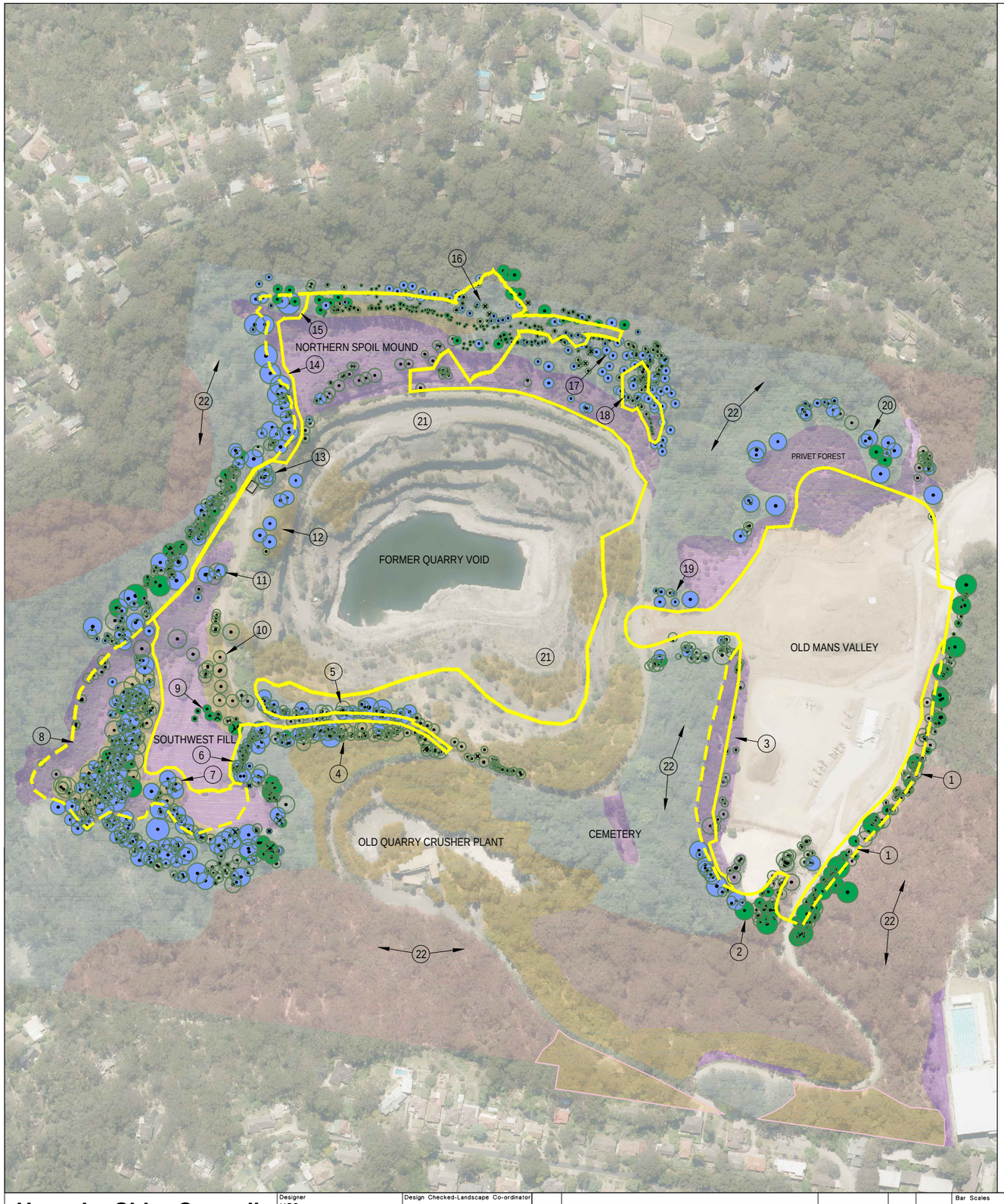


NOTES - VEGETATION AND EXTENT OF WORKS

1. **Old Mans Valley (eastern edge area)**
Significant trees and vegetation in this area are being protected. The Extent of Works line has been adjusted to protect Blackbutt Gully Forest. It is noted that the root zone of most trees here sit on a rock shelf high above the area of works.

2. **Old Mans Valley (south area)**
Design adjustments have been made to protect a Blue Gum tree in this vicinity.

3. **Old Mans Valley (west area)**
The limit of works line has been adjusted to protect vegetation this area. Substantial rehabilitation and restoration of natural vegetation is planned for this area.

4. **Quarry South Track (upper side)**
Very steep slopes with unconsolidated soils exist in this area. Significant native trees in this area will be retained and protected, as they are outside the Extent of Works. Some trees in this area have fallen due to extreme slope and unconsolidated soils. Trees that pose an unreasonable risk will be removed.

5. **Quarry South Track (lower side and Quarry Void slope)**
Essential engineering works will be carried out to stabilise this track. Trackside vegetation protection will be prioritised in design and works. Extremely steep unstable slopes of the southern quarry walls will require detailed assessment. Depending on findings, works along the top of the cliff may require the removal of unstable trees that are vulnerable to failure and may contribute to further slope instability.

6. **South West Area (east side)**
Blue Gum and Blackbutt vegetation in this area will be protected and enhanced over time.

7. **South West Area (south side)**
The Extent of Works has been amended here to ensure protection of quality vegetation, including Blue Gum and Blackbutt trees in this area.

8. **South West Area (west side)**
The Extent of Works has been amended here to ensure protection of quality vegetation, including Blue Gum and Blackbutt trees in this area.

9. **South West Area (central area)**
Due to the need to regrade this area, it is likely that 5 Blackbutt trees in this area will require removal. Substantial planting, rehabilitation and restoration of natural vegetation is planned for this area.

10. **South West Area (central area)**
Due to the need to regrade this area, it is likely that some non-endemic Casuarina trees will require removal. Substantial planting, rehabilitation and restoration of natural vegetation is planned for this area.

11. **South West Area (north area)**
Due to the need to substantially regrade and stabilise this area, it is likely that 3 Blue Gums in this area will be removed. Substantial planting, rehabilitation and restoration of natural vegetation is planned for this area.

12. **Quarry Void (western edge)**
While every effort will be made to retain trees in this area, due to stabilisation and regrading works it is likely Blue Gum trees growing on the quarry void edge will require removal. Substantial planting, rehabilitation and restoration of natural vegetation is planned for this area.

13. **Fuel Tank Area**
Protection of Blue Gum trees in this area is a high priority in design and works.

14. **Northern Spoil Mound (western edge)**
Significant forest trees and vegetation in this area is being protected. The Extent of Works line has been adjusted to ensure protection of Blue Gum trees in this area.

15. **Northern Spoil Mound (north-west)**
The Extent of Works line has been adjusted to ensure protection of Blue Gum trees in this area.

16. **Northern Spoil Mound (central area)**
Due to an identified high risk of potential slope failure, this area will be subject to essential regrading, drainage rectification and remediation. As a result, tree vegetation in this area will need to be removed. With the works providing improved conditions for revegetation, substantial planting and restoration of natural forest vegetation is planned for this area. Adjacent areas outside the Extent of Works line will be protected.

17. **Northern Spoil Mound**
This area is outside the Extent of Works line. Regrading and drainage rectification works required in parts of the Northern Spoil Mound (central area), will ensure the long-term stability of this vegetated embankment.

18. **Northern Spoil Mound (north works area)**
Due to an identified high risk of potential slope failure, this area will be subject to essential regrading and remediation. As a result, tree vegetation within the Extent of Works line will need to be removed. With the works providing improved conditions for revegetation, substantial planting and restoration of natural forest vegetation is planned for this area. Adjacent areas out of the limit of works line will be protected.

19. **Quarry Access Track**
The trees in this area are outside the Extent of Works. They will be protected.

20. **Old Mans Valley (north)**
The trees in this area are outside the Extent of Works. They will be protected.

21. **Quarry Void Walls and Ramps**
Geotechnical advice will further inform retention or removal of primarily non-endemic vegetation in these areas. Planting and restoration are planned for some areas within the Quarry Void to enhance habitat and amenity of the area.

22. **Hornsby Park Areas Generally**
The preliminary Vegetation Management Plan (VMP) is a key component of the overall environmental 'Offsets Package' for the Hornsby Park proposal. It will guide the development of a final detailed VMP for the sites' natural forest environment restoration and rehabilitation. The Offsets Package will include the final VMP to guide ongoing management of the site's biodiversity values in perpetuity.

LEGEND

- Blue Gum *(Eucalyptus saligna)*
- Blackbutt *(Eucalyptus pilularis)*
- Other surveyed trees
- Dead Tree
- Former extent of works line
- Revised extent of works line
- CEEC Blue Gum High Diatreme Forest areas
- Blackbutt Gully Forest (good quality/ regeneration)
- Blackbutt Gully Forest (moderate/ poor quality/ regeneration)
- Blackbutt Gully Forest (poor quality/ regeneration)

Hornsby Shire Council
Major Projects Branch
TELEPHONE: (02) 9847 6666
FACSIMILE: (02) 9847 6999

Designer: HSC | Design Checked-Landscape Co-ordinator | Signed:
Drawn: HSC | Drawing Checked | Signed:
Surveyor: HSC | – Field Book | – Level Book | AHD Datum
Project Identifier\-\CAD File Name: Hornsby Park Project – Vegetation and EOW
TRIM Document Number: –
Authorised for release - Landscape Coordinator
Name: R. MINTER Signed: Date:

Issue	Description	Name	Initial	Date
A	FOR INFORMATION – REVISED EXTENT OF WORKS AND VEG MAPPING	JAMES FRAWLEY	JF	07.11.19

Design not to be amended without authorisation by Manager Major Projects

Bar Scales: 0 50 100 150m
SCALE 1:2500 @ A1
SCALE 1:5000 @ A3
DO NOT SCALE, USE FIGURED DIMENSIONS ONLY

HORNSBY SHIRE COUNCIL
PO BOX 37, HORNSBY NSW 1630
DX 9655 HORNSBY

REVISED EXTENT OF WORKS AND VEGETATION MAPPING

Project Number: 100125
Sheet 1 of 1
Issue: A
HSC Drawing Number: -

LEGEND

- PRE-NORTHCONNEX FILL SURVEY SURFACE
- CADASTRE
- APPROX. NORTHCONNEX FILL SURFACE
- APPROX. NORTHCONNEX FILL BOUNDARY

A
FIG03A

0 30 60 90m
SCALE 1:3000 AT ORIGINAL SIZE

N

HORNSBY SHIRE COUNCIL
HORNSBY QUARRY REHABILITATION

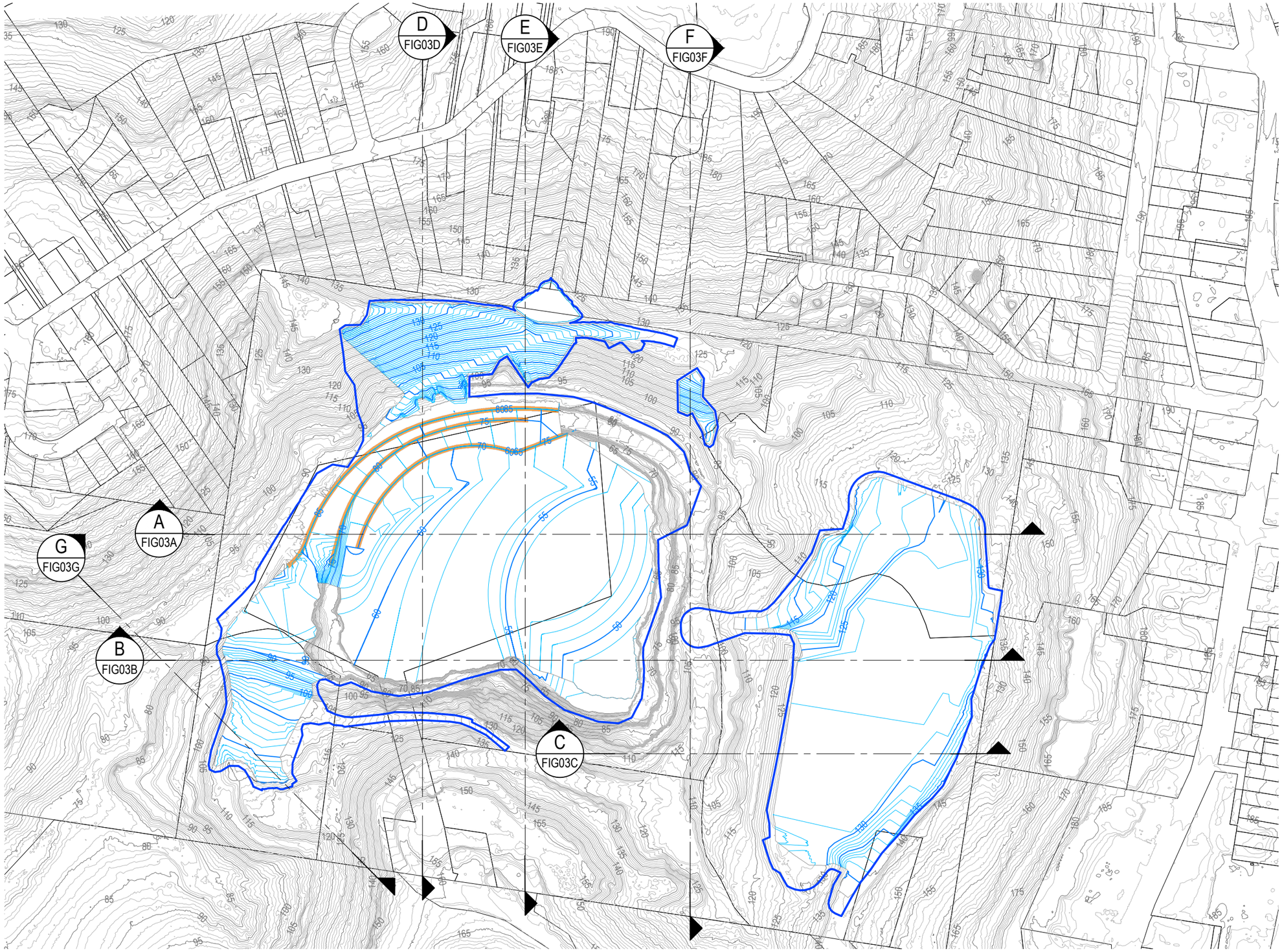
EXISTING SITE PLAN

Job Number 21-26457
Revision E
Date NOV 2019

Figure 01

Level 15, 133 Castlereagh Street, Sydney NSW 2000 Australia T 61 2 9239 7100 F 61 2 9239 7199 E sydmail@ghd.com W www.ghd.com

Plot Date: 11 November 2019 - 1:27 PM Plotted by: Alison Horlyck Cad File No: G:\21\26457\CADD\Drawings\21-26457-FIG01.dwg



LEGEND

- PRE-NORTHCONNEX FILL SURVEY SURFACE
- CADASTRE
- DESIGN SURFACE
- EXTENT OF WORKS
- RETAINING WALLS

0 50 100m

SCALE 1:3500 AT ORIGINAL SIZE

N

HORNSBY SHIRE COUNCIL
HORNSBY QUARRY REHABILITATION

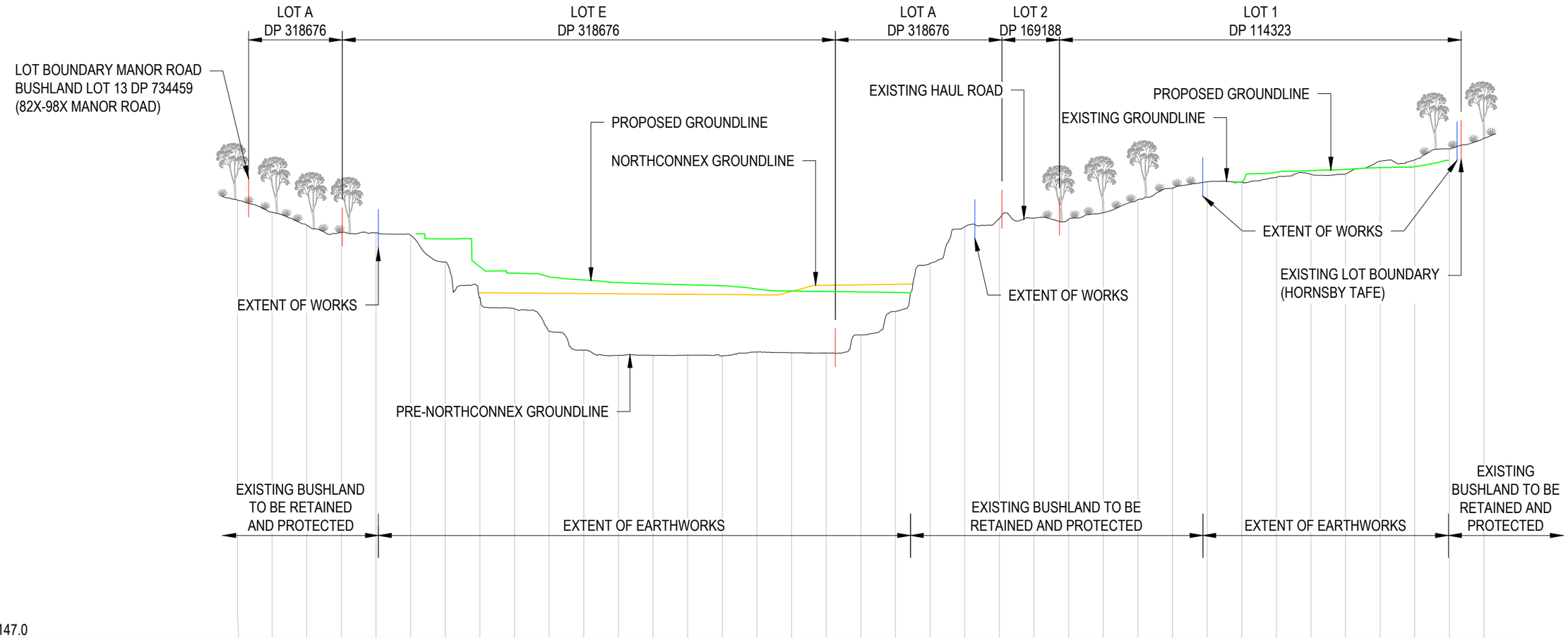
PROPOSED LANDFORM

Job Number 21-26457
Revision J
Date NOV 2019

Figure 02

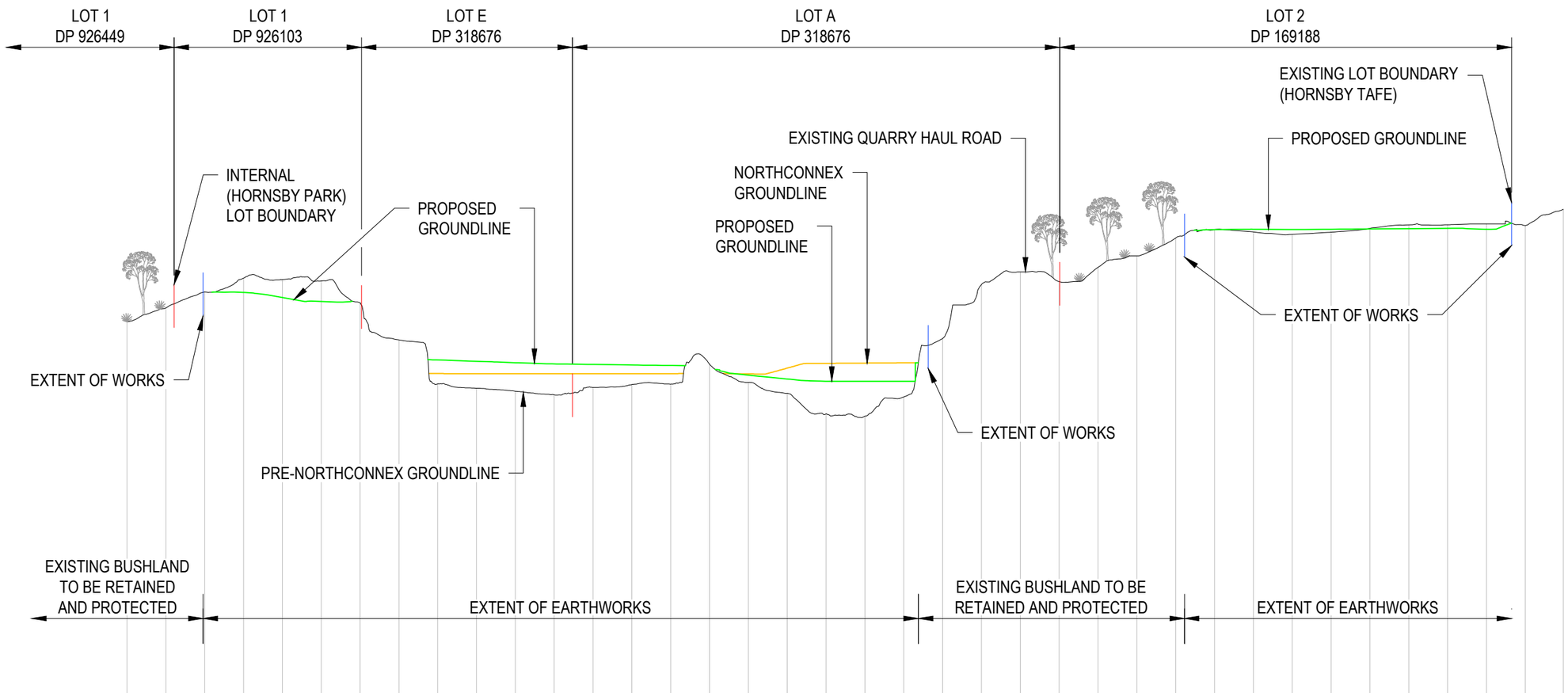
Level 15, 133 Castlereagh Street, Sydney NSW 2000 Australia T 61 2 9239 7100 F 61 2 9239 7199 E sydmail@ghd.com W www.ghd.com

Plot Date: 11 November 2019 - 1:29 PM Plotted by: Laurence Gae Posadas Cad File No: \\ghdnet\ghd\PH\Cebu\Projects\21\26457\CADD\Drawings\21-26457-FIG02.dwg



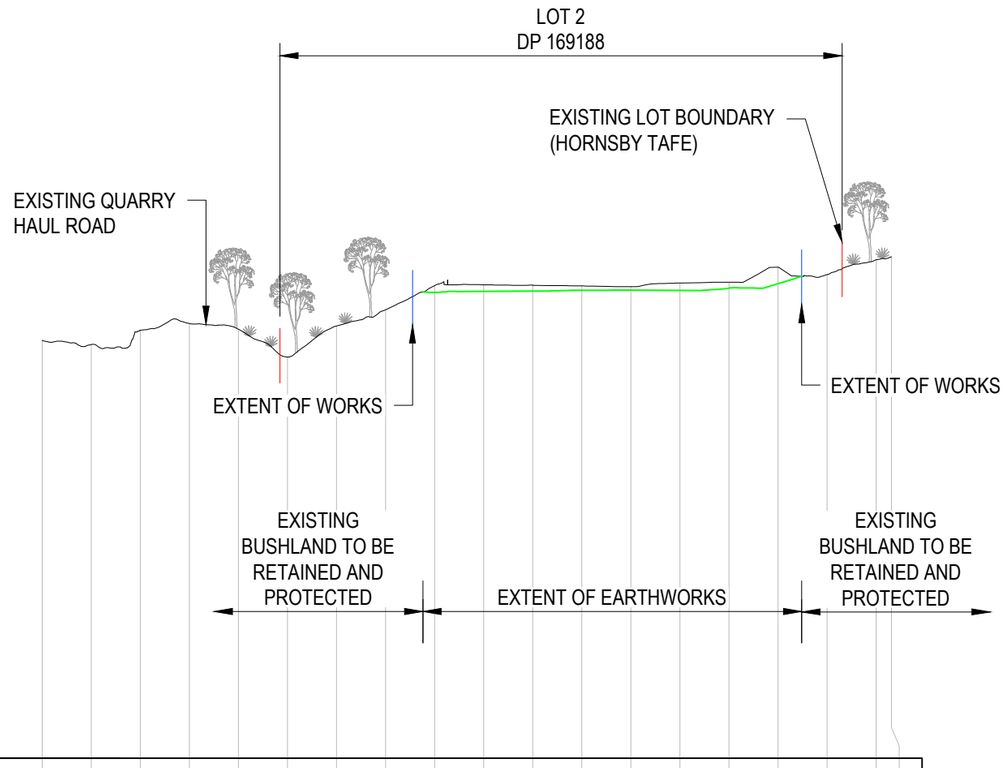
DATUM RL. -147.0

| | | |



DATUM RL. -133.0

| | | |



DATUM RL. -62.0

DESIGN SURFACE										127.86	128.32	128.45	128.68	128.78	128.68	129.70	131.40					
APPROX. NORTHCONNEX FILL SURFACE																						
PRE-NORTHCONNEX SURFACE	108.28	106.66	112.45	115.18	112.81	101.5	114.18	120.77	130.64	130.99	130.79	130.5	130.23	131.68	131.98	138.1	135.14	141.17	142.39			
CHAINAGE	0	20	40	60	80	100	120	140	160	180	200	220	240	260	280	300	320	340	346.26			

C SECTION

FIG02 SCALE 1 : 2500

0 25 50 75m

SCALE 1:2500 AT ORIGINAL SIZE

HORNSBY SHIRE COUNCIL
HORNSBY QUARRY REHABILITATION

CROSS SECTIONS
SHEET 3

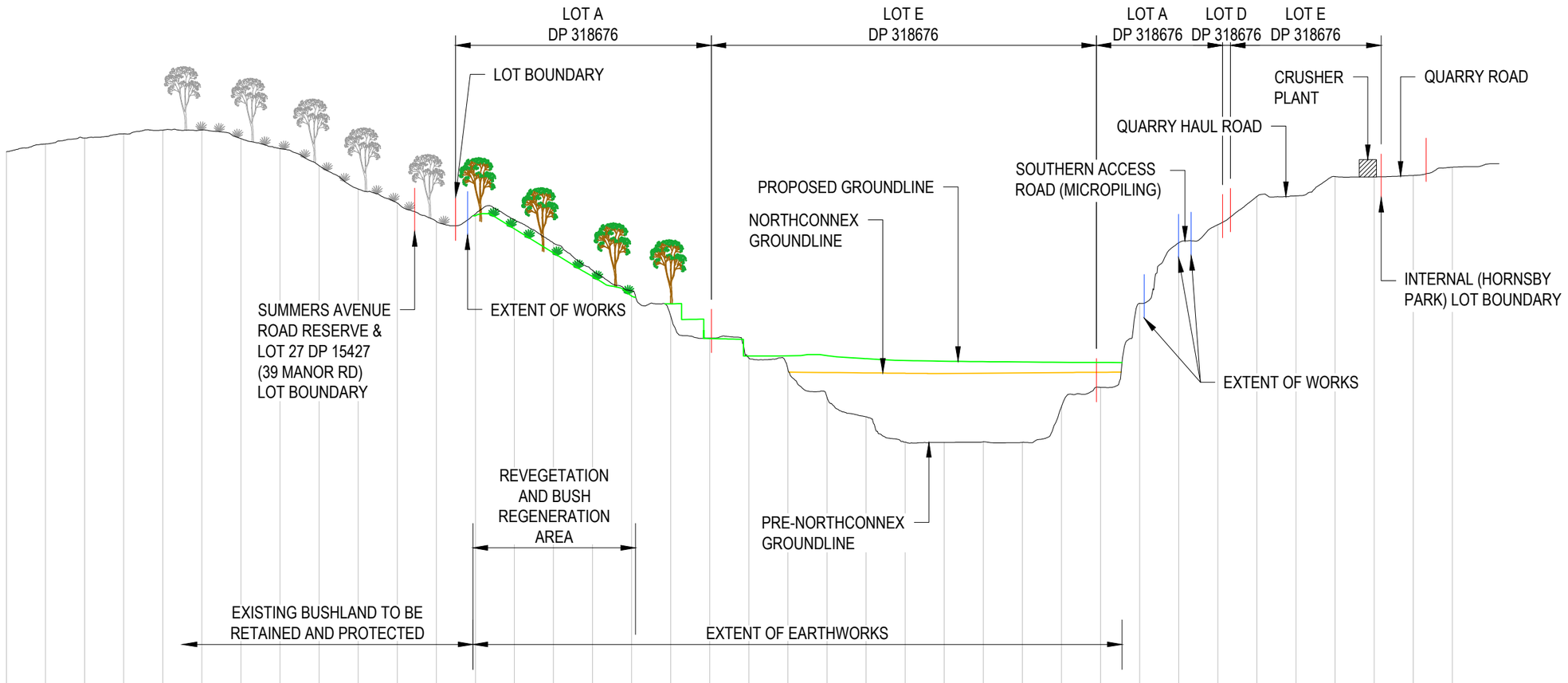
Job Number 21-26457
Revision J
Date NOV 2019

Figure 03C

Level 15, 133 Castlereagh Street, Sydney NSW 2000 Australia T 61 2 9239 7100 F 61 2 9239 7199 E sydmail@ghd.com W www.ghd.com

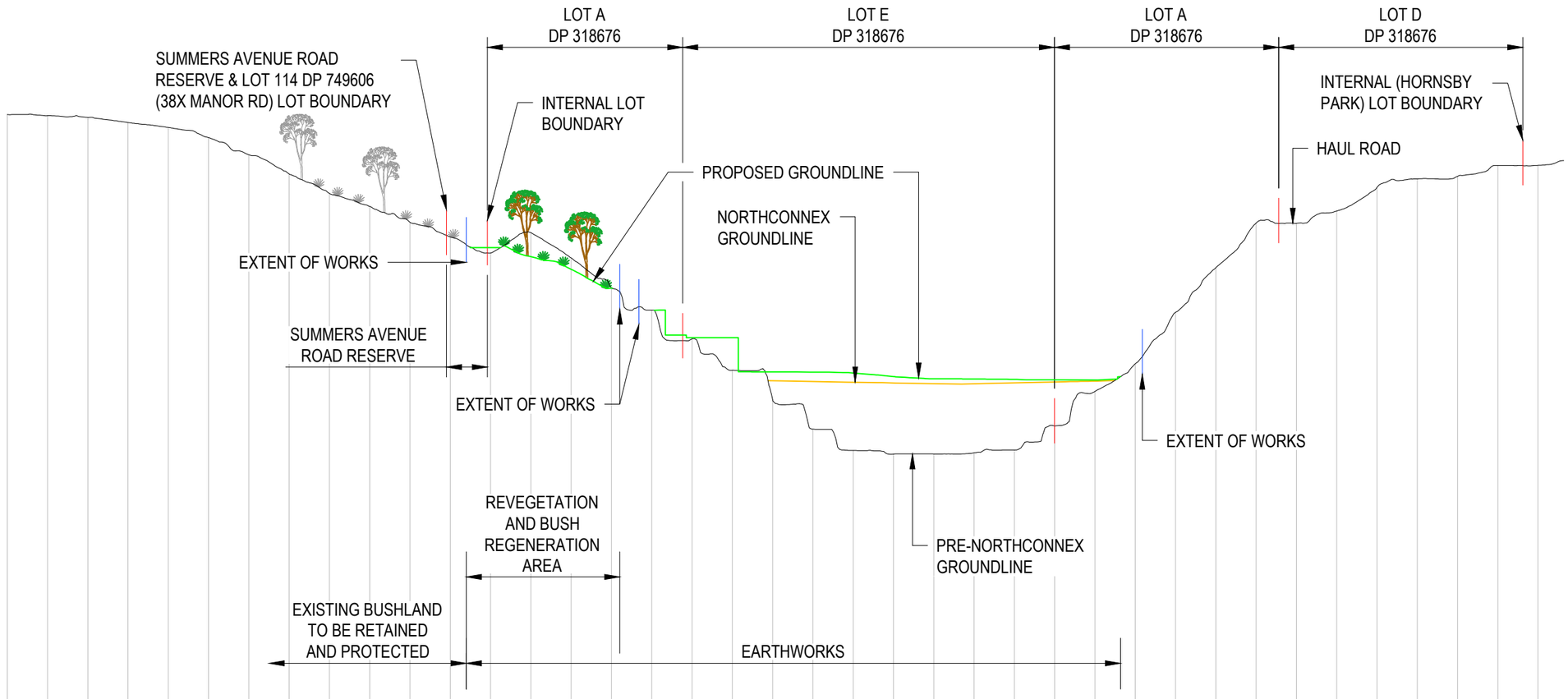
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Cad File No: \\ghdnet\ghd\PH\Cebu\Projects\21\26457\CADD\Drawings\21-26457-FIG03.dwg



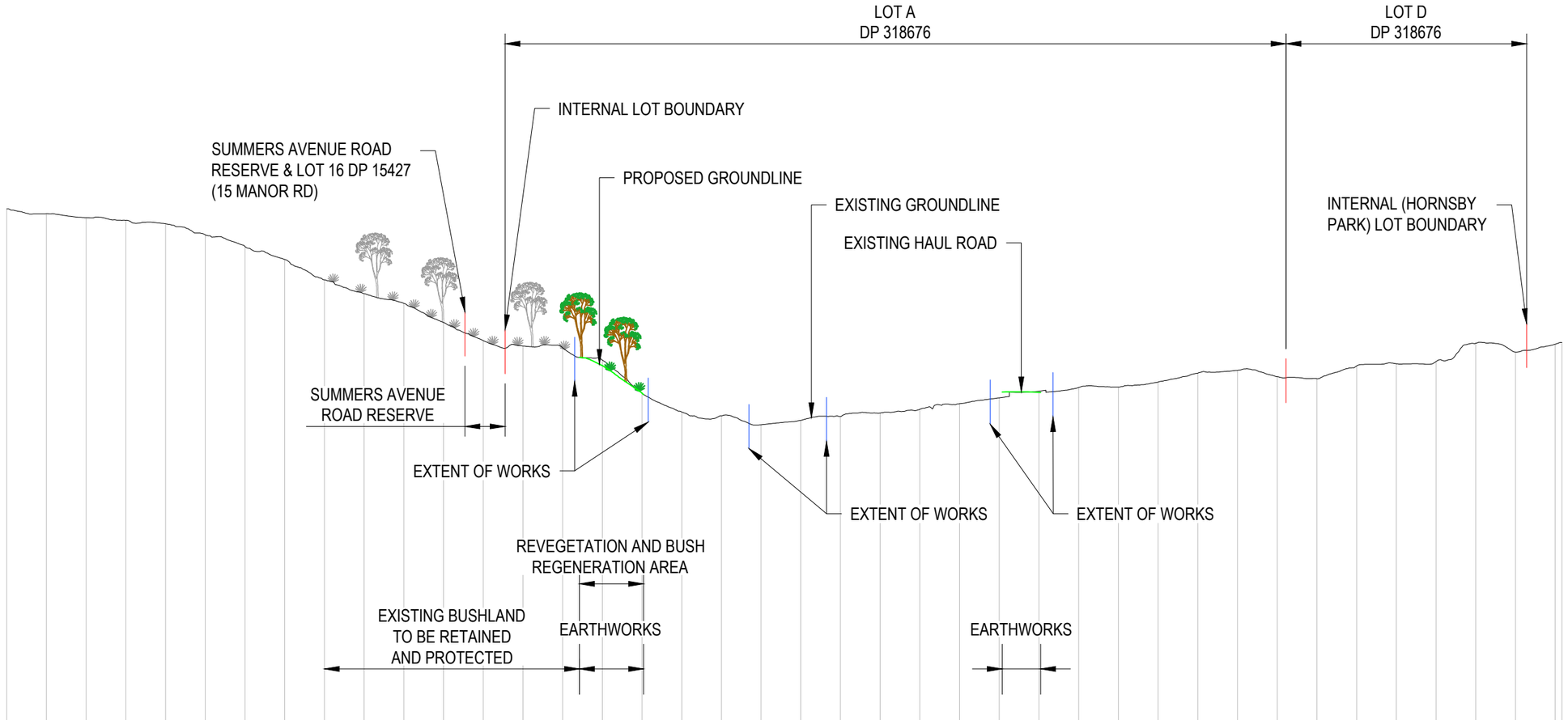
DATUM RL. -146.0

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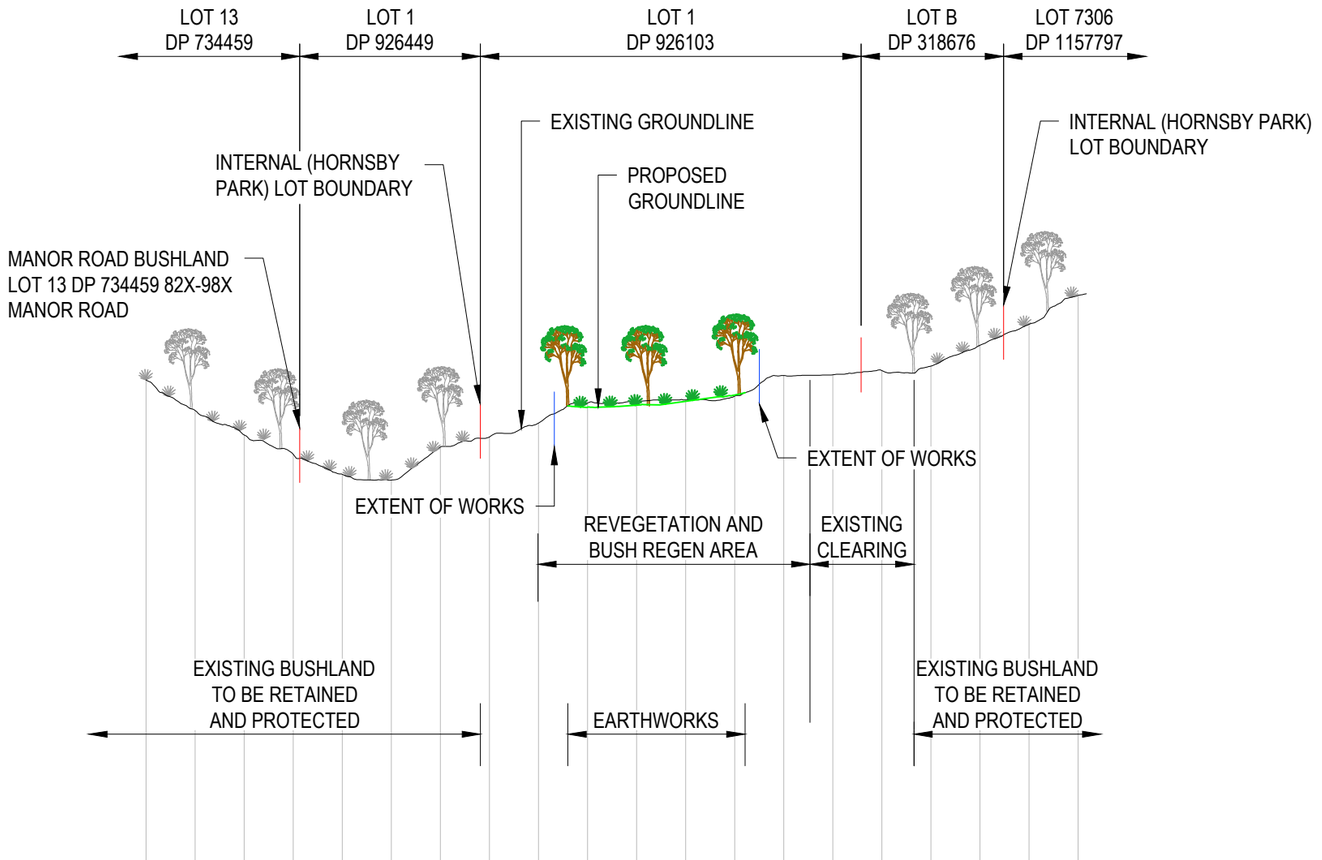
DATUM RL. -147.0

| | | |


LOT A
DP 318676
LOT D
DP 318676
INTERNAL LOT BOUNDARY
SUMMERS AVENUE ROAD
RESERVE & LOT 16 DP 15427
(15 MANOR RD)
PROPOSED GROUNDLINE
EXISTING GROUNDLINE
EXISTING HAUL ROAD
INTERNAL (HORNSBY
PARK) LOT BOUNDARY
SUMMERS AVENUE
ROAD RESERVE
EXTENT OF WORKS
EXTENT OF WORKS
EXTENT OF WORKS
REVEGETATION AND BUSH
REGENERATION AREA
EXISTING BUSHLAND
TO BE RETAINED
AND PROTECTED
EARTHWORKS
EARTHWORKS

DATUM RL. -76.0

| | | |



DATUM RL. -84.0

DESIGN SURFACE											109.06	109.89	111.46	114.02								
APPROX. NORTHCONNEX FILL SURFACE																						
PRE-NORTHCONNEX SURFACE	120.21	107.72	97.8	89.81	81.71	79.39	92.85	97	102.57	110.85	111.34	112.06	113.54	121.96	122.33	123.99	125.86	134.3	142.8	154.59		
CHAINAGE	0	20	40	60	80	100	120	140	160	180	200	220	240	260	280	300	320	340	360	380		

G SECTION

FIG02 SCALE 1 : 2500

0 25 50 75m

SCALE 1:2500 AT ORIGINAL SIZE

HORNSBY SHIRE COUNCIL
HORNSBY QUARRY REHABILITATION

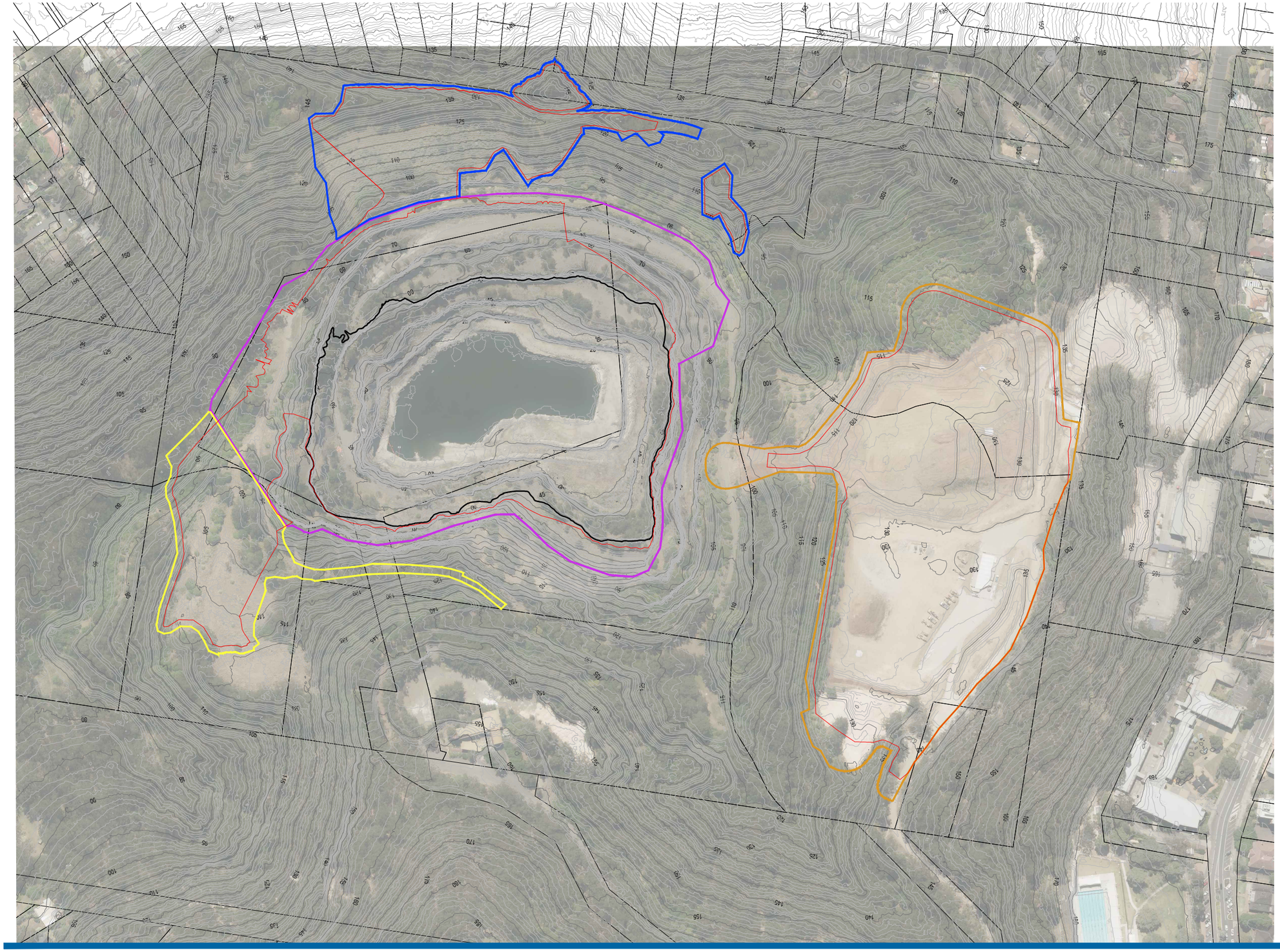
CROSS SECTIONS
SHEET 7

Job Number 21-26457
Revision J
Date NOV 2019

Figure 03G

Level 15, 133 Castlereagh Street, Sydney NSW 2000 Australia T 61 2 9239 7100 F 61 2 9239 7199 E sydmail@ghd.com W www.ghd.com

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LEGEND

- CADASTRE
- PRE-NORTHCONNEX FILL SURVEY SURFACE
- APPROX. NORTHCONNEX FILL BOUNDARY
- EARTHWORKS DESIGN EXTENT
- NORTHERN SPOIL MOUND WORKS AREA
- SOUTH-WEST FILL WORKS AREA
- QUARRY VOID WORKS AREA
- OLD MANS VALLEY WORKS AREA

0 30 60 90m

SCALE 1:3000 AT ORIGINAL SIZE

N

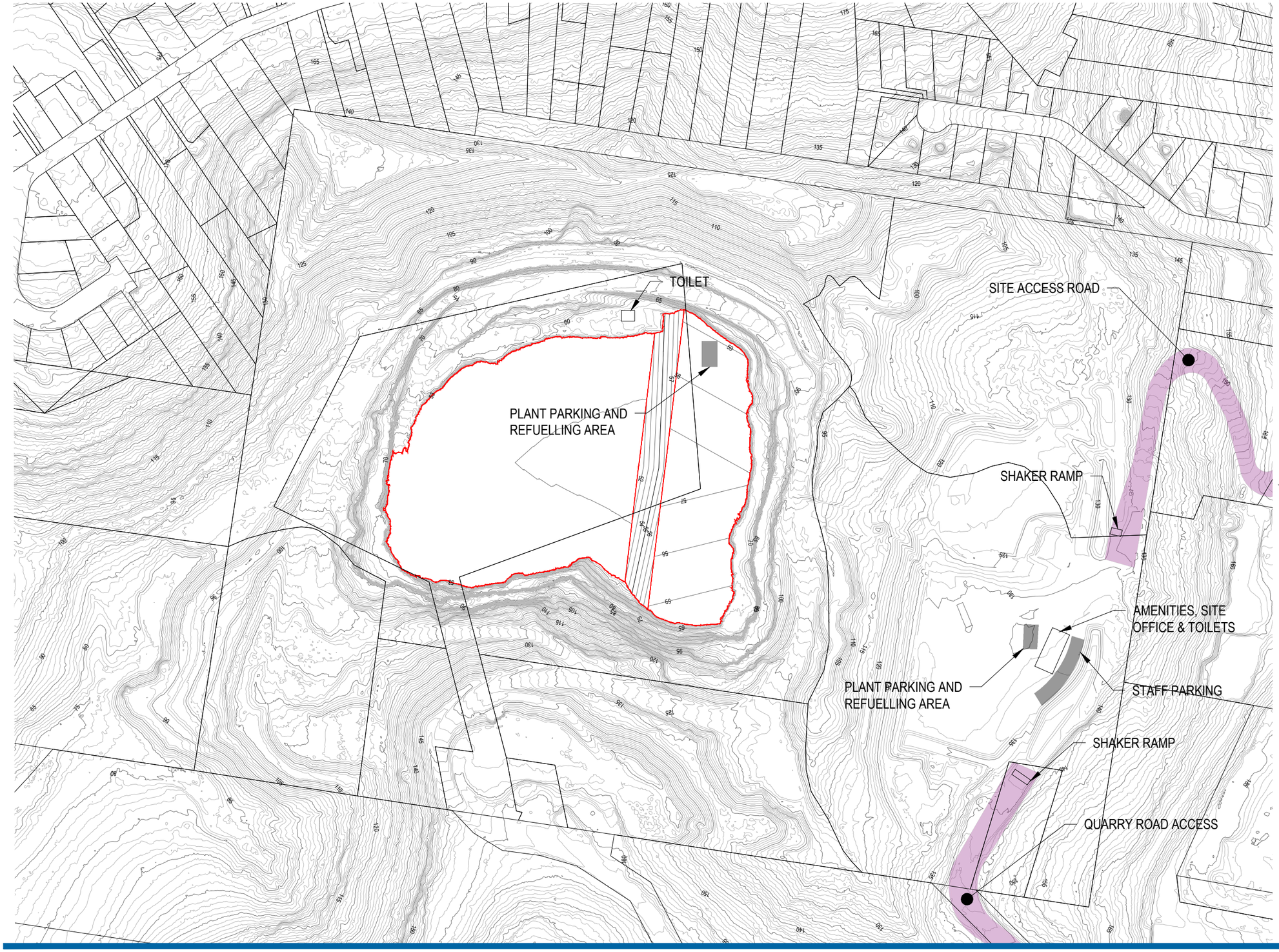
HORNSBY SHIRE COUNCIL
HORNSBY QUARRY REHABILITATION
EXTENT OF WORKS

Job Number 21-26457
Revision E
Date NOV 2019

Figure 04

Level 15, 133 Castlereagh Street, Sydney NSW 2000 Australia T 61 2 9239 7100 F 61 2 9239 7199 E sydmail@ghd.com W www.ghd.com

Plot Date: 11 November 2019 - 11:54 AM Plotted by: Alison Horlyck Cad File No: G:\21\26457\CADD\Drawings\21-26457-FIG6.1.dwg



LEGEND

- SURVEY SURFACE
- APPROX. FILL SURFACE (NORTHCONNEX)
- APPROX. FILL BOUNDARY (NORTHCONNEX)

0 30 60 90m

SCALE 1:3000 AT ORIGINAL SIZE

N

HORNSBY SHIRE COUNCIL
HORNSBY QUARRY REHABILITATION

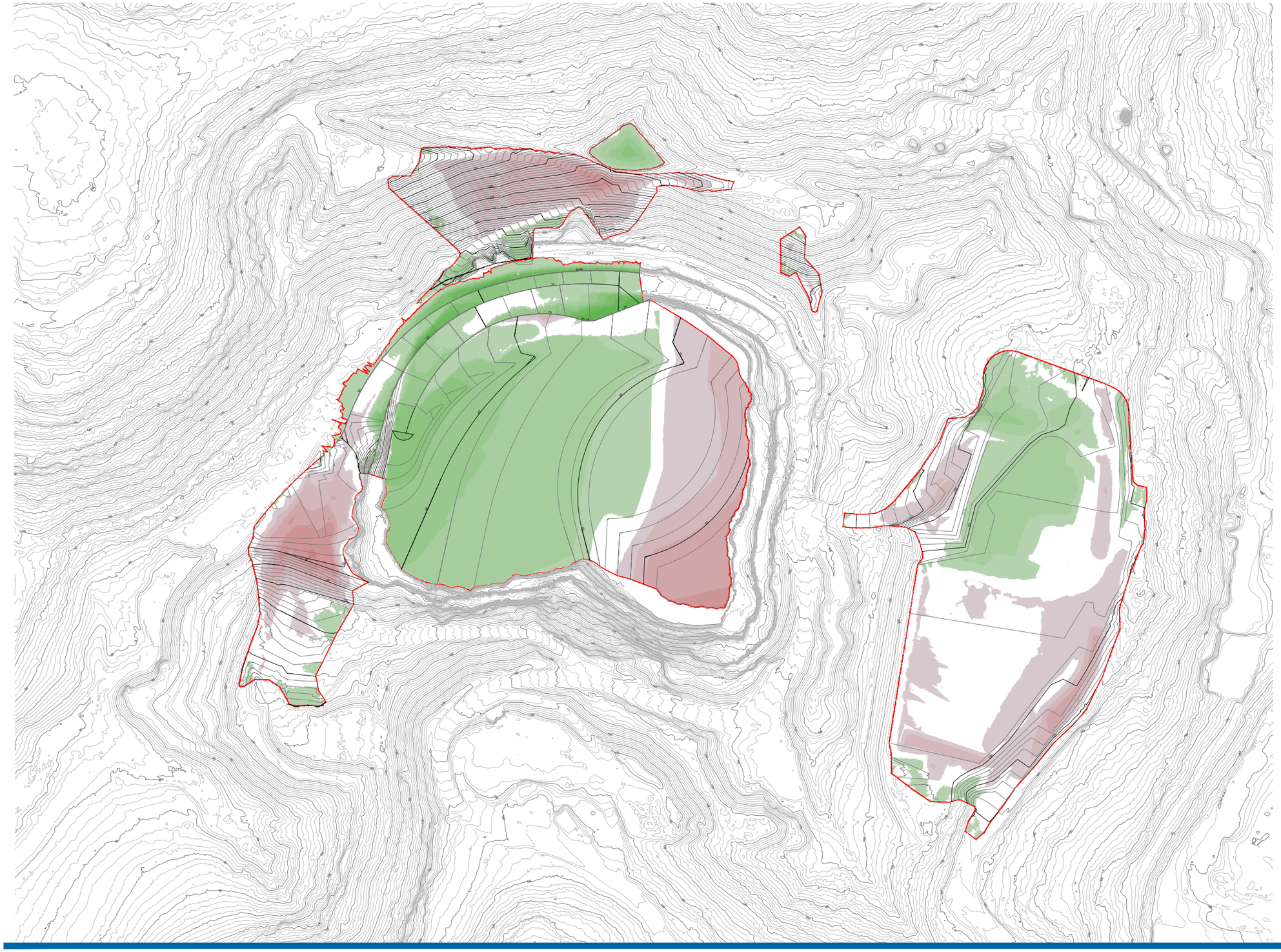
SITE MANAGEMENT PLAN

Job Number 21-26457
Revision C
Date NOV 2019

Figure 05

Level 15, 133 Castlereagh Street, Sydney NSW 2000 Australia T 61 2 9239 7100 F 61 2 9239 7199 E sydmail@ghd.com W www.ghd.com

Plot Date: 11 November 2019 - 11:58 AM Plotted by: Alison Horlyck Cad File No: G:\21\26457\CADD\Drawings\21-26457-FIG04.dwg



LEGEND

ASSUMED EXISTING SURFACE

PIT AREA DESIGN SURFACE

VOLUME CALCULATION BOUNDARY

CUT FILL DEPTH RANGE

- 25m CUT
- 22.5m
- 20m
- 17.5m
- 15m
- 12.5m
- 10m
- 7.5m
- 5m
- 2.5m
- 0
- 2.5m
- 5m
- 7.5m
- 10m
- 12.5m
- 15m
- 17.5m
- 20m FILL

VOLUMES

AREA	CUT (m³)	FILL (m³)
QUARRY VOID AND SW FILL AREA	135,800	182,300
OLD MANS VALLEY	62,900	48,700
NORTHERN SPOIL MOUND	42,900	6,400
TOTAL	241,600	237,400

MEASURED FROM ASSUMED NORTHCONNEX FILL SURFACE AS ILLUSTRATED ON FIGURE 1

0 30 60 90m

SCALE 1:3000 AT ORIGINAL SIZE

N

HORNSBY SHIRE COUNCIL
HORNSBY QUARRY REHABILITATION PROJECT FINAL LANDFORM

CUT AND FILL DETAILS

Job Number 21-26457
Revision D
Date NOV 2019

Figure 06

Level 15, 133 Castlereagh Street, Sydney NSW 2000 Australia T 61 2 9239 7100 F 61 2 9239 7199 E sydmail@ghd.com W www.ghd.com

Plot Date: 11 November 2019 - 12:39 PM Plotted by: Alison Horlyck Cad File No: G:\21\26457\CADD\Drawings\21-26457-FIG6.2.dwg