

Haynes Consulting Engineers Pty Ltd  
ABN No. 53613630078  
P.O Box 549 Noosa Heads 4567

Ph: 0432 784 150



## LEVEL 2 CERTIFICATION:

**18 Lots at Stage 3 Greendale Downs, Watergum Drive and Bottlebrush Court, Pie Creek  
Lots 43, 44, 45, 46, 47, 50, 51, 86, 87, 88, 89, 90, 91, 92  
SP311232**

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CERTIFICATION LETTER

LIMITATIONS

TEST LOCATIONS Plans S3-S0 to S3-S6 inclusive revision 0

TEST RESULTS Compaction tests G18032-6/1, G18032-7/2, 677079.00-1, 677079.00-3,  
677079.00-4, 677079.00-6, 677079.00-7, 677079.00-8, 677094.00-1, 677079.00-9

To: Roberts Bros. Pty Ltd  
(by email)

## LEVEL 2 CERTIFICATION

**18 Lots at Stage 3 Greendale Downs, Watergum Drive and Bottlebrush Court, Pie Creek**  
**Lots 43, 44, 45, 46, 47, 50, 51, 86, 87, 87, 88, 89, 90, 91, 92**  
**SP311232**

This letter provides Level 2 certification to AS3798-2007 'Guidelines on earthworks for commercial and residential developments' and includes the results of testing conducted during filling earthworks on proposed Lots 43, 44, 45, 46, 47, 50, 51, 86, 87, 87, 88, 89, 90, 91, 92 (14 lots). There were 18 lots in stage 3 but lots 41, 42, 48, 49 were not filled.

Roberts Brothers Pty Ltd personnel and sub-contractors undertook the cut to fill and compaction using existing site material to create house pads.

Inspections of surface stripping (to remove organic topsoil), removal of unsuitable materials and subgrade proof rolling prior to filling were completed.

Determination of field density of compacted fill in accordance with AS1289 was completed by Geotech SC Pty Ltd and Douglas Partners as attached,

- Report Nos G18032-6/1 dated 8-5-2018
- Report No G18032-7/2 dated 10-5-2018
- Report No 677079.00-1 dated 19-3-2019
- Report No 677079.00-3 dated 19-3-2019
- Report No 677079.00-4 dated 19-3-2019
- Report No 677079.00-6 dated 25-3-2019
- Report No 677079.00-7 dated 3-4-2019
- Report No 677079.00-8 dated 16-4-2019
- Report No 677094.00-1 dated 16-4-2019
- Report No 677079.00-9 dated 23-5-2019

The compaction tests show that results were above the required 95% Standard Compaction. Test locations are shown on the attached plans 1803 S3-S0, S3-S1, S3-S2, S3-S3, S3-S4, S3-S5, and S3-S6 which are all Revision 0.

This certification only provides an assurance of the density of the fill tested, and suitability of the stripped surface for placement of that fill. This certification does not address any other issues that may be relevant to foundation and building construction.

Please refer to report limitations attached, the Client in this instance is Roberts Brothers Pty Ltd.

Regards,



A Haynes BE Civil (Hons) RPEQ MIEAust CPEng

## LIMITATIONS

This report is provided for the sole use by the Client and its professional advisers. No responsibility whatsoever for the contents of this report will be accepted to any person other than the Client. Any use which a third party makes of this report, or any reliance on or decisions to be made based on it, is the responsibility of such third parties. Haynes Consulting Engineers accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report.

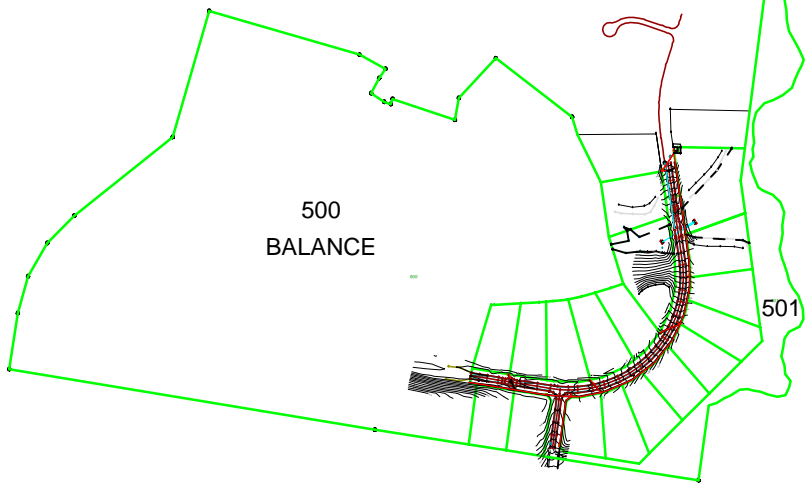
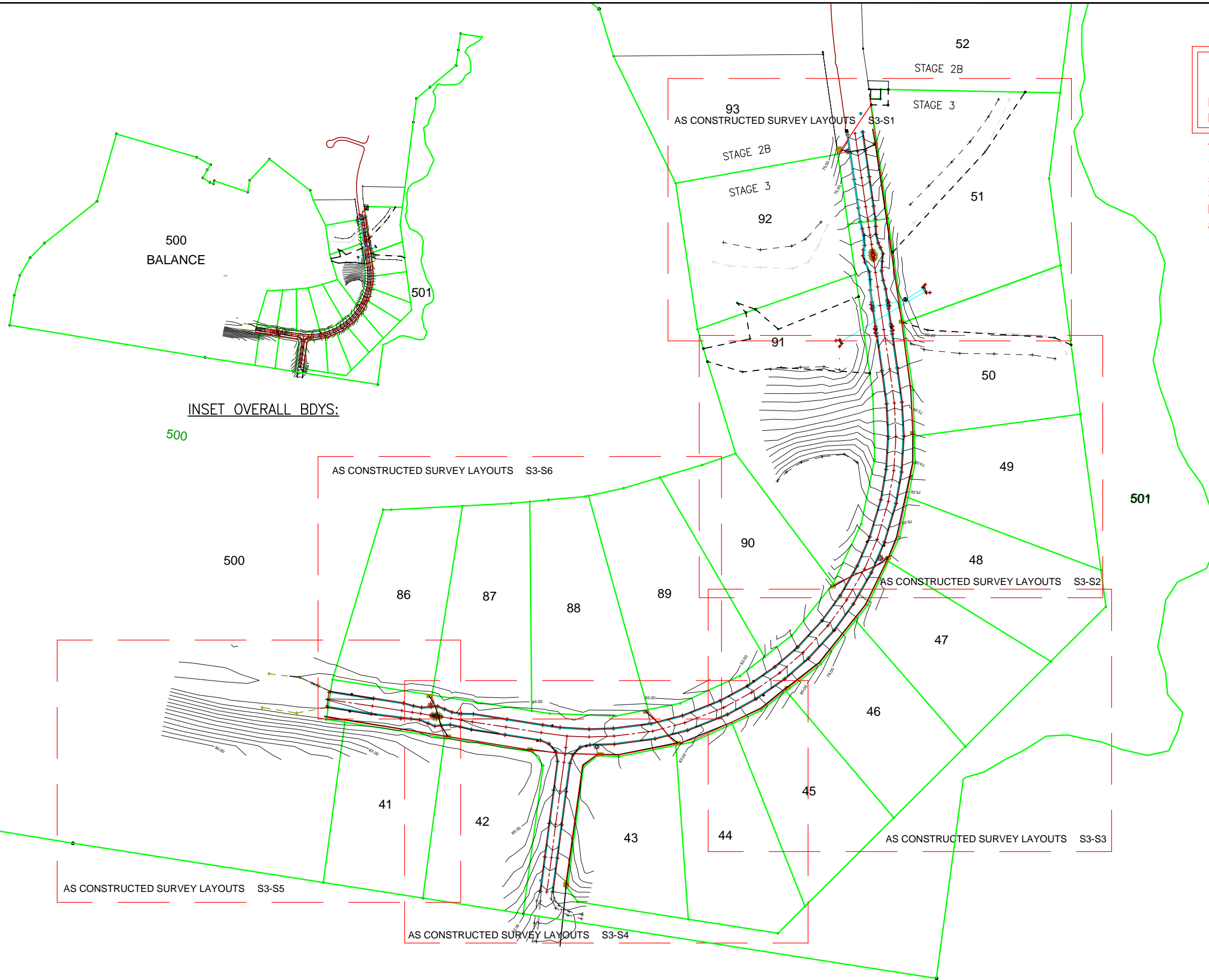
Haynes Consulting Engineers did not perform a complete assessment of all possible conditions or circumstances that may exist at the site referenced in the report. If a service is not expressly indicated, do not assume it has been provided. If a matter is not addressed, do not assume that any determination has been made by Haynes Consulting Engineers in regards to it.


Conditions may exist which were undetectable given that economic and time constraints limit the practical extent of investigation. Variations in conditions may occur between investigation locations, and there may be special conditions pertaining to the site which have not been revealed by the investigation and which have not therefore been taken into account in the report.

Where variations exist on site, additional studies and actions may be required. Haynes Consulting Engineers's opinions are based upon information that existed at the time that the works were performed. The passage of time, man-made or natural events, may alter the site conditions. It is understood that the Services undertaken allowed Haynes Consulting Engineers to form an opinion of the actual conditions of the site at the time the site was visited and cannot be used to assess the effect of any subsequent changes in the quality of the site, or its surroundings, or any laws or regulations.

Any assessments made in this report are based on the conditions indicated from published sources and the findings of the investigation described. Actual subsurface conditions may differ from those indicated in the report (e.g. between boreholes or test pits). No warranty is included, either express or implied, that the actual conditions will conform exactly to the assessments contained in this report.

Where data supplied by the client or other external sources, including previous site investigation data, have been used, it has been assumed that the information is correct unless otherwise stated. No responsibility is accepted by Haynes Consulting Engineers for incomplete or inaccurate data supplied by others.



CERTIFIED BY:   
 RPEQ No.: 13201 (Allister Haynes)  
 DATE: 17/7/2019

This drawing is an accurate representation of the works as-constructed. All the locations and levels shown on this plan have been provided by a Surveyor as defined in the Surveyors Act 2003. I hereby accept responsibility for the as-constructed information shown on this plan.

INSET OVERALL BDYS:

500

AS CONSTRUCTED SURVEY LAYOUTS S3-S6

500

501


AS CONSTRUCTED SURVEY LAYOUTS S3-S2

AS CONSTRUCTED SURVEY LAYOUTS S3-S5

AS CONSTRUCTED SURVEY LAYOUTS S3-S4



0 5 10 15m Scale 1:2000 @A3


<b>A3</b>	0	17-7-19	AS CONSTRUCTED	ATH	PSM No	PM196359		HAYNES CONSULTING ENGINEERS ABN 53 613 630 078 PO BOX 549 NOOSA HEADS QLD 4567 (0432) 784 150	<b>GREENDALE DOWNS STAGE 3</b> Lots 41-51, 86-92, 500, 501 on SP311232 Surveyed by Murray and Associates Pty Ltd <b>AS CONSTRUCTED SURVEY LAYOUTS</b>	1803
	Rv	DATE	REVISIONS	APPR.	(AHD) RL	82.237				

**LEGEND:**

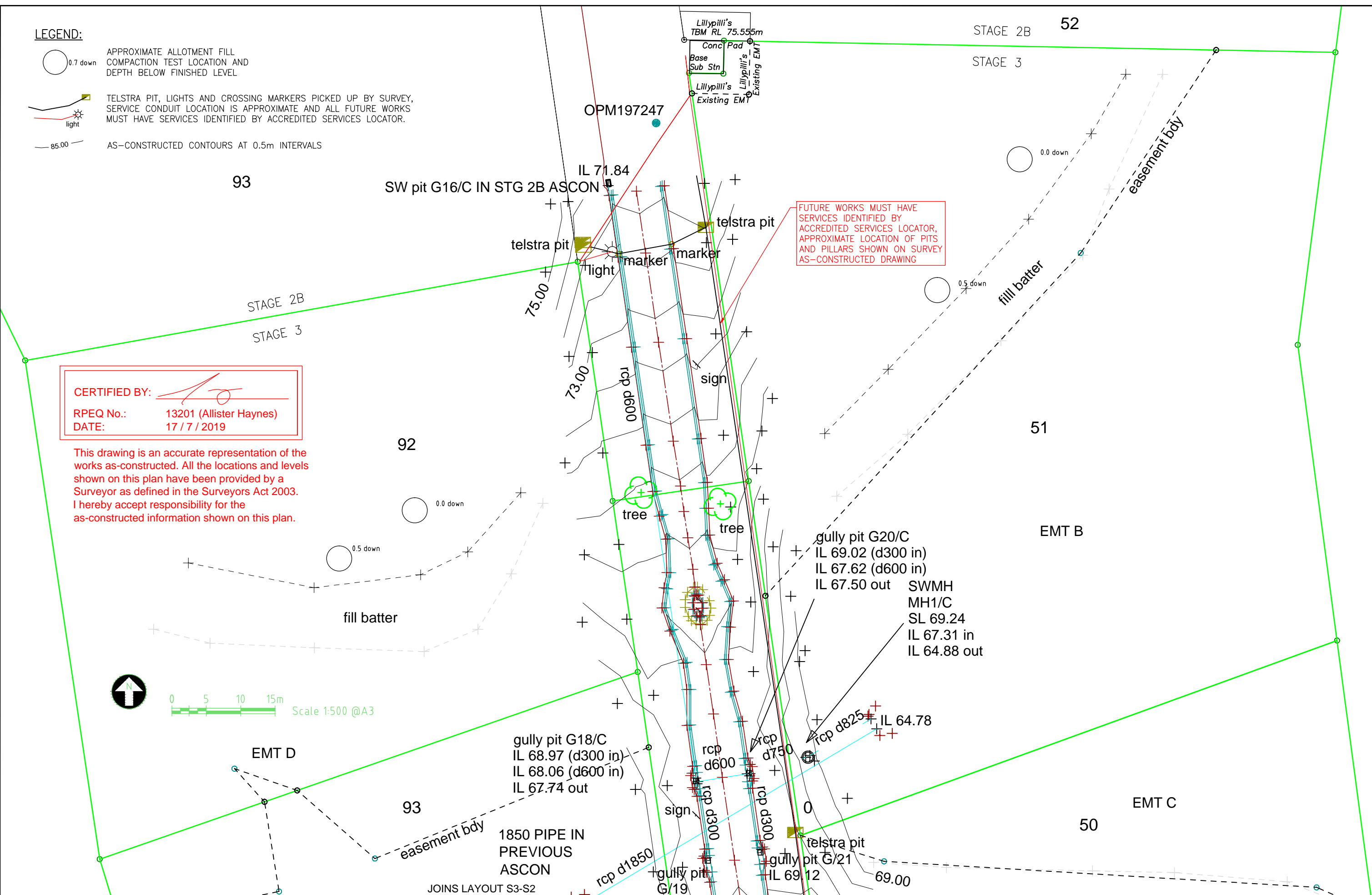
○ 0.7 down  
APPROXIMATE ALLOTMENT FILL  
COMPACTION TEST LOCATION AND  
DEPTH BELOW FINISHED LEVEL

⊛ light  
TELSTRA PIT, LIGHTS AND CROSSING MARKERS PICKED UP BY SURVEY,  
SERVICE CONDUIT LOCATION IS APPROXIMATE AND ALL FUTURE WORKS  
MUST HAVE SERVICES IDENTIFIED BY ACCREDITED SERVICES LOCATOR.

— 85.00 —  
AS-CONSTRUCTED CONTOURS AT 0.5m INTERVALS

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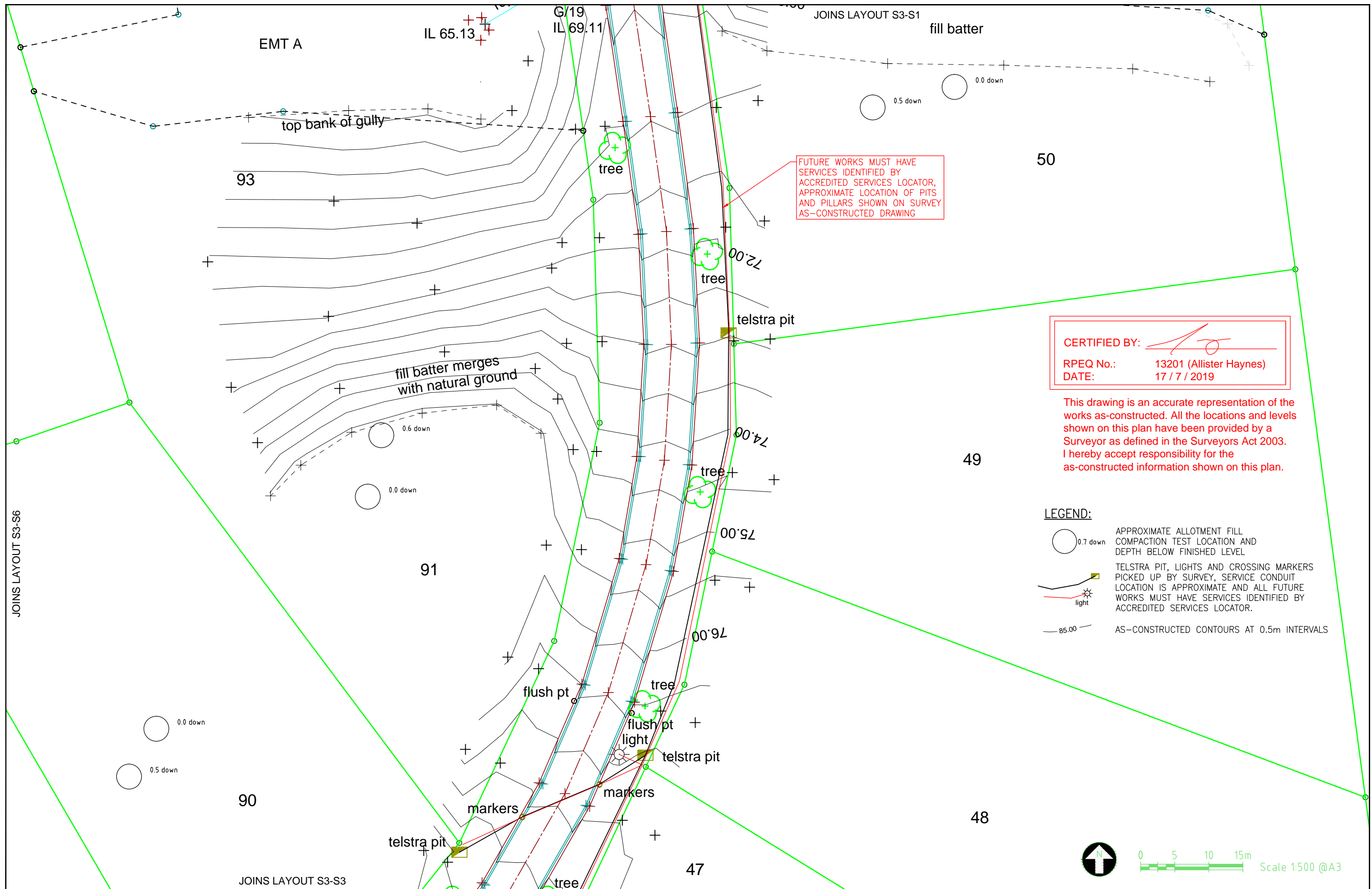
PSM No	PM196359
(AHD) RL	82.237
SURVEYED	Murray & Assoc. Pty Ltd




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PO BOX 549 NOOSA HEADS QLD 4567  
(0432) 784 150

**GREENDALE DOWNS STAGE 3**  
Lots 41-51, 86-92, 500, 501 on SP311232  
Surveyed by Murray and Associates Pty Ltd  
**AS CONSTRUCTED SURVEY LAYOUTS**

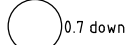


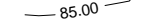
1803
Sheet No. - Revision No.
S3-S1 0



FUTURE WORKS MUST HAVE SERVICES IDENTIFIED BY ACCREDITED SERVICES LOCATOR, APPROXIMATE LOCATION OF PITS AND PILLARS SHOWN ON SURVEY AS-CONSTRUCTED DRAWING

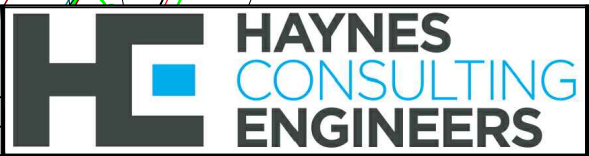
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- LEGEND:**
-  APPROXIMATE ALLOTMENT FILL COMPACTION TEST LOCATION AND DEPTH BELOW FINISHED LEVEL
  -  TELSTRA PIT, LIGHTS AND CROSSING MARKERS PICKED UP BY SURVEY, SERVICE CONDUIT LOCATION IS APPROXIMATE AND ALL FUTURE WORKS MUST HAVE SERVICES IDENTIFIED BY ACCREDITED SERVICES LOCATOR.
  -  light
  -  AS-CONSTRUCTED CONTOURS AT 0.5m INTERVALS

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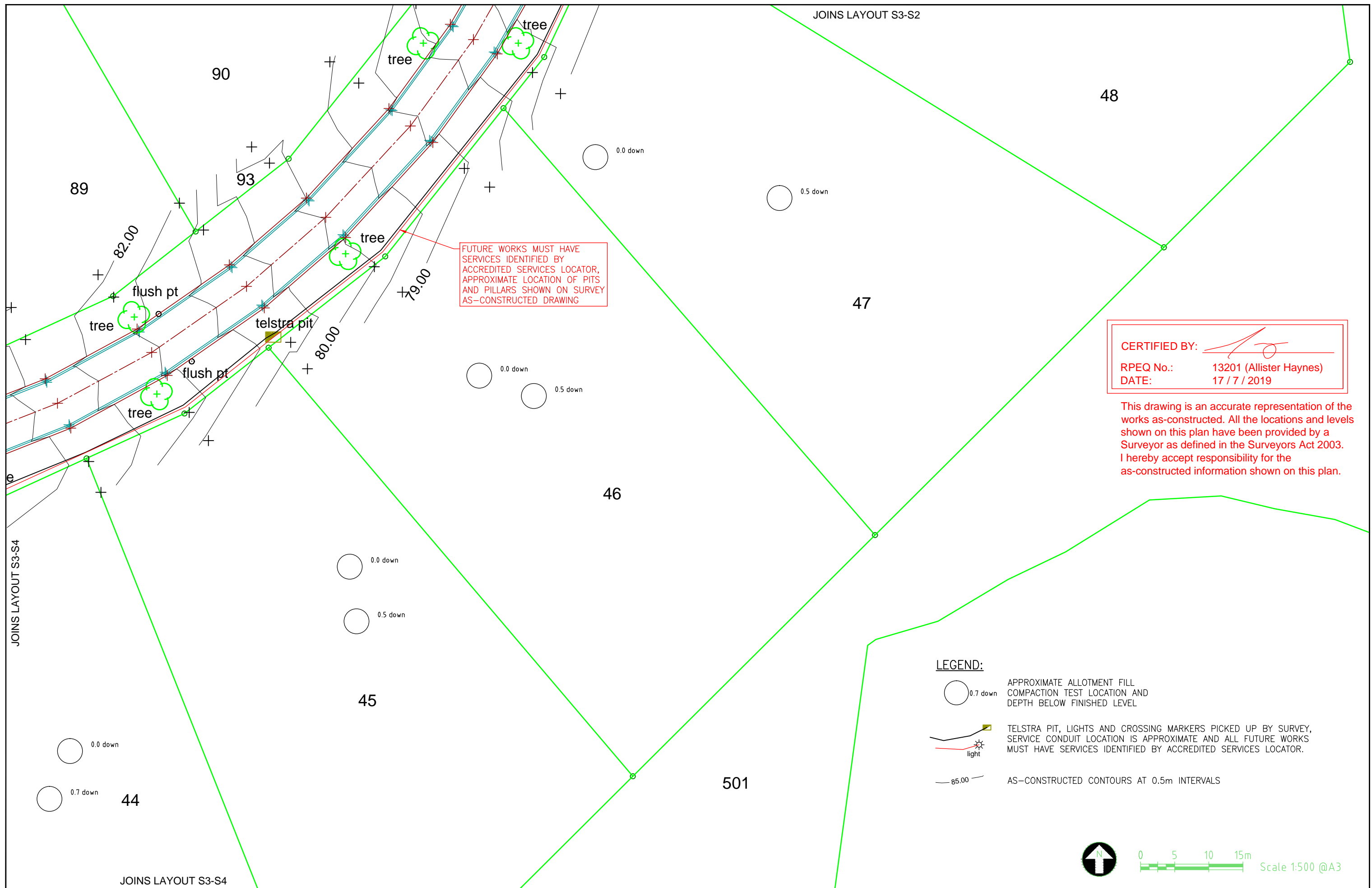
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1803
Sheet No. - Revision No.
S3-S2 0



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	Rv	DATE	REVISIONS	APPR.

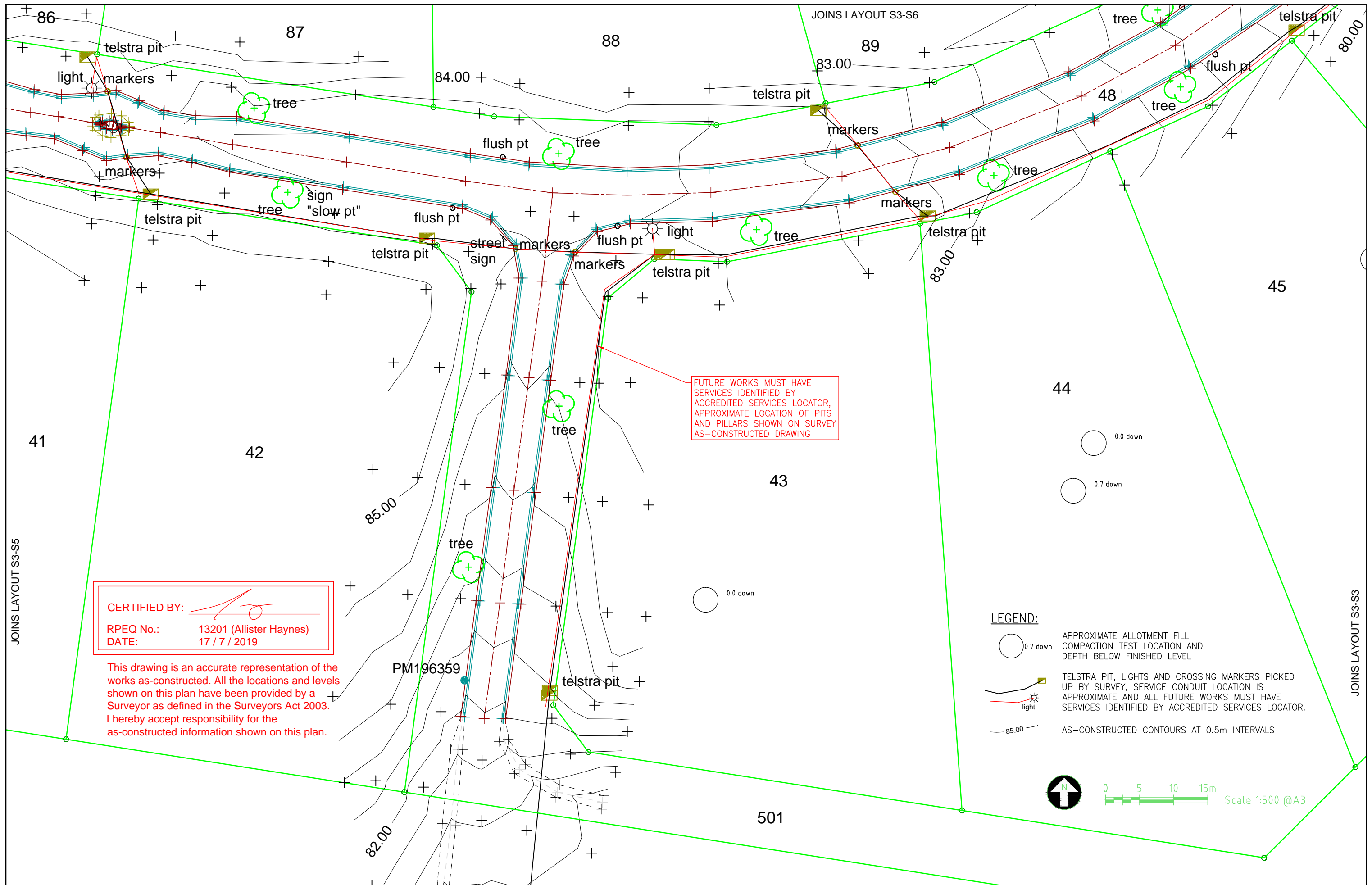
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1803
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S3-S3 0

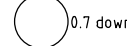

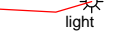
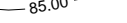



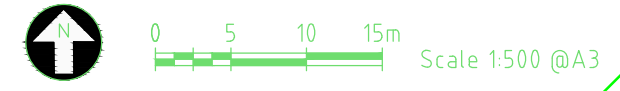
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**LEGEND:**

-  0.7 down
-  0.0 down
-  TELSTRA PIT, LIGHTS AND CROSSING MARKERS PICKED UP BY SURVEY, SERVICE CONDUIT LOCATION IS APPROXIMATE AND ALL FUTURE WORKS MUST HAVE SERVICES IDENTIFIED BY ACCREDITED SERVICES LOCATOR.
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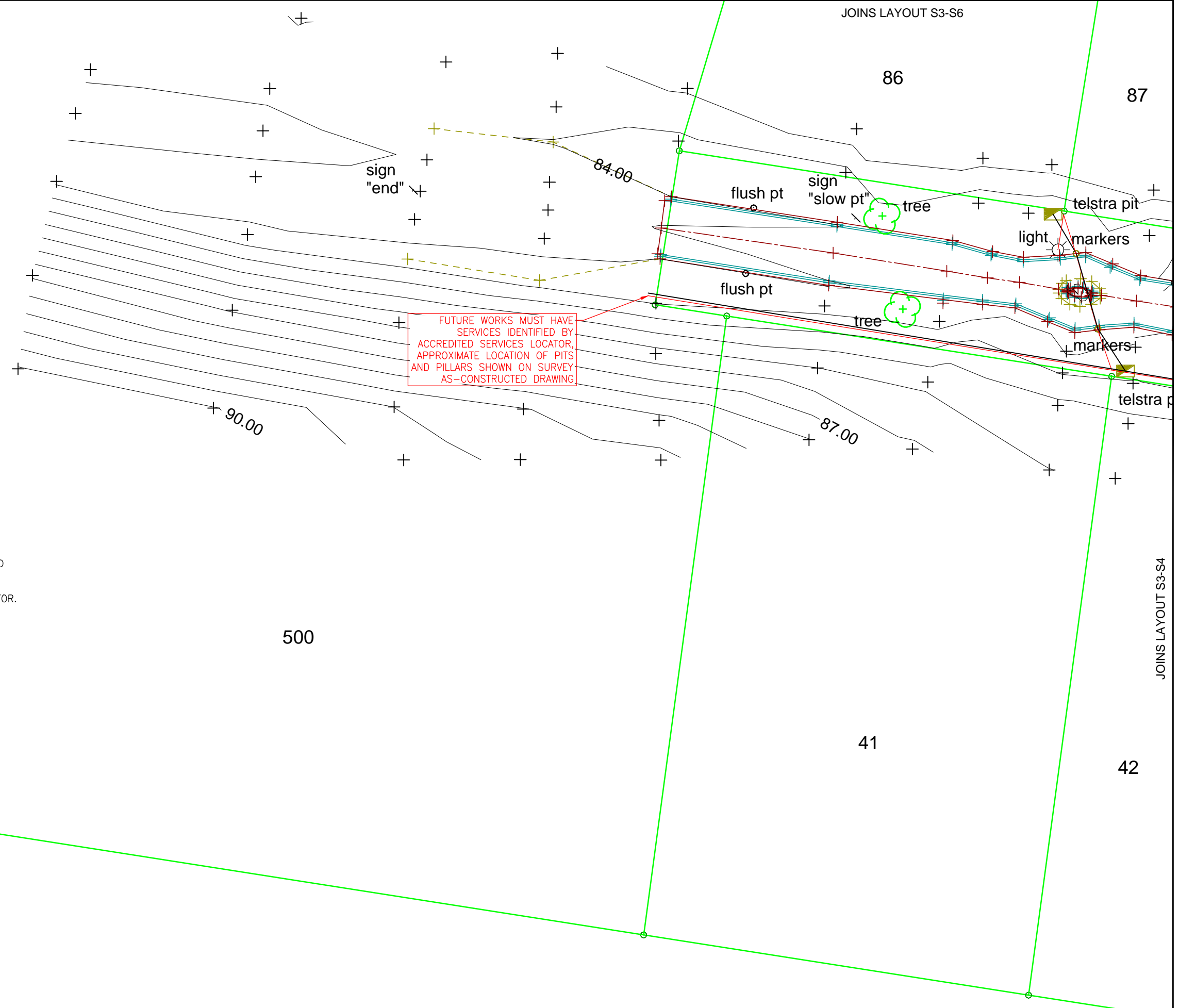
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1803
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S3-S4 0




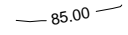


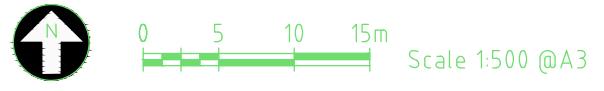
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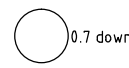


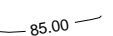
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0 5 10 15m

Scale 1:500 @A3

500

90

89

86

87

88

0.5 down

0.6 down

0.0 down


0.6 down

0.0 down

0.7 down

0.8 down

0.0 down

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Energex & Telstra Crossing

flush pt

sign "slow pt"

tree

telstra pit

light

markers

84.00

telstra pit

83.00

markers

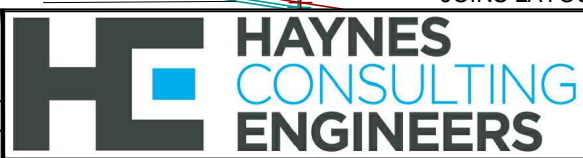
JOINS LAYOUT S3-S5

JOINS LAYOUT S3-S4

A3

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**AS CONSTRUCTED SURVEY LAYOUTS**

1803
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S3-S6 0

JOINS LAYOUT S3-S3