

# PROPOSED RESIDENTIAL SUBDIVISION

DEVELOPMENT APPLICATION - LOT 7 DP1196266  
CONCEPT CIVIL ENGINEERING PACKAGE

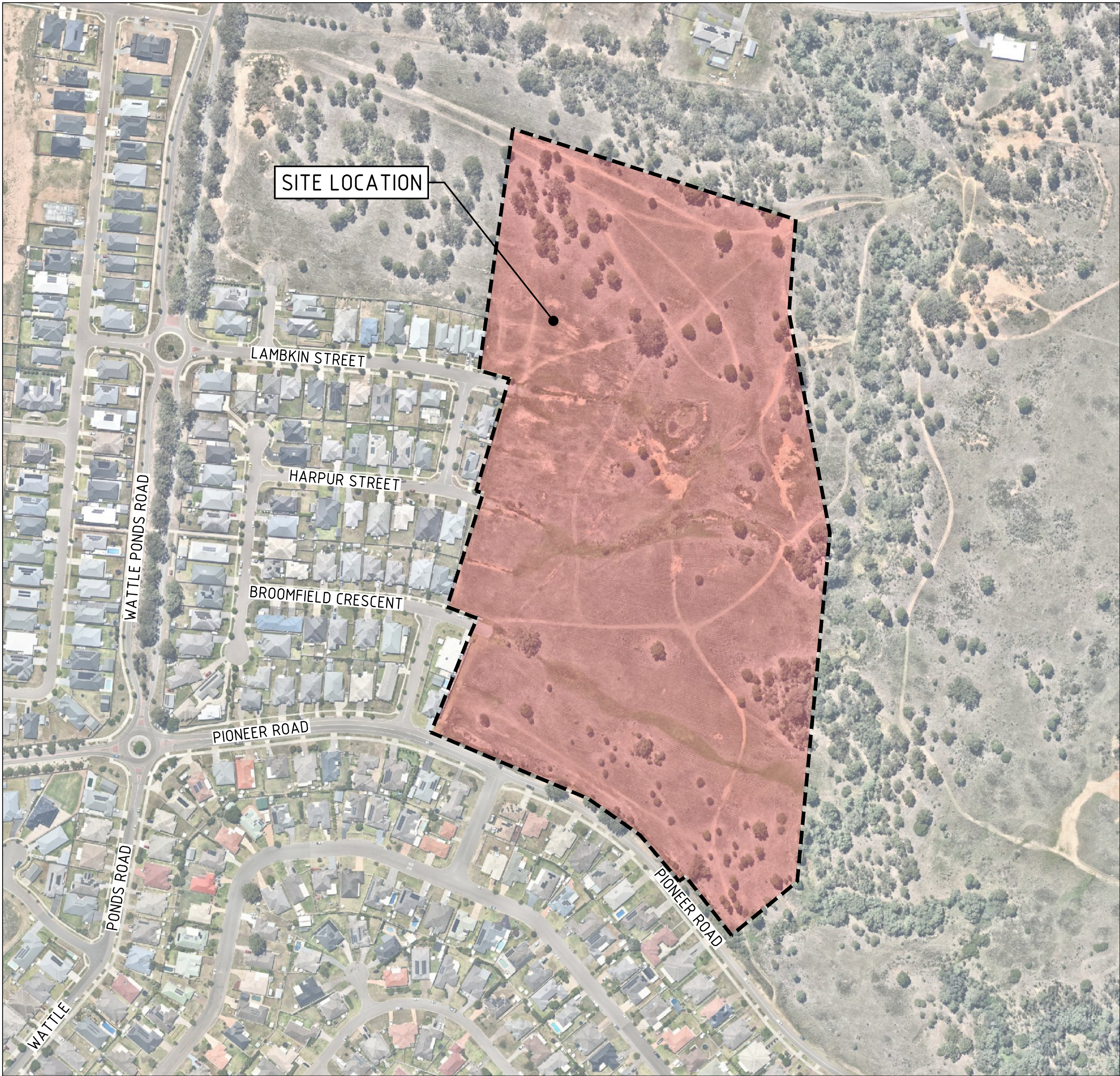


IMAGE SOURCE : NEARMAPS

LOCALITY PLAN

DRAWING LIST

| DWGNO     | DRAWINGTITLE                                       |
|-----------|----------------------------------------------------|
| DA-C01.01 | COVER SHEET, DRAWING LIST AND LOCALITY PLAN        |
| DA-C01.21 | PROPOSED SUBDIVISION MASTERPLAN                    |
| DA-C01.22 | CONSTRUCTION STAGING PLAN - STAGE 1 WORKS          |
| DA-C01.23 | CONSTRUCTION STAGING PLAN - STAGE 2 WORKS          |
| DA-C01.24 | CONSTRUCTION STAGING PLAN - STAGE 3 WORKS          |
| DA-C01.25 | CONSTRUCTION STAGING PLAN - STAGE 4 WORKS          |
| DA-C01.26 | CONSTRUCTION STAGING PLAN - STAGE 5 WORKS          |
| DA-C01.27 | CONSTRUCTION STAGING PLAN - STAGE 6 WORKS          |
| DA-C01.28 | CONSTRUCTION STAGING PLAN - STAGE 7 WORKS          |
| DA-C01.30 | OPERATIONAL & COMMUNITY LAND                       |
| DA-C01.31 | TYPICAL ROAD CROSS SECTIONS - SHEET 1              |
| DA-C01.32 | TYPICAL ROAD CROSS SECTIONS - SHEET 2              |
| DA-C01.33 | TYPICAL ROAD CROSS SECTIONS - SHEET 3              |
| DA-C02.01 | EROSION AND SEDIMENT CONTROL PLAN                  |
| DA-C02.11 | EROSION AND SEDIMENT CONTROL DETAILS               |
| DA-C03.01 | BULK EARTHWORKS CUT AND FILL PLAN                  |
| DA-C03.11 | BULK EARTHWORKS SECTIONS - SHEET 1                 |
| DA-C03.12 | BULK EARTHWORKS SECTIONS - SHEET 2                 |
| DA-C04.01 | SITEWORKS AND STORMWATER MANAGEMENT PLAN - SHEET 1 |
| DA-C04.02 | SITEWORKS AND STORMWATER MANAGEMENT PLAN - SHEET 2 |
| DA-C05.01 | ALIGNMENT CONTROL PLAN                             |
| DA-C04.11 | LONGITUDINAL SECTIONS - SHEET 1                    |
| DA-C04.12 | LONGITUDINAL SECTIONS - SHEET 2                    |
| DA-C04.13 | LONGITUDINAL SECTIONS - SHEET 3                    |
| DA-C04.14 | LONGITUDINAL SECTIONS - SHEET 4                    |
| DA-C04.15 | LONGITUDINAL SECTIONS - SHEET 5                    |
| DA-C04.16 | LONGITUDINAL SECTIONS - SHEET 6                    |
| DA-C04.17 | LONGITUDINAL SECTIONS - SHEET 7                    |
| DA-C09.01 | DETAILS                                            |
| DA-R01.01 | RIPARIAN OFFSET PLAN                               |

NOTES

THESE PLANS ARE CONCEPT AND PROVIDED FOR DA INFORMATION PURPOSES ONLY. THEY ARE PROVIDED TO SHOW THE GENERAL INTENT OF ROAD GRADING AND EARTHWORKS. HOWEVER THESE PLANS ARE NOT FINAL AND AS SUCH DETAILED ENGINEERING PLANS SUBMITTED AS PART OF FUTURE CC/SWC APPLICATIONS WITH COUNCIL OR PRIVATE CERTIFIER MAY DIFFER MATERIALLY FROM WHAT IS SHOWN ON THESE PLANS AS LOT GRADING MAY CHANGE DUE TO REQUIREMENTS OF BUILDERS OR OTHER COMMERCIAL CONSIDERATIONS. THESE PLANS SHALL NOT BE TAKEN TO REPRESENT THE ONLY SCOPE OF EARTHWORKS AND RETAINING THAT CAN BE UNDERTAKEN AS PART OF FUTURE CC/SWC APPLICATION.

NOT FOR CONSTRUCTION

DRAWN: C. W-HEALON  
DESIGNED: E. DOLAN  
JOB MANAGER: R. DIERCKE  
VERIFIER: A. BROWN

| REVISION | DESCRIPTION                        | ISSUED | VER'D | APP'D | DATE     |
|----------|------------------------------------|--------|-------|-------|----------|
| A        | ISSUED FOR CLIENT REVIEW           | CWH    | AB    | ED    | 05.06.24 |
| B        | ISSUED FOR CLIENT REVIEW           | CWH    | AB    | RD    | 15.07.24 |
| C        | ISSUED FOR DEVELOPMENT APPLICATION | RK     | AB    | RD    | 22.08.24 |
| D        | ISSUED FOR DEVELOPMENT APPLICATION | CWH    | AB    | RD    | 11.09.24 |
| E        | ISSUED FOR DEVELOPMENT APPLICATION | CWH    | CP    | RD    | 31.01.25 |
| F        | ISSUED FOR DA APPROVAL             | EW     | CP    | RD    | 02.06.25 |

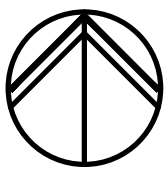
Drawn: 08.06.2025 3:16 PM  
Project by: ERMMA (VER)  
Format: C:\15 Proj-July 24 Projects\Newcastle\YEAR 2025\8806N\233144 - Singleton Ridge Stages 5-140 - Greenmap\CV15\323\CA201\DA\NL233144-DA-C01.01 COVER SHEET.dwg



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ABN 81 094 433 100

PROJECT

PROPOSED RESIDENTIAL  
SUBDIVISION OF LOT 7 DP1196266  
  
SINGLETON LGA

DRAWING TITLE

CIVIL ENGINEERING PACKAGE  
  
COVER SHEET, DRAWING LIST  
AND LOCALITY PLAN

JOB NUMBER

NL233144

DRAWING NUMBER

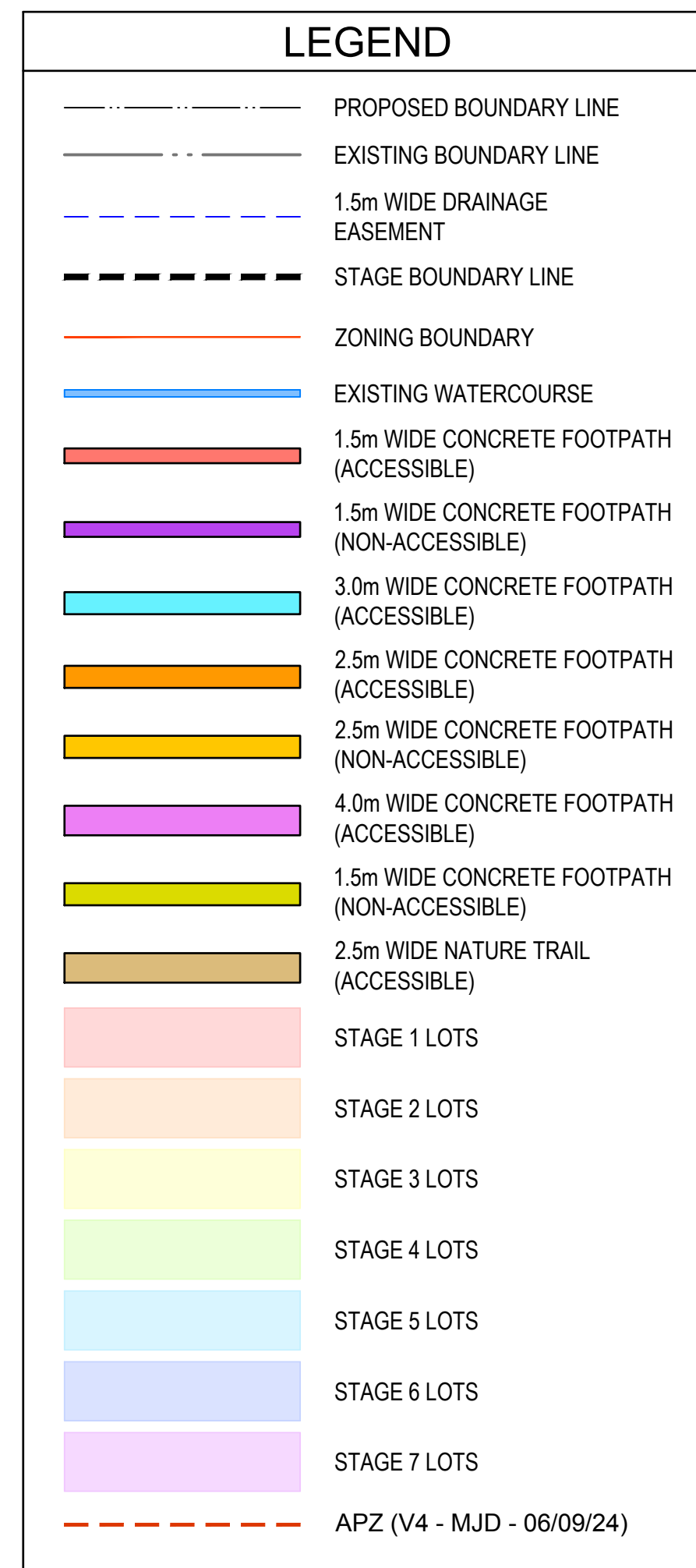
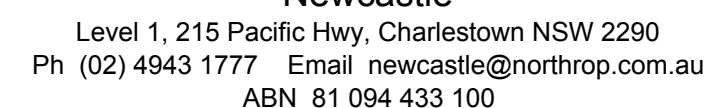
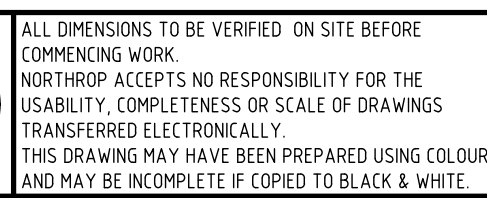
DA-C01.01

REVISION

F

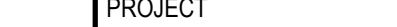
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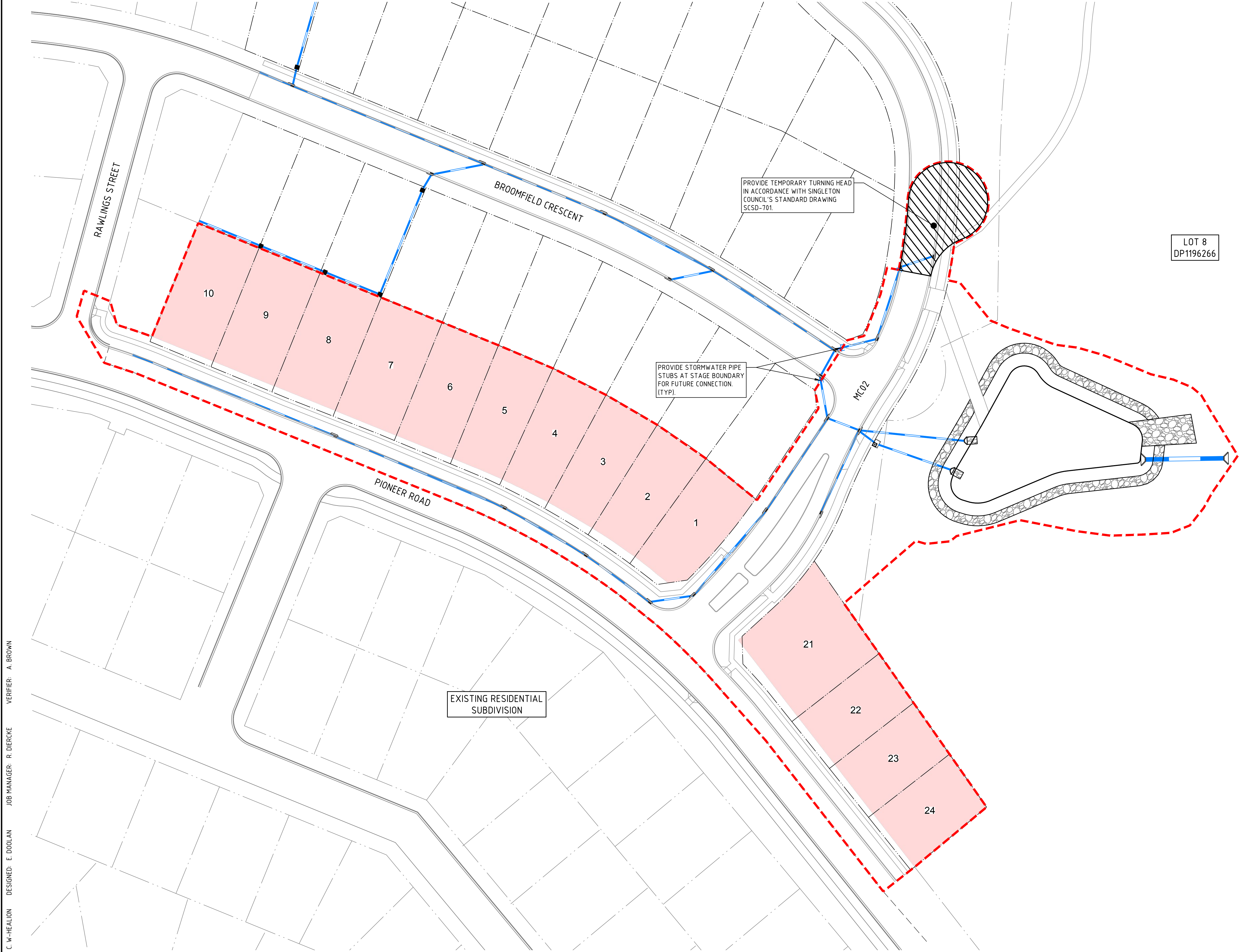
REFER TO LANDSCAPE PLANS FOR DETAILS FOR  
PLAYGROUND, WALKING TRAILS AND OPEN SPACE AREAS,  
ENTRY STATEMENT AND CONCEPT CIVIL PLANS.

| LOT SUMMARY |    |
|-------------|----|
| STAGE 1     | 14 |
| STAGE 2     | 10 |
| STAGE 3     | 11 |
| STAGE 4     | 10 |
| STAGE 5     | 11 |
| STAGE 6     | 15 |
| STAGE 7     | 17 |
| TOTAL       | 88 |

| REVISION | DESCRIPTION                        | ISSUED | VER'D | APP'D | DATE     | CLIENT                                                                                  | ARCHITECT                                                                             | PROJECT                                                                                                   | DRAWING TITLE                              | JOB NUMBER      | REVISION         |          |
|----------|------------------------------------|--------|-------|-------|----------|-----------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|--------------------------------------------|-----------------|------------------|----------|
| D        | ISSUED FOR DEVELOPMENT APPLICATION | RK     | AB    | RD    | 22.08.24 |     |  | <b>PROPOSED RESIDENTIAL<br/>SUBDIVISION OF LOT 7 DP1196266<br/>INCLUDING WORKS IN LOT 8<br/>DP1196266</b> | <b>PROPOSED SUBDIVISION<br/>MASTERPLAN</b> | <b>NL233144</b> | <b>DA-C01.21</b> | <b>I</b> |
| E        | ISSUED FOR DEVELOPMENT APPLICATION | CWH    | AB    | RD    | 11.09.24 |                                                                                         |                                                                                       |                                                                                                           |                                            |                 |                  |          |
| F        | ISSUED FOR DEVELOPMENT APPLICATION | CWH    | CP    | RD    | 31.01.25 |                                                                                         |                                                                                       |                                                                                                           |                                            |                 |                  |          |
| G        | ISSUED FOR DA APPROVAL             | EW     | CP    | RD    | 02.06.25 |                                                                                         |                                                                                       |                                                                                                           |                                            |                 |                  |          |
| H        | ISSUED FOR DA APPROVAL             | EW     | CP    | RD    | 05.06.25 |                                                                                         |                                                                                       |                                                                                                           |                                            |                 |                  |          |
| I        | ISSUED FOR DA APPROVAL             | EW     | CP    | RD    | 06.05.25 | DRAWING NOT TO BE USED FOR CONSTRUCTION<br>UNLESS VERIFICATION SIGNATURE HAS BEEN ADDED | THE COPYRIGHT OF THIS DRAWING REMAINS WITH<br>NORTHROP CONSULTING ENGINEERS PTY LTD   | DRAWING SHEET SIZE = A1                                                                                   |                                            |                 |                  |          |



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LEGEND

PROPOSED BOUNDARY LINE

EXISTING BOUNDARY LINE

STAGE BOUNDARY LINE

STORMWATER PIPE

STORMWATER PIPE STUB

STAGE 1 LOTS

STAGE 2 LOTS

STAGE 3 LOTS

STAGE 4 LOTS

STAGE 5 LOTS

STAGE 6 LOTS

STAGE 7 LOTS

TEMPORARY PAVEMENT

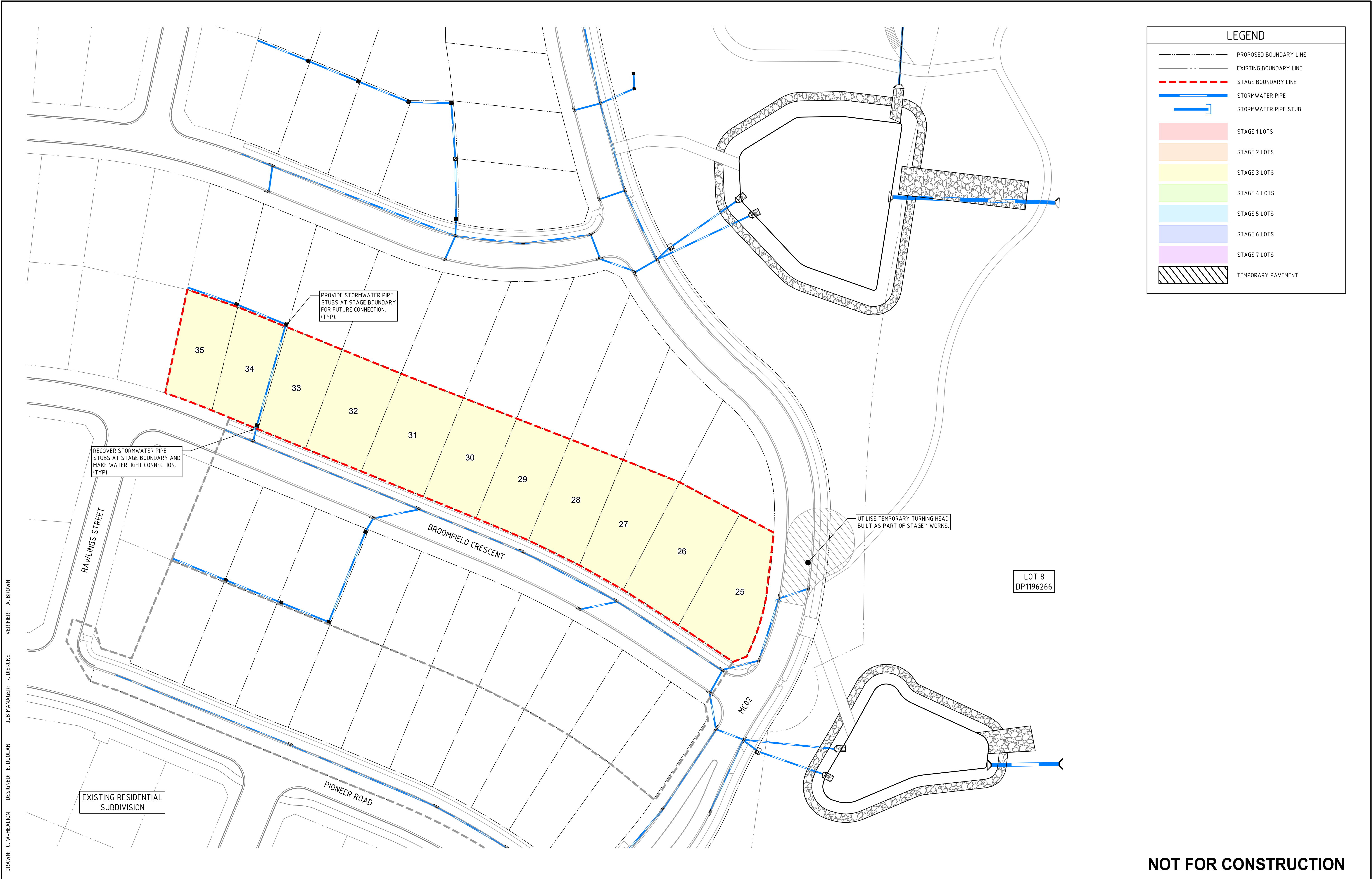
NOT FOR CONSTRUCTION

| REVISION                                                                                |                                    | DESCRIPTION | ISSUED | VER'D | APP'D | DATE     | CLIENT                                                                                                           | ARCHITECT                                                                                                                                                                                                                                                                           | SCALE                                        | PROJECT                                                | DRAWING TITLE | JOB NUMBER                |                |          |
|-----------------------------------------------------------------------------------------|------------------------------------|-------------|--------|-------|-------|----------|------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|--------------------------------------------------------|---------------|---------------------------|----------------|----------|
| A                                                                                       | ISSUED FOR DEVELOPMENT APPLICATION |             | CWH    | CP    | RD    | 31.01.25 |  <div>SINGLETON COUNCIL</div> |  <div>NORTHROP</div> <div>Newcastle</div> <div>Level 1, 215 Pacific Hwy, Charlestown NSW 2290</div> <div>Ph (02) 4943 1777 Email newcastle@northrop.com.au</div> <div>ABN 81 094 433 100</div> | SCALE 1:600@A1                               | PROPOSED RESIDENTIAL<br>SUBDIVISION OF LOT 7 DP1196266 | SINGLETON LGA | CIVIL ENGINEERING PACKAGE | NL233144       |          |
| B                                                                                       | ISSUED FOR DA APPROVAL             |             | EW     | CP    | RD    | 02.06.25 |                                                                                                                  |                                                                                                                                                                                                                                                                                     |                                              |                                                        |               |                           |                |          |
| C                                                                                       | ISSUED FOR DA APPROVAL             |             | EW     | CP    | RD    | 06.06.25 |                                                                                                                  |                                                                                                                                                                                                                                                                                     |                                              |                                                        |               |                           |                |          |
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|                                                                                         |                                    |             |        |       |       |          |                                                                                                                  |                                                                                                                                                                                                                                                                                     |                                              |                                                        |               |                           | DA-C01.22      | C        |
| DRAWING SHEET SIZE = A1                                                                 |                                    |             |        |       |       |          |                                                                                                                  |                                                                                                                                                                                                                                                                                     |                                              |                                                        |               |                           |                |          |









LEGEND

PROPOSED BOUNDARY LINE

EXISTING BOUNDARY LINE

STAGE BOUNDARY LINE

STORMWATER PIPE

STORMWATER PIPE STUB

STAGE 1 LOTS

STAGE 2 LOTS

STAGE 3 LOTS

STAGE 4 LOTS

STAGE 5 LOTS

STAGE 6 LOTS

STAGE 7 LOTS

TEMPORARY PAVEMENT

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| REVISION | DESCRIPTION                        | ISSUED | VER'D | APP'D | DATE     |
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| A        | ISSUED FOR DEVELOPMENT APPLICATION | CWH    | CP    | RD    | 31.01.25 |
| B        | ISSUED FOR DA APPROVAL             | EW     | CP    | RD    | 02.06.25 |
| C        | ISSUED FOR DA APPROVAL             | EW     | CP    | RD    | 06.06.25 |
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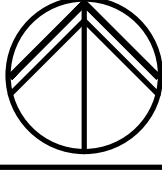


SINGLETON  
COUNCIL

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SCALE 1:600@A1

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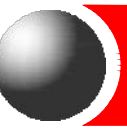
6

12

18

24

30m



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PROJECT

PROPOSED RESIDENTIAL  
SUBDIVISION OF LOT 7 DP1196266

SINGLETON LGA

DRAWING TITLE

CIVIL ENGINEERING PACKAGE

CONSTRUCTION STAGING PLAN  
- STAGE 3 WORKS

JOB NUMBER

NL233144

DRAWING NUMBER

DA-C01.24

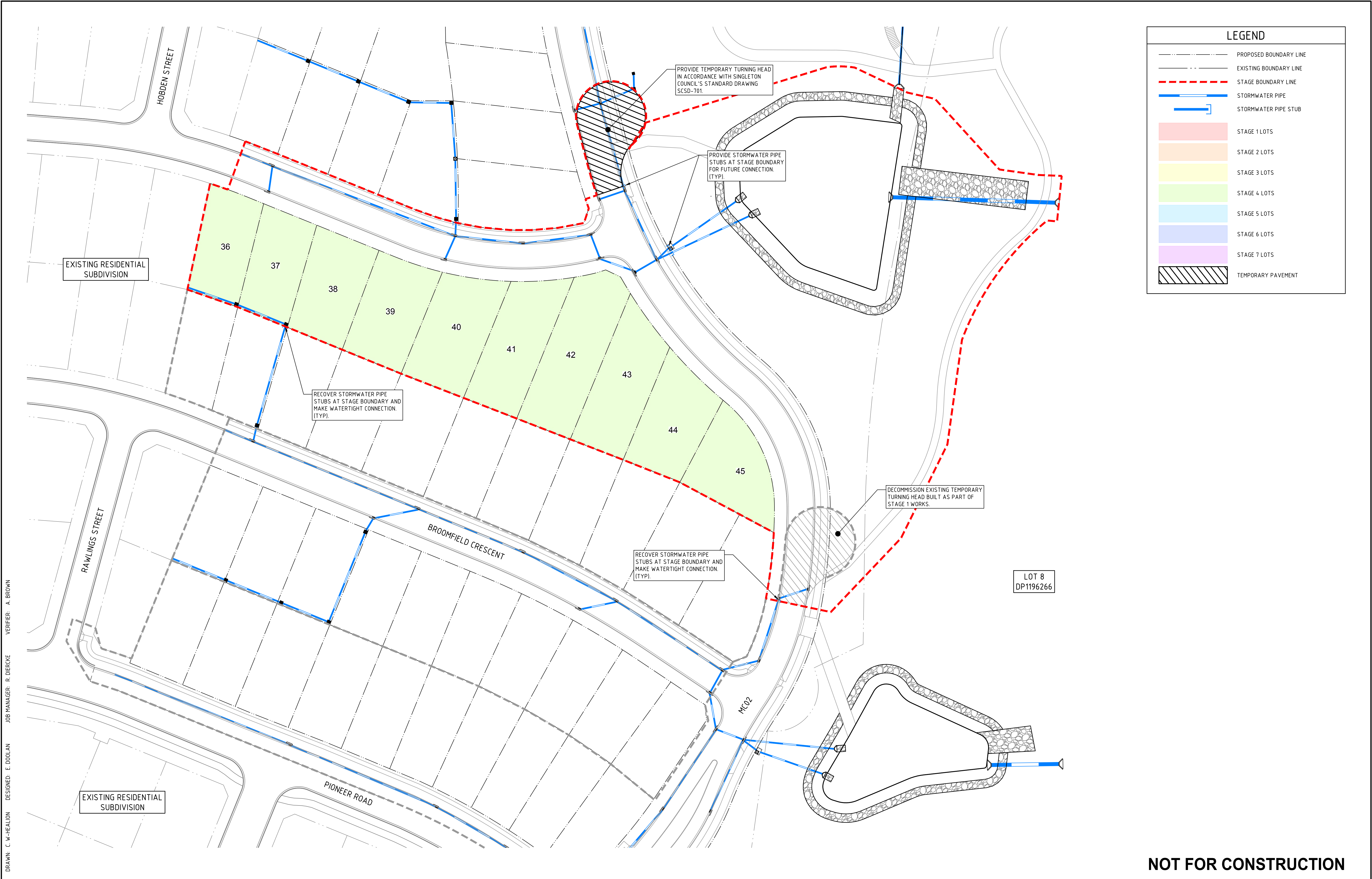
REVISION

C

DRAWING SHEET SIZE = A1

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| REVISION | DESCRIPTION                        | ISSUED | VER'D | APP'D | DATE     |
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| A        | ISSUED FOR DEVELOPMENT APPLICATION | CWH    | CP    | RD    | 31.01.25 |
| B        | ISSUED FOR DA APPROVAL             | EW     | CP    | RD    | 02.06.25 |
| C        | ISSUED FOR DA APPROVAL             | EW     | CP    | RD    | 06.06.25 |
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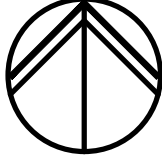


**SINGLETON COUNCIL**

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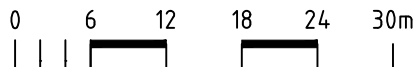
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SCALE 1:600@A1





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ABN 81 094 433 100

PROJECT

**PROPOSED RESIDENTIAL SUBDIVISION OF LOT 7 DP1196266**

**SINGLETON LGA**

DRAWING TITLE

**CIVIL ENGINEERING PACKAGE**

**CONSTRUCTION STAGING PLAN - STAGE 4 WORKS**

JOB NUMBER

**NL233144**

DRAWING NUMBER

**DA-C01.25**

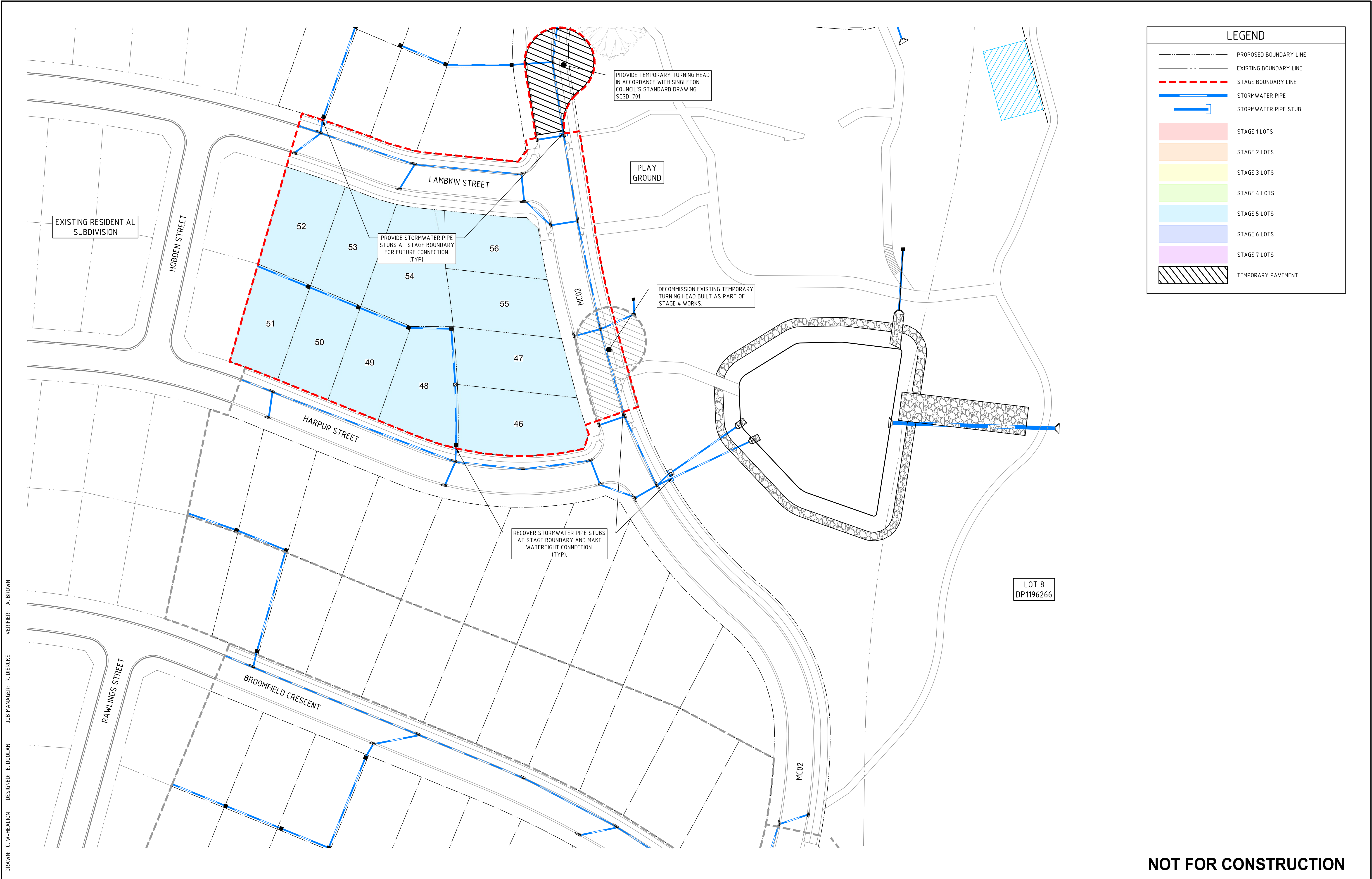
REVISION

**C**

DRAWING SHEET SIZE = A1

NOT FOR CONSTRUCTION





LEGEND

PROPOSED BOUNDARY LINE

EXISTING BOUNDARY LINE

STAGE BOUNDARY LINE

STORMWATER PIPE

STORMWATER PIPE STUB

STAGE 1 LOTS

STAGE 2 LOTS

STAGE 3 LOTS

STAGE 4 LOTS

STAGE 5 LOTS

STAGE 6 LOTS

STAGE 7 LOTS

TEMPORARY PAVEMENT

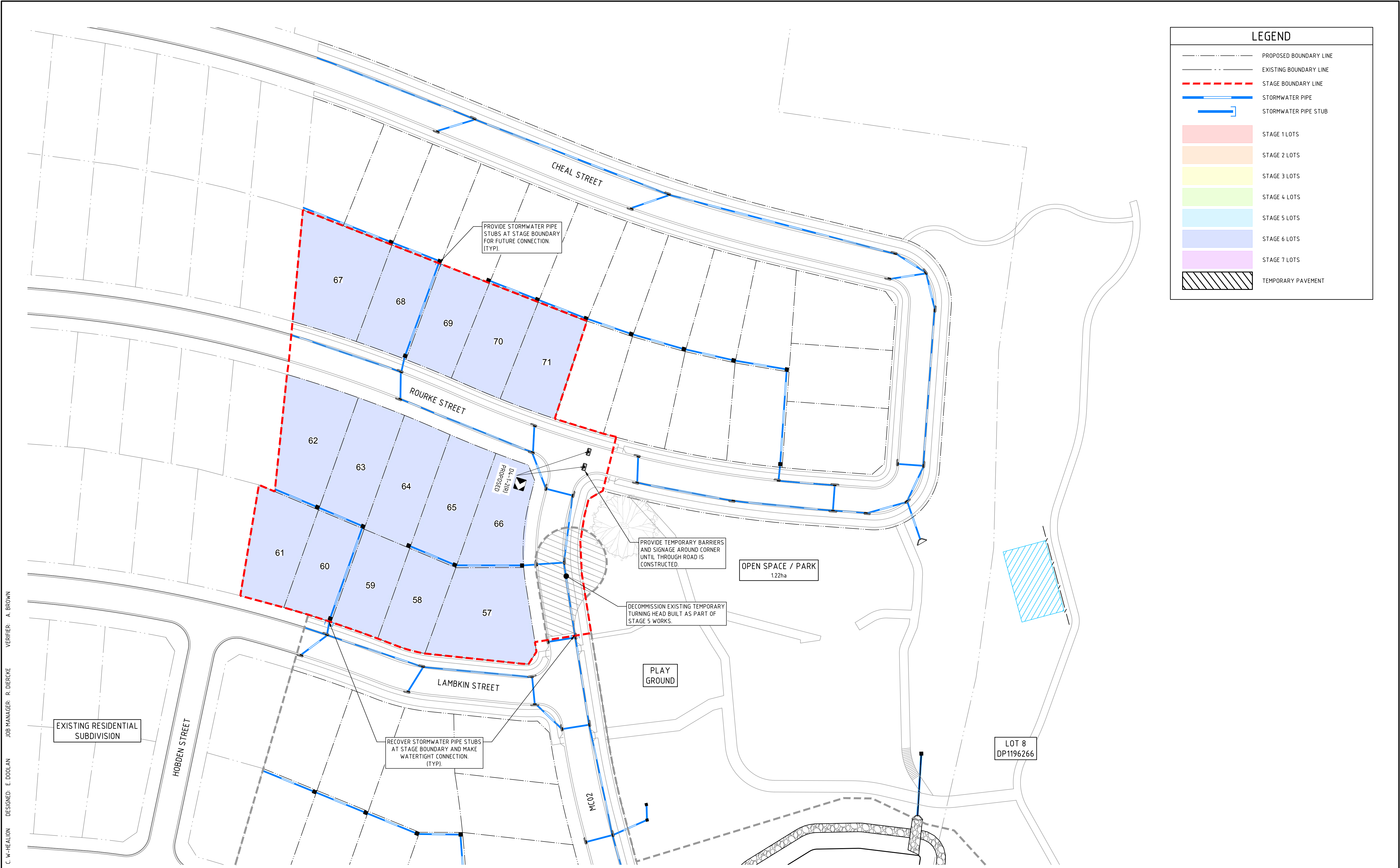
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| REVISION |                                    | DESCRIPTION | ISSUED | VER'D | APP'D | DATE     | CLIENT                                                                                                               | ARCHITECT                                                                                                                                                                                                                                                                           | PROJECT                                                |                           | DRAWING TITLE                                | JOB NUMBER              |
|----------|------------------------------------|-------------|--------|-------|-------|----------|----------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|---------------------------|----------------------------------------------|-------------------------|
| A        | ISSUED FOR DEVELOPMENT APPLICATION |             | CWH    | CP    | RD    | 31.01.25 |  <div>SINGLETON<br/>COUNCIL</div> |  <div>NORTHROP</div> <div>Newcastle</div> <div>Level 1, 215 Pacific Hwy, Charlestown NSW 2290</div> <div>Ph (02) 4943 1777 Email newcastle@northrop.com.au</div> <div>ABN 81 094 433 100</div> | PROPOSED RESIDENTIAL<br>SUBDIVISION OF LOT 7 DP1196266 | CIVIL ENGINEERING PACKAGE | NL233144                                     |                         |
| B        | ISSUED FOR DA APPROVAL             |             | EW     | CP    | RD    | 02.06.25 |                                                                                                                      |                                                                                                                                                                                                                                                                                     |                                                        |                           |                                              |                         |
| C        | ISSUED FOR DA APPROVAL             |             | EW     | CP    | RD    | 06.06.25 |                                                                                                                      |                                                                                                                                                                                                                                                                                     |                                                        |                           |                                              |                         |
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|          |                                    |             |        |       |       |          |                                                                                                                      | SCALE 1:600@A1                                                                                                                                                                                                                                                                      |                                                        |                           |                                              |                         |



DRAWN: C. W. HEALON  
DESIGNED: E. DOLAN  
JOB MANAGER: R. DIERCKE  
VERIFIER: A. BROWN



LEGEND

PROPOSED BOUNDARY LINE

EXISTING BOUNDARY LINE

STAGE BOUNDARY LINE

STORMWATER PIPE

STORMWATER PIPE STUB

STAGE 1 LOTS

STAGE 2 LOTS

STAGE 3 LOTS

STAGE 4 LOTS

STAGE 5 LOTS

STAGE 6 LOTS

STAGE 7 LOTS

TEMPORARY PAVEMENT

NOT FOR CONSTRUCTION

| REVISION | DESCRIPTION                        | ISSUED | VER'D | APP'D | DATE     |
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|          |                                    |        |       |       |          |
|          |                                    |        |       |       |          |

SINGLETON  
COUNCIL

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ARCHITECT

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SCALE 1:600@A1

0

6

12

18

24

30m

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ABN 81 094 433 100

PROJECT

**PROPOSED RESIDENTIAL  
SUBDIVISION OF LOT 7 DP1196266**

**SINGLETON LGA**

DRAWING TITLE

**CIVIL ENGINEERING PACKAGE**

**CONSTRUCTION STAGING PLAN  
- STAGE 6 WORKS**

JOB NUMBER

**NL233144**

DRAWING NUMBER

**DA-C01.27**

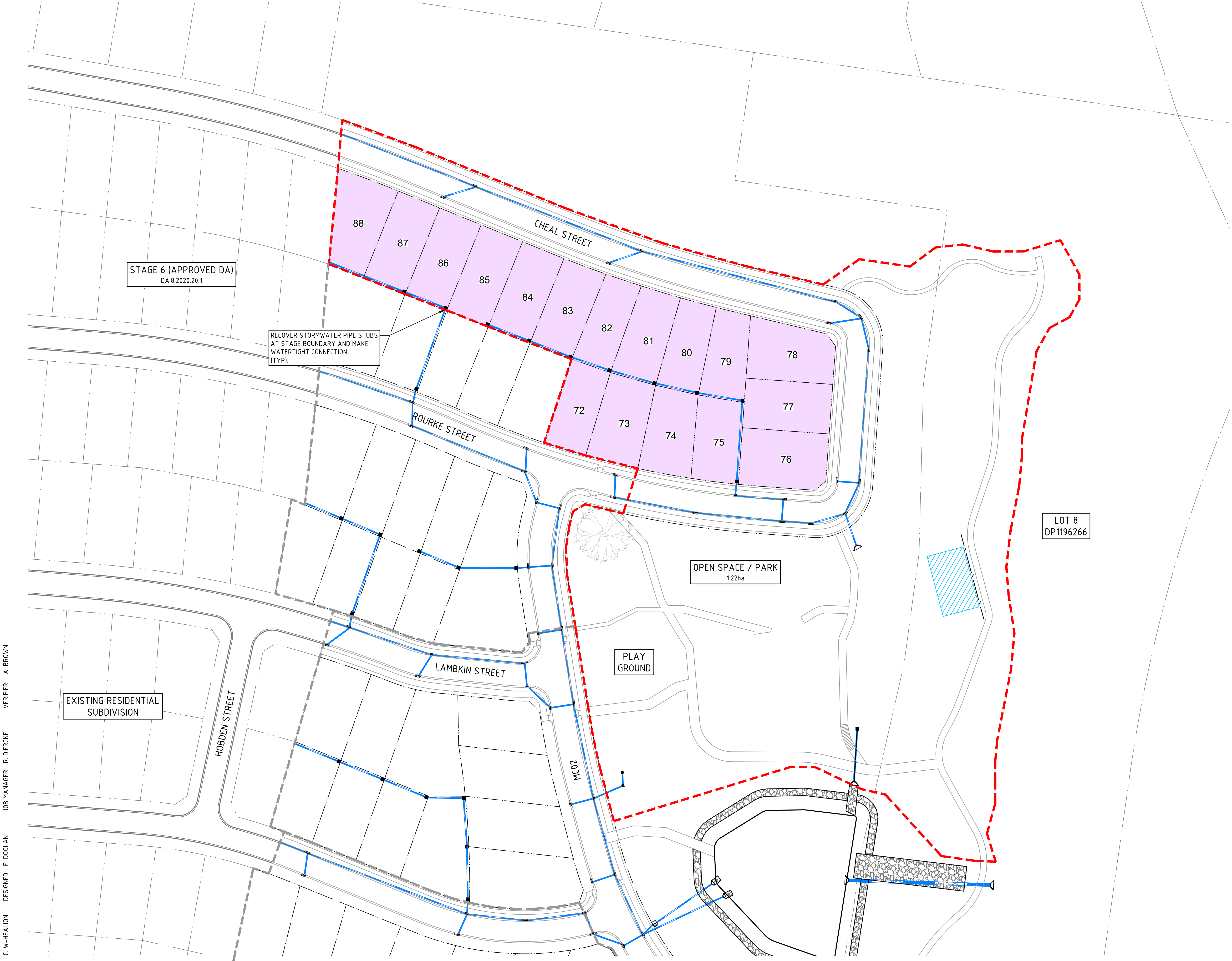
REVISION

**B**

DRAWING SHEET SIZE = A1



DRAWN: C. W-HEALON    DESIGNED: E. DOLAN    JOB MANAGER: R. DIERCKE    VERIFIER: A. BROWN



LEGEND

PROPOSED BOUNDARY LINE

EXISTING BOUNDARY LINE

STAGE BOUNDARY LINE

STORMWATER PIPE

STORMWATER PIPE STUB

STAGE 1 LOTS

STAGE 2 LOTS

STAGE 3 LOTS

STAGE 4 LOTS

STAGE 5 LOTS

STAGE 6 LOTS

STAGE 7 LOTS

TEMPORARY PAVEMENT

NOT FOR CONSTRUCTION

|                                              |  |                |          |
|----------------------------------------------|--|----------------|----------|
| DRAWING TITLE                                |  | JOB NUMBER     |          |
| CIVIL ENGINEERING PACKAGE                    |  | NL233144       |          |
| CONSTRUCTION STAGING PLAN<br>- STAGE 7 WORKS |  | DRAWING NUMBER | REVISION |
|                                              |  | DA-C01.28      | B        |
| DRAWING SHEET SIZE = A1                      |  |                |          |

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|          |                                    |        |       |       |          |
|          |                                    |        |       |       |          |
|          |                                    |        |       |       |          |

SINGLETON  
COUNCIL

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SCALE 1:800@A1

0 8 16 24 32 40m

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PROJECT

PROPOSED RESIDENTIAL  
SUBDIVISION OF LOT 7 DP1196266

SINGLETON LGA

DRAWING TITLE

CIVIL ENGINEERING PACKAGE

CONSTRUCTION STAGING PLAN  
- STAGE 7 WORKS

JOB NUMBER

NL233144

DRAWING NUMBER

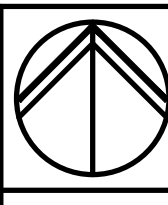
DA-C01.28

REVISION

B

DRAWING SHEET SIZE = A1





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SCALE 1:1000 @ A1

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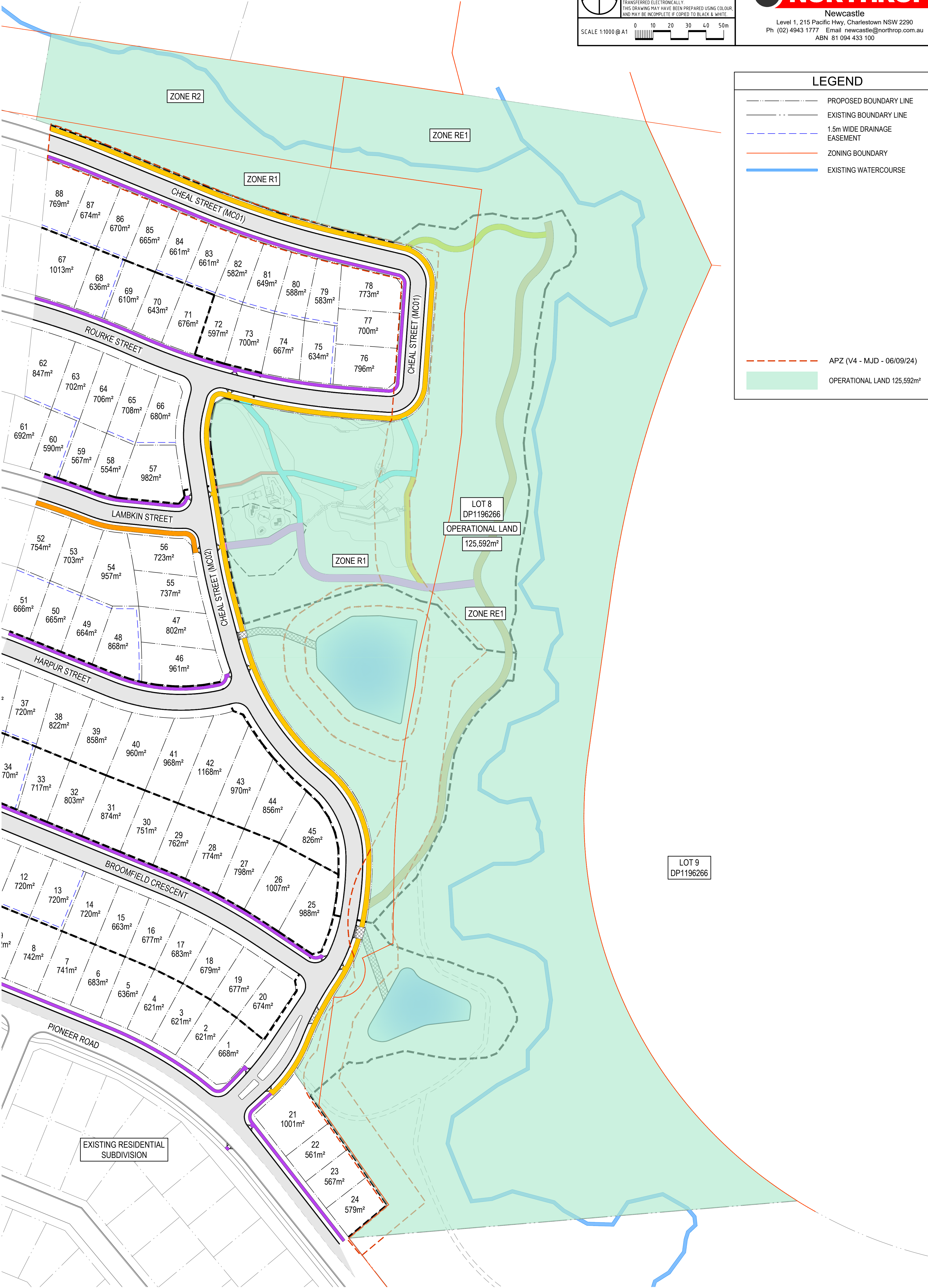
50m



**NORTHROP**

Newcastle

Level 1, 215 Pacific Hwy, Charlestown NSW 2290  
Ph (02) 4943 1777 Email [newcastle@northrop.com.au](mailto:newcastle@northrop.com.au)  
ABN 81 094 433 100



**LEGEND**

---

PROPOSED BOUNDARY LINE

---

EXISTING BOUNDARY LINE

---

1.5m WIDE DRAINAGE EASEMENT

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ZONING BOUNDARY

---

EXISTING WATERCOURSE

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APZ (V4 - MJD - 06/09/24)

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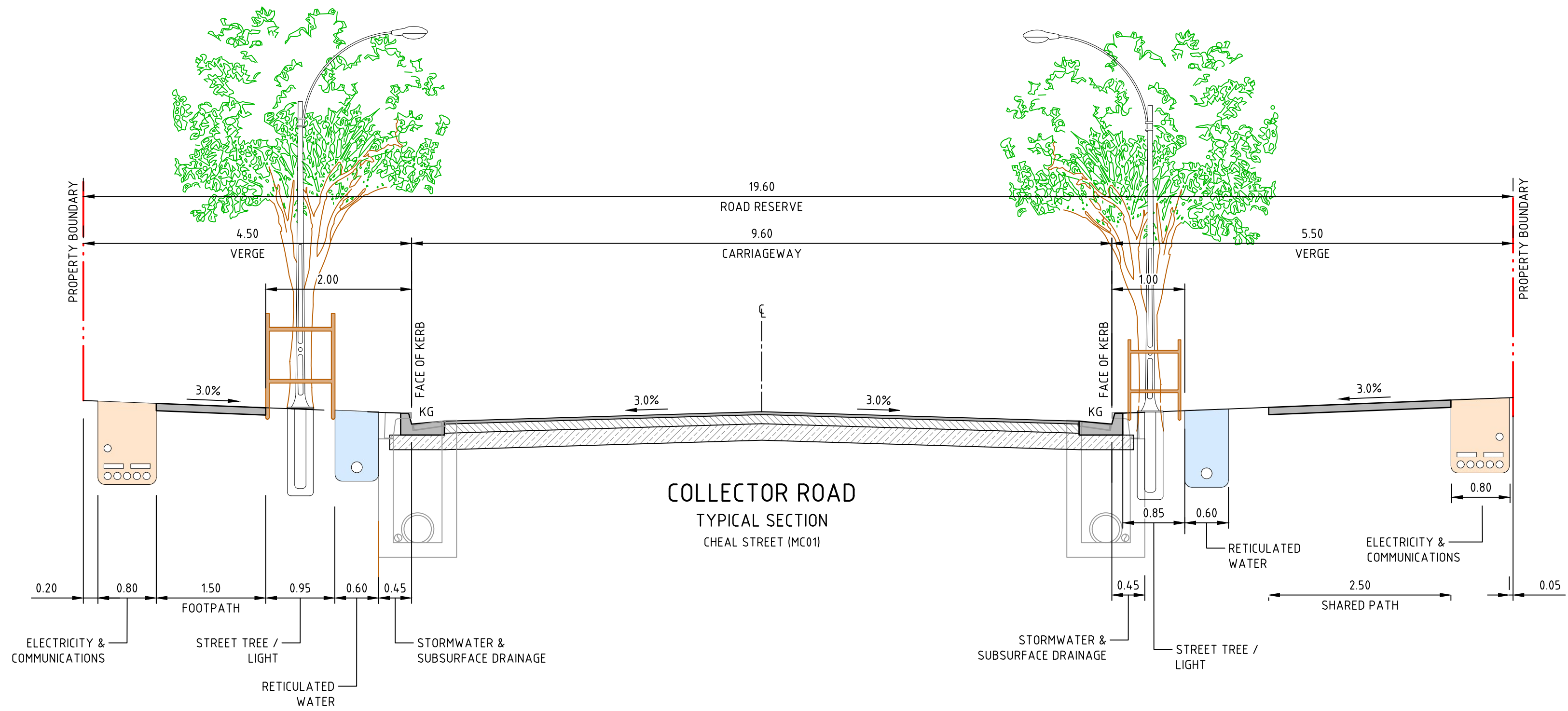
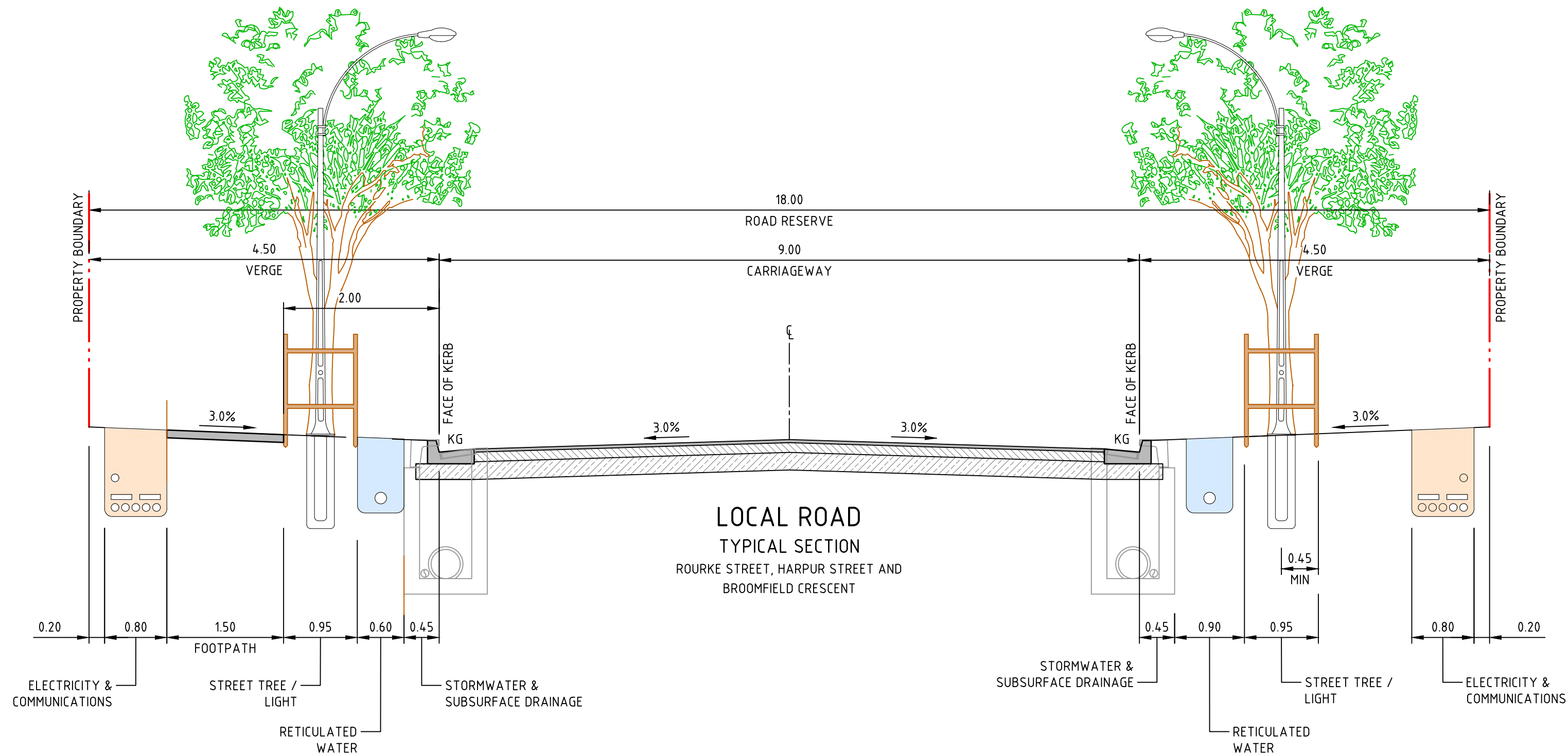
OPERATIONAL LAND 125,592m²

NOT FOR CONSTRUCTION

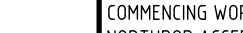
| REVISION                                                                                | DESCRIPTION                        | ISSUED | VER'D | APP'D | DATE     | CLIENT                                                                                                | ARCHITECT                                                                           | PROJECT                                                                                         | DRAWING TITLE                   | JOB NUMBER     |          |
|-----------------------------------------------------------------------------------------|------------------------------------|--------|-------|-------|----------|-------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|---------------------------------|----------------|----------|
| A                                                                                       | ISSUED FOR DEVELOPMENT APPLICATION | EW     | CP    | RD    | 23.05.25 |  SINGLETON COUNCIL |                                                                                     | PROPOSED RESIDENTIAL<br>SUBDIVISION OF LOT 7 DP1196266<br>INCLUDING WORKS IN LOT 8<br>DP1196266 | OPERATIONAL &<br>COMMUNITY LAND | NL233144       |          |
| B                                                                                       | ISSUED FOR DEVELOPMENT APPLICATION | EW     | CP    | RD    | 10.06.25 |                                                                                                       |                                                                                     |                                                                                                 |                                 | DRAWING NUMBER | REVISION |
|                                                                                         |                                    |        |       |       |          |                                                                                                       | DA-C01.30                                                                           |                                                                                                 | B                               |                |          |
|                                                                                         |                                    |        |       |       |          |                                                                                                       | DRAWING SHEET SIZE = A1                                                             |                                                                                                 |                                 |                |          |
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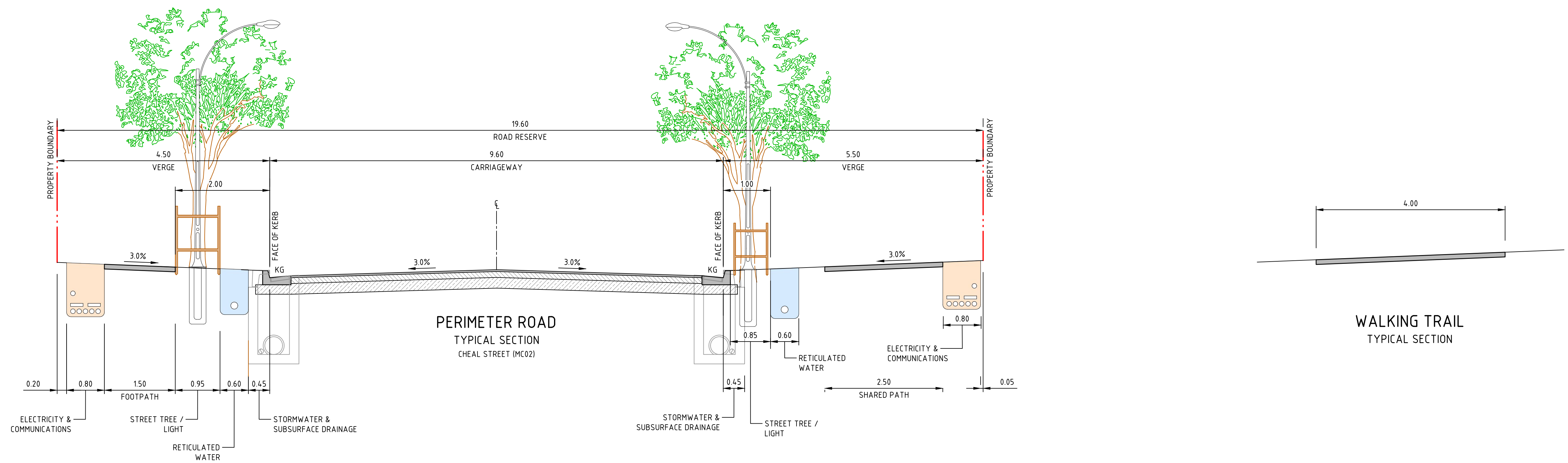
VERIFIER: A. BROWN  
JOB MANAGER: R. DIERCKE  
DESIGNED: E. DOLAN  
DRAWN: C. W-HEALON



NOT FOR CONSTRUCTION

| REVISION                                                                                | DESCRIPTION                        | ISSUED | VER'D | APP'D | DATE     | CLIENT                                                                                                            | ARCHITECT                                                                        |                                                                                                                                                                                                                                                    | ALL DIMENSIONS TO BE VERIFIED ON SITE BEFORE COMMENCING WORK. NORTHROP ACCEPTS NO RESPONSIBILITY FOR THE USABILITY, COMPLETENESS OR SCALE OF DRAWINGS TRANSFERRED ELECTRONICALLY. THIS DRAWING MAY HAVE BEEN PREPARED USING COLOUR, AND MAY BE INCOMPLETE IF COPIED TO BLACK & WHITE. | PROJECT                                                                            | DRAWING TITLE                                                                        | JOB NUMBER              |          |
|-----------------------------------------------------------------------------------------|------------------------------------|--------|-------|-------|----------|-------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|-------------------------|----------|
| A                                                                                       | ISSUED FOR CLIENT REVIEW           | CWH    | AB    | ED    | 05.06.24 | <br><b>SINGLETON COUNCIL</b> | THE COPYRIGHT OF THIS DRAWING REMAINS WITH NORTHROP CONSULTING ENGINEERS PTY LTD | <br><b>NORTHROP</b><br>Newcastle<br>Level 1, 215 Pacific Hwy, Charlestown NSW 2290<br>Ph (02) 4943 1777 Email newcastle@northrop.com.au<br>ABN 81 094 433 100 | SCALE 1:50@A1<br>                                                                                                                                                                                | PROPOSED RESIDENTIAL<br>SUBDIVISION OF LOT 7 DP1196266<br><br><b>SINGLETON LGA</b> | <b>CIVIL ENGINEERING PACKAGE</b><br><br><b>TYPICAL ROAD CROSS SECTIONS - SHEET 1</b> | <b>NL233144</b>         |          |
| B                                                                                       | ISSUED FOR CLIENT REVIEW           | CWH    | AB    | RD    | 15.07.24 |                                                                                                                   |                                                                                  |                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                       |                                                                                    |                                                                                      |                         |          |
| C                                                                                       | ISSUED FOR DEVELOPMENT APPLICATION | RK     | AB    | RD    | 22.08.24 |                                                                                                                   |                                                                                  |                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                       |                                                                                    |                                                                                      |                         |          |
| D                                                                                       | ISSUED FOR DEVELOPMENT APPLICATION | CWH    | AB    | RD    | 11.09.24 |                                                                                                                   |                                                                                  |                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                       |                                                                                    |                                                                                      |                         |          |
| E                                                                                       | ISSUED FOR DEVELOPMENT APPLICATION | CWH    | CP    | RD    | 31.01.25 |                                                                                                                   |                                                                                  |                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                       |                                                                                    |                                                                                      |                         |          |
| F                                                                                       | ISSUED FOR DA APPROVAL             | EW     | CP    | RD    | 02.06.25 |                                                                                                                   |                                                                                  |                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                       |                                                                                    |                                                                                      |                         |          |
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|                                                                                         |                                    |        |       |       |          |                                                                                                                   |                                                                                  |                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                       |                                                                                    |                                                                                      | <b>DA-C01.31</b>        | <b>F</b> |
|                                                                                         |                                    |        |       |       |          |                                                                                                                   |                                                                                  |                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                       |                                                                                    |                                                                                      | DRAWING SHEET SIZE ± A1 |          |



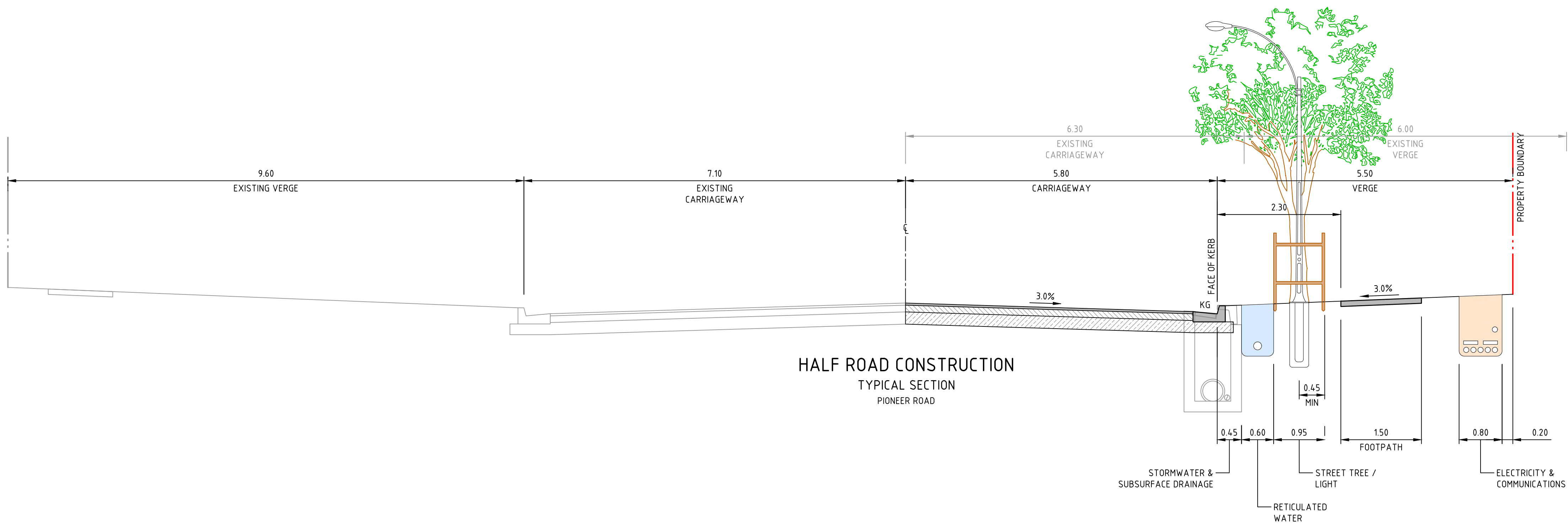


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| REVISION | DESCRIPTION                        | ISSUED | VER'D | APP'D | DATE     | CLIENT                                                                                                            | ARCHITECT                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                     | PROJECT                                             | DRAWING TITLE                         | JOB NUMBER |          |                                                                                                                                                                                     |                         |          |
|----------|------------------------------------|--------|-------|-------|----------|-------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|---------------------------------------|------------|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|----------|
| A        | ISSUED FOR CLIENT REVIEW           | CWH    | AB    | RD    | 15.07.24 | <br><b>SINGLETON COUNCIL</b> | <br><b>NORTHROP</b><br>Newcastle<br>Level 1, 215 Pacific Hwy, Charlestown NSW 2290<br>Ph (02) 4943 1777 Email newcastle@northrop.com.au<br>ABN 81 094 433 100 | <p>ALL DIMENSIONS TO BE VERIFIED ON SITE BEFORE COMMENCING WORK.<br/>NORTHROP ACCEPTS NO RESPONSIBILITY FOR THE USABILITY, COMPLETENESS OR SCALE OF DRAWINGS TRANSFERRED ELECTRONICALLY.<br/>THIS DRAWING MAY HAVE BEEN PREPARED USING COLOUR, AND MAY BE INCOMPLETE IF COPIED TO BLACK &amp; WHITE.</p> <p>SCALE 1:50@A1</p>  | PROPOSED RESIDENTIAL SUBDIVISION OF LOT 7 DP1196266 | CIVIL ENGINEERING PACKAGE             | NL233144   |          |                                                                                                                                                                                     |                         |          |
| B        | ISSUED FOR DEVELOPMENT APPLICATION |        | RK    | AB    | RD       |                                                                                                                   |                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                     |                                       |            | 22.08.24 | <p>DRAWING NOT TO BE USED FOR CONSTRUCTION UNLESS VERIFICATION SIGNATURE HAS BEEN ADDED</p> <p>THE COPYRIGHT OF THIS DRAWING REMAINS WITH NORTHROP CONSULTING ENGINEERS PTY LTD</p> | DRAWING NUMBER          | REVISION |
| C        | ISSUED FOR DEVELOPMENT APPLICATION |        | CWH   | AB    | RD       |                                                                                                                   |                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                     |                                       |            | 11.09.24 |                                                                                                                                                                                     | DA-C01.32               | E        |
| D        | ISSUED FOR DEVELOPMENT APPLICATION |        | CWH   | CP    | RD       |                                                                                                                   |                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                     |                                       |            | 31.01.25 |                                                                                                                                                                                     | DRAWING SHEET SIZE = A1 |          |
| E        | ISSUED FOR DA APPROVAL             |        | EW    | CP    | RD       |                                                                                                                   |                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                     |                                       |            | 02.06.25 |                                                                                                                                                                                     |                         |          |
|          |                                    |        |       |       |          |                                                                                                                   |                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                     | SINGLETON LGA                                       | TYPICAL ROAD CROSS SECTIONS - SHEET 2 |            |          |                                                                                                                                                                                     |                         |          |



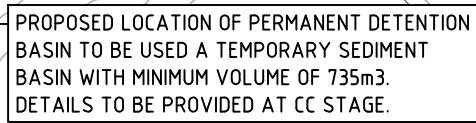
DRAWN: C. W. HEALON  
DESIGNED: E. DOOLAN  
JOB MANAGER: R. DIERCKE  
VERIFIER: A. BROWN



NOT FOR CONSTRUCTION

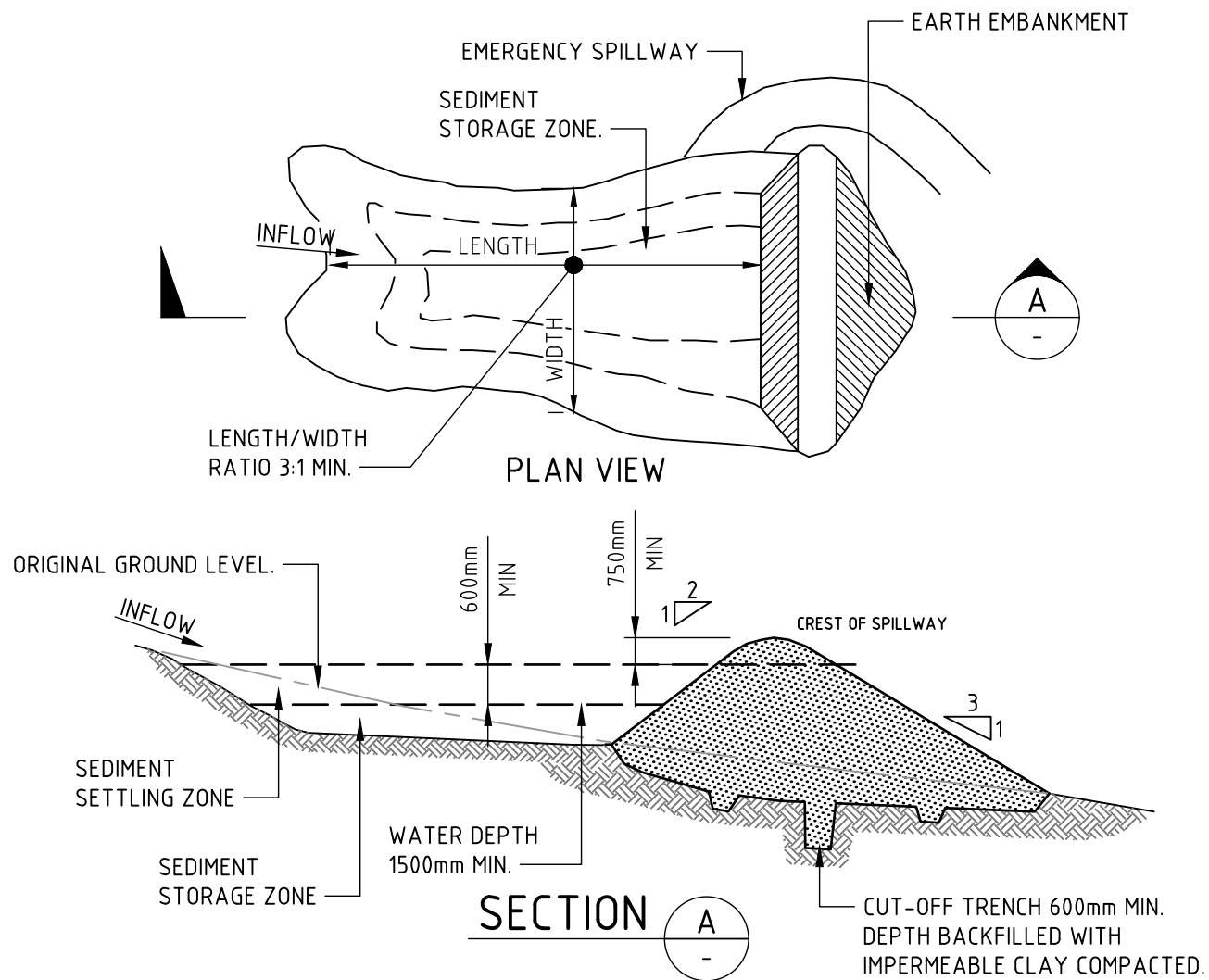
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|-----------------------------------------------------------------------------------------|--|------------------------------------|--|--------|-------|-------|----------|---------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|---------------------------|----------|-------------------------|----------|
| A                                                                                       |  | ISSUED FOR DEVELOPMENT APPLICATION |  | CWH    | CP    | RD    | 31.01.25 |  <p><b>SINGLETON COUNCIL</b></p> | <p>ALL DIMENSIONS TO BE VERIFIED ON SITE BEFORE COMMENCING WORK.</p> <p>NORTHROP ACCEPTS NO RESPONSIBILITY FOR THE USABILITY, COMPLETENESS OR SCALE OF DRAWINGS TRANSFERRED ELECTRONICALLY.</p> <p>THIS DRAWING MAY HAVE BEEN PREPARED USING COLOUR AND MAY BE INCOMPLETE IF COPIED TO BLACK &amp; WHITE.</p> |  <p><b>NORTHROP</b></p> <p>Newcastle</p> <p>Level 1, 215 Pacific Hwy, Charlestown NSW 2290</p> <p>Ph (02) 4943 1777 Email newcastle@northrop.com.au</p> <p>ABN 81 094 433 100</p> | PROPOSED RESIDENTIAL<br>SUBDIVISION OF LOT 7 DP1196266 | CIVIL ENGINEERING PACKAGE | NL233144 |                         |          |
| B                                                                                       |  | ISSUED FOR DA APPROVAL             |  | EW     | CP    | RD    | 02.06.25 |                                                                                                                     |                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                        |                                                        |                           |          | DRAWING NUMBER          | REVISION |
|                                                                                         |  |                                    |  |        |       |       |          |                                                                                                                     |                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                        |                                                        |                           |          | DA-C01.33               | B        |
|                                                                                         |  |                                    |  |        |       |       |          |                                                                                                                     |                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                        |                                                        |                           |          | DRAWING SHEET SIZE = A1 |          |
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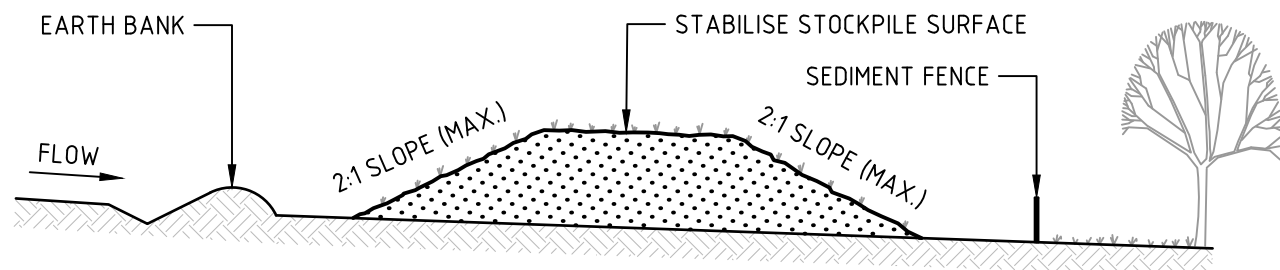
VERIFIER: A. BROWN  
JOB MANAGER: R. DIERCKE  
DESIGNED: E. DOULAN  
DRAWN: C. W-HEALON



CONSTRUCTION NOTES

1. REMOVE ALL VEGETATION AND TOPSOIL FROM UNDER THE DAM WALL AND FROM WITHIN THE STORAGE AREA.
2. CONSTRUCT A CUT-OFF TRENCH 500mm DEEP AND 1200mm WIDE ALONG THE CENTRELINE OF THE EMBANKMENT EXTENDING TO A POINT ON THE GULLY WALL LEVEL WITH THE RISER CREST.
3. MAINTAIN THE TRENCH FREE OF WATER AND RECOMPACT THE MATERIALS WITH EQUIPMENT AS SPECIFIED IN THE SWMP TO 95 PER CENT STANDARD PROCTOR DENSITY.
4. SELECT FILL FOLLOWING THE SWMP THAT IS FREE OF ROOTS, WOOD, ROCK, LARGE STONE OR FOREIGN MATERIAL.
5. PREPARE THE SITE UNDER THE EMBANKMENT BY RIPPING TO AT LEAST 100mm TO HELP BOND COMPACTED FILL TO THE EXISTING SUBSTRATE.
6. SPREAD THE FILL IN 100mm TO 150mm LAYERS AND COMPACT IT AT OPTIMUM MOISTURE CONTENT FOLLOWING THE SWMP.
7. CONSTRUCT THE EMERGENCY SPILLWAY.
8. REHABILITATE THE STRUCTURE FOLLOWING THE SWMP.

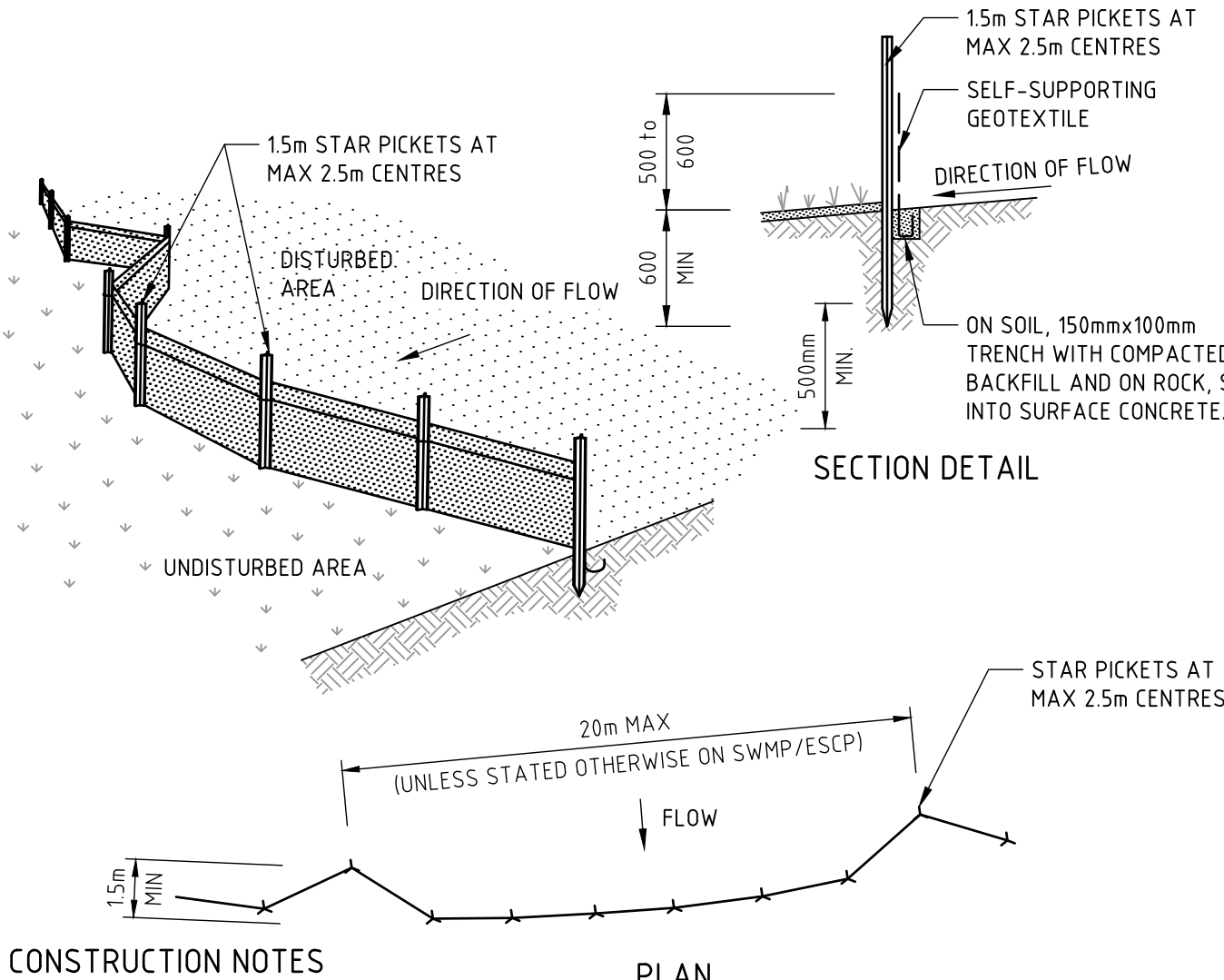
(APPLIES TO 'TYPE D' AND 'TYPE F' SOILS ONLY)  
EARTH SEDIMENT BASIN - WET (SD 6-4)



CONSTRUCTION NOTES

1. PLACE STOCKPILES MORE THAN 2m (PREFERABLY 5m) FROM EXISTING VEGETATION, CONCENTRATED WATER FLOW, ROADS AND HAZARD AREAS.
2. CONSTRUCT ON THE CONTOUR AS LOW, FLAT, ELONGATED MOUNDS.
3. WHERE THERE IS SUFFICIENT AREA, TOPSOIL STOCKPILES SHALL BE LESS THAN 2m IN HEIGHT.
4. WHERE THEY ARE TO BE IN PLACE FOR MORE THAN 10 DAYS, STABILISE FOLLOWING THE APPROVED ESCP OR SWMP TO REDUCE THE C-FACTOR TO LESS THAN 0.10.
5. CONSTRUCT EARTH BANKS (STANDARD DRAWING 5-5) ON THE UPSLOPE SIDE TO DIVERT WATER AROUND STOCKPILES AND SEDIMENT FENCES (STANDARD DRAWING 6-8) 1 TO 2m DOWNSLOPE.

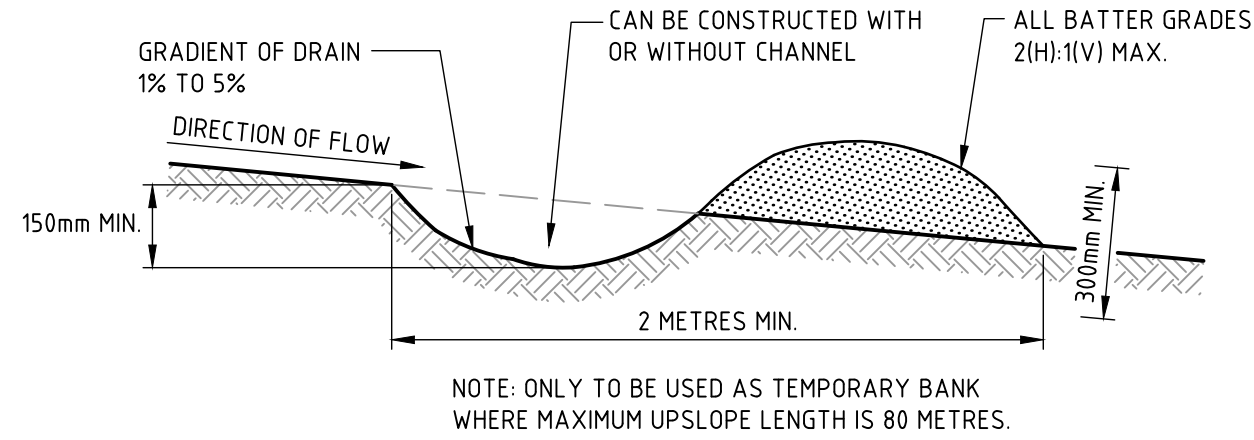
STOCKPILES (SD 4-1)



CONSTRUCTION NOTES

1. CONSTRUCT SEDIMENT FENCES AS CLOSE AS POSSIBLE TO BEING PARALLEL TO THE CONTOURS OF THE SITE, BUT WITH SMALL RETURNS AS SHOWN IN THE DRAWING TO LIMIT THE CATCHMENT AREA OF ANY ONE SECTION. THE CATCHMENT AREA SHOULD BE SMALL ENOUGH TO LIMIT WATER FLOW IF CONCENTRATED AT ONE POINT TO 50 LITRES PER SECOND IN THE DESIGN STORM EVENT, USUALLY THE 10-YEAR EVENT.
2. CUT A 150mm DEEP TRENCH ALONG THE UPSLOPE LINE OF THE FENCE FOR THE BOTTOM OF THE FABRIC TO BE ENTRENCHED.
3. DRIVE 15 METRE LONG STAR PICKETS INTO GROUND AT 2.5 METRE INTERVALS (MAX) AT THE DOWNSLOPE EDGE OF THE TRENCH. ENSURE ANY STAR PICKETS ARE FITTED WITH SAFETY CAPS.
4. FIX SELF-SUPPORTING GEOTEXTILE TO THE UPSLOPE SIDE OF THE POSTS ENSURING IT GOES TO THE BASE OF THE TRENCH. FIX THE GEOTEXTILE WITH WIRE TIES OR AS RECOMMENDED BY THE MANUFACTURER. ONLY USE GEOTEXTILE SPECIFICALLY PRODUCED FOR SEDIMENT FENCING. THE USE OF SHADE CLOTH FOR THIS PURPOSE IS NOT SATISFACTORY.
5. JOIN SECTIONS OF FABRIC AT A SUPPORT POST WITH A 150mm OVERLAP.
6. BACKFILL THE TRENCH OVER THE BASE OF THE FABRIC AND COMPACT IT THOROUGHLY OVER THE GEOTEXTILE.

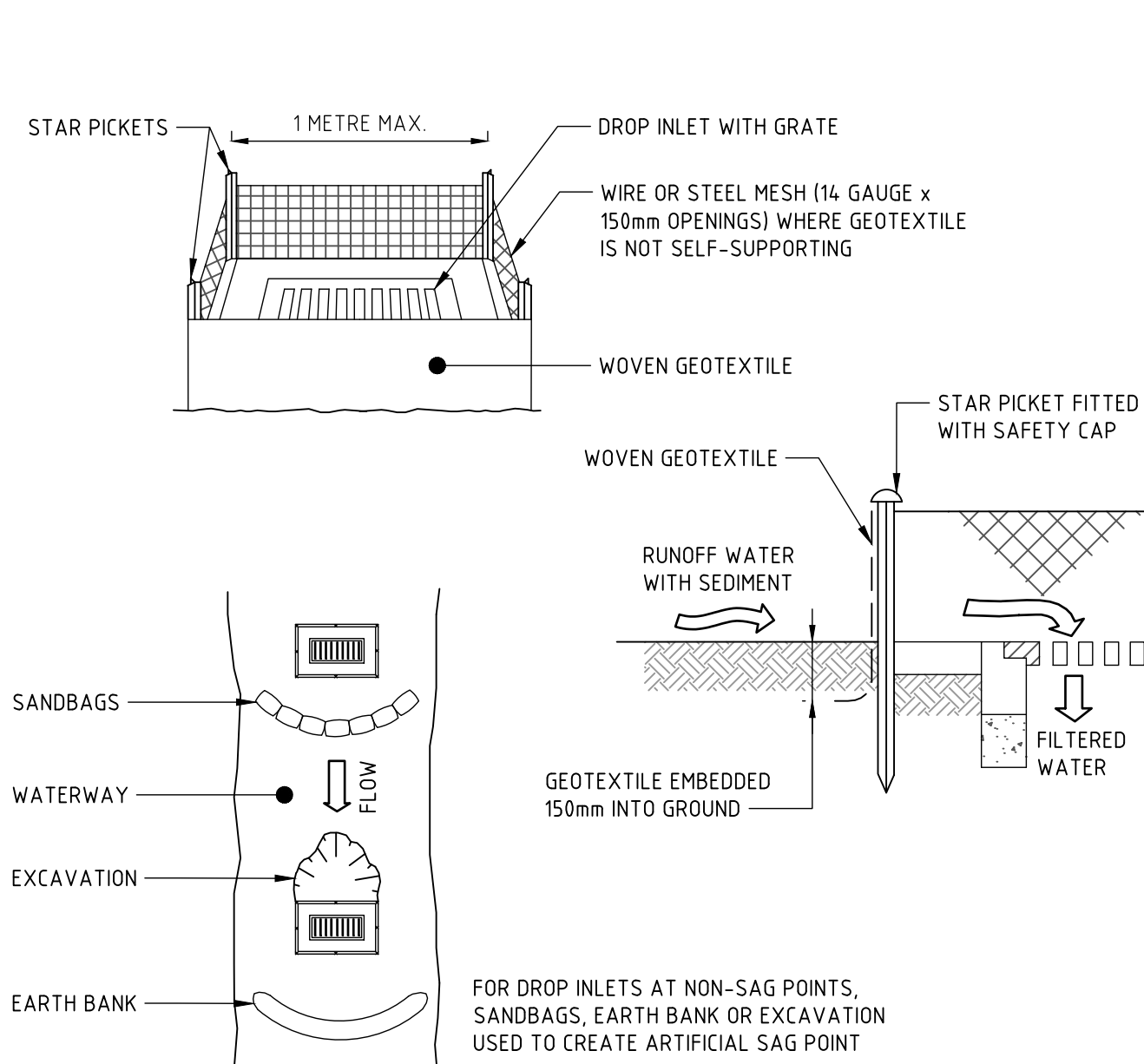
SEDIMENT FENCE (SD 6-8)



DIRTY WATER DIVERSION DRAIN CONSTRUCTION NOTES:

1. BUILD WITH GRADIENTS BETWEEN 1% AND 5%.
2. AVOID REMOVING TREES AND SHRUBS IF POSSIBLE - WORK AROUND THEM.
3. ENSURE THE STRUCTURES ARE FREE OF PROJECTIONS OR OTHER IRREGULARITIES THAT COULD IMPEDE WATER FLOW.
4. BUILD THE DRAINS WITH CIRCULAR, PARABOLIC OR TRAPEZOIDAL CROSS-SECTIONS, NOT "V" SHAPED.
5. ENSURE BANKS ARE PROPERLY COMPACTED TO PREVENT FAILURE. SURFACE SHOULD BE LEFT ROUGH TO PROMOTE GERMINATION OF VEGETATION ON THE BANK.
6. COMPLETE PERMANENT OR TEMPORARY STABILISATION WITHIN 10 DAYS OF CONSTRUCTION.

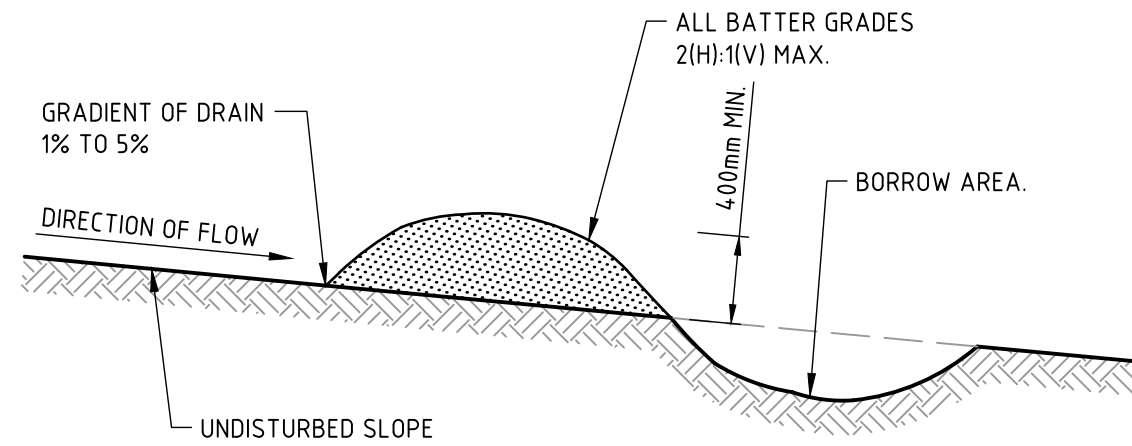
DIRTY WATER DIVERSION DRAIN



CONSTRUCTION NOTES

1. FABRICATE A SEDIMENT BARRIER MADE FROM GEOTEXTILE OR STRAW BALES.
2. FOLLOW STANDARD DRAWING 6-7 AND STANDARD DRAWING 6-8 FOR INSTALLATION PROCEDURES FOR THE STRAW BALES OR GEOFABRIC. REDUCE THE PICKET SPACING TO 1 METRE CENTRES.
3. IN WATERWAYS, ARTIFICIAL SAG POINTS CAN BE CREATED WITH SANDBAGS OR EARTH BANKS AS SHOWN IN THE DRAWING.
4. DO NOT COVER THE INLET WITH GEOTEXTILE UNLESS THE DESIGN IS ADEQUATE TO ALLOW FOR ALL WATERS TO BYPASS IT.

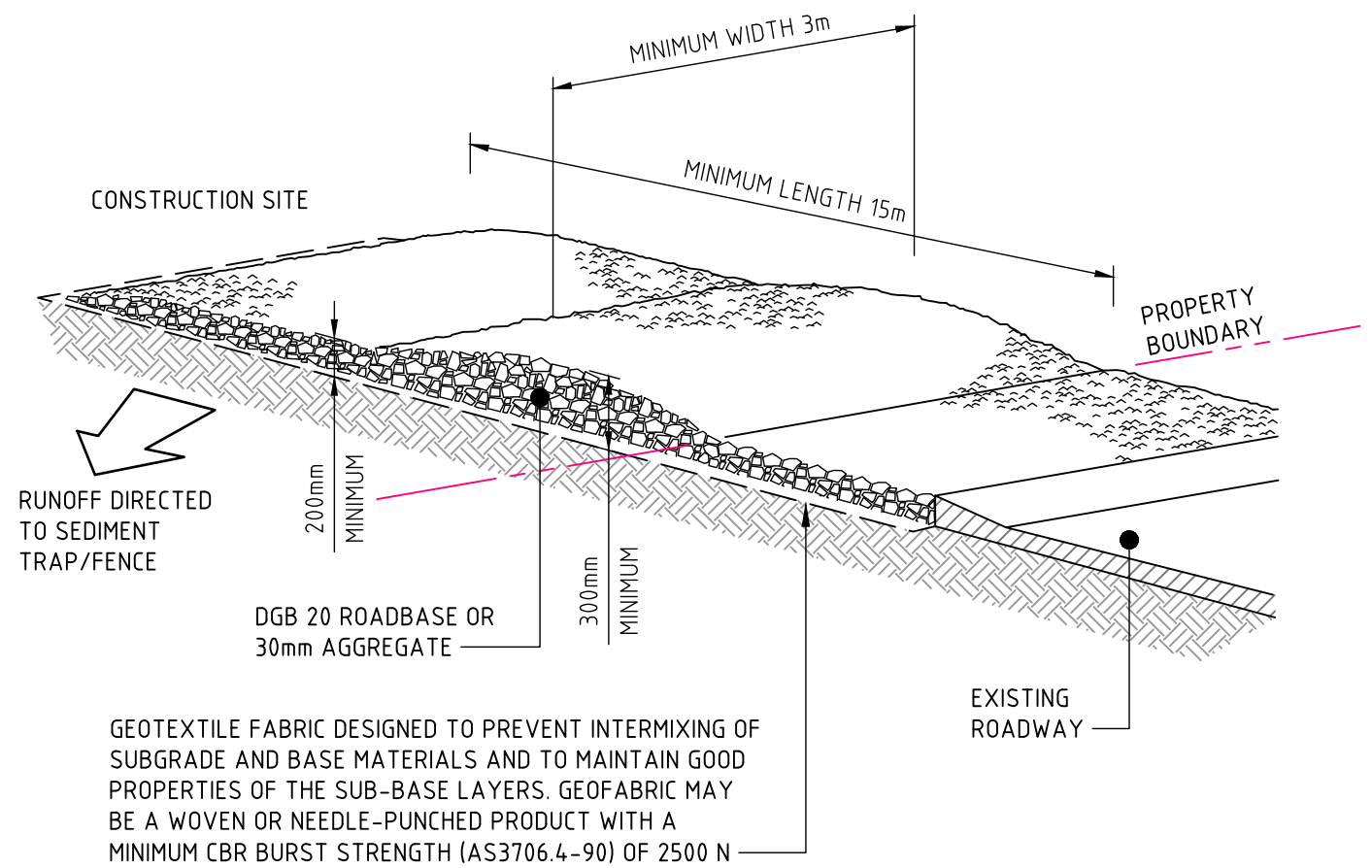
GEOTEXTILE INLET FILTER (SD 6-12)



CLEAN WATER DIVERSION DRAIN CONSTRUCTION NOTES:

1. BUILD WITH GRADIENTS BETWEEN 1% AND 5%.
2. BANK TO BE FORMED BY PUSHING UP TOPSOIL FROM THE LOWER 'DISTURBED AREA'. NO DISTURBANCE IS TO OCCUR ON THE UPSLOPE 'CLEAN' WATER FLOW PATH AREA.
3. AVOID REMOVING TREES AND SHRUBS IF POSSIBLE - WORK AROUND THEM.
4. ENSURE BANKS ARE PROPERLY COMPACTED TO PREVENT FAILURE. SURFACE SHOULD BE LEFT ROUGH TO PROMOTE GERMINATION OF VEGETATION ON THE BANK.
5. OUTSIDE BATTER (EXPOSED TO CONVEYED FLOWS) SHOULD BE STABILISED VIA SEEDING WITH FAST GROWING COVER CROP IMMEDIATELY FOLLOWING FORMATION.
6. AVOID HAVING EXPOSED DISPERSIVE SOIL ON THE OUTSIDE BATTER. COVER WITH NON-DISPERSIVE TOPSOIL IF PRESENT.

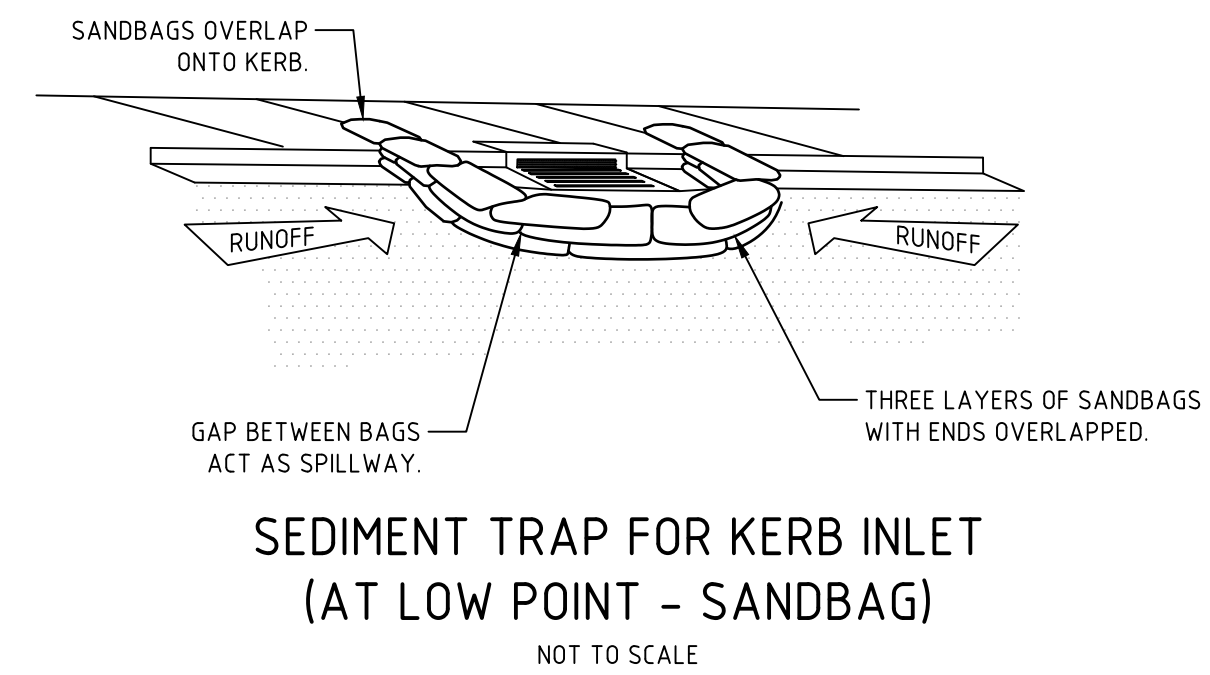
CLEAN WATER DIVERSION DRAIN



CONSTRUCTION NOTES

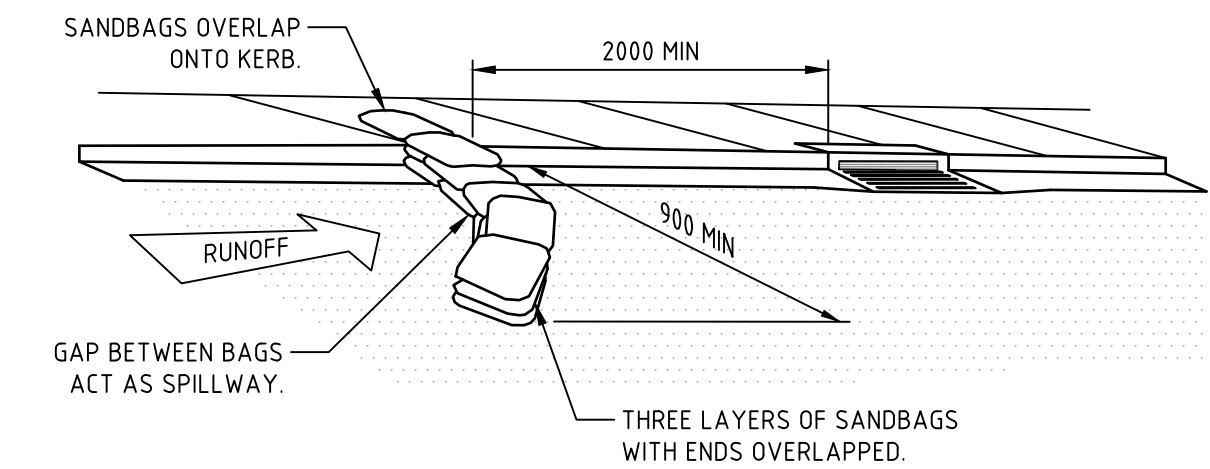
1. STRIP THE TOPSOIL, LEVEL THE SITE AND COMPACT THE SUBGRADE.
2. COVER THE AREA WITH NEEDLE-PUNCHED GEOTEXTILE.
3. CONSTRUCT A 200mm THICK PAD OVER THE GEOTEXTILE USING ROAD BASE OR 30mm AGGREGATE.
4. ENSURE THE STRUCTURE IS AT LEAST 15 METRES LONG OR TO BUILDING ALIGNMENT AND AT LEAST 3 METRES WIDE.
5. WHERE A SEDIMENT FENCE JOINS ONTO THE STABILISED ACCESS, CONSTRUCT A HUMPS IN THE STABILISED ACCESS TO DIVERT WATER TO THE SEDIMENT FENCE.

STABILISED SITE ACCESS (SD 6-14)



SEDIMENT TRAP FOR KERB INLET  
(AT LOW POINT - SANDBAG)

NOT TO SCALE



SEDIMENT TRAP FOR KERB INLET  
(ON GRADE - SANDBAG)

NOT TO SCALE

NOT FOR CONSTRUCTION

| REVISION | DESCRIPTION                        | ISSUED | VER'D | APP'D | DATE     |
|----------|------------------------------------|--------|-------|-------|----------|
| A        | ISSUED FOR CLIENT REVIEW           | CWH    | AB    | ED    | 05.06.24 |
| B        | ISSUED FOR CLIENT REVIEW           | CWH    | AB    | RD    | 15.07.24 |
| C        | ISSUED FOR DEVELOPMENT APPLICATION | RK     | AB    | RD    | 22.08.24 |
| D        | ISSUED FOR DEVELOPMENT APPLICATION | CWH    | AB    | RD    | 11.09.24 |
| E        | ISSUED FOR DEVELOPMENT APPLICATION | CWH    | CP    | RD    | 31.01.25 |
| F        | ISSUED FOR DA APPROVAL             | EW     | CP    | RD    | 02.06.25 |

| CLIENT                                                                                                   |
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| <br>SINGLETON COUNCIL |
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| ARCHITECT                                                                           |
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| <br>Newcastle<br>Level 1, 215 Pacific Hwy, Charlestown NSW 2290<br>Ph (02) 4943 1777 Email newcastle@northrop.com.au<br>ABN 81 094 433 100 |
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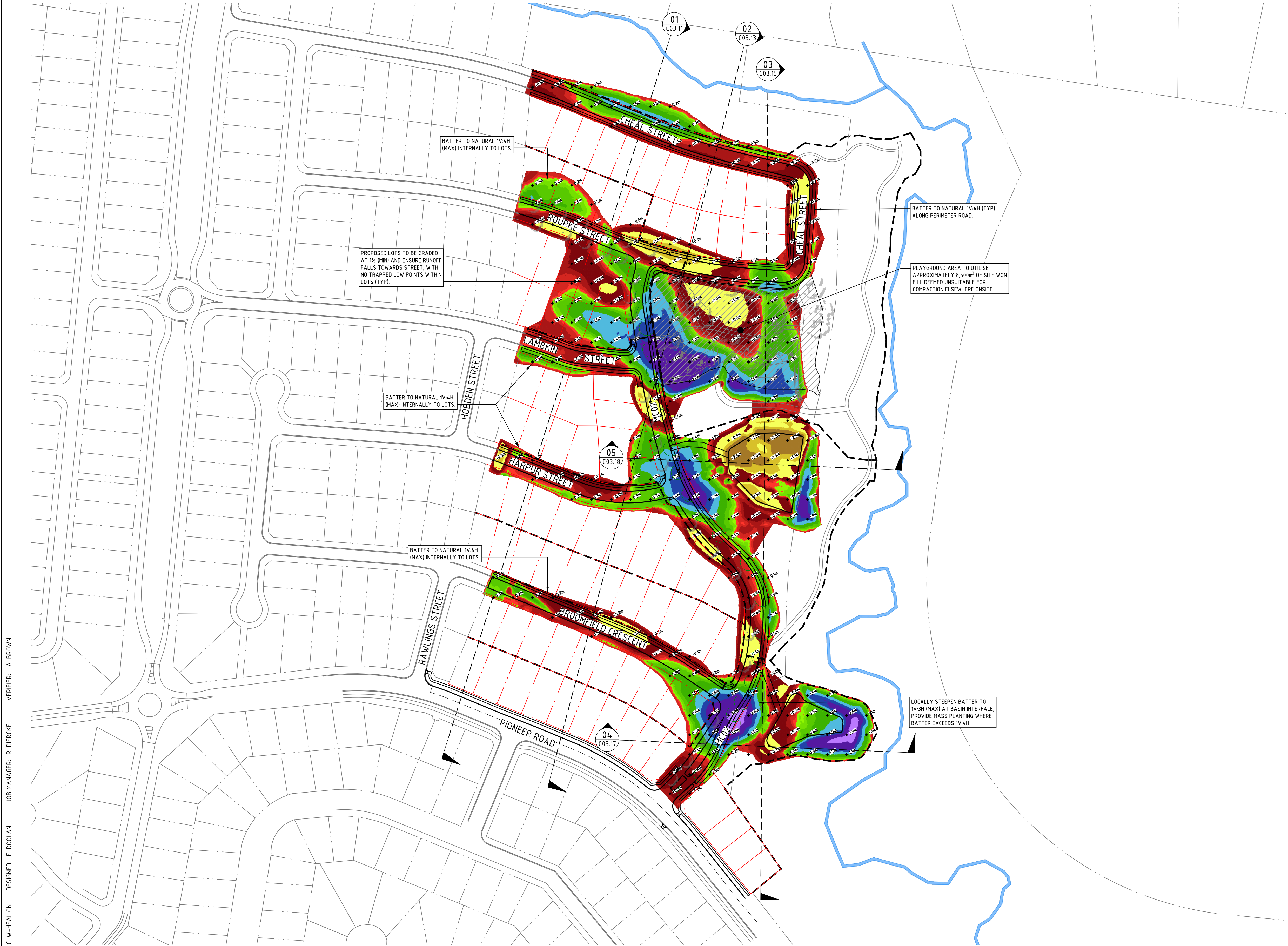
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| PROJECT<br>PROPOSED RESIDENTIAL<br>SUBDIVISION OF LOT 7 DP1196266<br>SINGLETON LGA |
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|                                                                                       |
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| DRAWING TITLE<br>CIVIL ENGINEERING PACKAGE<br>EROSION AND SEDIMENT<br>CONTROL DETAILS |
|---------------------------------------------------------------------------------------|

|                             |               |
|-----------------------------|---------------|
| JOB NUMBER<br>NL233144      | REVISION<br>F |
| DRAWING NUMBER<br>DA-C02.11 |               |
| DRAWING SHEET SIZE = A1     |               |



DRAWN: C. W-HEALON    DESIGNED: E. DOULAN    JOB MANAGER: R. DIERCKE    VERIFIER: A. BROWN



LEGEND

PROPOSED PROPERTY BOUNDARY

EXISTING PROPERTY BOUNDARY

STAGING BOUNDARY

BULK EARTHWORKS SPOT DEPTH

DEPTH OF CUT

- 20m

TO

- 3m

- 3m

TO

- 2m

- 2m

TO

- 1.5m

- 1.5m

TO

- 1m

- 1m

TO

- 0.5m

- 0.5m

TO

- 0.25m

- 0.25m

TO

- 0.1m

- 0.1m

TO

- 0.0m

DEPTH OF FILL

0.0m

TO

0.1m

0.1m

TO

0.25m

0.25m

TO

0.5m

0.5m

TO

1m

1m

TO

1.5m

1.5m

TO

2m

2m

TO

3m

3m

TO

5m

FILL AREA FOR UNSUITABLE TOPSOIL

NOTES

1. BULK EARTHWORKS LEVELS AND VOLUMES ARE BASED ON A COMPARISON OF THE DESIGN SURFACE (MINUS 250mm) AND THE EXISTING SURFACE LEVEL AS SURVEYED.

2. NO ALLOWANCE HAS BEEN MADE FOR SELECT LAYERS OR UNSUITABLE MATERIAL THAT IS LIKELY TO BE PRESENT.

3. NO ALLOWANCE HAS BEEN MADE FOR TEMPORARY SEDIMENT DAMS

4. NO ALLOWANCE HAS BEEN MADE FOR SERVICE TRENCHES, DRAINAGE TRENCHES, DRAINAGE INFRASTRUCTURE (PITS, CULVERTS, ETC) IN THE LEVELS OR VOLUMES PRESENTED ON THIS PLAN.

5. NO ALLOWANCE FOR ANY TEMPORARY BATTERS DURING WORKS.

6. NO BULKING FACTORS HAVE BEEN CONSIDERED/ALLOWED FOR.

7. BULK EARTHWORKS OF CUT / FILL APPROXIMATELY 30,000m³. DETAILED GRADING AND EARTHWORKS TO BE PROVIDED AT DETAILED DESIGN.

8. APPROXIMATE BULK EARTHWORKS VOLUMES BASED ON THE NOTES ABOVE ARE AS FOLLOWS;

• BULK CUT

= 22,647m³

• BULK FILL

= 27,125m³

• BULK CUT/FILL BALANCE

= 4,478m³ (IMPORT)

9. ALL BULK EARTHWORKS TO BE UNDERTAKEN IN ACCORDANCE WITH SITE SPECIFIC GEOTECHNICAL REPORT AND BULK EARTHWORKS NOTES.

| REVISION | DESCRIPTION                        | ISSUED | VER'D | APP'D | DATE     |
|----------|------------------------------------|--------|-------|-------|----------|
| C        | ISSUED FOR DEVELOPMENT APPLICATION | RK     | AB    | RD    | 22.08.24 |
| D        | ISSUED FOR DEVELOPMENT APPLICATION | CWH    | AB    | RD    | 11.09.24 |
| E        | ISSUED FOR DEVELOPMENT APPLICATION | CWH    | CP    | RD    | 31.01.25 |
| F        | ISSUED FOR DA APPROVAL             | EW     | CP    | RD    | 02.06.25 |
| G        | ISSUED FOR DA APPROVAL             | EW     | CP    | RD    | 05.06.25 |
| H        | ISSUED FOR DA APPROVAL             | EW     | CP    | RD    | 06.06.25 |

SINGLETON COUNCIL

DRAWING NOT TO BE USED FOR CONSTRUCTION  
UNLESS VERIFICATION SIGNATURE HAS BEEN ADDED

ARCHITECT

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SCALE 1:1500 @ A1

NORTHROP

Newcastle

Level 1, 215 Pacific Hwy, Charlestown NSW 2290

Ph (02) 4943 1777 Email newcastle@northrop.com.au

ABN 81 094 433 100

PROJECT

PROPOSED RESIDENTIAL  
SUBDIVISION OF LOT 7 DP1196266

SINGLETON LGA

DRAWING TITLE

CIVIL ENGINEERING PACKAGE

BULK EARTHWORKS CUT AND  
FILL PLAN

DRAWING NUMBER

REVISION

NL233144

DA-C03.01

H

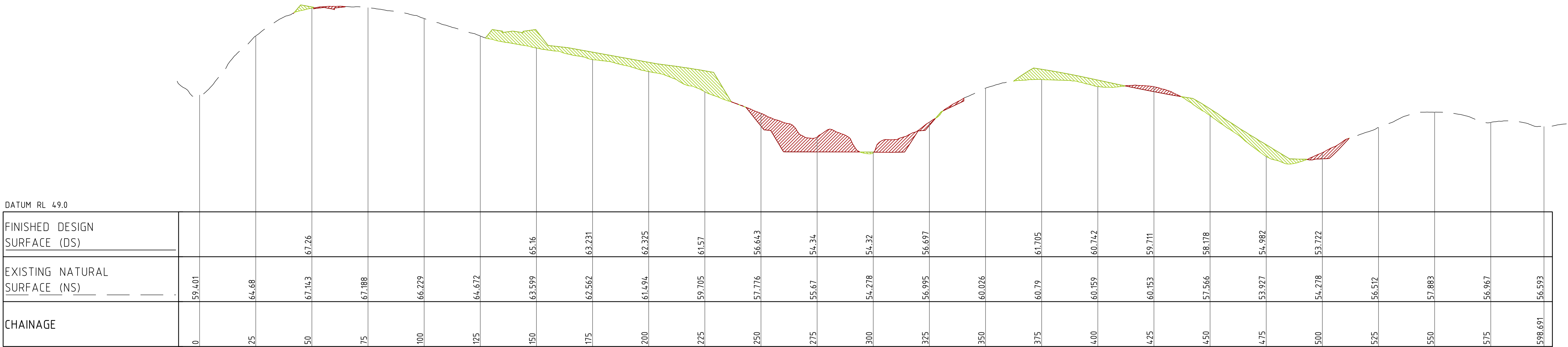
DRAWING SHEET SIZE = A1



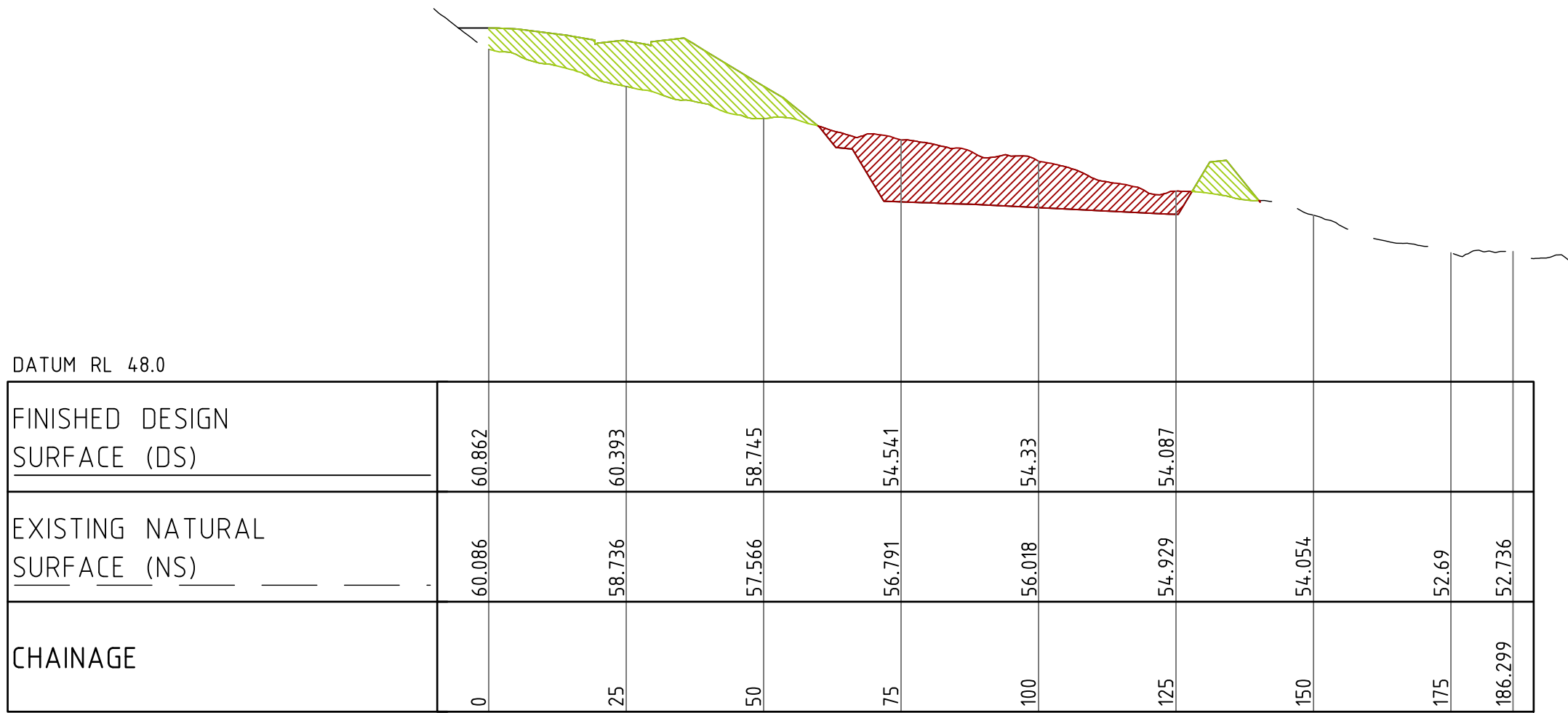




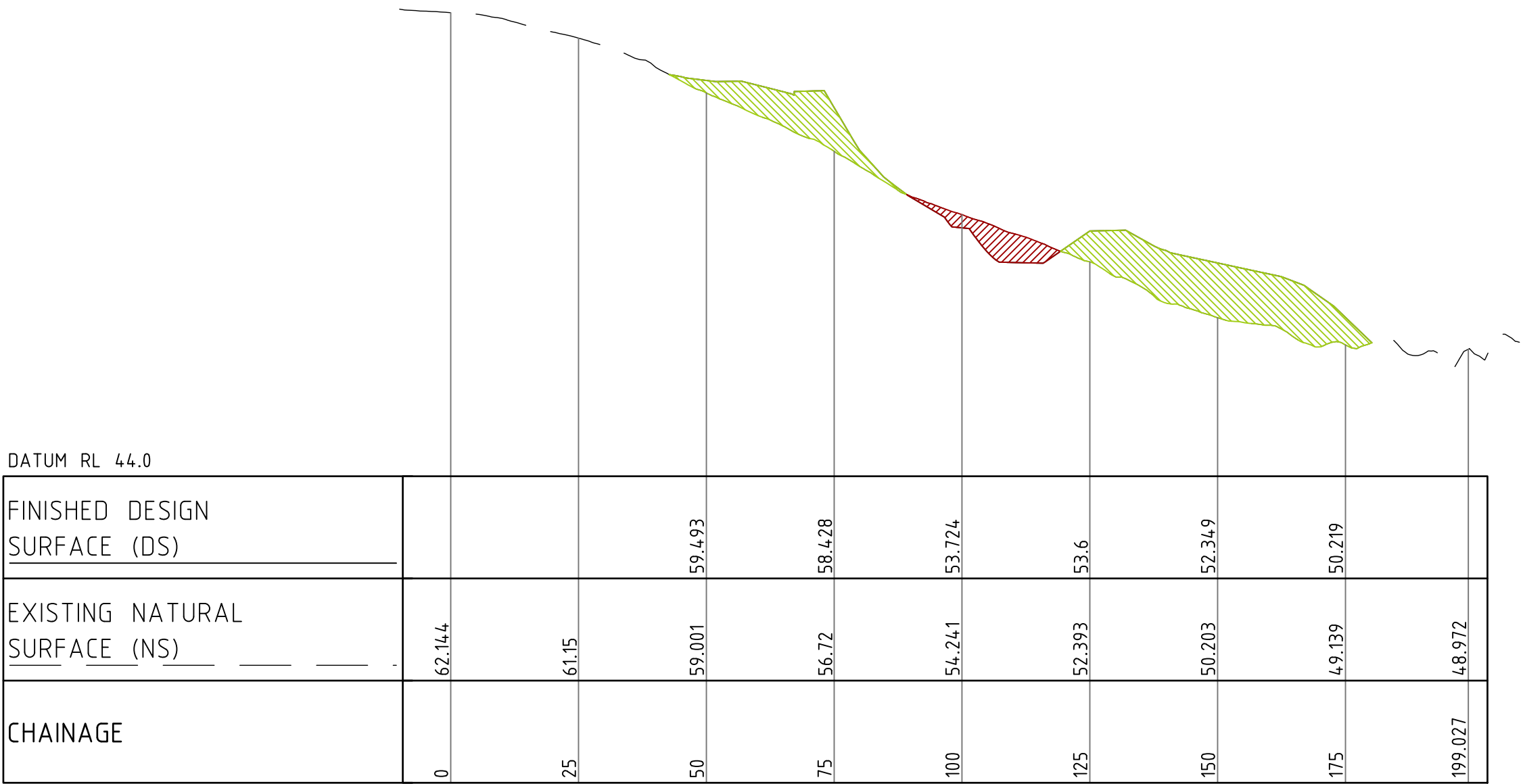
DRAWN: C. W-HEALON  
DESIGNED: E. DOLAN  
JOB MANAGER: R. DIERCKE  
VERIFIER: A. BROWN



LONGITUDINAL SECTION ALONG BE03  
HORIZONTAL SCALE 1:1000@A1  
VERTICAL SCALE 1:200@A1



LONGITUDINAL SECTION ALONG BE04  
HORIZONTAL SCALE 1:1000@A1  
VERTICAL SCALE 1:200@A1



LONGITUDINAL SECTION ALONG BE05  
HORIZONTAL SCALE 1:1000@A1  
VERTICAL SCALE 1:200@A1

NOT FOR CONSTRUCTION

| REVISION | DESCRIPTION                        | ISSUED | VER'D | APP'D | DATE     | CLIENT                                                                                                                                                                                                                            | ARCHITECT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | PROJECT                                                | DRAWING TITLE             | JOB NUMBER |                                       |                                    |                      |
|----------|------------------------------------|--------|-------|-------|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|---------------------------|------------|---------------------------------------|------------------------------------|----------------------|
| A        | ISSUED FOR CLIENT REVIEW           | CWH    | AB    | ED    | 05.06.24 | <div><p><b>SINGLETON COUNCIL</b></p></div> <div>DRAWING NOT TO BE USED FOR CONSTRUCTION<br/>UNLESS VERIFICATION SIGNATURE HAS BEEN ADDED</div> | <div>ALL DIMENSIONS TO BE VERIFIED ON SITE BEFORE COMMENCING WORK.<br/>NORTHROP ACCEPTS NO RESPONSIBILITY FOR THE USABILITY, COMPLETENESS OR SCALE OF DRAWINGS TRANSFERRED ELECTRONICALLY.<br/>THIS DRAWING MAY HAVE BEEN PREPARED USING COLOUR AND MAY BE INCOMPLETE IF COPIED TO BLACK &amp; WHITE.</div> <div>SCALE 1:100 @ A1<br/>SCALE 1:500 @ A1</div> <div><p><b>NORTHROP</b><br/>Newcastle<br/>Level 1, 215 Pacific Hwy, Charlestown NSW 2290<br/>Ph (02) 4943 1777 Email newcastle@northrop.com.au<br/>ABN 81 094 433 100</p></div> | PROPOSED RESIDENTIAL<br>SUBDIVISION OF LOT 7 DP1196266 | CIVIL ENGINEERING PACKAGE | NL233144   |                                       |                                    |                      |
| B        | ISSUED FOR CLIENT REVIEW           | CWH    | AB    | RD    | 15.07.24 |                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                        |                           |            |                                       |                                    |                      |
| C        | ISSUED FOR DEVELOPMENT APPLICATION | RK     | AB    | RD    | 22.08.24 |                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                        |                           |            |                                       |                                    |                      |
| D        | ISSUED FOR DEVELOPMENT APPLICATION | CWH    | AB    | RD    | 11.09.24 |                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                        |                           |            |                                       |                                    |                      |
| E        | ISSUED FOR DEVELOPMENT APPLICATION | CWH    | CP    | RD    | 31.01.25 |                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                        |                           |            |                                       |                                    |                      |
| F        | ISSUED FOR DA APPROVAL             | EW     | CP    | RD    | 02.06.25 |                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                        |                           |            |                                       |                                    |                      |
|          |                                    |        |       |       |          |                                                                                                                                                                                                                                   | THE COPYRIGHT OF THIS DRAWING REMAINS WITH<br>NORTHROP CONSULTING ENGINEERS PTY LTD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | SINGLETON LGA                                          |                           |            | BULK EARTHWORKS<br>SECTIONS - SHEET 2 | DRAWING NUMBER<br><b>DA-C03.12</b> | REVISION<br><b>F</b> |
|          |                                    |        |       |       |          |                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                        |                           |            | DRAWING SHEET SIZE = A1               |                                    |                      |







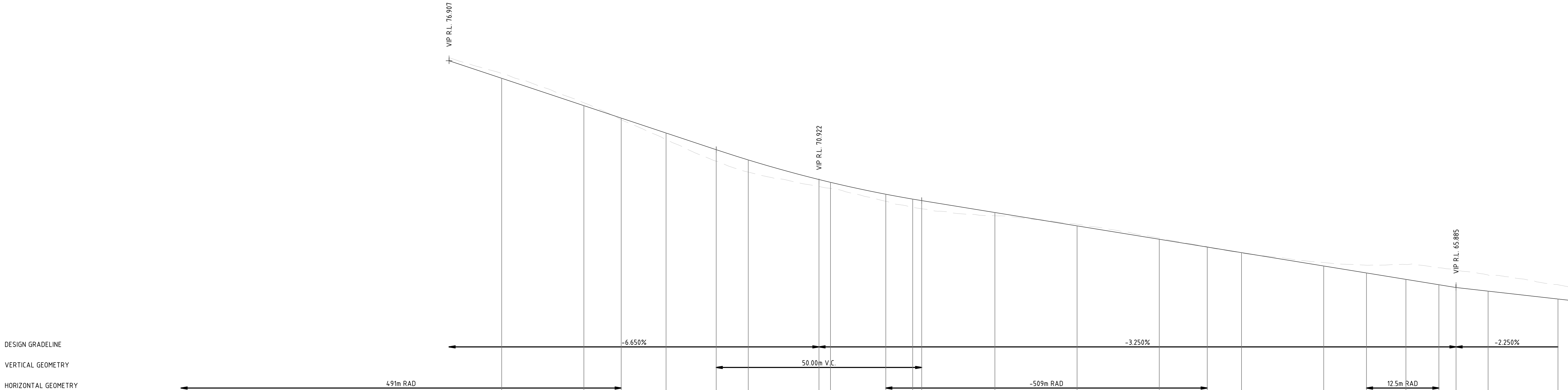








VERIFIER: A. BROWN  
JOB MANAGER: R. DIERCKE  
DESIGNED: E. DOOLAN  
DRAWN: C. W-HEALON



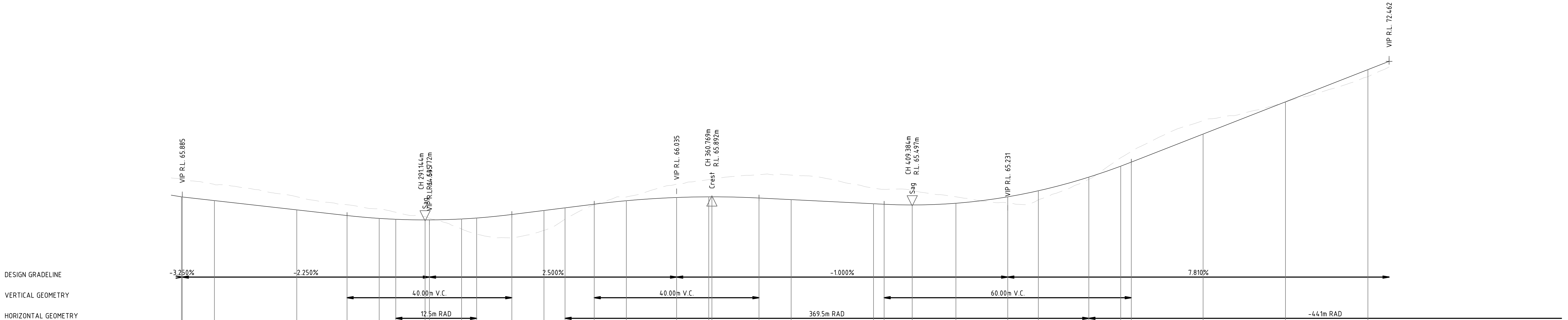
LONGITUDINAL SECTION ALONG ROURKE / CHEAL STREET (MC01)  
HORIZONTAL SCALE 1:500@A1  
VERTICAL SCALE 1:100@A1

NOT FOR CONSTRUCTION

| REVISION |  | DESCRIPTION                        | ISSUED | VER'D | APP'D | DATE     | CLIENT                                                                                                                                                                                                      | ARCHITECT                                                                        | ALL DIMENSIONS TO BE VERIFIED ON SITE BEFORE COMMENCING WORK.<br>NORTHROP ACCEPTS NO RESPONSIBILITY FOR THE USABILITY, COMPLETENESS OR SCALE OF DRAWINGS TRANSFERRED ELECTRONICALLY.<br>THIS DRAWING MAY HAVE BEEN PREPARED USING COLOUR, AND MAY BE INCOMPLETE IF COPIED TO BLACK & WHITE. |                                  | <br><b>NORTHROP</b><br>Newcastle<br>Level 1, 215 Pacific Hwy, Charlestown NSW 2290<br>Ph (02) 4943 1777 Email newcastle@northrop.com.au<br>ABN 81 094 433 100 | PROJECT                                             | DRAWING TITLE                   | JOB NUMBER |   |                         |
|----------|--|------------------------------------|--------|-------|-------|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|---------------------------------|------------|---|-------------------------|
| A        |  | ISSUED FOR CLIENT REVIEW           | CWH    | AB    | ED    | 05.06.24 | <br><b>SINGLETON COUNCIL</b><br><br>DRAWING NOT TO BE USED FOR CONSTRUCTION UNLESS VERIFICATION SIGNATURE HAS BEEN ADDED | THE COPYRIGHT OF THIS DRAWING REMAINS WITH NORTHROP CONSULTING ENGINEERS PTY LTD | SCALE 1:100 @A1<br>SCALE 1500 @A1                                                                                                                                                                                                                                                           | 0 1 2 3 4 5m<br>0 5 10 15 20 25m |                                                                                                                                                                                                                                                    | PROPOSED RESIDENTIAL SUBDIVISION OF LOT 7 DP1196266 | CIVIL ENGINEERING PACKAGE       | NL233144   |   |                         |
| B        |  | ISSUED FOR CLIENT REVIEW           | CWH    | AB    | RD    | 15.07.24 |                                                                                                                                                                                                             |                                                                                  |                                                                                                                                                                                                                                                                                             |                                  |                                                                                                                                                                                                                                                    |                                                     |                                 |            |   |                         |
| C        |  | ISSUED FOR DEVELOPMENT APPLICATION | RK     | AB    | RD    | 22.08.24 |                                                                                                                                                                                                             |                                                                                  |                                                                                                                                                                                                                                                                                             |                                  |                                                                                                                                                                                                                                                    |                                                     |                                 |            |   |                         |
| D        |  | ISSUED FOR DEVELOPMENT APPLICATION | CWH    | AB    | RD    | 11.09.24 |                                                                                                                                                                                                             |                                                                                  |                                                                                                                                                                                                                                                                                             |                                  |                                                                                                                                                                                                                                                    |                                                     |                                 |            |   |                         |
| E        |  | ISSUED FOR DEVELOPMENT APPLICATION | CWH    | CP    | RD    | 31.01.25 |                                                                                                                                                                                                             |                                                                                  |                                                                                                                                                                                                                                                                                             |                                  |                                                                                                                                                                                                                                                    |                                                     |                                 |            |   |                         |
| F        |  | ISSUED FOR DA APPROVAL             | EW     | CP    | RD    | 02.06.25 |                                                                                                                                                                                                             |                                                                                  |                                                                                                                                                                                                                                                                                             |                                  |                                                                                                                                                                                                                                                    |                                                     |                                 |            |   |                         |
|          |  |                                    |        |       |       |          |                                                                                                                                                                                                             |                                                                                  |                                                                                                                                                                                                                                                                                             |                                  |                                                                                                                                                                                                                                                    | SINGLETON LGA                                       | LONGITUDINAL SECTIONS - SHEET 1 | DA-C04.11  | F | DRAWING SHEET SIZE ± A1 |



VERIFIER: A. BROWN  
JOB MANAGER: R. DIERCKE  
DESIGNED: E. DOOLAN  
DRAWN: C. W-HEALON



| FINISHED SURFACE |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | </ |
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LONGITUDINAL SECTION ALONG ROURKE / CHEAL STREET (MC01)

HORIZONTAL SCALE 1:500@A1  
VERTICAL SCALE 1:100@A1

NOT FOR CONSTRUCTION

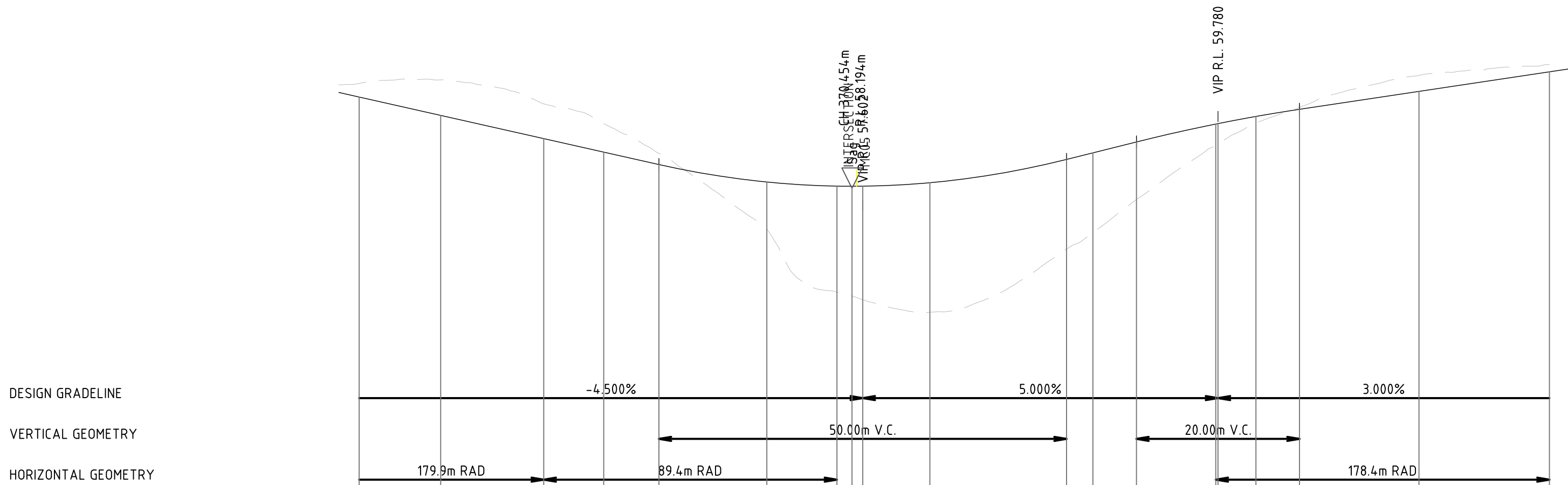
| REVISION                | DESCRIPTION                        | ISSUED | VER'D | APP'D | DATE     | CLIENT                                                                                                                                                                      | ARCHITECT                                                                        | ALL DIMENSIONS TO BE VERIFIED ON SITE BEFORE COMMENCING WORK. NORTHROP ACCEPTS NO RESPONSIBILITY FOR THE USABILITY, COMPLETENESS OR SCALE OF DRAWINGS TRANSFERRED ELECTRONICALLY. THIS DRAWING MAY HAVE BEEN PREPARED USING COLOUR, AND MAY BE INCOMPLETE IF COPIED TO BLACK & WHITE. | PROJECT                                                                  | DRAWING TITLE                                                    | DRAWING NUMBER            | REVISION |
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| A                       | ISSUED FOR CLIENT REVIEW           | CWH    | AB    | ED    | 05.06.24 | <br>DRAWING NOT TO BE USED FOR CONSTRUCTION UNLESS VERIFICATION SIGNATURE HAS BEEN ADDED | THE COPYRIGHT OF THIS DRAWING REMAINS WITH NORTHROP CONSULTING ENGINEERS PTY LTD | <br>Newcastle<br>Level 1, 215 Pacific Hwy, Charlestown NSW 2290<br>Ph (02) 4943 1777 Email newcastle@northrop.com.au<br>ABN 81 094 433 100                                                       | PROPOSED RESIDENTIAL SUBDIVISION OF LOT 7 DP1196266<br><br>SINGLETON LGA | CIVIL ENGINEERING PACKAGE<br><br>LONGITUDINAL SECTIONS - SHEET 2 | NL233144<br><br>DA-C04.12 | F        |
| B                       | ISSUED FOR CLIENT REVIEW           | CWH    | AB    | RD    | 15.07.24 |                                                                                                                                                                             |                                                                                  |                                                                                                                                                                                                                                                                                       |                                                                          |                                                                  |                           |          |
| C                       | ISSUED FOR DEVELOPMENT APPLICATION | RK     | AB    | RD    | 22.08.24 |                                                                                                                                                                             |                                                                                  |                                                                                                                                                                                                                                                                                       |                                                                          |                                                                  |                           |          |
| D                       | ISSUED FOR DEVELOPMENT APPLICATION | CWH    | AB    | RD    | 11.09.24 |                                                                                                                                                                             |                                                                                  |                                                                                                                                                                                                                                                                                       |                                                                          |                                                                  |                           |          |
| E                       | ISSUED FOR DEVELOPMENT APPLICATION | CWH    | CP    | RD    | 31.01.25 |                                                                                                                                                                             |                                                                                  |                                                                                                                                                                                                                                                                                       |                                                                          |                                                                  |                           |          |
| F                       | ISSUED FOR DA APPROVAL             | EW     | CP    | RD    | 02.06.25 |                                                                                                                                                                             |                                                                                  |                                                                                                                                                                                                                                                                                       |                                                                          |                                                                  |                           |          |
| DRAWING SHEET SIZE = A1 |                                    |        |       |       |          |                                                                                                                                                                             |                                                                                  |                                                                                                                                                                                                                                                                                       |                                                                          |                                                                  |                           |          |





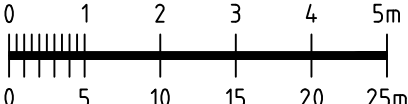


DRAWN: C. W. HEALON  
DESIGNED: E. DOOLAN  
JOB MANAGER: R. DIERCKE  
VERIFIER: A. BROWN

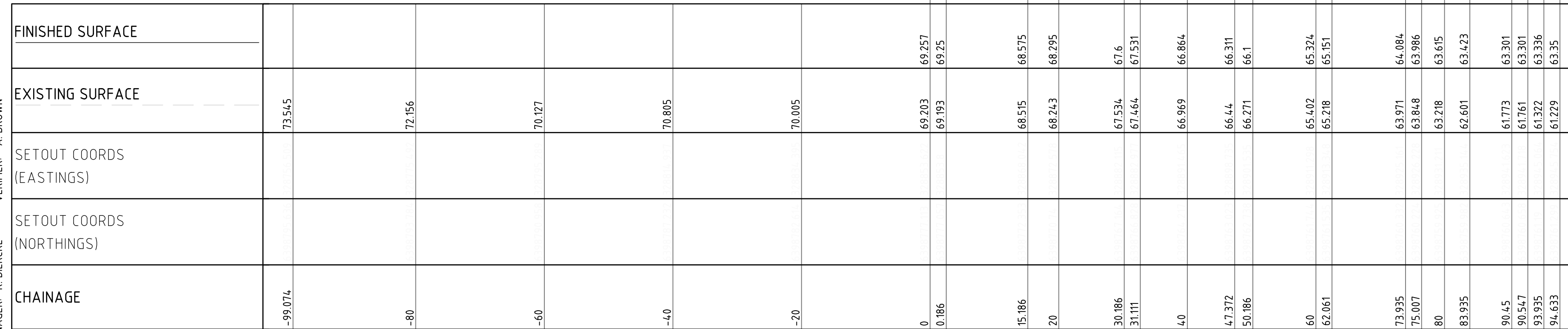


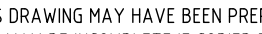
LONGITUDINAL SECTION ALONG CHEAL STREET (MC02)  
HORIZONTAL SCALE 1:500@A1  
VERTICAL SCALE 1:100@A1

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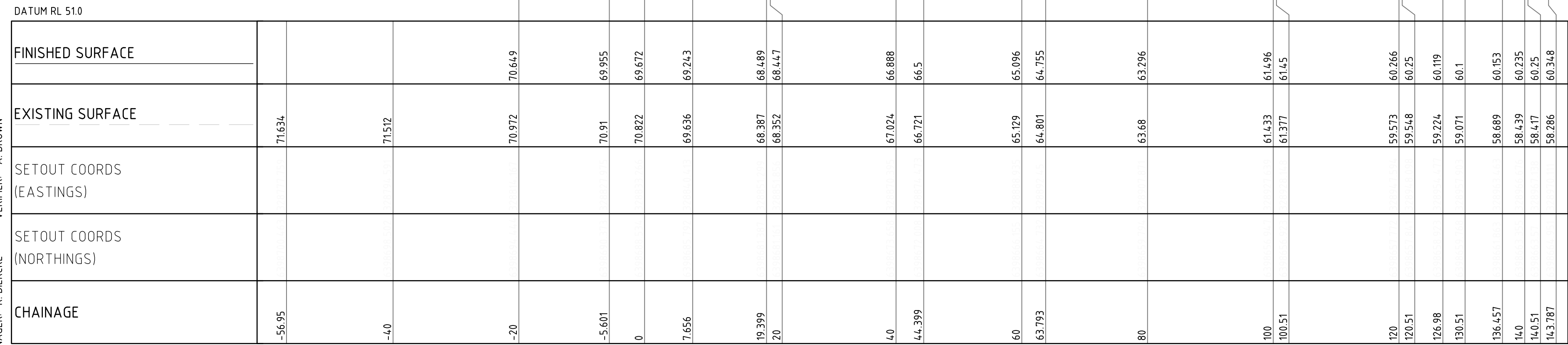
| REVISION | DESCRIPTION                        | ISSUED | VER'D | APP'D | DATE     | CLIENT                                                                                                                                                                                                                            | ARCHITECT                                                                                                                                                                                                                                                                  | ALL DIMENSIONS TO BE VERIFIED ON SITE BEFORE COMMENCING WORK. NORTHROP ACCEPTS NO RESPONSIBILITY FOR THE USABILITY, COMPLETENESS OR SCALE OF DRAWINGS TRANSFERRED ELECTRONICALLY. THIS DRAWING MAY HAVE BEEN PREPARED USING COLOUR, AND MAY BE INCOMPLETE IF COPIED TO BLACK & WHITE. | PROJECT                                                                                     | DRAWING TITLE                                                                       | JOB NUMBER                                                                                                         |
|----------|------------------------------------|--------|-------|-------|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|
| A        | ISSUED FOR CLIENT REVIEW           | CWH    | AB    | ED    | 05.06.24 | <div><p><b>SINGLETON COUNCIL</b></p></div> <div>DRAWING NOT TO BE USED FOR CONSTRUCTION<br/>UNLESS VERIFICATION SIGNATURE HAS BEEN ADDED</div> | <div><p><b>NORTHROP</b><br/>Newcastle</p><div>Level 1, 215 Pacific Hwy, Charlestown NSW 2290<br/>Ph (02) 4943 1777 Email newcastle@northrop.com.au<br/>ABN 81 094 433 100</div></div> | <div><p>SCALE 1:100 @ A1<br/>SCALE 1:500 @ A1</p></div>                                                                                                                                          | <div>PROPOSED RESIDENTIAL<br/>SUBDIVISION OF LOT 7 DP1196266</div> <div>SINGLETON LGA</div> | <div>CIVIL ENGINEERING PACKAGE</div> <div>LONGITUDINAL SECTIONS -<br/>SHEET 4</div> | <div>DRAWING NUMBER<br/><b>DA-C04.14</b></div> <div>REVISION<br/><b>F</b></div> <div>DRAWING SHEET SIZE ± A1</div> |
| B        | ISSUED FOR CLIENT REVIEW           | CWH    | AB    | RD    | 15.07.24 |                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                       |                                                                                             |                                                                                     |                                                                                                                    |
| C        | ISSUED FOR DEVELOPMENT APPLICATION | RK     | AB    | RD    | 22.08.24 |                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                       |                                                                                             |                                                                                     |                                                                                                                    |
| D        | ISSUED FOR DEVELOPMENT APPLICATION | CWH    | AB    | RD    | 11.09.24 |                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                       |                                                                                             |                                                                                     |                                                                                                                    |
| E        | ISSUED FOR DEVELOPMENT APPLICATION | CWH    | CP    | RD    | 31.01.25 |                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                       |                                                                                             |                                                                                     |                                                                                                                    |
| F        | ISSUED FOR DA APPROVAL             | EW     | CP    | RD    | 02.06.25 |                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                       |                                                                                             |                                                                                     |                                                                                                                    |





| VERSION                                                                                 | DESCRIPTION                        | ISSUED | VER'D | APP'D | DATE     | CLIENT                                                                                                         | ARCHITECT                                                                                                                                                                                                                                       | SCALE                                | PROJ. NO.                                                      | DRAWING TITLE                                                                      | JOB NUMBER      |
|-----------------------------------------------------------------------------------------|------------------------------------|--------|-------|-------|----------|----------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|----------------------------------------------------------------|------------------------------------------------------------------------------------|-----------------|
| A                                                                                       | ISSUED FOR CLIENT REVIEW           | CWH    | AB    | ED    | 05.06.24 |  <b>SINGLETON COUNCIL</b> |  <b>NORTHROP</b><br>Newcastle<br>Level 1, 215 Pacific Hwy, Charlestown NSW 2290<br>Ph (02) 4943 1777 Email newcastle@northrop.com.au<br>ABN 81 094 433 100 | SCALE 1:100 @ A1<br>SCALE 1:500 @ A1 | <b>PROPOSED RESIDENTIAL<br/>SUBDIVISION OF LOT 7 DP1196266</b> | <b>CIVIL ENGINEERING PACKAGE</b><br><br><b>LONGITUDINAL SECTIONS -<br/>SHEET 5</b> | <b>NL233144</b> |
| B                                                                                       | ISSUED FOR CLIENT REVIEW           | CWH    | AB    | RD    | 15.07.24 |                                                                                                                |                                                                                                                                                                                                                                                 |                                      |                                                                |                                                                                    |                 |
| C                                                                                       | ISSUED FOR DEVELOPMENT APPLICATION | RK     | AB    | RD    | 22.08.24 |                                                                                                                |                                                                                                                                                                                                                                                 |                                      |                                                                |                                                                                    |                 |
| D                                                                                       | ISSUED FOR DEVELOPMENT APPLICATION | CWH    | AB    | RD    | 11.09.24 |                                                                                                                |                                                                                                                                                                                                                                                 |                                      |                                                                |                                                                                    |                 |
| E                                                                                       | ISSUED FOR DEVELOPMENT APPLICATION | CWH    | CP    | RD    | 31.01.25 |                                                                                                                |                                                                                                                                                                                                                                                 |                                      |                                                                |                                                                                    |                 |
| F                                                                                       | ISSUED FOR DA APPROVAL             | EW     | CP    | RD    | 02.06.25 |                                                                                                                |                                                                                                                                                                                                                                                 |                                      |                                                                |                                                                                    |                 |
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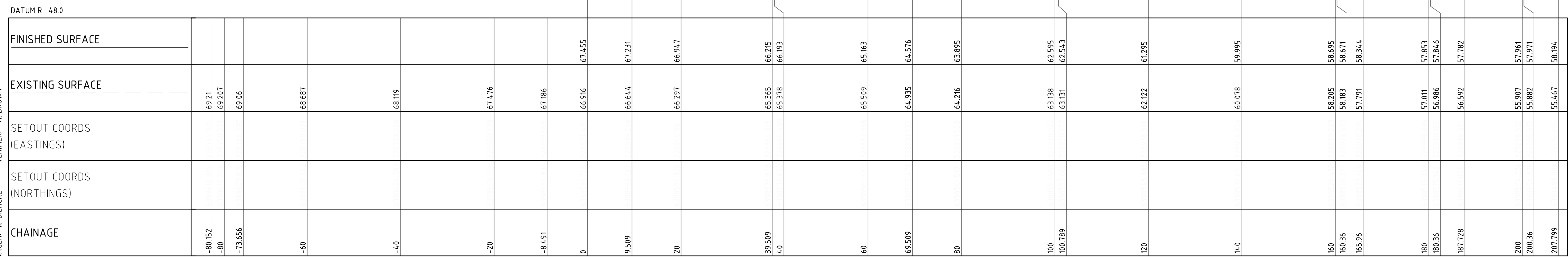
HORIZONTAL SCALE 1:500@A1  
VERTICAL SCALE 1:100@A1

| REVISION | DESCRIPTION                        | ISSUED | VER'D | APP'D | DATE     |
|----------|------------------------------------|--------|-------|-------|----------|
| A        | ISSUED FOR CLIENT REVIEW           | CWH    | AB    | ED    | 05.06.24 |
| B        | ISSUED FOR CLIENT REVIEW           | CWH    | AB    | RD    | 15.07.24 |
| C        | ISSUED FOR DEVELOPMENT APPLICATION | RK     | AB    | RD    | 22.08.24 |
| D        | ISSUED FOR DEVELOPMENT APPLICATION | CWH    | AB    | RD    | 11.09.24 |
| E        | ISSUED FOR DEVELOPMENT APPLICATION | CWH    | CP    | RD    | 31.01.25 |
| F        | ISSUED FOR DA APPROVAL             | EW     | CP    | RD    | 02.06.25 |

|                                                                                                                                       |                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                       |                                                                                                                                     |                                                               |                                                                 |                                                   |
|---------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|-----------------------------------------------------------------|---------------------------------------------------|
| <div><div><b>SINGLETON</b><br/>COUNCIL</div></div> | ARCHITECT                                                                                                  | <div><div>ALL DIMENSIONS TO BE VERIFIED ON SITE BEFORE COMMENCING WORK.<br/>NORTHROP ACCEPTS NO RESPONSIBILITY FOR THE USABILITY, COMPLETENESS OR SCALE OF DRAWINGS TRANSFERRED ELECTRONICALLY.<br/>THIS DRAWING MAY HAVE BEEN PREPARED USING COLOUR, AND MAY BE INCOMPLETE IF COPIED TO BLACK &amp; WHITE.</div><div><div>SCALE 1:100 @ A1</div><div>SCALE 1:500 @ A1</div></div></div> | <div><div><div><b>NORTHROP</b></div><div>Newcastle</div><div>Level 1, 215 Pacific Hwy, Charlestown NSW 2290<br/>Ph (02) 4943 1777 Email <a href="mailto:newcastle@northrop.com.au">newcastle@northrop.com.au</a><br/>ABN 81 094 433 100</div></div></div> | <div><div>PROJECT</div><div><b>PROPOSED RESIDENTIAL<br/>SUBDIVISION OF LOT 7 DP1196266</b></div><div><b>SINGLETON LGA</b></div></div> | <div><div>DRAWING TITLE</div><div><b>CIVIL ENGINEERING PACKAGE</b></div><div><b>LONGITUDINAL SECTIONS -<br/>SHEET 6</b></div></div> | <div><div>JOB NUMBER</div><div><b>NL233144</b></div></div>    |                                                                 |                                                   |
|                                                                                                                                       | <div><div>DRAWING NOT TO BE USED FOR CONSTRUCTION UNLESS VERIFICATION SIGNATURE HAS BEEN ADDED</div></div> | <div><div>THE COPYRIGHT OF THIS DRAWING REMAINS WITH<br/>NORTHROP CONSULTING ENGINEERS PTY LTD</div></div>                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                       |                                                                                                                                     | <div><div>0 1 2 3 4 5m</div><div>0 5 10 15 20 25m</div></div> | <div><div>DRAWING NUMBER</div><div><b>DA-C04.16</b></div></div> | <div><div>REVISION</div><div><b>F</b></div></div> |
|                                                                                                                                       | <div><div>DRAWING SHEET SIZE = A1</div></div>                                                              |                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                       |                                                                                                                                     |                                                               |                                                                 |                                                   |

**NOT FOR CONSTRUCTION**





HORIZONTAL SCALE 1:500@A1  
VERTICAL SCALE 1:100@A1

| REVISION | DESCRIPTION                        | ISSUED | VER'D | APP'D | DATE     |
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| A        | ISSUED FOR DEVELOPMENT APPLICATION | RK     | AB    | RD    | 22.08.24 |
| B        | ISSUED FOR DEVELOPMENT APPLICATION | CWH    | AB    | RD    | 11.09.24 |
| C        | ISSUED FOR DEVELOPMENT APPLICATION | CWH    | CP    | RD    | 31.01.25 |
| D        | ISSUED FOR DA APPROVAL             | EW     | CP    | RD    | 02.06.25 |
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|           |                                                                                     |
|-----------|-------------------------------------------------------------------------------------|
| ARCHITECT |                                                                                     |
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PROJECT

**PROPOSED RESIDENTIAL  
SUBDIVISION OF LOT 7 DP1196266**

**SINGLETON LGA**

DRAWING TITLE

**CIVIL ENGINEERING PACKAGE**

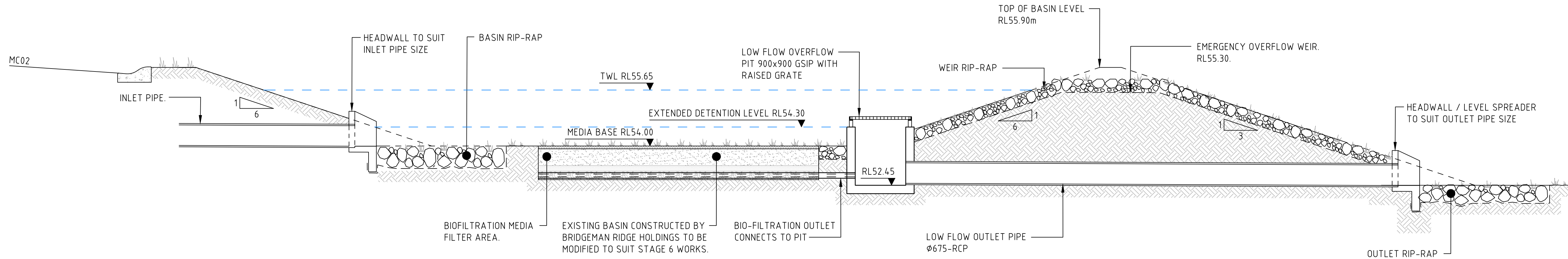
**LONGITUDINAL SECTIONS -**  
**SHEET 7**

|                         |  |                 |  |
|-------------------------|--|-----------------|--|
| JOB NUMBER              |  | <b>NL233144</b> |  |
| DRAWING NUMBER          |  | REVISION        |  |
| <b>DA-C04.17</b>        |  | <b>D</b>        |  |
| DRAWING SHEET SIZE = A1 |  |                 |  |

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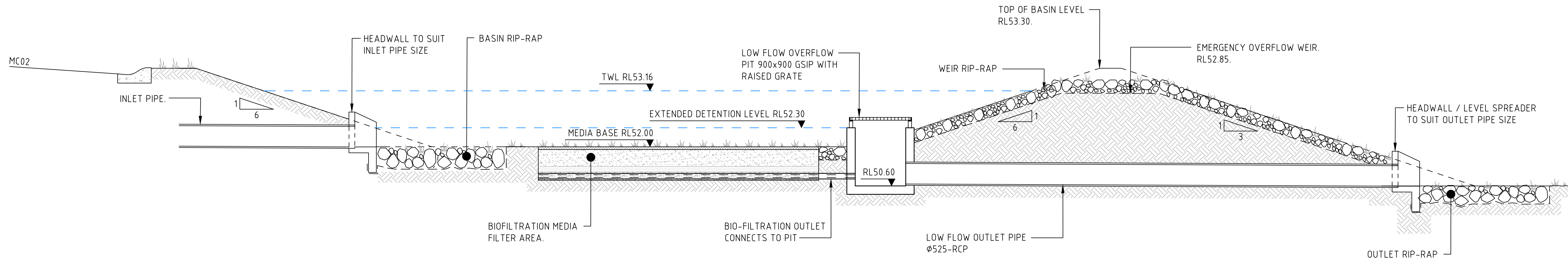


DRAWN: C. W-HEALON  
DESIGNED: E. DOLAN  
JOB MANAGER: R. DIERCKE  
VERIFIER: A. BROWN



TYPICAL BIOFILTRATION / DETENTION BASIN 1 DETAIL  
AND LOW FLOW OUTLET CONFIGURATION

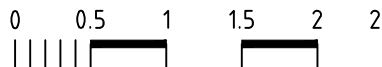
SCALE 1:50



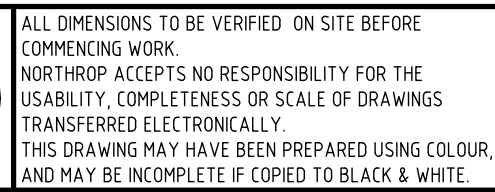
TYPICAL BIOFILTRATION / DETENTION BASIN 2 DETAIL  
AND LOW FLOW OUTLET CONFIGURATION

SCALE 1:50

NOT FOR CONSTRUCTION

| REVISION                                                                             | DESCRIPTION                        | ISSUED | VER'D | APP'D | DATE     | CLIENT                                                                                                   | ARCHITECT                                                                                                                                                                                                                                                                                                                                                                          | PROJECT                                                                                                                                                                                                                         | DRAWING TITLE                                                               | JOB NUMBER                               |          |
|--------------------------------------------------------------------------------------|------------------------------------|--------|-------|-------|----------|----------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|------------------------------------------|----------|
| A                                                                                    | ISSUED FOR CLIENT REVIEW           | CWH    | AB    | ED    | 05.06.24 | <br>SINGLETON COUNCIL | ALL DIMENSIONS TO BE VERIFIED ON SITE BEFORE COMMENCING WORK.<br>NORTHROP ACCEPTS NO RESPONSIBILITY FOR THE USABILITY, COMPLETENESS OR SCALE OF DRAWINGS TRANSFERRED ELECTRONICALLY.<br>THIS DRAWING MAY HAVE BEEN PREPARED USING COLOUR AND MAY BE INCOMPLETE IF COPIED TO BLACK & WHITE.<br><br>THE COPYRIGHT OF THIS DRAWING REMAINS WITH NORTHROP CONSULTING ENGINEERS PTY LTD | <br>Newcastle<br>Level 1, 215 Pacific Hwy, Charlestown NSW 2290<br>Ph (02) 4943 1777 Email newcastle@northrop.com.au<br>ABN 81 094 433 100 | PROPOSED RESIDENTIAL<br>SUBDIVISION OF LOT 7 DP1196266<br><br>SINGLETON LGA | CIVIL ENGINEERING PACKAGE<br><br>DETAILS | NL233144 |
| B                                                                                    | ISSUED FOR CLIENT REVIEW           | CWH    | AB    | RD    | 15.07.24 |                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                 |                                                                             |                                          |          |
| C                                                                                    | ISSUED FOR DEVELOPMENT APPLICATION | RK     | AB    | RD    | 22.08.24 |                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                 |                                                                             |                                          |          |
| D                                                                                    | ISSUED FOR DEVELOPMENT APPLICATION | CWH    | AB    | RD    | 11.09.24 |                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                 |                                                                             |                                          |          |
| E                                                                                    | ISSUED FOR DEVELOPMENT APPLICATION | CWH    | CP    | RD    | 31.01.25 |                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                 |                                                                             |                                          |          |
| F                                                                                    | ISSUED FOR DA APPROVAL             | EW     | CP    | RD    | 02.06.25 |                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                 |                                                                             |                                          |          |
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|                                                                                      |                                    |        |       |       |          |                     |                                                                                                                                                                                                                                                                                                                                                                                    | DA-C09.01                                                                                                                                                                                                                       |                                                                             | F                                        |          |
|                                                                                      |                                    |        |       |       |          |                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                    | DRAWING SHEET SIZE = A1                                                                                                                                                                                                         |                                                                             |                                          |          |





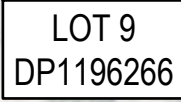
**NORTHROP**  
Newcastle

Newcastle

Level 1, 215 Pacific Hwy, Charlestown NSW 2290  
Ph (02) 4943 1777 Email [newcastle@northrop.com.au](mailto:newcastle@northrop.com.au)  
ABN 81 094 433 100

Legend:

- PROPOSED BOUNDARY LINE (dashed grey line)
- EXISTING BOUNDARY LINE (solid grey line)
- 30m RIPARIAN OFFSET (dashed green line)
- 15m RIPARIAN OFFSET (dashed orange line)
- EXISTING WATERCOURSE (RETAINED) (solid blue line)
- EXISTING WATERCOURSE (REMOVED) (dashed blue line)
- APZ (dashed red line)



LOT 8  
DP1196266

| REVISION | DESCRIPTION                        | ISSUED | VER'D | APP'D | DATE     |
|----------|------------------------------------|--------|-------|-------|----------|
| A        | ISSUED FOR DEVELOPMENT APPLICATION | CWH    | AB    | RD    | 31.01.25 |
| B        | ISSUED FOR DA APPROVAL             | EW     | CP    | RD    | 02.06.25 |
| C        | ISSUED FOR DA APPROVAL             | EW     | CP    | RD    | 06.06.25 |
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**PROPOSED RESIDENTIAL  
SUBDIVISION OF LOT 7 DP1196266  
INCLUDING WORKS IN LOT 8  
DP1196266**

**CIVIL ENGINEERING PACKAGE**

**RIPARIAN OFFSET PLAN**

NL233144

|                  |          |
|------------------|----------|
| DRAWING NUMBER   | REVISION |
| <b>DA-R01.01</b> | <b>C</b> |

DRAWING SHEET SIZE = A1