

Certificate of controlled fill

Site: Lot 2261 Oakland Avenue, Mount Barker
Job No: 274804- S52672 Blefari Stage 5, MOUNT BARKER, SA 5251
Date: 11/01/2022
Revision No: A

Site earthworks

Site preparation within the area certified as being 'controlled fill' [the extent of which is defined by the area hatched in red on Greenhill Drawing No. 20-2458-002 Rev 0, and fill was placed and compacted under the supervision of FMG Research between 30/03/2021 and 8/10/2021.

The topsoil, vegetation, and any existing 'uncontrolled fill' was removed. The surface was confirmed to be 'natural ground' then proof rolled to verify a firm stable base prior to filling.

The level of subgrade was recorded prior to fill commencing. The Filling (consisting of Sandy Gravelly Clay/ Sandy Clay won from the site) was placed, compacted and tested under the supervision of FMG Research in accordance with the requirements for Level 1 Supervision set out in AS3798 'Guidelines on Earthworks for Commercial and Residential Developments'.

Field density tests have been carried out with test locations selected randomly, and have reached a minimum compacted density of 95% in accordance with AS1289 5.1.1 (Standard Compaction). The final fill level was recorded.

Certification

The filling placed and compacted within the area [the extent of which is defined by the area hatched in red on Greenhill Drawing No. 20-2458-002 Rev 0 in our opinion can be considered as 'controlled fill' meeting the requirements of AS2870 'Residential Slabs and Footings' for the purpose of footing design. This certification is not applicable for structures that imply loading outside the scope of AS2870.

The certificate applies to fill placed from the recorded subgrade level up to the final fill level as recorded on the plans attached and held at FMG Research. Any filling discovered outside the defined area or to a depth significantly greater than shown on the plan(s) and any topsoil/ landscaping fill placed is not included in this certification.

Retaining wall and fill batter note

Any filling on the high side of a retaining wall within a zone of width equal to the height of the retaining wall shall not be considered controlled fill. Design of footings and structures in this zone needs to be considered by the footing designer considering the fill as uncontrolled.

Any fill within an angle of 30° degrees from the base of a fill batter shall not be considered controlled fill. *Note the actual angle depends on soil type and should be confirmed by the engineer if footings are proposed to be within or adjacent to this zone.

Important notes regarding this certificate

This certification is based on the supervision and testing undertaken during our engagement and at the time of the certification. Any subsequent site works may impact on this certification. FMG Research is an experienced geotechnical inspection and testing authority (GITA) and all due care has been taken

when assessing and defining 'natural' ground. Should conditions encountered on site be markedly different from those anticipated and described in this report then FMG Engineering should be notified immediately.



Jeff Zanker

BEng (Civil & Water) (Hons) BAppSc (EnvMgt) GradCertPavtTech CPEng NER,
Senior Civil Engineer, FMG Engineering

Attached:

1. Greenhill Drawing No. 20-2458-002 Rev 0
2. Alexander Symonds Drawing No. 21A0723.C0005 Topsoil Strip Levels Rev 0 Sheet 3 of 4
3. Alexander Symonds Drawing No. 21A0723.C0005 Topsoil Strip Levels Rev 0 Sheet 4 of 4
4. Alexander Symonds Drawing No. 21A0723.C0005 Post Fill Levels Rev 0 Sheet 3 of 4
5. Alexander Symonds Drawing No. 21A0723.C0005 Post Fill Levels Rev 0 Sheet 4 of 4

The work carried out in the preparation of this report has been performed in accordance with the requirements of FMG Engineering's Quality Management System which is certified by BSI Group ANZ Pty Limited to comply with the requirements of ISO9001: 2015. This report is copyright to FMG Engineering. This report was prepared specifically for the client named and for the purposes described in the Introduction or scope. No part of this report including the whole of same shall be used for any other purpose nor by any third party without the prior written consent of FMG Engineering.



0	22.12.2021	INITIAL RELEASE	AS	NM
REV	DATE	DESCRIPTION	CALC	FIELD
ADDITIONS, AMENDMENTS AND APPROVALS				

47.51 NATURAL SURFACE POINTS	
LEGEND	
AS	NM
CALC	FIELD

COORDINATE SYSTEM
VERTICAL: AHD
HORIZONTAL: GROUND PLANE ORIENTED TO: MGA 94 ZONE 54
SCALE: GROUND (CSF = 1.0000021)
ADOPTED STATION & AUTHORITY
PSM 6627/14226 RL: 350.142 SDB
PSM 6627/14226 E: 307216.149 SDB
N: 6114638.370 SDB
SDB denotes SA Government survey data base values (Dated: / / 2015)

NOTES
Property boundaries and easements shown hereon have been compiled from government records and show discrepancies to Certificate of Title dimensions. Boundaries have not been verified by field survey. Construction or design on or near boundaries or easements will require additional survey work.

0 2 4 8 12 16 20 m
1:200
ORIGINAL SHEET SIZE A1
GRID INT: 50m
CONTOUR INTERVAL: MAJ:1.0m & MIN:0.2m
SURVEY: NM 23.03.2021
DRAWN: AS 22.12.2021
CHECKED: RES 22.12.2021

Alexander & Symonds Pty Ltd
11 King William Street Kent Town,
South Australia 5067
PO Box 1000 Kent Town, SA 5071
ABN 93007 753 988

T (08) 8130 1666
F (08) 8362 0099
W www.alexander.com.au
E adelaide@alexander.com.au

+ Property + Land Development +
+ Construction + Mining +
+ Spatial Information Management +

Alexander Symonds
Surveying Consultants

POST TOPSOIL STRIP SURVEY STAGE 5 - BLEFARI MOUNT BARKER		DRAWING No.	SHEET 3 OF 4	REVISION
21A0723.C0005 Topsoil Strip Levels Rev 0				0



0	22.12.2021	INITIAL RELEASE	AS	NM
REV	DATE	DESCRIPTION	CALC	FIELD
ADDITIONS, AMENDMENTS AND APPROVALS				

47.51 NATURAL SURFACE POINTS	
LEGEND	

COORDINATE SYSTEM	
VERTICAL:	AHD
HORIZONTAL:	GROUND PLANE ORIENTED
TO: MGA 94 ZONE 54	
SCALE: GROUND (CSF = 1.0000021)	
ADOPTED STATION & AUTHORITY	
PSM 6627/14226	RL: 350.142 SDB
PSM 6627/14226	E: 307216.149 SDB
N: 6114638.370 SDB	
SDB denotes SA Government survey data base values (Dated: / / 2015)	

0248121620

1:200

ORIGINAL SHEET SIZE A1

Notes:

Property boundaries and easements shown hereon have been compiled from government records and show discrepancies to Certificate of Title dimensions. Boundaries have not been verified by field survey. Construction or design on or near boundaries or easements will require additional survey work.

GRID INT:

CONTOUR INTERVAL:

SURVEY:

DRAWN:

CHECKED:

50m

MAJ:1.0m & MIN:0.2m

NM

AS

RES

22.03.2021

22.12.2021

22.12.2021

Alexander & Symonds Pty Ltd
11 King William Street Kent Town,
South Australia 5067
PO Box 1000 Kent Town, SA 5071
ABN 93007 753 988

T

F

W

E

(08) 8130 1666

(08) 8362 0099

www.alexander.com.au

adelaide@alexander.com.au

+ Property + Land Development +

+ Construction + Mining +

+ Spatial Information Management +

Alexander
Symonds
Surveying
Consultants

POST TOPSOIL STRIP SURVEY
STAGE 5 - BLEFARI
MOUNT BARKER

DRAWING No.

21A0723.C0005 Topsoil Strip Levels Rev 0

SHEET 4 OF 4

REVISION

0



0	20.12.2021	INITIAL RELEASE	AS	PSW
REV	DATE	DESCRIPTION	CALC	FIELD
ADDITIONS, AMENDMENTS AND APPROVALS				

47.51	NATURAL SURFACE POINTS
---	BOTTOM OF BANK
---	TOP OF BANK
---	CHANGE OF GRADE

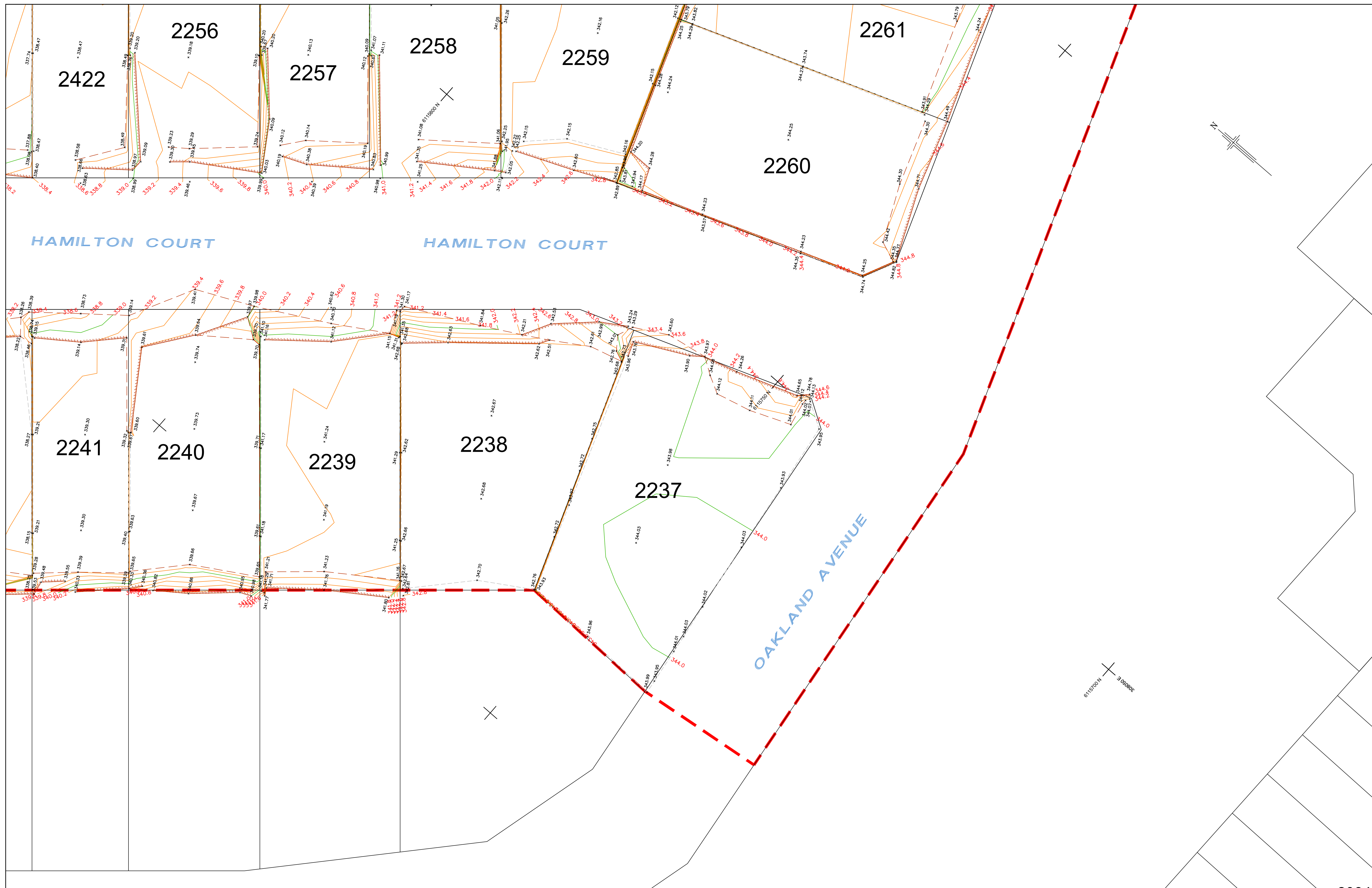
LEGEND

COORDINATE SYSTEM	
VERTICAL:	AHD
HORIZONTAL:	GROUND PLANE ORIENTED TO: MGA 94 ZONE 54
SCALE: GROUND	(CSF = 1.00000021)
ADOPTED STATION & AUTHORITY	
PSM 6627/14226	RL: 350.142 SDB
PSM 6627/14226	E: 307216.149 SDB
N: 6114638.370 SDB	
SDB denotes SA Government survey data base values (Dated: / / 2015)	

0 2 4 8 12 16 20 m	
1:200	
ORIGINAL SHEET SIZE A1	
ALEXANDER & SYMONDS PTY. LTD.	
Notes: Property boundaries and easements shown hereon have been compiled from government records and show discrepancies to Certificate of Title dimensions. Boundaries have not been verified by field survey. Construction or design on or near boundaries or easements will require additional survey work.	
GRID INT:	50m
CONTOUR INTERVAL:	MAJ:1.0m & MIN: 0.2m
SURVEY:	PSW 17.12.2021
DRAWN:	AS 20.12.2021
CHECKED:	RES 20.12.2021

Alexander & Symonds Pty Ltd 11 King William Street Kent Town, South Australia 5067 PO Box 1000 Kent Town, SA 5071 ABN 93007 753 988	
T	(08) 8130 1666
F	(08) 8362 0099
W	www.alexander.com.au
E	ade@alexander.com.au
+ Property + Land Development + + Construction + Mining + + Spatial Information Management +	

POST FILL LEVEL SURVEY STAGE 5 - BLEFARI MOUNT BARKER	
DRAWING No.	SHEET 3 OF 4
21A0723.C0005 Post Fill Levels Rev 0	
REVISION	0



0	20.12.2021	INITIAL RELEASE	AS	PSW
REV	DATE	DESCRIPTION	CALC	FIELD
ADDITIONS, AMENDMENTS AND APPROVALS				

47.51	NATURAL SURFACE POINTS
---	BOTTOM OF BANK
----	TOP OF BANK
---	CHANGE OF GRADE

LEGEND

COORDINATE SYSTEM	
VERTICAL:	AHD
HORIZONTAL:	GROUND PLANE ORIENTED TO: MGA 94 ZONE 54
SCALE: GROUND (CSF = 1.0000021)	
ADOPTED STATION & AUTHORITY	
PSM 6627/14226	RL: 350.142 SDB
PSM 6627/14226	E: 307216.149 SDB
N: 6114638.370 SDB	
SDB denotes SA Government survey data base values (Dated: / / 2015)	

Notes:
Property boundaries and easements shown hereon have been compiled from government records and show discrepancies to Certificate of Title dimensions.
Boundaries have not been verified by field survey.
Construction or design on or near boundaries or easements will require additional survey work.



1:200

ORIGINAL SHEET SIZE A1

GRID INT:	50m
CONTOUR INTERVAL:	MAJ:1.0m & MIN: 0.2m
SURVEY:	PSW 17.12.2021
DRAWN:	AS 20.12.2021
CHECKED:	RES 20.12.2021

Alexander & Symonds Pty Ltd
11 King William Street Kent Town,
South Australia 5067
PO Box 1000 Kent Town, SA 5071
ABN 93007 753 988

T (08) 8130 1666
F (08) 8362 0099
W www.alexander.com.au
E adelaide@alexander.com.au
+ Property + Land Development +
+ Construction + Mining +
+ Spatial Information Management +



POST FILL LEVEL SURVEY
STAGE 5 - BLEFARI
MOUNT BARKER

DRAWING No.	SHEET 4 OF 4	REVISION
21A0723.C0005 Post Fill Levels Rev 0		0