

Subject: FW: Andrews Road - Glass Recovery Services Intersection Upgrade - Detail Survey [110058]
Date: Tuesday, 17 January 2017 at 2:40:43 pm Australian Eastern Daylight Time
From: Vijay Zala
To: Carlo Ranieri
Attachments: 16754 Andrews Road Cranebrook - DETAIL SURVEY sheet 1.pdf, 16754 Andrews Road Cranebrook - DETAIL SURVEY sheet 2.pdf, 16754 Andrews Road Cranebrook - DETAIL SURVEY sheet 3.pdf, DOC021216-011.pdf, DOC021216-012.pdf, image001.png

From: Peter Sharoff [mailto:psharoff@jwprince.com.au]
Sent: Thursday, 22 December 2016 4:57 PM
To: Drew Langford <drew@langfordenvironmental.com.au>
Cc: Robert Odewahn <ROdewahn@jwprince.com.au>
Subject: RE: Andrews Road - Glass Recovery Services Intersection Upgrade - Detail Survey [110058]

Hi Drew,

As discussed Penrith City Council (David Drozd) has confirmed we can proceed with the design based on Austroads Type CHR(s) short channelized right turn intersection treatment. This will save approximately 90 metres in the length of roadworks at the western end that would have been required for the full length Type CHR intersection treatment. See attached sketches. Detail survey has also been completed. See attached.

Regards,

Peter Sharoff – Senior Project Manager - Roads & Traffic Infrastructure
(TfNSW - Lead Road Safety Auditor – Level 3)

J. WYNDHAM PRINCE
CONSULTING CIVIL INFRASTRUCTURE ENGINEERS
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From: Drew Langford [mailto:drew@langfordenvironmental.com.au]
Sent: Tuesday, 29 November 2016 4:35 PM
To: Peter Sharoff <psharoff@jwprince.com.au>
Cc: 'Carlo Ranieri' <carloranieri@bigpond.com.au>
Subject: RE: Andrews Road - Glass Recovery Services Intersection Upgrade - Detail Survey [110058]

Approved.

Best regards,
DREW LANGFORD
Director



Consulting, Solutions, Business Development.

M: [0477 281 571](tel:0477281571)

W: www.langfordenvironmental.com.au

E: drew@langfordenvironmental.com.au

From: Peter Sharoff [<mailto:psharoff@jwprince.com.au>]

Sent: Tuesday, 29 November 2016 4:30 PM

To: Drew Langford <drew@langfordenvironmental.com.au>

Subject: Andrews Road - Glass Recovery Services Intersection Upgrade - Detail Survey [110058]

Hi Drew,

As discussed I need your approval to proceed with the Detail Survey (Item 10).

Regards,

Peter Sharoff – Project Manager - Roads & Traffic Infrastructure

(TfNSW - Lead Road Safety Auditor – Level 3)

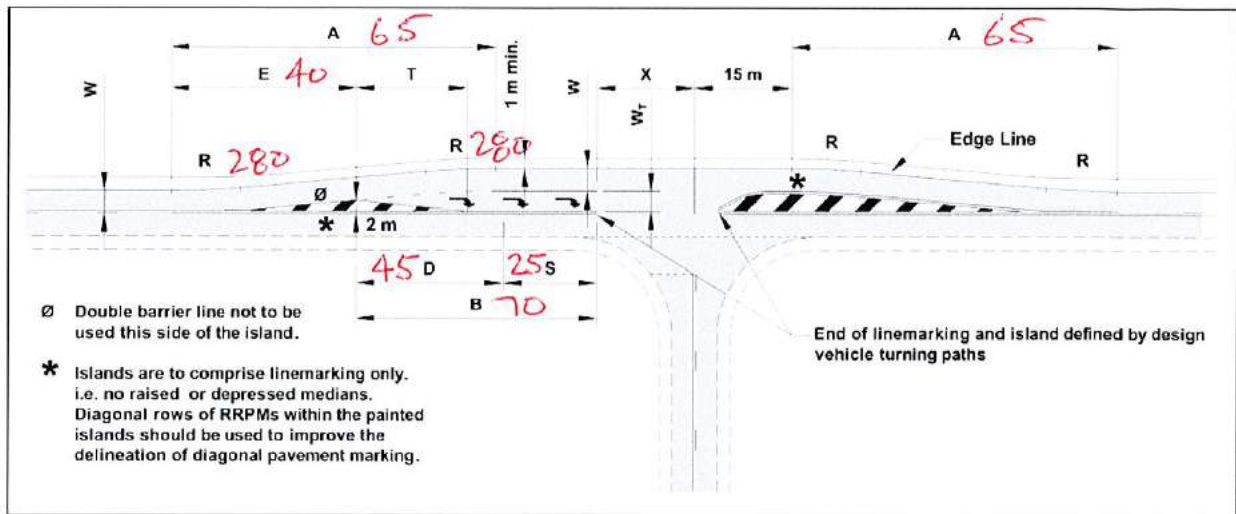
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Note: The dimensions of the treatment are defined below and values of A, D, R and T are shown in Table 7.1:

- W** = Nominal through lane width (m) (including widening for curves). For a new intersection on an existing road, the width is to be in accordance with the current link strategy.
W_T = Nominal width of turn lane (m), including widening for curves based on the design turning vehicle = 3.0 m minimum.
B = Total length of auxiliary lane including taper, diverge/deceleration and storage (m).
E = Distance from start of taper to 2.0 m width (m) and is given by:
- $$E = 2 \left(\frac{A}{W_T} \right)$$
- T** = Taper length (m) and is given by:
- $$T = \frac{0.33xVxW_T}{3.6}$$
- S** = Storage length to cater for one design turning vehicle (m).
V = Design speed of major road approach (km/h).
X = Distance based on design vehicle turning path, typically 10–15 m.

Source: QDMR (2006).

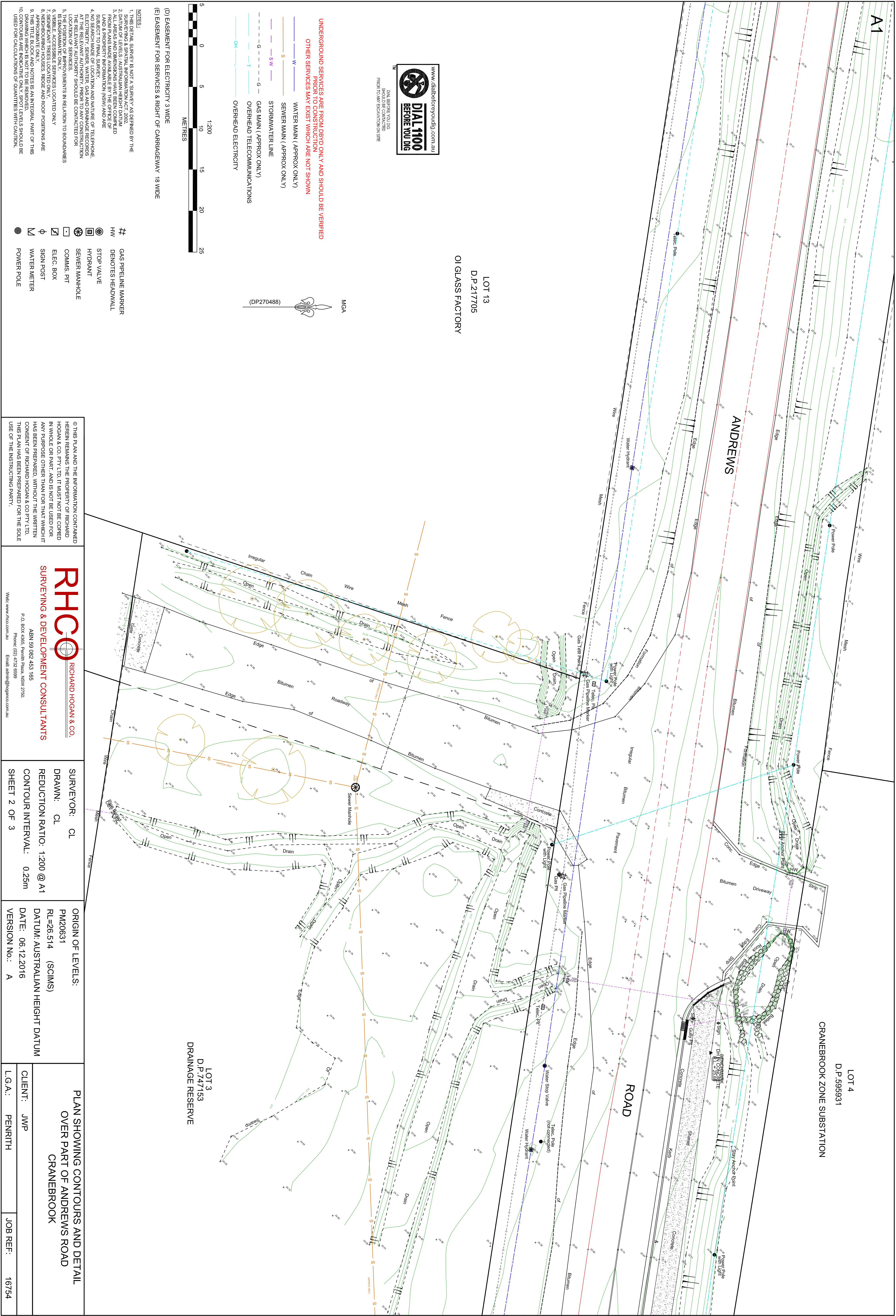
Figure 7.6: Channelised right-turn treatment with a short turn slot [CHR(S)] two-lane rural road

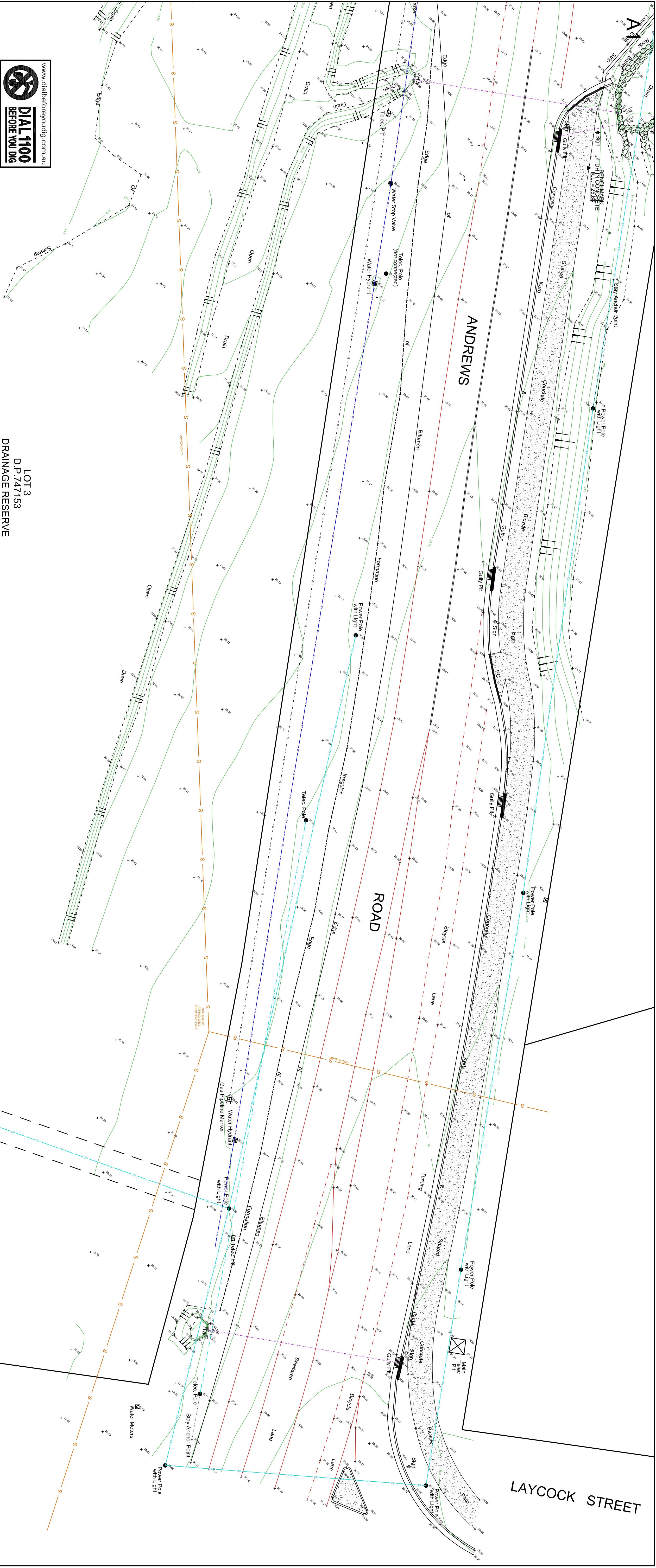
7.5.3 Rural Channelised T-junction – Full Length (CHR)

For this layout, all traffic is required to deviate and therefore the road alignment for the through movement must be designed to suit the operating speed. This deviation requires the pavement to be widened to provide a full-length right-turn lane as shown in Figure 7.7.

The minimum lengths of deceleration (D) for different design speeds are shown in Table 5.2 and should be based on the comfortable deceleration rate of 2.5 m/s². The storage length (S) is usually determined through the use of computer programs such as aaSIDRA.

Details of the departure end of the right-turn lane should be determined using turning path templates (minimum radius 15.0 m). This will depend on the width and the angle of intersection of the road that the turning vehicle is entering.

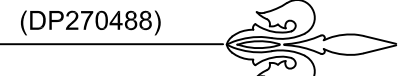




DIAL BEFORE YOU DIG
SHOULD BE CONTACTED
PRIOR TO ANY EXCAVATION ON SITE

**UNDERGROUND SERVICES ARE FROM DBDO ONLY AND SHOULD BE VERIFIED
PRIOR TO CONSTRUCTION
OTHER SERVICES MAY EXIST WHICH ARE NOT SHOWN**

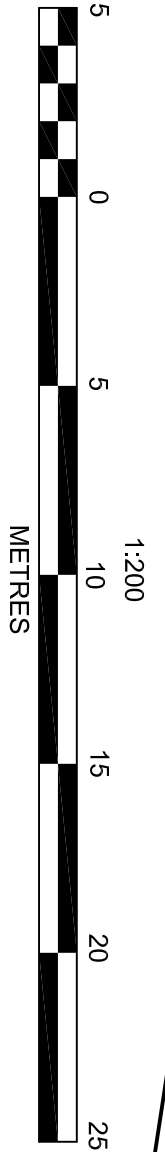
- WATER MAIN (APPROX ONLY)
- SEWER MAIN (APPROX ONLY)
- STORMWATER LINE
- GAS MAIN (APPROX ONLY)
- OVERHEAD TELECOMMUNICATIONS
- OVERHEAD ELECTRICITY



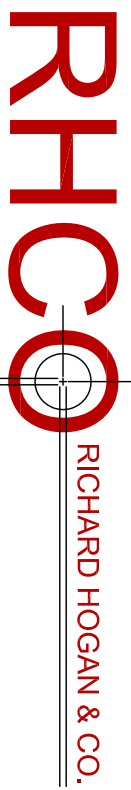
(D) EASEMENT FOR ELECTRICITY 3 WIDE
(E) EASEMENT FOR SERVICES & RIGHT OF CARRAGEWAY 18 WIDE

NOTES:

- THIS DETAIL SURVEY IS NOT A SURVEY AS DEFINED BY THE SURVEYING & SPATIAL INFORMATION ACT 2002.
- DATUM OF LEVELS: AUSTRALIAN HEIGHT DATUM 2002.
- ALL AREAS AND DIMENSIONS HAVE BEEN OBTAINED FROM THE SURVEY DATA AND ARE NOT TO BE USED FOR LAND & PROPERTY INFORMATION (NSW) AND ARE SUBJECT TO FINAL SURVEY.
- NO SEARCH MADE OF LOCATION AND NATURE OF TELEPHONE, CABLE, OR OTHER SERVICES IN RELATION TO BOUNDARIES AT THE RELEVANT AUTHORITY. PRIOR TO ANY CONSTRUCTION THE RELEVANT AUTHORITY SHOULD BE CONTACTED FOR IS DIAGRAMMATIC ONLY.
- VISIBLE, ACCESSIBLE SERVICES LOCATED ONLY.
- NEIGHBOURING HOUSES, RIDGE AND ROOF POSITIONS ARE APPROXIMATE ONLY.
- THIS TITLE BLOCK AND NOTES IS AN INTEGRAL PART OF THIS PLAN AND SHOULD BE KEPT WITH THE PLAN.
- CONTOURS ARE INDICATIVE ONLY. SPOT LEVELS SHOULD BE USED FOR CALCULATIONS OF QUANTITIES WITH CAUTION.



- GAS PIPELINE MARKER
- DEVIATES HEADWALL
- STOP VALVE
- HYDRANT
- SEWER MANHOLE
- COMMS. PIT
- ELEC. BOX
- SIGN POST
- WATER METER
- POWER POLE



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Web: www.rhco.com.au

SURVEYOR: CL
DRAWN: CL
REDUCTION RATIO: 1:200 @ A1
CONTOUR INTERVAL: 0.25m
SHEET 3 OF 3

ORIGIN OF LEVELS:
PM20631
RL=26.514 (SCIMS)
DATUM: AUSTRALIAN HEIGHT DATUM
DATE: 06.12.2016
VERSION No.: A

PLAN SHOWING CONTOURS AND DETAIL
OVER PART OF ANDREWS ROAD
CRANEBROOK
CLIENT: JWP
L.G.A.: PENRITH
JOB REF: 16754

CAD FILENAME: X:\2016-RHCO\16754 - JWP - Andrews Rd Penrith\ACAD\16754 Andrews Road Cranebrook - DETAIL SURVEY.dwg

