETAIL. SLAB DEPTH TOLERANCE ALLOWABLE -10mm, +15mm.
- 6.2 WHERE DEPTH IS BELOW NOMINATED DEPTH, MAX AREA ALLOWED TO BE ≤ 5% OF THE TOTAL AREA.
- 6.3 DEPTH TESTING LOCATIONS TO BE NO CLOSER THAN 1000mm APART.
- 6.4 SLAB DEPTH IS TO BE PART OF A QUALITY CONTROL INSPECTION REGIME.
- 6.5 SLAB AND FOOTING CAN BE POURED MONOLITHICALLY IF DESIRED.

DATE LAST MODIFIED - 21/09/21



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PROJECT :  
LOT 264 ATTADALE AV DARCH

CLIENT : PARCEL DARCH PTY LTD

SCALE 1:20

DATE 16/11/22

APPROVED

# EXPLANATORY NOTES & STANDARD RECOMMENDATIONS - EQUIVALENT CLASS SITES (Sheet 1 of 2)

## GENERAL

1. THE EXPLANATORY NOTES AND THE STANDARD RECOMMENDATIONS ARE TO BE READ IN CONJUNCTION WITH THE SITE CLASSIFICATION REPORT.
2. ALL REFERRED STANDARDS TO BE THE CURRENT VERSION AT THE TIME OF THE CONSTRUCTION.
3. THE PURPOSE OF THE SITE CLASSIFICATION REPORT IS TO CLASSIFY THE SITE IN ACCORDANCE WITH AS2870 "RESIDENTIAL SLABS AND FOOTING". IT IS NOT INTENDED FOR ANY OTHER PURPOSE, INCLUDING SOLE INFORMATION IN THE PROVISION OF A QUOTATION FOR SITE WORKS. IT IS RECOMMENDED OTHER PARTIES TO PERFORM THEIR OWN INVESTIGATION FOR QUOTATION PURPOSES.
4. THE SITE CLASSIFICATION REPORT WILL INCLUDE BUT IS NOT LIMITED TO:
  - a. THE SITE CLASSIFICATION IN ACCORDANCE WITH AS2870 "RESIDENTIAL SLABS AND FOOTING",
  - b. A WIND CLASSIFICATION IN ACCORDANCE WITH AS4055 "WIND LOADS FOR HOUSING",
  - c. A COASTAL CORROSION CLASSIFICATION,
  - d. ADDITIONAL EARTHWORK RECOMMENDATIONS WHERE APPLICABLE,
  - e. STANDARD FOOTING DESIGN FOR SINGLE STOREY SLAB ON GROUND CONSTRUCTION.
5. THE SITE CLASSIFICATION IS BASED ON THE SITE AS PRESENTED AT THE TIME OF THE ASSESSMENT. THE SITE CLASSIFICATION AND RECOMMENDATIONS INCLUDED IN THE REPORT ARE SUBJECT TO SATISFACTORY COMPLETION OF RECOMMENDED EARTHWORKS, (REFER NOTE 17) AS A MINIMUM. SHOULD CHANGES TO THE SITE OCCUR, OTHER THAN THE RECOMMENDATIONS INCLUDED IN THE SITE CLASSIFICATION REPORT, REFER BACK TO THIS OFFICE FOR REVIEW OF CLASSIFICATION AND FOOTING DESIGN.
6. ALL RECOMMENDATIONS GIVEN IN THE SITE CLASSIFICATION REPORT HAVE BEEN DETERMINED FROM THE INFORMATION THAT WAS AVAILABLE TO THIS OFFICE AT THE TIME OF INVESTIGATION. IF FURTHER INFORMATION RELATING TO THE SITE OR DEVELOPMENT BECOMES AVAILABLE, THESE RECOMMENDATIONS ARE SUBJECT TO CHANGE.
7. EQUIVALENT CLASS SITES ARE BASED ON DIFFERENTIAL SURFACE MOVEMENT ARISING FROM ISSUE OTHER THAN SHRINK-SWELL (REACTIVITY) ONLY. THESE MAY INCLUDE SETTLEMENT AND/OR CONSOLIDATION THAT MAY OCCUR AS A RESULT OF THE UNDERLYING GROUND CONDITIONS.
8. BOREHOLES EXCAVATED REVEAL THE SOIL PROFILE AT THE BOREHOLE LOCATION ONLY. FROM THIS, IT IS INFERRED THAT THESE ARE THE SOIL CONDITIONS OVER THE SITE. VARIATIONS CAN OCCUR WHICH MAY NOT HAVE BEEN DETECTED AT THE INVESTIGATION STAGE. ANY ANOMALIES SHOULD BE REFERRED BACK TO THIS OFFICE FOR A REASSESSMENT.
9. A NUMBER OF BOREHOLES ARE CONDUCTED ACROSS THE SITE TO DETERMINE THE SOIL PROFILES AND PROVIDE A REPRESENTATION OF THE GROUND CONDITIONS.
10. THIS REPORT IS FOR STRUCTERRE ONLY TO USE IN DESIGN. ANY DESIGN BY ANYONE ELSE FOR ANY STRUCTURE MUST BE SPECIFICALLY APPROVED BY STRUCTERRE. IF USED BY ANYONE ELSE FOR ANYTHING OTHER THAN A STRUCTERRE DESIGN OR STRUCTURE, STRUCTERRE TAKES NO RESPONSIBILITY.

## SAND PAD

11. THE RECOMMENDED FOOTING DESIGN IS ONLY TO BE USED IN CONJUNCTION WITH THE RECOMMENDED SAND PAD AND EARTHWORKS AS OUTLINED IN THE SITE CLASSIFICATION REPORT.
12. THE RECOMMENDATIONS FOR THE SAND PAD IS FOR STRUCTURAL PURPOSES ONLY, AND DOES NOT PROVIDE THE MINIMUM FINISHED PAD LEVEL IN RELATION TO FLOOD LEVELS OR DEPTH TO GROUNDWATER. SHOULD THE TEST BE LOCATED IN A LOW LYING OR FLOOD PRONE AREA, REFER TO THE LOCAL AUTHORITY FOR MINIMUM BUILDING HEIGHT.
13. IMPORTED FILL FOR USE AS A SAND PAD TO BE IN ACCORDANCE TO AS 3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS" WHICH INCLUDES BUT IS NOT LIMITED TO: BE FREE FROM ANY DELETERIOUS MATERIALS INCLUDING ORGANICS, (ROOTS, STUMPS, GRASSES, DECOMPOSED ORGANICS - PEAT, TIMBER, ETC), BUILDING RUBBLE, GLASS, PLASTICS OR WASTE MATERIAL. THE FINES CONTENT, (PERCENTAGE PASSING THE 0.075mm SIEVE) TO BE LESS THAN 5% BY MASS.
14. ON SAND SITES A SAND PAD IS NOT REQUIRED STRUCTURALLY, HOWEVER IF ROCK IS ENCOUNTERED, A MINIMUM 200mm SAND PAD BEYOND THE BASE OF FOOTING IS RECOMMENDED.
15. SAND PAD TO EXTEND BEYOND BUILDING AREA A MINIMUM OF 1.5 TIMES THE PAD DEPTH.
16. RECOMMENDED SAND PAD DEPTH IS ABOVE THE HIGHEST POINT, UNLESS OTHERWISE SPECIFIED.
17. IT IS REQUIRED THAT EARTHWORKS CONFIRM THAT THE MINIMUM DEPTH OF RECOMMENDED SAND PAD IS ACHIEVED.

## EARTHWORKS

18. RECOMMENDED EARTHWORKS TO BE CONDUCTED IN ACCORDANCE WITH AS3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS", AND TO INCLUDE BUT NOT BE LIMITED TO:
  - a. REMOVAL OF ALL VEGETATION, TOPSOILS, UNCONTROLLED FILLS AND OTHER DELETERIOUS MATERIALS FROM THE BUILDING AREA,
  - b. GRUBBING OUT OF ANY TREES ENSURING THE REMAINING HOLES ARE BACKFILLED WITH CLEAN COMPACTED SAND,
  - c. NOTIFYING THE ENGINEER OF ANY UNUSUAL FEATURE OR DISCREPANCY THAT MAY BECOME EVIDENT DURING EARTHWORKS, PRIOR TO PROCEEDING,
  - d. COMPACTING TO MEET THE REQUIREMENTS AS OUTLINED IN AS 3798 TABLE 5.1.
19. FILL MATERIAL (WHICH IS NOT ALWAYS APPARENT AT THE INITIAL INVESTIGATION STAGE) IS TO BE DEALT WITH AS FOLLOWS:
  - a. IF IT IS CERTIFIED BY OTHERS IT CAN REMAIN.
  - b. IF IT IS NOT CERTIFIED WILL REQUIRE REMOVAL DOWN TO NATURAL GROUND OR VERIFIED. ANY SAND CAN BE REUSED.
  - c. IF A PAD HAS ALREADY BEEN CONSTRUCTED, THE SITE CLASSIFICATION IS NOT CERTIFICATION OF THE PAD. CONTACT THIS OFFICE SHOULD A SAND PAD CERTIFICATION BE REQUIRED.
20. ANY ORGANIC MATTER OR ROOTS ENCOUNTERED, WHICH IS BEYOND WHAT IS NORMALLY CONSIDERED ACCEPTABLE IS TO BE REMOVED. THIS WILL NECESSITATE RAKING THE SITE TO REMOVE ORGANIC MATERIAL, TURNING THE SITE OVER AND RE-COMPACTING TO A MINIMUM.

## RETAINING WALLS

21. AN ASSESSMENT OF ANY EXISTING OR PROPOSED RETAINING WALLS HAS NOT BEEN CONDUCTED AS PART OF THIS SITE CLASSIFICATION REPORT.
22. IF THE PROPOSED BUILDING IS TO BE LOCATED CLOSER THAN THE HEIGHT OF THE RETAINING WALL, THIS MAY PLACE ADDITIONAL LOADS ON THE WALL THAT WERE NOT INITIALLY DESIGNED FOR. AN INSPECTION OF THE STRUCTURAL INTEGRITY OF THE RETAINING WALL WILL BE REQUIRED TO PROVIDE CERTIFICATION AND/OR RECOMMENDATIONS PRIOR TO ANY CONSTRUCTION. PLEASE REFER BACK TO THIS OFFICE FOR ASSISTANCE.  
STORMWATER DRAINAGE
23. UNLESS OTHERWISE SPECIFIED, ALL SOAKWELLS ARE TO BE LOCATED THE DEPTH OF THE SOAKWELL AWAY FROM THE BUILDING OR SETBACK A MINIMUM OF 1200mm, WHICHEVER IS GREATER, UNLESS SPECIFIED OTHERWISE. PLEASE REFER BACK TO THIS OFFICE IF THE SETBACK CANNOT BE ACHIEVED.

DOC# SS001 - 1.1.10 SCR EQUIVALENT V1.1 - AUGUST 2021



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PROJECT :  
LOT 264 ATTADALE AV DARCH

CLIENT : PARCEL DARCH PTY LTD

SCALE 1:20

DATE 16/11/22

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## EXPLANATORY NOTES & STANDARD RECOMMENDATIONS - EQUIVALENT CLASS SITES (Sheet 2 of 2)

### WIND CLASSIFICATION

24. WIND CLASSIFICATION IS GIVEN FOR THE EXPECTED CONDITION 5 YEARS HENCE. THIS CLASSIFICATION IS LIMITED TO BUILDINGS CLASSES 1 AND 10, WHICH HAVE THE FOLLOWING LIMITATION (AS PER AS4055):

- a. MAXIMUM DISTANCE FROM THE GROUND LEVEL TO THE UNDERSIDE OF EAVES SHALL NOT EXCEED 6.0m,
- b. MAXIMUM DISTANCE FROM GROUND LEVEL TO THE HIGHEST POINT OF THE ROOF, EXCLUDING CHIMNEYS, SHALL NOT EXCEED 8.5m,
- c. THE ROOF PITCH SHALL NOT EXCEED 35 °,
- d. THE WIDTH, EXCLUDING EAVES, SHALL NOT EXCEED 16.0m AND THE LENGTH SHALL NOT EXCEED 5x THE WIDTH.

IF THE BUILDING FALLS OUTSIDE OF THESE LIMITATIONS, THE STATED WIND CLASSIFICATION DOES NOT APPLY. REFER BACK TO THIS OFFICE FOR A REVISED WIND CLASSIFICATION.

### ENVIRONMENTAL

25. NO ENVIRONMENTAL ASSESSMENT OF THIS SITE HAS BEEN UNDERTAKEN. SHOULD AN ENVIRONMENTAL ASSESSMENT BE REQUIRED, PLEASE CONTACT THIS OFFICE.

### SEISMIC

26. RECOMMENDED FOOTING DETAILS ARE SUITABLE FOR SEISMIC CONDITIONS WITH AN EARTHQUAKE HAZARD FACTOR OF  $\leq 0.11$ . RECOMMENDED FOOTING DETAILS PROVIDED FOR SITES WITH AN EARTHQUAKE HAZARD FACTOR OF  $> 0.11$ , ARE NOT FOR CONSTRUCTION, BUT FOR COSTING PURPOSES ONLY. IT IS REQUIRED THAT A FULL SEISMIC DESIGN IS CONDUCTED.

### CORROSION CLASSIFICATION

27. THE CORROSION CLASSIFICATION HAS BEEN ASSESSED IN ACCORDANCE WITH AS3700.

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A blue ink handwritten signature is written over the 'APPROVED' field.

**SITE CLASSIFICATION REPORT**  
CERTIFICATE 2590270

**CLIENT** PARCEL DARCH PTY LTD  
**JOB ADDRESS** LOT 265 ATTADALE AV DARCH  
**CLIENT JOB NO.**  
**OWNER**  
**STRUCTERRE JOB NO.** S1067816  
**DATE OF ASSESSMENT** 4/5/22

**SITE RECORD**



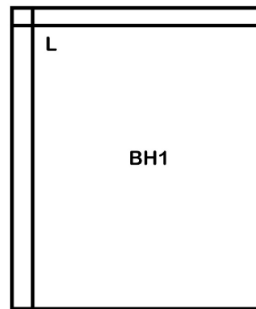
SITE CLASSIFICATION	<b>A</b>	<i>(in accordance with AS2870)</i>
FOOTING DETAIL	<b>B1</b>	
SAND PAD	<b>No sand pad required structurally</b>	
BUSHFIRE PRONE AREA	<b>Not in a Bushfire Prone Area (see NOTE 2.)</b>	
CORROSION CLASSIFICATION	<b>R1</b>	<i>(Durability Class in accordance with AS3700)</i>
WIND CLASSIFICATION	<b>N1</b>	<i>(in accordance with AS4055)</i>
-TERRAIN CATEGORY	<b>3</b>	
-TOPOGRAPHIC	<b>T0</b>	
-SHIELDING	<b>Full Shielding</b>	



## SOIL PROFILE

BOREHOLE 1: 0 - 1000 SAND trace gravel, limestone & artificial material - brown; 1000 GRAVEL (limestone) refusal.

## APPROXIMATE BOREHOLE LOCATIONS



Attadale Av

### NOTE 1 Explanatory Notes & Standard Recommendations

This site classification report must be read in conjunction with the applicable Explanatory Notes & Standard Recommendations. For A Class sites, refer to the Explanatory Notes and Standard Recommendations for Stable (A Class) Sites, version 1.0 July 2018. For S, M, H1, H2 & E Class sites, refer to the Explanatory Notes and Standard Recommendations for Reactive (S, M, H1, H2 & E Class) Sites version 1.0 July 2018. For Equivalent Class sites, refer to the Explanatory Notes and Standard Recommendations for Equivalent Class Sites, version 1.0 July 2018.

### NOTE 2 Bushfire - Prone Area

The Site may be situated in a bush fire prone area in accordance with the Department of Fire and Emergency Services (DFES) Bushfire Prone Area Map (Reference: <http://www.dfes.wa.gov.au/regulationandcompliance/bushfireproneareas/>) the current version at the time of this assessment. A Bushfire Attack Level (BAL) assessment may be required for this site, please confirm with the local authority. Should you require an assessment, please contact this Office.

## ADDITIONAL NOTES / REQUIREMENTS

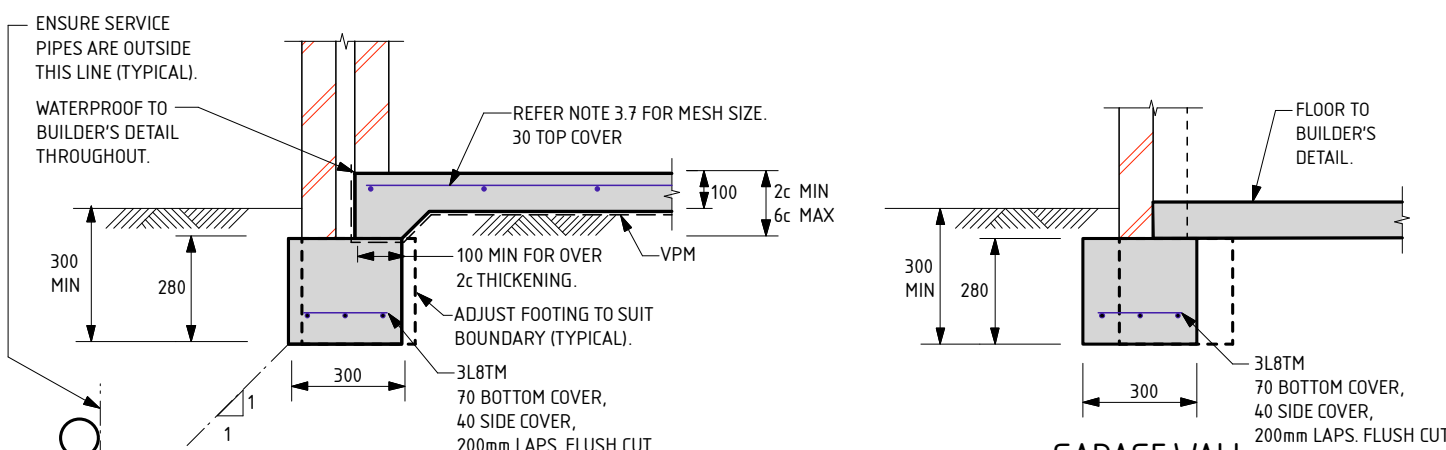
### Site Condition

At the time of inspection the site was considered to be level and cleared. For specific levels of this site or topographical features, please refer to a professional site survey.

### Structerre Geotech Reference

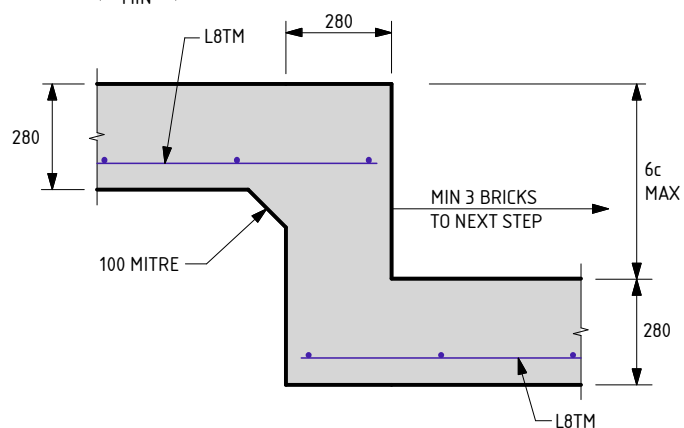
The Site Classification is based on any remedial works being successfully completed as outlined in the Structerre Geotechnical Report J408657 dated 3/05/22. The footing details are subject to the recommendations being completed to an acceptable level as outlined in this report, if applicable.

-- END OF REPORT --

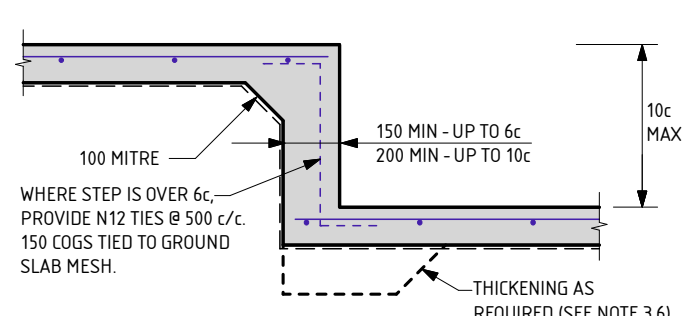


**EXTERNAL WALLS**

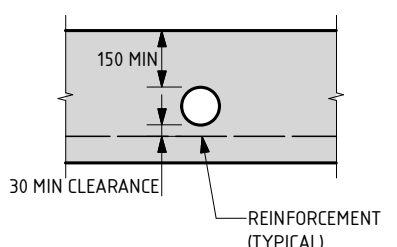
**GARAGE WALL**



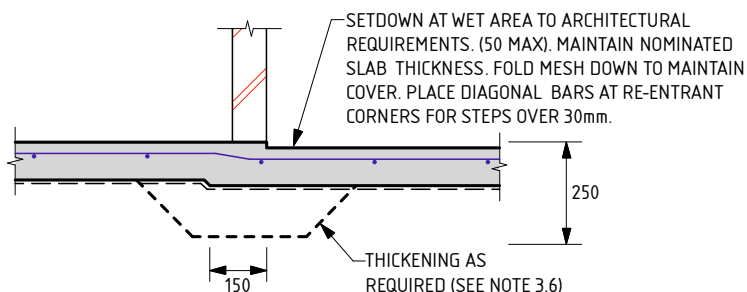
**FOOTING STEP**



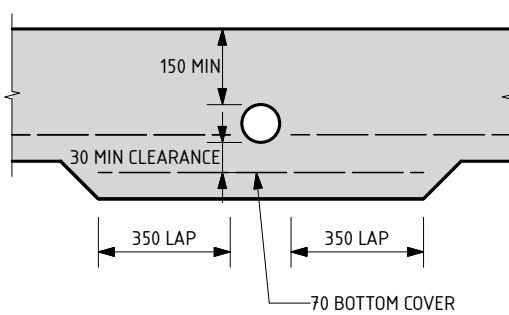
**SLAB STEP**



**OPTION A  
PENETRATION CLEAR OF REINFORCEMENT**



**WET AREA STEP**



**OPTION B  
PENETRATION INTERRUPTS REINFORCEMENT**

**SERVICE PIPE DIAGRAM**

- MAXIMUM PENETRATION SIZE TO BE Ø150.

THE APPROVED SIGNATURE ON THIS FOOTING AND SLAB DETAIL ENDORSES ITS USE FOR SINGLE STOREY BUILDINGS.  
DATE LAST MODIFIED - 23/11/21

**B1**

SHEET 1 OF 2



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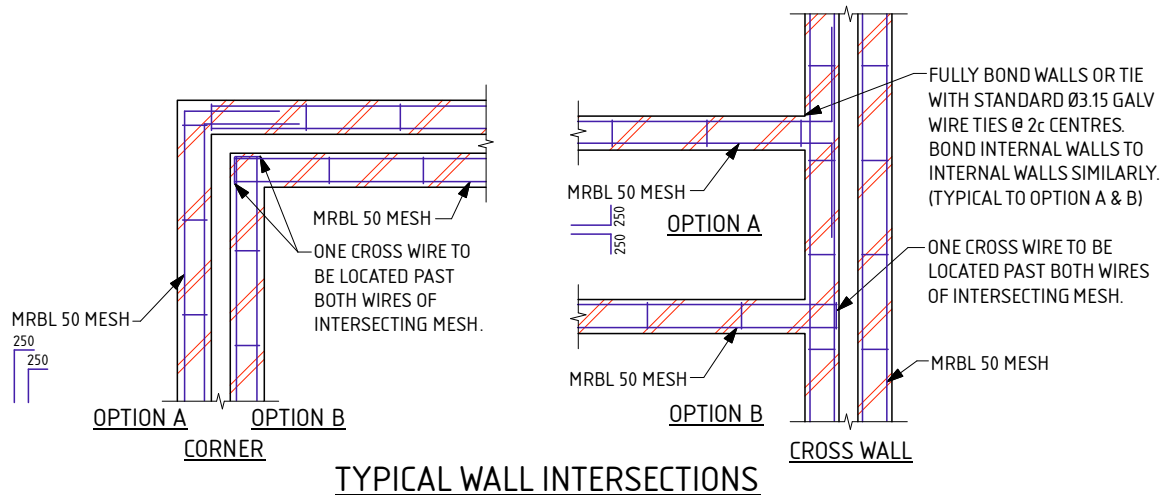
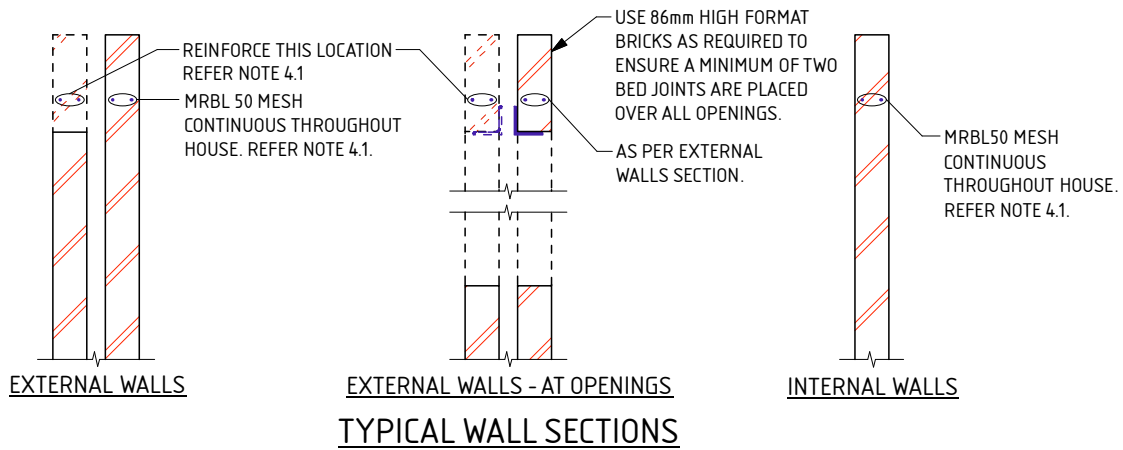
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#### NOTES FOR B1 FOOTING

THESE NOTES ARE TO BE READ IN CONJUNCTION WITH THE ATTACHED FOOTING DETAILS.

#### 1.0 SITE CLASSIFICATION

- 1.1 THE SITE CLASSIFICATION NOTED IN THE SITE CLASSIFICATION REPORT IS AS DEFINED IN AS2870 - RESIDENTIAL SLABS & FOOTINGS AS DETERMINED BY AN ASSESSMENT OF THE SITE. REFER TO THE ATTACHED REPORT FOR ANY SPECIAL REQUIREMENTS.

#### 2.0 EARTHWORKS

- 2.1 SAND PAD, IF APPLICABLE, TO BE AS PER SITE INSPECTION REPORT.
- 2.2 EARTHWORKS SHALL INCLUDE, BUT NOT BE LIMITED TO:
- REMOVE ALL ORGANIC MATERIAL FROM THE BUILDING AREA.
  - REMOVE ALL RUBBISH AND DELETERIOUS FILL FROM THE PAD AREA.
  - GRUB OUT ANY TREES WHERE NECESSARY AND ENSURE THE REMAINING HOLES ARE FILLED AND COMPACTED SATISFACTORILY WITH SAND.
  - NOTIFY THE ENGINEER OF ANY UNUSUAL FEATURES OR DISCREPANCIES WHICH MAY BECOME EVIDENT DURING EARTHWORKS, PRIOR TO PROCEEDING.
- 2.3 ANY PREDOMINANT ROCK IN THE HOUSE PAD AREAS IS TO BE INSPECTED BY THE ENGINEER.
- 2.4 IF CLAY ON SITE, AN ENGINEER TO BE CONSULTED.
- 2.5 SAND FILL TO BE CLEAN WELL DRAINED, WITH MAX FINES (PARTICLES UP TO 0.075mm) CONTENT OF 5%. SAND TO BE COMPACTED TO A MIN 6 BLOWS/300mm FOR 750mm OR THE DEPTH OF THE PAD.

#### 3.0 FOOTINGS & SLABS

- 3.1 A MINIMUM OF 150mm OF SAND REQUIRED UNDER FOOTINGS.
- 3.2 ROOF AND SURFACE WATER TO BE TAKEN AWAY FROM FOUNDATION AREA.
- 3.3 EXCAVATIONS FOR ALL SERVICE PIPES NOT TO UNDERMINE FOOTINGS. IF UNDERMINING IS LIKELY TO OCCUR, CONTACT THE ENGINEER PRIOR TO PROCEEDING.
- 3.4 WHERE PLUMBING PIPES PASS THROUGH FOOTINGS OR SLAB, SPECIFIED TOTAL THICKNESS OF ALL CONCRETE IS ALWAYS TO BE MAINTAINED.
- 3.5 SETDOWN AT WET AREA TO ARCHITECTURAL REQUIREMENT (50mm MAX). MAINTAIN 100mm SLAB THICKNESS. FOLD MESH DOWN TO MAINTAIN COVER, PLACE DIAGONAL BARS AT RE-ENTRANT CORNER FOR STEPS OVER 30mm. BARS TO BE N12 x 1200 LONG.
- 3.6 PLACE SLAB THICKENINGS (300 WIDE x 250 DEEP) UNDER INTERNAL WALLS (90 OR 110) HIGHER THAN 3.7m.
- 3.7 IF THE LENGTH TO WIDTH RATIO OF THE GROUND SLAB OR ANY PART OF THE GROUND SLAB EXCEEDS 3:1. REFER BACK TO THIS OFFICE FOR MESH SIZE. IF THE LENGTH TO WIDTH RATIO IS LESS THAN 1:3. USE THE FOLLOWING:
- USE SL52/SL63 MESH FOR SLAB SPAN UP TO 22m.
  - USE SL62 MESH FOR SLAB SPAN UP TO 26m.
  - USE SL72 MESH FOR SLAB SPAN UP TO 30m.
  - USE SL82 MESH FOR SLAB SPAN UP TO 32m.

- 3.8 FOR SLAB SPANS > 32m REFER TO ENGINEER FOR MESH SIZE.

- 3.9 REINFORCEMENT SHALL BE IN ACCORDANCE WITH THE FOLLOWING STANDARDS;

- L INDICATES PLAIN OR DEFORMED WIRE R500L OR D500L TO AS/NZS 4671.
- SL INDICATES DEFORMED SQUARE MESH D500L TO AS/NZS 4671.
- N INDICATES DEFORMED BARS D500N TO AS/NZS 4671.
- TM SUFFIX INDICATES TRENCH MESH USING DEFORMED BARS D500L TO AS/NZS 4671.

ALL STEELWORK TO BE TREATED IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OR TO AS 3700, AS APPLICABLE.

- 3.10 LAP ALL MESH TWO TRANSVERSE WIRES PLUS 25mm OR TO MANUFACTURER'S SPECIFICATIONS.

- 3.11 CONCRETE TO CONFORM WITH AS 3600.

- 3.12 BLENDED CEMENT TO CONFORM WITH AS 3972.

- 3.13 ALL CONCRETE TO BE N20/20/100.

- 3.14 FOR ISOLATED PAD FOOTINGS, REFER BACK TO ENGINEER.

- 3.15 FOOTING POSITION UNDER BRICKWORK CAN BE ADJUSTED TO SUIT PARAPET WALLS.

- 3.16 IF POLISHED (OR HONED) CONCRETE FINISHES ARE DESIRED, THIS DESIGN SHOULD BE REFERRED BACK TO THIS OFFICE FOR CONSIDERATION, AS IT IS NOT THE INTENTION OF THESE DESIGNS FOR SUCH FINISHES.

- 3.17 PIERCING THE VAPOUR BARRIER (VPM) USING LEVELLING PINS ON FREE DRAINING SAND PADS IS ALLOWABLE.

- 3.18 REFER BACK TO THE ENGINEER IF AGGRESSIVE SOILS ARE ENCOUNTERED (IN ACCORDANCE WITH AS2870).

- 3.19 CURE SLAB AS DETERMINED BY ENGINEER.

- 3.20 THE FOOTING DETAILS HAVE BEEN DESIGNED IN ACCORDANCE WITH AS3600 AND SECTION 4 OF AS2870.

#### 4.0 MASONRY

- 4.1 PLACE MRBL50 MESH IN THE BED JOINT IMMEDIATELY OVER DOOR AND WINDOW HEAD LEVEL CONTINUOUS

- THROUGHOUT THE BUILDING IN BOTH INTERNAL AND EXTERNAL WALLS. MESH MAY STEP BED JOINTS

- UP TO A HEIGHT OF 1c, 500 LAP IS REQUIRED AT EACH STEP.

- 4.2 LAP 250 AT SPLICES AND AROUND CORNERS AND COG 250 INTO INTERSECTING WALLS. 20mm COVER TO ALL WIRES.

- 4.3 ALL MESH IN EXTERNAL FACE OF EXTERNAL LEAF TO BE GALVANIZED TO AS/NZS 4680.

- 4.4 WHEN BRICKWORK EXTENDS ABOVE OPENINGS TO EXTERNAL LEAF REINFORCE AS PER CLAUSE 4.1.

- 4.5 ALL PERPENDS TO BE FULLY MORTARED.

- 4.6 A BRICK COURSE, AS REFERRED TO IN THIS DOCUMENT IS STANDARD 86mm HIGH.

- 4.7 2L6 WIRES MAY BE USED AS AN ALTERNATIVE TO THE MRBL50 MESH. WHERE L6 WIRES ARE USED, ALL SPLICES AND COGS TO BE 500 LONG.

DATE LAST MODIFIED - 23/11/21

SHEET 2 OF 2



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PROJECT :

LOT 265 ATTADALE AV DARCH

CLIENT :

PARCEL DARCH PTY LTD

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DATE

10/5/22

## EXPLANATORY NOTES AND STANDARD RECOMMENDATIONS – STABLE (A CLASS) SITES (Sheet 1 of 2)

### GENERAL

1. THE EXPLANATORY NOTES AND THE STANDARD RECOMMENDATIONS ARE TO BE READ IN CONJUNCTION WITH THE SITE CLASSIFICATION REPORT.
2. ALL REFERRED STANDARDS TO BE THE CURRENT VERSION AT THE TIME OF THE CONSTRUCTION.
3. THE PURPOSE OF THE SITE CLASSIFICATION REPORT IS TO CLASSIFY THE SITE IN ACCORDANCE WITH AS2870 "RESIDENTIAL SLABS AND FOOTING". IT IS NOT INTENDED FOR ANY OTHER PURPOSE, INCLUDING SOLE INFORMATION IN THE PROVISION OF A QUOTATION FOR SITE WORKS BY EARTH WORKERS. IT IS RECOMMENDED EARTH WORKERS PERFORM THEIR OWN INVESTIGATION FOR QUOTATION PURPOSES.
4. THE SITE CLASSIFICATION REPORT WILL INCLUDE BUT IS NOT LIMITED TO:
  - a. THE SITE CLASSIFICATION IN ACCORDANCE WITH AS2870 RESIDENTIAL SLABS AND FOOTING CONSTRUCTION,
  - b. A WIND RATING IN ACCORDANCE WITH AS 4055 WIND LOADS FOR HOUSING,
  - c. A COASTAL CORROSION CLASSIFICATION,
  - d. ADDITIONAL EARTHWORK RECOMMENDATION WHERE APPLICABLE,
  - e. STANDARD FOOTING DESIGN FOR SINGLE STOREY SLAB ON GROUND CONDITIONS.
5. THE SITE CLASSIFICATION REPORT IS BASED ON THE SITE AS PRESENTED AT THE TIME OF ASSESSMENT. IF FURTHER INFORMATION RELATING TO THE SITE OR DEVELOPMENT BECOMES AVAILABLE, THESE RECOMMENDATIONS ARE SUBJECT TO CHANGE.
6. CLASS A SITES ARE STABLE SITES, GENERALLY SAND, LIMESTONE, GRAVEL OR A COMBINATION. CLASS P ARE PARTICULAR CLASSIFICATIONS SUCH AN UNUSUAL SITES OR SITES REQUIRING ADDITIONAL INVESTIGATION PRIOR TO PROVIDING DETAILS.
7. BOREHOLES EXCAVATED REVEAL THE SOIL PROFILE AT THE BOREHOLE LOCATION ONLY. FROM THIS, IT IS INFERRED THAT THESE ARE THE SOIL CONDITION OVER THE SITE. VARIATIONS CAN OCCUR WHICH MAY NOT HAVE BEEN DETECTED AT THE INVESTIGATION STAGE. ANY ANOMALIES SHOULD BE REFERRED BACK TO THIS OFFICE FOR REASSESSMENT.
8. A NUMBER OF BOREHOLES ARE CONDUCTED ACROSS THE SITE IN ORDER TO DETERMINE THE SOIL PROFILES AND PROVIDE A REPRESENTATION OF THE GROUND CONDITIONS.
9. THIS REPORT IS FOR STRUCTERRE ONLY TO USE IN DESIGN. ANY DESIGN BY ANYONE ELSE FOR ANY STRUCTURE MUST BE SPECIFICALLY APPROVED BY STRUCTERRE. IF USED BY ANYONE ELSE FOR ANYTHING OTHER THAN A STRUCTERRE DESIGN OR STRUCTURE, STRUCTERRE TAKES NO RESPONSIBILITY.

### SAND PAD

10. THE RECOMMENDED FOOTING DESIGN IS ONLY TO BE USED IN CONJUNCTION WITH THE RECOMMENDED SAND PAD AND EARTHWORKS AS OUTLINED IN THE SITE CLASSIFICATION REPORT.
11. THE RECOMMENDATIONS FOR THE SAND PAD IS FOR STRUCTURAL PURPOSES ONLY, AND DOES NOT PROVIDE THE MINIMUM FINISHED PAD LEVEL IN RELATION TO FLOOD LEVELS, OR DEPTH TO GROUNDWATER. SHOULD THE TEST BE LOCATED IN A LOW LYING OR FLOOD PRONE AREA, REFER TO THE LOCAL AUTHORITY FOR MINIMUM BUILDING HEIGHT.
12. IMPORTED FILL FOR USE AS A SAND PAD TO BE IN ACCORDANCE TO AS 3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS" WHICH INCLUDES BUT IS NOT LIMITED TO: BE FREE FROM ANY DELETERIOUS MATERIALS INCLUDING ORGANICS, (ROOTS, STUMPS, GRASSES, DECOMPOSED ORGANICS – PEAT, TIMBER, ETC), BUILDING RUBBLE, GLASS, PLASTICS OR WASTE MATERIAL. THE FINES CONTENT, (PERCENTAGE PASSING THE 0.075mm SIEVE) TO BE LESS THAN 5% BY MASS.
13. ON CLASS A SITES, A SAND PAD IS NOT REQUIRED STRUCTURALLY, HOWEVER IF ROCK IS ENCOUNTERED, A MINIMUM 450mm SAND PAD BEYOND THE BASE OF FOOTING IS RECOMMENDED.
14. SAND PAD TO EXTEND BEYOND BUILDING AREA A MINIMUM OF 1.5 TIMES THE PAD DEPTH. RECOMMENDED SAND PAD DEPTH IS ABOVE THE HIGHEST POINT, UNLESS OTHERWISE SPECIFIED.
15. IT IS REQUIRED THAT EARTHWORKS CONFIRM THAT THE MINIMUM DEPTH OF RECOMMENDED SAND PAD IS ACHIEVED.

### EARTHWORKS

16. RECOMMENDED EARTHWORKS TO BE CONDUCTED IN ACCORDANCE WITH AS3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS", AND TO INCLUDE BUT NOT BE LIMITED TO:
  - a. REMOVAL OF ALL VEGETATION, TOPSOILS, UNCONTROLLED FILLS AND OTHER DELETERIOUS MATERIALS FROM THE BUILDING AREA,
  - b. GRUBBING OUT OF ANY TREES ENSURING THE REMAINING HOLES ARE BACKFILLED WITH CLEAN COMPACTED SAND,
  - c. NOTIFYING THE ENGINEER OF ANY UNUSUAL FEATURE OR DISCREPANCY THAT MAY BECOME EVIDENT DURING EARTHWORKS, PRIOR TO PROCEEDING,
  - d. COMPACTING TO MEET THE REQUIREMENTS AS OUTLINED IN AS 3798 TABLE 5.1.
17. FILL MATERIAL (WHICH IS NOT ALWAYS APPARENT AT THE INITIAL INVESTIGATION STAGE) IS TO BE DEALT WITH AS FOLLOWS:
  - a. IF IT IS CERTIFIED BY OTHERS IT CAN REMAIN.
  - b. IF IT IS NOT CERTIFIED WILL REQUIRE REMOVAL DOWN TO NATURAL GROUND OR VERIFIED. ANY SAND CAN BE REUSED.
  - c. IF A PAD HAS ALREADY BEEN CONSTRUCTED, THE SITE CLASSIFICATION IS NOT CERTIFICATION OF THE PAD. CONTACT THIS OFFICE SHOULD A SAND PAD CERTIFICATION BE REQUIRED.
18. ANY ORGANIC MATTER OR ROOTS ENCOUNTERED, WHICH IS BEYOND WHAT IS NORMALLY CONSIDERED ACCEPTABLE IS TO BE REMOVED. THIS WILL NECESSITATE RAKING THE SITE TO REMOVE ORGANIC MATERIAL, TURNING THE SITE OVER AND RE- COMPACTING TO A MINIMUM.

### RETAINING WALLS

19. AN ASSESSMENT OF ANY EXISTING OR PROPOSED RETAINING WALLS HAS NOT BEEN CONDUCTED AS PART OF THIS SITE CLASSIFICATION REPORT.
20. IF THE PROPOSED BUILDING IS TO BE LOCATED CLOSER TO THE RETAINING WALL THAN THE HEIGHT OF THE RETAINING WALL, THIS MAY PLACE ADDITIONAL LOADS ON THE WALL THAT WERE NOT INITIALLY DESIGNED FOR. AN INSPECTION OF THE STRUCTURAL INTEGRITY OF THE RETAINING WALL WILL BE REQUIRED TO PROVIDE CERTIFICATION AND/OR RECOMMENDATIONS PRIOR TO ANY CONSTRUCTION. PLEASE REFER BACK TO THIS OFFICE FOR ASSISTANCE.

### STORMWATER DRAINAGE

21. ALL SOAKWELLS ARE TO BE LOCATED THE DEPTH OF SOAKWELL AWAY FROM THE BUILDING AND SETBACK MINIMUM OF 1200mm, WHICHEVER IS GREATER. PLEASE REFER BACK TO THIS OFFICE IF REQUIRED THE SET-BACK CANNOT BE ACHIEVED.

DOC# SS001 - 1.1.3 V1.1 - AUGUST 2021



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SCALE 1:20

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## EXPLANATORY NOTES AND STANDARD RECOMMENDATIONS – STABLE (A CLASS) SITES (Sheet 2 of 2)

### WIND CLASSIFICATION

22. WIND CLASSIFICATION IS GIVEN FOR THE EXPECTED CONDITION 5 YEARS HENCE. THIS CLASSIFICATION IS LIMITED TO BUILDINGS CLASSES 1 AND 10, WHICH HAVE THE FOLLOWING LIMITATION (AS PER AS4055):

- a. MAXIMUM DISTANCE FROM THE GROUND LEVEL TO THE UNDERSIDE OF EAVES SHALL NOT EXCEED 6.0m.
- b. MAXIMUM DISTANCE FROM GROUND LEVEL TO THE HIGHEST POINT OF THE ROOF, EXCLUDING CHIMNEYS, SHALL NOT EXCEED 8.5m.
- c. THE ROOF PITCH SHALL NOT EXCEED 35°.
- d. THE WIDTH, EXCLUDING EAVES, SHALL NOT EXCEED 16.0m AND THE LENGTH SHALL NOT EXCEED 5x THE WIDTH.

IF THE BUILDING FALLS OUTSIDE OF THESE LIMITATIONS, THE STATED WIND CLASSIFICATION DOES NOT APPLY. REFER BACK TO THIS OFFICE FOR A REVISED WIND CLASSIFICATION.

### ENVIRONMENTAL

23. NO ENVIRONMENTAL ASSESSMENT OF THIS SITE HAS BEEN UNDERTAKEN. SHOULD AN ENVIRONMENTAL ASSESSMENT BE REQUIRED, IT IS RECOMMENDED THAT AN ENVIRONMENTAL ENGINEER BE ENGAGED.

### SEISMIC

24. RECOMMENDED FOOTING DETAILS ARE SUITABLE FOR SEISMIC CONDITIONS WITH AN EARTHQUAKE HAZARD FACTOR OF  $\leq 0.11$ . RECOMMENDED FOOTING DETAILS PROVIDED FOR SITES WITH AN EARTHQUAKE HAZARD FACTOR OF  $> 0.11$ , ARE NOT FOR CONSTRUCTION, BUT FOR COSTING PURPOSES ONLY. IT IS RECOMMENDED REQUIRED THAT A FULL SEISMIC DESIGN IS CONDUCTED.

### CORROSION CLASSIFICATION

25. THE CORROSION CLASSIFICATION HAS BEEN ASSESSED IN ACCORDANCE WITH AS3700.

DOC# SS001 - 1.1.3 V1.1 - AUGUST 2021



Zemla Pty. Ltd. (ABN: 71 349 772 837) ATF the Young Purich and Higham  
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PROJECT :  
LOT 265 ATTADALE AV DARCH

CLIENT : PARCEL DARCH PTY LTD

SCALE 1:20

DATE 10/5/22

APPROVED

A blue ink handwritten signature is written over the 'APPROVED' field.

**SITE CLASSIFICATION REPORT**  
CERTIFICATE 2590262

**CLIENT** PARCEL DARCH PTY LTD  
**JOB ADDRESS** LOT 266 ATTADALE AV DARCH  
**CLIENT JOB NO.**  
**OWNER**  
**STRUCTERRE JOB NO.** S1067814  
**DATE OF ASSESSMENT** 4/5/22

**SITE RECORD**

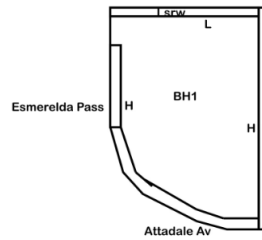


SITE CLASSIFICATION	<b>A</b>	<i>(in accordance with AS2870)</i>
FOOTING DETAIL	<b>B1</b>	
SAND PAD	<b>No sand pad required structurally</b>	
BUSHFIRE PRONE AREA	<b>Not in a Bushfire Prone Area (see NOTE 2.)</b>	
CORROSION CLASSIFICATION	<b>R1</b>	<i>(Durability Class in accordance with AS3700)</i>
WIND CLASSIFICATION	<b>N1</b>	<i>(in accordance with AS4055)</i>
-TERRAIN CATEGORY	<b>3</b>	
-TOPOGRAPHIC	<b>T0</b>	
-SHIELDING	<b>Full Shielding</b>	

## SOIL PROFILE

BOREHOLE 1: 0 - 1800 SAND trace gravel, limestone & artificial material - brown; 1800 end of hole.

## APPROXIMATE BOREHOLE LOCATIONS



### NOTE 1 Explanatory Notes & Standard Recommendations

This site classification report must be read in conjunction with the applicable Explanatory Notes & Standard Recommendations. For A Class sites, refer to the Explanatory Notes and Standard Recommendations for Stable (A Class) Sites, version 1.0 July 2018. For S, M, H1, H2 & E Class sites, refer to the Explanatory Notes and Standard Recommendations for Reactive (S, M, H1, H2 & E Class) Sites version 1.0 July 2018. For Equivalent Class sites, refer to the Explanatory Notes and Standard Recommendations for Equivalent Class Sites, version 1.0 July 2018.

### NOTE 2 Bushfire - Prone Area

The Site may be situated in a bush fire prone area in accordance with the Department of Fire and Emergency Services (DFES) Bushfire Prone Area Map (Reference: <http://www.dfes.wa.gov.au/regulationandcompliance/bushfireproneareas/>) the current version at the time of this assessment. A Bushfire Attack Level (BAL) assessment may be required for this site, please confirm with the local authority. Should you require an assessment, please contact this Office.

### ADDITIONAL NOTES / REQUIREMENTS

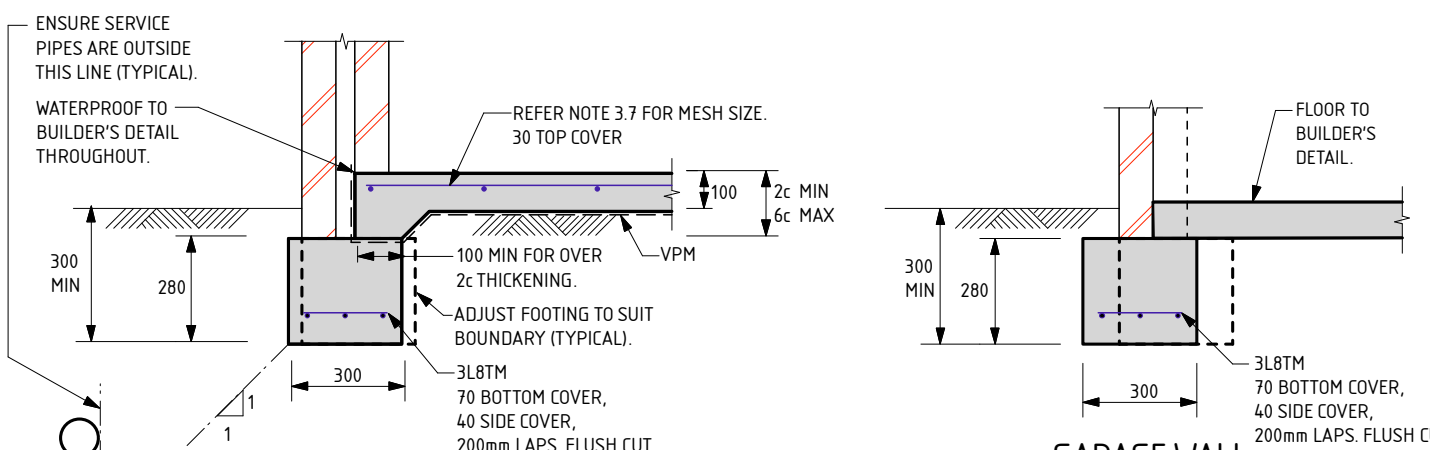
#### Site Condition

At the time of inspection the site was considered to be level and cleared. For specific levels of this site or topographical features, please refer to a professional site survey.

#### Structerre Geotech Reference

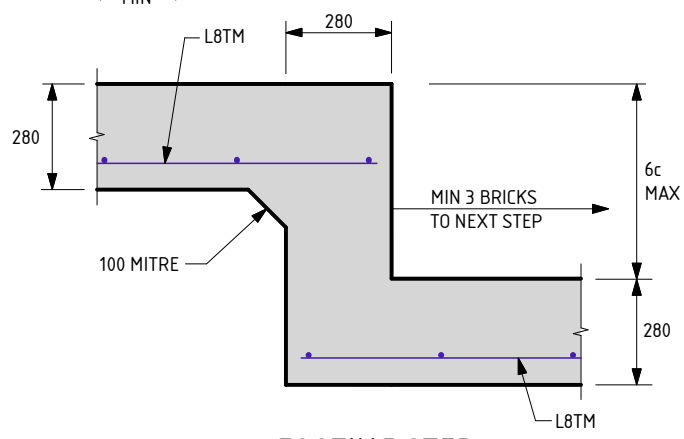
The Site Classification is based on any remedial works being successfully completed as outlined in the Structerre Geotechnical Report J408657 dated 3/05/22. The footing details are subject to the recommendations being completed to an acceptable level as outlined in this report, if applicable.

**-- END OF REPORT --**

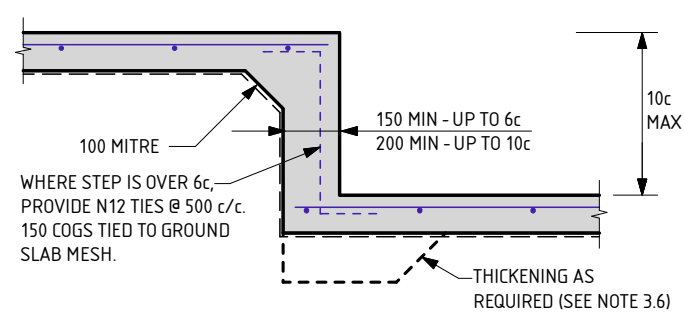


**EXTERNAL WALLS**

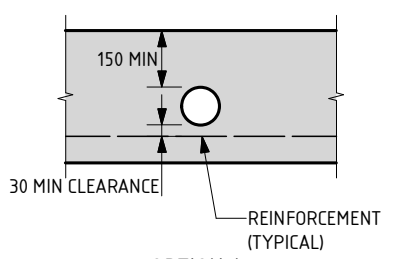
**GARAGE WALL**



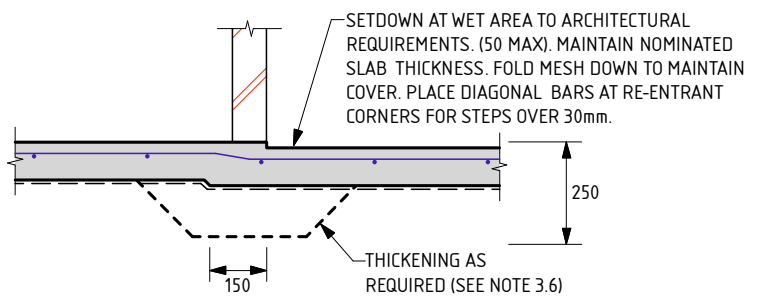
**FOOTING STEP**



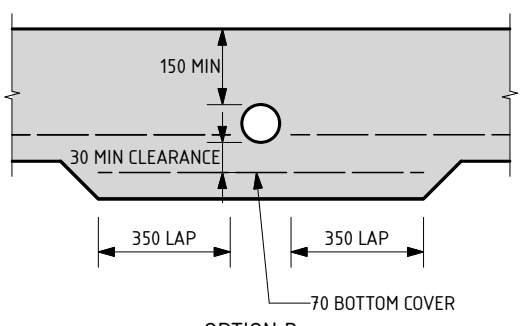
**SLAB STEP**



**OPTION A  
PENETRATION CLEAR OF REINFORCEMENT**



**WET AREA STEP**



**OPTION B  
PENETRATION INTERRUPTS REINFORCEMENT**

**SERVICE PIPE DIAGRAM**

- MAXIMUM PENETRATION SIZE TO BE Ø150.

THE APPROVED SIGNATURE ON THIS FOOTING AND SLAB DETAIL ENDORSES ITS USE FOR SINGLE STOREY BUILDINGS.  
DATE LAST MODIFIED - 23/11/21

**B1**

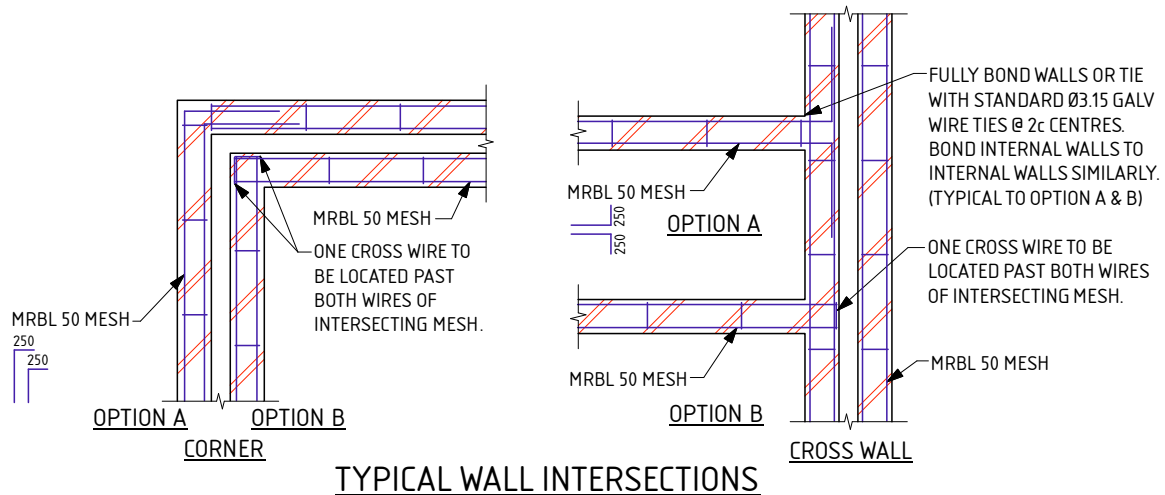
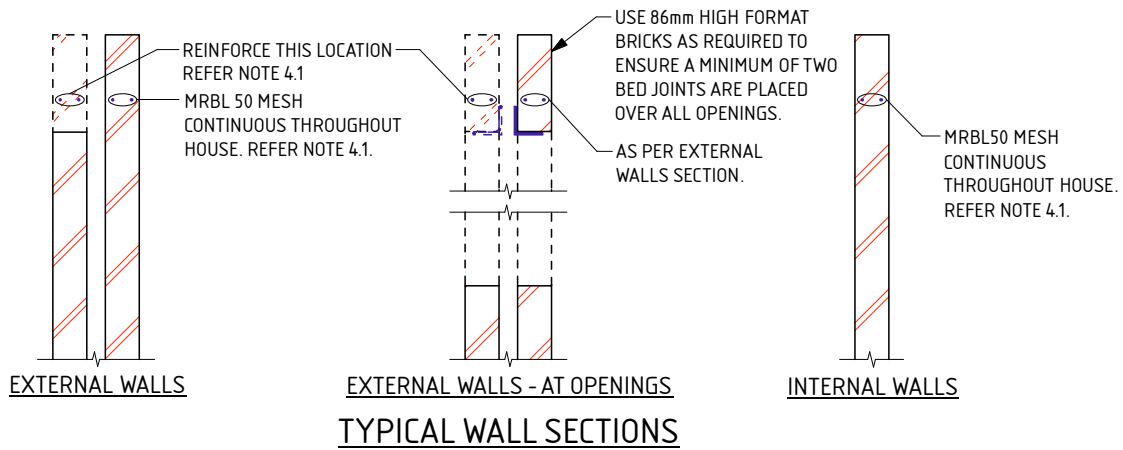
SHEET 1 OF 2



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PROJECT: LOT 266 ATTADALE AV DARCH	
CLIENT: PARCEL DARCH PTY LTD	
SCALE: 1:20	APPROVED
DATE: 10/5/22	





#### NOTES FOR B1 FOOTING

THESE NOTES ARE TO BE READ IN CONJUNCTION WITH THE ATTACHED FOOTING DETAILS.

#### 1.0 SITE CLASSIFICATION

- 1.1 THE SITE CLASSIFICATION NOTED IN THE SITE CLASSIFICATION REPORT IS AS DEFINED IN AS2870 - RESIDENTIAL SLABS & FOOTINGS AS DETERMINED BY AN ASSESSMENT OF THE SITE. REFER TO THE ATTACHED REPORT FOR ANY SPECIAL REQUIREMENTS.

#### 2.0 EARTHWORKS

- 2.1 SAND PAD, IF APPLICABLE, TO BE AS PER SITE INSPECTION REPORT.
- 2.2 EARTHWORKS SHALL INCLUDE, BUT NOT BE LIMITED TO:
  - a) REMOVE ALL ORGANIC MATERIAL FROM THE BUILDING AREA.
  - b) REMOVE ALL RUBBISH AND DELETERIOUS FILL FROM THE PAD AREA.
  - c) GRUB OUT ANY TREES WHERE NECESSARY AND ENSURE THE REMAINING HOLES ARE FILLED AND COMPACTED SATISFACTORILY WITH SAND.
  - d) NOTIFY THE ENGINEER OF ANY UNUSUAL FEATURES OR DISCREPANCIES WHICH MAY BECOME EVIDENT DURING EARTHWORKS, PRIOR TO PROCEEDING.
- 2.3 ANY PREDOMINANT ROCK IN THE HOUSE PAD AREAS IS TO BE INSPECTED BY THE ENGINEER.
- 2.4 IF CLAY ON SITE, AN ENGINEER TO BE CONSULTED.
- 2.5 SAND FILL TO BE CLEAN WELL DRAINED, WITH MAX FINES (PARTICLES UP TO 0.075mm) CONTENT OF 5%. SAND TO BE COMPACTED TO A MIN 6 BLOWS/300mm FOR 750mm OR THE DEPTH OF THE PAD.

#### 3.0 FOOTINGS & SLABS

- 3.1 A MINIMUM OF 150mm OF SAND REQUIRED UNDER FOOTINGS.
- 3.2 ROOF AND SURFACE WATER TO BE TAKEN AWAY FROM FOUNDATION AREA.
- 3.3 EXCAVATIONS FOR ALL SERVICE PIPES NOT TO UNDERMINE FOOTINGS. IF UNDERMINING IS LIKELY TO OCCUR, CONTACT THE ENGINEER PRIOR TO PROCEEDING.
- 3.4 WHERE PLUMBING PIPES PASS THROUGH FOOTINGS OR SLAB, SPECIFIED TOTAL THICKNESS OF ALL CONCRETE IS ALWAYS TO BE MAINTAINED.
- 3.5 SETDOWN AT WET AREA TO ARCHITECTURAL REQUIREMENT (50mm MAX). MAINTAIN 100mm SLAB THICKNESS. FOLD MESH DOWN TO MAINTAIN COVER, PLACE DIAGONAL BARS AT RE-ENTRANT CORNER FOR STEPS OVER 30mm. BARS TO BE N12 x 1200 LONG.
- 3.6 PLACE SLAB THICKENINGS (300 WIDE x 250 DEEP) UNDER INTERNAL WALLS (90 OR 110) HIGHER THAN 3.7m.
- 3.7 IF THE LENGTH TO WIDTH RATIO OF THE GROUND SLAB OR ANY PART OF THE GROUND SLAB EXCEEDS 3:1. REFER BACK TO THIS OFFICE FOR MESH SIZE. IF THE LENGTH TO WIDTH RATIO IS LESS THAN 1:3. USE THE FOLLOWING:
  - USE SL52/SL63 MESH FOR SLAB SPAN UP TO 22m.
  - USE SL62 MESH FOR SLAB SPAN UP TO 26m.
  - USE SL72 MESH FOR SLAB SPAN UP TO 30m.
  - USE SL82 MESH FOR SLAB SPAN UP TO 32m.

- 3.8 FOR SLAB SPANS > 32m REFER TO ENGINEER FOR MESH SIZE.

- 3.9 REINFORCEMENT SHALL BE IN ACCORDANCE WITH THE FOLLOWING STANDARDS;

L INDICATES PLAIN OR DEFORMED WIRE R500L OR D500L TO AS/NZS 4671.

SL INDICATES DEFORMED SQUARE MESH D500L TO AS/NZS 4671.

N INDICATES DEFORMED BARS D500N TO AS/NZS 4671.

TM SUFFIX INDICATES TRENCH MESH USING DEFORMED BARS D500L TO AS/NZS 4671.

ALL STEELWORK TO BE TREATED IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OR TO AS 3700, AS APPLICABLE.

- 3.10 LAP ALL MESH TWO TRANSVERSE WIRES PLUS 25mm OR TO MANUFACTURER'S SPECIFICATIONS.

- 3.11 CONCRETE TO CONFORM WITH AS 3600.

- 3.12 BLENDED CEMENT TO CONFORM WITH AS 3972.

- 3.13 ALL CONCRETE TO BE N20/20/100.

- 3.14 FOR ISOLATED PAD FOOTINGS, REFER BACK TO ENGINEER.

- 3.15 FOOTING POSITION UNDER BRICKWORK CAN BE ADJUSTED TO SUIT PARAPET WALLS.

- 3.16 IF POLISHED (OR HONED) CONCRETE FINISHES ARE DESIRED, THIS DESIGN SHOULD BE REFERRED BACK TO THIS OFFICE FOR CONSIDERATION, AS IT IS NOT THE INTENTION OF THESE DESIGNS FOR SUCH FINISHES.

- 3.17 PIERCING THE VAPOUR BARRIER (VPM) USING LEVELLING PINS ON FREE DRAINING SAND PADS IS ALLOWABLE.

- 3.18 REFER BACK TO THE ENGINEER IF AGGRESSIVE SOILS ARE ENCOUNTERED (IN ACCORDANCE WITH AS2870).

- 3.19 CURE SLAB AS DETERMINED BY ENGINEER.

- 3.20 THE FOOTING DETAILS HAVE BEEN DESIGNED IN ACCORDANCE WITH AS3600 AND SECTION 4 OF AS2870.

#### 4.0 MASONRY

- 4.1 PLACE MRBL50 MESH IN THE BED JOINT IMMEDIATELY OVER DOOR AND WINDOW HEAD LEVEL CONTINUOUS THROUGHOUT THE BUILDING IN BOTH INTERNAL AND EXTERNAL WALLS. MESH MAY STEP BED JOINTS UP TO A HEIGHT OF 1c, 500 LAP IS REQUIRED AT EACH STEP.

- 4.2 LAP 250 AT SPLICES AND AROUND CORNERS AND COG 250 INTO INTERSECTING WALLS. 20mm COVER TO ALL WIRES.

- 4.3 ALL MESH IN EXTERNAL FACE OF EXTERNAL LEAF TO BE GALVANIZED TO AS/NZS 4680.

- 4.4 WHEN BRICKWORK EXTENDS ABOVE OPENINGS TO EXTERNAL LEAF REINFORCE AS PER CLAUSE 4.1.

- 4.5 ALL PERPENDS TO BE FULLY MORTARED.

- 4.6 A BRICK COURSE, AS REFERRED TO IN THIS DOCUMENT IS STANDARD 86mm HIGH.

- 4.7 2L6 WIRES MAY BE USED AS AN ALTERNATIVE TO THE MRBL50 MESH. WHERE L6 WIRES ARE USED, ALL SPLICES AND COGS TO BE 500 LONG.

DATE LAST MODIFIED - 23/11/21

SHEET 2 OF 2



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PROJECT :

LOT 266 ATTADALE AV DARCH

CLIENT :

PARCEL DARCH PTY LTD

SCALE

1:20

APPROVED

DATE

10/5/22

## EXPLANATORY NOTES AND STANDARD RECOMMENDATIONS – STABLE (A CLASS) SITES (Sheet 1 of 2)

### GENERAL

1. THE EXPLANATORY NOTES AND THE STANDARD RECOMMENDATIONS ARE TO BE READ IN CONJUNCTION WITH THE SITE CLASSIFICATION REPORT.
2. ALL REFERRED STANDARDS TO BE THE CURRENT VERSION AT THE TIME OF THE CONSTRUCTION.
3. THE PURPOSE OF THE SITE CLASSIFICATION REPORT IS TO CLASSIFY THE SITE IN ACCORDANCE WITH AS2870 "RESIDENTIAL SLABS AND FOOTING". IT IS NOT INTENDED FOR ANY OTHER PURPOSE, INCLUDING SOLE INFORMATION IN THE PROVISION OF A QUOTATION FOR SITE WORKS BY EARTH WORKERS. IT IS RECOMMENDED EARTH WORKERS PERFORM THEIR OWN INVESTIGATION FOR QUOTATION PURPOSES.
4. THE SITE CLASSIFICATION REPORT WILL INCLUDE BUT IS NOT LIMITED TO:
  - a. THE SITE CLASSIFICATION IN ACCORDANCE WITH AS2870 RESIDENTIAL SLABS AND FOOTING CONSTRUCTION,
  - b. A WIND RATING IN ACCORDANCE WITH AS 4055 WIND LOADS FOR HOUSING,
  - c. A COASTAL CORROSION CLASSIFICATION,
  - d. ADDITIONAL EARTHWORK RECOMMENDATION WHERE APPLICABLE,
  - e. STANDARD FOOTING DESIGN FOR SINGLE STOREY SLAB ON GROUND CONDITIONS.
5. THE SITE CLASSIFICATION REPORT IS BASED ON THE SITE AS PRESENTED AT THE TIME OF ASSESSMENT. IF FURTHER INFORMATION RELATING TO THE SITE OR DEVELOPMENT BECOMES AVAILABLE, THESE RECOMMENDATIONS ARE SUBJECT TO CHANGE.
6. CLASS A SITES ARE STABLE SITES, GENERALLY SAND, LIMESTONE, GRAVEL OR A COMBINATION. CLASS P ARE PARTICULAR CLASSIFICATIONS SUCH AN UNUSUAL SITES OR SITES REQUIRING ADDITIONAL INVESTIGATION PRIOR TO PROVIDING DETAILS.
7. BOREHOLES EXCAVATED REVEAL THE SOIL PROFILE AT THE BOREHOLE LOCATION ONLY. FROM THIS, IT IS INFERRED THAT THESE ARE THE SOIL CONDITION OVER THE SITE. VARIATIONS CAN OCCUR WHICH MAY NOT HAVE BEEN DETECTED AT THE INVESTIGATION STAGE. ANY ANOMALIES SHOULD BE REFERRED BACK TO THIS OFFICE FOR REASSESSMENT.
8. A NUMBER OF BOREHOLES ARE CONDUCTED ACROSS THE SITE IN ORDER TO DETERMINE THE SOIL PROFILES AND PROVIDE A REPRESENTATION OF THE GROUND CONDITIONS.
9. THIS REPORT IS FOR STRUCTERRE ONLY TO USE IN DESIGN. ANY DESIGN BY ANYONE ELSE FOR ANY STRUCTURE MUST BE SPECIFICALLY APPROVED BY STRUCTERRE. IF USED BY ANYONE ELSE FOR ANYTHING OTHER THAN A STRUCTERRE DESIGN OR STRUCTURE, STRUCTERRE TAKES NO RESPONSIBILITY.

### SAND PAD

10. THE RECOMMENDED FOOTING DESIGN IS ONLY TO BE USED IN CONJUNCTION WITH THE RECOMMENDED SAND PAD AND EARTHWORKS AS OUTLINED IN THE SITE CLASSIFICATION REPORT.
11. THE RECOMMENDATIONS FOR THE SAND PAD IS FOR STRUCTURAL PURPOSES ONLY, AND DOES NOT PROVIDE THE MINIMUM FINISHED PAD LEVEL IN RELATION TO FLOOD LEVELS, OR DEPTH TO GROUNDWATER. SHOULD THE TEST BE LOCATED IN A LOW LYING OR FLOOD PRONE AREA, REFER TO THE LOCAL AUTHORITY FOR MINIMUM BUILDING HEIGHT.
12. IMPORTED FILL FOR USE AS A SAND PAD TO BE IN ACCORDANCE TO AS 3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS" WHICH INCLUDES BUT IS NOT LIMITED TO: BE FREE FROM ANY DELETERIOUS MATERIALS INCLUDING ORGANICS, (ROOTS, STUMPS, GRASSES, DECOMPOSED ORGANICS – PEAT, TIMBER, ETC), BUILDING RUBBLE, GLASS, PLASTICS OR WASTE MATERIAL. THE FINES CONTENT, (PERCENTAGE PASSING THE 0.075mm SIEVE) TO BE LESS THAN 5% BY MASS.
13. ON CLASS A SITES, A SAND PAD IS NOT REQUIRED STRUCTURALLY, HOWEVER IF ROCK IS ENCOUNTERED, A MINIMUM 450mm SAND PAD BEYOND THE BASE OF FOOTING IS RECOMMENDED.
14. SAND PAD TO EXTEND BEYOND BUILDING AREA A MINIMUM OF 1.5 TIMES THE PAD DEPTH. RECOMMENDED SAND PAD DEPTH IS ABOVE THE HIGHEST POINT, UNLESS OTHERWISE SPECIFIED.
15. IT IS REQUIRED THAT EARTHWORKS CONFIRM THAT THE MINIMUM DEPTH OF RECOMMENDED SAND PAD IS ACHIEVED.

### EARTHWORKS

16. RECOMMENDED EARTHWORKS TO BE CONDUCTED IN ACCORDANCE WITH AS3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS", AND TO INCLUDE BUT NOT BE LIMITED TO:
  - a. REMOVAL OF ALL VEGETATION, TOPSOILS, UNCONTROLLED FILLS AND OTHER DELETERIOUS MATERIALS FROM THE BUILDING AREA,
  - b. GRUBBING OUT OF ANY TREES ENSURING THE REMAINING HOLES ARE BACKFILLED WITH CLEAN COMPACTED SAND,
  - c. NOTIFYING THE ENGINEER OF ANY UNUSUAL FEATURE OR DISCREPANCY THAT MAY BECOME EVIDENT DURING EARTHWORKS, PRIOR TO PROCEEDING,
  - d. COMPACTING TO MEET THE REQUIREMENTS AS OUTLINED IN AS 3798 TABLE 5.1.
17. FILL MATERIAL (WHICH IS NOT ALWAYS APPARENT AT THE INITIAL INVESTIGATION STAGE) IS TO BE DEALT WITH AS FOLLOWS:
  - a. IF IT IS CERTIFIED BY OTHERS IT CAN REMAIN.
  - b. IF IT IS NOT CERTIFIED WILL REQUIRE REMOVAL DOWN TO NATURAL GROUND OR VERIFIED. ANY SAND CAN BE REUSED.
  - c. IF A PAD HAS ALREADY BEEN CONSTRUCTED, THE SITE CLASSIFICATION IS NOT CERTIFICATION OF THE PAD. CONTACT THIS OFFICE SHOULD A SAND PAD CERTIFICATION BE REQUIRED.
18. ANY ORGANIC MATTER OR ROOTS ENCOUNTERED, WHICH IS BEYOND WHAT IS NORMALLY CONSIDERED ACCEPTABLE IS TO BE REMOVED. THIS WILL NECESSITATE RAKING THE SITE TO REMOVE ORGANIC MATERIAL, TURNING THE SITE OVER AND RE- COMPACTING TO A MINIMUM.

### RETAINING WALLS

19. AN ASSESSMENT OF ANY EXISTING OR PROPOSED RETAINING WALLS HAS NOT BEEN CONDUCTED AS PART OF THIS SITE CLASSIFICATION REPORT.
20. IF THE PROPOSED BUILDING IS TO BE LOCATED CLOSER TO THE RETAINING WALL THAN THE HEIGHT OF THE RETAINING WALL, THIS MAY PLACE ADDITIONAL LOADS ON THE WALL THAT WERE NOT INITIALLY DESIGNED FOR. AN INSPECTION OF THE STRUCTURAL INTEGRITY OF THE RETAINING WALL WILL BE REQUIRED TO PROVIDE CERTIFICATION AND/OR RECOMMENDATIONS PRIOR TO ANY CONSTRUCTION. PLEASE REFER BACK TO THIS OFFICE FOR ASSISTANCE.

### STORMWATER DRAINAGE

21. ALL SOAKWELLS ARE TO BE LOCATED THE DEPTH OF SOAKWELL AWAY FROM THE BUILDING AND SETBACK MINIMUM OF 1200mm, WHICHEVER IS GREATER. PLEASE REFER BACK TO THIS OFFICE IF REQUIRED THE SET-BACK CANNOT BE ACHIEVED.

DOC# SS001 - 1.1.3 V1.1 - AUGUST 2021



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TEL (08) 9205 4500 FAX (08) 9205 4541 EMAIL: perth@strucTerre.com.au

PROJECT :  
LOT 266 ATTADALE AV DARCH

CLIENT : PARCEL DARCH PTY LTD

SCALE 1:20

DATE 10/5/22

APPROVED

## EXPLANATORY NOTES AND STANDARD RECOMMENDATIONS – STABLE (A CLASS) SITES (Sheet 2 of 2)

### WIND CLASSIFICATION

22. WIND CLASSIFICATION IS GIVEN FOR THE EXPECTED CONDITION 5 YEARS HENCE. THIS CLASSIFICATION IS LIMITED TO BUILDINGS CLASSES 1 AND 10, WHICH HAVE THE FOLLOWING LIMITATION (AS PER AS4055):

- a. MAXIMUM DISTANCE FROM THE GROUND LEVEL TO THE UNDERSIDE OF EAVES SHALL NOT EXCEED 6.0m.
- b. MAXIMUM DISTANCE FROM GROUND LEVEL TO THE HIGHEST POINT OF THE ROOF, EXCLUDING CHIMNEYS, SHALL NOT EXCEED 8.5m.
- c. THE ROOF PITCH SHALL NOT EXCEED 35°.
- d. THE WIDTH, EXCLUDING EAVES, SHALL NOT EXCEED 16.0m AND THE LENGTH SHALL NOT EXCEED 5x THE WIDTH.

IF THE BUILDING FALLS OUTSIDE OF THESE LIMITATIONS, THE STATED WIND CLASSIFICATION DOES NOT APPLY. REFER BACK TO THIS OFFICE FOR A REVISED WIND CLASSIFICATION.

### ENVIRONMENTAL

23. NO ENVIRONMENTAL ASSESSMENT OF THIS SITE HAS BEEN UNDERTAKEN. SHOULD AN ENVIRONMENTAL ASSESSMENT BE REQUIRED, IT IS RECOMMENDED THAT AN ENVIRONMENTAL ENGINEER BE ENGAGED.

### SEISMIC

24. RECOMMENDED FOOTING DETAILS ARE SUITABLE FOR SEISMIC CONDITIONS WITH AN EARTHQUAKE HAZARD FACTOR OF  $\leq 0.11$ . RECOMMENDED FOOTING DETAILS PROVIDED FOR SITES WITH AN EARTHQUAKE HAZARD FACTOR OF  $> 0.11$ , ARE NOT FOR CONSTRUCTION, BUT FOR COSTING PURPOSES ONLY. IT IS RECOMMENDED REQUIRED THAT A FULL SEISMIC DESIGN IS CONDUCTED.

### CORROSION CLASSIFICATION

25. THE CORROSION CLASSIFICATION HAS BEEN ASSESSED IN ACCORDANCE WITH AS3700.

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LOT 266 ATTADALE AV DARCH

CLIENT : PARCEL DARCH PTY LTD

SCALE 1:20

DATE 10/5/22

APPROVED

A blue ink handwritten signature is written over the 'APPROVED' field.

**SITE CLASSIFICATION REPORT**  
CERTIFICATE 2590261

**CLIENT** PARCEL DARCH PTY LTD  
**JOB ADDRESS** LOT 277 ATTADALE AV DARCH  
**CLIENT JOB NO.**  
**OWNER**  
**STRUCTERRE JOB NO.** S1067817  
**DATE OF ASSESSMENT** 4/5/22

**SITE RECORD**

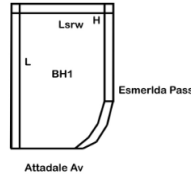


SITE CLASSIFICATION	<b>A</b>	<i>(in accordance with AS2870)</i>
FOOTING DETAIL	<b>B1</b>	
SAND PAD	<b>No sand pad required structurally</b>	
BUSHFIRE PRONE AREA	<b>Not in a Bushfire Prone Area (see NOTE 2.)</b>	
CORROSION CLASSIFICATION	<b>R1</b>	<i>(Durability Class in accordance with AS3700)</i>
WIND CLASSIFICATION	<b>N1</b>	<i>(in accordance with AS4055)</i>
-TERRAIN CATEGORY	<b>3</b>	
-TOPOGRAPHIC	<b>T0</b>	
-SHIELDING	<b>Full Shielding</b>	

## SOIL PROFILE

BOREHOLE 1: 0 - 1800 SAND trace gravel, limestone & artificial material - brown; 1800 end of hole.

## APPROXIMATE BOREHOLE LOCATIONS



### NOTE 1 Explanatory Notes & Standard Recommendations

This site classification report must be read in conjunction with the applicable Explanatory Notes & Standard Recommendations. For A Class sites, refer to the Explanatory Notes and Standard Recommendations for Stable (A Class) Sites, version 1.0 July 2018. For S, M, H1, H2 & E Class sites, refer to the Explanatory Notes and Standard Recommendations for Reactive (S, M, H1, H2 & E Class) Sites version 1.0 July 2018. For Equivalent Class sites, refer to the Explanatory Notes and Standard Recommendations for Equivalent Class Sites, version 1.0 July 2018.

### NOTE 2 Bushfire - Prone Area

The Site may be situated in a bush fire prone area in accordance with the Department of Fire and Emergency Services (DFES) Bushfire Prone Area Map (Reference: <http://www.dfes.wa.gov.au/regulationandcompliance/bushfireproneareas/>) the current version at the time of this assessment. A Bushfire Attack Level (BAL) assessment may be required for this site, please confirm with the local authority. Should you require an assessment, please contact this Office.

## ADDITIONAL NOTES / REQUIREMENTS

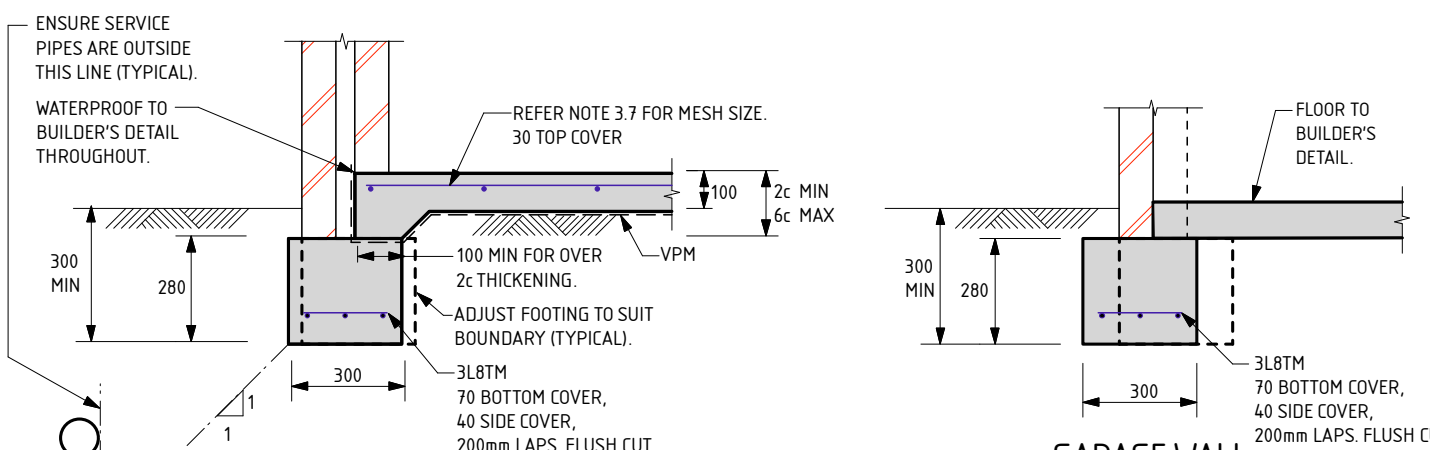
### Site Condition

At the time of inspection the site was considered to be level and cleared. For specific levels of this site or topographical features, please refer to a professional site survey.

### Structerre Geotech Reference

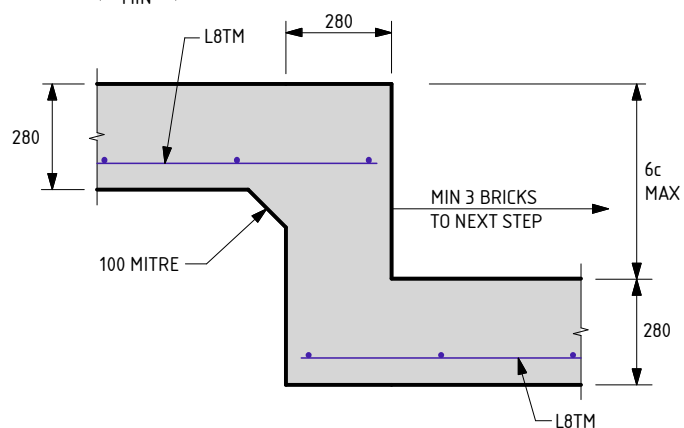
The Site Classification is based on any remedial works being successfully completed as outlined in the Structerre Geotechnical Report J408657 dated 3/05/22. The footing details are subject to the recommendations being completed to an acceptable level as outlined in this report, if applicable.

**-- END OF REPORT --**

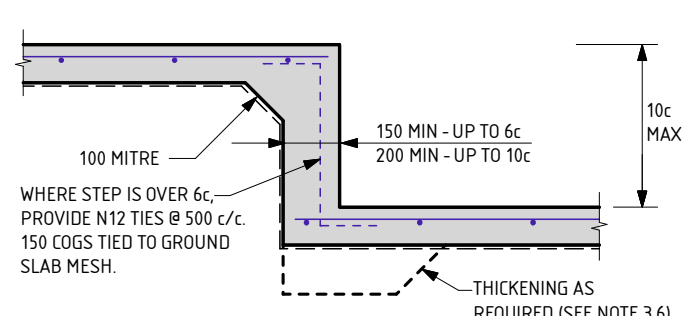


**EXTERNAL WALLS**

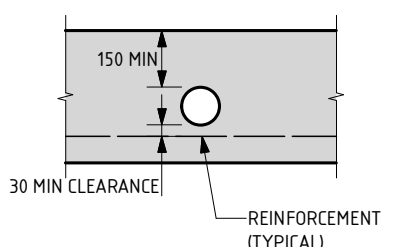
**GARAGE WALL**



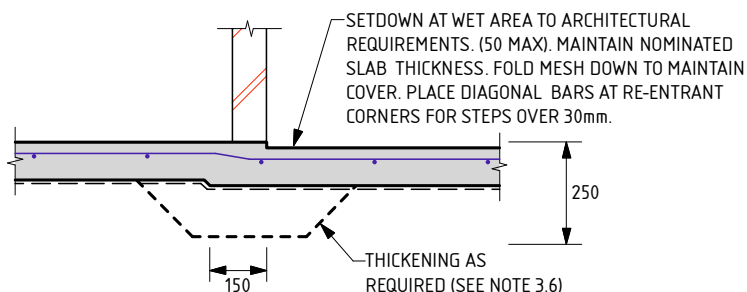
**FOOTING STEP**



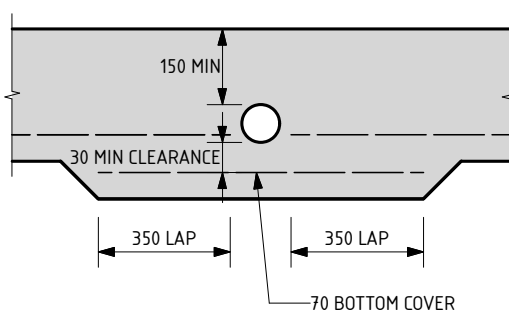
**SLAB STEP**



**OPTION A  
PENETRATION CLEAR OF REINFORCEMENT**



**WET AREA STEP**



**OPTION B  
PENETRATION INTERRUPTS REINFORCEMENT**

**SERVICE PIPE DIAGRAM**

- MAXIMUM PENETRATION SIZE TO BE Ø150.

THE APPROVED SIGNATURE ON THIS FOOTING AND SLAB DETAIL ENDORSES ITS USE FOR SINGLE STOREY BUILDINGS.  
DATE LAST MODIFIED - 23/11/21

**B1**

SHEET 1 OF 2



Zemla Pty. Ltd. (ABN: 71 349 772 837) ATF the Young Purich and Higham Unit Trust trading as StrucTerre Consulting Engineers  
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TEL (08) 9205 4500 FAX (08) 9205 4541 EMAIL: perth@strucTerre.com.au

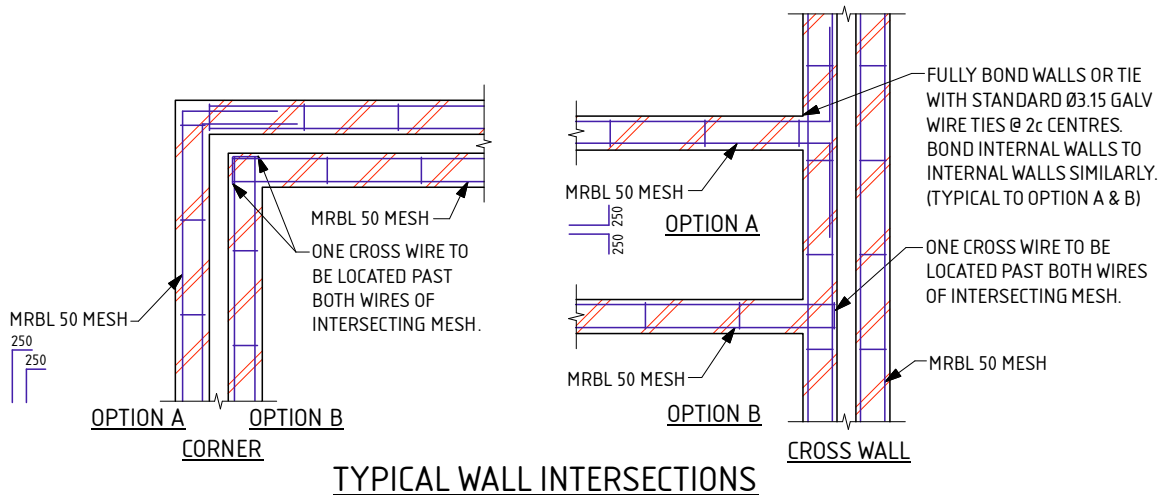
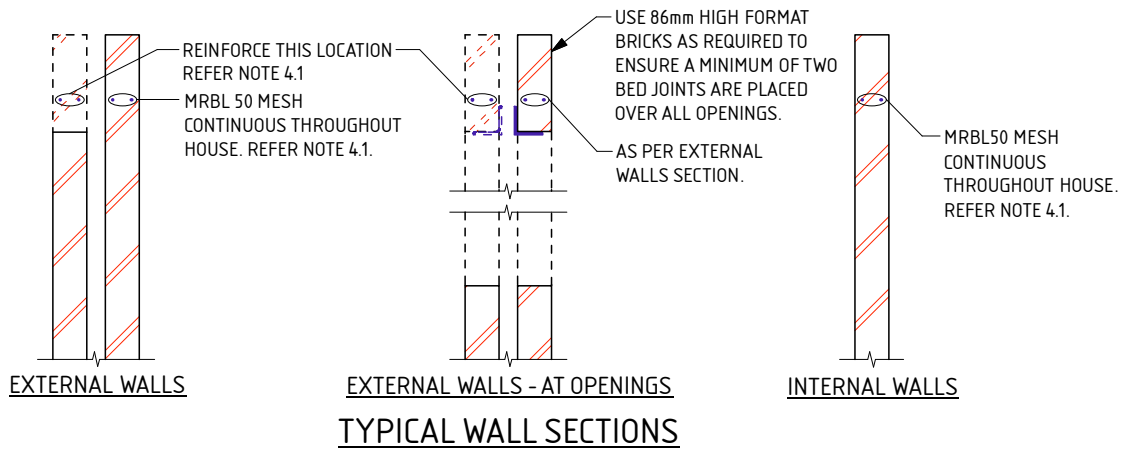
PROJECT: LOT 277 ATTADALE AV DARCH

CLIENT: PARCEL DARCH PTY LTD

SCALE 1:20

DATE 10/5/22

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**NOTES FOR B1 FOOTING**

THESE NOTES ARE TO BE READ IN CONJUNCTION WITH THE ATTACHED FOOTING DETAILS.

**1.0 SITE CLASSIFICATION**

1.1 THE SITE CLASSIFICATION NOTED IN THE SITE CLASSIFICATION REPORT IS AS DEFINED IN AS2870 - RESIDENTIAL SLABS & FOOTINGS AS DETERMINED BY AN ASSESSMENT OF THE SITE. REFER TO THE ATTACHED REPORT FOR ANY SPECIAL REQUIREMENTS.

**2.0 EARTHWORKS**

- 2.1 SAND PAD, IF APPLICABLE, TO BE AS PER SITE INSPECTION REPORT.
- 2.2 EARTHWORKS SHALL INCLUDE, BUT NOT BE LIMITED TO:
  - a) REMOVE ALL ORGANIC MATERIAL FROM THE BUILDING AREA.
  - b) REMOVE ALL RUBBISH AND DELETERIOUS FILL FROM THE PAD AREA.
  - c) GRUB OUT ANY TREES WHERE NECESSARY AND ENSURE THE REMAINING HOLES ARE FILLED AND COMPACTED SATISFACTORILY WITH SAND.
  - d) NOTIFY THE ENGINEER OF ANY UNUSUAL FEATURES OR DISCREPANCIES WHICH MAY BECOME EVIDENT DURING EARTHWORKS, PRIOR TO PROCEEDING.
- 2.3 ANY PREDOMINANT ROCK IN THE HOUSE PAD AREAS IS TO BE INSPECTED BY THE ENGINEER.
- 2.4 IF CLAY ON SITE, AN ENGINEER TO BE CONSULTED.
- 2.5 SAND FILL TO BE CLEAN WELL DRAINED, WITH MAX FINES (PARTICLES UP TO 0.075mm) CONTENT OF 5%. SAND TO BE COMPACTED TO A MIN 6 BLOWS/300mm FOR 750mm OR THE DEPTH OF THE PAD.

**3.0 FOOTINGS & SLABS**

- 3.1 A MINIMUM OF 150mm OF SAND REQUIRED UNDER FOOTINGS.
- 3.2 ROOF AND SURFACE WATER TO BE TAKEN AWAY FROM FOUNDATION AREA.
- 3.3 EXCAVATIONS FOR ALL SERVICE PIPES NOT TO UNDERMINE FOOTINGS. IF UNDERMINING IS LIKELY TO OCCUR, CONTACT THE ENGINEER PRIOR TO PROCEEDING.
- 3.4 WHERE PLUMBING PIPES PASS THROUGH FOOTINGS OR SLAB, SPECIFIED TOTAL THICKNESS OF ALL CONCRETE IS ALWAYS TO BE MAINTAINED.
- 3.5 SETDOWN AT WET AREA TO ARCHITECTURAL REQUIREMENT (50mm MAX). MAINTAIN 100mm SLAB THICKNESS. FOLD MESH DOWN TO MAINTAIN COVER, PLACE DIAGONAL BARS AT RE-ENTRANT CORNER FOR STEPS OVER 30mm. BARS TO BE N12 x 1200 LONG.
- 3.6 PLACE SLAB THICKENINGS (300 WIDE x 250 DEEP) UNDER INTERNAL WALLS (90 OR 110) HIGHER THAN 3.7m.
- 3.7 IF THE LENGTH TO WIDTH RATIO OF THE GROUND SLAB OR ANY PART OF THE GROUND SLAB EXCEEDS 3:1. REFER BACK TO THIS OFFICE FOR MESH SIZE. IF THE LENGTH TO WIDTH RATIO IS LESS THAN 1:3. USE THE FOLLOWING:
  - USE SL52/SL63 MESH FOR SLAB SPAN UP TO 22m.
  - USE SL62 MESH FOR SLAB SPAN UP TO 26m.
  - USE SL72 MESH FOR SLAB SPAN UP TO 30m.
  - USE SL82 MESH FOR SLAB SPAN UP TO 32m.

- 3.8 FOR SLAB SPANS > 32m REFER TO ENGINEER FOR MESH SIZE.
- 3.9 REINFORCEMENT SHALL BE IN ACCORDANCE WITH THE FOLLOWING STANDARDS:
  - L INDICATES PLAIN OR DEFORMED WIRE R500L OR D500L TO AS/NZS 4671.
  - SL INDICATES DEFORMED SQUARE MESH D500L TO AS/NZS 4671.
  - N INDICATES DEFORMED BARS D500N TO AS/NZS 4671.
  - TM SUFFIX INDICATES TRENCH MESH USING DEFORMED BARS D500L TO AS/NZS 4671.
- ALL STEELWORK TO BE TREATED IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OR TO AS 3700, AS APPLICABLE.
- 3.10 LAP ALL MESH TWO TRANSVERSE WIRES PLUS 25mm OR TO MANUFACTURER'S SPECIFICATIONS.
- 3.11 CONCRETE TO CONFORM WITH AS 3600.
- 3.12 BLENDED CEMENT TO CONFORM WITH AS 3972.
- 3.13 ALL CONCRETE TO BE N20/20/100.
- 3.14 FOR ISOLATED PAD FOOTINGS, REFER BACK TO ENGINEER.
- 3.15 FOOTING POSITION UNDER BRICKWORK CAN BE ADJUSTED TO SUIT PARAPET WALLS.
- 3.16 IF POLISHED (OR HONED) CONCRETE FINISHES ARE DESIRED, THIS DESIGN SHOULD BE REFERRED BACK TO THIS OFFICE FOR CONSIDERATION, AS IT IS NOT THE INTENTION OF THESE DESIGNS FOR SUCH FINISHES.
- 3.17 PIERCING THE VAPOUR BARRIER (VPM) USING LEVELLING PINS ON FREE DRAINING SAND PADS IS ALLOWABLE.
- 3.18 REFER BACK TO THE ENGINEER IF AGGRESSIVE SOILS ARE ENCOUNTERED (IN ACCORDANCE WITH AS2870).
- 3.19 CURE SLAB AS DETERMINED BY ENGINEER.
- 3.20 THE FOOTING DETAILS HAVE BEEN DESIGNED IN ACCORDANCE WITH AS3600 AND SECTION 4 OF AS2870.

**4.0 MASONRY**

- 4.1 PLACE MRBL50 MESH IN THE BED JOINT IMMEDIATELY OVER DOOR AND WINDOW HEAD LEVEL CONTINUOUS THROUGHOUT THE BUILDING IN BOTH INTERNAL AND EXTERNAL WALLS. MESH MAY STEP BED JOINTS UP TO A HEIGHT OF 1c, 500 LAP IS REQUIRED AT EACH STEP.
- 4.2 LAP 250 AT SPLICES AND AROUND CORNERS AND COG 250 INTO INTERSECTING WALLS. 20mm COVER TO ALL WIRES.
- 4.3 ALL MESH IN EXTERNAL FACE OF EXTERNAL LEAF TO BE GALVANIZED TO AS/NZS 4680.
- 4.4 WHEN BRICKWORK EXTENDS ABOVE OPENINGS TO EXTERNAL LEAF REINFORCE AS PER CLAUSE 4.1.
- 4.5 ALL PERPENDS TO BE FULLY MORTARED.
- 4.6 A BRICK COURSE, AS REFERRED TO IN THIS DOCUMENT IS STANDARD 86mm HIGH.
- 4.7 2L6 WIRES MAY BE USED AS AN ALTERNATIVE TO THE MRBL50 MESH. WHERE L6 WIRES ARE USED, ALL SPLICES AND COGS TO BE 500 LONG.

DATE LAST MODIFIED - 23/11/21

SHEET 2 OF 2



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PROJECT: LOT 277 ATTADALE AV DARCH

CLIENT: PARCEL DARCH PTY LTD

SCALE: 1:20

DATE: 10/5/22

APPROVED

## EXPLANATORY NOTES AND STANDARD RECOMMENDATIONS – STABLE (A CLASS) SITES (Sheet 1 of 2)

### GENERAL

1. THE EXPLANATORY NOTES AND THE STANDARD RECOMMENDATIONS ARE TO BE READ IN CONJUNCTION WITH THE SITE CLASSIFICATION REPORT.
2. ALL REFERRED STANDARDS TO BE THE CURRENT VERSION AT THE TIME OF THE CONSTRUCTION.
3. THE PURPOSE OF THE SITE CLASSIFICATION REPORT IS TO CLASSIFY THE SITE IN ACCORDANCE WITH AS2870 "RESIDENTIAL SLABS AND FOOTING". IT IS NOT INTENDED FOR ANY OTHER PURPOSE, INCLUDING SOLE INFORMATION IN THE PROVISION OF A QUOTATION FOR SITE WORKS BY EARTH WORKERS. IT IS RECOMMENDED EARTH WORKERS PERFORM THEIR OWN INVESTIGATION FOR QUOTATION PURPOSES.
4. THE SITE CLASSIFICATION REPORT WILL INCLUDE BUT IS NOT LIMITED TO:
  - a. THE SITE CLASSIFICATION IN ACCORDANCE WITH AS2870 RESIDENTIAL SLABS AND FOOTING CONSTRUCTION,
  - b. A WIND RATING IN ACCORDANCE WITH AS 4055 WIND LOADS FOR HOUSING,
  - c. A COASTAL CORROSION CLASSIFICATION,
  - d. ADDITIONAL EARTHWORK RECOMMENDATION WHERE APPLICABLE,
  - e. STANDARD FOOTING DESIGN FOR SINGLE STOREY SLAB ON GROUND CONDITIONS.
5. THE SITE CLASSIFICATION REPORT IS BASED ON THE SITE AS PRESENTED AT THE TIME OF ASSESSMENT. IF FURTHER INFORMATION RELATING TO THE SITE OR DEVELOPMENT BECOMES AVAILABLE, THESE RECOMMENDATIONS ARE SUBJECT TO CHANGE.
6. CLASS A SITES ARE STABLE SITES, GENERALLY SAND, LIMESTONE, GRAVEL OR A COMBINATION. CLASS P ARE PARTICULAR CLASSIFICATIONS SUCH AN UNUSUAL SITES OR SITES REQUIRING ADDITIONAL INVESTIGATION PRIOR TO PROVIDING DETAILS.
7. BOREHOLES EXCAVATED REVEAL THE SOIL PROFILE AT THE BOREHOLE LOCATION ONLY. FROM THIS, IT IS INFERRED THAT THESE ARE THE SOIL CONDITION OVER THE SITE. VARIATIONS CAN OCCUR WHICH MAY NOT HAVE BEEN DETECTED AT THE INVESTIGATION STAGE. ANY ANOMALIES SHOULD BE REFERRED BACK TO THIS OFFICE FOR REASSESSMENT.
8. A NUMBER OF BOREHOLES ARE CONDUCTED ACROSS THE SITE IN ORDER TO DETERMINE THE SOIL PROFILES AND PROVIDE A REPRESENTATION OF THE GROUND CONDITIONS.
9. THIS REPORT IS FOR STRUCTERRE ONLY TO USE IN DESIGN. ANY DESIGN BY ANYONE ELSE FOR ANY STRUCTURE MUST BE SPECIFICALLY APPROVED BY STRUCTERRE. IF USED BY ANYONE ELSE FOR ANYTHING OTHER THAN A STRUCTERRE DESIGN OR STRUCTURE, STRUCTERRE TAKES NO RESPONSIBILITY.

### SAND PAD

10. THE RECOMMENDED FOOTING DESIGN IS ONLY TO BE USED IN CONJUNCTION WITH THE RECOMMENDED SAND PAD AND EARTHWORKS AS OUTLINED IN THE SITE CLASSIFICATION REPORT.
11. THE RECOMMENDATIONS FOR THE SAND PAD IS FOR STRUCTURAL PURPOSES ONLY, AND DOES NOT PROVIDE THE MINIMUM FINISHED PAD LEVEL IN RELATION TO FLOOD LEVELS, OR DEPTH TO GROUNDWATER. SHOULD THE TEST BE LOCATED IN A LOW LYING OR FLOOD PRONE AREA, REFER TO THE LOCAL AUTHORITY FOR MINIMUM BUILDING HEIGHT.
12. IMPORTED FILL FOR USE AS A SAND PAD TO BE IN ACCORDANCE TO AS 3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS" WHICH INCLUDES BUT IS NOT LIMITED TO: BE FREE FROM ANY DELETERIOUS MATERIALS INCLUDING ORGANICS, (ROOTS, STUMPS, GRASSES, DECOMPOSED ORGANICS – PEAT, TIMBER, ETC), BUILDING RUBBLE, GLASS, PLASTICS OR WASTE MATERIAL. THE FINES CONTENT, (PERCENTAGE PASSING THE 0.075mm SIEVE) TO BE LESS THAN 5% BY MASS.
13. ON CLASS A SITES, A SAND PAD IS NOT REQUIRED STRUCTURALLY, HOWEVER IF ROCK IS ENCOUNTERED, A MINIMUM 450mm SAND PAD BEYOND THE BASE OF FOOTING IS RECOMMENDED.
14. SAND PAD TO EXTEND BEYOND BUILDING AREA A MINIMUM OF 1.5 TIMES THE PAD DEPTH. RECOMMENDED SAND PAD DEPTH IS ABOVE THE HIGHEST POINT, UNLESS OTHERWISE SPECIFIED.
15. IT IS REQUIRED THAT EARTHWORKS CONFIRM THAT THE MINIMUM DEPTH OF RECOMMENDED SAND PAD IS ACHIEVED.

### EARTHWORKS

16. RECOMMENDED EARTHWORKS TO BE CONDUCTED IN ACCORDANCE WITH AS3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS", AND TO INCLUDE BUT NOT BE LIMITED TO:
  - a. REMOVAL OF ALL VEGETATION, TOPSOILS, UNCONTROLLED FILLS AND OTHER DELETERIOUS MATERIALS FROM THE BUILDING AREA,
  - b. GRUBBING OUT OF ANY TREES ENSURING THE REMAINING HOLES ARE BACKFILLED WITH CLEAN COMPACTED SAND,
  - c. NOTIFYING THE ENGINEER OF ANY UNUSUAL FEATURE OR DISCREPANCY THAT MAY BECOME EVIDENT DURING EARTHWORKS, PRIOR TO PROCEEDING,
  - d. COMPACTING TO MEET THE REQUIREMENTS AS OUTLINED IN AS 3798 TABLE 5.1.
17. FILL MATERIAL (WHICH IS NOT ALWAYS APPARENT AT THE INITIAL INVESTIGATION STAGE) IS TO BE DEALT WITH AS FOLLOWS:
  - a. IF IT IS CERTIFIED BY OTHERS IT CAN REMAIN.
  - b. IF IT IS NOT CERTIFIED WILL REQUIRE REMOVAL DOWN TO NATURAL GROUND OR VERIFIED. ANY SAND CAN BE REUSED.
  - c. IF A PAD HAS ALREADY BEEN CONSTRUCTED, THE SITE CLASSIFICATION IS NOT CERTIFICATION OF THE PAD. CONTACT THIS OFFICE SHOULD A SAND PAD CERTIFICATION BE REQUIRED.
18. ANY ORGANIC MATTER OR ROOTS ENCOUNTERED, WHICH IS BEYOND WHAT IS NORMALLY CONSIDERED ACCEPTABLE IS TO BE REMOVED. THIS WILL NECESSITATE RAKING THE SITE TO REMOVE ORGANIC MATERIAL, TURNING THE SITE OVER AND RE- COMPACTING TO A MINIMUM.

### RETAINING WALLS

19. AN ASSESSMENT OF ANY EXISTING OR PROPOSED RETAINING WALLS HAS NOT BEEN CONDUCTED AS PART OF THIS SITE CLASSIFICATION REPORT.
20. IF THE PROPOSED BUILDING IS TO BE LOCATED CLOSER TO THE RETAINING WALL THAN THE HEIGHT OF THE RETAINING WALL, THIS MAY PLACE ADDITIONAL LOADS ON THE WALL THAT WERE NOT INITIALLY DESIGNED FOR. AN INSPECTION OF THE STRUCTURAL INTEGRITY OF THE RETAINING WALL WILL BE REQUIRED TO PROVIDE CERTIFICATION AND/OR RECOMMENDATIONS PRIOR TO ANY CONSTRUCTION. PLEASE REFER BACK TO THIS OFFICE FOR ASSISTANCE.

### STORMWATER DRAINAGE

21. ALL SOAKWELLS ARE TO BE LOCATED THE DEPTH OF SOAKWELL AWAY FROM THE BUILDING AND SETBACK MINIMUM OF 1200mm, WHICHEVER IS GREATER. PLEASE REFER BACK TO THIS OFFICE IF REQUIRED THE SET-BACK CANNOT BE ACHIEVED.

DOC# SS001 - 1.1.3 V1.1 - AUGUST 2021



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PROJECT :  
LOT 277 ATTADALE AV DARCH

CLIENT : PARCEL DARCH PTY LTD

SCALE 1:20

DATE 10/5/22

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## EXPLANATORY NOTES AND STANDARD RECOMMENDATIONS – STABLE (A CLASS) SITES (Sheet 2 of 2)

### WIND CLASSIFICATION

22. WIND CLASSIFICATION IS GIVEN FOR THE EXPECTED CONDITION 5 YEARS HENCE. THIS CLASSIFICATION IS LIMITED TO BUILDINGS CLASSES 1 AND 10, WHICH HAVE THE FOLLOWING LIMITATION (AS PER AS4055):

- a. MAXIMUM DISTANCE FROM THE GROUND LEVEL TO THE UNDERSIDE OF EAVES SHALL NOT EXCEED 6.0m.
- b. MAXIMUM DISTANCE FROM GROUND LEVEL TO THE HIGHEST POINT OF THE ROOF, EXCLUDING CHIMNEYS, SHALL NOT EXCEED 8.5m.
- c. THE ROOF PITCH SHALL NOT EXCEED 35°.
- d. THE WIDTH, EXCLUDING EAVES, SHALL NOT EXCEED 16.0m AND THE LENGTH SHALL NOT EXCEED 5x THE WIDTH.

IF THE BUILDING FALLS OUTSIDE OF THESE LIMITATIONS, THE STATED WIND CLASSIFICATION DOES NOT APPLY. REFER BACK TO THIS OFFICE FOR A REVISED WIND CLASSIFICATION.

### ENVIRONMENTAL

23. NO ENVIRONMENTAL ASSESSMENT OF THIS SITE HAS BEEN UNDERTAKEN. SHOULD AN ENVIRONMENTAL ASSESSMENT BE REQUIRED, IT IS RECOMMENDED THAT AN ENVIRONMENTAL ENGINEER BE ENGAGED.

### SEISMIC

24. RECOMMENDED FOOTING DETAILS ARE SUITABLE FOR SEISMIC CONDITIONS WITH AN EARTHQUAKE HAZARD FACTOR OF  $\leq 0.11$ . RECOMMENDED FOOTING DETAILS PROVIDED FOR SITES WITH AN EARTHQUAKE HAZARD FACTOR OF  $> 0.11$ , ARE NOT FOR CONSTRUCTION, BUT FOR COSTING PURPOSES ONLY. IT IS RECOMMENDED REQUIRED THAT A FULL SEISMIC DESIGN IS CONDUCTED.

### CORROSION CLASSIFICATION

25. THE CORROSION CLASSIFICATION HAS BEEN ASSESSED IN ACCORDANCE WITH AS3700.

DOC# SS001 - 1.1.3 V1.1 - AUGUST 2021



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DATE 10/5/22

APPROVED

A blue ink handwritten signature is written over the 'APPROVED' field.

## SITE CLASSIFICATION REPORT

CERTIFICATE 2590269

**CLIENT** PARCEL DARCH PTY LTD  
**JOB ADDRESS** LOT 278 ATTADALE AV DARCH  
**CLIENT JOB NO.**  
**OWNER**  
**STRUCTERRE JOB NO.** S1067825  
**DATE OF ASSESSMENT** 4/5/22

### SITE RECORD



SITE CLASSIFICATION	<b>A</b>	<i>(in accordance with AS2870)</i>
FOOTING DETAIL	<b>B1</b>	
SAND PAD	<b>No sand pad required structurally</b>	
BUSHFIRE PRONE AREA	<b>Not in a Bushfire Prone Area (see NOTE 2.)</b>	
CORROSION CLASSIFICATION	<b>R1</b>	<i>(Durability Class in accordance with AS3700)</i>
WIND CLASSIFICATION	<b>N1</b>	<i>(in accordance with AS4055)</i>
-TERRAIN CATEGORY	<b>3</b>	
-TOPOGRAPHIC	<b>T0</b>	
-SHIELDING	<b>Full Shielding</b>	

**WA | QLD | NSW | VIC**

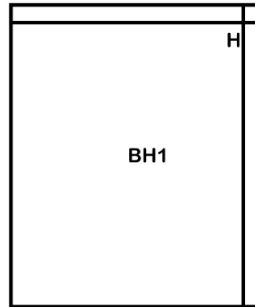
1 Erindale Road, Balcatta, Western Australia 6021 | PO Box 792, Balcatta, Western Australia 6914  
 Phone (+618) 9205 4500 | Fax (+618) 9205 4501 | Email [wageotechsite@strucsterre.com.au](mailto:wageotechsite@strucsterre.com.au) | Web [www.strucsterre.com.au](http://www.strucsterre.com.au)  
 ABN 71 349 772 837 Zemla Pty Ltd ACN 008 966 283 as trustee for the Young Purich and Higham Unit Trust trading as Strucsterre Consulting Engineers

Issued Date: 10 May 2022

## SOIL PROFILE

BOREHOLE 1: 0 - 1800 SAND trace gravel, limestone & artificial material - brown; 1800 end of hole.

## APPROXIMATE BOREHOLE LOCATIONS



Attadale Av

### NOTE 1 Explanatory Notes & Standard Recommendations

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### NOTE 2 Bushfire - Prone Area

The Site may be situated in a bush fire prone area in accordance with the Department of Fire and Emergency Services (DFES) Bushfire Prone Area Map (Reference: <http://www.dfes.wa.gov.au/regulationandcompliance/bushfireproneareas/>) the current version at the time of this assessment. A Bushfire Attack Level (BAL) assessment may be required for this site, please confirm with the local authority. Should you require an assessment, please contact this Office.

### ADDITIONAL NOTES / REQUIREMENTS

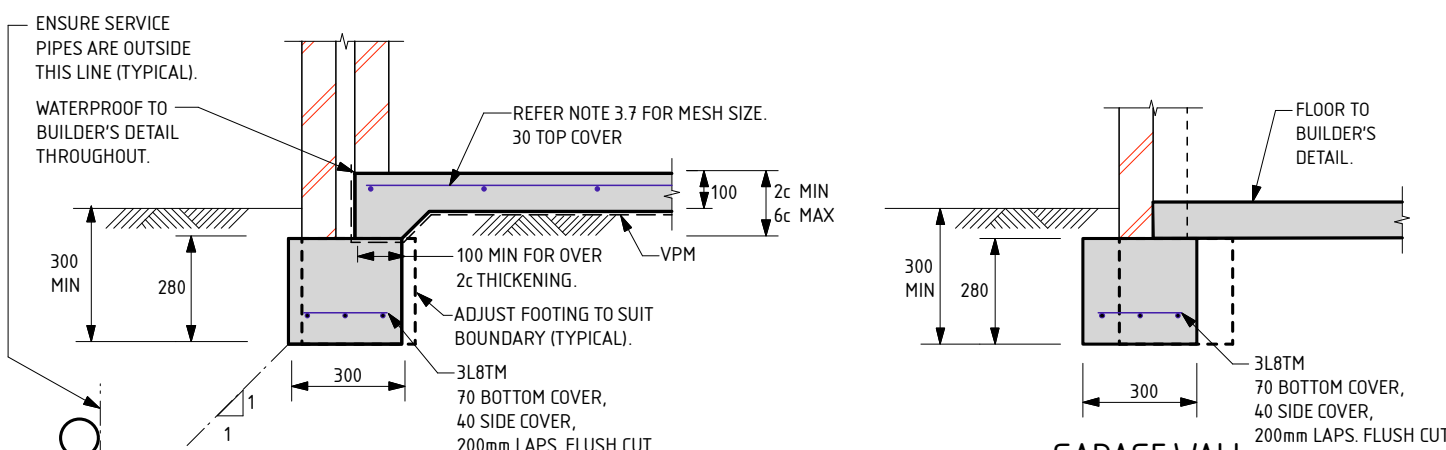
#### Site Condition

At the time of inspection the site was considered to be level and cleared. For specific levels of this site or topographical features, please refer to a professional site survey.

#### Structerre Geotech Reference

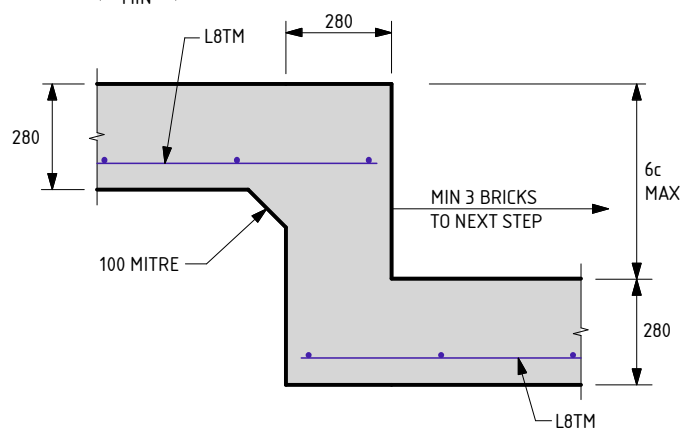
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**-- END OF REPORT --**

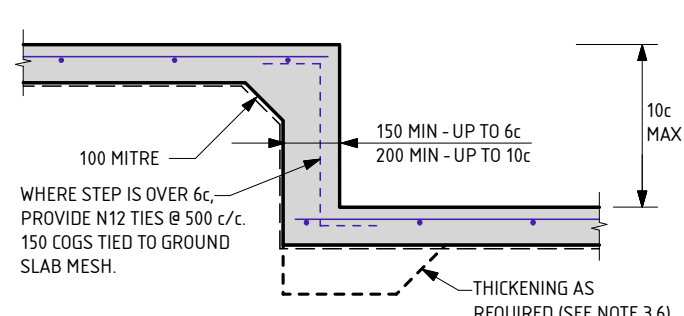


**EXTERNAL WALLS**

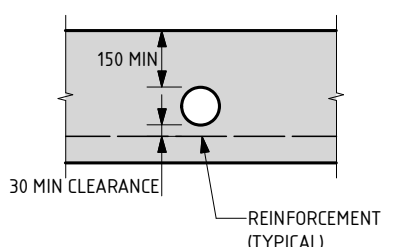
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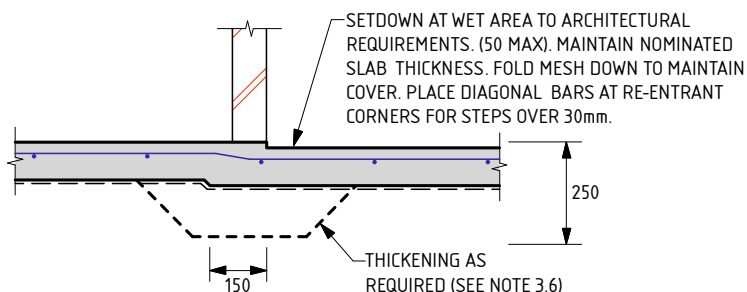
**FOOTING STEP**



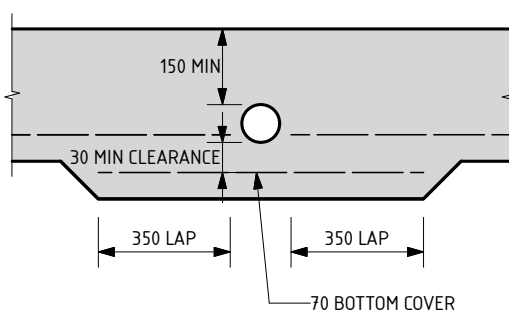
**SLAB STEP**



**OPTION A  
PENETRATION CLEAR OF REINFORCEMENT**



**WET AREA STEP**



**OPTION B  
PENETRATION INTERRUPTS REINFORCEMENT**

**SERVICE PIPE DIAGRAM**

- MAXIMUM PENETRATION SIZE TO BE Ø150.

THE APPROVED SIGNATURE ON THIS FOOTING AND SLAB DETAIL ENDORSES ITS USE FOR SINGLE STOREY BUILDINGS.  
DATE LAST MODIFIED - 23/11/21

**B1**

SHEET 1 OF 2



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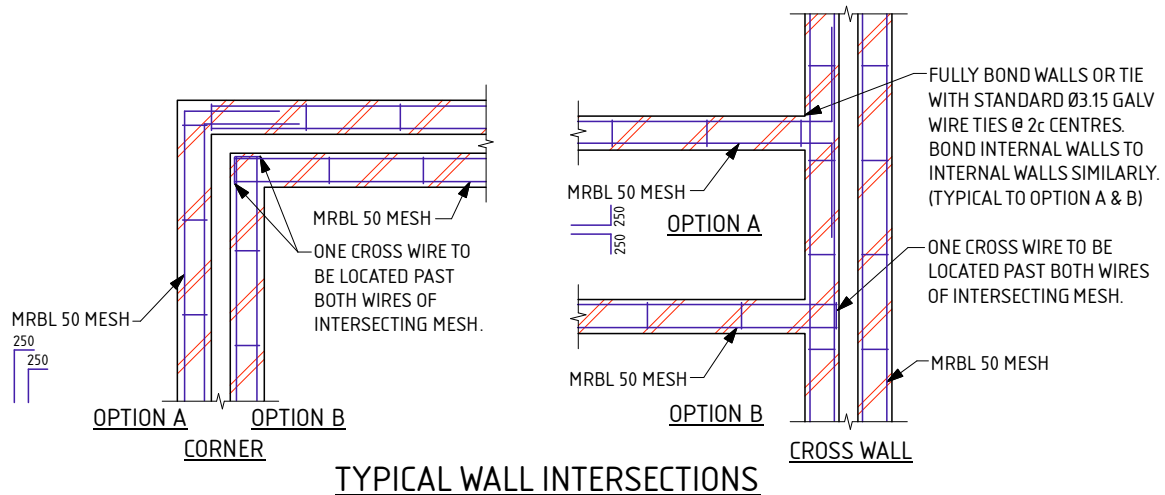
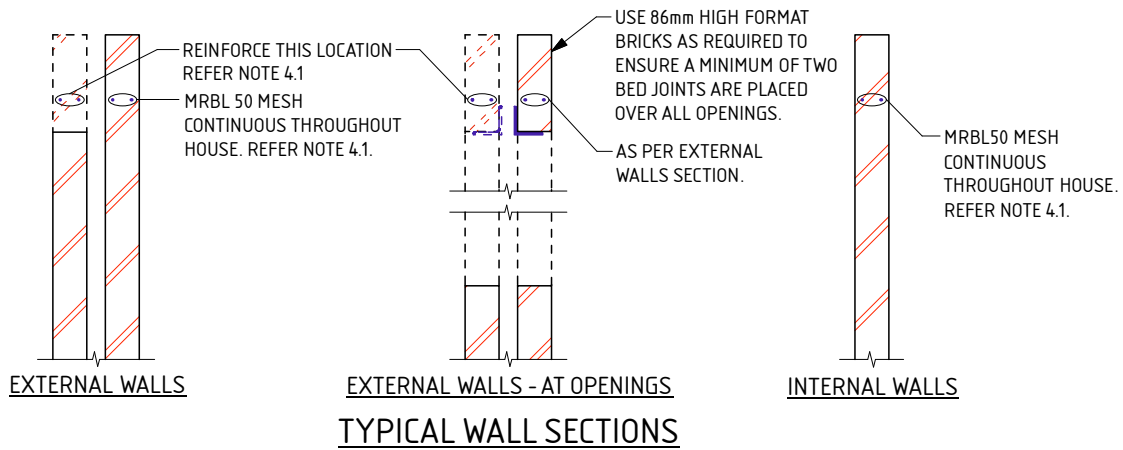
PROJECT: LOT 278 ATTADALE AV DARCH

CLIENT: PARCEL DARCH PTY LTD

SCALE: 1:20

DATE: 10/5/22

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#### NOTES FOR B1 FOOTING

THESE NOTES ARE TO BE READ IN CONJUNCTION WITH THE ATTACHED FOOTING DETAILS.

#### 1.0 SITE CLASSIFICATION

- 1.1 THE SITE CLASSIFICATION NOTED IN THE SITE CLASSIFICATION REPORT IS AS DEFINED IN AS2870 - RESIDENTIAL SLABS & FOOTINGS AS DETERMINED BY AN ASSESSMENT OF THE SITE. REFER TO THE ATTACHED REPORT FOR ANY SPECIAL REQUIREMENTS.

#### 2.0 EARTHWORKS

- 2.1 SAND PAD, IF APPLICABLE, TO BE AS PER SITE INSPECTION REPORT.
- 2.2 EARTHWORKS SHALL INCLUDE, BUT NOT BE LIMITED TO:
- REMOVE ALL ORGANIC MATERIAL FROM THE BUILDING AREA.
  - REMOVE ALL RUBBISH AND DELETERIOUS FILL FROM THE PAD AREA.
  - GRUB OUT ANY TREES WHERE NECESSARY AND ENSURE THE REMAINING HOLES ARE FILLED AND COMPACTED SATISFACTORILY WITH SAND.
  - NOTIFY THE ENGINEER OF ANY UNUSUAL FEATURES OR DISCREPANCIES WHICH MAY BECOME EVIDENT DURING EARTHWORKS, PRIOR TO PROCEEDING.
- 2.3 ANY PREDOMINANT ROCK IN THE HOUSE PAD AREAS IS TO BE INSPECTED BY THE ENGINEER.
- 2.4 IF CLAY ON SITE, AN ENGINEER TO BE CONSULTED.
- 2.5 SAND FILL TO BE CLEAN WELL DRAINED, WITH MAX FINES (PARTICLES UP TO 0.075mm) CONTENT OF 5%. SAND TO BE COMPACTED TO A MIN 6 BLOWS/300mm FOR 750mm OR THE DEPTH OF THE PAD.

#### 3.0 FOOTINGS & SLABS

- 3.1 A MINIMUM OF 150mm OF SAND REQUIRED UNDER FOOTINGS.
- 3.2 ROOF AND SURFACE WATER TO BE TAKEN AWAY FROM FOUNDATION AREA.
- 3.3 EXCAVATIONS FOR ALL SERVICE PIPES NOT TO UNDERMINE FOOTINGS. IF UNDERMINING IS LIKELY TO OCCUR, CONTACT THE ENGINEER PRIOR TO PROCEEDING.
- 3.4 WHERE PLUMBING PIPES PASS THROUGH FOOTINGS OR SLAB, SPECIFIED TOTAL THICKNESS OF ALL CONCRETE IS ALWAYS TO BE MAINTAINED.
- 3.5 SETDOWN AT WET AREA TO ARCHITECTURAL REQUIREMENT (50mm MAX). MAINTAIN 100mm SLAB THICKNESS. FOLD MESH DOWN TO MAINTAIN COVER, PLACE DIAGONAL BARS AT RE-ENTRANT CORNER FOR STEPS OVER 30mm. BARS TO BE N12 x 1200 LONG.
- 3.6 PLACE SLAB THICKENINGS (300 WIDE x 250 DEEP) UNDER INTERNAL WALLS (90 OR 110) HIGHER THAN 3.7m.
- 3.7 IF THE LENGTH TO WIDTH RATIO OF THE GROUND SLAB OR ANY PART OF THE GROUND SLAB EXCEEDS 3:1. REFER BACK TO THIS OFFICE FOR MESH SIZE. IF THE LENGTH TO WIDTH RATIO IS LESS THAN 1:3. USE THE FOLLOWING:
- USE SL52/SL63 MESH FOR SLAB SPAN UP TO 22m.
  - USE SL62 MESH FOR SLAB SPAN UP TO 26m.
  - USE SL72 MESH FOR SLAB SPAN UP TO 30m.
  - USE SL82 MESH FOR SLAB SPAN UP TO 32m.

- 3.8 FOR SLAB SPANS > 32m REFER TO ENGINEER FOR MESH SIZE.

- 3.9 REINFORCEMENT SHALL BE IN ACCORDANCE WITH THE FOLLOWING STANDARDS;

- L INDICATES PLAIN OR DEFORMED WIRE R500L OR D500L TO AS/NZS 4671.
- SL INDICATES DEFORMED SQUARE MESH D500L TO AS/NZS 4671.
- N INDICATES DEFORMED BARS D500N TO AS/NZS 4671.
- TM SUFFIX INDICATES TRENCH MESH USING DEFORMED BARS D500L TO AS/NZS 4671.

ALL STEELWORK TO BE TREATED IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OR TO AS 3700, AS APPLICABLE.

- 3.10 LAP ALL MESH TWO TRANSVERSE WIRES PLUS 25mm OR TO MANUFACTURER'S SPECIFICATIONS.

- 3.11 CONCRETE TO CONFORM WITH AS 3600.

- 3.12 BLENDED CEMENT TO CONFORM WITH AS 3972.

- 3.13 ALL CONCRETE TO BE N20/20/100.

- 3.14 FOR ISOLATED PAD FOOTINGS, REFER BACK TO ENGINEER.

- 3.15 FOOTING POSITION UNDER BRICKWORK CAN BE ADJUSTED TO SUIT PARAPET WALLS.

- 3.16 IF POLISHED (OR HONED) CONCRETE FINISHES ARE DESIRED, THIS DESIGN SHOULD BE REFERRED BACK TO THIS OFFICE FOR CONSIDERATION, AS IT IS NOT THE INTENTION OF THESE DESIGNS FOR SUCH FINISHES.

- 3.17 PIERCING THE VAPOUR BARRIER (VPM) USING LEVELLING PINS ON FREE DRAINING SAND PADS IS ALLOWABLE.

- 3.18 REFER BACK TO THE ENGINEER IF AGGRESSIVE SOILS ARE ENCOUNTERED (IN ACCORDANCE WITH AS2870).

- 3.19 CURE SLAB AS DETERMINED BY ENGINEER.

- 3.20 THE FOOTING DETAILS HAVE BEEN DESIGNED IN ACCORDANCE WITH AS3600 AND SECTION 4 OF AS2870.

#### 4.0 MASONRY

- 4.1 PLACE MRBL50 MESH IN THE BED JOINT IMMEDIATELY OVER DOOR AND WINDOW HEAD LEVEL CONTINUOUS

- THROUGHOUT THE BUILDING IN BOTH INTERNAL AND EXTERNAL WALLS. MESH MAY STEP BED JOINTS

- UP TO A HEIGHT OF 1c, 500 LAP IS REQUIRED AT EACH STEP.

- 4.2 LAP 250 AT SPLICES AND AROUND CORNERS AND COG 250 INTO INTERSECTING WALLS. 20mm COVER TO ALL WIRES.

- 4.3 ALL MESH IN EXTERNAL FACE OF EXTERNAL LEAF TO BE GALVANIZED TO AS/NZS 4680.

- 4.4 WHEN BRICKWORK EXTENDS ABOVE OPENINGS TO EXTERNAL LEAF REINFORCE AS PER CLAUSE 4.1.

- 4.5 ALL PERPENDS TO BE FULLY MORTARED.

- 4.6 A BRICK COURSE, AS REFERRED TO IN THIS DOCUMENT IS STANDARD 86mm HIGH.

- 4.7 2L6 WIRES MAY BE USED AS AN ALTERNATIVE TO THE MRBL50 MESH. WHERE L6 WIRES ARE USED, ALL SPLICES AND COGS TO BE 500 LONG.

DATE LAST MODIFIED - 23/11/21

SHEET 2 OF 2



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PROJECT :

LOT 278 ATTADALE AV DARCH

CLIENT :

PARCEL DARCH PTY LTD

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DATE

10/5/22

## EXPLANATORY NOTES AND STANDARD RECOMMENDATIONS – STABLE (A CLASS) SITES (Sheet 1 of 2)

### GENERAL

1. THE EXPLANATORY NOTES AND THE STANDARD RECOMMENDATIONS ARE TO BE READ IN CONJUNCTION WITH THE SITE CLASSIFICATION REPORT.
2. ALL REFERRED STANDARDS TO BE THE CURRENT VERSION AT THE TIME OF THE CONSTRUCTION.
3. THE PURPOSE OF THE SITE CLASSIFICATION REPORT IS TO CLASSIFY THE SITE IN ACCORDANCE WITH AS2870 "RESIDENTIAL SLABS AND FOOTING". IT IS NOT INTENDED FOR ANY OTHER PURPOSE, INCLUDING SOLE INFORMATION IN THE PROVISION OF A QUOTATION FOR SITE WORKS BY EARTH WORKERS. IT IS RECOMMENDED EARTH WORKERS PERFORM THEIR OWN INVESTIGATION FOR QUOTATION PURPOSES.
4. THE SITE CLASSIFICATION REPORT WILL INCLUDE BUT IS NOT LIMITED TO:
  - a. THE SITE CLASSIFICATION IN ACCORDANCE WITH AS2870 RESIDENTIAL SLABS AND FOOTING CONSTRUCTION,
  - b. A WIND RATING IN ACCORDANCE WITH AS 4055 WIND LOADS FOR HOUSING,
  - c. A COASTAL CORROSION CLASSIFICATION,
  - d. ADDITIONAL EARTHWORK RECOMMENDATION WHERE APPLICABLE,
  - e. STANDARD FOOTING DESIGN FOR SINGLE STOREY SLAB ON GROUND CONDITIONS.
5. THE SITE CLASSIFICATION REPORT IS BASED ON THE SITE AS PRESENTED AT THE TIME OF ASSESSMENT. IF FURTHER INFORMATION RELATING TO THE SITE OR DEVELOPMENT BECOMES AVAILABLE, THESE RECOMMENDATIONS ARE SUBJECT TO CHANGE.
6. CLASS A SITES ARE STABLE SITES, GENERALLY SAND, LIMESTONE, GRAVEL OR A COMBINATION. CLASS P ARE PARTICULAR CLASSIFICATIONS SUCH AN UNUSUAL SITES OR SITES REQUIRING ADDITIONAL INVESTIGATION PRIOR TO PROVIDING DETAILS.
7. BOREHOLES EXCAVATED REVEAL THE SOIL PROFILE AT THE BOREHOLE LOCATION ONLY. FROM THIS, IT IS INFERRED THAT THESE ARE THE SOIL CONDITION OVER THE SITE. VARIATIONS CAN OCCUR WHICH MAY NOT HAVE BEEN DETECTED AT THE INVESTIGATION STAGE. ANY ANOMALIES SHOULD BE REFERRED BACK TO THIS OFFICE FOR REASSESSMENT.
8. A NUMBER OF BOREHOLES ARE CONDUCTED ACROSS THE SITE IN ORDER TO DETERMINE THE SOIL PROFILES AND PROVIDE A REPRESENTATION OF THE GROUND CONDITIONS.
9. THIS REPORT IS FOR STRUCTERRE ONLY TO USE IN DESIGN. ANY DESIGN BY ANYONE ELSE FOR ANY STRUCTURE MUST BE SPECIFICALLY APPROVED BY STRUCTERRE. IF USED BY ANYONE ELSE FOR ANYTHING OTHER THAN A STRUCTERRE DESIGN OR STRUCTURE, STRUCTERRE TAKES NO RESPONSIBILITY.

### SAND PAD

10. THE RECOMMENDED FOOTING DESIGN IS ONLY TO BE USED IN CONJUNCTION WITH THE RECOMMENDED SAND PAD AND EARTHWORKS AS OUTLINED IN THE SITE CLASSIFICATION REPORT.
11. THE RECOMMENDATIONS FOR THE SAND PAD IS FOR STRUCTURAL PURPOSES ONLY, AND DOES NOT PROVIDE THE MINIMUM FINISHED PAD LEVEL IN RELATION TO FLOOD LEVELS, OR DEPTH TO GROUNDWATER. SHOULD THE TEST BE LOCATED IN A LOW LYING OR FLOOD PRONE AREA, REFER TO THE LOCAL AUTHORITY FOR MINIMUM BUILDING HEIGHT.
12. IMPORTED FILL FOR USE AS A SAND PAD TO BE IN ACCORDANCE TO AS 3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS" WHICH INCLUDES BUT IS NOT LIMITED TO: BE FREE FROM ANY DELETERIOUS MATERIALS INCLUDING ORGANICS, (ROOTS, STUMPS, GRASSES, DECOMPOSED ORGANICS – PEAT, TIMBER, ETC), BUILDING RUBBLE, GLASS, PLASTICS OR WASTE MATERIAL. THE FINES CONTENT, (PERCENTAGE PASSING THE 0.075mm SIEVE) TO BE LESS THAN 5% BY MASS.
13. ON CLASS A SITES, A SAND PAD IS NOT REQUIRED STRUCTURALLY, HOWEVER IF ROCK IS ENCOUNTERED, A MINIMUM 450mm SAND PAD BEYOND THE BASE OF FOOTING IS RECOMMENDED.
14. SAND PAD TO EXTEND BEYOND BUILDING AREA A MINIMUM OF 1.5 TIMES THE PAD DEPTH. RECOMMENDED SAND PAD DEPTH IS ABOVE THE HIGHEST POINT, UNLESS OTHERWISE SPECIFIED.
15. IT IS REQUIRED THAT EARTHWORKS CONFIRM THAT THE MINIMUM DEPTH OF RECOMMENDED SAND PAD IS ACHIEVED.

### EARTHWORKS

16. RECOMMENDED EARTHWORKS TO BE CONDUCTED IN ACCORDANCE WITH AS3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS", AND TO INCLUDE BUT NOT BE LIMITED TO:
  - a. REMOVAL OF ALL VEGETATION, TOPSOILS, UNCONTROLLED FILLS AND OTHER DELETERIOUS MATERIALS FROM THE BUILDING AREA,
  - b. GRUBBING OUT OF ANY TREES ENSURING THE REMAINING HOLES ARE BACKFILLED WITH CLEAN COMPACTED SAND,
  - c. NOTIFYING THE ENGINEER OF ANY UNUSUAL FEATURE OR DISCREPANCY THAT MAY BECOME EVIDENT DURING EARTHWORKS, PRIOR TO PROCEEDING,
  - d. COMPACTING TO MEET THE REQUIREMENTS AS OUTLINED IN AS 3798 TABLE 5.1.
17. FILL MATERIAL (WHICH IS NOT ALWAYS APPARENT AT THE INITIAL INVESTIGATION STAGE) IS TO BE DEALT WITH AS FOLLOWS:
  - a. IF IT IS CERTIFIED BY OTHERS IT CAN REMAIN.
  - b. IF IT IS NOT CERTIFIED WILL REQUIRE REMOVAL DOWN TO NATURAL GROUND OR VERIFIED. ANY SAND CAN BE REUSED.
  - c. IF A PAD HAS ALREADY BEEN CONSTRUCTED, THE SITE CLASSIFICATION IS NOT CERTIFICATION OF THE PAD. CONTACT THIS OFFICE SHOULD A SAND PAD CERTIFICATION BE REQUIRED.
18. ANY ORGANIC MATTER OR ROOTS ENCOUNTERED, WHICH IS BEYOND WHAT IS NORMALLY CONSIDERED ACCEPTABLE IS TO BE REMOVED. THIS WILL NECESSITATE RAKING THE SITE TO REMOVE ORGANIC MATERIAL, TURNING THE SITE OVER AND RE- COMPACTING TO A MINIMUM.

### RETAINING WALLS

19. AN ASSESSMENT OF ANY EXISTING OR PROPOSED RETAINING WALLS HAS NOT BEEN CONDUCTED AS PART OF THIS SITE CLASSIFICATION REPORT.
20. IF THE PROPOSED BUILDING IS TO BE LOCATED CLOSER TO THE RETAINING WALL THAN THE HEIGHT OF THE RETAINING WALL, THIS MAY PLACE ADDITIONAL LOADS ON THE WALL THAT WERE NOT INITIALLY DESIGNED FOR. AN INSPECTION OF THE STRUCTURAL INTEGRITY OF THE RETAINING WALL WILL BE REQUIRED TO PROVIDE CERTIFICATION AND/OR RECOMMENDATIONS PRIOR TO ANY CONSTRUCTION. PLEASE REFER BACK TO THIS OFFICE FOR ASSISTANCE.

### STORMWATER DRAINAGE

21. ALL SOAKWELLS ARE TO BE LOCATED THE DEPTH OF SOAKWELL AWAY FROM THE BUILDING AND SETBACK MINIMUM OF 1200mm, WHICHEVER IS GREATER. PLEASE REFER BACK TO THIS OFFICE IF REQUIRED THE SET-BACK CANNOT BE ACHIEVED.

DOC# SS001 - 1.1.3 V1.1 - AUGUST 2021



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PROJECT :  
LOT 278 ATTADALE AV DARCH

CLIENT : PARCEL DARCH PTY LTD

SCALE 1:20

DATE 10/5/22

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## EXPLANATORY NOTES AND STANDARD RECOMMENDATIONS – STABLE (A CLASS) SITES (Sheet 2 of 2)

### WIND CLASSIFICATION

22. WIND CLASSIFICATION IS GIVEN FOR THE EXPECTED CONDITION 5 YEARS HENCE. THIS CLASSIFICATION IS LIMITED TO BUILDINGS CLASSES 1 AND 10, WHICH HAVE THE FOLLOWING LIMITATION (AS PER AS4055):

- a. MAXIMUM DISTANCE FROM THE GROUND LEVEL TO THE UNDERSIDE OF EAVES SHALL NOT EXCEED 6.0m.
- b. MAXIMUM DISTANCE FROM GROUND LEVEL TO THE HIGHEST POINT OF THE ROOF, EXCLUDING CHIMNEYS, SHALL NOT EXCEED 8.5m.
- c. THE ROOF PITCH SHALL NOT EXCEED 35°.
- d. THE WIDTH, EXCLUDING EAVES, SHALL NOT EXCEED 16.0m AND THE LENGTH SHALL NOT EXCEED 5x THE WIDTH.

IF THE BUILDING FALLS OUTSIDE OF THESE LIMITATIONS, THE STATED WIND CLASSIFICATION DOES NOT APPLY. REFER BACK TO THIS OFFICE FOR A REVISED WIND CLASSIFICATION.

### ENVIRONMENTAL

23. NO ENVIRONMENTAL ASSESSMENT OF THIS SITE HAS BEEN UNDERTAKEN. SHOULD AN ENVIRONMENTAL ASSESSMENT BE REQUIRED, IT IS RECOMMENDED THAT AN ENVIRONMENTAL ENGINEER BE ENGAGED.

### SEISMIC

24. RECOMMENDED FOOTING DETAILS ARE SUITABLE FOR SEISMIC CONDITIONS WITH AN EARTHQUAKE HAZARD FACTOR OF  $\leq 0.11$ . RECOMMENDED FOOTING DETAILS PROVIDED FOR SITES WITH AN EARTHQUAKE HAZARD FACTOR OF  $> 0.11$ , ARE NOT FOR CONSTRUCTION, BUT FOR COSTING PURPOSES ONLY. IT IS RECOMMENDED REQUIRED THAT A FULL SEISMIC DESIGN IS CONDUCTED.

### CORROSION CLASSIFICATION

25. THE CORROSION CLASSIFICATION HAS BEEN ASSESSED IN ACCORDANCE WITH AS3700.

DOC# SS001 - 1.1.3 V1.1 - AUGUST 2021



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SCALE 1:20

DATE 10/5/22

APPROVED

A blue ink handwritten signature is written over the 'APPROVED' field.

**SITE CLASSIFICATION REPORT**  
CERTIFICATE 2595177

**CLIENT** PARCEL DARCH PTY LTD  
**JOB ADDRESS** LOT 279 ATTADALE AV DARCH  
**CLIENT JOB NO.**  
**OWNER**  
**STRUCTERRE JOB NO.** S1082666  
**DATE OF ASSESSMENT** 15/11/22

**SITE RECORD**



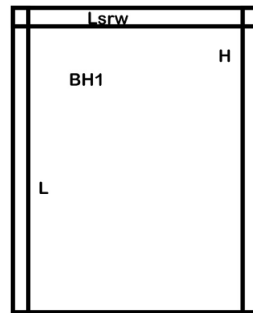
<b>SITE CLASSIFICATION</b>	<b>S - EQUIVALENT</b> <i>(in accordance with AS2870)</i>
<b>FOOTING DETAIL</b>	<b>CM3</b>
<b>SAND PAD</b>	<b>No sand pad required structurally</b>
<b>BUSHFIRE PRONE AREA</b>	<b>Not in a Bushfire Prone Area (see NOTE 2.)</b>
<b>CORROSION CLASSIFICATION</b>	<b>R1</b> <i>(Durability Class in accordance with AS3700)</i>
<b>WIND CLASSIFICATION</b>	<b>N1</b> <i>(in accordance with AS4055)</i>
-TERRAIN CATEGORY	3
-TOPOGRAPHIC	T0
-SHIELDING	Full Shielding



## SOIL PROFILE

BOREHOLE 1: 0 - 900 FILL sand with artificial material trace limestone gravel - grey; 900 hard ground refusal.

## APPROXIMATE BOREHOLE LOCATIONS



Attadale Av

### NOTE 1 Explanatory Notes & Standard Recommendations

This site classification report must be read in conjunction with the applicable Explanatory Notes & Standard Recommendations. For A Class sites, refer to the Explanatory Notes and Standard Recommendations for Stable (A Class) Sites, version 1.0 July 2018. For S, M, H1, H2 & E Class sites, refer to the Explanatory Notes and Standard Recommendations for Reactive (S, M, H1, H2 & E Class) Sites version 1.0 July 2018. For Equivalent Class sites, refer to the Explanatory Notes and Standard Recommendations for Equivalent Class Sites, version 1.0 July 2018.

### NOTE 2 Bushfire - Prone Area

The Site may be situated in a bush fire prone area in accordance with the Department of Fire and Emergency Services (DFES) Bushfire Prone Area Map (Reference: <http://www.dfes.wa.gov.au/regulationandcompliance/bushfireproneareas/>) the current version at the time of this assessment. A Bushfire Attack Level (BAL) assessment may be required for this site, please confirm with the local authority. Should you require an assessment, please contact this Office.

## ADDITIONAL NOTES / REQUIREMENTS

### Site Condition

At the time of inspection the site was considered to be level and cleared. For specific levels of this site or topographical features, please refer to a professional site survey.

### Structerre Geotech Reference

The Site Classification is based on any remedial works being successfully completed as outlined in the Structerre Geotechnical Report J380185 dated 02/04/2021. The footing details are subject to the recommendations being completed to an acceptable level as outlined in this report, if applicable.

### Internal Thickenings

Internal thickenings are required for the proposed residence as specified on the recommended footing detail. Please provide a copy of the architectural drawings to this Office, so that the internal thickenings can be designed and drawn in accordance with AS2870.

### Internal Thickening Inspection

This detail is subject to a internal thickening layout inspection. It is recommended that an inspection be conducted by a representative from this Office prior to concrete pour.

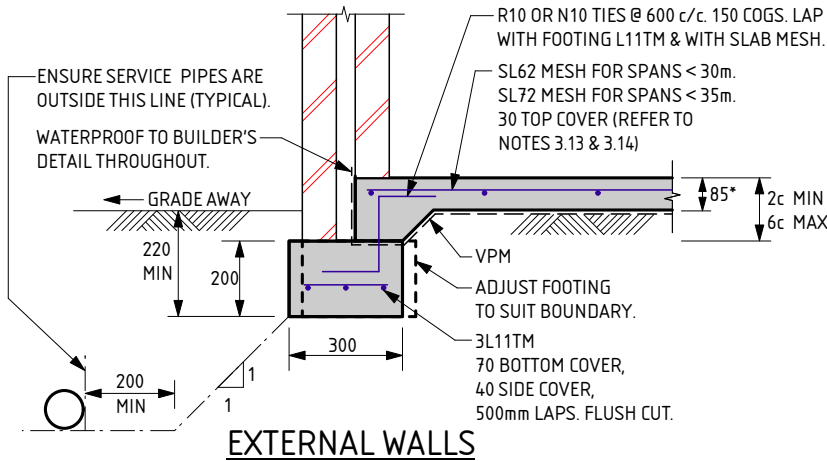
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CERTIFICATE 2595177

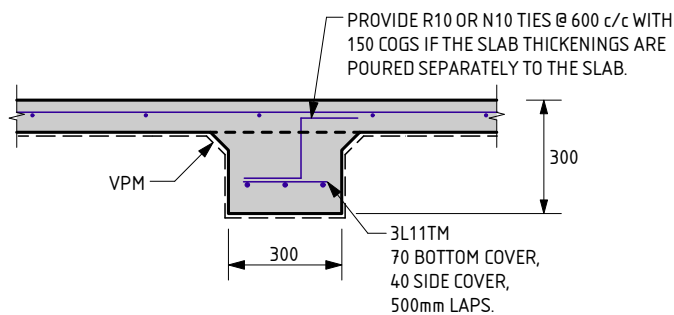
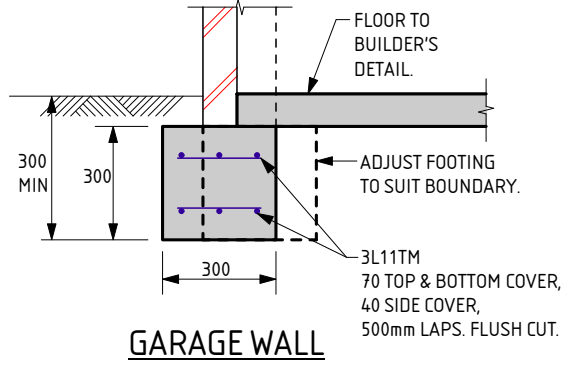
Issued Date: 16 November 2022

Signed:

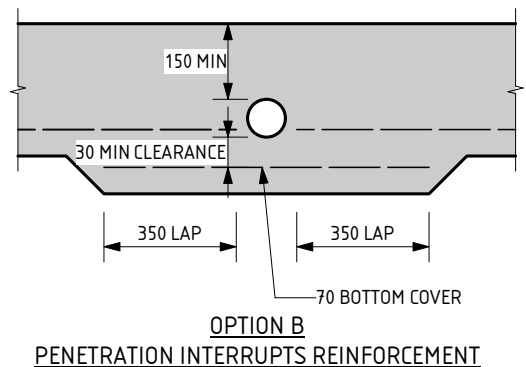
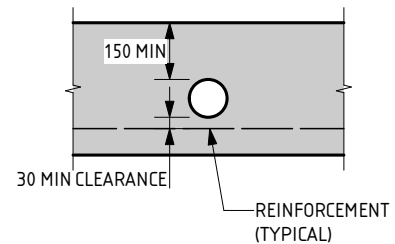
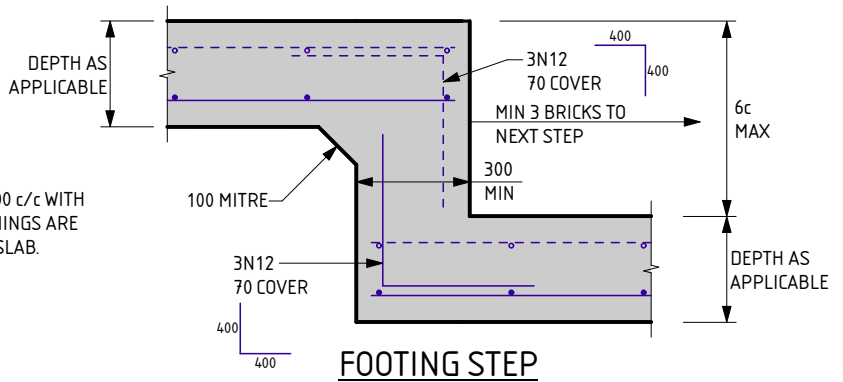
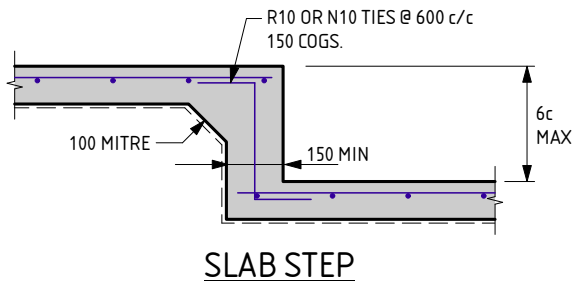
  
Gervase Purich  
Chief Executive Officer



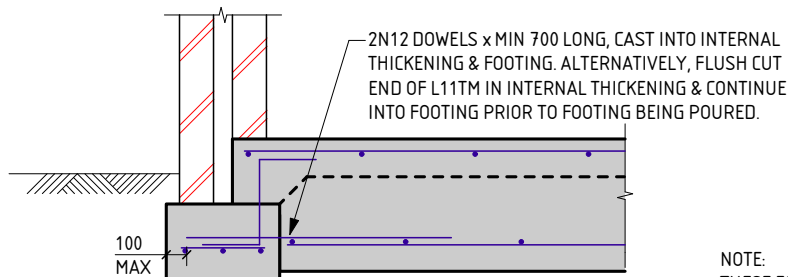
\* 100mm SLAB MAY BE INSTALLED INSTEAD OF 85mm.  
IF 100mm SLAB USED, MESH TO BE:  
SL62 MESH FOR SPANS < 25m.  
SL72 MESH FOR SPANS < 30m.  
SL82 MESH FOR SPANS < 35m.



REFER TO STRUCterre'S DRAWINGS FOR PLACEMENT OF INTERNAL THICKENINGS. LOCATIONS TO BE CONFIRMED ON SITE BY STRUCterre PRIOR TO CONCRETE POUR.



**SERVICE PIPE DIAGRAM**  
- MAXIMUM PENETRATION SIZE TO BE Ø150.



NOTE:  
THESE FOOTING DETAILS ARE TO BE READ IN CONJUNCTION WITH THE REACTIVE SITE NOTES.

THE APPROVED SIGNATURE ON THIS DETAIL ENDORSES ITS USE FOR SINGLE STOREY BUILDINGS ON BUILDING PLATFORMS WITH UP TO 11mm OF SURFACE MOVEMENT.  
DATE LAST MODIFIED - 20/09/18

**CM3**  
CAVITY MASONRY

THIS DETAIL IS EQUIVALENT TO  
STRUCterre FOOTING DETAIL C4.0

**STRUCterre**  
consulting engineers

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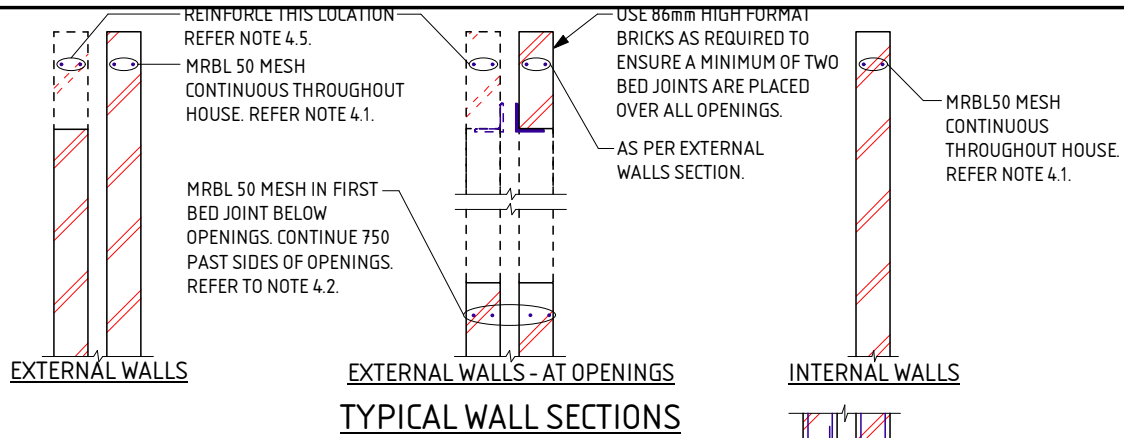
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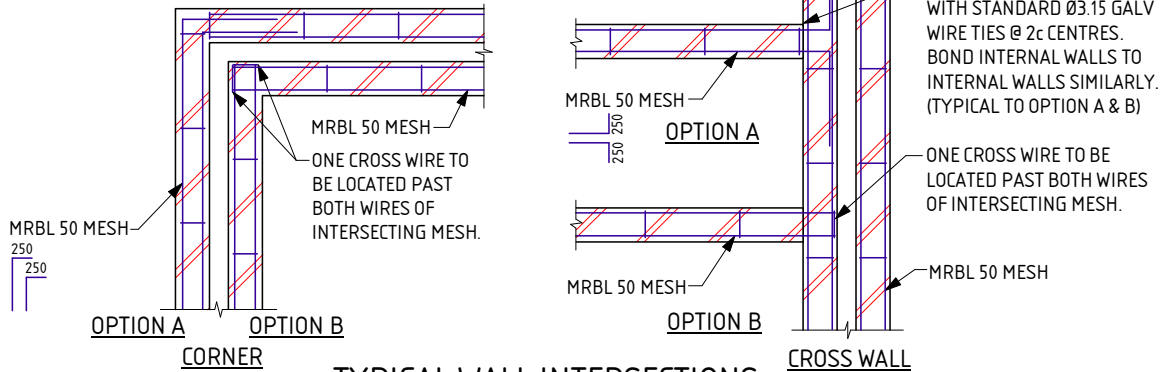
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DATE 16/11/22

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TYPICAL WALL SECTIONS



TYPICAL WALL INTERSECTIONS

REACTIVE SITE NOTES FOR CM1 - CM7

THESE NOTES ARE TO BE READ IN CONJUNCTION WITH THE ATTACHED FOOTING DETAILS.

1.0 SITE CLASSIFICATION

- 1.1 REFER TO ATTACHED CERTIFICATE OF INSPECTION FOR SITE CLASSIFICATION. THE SITE CLASSIFICATION NOTED, IS AS DEFINED IN AS2870 - RESIDENTIAL SLABS & FOOTINGS.
- 1.2 THE SITE CLASSIFICATION HAS BEEN DETERMINED BY INVESTIGATION OF THE SITE, AS PER THE ATTACHED CERTIFICATE OF INSPECTION. REFER TO THE ATTACHED CERTIFICATE FOR ANY SPECIAL REQUIREMENTS.

2.0 EARTHWORKS

- 2.1 SAND PAD IF APPLICABLE TO BE AS PER SITE INSPECTION REPORT.
- 2.2 EARTHWORKS SHALL INCLUDE, BUT NOT BE LIMITED TO:
  - a) REMOVE ALL ORGANIC MATERIAL FROM THE PAD AREA.
  - b) REMOVE ALL RUBBISH AND DELETERIOUS FILL (SUCH AS CLAY FILL) FROM THE PAD AREA.
  - c) GRUB OUT ANY TREES WHERE NECESSARY AND ENSURE THE REMAINING HOLES ARE FILLED AND COMPACTED SATISFACTORILY WITH SAND.
  - d) NOTIFY THE ENGINEER OF ANY UNUSUAL FEATURES OR DISCREPANCIES WHICH MAY BECOME EVIDENT DURING EARTHWORKS, PRIOR TO PROCEEDING.
- 2.3 ANY PREDOMINANT ROCK IN THE HOUSE PAD AREAS IS TO BE INSPECTED BY THE ENGINEER.
- 2.4 ANY CUT TO THE SITE, OTHER THAN TOPSOIL STRIPPING, WILL REQUIRE THE PREPARED CUT BASE TO BE INSPECTED AND APPROVED BY THE ENGINEER.
- 2.5 MAXIMUM SAND PAD DEPTH NOT TO EXCEED 150% OF MINIMUM PAD DEPTH OR 2000mm WITHOUT THE ENGINEER'S APPROVAL.
- 2.6 IF APPLICABLE SAND FILL TO BE CLEAN WELL DRAINED, WITH MAX FINES (PARTICLES UP TO 0.075mm) CONTENT OF 5%. SAND TO BE COMPACTED TO A MIN 6 BLOWS/300mm FOR THE DEPTH OF THE PAD OR TO DISCRETION OF ENGINEER.
- 2.7 COMPACTION TESTING TO BE PERFORMED BY STRUCTERRE.

3.0 FOOTINGS & SLABS

- 3.1 FOOTINGS ARE TO BE PLACED DIRECTLY INTO SAND PAD OF SPECIFIED THICKNESS.
- 3.2 ALL STORMWATER MUST BE DISCHARGED INTO COUNCIL DRAINS OR A MINIMUM OF 3m FOR S CLASS SITES, 4m FOR M CLASS SITES AND 5m FOR H1 & H2 CLASS SITES, AWAY FROM THE RESIDENCE AND/OR ADJACENT BUILDINGS INTO SOAKWELLS. IF THIS RESTRICTION CANNOT BE ACHIEVED REFER BACK TO THIS OFFICE FOR AN ALTERNATIVE DESIGN. WHERE THE SITE HAS BEEN CLASSIFIED AS AN 'EQUIVALENT' SITE CLASSIFICATION, REFER TO 'EXPLANATORY NOTES & STANDARD RECOMMENDATIONS - EQUIVALENT CLASS SITES' FOR STORMWATER DRAINAGE REQUIREMENTS UNLESS SPECIFIED OTHERWISE.
- 3.3 EXCAVATIONS FOR ALL SERVICE PIPES NOT TO UNDERMINE FOOTINGS. IF UNDERMINING IS LIKELY TO OCCUR, CONTACT THE ENGINEER PRIOR TO PROCEEDING.
- 3.4 WHERE PLUMBING PIPES PASS THROUGH FOOTINGS OR SLAB, SPECIFIED TOTAL THICKNESS OF ALL CONCRETE IS ALWAYS TO BE MAINTAINED.
- 3.5 SETDOWN AT WET AREA TO ARCHITECTURAL REQUIREMENT (50mm MAX). MAINTAIN 85mm SLAB THICKNESS. FOLD MESH DOWN TO MAINTAIN COVER, PLACE DIAGONAL BARS AT RE-ENTRANT CORNER FOR STEPS OVER 30mm. BARS TO BE N12x 1200 LONG.
- 3.6 REINFORCEMENT SHALL BE IN ACCORDANCE WITH THE FOLLOWING STANDARDS;
 

L	INDICATES PLAIN OR DEFORMED WIRE R500L OR D500L TO AS/NZS 4671.
SL	INDICATES DEFORMED SQUARE MESH D500L TO AS/NZS 4671.
N	INDICATES DEFORMED BARS D500N TO AS/NZS 4671.
TM SUFFIX	INDICATES TRENCH MESH USING DEFORMED BARS D500L TO AS/NZS 4671.

 ALL STEELWORK TO BE TREATED IN ACCORDANCE WITH TABLE 3.4.4.4 "CORROSION PROTECTION" OF THE BUILDING CODE OF AUSTRALIA.
- 3.7 LAP ALL MESH TWO TRANSVERSE WIRES PLUS 25mm OR TO MANUFACTURER'S SPECIFICATIONS.

3.8 CONCRETE TO CONFORM WITH AS 3600.

- 3.9 BLENDED CEMENT TO CONFORM WITH AS1317.
- 3.10 ALL CONCRETE TO BE N20/20/100.
- 3.11 FOR ISOLATED PAD FOOTINGS, REFER BACK TO ENGINEER.
- 3.12 FOOTING POSITION UNDER BRICKWORK CAN BE ADJUSTED TO SUIT PARAPET WALLS.
- 3.13 FOR SLAB SPANS > 35m REFER TO ENGINEER FOR MESH SIZE.
- 3.14 IF THE LENGTH TO WIDTH RATIO OF THE GROUND SLAB OR ANY PART OF THE GROUND SLAB EXCEEDS 3:1, REFER BACK TO THIS OFFICE FOR MESH SIZE.
- 3.15 IF POLISHED (OR HONED) CONCRETE FINISHES ARE DESIRED, THIS DESIGN SHOULD BE REFERRED BACK TO THIS OFFICE FOR CONSIDERATION, AS IT IS NOT THE INTENTION OF THESE DESIGNS FOR SUCH FINISHES.
- 3.16 PLACE SLAB THICKENING (300 WIDE x 250 DEEP) UNDER INTERNAL WALLS (90 OR 110) HIGHER THAN 3.7m WHERE GREATER THAN 1m FROM INTERNAL THICKENING. PROVIDE SAME TRENCH MESH AS INTERNAL THICKENING DETAIL, WHERE REQUIRED.
- 3.17 PIERCING THE VAPOUR BARRIER (VPM) USING LEVELLING PINS ON FREE DRAINING SAND PADS IS ALLOWABLE.
- 3.18 CURE SLAB AS DETERMINED BY ENGINEER.
- 3.19 THE SLAB IS CONSIDERED SUITABLE AS A PHYSICAL BARRIER AGAINST INGRESS OF TERMITES. IF THE FOOTING AND SLAB IS PLACED IN 2 POURS, THE PHYSICAL BARRIER ALSO INCLUDES THE FOOTING AND SLAB JOINT.
- 3.20 THE FOOTING DETAILS HAVE BEEN DESIGNED IN ACCORDANCE WITH AS3600 AND SECTION 4 OF AS2870.

4.0 MASONRY

- 4.1 PLACE MRBL50 MESH IN TOP BED JOINT CONTINUOUS THROUGHOUT ALL BRICKWORK.
- 4.2 REINFORCE BED JOINT BELOW WINDOW SILLS WITH MRBL50 MESH. CONTINUE 750 PAST SIDES OF OPENING.
- 4.3 LAP 250 AT SPLICES AND AROUND CORNERS AND COG 250 INTO INTERSECTING WALLS. 20mm COVER TO ALL WIRES.
- 4.4 ALL MESH IN EXTERNAL FACE OF EXTERNAL LEAF TO BE GALVANIZED TO AS/NZS 4680.
- 4.5 WHEN BRICKWORK EXTENDS ABOVE OPENINGS TO EXTERNAL LEAF REINFORCE AS PER CLAUSE 4.1, 4.2 & 4.3.
- 4.6 TYPICAL WALL SECTIONS ARE SHOWN FOR 28C INTERNAL CEILINGS. WHERE THERE ARE 3 OR MORE BED JOINTS OVER THE OPENING, REINFORCE BED JOINT OVER OPENING WITH MRBL50 MESH. CONTINUE 750 PAST SIDE OF OPENING.
- 4.7 ALL PERPENDS TO BE FULLY MORTARED.
- 4.8 A BRICK COURSE, AS REFERRED TO IN THIS DOCUMENT IS STANDARD 86mm HIGH.
- 4.9 2L6 WIRES MAY BE USED AS AN ALTERNATIVE TO THE MRBL50 MESH. WHERE L6 WIRES ARE USED, ALL SPLICES AND COGS TO BE 500 LONG.

5.0 MAINTENANCE

- 5.1 IT IS CONSIDERED THAT THIS DESIGN IS SUITABLE FOR THE FOUNDATION CONDITIONS TO BE ENCOUNTERED AND WILL ADEQUATELY CONTROL ANY CRACKING OF BRICKWORK AND CONCRETE, SUBJECT TO THE MAINTENANCE PROCEDURES BELOW BEING SATISFIED.
- 5.2 BUILDER TO ENSURE THAT CLIENT BE INFORMED OF NECESSITY TO MAINTAIN DRAINS IN GOOD WORKING ORDER AT ALL TIMES.
- 5.3 BUILDER TO ADVISE CLIENT TO CONSULT AN ENGINEER BEFORE PLANTING TREES OR SHRUBS WITHIN 2.5m, OR A DISTANCE EQUAL TO THE ANTICIPATED MAXIMUM HEIGHT OF THE TREE, OF THE BUILDING.
- 5.4 SITE TO BE MAINTAINED AS PER CSIRO INFORMATION PAMPHLET BTF 18 & STRUCTERRE'S CLAY FACT SHEET.
- 5.5 AS2870 AND 'CSIRO PAMPHLET BTF 18' COVER THE EXPECTED PERFORMANCE AND RESPONSIBILITIES OF ALL PARTIES WITH THE USE OF THESE DETAILS.

6.0 QUALITY CONTROL PROGRAM REQUIREMENTS

- 6.1 WORKING SLAB DEPTH AS INDICATED ON THE DETAIL. SLAB DEPTH TOLERANCE ALLOWABLE -10mm, +15mm.
- 6.2 WHERE DEPTH IS BELOW NOMINATED DEPTH, MAX AREA ALLOWED TO BE ≤ 5% OF THE TOTAL AREA.
- 6.3 DEPTH TESTING LOCATIONS TO BE NO CLOSER THAN 1000mm APART.
- 6.4 SLAB DEPTH IS TO BE PART OF A QUALITY CONTROL INSPECTION REGIME.
- 6.5 SLAB AND FOOTING CAN BE POURED MONOLITHICALLY IF DESIRED.

DATE LAST MODIFIED - 21/09/21



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PROJECT :  
LOT 279 ATTADALE AV DARCH

CLIENT : PARCEL DARCH PTY LTD

SCALE 1:20

DATE 16/11/22

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## EXPLANATORY NOTES & STANDARD RECOMMENDATIONS - EQUIVALENT CLASS SITES (Sheet 1 of 2)

### GENERAL

1. THE EXPLANATORY NOTES AND THE STANDARD RECOMMENDATIONS ARE TO BE READ IN CONJUNCTION WITH THE SITE CLASSIFICATION REPORT.
2. ALL REFERRED STANDARDS TO BE THE CURRENT VERSION AT THE TIME OF THE CONSTRUCTION.
3. THE PURPOSE OF THE SITE CLASSIFICATION REPORT IS TO CLASSIFY THE SITE IN ACCORDANCE WITH AS2870 "RESIDENTIAL SLABS AND FOOTING". IT IS NOT INTENDED FOR ANY OTHER PURPOSE, INCLUDING SOLE INFORMATION IN THE PROVISION OF A QUOTATION FOR SITE WORKS. IT IS RECOMMENDED OTHER PARTIES TO PERFORM THEIR OWN INVESTIGATION FOR QUOTATION PURPOSES.
4. THE SITE CLASSIFICATION REPORT WILL INCLUDE BUT IS NOT LIMITED TO:
  - a. THE SITE CLASSIFICATION IN ACCORDANCE WITH AS2870 "RESIDENTIAL SLABS AND FOOTING",
  - b. A WIND CLASSIFICATION IN ACCORDANCE WITH AS4055 "WIND LOADS FOR HOUSING",
  - c. A COASTAL CORROSION CLASSIFICATION,
  - d. ADDITIONAL EARTHWORK RECOMMENDATIONS WHERE APPLICABLE,
  - e. STANDARD FOOTING DESIGN FOR SINGLE STOREY SLAB ON GROUND CONSTRUCTION.
5. THE SITE CLASSIFICATION IS BASED ON THE SITE AS PRESENTED AT THE TIME OF THE ASSESSMENT. THE SITE CLASSIFICATION AND RECOMMENDATIONS INCLUDED IN THE REPORT ARE SUBJECT TO SATISFACTORY COMPLETION OF RECOMMENDED EARTHWORKS, (REFER NOTE 17) AS A MINIMUM. SHOULD CHANGES TO THE SITE OCCUR, OTHER THAN THE RECOMMENDATIONS INCLUDED IN THE SITE CLASSIFICATION REPORT, REFER BACK TO THIS OFFICE FOR REVIEW OF CLASSIFICATION AND FOOTING DESIGN.
6. ALL RECOMMENDATIONS GIVEN IN THE SITE CLASSIFICATION REPORT HAVE BEEN DETERMINED FROM THE INFORMATION THAT WAS AVAILABLE TO THIS OFFICE AT THE TIME OF INVESTIGATION. IF FURTHER INFORMATION RELATING TO THE SITE OR DEVELOPMENT BECOMES AVAILABLE, THESE RECOMMENDATIONS ARE SUBJECT TO CHANGE.
7. EQUIVALENT CLASS SITES ARE BASED ON DIFFERENTIAL SURFACE MOVEMENT ARISING FROM ISSUE OTHER THAN SHRINK-SWELL (REACTIVITY) ONLY. THESE MAY INCLUDE SETTLEMENT AND/OR CONSOLIDATION THAT MAY OCCUR AS A RESULT OF THE UNDERLYING GROUND CONDITIONS.
8. BOREHOLES EXCAVATED REVEAL THE SOIL PROFILE AT THE BOREHOLE LOCATION ONLY. FROM THIS, IT IS INFERRED THAT THESE ARE THE SOIL CONDITIONS OVER THE SITE. VARIATIONS CAN OCCUR WHICH MAY NOT HAVE BEEN DETECTED AT THE INVESTIGATION STAGE. ANY ANOMALIES SHOULD BE REFERRED BACK TO THIS OFFICE FOR A REASSESSMENT.
9. A NUMBER OF BOREHOLES ARE CONDUCTED ACROSS THE SITE TO DETERMINE THE SOIL PROFILES AND PROVIDE A REPRESENTATION OF THE GROUND CONDITIONS.
10. THIS REPORT IS FOR STRUCTERRE ONLY TO USE IN DESIGN. ANY DESIGN BY ANYONE ELSE FOR ANY STRUCTURE MUST BE SPECIFICALLY APPROVED BY STRUCTERRE. IF USED BY ANYONE ELSE FOR ANYTHING OTHER THAN A STRUCTERRE DESIGN OR STRUCTURE, STRUCTERRE TAKES NO RESPONSIBILITY.

### SAND PAD

11. THE RECOMMENDED FOOTING DESIGN IS ONLY TO BE USED IN CONJUNCTION WITH THE RECOMMENDED SAND PAD AND EARTHWORKS AS OUTLINED IN THE SITE CLASSIFICATION REPORT.
12. THE RECOMMENDATIONS FOR THE SAND PAD IS FOR STRUCTURAL PURPOSES ONLY, AND DOES NOT PROVIDE THE MINIMUM FINISHED PAD LEVEL IN RELATION TO FLOOD LEVELS OR DEPTH TO GROUNDWATER. SHOULD THE TEST BE LOCATED IN A LOW LYING OR FLOOD PRONE AREA, REFER TO THE LOCAL AUTHORITY FOR MINIMUM BUILDING HEIGHT.
13. IMPORTED FILL FOR USE AS A SAND PAD TO BE IN ACCORDANCE TO AS 3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS" WHICH INCLUDES BUT IS NOT LIMITED TO: BE FREE FROM ANY DELETERIOUS MATERIALS INCLUDING ORGANICS, (ROOTS, STUMPS, GRASSES, DECOMPOSED ORGANICS - PEAT, TIMBER, ETC), BUILDING RUBBLE, GLASS, PLASTICS OR WASTE MATERIAL. THE FINES CONTENT, (PERCENTAGE PASSING THE 0.075mm SIEVE) TO BE LESS THAN 5% BY MASS.
14. ON SAND SITES A SAND PAD IS NOT REQUIRED STRUCTURALLY, HOWEVER IF ROCK IS ENCOUNTERED, A MINIMUM 200mm SAND PAD BEYOND THE BASE OF FOOTING IS RECOMMENDED.
15. SAND PAD TO EXTEND BEYOND BUILDING AREA A MINIMUM OF 1.5 TIMES THE PAD DEPTH.
16. RECOMMENDED SAND PAD DEPTH IS ABOVE THE HIGHEST POINT, UNLESS OTHERWISE SPECIFIED.
17. IT IS REQUIRED THAT EARTHWORKS CONFIRM THAT THE MINIMUM DEPTH OF RECOMMENDED SAND PAD IS ACHIEVED.

### EARTHWORKS

18. RECOMMENDED EARTHWORKS TO BE CONDUCTED IN ACCORDANCE WITH AS3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS", AND TO INCLUDE BUT NOT BE LIMITED TO:
  - a. REMOVAL OF ALL VEGETATION, TOPSOILS, UNCONTROLLED FILLS AND OTHER DELETERIOUS MATERIALS FROM THE BUILDING AREA,
  - b. GRUBBING OUT OF ANY TREES ENSURING THE REMAINING HOLES ARE BACKFILLED WITH CLEAN COMPACTED SAND,
  - c. NOTIFYING THE ENGINEER OF ANY UNUSUAL FEATURE OR DISCREPANCY THAT MAY BECOME EVIDENT DURING EARTHWORKS, PRIOR TO PROCEEDING,
  - d. COMPACTING TO MEET THE REQUIREMENTS AS OUTLINED IN AS 3798 TABLE 5.1.
19. FILL MATERIAL (WHICH IS NOT ALWAYS APPARENT AT THE INITIAL INVESTIGATION STAGE) IS TO BE DEALT WITH AS FOLLOWS:
  - a. IF IT IS CERTIFIED BY OTHERS IT CAN REMAIN.
  - b. IF IT IS NOT CERTIFIED WILL REQUIRE REMOVAL DOWN TO NATURAL GROUND OR VERIFIED. ANY SAND CAN BE REUSED.
  - c. IF A PAD HAS ALREADY BEEN CONSTRUCTED, THE SITE CLASSIFICATION IS NOT CERTIFICATION OF THE PAD. CONTACT THIS OFFICE SHOULD A SAND PAD CERTIFICATION BE REQUIRED.
20. ANY ORGANIC MATTER OR ROOTS ENCOUNTERED, WHICH IS BEYOND WHAT IS NORMALLY CONSIDERED ACCEPTABLE IS TO BE REMOVED. THIS WILL NECESSITATE RAKING THE SITE TO REMOVE ORGANIC MATERIAL, TURNING THE SITE OVER AND RE-COMPACTING TO A MINIMUM.

### RETAINING WALLS

21. AN ASSESSMENT OF ANY EXISTING OR PROPOSED RETAINING WALLS HAS NOT BEEN CONDUCTED AS PART OF THIS SITE CLASSIFICATION REPORT.
22. IF THE PROPOSED BUILDING IS TO BE LOCATED CLOSER THAN THE HEIGHT OF THE RETAINING WALL, THIS MAY PLACE ADDITIONAL LOADS ON THE WALL THAT WERE NOT INITIALLY DESIGNED FOR. AN INSPECTION OF THE STRUCTURAL INTEGRITY OF THE RETAINING WALL WILL BE REQUIRED TO PROVIDE CERTIFICATION AND/OR RECOMMENDATIONS PRIOR TO ANY CONSTRUCTION. PLEASE REFER BACK TO THIS OFFICE FOR ASSISTANCE.  
STORMWATER DRAINAGE
23. UNLESS OTHERWISE SPECIFIED, ALL SOAKWELLS ARE TO BE LOCATED THE DEPTH OF THE SOAKWELL AWAY FROM THE BUILDING OR SETBACK A MINIMUM OF 1200mm, WHICHEVER IS GREATER, UNLESS SPECIFIED OTHERWISE. PLEASE REFER BACK TO THIS OFFICE IF THE SETBACK CANNOT BE ACHIEVED.

DOC# SS001 - 1.1.10 SCR EQUIVALENT V1.1 - AUGUST 2021



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LOT 279 ATTADALE AV DARCH

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SCALE 1:20

DATE 16/11/22

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## EXPLANATORY NOTES & STANDARD RECOMMENDATIONS - EQUIVALENT CLASS SITES (Sheet 2 of 2)

### WIND CLASSIFICATION

24. WIND CLASSIFICATION IS GIVEN FOR THE EXPECTED CONDITION 5 YEARS HENCE. THIS CLASSIFICATION IS LIMITED TO BUILDINGS CLASSES 1 AND 10, WHICH HAVE THE FOLLOWING LIMITATION (AS PER AS4055):

- a. MAXIMUM DISTANCE FROM THE GROUND LEVEL TO THE UNDERSIDE OF EAVES SHALL NOT EXCEED 6.0m,
- b. MAXIMUM DISTANCE FROM GROUND LEVEL TO THE HIGHEST POINT OF THE ROOF, EXCLUDING CHIMNEYS, SHALL NOT EXCEED 8.5m,
- c. THE ROOF PITCH SHALL NOT EXCEED 35 °,
- d. THE WIDTH, EXCLUDING EAVES, SHALL NOT EXCEED 16.0m AND THE LENGTH SHALL NOT EXCEED 5x THE WIDTH.

IF THE BUILDING FALLS OUTSIDE OF THESE LIMITATIONS, THE STATED WIND CLASSIFICATION DOES NOT APPLY. REFER BACK TO THIS OFFICE FOR A REVISED WIND CLASSIFICATION.

### ENVIRONMENTAL

25. NO ENVIRONMENTAL ASSESSMENT OF THIS SITE HAS BEEN UNDERTAKEN. SHOULD AN ENVIRONMENTAL ASSESSMENT BE REQUIRED, PLEASE CONTACT THIS OFFICE.

### SEISMIC

26. RECOMMENDED FOOTING DETAILS ARE SUITABLE FOR SEISMIC CONDITIONS WITH AN EARTHQUAKE HAZARD FACTOR OF  $\leq 0.11$ . RECOMMENDED FOOTING DETAILS PROVIDED FOR SITES WITH AN EARTHQUAKE HAZARD FACTOR OF  $> 0.11$ , ARE NOT FOR CONSTRUCTION, BUT FOR COSTING PURPOSES ONLY. IT IS REQUIRED THAT A FULL SEISMIC DESIGN IS CONDUCTED.

### CORROSION CLASSIFICATION

27. THE CORROSION CLASSIFICATION HAS BEEN ASSESSED IN ACCORDANCE WITH AS3700.

DOC# SS001 - 1.1.10 SCR EQUIVALENT V1.1 - AUGUST 2021



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PROJECT :  
LOT 279 ATTADALE AV DARCH

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SCALE 1:20

DATE 16/11/22

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A blue ink handwritten signature is written over the 'APPROVED' field.

**SITE CLASSIFICATION REPORT**  
CERTIFICATE 2595179

**CLIENT** PARCEL DARCH PTY LTD  
**JOB ADDRESS** LOT 280 ATTADALE AV DARCH  
**CLIENT JOB NO.**  
**OWNER**  
**STRUCTERRE JOB NO.** S1082667  
**DATE OF ASSESSMENT** 15/11/22

**SITE RECORD**

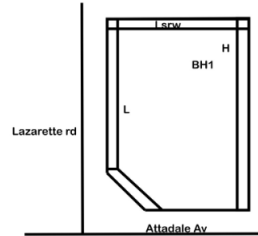


<b>SITE CLASSIFICATION</b>	<b>S - EQUIVALENT</b> <i>(in accordance with AS2870)</i>
<b>FOOTING DETAIL</b>	<b>CM3</b>
<b>SAND PAD</b>	<b>No sand pad required structurally</b>
<b>BUSHFIRE PRONE AREA</b>	<b>Not in a Bushfire Prone Area (see NOTE 2.)</b>
<b>CORROSION CLASSIFICATION</b>	<b>R1</b> <i>(Durability Class in accordance with AS3700)</i>
<b>WIND CLASSIFICATION</b>	<b>N1</b> <i>(in accordance with AS4055)</i>
<b>-TERRAIN CATEGORY</b>	<b>3</b>
<b>-TOPOGRAPHIC</b>	<b>T0</b>
<b>-SHIELDING</b>	<b>Full Shielding</b>

## SOIL PROFILE

BOREHOLE 1: 0 - 1800 FILL sand with artificial material trace limestone gravel - grey; 1800 end of hole.

## APPROXIMATE BOREHOLE LOCATIONS



### NOTE 1 Explanatory Notes & Standard Recommendations

This site classification report must be read in conjunction with the applicable Explanatory Notes & Standard Recommendations. For A Class sites, refer to the Explanatory Notes and Standard Recommendations for Stable (A Class) Sites, version 1.0 July 2018. For S, M, H1, H2 & E Class sites, refer to the Explanatory Notes and Standard Recommendations for Reactive (S, M, H1, H2 & E Class) Sites version 1.0 July 2018. For Equivalent Class sites, refer to the Explanatory Notes and Standard Recommendations for Equivalent Class Sites, version 1.0 July 2018.

### NOTE 2 Bushfire - Prone Area

The Site may be situated in a bush fire prone area in accordance with the Department of Fire and Emergency Services (DFES) Bushfire Prone Area Map (Reference: <http://www.dfes.wa.gov.au/regulationandcompliance/bushfireproneareas/>) the current version at the time of this assessment. A Bushfire Attack Level (BAL) assessment may be required for this site, please confirm with the local authority. Should you require an assessment, please contact this Office.

## ADDITIONAL NOTES / REQUIREMENTS

### Site Condition

At the time of inspection the site was considered to be level and cleared. For specific levels of this site or topographical features, please refer to a professional site survey.

### Structerre Geotech Reference

The Site Classification is based on any remedial works being successfully completed as outlined in the Structerre Geotechnical Report J380185 dated 02/04/2021. The footing details are subject to the recommendations being completed to an acceptable level as outlined in this report, if applicable.

### Internal Thickenings

Internal thickenings are required for the proposed residence as specified on the recommended footing detail. Please provide a copy of the architectural drawings to this Office, so that the internal thickenings can be designed and drawn in accordance with AS2870.

### Internal Thickening Inspection

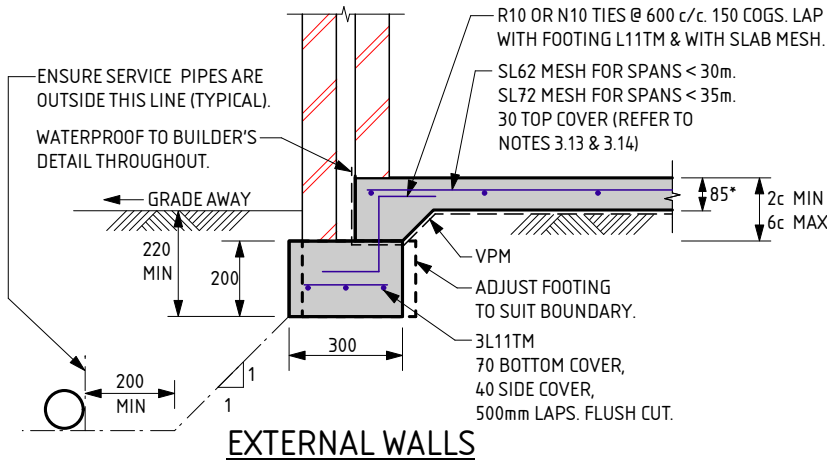
This detail is subject to a internal thickening layout inspection. It is recommended that an inspection be conducted by a representative from this Office prior to concrete pour.

-- END OF REPORT --

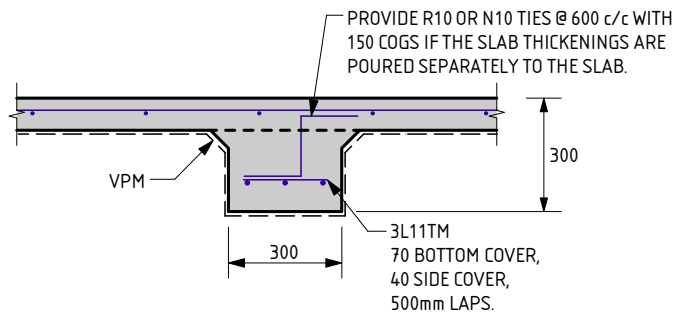
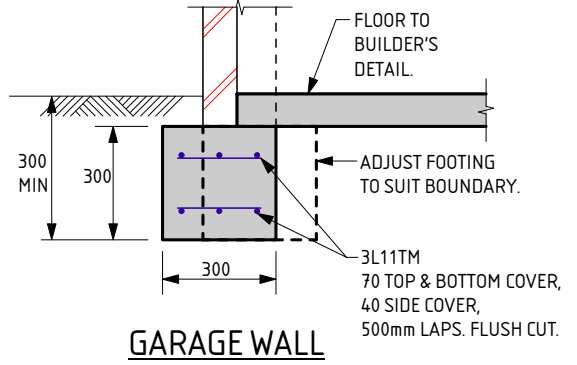


Signed:

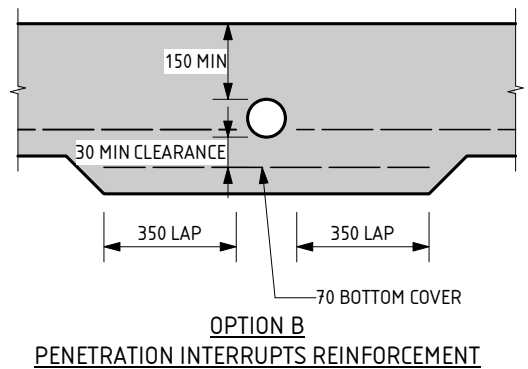
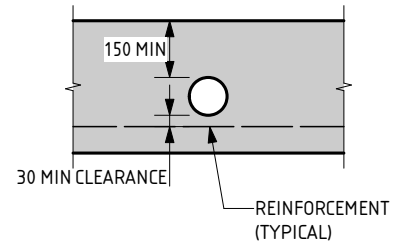
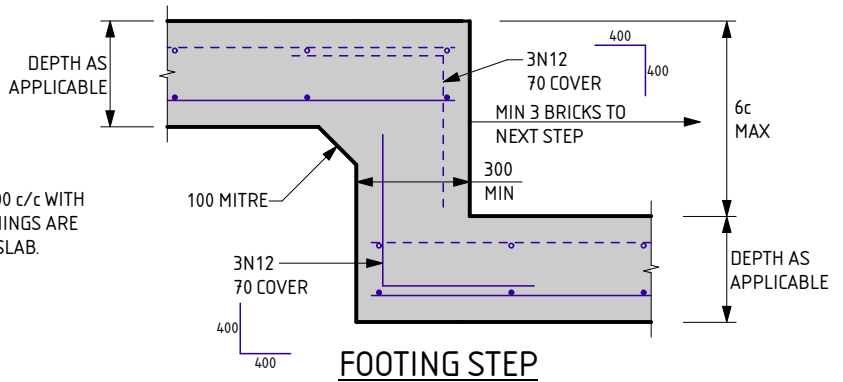
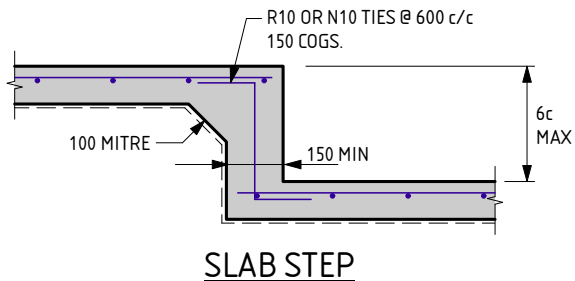
  
Gervase Purich  
Chief Executive Officer



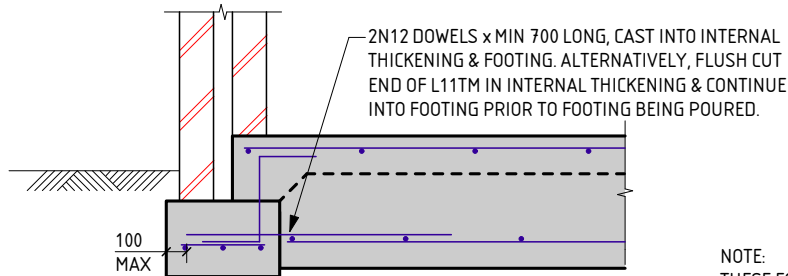
\* 100mm SLAB MAY BE INSTALLED INSTEAD OF 85mm.  
IF 100mm SLAB USED, MESH TO BE:  
SL62 MESH FOR SPANS < 25m.  
SL72 MESH FOR SPANS < 30m.  
SL82 MESH FOR SPANS < 35m.



REFER TO STRUCTERRE'S DRAWINGS FOR PLACEMENT OF INTERNAL THICKENINGS. LOCATIONS TO BE CONFIRMED ON SITE BY STRUCTERRE PRIOR TO CONCRETE POUR.



**SERVICE PIPE DIAGRAM**  
- MAXIMUM PENETRATION SIZE TO BE Ø150.



**EXTERNAL FOOTING TO INTERNAL THICKENING**

THIS DETAIL IS EQUIVALENT TO  
STRUCTERRE FOOTING DETAIL C4.0

NOTE:  
THESE FOOTING DETAILS ARE TO BE READ IN CONJUNCTION WITH THE REACTIVE SITE NOTES.

THE APPROVED SIGNATURE ON THIS DETAIL ENDORSES ITS USE FOR SINGLE STOREY BUILDINGS ON BUILDING PLATFORMS WITH UP TO 11mm OF SURFACE MOVEMENT.  
DATE LAST MODIFIED - 20/09/18

**CM3**  
CAVITY MASONRY

**STRUCterre**  
consulting engineers

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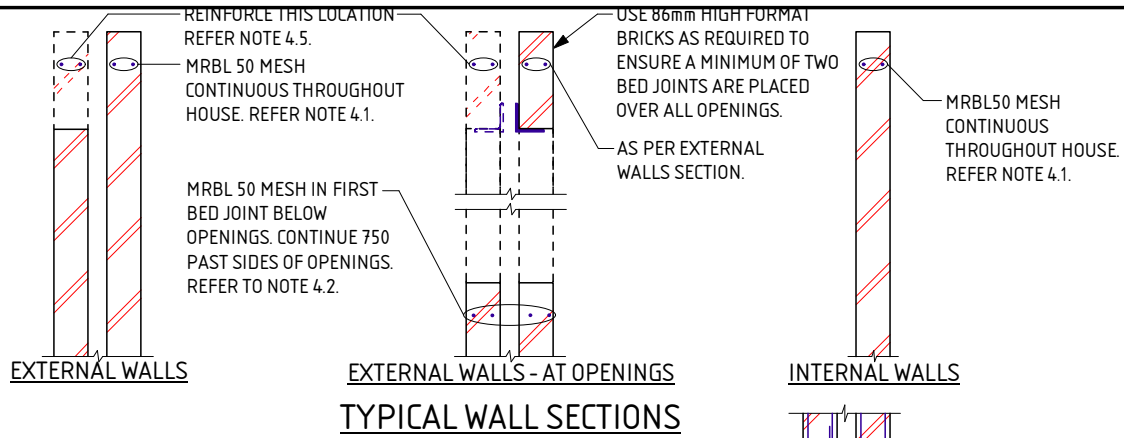
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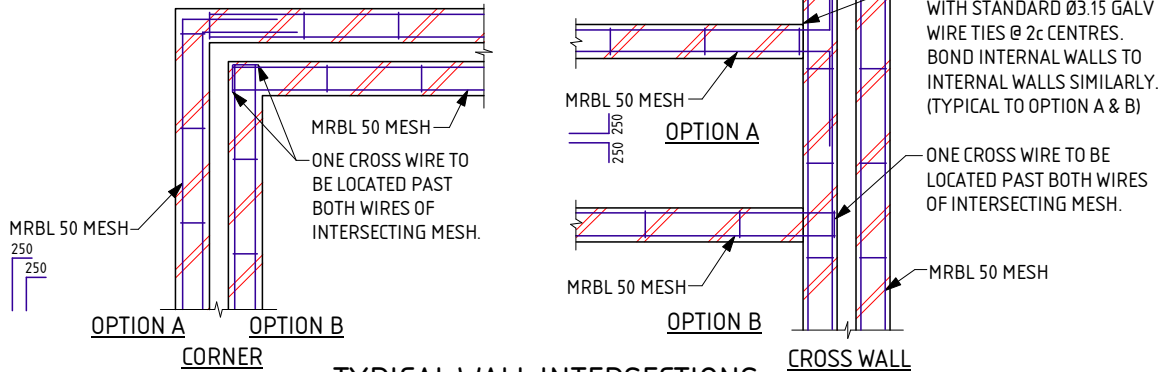
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TYPICAL WALL SECTIONS



TYPICAL WALL INTERSECTIONS

REACTIVE SITE NOTES FOR CM1 - CM7

THESE NOTES ARE TO BE READ IN CONJUNCTION WITH THE ATTACHED FOOTING DETAILS.

1.0 SITE CLASSIFICATION

- 1.1 REFER TO ATTACHED CERTIFICATE OF INSPECTION FOR SITE CLASSIFICATION. THE SITE CLASSIFICATION NOTED, IS AS DEFINED IN AS2870 - RESIDENTIAL SLABS & FOOTINGS.
- 1.2 THE SITE CLASSIFICATION HAS BEEN DETERMINED BY INVESTIGATION OF THE SITE, AS PER THE ATTACHED CERTIFICATE OF INSPECTION. REFER TO THE ATTACHED CERTIFICATE FOR ANY SPECIAL REQUIREMENTS.

2.0 EARTHWORKS

- 2.1 SAND PAD IF APPLICABLE TO BE AS PER SITE INSPECTION REPORT.
- 2.2 EARTHWORKS SHALL INCLUDE, BUT NOT BE LIMITED TO:
  - a) REMOVE ALL ORGANIC MATERIAL FROM THE PAD AREA.
  - b) REMOVE ALL RUBBISH AND DELETERIOUS FILL (SUCH AS CLAY FILL) FROM THE PAD AREA.
  - c) GRUB OUT ANY TREES WHERE NECESSARY AND ENSURE THE REMAINING HOLES ARE FILLED AND COMPACTED SATISFACTORILY WITH SAND.
  - d) NOTIFY THE ENGINEER OF ANY UNUSUAL FEATURES OR DISCREPANCIES WHICH MAY BECOME EVIDENT DURING EARTHWORKS, PRIOR TO PROCEEDING.
- 2.3 ANY PREDOMINANT ROCK IN THE HOUSE PAD AREAS IS TO BE INSPECTED BY THE ENGINEER.
- 2.4 ANY CUT TO THE SITE, OTHER THAN TOPSOIL STRIPPING, WILL REQUIRE THE PREPARED CUT BASE TO BE INSPECTED AND APPROVED BY THE ENGINEER.
- 2.5 MAXIMUM SAND PAD DEPTH NOT TO EXCEED 150% OF MINIMUM PAD DEPTH OR 2000mm WITHOUT THE ENGINEER'S APPROVAL.
- 2.6 IF APPLICABLE SAND FILL TO BE CLEAN WELL DRAINED, WITH MAX FINES (PARTICLES UP TO 0.075mm) CONTENT OF 5%. SAND TO BE COMPACTED TO A MIN 6 BLOWS/300mm FOR THE DEPTH OF THE PAD OR TO DISCRETION OF ENGINEER.
- 2.7 COMPACTION TESTING TO BE PERFORMED BY STRUCTERRE.

3.0 FOOTINGS & SLABS

- 3.1 FOOTINGS ARE TO BE PLACED DIRECTLY INTO SAND PAD OF SPECIFIED THICKNESS.
- 3.2 ALL STORMWATER MUST BE DISCHARGED INTO COUNCIL DRAINS OR A MINIMUM OF 3m FOR S CLASS SITES, 4m FOR M CLASS SITES AND 5m FOR H1 & H2 CLASS SITES, AWAY FROM THE RESIDENCE AND/OR ADJACENT BUILDINGS INTO SOAKWELLS. IF THIS RESTRICTION CANNOT BE ACHIEVED REFER BACK TO THIS OFFICE FOR AN ALTERNATIVE DESIGN. WHERE THE SITE HAS BEEN CLASSIFIED AS AN 'EQUIVALENT' SITE CLASSIFICATION, REFER TO 'EXPLANATORY NOTES & STANDARD RECOMMENDATIONS - EQUIVALENT CLASS SITES' FOR STORMWATER DRAINAGE REQUIREMENTS UNLESS SPECIFIED OTHERWISE.
- 3.3 EXCAVATIONS FOR ALL SERVICE PIPES NOT TO UNDERMINE FOOTINGS. IF UNDERMINING IS LIKELY TO OCCUR, CONTACT THE ENGINEER PRIOR TO PROCEEDING.
- 3.4 WHERE PLUMBING PIPES PASS THROUGH FOOTINGS OR SLAB, SPECIFIED TOTAL THICKNESS OF ALL CONCRETE IS ALWAYS TO BE MAINTAINED.
- 3.5 SETDOWN AT WET AREA TO ARCHITECTURAL REQUIREMENT (50mm MAX). MAINTAIN 85mm SLAB THICKNESS. FOLD MESH DOWN TO MAINTAIN COVER, PLACE DIAGONAL BARS AT RE-ENTRANT CORNER FOR STEPS OVER 30mm. BARS TO BE N12x 1200 LONG.
- 3.6 REINFORCEMENT SHALL BE IN ACCORDANCE WITH THE FOLLOWING STANDARDS;
 

L	INDICATES PLAIN OR DEFORMED WIRE R500L OR D500L TO AS/NZS 4671.
SL	INDICATES DEFORMED SQUARE MESH D500L TO AS/NZS 4671.
N	INDICATES DEFORMED BARS D500N TO AS/NZS 4671.
TM SUFFIX	INDICATES TRENCH MESH USING DEFORMED BARS D500L TO AS/NZS 4671.

 ALL STEELWORK TO BE TREATED IN ACCORDANCE WITH TABLE 3.4.4.4 "CORROSION PROTECTION" OF THE BUILDING CODE OF AUSTRALIA.
- 3.7 LAP ALL MESH TWO TRANSVERSE WIRES PLUS 25mm OR TO MANUFACTURER'S SPECIFICATIONS.

3.8 CONCRETE TO CONFORM WITH AS 3600.

- 3.9 BLENDED CEMENT TO CONFORM WITH AS1317.
- 3.10 ALL CONCRETE TO BE N20/20/100.
- 3.11 FOR ISOLATED PAD FOOTINGS, REFER BACK TO ENGINEER.
- 3.12 FOOTING POSITION UNDER BRICKWORK CAN BE ADJUSTED TO SUIT PARAPET WALLS.
- 3.13 FOR SLAB SPANS > 35m REFER TO ENGINEER FOR MESH SIZE.
- 3.14 IF THE LENGTH TO WIDTH RATIO OF THE GROUND SLAB OR ANY PART OF THE GROUND SLAB EXCEEDS 3:1, REFER BACK TO THIS OFFICE FOR MESH SIZE.
- 3.15 IF POLISHED (OR HONED) CONCRETE FINISHES ARE DESIRED, THIS DESIGN SHOULD BE REFERRED BACK TO THIS OFFICE FOR CONSIDERATION, AS IT IS NOT THE INTENTION OF THESE DESIGNS FOR SUCH FINISHES.
- 3.16 PLACE SLAB THICKENING (300 WIDE x 250 DEEP) UNDER INTERNAL WALLS (90 OR 110) HIGHER THAN 3.7m WHERE GREATER THAN 1m FROM INTERNAL THICKENING. PROVIDE SAME TRENCH MESH AS INTERNAL THICKENING DETAIL, WHERE REQUIRED.
- 3.17 PIERCING THE VAPOUR BARRIER (VPM) USING LEVELLING PINS ON FREE DRAINING SAND PADS IS ALLOWABLE.
- 3.18 CURE SLAB AS DETERMINED BY ENGINEER.
- 3.19 THE SLAB IS CONSIDERED SUITABLE AS A PHYSICAL BARRIER AGAINST INGRESS OF TERMITES. IF THE FOOTING AND SLAB IS PLACED IN 2 POURS, THE PHYSICAL BARRIER ALSO INCLUDES THE FOOTING AND SLAB JOINT.
- 3.20 THE FOOTING DETAILS HAVE BEEN DESIGNED IN ACCORDANCE WITH AS3600 AND SECTION 4 OF AS2870.

4.0 MASONRY

- 4.1 PLACE MRBL50 MESH IN TOP BED JOINT CONTINUOUS THROUGHOUT ALL BRICKWORK.
- 4.2 REINFORCE BED JOINT BELOW WINDOW SILLS WITH MRBL50 MESH. CONTINUE 750 PAST SIDES OF OPENING.
- 4.3 LAP 250 AT SPLICES AND AROUND CORNERS AND COG 250 INTO INTERSECTING WALLS. 20mm COVER TO ALL WIRES.
- 4.4 ALL MESH IN EXTERNAL FACE OF EXTERNAL LEAF TO BE GALVANIZED TO AS/NZS 4680.
- 4.5 WHEN BRICKWORK EXTENDS ABOVE OPENINGS TO EXTERNAL LEAF REINFORCE AS PER CLAUSE 4.1, 4.2 & 4.3.
- 4.6 TYPICAL WALL SECTIONS ARE SHOWN FOR 28C INTERNAL CEILINGS. WHERE THERE ARE 3 OR MORE BED JOINTS OVER THE OPENING, REINFORCE BED JOINT OVER OPENING WITH MRBL50 MESH. CONTINUE 750 PAST SIDE OF OPENING.
- 4.7 ALL PERPENDS TO BE FULLY MORTARED.
- 4.8 A BRICK COURSE, AS REFERRED TO IN THIS DOCUMENT IS STANDARD 86mm HIGH.
- 4.9 2L6 WIRES MAY BE USED AS AN ALTERNATIVE TO THE MRBL50 MESH. WHERE L6 WIRES ARE USED, ALL SPLICES AND COGS TO BE 500 LONG.

5.0 MAINTENANCE

- 5.1 IT IS CONSIDERED THAT THIS DESIGN IS SUITABLE FOR THE FOUNDATION CONDITIONS TO BE ENCOUNTERED AND WILL ADEQUATELY CONTROL ANY CRACKING OF BRICKWORK AND CONCRETE, SUBJECT TO THE MAINTENANCE PROCEDURES BELOW BEING SATISFIED.
- 5.2 BUILDER TO ENSURE THAT CLIENT BE INFORMED OF NECESSITY TO MAINTAIN DRAINS IN GOOD WORKING ORDER AT ALL TIMES.
- 5.3 BUILDER TO ADVISE CLIENT TO CONSULT AN ENGINEER BEFORE PLANTING TREES OR SHRUBS WITHIN 2.5m, OR A DISTANCE EQUAL TO THE ANTICIPATED MAXIMUM HEIGHT OF THE TREE, OF THE BUILDING.
- 5.4 SITE TO BE MAINTAINED AS PER CSIRO INFORMATION PAMPHLET BTF 18 & STRUCTERRE'S CLAY FACT SHEET.
- 5.5 AS2870 AND 'CSIRO PAMPHLET BTF 18' COVER THE EXPECTED PERFORMANCE AND RESPONSIBILITIES OF ALL PARTIES WITH THE USE OF THESE DETAILS.

6.0 QUALITY CONTROL PROGRAM REQUIREMENTS

- 6.1 WORKING SLAB DEPTH AS INDICATED ON THE DETAIL. SLAB DEPTH TOLERANCE ALLOWABLE -10mm, +15mm.
- 6.2 WHERE DEPTH IS BELOW NOMINATED DEPTH, MAX AREA ALLOWED TO BE ≤ 5% OF THE TOTAL AREA.
- 6.3 DEPTH TESTING LOCATIONS TO BE NO CLOSER THAN 1000mm APART.
- 6.4 SLAB DEPTH IS TO BE PART OF A QUALITY CONTROL INSPECTION REGIME.
- 6.5 SLAB AND FOOTING CAN BE POURED MONOLITHICALLY IF DESIRED.

DATE LAST MODIFIED - 21/09/21



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PROJECT : LOT 280 ATTADALE AV DARCH

CLIENT : PARCEL DARCH PTY LTD

SCALE 1:20

DATE 16/11/22

APPROVED

## EXPLANATORY NOTES & STANDARD RECOMMENDATIONS - EQUIVALENT CLASS SITES (Sheet 1 of 2)

### GENERAL

1. THE EXPLANATORY NOTES AND THE STANDARD RECOMMENDATIONS ARE TO BE READ IN CONJUNCTION WITH THE SITE CLASSIFICATION REPORT.
2. ALL REFERRED STANDARDS TO BE THE CURRENT VERSION AT THE TIME OF THE CONSTRUCTION.
3. THE PURPOSE OF THE SITE CLASSIFICATION REPORT IS TO CLASSIFY THE SITE IN ACCORDANCE WITH AS2870 "RESIDENTIAL SLABS AND FOOTING". IT IS NOT INTENDED FOR ANY OTHER PURPOSE, INCLUDING SOLE INFORMATION IN THE PROVISION OF A QUOTATION FOR SITE WORKS. IT IS RECOMMENDED OTHER PARTIES TO PERFORM THEIR OWN INVESTIGATION FOR QUOTATION PURPOSES.
4. THE SITE CLASSIFICATION REPORT WILL INCLUDE BUT IS NOT LIMITED TO:
  - a. THE SITE CLASSIFICATION IN ACCORDANCE WITH AS2870 "RESIDENTIAL SLABS AND FOOTING",
  - b. A WIND CLASSIFICATION IN ACCORDANCE WITH AS4055 "WIND LOADS FOR HOUSING",
  - c. A COASTAL CORROSION CLASSIFICATION,
  - d. ADDITIONAL EARTHWORK RECOMMENDATIONS WHERE APPLICABLE,
  - e. STANDARD FOOTING DESIGN FOR SINGLE STOREY SLAB ON GROUND CONSTRUCTION.
5. THE SITE CLASSIFICATION IS BASED ON THE SITE AS PRESENTED AT THE TIME OF THE ASSESSMENT. THE SITE CLASSIFICATION AND RECOMMENDATIONS INCLUDED IN THE REPORT ARE SUBJECT TO SATISFACTORY COMPLETION OF RECOMMENDED EARTHWORKS, (REFER NOTE 17) AS A MINIMUM. SHOULD CHANGES TO THE SITE OCCUR, OTHER THAN THE RECOMMENDATIONS INCLUDED IN THE SITE CLASSIFICATION REPORT, REFER BACK TO THIS OFFICE FOR REVIEW OF CLASSIFICATION AND FOOTING DESIGN.
6. ALL RECOMMENDATIONS GIVEN IN THE SITE CLASSIFICATION REPORT HAVE BEEN DETERMINED FROM THE INFORMATION THAT WAS AVAILABLE TO THIS OFFICE AT THE TIME OF INVESTIGATION. IF FURTHER INFORMATION RELATING TO THE SITE OR DEVELOPMENT BECOMES AVAILABLE, THESE RECOMMENDATIONS ARE SUBJECT TO CHANGE.
7. EQUIVALENT CLASS SITES ARE BASED ON DIFFERENTIAL SURFACE MOVEMENT ARISING FROM ISSUE OTHER THAN SHRINK-SWELL (REACTIVITY) ONLY. THESE MAY INCLUDE SETTLEMENT AND/OR CONSOLIDATION THAT MAY OCCUR AS A RESULT OF THE UNDERLYING GROUND CONDITIONS.
8. BOREHOLES EXCAVATED REVEAL THE SOIL PROFILE AT THE BOREHOLE LOCATION ONLY. FROM THIS, IT IS INFERRED THAT THESE ARE THE SOIL CONDITIONS OVER THE SITE. VARIATIONS CAN OCCUR WHICH MAY NOT HAVE BEEN DETECTED AT THE INVESTIGATION STAGE. ANY ANOMALIES SHOULD BE REFERRED BACK TO THIS OFFICE FOR A REASSESSMENT.
9. A NUMBER OF BOREHOLES ARE CONDUCTED ACROSS THE SITE TO DETERMINE THE SOIL PROFILES AND PROVIDE A REPRESENTATION OF THE GROUND CONDITIONS.
10. THIS REPORT IS FOR STRUCTERRE ONLY TO USE IN DESIGN. ANY DESIGN BY ANYONE ELSE FOR ANY STRUCTURE MUST BE SPECIFICALLY APPROVED BY STRUCTERRE. IF USED BY ANYONE ELSE FOR ANYTHING OTHER THAN A STRUCTERRE DESIGN OR STRUCTURE, STRUCTERRE TAKES NO RESPONSIBILITY.

### SAND PAD

11. THE RECOMMENDED FOOTING DESIGN IS ONLY TO BE USED IN CONJUNCTION WITH THE RECOMMENDED SAND PAD AND EARTHWORKS AS OUTLINED IN THE SITE CLASSIFICATION REPORT.
12. THE RECOMMENDATIONS FOR THE SAND PAD IS FOR STRUCTURAL PURPOSES ONLY, AND DOES NOT PROVIDE THE MINIMUM FINISHED PAD LEVEL IN RELATION TO FLOOD LEVELS OR DEPTH TO GROUNDWATER. SHOULD THE TEST BE LOCATED IN A LOW LYING OR FLOOD PRONE AREA, REFER TO THE LOCAL AUTHORITY FOR MINIMUM BUILDING HEIGHT.
13. IMPORTED FILL FOR USE AS A SAND PAD TO BE IN ACCORDANCE TO AS 3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS" WHICH INCLUDES BUT IS NOT LIMITED TO: BE FREE FROM ANY DELETERIOUS MATERIALS INCLUDING ORGANICS, (ROOTS, STUMPS, GRASSES, DECOMPOSED ORGANICS - PEAT, TIMBER, ETC), BUILDING RUBBLE, GLASS, PLASTICS OR WASTE MATERIAL. THE FINES CONTENT, (PERCENTAGE PASSING THE 0.075mm SIEVE) TO BE LESS THAN 5% BY MASS.
14. ON SAND SITES A SAND PAD IS NOT REQUIRED STRUCTURALLY, HOWEVER IF ROCK IS ENCOUNTERED, A MINIMUM 200mm SAND PAD BEYOND THE BASE OF FOOTING IS RECOMMENDED.
15. SAND PAD TO EXTEND BEYOND BUILDING AREA A MINIMUM OF 1.5 TIMES THE PAD DEPTH.
16. RECOMMENDED SAND PAD DEPTH IS ABOVE THE HIGHEST POINT, UNLESS OTHERWISE SPECIFIED.
17. IT IS REQUIRED THAT EARTHWORKS CONFIRM THAT THE MINIMUM DEPTH OF RECOMMENDED SAND PAD IS ACHIEVED.

### EARTHWORKS

18. RECOMMENDED EARTHWORKS TO BE CONDUCTED IN ACCORDANCE WITH AS3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS", AND TO INCLUDE BUT NOT BE LIMITED TO:
  - a. REMOVAL OF ALL VEGETATION, TOPSOILS, UNCONTROLLED FILLS AND OTHER DELETERIOUS MATERIALS FROM THE BUILDING AREA,
  - b. GRUBBING OUT OF ANY TREES ENSURING THE REMAINING HOLES ARE BACKFILLED WITH CLEAN COMPACTED SAND,
  - c. NOTIFYING THE ENGINEER OF ANY UNUSUAL FEATURE OR DISCREPANCY THAT MAY BECOME EVIDENT DURING EARTHWORKS, PRIOR TO PROCEEDING,
  - d. COMPACTING TO MEET THE REQUIREMENTS AS OUTLINED IN AS 3798 TABLE 5.1.
19. FILL MATERIAL (WHICH IS NOT ALWAYS APPARENT AT THE INITIAL INVESTIGATION STAGE) IS TO BE DEALT WITH AS FOLLOWS:
  - a. IF IT IS CERTIFIED BY OTHERS IT CAN REMAIN.
  - b. IF IT IS NOT CERTIFIED WILL REQUIRE REMOVAL DOWN TO NATURAL GROUND OR VERIFIED. ANY SAND CAN BE REUSED.
  - c. IF A PAD HAS ALREADY BEEN CONSTRUCTED, THE SITE CLASSIFICATION IS NOT CERTIFICATION OF THE PAD. CONTACT THIS OFFICE SHOULD A SAND PAD CERTIFICATION BE REQUIRED.
20. ANY ORGANIC MATTER OR ROOTS ENCOUNTERED, WHICH IS BEYOND WHAT IS NORMALLY CONSIDERED ACCEPTABLE IS TO BE REMOVED. THIS WILL NECESSITATE RAKING THE SITE TO REMOVE ORGANIC MATERIAL, TURNING THE SITE OVER AND RE-COMPACTING TO A MINIMUM.

### RETAINING WALLS

21. AN ASSESSMENT OF ANY EXISTING OR PROPOSED RETAINING WALLS HAS NOT BEEN CONDUCTED AS PART OF THIS SITE CLASSIFICATION REPORT.
22. IF THE PROPOSED BUILDING IS TO BE LOCATED CLOSER THAN THE HEIGHT OF THE RETAINING WALL, THIS MAY PLACE ADDITIONAL LOADS ON THE WALL THAT WERE NOT INITIALLY DESIGNED FOR. AN INSPECTION OF THE STRUCTURAL INTEGRITY OF THE RETAINING WALL WILL BE REQUIRED TO PROVIDE CERTIFICATION AND/OR RECOMMENDATIONS PRIOR TO ANY CONSTRUCTION. PLEASE REFER BACK TO THIS OFFICE FOR ASSISTANCE.  
STORMWATER DRAINAGE
23. UNLESS OTHERWISE SPECIFIED, ALL SOAKWELLS ARE TO BE LOCATED THE DEPTH OF THE SOAKWELL AWAY FROM THE BUILDING OR SETBACK A MINIMUM OF 1200mm, WHICHEVER IS GREATER, UNLESS SPECIFIED OTHERWISE. PLEASE REFER BACK TO THIS OFFICE IF THE SETBACK CANNOT BE ACHIEVED.

DOC# SS001 - 1.1.10 SCR EQUIVALENT V1.1 - AUGUST 2021



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PROJECT :  
LOT 280 ATTADALE AV DARCH

CLIENT : PARCEL DARCH PTY LTD

SCALE 1:20

DATE 16/11/22

APPROVED

## EXPLANATORY NOTES & STANDARD RECOMMENDATIONS - EQUIVALENT CLASS SITES (Sheet 2 of 2)

### WIND CLASSIFICATION

24. WIND CLASSIFICATION IS GIVEN FOR THE EXPECTED CONDITION 5 YEARS HENCE. THIS CLASSIFICATION IS LIMITED TO BUILDINGS CLASSES 1 AND 10, WHICH HAVE THE FOLLOWING LIMITATION (AS PER AS4055):

- a. MAXIMUM DISTANCE FROM THE GROUND LEVEL TO THE UNDERSIDE OF EAVES SHALL NOT EXCEED 6.0m,
- b. MAXIMUM DISTANCE FROM GROUND LEVEL TO THE HIGHEST POINT OF THE ROOF, EXCLUDING CHIMNEYS, SHALL NOT EXCEED 8.5m,
- c. THE ROOF PITCH SHALL NOT EXCEED 35 °,
- d. THE WIDTH, EXCLUDING EAVES, SHALL NOT EXCEED 16.0m AND THE LENGTH SHALL NOT EXCEED 5x THE WIDTH.

IF THE BUILDING FALLS OUTSIDE OF THESE LIMITATIONS, THE STATED WIND CLASSIFICATION DOES NOT APPLY. REFER BACK TO THIS OFFICE FOR A REVISED WIND CLASSIFICATION.

### ENVIRONMENTAL

25. NO ENVIRONMENTAL ASSESSMENT OF THIS SITE HAS BEEN UNDERTAKEN. SHOULD AN ENVIRONMENTAL ASSESSMENT BE REQUIRED, PLEASE CONTACT THIS OFFICE.

### SEISMIC

26. RECOMMENDED FOOTING DETAILS ARE SUITABLE FOR SEISMIC CONDITIONS WITH AN EARTHQUAKE HAZARD FACTOR OF  $\leq 0.11$ . RECOMMENDED FOOTING DETAILS PROVIDED FOR SITES WITH AN EARTHQUAKE HAZARD FACTOR OF  $> 0.11$ , ARE NOT FOR CONSTRUCTION, BUT FOR COSTING PURPOSES ONLY. IT IS REQUIRED THAT A FULL SEISMIC DESIGN IS CONDUCTED.

### CORROSION CLASSIFICATION

27. THE CORROSION CLASSIFICATION HAS BEEN ASSESSED IN ACCORDANCE WITH AS3700.

DOC# SS001 - 1.1.10 SCR EQUIVALENT V1.1 - AUGUST 2021



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LOT 280 ATTADALE AV DARCH

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SCALE 1:20

DATE 16/11/22

APPROVED

A blue ink handwritten signature is written over the 'APPROVED' field.

**SITE CLASSIFICATION REPORT**  
CERTIFICATE 2595180

**CLIENT** PARCEL DARCH PTY LTD  
**JOB ADDRESS** LOT 281 ATTADALE AV DARCH  
**CLIENT JOB NO.**  
**OWNER**  
**STRUCTERRE JOB NO.** S1082668  
**DATE OF ASSESSMENT** 15/11/22

**SITE RECORD**

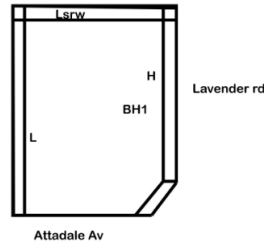


<b>SITE CLASSIFICATION</b>	<b>S - EQUIVALENT</b> <i>(in accordance with AS2870)</i>
<b>FOOTING DETAIL</b>	<b>CM3</b>
<b>SAND PAD</b>	<b>No sand pad required structurally</b>
<b>BUSHFIRE PRONE AREA</b>	<b>Not in a Bushfire Prone Area (see NOTE 2.)</b>
<b>CORROSION CLASSIFICATION</b>	<b>R1</b> <i>(Durability Class in accordance with AS3700)</i>
<b>WIND CLASSIFICATION</b>	<b>N1</b> <i>(in accordance with AS4055)</i>
<b>-TERRAIN CATEGORY</b>	<b>3</b>
<b>-TOPOGRAPHIC</b>	<b>T0</b>
<b>-SHIELDING</b>	<b>Full Shielding</b>

## SOIL PROFILE

BOREHOLE 1: 0 - 1800 FILL sand with artificial material trace limestone gravel - grey; 1800 end of hole.

## APPROXIMATE BOREHOLE LOCATIONS



### NOTE 1 Explanatory Notes & Standard Recommendations

This site classification report must be read in conjunction with the applicable Explanatory Notes & Standard Recommendations. For A Class sites, refer to the Explanatory Notes and Standard Recommendations for Stable (A Class) Sites, version 1.0 July 2018. For S, M, H1, H2 & E Class sites, refer to the Explanatory Notes and Standard Recommendations for Reactive (S, M, H1, H2 & E Class) Sites version 1.0 July 2018. For Equivalent Class sites, refer to the Explanatory Notes and Standard Recommendations for Equivalent Class Sites, version 1.0 July 2018.

### NOTE 2 Bushfire - Prone Area

The Site may be situated in a bush fire prone area in accordance with the Department of Fire and Emergency Services (DFES) Bushfire Prone Area Map (Reference: <http://www.dfes.wa.gov.au/regulationandcompliance/bushfireproneareas/>) the current version at the time of this assessment. A Bushfire Attack Level (BAL) assessment may be required for this site, please confirm with the local authority. Should you require an assessment, please contact this Office.

## ADDITIONAL NOTES / REQUIREMENTS

### Site Condition

At the time of inspection the site was considered to be level and cleared. For specific levels of this site or topographical features, please refer to a professional site survey.

### Structerre Geotech Reference

The Site Classification is based on any remedial works being successfully completed as outlined in the Structerre Geotechnical Report J380185 dated 02/04/2021. The footing details are subject to the recommendations being completed to an acceptable level as outlined in this report, if applicable.

### Internal Thickenings


Internal thickenings are required for the proposed residence as specified on the recommended footing detail. Please provide a copy of the architectural drawings to this Office, so that the internal thickenings can be designed and drawn in accordance with AS2870.

### Internal Thickening Inspection

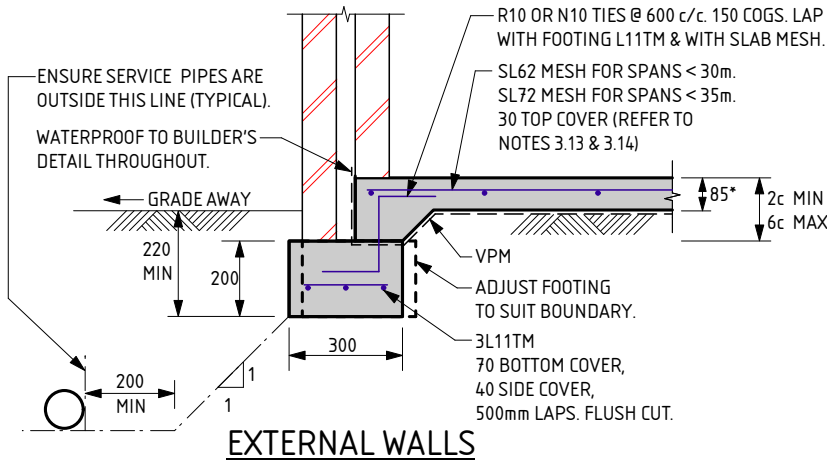
This detail is subject to an internal thickening layout inspection. It is recommended that an inspection be conducted by a representative from this Office prior to concrete pour.

-- END OF REPORT --

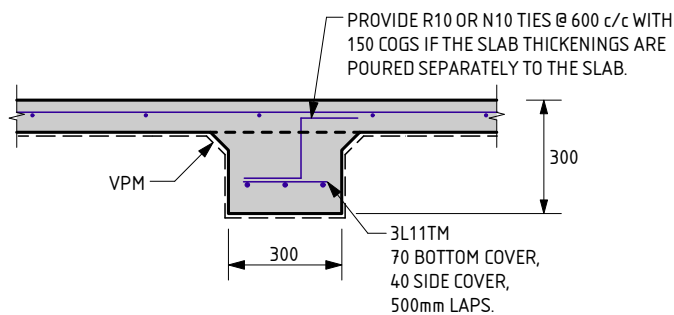
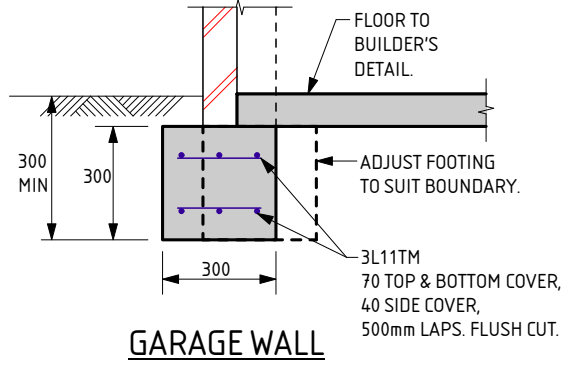
Signed:

  
Gervase Purich  
Chief Executive Officer

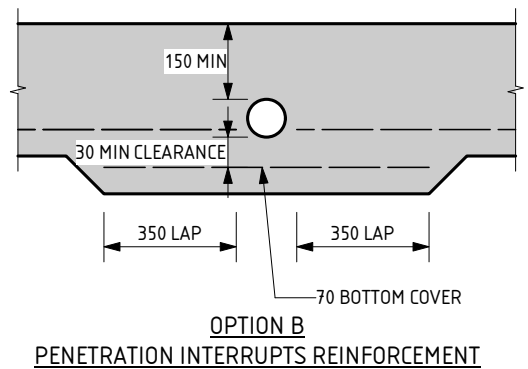
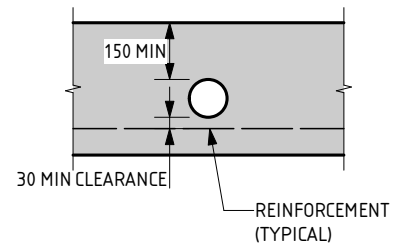
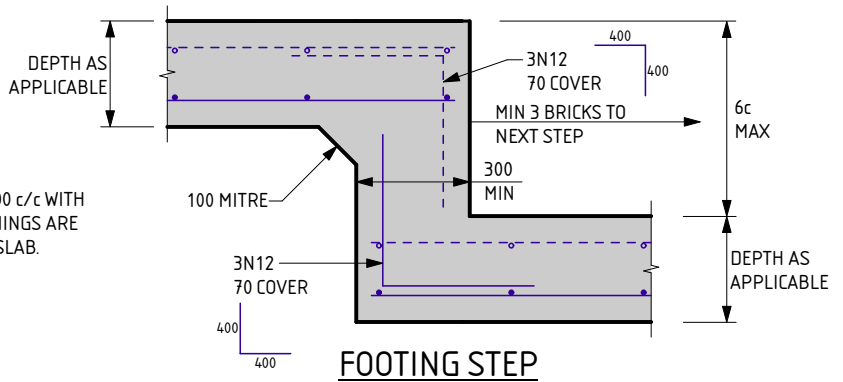
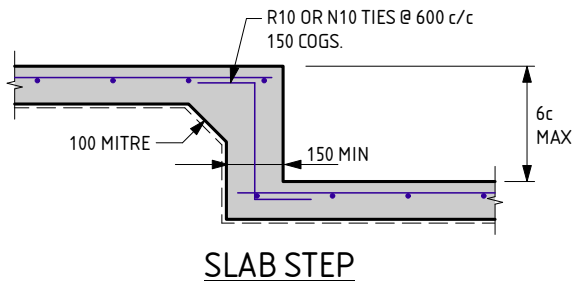




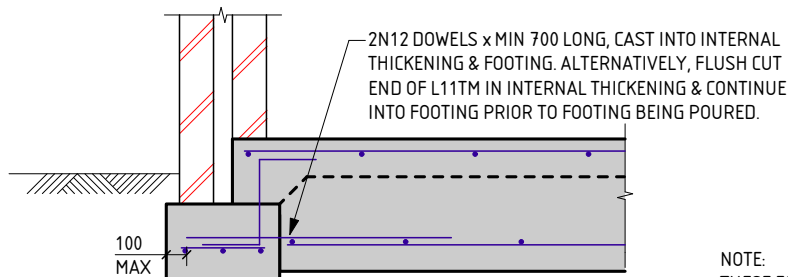
\* 100mm SLAB MAY BE INSTALLED INSTEAD OF 85mm.  
IF 100mm SLAB USED, MESH TO BE:  
SL62 MESH FOR SPANS < 25m.  
SL72 MESH FOR SPANS < 30m.  
SL82 MESH FOR SPANS < 35m.



REFER TO STRUCterre'S DRAWINGS FOR PLACEMENT OF INTERNAL THICKENINGS. LOCATIONS TO BE CONFIRMED ON SITE BY STRUCterre PRIOR TO CONCRETE POUR.



**SERVICE PIPE DIAGRAM**  
- MAXIMUM PENETRATION SIZE TO BE Ø150.



NOTE:  
THESE FOOTING DETAILS ARE TO BE READ IN CONJUNCTION WITH THE REACTIVE SITE NOTES.

THE APPROVED SIGNATURE ON THIS DETAIL ENDORSES ITS USE FOR SINGLE STOREY BUILDINGS ON BUILDING PLATFORMS WITH UP TO 11mm OF SURFACE MOVEMENT.  
DATE LAST MODIFIED - 20/09/18

**CM3**  
CAVITY MASONRY

THIS DETAIL IS EQUIVALENT TO  
STRUCterre FOOTING DETAIL C4.0

**STRUCterre**  
consulting engineers

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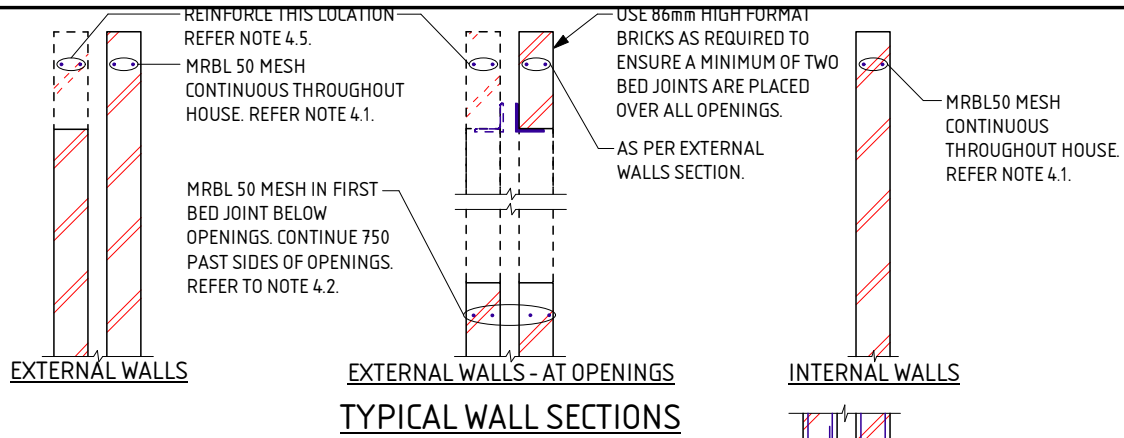
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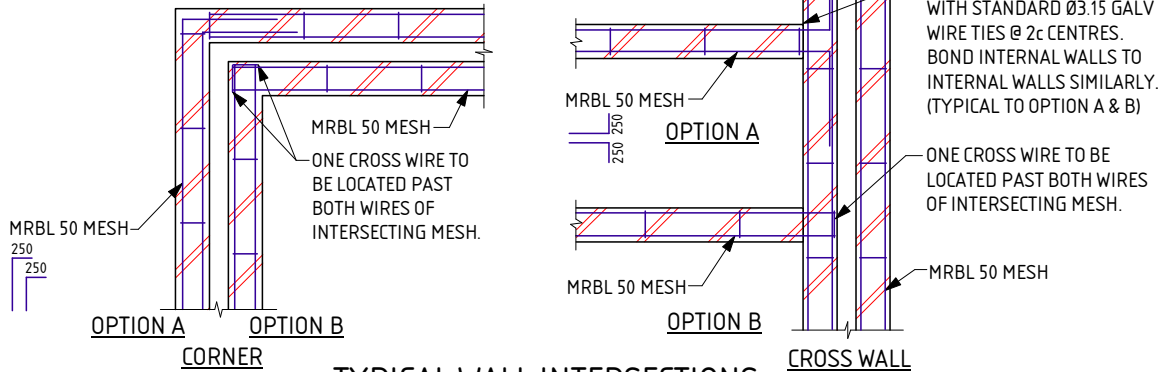
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APPROVED



TYPICAL WALL SECTIONS



TYPICAL WALL INTERSECTIONS

REACTIVE SITE NOTES FOR CM1 - CM7

THESE NOTES ARE TO BE READ IN CONJUNCTION WITH THE ATTACHED FOOTING DETAILS.

1.0 SITE CLASSIFICATION

- 1.1 REFER TO ATTACHED CERTIFICATE OF INSPECTION FOR SITE CLASSIFICATION. THE SITE CLASSIFICATION NOTED, IS AS DEFINED IN AS2870 - RESIDENTIAL SLABS & FOOTINGS.
- 1.2 THE SITE CLASSIFICATION HAS BEEN DETERMINED BY INVESTIGATION OF THE SITE, AS PER THE ATTACHED CERTIFICATE OF INSPECTION. REFER TO THE ATTACHED CERTIFICATE FOR ANY SPECIAL REQUIREMENTS.

2.0 EARTHWORKS

- 2.1 SAND PAD IF APPLICABLE TO BE AS PER SITE INSPECTION REPORT.
- 2.2 EARTHWORKS SHALL INCLUDE, BUT NOT BE LIMITED TO:
  - a) REMOVE ALL ORGANIC MATERIAL FROM THE PAD AREA.
  - b) REMOVE ALL RUBBISH AND DELETERIOUS FILL (SUCH AS CLAY FILL) FROM THE PAD AREA.
  - c) GRUB OUT ANY TREES WHERE NECESSARY AND ENSURE THE REMAINING HOLES ARE FILLED AND COMPACTED SATISFACTORILY WITH SAND.
  - d) NOTIFY THE ENGINEER OF ANY UNUSUAL FEATURES OR DISCREPANCIES WHICH MAY BECOME EVIDENT DURING EARTHWORKS, PRIOR TO PROCEEDING.
- 2.3 ANY PREDOMINANT ROCK IN THE HOUSE PAD AREAS IS TO BE INSPECTED BY THE ENGINEER.
- 2.4 ANY CUT TO THE SITE, OTHER THAN TOPSOIL STRIPPING, WILL REQUIRE THE PREPARED CUT BASE TO BE INSPECTED AND APPROVED BY THE ENGINEER.
- 2.5 MAXIMUM SAND PAD DEPTH NOT TO EXCEED 150% OF MINIMUM PAD DEPTH OR 2000mm WITHOUT THE ENGINEER'S APPROVAL.
- 2.6 IF APPLICABLE SAND FILL TO BE CLEAN WELL DRAINED, WITH MAX FINES (PARTICLES UP TO 0.075mm) CONTENT OF 5%. SAND TO BE COMPACTED TO A MIN 6 BLOWS/300mm FOR THE DEPTH OF THE PAD OR TO DISCRETION OF ENGINEER.
- 2.7 COMPACTION TESTING TO BE PERFORMED BY STRUCTERRE.

3.0 FOOTINGS & SLABS

- 3.1 FOOTINGS ARE TO BE PLACED DIRECTLY INTO SAND PAD OF SPECIFIED THICKNESS.
- 3.2 ALL STORMWATER MUST BE DISCHARGED INTO COUNCIL DRAINS OR A MINIMUM OF 3m FOR S CLASS SITES, 4m FOR M CLASS SITES AND 5m FOR H1 & H2 CLASS SITES, AWAY FROM THE RESIDENCE AND/OR ADJACENT BUILDINGS INTO SOAKWELLS. IF THIS RESTRICTION CANNOT BE ACHIEVED REFER BACK TO THIS OFFICE FOR AN ALTERNATIVE DESIGN. WHERE THE SITE HAS BEEN CLASSIFIED AS AN 'EQUIVALENT' SITE CLASSIFICATION, REFER TO 'EXPLANATORY NOTES & STANDARD RECOMMENDATIONS - EQUIVALENT CLASS SITES' FOR STORMWATER DRAINAGE REQUIREMENTS UNLESS SPECIFIED OTHERWISE.
- 3.3 EXCAVATIONS FOR ALL SERVICE PIPES NOT TO UNDERMINE FOOTINGS. IF UNDERMINING IS LIKELY TO OCCUR, CONTACT THE ENGINEER PRIOR TO PROCEEDING.
- 3.4 WHERE PLUMBING PIPES PASS THROUGH FOOTINGS OR SLAB, SPECIFIED TOTAL THICKNESS OF ALL CONCRETE IS ALWAYS TO BE MAINTAINED.
- 3.5 SETDOWN AT WET AREA TO ARCHITECTURAL REQUIREMENT (50mm MAX). MAINTAIN 85mm SLAB THICKNESS. FOLD MESH DOWN TO MAINTAIN COVER, PLACE DIAGONAL BARS AT RE-ENTRANT CORNER FOR STEPS OVER 30mm. BARS TO BE N12x 1200 LONG.
- 3.6 REINFORCEMENT SHALL BE IN ACCORDANCE WITH THE FOLLOWING STANDARDS;
 

L	INDICATES PLAIN OR DEFORMED WIRE R500L OR D500L TO AS/NZS 4671.
SL	INDICATES DEFORMED SQUARE MESH D500L TO AS/NZS 4671.
N	INDICATES DEFORMED BARS D500N TO AS/NZS 4671.
TM SUFFIX	INDICATES TRENCH MESH USING DEFORMED BARS D500L TO AS/NZS 4671.

 ALL STEELWORK TO BE TREATED IN ACCORDANCE WITH TABLE 3.4.4.4 "CORROSION PROTECTION" OF THE BUILDING CODE OF AUSTRALIA.
- 3.7 LAP ALL MESH TWO TRANSVERSE WIRES PLUS 25mm OR TO MANUFACTURER'S SPECIFICATIONS.

3.8 CONCRETE TO CONFORM WITH AS 3600.

- 3.9 BLENDED CEMENT TO CONFORM WITH AS1317.
- 3.10 ALL CONCRETE TO BE N20/20/100.
- 3.11 FOR ISOLATED PAD FOOTINGS, REFER BACK TO ENGINEER.
- 3.12 FOOTING POSITION UNDER BRICKWORK CAN BE ADJUSTED TO SUIT PARAPET WALLS.
- 3.13 FOR SLAB SPANS > 35m REFER TO ENGINEER FOR MESH SIZE.
- 3.14 IF THE LENGTH TO WIDTH RATIO OF THE GROUND SLAB OR ANY PART OF THE GROUND SLAB EXCEEDS 3:1, REFER BACK TO THIS OFFICE FOR MESH SIZE.
- 3.15 IF POLISHED (OR HONED) CONCRETE FINISHES ARE DESIRED, THIS DESIGN SHOULD BE REFERRED BACK TO THIS OFFICE FOR CONSIDERATION, AS IT IS NOT THE INTENTION OF THESE DESIGNS FOR SUCH FINISHES.
- 3.16 PLACE SLAB THICKENING (300 WIDE x 250 DEEP) UNDER INTERNAL WALLS (90 OR 110) HIGHER THAN 3.7m WHERE GREATER THAN 1m FROM INTERNAL THICKENING. PROVIDE SAME TRENCH MESH AS INTERNAL THICKENING DETAIL, WHERE REQUIRED.
- 3.17 PIERCING THE VAPOUR BARRIER (VPM) USING LEVELLING PINS ON FREE DRAINING SAND PADS IS ALLOWABLE.
- 3.18 CURE SLAB AS DETERMINED BY ENGINEER.
- 3.19 THE SLAB IS CONSIDERED SUITABLE AS A PHYSICAL BARRIER AGAINST INGRESS OF TERMITES. IF THE FOOTING AND SLAB IS PLACED IN 2 POURS, THE PHYSICAL BARRIER ALSO INCLUDES THE FOOTING AND SLAB JOINT.
- 3.20 THE FOOTING DETAILS HAVE BEEN DESIGNED IN ACCORDANCE WITH AS3600 AND SECTION 4 OF AS2870.

4.0 MASONRY

- 4.1 PLACE MRBL50 MESH IN TOP BED JOINT CONTINUOUS THROUGHOUT ALL BRICKWORK.
- 4.2 REINFORCE BED JOINT BELOW WINDOW SILLS WITH MRBL50 MESH. CONTINUE 750 PAST SIDES OF OPENING.
- 4.3 LAP 250 AT SPLICES AND AROUND CORNERS AND COG 250 INTO INTERSECTING WALLS. 20mm COVER TO ALL WIRES.
- 4.4 ALL MESH IN EXTERNAL FACE OF EXTERNAL LEAF TO BE GALVANIZED TO AS/NZS 4680.
- 4.5 WHEN BRICKWORK EXTENDS ABOVE OPENINGS TO EXTERNAL LEAF REINFORCE AS PER CLAUSE 4.1, 4.2 & 4.3.
- 4.6 TYPICAL WALL SECTIONS ARE SHOWN FOR 28C INTERNAL CEILINGS. WHERE THERE ARE 3 OR MORE BED JOINTS OVER THE OPENING, REINFORCE BED JOINT OVER OPENING WITH MRBL50 MESH. CONTINUE 750 PAST SIDE OF OPENING.
- 4.7 ALL PERPENDS TO BE FULLY MORTARED.
- 4.8 A BRICK COURSE, AS REFERRED TO IN THIS DOCUMENT IS STANDARD 86mm HIGH.
- 4.9 2L6 WIRES MAY BE USED AS AN ALTERNATIVE TO THE MRBL50 MESH. WHERE L6 WIRES ARE USED, ALL SPLICES AND COGS TO BE 500 LONG.

5.0 MAINTENANCE

- 5.1 IT IS CONSIDERED THAT THIS DESIGN IS SUITABLE FOR THE FOUNDATION CONDITIONS TO BE ENCOUNTERED AND WILL ADEQUATELY CONTROL ANY CRACKING OF BRICKWORK AND CONCRETE, SUBJECT TO THE MAINTENANCE PROCEDURES BELOW BEING SATISFIED.
- 5.2 BUILDER TO ENSURE THAT CLIENT BE INFORMED OF NECESSITY TO MAINTAIN DRAINS IN GOOD WORKING ORDER AT ALL TIMES.
- 5.3 BUILDER TO ADVISE CLIENT TO CONSULT AN ENGINEER BEFORE PLANTING TREES OR SHRUBS WITHIN 2.5m, OR A DISTANCE EQUAL TO THE ANTICIPATED MAXIMUM HEIGHT OF THE TREE, OF THE BUILDING.
- 5.4 SITE TO BE MAINTAINED AS PER CSIRO INFORMATION PAMPHLET BTF 18 & STRUCTERRE'S CLAY FACT SHEET.
- 5.5 AS2870 AND 'CSIRO PAMPHLET BTF 18' COVER THE EXPECTED PERFORMANCE AND RESPONSIBILITIES OF ALL PARTIES WITH THE USE OF THESE DETAILS.

6.0 QUALITY CONTROL PROGRAM REQUIREMENTS

- 6.1 WORKING SLAB DEPTH AS INDICATED ON THE DETAIL. SLAB DEPTH TOLERANCE ALLOWABLE -10mm, +15mm.
- 6.2 WHERE DEPTH IS BELOW NOMINATED DEPTH, MAX AREA ALLOWED TO BE ≤ 5% OF THE TOTAL AREA.
- 6.3 DEPTH TESTING LOCATIONS TO BE NO CLOSER THAN 1000mm APART.
- 6.4 SLAB DEPTH IS TO BE PART OF A QUALITY CONTROL INSPECTION REGIME.
- 6.5 SLAB AND FOOTING CAN BE Poured MONOLITHICALLY IF DESIRED.

DATE LAST MODIFIED - 21/09/21



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PROJECT :  
LOT 281 ATTADALE AV DARCH

CLIENT : PARCEL DARCH PTY LTD

SCALE 1:20

DATE 16/11/22

APPROVED

# EXPLANATORY NOTES & STANDARD RECOMMENDATIONS - EQUIVALENT CLASS SITES (Sheet 1 of 2)

## GENERAL

1. THE EXPLANATORY NOTES AND THE STANDARD RECOMMENDATIONS ARE TO BE READ IN CONJUNCTION WITH THE SITE CLASSIFICATION REPORT.
2. ALL REFERRED STANDARDS TO BE THE CURRENT VERSION AT THE TIME OF THE CONSTRUCTION.
3. THE PURPOSE OF THE SITE CLASSIFICATION REPORT IS TO CLASSIFY THE SITE IN ACCORDANCE WITH AS2870 "RESIDENTIAL SLABS AND FOOTING". IT IS NOT INTENDED FOR ANY OTHER PURPOSE, INCLUDING SOLE INFORMATION IN THE PROVISION OF A QUOTATION FOR SITE WORKS. IT IS RECOMMENDED OTHER PARTIES TO PERFORM THEIR OWN INVESTIGATION FOR QUOTATION PURPOSES.
4. THE SITE CLASSIFICATION REPORT WILL INCLUDE BUT IS NOT LIMITED TO:
  - a. THE SITE CLASSIFICATION IN ACCORDANCE WITH AS2870 "RESIDENTIAL SLABS AND FOOTING",
  - b. A WIND CLASSIFICATION IN ACCORDANCE WITH AS4055 "WIND LOADS FOR HOUSING",
  - c. A COASTAL CORROSION CLASSIFICATION,
  - d. ADDITIONAL EARTHWORK RECOMMENDATIONS WHERE APPLICABLE,
  - e. STANDARD FOOTING DESIGN FOR SINGLE STOREY SLAB ON GROUND CONSTRUCTION.
5. THE SITE CLASSIFICATION IS BASED ON THE SITE AS PRESENTED AT THE TIME OF THE ASSESSMENT. THE SITE CLASSIFICATION AND RECOMMENDATIONS INCLUDED IN THE REPORT ARE SUBJECT TO SATISFACTORY COMPLETION OF RECOMMENDED EARTHWORKS, (REFER NOTE 17) AS A MINIMUM. SHOULD CHANGES TO THE SITE OCCUR, OTHER THAN THE RECOMMENDATIONS INCLUDED IN THE SITE CLASSIFICATION REPORT, REFER BACK TO THIS OFFICE FOR REVIEW OF CLASSIFICATION AND FOOTING DESIGN.
6. ALL RECOMMENDATIONS GIVEN IN THE SITE CLASSIFICATION REPORT HAVE BEEN DETERMINED FROM THE INFORMATION THAT WAS AVAILABLE TO THIS OFFICE AT THE TIME OF INVESTIGATION. IF FURTHER INFORMATION RELATING TO THE SITE OR DEVELOPMENT BECOMES AVAILABLE, THESE RECOMMENDATIONS ARE SUBJECT TO CHANGE.
7. EQUIVALENT CLASS SITES ARE BASED ON DIFFERENTIAL SURFACE MOVEMENT ARISING FROM ISSUE OTHER THAN SHRINK-SWELL (REACTIVITY) ONLY. THESE MAY INCLUDE SETTLEMENT AND/OR CONSOLIDATION THAT MAY OCCUR AS A RESULT OF THE UNDERLYING GROUND CONDITIONS.
8. BOREHOLES EXCAVATED REVEAL THE SOIL PROFILE AT THE BOREHOLE LOCATION ONLY. FROM THIS, IT IS INFERRED THAT THESE ARE THE SOIL CONDITIONS OVER THE SITE. VARIATIONS CAN OCCUR WHICH MAY NOT HAVE BEEN DETECTED AT THE INVESTIGATION STAGE. ANY ANOMALIES SHOULD BE REFERRED BACK TO THIS OFFICE FOR A REASSESSMENT.
9. A NUMBER OF BOREHOLES ARE CONDUCTED ACROSS THE SITE TO DETERMINE THE SOIL PROFILES AND PROVIDE A REPRESENTATION OF THE GROUND CONDITIONS.
10. THIS REPORT IS FOR STRUCTERRE ONLY TO USE IN DESIGN. ANY DESIGN BY ANYONE ELSE FOR ANY STRUCTURE MUST BE SPECIFICALLY APPROVED BY STRUCTERRE. IF USED BY ANYONE ELSE FOR ANYTHING OTHER THAN A STRUCTERRE DESIGN OR STRUCTURE, STRUCTERRE TAKES NO RESPONSIBILITY.

## SAND PAD

11. THE RECOMMENDED FOOTING DESIGN IS ONLY TO BE USED IN CONJUNCTION WITH THE RECOMMENDED SAND PAD AND EARTHWORKS AS OUTLINED IN THE SITE CLASSIFICATION REPORT.
12. THE RECOMMENDATIONS FOR THE SAND PAD IS FOR STRUCTURAL PURPOSES ONLY, AND DOES NOT PROVIDE THE MINIMUM FINISHED PAD LEVEL IN RELATION TO FLOOD LEVELS OR DEPTH TO GROUNDWATER. SHOULD THE TEST BE LOCATED IN A LOW LYING OR FLOOD PRONE AREA, REFER TO THE LOCAL AUTHORITY FOR MINIMUM BUILDING HEIGHT.
13. IMPORTED FILL FOR USE AS A SAND PAD TO BE IN ACCORDANCE TO AS 3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS" WHICH INCLUDES BUT IS NOT LIMITED TO: BE FREE FROM ANY DELETERIOUS MATERIALS INCLUDING ORGANICS, (ROOTS, STUMPS, GRASSES, DECOMPOSED ORGANICS - PEAT, TIMBER, ETC), BUILDING RUBBLE, GLASS, PLASTICS OR WASTE MATERIAL. THE FINES CONTENT, (PERCENTAGE PASSING THE 0.075mm SIEVE) TO BE LESS THAN 5% BY MASS.
14. ON SAND SITES A SAND PAD IS NOT REQUIRED STRUCTURALLY, HOWEVER IF ROCK IS ENCOUNTERED, A MINIMUM 200mm SAND PAD BEYOND THE BASE OF FOOTING IS RECOMMENDED.
15. SAND PAD TO EXTEND BEYOND BUILDING AREA A MINIMUM OF 1.5 TIMES THE PAD DEPTH.
16. RECOMMENDED SAND PAD DEPTH IS ABOVE THE HIGHEST POINT, UNLESS OTHERWISE SPECIFIED.
17. IT IS REQUIRED THAT EARTHWORKS CONFIRM THAT THE MINIMUM DEPTH OF RECOMMENDED SAND PAD IS ACHIEVED.

## EARTHWORKS

18. RECOMMENDED EARTHWORKS TO BE CONDUCTED IN ACCORDANCE WITH AS3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS", AND TO INCLUDE BUT NOT BE LIMITED TO:
  - a. REMOVAL OF ALL VEGETATION, TOPSOILS, UNCONTROLLED FILLS AND OTHER DELETERIOUS MATERIALS FROM THE BUILDING AREA,
  - b. GRUBBING OUT OF ANY TREES ENSURING THE REMAINING HOLES ARE BACKFILLED WITH CLEAN COMPACTED SAND,
  - c. NOTIFYING THE ENGINEER OF ANY UNUSUAL FEATURE OR DISCREPANCY THAT MAY BECOME EVIDENT DURING EARTHWORKS, PRIOR TO PROCEEDING,
  - d. COMPACTING TO MEET THE REQUIREMENTS AS OUTLINED IN AS 3798 TABLE 5.1.
19. FILL MATERIAL (WHICH IS NOT ALWAYS APPARENT AT THE INITIAL INVESTIGATION STAGE) IS TO BE DEALT WITH AS FOLLOWS:
  - a. IF IT IS CERTIFIED BY OTHERS IT CAN REMAIN.
  - b. IF IT IS NOT CERTIFIED WILL REQUIRE REMOVAL DOWN TO NATURAL GROUND OR VERIFIED. ANY SAND CAN BE REUSED.
  - c. IF A PAD HAS ALREADY BEEN CONSTRUCTED, THE SITE CLASSIFICATION IS NOT CERTIFICATION OF THE PAD. CONTACT THIS OFFICE SHOULD A SAND PAD CERTIFICATION BE REQUIRED.
20. ANY ORGANIC MATTER OR ROOTS ENCOUNTERED, WHICH IS BEYOND WHAT IS NORMALLY CONSIDERED ACCEPTABLE IS TO BE REMOVED. THIS WILL NECESSITATE RAKING THE SITE TO REMOVE ORGANIC MATERIAL, TURNING THE SITE OVER AND RE-COMPACTING TO A MINIMUM.

## RETAINING WALLS

21. AN ASSESSMENT OF ANY EXISTING OR PROPOSED RETAINING WALLS HAS NOT BEEN CONDUCTED AS PART OF THIS SITE CLASSIFICATION REPORT.
22. IF THE PROPOSED BUILDING IS TO BE LOCATED CLOSER THAN THE HEIGHT OF THE RETAINING WALL, THIS MAY PLACE ADDITIONAL LOADS ON THE WALL THAT WERE NOT INITIALLY DESIGNED FOR. AN INSPECTION OF THE STRUCTURAL INTEGRITY OF THE RETAINING WALL WILL BE REQUIRED TO PROVIDE CERTIFICATION AND/OR RECOMMENDATIONS PRIOR TO ANY CONSTRUCTION. PLEASE REFER BACK TO THIS OFFICE FOR ASSISTANCE.  
STORMWATER DRAINAGE
23. UNLESS OTHERWISE SPECIFIED, ALL SOAKWELLS ARE TO BE LOCATED THE DEPTH OF THE SOAKWELL AWAY FROM THE BUILDING OR SETBACK A MINIMUM OF 1200mm, WHICHEVER IS GREATER, UNLESS SPECIFIED OTHERWISE. PLEASE REFER BACK TO THIS OFFICE IF THE SETBACK CANNOT BE ACHIEVED.

DOC# SS001 - 1.1.10 SCR EQUIVALENT V1.1 - AUGUST 2021



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PROJECT :  
LOT 281 ATTADALE AV DARCH

CLIENT : PARCEL DARCH PTY LTD

SCALE 1:20

DATE 16/11/22

APPROVED

## EXPLANATORY NOTES & STANDARD RECOMMENDATIONS - EQUIVALENT CLASS SITES (Sheet 2 of 2)

### WIND CLASSIFICATION

24. WIND CLASSIFICATION IS GIVEN FOR THE EXPECTED CONDITION 5 YEARS HENCE. THIS CLASSIFICATION IS LIMITED TO BUILDINGS CLASSES 1 AND 10, WHICH HAVE THE FOLLOWING LIMITATION (AS PER AS4055):

- a. MAXIMUM DISTANCE FROM THE GROUND LEVEL TO THE UNDERSIDE OF EAVES SHALL NOT EXCEED 6.0m,
- b. MAXIMUM DISTANCE FROM GROUND LEVEL TO THE HIGHEST POINT OF THE ROOF, EXCLUDING CHIMNEYS, SHALL NOT EXCEED 8.5m,
- c. THE ROOF PITCH SHALL NOT EXCEED 35 °,
- d. THE WIDTH, EXCLUDING EAVES, SHALL NOT EXCEED 16.0m AND THE LENGTH SHALL NOT EXCEED 5x THE WIDTH.

IF THE BUILDING FALLS OUTSIDE OF THESE LIMITATIONS, THE STATED WIND CLASSIFICATION DOES NOT APPLY. REFER BACK TO THIS OFFICE FOR A REVISED WIND CLASSIFICATION.

### ENVIRONMENTAL

25. NO ENVIRONMENTAL ASSESSMENT OF THIS SITE HAS BEEN UNDERTAKEN. SHOULD AN ENVIRONMENTAL ASSESSMENT BE REQUIRED, PLEASE CONTACT THIS OFFICE.

### SEISMIC

26. RECOMMENDED FOOTING DETAILS ARE SUITABLE FOR SEISMIC CONDITIONS WITH AN EARTHQUAKE HAZARD FACTOR OF  $\leq 0.11$ . RECOMMENDED FOOTING DETAILS PROVIDED FOR SITES WITH AN EARTHQUAKE HAZARD FACTOR OF  $> 0.11$ , ARE NOT FOR CONSTRUCTION, BUT FOR COSTING PURPOSES ONLY. IT IS REQUIRED THAT A FULL SEISMIC DESIGN IS CONDUCTED.

### CORROSION CLASSIFICATION

27. THE CORROSION CLASSIFICATION HAS BEEN ASSESSED IN ACCORDANCE WITH AS3700.

DOC# SS001 - 1.1.10 SCR EQUIVALENT V1.1 - AUGUST 2021



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PROJECT :  
LOT 281 ATTADALE AV DARCH

CLIENT : PARCEL DARCH PTY LTD

SCALE 1:20

DATE 16/11/22

APPROVED

A handwritten signature in blue ink, appearing to be 'S. Darch', is written over the 'APPROVED' field.

**SITE CLASSIFICATION REPORT**  
CERTIFICATE 2595181

**CLIENT** PARCEL DARCH PTY LTD  
**JOB ADDRESS** LOT 282 ATTADALE AV DARCH  
**CLIENT JOB NO.**  
**OWNER**  
**STRUCTERRE JOB NO.** S1082669  
**DATE OF ASSESSMENT** 15/11/22

**SITE RECORD**

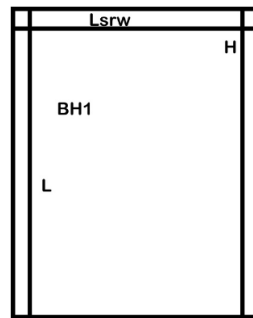


<b>SITE CLASSIFICATION</b>	<b>S - EQUIVALENT</b> <i>(in accordance with AS2870)</i>
<b>FOOTING DETAIL</b>	<b>CM3</b>
<b>SAND PAD</b>	<b>No sand pad required structurally</b>
<b>BUSHFIRE PRONE AREA</b>	<b>Not in a Bushfire Prone Area (see NOTE 2.)</b>
<b>CORROSION CLASSIFICATION</b>	<b>R1</b> <i>(Durability Class in accordance with AS3700)</i>
<b>WIND CLASSIFICATION</b>	<b>N1</b> <i>(in accordance with AS4055)</i>
-TERRAIN CATEGORY	3
-TOPOGRAPHIC	T0
-SHIELDING	Full Shielding

## SOIL PROFILE

BOREHOLE 1: 0 - 600 FILL sand with artificial material & limestone gravel - grey; 600 GRAVEL (limestone) refusal.

## APPROXIMATE BOREHOLE LOCATIONS



Attadale Av

### NOTE 1 Explanatory Notes & Standard Recommendations

This site classification report must be read in conjunction with the applicable Explanatory Notes & Standard Recommendations. For A Class sites, refer to the Explanatory Notes and Standard Recommendations for Stable (A Class) Sites, version 1.0 July 2018. For S, M, H1, H2 & E Class sites, refer to the Explanatory Notes and Standard Recommendations for Reactive (S, M, H1, H2 & E Class) Sites version 1.0 July 2018. For Equivalent Class sites, refer to the Explanatory Notes and Standard Recommendations for Equivalent Class Sites, version 1.0 July 2018.

### NOTE 2 Bushfire - Prone Area

The Site may be situated in a bush fire prone area in accordance with the Department of Fire and Emergency Services (DFES) Bushfire Prone Area Map (Reference: <http://www.dfes.wa.gov.au/regulationandcompliance/bushfireproneareas/>) the current version at the time of this assessment. A Bushfire Attack Level (BAL) assessment may be required for this site, please confirm with the local authority. Should you require an assessment, please contact this Office.

## ADDITIONAL NOTES / REQUIREMENTS

### Site Condition

At the time of inspection the site was considered to be level and cleared. For specific levels of this site or topographical features, please refer to a professional site survey.

### Structerre Geotech Reference

The Site Classification is based on any remedial works being successfully completed as outlined in the Structerre Geotechnical Report J380185 dated 02/04/2021. The footing details are subject to the recommendations being completed to an acceptable level as outlined in this report, if applicable.

### Internal Thickenings

Internal thickenings are required for the proposed residence as specified on the recommended footing detail. Please provide a copy of the architectural drawings to this Office, so that the internal thickenings can be designed and drawn in accordance with AS2870.

### Internal Thickening Inspection

This detail is subject to a internal thickening layout inspection. It is recommended that an inspection be conducted by a representative from this Office prior to concrete pour.


-- END OF REPORT --

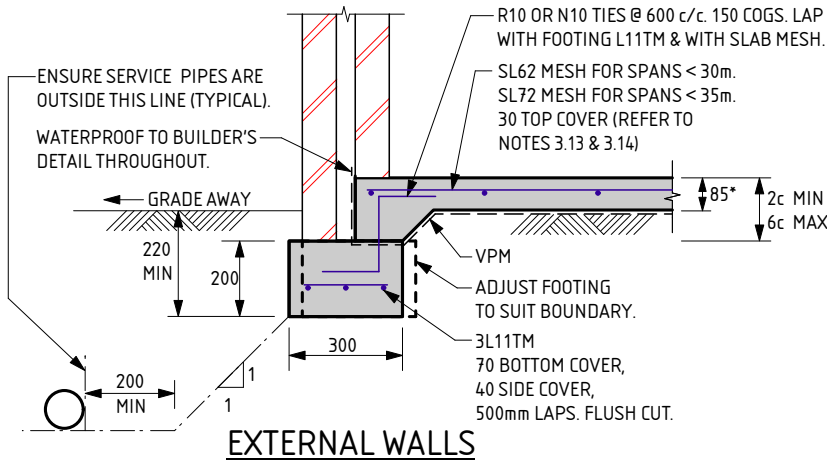
CERTIFICATE 2595181

Issued Date: 16 November 2022

- 3 -

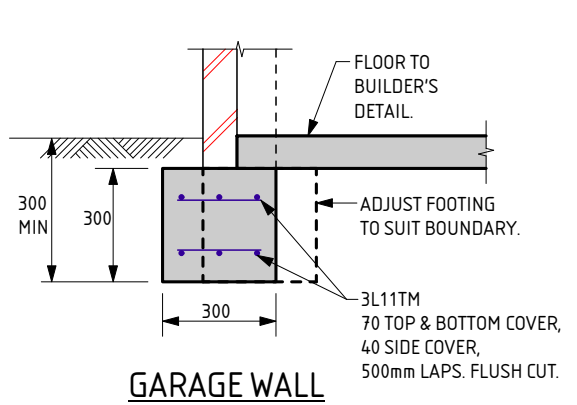
Signed:

  
Gervase Purich  
Chief Executive Officer

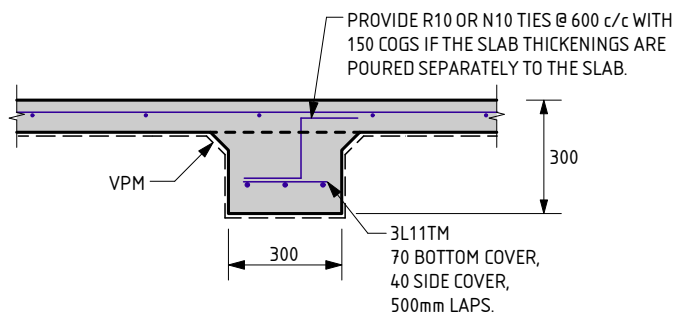


**EXTERNAL WALLS**

\* 100mm SLAB MAY BE INSTALLED INSTEAD OF 85mm.  
 IF 100mm SLAB USED, MESH TO BE:  
 SL62 MESH FOR SPANS < 25m.  
 SL72 MESH FOR SPANS < 30m.  
 SL82 MESH FOR SPANS < 35m.

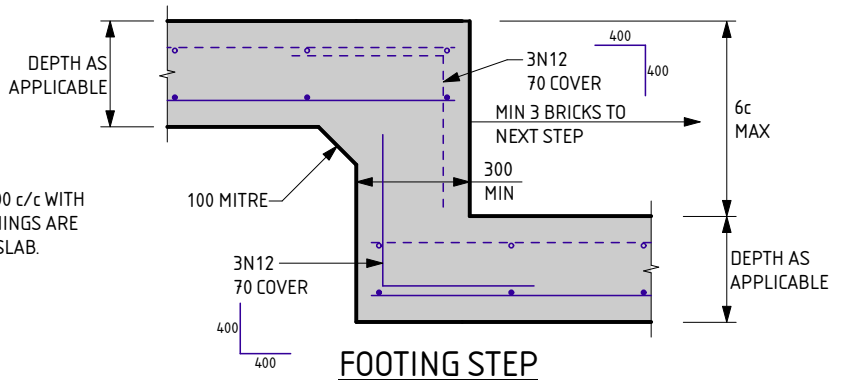


**GARAGE WALL**

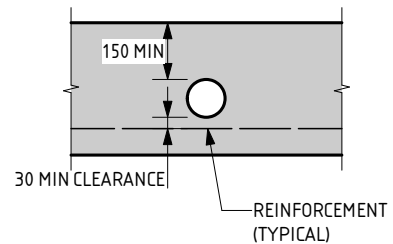


**INTERNAL THICKENING**

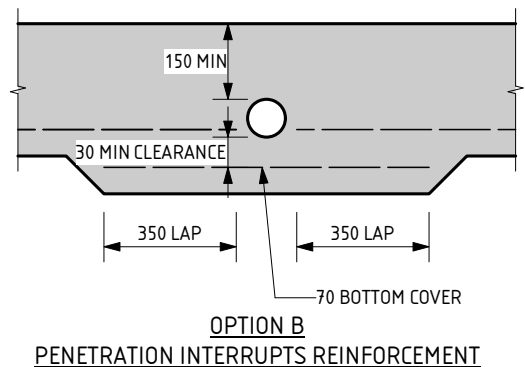
REFER TO STRUCTERRE'S DRAWINGS FOR PLACEMENT OF INTERNAL THICKENINGS. LOCATIONS TO BE CONFIRMED ON SITE BY STRUCTERRE PRIOR TO CONCRETE POUR.



**FOOTING STEP**



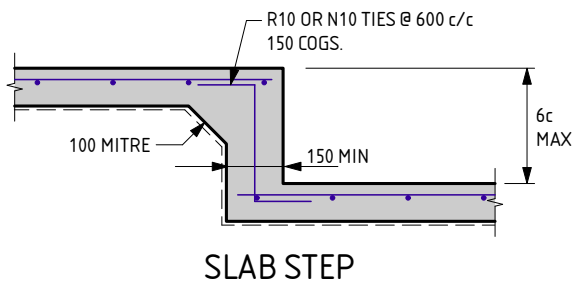
**OPTION A  
PENETRATION CLEAR OF REINFORCEMENT**



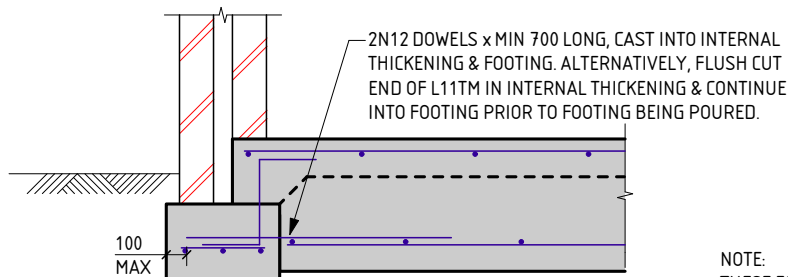
**OPTION B  
PENETRATION INTERRUPTS REINFORCEMENT**

**SERVICE PIPE DIAGRAM**

- MAXIMUM PENETRATION SIZE TO BE Ø150.



**SLAB STEP**



**EXTERNAL FOOTING TO INTERNAL THICKENING**

THIS DETAIL IS EQUIVALENT TO  
 STRUCTERRE FOOTING DETAIL C4.0

NOTE:  
 THESE FOOTING DETAILS ARE TO BE READ IN CONJUNCTION WITH THE REACTIVE SITE NOTES.

THE APPROVED SIGNATURE ON THIS DETAIL ENDORSES ITS USE FOR SINGLE STOREY BUILDINGS ON BUILDING PLATFORMS WITH UP TO 11mm OF SURFACE MOVEMENT.  
 DATE LAST MODIFIED - 20/09/18

**CM3**  
 CAVITY MASONRY



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PROJECT: LOT 282 ATTADALE AV DARCH

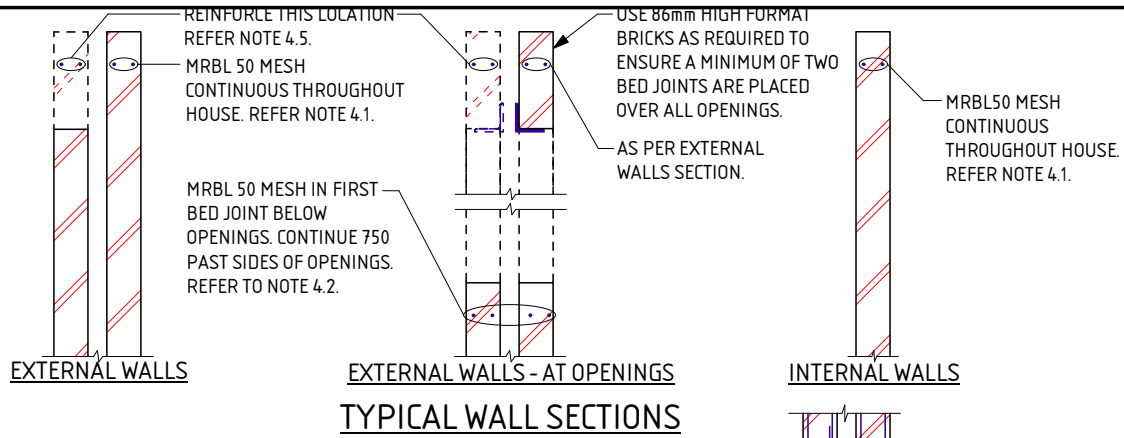
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SCALE: 1:20

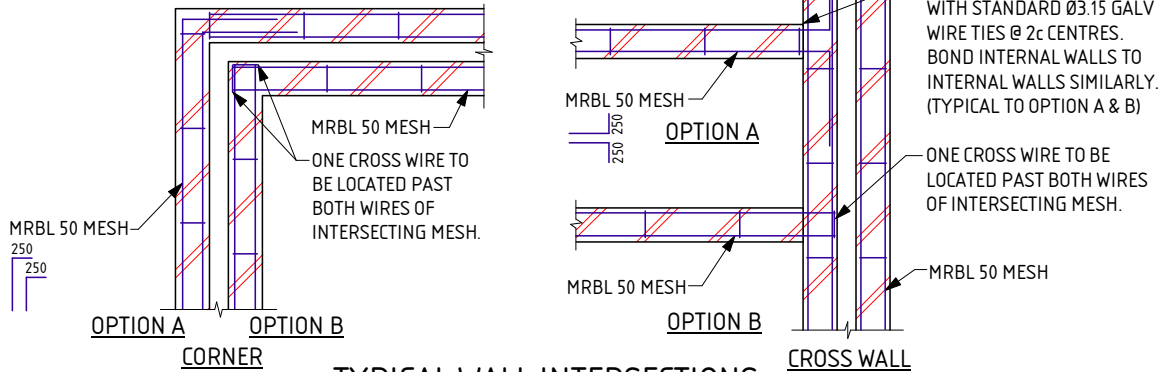
DATE: 16/11/22

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**TYPICAL WALL SECTIONS**



**TYPICAL WALL INTERSECTIONS**

**REACTIVE SITE NOTES FOR CM1 - CM7**

THESE NOTES ARE TO BE READ IN CONJUNCTION WITH THE ATTACHED FOOTING DETAILS.

**1.0 SITE CLASSIFICATION**

- 1.1 REFER TO ATTACHED CERTIFICATE OF INSPECTION FOR SITE CLASSIFICATION. THE SITE CLASSIFICATION NOTED, IS AS DEFINED IN AS2870 - RESIDENTIAL SLABS & FOOTINGS.
- 1.2 THE SITE CLASSIFICATION HAS BEEN DETERMINED BY INVESTIGATION OF THE SITE, AS PER THE ATTACHED CERTIFICATE OF INSPECTION. REFER TO THE ATTACHED CERTIFICATE FOR ANY SPECIAL REQUIREMENTS.

**2.0 EARTHWORKS**

- 2.1 SAND PAD IF APPLICABLE TO BE AS PER SITE INSPECTION REPORT.
- 2.2 EARTHWORKS SHALL INCLUDE, BUT NOT BE LIMITED TO:
  - a) REMOVE ALL ORGANIC MATERIAL FROM THE PAD AREA.
  - b) REMOVE ALL RUBBISH AND DELETERIOUS FILL (SUCH AS CLAY FILL) FROM THE PAD AREA.
  - c) GRUB OUT ANY TREES WHERE NECESSARY AND ENSURE THE REMAINING HOLES ARE FILLED AND COMPACTED SATISFACTORILY WITH SAND.
  - d) NOTIFY THE ENGINEER OF ANY UNUSUAL FEATURES OR DISCREPANCIES WHICH MAY BECOME EVIDENT DURING EARTHWORKS, PRIOR TO PROCEEDING.
- 2.3 ANY PREDOMINANT ROCK IN THE HOUSE PAD AREAS IS TO BE INSPECTED BY THE ENGINEER.
- 2.4 ANY CUT TO THE SITE, OTHER THAN TOPSOIL STRIPPING, WILL REQUIRE THE PREPARED CUT BASE TO BE INSPECTED AND APPROVED BY THE ENGINEER.
- 2.5 MAXIMUM SAND PAD DEPTH NOT TO EXCEED 150% OF MINIMUM PAD DEPTH OR 2000mm WITHOUT THE ENGINEER'S APPROVAL.
- 2.6 IF APPLICABLE SAND FILL TO BE CLEAN WELL DRAINED, WITH MAX FINES (PARTICLES UP TO 0.075mm) CONTENT OF 5%. SAND TO BE COMPACTED TO A MIN 6 BLOWS/300mm FOR THE DEPTH OF THE PAD OR TO DISCRETION OF ENGINEER.
- 2.7 COMPACTION TESTING TO BE PERFORMED BY STRUCTERRE.

**3.0 FOOTINGS & SLABS**

- 3.1 FOOTINGS ARE TO BE PLACED DIRECTLY INTO SAND PAD OF SPECIFIED THICKNESS.
- 3.2 ALL STORMWATER MUST BE DISCHARGED INTO COUNCIL DRAINS OR A MINIMUM OF 3m FOR S CLASS SITES, 4m FOR M CLASS SITES AND 5m FOR H1 & H2 CLASS SITES, AWAY FROM THE RESIDENCE AND/OR ADJACENT BUILDINGS INTO SOAKWELLS. IF THIS RESTRICTION CANNOT BE ACHIEVED REFER BACK TO THIS OFFICE FOR AN ALTERNATIVE DESIGN. WHERE THE SITE HAS BEEN CLASSIFIED AS AN 'EQUIVALENT' SITE CLASSIFICATION, REFER TO 'EXPLANATORY NOTES & STANDARD RECOMMENDATIONS - EQUIVALENT CLASS SITES' FOR STORMWATER DRAINAGE REQUIREMENTS UNLESS SPECIFIED OTHERWISE.
- 3.3 EXCAVATIONS FOR ALL SERVICE PIPES NOT TO UNDERMINE FOOTINGS. IF UNDERMINING IS LIKELY TO OCCUR, CONTACT THE ENGINEER PRIOR TO PROCEEDING.
- 3.4 WHERE PLUMBING PIPES PASS THROUGH FOOTINGS OR SLAB, SPECIFIED TOTAL THICKNESS OF ALL CONCRETE IS ALWAYS TO BE MAINTAINED.
- 3.5 SETDOWN AT WET AREA TO ARCHITECTURAL REQUIREMENT (50mm MAX). MAINTAIN 85mm SLAB THICKNESS. FOLD MESH DOWN TO MAINTAIN COVER, PLACE DIAGONAL BARS AT RE-ENTRANT CORNER FOR STEPS OVER 30mm. BARS TO BE N12x 1200 LONG.
- 3.6 REINFORCEMENT SHALL BE IN ACCORDANCE WITH THE FOLLOWING STANDARDS;
 

L	INDICATES PLAIN OR DEFORMED WIRE R500L OR D500L TO AS/NZS 4671.
SL	INDICATES DEFORMED SQUARE MESH D500L TO AS/NZS 4671.
N	INDICATES DEFORMED BARS D500N TO AS/NZS 4671.
TM SUFFIX	INDICATES TRENCH MESH USING DEFORMED BARS D500L TO AS/NZS 4671.

 ALL STEELWORK TO BE TREATED IN ACCORDANCE WITH TABLE 3.4.4.4 "CORROSION PROTECTION" OF THE BUILDING CODE OF AUSTRALIA.
- 3.7 LAP ALL MESH TWO TRANSVERSE WIRES PLUS 25mm OR TO MANUFACTURER'S SPECIFICATIONS.

**3.8 CONCRETE TO CONFORM WITH AS 3600.**

- 3.9 BLENDED CEMENT TO CONFORM WITH AS1317.
- 3.10 ALL CONCRETE TO BE N20/20/100.
- 3.11 FOR ISOLATED PAD FOOTINGS, REFER BACK TO ENGINEER.
- 3.12 FOOTING POSITION UNDER BRICKWORK CAN BE ADJUSTED TO SUIT PARAPET WALLS.
- 3.13 FOR SLAB SPANS > 35m REFER TO ENGINEER FOR MESH SIZE.
- 3.14 IF THE LENGTH TO WIDTH RATIO OF THE GROUND SLAB OR ANY PART OF THE GROUND SLAB EXCEEDS 3:1, REFER BACK TO THIS OFFICE FOR MESH SIZE.
- 3.15 IF POLISHED (OR HONED) CONCRETE FINISHES ARE DESIRED, THIS DESIGN SHOULD BE REFERRED BACK TO THIS OFFICE FOR CONSIDERATION, AS IT IS NOT THE INTENTION OF THESE DESIGNS FOR SUCH FINISHES.
- 3.16 PLACE SLAB THICKENING (300 WIDE x 250 DEEP) UNDER INTERNAL WALLS (90 OR 110) HIGHER THAN 3.7m WHERE GREATER THAN 1m FROM INTERNAL THICKENING. PROVIDE SAME TRENCH MESH AS INTERNAL THICKENING DETAIL, WHERE REQUIRED.
- 3.17 PIERCING THE VAPOUR BARRIER (VPM) USING LEVELLING PINS ON FREE DRAINING SAND PADS IS ALLOWABLE.
- 3.18 CURE SLAB AS DETERMINED BY ENGINEER.
- 3.19 THE SLAB IS CONSIDERED SUITABLE AS A PHYSICAL BARRIER AGAINST INGRESS OF TERMITES. IF THE FOOTING AND SLAB IS PLACED IN 2 POURS, THE PHYSICAL BARRIER ALSO INCLUDES THE FOOTING AND SLAB JOINTING.
- 3.20 THE FOOTING DETAILS HAVE BEEN DESIGNED IN ACCORDANCE WITH AS3600 AND SECTION 4 OF AS2870.

**4.0 MASONRY**

- 4.1 PLACE MRBL50 MESH IN TOP BED JOINT CONTINUOUS THROUGHOUT ALL BRICKWORK.
- 4.2 REINFORCE BED JOINT BELOW WINDOW SILLS WITH MRBL50 MESH. CONTINUE 750 PAST SIDES OF OPENING.
- 4.3 LAP 250 AT SPLICES AND AROUND CORNERS AND COG 250 INTO INTERSECTING WALLS. 20mm COVER TO ALL WIRES.
- 4.4 ALL MESH IN EXTERNAL FACE OF EXTERNAL LEAF TO BE GALVANIZED TO AS/NZS 4680.
- 4.5 WHEN BRICKWORK EXTENDS ABOVE OPENINGS TO EXTERNAL LEAF REINFORCE AS PER CLAUSE 4.1, 4.2 & 4.3.
- 4.6 TYPICAL WALL SECTIONS ARE SHOWN FOR 28C INTERNAL CEILINGS. WHERE THERE ARE 3 OR MORE BED JOINTS OVER THE OPENING, REINFORCE BED JOINT OVER OPENING WITH MRBL50 MESH. CONTINUE 750 PAST SIDE OF OPENING.
- 4.7 ALL PERPENDS TO BE FULLY MORTARED.
- 4.8 A BRICK COURSE, AS REFERRED TO IN THIS DOCUMENT IS STANDARD 86mm HIGH.
- 4.9 2L6 WIRES MAY BE USED AS AN ALTERNATIVE TO THE MRBL50 MESH. WHERE L6 WIRES ARE USED, ALL SPLICES AND COGS TO BE 500 LONG.

**5.0 MAINTENANCE**

- 5.1 IT IS CONSIDERED THAT THIS DESIGN IS SUITABLE FOR THE FOUNDATION CONDITIONS TO BE ENCOUNTERED AND WILL ADEQUATELY CONTROL ANY CRACKING OF BRICKWORK AND CONCRETE, SUBJECT TO THE MAINTENANCE PROCEDURES BELOW BEING SATISFIED.
- 5.2 BUILDER TO ENSURE THAT CLIENT BE INFORMED OF NECESSITY TO MAINTAIN DRAINS IN GOOD WORKING ORDER AT ALL TIMES.
- 5.3 BUILDER TO ADVISE CLIENT TO CONSULT AN ENGINEER BEFORE PLANTING TREES OR SHRUBS WITHIN 2.5m, OR A DISTANCE EQUAL TO THE ANTICIPATED MAXIMUM HEIGHT OF THE TREE, OF THE BUILDING.
- 5.4 SITE TO BE MAINTAINED AS PER CSIRO INFORMATION PAMPHLET BTF 18 & STRUCTERRE'S CLAY FACT SHEET.
- 5.5 AS2870 AND 'CSIRO PAMPHLET BTF 18' COVER THE EXPECTED PERFORMANCE AND RESPONSIBILITIES OF ALL PARTIES WITH THE USE OF THESE DETAILS.

**6.0 QUALITY CONTROL PROGRAM REQUIREMENTS**

- 6.1 WORKING SLAB DEPTH AS INDICATED ON THE DETAIL. SLAB DEPTH TOLERANCE ALLOWABLE -10mm, +15mm.
- 6.2 WHERE DEPTH IS BELOW NOMINATED DEPTH, MAX AREA ALLOWED TO BE ≤ 5% OF THE TOTAL AREA.
- 6.3 DEPTH TESTING LOCATIONS TO BE NO CLOSER THAN 1000mm APART.
- 6.4 SLAB DEPTH IS TO BE PART OF A QUALITY CONTROL INSPECTION REGIME.
- 6.5 SLAB AND FOOTING CAN BE POURED MONOLITHICALLY IF DESIRED.

DATE LAST MODIFIED - 21/09/21



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PROJECT :  
**LOT 282 ATTADALE AV DARCH**

CLIENT : **PARCEL DARCH PTY LTD**

SCALE **1:20**

DATE **16/11/22**

APPROVED

# EXPLANATORY NOTES & STANDARD RECOMMENDATIONS - EQUIVALENT CLASS SITES (Sheet 1 of 2)

## GENERAL

1. THE EXPLANATORY NOTES AND THE STANDARD RECOMMENDATIONS ARE TO BE READ IN CONJUNCTION WITH THE SITE CLASSIFICATION REPORT.
2. ALL REFERRED STANDARDS TO BE THE CURRENT VERSION AT THE TIME OF THE CONSTRUCTION.
3. THE PURPOSE OF THE SITE CLASSIFICATION REPORT IS TO CLASSIFY THE SITE IN ACCORDANCE WITH AS2870 "RESIDENTIAL SLABS AND FOOTING". IT IS NOT INTENDED FOR ANY OTHER PURPOSE, INCLUDING SOLE INFORMATION IN THE PROVISION OF A QUOTATION FOR SITE WORKS. IT IS RECOMMENDED OTHER PARTIES TO PERFORM THEIR OWN INVESTIGATION FOR QUOTATION PURPOSES.
4. THE SITE CLASSIFICATION REPORT WILL INCLUDE BUT IS NOT LIMITED TO:
  - a. THE SITE CLASSIFICATION IN ACCORDANCE WITH AS2870 "RESIDENTIAL SLABS AND FOOTING",
  - b. A WIND CLASSIFICATION IN ACCORDANCE WITH AS4055 "WIND LOADS FOR HOUSING",
  - c. A COASTAL CORROSION CLASSIFICATION,
  - d. ADDITIONAL EARTHWORK RECOMMENDATIONS WHERE APPLICABLE,
  - e. STANDARD FOOTING DESIGN FOR SINGLE STOREY SLAB ON GROUND CONSTRUCTION.
5. THE SITE CLASSIFICATION IS BASED ON THE SITE AS PRESENTED AT THE TIME OF THE ASSESSMENT. THE SITE CLASSIFICATION AND RECOMMENDATIONS INCLUDED IN THE REPORT ARE SUBJECT TO SATISFACTORY COMPLETION OF RECOMMENDED EARTHWORKS, (REFER NOTE 17) AS A MINIMUM. SHOULD CHANGES TO THE SITE OCCUR, OTHER THAN THE RECOMMENDATIONS INCLUDED IN THE SITE CLASSIFICATION REPORT, REFER BACK TO THIS OFFICE FOR REVIEW OF CLASSIFICATION AND FOOTING DESIGN.
6. ALL RECOMMENDATIONS GIVEN IN THE SITE CLASSIFICATION REPORT HAVE BEEN DETERMINED FROM THE INFORMATION THAT WAS AVAILABLE TO THIS OFFICE AT THE TIME OF INVESTIGATION. IF FURTHER INFORMATION RELATING TO THE SITE OR DEVELOPMENT BECOMES AVAILABLE, THESE RECOMMENDATIONS ARE SUBJECT TO CHANGE.
7. EQUIVALENT CLASS SITES ARE BASED ON DIFFERENTIAL SURFACE MOVEMENT ARISING FROM ISSUE OTHER THAN SHRINK-SWELL (REACTIVITY) ONLY. THESE MAY INCLUDE SETTLEMENT AND/OR CONSOLIDATION THAT MAY OCCUR AS A RESULT OF THE UNDERLYING GROUND CONDITIONS.
8. BOREHOLES EXCAVATED REVEAL THE SOIL PROFILE AT THE BOREHOLE LOCATION ONLY. FROM THIS, IT IS INFERRED THAT THESE ARE THE SOIL CONDITIONS OVER THE SITE. VARIATIONS CAN OCCUR WHICH MAY NOT HAVE BEEN DETECTED AT THE INVESTIGATION STAGE. ANY ANOMALIES SHOULD BE REFERRED BACK TO THIS OFFICE FOR A REASSESSMENT.
9. A NUMBER OF BOREHOLES ARE CONDUCTED ACROSS THE SITE TO DETERMINE THE SOIL PROFILES AND PROVIDE A REPRESENTATION OF THE GROUND CONDITIONS.
10. THIS REPORT IS FOR STRUCTERRE ONLY TO USE IN DESIGN. ANY DESIGN BY ANYONE ELSE FOR ANY STRUCTURE MUST BE SPECIFICALLY APPROVED BY STRUCTERRE. IF USED BY ANYONE ELSE FOR ANYTHING OTHER THAN A STRUCTERRE DESIGN OR STRUCTURE, STRUCTERRE TAKES NO RESPONSIBILITY.

## SAND PAD

11. THE RECOMMENDED FOOTING DESIGN IS ONLY TO BE USED IN CONJUNCTION WITH THE RECOMMENDED SAND PAD AND EARTHWORKS AS OUTLINED IN THE SITE CLASSIFICATION REPORT.
12. THE RECOMMENDATIONS FOR THE SAND PAD IS FOR STRUCTURAL PURPOSES ONLY, AND DOES NOT PROVIDE THE MINIMUM FINISHED PAD LEVEL IN RELATION TO FLOOD LEVELS OR DEPTH TO GROUNDWATER. SHOULD THE TEST BE LOCATED IN A LOW LYING OR FLOOD PRONE AREA, REFER TO THE LOCAL AUTHORITY FOR MINIMUM BUILDING HEIGHT.
13. IMPORTED FILL FOR USE AS A SAND PAD TO BE IN ACCORDANCE TO AS 3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS" WHICH INCLUDES BUT IS NOT LIMITED TO: BE FREE FROM ANY DELETERIOUS MATERIALS INCLUDING ORGANICS, (ROOTS, STUMPS, GRASSES, DECOMPOSED ORGANICS - PEAT, TIMBER, ETC), BUILDING RUBBLE, GLASS, PLASTICS OR WASTE MATERIAL. THE FINES CONTENT, (PERCENTAGE PASSING THE 0.075mm SIEVE) TO BE LESS THAN 5% BY MASS.
14. ON SAND SITES A SAND PAD IS NOT REQUIRED STRUCTURALLY, HOWEVER IF ROCK IS ENCOUNTERED, A MINIMUM 200mm SAND PAD BEYOND THE BASE OF FOOTING IS RECOMMENDED.
15. SAND PAD TO EXTEND BEYOND BUILDING AREA A MINIMUM OF 1.5 TIMES THE PAD DEPTH.
16. RECOMMENDED SAND PAD DEPTH IS ABOVE THE HIGHEST POINT, UNLESS OTHERWISE SPECIFIED.
17. IT IS REQUIRED THAT EARTHWORKS CONFIRM THAT THE MINIMUM DEPTH OF RECOMMENDED SAND PAD IS ACHIEVED.

## EARTHWORKS

18. RECOMMENDED EARTHWORKS TO BE CONDUCTED IN ACCORDANCE WITH AS3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS", AND TO INCLUDE BUT NOT BE LIMITED TO:
  - a. REMOVAL OF ALL VEGETATION, TOPSOILS, UNCONTROLLED FILLS AND OTHER DELETERIOUS MATERIALS FROM THE BUILDING AREA,
  - b. GRUBBING OUT OF ANY TREES ENSURING THE REMAINING HOLES ARE BACKFILLED WITH CLEAN COMPACTED SAND,
  - c. NOTIFYING THE ENGINEER OF ANY UNUSUAL FEATURE OR DISCREPANCY THAT MAY BECOME EVIDENT DURING EARTHWORKS, PRIOR TO PROCEEDING,
  - d. COMPACTING TO MEET THE REQUIREMENTS AS OUTLINED IN AS 3798 TABLE 5.1.
19. FILL MATERIAL (WHICH IS NOT ALWAYS APPARENT AT THE INITIAL INVESTIGATION STAGE) IS TO BE DEALT WITH AS FOLLOWS:
  - a. IF IT IS CERTIFIED BY OTHERS IT CAN REMAIN.
  - b. IF IT IS NOT CERTIFIED WILL REQUIRE REMOVAL DOWN TO NATURAL GROUND OR VERIFIED. ANY SAND CAN BE REUSED.
  - c. IF A PAD HAS ALREADY BEEN CONSTRUCTED, THE SITE CLASSIFICATION IS NOT CERTIFICATION OF THE PAD. CONTACT THIS OFFICE SHOULD A SAND PAD CERTIFICATION BE REQUIRED.
20. ANY ORGANIC MATTER OR ROOTS ENCOUNTERED, WHICH IS BEYOND WHAT IS NORMALLY CONSIDERED ACCEPTABLE IS TO BE REMOVED. THIS WILL NECESSITATE RAKING THE SITE TO REMOVE ORGANIC MATERIAL, TURNING THE SITE OVER AND RE-COMPACTING TO A MINIMUM.

## RETAINING WALLS

21. AN ASSESSMENT OF ANY EXISTING OR PROPOSED RETAINING WALLS HAS NOT BEEN CONDUCTED AS PART OF THIS SITE CLASSIFICATION REPORT.
22. IF THE PROPOSED BUILDING IS TO BE LOCATED CLOSER THAN THE HEIGHT OF THE RETAINING WALL, THIS MAY PLACE ADDITIONAL LOADS ON THE WALL THAT WERE NOT INITIALLY DESIGNED FOR. AN INSPECTION OF THE STRUCTURAL INTEGRITY OF THE RETAINING WALL WILL BE REQUIRED TO PROVIDE CERTIFICATION AND/OR RECOMMENDATIONS PRIOR TO ANY CONSTRUCTION. PLEASE REFER BACK TO THIS OFFICE FOR ASSISTANCE.  
STORMWATER DRAINAGE
23. UNLESS OTHERWISE SPECIFIED, ALL SOAKWELLS ARE TO BE LOCATED THE DEPTH OF THE SOAKWELL AWAY FROM THE BUILDING OR SETBACK A MINIMUM OF 1200mm, WHICHEVER IS GREATER, UNLESS SPECIFIED OTHERWISE. PLEASE REFER BACK TO THIS OFFICE IF THE SETBACK CANNOT BE ACHIEVED.

DOC# SS001 - 1.1.10 SCR EQUIVALENT V1.1 - AUGUST 2021



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PROJECT :  
LOT 282 ATTADALE AV DARCH

CLIENT : PARCEL DARCH PTY LTD

SCALE 1:20

DATE 16/11/22

APPROVED

## EXPLANATORY NOTES & STANDARD RECOMMENDATIONS - EQUIVALENT CLASS SITES (Sheet 2 of 2)

### WIND CLASSIFICATION

24. WIND CLASSIFICATION IS GIVEN FOR THE EXPECTED CONDITION 5 YEARS HENCE. THIS CLASSIFICATION IS LIMITED TO BUILDINGS CLASSES 1 AND 10, WHICH HAVE THE FOLLOWING LIMITATION (AS PER AS4055):

- a. MAXIMUM DISTANCE FROM THE GROUND LEVEL TO THE UNDERSIDE OF EAVES SHALL NOT EXCEED 6.0m,
- b. MAXIMUM DISTANCE FROM GROUND LEVEL TO THE HIGHEST POINT OF THE ROOF, EXCLUDING CHIMNEYS, SHALL NOT EXCEED 8.5m,
- c. THE ROOF PITCH SHALL NOT EXCEED 35 °,
- d. THE WIDTH, EXCLUDING EAVES, SHALL NOT EXCEED 16.0m AND THE LENGTH SHALL NOT EXCEED 5x THE WIDTH.

IF THE BUILDING FALLS OUTSIDE OF THESE LIMITATIONS, THE STATED WIND CLASSIFICATION DOES NOT APPLY. REFER BACK TO THIS OFFICE FOR A REVISED WIND CLASSIFICATION.

### ENVIRONMENTAL

25. NO ENVIRONMENTAL ASSESSMENT OF THIS SITE HAS BEEN UNDERTAKEN. SHOULD AN ENVIRONMENTAL ASSESSMENT BE REQUIRED, PLEASE CONTACT THIS OFFICE.

### SEISMIC

26. RECOMMENDED FOOTING DETAILS ARE SUITABLE FOR SEISMIC CONDITIONS WITH AN EARTHQUAKE HAZARD FACTOR OF  $\leq 0.11$ . RECOMMENDED FOOTING DETAILS PROVIDED FOR SITES WITH AN EARTHQUAKE HAZARD FACTOR OF  $> 0.11$ , ARE NOT FOR CONSTRUCTION, BUT FOR COSTING PURPOSES ONLY. IT IS REQUIRED THAT A FULL SEISMIC DESIGN IS CONDUCTED.

### CORROSION CLASSIFICATION

27. THE CORROSION CLASSIFICATION HAS BEEN ASSESSED IN ACCORDANCE WITH AS3700.

DOC# SS001 - 1.1.10 SCR EQUIVALENT V1.1 - AUGUST 2021



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PROJECT :  
LOT 282 ATTADALE AV DARCH

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SCALE 1:20

DATE 16/11/22

APPROVED

A blue ink handwritten signature is written over the 'APPROVED' field.

**SITE CLASSIFICATION REPORT**  
CERTIFICATE 2595182

**CLIENT** PARCEL DARCH PTY LTD  
**JOB ADDRESS** LOT 283 ATTADALE AV DARCH  
**CLIENT JOB NO.**  
**OWNER**  
**STRUCTERRE JOB NO.** S1082671  
**DATE OF ASSESSMENT** 15/11/22

**SITE RECORD**

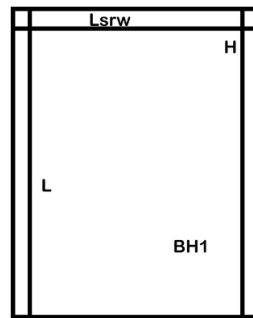


<b>SITE CLASSIFICATION</b>	<b>S - EQUIVALENT</b> <i>(in accordance with AS2870)</i>
<b>FOOTING DETAIL</b>	<b>CM3</b>
<b>SAND PAD</b>	<b>No sand pad required structurally</b>
<b>BUSHFIRE PRONE AREA</b>	<b>Not in a Bushfire Prone Area (see NOTE 2.)</b>
<b>CORROSION CLASSIFICATION</b>	<b>R1</b> <i>(Durability Class in accordance with AS3700)</i>
<b>WIND CLASSIFICATION</b>	<b>N1</b> <i>(in accordance with AS4055)</i>
-TERRAIN CATEGORY	3
-TOPOGRAPHIC	T0
-SHIELDING	Full Shielding

## SOIL PROFILE

BOREHOLE 1: 0 - 1800 FILL sand with artificial material trace limestone gravel - grey; 1800 end of hole.

## APPROXIMATE BOREHOLE LOCATIONS



Attadale Av

### NOTE 1 Explanatory Notes & Standard Recommendations

This site classification report must be read in conjunction with the applicable Explanatory Notes & Standard Recommendations. For A Class sites, refer to the Explanatory Notes and Standard Recommendations for Stable (A Class) Sites, version 1.0 July 2018. For S, M, H1, H2 & E Class sites, refer to the Explanatory Notes and Standard Recommendations for Reactive (S, M, H1, H2 & E Class) Sites version 1.0 July 2018. For Equivalent Class sites, refer to the Explanatory Notes and Standard Recommendations for Equivalent Class Sites, version 1.0 July 2018.

### NOTE 2 Bushfire - Prone Area

The Site may be situated in a bush fire prone area in accordance with the Department of Fire and Emergency Services (DFES) Bushfire Prone Area Map (Reference: <http://www.dfes.wa.gov.au/regulationandcompliance/bushfireproneareas/>) the current version at the time of this assessment. A Bushfire Attack Level (BAL) assessment may be required for this site, please confirm with the local authority. Should you require an assessment, please contact this Office.

## ADDITIONAL NOTES / REQUIREMENTS

### Site Condition

At the time of inspection the site was considered to be level and cleared. For specific levels of this site or topographical features, please refer to a professional site survey.

### Structerre Geotech Reference

The Site Classification is based on any remedial works being successfully completed as outlined in the Structerre Geotechnical Report J380185 dated 02/04/2021. The footing details are subject to the recommendations being completed to an acceptable level as outlined in this report, if applicable.

### Internal Thickenings

Internal thickenings are required for the proposed residence as specified on the recommended footing detail. Please provide a copy of the architectural drawings to this Office, so that the internal thickenings can be designed and drawn in accordance with AS2870.

### Internal Thickening Inspection

This detail is subject to a internal thickening layout inspection. It is recommended that an inspection be conducted by a representative from this Office prior to concrete pour.

-- END OF REPORT --

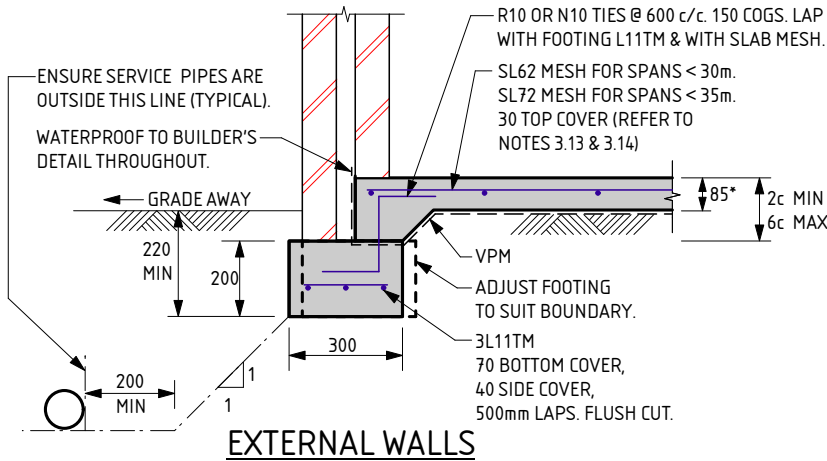
CERTIFICATE 2595182

Issued Date: 16 November 2022

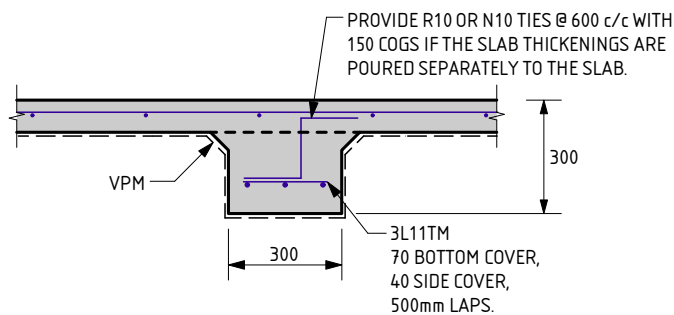
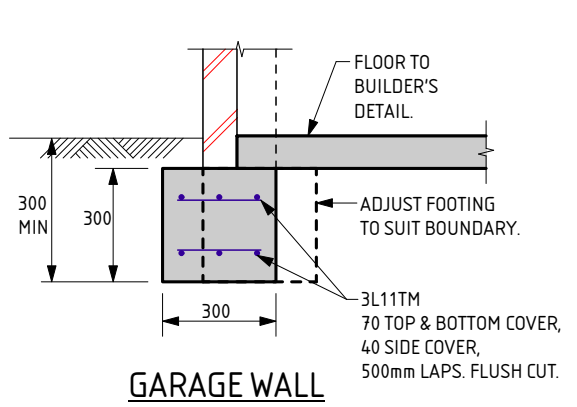
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Signed:

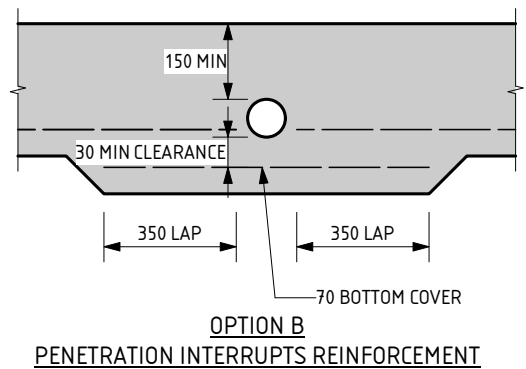
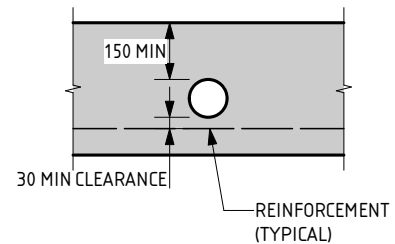
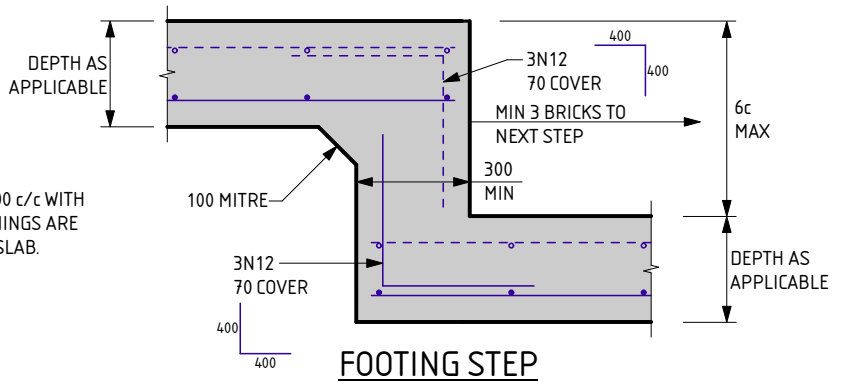
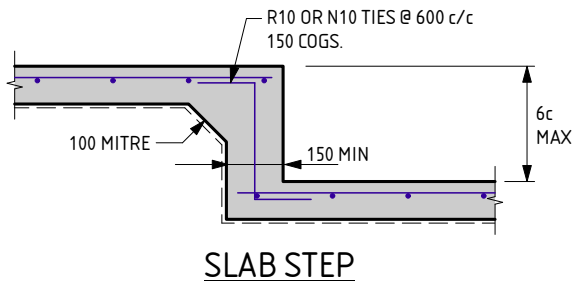
  
Gervase Purich  
Chief Executive Officer



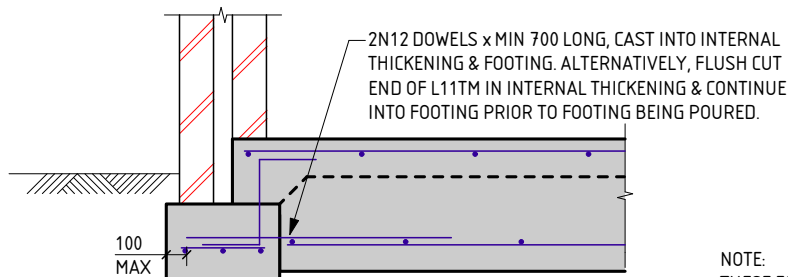
\* 100mm SLAB MAY BE INSTALLED INSTEAD OF 85mm.  
IF 100mm SLAB USED, MESH TO BE:  
SL62 MESH FOR SPANS < 25m.  
SL72 MESH FOR SPANS < 30m.  
SL82 MESH FOR SPANS < 35m.



REFER TO STRUCTERRE'S DRAWINGS FOR PLACEMENT OF INTERNAL THICKENINGS. LOCATIONS TO BE CONFIRMED ON SITE BY STRUCTERRE PRIOR TO CONCRETE POUR.



**SERVICE PIPE DIAGRAM**  
- MAXIMUM PENETRATION SIZE TO BE Ø150.



### EXTERNAL FOOTING TO INTERNAL THICKENING

THIS DETAIL IS EQUIVALENT TO  
STRUCTERRE FOOTING DETAIL C4.0

NOTE:  
THESE FOOTING DETAILS ARE TO BE READ IN CONJUNCTION WITH THE REACTIVE SITE NOTES.

THE APPROVED SIGNATURE ON THIS DETAIL ENDORSES ITS USE FOR SINGLE STOREY BUILDINGS ON BUILDING PLATFORMS WITH UP TO 11mm OF SURFACE MOVEMENT.  
DATE LAST MODIFIED - 20/09/18

**CM3**  
CAVITY MASONRY

**STRUCterre**  
consulting engineers

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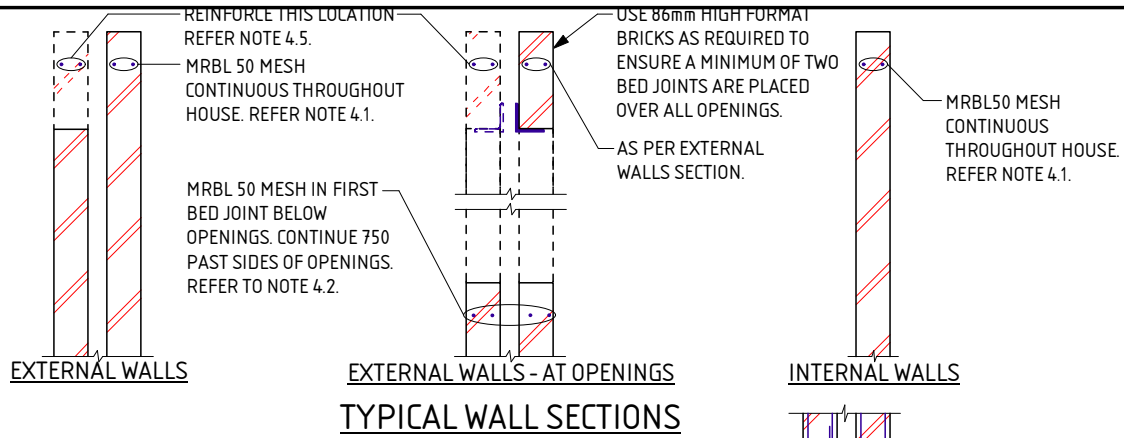
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LOT 283 ATTADALE AV DARCH

CLIENT: PARCEL DARCH PTY LTD

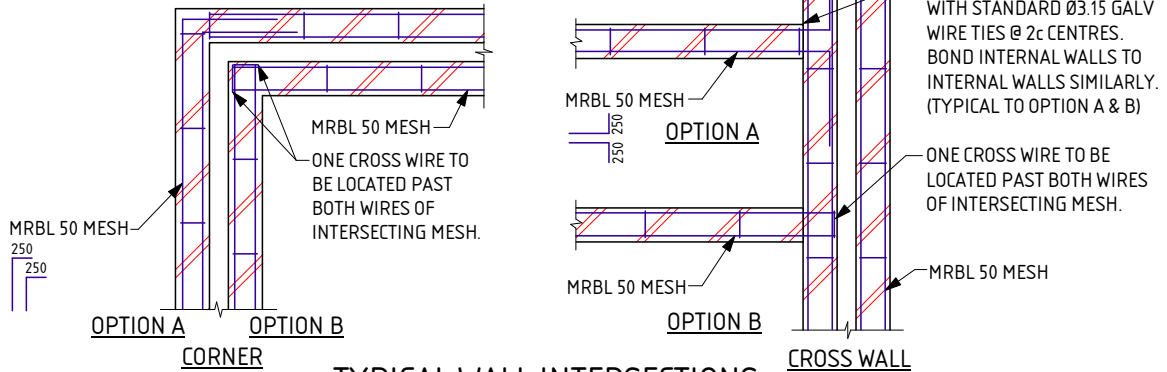
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DATE 16/11/22

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TYPICAL WALL SECTIONS



TYPICAL WALL INTERSECTIONS

REACTIVE SITE NOTES FOR CM1 - CM7

THESE NOTES ARE TO BE READ IN CONJUNCTION WITH THE ATTACHED FOOTING DETAILS.

1.0 SITE CLASSIFICATION

- 1.1 REFER TO ATTACHED CERTIFICATE OF INSPECTION FOR SITE CLASSIFICATION. THE SITE CLASSIFICATION NOTED, IS AS DEFINED IN AS2870 - RESIDENTIAL SLABS & FOOTINGS.
- 1.2 THE SITE CLASSIFICATION HAS BEEN DETERMINED BY INVESTIGATION OF THE SITE, AS PER THE ATTACHED CERTIFICATE OF INSPECTION. REFER TO THE ATTACHED CERTIFICATE FOR ANY SPECIAL REQUIREMENTS.

2.0 EARTHWORKS

- 2.1 SAND PAD IF APPLICABLE TO BE AS PER SITE INSPECTION REPORT.
- 2.2 EARTHWORKS SHALL INCLUDE, BUT NOT BE LIMITED TO:
  - a) REMOVE ALL ORGANIC MATERIAL FROM THE PAD AREA.
  - b) REMOVE ALL RUBBISH AND DELETERIOUS FILL (SUCH AS CLAY FILL) FROM THE PAD AREA.
  - c) GRUB OUT ANY TREES WHERE NECESSARY AND ENSURE THE REMAINING HOLES ARE FILLED AND COMPACTED SATISFACTORILY WITH SAND.
  - d) NOTIFY THE ENGINEER OF ANY UNUSUAL FEATURES OR DISCREPANCIES WHICH MAY BECOME EVIDENT DURING EARTHWORKS, PRIOR TO PROCEEDING.
- 2.3 ANY PREDOMINANT ROCK IN THE HOUSE PAD AREAS IS TO BE INSPECTED BY THE ENGINEER.
- 2.4 ANY CUT TO THE SITE, OTHER THAN TOPSOIL STRIPPING, WILL REQUIRE THE PREPARED CUT BASE TO BE INSPECTED AND APPROVED BY THE ENGINEER.
- 2.5 MAXIMUM SAND PAD DEPTH NOT TO EXCEED 150% OF MINIMUM PAD DEPTH OR 2000mm WITHOUT THE ENGINEER'S APPROVAL.
- 2.6 IF APPLICABLE SAND FILL TO BE CLEAN WELL DRAINED, WITH MAX FINES (PARTICLES UP TO 0.075mm) CONTENT OF 5%. SAND TO BE COMPACTED TO A MIN 6 BLOWS/300mm FOR THE DEPTH OF THE PAD OR TO DISCRETION OF ENGINEER.
- 2.7 COMPACTION TESTING TO BE PERFORMED BY STRUCTERRE.

3.0 FOOTINGS & SLABS

- 3.1 FOOTINGS ARE TO BE PLACED DIRECTLY INTO SAND PAD OF SPECIFIED THICKNESS.
- 3.2 ALL STORMWATER MUST BE DISCHARGED INTO COUNCIL DRAINS OR A MINIMUM OF 3m FOR S CLASS SITES, 4m FOR M CLASS SITES AND 5m FOR H1 & H2 CLASS SITES, AWAY FROM THE RESIDENCE AND/OR ADJACENT BUILDINGS INTO SOAKWELLS. IF THIS RESTRICTION CANNOT BE ACHIEVED REFER BACK TO THIS OFFICE FOR AN ALTERNATIVE DESIGN. WHERE THE SITE HAS BEEN CLASSIFIED AS AN 'EQUIVALENT' SITE CLASSIFICATION, REFER TO 'EXPLANATORY NOTES & STANDARD RECOMMENDATIONS - EQUIVALENT CLASS SITES' FOR STORMWATER DRAINAGE REQUIREMENTS UNLESS SPECIFIED OTHERWISE.
- 3.3 EXCAVATIONS FOR ALL SERVICE PIPES NOT TO UNDERMINE FOOTINGS. IF UNDERMINING IS LIKELY TO OCCUR, CONTACT THE ENGINEER PRIOR TO PROCEEDING.
- 3.4 WHERE PLUMBING PIPES PASS THROUGH FOOTINGS OR SLAB, SPECIFIED TOTAL THICKNESS OF ALL CONCRETE IS ALWAYS TO BE MAINTAINED.
- 3.5 SETDOWN AT WET AREA TO ARCHITECTURAL REQUIREMENT (50mm MAX). MAINTAIN 85mm SLAB THICKNESS. FOLD MESH DOWN TO MAINTAIN COVER, PLACE DIAGONAL BARS AT RE-ENTRANT CORNER FOR STEPS OVER 30mm. BARS TO BE N12x 1200 LONG.
- 3.6 REINFORCEMENT SHALL BE IN ACCORDANCE WITH THE FOLLOWING STANDARDS;
 

L	INDICATES PLAIN OR DEFORMED WIRE R500L OR D500L TO AS/NZS 4671.
SL	INDICATES DEFORMED SQUARE MESH D500L TO AS/NZS 4671.
N	INDICATES DEFORMED BARS D500N TO AS/NZS 4671.
TM SUFFIX	INDICATES TRENCH MESH USING DEFORMED BARS D500L TO AS/NZS 4671.

 ALL STEELWORK TO BE TREATED IN ACCORDANCE WITH TABLE 3.4.4.4 "CORROSION PROTECTION" OF THE BUILDING CODE OF AUSTRALIA.
- 3.7 LAP ALL MESH TWO TRANSVERSE WIRES PLUS 25mm OR TO MANUFACTURER'S SPECIFICATIONS.

3.8 CONCRETE TO CONFORM WITH AS 3600.

- 3.9 BLENDED CEMENT TO CONFORM WITH AS1317.
- 3.10 ALL CONCRETE TO BE N20/20/100.
- 3.11 FOR ISOLATED PAD FOOTINGS, REFER BACK TO ENGINEER.
- 3.12 FOOTING POSITION UNDER BRICKWORK CAN BE ADJUSTED TO SUIT PARAPET WALLS.
- 3.13 FOR SLAB SPANS > 35m REFER TO ENGINEER FOR MESH SIZE.
- 3.14 IF THE LENGTH TO WIDTH RATIO OF THE GROUND SLAB OR ANY PART OF THE GROUND SLAB EXCEEDS 3:1, REFER BACK TO THIS OFFICE FOR MESH SIZE.
- 3.15 IF POLISHED (OR HONED) CONCRETE FINISHES ARE DESIRED, THIS DESIGN SHOULD BE REFERRED BACK TO THIS OFFICE FOR CONSIDERATION, AS IT IS NOT THE INTENTION OF THESE DESIGNS FOR SUCH FINISHES.
- 3.16 PLACE SLAB THICKENING (300 WIDE x 250 DEEP) UNDER INTERNAL WALLS (90 OR 110) HIGHER THAN 3.7m WHERE GREATER THAN 1m FROM INTERNAL THICKENING. PROVIDE SAME TRENCH MESH AS INTERNAL THICKENING DETAIL, WHERE REQUIRED.
- 3.17 PIERCING THE VAPOUR BARRIER (VPM) USING LEVELLING PINS ON FREE DRAINING SAND PADS IS ALLOWABLE.
- 3.18 CURE SLAB AS DETERMINED BY ENGINEER.
- 3.19 THE SLAB IS CONSIDERED SUITABLE AS A PHYSICAL BARRIER AGAINST INGRESS OF TERMITES. IF THE FOOTING AND SLAB IS PLACED IN 2 POURS, THE PHYSICAL BARRIER ALSO INCLUDES THE FOOTING AND SLAB JOINT.
- 3.20 THE FOOTING DETAILS HAVE BEEN DESIGNED IN ACCORDANCE WITH AS3600 AND SECTION 4 OF AS2870.

4.0 MASONRY

- 4.1 PLACE MRBL50 MESH IN TOP BED JOINT CONTINUOUS THROUGHOUT ALL BRICKWORK.
- 4.2 REINFORCE BED JOINT BELOW WINDOW SILLS WITH MRBL50 MESH. CONTINUE 750 PAST SIDES OF OPENING.
- 4.3 LAP 250 AT SPLICES AND AROUND CORNERS AND COG 250 INTO INTERSECTING WALLS. 20mm COVER TO ALL WIRES.
- 4.4 ALL MESH IN EXTERNAL FACE OF EXTERNAL LEAF TO BE GALVANIZED TO AS/NZS 4680.
- 4.5 WHEN BRICKWORK EXTENDS ABOVE OPENINGS TO EXTERNAL LEAF REINFORCE AS PER CLAUSE 4.1, 4.2 & 4.3.
- 4.6 TYPICAL WALL SECTIONS ARE SHOWN FOR 28C INTERNAL CEILINGS. WHERE THERE ARE 3 OR MORE BED JOINTS OVER THE OPENING, REINFORCE BED JOINT OVER OPENING WITH MRBL50 MESH. CONTINUE 750 PAST SIDE OF OPENING.
- 4.7 ALL PERPENDS TO BE FULLY MORTARED.
- 4.8 A BRICK COURSE, AS REFERRED TO IN THIS DOCUMENT IS STANDARD 86mm HIGH.
- 4.9 2L6 WIRES MAY BE USED AS AN ALTERNATIVE TO THE MRBL50 MESH. WHERE L6 WIRES ARE USED, ALL SPLICES AND COGS TO BE 500 LONG.

5.0 MAINTENANCE

- 5.1 IT IS CONSIDERED THAT THIS DESIGN IS SUITABLE FOR THE FOUNDATION CONDITIONS TO BE ENCOUNTERED AND WILL ADEQUATELY CONTROL ANY CRACKING OF BRICKWORK AND CONCRETE, SUBJECT TO THE MAINTENANCE PROCEDURES BELOW BEING SATISFIED.
- 5.2 BUILDER TO ENSURE THAT CLIENT BE INFORMED OF NECESSITY TO MAINTAIN DRAINS IN GOOD WORKING ORDER AT ALL TIMES.
- 5.3 BUILDER TO ADVISE CLIENT TO CONSULT AN ENGINEER BEFORE PLANTING TREES OR SHRUBS WITHIN 2.5m, OR A DISTANCE EQUAL TO THE ANTICIPATED MAXIMUM HEIGHT OF THE TREE, OF THE BUILDING.
- 5.4 SITE TO BE MAINTAINED AS PER CSIRO INFORMATION PAMPHLET BTF 18 & STRUCTERRE'S CLAY FACT SHEET.
- 5.5 AS2870 AND 'CSIRO PAMPHLET BTF 18' COVER THE EXPECTED PERFORMANCE AND RESPONSIBILITIES OF ALL PARTIES WITH THE USE OF THESE DETAILS.

6.0 QUALITY CONTROL PROGRAM REQUIREMENTS

- 6.1 WORKING SLAB DEPTH AS INDICATED ON THE DETAIL. SLAB DEPTH TOLERANCE ALLOWABLE -10mm, +15mm.
- 6.2 WHERE DEPTH IS BELOW NOMINATED DEPTH, MAX AREA ALLOWED TO BE ≤ 5% OF THE TOTAL AREA.
- 6.3 DEPTH TESTING LOCATIONS TO BE NO CLOSER THAN 1000mm APART.
- 6.4 SLAB DEPTH IS TO BE PART OF A QUALITY CONTROL INSPECTION REGIME.
- 6.5 SLAB AND FOOTING CAN BE POURED MONOLITHICALLY IF DESIRED.

DATE LAST MODIFIED - 21/09/21



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DATE 16/11/22

APPROVED



## EXPLANATORY NOTES & STANDARD RECOMMENDATIONS - EQUIVALENT CLASS SITES (Sheet 1 of 2)

### GENERAL

1. THE EXPLANATORY NOTES AND THE STANDARD RECOMMENDATIONS ARE TO BE READ IN CONJUNCTION WITH THE SITE CLASSIFICATION REPORT.
2. ALL REFERRED STANDARDS TO BE THE CURRENT VERSION AT THE TIME OF THE CONSTRUCTION.
3. THE PURPOSE OF THE SITE CLASSIFICATION REPORT IS TO CLASSIFY THE SITE IN ACCORDANCE WITH AS2870 "RESIDENTIAL SLABS AND FOOTING". IT IS NOT INTENDED FOR ANY OTHER PURPOSE, INCLUDING SOLE INFORMATION IN THE PROVISION OF A QUOTATION FOR SITE WORKS. IT IS RECOMMENDED OTHER PARTIES TO PERFORM THEIR OWN INVESTIGATION FOR QUOTATION PURPOSES.
4. THE SITE CLASSIFICATION REPORT WILL INCLUDE BUT IS NOT LIMITED TO:
  - a. THE SITE CLASSIFICATION IN ACCORDANCE WITH AS2870 "RESIDENTIAL SLABS AND FOOTING",
  - b. A WIND CLASSIFICATION IN ACCORDANCE WITH AS4055 "WIND LOADS FOR HOUSING",
  - c. A COASTAL CORROSION CLASSIFICATION,
  - d. ADDITIONAL EARTHWORK RECOMMENDATIONS WHERE APPLICABLE,
  - e. STANDARD FOOTING DESIGN FOR SINGLE STOREY SLAB ON GROUND CONSTRUCTION.
5. THE SITE CLASSIFICATION IS BASED ON THE SITE AS PRESENTED AT THE TIME OF THE ASSESSMENT. THE SITE CLASSIFICATION AND RECOMMENDATIONS INCLUDED IN THE REPORT ARE SUBJECT TO SATISFACTORY COMPLETION OF RECOMMENDED EARTHWORKS, (REFER NOTE 17) AS A MINIMUM. SHOULD CHANGES TO THE SITE OCCUR, OTHER THAN THE RECOMMENDATIONS INCLUDED IN THE SITE CLASSIFICATION REPORT, REFER BACK TO THIS OFFICE FOR REVIEW OF CLASSIFICATION AND FOOTING DESIGN.
6. ALL RECOMMENDATIONS GIVEN IN THE SITE CLASSIFICATION REPORT HAVE BEEN DETERMINED FROM THE INFORMATION THAT WAS AVAILABLE TO THIS OFFICE AT THE TIME OF INVESTIGATION. IF FURTHER INFORMATION RELATING TO THE SITE OR DEVELOPMENT BECOMES AVAILABLE, THESE RECOMMENDATIONS ARE SUBJECT TO CHANGE.
7. EQUIVALENT CLASS SITES ARE BASED ON DIFFERENTIAL SURFACE MOVEMENT ARISING FROM ISSUE OTHER THAN SHRINK-SWELL (REACTIVITY) ONLY. THESE MAY INCLUDE SETTLEMENT AND/OR CONSOLIDATION THAT MAY OCCUR AS A RESULT OF THE UNDERLYING GROUND CONDITIONS.
8. BOREHOLES EXCAVATED REVEAL THE SOIL PROFILE AT THE BOREHOLE LOCATION ONLY. FROM THIS, IT IS INFERRED THAT THESE ARE THE SOIL CONDITIONS OVER THE SITE. VARIATIONS CAN OCCUR WHICH MAY NOT HAVE BEEN DETECTED AT THE INVESTIGATION STAGE. ANY ANOMALIES SHOULD BE REFERRED BACK TO THIS OFFICE FOR A REASSESSMENT.
9. A NUMBER OF BOREHOLES ARE CONDUCTED ACROSS THE SITE TO DETERMINE THE SOIL PROFILES AND PROVIDE A REPRESENTATION OF THE GROUND CONDITIONS.
10. THIS REPORT IS FOR STRUCTERRE ONLY TO USE IN DESIGN. ANY DESIGN BY ANYONE ELSE FOR ANY STRUCTURE MUST BE SPECIFICALLY APPROVED BY STRUCTERRE. IF USED BY ANYONE ELSE FOR ANYTHING OTHER THAN A STRUCTERRE DESIGN OR STRUCTURE, STRUCTERRE TAKES NO RESPONSIBILITY.

### SAND PAD

11. THE RECOMMENDED FOOTING DESIGN IS ONLY TO BE USED IN CONJUNCTION WITH THE RECOMMENDED SAND PAD AND EARTHWORKS AS OUTLINED IN THE SITE CLASSIFICATION REPORT.
12. THE RECOMMENDATIONS FOR THE SAND PAD IS FOR STRUCTURAL PURPOSES ONLY, AND DOES NOT PROVIDE THE MINIMUM FINISHED PAD LEVEL IN RELATION TO FLOOD LEVELS OR DEPTH TO GROUNDWATER. SHOULD THE TEST BE LOCATED IN A LOW LYING OR FLOOD PRONE AREA, REFER TO THE LOCAL AUTHORITY FOR MINIMUM BUILDING HEIGHT.
13. IMPORTED FILL FOR USE AS A SAND PAD TO BE IN ACCORDANCE TO AS 3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS" WHICH INCLUDES BUT IS NOT LIMITED TO: BE FREE FROM ANY DELETERIOUS MATERIALS INCLUDING ORGANICS, (ROOTS, STUMPS, GRASSES, DECOMPOSED ORGANICS - PEAT, TIMBER, ETC), BUILDING RUBBLE, GLASS, PLASTICS OR WASTE MATERIAL. THE FINES CONTENT, (PERCENTAGE PASSING THE 0.075mm SIEVE) TO BE LESS THAN 5% BY MASS.
14. ON SAND SITES A SAND PAD IS NOT REQUIRED STRUCTURALLY, HOWEVER IF ROCK IS ENCOUNTERED, A MINIMUM 200mm SAND PAD BEYOND THE BASE OF FOOTING IS RECOMMENDED.
15. SAND PAD TO EXTEND BEYOND BUILDING AREA A MINIMUM OF 1.5 TIMES THE PAD DEPTH.
16. RECOMMENDED SAND PAD DEPTH IS ABOVE THE HIGHEST POINT, UNLESS OTHERWISE SPECIFIED.
17. IT IS REQUIRED THAT EARTHWORKS CONFIRM THAT THE MINIMUM DEPTH OF RECOMMENDED SAND PAD IS ACHIEVED.

### EARTHWORKS

18. RECOMMENDED EARTHWORKS TO BE CONDUCTED IN ACCORDANCE WITH AS3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS", AND TO INCLUDE BUT NOT BE LIMITED TO:
  - a. REMOVAL OF ALL VEGETATION, TOPSOILS, UNCONTROLLED FILLS AND OTHER DELETERIOUS MATERIALS FROM THE BUILDING AREA,
  - b. GRUBBING OUT OF ANY TREES ENSURING THE REMAINING HOLES ARE BACKFILLED WITH CLEAN COMPACTED SAND,
  - c. NOTIFYING THE ENGINEER OF ANY UNUSUAL FEATURE OR DISCREPANCY THAT MAY BECOME EVIDENT DURING EARTHWORKS, PRIOR TO PROCEEDING,
  - d. COMPACTING TO MEET THE REQUIREMENTS AS OUTLINED IN AS 3798 TABLE 5.1.
19. FILL MATERIAL (WHICH IS NOT ALWAYS APPARENT AT THE INITIAL INVESTIGATION STAGE) IS TO BE DEALT WITH AS FOLLOWS:
  - a. IF IT IS CERTIFIED BY OTHERS IT CAN REMAIN.
  - b. IF IT IS NOT CERTIFIED WILL REQUIRE REMOVAL DOWN TO NATURAL GROUND OR VERIFIED. ANY SAND CAN BE REUSED.
  - c. IF A PAD HAS ALREADY BEEN CONSTRUCTED, THE SITE CLASSIFICATION IS NOT CERTIFICATION OF THE PAD. CONTACT THIS OFFICE SHOULD A SAND PAD CERTIFICATION BE REQUIRED.
20. ANY ORGANIC MATTER OR ROOTS ENCOUNTERED, WHICH IS BEYOND WHAT IS NORMALLY CONSIDERED ACCEPTABLE IS TO BE REMOVED. THIS WILL NECESSITATE RAKING THE SITE TO REMOVE ORGANIC MATERIAL, TURNING THE SITE OVER AND RE-COMPACTING TO A MINIMUM.

### RETAINING WALLS

21. AN ASSESSMENT OF ANY EXISTING OR PROPOSED RETAINING WALLS HAS NOT BEEN CONDUCTED AS PART OF THIS SITE CLASSIFICATION REPORT.
22. IF THE PROPOSED BUILDING IS TO BE LOCATED CLOSER THAN THE HEIGHT OF THE RETAINING WALL, THIS MAY PLACE ADDITIONAL LOADS ON THE WALL THAT WERE NOT INITIALLY DESIGNED FOR. AN INSPECTION OF THE STRUCTURAL INTEGRITY OF THE RETAINING WALL WILL BE REQUIRED TO PROVIDE CERTIFICATION AND/OR RECOMMENDATIONS PRIOR TO ANY CONSTRUCTION. PLEASE REFER BACK TO THIS OFFICE FOR ASSISTANCE.  
STORMWATER DRAINAGE
23. UNLESS OTHERWISE SPECIFIED, ALL SOAKWELLS ARE TO BE LOCATED THE DEPTH OF THE SOAKWELL AWAY FROM THE BUILDING OR SETBACK A MINIMUM OF 1200mm, WHICHEVER IS GREATER, UNLESS SPECIFIED OTHERWISE. PLEASE REFER BACK TO THIS OFFICE IF THE SETBACK CANNOT BE ACHIEVED.

DOC# SS001 - 1.1.10 SCR EQUIVALENT V1.1 - AUGUST 2021



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PROJECT :  
LOT 283 ATTADALE AV DARCH

CLIENT : PARCEL DARCH PTY LTD

SCALE 1:20

DATE 16/11/22

APPROVED

## EXPLANATORY NOTES & STANDARD RECOMMENDATIONS - EQUIVALENT CLASS SITES (Sheet 2 of 2)

### WIND CLASSIFICATION

24. WIND CLASSIFICATION IS GIVEN FOR THE EXPECTED CONDITION 5 YEARS HENCE. THIS CLASSIFICATION IS LIMITED TO BUILDINGS CLASSES 1 AND 10, WHICH HAVE THE FOLLOWING LIMITATION (AS PER AS4055):

- a. MAXIMUM DISTANCE FROM THE GROUND LEVEL TO THE UNDERSIDE OF EAVES SHALL NOT EXCEED 6.0m,
- b. MAXIMUM DISTANCE FROM GROUND LEVEL TO THE HIGHEST POINT OF THE ROOF, EXCLUDING CHIMNEYS, SHALL NOT EXCEED 8.5m,
- c. THE ROOF PITCH SHALL NOT EXCEED 35 °,
- d. THE WIDTH, EXCLUDING EAVES, SHALL NOT EXCEED 16.0m AND THE LENGTH SHALL NOT EXCEED 5x THE WIDTH.

IF THE BUILDING FALLS OUTSIDE OF THESE LIMITATIONS, THE STATED WIND CLASSIFICATION DOES NOT APPLY. REFER BACK TO THIS OFFICE FOR A REVISED WIND CLASSIFICATION.

### ENVIRONMENTAL

25. NO ENVIRONMENTAL ASSESSMENT OF THIS SITE HAS BEEN UNDERTAKEN. SHOULD AN ENVIRONMENTAL ASSESSMENT BE REQUIRED, PLEASE CONTACT THIS OFFICE.

### SEISMIC

26. RECOMMENDED FOOTING DETAILS ARE SUITABLE FOR SEISMIC CONDITIONS WITH AN EARTHQUAKE HAZARD FACTOR OF  $\leq 0.11$ . RECOMMENDED FOOTING DETAILS PROVIDED FOR SITES WITH AN EARTHQUAKE HAZARD FACTOR OF  $> 0.11$ , ARE NOT FOR CONSTRUCTION, BUT FOR COSTING PURPOSES ONLY. IT IS REQUIRED THAT A FULL SEISMIC DESIGN IS CONDUCTED.

### CORROSION CLASSIFICATION

27. THE CORROSION CLASSIFICATION HAS BEEN ASSESSED IN ACCORDANCE WITH AS3700.

DOC# SS001 - 1.1.10 SCR EQUIVALENT V1.1 - AUGUST 2021



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SCALE 1:20

DATE 16/11/22

APPROVED

A blue ink handwritten signature is written over the 'APPROVED' field.

**SITE CLASSIFICATION REPORT**  
CERTIFICATE 2595178

**CLIENT** PARCEL DARCH PTY LTD  
**JOB ADDRESS** LOT 284 ATTADALE AV DARCH  
**CLIENT JOB NO.**  
**OWNER**  
**STRUCTERRE JOB NO.** S1082673  
**DATE OF ASSESSMENT** 15/11/22

**SITE RECORD**

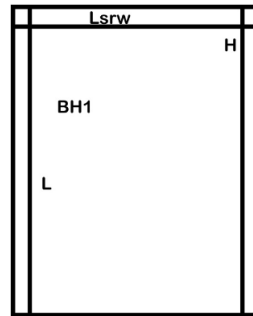


<b>SITE CLASSIFICATION</b>	<b>S - EQUIVALENT</b> <i>(in accordance with AS2870)</i>
<b>FOOTING DETAIL</b>	<b>CM3</b>
<b>SAND PAD</b>	<b>No sand pad required structurally</b>
<b>BUSHFIRE PRONE AREA</b>	<b>Not in a Bushfire Prone Area (see NOTE 2.)</b>
<b>CORROSION CLASSIFICATION</b>	<b>R1</b> <i>(Durability Class in accordance with AS3700)</i>
<b>WIND CLASSIFICATION</b>	<b>N1</b> <i>(in accordance with AS4055)</i>
-TERRAIN CATEGORY	3
-TOPOGRAPHIC	T0
-SHIELDING	Full Shielding

## SOIL PROFILE

BOREHOLE 1: 0 - 700 FILL sand with artificial material & limestone gravel - grey; 700 end of hole.

## APPROXIMATE BOREHOLE LOCATIONS



Attadale Av

### NOTE 1 Explanatory Notes & Standard Recommendations

This site classification report must be read in conjunction with the applicable Explanatory Notes & Standard Recommendations. For A Class sites, refer to the Explanatory Notes and Standard Recommendations for Stable (A Class) Sites, version 1.0 July 2018. For S, M, H1, H2 & E Class sites, refer to the Explanatory Notes and Standard Recommendations for Reactive (S, M, H1, H2 & E Class) Sites version 1.0 July 2018. For Equivalent Class sites, refer to the Explanatory Notes and Standard Recommendations for Equivalent Class Sites, version 1.0 July 2018.

### NOTE 2 Bushfire - Prone Area

The Site may be situated in a bush fire prone area in accordance with the Department of Fire and Emergency Services (DFES) Bushfire Prone Area Map (Reference: <http://www.dfes.wa.gov.au/regulationandcompliance/bushfireproneareas/>) the current version at the time of this assessment. A Bushfire Attack Level (BAL) assessment may be required for this site, please confirm with the local authority. Should you require an assessment, please contact this Office.

### ADDITIONAL NOTES / REQUIREMENTS

#### Site Condition

At the time of inspection the site was considered to be level and cleared. For specific levels of this site or topographical features, please refer to a professional site survey.

#### Structerre Geotech Reference

The Site Classification is based on any remedial works being successfully completed as outlined in the Structerre Geotechnical Report J380185 dated 02/04/2021. The footing details are subject to the recommendations being completed to an acceptable level as outlined in this report, if applicable.

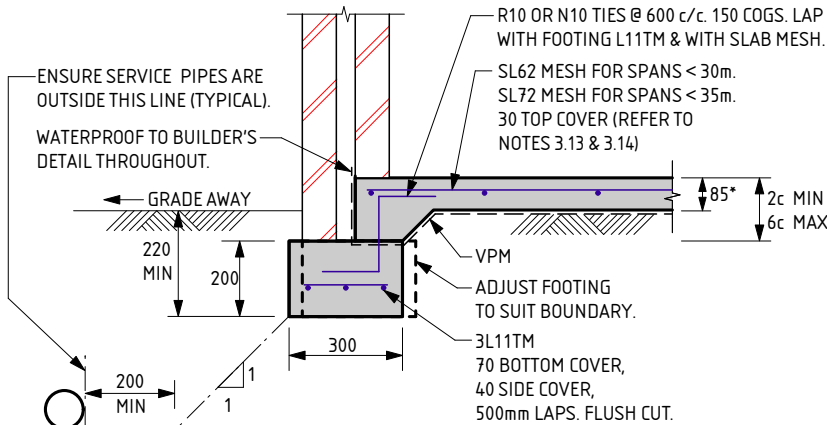
#### Internal Thickenings

Internal thickenings are required for the proposed residence as specified on the recommended footing detail. Please provide a copy of the architectural drawings to this Office, so that the internal thickenings can be designed and drawn in accordance with AS2870.

#### Internal Thickening Inspection

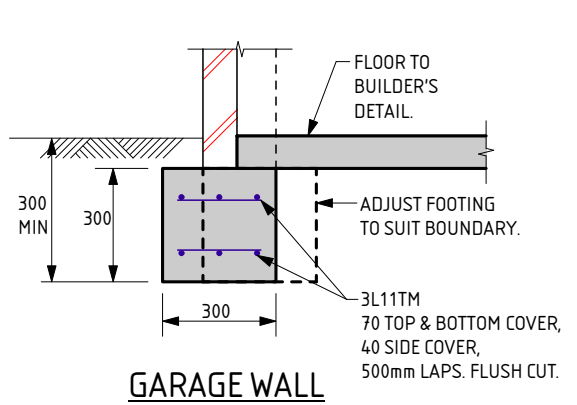
This detail is subject to a internal thickening layout inspection. It is recommended that an inspection be conducted by a representative from this Office prior to concrete pour.

-- END OF REPORT --

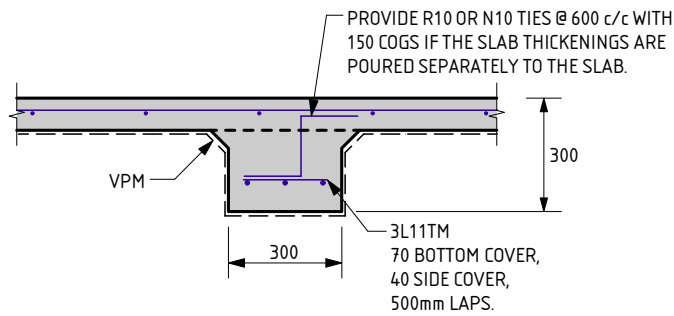


**EXTERNAL WALLS**

\* 100mm SLAB MAY BE INSTALLED INSTEAD OF 85mm.  
 IF 100mm SLAB USED, MESH TO BE:  
 SL62 MESH FOR SPANS < 25m.  
 SL72 MESH FOR SPANS < 30m.  
 SL82 MESH FOR SPANS < 35m.

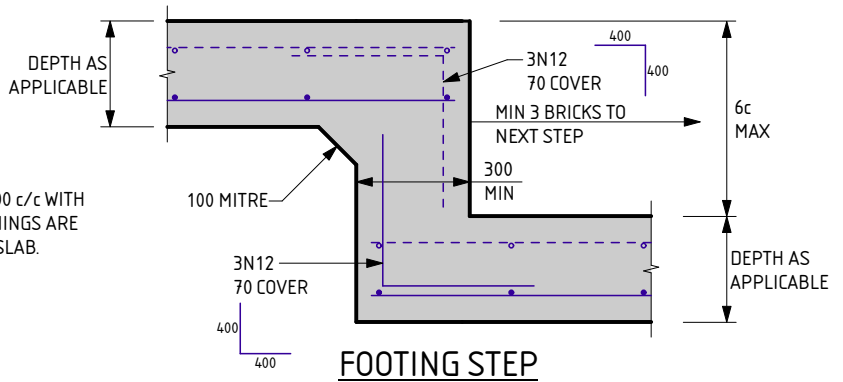


**GARAGE WALL**

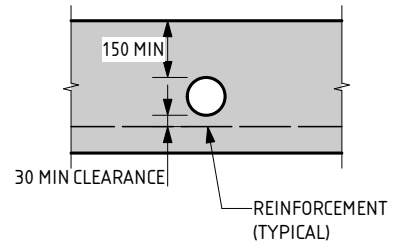


**INTERNAL THICKENING**

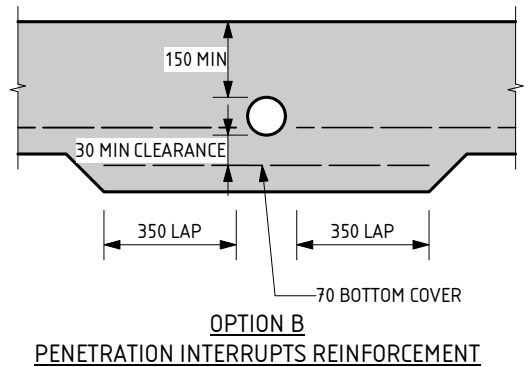
REFER TO STRUCTERRE'S DRAWINGS FOR PLACEMENT OF INTERNAL THICKENINGS. LOCATIONS TO BE CONFIRMED ON SITE BY STRUCTERRE PRIOR TO CONCRETE POUR.



**FOOTING STEP**



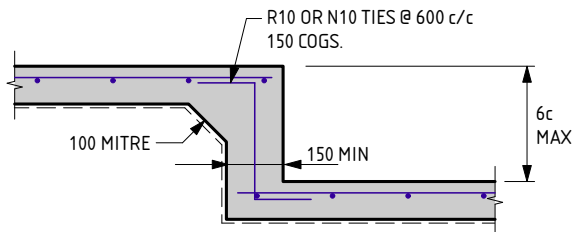
**OPTION A  
PENETRATION CLEAR OF REINFORCEMENT**



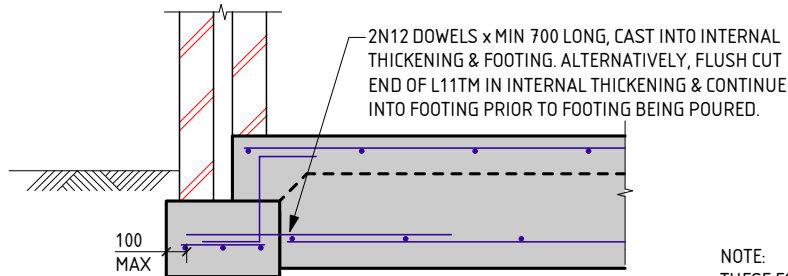
**OPTION B  
PENETRATION INTERRUPTS REINFORCEMENT**

**SERVICE PIPE DIAGRAM**

- MAXIMUM PENETRATION SIZE TO BE Ø150.



**SLAB STEP**



**EXTERNAL FOOTING TO INTERNAL THICKENING**

THIS DETAIL IS EQUIVALENT TO  
 STRUCTERRE FOOTING DETAIL C4.0

NOTE:  
 THESE FOOTING DETAILS ARE TO BE READ IN CONJUNCTION WITH THE REACTIVE SITE NOTES.

THE APPROVED SIGNATURE ON THIS DETAIL ENDORSES ITS USE FOR SINGLE STOREY BUILDINGS ON BUILDING PLATFORMS WITH UP TO 11mm OF SURFACE MOVEMENT.  
 DATE LAST MODIFIED - 20/09/18

**CM3**  
 CAVITY MASONRY



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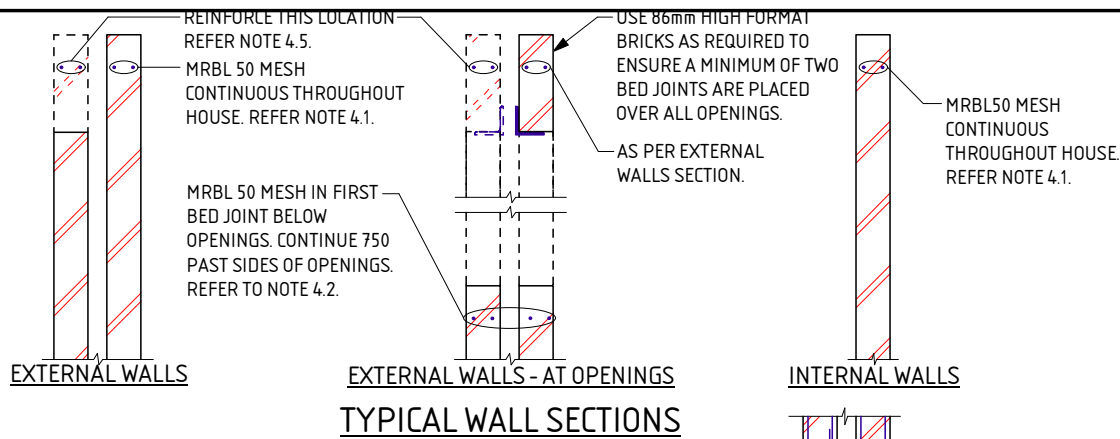
PROJECT: LOT 284 ATTADALE AV DARCH

CLIENT: PARCEL DARCH PTY LTD

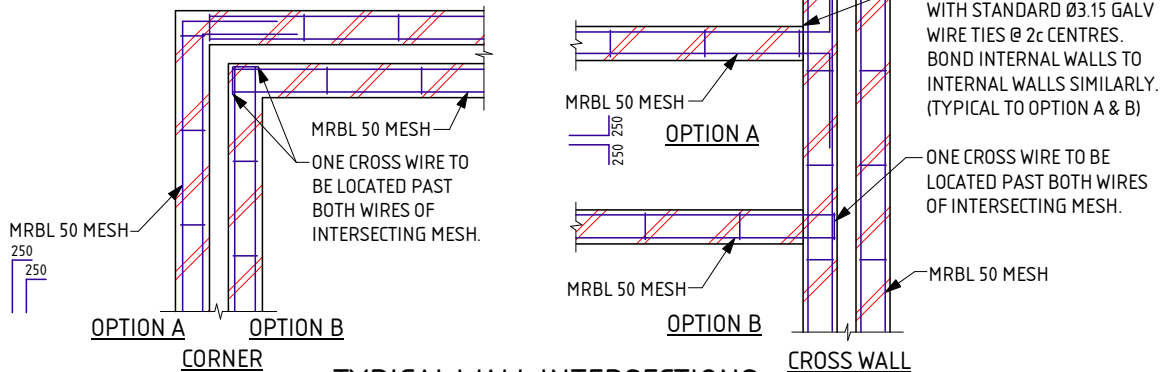
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APPROVED



TYPICAL WALL SECTIONS



TYPICAL WALL INTERSECTIONS

REACTIVE SITE NOTES FOR CM1 - CM7

THESE NOTES ARE TO BE READ IN CONJUNCTION WITH THE ATTACHED FOOTING DETAILS.

1.0 SITE CLASSIFICATION

- 1.1 REFER TO ATTACHED CERTIFICATE OF INSPECTION FOR SITE CLASSIFICATION. THE SITE CLASSIFICATION NOTED, IS AS DEFINED IN AS2870 - RESIDENTIAL SLABS & FOOTINGS.
- 1.2 THE SITE CLASSIFICATION HAS BEEN DETERMINED BY INVESTIGATION OF THE SITE, AS PER THE ATTACHED CERTIFICATE OF INSPECTION. REFER TO THE ATTACHED CERTIFICATE FOR ANY SPECIAL REQUIREMENTS.

2.0 EARTHWORKS

- 2.1 SAND PAD IF APPLICABLE TO BE AS PER SITE INSPECTION REPORT.
- 2.2 EARTHWORKS SHALL INCLUDE, BUT NOT BE LIMITED TO:
  - a) REMOVE ALL ORGANIC MATERIAL FROM THE PAD AREA.
  - b) REMOVE ALL RUBBISH AND DELETERIOUS FILL (SUCH AS CLAY FILL) FROM THE PAD AREA.
  - c) GRUB OUT ANY TREES WHERE NECESSARY AND ENSURE THE REMAINING HOLES ARE FILLED AND COMPACTED SATISFACTORILY WITH SAND.
  - d) NOTIFY THE ENGINEER OF ANY UNUSUAL FEATURES OR DISCREPANCIES WHICH MAY BECOME EVIDENT DURING EARTHWORKS, PRIOR TO PROCEEDING.
- 2.3 ANY PREDOMINANT ROCK IN THE HOUSE PAD AREAS IS TO BE INSPECTED BY THE ENGINEER.
- 2.4 ANY CUT TO THE SITE, OTHER THAN TOPSOIL STRIPPING, WILL REQUIRE THE PREPARED CUT BASE TO BE INSPECTED AND APPROVED BY THE ENGINEER.
- 2.5 MAXIMUM SAND PAD DEPTH NOT TO EXCEED 150% OF MINIMUM PAD DEPTH OR 2000mm WITHOUT THE ENGINEER'S APPROVAL.
- 2.6 IF APPLICABLE SAND FILL TO BE CLEAN WELL DRAINED, WITH MAX FINES (PARTICLES UP TO 0.075mm) CONTENT OF 5%. SAND TO BE COMPACTED TO A MIN 6 BLOWS/300mm FOR THE DEPTH OF THE PAD OR TO DISCRETION OF ENGINEER.
- 2.7 COMPACTION TESTING TO BE PERFORMED BY STRUCTERRE.

3.0 FOOTINGS & SLABS

- 3.1 FOOTINGS ARE TO BE PLACED DIRECTLY INTO SAND PAD OF SPECIFIED THICKNESS.
- 3.2 ALL STORMWATER MUST BE DISCHARGED INTO COUNCIL DRAINS OR A MINIMUM OF 3m FOR S CLASS SITES, 4m FOR M CLASS SITES AND 5m FOR H1 & H2 CLASS SITES, AWAY FROM THE RESIDENCE AND/OR ADJACENT BUILDINGS INTO SOAKWELLS. IF THIS RESTRICTION CANNOT BE ACHIEVED REFER BACK TO THIS OFFICE FOR AN ALTERNATIVE DESIGN. WHERE THE SITE HAS BEEN CLASSIFIED AS AN 'EQUIVALENT' SITE CLASSIFICATION, REFER TO 'EXPLANATORY NOTES & STANDARD RECOMMENDATIONS - EQUIVALENT CLASS SITES' FOR STORMWATER DRAINAGE REQUIREMENTS UNLESS SPECIFIED OTHERWISE.
- 3.3 EXCAVATIONS FOR ALL SERVICE PIPES NOT TO UNDERMINE FOOTINGS. IF UNDERMINING IS LIKELY TO OCCUR, CONTACT THE ENGINEER PRIOR TO PROCEEDING.
- 3.4 WHERE PLUMBING PIPES PASS THROUGH FOOTINGS OR SLAB, SPECIFIED TOTAL THICKNESS OF ALL CONCRETE IS ALWAYS TO BE MAINTAINED.
- 3.5 SETDOWN AT WET AREA TO ARCHITECTURAL REQUIREMENT (50mm MAX). MAINTAIN 85mm SLAB THICKNESS. FOLD MESH DOWN TO MAINTAIN COVER, PLACE DIAGONAL BARS AT RE-ENTRANT CORNER FOR STEPS OVER 30mm. BARS TO BE N12x 1200 LONG.
- 3.6 REINFORCEMENT SHALL BE IN ACCORDANCE WITH THE FOLLOWING STANDARDS;
 

L	INDICATES PLAIN OR DEFORMED WIRE R500L OR D500L TO AS/NZS 4671.
SL	INDICATES DEFORMED SQUARE MESH D500L TO AS/NZS 4671.
N	INDICATES DEFORMED BARS D500N TO AS/NZS 4671.
TM SUFFIX	INDICATES TRENCH MESH USING DEFORMED BARS D500L TO AS/NZS 4671.

 ALL STEELWORK TO BE TREATED IN ACCORDANCE WITH TABLE 3.4.4.4 "CORROSION PROTECTION" OF THE BUILDING CODE OF AUSTRALIA.
- 3.7 LAP ALL MESH TWO TRANSVERSE WIRES PLUS 25mm OR TO MANUFACTURER'S SPECIFICATIONS.

3.8 CONCRETE TO CONFORM WITH AS 3600.

- 3.9 BLENDED CEMENT TO CONFORM WITH AS1317.
- 3.10 ALL CONCRETE TO BE N20/20/100.
- 3.11 FOR ISOLATED PAD FOOTINGS, REFER BACK TO ENGINEER.
- 3.12 FOOTING POSITION UNDER BRICKWORK CAN BE ADJUSTED TO SUIT PARAPET WALLS.
- 3.13 FOR SLAB SPANS > 35m REFER TO ENGINEER FOR MESH SIZE.
- 3.14 IF THE LENGTH TO WIDTH RATIO OF THE GROUND SLAB OR ANY PART OF THE GROUND SLAB EXCEEDS 3:1, REFER BACK TO THIS OFFICE FOR MESH SIZE.
- 3.15 IF POLISHED (OR HONED) CONCRETE FINISHES ARE DESIRED, THIS DESIGN SHOULD BE REFERRED BACK TO THIS OFFICE FOR CONSIDERATION, AS IT IS NOT THE INTENTION OF THESE DESIGNS FOR SUCH FINISHES.
- 3.16 PLACE SLAB THICKENING (300 WIDE x 250 DEEP) UNDER INTERNAL WALLS (90 OR 110) HIGHER THAN 3.7m WHERE GREATER THAN 1m FROM INTERNAL THICKENING. PROVIDE SAME TRENCH MESH AS INTERNAL THICKENING DETAIL, WHERE REQUIRED.
- 3.17 PIERCING THE VAPOUR BARRIER (VPM) USING LEVELLING PINS ON FREE DRAINING SAND PADS IS ALLOWABLE.
- 3.18 CURE SLAB AS DETERMINED BY ENGINEER.
- 3.19 THE SLAB IS CONSIDERED SUITABLE AS A PHYSICAL BARRIER AGAINST INGRESS OF TERMITES. IF THE FOOTING AND SLAB IS PLACED IN 2 POURS, THE PHYSICAL BARRIER ALSO INCLUDES THE FOOTING AND SLAB JOINT.
- 3.20 THE FOOTING DETAILS HAVE BEEN DESIGNED IN ACCORDANCE WITH AS3600 AND SECTION 4 OF AS2870.

4.0 MASONRY

- 4.1 PLACE MRBL50 MESH IN TOP BED JOINT CONTINUOUS THROUGHOUT ALL BRICKWORK.
- 4.2 REINFORCE BED JOINT BELOW WINDOW SILLS WITH MRBL50 MESH. CONTINUE 750 PAST SIDES OF OPENING.
- 4.3 LAP 250 AT SPLICES AND AROUND CORNERS AND COG 250 INTO INTERSECTING WALLS. 20mm COVER TO ALL WIRES.
- 4.4 ALL MESH IN EXTERNAL FACE OF EXTERNAL LEAF TO BE GALVANIZED TO AS/NZS 4680.
- 4.5 WHEN BRICKWORK EXTENDS ABOVE OPENINGS TO EXTERNAL LEAF REINFORCE AS PER CLAUSE 4.1, 4.2 & 4.3.
- 4.6 TYPICAL WALL SECTIONS ARE SHOWN FOR 28C INTERNAL CEILINGS. WHERE THERE ARE 3 OR MORE BED JOINTS OVER THE OPENING, REINFORCE BED JOINT OVER OPENING WITH MRBL50 MESH. CONTINUE 750 PAST SIDE OF OPENING.
- 4.7 ALL PERPENDS TO BE FULLY MORTARED.
- 4.8 A BRICK COURSE, AS REFERRED TO IN THIS DOCUMENT IS STANDARD 86mm HIGH.
- 4.9 2L6 WIRES MAY BE USED AS AN ALTERNATIVE TO THE MRBL50 MESH. WHERE L6 WIRES ARE USED, ALL SPLICES AND COGS TO BE 500 LONG.

5.0 MAINTENANCE

- 5.1 IT IS CONSIDERED THAT THIS DESIGN IS SUITABLE FOR THE FOUNDATION CONDITIONS TO BE ENCOUNTERED AND WILL ADEQUATELY CONTROL ANY CRACKING OF BRICKWORK AND CONCRETE, SUBJECT TO THE MAINTENANCE PROCEDURES BELOW BEING SATISFIED.
- 5.2 BUILDER TO ENSURE THAT CLIENT BE INFORMED OF NECESSITY TO MAINTAIN DRAINS IN GOOD WORKING ORDER AT ALL TIMES.
- 5.3 BUILDER TO ADVISE CLIENT TO CONSULT AN ENGINEER BEFORE PLANTING TREES OR SHRUBS WITHIN 2.5m, OR A DISTANCE EQUAL TO THE ANTICIPATED MAXIMUM HEIGHT OF THE TREE, OF THE BUILDING.
- 5.4 SITE TO BE MAINTAINED AS PER CSIRO INFORMATION PAMPHLET BTF 18 & STRUCTERRE'S CLAY FACT SHEET.
- 5.5 AS2870 AND 'CSIRO PAMPHLET BTF 18' COVER THE EXPECTED PERFORMANCE AND RESPONSIBILITIES OF ALL PARTIES WITH THE USE OF THESE DETAILS.

6.0 QUALITY CONTROL PROGRAM REQUIREMENTS

- 6.1 WORKING SLAB DEPTH AS INDICATED ON THE DETAIL. SLAB DEPTH TOLERANCE ALLOWABLE -10mm, +15mm.
- 6.2 WHERE DEPTH IS BELOW NOMINATED DEPTH, MAX AREA ALLOWED TO BE ≤ 5% OF THE TOTAL AREA.
- 6.3 DEPTH TESTING LOCATIONS TO BE NO CLOSER THAN 1000mm APART.
- 6.4 SLAB DEPTH IS TO BE PART OF A QUALITY CONTROL INSPECTION REGIME.
- 6.5 SLAB AND FOOTING CAN BE Poured MONOLITHICALLY IF DESIRED.

DATE LAST MODIFIED - 21/09/21



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DATE 16/11/22

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## EXPLANATORY NOTES & STANDARD RECOMMENDATIONS - EQUIVALENT CLASS SITES (Sheet 1 of 2)

### GENERAL

1. THE EXPLANATORY NOTES AND THE STANDARD RECOMMENDATIONS ARE TO BE READ IN CONJUNCTION WITH THE SITE CLASSIFICATION REPORT.
2. ALL REFERRED STANDARDS TO BE THE CURRENT VERSION AT THE TIME OF THE CONSTRUCTION.
3. THE PURPOSE OF THE SITE CLASSIFICATION REPORT IS TO CLASSIFY THE SITE IN ACCORDANCE WITH AS2870 "RESIDENTIAL SLABS AND FOOTING". IT IS NOT INTENDED FOR ANY OTHER PURPOSE, INCLUDING SOLE INFORMATION IN THE PROVISION OF A QUOTATION FOR SITE WORKS. IT IS RECOMMENDED OTHER PARTIES TO PERFORM THEIR OWN INVESTIGATION FOR QUOTATION PURPOSES.
4. THE SITE CLASSIFICATION REPORT WILL INCLUDE BUT IS NOT LIMITED TO:
  - a. THE SITE CLASSIFICATION IN ACCORDANCE WITH AS2870 "RESIDENTIAL SLABS AND FOOTING",
  - b. A WIND CLASSIFICATION IN ACCORDANCE WITH AS4055 "WIND LOADS FOR HOUSING",
  - c. A COASTAL CORROSION CLASSIFICATION,
  - d. ADDITIONAL EARTHWORK RECOMMENDATIONS WHERE APPLICABLE,
  - e. STANDARD FOOTING DESIGN FOR SINGLE STOREY SLAB ON GROUND CONSTRUCTION.
5. THE SITE CLASSIFICATION IS BASED ON THE SITE AS PRESENTED AT THE TIME OF THE ASSESSMENT. THE SITE CLASSIFICATION AND RECOMMENDATIONS INCLUDED IN THE REPORT ARE SUBJECT TO SATISFACTORY COMPLETION OF RECOMMENDED EARTHWORKS, (REFER NOTE 17) AS A MINIMUM. SHOULD CHANGES TO THE SITE OCCUR, OTHER THAN THE RECOMMENDATIONS INCLUDED IN THE SITE CLASSIFICATION REPORT, REFER BACK TO THIS OFFICE FOR REVIEW OF CLASSIFICATION AND FOOTING DESIGN.
6. ALL RECOMMENDATIONS GIVEN IN THE SITE CLASSIFICATION REPORT HAVE BEEN DETERMINED FROM THE INFORMATION THAT WAS AVAILABLE TO THIS OFFICE AT THE TIME OF INVESTIGATION. IF FURTHER INFORMATION RELATING TO THE SITE OR DEVELOPMENT BECOMES AVAILABLE, THESE RECOMMENDATIONS ARE SUBJECT TO CHANGE.
7. EQUIVALENT CLASS SITES ARE BASED ON DIFFERENTIAL SURFACE MOVEMENT ARISING FROM ISSUE OTHER THAN SHRINK-SWELL (REACTIVITY) ONLY. THESE MAY INCLUDE SETTLEMENT AND/OR CONSOLIDATION THAT MAY OCCUR AS A RESULT OF THE UNDERLYING GROUND CONDITIONS.
8. BOREHOLES EXCAVATED REVEAL THE SOIL PROFILE AT THE BOREHOLE LOCATION ONLY. FROM THIS, IT IS INFERRED THAT THESE ARE THE SOIL CONDITIONS OVER THE SITE. VARIATIONS CAN OCCUR WHICH MAY NOT HAVE BEEN DETECTED AT THE INVESTIGATION STAGE. ANY ANOMALIES SHOULD BE REFERRED BACK TO THIS OFFICE FOR A REASSESSMENT.
9. A NUMBER OF BOREHOLES ARE CONDUCTED ACROSS THE SITE TO DETERMINE THE SOIL PROFILES AND PROVIDE A REPRESENTATION OF THE GROUND CONDITIONS.
10. THIS REPORT IS FOR STRUCTERRE ONLY TO USE IN DESIGN. ANY DESIGN BY ANYONE ELSE FOR ANY STRUCTURE MUST BE SPECIFICALLY APPROVED BY STRUCTERRE. IF USED BY ANYONE ELSE FOR ANYTHING OTHER THAN A STRUCTERRE DESIGN OR STRUCTURE, STRUCTERRE TAKES NO RESPONSIBILITY.

### SAND PAD

11. THE RECOMMENDED FOOTING DESIGN IS ONLY TO BE USED IN CONJUNCTION WITH THE RECOMMENDED SAND PAD AND EARTHWORKS AS OUTLINED IN THE SITE CLASSIFICATION REPORT.
12. THE RECOMMENDATIONS FOR THE SAND PAD IS FOR STRUCTURAL PURPOSES ONLY, AND DOES NOT PROVIDE THE MINIMUM FINISHED PAD LEVEL IN RELATION TO FLOOD LEVELS OR DEPTH TO GROUNDWATER. SHOULD THE TEST BE LOCATED IN A LOW LYING OR FLOOD PRONE AREA, REFER TO THE LOCAL AUTHORITY FOR MINIMUM BUILDING HEIGHT.
13. IMPORTED FILL FOR USE AS A SAND PAD TO BE IN ACCORDANCE TO AS 3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS" WHICH INCLUDES BUT IS NOT LIMITED TO: BE FREE FROM ANY DELETERIOUS MATERIALS INCLUDING ORGANICS, (ROOTS, STUMPS, GRASSES, DECOMPOSED ORGANICS - PEAT, TIMBER, ETC), BUILDING RUBBLE, GLASS, PLASTICS OR WASTE MATERIAL. THE FINES CONTENT, (PERCENTAGE PASSING THE 0.075mm SIEVE) TO BE LESS THAN 5% BY MASS.
14. ON SAND SITES A SAND PAD IS NOT REQUIRED STRUCTURALLY, HOWEVER IF ROCK IS ENCOUNTERED, A MINIMUM 200mm SAND PAD BEYOND THE BASE OF FOOTING IS RECOMMENDED.
15. SAND PAD TO EXTEND BEYOND BUILDING AREA A MINIMUM OF 1.5 TIMES THE PAD DEPTH.
16. RECOMMENDED SAND PAD DEPTH IS ABOVE THE HIGHEST POINT, UNLESS OTHERWISE SPECIFIED.
17. IT IS REQUIRED THAT EARTHWORKS CONFIRM THAT THE MINIMUM DEPTH OF RECOMMENDED SAND PAD IS ACHIEVED.

### EARTHWORKS

18. RECOMMENDED EARTHWORKS TO BE CONDUCTED IN ACCORDANCE WITH AS3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS", AND TO INCLUDE BUT NOT BE LIMITED TO:
  - a. REMOVAL OF ALL VEGETATION, TOPSOILS, UNCONTROLLED FILLS AND OTHER DELETERIOUS MATERIALS FROM THE BUILDING AREA,
  - b. GRUBBING OUT OF ANY TREES ENSURING THE REMAINING HOLES ARE BACKFILLED WITH CLEAN COMPACTED SAND,
  - c. NOTIFYING THE ENGINEER OF ANY UNUSUAL FEATURE OR DISCREPANCY THAT MAY BECOME EVIDENT DURING EARTHWORKS, PRIOR TO PROCEEDING,
  - d. COMPACTING TO MEET THE REQUIREMENTS AS OUTLINED IN AS 3798 TABLE 5.1.
19. FILL MATERIAL (WHICH IS NOT ALWAYS APPARENT AT THE INITIAL INVESTIGATION STAGE) IS TO BE DEALT WITH AS FOLLOWS:
  - a. IF IT IS CERTIFIED BY OTHERS IT CAN REMAIN.
  - b. IF IT IS NOT CERTIFIED WILL REQUIRE REMOVAL DOWN TO NATURAL GROUND OR VERIFIED. ANY SAND CAN BE REUSED.
  - c. IF A PAD HAS ALREADY BEEN CONSTRUCTED, THE SITE CLASSIFICATION IS NOT CERTIFICATION OF THE PAD. CONTACT THIS OFFICE SHOULD A SAND PAD CERTIFICATION BE REQUIRED.
20. ANY ORGANIC MATTER OR ROOTS ENCOUNTERED, WHICH IS BEYOND WHAT IS NORMALLY CONSIDERED ACCEPTABLE IS TO BE REMOVED. THIS WILL NECESSITATE RAKING THE SITE TO REMOVE ORGANIC MATERIAL, TURNING THE SITE OVER AND RE-COMPACTING TO A MINIMUM.

### RETAINING WALLS

21. AN ASSESSMENT OF ANY EXISTING OR PROPOSED RETAINING WALLS HAS NOT BEEN CONDUCTED AS PART OF THIS SITE CLASSIFICATION REPORT.
22. IF THE PROPOSED BUILDING IS TO BE LOCATED CLOSER THAN THE HEIGHT OF THE RETAINING WALL, THIS MAY PLACE ADDITIONAL LOADS ON THE WALL THAT WERE NOT INITIALLY DESIGNED FOR. AN INSPECTION OF THE STRUCTURAL INTEGRITY OF THE RETAINING WALL WILL BE REQUIRED TO PROVIDE CERTIFICATION AND/OR RECOMMENDATIONS PRIOR TO ANY CONSTRUCTION. PLEASE REFER BACK TO THIS OFFICE FOR ASSISTANCE.  
STORMWATER DRAINAGE
23. UNLESS OTHERWISE SPECIFIED, ALL SOAKWELLS ARE TO BE LOCATED THE DEPTH OF THE SOAKWELL AWAY FROM THE BUILDING OR SETBACK A MINIMUM OF 1200mm, WHICHEVER IS GREATER, UNLESS SPECIFIED OTHERWISE. PLEASE REFER BACK TO THIS OFFICE IF THE SETBACK CANNOT BE ACHIEVED.

DOC# SS001 - 1.1.10 SCR EQUIVALENT V1.1 - AUGUST 2021



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DATE 16/11/22

APPROVED

## EXPLANATORY NOTES & STANDARD RECOMMENDATIONS - EQUIVALENT CLASS SITES (Sheet 2 of 2)

### WIND CLASSIFICATION

24. WIND CLASSIFICATION IS GIVEN FOR THE EXPECTED CONDITION 5 YEARS HENCE. THIS CLASSIFICATION IS LIMITED TO BUILDINGS CLASSES 1 AND 10, WHICH HAVE THE FOLLOWING LIMITATION (AS PER AS4055):

- a. MAXIMUM DISTANCE FROM THE GROUND LEVEL TO THE UNDERSIDE OF EAVES SHALL NOT EXCEED 6.0m,
- b. MAXIMUM DISTANCE FROM GROUND LEVEL TO THE HIGHEST POINT OF THE ROOF, EXCLUDING CHIMNEYS, SHALL NOT EXCEED 8.5m,
- c. THE ROOF PITCH SHALL NOT EXCEED 35 °,
- d. THE WIDTH, EXCLUDING EAVES, SHALL NOT EXCEED 16.0m AND THE LENGTH SHALL NOT EXCEED 5x THE WIDTH.

IF THE BUILDING FALLS OUTSIDE OF THESE LIMITATIONS, THE STATED WIND CLASSIFICATION DOES NOT APPLY. REFER BACK TO THIS OFFICE FOR A REVISED WIND CLASSIFICATION.

### ENVIRONMENTAL

25. NO ENVIRONMENTAL ASSESSMENT OF THIS SITE HAS BEEN UNDERTAKEN. SHOULD AN ENVIRONMENTAL ASSESSMENT BE REQUIRED, PLEASE CONTACT THIS OFFICE.

### SEISMIC

26. RECOMMENDED FOOTING DETAILS ARE SUITABLE FOR SEISMIC CONDITIONS WITH AN EARTHQUAKE HAZARD FACTOR OF  $\leq 0.11$ . RECOMMENDED FOOTING DETAILS PROVIDED FOR SITES WITH AN EARTHQUAKE HAZARD FACTOR OF  $> 0.11$ , ARE NOT FOR CONSTRUCTION, BUT FOR COSTING PURPOSES ONLY. IT IS REQUIRED THAT A FULL SEISMIC DESIGN IS CONDUCTED.

### CORROSION CLASSIFICATION

27. THE CORROSION CLASSIFICATION HAS BEEN ASSESSED IN ACCORDANCE WITH AS3700.

DOC# SS001 - 1.1.10 SCR EQUIVALENT V1.1 - AUGUST 2021



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**SITE CLASSIFICATION REPORT**  
CERTIFICATE 2595175

**CLIENT** PARCEL DARCH PTY LTD  
**JOB ADDRESS** LOT 285 ATTADALE AV DARCH  
**CLIENT JOB NO.**  
**OWNER**  
**STRUCTERRE JOB NO.** S1082674  
**DATE OF ASSESSMENT** 15/11/22

**SITE RECORD**

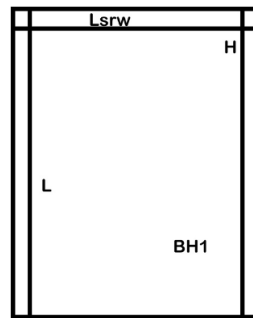


<b>SITE CLASSIFICATION</b>	<b>S - EQUIVALENT</b> <i>(in accordance with AS2870)</i>
<b>FOOTING DETAIL</b>	<b>CM3</b>
<b>SAND PAD</b>	<b>No sand pad required structurally</b>
<b>BUSHFIRE PRONE AREA</b>	<b>Not in a Bushfire Prone Area (see NOTE 2.)</b>
<b>CORROSION CLASSIFICATION</b>	<b>R1</b> <i>(Durability Class in accordance with AS3700)</i>
<b>WIND CLASSIFICATION</b>	<b>N1</b> <i>(in accordance with AS4055)</i>
-TERRAIN CATEGORY	3
-TOPOGRAPHIC	T0
-SHIELDING	Full Shielding

## SOIL PROFILE

BOREHOLE 1: 0 - 1800 FILL sand with artificial material trace limestone gravel - grey; 1800 end of hole.

## APPROXIMATE BOREHOLE LOCATIONS



Attadale Av

### NOTE 1 Explanatory Notes & Standard Recommendations

This site classification report must be read in conjunction with the applicable Explanatory Notes & Standard Recommendations. For A Class sites, refer to the Explanatory Notes and Standard Recommendations for Stable (A Class) Sites, version 1.0 July 2018. For S, M, H1, H2 & E Class sites, refer to the Explanatory Notes and Standard Recommendations for Reactive (S, M, H1, H2 & E Class) Sites version 1.0 July 2018. For Equivalent Class sites, refer to the Explanatory Notes and Standard Recommendations for Equivalent Class Sites, version 1.0 July 2018.

### NOTE 2 Bushfire - Prone Area

The Site may be situated in a bush fire prone area in accordance with the Department of Fire and Emergency Services (DFES) Bushfire Prone Area Map (Reference: <http://www.dfes.wa.gov.au/regulationandcompliance/bushfireproneareas/>) the current version at the time of this assessment. A Bushfire Attack Level (BAL) assessment may be required for this site, please confirm with the local authority. Should you require an assessment, please contact this Office.

## ADDITIONAL NOTES / REQUIREMENTS

### Site Condition

At the time of inspection the site was considered to be level and cleared. For specific levels of this site or topographical features, please refer to a professional site survey.

### Structerre Geotech Reference

The Site Classification is based on any remedial works being successfully completed as outlined in the Structerre Geotechnical Report J380185 dated 02/04/2021. The footing details are subject to the recommendations being completed to an acceptable level as outlined in this report, if applicable.

### Internal Thickenings

Internal thickenings are required for the proposed residence as specified on the recommended footing detail. Please provide a copy of the architectural drawings to this Office, so that the internal thickenings can be designed and drawn in accordance with AS2870.

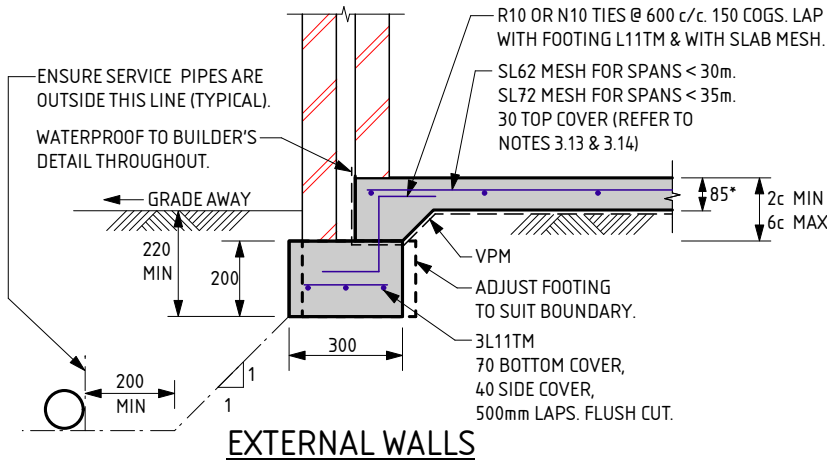
### Internal Thickening Inspection

This detail is subject to a internal thickening layout inspection. It is recommended that an inspection be conducted by a representative from this Office prior to concrete pour.

-- END OF REPORT --

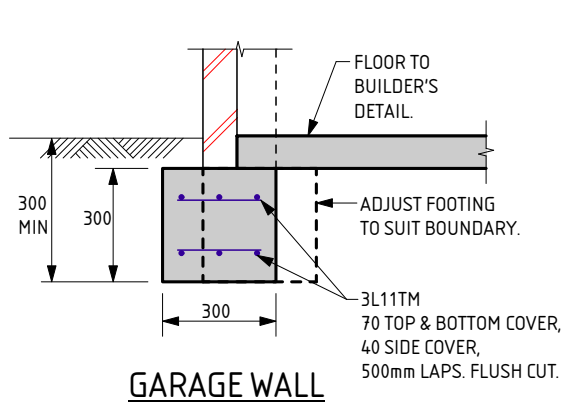
Signed:

  
Gervase Purich  
Chief Executive Officer

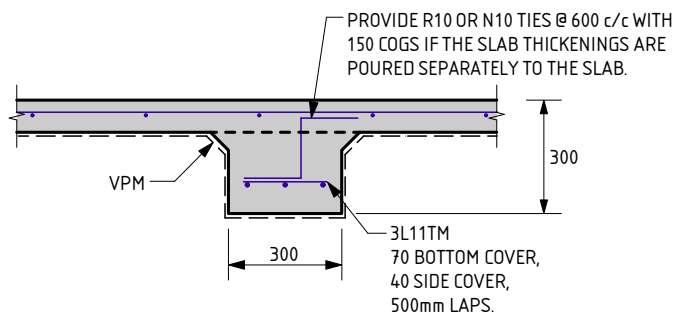


**EXTERNAL WALLS**

\* 100mm SLAB MAY BE INSTALLED INSTEAD OF 85mm.  
 IF 100mm SLAB USED, MESH TO BE:  
 SL62 MESH FOR SPANS < 25m.  
 SL72 MESH FOR SPANS < 30m.  
 SL82 MESH FOR SPANS < 35m.

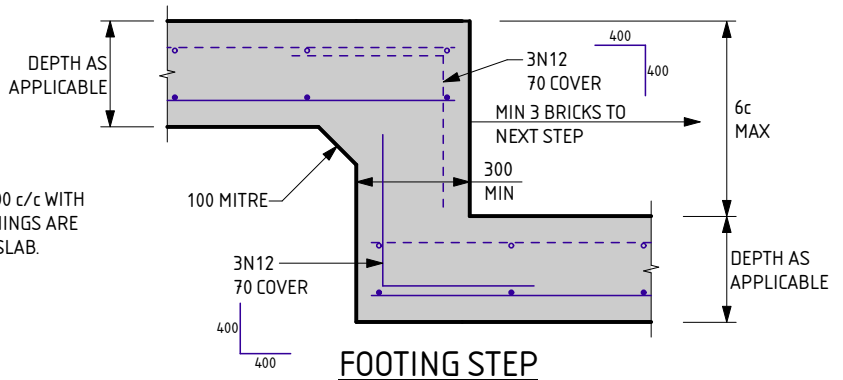


**GARAGE WALL**

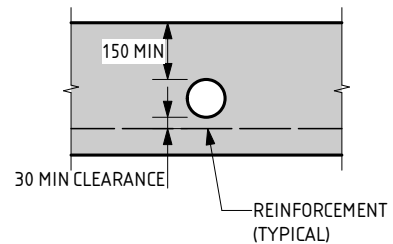


**INTERNAL THICKENING**

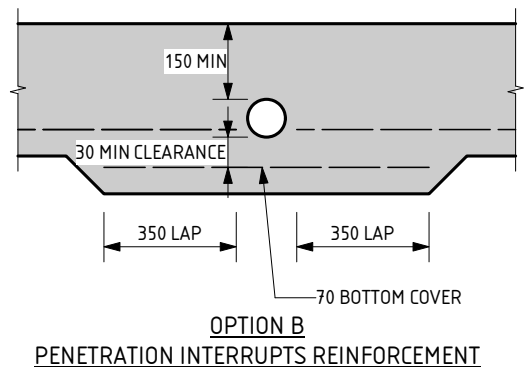
REFER TO STRUCTERRE'S DRAWINGS FOR PLACEMENT OF INTERNAL THICKENINGS. LOCATIONS TO BE CONFIRMED ON SITE BY STRUCTERRE PRIOR TO CONCRETE POUR.



**FOOTING STEP**



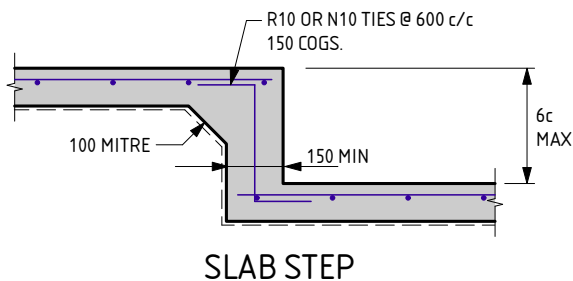
**OPTION A  
PENETRATION CLEAR OF REINFORCEMENT**



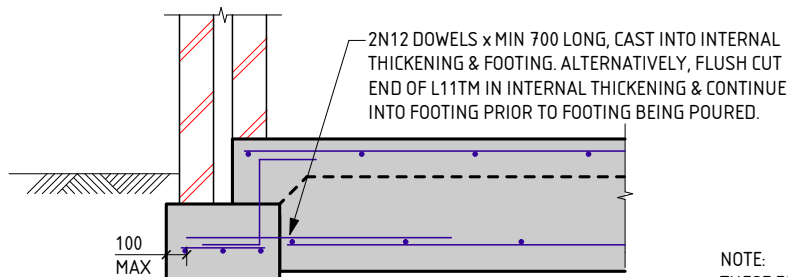
**OPTION B  
PENETRATION INTERRUPTS REINFORCEMENT**

**SERVICE PIPE DIAGRAM**

- MAXIMUM PENETRATION SIZE TO BE Ø150.



**SLAB STEP**



**EXTERNAL FOOTING TO INTERNAL THICKENING**

THIS DETAIL IS EQUIVALENT TO  
 STRUCTERRE FOOTING DETAIL C4.0

NOTE:  
 THESE FOOTING DETAILS ARE TO BE READ IN CONJUNCTION WITH THE REACTIVE SITE NOTES.

THE APPROVED SIGNATURE ON THIS DETAIL ENDORSES ITS USE FOR SINGLE STOREY BUILDINGS ON BUILDING PLATFORMS WITH UP TO 11mm OF SURFACE MOVEMENT.  
 DATE LAST MODIFIED - 20/09/18

**CM3**  
 CAVITY MASONRY



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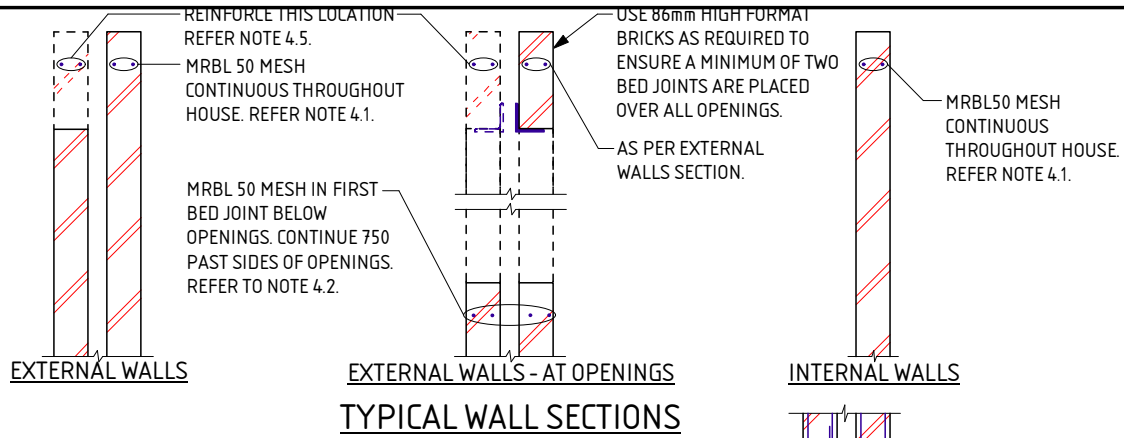
PROJECT: LOT 285 ATTADALE AV DARCH

CLIENT: PARCEL DARCH PTY LTD

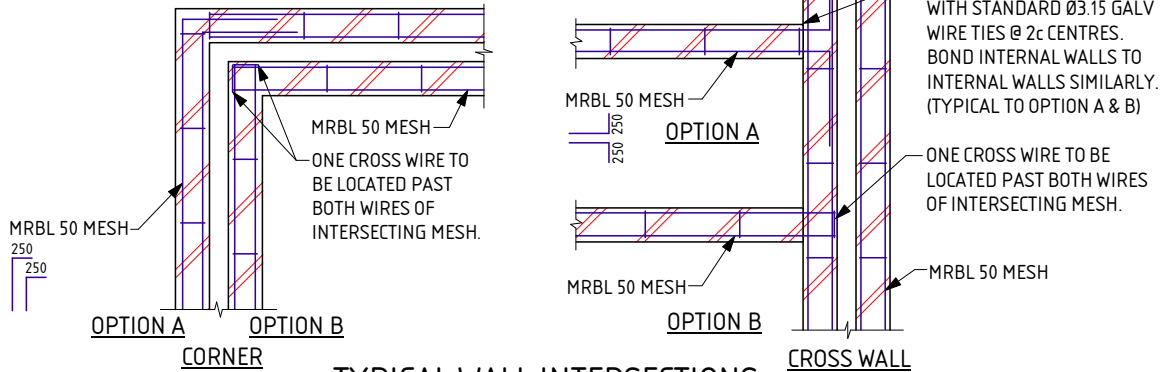
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DATE: 16/11/22

APPROVED



TYPICAL WALL SECTIONS



TYPICAL WALL INTERSECTIONS

REACTIVE SITE NOTES FOR CM1 - CM7

THESE NOTES ARE TO BE READ IN CONJUNCTION WITH THE ATTACHED FOOTING DETAILS.

1.0 SITE CLASSIFICATION

- 1.1 REFER TO ATTACHED CERTIFICATE OF INSPECTION FOR SITE CLASSIFICATION. THE SITE CLASSIFICATION NOTED, IS AS DEFINED IN AS2870 - RESIDENTIAL SLABS & FOOTINGS.
- 1.2 THE SITE CLASSIFICATION HAS BEEN DETERMINED BY INVESTIGATION OF THE SITE, AS PER THE ATTACHED CERTIFICATE OF INSPECTION. REFER TO THE ATTACHED CERTIFICATE FOR ANY SPECIAL REQUIREMENTS.

2.0 EARTHWORKS

- 2.1 SAND PAD IF APPLICABLE TO BE AS PER SITE INSPECTION REPORT.
- 2.2 EARTHWORKS SHALL INCLUDE, BUT NOT BE LIMITED TO:
  - a) REMOVE ALL ORGANIC MATERIAL FROM THE PAD AREA.
  - b) REMOVE ALL RUBBISH AND DELETERIOUS FILL (SUCH AS CLAY FILL) FROM THE PAD AREA.
  - c) GRUB OUT ANY TREES WHERE NECESSARY AND ENSURE THE REMAINING HOLES ARE FILLED AND COMPACTED SATISFACTORILY WITH SAND.
  - d) NOTIFY THE ENGINEER OF ANY UNUSUAL FEATURES OR DISCREPANCIES WHICH MAY BECOME EVIDENT DURING EARTHWORKS, PRIOR TO PROCEEDING.
- 2.3 ANY PREDOMINANT ROCK IN THE HOUSE PAD AREAS IS TO BE INSPECTED BY THE ENGINEER.
- 2.4 ANY CUT TO THE SITE, OTHER THAN TOPSOIL STRIPPING, WILL REQUIRE THE PREPARED CUT BASE TO BE INSPECTED AND APPROVED BY THE ENGINEER.
- 2.5 MAXIMUM SAND PAD DEPTH NOT TO EXCEED 150% OF MINIMUM PAD DEPTH OR 2000mm WITHOUT THE ENGINEER'S APPROVAL.
- 2.6 IF APPLICABLE SAND FILL TO BE CLEAN WELL DRAINED, WITH MAX FINES (PARTICLES UP TO 0.075mm) CONTENT OF 5%. SAND TO BE COMPACTED TO A MIN 6 BLOWS/300mm FOR THE DEPTH OF THE PAD OR TO DISCRETION OF ENGINEER.
- 2.7 COMPACTION TESTING TO BE PERFORMED BY STRUCTERRE.

3.0 FOOTINGS & SLABS

- 3.1 FOOTINGS ARE TO BE PLACED DIRECTLY INTO SAND PAD OF SPECIFIED THICKNESS.
- 3.2 ALL STORMWATER MUST BE DISCHARGED INTO COUNCIL DRAINS OR A MINIMUM OF 3m FOR S CLASS SITES, 4m FOR M CLASS SITES AND 5m FOR H1 & H2 CLASS SITES, AWAY FROM THE RESIDENCE AND/OR ADJACENT BUILDINGS INTO SOAKWELLS. IF THIS RESTRICTION CANNOT BE ACHIEVED REFER BACK TO THIS OFFICE FOR AN ALTERNATIVE DESIGN. WHERE THE SITE HAS BEEN CLASSIFIED AS AN 'EQUIVALENT' SITE CLASSIFICATION, REFER TO 'EXPLANATORY NOTES & STANDARD RECOMMENDATIONS - EQUIVALENT CLASS SITES' FOR STORMWATER DRAINAGE REQUIREMENTS UNLESS SPECIFIED OTHERWISE.
- 3.3 EXCAVATIONS FOR ALL SERVICE PIPES NOT TO UNDERMINE FOOTINGS. IF UNDERMINING IS LIKELY TO OCCUR, CONTACT THE ENGINEER PRIOR TO PROCEEDING.
- 3.4 WHERE PLUMBING PIPES PASS THROUGH FOOTINGS OR SLAB, SPECIFIED TOTAL THICKNESS OF ALL CONCRETE IS ALWAYS TO BE MAINTAINED.
- 3.5 SETDOWN AT WET AREA TO ARCHITECTURAL REQUIREMENT (50mm MAX). MAINTAIN 85mm SLAB THICKNESS. FOLD MESH DOWN TO MAINTAIN COVER, PLACE DIAGONAL BARS AT RE-ENTRANT CORNER FOR STEPS OVER 30mm. BARS TO BE N12x 1200 LONG.
- 3.6 REINFORCEMENT SHALL BE IN ACCORDANCE WITH THE FOLLOWING STANDARDS;
  - L INDICATES PLAIN OR DEFORMED WIRE R500L OR D500L TO AS/NZS 4671.
  - SL INDICATES DEFORMED SQUARE MESH D500L TO AS/NZS 4671.
  - N INDICATES DEFORMED BARS D500N TO AS/NZS 4671.
  - TM SUFFIX INDICATES TRENCH MESH USING DEFORMED BARS D500L TO AS/NZS 4671.
 ALL STEELWORK TO BE TREATED IN ACCORDANCE WITH TABLE 3.4.4.4 "CORROSION PROTECTION" OF THE BUILDING CODE OF AUSTRALIA.
- 3.7 LAP ALL MESH TWO TRANSVERSE WIRES PLUS 25mm OR TO MANUFACTURER'S SPECIFICATIONS.

3.8 CONCRETE TO CONFORM WITH AS 3600.

- 3.9 BLENDED CEMENT TO CONFORM WITH AS1317.
- 3.10 ALL CONCRETE TO BE N20/20/100.
- 3.11 FOR ISOLATED PAD FOOTINGS, REFER BACK TO ENGINEER.
- 3.12 FOOTING POSITION UNDER BRICKWORK CAN BE ADJUSTED TO SUIT PARAPET WALLS.
- 3.13 FOR SLAB SPANS > 35m REFER TO ENGINEER FOR MESH SIZE.
- 3.14 IF THE LENGTH TO WIDTH RATIO OF THE GROUND SLAB OR ANY PART OF THE GROUND SLAB EXCEEDS 3:1, REFER BACK TO THIS OFFICE FOR MESH SIZE.
- 3.15 IF POLISHED (OR HONED) CONCRETE FINISHES ARE DESIRED, THIS DESIGN SHOULD BE REFERRED BACK TO THIS OFFICE FOR CONSIDERATION, AS IT IS NOT THE INTENTION OF THESE DESIGNS FOR SUCH FINISHES.
- 3.16 PLACE SLAB THICKENING (300 WIDE x 250 DEEP) UNDER INTERNAL WALLS (90 OR 110) HIGHER THAN 3.7m WHERE GREATER THAN 1m FROM INTERNAL THICKENING. PROVIDE SAME TRENCH MESH AS INTERNAL THICKENING DETAIL, WHERE REQUIRED.
- 3.17 PIERCING THE VAPOUR BARRIER (VPM) USING LEVELLING PINS ON FREE DRAINING SAND PADS IS ALLOWABLE.
- 3.18 CURE SLAB AS DETERMINED BY ENGINEER.
- 3.19 THE SLAB IS CONSIDERED SUITABLE AS A PHYSICAL BARRIER AGAINST INGRESS OF TERMITES. IF THE FOOTING AND SLAB IS PLACED IN 2 POURS, THE PHYSICAL BARRIER ALSO INCLUDES THE FOOTING AND SLAB JOINT.
- 3.20 THE FOOTING DETAILS HAVE BEEN DESIGNED IN ACCORDANCE WITH AS3600 AND SECTION 4 OF AS2870.

4.0 MASONRY

- 4.1 PLACE MRBL50 MESH IN TOP BED JOINT CONTINUOUS THROUGHOUT ALL BRICKWORK.
- 4.2 REINFORCE BED JOINT BELOW WINDOW SILLS WITH MRBL50 MESH. CONTINUE 750 PAST SIDES OF OPENING.
- 4.3 LAP 250 AT SPLICES AND AROUND CORNERS AND COG 250 INTO INTERSECTING WALLS. 20mm COVER TO ALL WIRES.
- 4.4 ALL MESH IN EXTERNAL FACE OF EXTERNAL LEAF TO BE GALVANIZED TO AS/NZS 4680.
- 4.5 WHEN BRICKWORK EXTENDS ABOVE OPENINGS TO EXTERNAL LEAF REINFORCE AS PER CLAUSE 4.1, 4.2 & 4.3.
- 4.6 TYPICAL WALL SECTIONS ARE SHOWN FOR 28C INTERNAL CEILINGS. WHERE THERE ARE 3 OR MORE BED JOINTS OVER THE OPENING, REINFORCE BED JOINT OVER OPENING WITH MRBL50 MESH. CONTINUE 750 PAST SIDE OF OPENING.
- 4.7 ALL PERPENDS TO BE FULLY MORTARED.
- 4.8 A BRICK COURSE, AS REFERRED TO IN THIS DOCUMENT IS STANDARD 86mm HIGH.
- 4.9 2L6 WIRES MAY BE USED AS AN ALTERNATIVE TO THE MRBL50 MESH. WHERE L6 WIRES ARE USED, ALL SPLICES AND COGS TO BE 500 LONG.

5.0 MAINTENANCE

- 5.1 IT IS CONSIDERED THAT THIS DESIGN IS SUITABLE FOR THE FOUNDATION CONDITIONS TO BE ENCOUNTERED AND WILL ADEQUATELY CONTROL ANY CRACKING OF BRICKWORK AND CONCRETE, SUBJECT TO THE MAINTENANCE PROCEDURES BELOW BEING SATISFIED.
- 5.2 BUILDER TO ENSURE THAT CLIENT BE INFORMED OF NECESSITY TO MAINTAIN DRAINS IN GOOD WORKING ORDER AT ALL TIMES.
- 5.3 BUILDER TO ADVISE CLIENT TO CONSULT AN ENGINEER BEFORE PLANTING TREES OR SHRUBS WITHIN 2.5m, OR A DISTANCE EQUAL TO THE ANTICIPATED MAXIMUM HEIGHT OF THE TREE, OF THE BUILDING.
- 5.4 SITE TO BE MAINTAINED AS PER CSIRO INFORMATION PAMPHLET BTF 18 & STRUCTERRE'S CLAY FACT SHEET.
- 5.5 AS2870 AND 'CSIRO PAMPHLET BTF 18' COVER THE EXPECTED PERFORMANCE AND RESPONSIBILITIES OF ALL PARTIES WITH THE USE OF THESE DETAILS.

6.0 QUALITY CONTROL PROGRAM REQUIREMENTS

- 6.1 WORKING SLAB DEPTH AS INDICATED ON THE DETAIL. SLAB DEPTH TOLERANCE ALLOWABLE -10mm, +15mm.
- 6.2 WHERE DEPTH IS BELOW NOMINATED DEPTH, MAX AREA ALLOWED TO BE ≤ 5% OF THE TOTAL AREA.
- 6.3 DEPTH TESTING LOCATIONS TO BE NO CLOSER THAN 1000mm APART.
- 6.4 SLAB DEPTH IS TO BE PART OF A QUALITY CONTROL INSPECTION REGIME.
- 6.5 SLAB AND FOOTING CAN BE POURED MONOLITHICALLY IF DESIRED.

DATE LAST MODIFIED - 21/09/21



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PROJECT :  
LOT 285 ATTADALE AV DARCH

CLIENT : PARCEL DARCH PTY LTD

SCALE 1:20

DATE 16/11/22

APPROVED

## EXPLANATORY NOTES & STANDARD RECOMMENDATIONS - EQUIVALENT CLASS SITES (Sheet 1 of 2)

### GENERAL

1. THE EXPLANATORY NOTES AND THE STANDARD RECOMMENDATIONS ARE TO BE READ IN CONJUNCTION WITH THE SITE CLASSIFICATION REPORT.
2. ALL REFERRED STANDARDS TO BE THE CURRENT VERSION AT THE TIME OF THE CONSTRUCTION.
3. THE PURPOSE OF THE SITE CLASSIFICATION REPORT IS TO CLASSIFY THE SITE IN ACCORDANCE WITH AS2870 "RESIDENTIAL SLABS AND FOOTING". IT IS NOT INTENDED FOR ANY OTHER PURPOSE, INCLUDING SOLE INFORMATION IN THE PROVISION OF A QUOTATION FOR SITE WORKS. IT IS RECOMMENDED OTHER PARTIES TO PERFORM THEIR OWN INVESTIGATION FOR QUOTATION PURPOSES.
4. THE SITE CLASSIFICATION REPORT WILL INCLUDE BUT IS NOT LIMITED TO:
  - a. THE SITE CLASSIFICATION IN ACCORDANCE WITH AS2870 "RESIDENTIAL SLABS AND FOOTING",
  - b. A WIND CLASSIFICATION IN ACCORDANCE WITH AS4055 "WIND LOADS FOR HOUSING",
  - c. A COASTAL CORROSION CLASSIFICATION,
  - d. ADDITIONAL EARTHWORK RECOMMENDATIONS WHERE APPLICABLE,
  - e. STANDARD FOOTING DESIGN FOR SINGLE STOREY SLAB ON GROUND CONSTRUCTION.
5. THE SITE CLASSIFICATION IS BASED ON THE SITE AS PRESENTED AT THE TIME OF THE ASSESSMENT. THE SITE CLASSIFICATION AND RECOMMENDATIONS INCLUDED IN THE REPORT ARE SUBJECT TO SATISFACTORY COMPLETION OF RECOMMENDED EARTHWORKS, (REFER NOTE 17) AS A MINIMUM. SHOULD CHANGES TO THE SITE OCCUR, OTHER THAN THE RECOMMENDATIONS INCLUDED IN THE SITE CLASSIFICATION REPORT, REFER BACK TO THIS OFFICE FOR REVIEW OF CLASSIFICATION AND FOOTING DESIGN.
6. ALL RECOMMENDATIONS GIVEN IN THE SITE CLASSIFICATION REPORT HAVE BEEN DETERMINED FROM THE INFORMATION THAT WAS AVAILABLE TO THIS OFFICE AT THE TIME OF INVESTIGATION. IF FURTHER INFORMATION RELATING TO THE SITE OR DEVELOPMENT BECOMES AVAILABLE, THESE RECOMMENDATIONS ARE SUBJECT TO CHANGE.
7. EQUIVALENT CLASS SITES ARE BASED ON DIFFERENTIAL SURFACE MOVEMENT ARISING FROM ISSUE OTHER THAN SHRINK-SWELL (REACTIVITY) ONLY. THESE MAY INCLUDE SETTLEMENT AND/OR CONSOLIDATION THAT MAY OCCUR AS A RESULT OF THE UNDERLYING GROUND CONDITIONS.
8. BOREHOLES EXCAVATED REVEAL THE SOIL PROFILE AT THE BOREHOLE LOCATION ONLY. FROM THIS, IT IS INFERRED THAT THESE ARE THE SOIL CONDITIONS OVER THE SITE. VARIATIONS CAN OCCUR WHICH MAY NOT HAVE BEEN DETECTED AT THE INVESTIGATION STAGE. ANY ANOMALIES SHOULD BE REFERRED BACK TO THIS OFFICE FOR A REASSESSMENT.
9. A NUMBER OF BOREHOLES ARE CONDUCTED ACROSS THE SITE TO DETERMINE THE SOIL PROFILES AND PROVIDE A REPRESENTATION OF THE GROUND CONDITIONS.
10. THIS REPORT IS FOR STRUCTERRE ONLY TO USE IN DESIGN. ANY DESIGN BY ANYONE ELSE FOR ANY STRUCTURE MUST BE SPECIFICALLY APPROVED BY STRUCTERRE. IF USED BY ANYONE ELSE FOR ANYTHING OTHER THAN A STRUCTERRE DESIGN OR STRUCTURE, STRUCTERRE TAKES NO RESPONSIBILITY.

### SAND PAD

11. THE RECOMMENDED FOOTING DESIGN IS ONLY TO BE USED IN CONJUNCTION WITH THE RECOMMENDED SAND PAD AND EARTHWORKS AS OUTLINED IN THE SITE CLASSIFICATION REPORT.
12. THE RECOMMENDATIONS FOR THE SAND PAD IS FOR STRUCTURAL PURPOSES ONLY, AND DOES NOT PROVIDE THE MINIMUM FINISHED PAD LEVEL IN RELATION TO FLOOD LEVELS OR DEPTH TO GROUNDWATER. SHOULD THE TEST BE LOCATED IN A LOW LYING OR FLOOD PRONE AREA, REFER TO THE LOCAL AUTHORITY FOR MINIMUM BUILDING HEIGHT.
13. IMPORTED FILL FOR USE AS A SAND PAD TO BE IN ACCORDANCE TO AS 3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS" WHICH INCLUDES BUT IS NOT LIMITED TO: BE FREE FROM ANY DELETERIOUS MATERIALS INCLUDING ORGANICS, (ROOTS, STUMPS, GRASSES, DECOMPOSED ORGANICS - PEAT, TIMBER, ETC), BUILDING RUBBLE, GLASS, PLASTICS OR WASTE MATERIAL. THE FINES CONTENT, (PERCENTAGE PASSING THE 0.075mm SIEVE) TO BE LESS THAN 5% BY MASS.
14. ON SAND SITES A SAND PAD IS NOT REQUIRED STRUCTURALLY, HOWEVER IF ROCK IS ENCOUNTERED, A MINIMUM 200mm SAND PAD BEYOND THE BASE OF FOOTING IS RECOMMENDED.
15. SAND PAD TO EXTEND BEYOND BUILDING AREA A MINIMUM OF 1.5 TIMES THE PAD DEPTH.
16. RECOMMENDED SAND PAD DEPTH IS ABOVE THE HIGHEST POINT, UNLESS OTHERWISE SPECIFIED.
17. IT IS REQUIRED THAT EARTHWORKS CONFIRM THAT THE MINIMUM DEPTH OF RECOMMENDED SAND PAD IS ACHIEVED.

### EARTHWORKS

18. RECOMMENDED EARTHWORKS TO BE CONDUCTED IN ACCORDANCE WITH AS3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS", AND TO INCLUDE BUT NOT BE LIMITED TO:
  - a. REMOVAL OF ALL VEGETATION, TOPSOILS, UNCONTROLLED FILLS AND OTHER DELETERIOUS MATERIALS FROM THE BUILDING AREA,
  - b. GRUBBING OUT OF ANY TREES ENSURING THE REMAINING HOLES ARE BACKFILLED WITH CLEAN COMPACTED SAND,
  - c. NOTIFYING THE ENGINEER OF ANY UNUSUAL FEATURE OR DISCREPANCY THAT MAY BECOME EVIDENT DURING EARTHWORKS, PRIOR TO PROCEEDING,
  - d. COMPACTING TO MEET THE REQUIREMENTS AS OUTLINED IN AS 3798 TABLE 5.1.
19. FILL MATERIAL (WHICH IS NOT ALWAYS APPARENT AT THE INITIAL INVESTIGATION STAGE) IS TO BE DEALT WITH AS FOLLOWS:
  - a. IF IT IS CERTIFIED BY OTHERS IT CAN REMAIN.
  - b. IF IT IS NOT CERTIFIED WILL REQUIRE REMOVAL DOWN TO NATURAL GROUND OR VERIFIED. ANY SAND CAN BE REUSED.
  - c. IF A PAD HAS ALREADY BEEN CONSTRUCTED, THE SITE CLASSIFICATION IS NOT CERTIFICATION OF THE PAD. CONTACT THIS OFFICE SHOULD A SAND PAD CERTIFICATION BE REQUIRED.
20. ANY ORGANIC MATTER OR ROOTS ENCOUNTERED, WHICH IS BEYOND WHAT IS NORMALLY CONSIDERED ACCEPTABLE IS TO BE REMOVED. THIS WILL NECESSITATE RAKING THE SITE TO REMOVE ORGANIC MATERIAL, TURNING THE SITE OVER AND RE-COMPACTING TO A MINIMUM.

### RETAINING WALLS

21. AN ASSESSMENT OF ANY EXISTING OR PROPOSED RETAINING WALLS HAS NOT BEEN CONDUCTED AS PART OF THIS SITE CLASSIFICATION REPORT.
22. IF THE PROPOSED BUILDING IS TO BE LOCATED CLOSER THAN THE HEIGHT OF THE RETAINING WALL, THIS MAY PLACE ADDITIONAL LOADS ON THE WALL THAT WERE NOT INITIALLY DESIGNED FOR. AN INSPECTION OF THE STRUCTURAL INTEGRITY OF THE RETAINING WALL WILL BE REQUIRED TO PROVIDE CERTIFICATION AND/OR RECOMMENDATIONS PRIOR TO ANY CONSTRUCTION. PLEASE REFER BACK TO THIS OFFICE FOR ASSISTANCE.  
STORMWATER DRAINAGE
23. UNLESS OTHERWISE SPECIFIED, ALL SOAKWELLS ARE TO BE LOCATED THE DEPTH OF THE SOAKWELL AWAY FROM THE BUILDING OR SETBACK A MINIMUM OF 1200mm, WHICHEVER IS GREATER, UNLESS SPECIFIED OTHERWISE. PLEASE REFER BACK TO THIS OFFICE IF THE SETBACK CANNOT BE ACHIEVED.

DOC# SS001 - 1.1.10 SCR EQUIVALENT V1.1 - AUGUST 2021



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PROJECT :  
LOT 285 ATTADALE AV DARCH

CLIENT : PARCEL DARCH PTY LTD

SCALE 1:20

DATE 16/11/22

APPROVED

## EXPLANATORY NOTES & STANDARD RECOMMENDATIONS - EQUIVALENT CLASS SITES (Sheet 2 of 2)

### WIND CLASSIFICATION

24. WIND CLASSIFICATION IS GIVEN FOR THE EXPECTED CONDITION 5 YEARS HENCE. THIS CLASSIFICATION IS LIMITED TO BUILDINGS CLASSES 1 AND 10, WHICH HAVE THE FOLLOWING LIMITATION (AS PER AS4055):

- a. MAXIMUM DISTANCE FROM THE GROUND LEVEL TO THE UNDERSIDE OF EAVES SHALL NOT EXCEED 6.0m,
- b. MAXIMUM DISTANCE FROM GROUND LEVEL TO THE HIGHEST POINT OF THE ROOF, EXCLUDING CHIMNEYS, SHALL NOT EXCEED 8.5m,
- c. THE ROOF PITCH SHALL NOT EXCEED 35 °,
- d. THE WIDTH, EXCLUDING EAVES, SHALL NOT EXCEED 16.0m AND THE LENGTH SHALL NOT EXCEED 5x THE WIDTH.

IF THE BUILDING FALLS OUTSIDE OF THESE LIMITATIONS, THE STATED WIND CLASSIFICATION DOES NOT APPLY. REFER BACK TO THIS OFFICE FOR A REVISED WIND CLASSIFICATION.

### ENVIRONMENTAL

25. NO ENVIRONMENTAL ASSESSMENT OF THIS SITE HAS BEEN UNDERTAKEN. SHOULD AN ENVIRONMENTAL ASSESSMENT BE REQUIRED, PLEASE CONTACT THIS OFFICE.

### SEISMIC

26. RECOMMENDED FOOTING DETAILS ARE SUITABLE FOR SEISMIC CONDITIONS WITH AN EARTHQUAKE HAZARD FACTOR OF  $\leq 0.11$ . RECOMMENDED FOOTING DETAILS PROVIDED FOR SITES WITH AN EARTHQUAKE HAZARD FACTOR OF  $> 0.11$ , ARE NOT FOR CONSTRUCTION, BUT FOR COSTING PURPOSES ONLY. IT IS REQUIRED THAT A FULL SEISMIC DESIGN IS CONDUCTED.

### CORROSION CLASSIFICATION

27. THE CORROSION CLASSIFICATION HAS BEEN ASSESSED IN ACCORDANCE WITH AS3700.

DOC# SS001 - 1.1.10 SCR EQUIVALENT V1.1 - AUGUST 2021



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PROJECT :  
LOT 285 ATTADALE AV DARCH

CLIENT : PARCEL DARCH PTY LTD

SCALE 1:20

DATE 16/11/22

APPROVED

A blue ink handwritten signature is written over the 'APPROVED' field.

**SITE CLASSIFICATION REPORT**  
CERTIFICATE 2595171

**CLIENT** PARCEL DARCH PTY LTD  
**JOB ADDRESS** LOT 286 ATTADALE AV DARCH  
**CLIENT JOB NO.**  
**OWNER**  
**STRUCTERRE JOB NO.** S1082676  
**DATE OF ASSESSMENT** 15/11/22

**SITE RECORD**



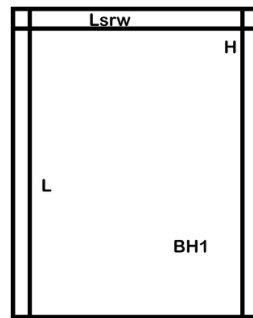
<b>SITE CLASSIFICATION</b>	<b>S - EQUIVALENT</b> <i>(in accordance with AS2870)</i>
<b>FOOTING DETAIL</b>	<b>CM3</b>
<b>SAND PAD</b>	<b>No sand pad required structurally</b>
<b>BUSHFIRE PRONE AREA</b>	<b>Not in a Bushfire Prone Area</b> <i>(see NOTE 2.)</i>
<b>CORROSION CLASSIFICATION</b>	<b>R1</b> <i>(Durability Class in accordance with AS3700)</i>
<b>WIND CLASSIFICATION</b>	<b>N1</b> <i>(in accordance with AS4055)</i>
-TERRAIN CATEGORY	3
-TOPOGRAPHIC	T0
-SHIELDING	Full Shielding



## SOIL PROFILE

BOREHOLE 1: 0 - 1300 FILL sand with artificial material trace limestone gravel - grey; 1300 hard ground refusal.

## APPROXIMATE BOREHOLE LOCATIONS



Attadale Av

### NOTE 1 Explanatory Notes & Standard Recommendations

This site classification report must be read in conjunction with the applicable Explanatory Notes & Standard Recommendations. For A Class sites, refer to the Explanatory Notes and Standard Recommendations for Stable (A Class) Sites, version 1.0 July 2018. For S, M, H1, H2 & E Class sites, refer to the Explanatory Notes and Standard Recommendations for Reactive (S, M, H1, H2 & E Class) Sites version 1.0 July 2018. For Equivalent Class sites, refer to the Explanatory Notes and Standard Recommendations for Equivalent Class Sites, version 1.0 July 2018.

### NOTE 2 Bushfire - Prone Area

The Site may be situated in a bush fire prone area in accordance with the Department of Fire and Emergency Services (DFES) Bushfire Prone Area Map (Reference: <http://www.dfes.wa.gov.au/regulationandcompliance/bushfireproneareas/>) the current version at the time of this assessment. A Bushfire Attack Level (BAL) assessment may be required for this site, please confirm with the local authority. Should you require an assessment, please contact this Office.

## ADDITIONAL NOTES / REQUIREMENTS

### Site Condition

At the time of inspection the site was considered to be level and cleared. For specific levels of this site or topographical features, please refer to a professional site survey.

### Structerre Geotech Reference

The Site Classification is based on any remedial works being successfully completed as outlined in the Structerre Geotechnical Report J380185 dated 02/04/2021. The footing details are subject to the recommendations being completed to an acceptable level as outlined in this report, if applicable.

### Internal Thickenings

Internal thickenings are required for the proposed residence as specified on the recommended footing detail. Please provide a copy of the architectural drawings to this Office, so that the internal thickenings can be designed and drawn in accordance with AS2870.

### Internal Thickening Inspection

This detail is subject to an internal thickening layout inspection. It is recommended that an inspection be conducted by a representative from this Office prior to concrete pour.

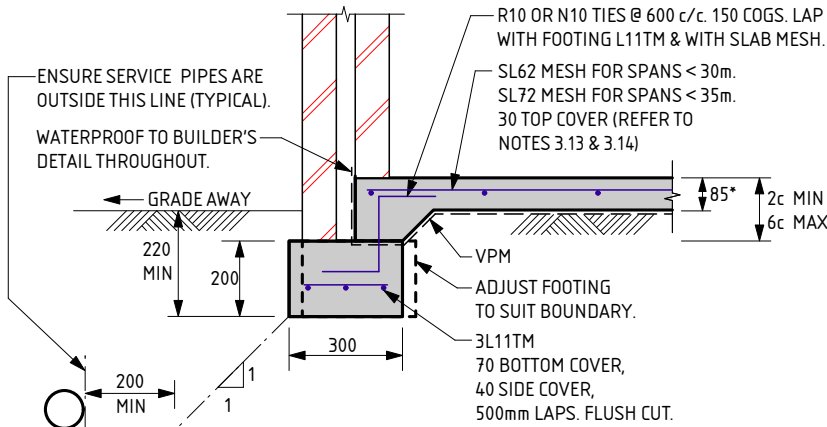
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Signed:



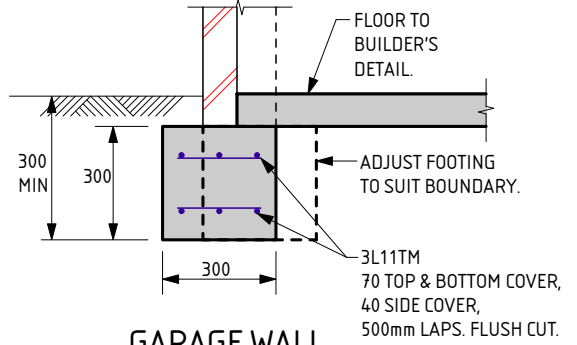
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Gervase Purich  
Chief Executive Officer

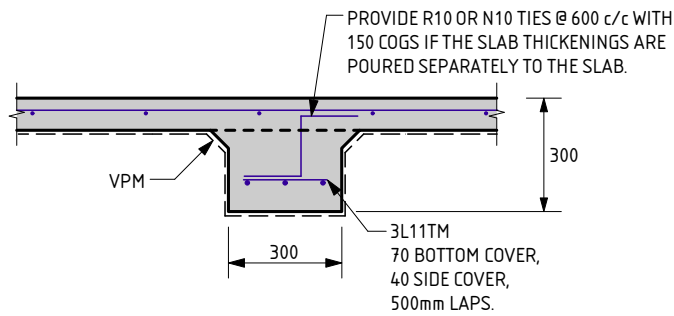


**EXTERNAL WALLS**

\* 100mm SLAB MAY BE INSTALLED INSTEAD OF 85mm.  
 IF 100mm SLAB USED, MESH TO BE:  
 SL62 MESH FOR SPANS < 25m.  
 SL72 MESH FOR SPANS < 30m.  
 SL82 MESH FOR SPANS < 35m.

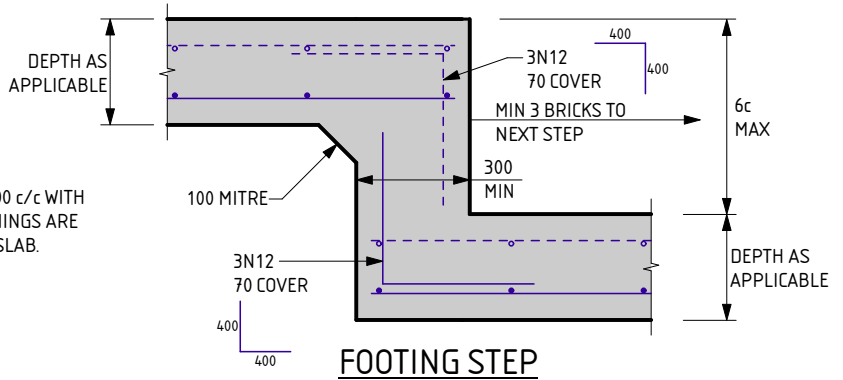


**GARAGE WALL**

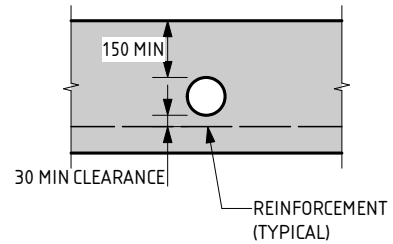


**INTERNAL THICKENING**

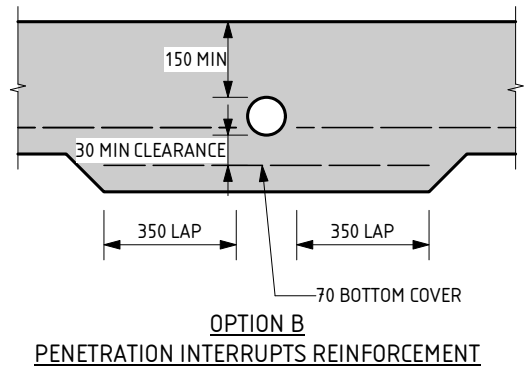
REFER TO STRUCTERRE'S DRAWINGS FOR PLACEMENT OF INTERNAL THICKENINGS. LOCATIONS TO BE CONFIRMED ON SITE BY STRUCTERRE PRIOR TO CONCRETE POUR.



**FOOTING STEP**



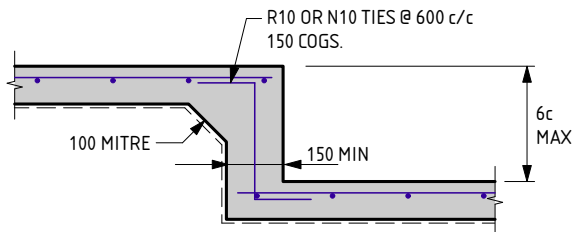
**OPTION A  
PENETRATION CLEAR OF REINFORCEMENT**



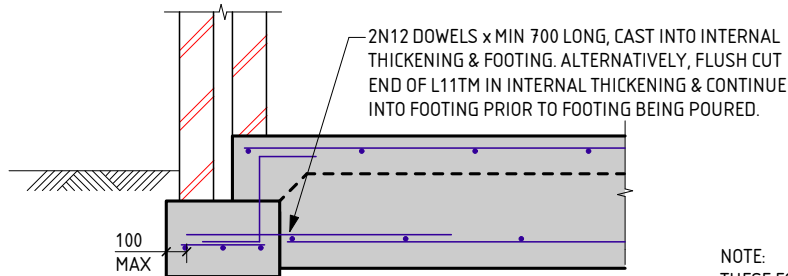
**OPTION B  
PENETRATION INTERRUPTS REINFORCEMENT**

**SERVICE PIPE DIAGRAM**

- MAXIMUM PENETRATION SIZE TO BE Ø150.



**SLAB STEP**



**EXTERNAL FOOTING TO INTERNAL THICKENING**

THIS DETAIL IS EQUIVALENT TO  
 STRUCTERRE FOOTING DETAIL C4.0

NOTE:  
 THESE FOOTING DETAILS ARE TO BE READ IN CONJUNCTION WITH THE REACTIVE SITE NOTES.

THE APPROVED SIGNATURE ON THIS DETAIL ENDORSES ITS USE FOR SINGLE STOREY BUILDINGS ON BUILDING PLATFORMS WITH UP TO 11mm OF SURFACE MOVEMENT.  
 DATE LAST MODIFIED - 20/09/18

**CM3**  
 CAVITY MASONRY



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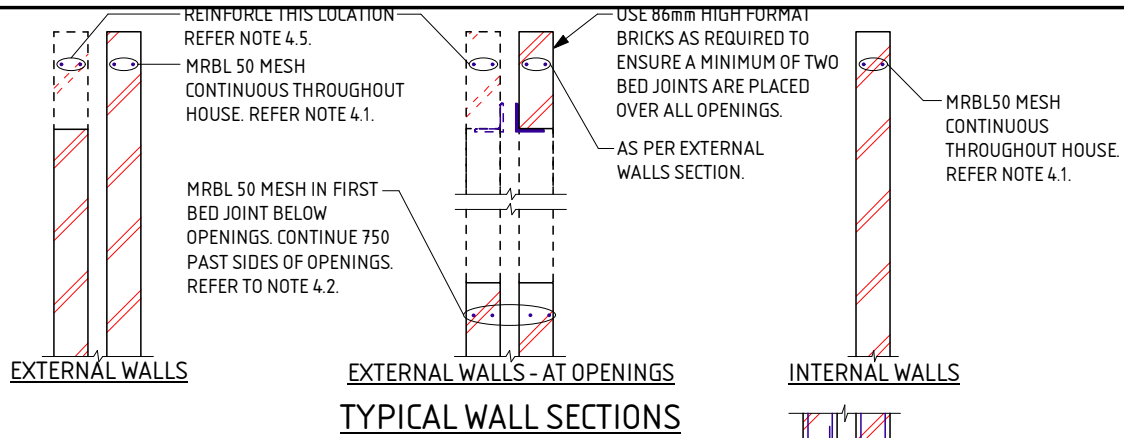
PROJECT: LOT 286 ATTADALE AV DARCH

CLIENT: PARCEL DARCH PTY LTD

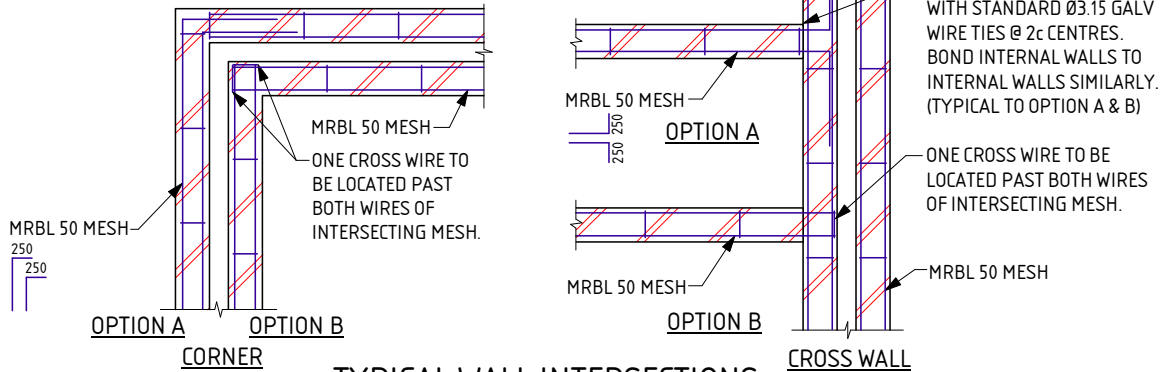
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DATE: 16/11/22

APPROVED



**TYPICAL WALL SECTIONS**



**TYPICAL WALL INTERSECTIONS**

**REACTIVE SITE NOTES FOR CM1 - CM7**

THESE NOTES ARE TO BE READ IN CONJUNCTION WITH THE ATTACHED FOOTING DETAILS.

**1.0 SITE CLASSIFICATION**

- 1.1 REFER TO ATTACHED CERTIFICATE OF INSPECTION FOR SITE CLASSIFICATION. THE SITE CLASSIFICATION NOTED, IS AS DEFINED IN AS2870 - RESIDENTIAL SLABS & FOOTINGS.
- 1.2 THE SITE CLASSIFICATION HAS BEEN DETERMINED BY INVESTIGATION OF THE SITE, AS PER THE ATTACHED CERTIFICATE OF INSPECTION. REFER TO THE ATTACHED CERTIFICATE FOR ANY SPECIAL REQUIREMENTS.

**2.0 EARTHWORKS**

- 2.1 SAND PAD IF APPLICABLE TO BE AS PER SITE INSPECTION REPORT.
- 2.2 EARTHWORKS SHALL INCLUDE, BUT NOT BE LIMITED TO:
  - a) REMOVE ALL ORGANIC MATERIAL FROM THE PAD AREA.
  - b) REMOVE ALL RUBBISH AND DELETERIOUS FILL (SUCH AS CLAY FILL) FROM THE PAD AREA.
  - c) GRUB OUT ANY TREES WHERE NECESSARY AND ENSURE THE REMAINING HOLES ARE FILLED AND COMPACTED SATISFACTORILY WITH SAND.
  - d) NOTIFY THE ENGINEER OF ANY UNUSUAL FEATURES OR DISCREPANCIES WHICH MAY BECOME EVIDENT DURING EARTHWORKS, PRIOR TO PROCEEDING.
- 2.3 ANY PREDOMINANT ROCK IN THE HOUSE PAD AREAS IS TO BE INSPECTED BY THE ENGINEER.
- 2.4 ANY CUT TO THE SITE, OTHER THAN TOPSOIL STRIPPING, WILL REQUIRE THE PREPARED CUT BASE TO BE INSPECTED AND APPROVED BY THE ENGINEER.
- 2.5 MAXIMUM SAND PAD DEPTH NOT TO EXCEED 150% OF MINIMUM PAD DEPTH OR 2000mm WITHOUT THE ENGINEER'S APPROVAL.
- 2.6 IF APPLICABLE SAND FILL TO BE CLEAN WELL DRAINED, WITH MAX FINES (PARTICLES UP TO 0.075mm) CONTENT OF 5%. SAND TO BE COMPACTED TO A MIN 6 BLOWS/300mm FOR THE DEPTH OF THE PAD OR TO DISCRETION OF ENGINEER.
- 2.7 COMPACTION TESTING TO BE PERFORMED BY STRUCTERRE.

**3.0 FOOTINGS & SLABS**

- 3.1 FOOTINGS ARE TO BE PLACED DIRECTLY INTO SAND PAD OF SPECIFIED THICKNESS.
- 3.2 ALL STORMWATER MUST BE DISCHARGED INTO COUNCIL DRAINS OR A MINIMUM OF 3m FOR S CLASS SITES, 4m FOR M CLASS SITES AND 5m FOR H1 & H2 CLASS SITES, AWAY FROM THE RESIDENCE AND/OR ADJACENT BUILDINGS INTO SOAKWELLS. IF THIS RESTRICTION CANNOT BE ACHIEVED REFER BACK TO THIS OFFICE FOR AN ALTERNATIVE DESIGN. WHERE THE SITE HAS BEEN CLASSIFIED AS AN 'EQUIVALENT' SITE CLASSIFICATION, REFER TO 'EXPLANATORY NOTES & STANDARD RECOMMENDATIONS - EQUIVALENT CLASS SITES' FOR STORMWATER DRAINAGE REQUIREMENTS UNLESS SPECIFIED OTHERWISE.
- 3.3 EXCAVATIONS FOR ALL SERVICE PIPES NOT TO UNDERMINE FOOTINGS. IF UNDERMINING IS LIKELY TO OCCUR, CONTACT THE ENGINEER PRIOR TO PROCEEDING.
- 3.4 WHERE PLUMBING PIPES PASS THROUGH FOOTINGS OR SLAB, SPECIFIED TOTAL THICKNESS OF ALL CONCRETE IS ALWAYS TO BE MAINTAINED.
- 3.5 SETDOWN AT WET AREA TO ARCHITECTURAL REQUIREMENT (50mm MAX). MAINTAIN 85mm SLAB THICKNESS. FOLD MESH DOWN TO MAINTAIN COVER, PLACE DIAGONAL BARS AT RE-ENTRANT CORNER FOR STEPS OVER 30mm. BARS TO BE N12x 1200 LONG.
- 3.6 REINFORCEMENT SHALL BE IN ACCORDANCE WITH THE FOLLOWING STANDARDS;
 

L	INDICATES PLAIN OR DEFORMED WIRE R500L OR D500L TO AS/NZS 4671.
SL	INDICATES DEFORMED SQUARE MESH D500L TO AS/NZS 4671.
N	INDICATES DEFORMED BARS D500N TO AS/NZS 4671.
TM SUFFIX	INDICATES TRENCH MESH USING DEFORMED BARS D500L TO AS/NZS 4671.

 ALL STEELWORK TO BE TREATED IN ACCORDANCE WITH TABLE 3.4.4.4 "CORROSION PROTECTION" OF THE BUILDING CODE OF AUSTRALIA.
- 3.7 LAP ALL MESH TWO TRANSVERSE WIRES PLUS 25mm OR TO MANUFACTURER'S SPECIFICATIONS.

**3.8 CONCRETE TO CONFORM WITH AS 3600.**

- 3.9 BLENDED CEMENT TO CONFORM WITH AS1317.
- 3.10 ALL CONCRETE TO BE N20/20/100.
- 3.11 FOR ISOLATED PAD FOOTINGS, REFER BACK TO ENGINEER.
- 3.12 FOOTING POSITION UNDER BRICKWORK CAN BE ADJUSTED TO SUIT PARAPET WALLS.
- 3.13 FOR SLAB SPANS > 35m REFER TO ENGINEER FOR MESH SIZE.
- 3.14 IF THE LENGTH TO WIDTH RATIO OF THE GROUND SLAB OR ANY PART OF THE GROUND SLAB EXCEEDS 3:1, REFER BACK TO THIS OFFICE FOR MESH SIZE.
- 3.15 IF POLISHED (OR HONED) CONCRETE FINISHES ARE DESIRED, THIS DESIGN SHOULD BE REFERRED BACK TO THIS OFFICE FOR CONSIDERATION, AS IT IS NOT THE INTENTION OF THESE DESIGNS FOR SUCH FINISHES.
- 3.16 PLACE SLAB THICKENING (300 WIDE x 250 DEEP) UNDER INTERNAL WALLS (90 OR 110) HIGHER THAN 3.7m WHERE GREATER THAN 1m FROM INTERNAL THICKENING. PROVIDE SAME TRENCH MESH AS INTERNAL THICKENING DETAIL, WHERE REQUIRED.
- 3.17 PIERCING THE VAPOUR BARRIER (VPM) USING LEVELLING PINS ON FREE DRAINING SAND PADS IS ALLOWABLE.
- 3.18 CURE SLAB AS DETERMINED BY ENGINEER.
- 3.19 THE SLAB IS CONSIDERED SUITABLE AS A PHYSICAL BARRIER AGAINST INGRESS OF TERMITES. IF THE FOOTING AND SLAB IS PLACED IN 2 POURS, THE PHYSICAL BARRIER ALSO INCLUDES THE FOOTING AND SLAB JOINTING.
- 3.20 THE FOOTING DETAILS HAVE BEEN DESIGNED IN ACCORDANCE WITH AS3600 AND SECTION 4 OF AS2870.

**4.0 MASONRY**

- 4.1 PLACE MRBL50 MESH IN TOP BED JOINT CONTINUOUS THROUGHOUT ALL BRICKWORK.
- 4.2 REINFORCE BED JOINT BELOW WINDOW SILLS WITH MRBL50 MESH. CONTINUE 750 PAST SIDES OF OPENING.
- 4.3 LAP 250 AT SPLICES AND AROUND CORNERS AND COG 250 INTO INTERSECTING WALLS. 20mm COVER TO ALL WIRES.
- 4.4 ALL MESH IN EXTERNAL FACE OF EXTERNAL LEAF TO BE GALVANIZED TO AS/NZS 4680.
- 4.5 WHEN BRICKWORK EXTENDS ABOVE OPENINGS TO EXTERNAL LEAF REINFORCE AS PER CLAUSE 4.1, 4.2 & 4.3.
- 4.6 TYPICAL WALL SECTIONS ARE SHOWN FOR 28C INTERNAL CEILINGS. WHERE THERE ARE 3 OR MORE BED JOINTS OVER THE OPENING, REINFORCE BED JOINT OVER OPENING WITH MRBL50 MESH. CONTINUE 750 PAST SIDE OF OPENING.
- 4.7 ALL PERPENDS TO BE FULLY MORTARED.
- 4.8 A BRICK COURSE, AS REFERRED TO IN THIS DOCUMENT IS STANDARD 86mm HIGH.
- 4.9 2L6 WIRES MAY BE USED AS AN ALTERNATIVE TO THE MRBL50 MESH. WHERE L6 WIRES ARE USED, ALL SPLICES AND COGS TO BE 500 LONG.

**5.0 MAINTENANCE**

- 5.1 IT IS CONSIDERED THAT THIS DESIGN IS SUITABLE FOR THE FOUNDATION CONDITIONS TO BE ENCOUNTERED AND WILL ADEQUATELY CONTROL ANY CRACKING OF BRICKWORK AND CONCRETE, SUBJECT TO THE MAINTENANCE PROCEDURES BELOW BEING SATISFIED.
- 5.2 BUILDER TO ENSURE THAT CLIENT BE INFORMED OF NECESSITY TO MAINTAIN DRAINS IN GOOD WORKING ORDER AT ALL TIMES.
- 5.3 BUILDER TO ADVISE CLIENT TO CONSULT AN ENGINEER BEFORE PLANTING TREES OR SHRUBS WITHIN 2.5m, OR A DISTANCE EQUAL TO THE ANTICIPATED MAXIMUM HEIGHT OF THE TREE, OF THE BUILDING.
- 5.4 SITE TO BE MAINTAINED AS PER CSIRO INFORMATION PAMPHLET BTF 18 & STRUCTERRE'S CLAY FACT SHEET.
- 5.5 AS2870 AND 'CSIRO PAMPHLET BTF 18' COVER THE EXPECTED PERFORMANCE AND RESPONSIBILITIES OF ALL PARTIES WITH THE USE OF THESE DETAILS.

**6.0 QUALITY CONTROL PROGRAM REQUIREMENTS**

- 6.1 WORKING SLAB DEPTH AS INDICATED ON THE DETAIL. SLAB DEPTH TOLERANCE ALLOWABLE -10mm, +15mm.
- 6.2 WHERE DEPTH IS BELOW NOMINATED DEPTH, MAX AREA ALLOWED TO BE ≤ 5% OF THE TOTAL AREA.
- 6.3 DEPTH TESTING LOCATIONS TO BE NO CLOSER THAN 1000mm APART.
- 6.4 SLAB DEPTH IS TO BE PART OF A QUALITY CONTROL INSPECTION REGIME.
- 6.5 SLAB AND FOOTING CAN BE Poured MONOLITHICALLY IF DESIRED.

DATE LAST MODIFIED - 21/09/21



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PROJECT :  
**LOT 286 ATTADALE AV DARCH**

CLIENT : **PARCEL DARCH PTY LTD**

SCALE **1:20**

DATE **16/11/22**

APPROVED

## EXPLANATORY NOTES & STANDARD RECOMMENDATIONS - EQUIVALENT CLASS SITES (Sheet 1 of 2)

### GENERAL

1. THE EXPLANATORY NOTES AND THE STANDARD RECOMMENDATIONS ARE TO BE READ IN CONJUNCTION WITH THE SITE CLASSIFICATION REPORT.
2. ALL REFERRED STANDARDS TO BE THE CURRENT VERSION AT THE TIME OF THE CONSTRUCTION.
3. THE PURPOSE OF THE SITE CLASSIFICATION REPORT IS TO CLASSIFY THE SITE IN ACCORDANCE WITH AS2870 "RESIDENTIAL SLABS AND FOOTING". IT IS NOT INTENDED FOR ANY OTHER PURPOSE, INCLUDING SOLE INFORMATION IN THE PROVISION OF A QUOTATION FOR SITE WORKS. IT IS RECOMMENDED OTHER PARTIES TO PERFORM THEIR OWN INVESTIGATION FOR QUOTATION PURPOSES.
4. THE SITE CLASSIFICATION REPORT WILL INCLUDE BUT IS NOT LIMITED TO:
  - a. THE SITE CLASSIFICATION IN ACCORDANCE WITH AS2870 "RESIDENTIAL SLABS AND FOOTING",
  - b. A WIND CLASSIFICATION IN ACCORDANCE WITH AS4055 "WIND LOADS FOR HOUSING",
  - c. A COASTAL CORROSION CLASSIFICATION,
  - d. ADDITIONAL EARTHWORK RECOMMENDATIONS WHERE APPLICABLE,
  - e. STANDARD FOOTING DESIGN FOR SINGLE STOREY SLAB ON GROUND CONSTRUCTION.
5. THE SITE CLASSIFICATION IS BASED ON THE SITE AS PRESENTED AT THE TIME OF THE ASSESSMENT. THE SITE CLASSIFICATION AND RECOMMENDATIONS INCLUDED IN THE REPORT ARE SUBJECT TO SATISFACTORY COMPLETION OF RECOMMENDED EARTHWORKS, (REFER NOTE 17) AS A MINIMUM. SHOULD CHANGES TO THE SITE OCCUR, OTHER THAN THE RECOMMENDATIONS INCLUDED IN THE SITE CLASSIFICATION REPORT, REFER BACK TO THIS OFFICE FOR REVIEW OF CLASSIFICATION AND FOOTING DESIGN.
6. ALL RECOMMENDATIONS GIVEN IN THE SITE CLASSIFICATION REPORT HAVE BEEN DETERMINED FROM THE INFORMATION THAT WAS AVAILABLE TO THIS OFFICE AT THE TIME OF INVESTIGATION. IF FURTHER INFORMATION RELATING TO THE SITE OR DEVELOPMENT BECOMES AVAILABLE, THESE RECOMMENDATIONS ARE SUBJECT TO CHANGE.
7. EQUIVALENT CLASS SITES ARE BASED ON DIFFERENTIAL SURFACE MOVEMENT ARISING FROM ISSUE OTHER THAN SHRINK-SWELL (REACTIVITY) ONLY. THESE MAY INCLUDE SETTLEMENT AND/OR CONSOLIDATION THAT MAY OCCUR AS A RESULT OF THE UNDERLYING GROUND CONDITIONS.
8. BOREHOLES EXCAVATED REVEAL THE SOIL PROFILE AT THE BOREHOLE LOCATION ONLY. FROM THIS, IT IS INFERRED THAT THESE ARE THE SOIL CONDITIONS OVER THE SITE. VARIATIONS CAN OCCUR WHICH MAY NOT HAVE BEEN DETECTED AT THE INVESTIGATION STAGE. ANY ANOMALIES SHOULD BE REFERRED BACK TO THIS OFFICE FOR A REASSESSMENT.
9. A NUMBER OF BOREHOLES ARE CONDUCTED ACROSS THE SITE TO DETERMINE THE SOIL PROFILES AND PROVIDE A REPRESENTATION OF THE GROUND CONDITIONS.
10. THIS REPORT IS FOR STRUCTERRE ONLY TO USE IN DESIGN. ANY DESIGN BY ANYONE ELSE FOR ANY STRUCTURE MUST BE SPECIFICALLY APPROVED BY STRUCTERRE. IF USED BY ANYONE ELSE FOR ANYTHING OTHER THAN A STRUCTERRE DESIGN OR STRUCTURE, STRUCTERRE TAKES NO RESPONSIBILITY.

### SAND PAD

11. THE RECOMMENDED FOOTING DESIGN IS ONLY TO BE USED IN CONJUNCTION WITH THE RECOMMENDED SAND PAD AND EARTHWORKS AS OUTLINED IN THE SITE CLASSIFICATION REPORT.
12. THE RECOMMENDATIONS FOR THE SAND PAD IS FOR STRUCTURAL PURPOSES ONLY, AND DOES NOT PROVIDE THE MINIMUM FINISHED PAD LEVEL IN RELATION TO FLOOD LEVELS OR DEPTH TO GROUNDWATER. SHOULD THE TEST BE LOCATED IN A LOW LYING OR FLOOD PRONE AREA, REFER TO THE LOCAL AUTHORITY FOR MINIMUM BUILDING HEIGHT.
13. IMPORTED FILL FOR USE AS A SAND PAD TO BE IN ACCORDANCE TO AS 3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS" WHICH INCLUDES BUT IS NOT LIMITED TO: BE FREE FROM ANY DELETERIOUS MATERIALS INCLUDING ORGANICS, (ROOTS, STUMPS, GRASSES, DECOMPOSED ORGANICS - PEAT, TIMBER, ETC), BUILDING RUBBLE, GLASS, PLASTICS OR WASTE MATERIAL. THE FINES CONTENT, (PERCENTAGE PASSING THE 0.075mm SIEVE) TO BE LESS THAN 5% BY MASS.
14. ON SAND SITES A SAND PAD IS NOT REQUIRED STRUCTURALLY, HOWEVER IF ROCK IS ENCOUNTERED, A MINIMUM 200mm SAND PAD BEYOND THE BASE OF FOOTING IS RECOMMENDED.
15. SAND PAD TO EXTEND BEYOND BUILDING AREA A MINIMUM OF 1.5 TIMES THE PAD DEPTH.
16. RECOMMENDED SAND PAD DEPTH IS ABOVE THE HIGHEST POINT, UNLESS OTHERWISE SPECIFIED.
17. IT IS REQUIRED THAT EARTHWORKS CONFIRM THAT THE MINIMUM DEPTH OF RECOMMENDED SAND PAD IS ACHIEVED.

### EARTHWORKS

18. RECOMMENDED EARTHWORKS TO BE CONDUCTED IN ACCORDANCE WITH AS3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS", AND TO INCLUDE BUT NOT BE LIMITED TO:
  - a. REMOVAL OF ALL VEGETATION, TOPSOILS, UNCONTROLLED FILLS AND OTHER DELETERIOUS MATERIALS FROM THE BUILDING AREA,
  - b. GRUBBING OUT OF ANY TREES ENSURING THE REMAINING HOLES ARE BACKFILLED WITH CLEAN COMPACTED SAND,
  - c. NOTIFYING THE ENGINEER OF ANY UNUSUAL FEATURE OR DISCREPANCY THAT MAY BECOME EVIDENT DURING EARTHWORKS, PRIOR TO PROCEEDING,
  - d. COMPACTING TO MEET THE REQUIREMENTS AS OUTLINED IN AS 3798 TABLE 5.1.
19. FILL MATERIAL (WHICH IS NOT ALWAYS APPARENT AT THE INITIAL INVESTIGATION STAGE) IS TO BE DEALT WITH AS FOLLOWS:
  - a. IF IT IS CERTIFIED BY OTHERS IT CAN REMAIN.
  - b. IF IT IS NOT CERTIFIED WILL REQUIRE REMOVAL DOWN TO NATURAL GROUND OR VERIFIED. ANY SAND CAN BE REUSED.
  - c. IF A PAD HAS ALREADY BEEN CONSTRUCTED, THE SITE CLASSIFICATION IS NOT CERTIFICATION OF THE PAD. CONTACT THIS OFFICE SHOULD A SAND PAD CERTIFICATION BE REQUIRED.
20. ANY ORGANIC MATTER OR ROOTS ENCOUNTERED, WHICH IS BEYOND WHAT IS NORMALLY CONSIDERED ACCEPTABLE IS TO BE REMOVED. THIS WILL NECESSITATE RAKING THE SITE TO REMOVE ORGANIC MATERIAL, TURNING THE SITE OVER AND RE-COMPACTING TO A MINIMUM.

### RETAINING WALLS

21. AN ASSESSMENT OF ANY EXISTING OR PROPOSED RETAINING WALLS HAS NOT BEEN CONDUCTED AS PART OF THIS SITE CLASSIFICATION REPORT.
22. IF THE PROPOSED BUILDING IS TO BE LOCATED CLOSER THAN THE HEIGHT OF THE RETAINING WALL, THIS MAY PLACE ADDITIONAL LOADS ON THE WALL THAT WERE NOT INITIALLY DESIGNED FOR. AN INSPECTION OF THE STRUCTURAL INTEGRITY OF THE RETAINING WALL WILL BE REQUIRED TO PROVIDE CERTIFICATION AND/OR RECOMMENDATIONS PRIOR TO ANY CONSTRUCTION. PLEASE REFER BACK TO THIS OFFICE FOR ASSISTANCE.  
STORMWATER DRAINAGE
23. UNLESS OTHERWISE SPECIFIED, ALL SOAKWELLS ARE TO BE LOCATED THE DEPTH OF THE SOAKWELL AWAY FROM THE BUILDING OR SETBACK A MINIMUM OF 1200mm, WHICHEVER IS GREATER, UNLESS SPECIFIED OTHERWISE. PLEASE REFER BACK TO THIS OFFICE IF THE SETBACK CANNOT BE ACHIEVED.

DOC# SS001 - 1.1.10 SCR EQUIVALENT V1.1 - AUGUST 2021



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PROJECT :  
LOT 286 ATTADALE AV DARCH

CLIENT : PARCEL DARCH PTY LTD

SCALE 1:20

DATE 16/11/22

APPROVED

## EXPLANATORY NOTES & STANDARD RECOMMENDATIONS - EQUIVALENT CLASS SITES (Sheet 2 of 2)

### WIND CLASSIFICATION

24. WIND CLASSIFICATION IS GIVEN FOR THE EXPECTED CONDITION 5 YEARS HENCE. THIS CLASSIFICATION IS LIMITED TO BUILDINGS CLASSES 1 AND 10, WHICH HAVE THE FOLLOWING LIMITATION (AS PER AS4055):

- a. MAXIMUM DISTANCE FROM THE GROUND LEVEL TO THE UNDERSIDE OF EAVES SHALL NOT EXCEED 6.0m,
- b. MAXIMUM DISTANCE FROM GROUND LEVEL TO THE HIGHEST POINT OF THE ROOF, EXCLUDING CHIMNEYS, SHALL NOT EXCEED 8.5m,
- c. THE ROOF PITCH SHALL NOT EXCEED 35 °,
- d. THE WIDTH, EXCLUDING EAVES, SHALL NOT EXCEED 16.0m AND THE LENGTH SHALL NOT EXCEED 5x THE WIDTH.

IF THE BUILDING FALLS OUTSIDE OF THESE LIMITATIONS, THE STATED WIND CLASSIFICATION DOES NOT APPLY. REFER BACK TO THIS OFFICE FOR A REVISED WIND CLASSIFICATION.

### ENVIRONMENTAL

25. NO ENVIRONMENTAL ASSESSMENT OF THIS SITE HAS BEEN UNDERTAKEN. SHOULD AN ENVIRONMENTAL ASSESSMENT BE REQUIRED, PLEASE CONTACT THIS OFFICE.

### SEISMIC

26. RECOMMENDED FOOTING DETAILS ARE SUITABLE FOR SEISMIC CONDITIONS WITH AN EARTHQUAKE HAZARD FACTOR OF  $\leq 0.11$ . RECOMMENDED FOOTING DETAILS PROVIDED FOR SITES WITH AN EARTHQUAKE HAZARD FACTOR OF  $> 0.11$ , ARE NOT FOR CONSTRUCTION, BUT FOR COSTING PURPOSES ONLY. IT IS REQUIRED THAT A FULL SEISMIC DESIGN IS CONDUCTED.

### CORROSION CLASSIFICATION

27. THE CORROSION CLASSIFICATION HAS BEEN ASSESSED IN ACCORDANCE WITH AS3700.

DOC# SS001 - 1.1.10 SCR EQUIVALENT V1.1 - AUGUST 2021



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PROJECT :  
LOT 286 ATTADALE AV DARCH

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SCALE 1:20

DATE 16/11/22

APPROVED

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**SITE CLASSIFICATION REPORT**  
CERTIFICATE 2595167

**CLIENT** PARCEL DARCH PTY LTD  
**JOB ADDRESS** LOT 287 ATTADALE AV DARCH  
**CLIENT JOB NO.**  
**OWNER**  
**STRUCTERRE JOB NO.** S1082677  
**DATE OF ASSESSMENT** 15/11/22

**SITE RECORD**

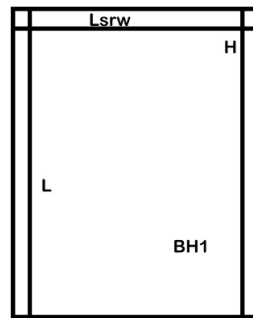


<b>SITE CLASSIFICATION</b>	<b>S - EQUIVALENT</b> <i>(in accordance with AS2870)</i>
<b>FOOTING DETAIL</b>	<b>CM3</b>
<b>SAND PAD</b>	<b>No sand pad required structurally</b>
<b>BUSHFIRE PRONE AREA</b>	<b>Not in a Bushfire Prone Area (see NOTE 2.)</b>
<b>CORROSION CLASSIFICATION</b>	<b>R1</b> <i>(Durability Class in accordance with AS3700)</i>
<b>WIND CLASSIFICATION</b>	<b>N1</b> <i>(in accordance with AS4055)</i>
-TERRAIN CATEGORY	3
-TOPOGRAPHIC	T0
-SHIELDING	Full Shielding

## SOIL PROFILE

BOREHOLE 1: 0 - 700 FILL sand with artificial material trace limestone gravel - grey; 700 hard ground refusal.

## APPROXIMATE BOREHOLE LOCATIONS



Attadale Av

### NOTE 1 Explanatory Notes & Standard Recommendations

This site classification report must be read in conjunction with the applicable Explanatory Notes & Standard Recommendations. For A Class sites, refer to the Explanatory Notes and Standard Recommendations for Stable (A Class) Sites, version 1.0 July 2018. For S, M, H1, H2 & E Class sites, refer to the Explanatory Notes and Standard Recommendations for Reactive (S, M, H1, H2 & E Class) Sites version 1.0 July 2018. For Equivalent Class sites, refer to the Explanatory Notes and Standard Recommendations for Equivalent Class Sites, version 1.0 July 2018.

### NOTE 2 Bushfire - Prone Area

The Site may be situated in a bush fire prone area in accordance with the Department of Fire and Emergency Services (DFES) Bushfire Prone Area Map (Reference: <http://www.dfes.wa.gov.au/regulationandcompliance/bushfireproneareas/>) the current version at the time of this assessment. A Bushfire Attack Level (BAL) assessment may be required for this site, please confirm with the local authority. Should you require an assessment, please contact this Office.

## ADDITIONAL NOTES / REQUIREMENTS

### Site Condition

At the time of inspection the site was considered to be level and cleared. For specific levels of this site or topographical features, please refer to a professional site survey.

### Structerre Geotech Reference

The Site Classification is based on any remedial works being successfully completed as outlined in the Structerre Geotechnical Report J380185 dated 2 April 2021. The footing details are subject to the recommendations being completed to an acceptable level as outlined in this report, if applicable.

### Internal Thickenings

Internal thickenings are required for the proposed residence as specified on the recommended footing detail. Please provide a copy of the architectural drawings to this Office, so that the internal thickenings can be designed and drawn in accordance with AS2870.

### Internal Thickening Inspection

This detail is subject to a internal thickening layout inspection. It is recommended that an inspection be conducted by a representative from this Office prior to concrete pour.

-- END OF REPORT --



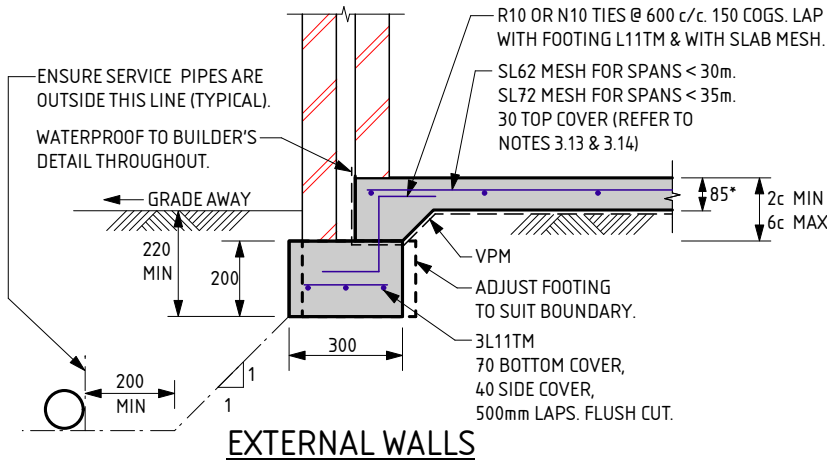
CERTIFICATE 2595167

Issued Date: 16 November 2022

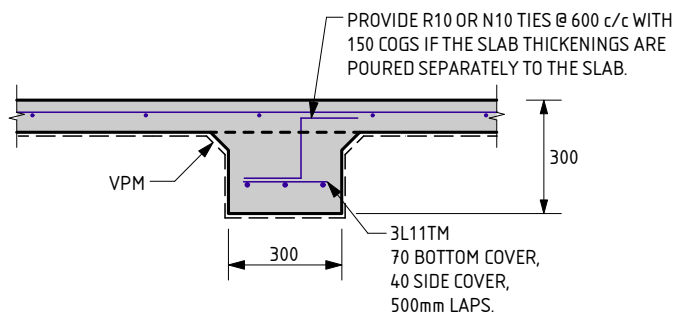
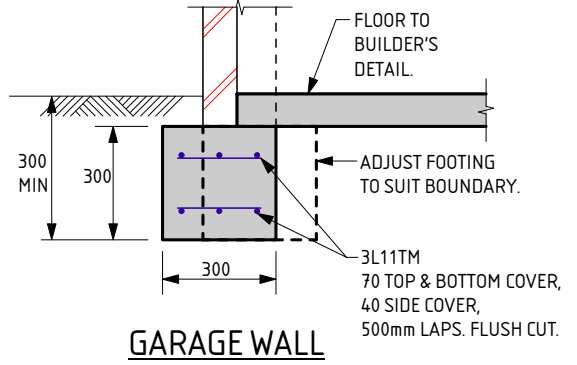
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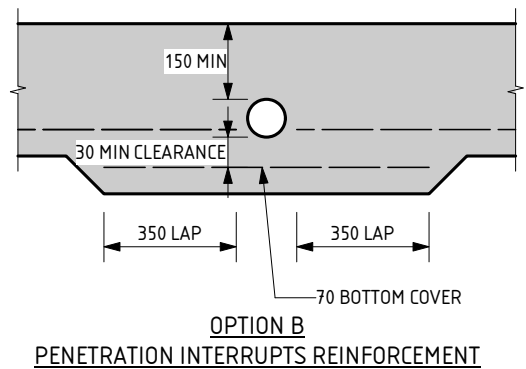
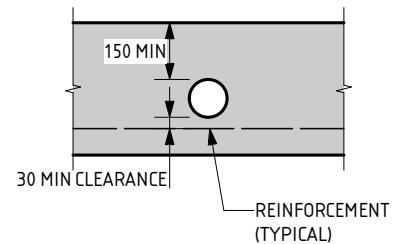
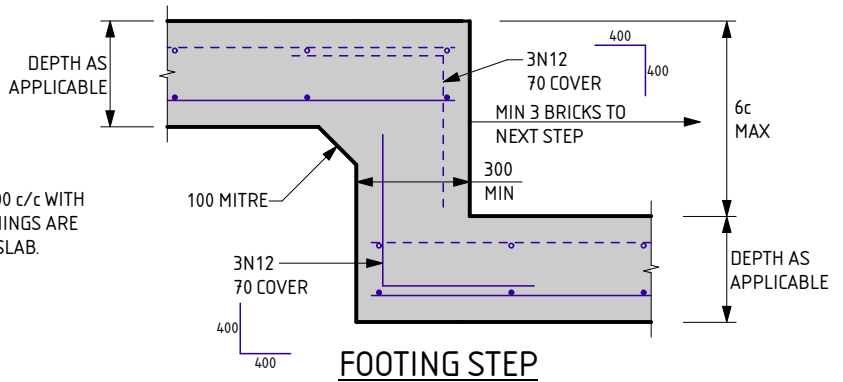
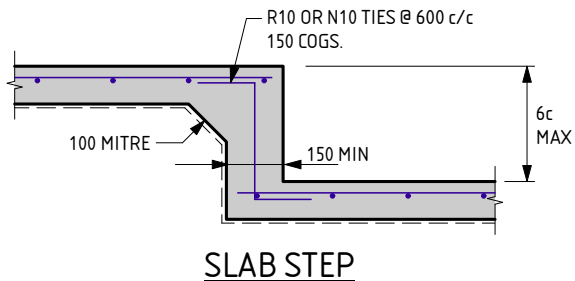
  
Gervase Purich  
Chief Executive Officer



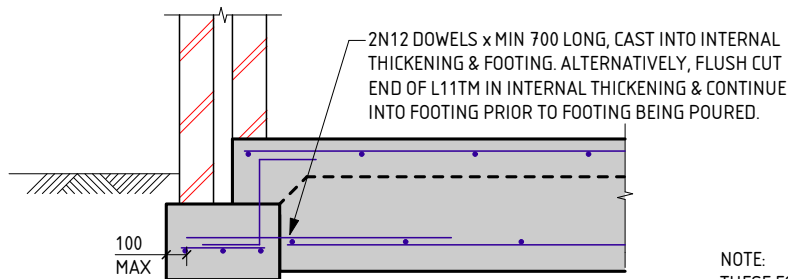
\* 100mm SLAB MAY BE INSTALLED INSTEAD OF 85mm.  
IF 100mm SLAB USED, MESH TO BE:  
SL62 MESH FOR SPANS < 25m.  
SL72 MESH FOR SPANS < 30m.  
SL82 MESH FOR SPANS < 35m.



REFER TO STRUCTERRE'S DRAWINGS FOR PLACEMENT OF INTERNAL THICKENINGS. LOCATIONS TO BE CONFIRMED ON SITE BY STRUCTERRE PRIOR TO CONCRETE POUR.



**SERVICE PIPE DIAGRAM**  
- MAXIMUM PENETRATION SIZE TO BE Ø150.



### EXTERNAL FOOTING TO INTERNAL THICKENING

THIS DETAIL IS EQUIVALENT TO  
STRUCTERRE FOOTING DETAIL C4.0

NOTE:  
THESE FOOTING DETAILS ARE TO BE READ IN CONJUNCTION WITH THE REACTIVE SITE NOTES.

THE APPROVED SIGNATURE ON THIS DETAIL ENDORSES ITS USE FOR SINGLE STOREY BUILDINGS ON BUILDING PLATFORMS WITH UP TO 11mm OF SURFACE MOVEMENT.  
DATE LAST MODIFIED - 20/09/18

**CM3**  
CAVITY MASONRY

**STRUCterre**  
consulting engineers

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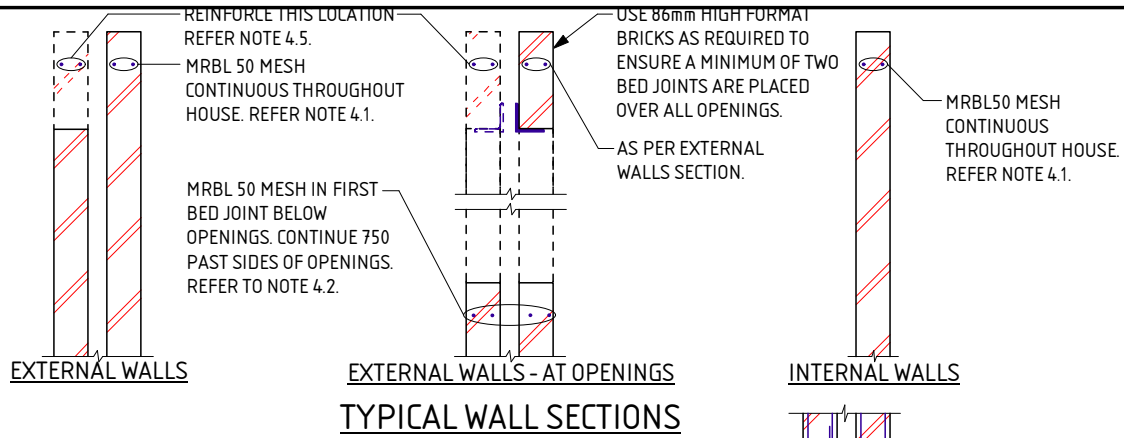
PROJECT:  
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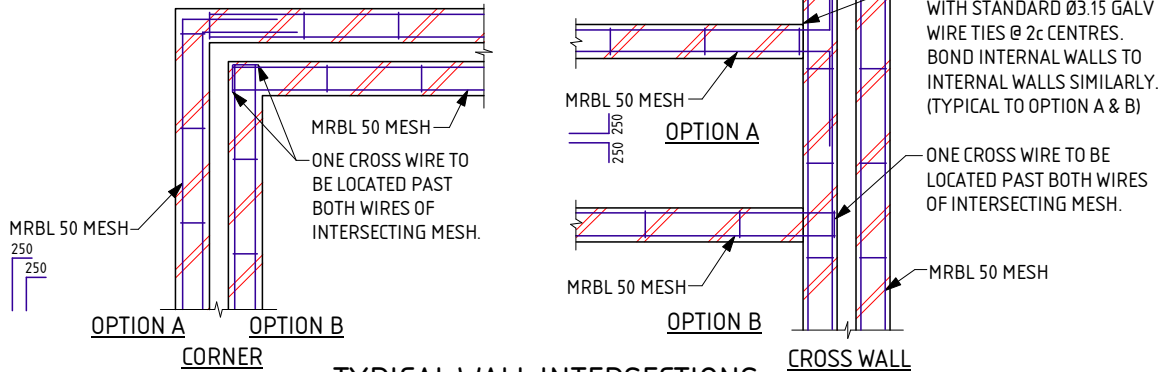
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DATE 16/11/22

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TYPICAL WALL SECTIONS



TYPICAL WALL INTERSECTIONS

REACTIVE SITE NOTES FOR CM1 - CM7

THESE NOTES ARE TO BE READ IN CONJUNCTION WITH THE ATTACHED FOOTING DETAILS.

1.0 SITE CLASSIFICATION

- 1.1 REFER TO ATTACHED CERTIFICATE OF INSPECTION FOR SITE CLASSIFICATION. THE SITE CLASSIFICATION NOTED, IS AS DEFINED IN AS2870 - RESIDENTIAL SLABS & FOOTINGS.
- 1.2 THE SITE CLASSIFICATION HAS BEEN DETERMINED BY INVESTIGATION OF THE SITE, AS PER THE ATTACHED CERTIFICATE OF INSPECTION. REFER TO THE ATTACHED CERTIFICATE FOR ANY SPECIAL REQUIREMENTS.

2.0 EARTHWORKS

- 2.1 SAND PAD IF APPLICABLE TO BE AS PER SITE INSPECTION REPORT.
- 2.2 EARTHWORKS SHALL INCLUDE, BUT NOT BE LIMITED TO:
  - a) REMOVE ALL ORGANIC MATERIAL FROM THE PAD AREA.
  - b) REMOVE ALL RUBBISH AND DELETERIOUS FILL (SUCH AS CLAY FILL) FROM THE PAD AREA.
  - c) GRUB OUT ANY TREES WHERE NECESSARY AND ENSURE THE REMAINING HOLES ARE FILLED AND COMPACTED SATISFACTORILY WITH SAND.
  - d) NOTIFY THE ENGINEER OF ANY UNUSUAL FEATURES OR DISCREPANCIES WHICH MAY BECOME EVIDENT DURING EARTHWORKS, PRIOR TO PROCEEDING.
- 2.3 ANY PREDOMINANT ROCK IN THE HOUSE PAD AREAS IS TO BE INSPECTED BY THE ENGINEER.
- 2.4 ANY CUT TO THE SITE, OTHER THAN TOPSOIL STRIPPING, WILL REQUIRE THE PREPARED CUT BASE TO BE INSPECTED AND APPROVED BY THE ENGINEER.
- 2.5 MAXIMUM SAND PAD DEPTH NOT TO EXCEED 150% OF MINIMUM PAD DEPTH OR 2000mm WITHOUT THE ENGINEER'S APPROVAL.
- 2.6 IF APPLICABLE SAND FILL TO BE CLEAN WELL DRAINED, WITH MAX FINES (PARTICLES UP TO 0.075mm) CONTENT OF 5%. SAND TO BE COMPACTED TO A MIN 6 BLOWS/300mm FOR THE DEPTH OF THE PAD OR TO DISCRETION OF ENGINEER.
- 2.7 COMPACTION TESTING TO BE PERFORMED BY STRUCTERRE.

3.0 FOOTINGS & SLABS

- 3.1 FOOTINGS ARE TO BE PLACED DIRECTLY INTO SAND PAD OF SPECIFIED THICKNESS.
- 3.2 ALL STORMWATER MUST BE DISCHARGED INTO COUNCIL DRAINS OR A MINIMUM OF 3m FOR S CLASS SITES, 4m FOR M CLASS SITES AND 5m FOR H1 & H2 CLASS SITES, AWAY FROM THE RESIDENCE AND/OR ADJACENT BUILDINGS INTO SOAKWELLS. IF THIS RESTRICTION CANNOT BE ACHIEVED REFER BACK TO THIS OFFICE FOR AN ALTERNATIVE DESIGN. WHERE THE SITE HAS BEEN CLASSIFIED AS AN 'EQUIVALENT' SITE CLASSIFICATION, REFER TO 'EXPLANATORY NOTES & STANDARD RECOMMENDATIONS - EQUIVALENT CLASS SITES' FOR STORMWATER DRAINAGE REQUIREMENTS UNLESS SPECIFIED OTHERWISE.
- 3.3 EXCAVATIONS FOR ALL SERVICE PIPES NOT TO UNDERMINE FOOTINGS. IF UNDERMINING IS LIKELY TO OCCUR, CONTACT THE ENGINEER PRIOR TO PROCEEDING.
- 3.4 WHERE PLUMBING PIPES PASS THROUGH FOOTINGS OR SLAB, SPECIFIED TOTAL THICKNESS OF ALL CONCRETE IS ALWAYS TO BE MAINTAINED.
- 3.5 SETDOWN AT WET AREA TO ARCHITECTURAL REQUIREMENT (50mm MAX). MAINTAIN 85mm SLAB THICKNESS. FOLD MESH DOWN TO MAINTAIN COVER, PLACE DIAGONAL BARS AT RE-ENTRANT CORNER FOR STEPS OVER 30mm. BARS TO BE N12x 1200 LONG.
- 3.6 REINFORCEMENT SHALL BE IN ACCORDANCE WITH THE FOLLOWING STANDARDS;
 

L	INDICATES PLAIN OR DEFORMED WIRE R500L OR D500L TO AS/NZS 4671.
SL	INDICATES DEFORMED SQUARE MESH D500L TO AS/NZS 4671.
N	INDICATES DEFORMED BARS D500N TO AS/NZS 4671.
TM SUFFIX	INDICATES TRENCH MESH USING DEFORMED BARS D500L TO AS/NZS 4671.

 ALL STEELWORK TO BE TREATED IN ACCORDANCE WITH TABLE 3.4.4.4 "CORROSION PROTECTION" OF THE BUILDING CODE OF AUSTRALIA.
- 3.7 LAP ALL MESH TWO TRANSVERSE WIRES PLUS 25mm OR TO MANUFACTURER'S SPECIFICATIONS.

3.8 CONCRETE TO CONFORM WITH AS 3600.

- 3.9 BLENDED CEMENT TO CONFORM WITH AS1317.
- 3.10 ALL CONCRETE TO BE N20/20/100.
- 3.11 FOR ISOLATED PAD FOOTINGS, REFER BACK TO ENGINEER.
- 3.12 FOOTING POSITION UNDER BRICKWORK CAN BE ADJUSTED TO SUIT PARAPET WALLS.
- 3.13 FOR SLAB SPANS > 35m REFER TO ENGINEER FOR MESH SIZE.
- 3.14 IF THE LENGTH TO WIDTH RATIO OF THE GROUND SLAB OR ANY PART OF THE GROUND SLAB EXCEEDS 3:1, REFER BACK TO THIS OFFICE FOR MESH SIZE.
- 3.15 IF POLISHED (OR HONED) CONCRETE FINISHES ARE DESIRED, THIS DESIGN SHOULD BE REFERRED BACK TO THIS OFFICE FOR CONSIDERATION, AS IT IS NOT THE INTENTION OF THESE DESIGNS FOR SUCH FINISHES.
- 3.16 PLACE SLAB THICKENING (300 WIDE x 250 DEEP) UNDER INTERNAL WALLS (90 OR 110) HIGHER THAN 3.7m WHERE GREATER THAN 1m FROM INTERNAL THICKENING. PROVIDE SAME TRENCH MESH AS INTERNAL THICKENING DETAIL, WHERE REQUIRED.
- 3.17 PIERCING THE VAPOUR BARRIER (VPM) USING LEVELLING PINS ON FREE DRAINING SAND PADS IS ALLOWABLE.
- 3.18 CURE SLAB AS DETERMINED BY ENGINEER.
- 3.19 THE SLAB IS CONSIDERED SUITABLE AS A PHYSICAL BARRIER AGAINST INGRESS OF TERMITES. IF THE FOOTING AND SLAB IS PLACED IN 2 POURS, THE PHYSICAL BARRIER ALSO INCLUDES THE FOOTING AND SLAB JOINT.
- 3.20 THE FOOTING DETAILS HAVE BEEN DESIGNED IN ACCORDANCE WITH AS3600 AND SECTION 4 OF AS2870.

4.0 MASONRY

- 4.1 PLACE MRBL50 MESH IN TOP BED JOINT CONTINUOUS THROUGHOUT ALL BRICKWORK.
- 4.2 REINFORCE BED JOINT BELOW WINDOW SILLS WITH MRBL50 MESH. CONTINUE 750 PAST SIDES OF OPENING.
- 4.3 LAP 250 AT SPLICES AND AROUND CORNERS AND COG 250 INTO INTERSECTING WALLS. 20mm COVER TO ALL WIRES.
- 4.4 ALL MESH IN EXTERNAL FACE OF EXTERNAL LEAF TO BE GALVANIZED TO AS/NZS 4680.
- 4.5 WHEN BRICKWORK EXTENDS ABOVE OPENINGS TO EXTERNAL LEAF REINFORCE AS PER CLAUSE 4.1, 4.2 & 4.3.
- 4.6 TYPICAL WALL SECTIONS ARE SHOWN FOR 28C INTERNAL CEILINGS. WHERE THERE ARE 3 OR MORE BED JOINTS OVER THE OPENING, REINFORCE BED JOINT OVER OPENING WITH MRBL50 MESH. CONTINUE 750 PAST SIDE OF OPENING.
- 4.7 ALL PERPENDS TO BE FULLY MORTARED.
- 4.8 A BRICK COURSE, AS REFERRED TO IN THIS DOCUMENT IS STANDARD 86mm HIGH.
- 4.9 2L6 WIRES MAY BE USED AS AN ALTERNATIVE TO THE MRBL50 MESH. WHERE L6 WIRES ARE USED, ALL SPLICES AND COGS TO BE 500 LONG.

5.0 MAINTENANCE

- 5.1 IT IS CONSIDERED THAT THIS DESIGN IS SUITABLE FOR THE FOUNDATION CONDITIONS TO BE ENCOUNTERED AND WILL ADEQUATELY CONTROL ANY CRACKING OF BRICKWORK AND CONCRETE, SUBJECT TO THE MAINTENANCE PROCEDURES BELOW BEING SATISFIED.
- 5.2 BUILDER TO ENSURE THAT CLIENT BE INFORMED OF NECESSITY TO MAINTAIN DRAINS IN GOOD WORKING ORDER AT ALL TIMES.
- 5.3 BUILDER TO ADVISE CLIENT TO CONSULT AN ENGINEER BEFORE PLANTING TREES OR SHRUBS WITHIN 2.5m, OR A DISTANCE EQUAL TO THE ANTICIPATED MAXIMUM HEIGHT OF THE TREE, OF THE BUILDING.
- 5.4 SITE TO BE MAINTAINED AS PER CSIRO INFORMATION PAMPHLET BTF 18 & STRUCTERRE'S CLAY FACT SHEET.
- 5.5 AS2870 AND 'CSIRO PAMPHLET BTF 18' COVER THE EXPECTED PERFORMANCE AND RESPONSIBILITIES OF ALL PARTIES WITH THE USE OF THESE DETAILS.

6.0 QUALITY CONTROL PROGRAM REQUIREMENTS

- 6.1 WORKING SLAB DEPTH AS INDICATED ON THE DETAIL. SLAB DEPTH TOLERANCE ALLOWABLE -10mm, +15mm.
- 6.2 WHERE DEPTH IS BELOW NOMINATED DEPTH, MAX AREA ALLOWED TO BE ≤ 5% OF THE TOTAL AREA.
- 6.3 DEPTH TESTING LOCATIONS TO BE NO CLOSER THAN 1000mm APART.
- 6.4 SLAB DEPTH IS TO BE PART OF A QUALITY CONTROL INSPECTION REGIME.
- 6.5 SLAB AND FOOTING CAN BE POURED MONOLITHICALLY IF DESIRED.

DATE LAST MODIFIED - 21/09/21



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PROJECT :  
LOT 287 ATTADALE AV DARCH

CLIENT : PARCEL DARCH PTY LTD

SCALE 1:20

DATE 16/11/22

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## EXPLANATORY NOTES & STANDARD RECOMMENDATIONS - EQUIVALENT CLASS SITES (Sheet 1 of 2)

### GENERAL

1. THE EXPLANATORY NOTES AND THE STANDARD RECOMMENDATIONS ARE TO BE READ IN CONJUNCTION WITH THE SITE CLASSIFICATION REPORT.
2. ALL REFERRED STANDARDS TO BE THE CURRENT VERSION AT THE TIME OF THE CONSTRUCTION.
3. THE PURPOSE OF THE SITE CLASSIFICATION REPORT IS TO CLASSIFY THE SITE IN ACCORDANCE WITH AS2870 "RESIDENTIAL SLABS AND FOOTING". IT IS NOT INTENDED FOR ANY OTHER PURPOSE, INCLUDING SOLE INFORMATION IN THE PROVISION OF A QUOTATION FOR SITE WORKS. IT IS RECOMMENDED OTHER PARTIES TO PERFORM THEIR OWN INVESTIGATION FOR QUOTATION PURPOSES.
4. THE SITE CLASSIFICATION REPORT WILL INCLUDE BUT IS NOT LIMITED TO:
  - a. THE SITE CLASSIFICATION IN ACCORDANCE WITH AS2870 "RESIDENTIAL SLABS AND FOOTING",
  - b. A WIND CLASSIFICATION IN ACCORDANCE WITH AS4055 "WIND LOADS FOR HOUSING",
  - c. A COASTAL CORROSION CLASSIFICATION,
  - d. ADDITIONAL EARTHWORK RECOMMENDATIONS WHERE APPLICABLE,
  - e. STANDARD FOOTING DESIGN FOR SINGLE STOREY SLAB ON GROUND CONSTRUCTION.
5. THE SITE CLASSIFICATION IS BASED ON THE SITE AS PRESENTED AT THE TIME OF THE ASSESSMENT. THE SITE CLASSIFICATION AND RECOMMENDATIONS INCLUDED IN THE REPORT ARE SUBJECT TO SATISFACTORY COMPLETION OF RECOMMENDED EARTHWORKS, (REFER NOTE 17) AS A MINIMUM. SHOULD CHANGES TO THE SITE OCCUR, OTHER THAN THE RECOMMENDATIONS INCLUDED IN THE SITE CLASSIFICATION REPORT, REFER BACK TO THIS OFFICE FOR REVIEW OF CLASSIFICATION AND FOOTING DESIGN.
6. ALL RECOMMENDATIONS GIVEN IN THE SITE CLASSIFICATION REPORT HAVE BEEN DETERMINED FROM THE INFORMATION THAT WAS AVAILABLE TO THIS OFFICE AT THE TIME OF INVESTIGATION. IF FURTHER INFORMATION RELATING TO THE SITE OR DEVELOPMENT BECOMES AVAILABLE, THESE RECOMMENDATIONS ARE SUBJECT TO CHANGE.
7. EQUIVALENT CLASS SITES ARE BASED ON DIFFERENTIAL SURFACE MOVEMENT ARISING FROM ISSUE OTHER THAN SHRINK-SWELL (REACTIVITY) ONLY. THESE MAY INCLUDE SETTLEMENT AND/OR CONSOLIDATION THAT MAY OCCUR AS A RESULT OF THE UNDERLYING GROUND CONDITIONS.
8. BOREHOLES EXCAVATED REVEAL THE SOIL PROFILE AT THE BOREHOLE LOCATION ONLY. FROM THIS, IT IS INFERRED THAT THESE ARE THE SOIL CONDITIONS OVER THE SITE. VARIATIONS CAN OCCUR WHICH MAY NOT HAVE BEEN DETECTED AT THE INVESTIGATION STAGE. ANY ANOMALIES SHOULD BE REFERRED BACK TO THIS OFFICE FOR A REASSESSMENT.
9. A NUMBER OF BOREHOLES ARE CONDUCTED ACROSS THE SITE TO DETERMINE THE SOIL PROFILES AND PROVIDE A REPRESENTATION OF THE GROUND CONDITIONS.
10. THIS REPORT IS FOR STRUCTERRE ONLY TO USE IN DESIGN. ANY DESIGN BY ANYONE ELSE FOR ANY STRUCTURE MUST BE SPECIFICALLY APPROVED BY STRUCTERRE. IF USED BY ANYONE ELSE FOR ANYTHING OTHER THAN A STRUCTERRE DESIGN OR STRUCTURE, STRUCTERRE TAKES NO RESPONSIBILITY.

### SAND PAD

11. THE RECOMMENDED FOOTING DESIGN IS ONLY TO BE USED IN CONJUNCTION WITH THE RECOMMENDED SAND PAD AND EARTHWORKS AS OUTLINED IN THE SITE CLASSIFICATION REPORT.
12. THE RECOMMENDATIONS FOR THE SAND PAD IS FOR STRUCTURAL PURPOSES ONLY, AND DOES NOT PROVIDE THE MINIMUM FINISHED PAD LEVEL IN RELATION TO FLOOD LEVELS OR DEPTH TO GROUNDWATER. SHOULD THE TEST BE LOCATED IN A LOW LYING OR FLOOD PRONE AREA, REFER TO THE LOCAL AUTHORITY FOR MINIMUM BUILDING HEIGHT.
13. IMPORTED FILL FOR USE AS A SAND PAD TO BE IN ACCORDANCE TO AS 3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS" WHICH INCLUDES BUT IS NOT LIMITED TO: BE FREE FROM ANY DELETERIOUS MATERIALS INCLUDING ORGANICS, (ROOTS, STUMPS, GRASSES, DECOMPOSED ORGANICS - PEAT, TIMBER, ETC), BUILDING RUBBLE, GLASS, PLASTICS OR WASTE MATERIAL. THE FINES CONTENT, (PERCENTAGE PASSING THE 0.075mm SIEVE) TO BE LESS THAN 5% BY MASS.
14. ON SAND SITES A SAND PAD IS NOT REQUIRED STRUCTURALLY, HOWEVER IF ROCK IS ENCOUNTERED, A MINIMUM 200mm SAND PAD BEYOND THE BASE OF FOOTING IS RECOMMENDED.
15. SAND PAD TO EXTEND BEYOND BUILDING AREA A MINIMUM OF 1.5 TIMES THE PAD DEPTH.
16. RECOMMENDED SAND PAD DEPTH IS ABOVE THE HIGHEST POINT, UNLESS OTHERWISE SPECIFIED.
17. IT IS REQUIRED THAT EARTHWORKS CONFIRM THAT THE MINIMUM DEPTH OF RECOMMENDED SAND PAD IS ACHIEVED.

### EARTHWORKS

18. RECOMMENDED EARTHWORKS TO BE CONDUCTED IN ACCORDANCE WITH AS3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS", AND TO INCLUDE BUT NOT BE LIMITED TO:
  - a. REMOVAL OF ALL VEGETATION, TOPSOILS, UNCONTROLLED FILLS AND OTHER DELETERIOUS MATERIALS FROM THE BUILDING AREA,
  - b. GRUBBING OUT OF ANY TREES ENSURING THE REMAINING HOLES ARE BACKFILLED WITH CLEAN COMPACTED SAND,
  - c. NOTIFYING THE ENGINEER OF ANY UNUSUAL FEATURE OR DISCREPANCY THAT MAY BECOME EVIDENT DURING EARTHWORKS, PRIOR TO PROCEEDING,
  - d. COMPACTING TO MEET THE REQUIREMENTS AS OUTLINED IN AS 3798 TABLE 5.1.
19. FILL MATERIAL (WHICH IS NOT ALWAYS APPARENT AT THE INITIAL INVESTIGATION STAGE) IS TO BE DEALT WITH AS FOLLOWS:
  - a. IF IT IS CERTIFIED BY OTHERS IT CAN REMAIN.
  - b. IF IT IS NOT CERTIFIED WILL REQUIRE REMOVAL DOWN TO NATURAL GROUND OR VERIFIED. ANY SAND CAN BE REUSED.
  - c. IF A PAD HAS ALREADY BEEN CONSTRUCTED, THE SITE CLASSIFICATION IS NOT CERTIFICATION OF THE PAD. CONTACT THIS OFFICE SHOULD A SAND PAD CERTIFICATION BE REQUIRED.
20. ANY ORGANIC MATTER OR ROOTS ENCOUNTERED, WHICH IS BEYOND WHAT IS NORMALLY CONSIDERED ACCEPTABLE IS TO BE REMOVED. THIS WILL NECESSITATE RAKING THE SITE TO REMOVE ORGANIC MATERIAL, TURNING THE SITE OVER AND RE-COMPACTING TO A MINIMUM.

### RETAINING WALLS

21. AN ASSESSMENT OF ANY EXISTING OR PROPOSED RETAINING WALLS HAS NOT BEEN CONDUCTED AS PART OF THIS SITE CLASSIFICATION REPORT.
22. IF THE PROPOSED BUILDING IS TO BE LOCATED CLOSER THAN THE HEIGHT OF THE RETAINING WALL, THIS MAY PLACE ADDITIONAL LOADS ON THE WALL THAT WERE NOT INITIALLY DESIGNED FOR. AN INSPECTION OF THE STRUCTURAL INTEGRITY OF THE RETAINING WALL WILL BE REQUIRED TO PROVIDE CERTIFICATION AND/OR RECOMMENDATIONS PRIOR TO ANY CONSTRUCTION. PLEASE REFER BACK TO THIS OFFICE FOR ASSISTANCE.  
STORMWATER DRAINAGE
23. UNLESS OTHERWISE SPECIFIED, ALL SOAKWELLS ARE TO BE LOCATED THE DEPTH OF THE SOAKWELL AWAY FROM THE BUILDING OR SETBACK A MINIMUM OF 1200mm, WHICHEVER IS GREATER, UNLESS SPECIFIED OTHERWISE. PLEASE REFER BACK TO THIS OFFICE IF THE SETBACK CANNOT BE ACHIEVED.

DOC# SS001 - 1.1.10 SCR EQUIVALENT V1.1 - AUGUST 2021



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PROJECT :  
LOT 287 ATTADALE AV DARCH

CLIENT : PARCEL DARCH PTY LTD

SCALE 1:20

DATE 16/11/22

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## EXPLANATORY NOTES & STANDARD RECOMMENDATIONS - EQUIVALENT CLASS SITES (Sheet 2 of 2)

### WIND CLASSIFICATION

24. WIND CLASSIFICATION IS GIVEN FOR THE EXPECTED CONDITION 5 YEARS HENCE. THIS CLASSIFICATION IS LIMITED TO BUILDINGS CLASSES 1 AND 10, WHICH HAVE THE FOLLOWING LIMITATION (AS PER AS4055):

- a. MAXIMUM DISTANCE FROM THE GROUND LEVEL TO THE UNDERSIDE OF EAVES SHALL NOT EXCEED 6.0m,
- b. MAXIMUM DISTANCE FROM GROUND LEVEL TO THE HIGHEST POINT OF THE ROOF, EXCLUDING CHIMNEYS, SHALL NOT EXCEED 8.5m,
- c. THE ROOF PITCH SHALL NOT EXCEED 35 °,
- d. THE WIDTH, EXCLUDING EAVES, SHALL NOT EXCEED 16.0m AND THE LENGTH SHALL NOT EXCEED 5x THE WIDTH.

IF THE BUILDING FALLS OUTSIDE OF THESE LIMITATIONS, THE STATED WIND CLASSIFICATION DOES NOT APPLY. REFER BACK TO THIS OFFICE FOR A REVISED WIND CLASSIFICATION.

### ENVIRONMENTAL

25. NO ENVIRONMENTAL ASSESSMENT OF THIS SITE HAS BEEN UNDERTAKEN. SHOULD AN ENVIRONMENTAL ASSESSMENT BE REQUIRED, PLEASE CONTACT THIS OFFICE.

### SEISMIC

26. RECOMMENDED FOOTING DETAILS ARE SUITABLE FOR SEISMIC CONDITIONS WITH AN EARTHQUAKE HAZARD FACTOR OF  $\leq 0.11$ . RECOMMENDED FOOTING DETAILS PROVIDED FOR SITES WITH AN EARTHQUAKE HAZARD FACTOR OF  $> 0.11$ , ARE NOT FOR CONSTRUCTION, BUT FOR COSTING PURPOSES ONLY. IT IS REQUIRED THAT A FULL SEISMIC DESIGN IS CONDUCTED.

### CORROSION CLASSIFICATION

27. THE CORROSION CLASSIFICATION HAS BEEN ASSESSED IN ACCORDANCE WITH AS3700.

DOC# SS001 - 1.1.10 SCR EQUIVALENT V1.1 - AUGUST 2021



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PROJECT :  
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CLIENT : PARCEL DARCH PTY LTD

SCALE 1:20

DATE 16/11/22

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A blue ink handwritten signature is written over the 'APPROVED' field.

**SITE CLASSIFICATION REPORT**  
CERTIFICATE 2595166

**CLIENT** PARCEL DARCH PTY LTD  
**JOB ADDRESS** LOT 288 ATTADALE AV DARCH  
**CLIENT JOB NO.**  
**OWNER**  
**STRUCTERRE JOB NO.** S1082678  
**DATE OF ASSESSMENT** 15/11/22

**SITE RECORD**

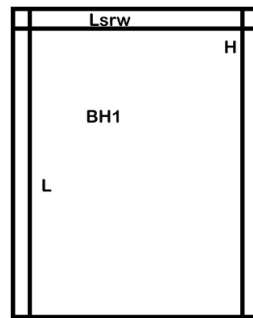


<b>SITE CLASSIFICATION</b>	<b>S - EQUIVALENT</b> <i>(in accordance with AS2870)</i>
<b>FOOTING DETAIL</b>	<b>CM3</b>
<b>SAND PAD</b>	<b>No sand pad required structurally</b>
<b>BUSHFIRE PRONE AREA</b>	<b>Not in a Bushfire Prone Area (see NOTE 2.)</b>
<b>CORROSION CLASSIFICATION</b>	<b>R1</b> <i>(Durability Class in accordance with AS3700)</i>
<b>WIND CLASSIFICATION</b>	<b>N1</b> <i>(in accordance with AS4055)</i>
-TERRAIN CATEGORY	3
-TOPOGRAPHIC	T0
-SHIELDING	Full Shielding

## SOIL PROFILE

BOREHOLE 1: 0 - 1100 FILL sand with artificial material trace limestone gravel - grey; 1100 hard ground refusal.

## APPROXIMATE BOREHOLE LOCATIONS



Attadale Av

### NOTE 1 Explanatory Notes & Standard Recommendations

This site classification report must be read in conjunction with the applicable Explanatory Notes & Standard Recommendations. For A Class sites, refer to the Explanatory Notes and Standard Recommendations for Stable (A Class) Sites, version 1.0 July 2018. For S, M, H1, H2 & E Class sites, refer to the Explanatory Notes and Standard Recommendations for Reactive (S, M, H1, H2 & E Class) Sites version 1.0 July 2018. For Equivalent Class sites, refer to the Explanatory Notes and Standard Recommendations for Equivalent Class Sites, version 1.0 July 2018.

### NOTE 2 Bushfire - Prone Area

The Site may be situated in a bush fire prone area in accordance with the Department of Fire and Emergency Services (DFES) Bushfire Prone Area Map (Reference: <http://www.dfes.wa.gov.au/regulationandcompliance/bushfireproneareas/>) the current version at the time of this assessment. A Bushfire Attack Level (BAL) assessment may be required for this site, please confirm with the local authority. Should you require an assessment, please contact this Office.

## ADDITIONAL NOTES / REQUIREMENTS

### Site Condition

At the time of inspection the site was considered to be level and cleared. For specific levels of this site or topographical features, please refer to a professional site survey.

### Structerre Geotech Reference

The Site Classification is based on any remedial works being successfully completed as outlined in the Structerre Geotechnical Report J380185 dated 02/04/2021. The footing details are subject to the recommendations being completed to an acceptable level as outlined in this report, if applicable.

### Internal Thickenings


Internal thickenings are required for the proposed residence as specified on the recommended footing detail. Please provide a copy of the architectural drawings to this Office, so that the internal thickenings can be designed and drawn in accordance with AS2870.

### Internal Thickening Inspection

This detail is subject to a internal thickening layout inspection. It is recommended that an inspection be conducted by a representative from this Office prior to concrete pour.

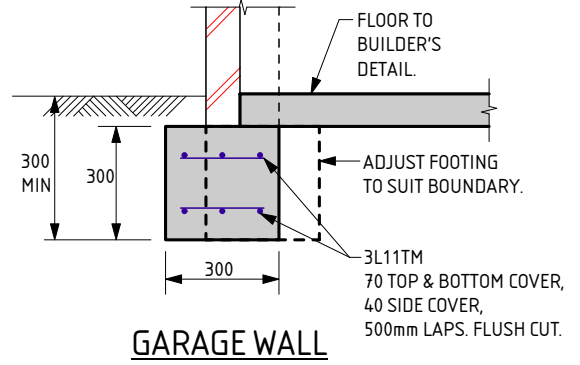
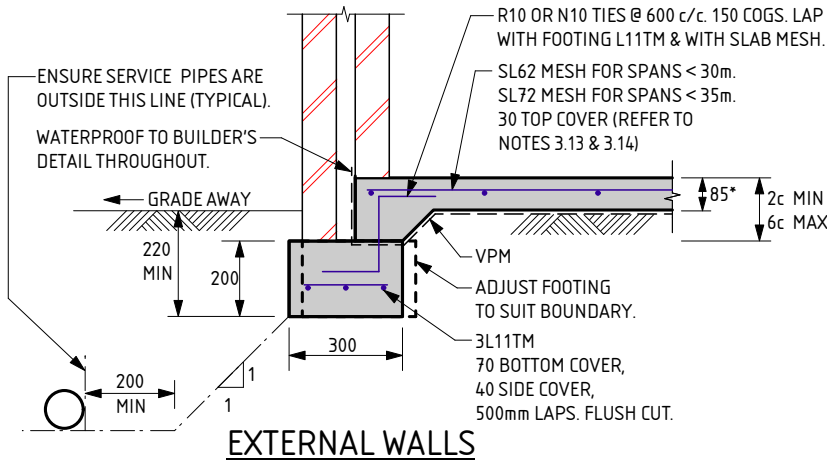
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Signed:

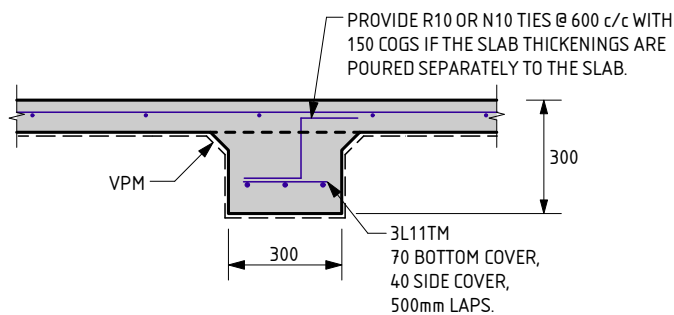


Gervase Purich  
Chief Executive Officer

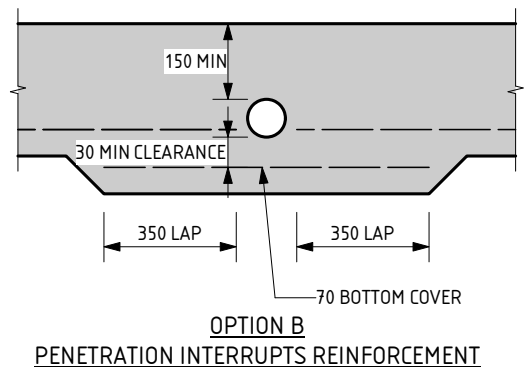
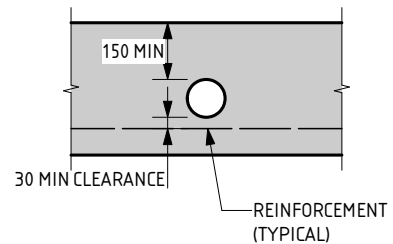
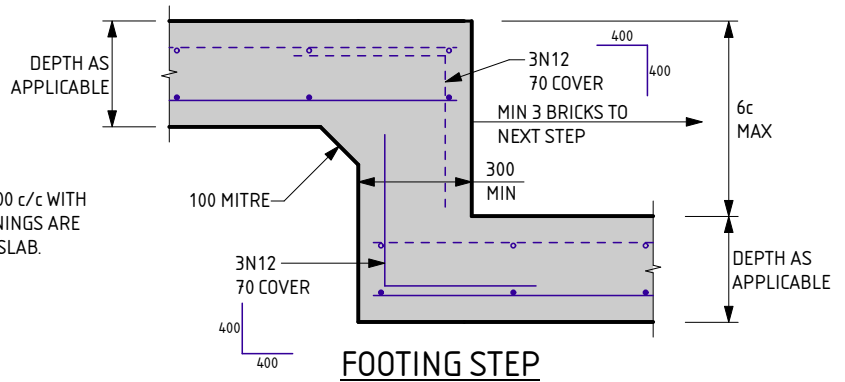
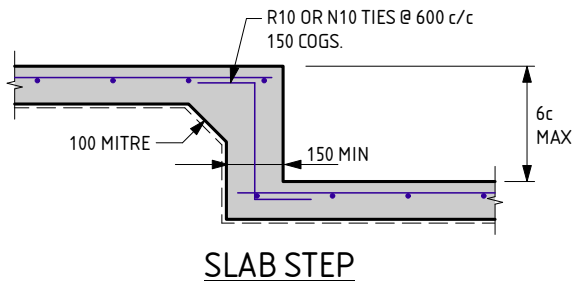




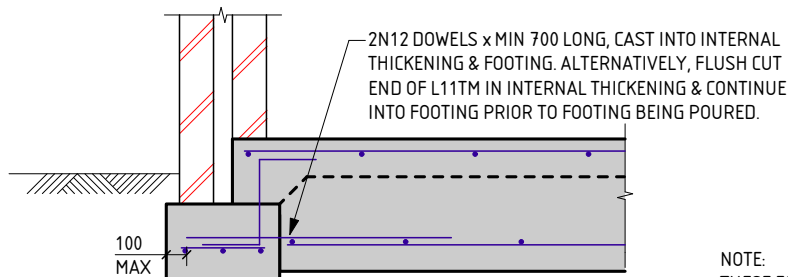
\* 100mm SLAB MAY BE INSTALLED INSTEAD OF 85mm.  
IF 100mm SLAB USED, MESH TO BE:  
SL62 MESH FOR SPANS < 25m.  
SL72 MESH FOR SPANS < 30m.  
SL82 MESH FOR SPANS < 35m.



REFER TO STRUCTERRE'S DRAWINGS FOR PLACEMENT OF INTERNAL THICKENINGS. LOCATIONS TO BE CONFIRMED ON SITE BY STRUCTERRE PRIOR TO CONCRETE POUR.



**SERVICE PIPE DIAGRAM**  
- MAXIMUM PENETRATION SIZE TO BE Ø150.



**EXTERNAL FOOTING TO INTERNAL THICKENING**

THIS DETAIL IS EQUIVALENT TO  
STRUCTERRE FOOTING DETAIL C4.0

NOTE:  
THESE FOOTING DETAILS ARE TO BE READ IN CONJUNCTION WITH THE REACTIVE SITE NOTES.

THE APPROVED SIGNATURE ON THIS DETAIL ENDORSES ITS USE FOR SINGLE STOREY BUILDINGS ON BUILDING PLATFORMS WITH UP TO 11mm OF SURFACE MOVEMENT.  
DATE LAST MODIFIED - 20/09/18

**CM3**  
CAVITY MASONRY

**STRUCterre**  
consulting engineers

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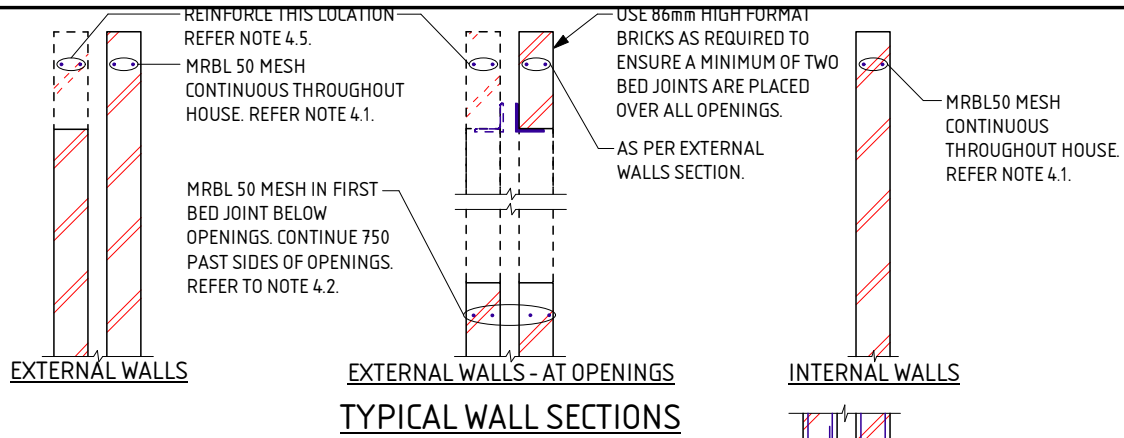
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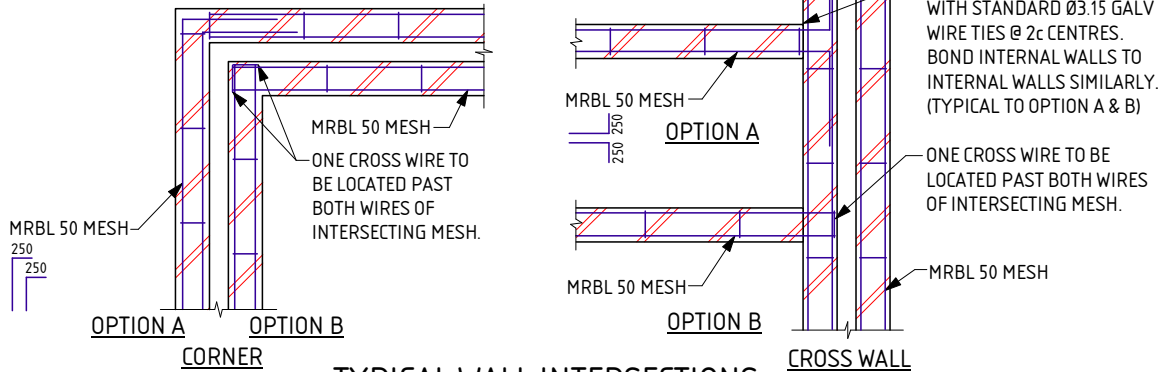
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DATE 16/11/22

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**TYPICAL WALL SECTIONS**



**TYPICAL WALL INTERSECTIONS**

**REACTIVE SITE NOTES FOR CM1 - CM7**

THESE NOTES ARE TO BE READ IN CONJUNCTION WITH THE ATTACHED FOOTING DETAILS.

**1.0 SITE CLASSIFICATION**

- 1.1 REFER TO ATTACHED CERTIFICATE OF INSPECTION FOR SITE CLASSIFICATION. THE SITE CLASSIFICATION NOTED, IS AS DEFINED IN AS2870 - RESIDENTIAL SLABS & FOOTINGS.
- 1.2 THE SITE CLASSIFICATION HAS BEEN DETERMINED BY INVESTIGATION OF THE SITE, AS PER THE ATTACHED CERTIFICATE OF INSPECTION. REFER TO THE ATTACHED CERTIFICATE FOR ANY SPECIAL REQUIREMENTS.

**2.0 EARTHWORKS**

- 2.1 SAND PAD IF APPLICABLE TO BE AS PER SITE INSPECTION REPORT.
- 2.2 EARTHWORKS SHALL INCLUDE, BUT NOT BE LIMITED TO:
  - a) REMOVE ALL ORGANIC MATERIAL FROM THE PAD AREA.
  - b) REMOVE ALL RUBBISH AND DELETERIOUS FILL (SUCH AS CLAY FILL) FROM THE PAD AREA.
  - c) GRUB OUT ANY TREES WHERE NECESSARY AND ENSURE THE REMAINING HOLES ARE FILLED AND COMPACTED SATISFACTORILY WITH SAND.
  - d) NOTIFY THE ENGINEER OF ANY UNUSUAL FEATURES OR DISCREPANCIES WHICH MAY BECOME EVIDENT DURING EARTHWORKS, PRIOR TO PROCEEDING.
- 2.3 ANY PREDOMINANT ROCK IN THE HOUSE PAD AREAS IS TO BE INSPECTED BY THE ENGINEER.
- 2.4 ANY CUT TO THE SITE, OTHER THAN TOPSOIL STRIPPING, WILL REQUIRE THE PREPARED CUT BASE TO BE INSPECTED AND APPROVED BY THE ENGINEER.
- 2.5 MAXIMUM SAND PAD DEPTH NOT TO EXCEED 150% OF MINIMUM PAD DEPTH OR 2000mm WITHOUT THE ENGINEER'S APPROVAL.
- 2.6 IF APPLICABLE SAND FILL TO BE CLEAN WELL DRAINED, WITH MAX FINES (PARTICLES UP TO 0.075mm) CONTENT OF 5%. SAND TO BE COMPACTED TO A MIN 6 BLOWS/300mm FOR THE DEPTH OF THE PAD OR TO DISCRETION OF ENGINEER.
- 2.7 COMPACTION TESTING TO BE PERFORMED BY STRUCTERRE.

**3.0 FOOTINGS & SLABS**

- 3.1 FOOTINGS ARE TO BE PLACED DIRECTLY INTO SAND PAD OF SPECIFIED THICKNESS.
- 3.2 ALL STORMWATER MUST BE DISCHARGED INTO COUNCIL DRAINS OR A MINIMUM OF 3m FOR S CLASS SITES, 4m FOR M CLASS SITES AND 5m FOR H1 & H2 CLASS SITES, AWAY FROM THE RESIDENCE AND/OR ADJACENT BUILDINGS INTO SOAKWELLS. IF THIS RESTRICTION CANNOT BE ACHIEVED REFER BACK TO THIS OFFICE FOR AN ALTERNATIVE DESIGN. WHERE THE SITE HAS BEEN CLASSIFIED AS AN 'EQUIVALENT' SITE CLASSIFICATION, REFER TO 'EXPLANATORY NOTES & STANDARD RECOMMENDATIONS - EQUIVALENT CLASS SITES' FOR STORMWATER DRAINAGE REQUIREMENTS UNLESS SPECIFIED OTHERWISE.
- 3.3 EXCAVATIONS FOR ALL SERVICE PIPES NOT TO UNDERMINE FOOTINGS. IF UNDERMINING IS LIKELY TO OCCUR, CONTACT THE ENGINEER PRIOR TO PROCEEDING.
- 3.4 WHERE PLUMBING PIPES PASS THROUGH FOOTINGS OR SLAB, SPECIFIED TOTAL THICKNESS OF ALL CONCRETE IS ALWAYS TO BE MAINTAINED.
- 3.5 SETDOWN AT WET AREA TO ARCHITECTURAL REQUIREMENT (50mm MAX). MAINTAIN 85mm SLAB THICKNESS. FOLD MESH DOWN TO MAINTAIN COVER, PLACE DIAGONAL BARS AT RE-ENTRANT CORNER FOR STEPS OVER 30mm. BARS TO BE N12x 1200 LONG.
- 3.6 REINFORCEMENT SHALL BE IN ACCORDANCE WITH THE FOLLOWING STANDARDS;
 

L	INDICATES PLAIN OR DEFORMED WIRE R500L OR D500L TO AS/NZS 4671.
SL	INDICATES DEFORMED SQUARE MESH D500L TO AS/NZS 4671.
N	INDICATES DEFORMED BARS D500N TO AS/NZS 4671.
TM SUFFIX	INDICATES TRENCH MESH USING DEFORMED BARS D500L TO AS/NZS 4671.

 ALL STEELWORK TO BE TREATED IN ACCORDANCE WITH TABLE 3.4.4.4 "CORROSION PROTECTION" OF THE BUILDING CODE OF AUSTRALIA.
- 3.7 LAP ALL MESH TWO TRANSVERSE WIRES PLUS 25mm OR TO MANUFACTURER'S SPECIFICATIONS.

**3.8 CONCRETE TO CONFORM WITH AS 3600.**

- 3.9 BLENDED CEMENT TO CONFORM WITH AS1317.
- 3.10 ALL CONCRETE TO BE N20/20/100.
- 3.11 FOR ISOLATED PAD FOOTINGS, REFER BACK TO ENGINEER.
- 3.12 FOOTING POSITION UNDER BRICKWORK CAN BE ADJUSTED TO SUIT PARAPET WALLS.
- 3.13 FOR SLAB SPANS > 35m REFER TO ENGINEER FOR MESH SIZE.
- 3.14 IF THE LENGTH TO WIDTH RATIO OF THE GROUND SLAB OR ANY PART OF THE GROUND SLAB EXCEEDS 3:1, REFER BACK TO THIS OFFICE FOR MESH SIZE.
- 3.15 IF POLISHED (OR HONED) CONCRETE FINISHES ARE DESIRED, THIS DESIGN SHOULD BE REFERRED BACK TO THIS OFFICE FOR CONSIDERATION, AS IT IS NOT THE INTENTION OF THESE DESIGNS FOR SUCH FINISHES.
- 3.16 PLACE SLAB THICKENING (300 WIDE x 250 DEEP) UNDER INTERNAL WALLS (90 OR 110) HIGHER THAN 3.7m WHERE GREATER THAN 1m FROM INTERNAL THICKENING. PROVIDE SAME TRENCH MESH AS INTERNAL THICKENING DETAIL, WHERE REQUIRED.
- 3.17 PIERCING THE VAPOUR BARRIER (VPM) USING LEVELLING PINS ON FREE DRAINING SAND PADS IS ALLOWABLE.
- 3.18 CURE SLAB AS DETERMINED BY ENGINEER.
- 3.19 THE SLAB IS CONSIDERED SUITABLE AS A PHYSICAL BARRIER AGAINST INGRESS OF TERMITES. IF THE FOOTING AND SLAB IS PLACED IN 2 POURS, THE PHYSICAL BARRIER ALSO INCLUDES THE FOOTING AND SLAB JOINT.
- 3.20 THE FOOTING DETAILS HAVE BEEN DESIGNED IN ACCORDANCE WITH AS3600 AND SECTION 4 OF AS2870.

**4.0 MASONRY**

- 4.1 PLACE MRBL50 MESH IN TOP BED JOINT CONTINUOUS THROUGHOUT ALL BRICKWORK.
- 4.2 REINFORCE BED JOINT BELOW WINDOW SILLS WITH MRBL50 MESH. CONTINUE 750 PAST SIDES OF OPENING.
- 4.3 LAP 250 AT SPLICES AND AROUND CORNERS AND COG 250 INTO INTERSECTING WALLS. 20mm COVER TO ALL WIRES.
- 4.4 ALL MESH IN EXTERNAL FACE OF EXTERNAL LEAF TO BE GALVANIZED TO AS/NZS 4680.
- 4.5 WHEN BRICKWORK EXTENDS ABOVE OPENINGS TO EXTERNAL LEAF REINFORCE AS PER CLAUSE 4.1, 4.2 & 4.3.
- 4.6 TYPICAL WALL SECTIONS ARE SHOWN FOR 28C INTERNAL CEILINGS. WHERE THERE ARE 3 OR MORE BED JOINTS OVER THE OPENING, REINFORCE BED JOINT OVER OPENING WITH MRBL50 MESH. CONTINUE 750 PAST SIDE OF OPENING.
- 4.7 ALL PERPENDS TO BE FULLY MORTARED.
- 4.8 A BRICK COURSE, AS REFERRED TO IN THIS DOCUMENT IS STANDARD 86mm HIGH.
- 4.9 2L6 WIRES MAY BE USED AS AN ALTERNATIVE TO THE MRBL50 MESH. WHERE L6 WIRES ARE USED, ALL SPLICES AND COGS TO BE 500 LONG.

**5.0 MAINTENANCE**

- 5.1 IT IS CONSIDERED THAT THIS DESIGN IS SUITABLE FOR THE FOUNDATION CONDITIONS TO BE ENCOUNTERED AND WILL ADEQUATELY CONTROL ANY CRACKING OF BRICKWORK AND CONCRETE, SUBJECT TO THE MAINTENANCE PROCEDURES BELOW BEING SATISFIED.
- 5.2 BUILDER TO ENSURE THAT CLIENT BE INFORMED OF NECESSITY TO MAINTAIN DRAINS IN GOOD WORKING ORDER AT ALL TIMES.
- 5.3 BUILDER TO ADVISE CLIENT TO CONSULT AN ENGINEER BEFORE PLANTING TREES OR SHRUBS WITHIN 2.5m, OR A DISTANCE EQUAL TO THE ANTICIPATED MAXIMUM HEIGHT OF THE TREE, OF THE BUILDING.
- 5.4 SITE TO BE MAINTAINED AS PER CSIRO INFORMATION PAMPHLET BTF 18 & STRUCTERRE'S CLAY FACT SHEET.
- 5.5 AS2870 AND 'CSIRO PAMPHLET BTF 18' COVER THE EXPECTED PERFORMANCE AND RESPONSIBILITIES OF ALL PARTIES WITH THE USE OF THESE DETAILS.

**6.0 QUALITY CONTROL PROGRAM REQUIREMENTS**

- 6.1 WORKING SLAB DEPTH AS INDICATED ON THE DETAIL. SLAB DEPTH TOLERANCE ALLOWABLE -10mm, +15mm.
- 6.2 WHERE DEPTH IS BELOW NOMINATED DEPTH, MAX AREA ALLOWED TO BE ≤ 5% OF THE TOTAL AREA.
- 6.3 DEPTH TESTING LOCATIONS TO BE NO CLOSER THAN 1000mm APART.
- 6.4 SLAB DEPTH IS TO BE PART OF A QUALITY CONTROL INSPECTION REGIME.
- 6.5 SLAB AND FOOTING CAN BE Poured MONOLITHICALLY IF DESIRED.

DATE LAST MODIFIED - 21/09/21



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CLIENT : **PARCEL DARCH PTY LTD**

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DATE **16/11/22**

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## EXPLANATORY NOTES & STANDARD RECOMMENDATIONS - EQUIVALENT CLASS SITES (Sheet 1 of 2)

### GENERAL

1. THE EXPLANATORY NOTES AND THE STANDARD RECOMMENDATIONS ARE TO BE READ IN CONJUNCTION WITH THE SITE CLASSIFICATION REPORT.
2. ALL REFERRED STANDARDS TO BE THE CURRENT VERSION AT THE TIME OF THE CONSTRUCTION.
3. THE PURPOSE OF THE SITE CLASSIFICATION REPORT IS TO CLASSIFY THE SITE IN ACCORDANCE WITH AS2870 "RESIDENTIAL SLABS AND FOOTING". IT IS NOT INTENDED FOR ANY OTHER PURPOSE, INCLUDING SOLE INFORMATION IN THE PROVISION OF A QUOTATION FOR SITE WORKS. IT IS RECOMMENDED OTHER PARTIES TO PERFORM THEIR OWN INVESTIGATION FOR QUOTATION PURPOSES.
4. THE SITE CLASSIFICATION REPORT WILL INCLUDE BUT IS NOT LIMITED TO:
  - a. THE SITE CLASSIFICATION IN ACCORDANCE WITH AS2870 "RESIDENTIAL SLABS AND FOOTING",
  - b. A WIND CLASSIFICATION IN ACCORDANCE WITH AS4055 "WIND LOADS FOR HOUSING",
  - c. A COASTAL CORROSION CLASSIFICATION,
  - d. ADDITIONAL EARTHWORK RECOMMENDATIONS WHERE APPLICABLE,
  - e. STANDARD FOOTING DESIGN FOR SINGLE STOREY SLAB ON GROUND CONSTRUCTION.
5. THE SITE CLASSIFICATION IS BASED ON THE SITE AS PRESENTED AT THE TIME OF THE ASSESSMENT. THE SITE CLASSIFICATION AND RECOMMENDATIONS INCLUDED IN THE REPORT ARE SUBJECT TO SATISFACTORY COMPLETION OF RECOMMENDED EARTHWORKS, (REFER NOTE 17) AS A MINIMUM. SHOULD CHANGES TO THE SITE OCCUR, OTHER THAN THE RECOMMENDATIONS INCLUDED IN THE SITE CLASSIFICATION REPORT, REFER BACK TO THIS OFFICE FOR REVIEW OF CLASSIFICATION AND FOOTING DESIGN.
6. ALL RECOMMENDATIONS GIVEN IN THE SITE CLASSIFICATION REPORT HAVE BEEN DETERMINED FROM THE INFORMATION THAT WAS AVAILABLE TO THIS OFFICE AT THE TIME OF INVESTIGATION. IF FURTHER INFORMATION RELATING TO THE SITE OR DEVELOPMENT BECOMES AVAILABLE, THESE RECOMMENDATIONS ARE SUBJECT TO CHANGE.
7. EQUIVALENT CLASS SITES ARE BASED ON DIFFERENTIAL SURFACE MOVEMENT ARISING FROM ISSUE OTHER THAN SHRINK-SWELL (REACTIVITY) ONLY. THESE MAY INCLUDE SETTLEMENT AND/OR CONSOLIDATION THAT MAY OCCUR AS A RESULT OF THE UNDERLYING GROUND CONDITIONS.
8. BOREHOLES EXCAVATED REVEAL THE SOIL PROFILE AT THE BOREHOLE LOCATION ONLY. FROM THIS, IT IS INFERRED THAT THESE ARE THE SOIL CONDITIONS OVER THE SITE. VARIATIONS CAN OCCUR WHICH MAY NOT HAVE BEEN DETECTED AT THE INVESTIGATION STAGE. ANY ANOMALIES SHOULD BE REFERRED BACK TO THIS OFFICE FOR A REASSESSMENT.
9. A NUMBER OF BOREHOLES ARE CONDUCTED ACROSS THE SITE TO DETERMINE THE SOIL PROFILES AND PROVIDE A REPRESENTATION OF THE GROUND CONDITIONS.
10. THIS REPORT IS FOR STRUCTERRE ONLY TO USE IN DESIGN. ANY DESIGN BY ANYONE ELSE FOR ANY STRUCTURE MUST BE SPECIFICALLY APPROVED BY STRUCTERRE. IF USED BY ANYONE ELSE FOR ANYTHING OTHER THAN A STRUCTERRE DESIGN OR STRUCTURE, STRUCTERRE TAKES NO RESPONSIBILITY.

### SAND PAD

11. THE RECOMMENDED FOOTING DESIGN IS ONLY TO BE USED IN CONJUNCTION WITH THE RECOMMENDED SAND PAD AND EARTHWORKS AS OUTLINED IN THE SITE CLASSIFICATION REPORT.
12. THE RECOMMENDATIONS FOR THE SAND PAD IS FOR STRUCTURAL PURPOSES ONLY, AND DOES NOT PROVIDE THE MINIMUM FINISHED PAD LEVEL IN RELATION TO FLOOD LEVELS OR DEPTH TO GROUNDWATER. SHOULD THE TEST BE LOCATED IN A LOW LYING OR FLOOD PRONE AREA, REFER TO THE LOCAL AUTHORITY FOR MINIMUM BUILDING HEIGHT.
13. IMPORTED FILL FOR USE AS A SAND PAD TO BE IN ACCORDANCE TO AS 3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS" WHICH INCLUDES BUT IS NOT LIMITED TO: BE FREE FROM ANY DELETERIOUS MATERIALS INCLUDING ORGANICS, (ROOTS, STUMPS, GRASSES, DECOMPOSED ORGANICS - PEAT, TIMBER, ETC), BUILDING RUBBLE, GLASS, PLASTICS OR WASTE MATERIAL. THE FINES CONTENT, (PERCENTAGE PASSING THE 0.075mm SIEVE) TO BE LESS THAN 5% BY MASS.
14. ON SAND SITES A SAND PAD IS NOT REQUIRED STRUCTURALLY, HOWEVER IF ROCK IS ENCOUNTERED, A MINIMUM 200mm SAND PAD BEYOND THE BASE OF FOOTING IS RECOMMENDED.
15. SAND PAD TO EXTEND BEYOND BUILDING AREA A MINIMUM OF 1.5 TIMES THE PAD DEPTH.
16. RECOMMENDED SAND PAD DEPTH IS ABOVE THE HIGHEST POINT, UNLESS OTHERWISE SPECIFIED.
17. IT IS REQUIRED THAT EARTHWORKS CONFIRM THAT THE MINIMUM DEPTH OF RECOMMENDED SAND PAD IS ACHIEVED.

### EARTHWORKS

18. RECOMMENDED EARTHWORKS TO BE CONDUCTED IN ACCORDANCE WITH AS3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS", AND TO INCLUDE BUT NOT BE LIMITED TO:
  - a. REMOVAL OF ALL VEGETATION, TOPSOILS, UNCONTROLLED FILLS AND OTHER DELETERIOUS MATERIALS FROM THE BUILDING AREA,
  - b. GRUBBING OUT OF ANY TREES ENSURING THE REMAINING HOLES ARE BACKFILLED WITH CLEAN COMPACTED SAND,
  - c. NOTIFYING THE ENGINEER OF ANY UNUSUAL FEATURE OR DISCREPANCY THAT MAY BECOME EVIDENT DURING EARTHWORKS, PRIOR TO PROCEEDING,
  - d. COMPACTING TO MEET THE REQUIREMENTS AS OUTLINED IN AS 3798 TABLE 5.1.
19. FILL MATERIAL (WHICH IS NOT ALWAYS APPARENT AT THE INITIAL INVESTIGATION STAGE) IS TO BE DEALT WITH AS FOLLOWS:
  - a. IF IT IS CERTIFIED BY OTHERS IT CAN REMAIN.
  - b. IF IT IS NOT CERTIFIED WILL REQUIRE REMOVAL DOWN TO NATURAL GROUND OR VERIFIED. ANY SAND CAN BE REUSED.
  - c. IF A PAD HAS ALREADY BEEN CONSTRUCTED, THE SITE CLASSIFICATION IS NOT CERTIFICATION OF THE PAD. CONTACT THIS OFFICE SHOULD A SAND PAD CERTIFICATION BE REQUIRED.
20. ANY ORGANIC MATTER OR ROOTS ENCOUNTERED, WHICH IS BEYOND WHAT IS NORMALLY CONSIDERED ACCEPTABLE IS TO BE REMOVED. THIS WILL NECESSITATE RAKING THE SITE TO REMOVE ORGANIC MATERIAL, TURNING THE SITE OVER AND RE-COMPACTING TO A MINIMUM.

### RETAINING WALLS

21. AN ASSESSMENT OF ANY EXISTING OR PROPOSED RETAINING WALLS HAS NOT BEEN CONDUCTED AS PART OF THIS SITE CLASSIFICATION REPORT.
22. IF THE PROPOSED BUILDING IS TO BE LOCATED CLOSER THAN THE HEIGHT OF THE RETAINING WALL, THIS MAY PLACE ADDITIONAL LOADS ON THE WALL THAT WERE NOT INITIALLY DESIGNED FOR. AN INSPECTION OF THE STRUCTURAL INTEGRITY OF THE RETAINING WALL WILL BE REQUIRED TO PROVIDE CERTIFICATION AND/OR RECOMMENDATIONS PRIOR TO ANY CONSTRUCTION. PLEASE REFER BACK TO THIS OFFICE FOR ASSISTANCE.  
STORMWATER DRAINAGE
23. UNLESS OTHERWISE SPECIFIED, ALL SOAKWELLS ARE TO BE LOCATED THE DEPTH OF THE SOAKWELL AWAY FROM THE BUILDING OR SETBACK A MINIMUM OF 1200mm, WHICHEVER IS GREATER, UNLESS SPECIFIED OTHERWISE. PLEASE REFER BACK TO THIS OFFICE IF THE SETBACK CANNOT BE ACHIEVED.

DOC# SS001 - 1.1.10 SCR EQUIVALENT V1.1 - AUGUST 2021



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## EXPLANATORY NOTES & STANDARD RECOMMENDATIONS - EQUIVALENT CLASS SITES (Sheet 2 of 2)

### WIND CLASSIFICATION

24. WIND CLASSIFICATION IS GIVEN FOR THE EXPECTED CONDITION 5 YEARS HENCE. THIS CLASSIFICATION IS LIMITED TO BUILDINGS CLASSES 1 AND 10, WHICH HAVE THE FOLLOWING LIMITATION (AS PER AS4055):

- a. MAXIMUM DISTANCE FROM THE GROUND LEVEL TO THE UNDERSIDE OF EAVES SHALL NOT EXCEED 6.0m,
- b. MAXIMUM DISTANCE FROM GROUND LEVEL TO THE HIGHEST POINT OF THE ROOF, EXCLUDING CHIMNEYS, SHALL NOT EXCEED 8.5m,
- c. THE ROOF PITCH SHALL NOT EXCEED 35 °,
- d. THE WIDTH, EXCLUDING EAVES, SHALL NOT EXCEED 16.0m AND THE LENGTH SHALL NOT EXCEED 5x THE WIDTH.

IF THE BUILDING FALLS OUTSIDE OF THESE LIMITATIONS, THE STATED WIND CLASSIFICATION DOES NOT APPLY. REFER BACK TO THIS OFFICE FOR A REVISED WIND CLASSIFICATION.

### ENVIRONMENTAL

25. NO ENVIRONMENTAL ASSESSMENT OF THIS SITE HAS BEEN UNDERTAKEN. SHOULD AN ENVIRONMENTAL ASSESSMENT BE REQUIRED, PLEASE CONTACT THIS OFFICE.

### SEISMIC

26. RECOMMENDED FOOTING DETAILS ARE SUITABLE FOR SEISMIC CONDITIONS WITH AN EARTHQUAKE HAZARD FACTOR OF  $\leq 0.11$ . RECOMMENDED FOOTING DETAILS PROVIDED FOR SITES WITH AN EARTHQUAKE HAZARD FACTOR OF  $> 0.11$ , ARE NOT FOR CONSTRUCTION, BUT FOR COSTING PURPOSES ONLY. IT IS REQUIRED THAT A FULL SEISMIC DESIGN IS CONDUCTED.

### CORROSION CLASSIFICATION

27. THE CORROSION CLASSIFICATION HAS BEEN ASSESSED IN ACCORDANCE WITH AS3700.

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