

SITE CLASSIFICATION REPORT
CERTIFICATE 2590276

CLIENT PARCEL DARCH PTY LTD
JOB ADDRESS LOT 181 DRIVER RD DARCH
CLIENT JOB NO.
OWNER
STRUCTERRE JOB NO. S1067826
DATE OF ASSESSMENT 4/5/22

SITE RECORD

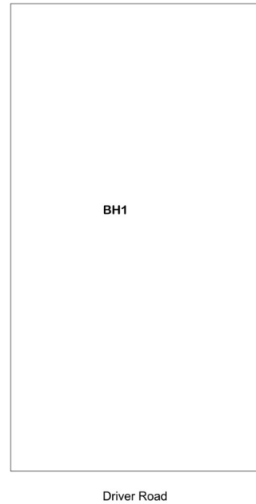


SITE CLASSIFICATION	A	<i>(in accordance with AS2870)</i>
FOOTING DETAIL	B1	
SAND PAD	No sand pad required structurally	
BUSHFIRE PRONE AREA	Not in a Bushfire Prone Area (see NOTE 2.)	
CORROSION CLASSIFICATION	R3	<i>(Durability Class in accordance with AS3700)</i>
WIND CLASSIFICATION	N1	<i>(in accordance with AS4055)</i>
-TERRAIN CATEGORY	3	
-TOPOGRAPHIC	T0	
-SHIELDING	Full Shielding	

SOIL PROFILE

BOREHOLE 1: 0 - 1800 SAND with gravel & 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

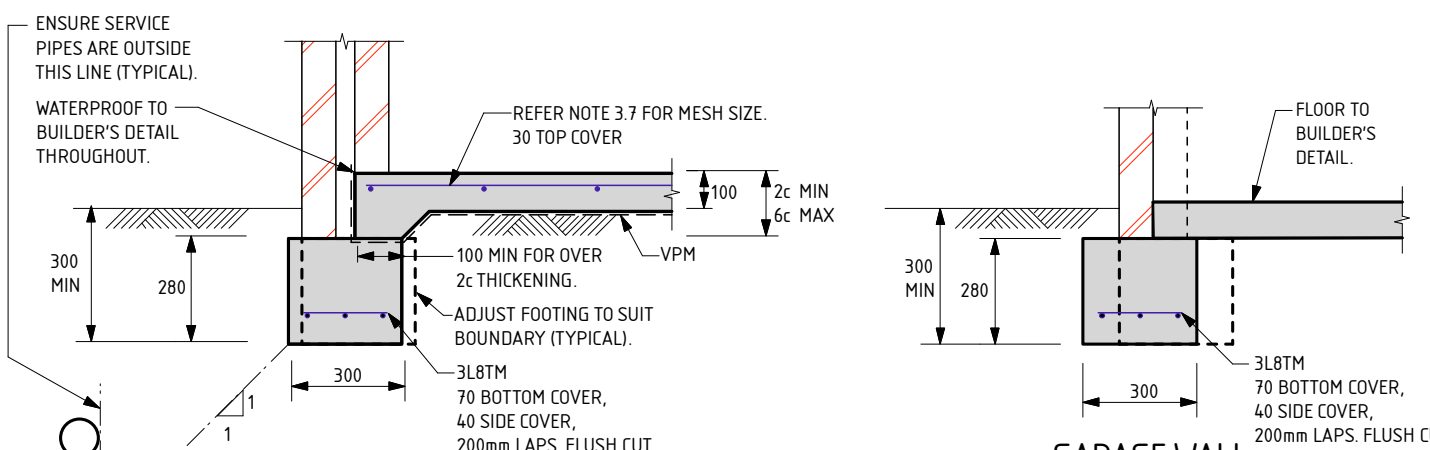
Site Condition

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

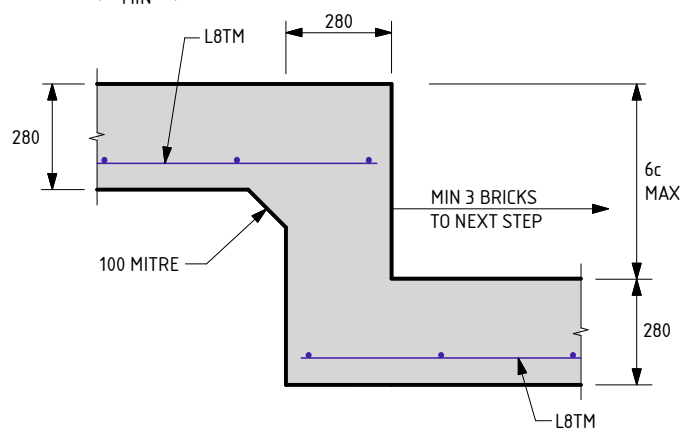
The Site Classification is based on any remedial works being successfully completed as outlined in the Structerre Geotechnical Report J408657 dated 3/05/22. The footing details are subject to the recommendations being completed to an acceptable level as outlined in this report, if applicable.

-- END OF REPORT --

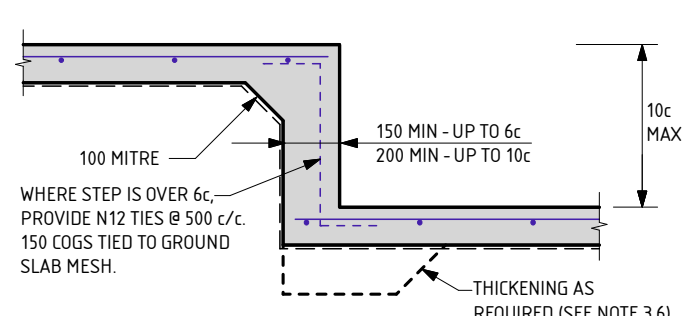


EXTERNAL WALLS

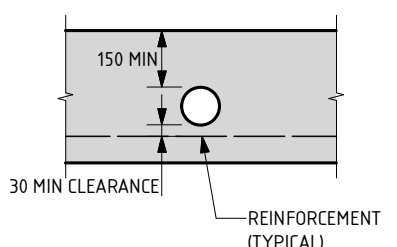
GARAGE WALL



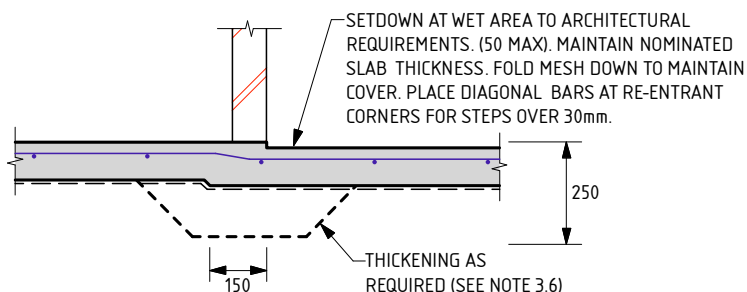
FOOTING STEP



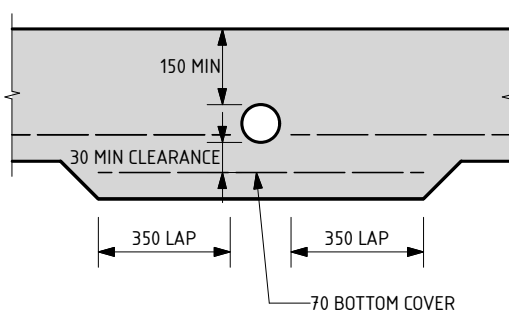
SLAB STEP



**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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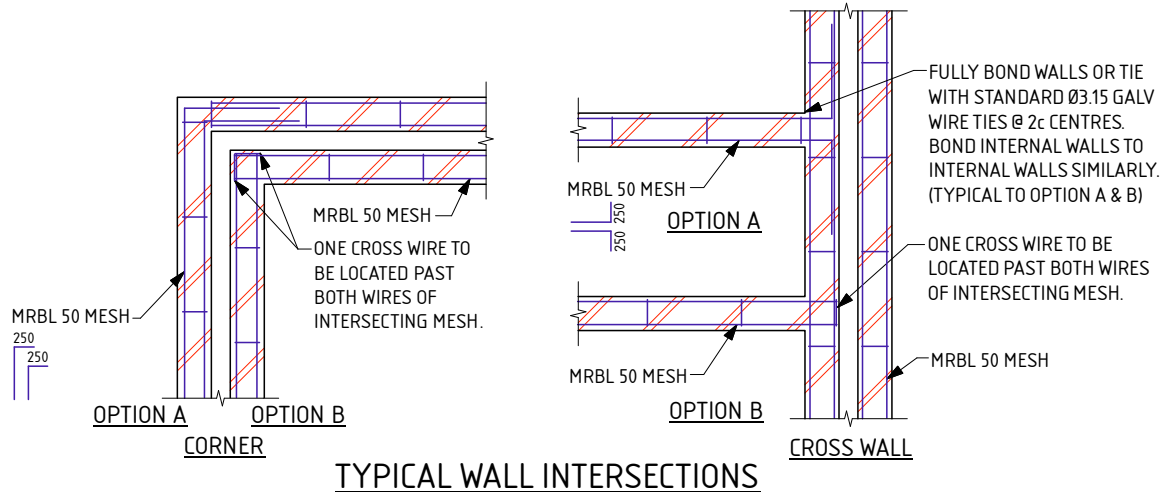
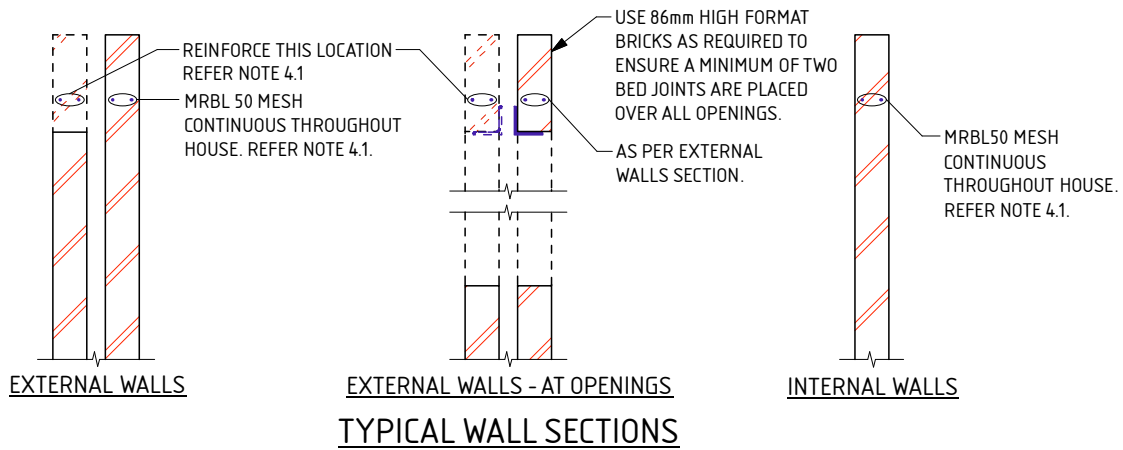
PROJECT: LOT 181 DRIVER RD DARCH

CLIENT: PARCEL DARCH PTY LTD

SCALE: 1:20

DATE: 10/5/22

APPROVED



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 181 DRIVER RD 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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PROJECT :
LOT 181 DRIVER RD 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 ≤ 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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DATE 10/5/22

APPROVED

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

SITE CLASSIFICATION REPORT
CERTIFICATE 2590277

CLIENT PARCEL DARCH PTY LTD
JOB ADDRESS LOT 182 DRIVER RD DARCH
CLIENT JOB NO.
OWNER
STRUCTERRE JOB NO. S1067827
DATE OF ASSESSMENT 4/5/22

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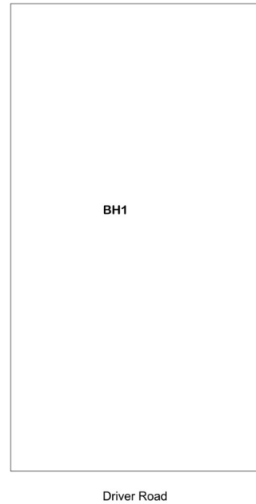


SITE CLASSIFICATION	A	<i>(in accordance with AS2870)</i>
FOOTING DETAIL	B1	
SAND PAD	No sand pad required structurally	
BUSHFIRE PRONE AREA	Not in a Bushfire Prone Area (see NOTE 2.)	
CORROSION CLASSIFICATION	R3	<i>(Durability Class in accordance with AS3700)</i>
WIND CLASSIFICATION	N1	<i>(in accordance with AS4055)</i>
-TERRAIN CATEGORY	3	
-TOPOGRAPHIC	T0	
-SHIELDING	Full Shielding	

SOIL PROFILE

BOREHOLE 1: 0 - 1800 SAND with gravel & 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

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-- END OF REPORT --

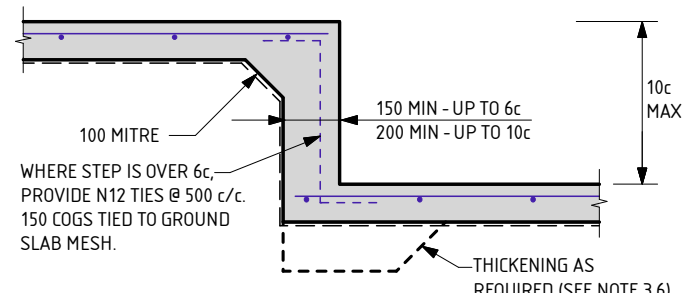


EXTERNAL WALLS

GARAGE WALL



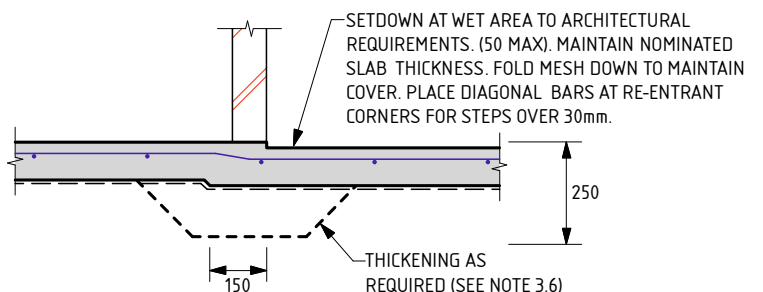
FOOTING STEP



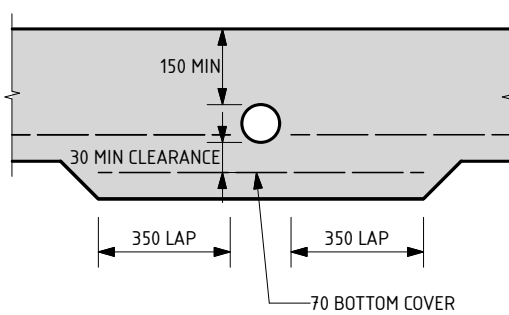
SLAB STEP



**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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SCALE: 1:20	APPROVED
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 - 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 182 DRIVER RD DARCH

CLIENT:

PARCEL DARCH PTY LTD

SCALE

1:20

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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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LOT 182 DRIVER RD 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 ≤ 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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APPROVED

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

SITE CLASSIFICATION REPORT
CERTIFICATE 2590278

CLIENT PARCEL DARCH PTY LTD
JOB ADDRESS LOT 183 DRIVER RD DARCH
CLIENT JOB NO.
OWNER
STRUCTERRE JOB NO. S1067829
DATE OF ASSESSMENT 4/5/22

SITE RECORD

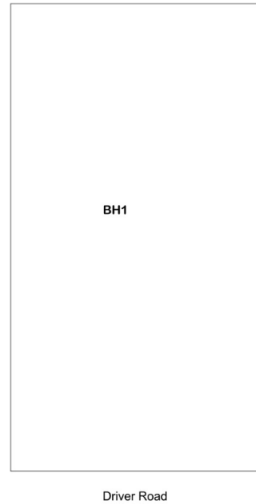


SITE CLASSIFICATION	A	<i>(in accordance with AS2870)</i>
FOOTING DETAIL	B1	
SAND PAD	No sand pad required structurally	
BUSHFIRE PRONE AREA	Not in a Bushfire Prone Area (see NOTE 2.)	
CORROSION CLASSIFICATION	R3	<i>(Durability Class in accordance with AS3700)</i>
WIND CLASSIFICATION	N1	<i>(in accordance with AS4055)</i>
-TERRAIN CATEGORY	3	
-TOPOGRAPHIC	T0	
-SHIELDING	Full Shielding	

SOIL PROFILE

BOREHOLE 1: 0 - 1800 SAND with gravel & 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 --

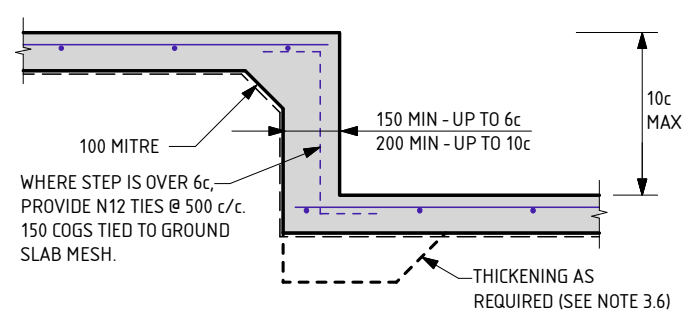


EXTERNAL WALLS

GARAGE WALL



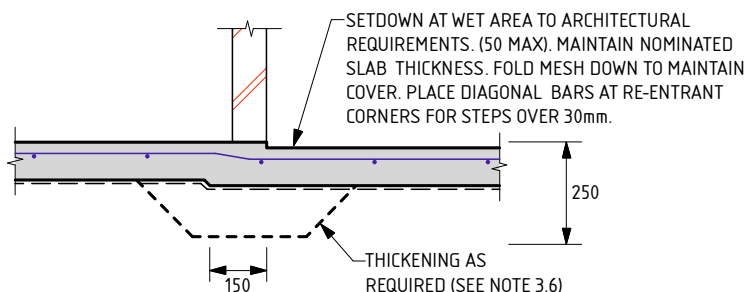
FOOTING STEP



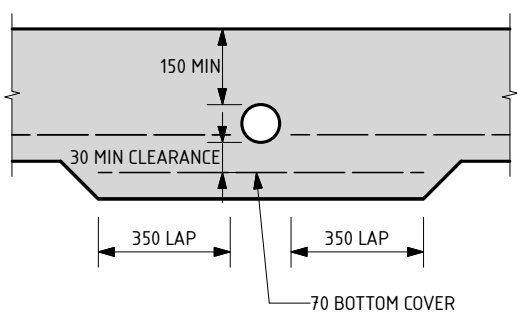
SLAB STEP



**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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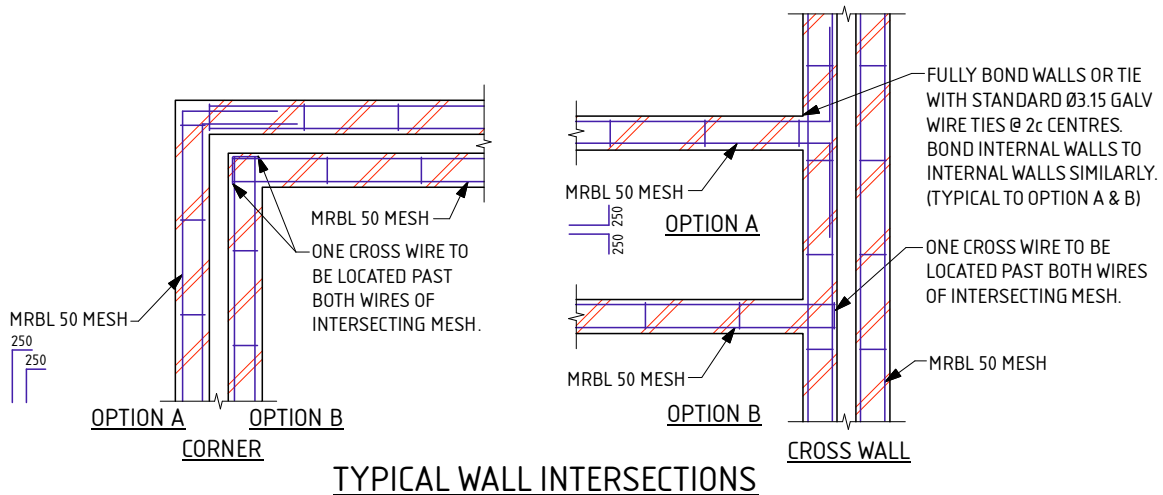
PROJECT: LOT 183 DRIVER RD DARCH

CLIENT: PARCEL DARCH PTY LTD

SCALE 1:20

DATE 10/5/22

APPROVED



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.

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- 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.

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SHEET 2 OF 2



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PROJECT :

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CLIENT :

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SCALE

1:20

APPROVED

DATE

10/5/22

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

GENERAL

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 - c. A COASTAL CORROSION CLASSIFICATION,
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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.
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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.
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SAND PAD

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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.
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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 183 DRIVER RD 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 ≤ 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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A blue ink handwritten signature is written over the 'APPROVED' field.

SITE CLASSIFICATION REPORT
CERTIFICATE 2590279

CLIENT PARCEL DARCH PTY LTD
JOB ADDRESS LOT 184 DRIVER RD DARCH
CLIENT JOB NO.
OWNER
STRUCTERRE JOB NO. S1067830
DATE OF ASSESSMENT 4/5/22

SITE RECORD

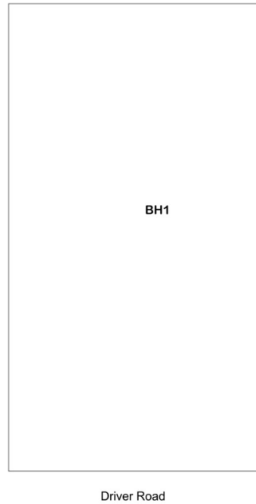


SITE CLASSIFICATION	A	<i>(in accordance with AS2870)</i>
FOOTING DETAIL	B1	
SAND PAD	No sand pad required structurally	
BUSHFIRE PRONE AREA	Not in a Bushfire Prone Area (see NOTE 2.)	
CORROSION CLASSIFICATION	R3	<i>(Durability Class in accordance with AS3700)</i>
WIND CLASSIFICATION	N1	<i>(in accordance with AS4055)</i>
-TERRAIN CATEGORY	3	
-TOPOGRAPHIC	T0	
-SHIELDING	Full Shielding	

SOIL PROFILE

BOREHOLE 1: 0 - 1800 SAND with gravel & 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

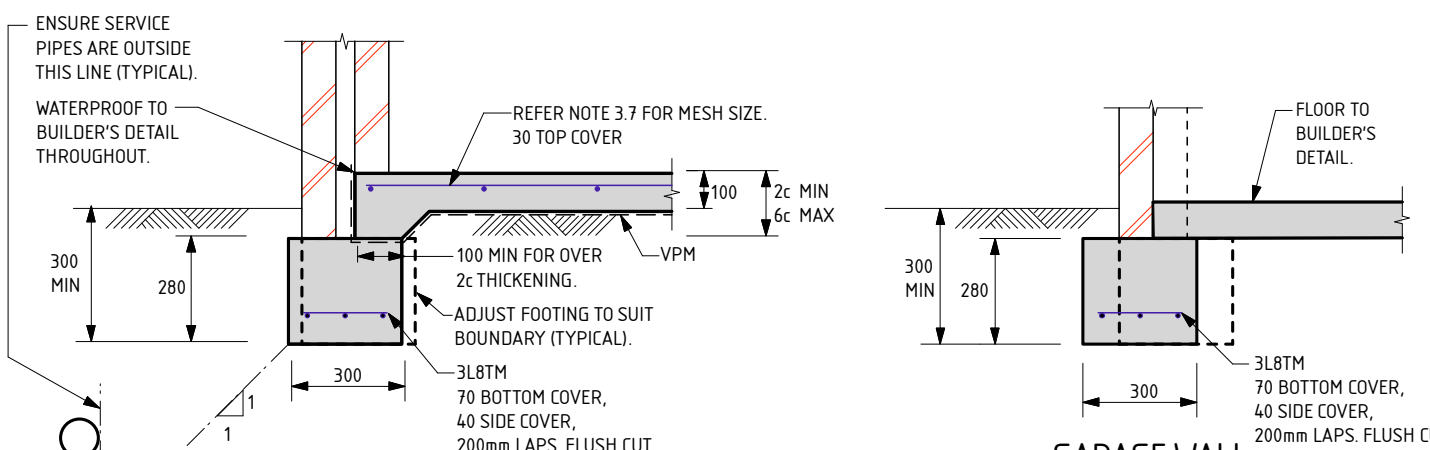
Site Condition

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 --

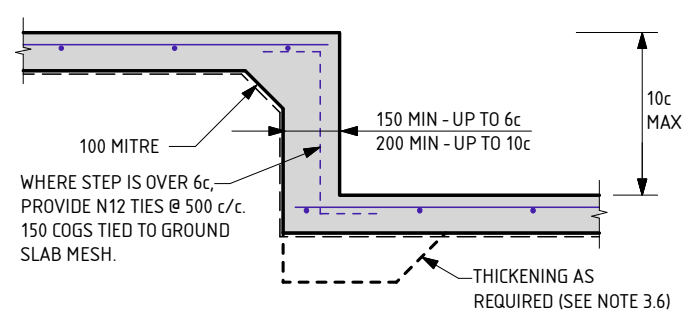


EXTERNAL WALLS

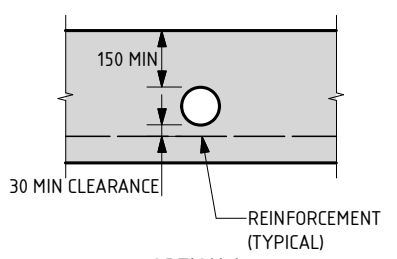
GARAGE WALL



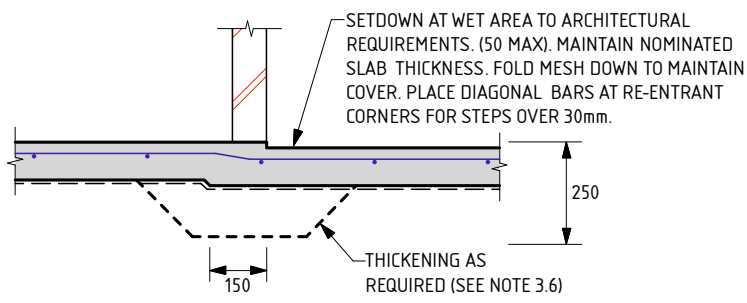
FOOTING STEP



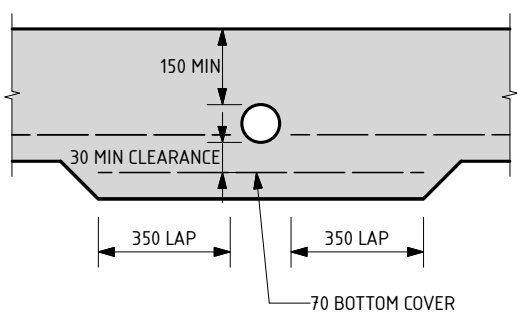
SLAB STEP



**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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SCALE: 1:20	APPROVED
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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.

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SHEET 2 OF 2



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SCALE

1:20

APPROVED

DATE

10/5/22

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

GENERAL

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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



Zemla Pty. Ltd. (ABN: 71 349 772 837) ATF the Young Purich and Higham
Unit Trust trading as StrucTerre Consulting Engineers
1 ERINDALE ROAD, BALCATT WA 6021
TEL (08) 9205 4500 FAX (08) 9205 4541 EMAIL: perth@strucTerre.com.au

PROJECT :
LOT 184 DRIVER RD 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 ≤ 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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PROJECT:
LOT 184 DRIVER RD 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 2590280

CLIENT PARCEL DARCH PTY LTD
JOB ADDRESS LOT 185 DRIVER RD DARCH
CLIENT JOB NO.
OWNER
STRUCTERRE JOB NO. S1067831
DATE OF ASSESSMENT 4/5/22

SITE RECORD

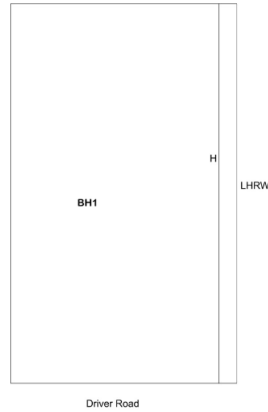


SITE CLASSIFICATION	A	<i>(in accordance with AS2870)</i>
FOOTING DETAIL	B1	
SAND PAD	No sand pad required structurally	
BUSHFIRE PRONE AREA	Not in a Bushfire Prone Area (see NOTE 2.)	
CORROSION CLASSIFICATION	R3	<i>(Durability Class in accordance with AS3700)</i>
WIND CLASSIFICATION	N1	<i>(in accordance with AS4055)</i>
-TERRAIN CATEGORY	3	
-TOPOGRAPHIC	T0	
-SHIELDING	Full Shielding	

SOIL PROFILE

BOREHOLE 1: 0 - 1800 SAND with gravel & 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 --

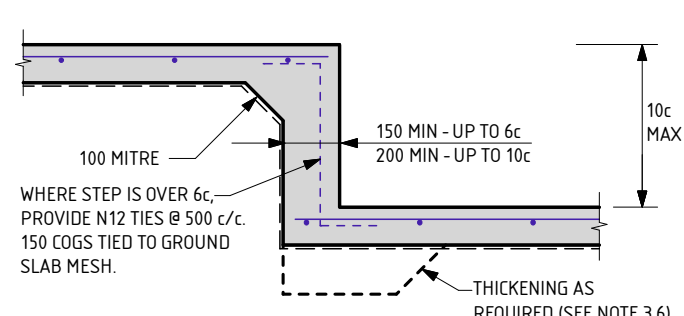


EXTERNAL WALLS

GARAGE WALL



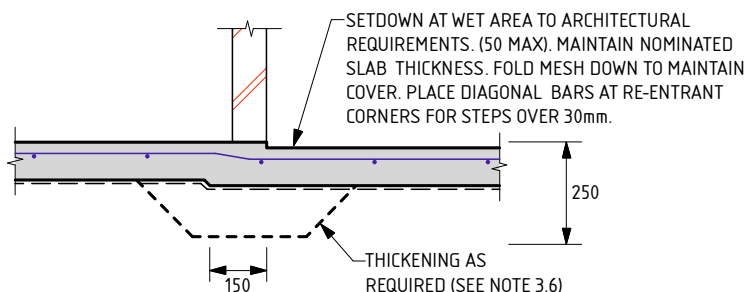
FOOTING STEP



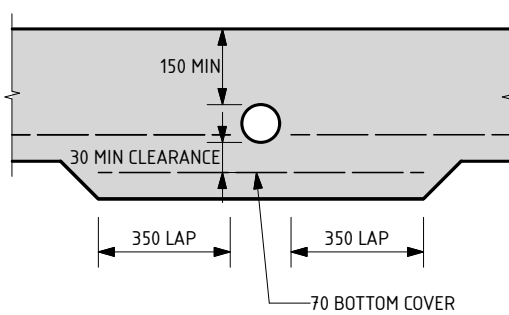
SLAB STEP



**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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PROJECT: LOT 185 DRIVER RD DARCH

CLIENT: PARCEL DARCH PTY LTD

SCALE: 1:20

DATE: 10/5/22

APPROVED



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 185 DRIVER RD 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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PROJECT :
LOT 185 DRIVER RD 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 ≤ 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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LOT 185 DRIVER RD DARCH

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SCALE 1:20

DATE 10/5/22

APPROVED

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

SITE CLASSIFICATION REPORT
CERTIFICATE 2590273

CLIENT PARCEL DARCH PTY LTD
JOB ADDRESS LOT 190 MANDERSTON APP DARCH
CLIENT JOB NO.
OWNER
STRUCTERRE JOB NO. S1067835
DATE OF ASSESSMENT 4/5/22

SITE RECORD

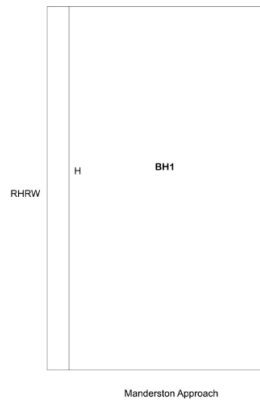


SITE CLASSIFICATION	A	<i>(in accordance with AS2870)</i>
FOOTING DETAIL	B1	
SAND PAD	No sand pad required structurally	
BUSHFIRE PRONE AREA	Not in a Bushfire Prone Area (see NOTE 2.)	
CORROSION CLASSIFICATION	R3	<i>(Durability Class in accordance with AS3700)</i>
WIND CLASSIFICATION	N1	<i>(in accordance with AS4055)</i>
-TERRAIN CATEGORY	3	
-TOPOGRAPHIC	T0	
-SHIELDING	Full Shielding	

SOIL PROFILE

BOREHOLE 1: 0 - 1800 SAND with gravel & 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

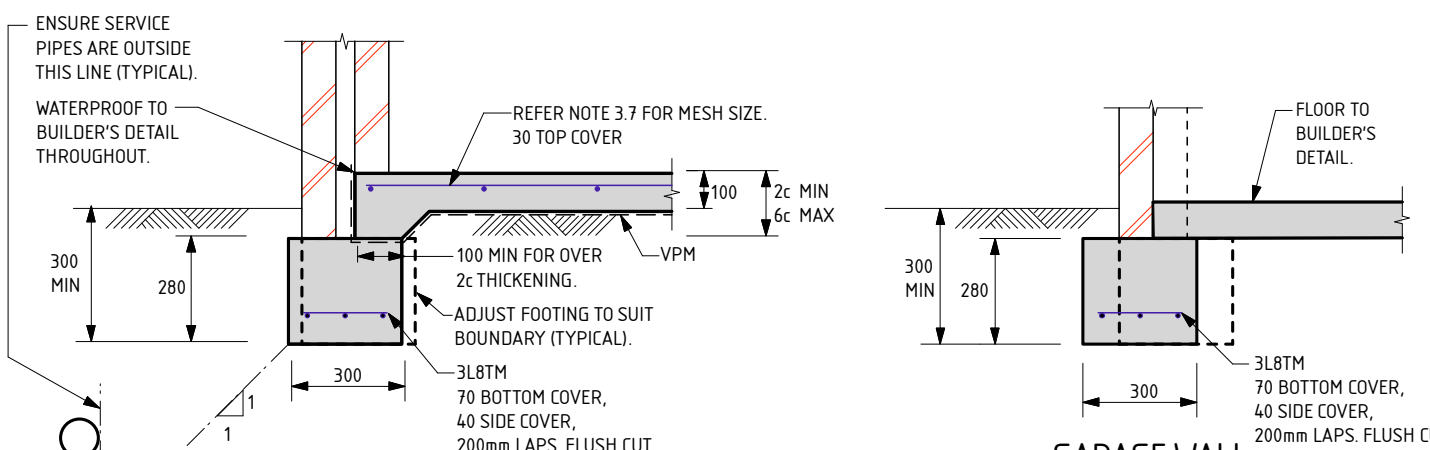
Site Condition

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 --

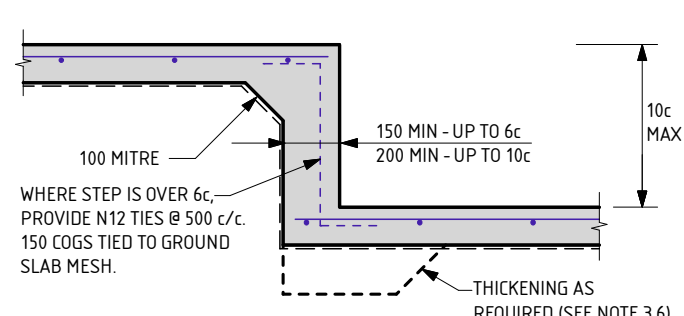


EXTERNAL WALLS

GARAGE WALL



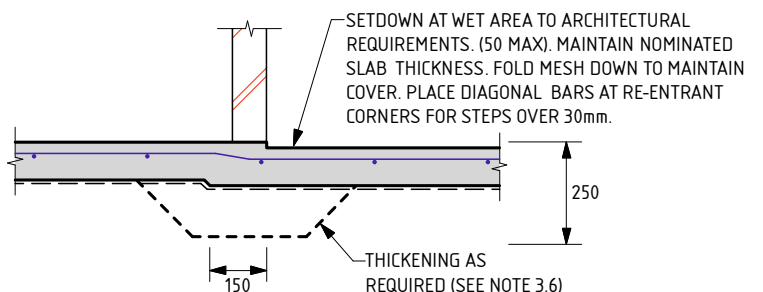
FOOTING STEP



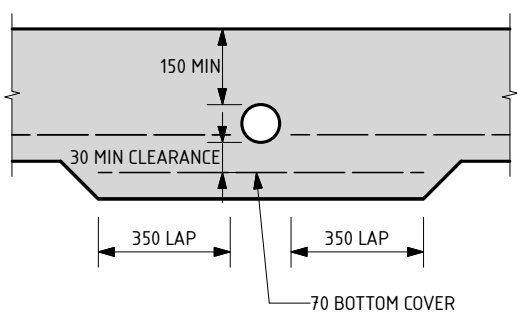
SLAB STEP



**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 190 MANDERSTON APP 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:
- 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 190 MANDERSTON APP 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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PROJECT :
LOT 190 MANDERSTON APP 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 ≤ 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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PROJECT:
LOT 190 MANDERSTON APP DARCH

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DATE 10/5/22

APPROVED

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

SITE CLASSIFICATION REPORT
CERTIFICATE 2590274

CLIENT PARCEL DARCH PTY LTD
JOB ADDRESS LOT 191 MANDERSTON APP DARCH
CLIENT JOB NO.
OWNER
STRUCTERRE JOB NO. S1067834
DATE OF ASSESSMENT 4/5/22

SITE RECORD

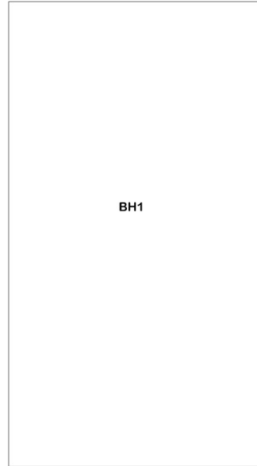


SITE CLASSIFICATION	A	<i>(in accordance with AS2870)</i>
FOOTING DETAIL	B1	
SAND PAD	No sand pad required structurally	
BUSHFIRE PRONE AREA	Not in a Bushfire Prone Area (see NOTE 2.)	
CORROSION CLASSIFICATION	R3	<i>(Durability Class in accordance with AS3700)</i>
WIND CLASSIFICATION	N1	<i>(in accordance with AS4055)</i>
-TERRAIN CATEGORY	3	
-TOPOGRAPHIC	T0	
-SHIELDING	Full Shielding	

SOIL PROFILE

BOREHOLE 1: 0 - 800 SAND with gravel & artificial material - brown; 800 GRAVEL (limestone) refusal.

APPROXIMATE BOREHOLE LOCATIONS



Manderston Approach

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.

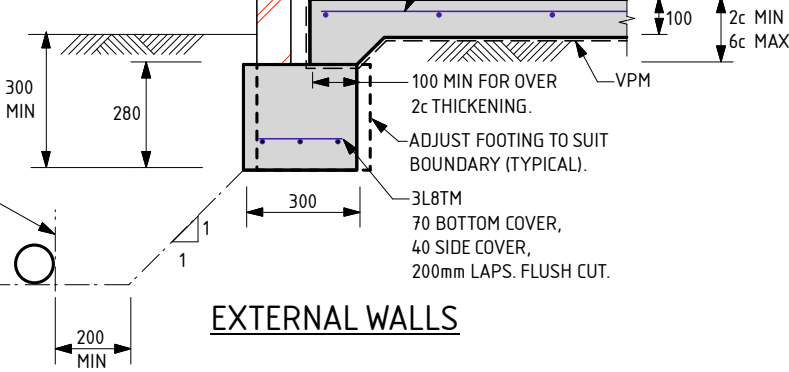
-- END OF REPORT --

ENSURE SERVICE PIPES ARE OUTSIDE THIS LINE (TYPICAL).

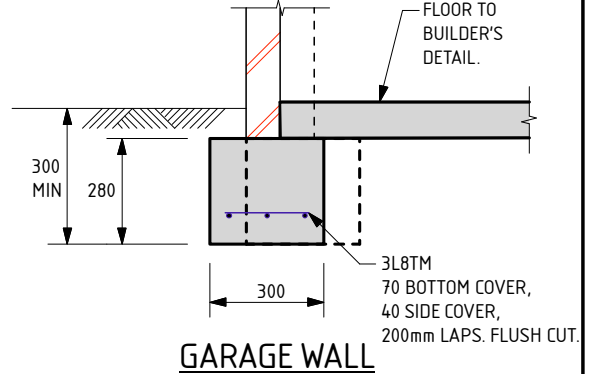
WATERPROOF TO BUILDER'S DETAIL THROUGHOUT.

REFER NOTE 3.7 FOR MESH SIZE.

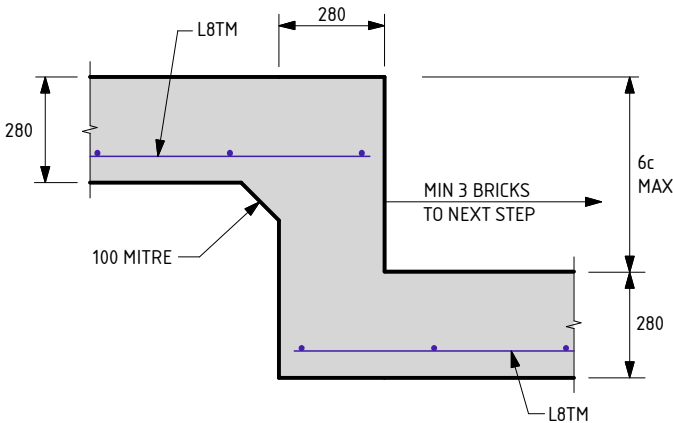
FLOOR TO BUILDER'S DETAIL.



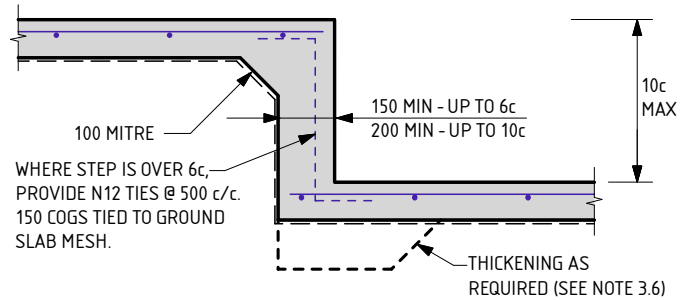
EXTERNAL WALLS



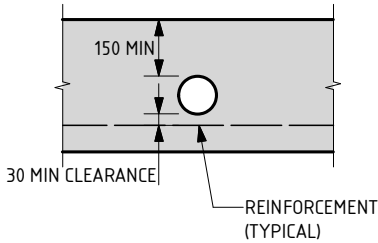
GARAGE WALL



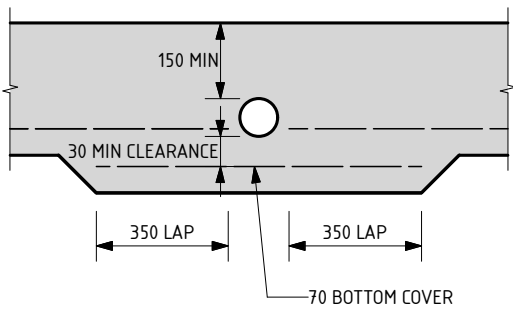
FOOTING STEP



SLAB STEP



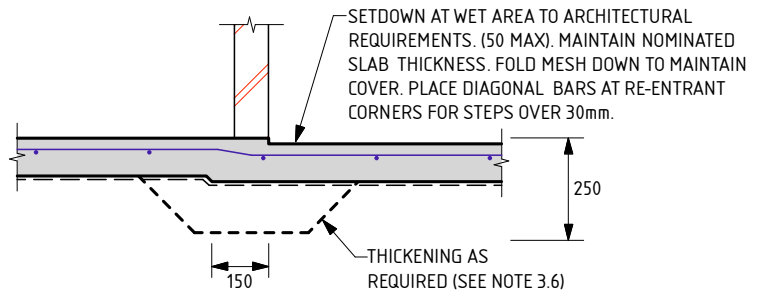
**OPTION A
PENETRATION CLEAR OF REINFORCEMENT**



**OPTION B
PENETRATION INTERRUPTS REINFORCEMENT**

SERVICE PIPE DIAGRAM

- MAXIMUM PENETRATION SIZE TO BE Ø150.



WET AREA STEP

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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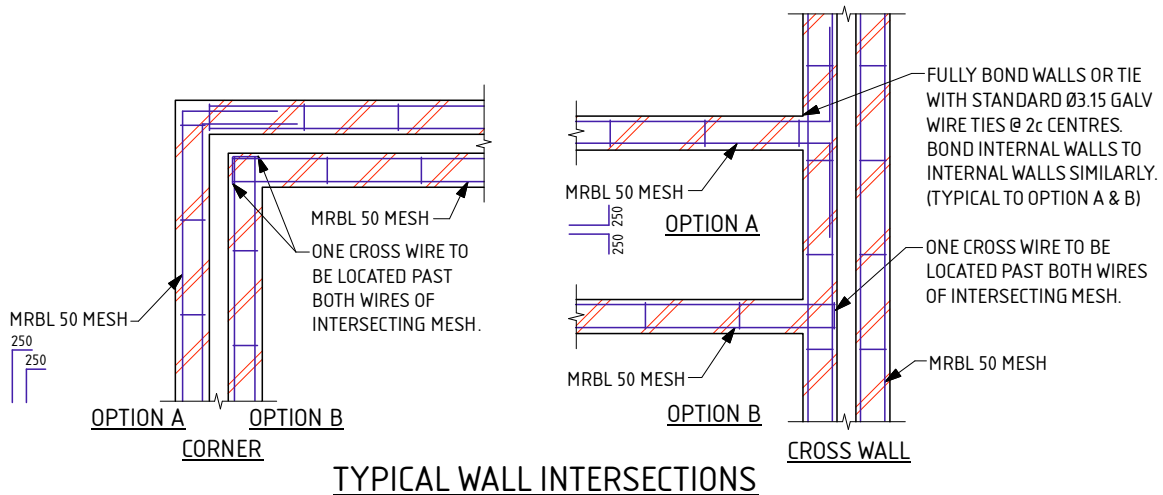
PROJECT: LOT 191 MANDERSTON APP DARCH

CLIENT: PARCEL DARCH PTY LTD

SCALE: 1:20

DATE: 10/5/22

APPROVED



NOTES FOR B1 FOOTING

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2.0 EARTHWORKS

- 2.1 SAND PAD, IF APPLICABLE, TO BE AS PER SITE INSPECTION REPORT.
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 - 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.
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- 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 191 MANDERSTON APP DARCH

CLIENT :

PARCEL DARCH PTY LTD

SCALE

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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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PROJECT :
LOT 191 MANDERSTON APP DARCH

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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 ≤ 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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APPROVED

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

SITE CLASSIFICATION REPORT
CERTIFICATE 2590275

CLIENT PARCEL DARCH PTY LTD
JOB ADDRESS LOT 192 MANDERSTON APP DARCH
CLIENT JOB NO.
OWNER
STRUCTERRE JOB NO. S1067833
DATE OF ASSESSMENT 4/5/22

SITE RECORD

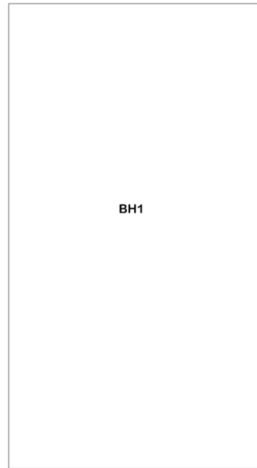


SITE CLASSIFICATION	A	<i>(in accordance with AS2870)</i>
FOOTING DETAIL	B1	
SAND PAD	No sand pad required structurally	
BUSHFIRE PRONE AREA	Not in a Bushfire Prone Area (see NOTE 2.)	
CORROSION CLASSIFICATION	R3	<i>(Durability Class in accordance with AS3700)</i>
WIND CLASSIFICATION	N1	<i>(in accordance with AS4055)</i>
-TERRAIN CATEGORY	3	
-TOPOGRAPHIC	T0	
-SHIELDING	Full Shielding	

SOIL PROFILE

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

APPROXIMATE BOREHOLE LOCATIONS



Manderston Approach

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

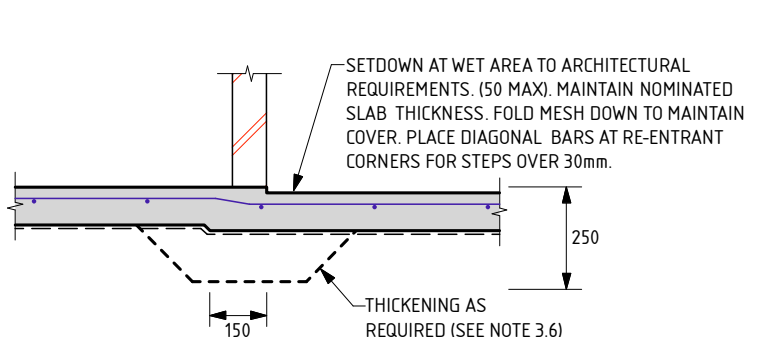
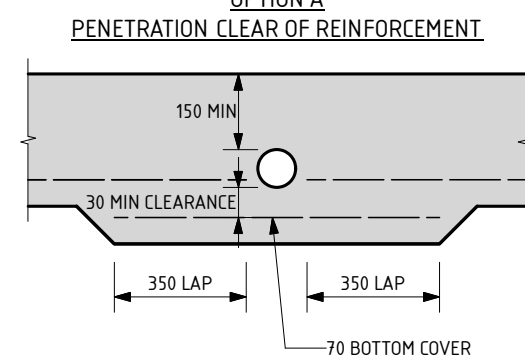
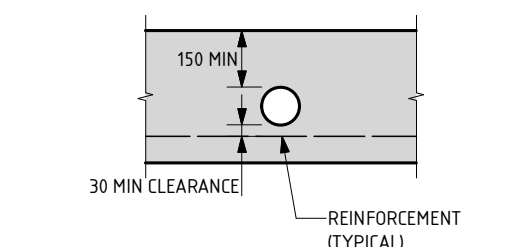
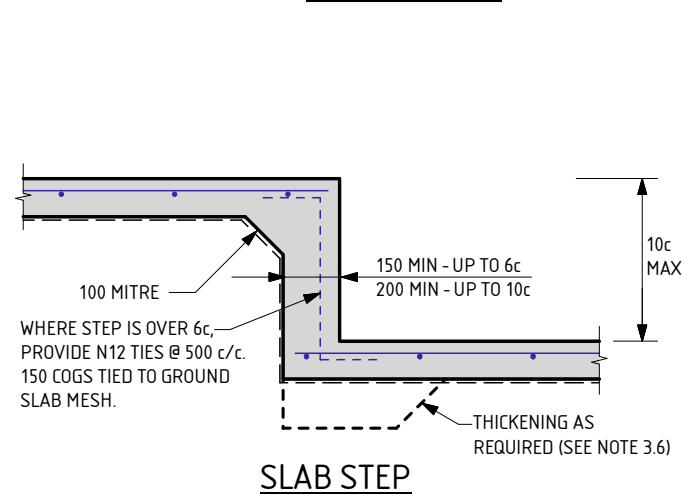
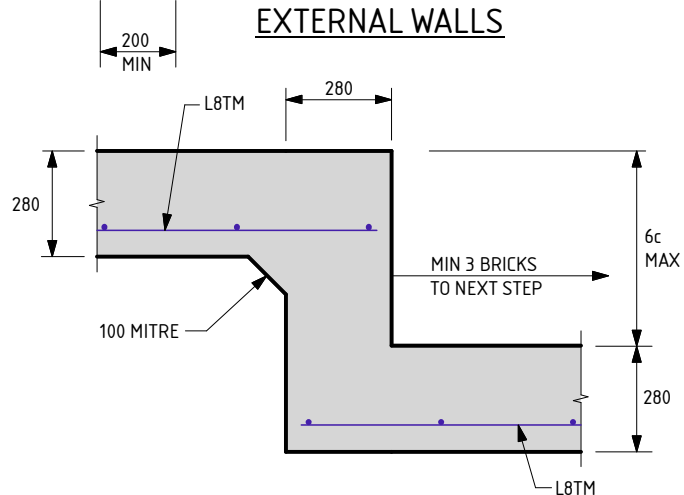
Site Condition

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 --



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

STRUCterre
consulting engineers

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PROJECT: LOT 192 MANDERSTON APP DARCH	
CLIENT: PARCEL DARCH PTY LTD	
SCALE: 1:20	APPROVED
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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.
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- 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.

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

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- 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.

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SHEET 2 OF 2



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SCALE

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APPROVED

DATE

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

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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 192 MANDERSTON APP 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 ≤ 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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SCALE 1:20

DATE 10/5/22

APPROVED

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

SITE CLASSIFICATION REPORT
CERTIFICATE 2590288

CLIENT PARCEL DARCH PTY LTD
JOB ADDRESS LOT 193 MANDERSTON APP DARCH
CLIENT JOB NO.
OWNER
STRUCTERRE JOB NO. S1067832
DATE OF ASSESSMENT 4/5/22

SITE RECORD

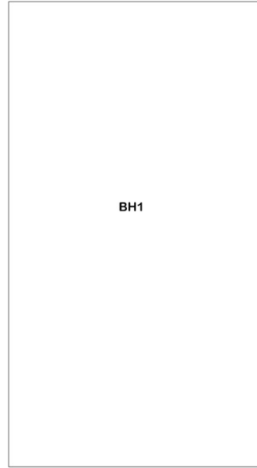


SITE CLASSIFICATION	A	<i>(in accordance with AS2870)</i>
FOOTING DETAIL	B1	
SAND PAD	No sand pad required structurally	
BUSHFIRE PRONE AREA	Not in a Bushfire Prone Area (see NOTE 2.)	
CORROSION CLASSIFICATION	R3	<i>(Durability Class in accordance with AS3700)</i>
WIND CLASSIFICATION	N1	<i>(in accordance with AS4055)</i>
-TERRAIN CATEGORY	3	
-TOPOGRAPHIC	T0	
-SHIELDING	Full Shielding	

SOIL PROFILE

BOREHOLE 1: 0 - 800 SAND with gravel & artificial material - brown; 800 GRAVEL (limestone) refusal.

APPROXIMATE BOREHOLE LOCATIONS



Manderston Approach

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

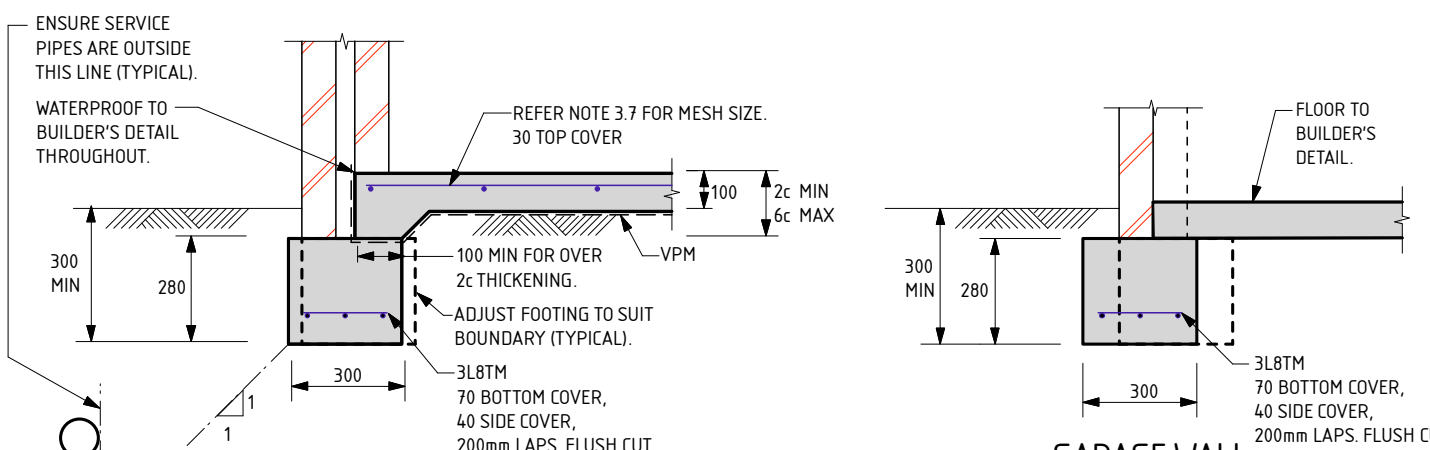
Site Condition

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 --

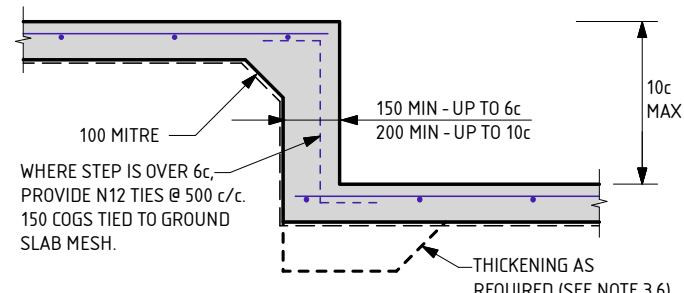


EXTERNAL WALLS

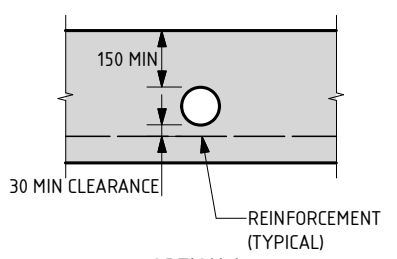
GARAGE WALL



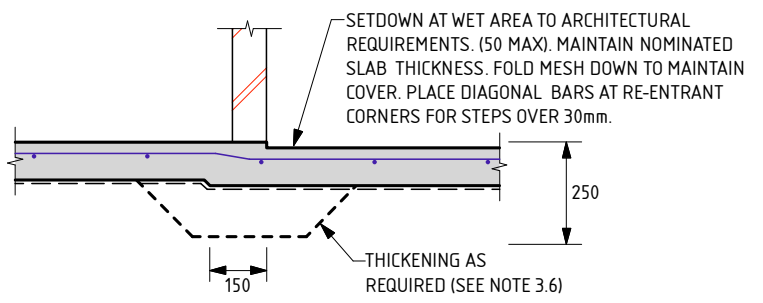
FOOTING STEP



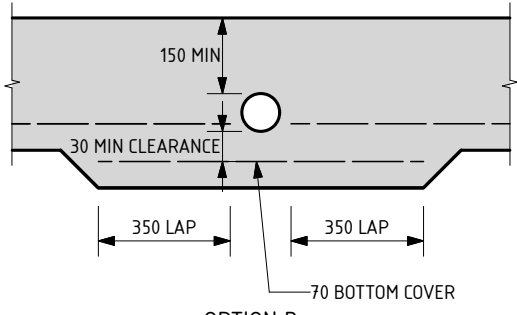
SLAB STEP



**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 193 MANDERSTON APP DARCH	
CLIENT: PARCEL DARCH PTY LTD	
SCALE: 1:20	APPROVED
DATE: 11/5/22	





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:
- 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 193 MANDERSTON APP DARCH

CLIENT :

PARCEL DARCH PTY LTD

SCALE

1:20

APPROVED

DATE

11/5/22

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

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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.

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 - 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

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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.

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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 ≤ 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
Unit Trust trading as StrucTerre Consulting Engineers
1 ERINDALE ROAD, BALCATTA W.A. 6021
TEL (08) 9205 4500 FAX (08) 9205 4541 EMAIL: perth@strucTerre.com.au

PROJECT:
LOT 193 MANDERSTON APP DARCH

CLIENT: PARCEL DARCH PTY LTD

SCALE 1:20

DATE 11/5/22

APPROVED

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

SITE CLASSIFICATION REPORT
CERTIFICATE 2590231

CLIENT PARCEL DARCH PTY LTD
JOB ADDRESS LOT 200 MANDERSTON APP DARCH
CLIENT JOB NO.
OWNER
STRUCTERRE JOB NO. S1067836
DATE OF ASSESSMENT 4/5/22

SITE RECORD

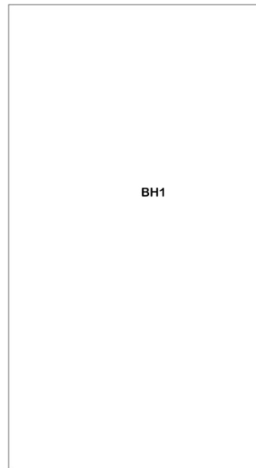


SITE CLASSIFICATION	A	<i>(in accordance with AS2870)</i>
FOOTING DETAIL	B1	
SAND PAD	No sand pad required structurally	
BUSHFIRE PRONE AREA	Not in a Bushfire Prone Area (see NOTE 2.)	
CORROSION CLASSIFICATION	R1	<i>(Durability Class in accordance with AS3700)</i>
WIND CLASSIFICATION	N1	<i>(in accordance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

SOIL PROFILE

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

APPROXIMATE BOREHOLE LOCATIONS



Manderston Approach

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

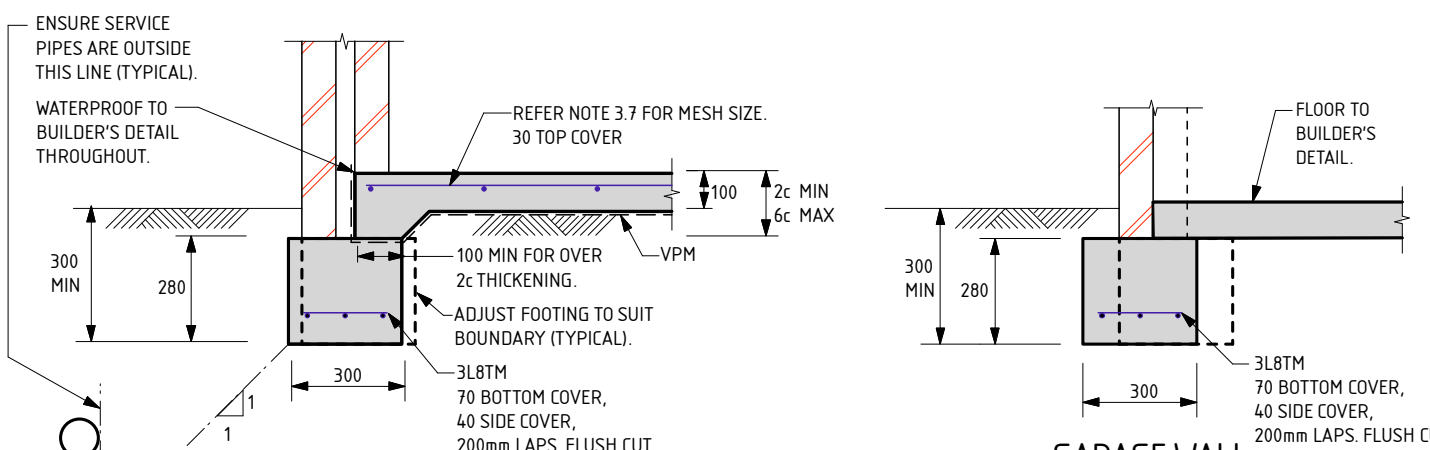
Site Condition

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 --

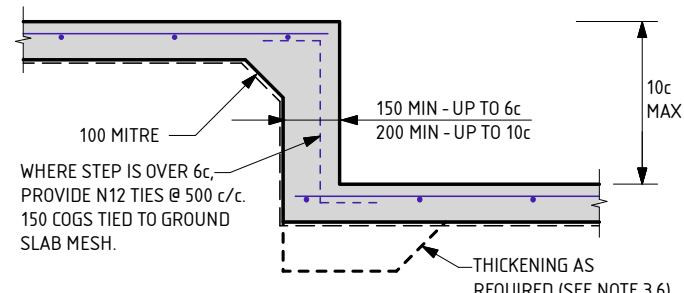


EXTERNAL WALLS

GARAGE WALL



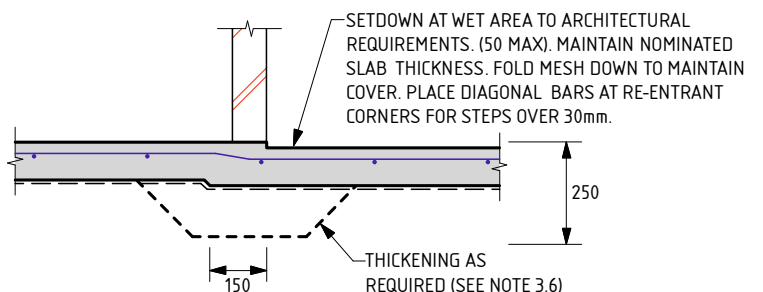
FOOTING STEP



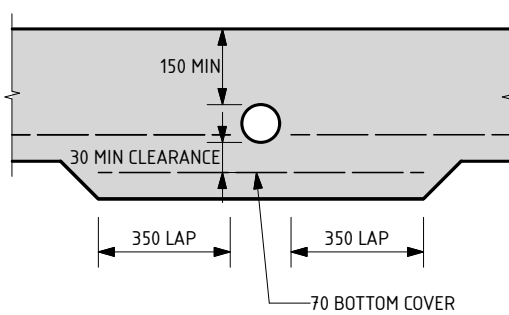
SLAB STEP



**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

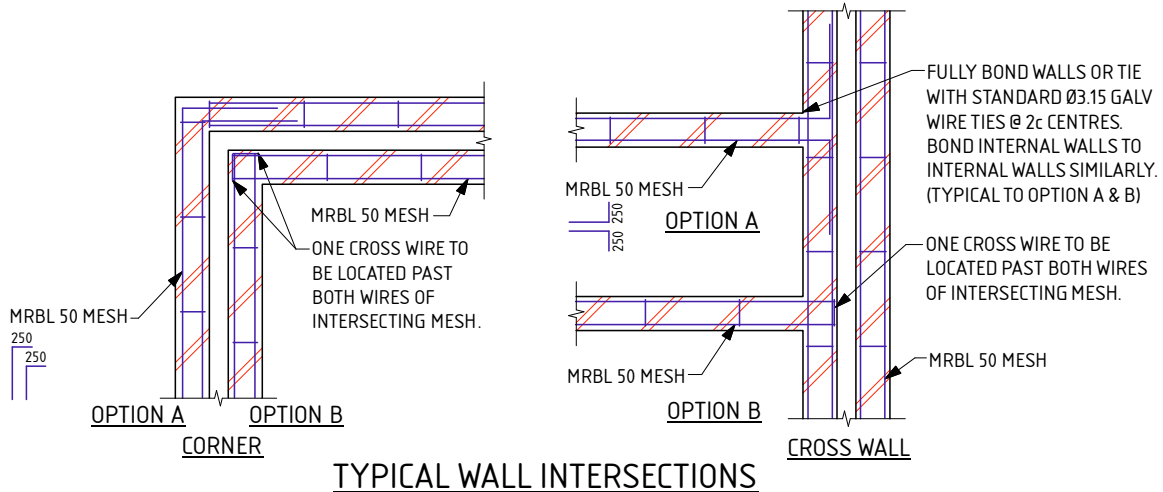
B1

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
1 ERINDALE ROAD, BALCATTA W.A. 6021
TEL (08) 9205 4500 FAX (08) 9205 4541 EMAIL: perth@strucTerre.com.au

PROJECT: LOT 200 MANDERSTON APP DARCH	
CLIENT: PARCEL DARCH PTY LTD	
SCALE: 1:20	APPROVED
DATE: 9/5/22	



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:
- 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 200 MANDERSTON APP DARCH

CLIENT :

PARCEL DARCH PTY LTD

SCALE

1:20

APPROVED

DATE

9/5/22

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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1 ERINDALE ROAD, BALCATTA W.A. 6021
TEL (08) 9205 4500 FAX (08) 9205 4541 EMAIL: perth@strucTerre.com.au

PROJECT :
LOT 200 MANDERSTON APP DARCH

CLIENT : PARCEL DARCH PTY LTD

SCALE 1:20

DATE 9/5/22

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 ≤ 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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PROJECT :
LOT 200 MANDERSTON APP DARCH

CLIENT : PARCEL DARCH PTY LTD

SCALE 1:20

DATE 9/5/22

APPROVED

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

SITE CLASSIFICATION REPORT
CERTIFICATE 2590230

CLIENT PARCEL DARCH PTY LTD
JOB ADDRESS LOT 201 MANDERSTON APP DARCH
CLIENT JOB NO.
OWNER
STRUCTERRE JOB NO. S1067837
DATE OF ASSESSMENT 4/5/22

SITE RECORD

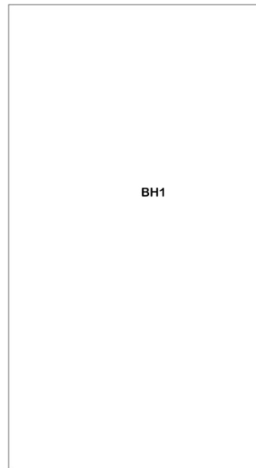


SITE CLASSIFICATION	A	<i>(in accordance with AS2870)</i>
FOOTING DETAIL	B1	
SAND PAD	No sand pad required structurally	
BUSHFIRE PRONE AREA	Not in a Bushfire Prone Area (see NOTE 2.)	
CORROSION CLASSIFICATION	R1	<i>(Durability Class in accordance with AS3700)</i>
WIND CLASSIFICATION	N1	<i>(in accordance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

SOIL PROFILE

BOREHOLE 1: 0 - 1100 SAND with gravel & artificial material - brown; 1100 GRAVEL (limestone) refusal.

APPROXIMATE BOREHOLE LOCATIONS



Manderston Approach

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 --

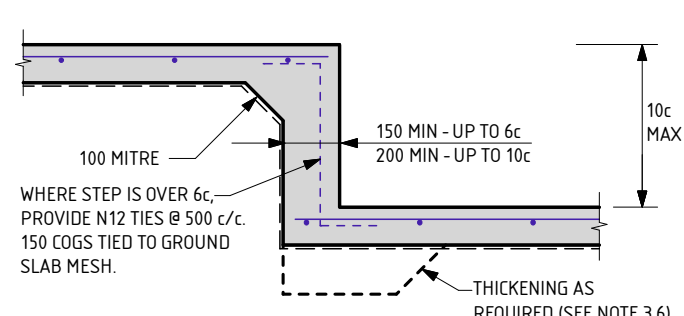


EXTERNAL WALLS

GARAGE WALL



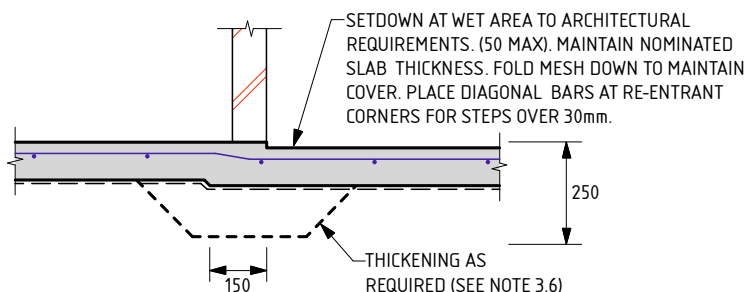
FOOTING STEP



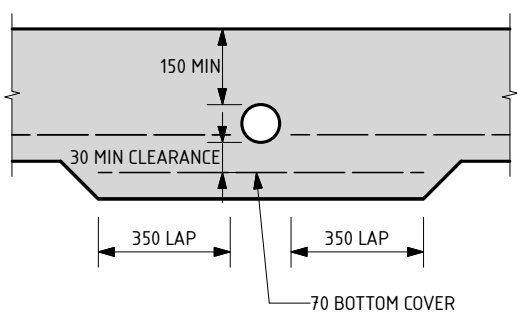
SLAB STEP



**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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PROJECT: LOT 201 MANDERSTON APP DARCH	
CLIENT: PARCEL DARCH PTY LTD	
SCALE: 1:20	APPROVED 
DATE: 9/5/22	



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:
- 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 201 MANDERSTON APP DARCH

CLIENT :

PARCEL DARCH PTY LTD

SCALE

1:20

APPROVED

DATE

9/5/22

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 201 MANDERSTON APP DARCH

CLIENT : PARCEL DARCH PTY LTD

SCALE 1:20

DATE 9/5/22

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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 ≤ 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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LOT 201 MANDERSTON APP DARCH

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SCALE 1:20

DATE 9/5/22

APPROVED

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

SITE CLASSIFICATION REPORT
CERTIFICATE 2590229

CLIENT PARCEL DARCH PTY LTD
JOB ADDRESS LOT 202 MANDERSTON APP DARCH
CLIENT JOB NO.
OWNER
STRUCTERRE JOB NO. S1067838
DATE OF ASSESSMENT 4/5/22

SITE RECORD

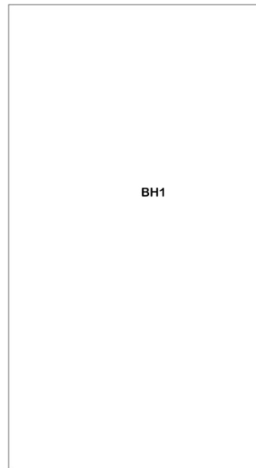


SITE CLASSIFICATION	A	<i>(in accordance with AS2870)</i>
FOOTING DETAIL	B1	
SAND PAD	No sand pad required structurally	
BUSHFIRE PRONE AREA	Not in a Bushfire Prone Area (see NOTE 2.)	
CORROSION CLASSIFICATION	R1	<i>(Durability Class in accordance with AS3700)</i>
WIND CLASSIFICATION	N1	<i>(in accordance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

SOIL PROFILE

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

APPROXIMATE BOREHOLE LOCATIONS



Manderston Approach

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 --

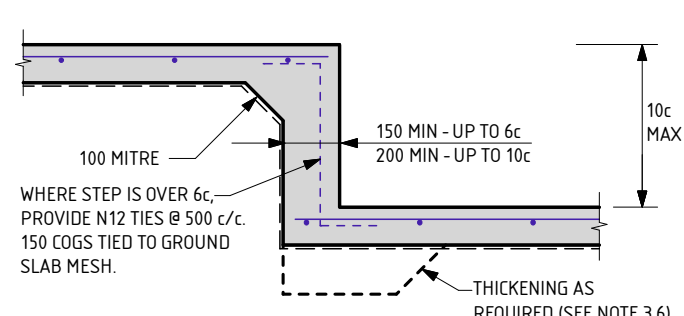


EXTERNAL WALLS

GARAGE WALL



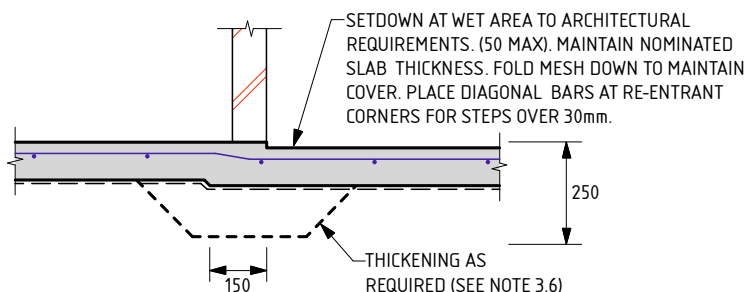
FOOTING STEP



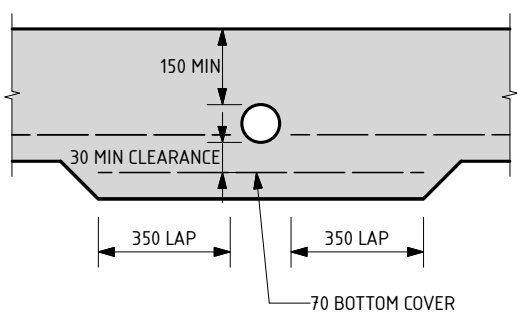
SLAB STEP



**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

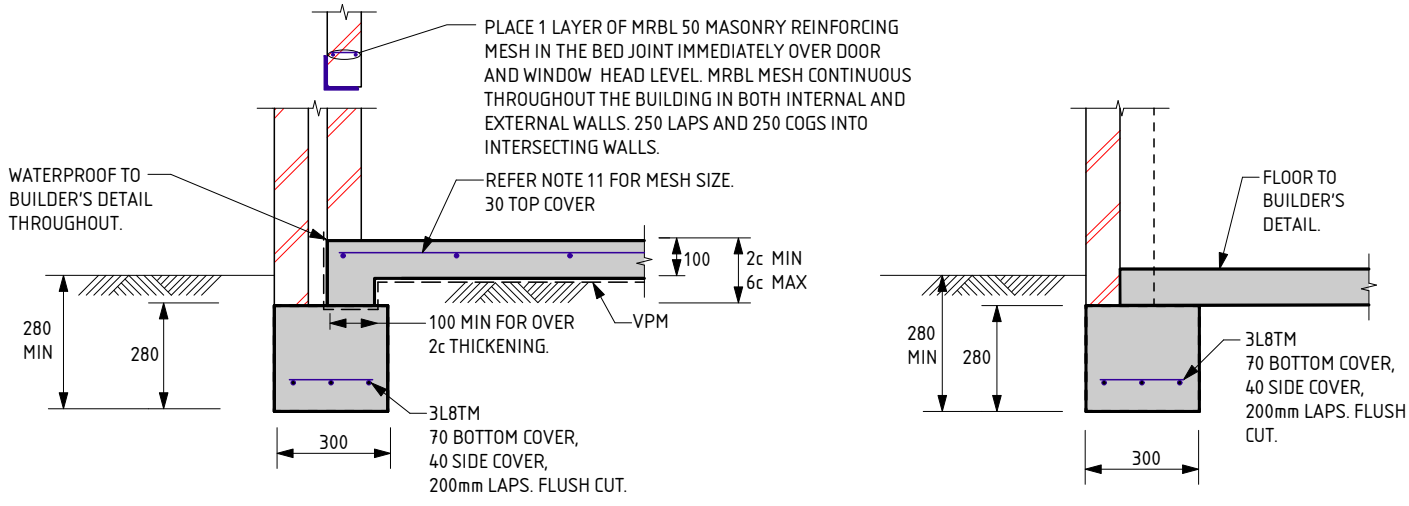
SHEET 1 OF 2



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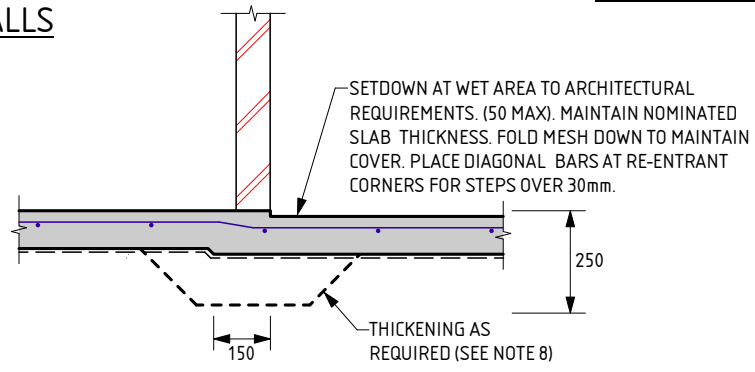
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PROJECT: LOT 202 MANDERSTON APP DARCH	
CLIENT: PARCEL DARCH PTY LTD	
SCALE: 1:20	APPROVED
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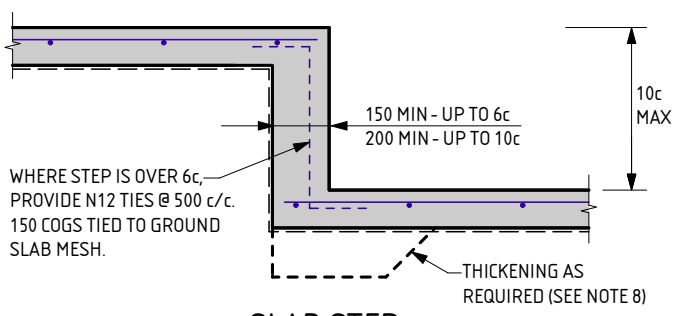


EXTERNAL WALLS

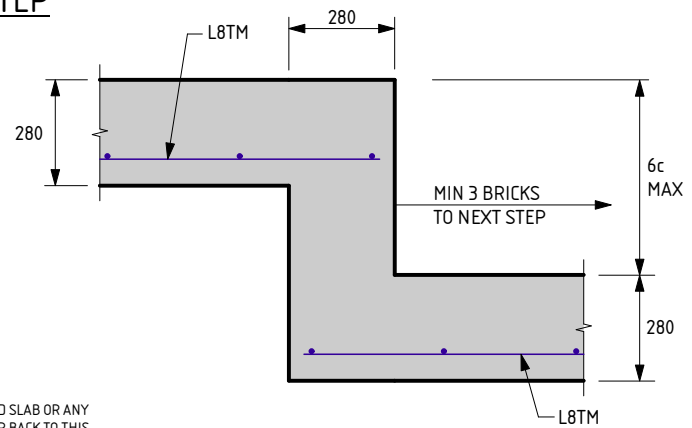
GARAGE WALL



WET AREA STEP



SLAB STEP



FOOTING STEP

B1S FOOTING NOTES:

- REMOVE ALL TOPSOIL, VEGETATION AND DELETERIOUS FILL MATERIAL FROM THE BUILDING AREA.
- SAND FILL TO BE CLEAN WELL DRAINED, WITH MAX FINES (PARTICLES UP TO 0.07mm) CONTENT OF 5%. SAND TO BE COMPACTED TO A MIN 6 BLOWS/300mm FOR 750mm OR DEPTH OF PAD.
- A MIN OF 150mm OF SAND REQUIRED UNDER FOOTINGS.
- IF CLAY ON SITE AN ENGINEER TO BE CONSULTED.
- ROOF AND SURFACE WATER TO BE TAKEN AWAY FROM FOUNDATION AREA.
- EXCAVATIONS FOR PLUMBING NOT TO ADVERSELY AFFECT THE FOUNDATION SOIL FOR THE FOOTING. IF UNSURE, CONTACT THE ENGINEER.
- WHERE PLUMBING PIPES PASS THROUGH FOOTINGS OR SLAB, SPECIFIED DEPTH OF ALL CONCRETE IS ALWAYS TO BE MAINTAINED.
- PLACE SLAB THICKENINGS (300 WIDE x 250 DEEP) UNDER INTERNAL WALLS (90 OR 110) HIGHER THAN 3.7m.
- REINFORCEMENT SHALL BE IN ACCORDANCE WITH THE FOLLOWING STANDARDS:
 - SL INDICATES DEFORMED SQUARE MESH D500L TO AS/NZS 4671.
 - TM SUFFIX INDICATES TRENCH MESH USING DEFORMED BARS D500L TO AS/NZS 4671.
 - N INDICATES 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.
- THE TWO OUTERMOST CROSS-BARS OF EACH SHEET OF MESH TO OVERLAP IN ACCORDANCE WITH AS3600.
- 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.
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- ALL CONCRETE TO BE N20/20/100.
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- PIERCING THE VAPOUR BARRIER (VPM) USING LEVELLING PINS ON FREE DRAINING SAND PADS IS ALLOWABLE.
- a) ALLOWABLE SLAB THICKNESS TOLERANCE -10mm, +15mm.
- b) AVERAGE DEPTH TO EQUAL NOMINATED DEPTH.
- c) WHERE DEPTH IS BELOW NOMINATED DEPTH, MAX AREA ALLOWED TO BE ≤ 5% OF THE TOTAL AREA.
- d) DEPTH TESTING LOCATIONS TO BE NO CLOSER THAN 1000mm APART.

THE APPROVED SIGNATURE ON THIS FOOTING AND SLAB DETAIL ENDORSES ITS USE FOR SINGLE STOREY BUILDINGS.
DATE LAST MODIFIED - 06/09/21

B1S



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CLIENT : PARCEL DARCH PTY LTD	
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EXPLANATORY NOTES AND STANDARD RECOMMENDATIONS – STABLE (A CLASS) SITES (Sheet 1 of 2)

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 - 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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Unit Trust trading as StrucTerre Consulting Engineers
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PROJECT :
LOT 202 MANDERSTON APP DARCH

CLIENT : PARCEL DARCH PTY LTD

SCALE 1:20

DATE 9/5/22

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

SITE CLASSIFICATION REPORT
CERTIFICATE 2590228

CLIENT PARCEL DARCH PTY LTD
JOB ADDRESS LOT 203 MANDERSTON APP DARCH
CLIENT JOB NO.
OWNER
STRUCTERRE JOB NO. S1067839
DATE OF ASSESSMENT 4/5/22

SITE RECORD

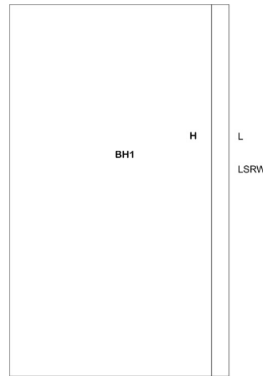


SITE CLASSIFICATION **A** *(in accordance with AS2870)*
FOOTING DETAIL **B1**
SAND PAD **No sand pad required structurally**
BUSHFIRE PRONE AREA **Not in a Bushfire Prone Area (see NOTE 2.)**
CORROSION CLASSIFICATION **R1** *(Durability Class in accordance with AS3700)*
WIND CLASSIFICATION **N1** *(in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

SOIL PROFILE

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

APPROXIMATE BOREHOLE LOCATIONS



Manderston Approach

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

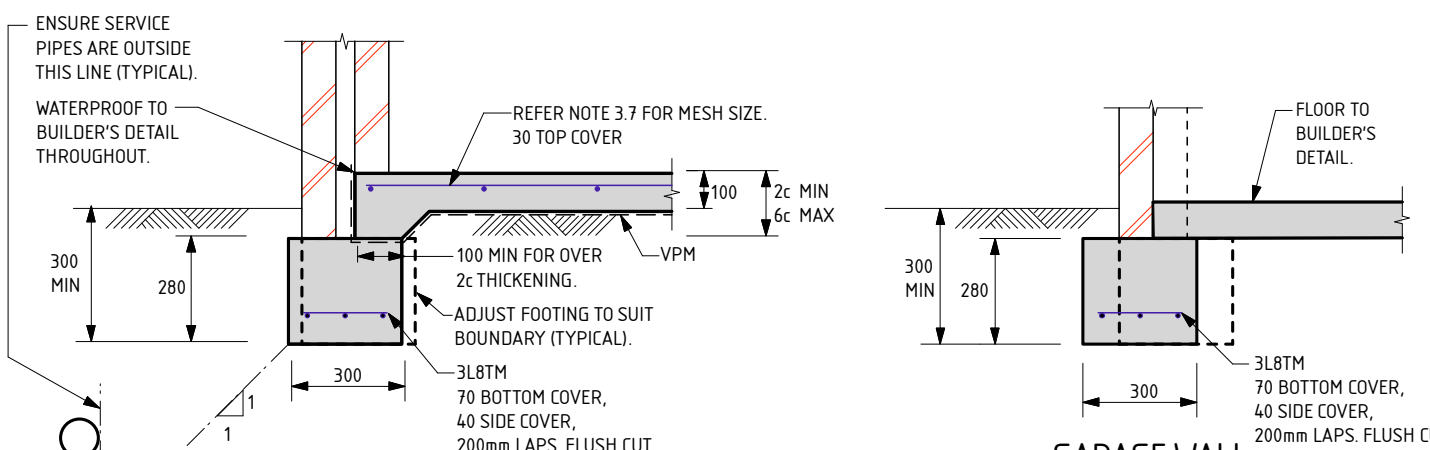
Site Condition

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 --

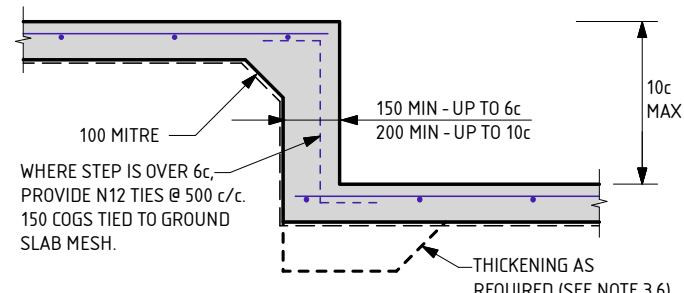


EXTERNAL WALLS

GARAGE WALL



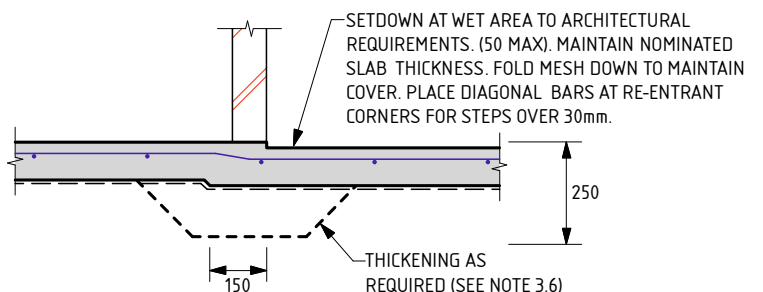
FOOTING STEP



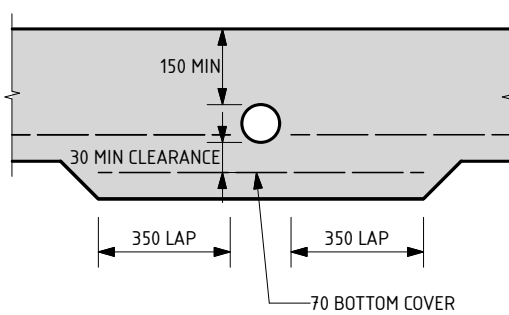
SLAB STEP



**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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SCALE: 1:20	APPROVED
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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.

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SHEET 2 OF 2



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PROJECT :

LOT 203 MANDERSTON APP DARCH

CLIENT :

PARCEL DARCH PTY LTD

SCALE

1:20

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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.
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SAND PAD

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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.

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 - d. COMPACTING TO MEET THE REQUIREMENTS AS OUTLINED IN AS 3798 TABLE 5.1.
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RETAINING WALLS

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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.

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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 ≤ 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
Unit Trust trading as StrucTerre Consulting Engineers
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PROJECT :
LOT 203 MANDERSTON APP DARCH

CLIENT : PARCEL DARCH PTY LTD

SCALE 1:20

DATE 9/5/22

APPROVED

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

SITE CLASSIFICATION REPORT
CERTIFICATE 2590252

CLIENT PARCEL DARCH PTY LTD
JOB ADDRESS LOT 208 ESMERELDA PASS DARCH
CLIENT JOB NO.
OWNER
STRUCTERRE JOB NO. S1067845
DATE OF ASSESSMENT 4/5/22

SITE RECORD

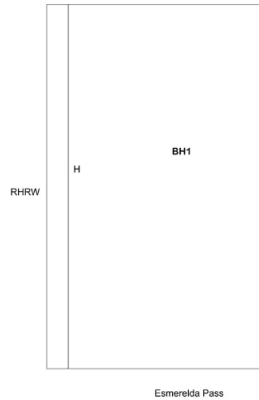


SITE CLASSIFICATION	A	<i>(in accordance with AS2870)</i>
FOOTING DETAIL	B1	
SAND PAD	No sand pad required structurally	
BUSHFIRE PRONE AREA	Not in a Bushfire Prone Area (see NOTE 2.)	
CORROSION CLASSIFICATION	R1	<i>(Durability Class in accordance with AS3700)</i>
WIND CLASSIFICATION	N1	<i>(in accordance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

SOIL PROFILE

BOREHOLE 1: 0 - 1800 SAND with gravel & 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

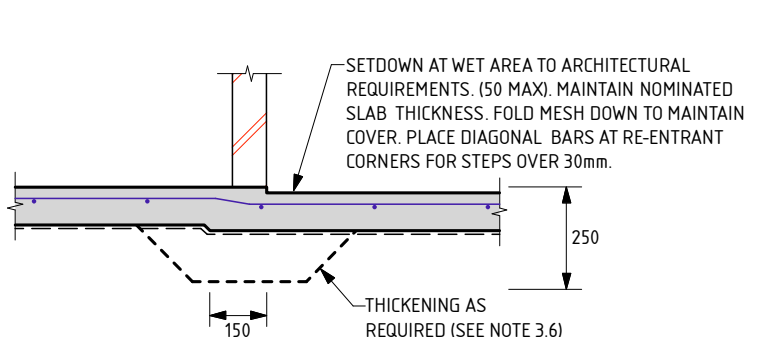
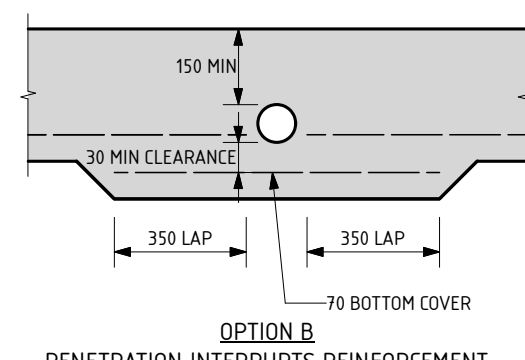
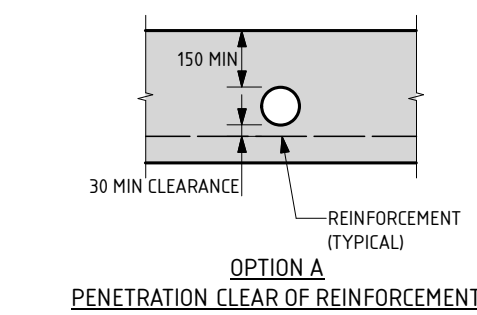
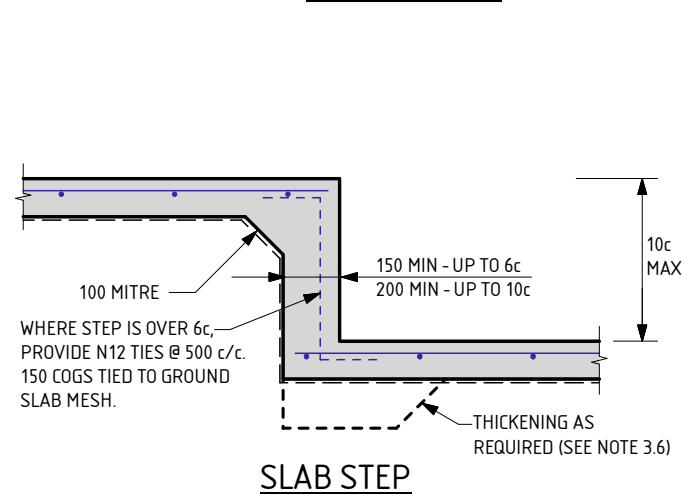
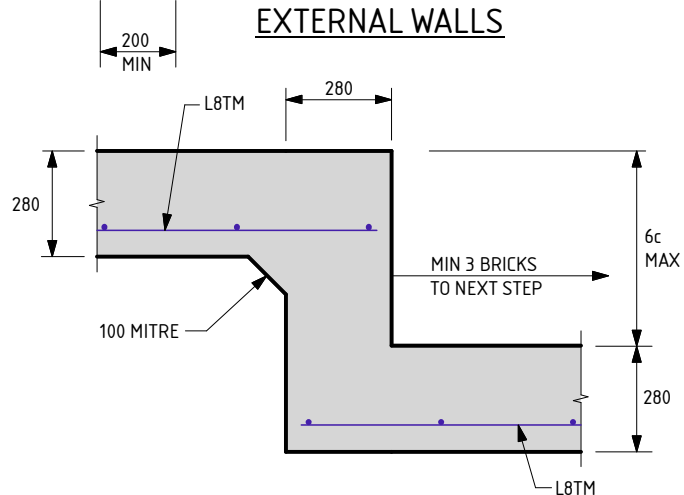
Site Condition

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 --



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

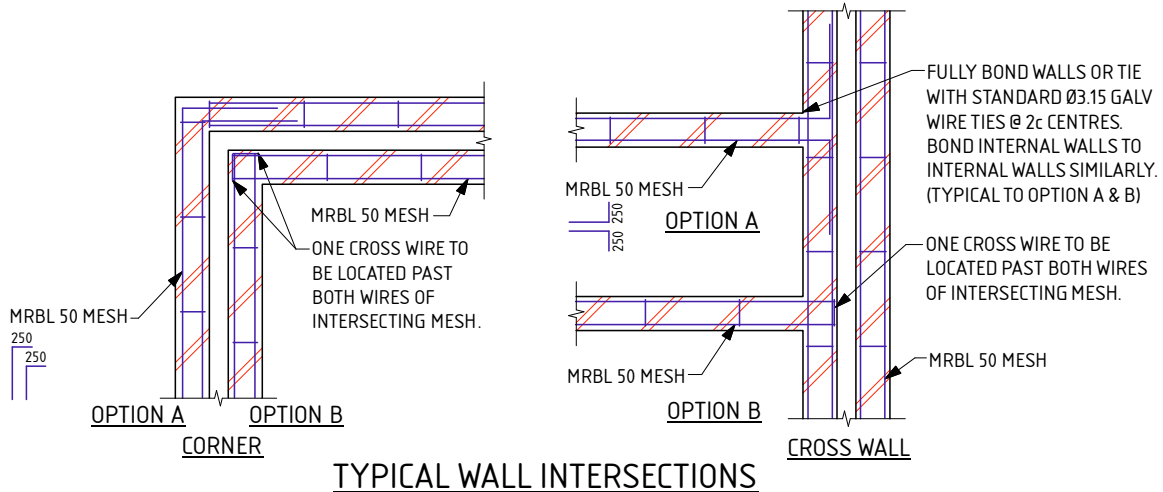
B1
SHEET 1 OF 2

STRUCterre
consulting engineers

Zemla Pty. Ltd. (ABN: 71 349 772 837) ATF the Young Purich and Higham
Unit Trust trading as StrucTerre Consulting Engineers
1 ERINDALE ROAD, BALCATTA WA 6021
TEL (08) 9205 4500 FAX (08) 9205 4541 EMAIL: perth@strucTerre.com.au

PROJECT: LOT 208 ESMERELDA PASS 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 208 ESMERELDA PASS 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 208 ESMERELDA PASS 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 ≤ 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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PROJECT :
LOT 208 ESMERELDA PASS DARCH

CLIENT : PARCEL DARCH PTY LTD

SCALE 1:20

DATE 10/5/22

APPROVED

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

SITE CLASSIFICATION REPORT
CERTIFICATE 2590251

CLIENT PARCEL DARCH PTY LTD
JOB ADDRESS LOT 209 ESMERELDA PASS DARCH
CLIENT JOB NO.
OWNER
STRUCTERRE JOB NO. S1067844
DATE OF ASSESSMENT 4/5/22

SITE RECORD

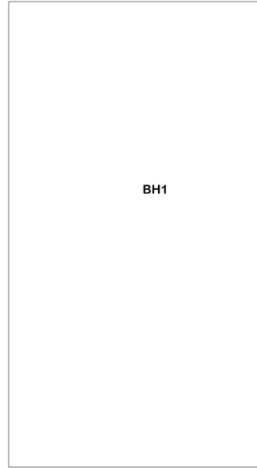


SITE CLASSIFICATION	A	<i>(in accordance with AS2870)</i>
FOOTING DETAIL	B1	
SAND PAD	No sand pad required structurally	
BUSHFIRE PRONE AREA	Not in a Bushfire Prone Area (see NOTE 2.)	
CORROSION CLASSIFICATION	R1	<i>(Durability Class in accordance with AS3700)</i>
WIND CLASSIFICATION	N1	<i>(in accordance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

SOIL PROFILE

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

APPROXIMATE BOREHOLE LOCATIONS



Esmereida Pass

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

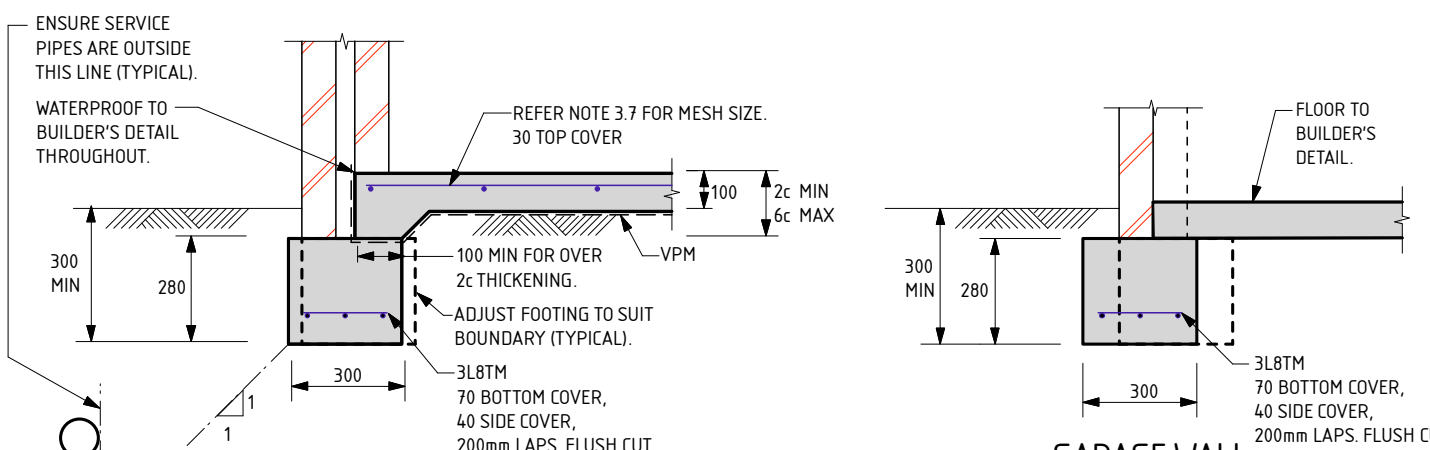
Site Condition

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 --

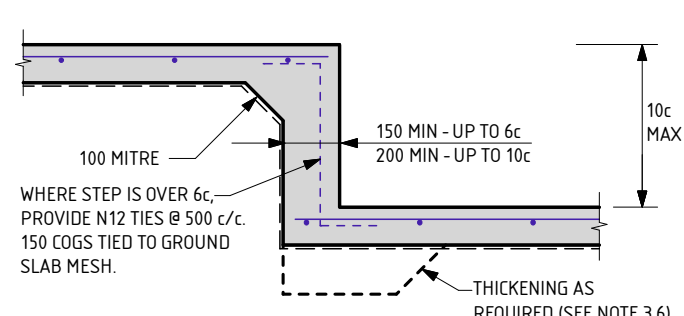


EXTERNAL WALLS

GARAGE WALL



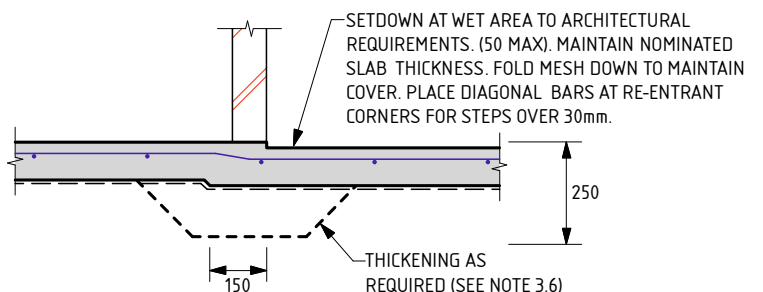
FOOTING STEP



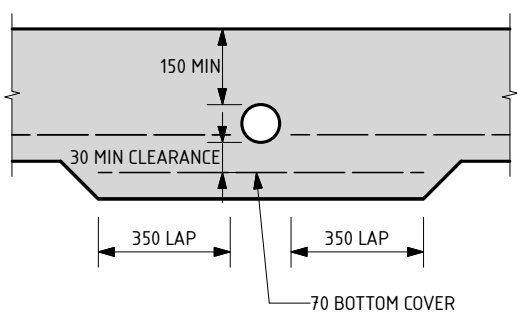
SLAB STEP



**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

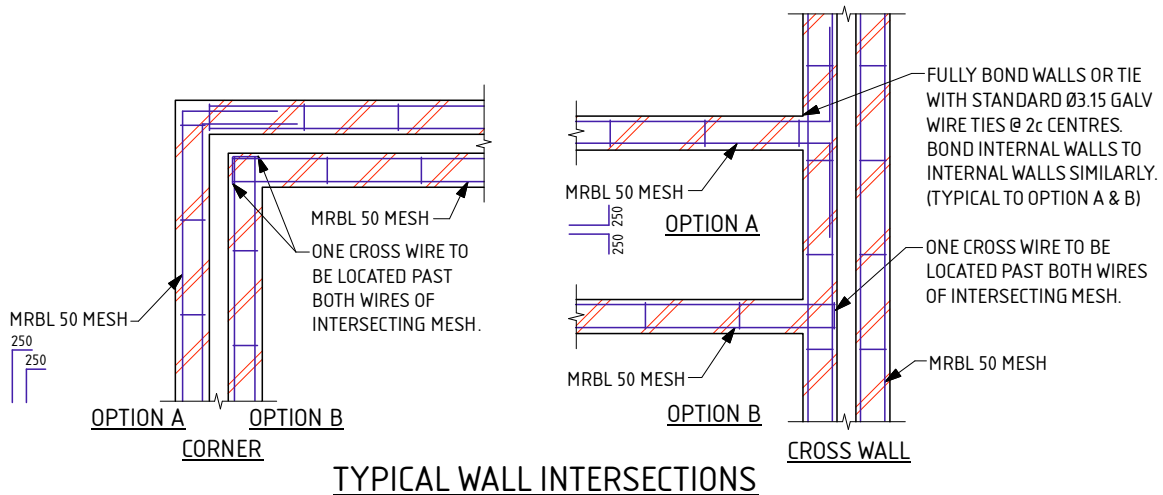
B1

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
1 ERINDALE ROAD, BALCATTA WA 6021
TEL (08) 9205 4500 FAX (08) 9205 4541 EMAIL: perth@strucTerre.com.au

PROJECT: LOT 209 ESMERELDA PASS 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

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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

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- 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.
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- 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 209 ESMERELDA PASS 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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PROJECT :
LOT 209 ESMERELDA PASS 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 ≤ 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' text.

SITE CLASSIFICATION REPORT
CERTIFICATE 2590285

CLIENT PARCEL DARCH PTY LTD
JOB ADDRESS LOT 210 ESMERELDA PASS DARCH
CLIENT JOB NO.
OWNER
STRUCTERRE JOB NO. S1067842
DATE OF ASSESSMENT 4/5/22

SITE RECORD

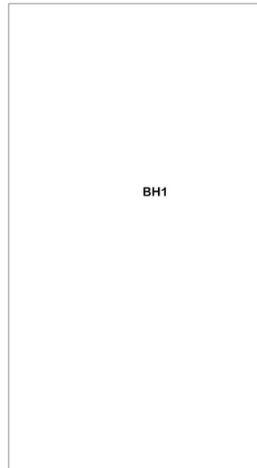


SITE CLASSIFICATION	A	<i>(in accordance with AS2870)</i>
FOOTING DETAIL	B1	
SAND PAD	No sand pad required structurally	
BUSHFIRE PRONE AREA	Not in a Bushfire Prone Area (see NOTE 2.)	
CORROSION CLASSIFICATION	R1	<i>(Durability Class in accordance with AS3700)</i>
WIND CLASSIFICATION	N1	<i>(in accordance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

SOIL PROFILE

BOREHOLE 1: 0 - 1200 SAND with gravel & artificial material - brown; 1200 - 1200 GRAVEL (limestone)

APPROXIMATE BOREHOLE LOCATIONS



Esmerelda Pass

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

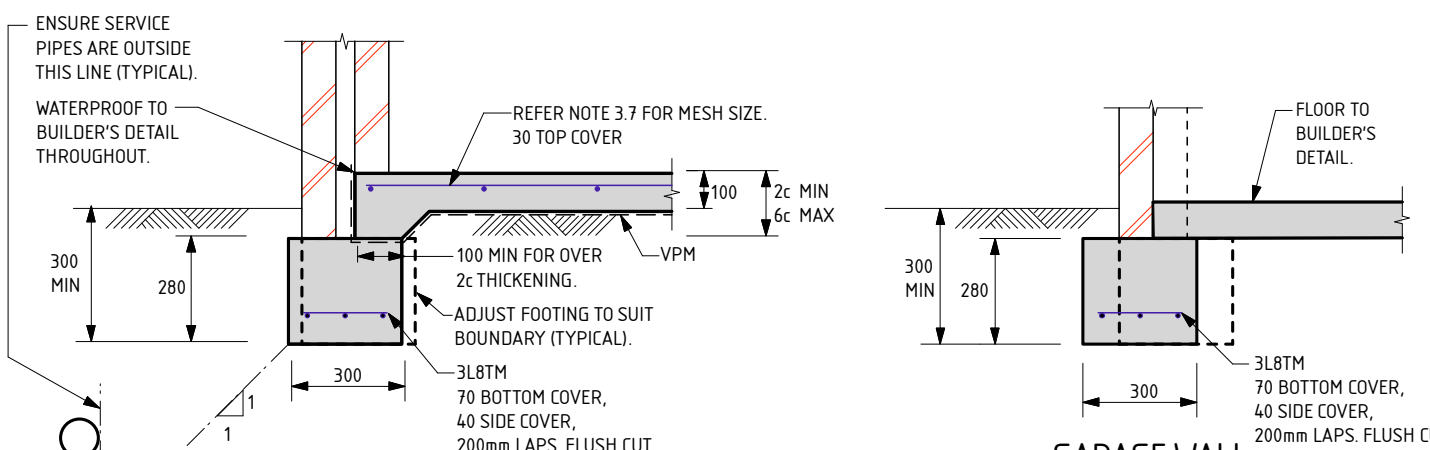
Site Condition

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 --

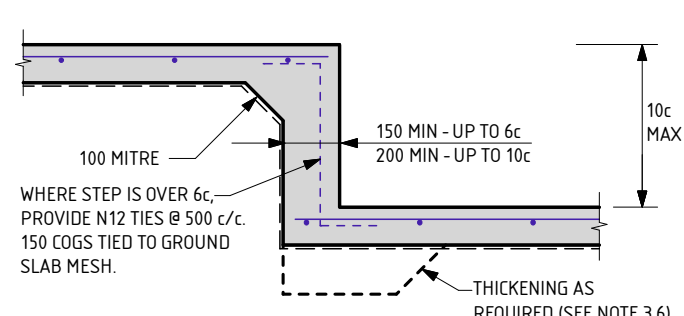


EXTERNAL WALLS

GARAGE WALL



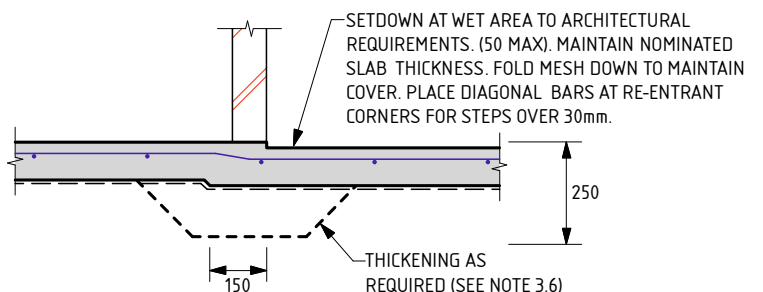
FOOTING STEP



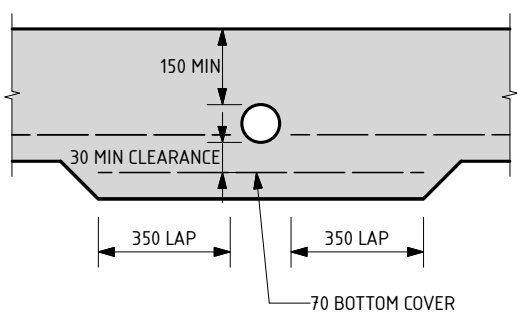
SLAB STEP



**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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 - 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.

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- 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.
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 - 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.

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- L INDICATES PLAIN OR DEFORMED WIRE R500L OR D500L TO AS/NZS 4671.
- SL INDICATES DEFORMED SQUARE MESH D500L TO AS/NZS 4671.
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- 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.

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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 210 ESMERELDA PASS DARCH

CLIENT :

PARCEL DARCH PTY LTD

SCALE

1:20

APPROVED

DATE

11/5/22

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 210 ESMERELDA PASS DARCH

CLIENT : PARCEL DARCH PTY LTD

SCALE 1:20

DATE 11/5/22

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 ≤ 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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DATE 11/5/22

APPROVED

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

SITE CLASSIFICATION REPORT
CERTIFICATE 2590232

CLIENT PARCEL DARCH PTY LTD
JOB ADDRESS LOT 211 ESMERELDA PASS DARCH
CLIENT JOB NO.
OWNER
STRUCTERRE JOB NO. S1067840
DATE OF ASSESSMENT 4/5/22

SITE RECORD

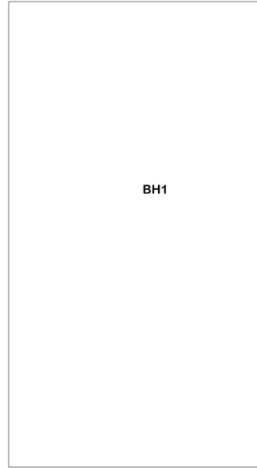


SITE CLASSIFICATION	A	<i>(in accordance with AS2870)</i>
FOOTING DETAIL	B1	
SAND PAD	No sand pad required structurally	
BUSHFIRE PRONE AREA	Not in a Bushfire Prone Area (see NOTE 2.)	
CORROSION CLASSIFICATION	R1	<i>(Durability Class in accordance with AS3700)</i>
WIND CLASSIFICATION	N1	<i>(in accordance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

SOIL PROFILE

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

APPROXIMATE BOREHOLE LOCATIONS



Esmereilda Pass

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

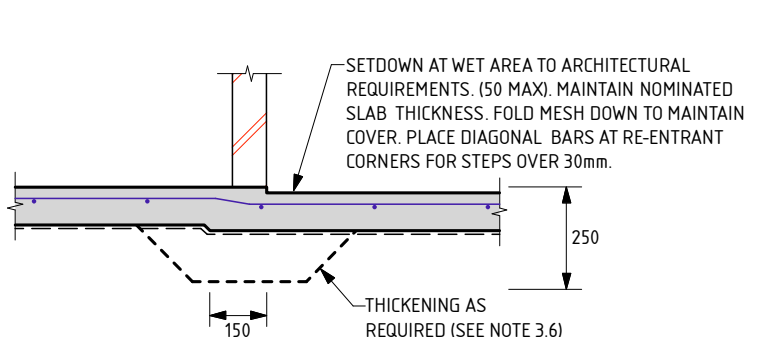
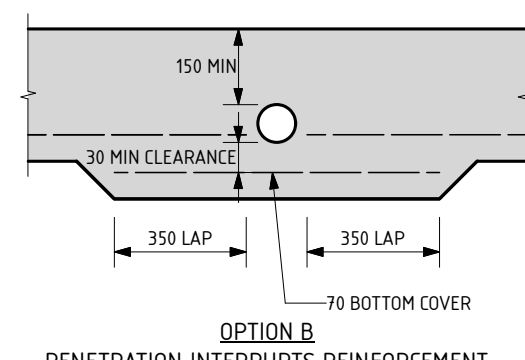
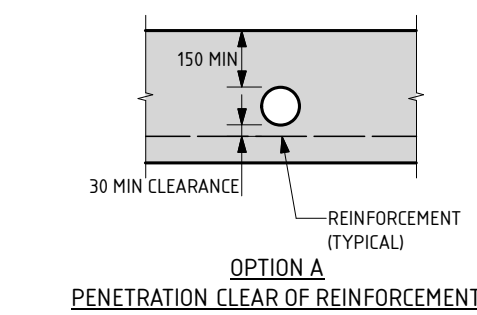
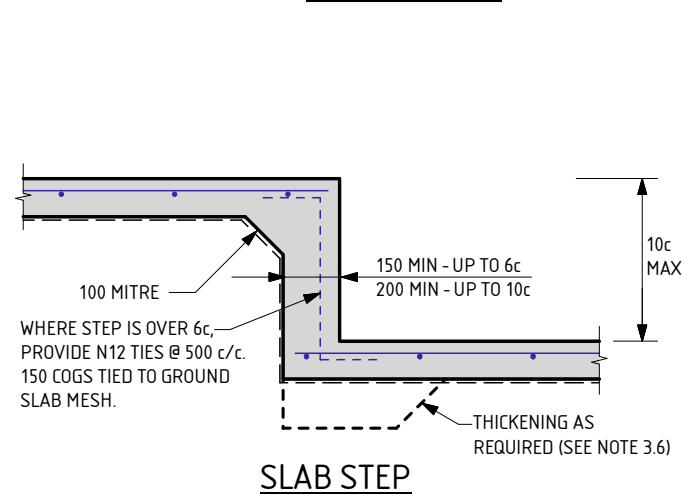
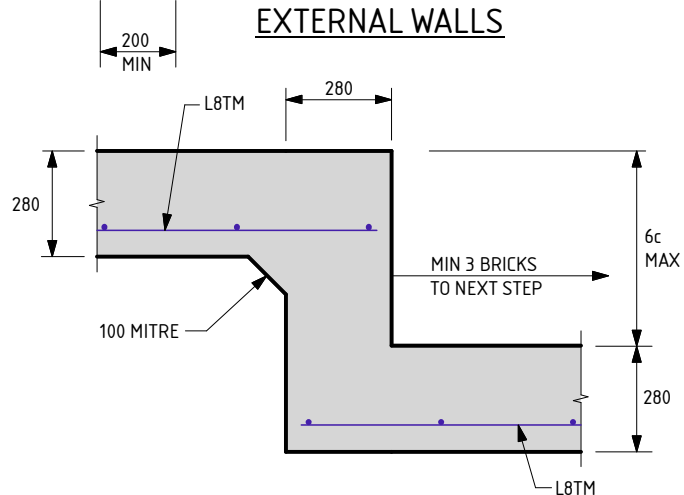
Site Condition

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 --



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

STRUCterre
consulting engineers

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PROJECT: LOT 211 ESMERELDA PASS DARCH	
CLIENT: PARCEL DARCH PTY LTD	
SCALE: 1:20	APPROVED
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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.

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SHEET 2 OF 2



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SAND PAD

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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 211 ESMERELDA PASS DARCH

CLIENT : PARCEL DARCH PTY LTD

SCALE 1:20

DATE 9/5/22

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 ≤ 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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APPROVED

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