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Technical Memorandum – Flood Modelling

2929 Old Cleveland Road, Chandler

September 2025

Prepared for:

That's Gold Pty Ltd

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This Technical Memorandum – Flood Modelling has been prepared to facilitate the proposed development of 2929 Old Cleveland Road, Chandler and is in relation to the previously prepared Flood Risk Assessment & Flood Emergency Management Plan by CWD Group, issued February 2023. Relevant details of the document are contained below.

Site & Letter Details	
Site Address	2929 Old Cleveland Road, Chandler
Real Site Description	Lot 47 on SL 11115
Prepared for	That's Gold Pty Ltd
Date	12 September 2025
Revision No.	D
Report Status	Final
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Industry Accreditation	RPEQ 14732
RPEQ Signature	

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1. Brisbane City Council Request for Information

CWD Group received the following informal information request via email dated 24th October 2024 from Brisbane City Council. The associated responses are also included below.

- *Council envisages a trapezoidal channel with 2m base and 1:3 sides. In accordance with your long section, it would be approx. 1.2m deep and would convey approx 13 cumecs which is similar to the culvert under Old Cleveland Road. At 1.5m deep, it would convey around 20 cumecs. Please refer to the attached mark up. The culvert under Old Cleveland Road is showing flows of 14, 14 and 17 cumecs for the three scenarios. The open drain can significantly reduce flooding for a range of events.*

Response: A 1.5m deep trapezoidal channel as per the dimensions above has been included in the model. This will require some reshaping of the channel which exists on the site.

- *The time of concentration derived as indicated in Appendix C is quite long and does not provide adequate description of the various times assumed or derived. The flows are likely underestimated as a result.*

Response: The rational method was used as a check for gross error as per Section 4.2.2 of QUDM. The Time of concentration was derived using the methodologies found in Section 4.6 of QUDM. The components of the time of concentration can be found on Table C1 in Appendix C. In short, it consists of an overland sheet flow of 11mins and travel time of 31.5 downstream of that. An additional check on the equivalent travel velocity was done and found to be 0.78 m/s which is reasonable for natural channel flow.

Additionally, WBNM parameters were set as per the recommendation in the WBNM technical documentation which consist of a lag parameter of 1.6, impervious lag parameter of 0.1 and routing link (stream) lag factor of 1. Losses are also shown on the tables below and are as per the ARR data hub.

- *The culverts under Tyberry Street are indicated in the report as being a single 1100mm x 400mm whereas it is 4 x 1200mm x 450mm. This is constricting flows at Tyberry Street.*

Response: The previous iteration of the model was based on supplied info whereas a field inspection was undertaken to verify culvert structure sizes and number. Tyberry Street culverts have been updated as per the above sizing and the site inspection. Updated culvert sizes can be seen in the tables below also.

- *No details provided on proposed earthworks indicated on drawing D03.*

Response: Drawing D03 contains a colour scale and map showing cut and fill. Detailed design drawing have not been completed. It should be noted that the change in model terrain is a comparison to the pre-development scenario which is based on the 2002 Council contours. Due to lack of available information, the 2002 contours were used to create a surface. Therefore the level accuracy is +/-0.5m for the pre-development scenario.

Works proposed from the date of the report will consist of:

- Reprofile the site channel to 1.5m deep, profile referenced above;
- Removing Crossing 1; and
- Excavating a 4m wide 300mm deep area along Old Cleveland Road to alleviate flows on the verge and convey to the channel.

- *Please clarify the flow diagrams E19, F22 & G22.*

Response: These plans show the peak discharge flowing under each blue line within the floodplain/model domain (not outside the line) and green points are flows through the culverts. The blue lines can be conceptualised cross section lines with the discharge reported being the flow going perpendicular to the line within the model. Whereas the green

points are simply flows through the pipe (flow over the crossing as weir flow is not included in this). It should be noted that much of the flows crossing Old Cleveland Road are coming from Tollet Street and both the East and West along Old Cleveland Road. Additionally, some of the Tyberry Street flows are being conveyed down to Tollet Street rather than through the site.

- *It is not clear what the flows across the various roads are.*

Response: Results for peak discharges are listed in the tables in section 8 of this report and also within maps E, F and G. All inflows have been adequately referenced in the model, the peak discharges pertinent to the evaluation of impacts on the site are shown.

- *It is not clear how catchments 1,4 & 6 are accounted for in the flow modelling. Flows from catchments 1,4 & 6 are upstream catchments of catchments 2, 5 & 7 respectively.*

Response: The SUB05 and SUB02 inflow areas are total flow boundaries which include SUB04 and SUB06 (included with total flow at SUB05) and SUB01 (included in SUB02 total flow). SUB03, SUB07 and SUB08 are local flows only.

- *Only 1.5 cumecs is indicated flowing across Old Cleveland Road which seems too low given only 17 cumecs is discharging through the culvert.*

Response: 1.5m³/s was found to be flowing down old Cleveland Road as opposed to across it. It should be noted that the model is a hydrodynamic model which will result in peak discharges occurring at different times in different locations. The 17.233 m³/s was found to be the peak discharge within the OCR1 culverts.

The OCR1 culvert is taking the majority of upstream flows. These flows consist of not only what is in the channel onsite, but also the flows coming down Tollet Street and those to the east and west. Additionally, it can be observed that the post development scenario reduces flow on Old Cleveland Road which results in more flow in the OCR1 culverts.

2. Site Description

The subject site is 2929 Old Cleveland Road, Chandler (Lot 47 on SL 11115). The total area of the subject site is approximately 2.02Ha. Figure 1 below shows the location of the subject site.



Figure 1: Site Location (Source: Nearmap)

3. Scope of Work

It is proposed to renovate the existing nursery with new facilities. It is also proposed to construct a car park to facilitate the proposed commercial activities on site.

This study seeks to review historical data to ascertain the impacts of prior works on the site on flood characteristics. Particular attention is given to upstream neighbours and Old Cleveland Road.

4. Previous Studies

CWD Group undertook a Flood Risk Assessment & Flood Emergency Management Plan (FRA & FEMP) for this site in February 2023 which described the flood constraints and hazard associated with the site and nominated quantitative triggers for action. The action plan and procedures prescribed as part of the FRA & FEMP aimed to mitigate the potential for flooding to cause loss of human life, damage to property or environmental pollution without causing undue burden on disaster management response.

In the CWD Group FRA & FEMP, overland flow flooding was stated as posing a risk to occupants exiting the site, utilising the report and its information, the occupants would be able to devise a specific emergency evacuation procedure which is to outline roles and responsibilities, evacuation routes and management actions to safely evacuate the grounds of all people before floodwaters enter the site.

Information and specific documentation can be found within the CWD Group Flood Risk Assessment & Flood Emergency Management Plan dated 02/02/2023 Revision A.

5. Available Data

Data used in hydrologic and hydraulic modelling and preparation of this memorandum is outlined in the Table below.

Catchment Boundaries	Generated as part of this study
Topographic Information	2002 BCC Contours, 2009 LiDAR, 2019 LiDAR
Hydraulic Structure Details	Survey and Site observations
Land Use	Aerial Photography
Existing Council Flood Studies	nil
Rainfall and Meteorological Data	Australian Bureau of Meteorology
Updated Survey	ONF Survey 12/08/2022
Aerial Imagery	Nearmap (Accessed May 2024)
Preliminary site layout	As Supplied

6. Aerial Photography Comparison

An aerial comparison of the subject site is provided below which shows imagery of the site for both September 2003 and May 2024, thus confirming the dwelling at the back of the property and the shop located in the northern corner of the site on Old Cleveland Road were both present for the modelling scenarios much like the external site levels.

Figure 2 shows the aerial imagery from September 2003, whilst **Figure 3** shows the aerial imagery from May 2024.



Figure 2: 2929 Old Cleveland Road, Chandler – September 2003 Aerial Imagery



Figure 3: 2929 Old Cleveland Road, Chandler – May 2024 Aerial Imagery

7. Hydraulic Model

7.1 Setup

For the purpose of this Technical Memorandum, updated Flood Modelling was required, we have modelled and have results for the following:

- Pre-Development (2002 contours onsite);
- Current development (Survey onsite including pipes);
- Post Development which includes increasing the pipes onsite from a single barrel each to three (3);
- All land external to the site uses the 2019 DEM;
- All pipes have a 30% blockage factor;
- Maps:
 - E = Pre-Development
 - F = Current Development
 - G = Post Development
 - Afflux are accompanied with the respective scenarios.

A long section representation of the drain through the site can be found in **Appendix D**. Culverts were input to the model with the following information:

Table 1: Pre-Development Culverts

ID	US Invert	DS Invert	Width/Diameter	Height	Number
TYBERRY1	9.36	9.33	1.2	0.45	4
OCR1	6.53	6.51	2.7	1.5	2
OCR2	6.21	6.08	1.5	0.4	3

Table 2: Current Culverts

ID	US Invert	DS Invert	Width/Diameter	Height	Number
TYBERRY1	9.36	9.33	1.2	0.45	4
SITE1	8.6	8.2	1.8	0	1
SITE2	7.89	7.81	1.8	0	1
SITE3	7.75	7.58	2.68	1.45	1
OCR1	6.53	6.51	2.7	1.5	2
OCR2	6.21	6.08	1.5	0.4	3

Table 3: Post Development Culverts

ID	US Invert	DS Invert	Width/Diameter	Height	Number
TYBERRY1	9.36	9.33	1.2	0.45	4
SITE2	7.89	7.81	1.8	0	1
SITE3	7.75	7.58	2.68	1.45	3
OCR1	6.53	6.51	2.7	1.5	2
OCR2	6.21	6.08	1.5	0.4	3

7.1.1 Post Development Model Description

The post development model comprised of the following changes to site when compared to the current conditions:

- Reprofilng the site channel to 1.5m deep profile referenced by BCC allowing more flow through the site;
- The culvert at Site 1 and its associated crossing, Crossing 1, were removed; and
- Excavating a 4m wide 300mm deep area along Old Cleveland Road to alleviate flows on the verge and convey to the channel. The 4m wide channel starts at 7m wide on the western boundary and tapers down to 4m wide over 14m.
- Undertaking EWKS/profiling of the area shown on Map D03 as being required to be at or below 10.1m AHD. This allows flows to traverse the site similar to pre development conditions and reach the internal channel.

Appendix D shows the model set up for the post development scenario as well as a sketch showing the long section and typical section.

7.2 Hydrology

A WBNM model was generated to create inflow hydrographs to form the existing case scenario and determine the critical durations for the site in accordance with the new rainfall data. The critical duration was assessed at the site with the critical events shown on Table 4.

The hydrologic model was run for the pre developed case and hydrographs were exported to input in the hydraulic model.

7.2.1 Design Storm Event Temporal Pattern Selection

Table 4: WBNM Critical Duration Information

Annual Exceedance Probability (AEP)	Critical Duration (min)	Temporal Pattern	Initial Loss (mm)*	Continuing Loss (mm/hr)
63.2%	180	6	18	2.3
50%	180	6	18	2.3
20%	90	7	18	2.3
10%	45	6	18	2.3
5%	45	6	18	2.3
2%	45	6	18	2.3
1%	45	6	18	2.3

7.2.2 Rational Method Comparison

Table 5: Rational vs WBNM

Annual Exceedance Probability (AEP)	Rational	Pre-Development	Difference	Change %
63.2%	6.219	6.107	-0.112	-1.8%
50%	7.483	7.152	-0.331	-4.4%
20%	11.45	12.185	0.735	6.4%
10%	14.268	16.356	2.088	14.6%
5%	17.256	21.188	3.932	22.8%

2%	22.231	24.439	2.208	9.9%
1%	25.871	27.373	1.502	5.8%

7.3 Hydraulic Model Results

7.3.1 Pre Development Conditions Mapping

Mapping of the pre-development catchment conditions including flood elevations, depth, velocity and hazard for the 2% AEP event is shown in **Appendix E**.

7.3.2 Current Conditions Mapping

Mapping of the current development catchment conditions including flood elevations, depth, velocity and hazard for the 2% AEP event is shown in **Appendix F**.

7.3.3 Post Developed Conditions Mapping

Mapping of the post development catchment conditions including flood elevations, depth, velocity and hazard for the 2% AEP event is shown in **Appendix G**.

7.3.4 Flood Impact Maps

Mapping for the flood impacts for the current and post development are shown in **Appendix F** and **Appendix G**.

8. Discussion of the Results

The current scenario afflux shows increases on neighbouring properties. However, the post development afflux has no adverse impacts on neighbouring private property due to the proposed works onsite to mitigate impacts. Therefore, the post development scenario can be considered acceptable.

Reporting point results are shown below in **Table 6**.

Table 6: Reporting Point Results

Point No.	Pre-Level m AHD	Current Level m AHD	Current Afflux m	Post Level m AHD	Post Afflux m
1	10.110	10.156	0.046	10.149	0.039
2	9.977	10.027	0.050	10.012	0.035
3	9.712	9.812	0.100	9.708	-0.004
4	9.611	9.700	0.089	9.619	0.008
5	9.466	9.559	0.093	9.479	0.013
6	9.315	9.377	0.062	9.244	-0.071
7	8.946	8.893	-0.053	8.875	-0.071
8	7.607	7.579	-0.028	7.573	-0.034
9	10.450	10.437	-0.013	10.437	-0.013
10	10.449	10.435	-0.014	10.436	-0.015

Table 7: Culvert Flows

ID	Pre-Development Discharge, m ³ /s	Current Discharge, m ³ /s	Post Development Discharge, m ³ /s
TYBERRY1	1.686	1.686	1.686
SITE1		2.605	-
SITE2		2.836	3.768
SITE3		1.757	4.649
OCR1	13.778	14.534	16.941
OCR2	4.805	4.728	4.686

Table 8: Peak Discharge Locations

Location	Pre-Development Discharge, m ³ /s	Current Discharge, m ³ /s	Post Development Discharge, m ³ /s
DS	22.4941	22.4953	22.3714
SUB05	8.1737	8.1737	8.1747
SUB07	8.6009	8.5969	8.6006
SITE_US	3.9566	2.8888	4.8413
SITE_MID1	2.0865	2.7852	4.8529
SITE_MID2	1.6335	2.899	4.6599
SITE_DS	1.6107	4.3974	5.5096
SUB03	1.5225	1.5226	1.5224
SUB02	5.4555	5.4702	5.4749

9. Qualifications & Certifications

Our analysis and overall approach have been specifically catered for the requirements of That's Gold Pty Ltd and may not be applicable beyond this scope. For this reason, any other third parties are not authorised to utilise this letter without further input and advice from CWD Group.

As a Registered Professional Engineer of Queensland (RPEQ) for this project, on behalf of CWD Group, I certify that this Technical Memorandum – Flood Modelling has been undertaken in accordance with current engineering best practice as recommended in the QUDM, ARR16 and Brisbane City Council Guidelines.

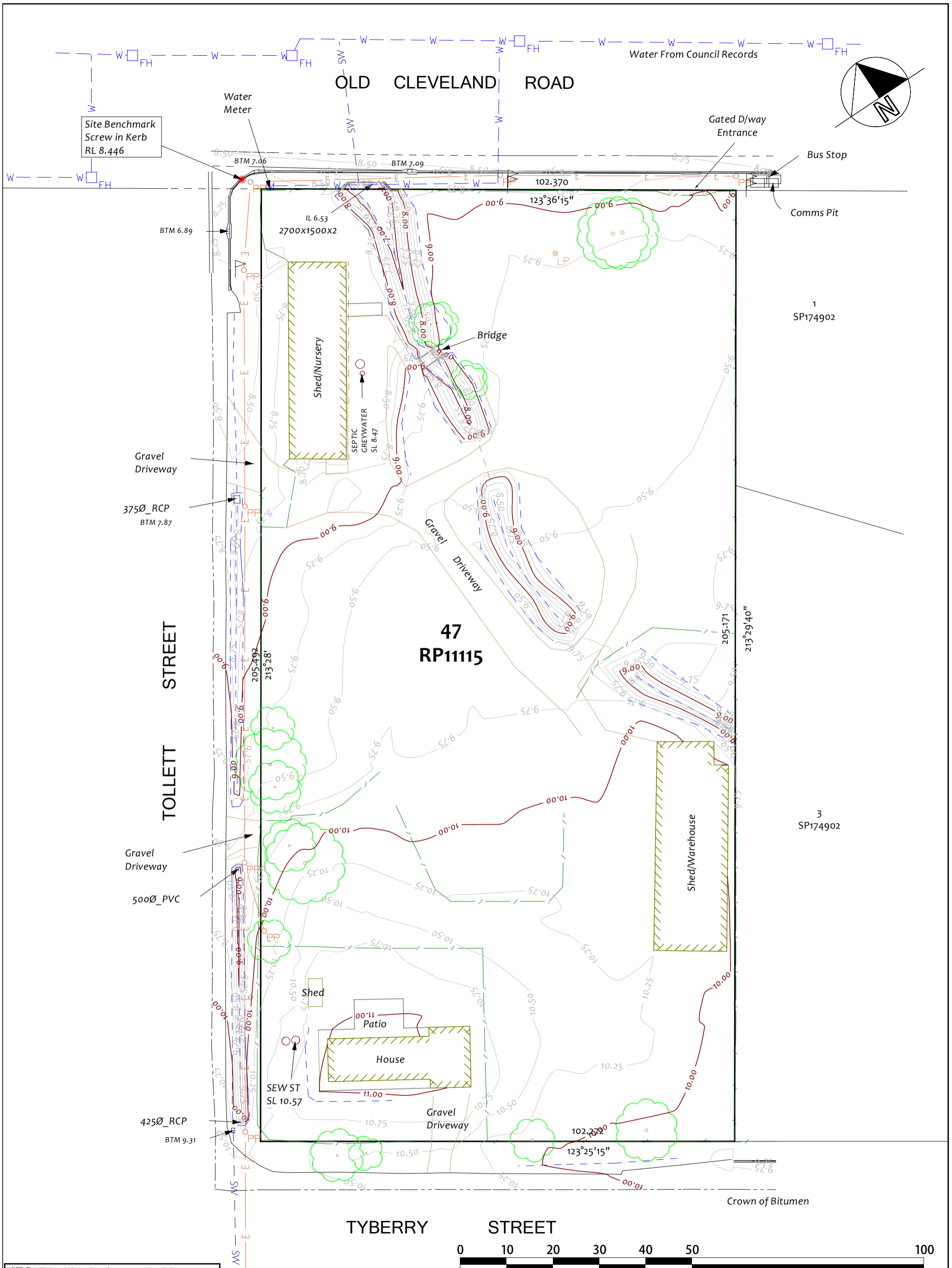
Name: Jeremy Cox

RPEQ No: 14732

Date: 12 September 2025

Signature:  _____

Appendix A Survey



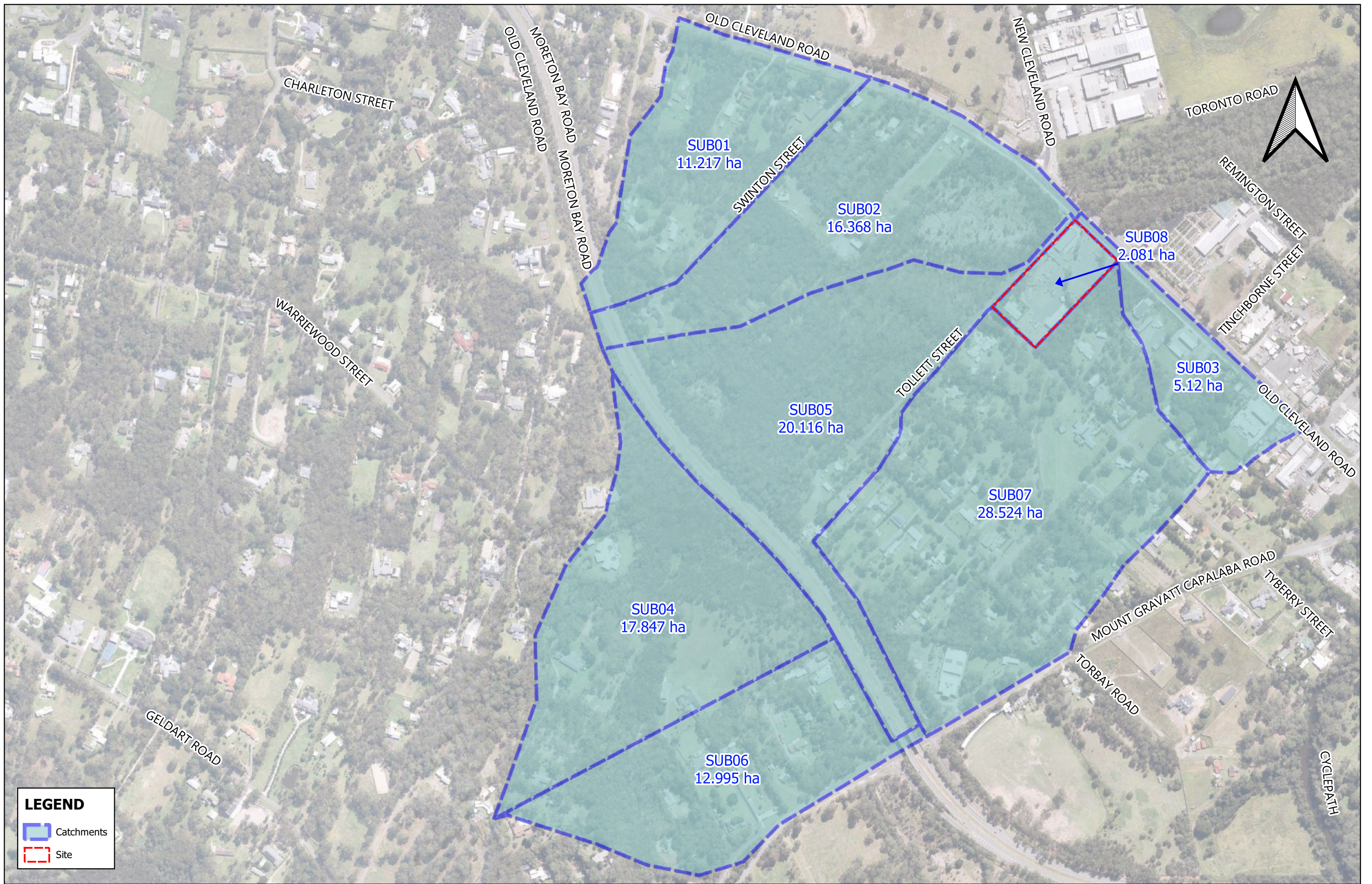
NOTE: The title boundaries as shown hereon were not marked at the time of survey and have been determined by plan dimensions only and not by field survey.

Horizontal Co-Ord Datum		Contour Interval 0.25m	Level Datum AHD-D	
Horizontal Co-Ord Origin		Level Origin PM 90911	Value 16.056	
Easting	Northing	Surveyed KN/KT	Date	09/08/2022
Azimuth IS286215	Field Book TSC3	Drawn KN/KT	Date	12/08/2022



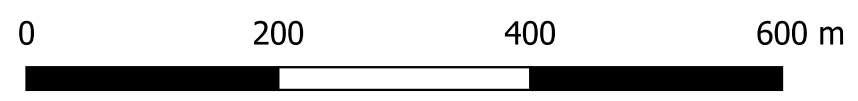
Client		Project		
That's Gold Pty Ltd		DETAIL SURVEY - 2929 OLD CLEVELAND ROAD - CHANDLER		
Computer File	Scale (A3)	Job No.	Locality	Drawing Number
M:\..BRISBANE\..10845..	1:750	10845	CHANDLER	10845_D1
			Rev	Sheet
			B	1 OF 1

Appendix B Catchment Delineation



LEGEND

- Catchments
- Site



Scale 1:6,000

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That's Gold Pty Ltd
 2929 Old Cleveland Road, Chandler QLD
 WBNM - Catchment Delineation

Jun 2024
 12038
 B01

Appendix C Rational Method Calculation

RATIONAL METHOD CALCULATIONS

Project: 12038 - 2929 Old Cleveland Rd, Chandler

Location of Discharge: Old Cleveland Road

Catchment Condition: Existing Site/Developed upstream

Other Comments:

Time of Concentration	42.5 minutes				
	Upstream	Site		Total	
Sub-Catchment Areas	114.268	2.079		116.35	ha
C10 Runoff Coefficients	0.76	0.71			
10yr 1hr Intensity (mm/hr)	66.50				

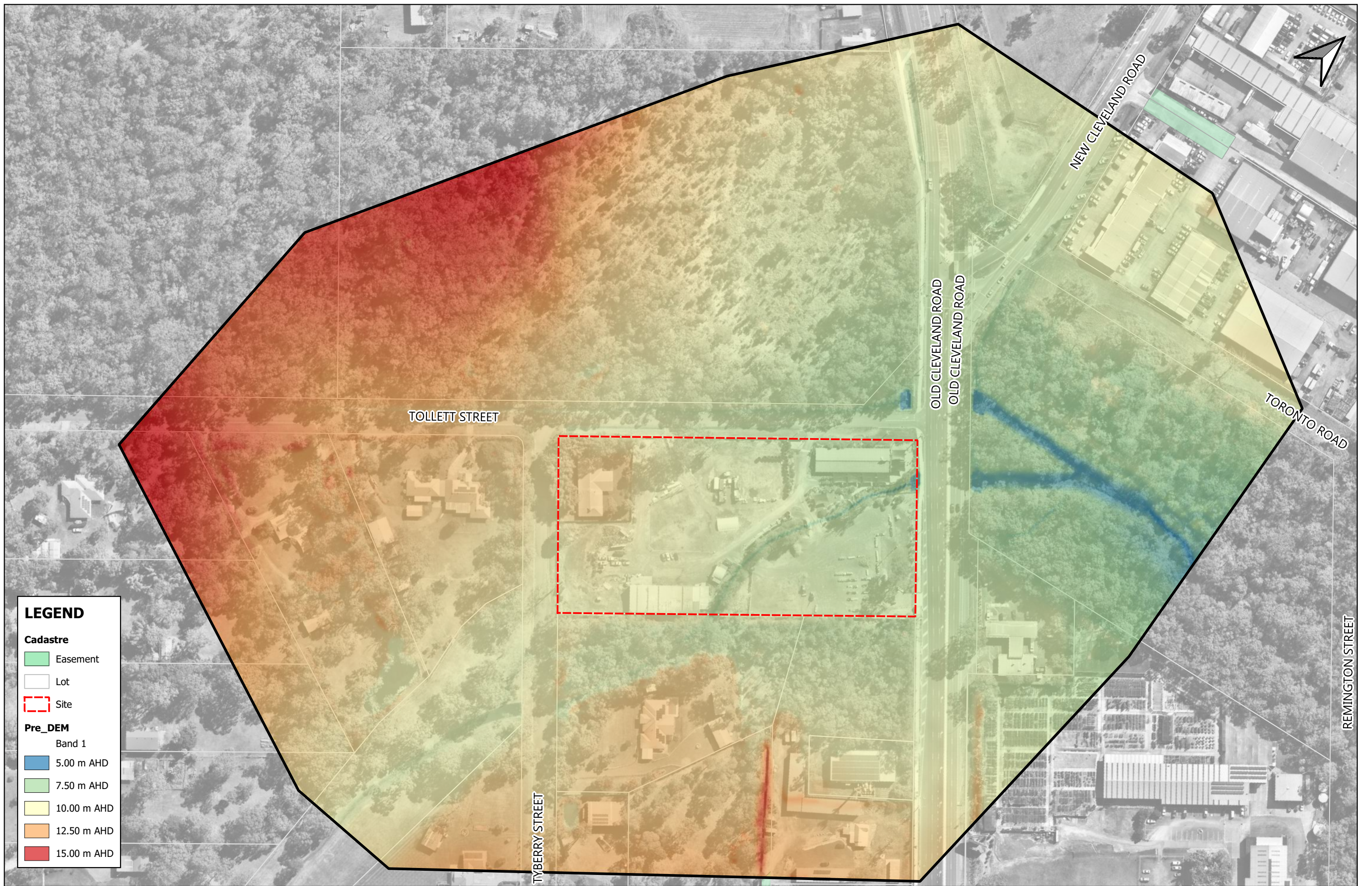
AEP %	Rainfall		Fy	Runoff Coefficients			Discharges (cumecs)			TOTAL
	Intensity (mm/hr)	Depth (mm)		Upstream	Site		Upstream	Site		
63.2	31.7	22	0.80	0.61	0.57	0.00	6.115	0.104	0.000	6.219
50	35.9	25	0.85	0.65	0.60	0.00	7.358	0.125	0.000	7.483
20	49.1	35	0.95	0.72	0.67	0.00	11.259	0.191	0.000	11.450
10	58.2	41	1.00	0.76	0.71	0.00	14.030	0.238	0.000	14.268
5	67.0	47	1.05	0.80	0.75	0.00	16.968	0.288	0.000	17.256
2	78.8	56	1.15	0.87	0.82	0.00	21.860	0.372	0.000	22.231
1	87.9	62	1.20	0.91	0.85	0.00	25.438	0.432	0.000	25.871

Upper Catchment Slope	11.1%
Overland Flow	11.0 min
Channel Travel Length	1465 metres
Channel Fall	39 metres
Travel Time	10.5 min
Delta for	3.0
Time of Concentration @ u/s bdy	42.5

Equiv Travel Velocity	0.78 m/s
-----------------------	----------

Table C1

Appendix D TUFLOW Model Setup



LEGEND

Cadastre

- Easement
- Lot
- Site

Pre_DEM

Band 1

- 5.00 m AHD
- 7.50 m AHD
- 10.00 m AHD
- 12.50 m AHD
- 15.00 m AHD



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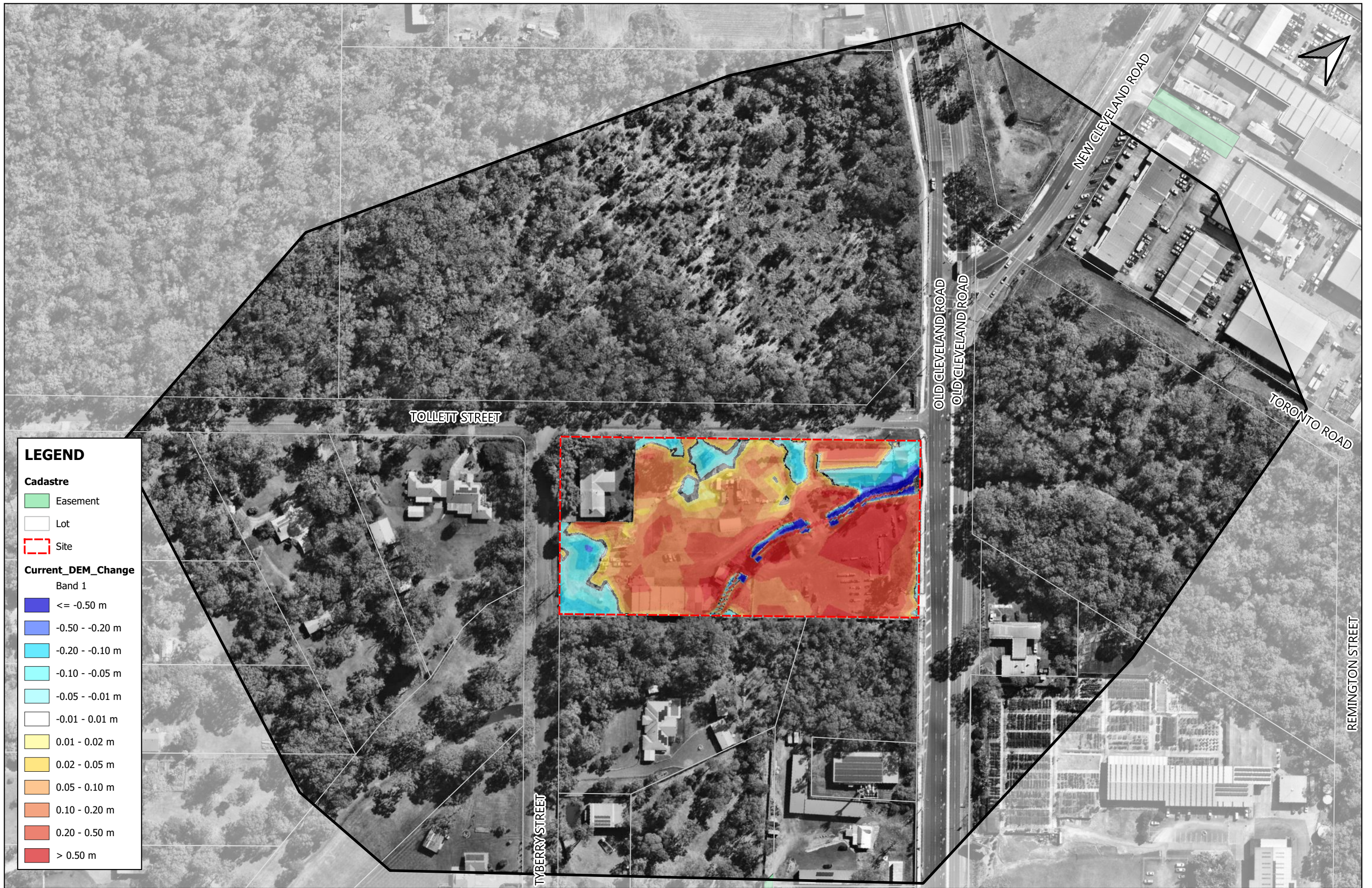
2929 Old Cleveland Road, Chandler QLD

TUFLOW - Pre Development - Model Terrain

May 2025

12038

D01



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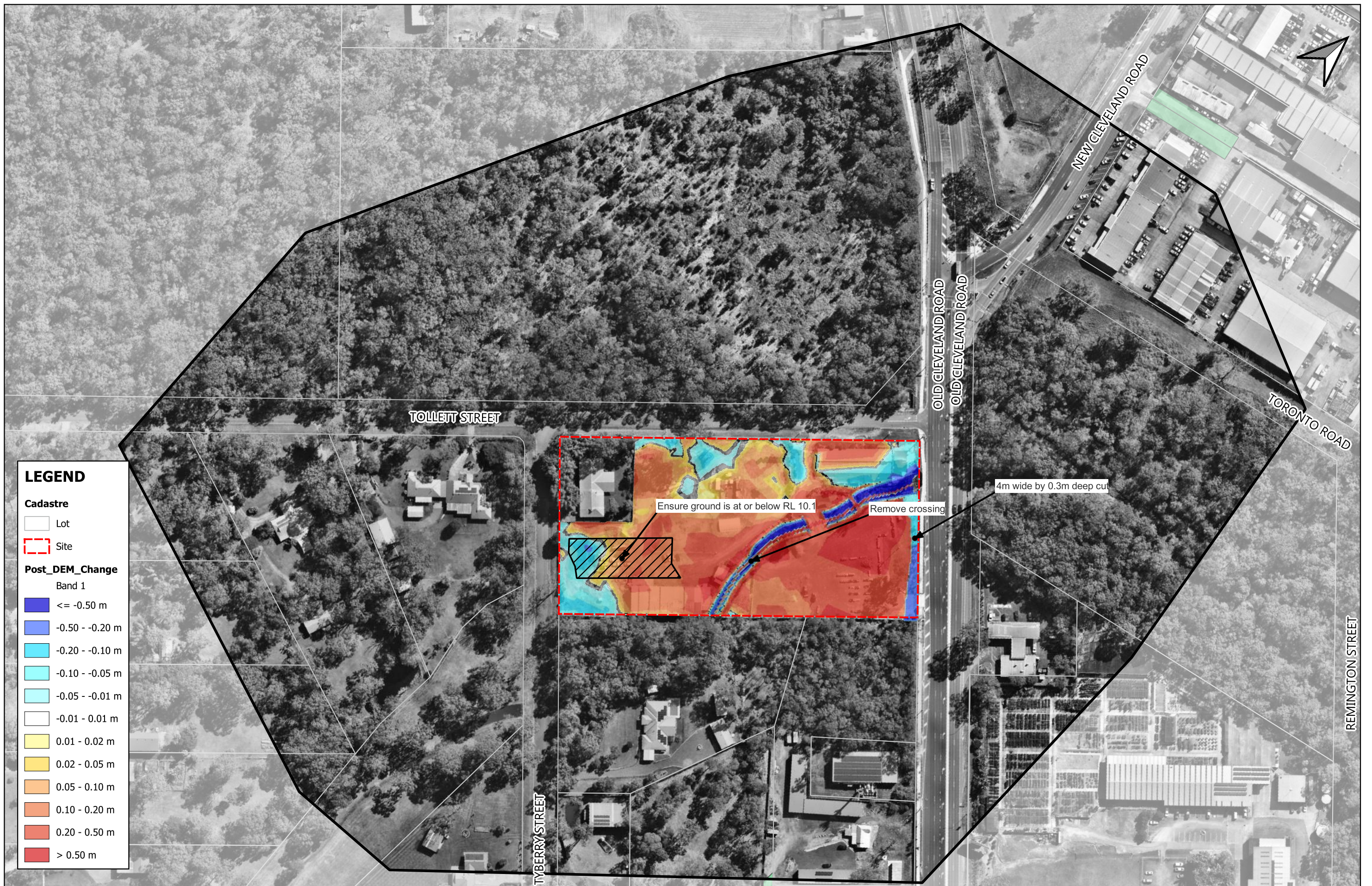
2929 Old Cleveland Road, Chandler QLD

TUFLOW - Current Development - Change in Model Terrain

May 2025

12038

D02



LEGEND

Cadastre

- Lot
- Site

Post_DEM_Change
Band 1

<= -0.50 m
-0.50 - -0.20 m
-0.20 - -0.10 m
-0.10 - -0.05 m
-0.05 - -0.01 m
-0.01 - 0.01 m
0.01 - 0.02 m
0.02 - 0.05 m
0.05 - 0.10 m
0.10 - 0.20 m
0.20 - 0.50 m
> 0.50 m



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11.09.2025

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2929 Old Cleveland Road, Chandler QLD

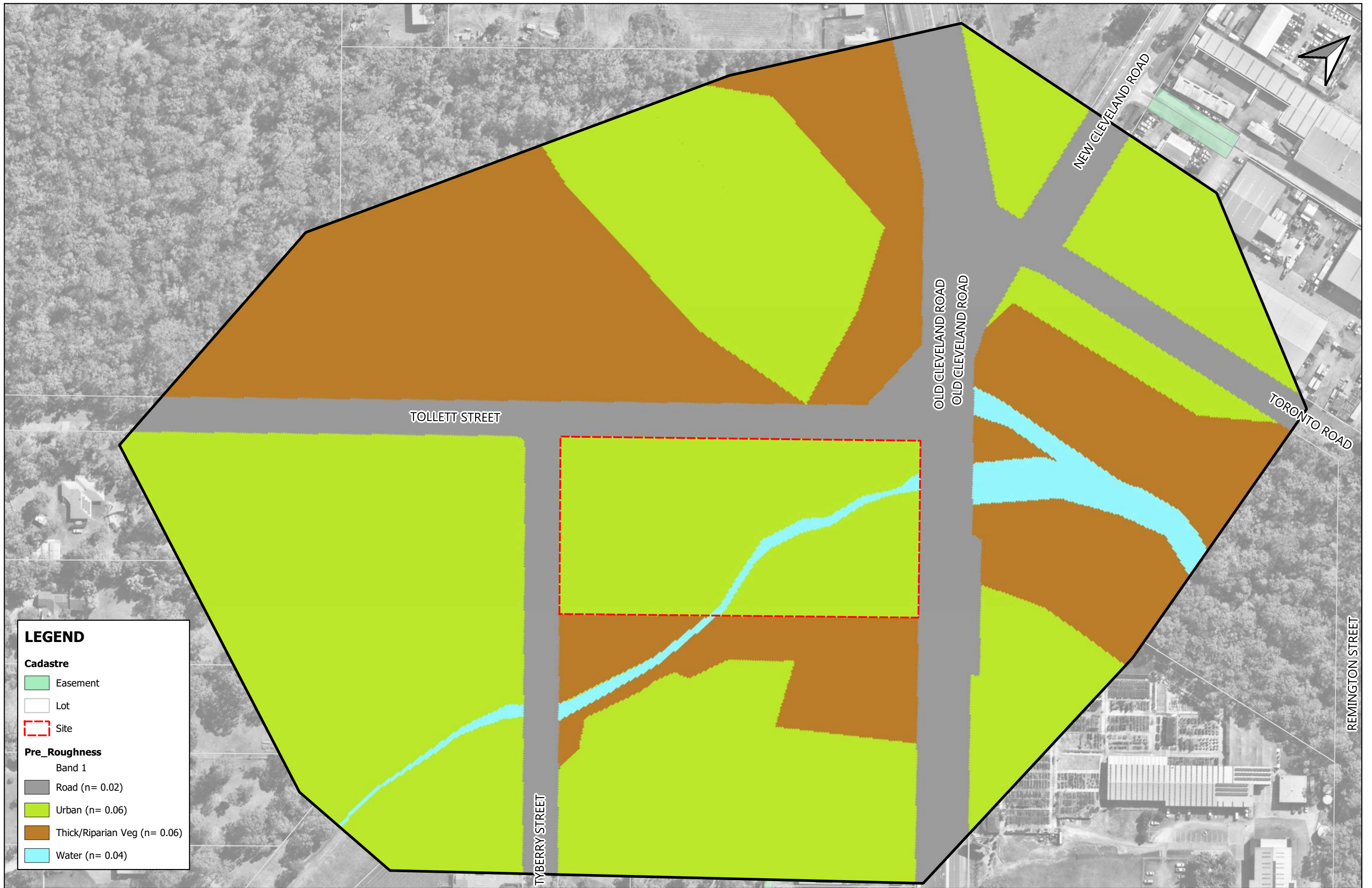
TUFLOW - Post Development - Change in Model Terrain

Sep 2025

12038

D03





LEGEND

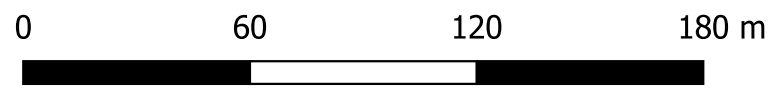
Cadastre

- Easement
- Lot
- Site

Pre_Roughness

Band 1

- Road (n= 0.02)
- Urban (n= 0.06)
- Thick/Riparian Veg (n= 0.06)
- Water (n= 0.04)



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01.05.2025

That's Gold Pty Ltd

2929 Old Cleveland Road, Chandler QLD

TUFLOW - Pre Development - Model Roughness

May 2025

12038

D04



LEGEND

Cadastre

- Easement
- Lot
- Site

Boundaries

- Model Outflow
- Model Inflow
- 1d Connection
- 1d Inflow/Outflow
- Reporting Points
- Inflow Areas

Pipes

- Rectangular
- Circular

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01.05.2025

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2929 Old Cleveland Road, Chandler QLD

TUFLOW - Model Boundaries

May 2025

12038

D05





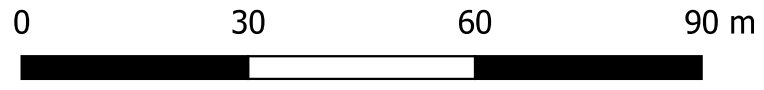
ID: OCR2
 Type: R
 Width_or_D: 1.5
 Height_or_H: 0.4
 Number_of: 3

ID: OCR1
 Type: R
 Width_or_D: 2.7
 Height_or_H: 1.5
 Number_of: 2

ID: TYBERRY1
 Type: R
 Width_or_D: 1.2
 Height_or_H: 0.45
 Number_of: 4

LEGEND

- Cadastre**
- Easement
 - Lot
 - Site
- Pipes_Pre**
- Rectangular



Scale 1:1,000

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TUFLOW - Pre Development - Culverts

May 2025

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D06



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TUFLOW - Current Development - Culverts

May 2025

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D07





LEGEND

Cadastre

- Easement
- Lot
- Site
- Peak Discharge Locations



Scale 1:2,000

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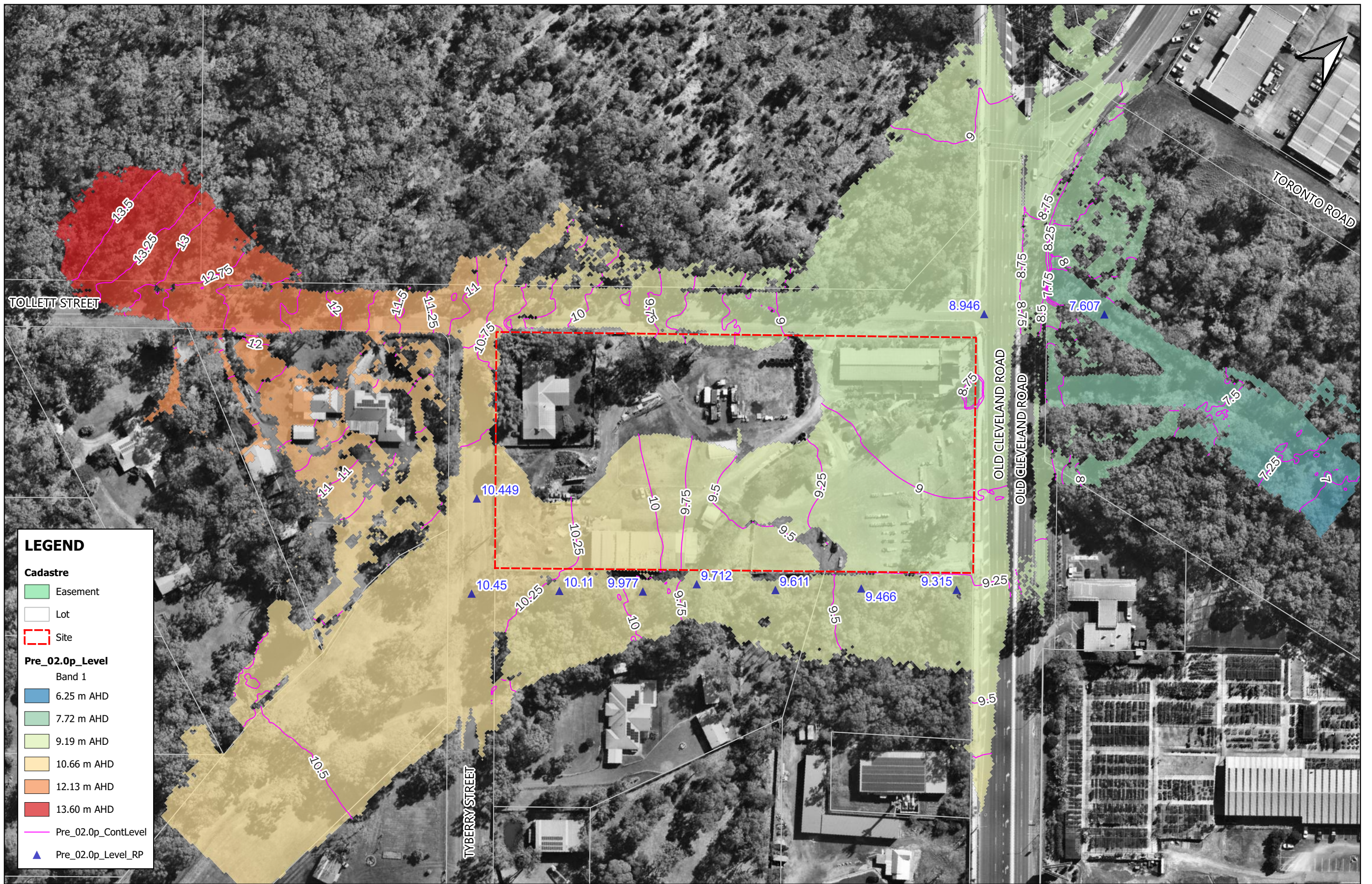
TUFLOW - Peak Discharge Locations

May 2025

12038

D09

Appendix E Pre-Development Model Results



LEGEND

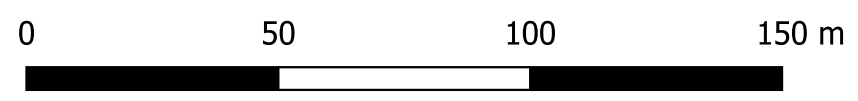
Cadastre

- Easement
- Lot
- Site

Pre_02.0p_Level

Band 1

- 6.25 m AHD
- 7.72 m AHD
- 9.19 m AHD
- 10.66 m AHD
- 12.13 m AHD
- 13.60 m AHD
- Pre_02.0p_ContLevel
- Pre_02.0p_Level_RP



Scale 1:1,500

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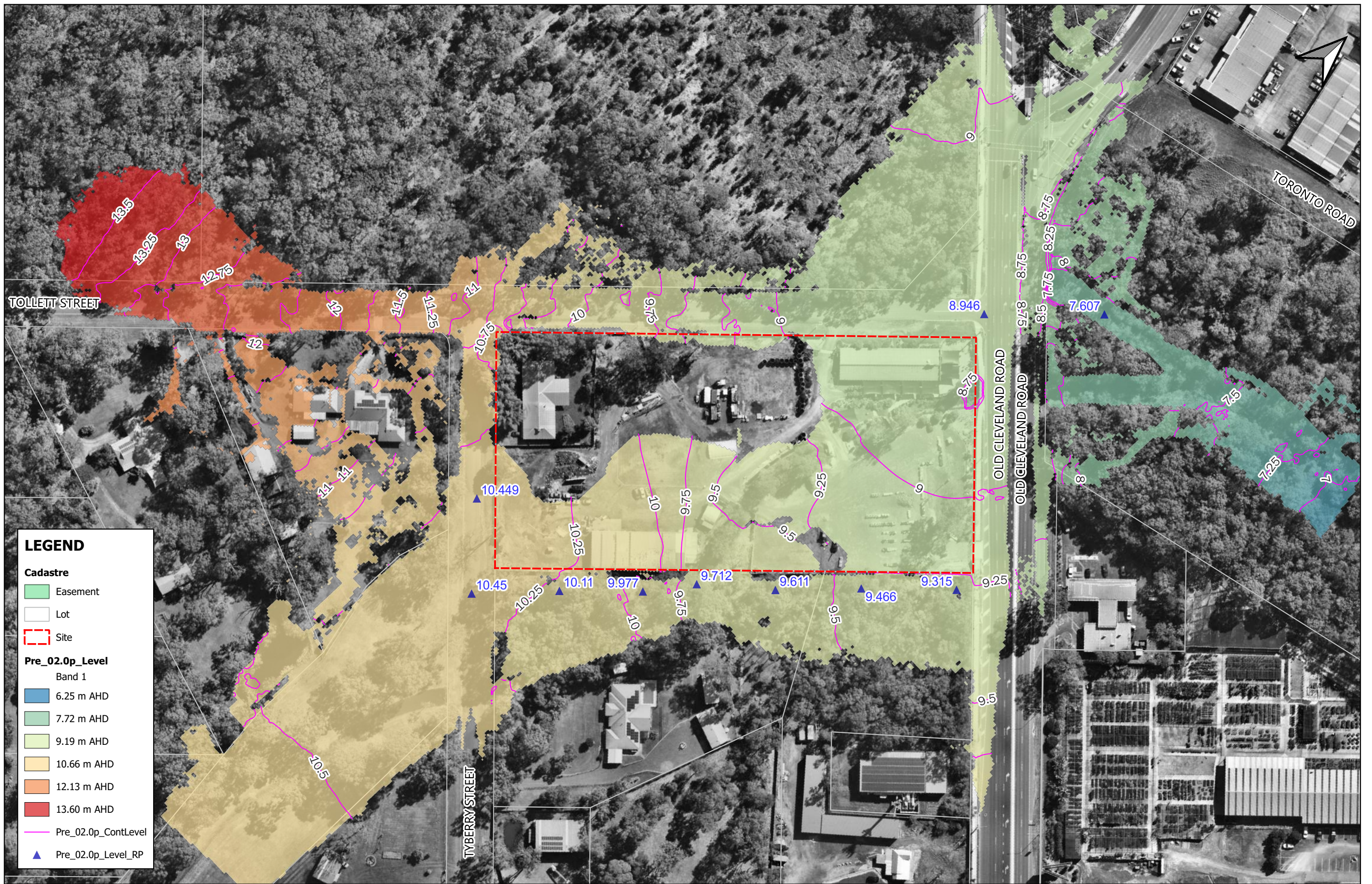
2929 Old Cleveland Road, Chandler QLD

Flood Level - Pre Development - 2% AEP

May 2025

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E03



LEGEND

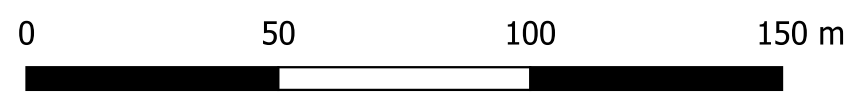
Cadastre

- Easement
- Lot
- Site

Pre_02.0p_Level

Band 1

- 6.25 m AHD
- 7.72 m AHD
- 9.19 m AHD
- 10.66 m AHD
- 12.13 m AHD
- 13.60 m AHD
- Pre_02.0p_ContLevel
- Pre_02.0p_Level_RP



Scale 1:1,500

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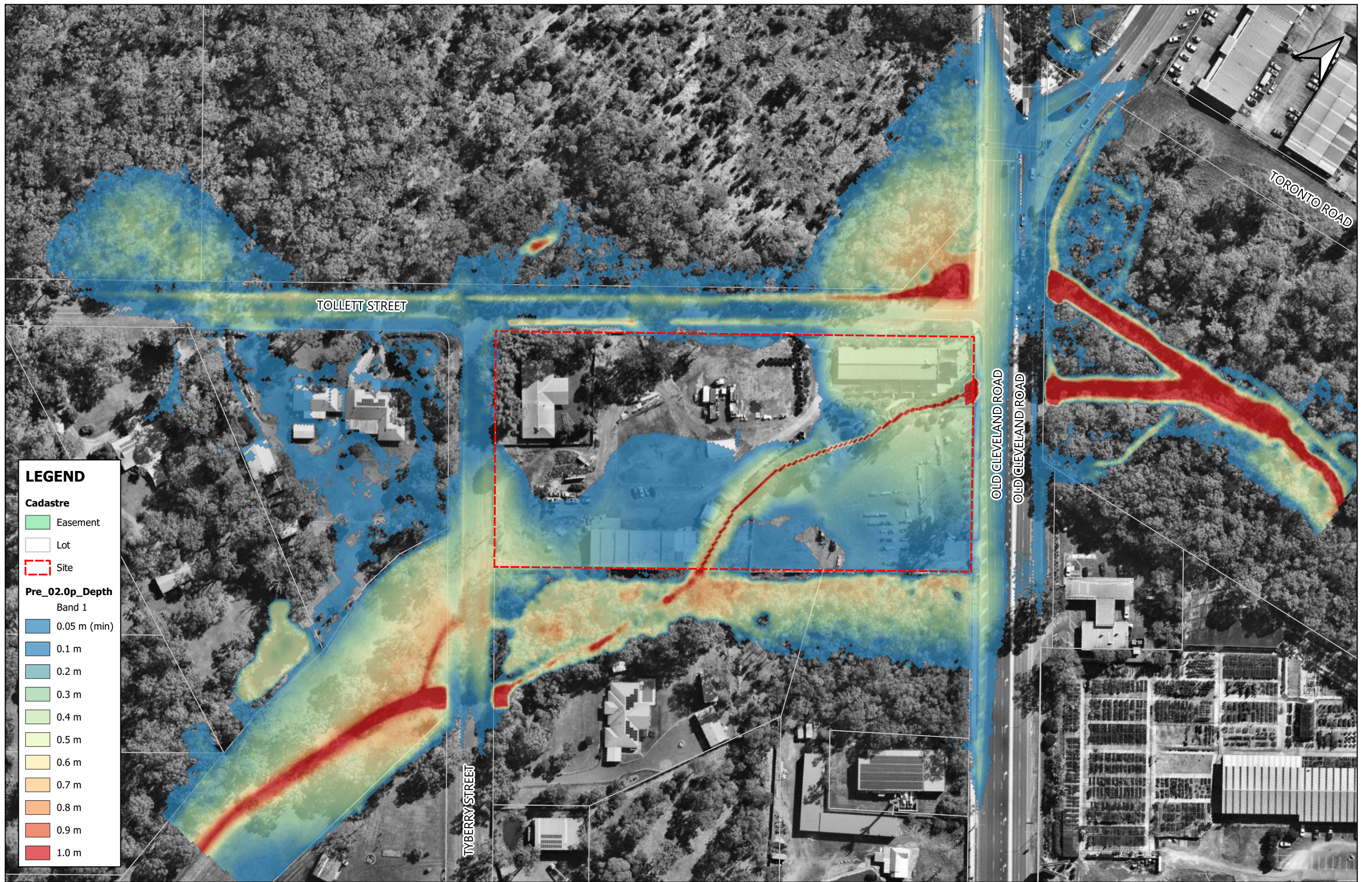
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 Flood Level - Pre Development - 2% AEP

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E03



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Flood Depth - Pre Development - 2% AEP

May 2025

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E11



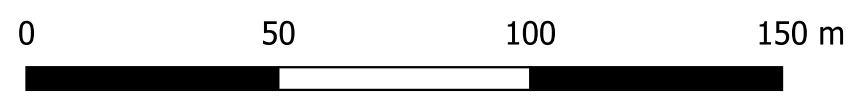
LEGEND

Cadastre

- Easement
- Lot
- Site

Pre_02.0p_Q

- Discharge (m³/s)
- Pre_02.0p_Pipe_Q



Scale 1:1,500

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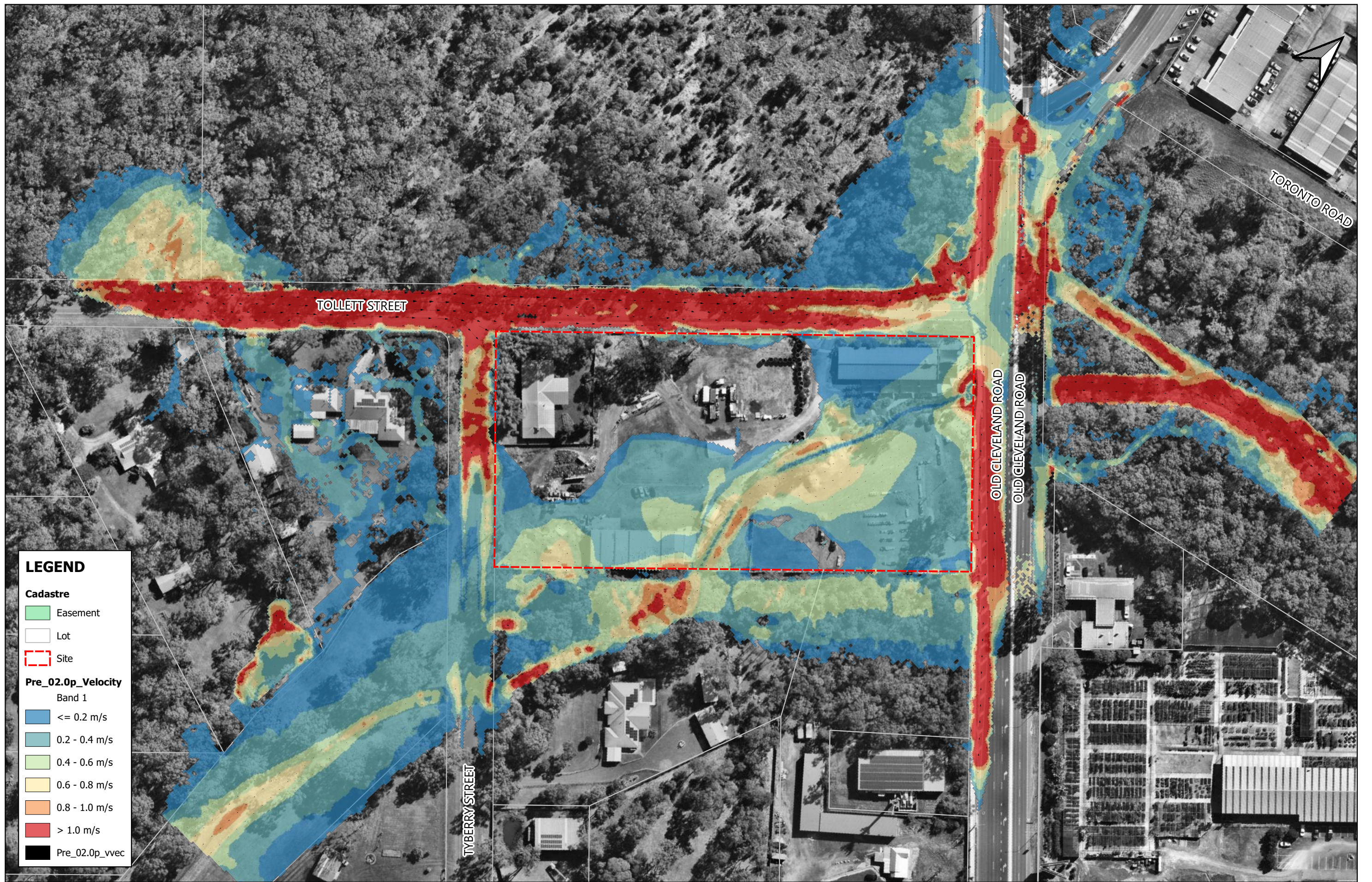
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 2929 Old Cleveland Road, Chandler QLD
 Peak Discharges - Pre Development - 2% AEP

May 2025

12038

E19



LEGEND

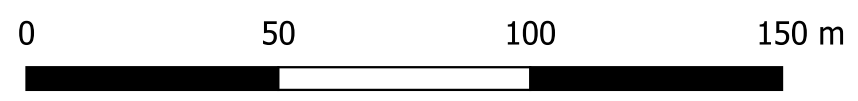
Cadastre

- Easement
- Lot
- Site

Pre_02.0p_Velocity

Band 1

- <= 0.2 m/s
- 0.2 - 0.4 m/s
- 0.4 - 0.6 m/s
- 0.6 - 0.8 m/s
- 0.8 - 1.0 m/s
- > 1.0 m/s
- Pre_02.0p_vvec



Scale 1:1,500

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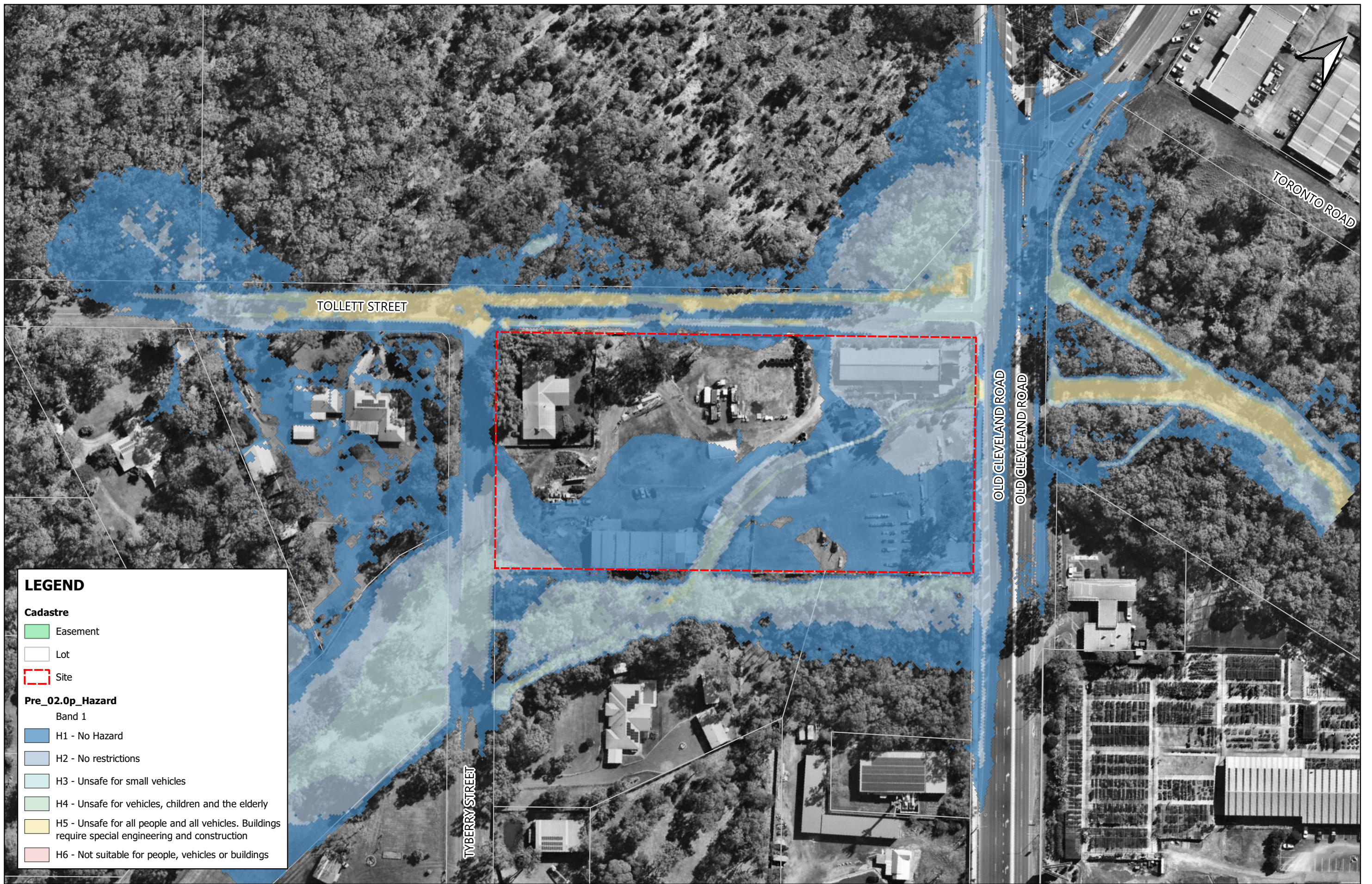
2929 Old Cleveland Road, Chandler QLD

Flood Velocity - Pre Development - 2% AEP

May 2025

12038

E27



LEGEND

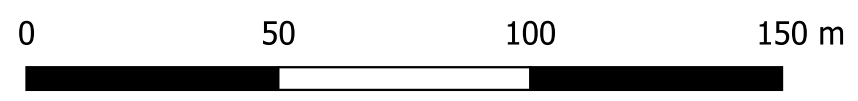
Cadastral

- Easement
- Lot
- Site

Pre_02.0p_Hazard

Band 1

- H1 - No Hazard
- H2 - No restrictions
- H3 - Unsafe for small vehicles
- H4 - Unsafe for vehicles, children and the elderly
- H5 - Unsafe for all people and all vehicles. Buildings require special engineering and construction
- H6 - Not suitable for people, vehicles or buildings



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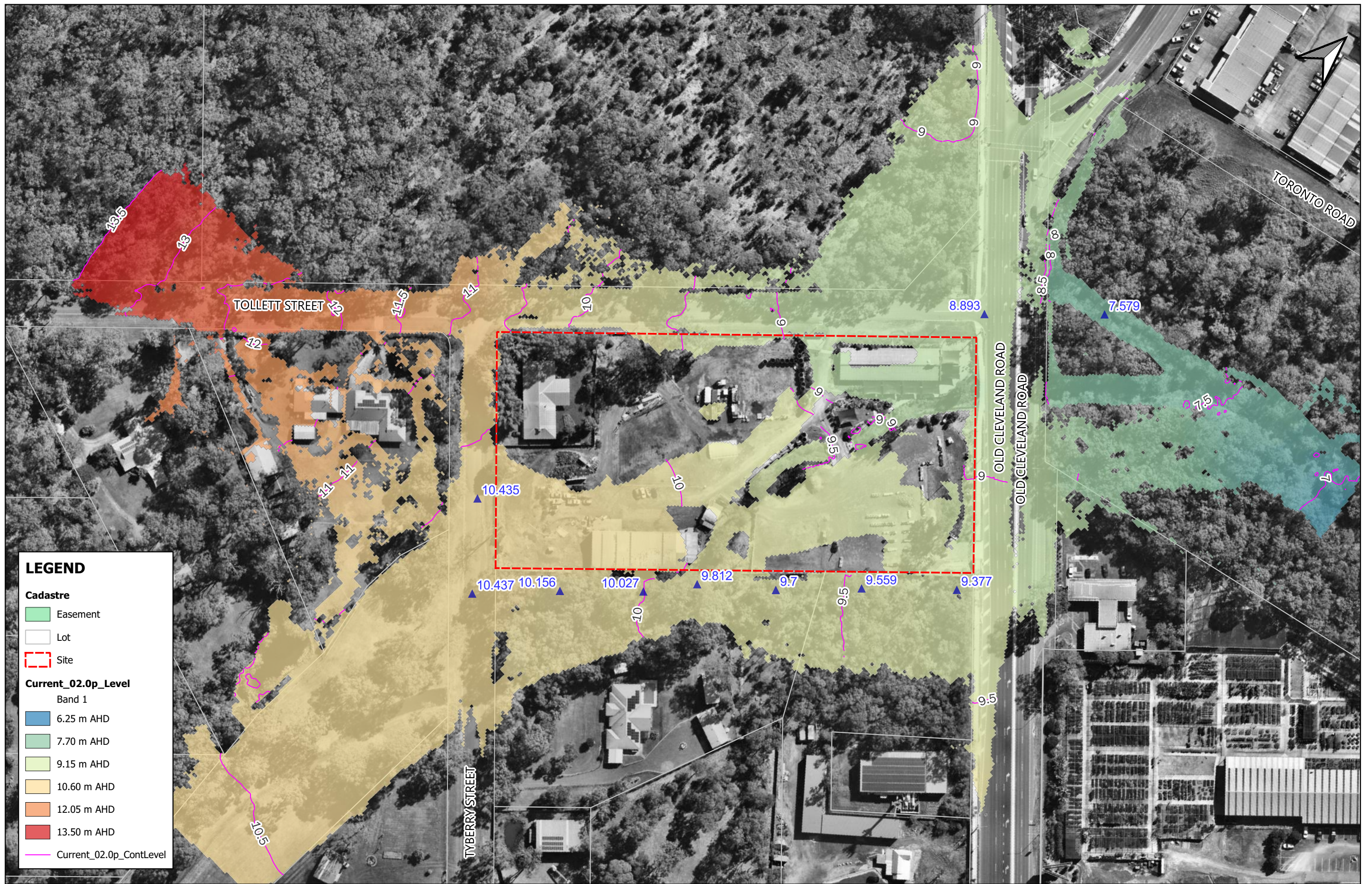
Flood Hazard - Pre Development - 2% AEP

May 2025

12038

E35

Appendix F Current Development Model Results



LEGEND

Cadastre

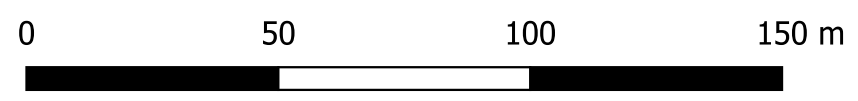
- Easement
- Lot
- Site

Current_02.0p_Level

Band 1

- 6.25 m AHD
- 7.70 m AHD
- 9.15 m AHD
- 10.60 m AHD
- 12.05 m AHD
- 13.50 m AHD

Current_02.0p_ContLevel



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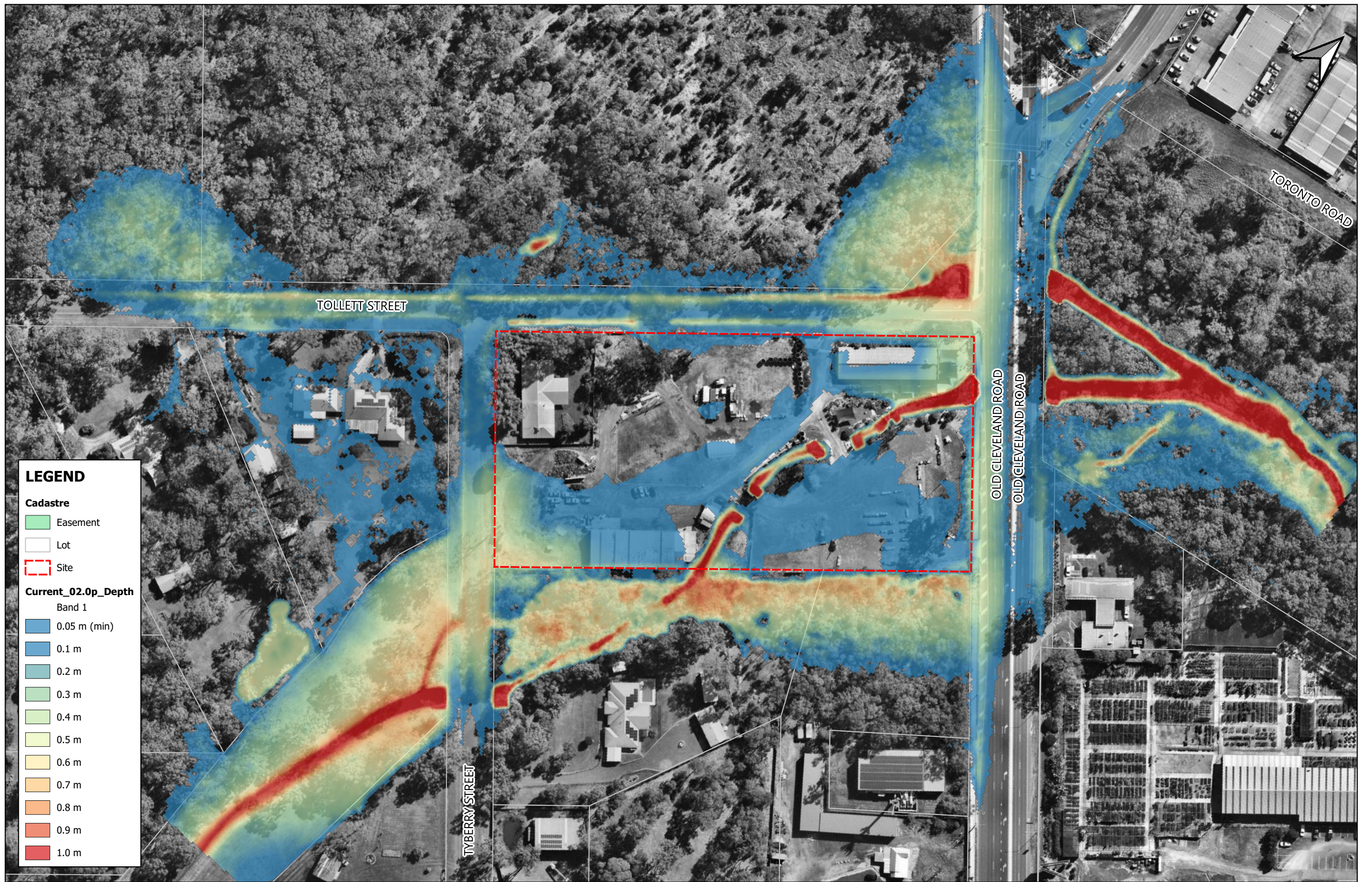
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 Flood Level - Current Development - 2% AEP

May 2025

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F04



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Flood Depth - Current Development - 2% AEP

May 2025

12038

F13



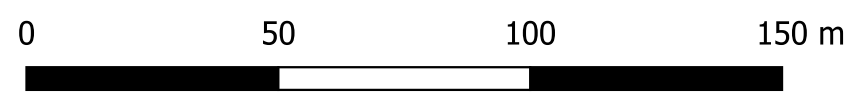
LEGEND

Cadastre

- Easement
- Lot
- Site

Current_02.0p_Q

- Discharge (m³/s)
- Current_02.0p_Pipe_Q



Scale 1:1,500

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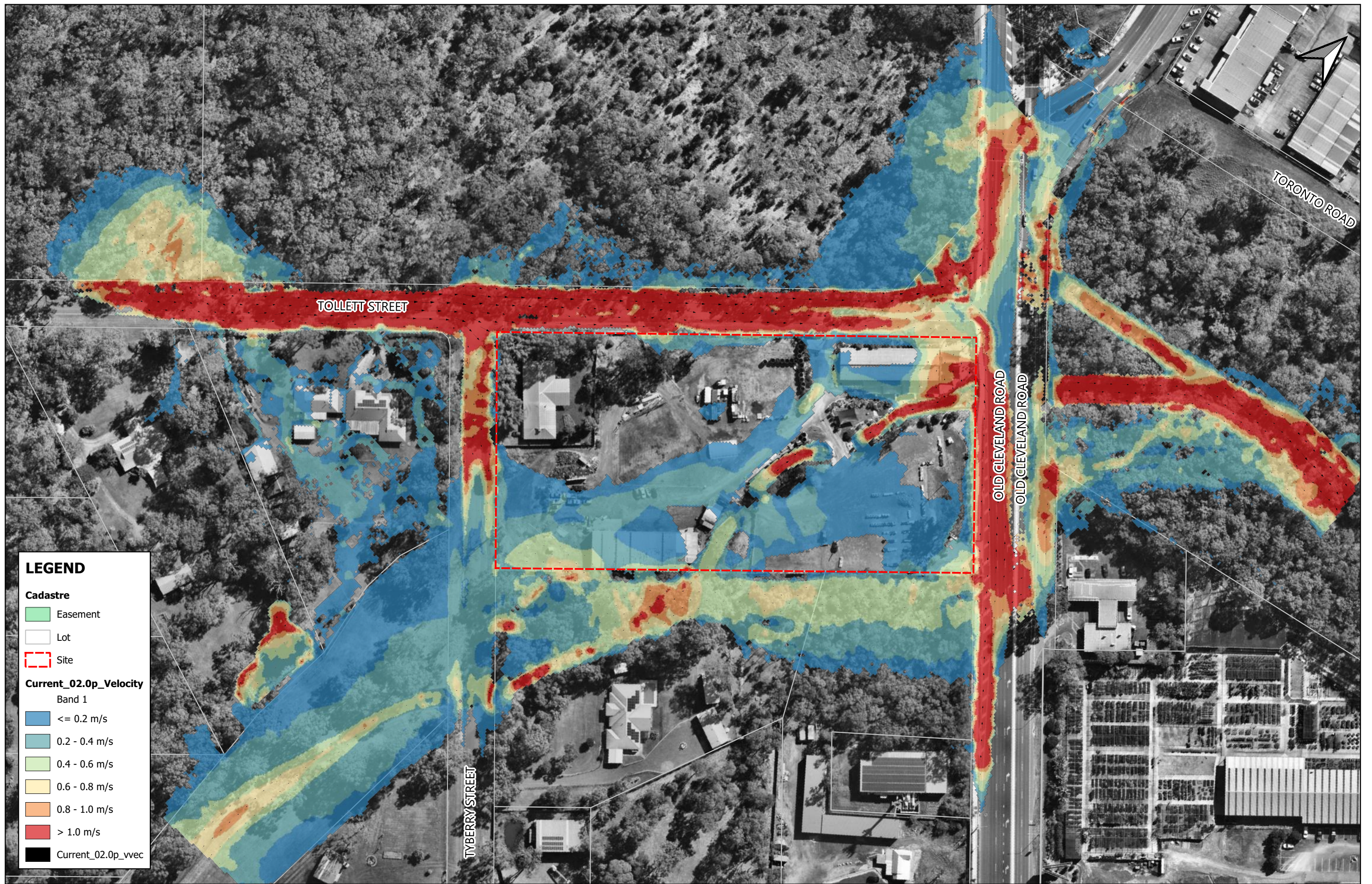
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Peak Discharges - Current Development - 2% AEP

May 2025

12038

F22



LEGEND

Cadastre

- Easement
- Lot
- Site

Current_02.0p_Velocity
Band 1

- <= 0.2 m/s
- 0.2 - 0.4 m/s
- 0.4 - 0.6 m/s
- 0.6 - 0.8 m/s
- 0.8 - 1.0 m/s
- > 1.0 m/s
- Current_02.0p_vvec



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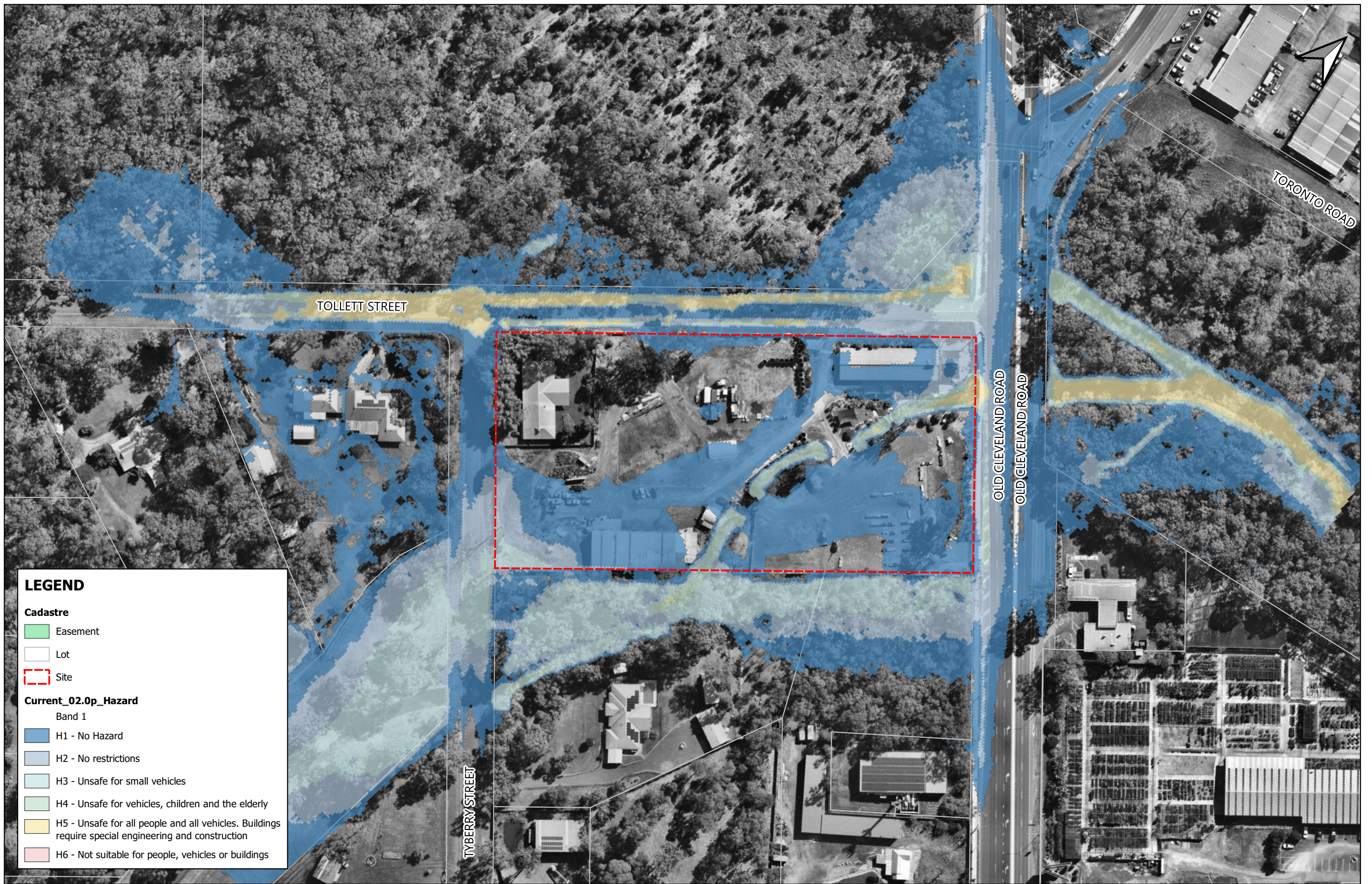
2929 Old Cleveland Road, Chandler QLD

Flood Velocity - Current Development - 2% AEP

May 2025

12038

F31



LEGEND

Cadastre

- Easement
- Lot
- Site

Current_02.0p_Hazard

Band 1

- H1 - No Hazard
- H2 - No restrictions
- H3 - Unsafe for small vehicles
- H4 - Unsafe for vehicles, children and the elderly
- H5 - Unsafe for all people and all vehicles. Buildings require special engineering and construction
- H6 - Not suitable for people, vehicles or buildings



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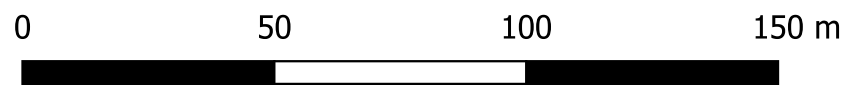
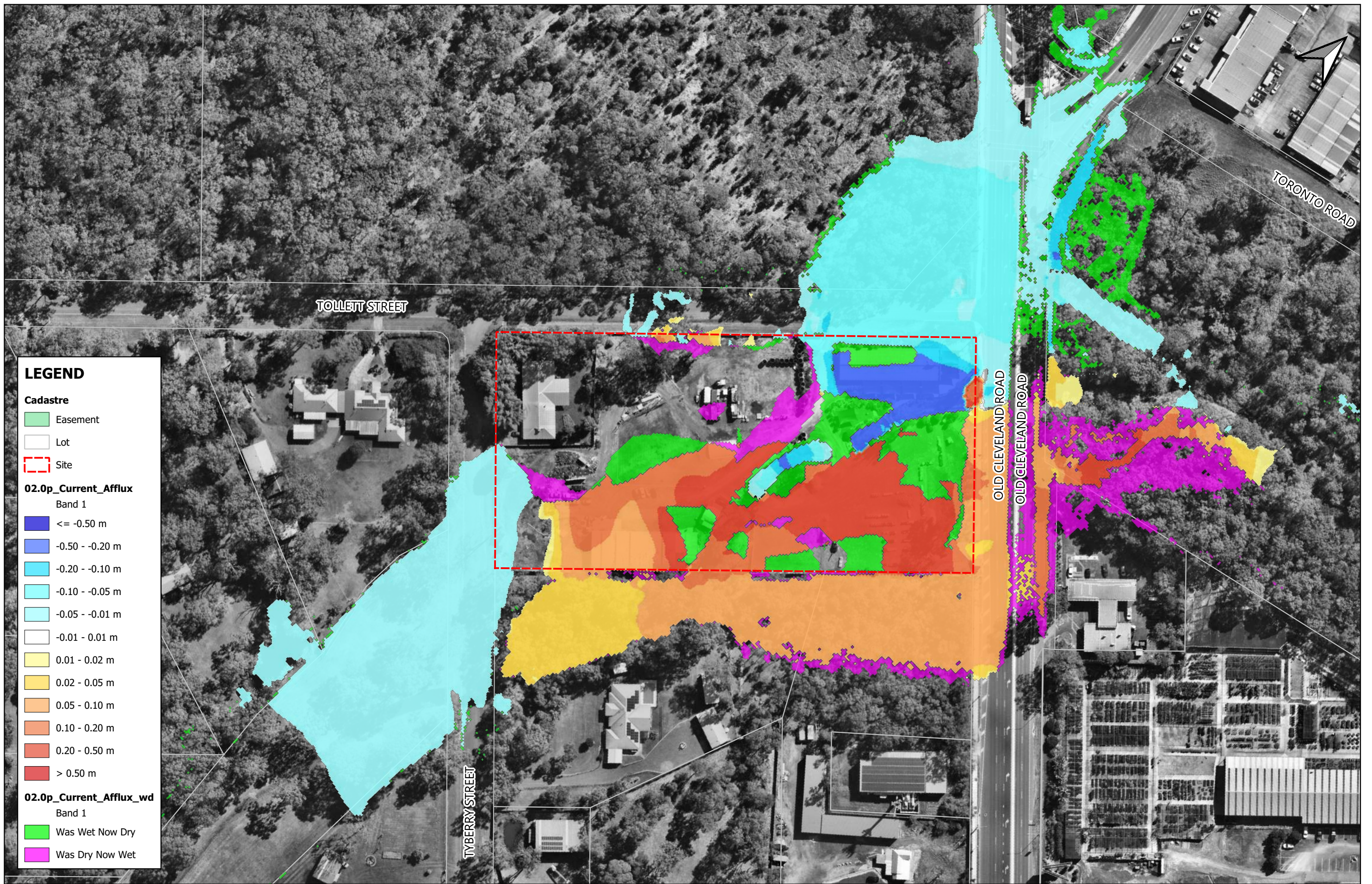
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Flood Hazard - Current Development - 2% AEP

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F40



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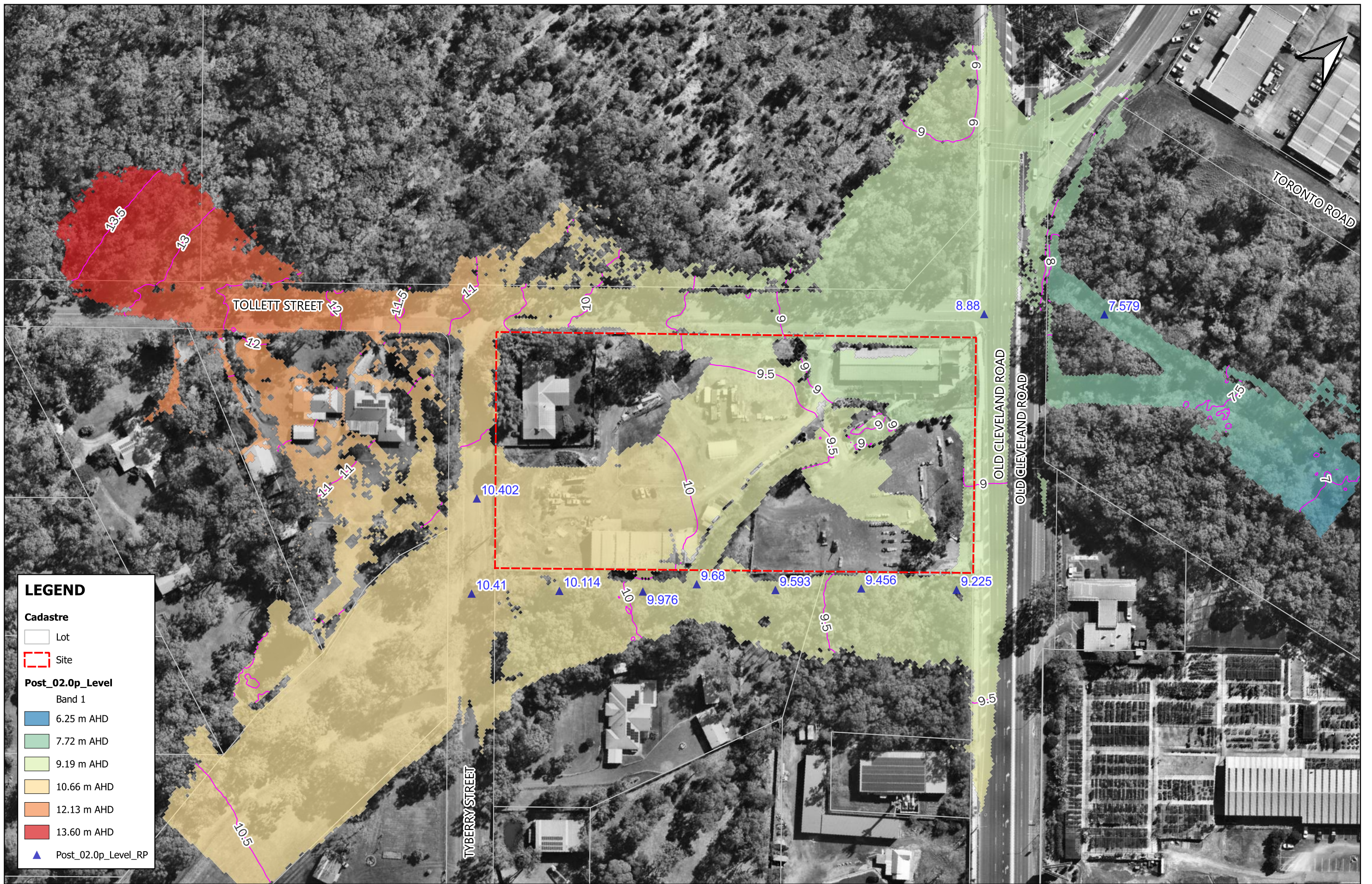
Flood Level - Current Impact Assessment - 2% AEP

May 2025

12038

F48

Appendix G Post Development Model Results



LEGEND

Cadastre

- Lot
- Site

Post_02.0p_Level

Band 1

- 6.25 m AHD
- 7.72 m AHD
- 9.19 m AHD
- 10.66 m AHD
- 12.13 m AHD
- 13.60 m AHD

Post_02.0p_Level_RP



Scale 1:1,500

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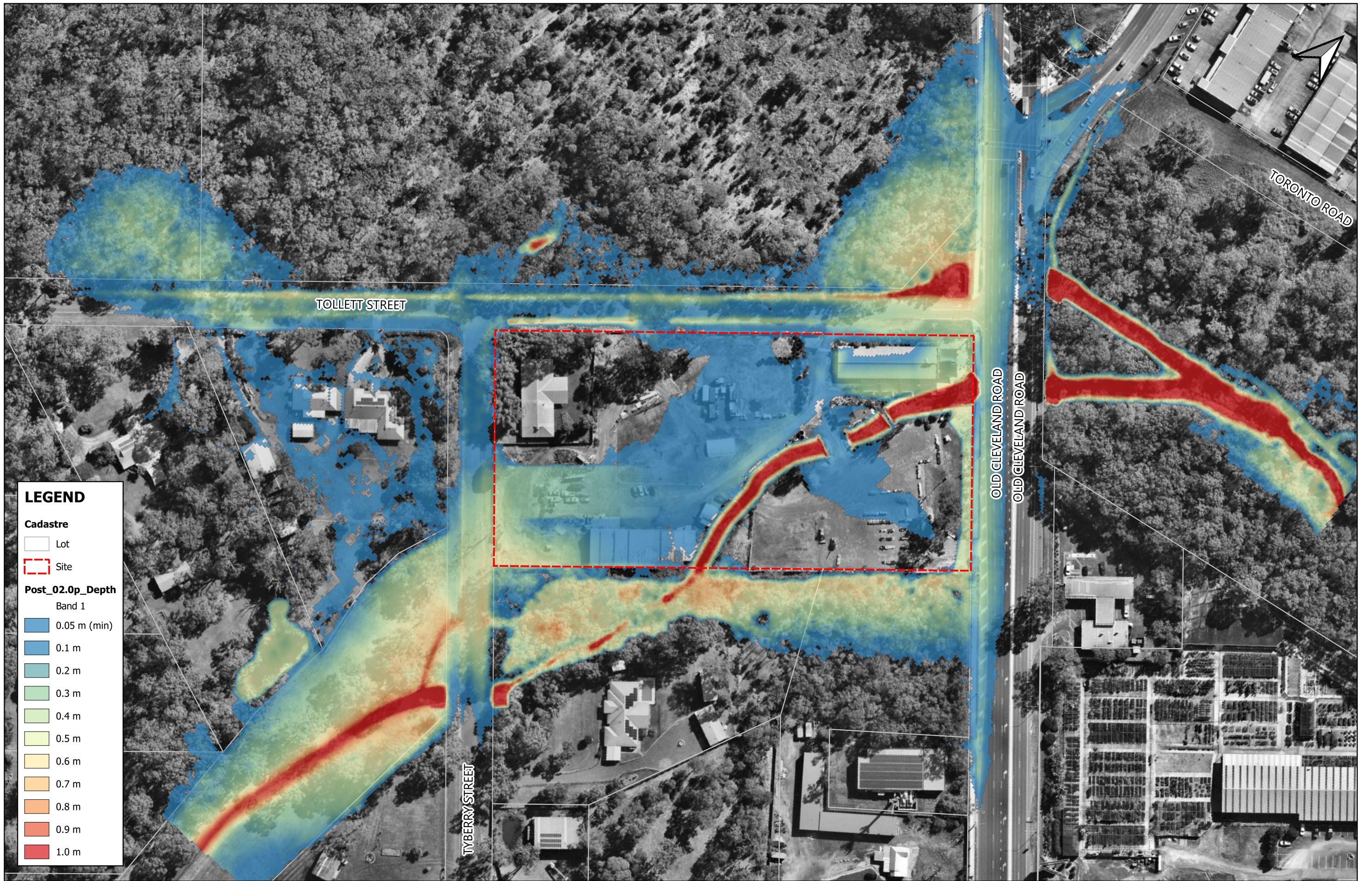
2929 Old Cleveland Road, Chandler QLD

Flood Level - Post Development - 2% AEP

Sep 2025

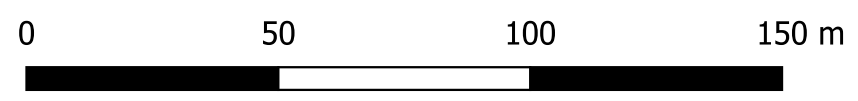
12038

G04



LEGEND

- Cadastre**
- Lot
 - Site
- Post_02.0p_Depth**
- Band 1
- 0.05 m (min)
 - 0.1 m
 - 0.2 m
 - 0.3 m
 - 0.4 m
 - 0.5 m
 - 0.6 m
 - 0.7 m
 - 0.8 m
 - 0.9 m
 - 1.0 m



Scale 1:1,500

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Flood Depth - Post Development - 2% AEP

Sep 2025

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G13



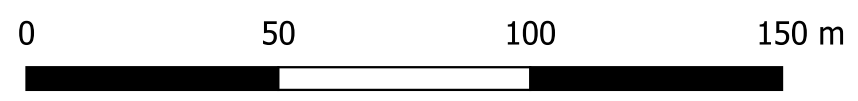
LEGEND

Cadastre

- Lot
- Site

Post_02.0p_Q

- Discharge (m³/s)
- Post_02.0p_Pipe_Q

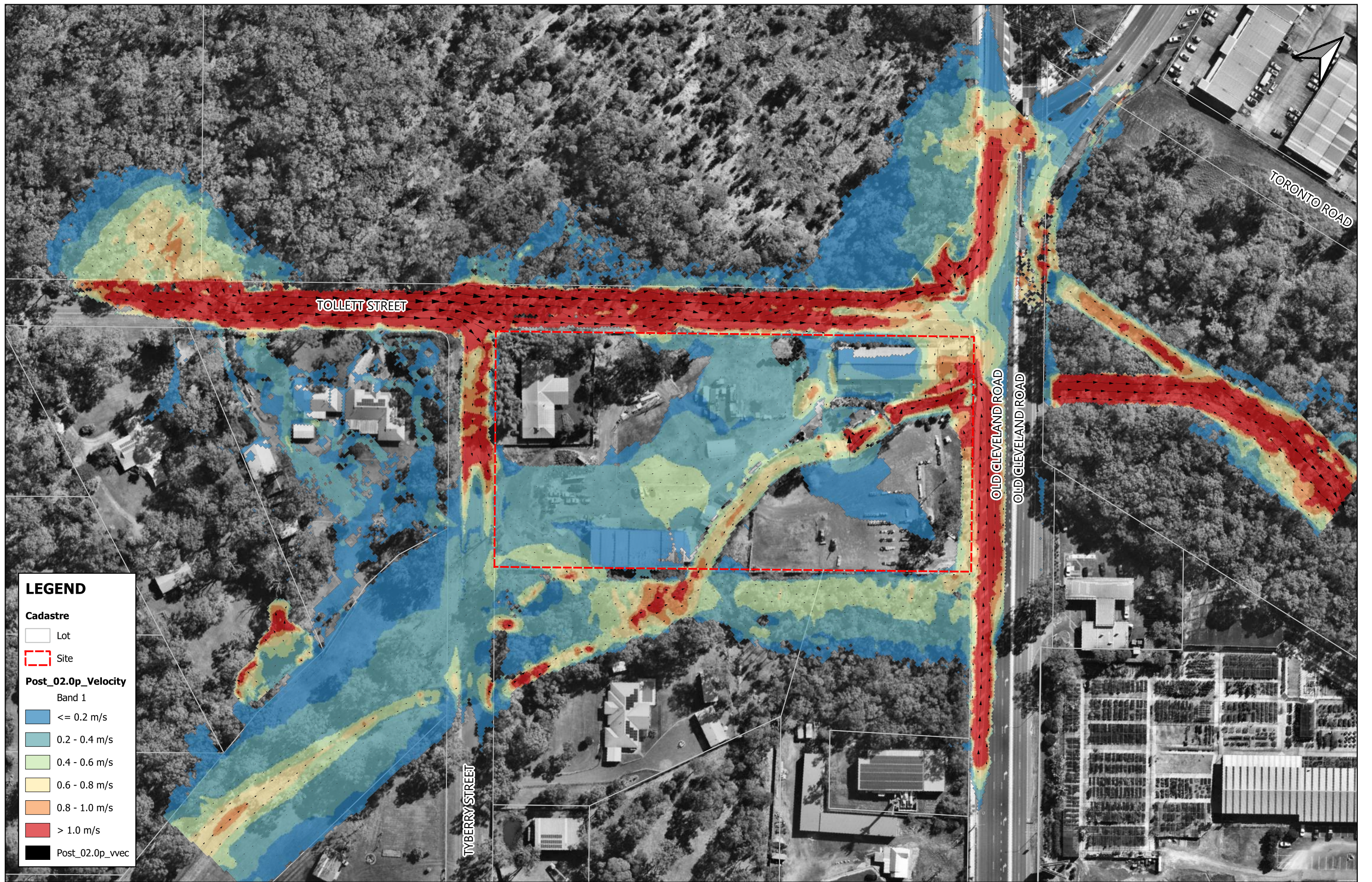


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 Peak Discharges - Post Development - 2% AEP

Sep 2025
 12038
 G22



LEGEND

Cadastre

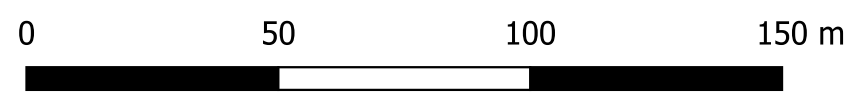
- Lot
- Site

Post_02.0p_Velocity

Band 1

- <= 0.2 m/s
- 0.2 - 0.4 m/s
- 0.4 - 0.6 m/s
- 0.6 - 0.8 m/s
- 0.8 - 1.0 m/s
- > 1.0 m/s

Post_02.0p_vvec

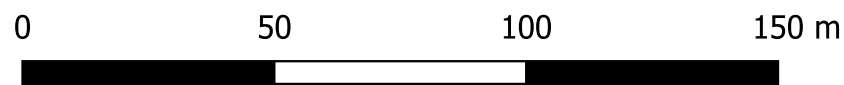
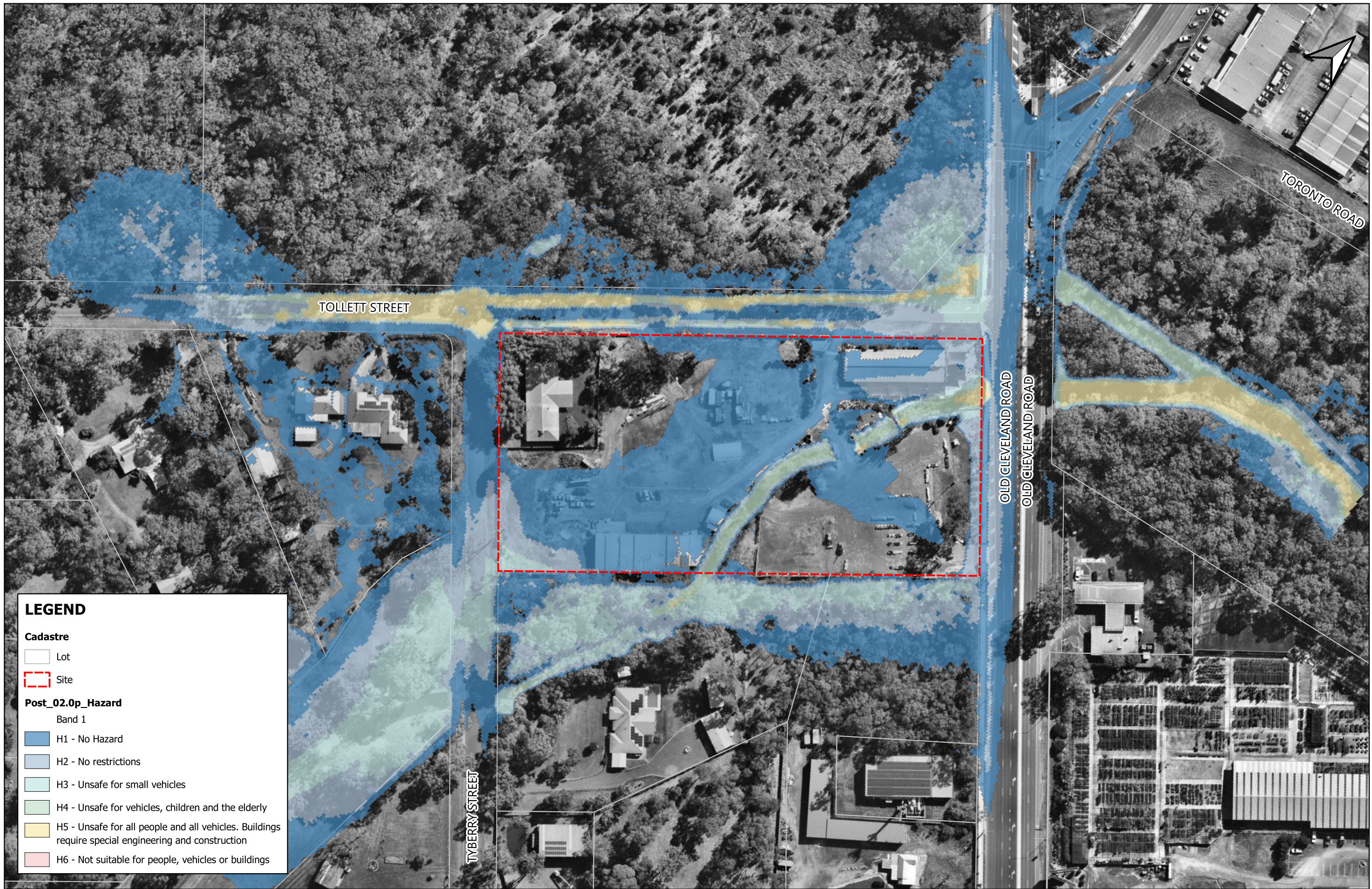


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 Flood Velocity - Post Development - 2% AEP

Sep 2025
 12038
 G31



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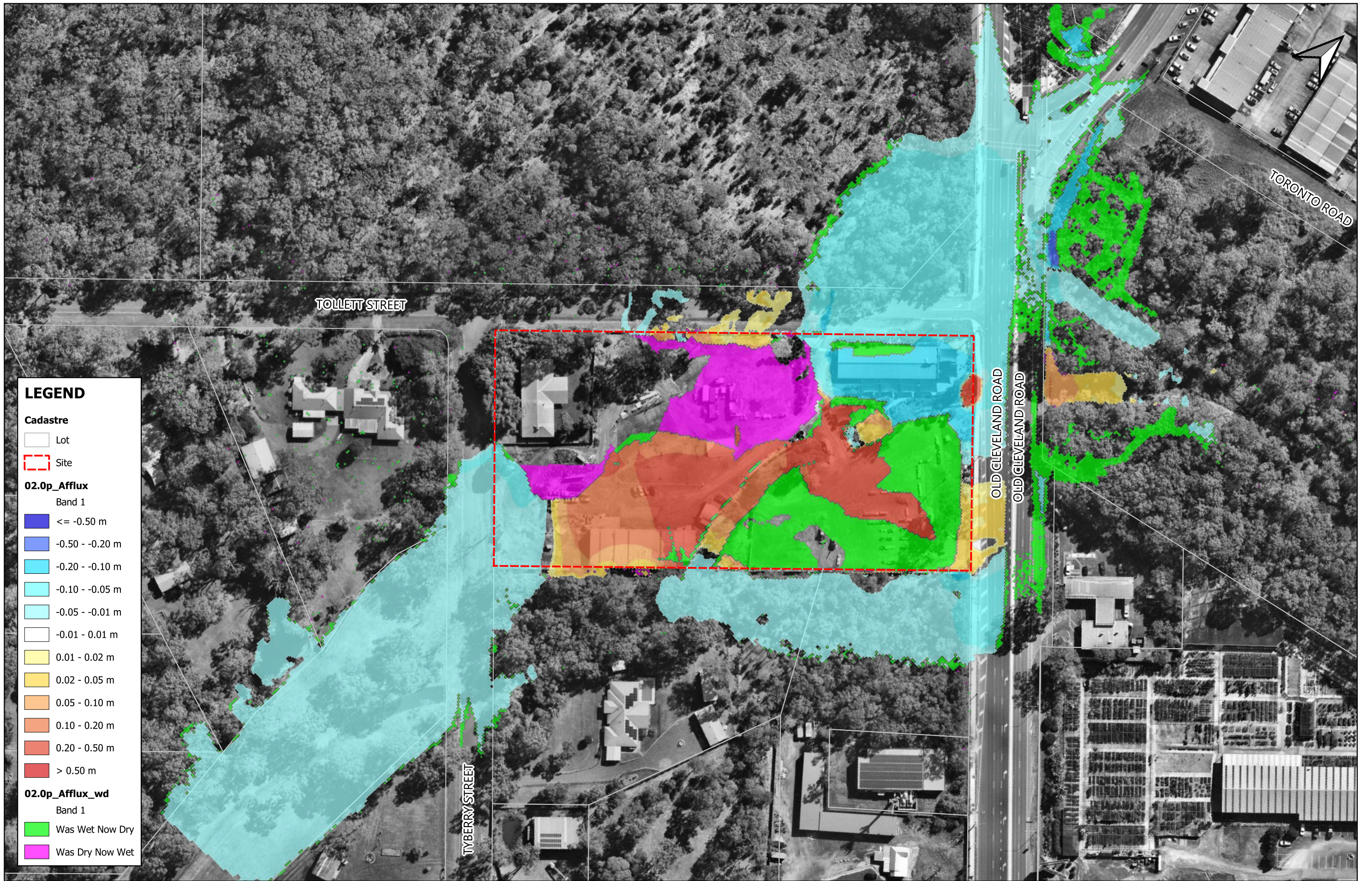
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Flood Hazard - Post Development - 2% AEP

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G40



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Flood Level - Impact Assessment - 2% AEP

Sep 2025

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