

**DA/886/2010 – Retirement Village – Staged Development
Lot 11 DP 830292, Lot 12 DP 830292
40 Burton Road, MOUNT HUTTON NSW 2290, 48 Burton Road, MOUNT
HUTTON NSW 2290**

ATTACHMENT No.6

**FLOODING REPORT
Prepared by Cardno Engineers**

Our Ref W4864

Contact Andrew Reid

20 December 2010



Northrop Consulting Engineers
Attn Ben Clark
P.O. Box 180
CHARLESTOWN NSW 2290

[via email bclark@northrop.com.au]

Cardno (NSW/ACT) Pty Ltd
ABN 95 001 145 035

Level 3
910 Pacific Highway
Gordon New South Wales
2072 Australia

Telephone: 02 9496 7700
Facsimile: 02 9499 3902
International: +61 2 9496 7700

Web: www.cardno.com.au

Dear Ben,

40 and 48 BURTON ROAD, MOUNT HUTTON – FLOOD ASSESSMENT FOR PROPOSED DEVELOPMENT

The subject site, Lots 11 and 12 of DP 830292, is proposed for redevelopment as a retirement village. Cardno has undertaken flood modelling to estimate flood behaviour for the site.

The site is located within the catchment of the South Creek Flood Study currently in preparation for Lake Macquarie City Council. The SOBEK two-dimensional flood model used for the South Creek Flood Study has been adopted for the analysis and modified to incorporate site-specific details from field survey and the proposed development layout.

The proposed development layout for the flood model is shown in Figure 0_1. Generally, the concept comprises a swale along the southern boundary discharging into a central swale between the two building pads. The central swale discharges through a culvert, of nominal size 4m by 1m, under the roadway to an above-ground detention storage on the northern boundary. The basin has an invert level of 10.6m AHD with four outlets of size 0.9m diameter, 1.2m by 0.9m culvert, 1.2m by 0.9m culvert, and 0.375m diameter respectively in a west to east direction. A second swale is located on the eastern side of the building pad and conveys runoff along the northern boundary.

The critical duration for peak water levels at the site is from a 2 hour storm in the 100y ARI event and 15 minute duration in the PMF event. Modelled results, excluding swale details, are shown in the following figures:

- Figure 1_1 – 100y ARI Peak Depth for Existing Site
- Figure 1_2 – 100y ARI Peak Velocity for Existing Site
- Figure 2_1 – PMF Peak Depth for Existing Site
- Figure 3_1 – 100y ARI Peak Depth for Proposed Site
- Figure 3_2 – 100y ARI Peak Velocity for Proposed Site
- Figure 3_3 – 100y ARI Peak Water Level for Proposed Site



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W:_Current Projects\4864 Lots 10-11 BurtonRd MtHutton\report\40_48 BurtonRd FloodAssessment 101220.doc

- Figure 3_4 – 100y ARI Water Level Difference for Proposed Site compared to Existing
- Figure 3_5 – 100y ARI Provisional High Hazard for Proposed Site
- Figure 4_1 – PMF Peak Depth for Proposed Site
- Figure 4_2 – PMF Peak Velocity for Proposed Site
- Figure 4_3 – PMF Peak Water Level for Proposed Site
- Figure 4_4 – 100y ARI Provisional High Hazard for Proposed Site

The results of the assessment indicate:

- The proposed development results in negligible adverse impacts to adjoining properties, and
- The flood drainage concept has scope for refinement of the proposed system of swales and pipes/culverts.

Please contact me on 9496-7700 if you would like to clarify details of the flood modelling.

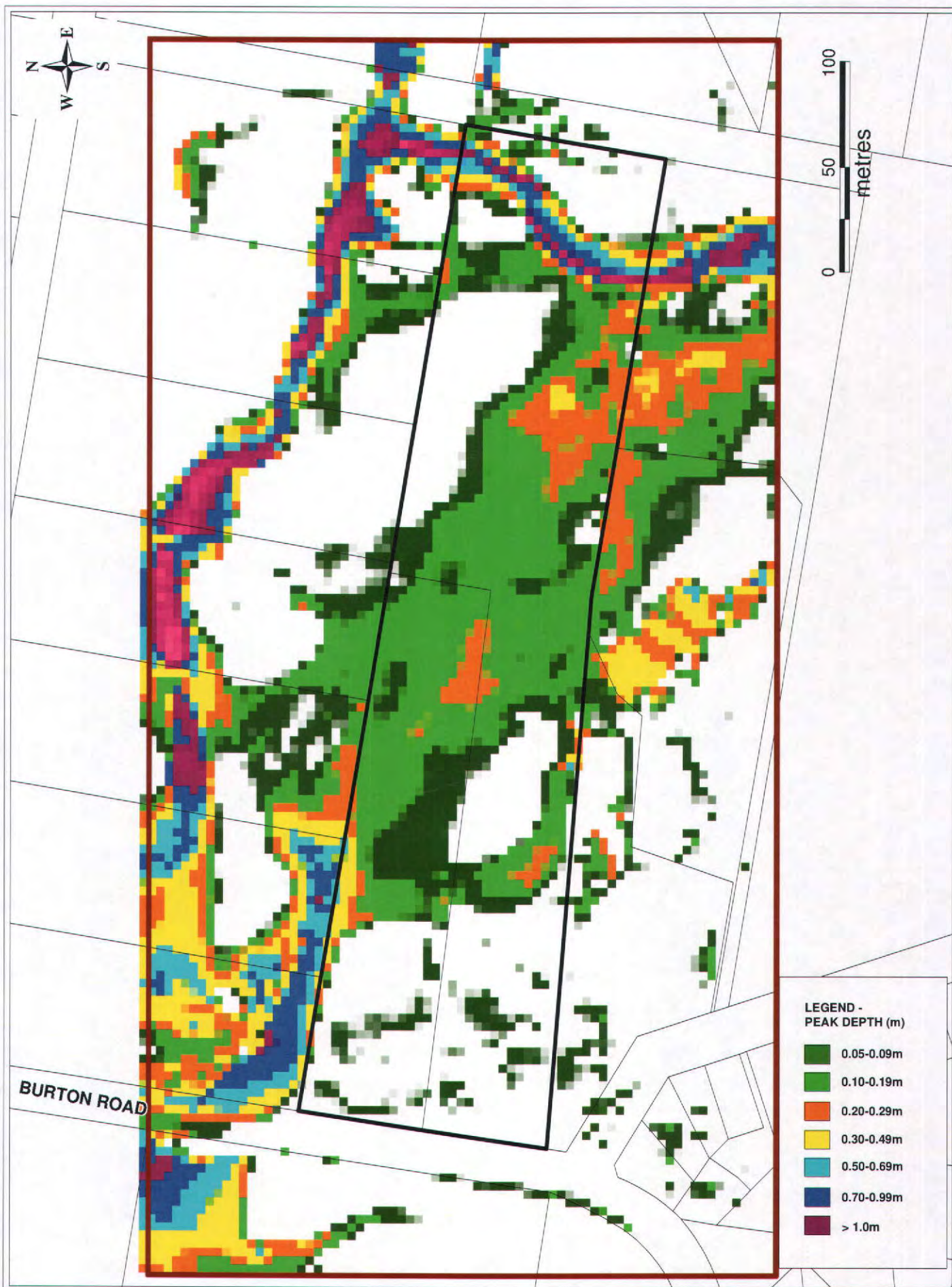
Yours faithfully

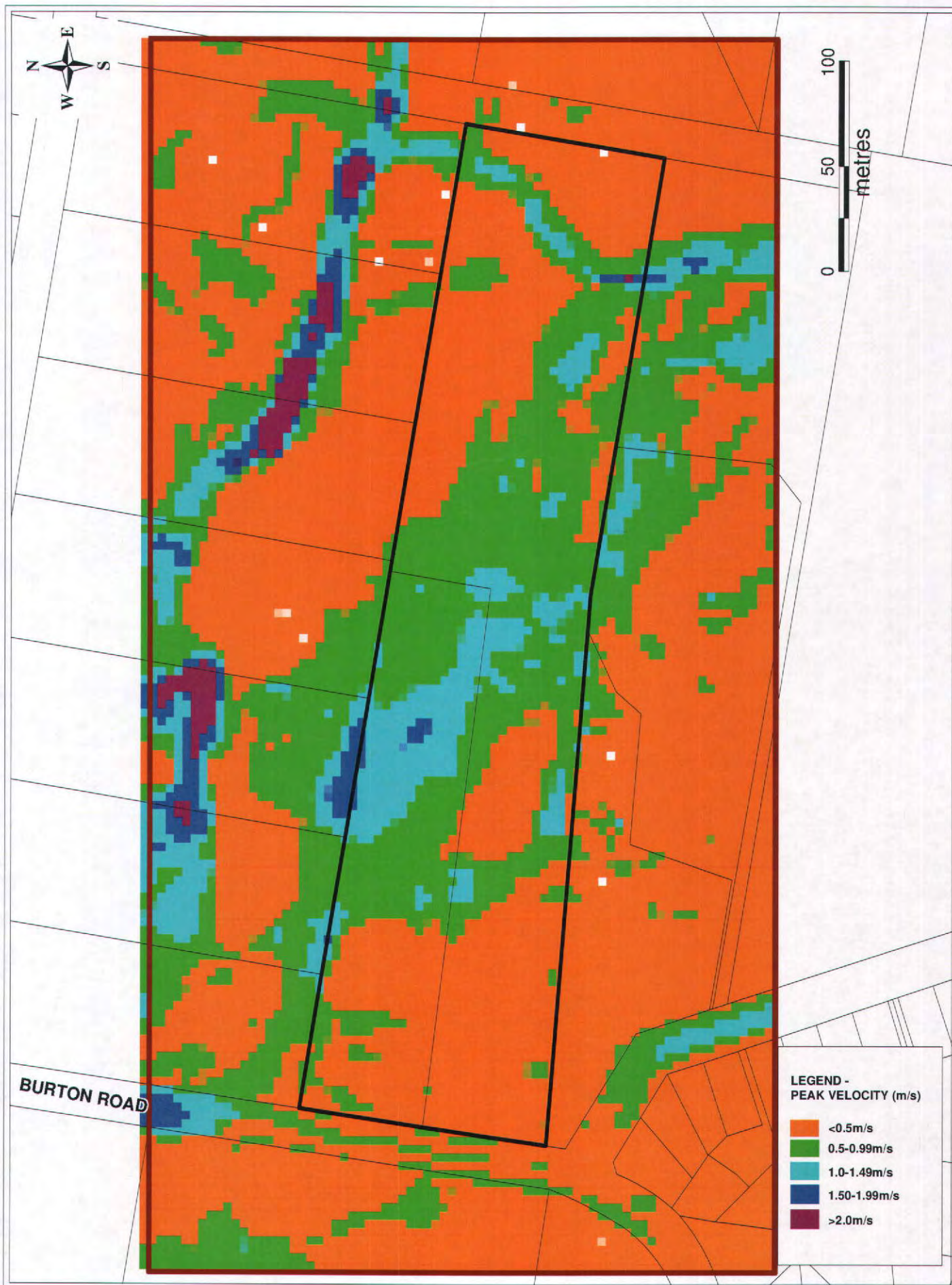
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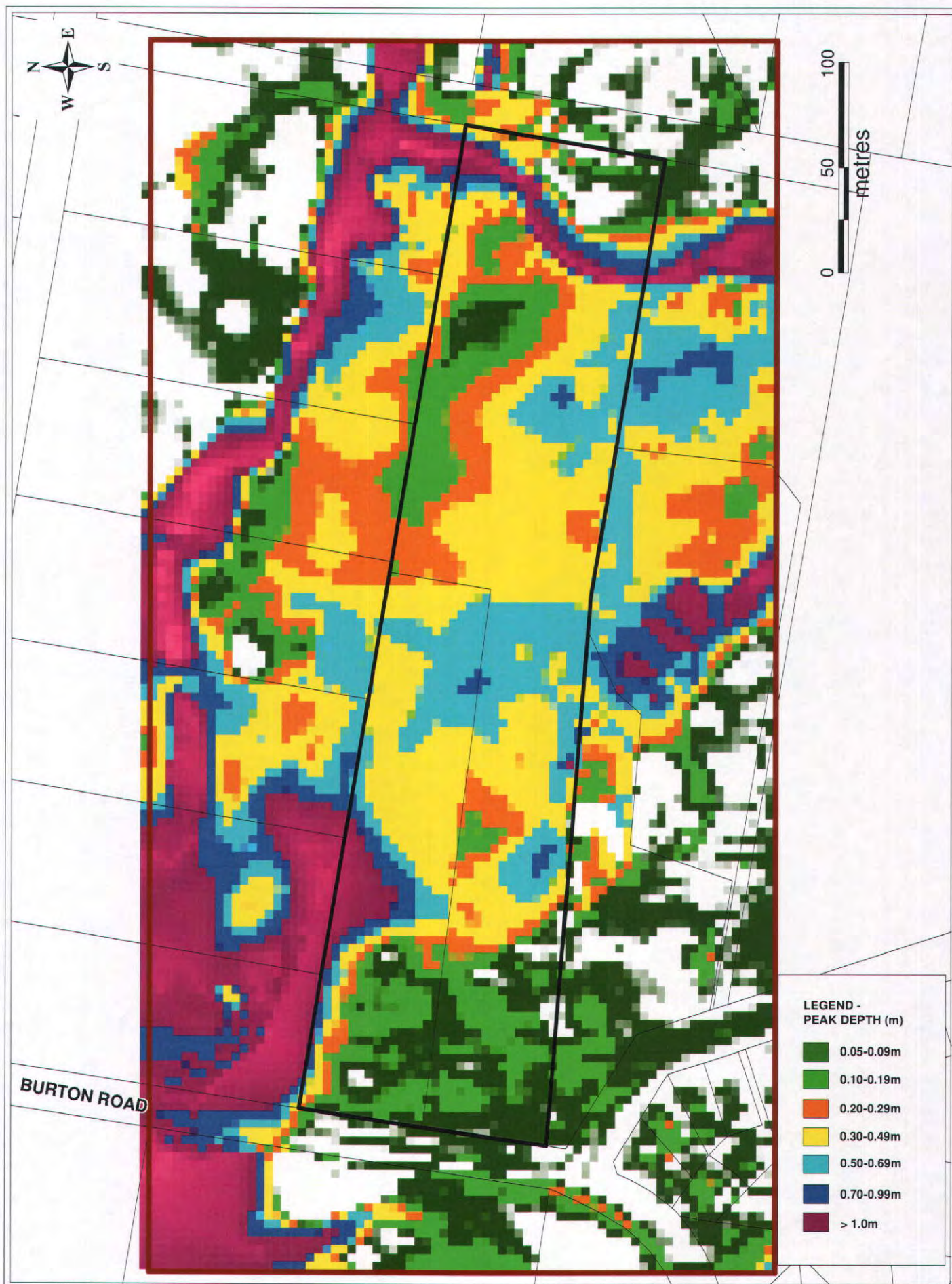
Andrew Reid
Project Engineer
for **Cardno (NSW/ACT) Pty Ltd**

Attachments – Figures (total thirteen)









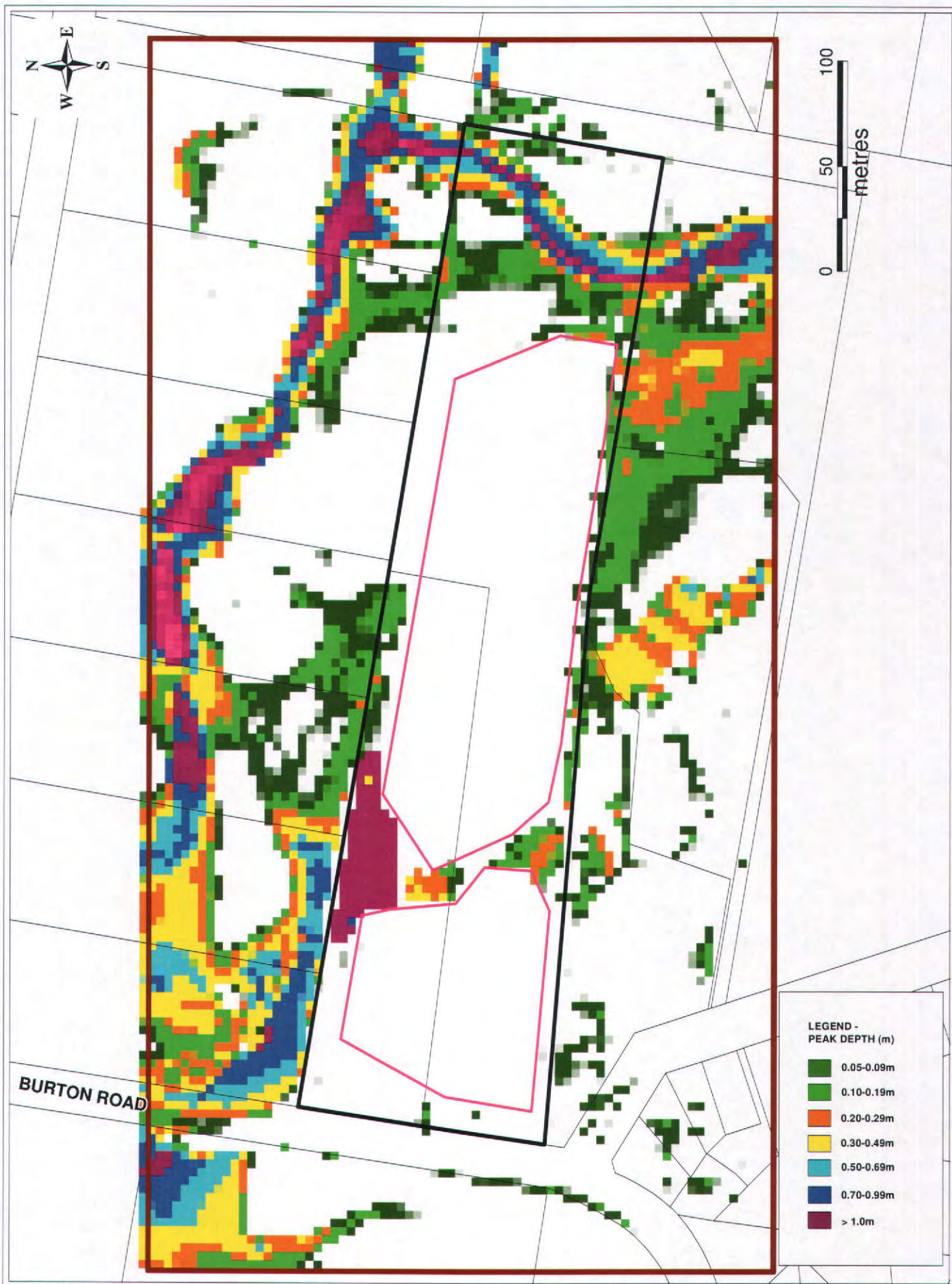


FIGURE 3_1
PROPOSED CASE - 100y Peak Depth

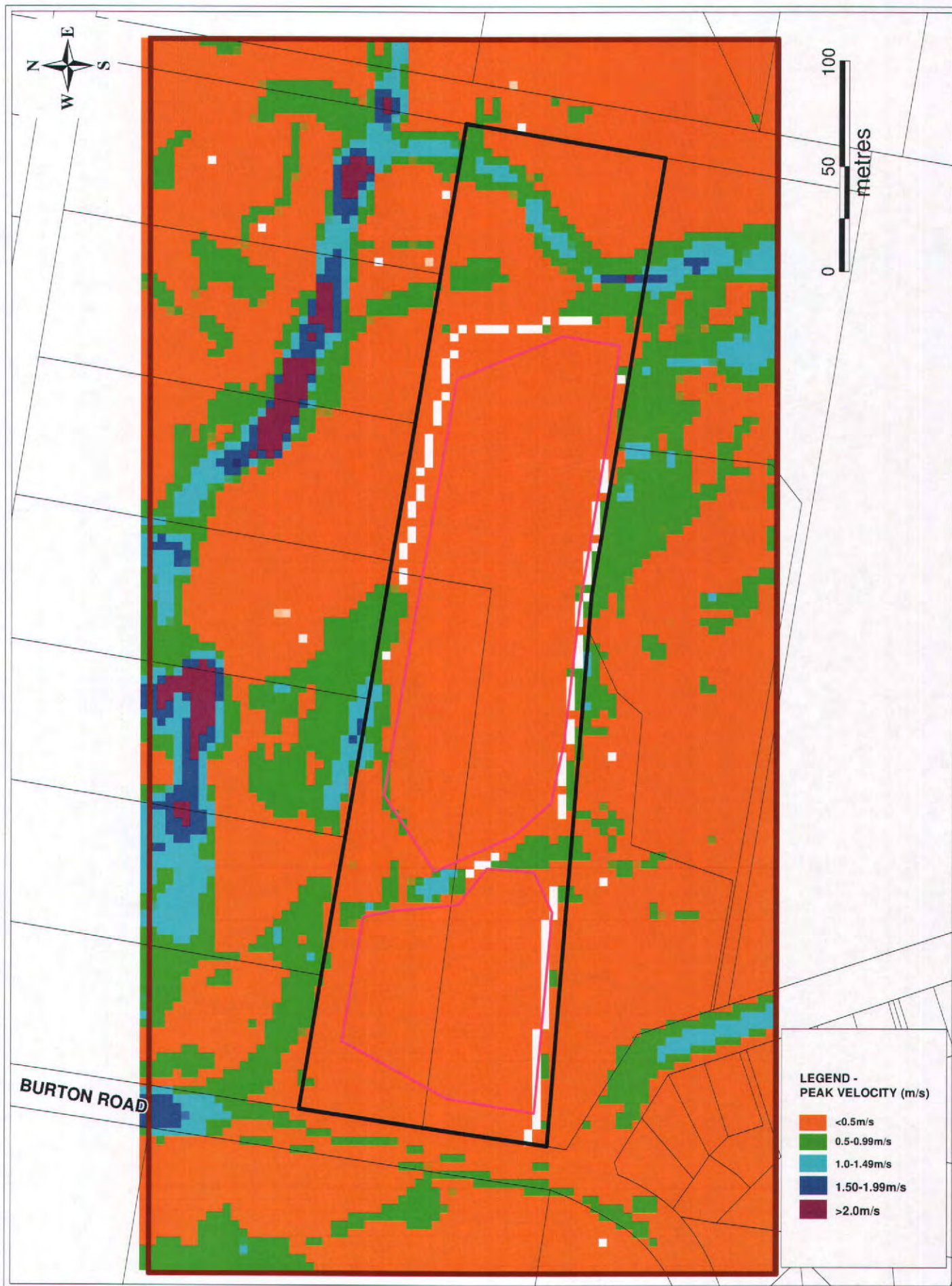
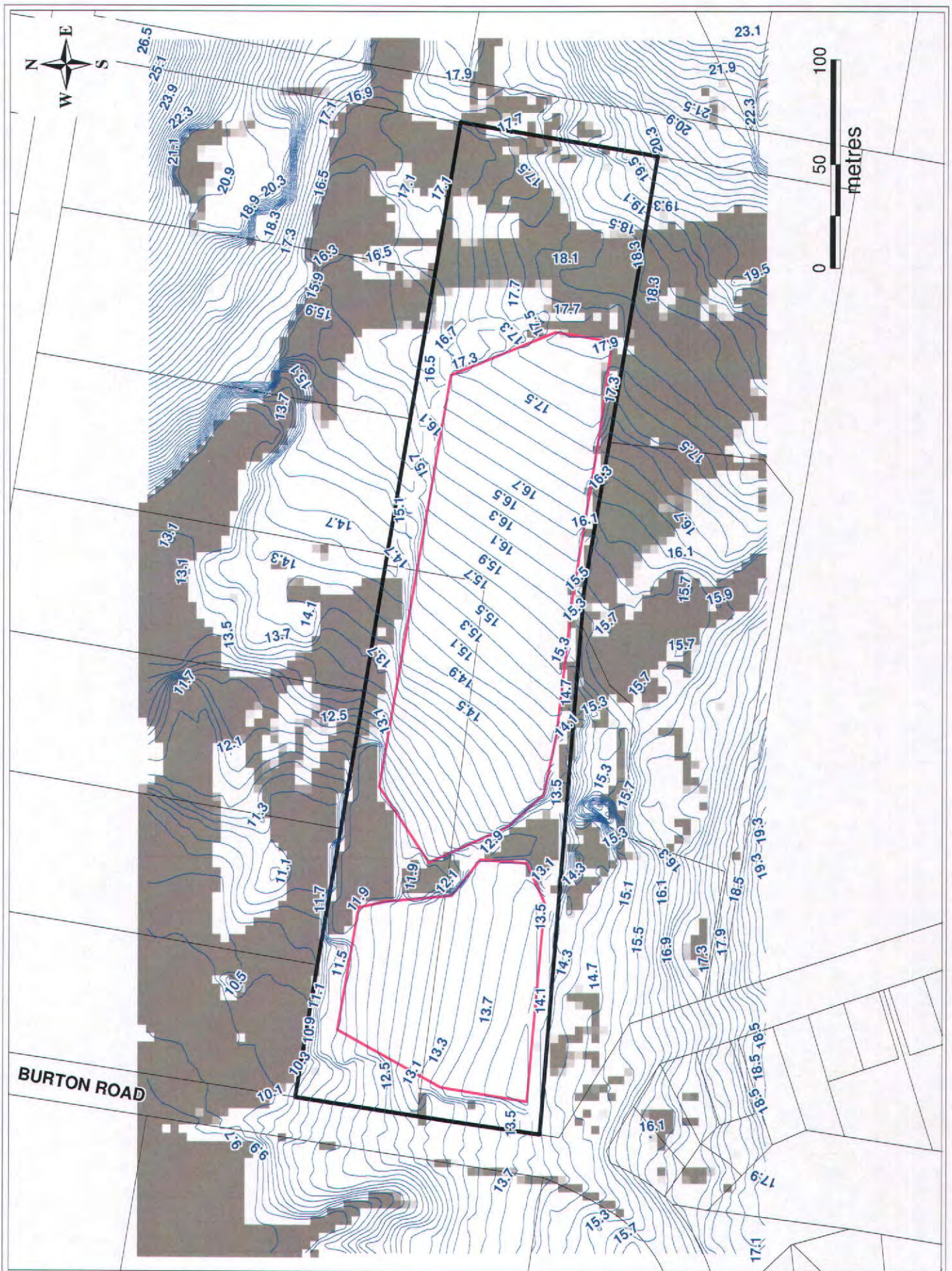


FIGURE 3_2
PROPOSED CASE - 100y Peak Velocity



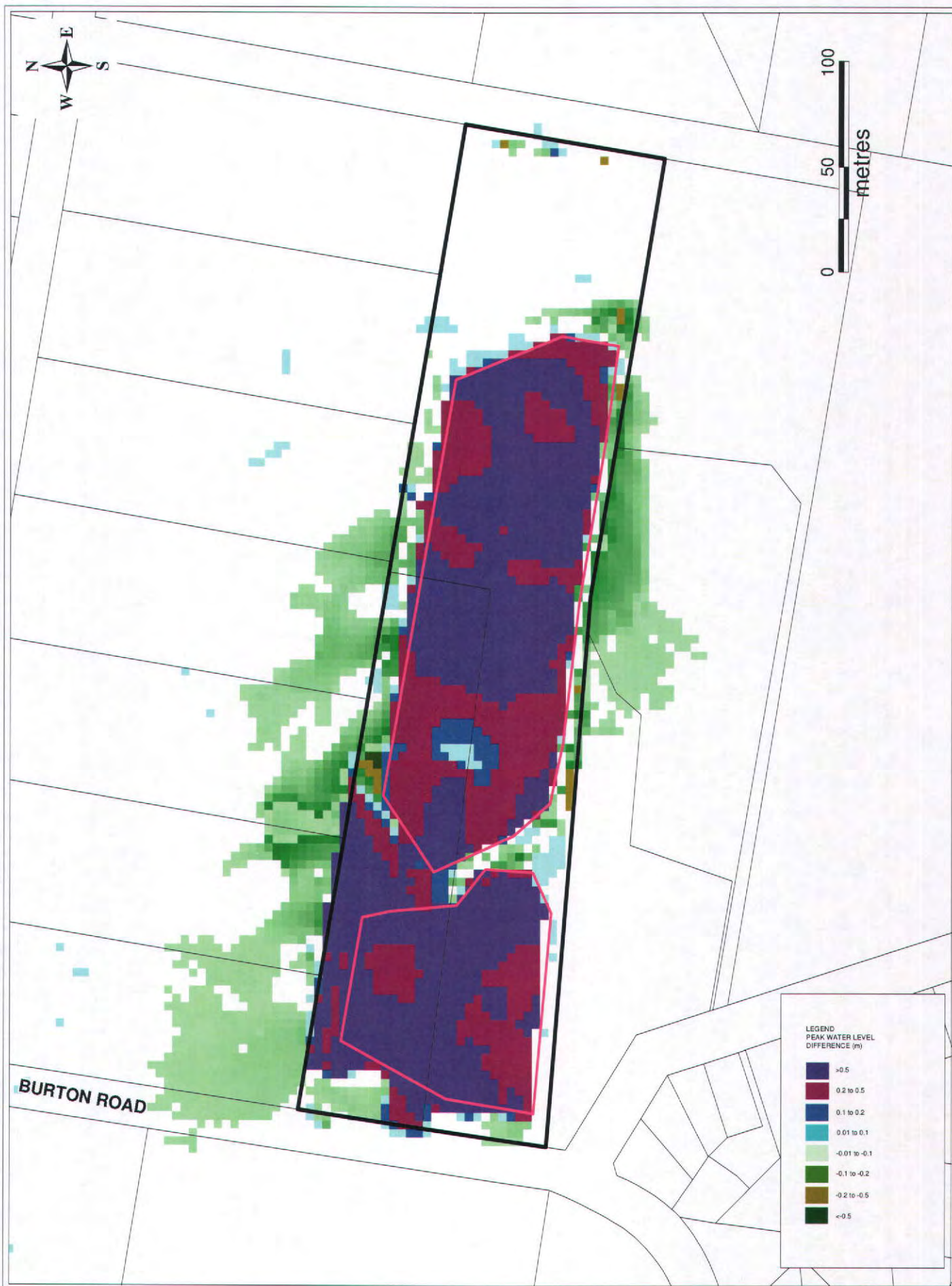


FIGURE 3_4
PROPOSED CASE - 100y Peak Water Level
Difference to Existing

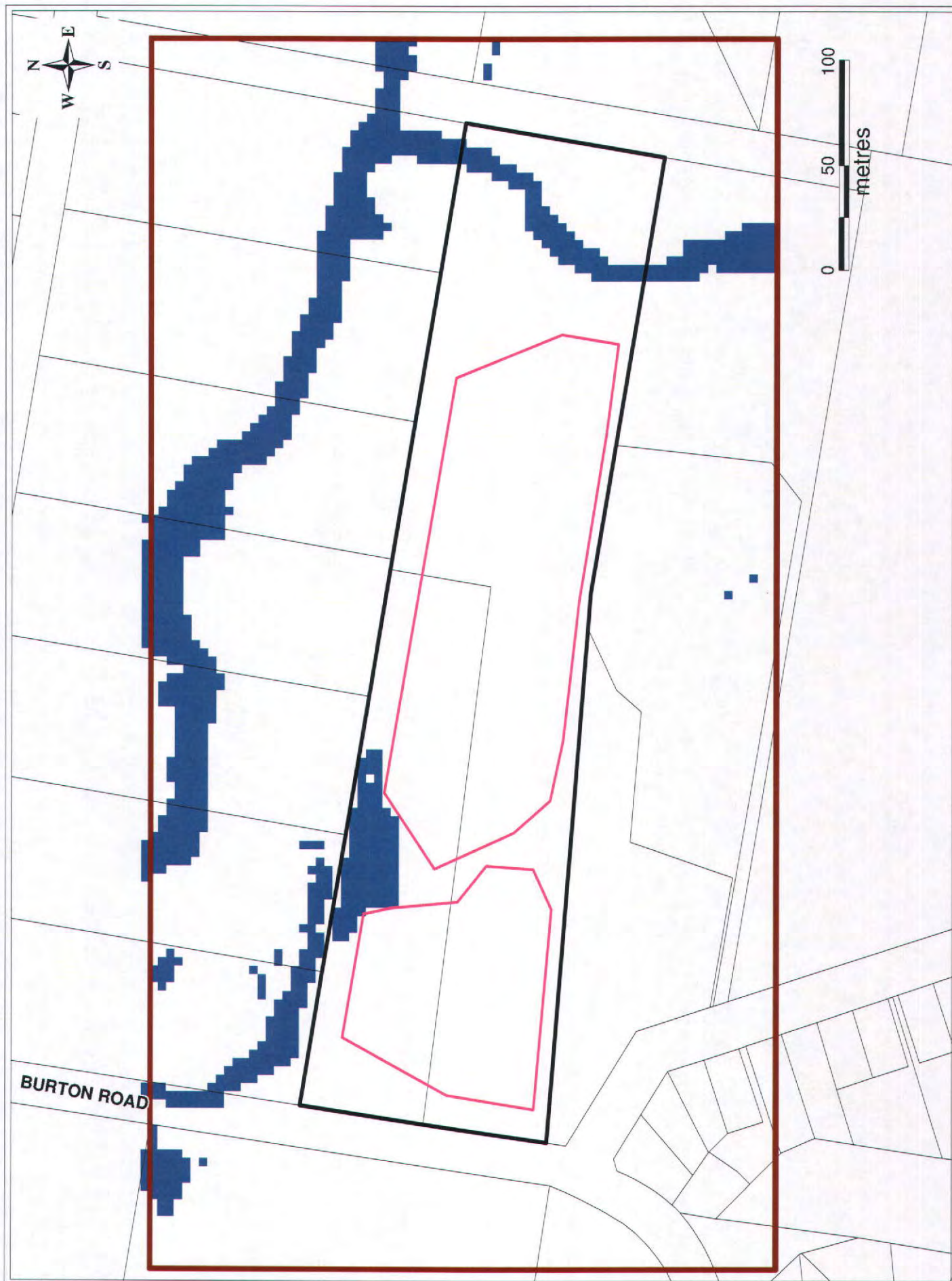


FIGURE 3_5
PROPOSED CASE - 100y Provisional High Hazard

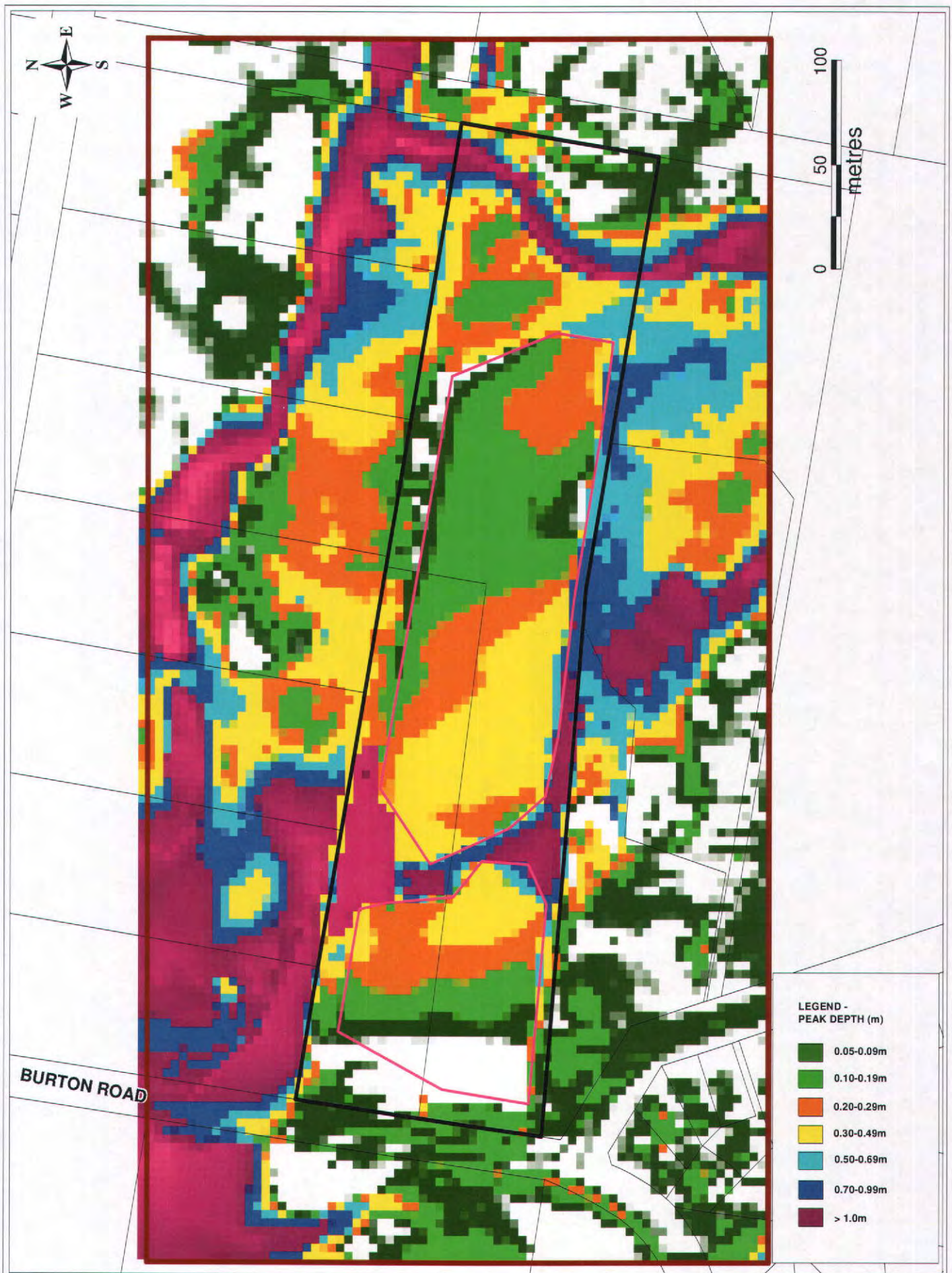
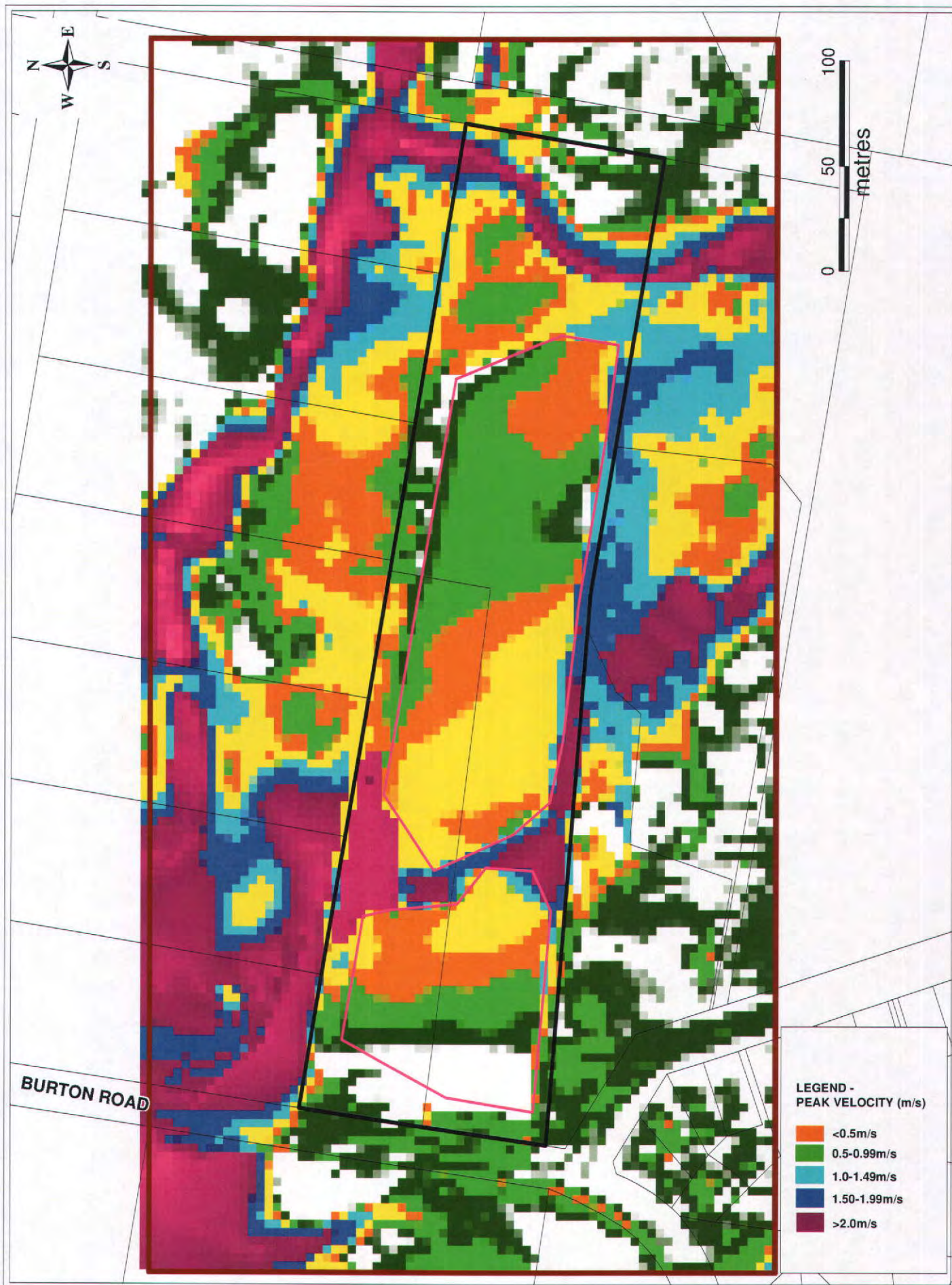
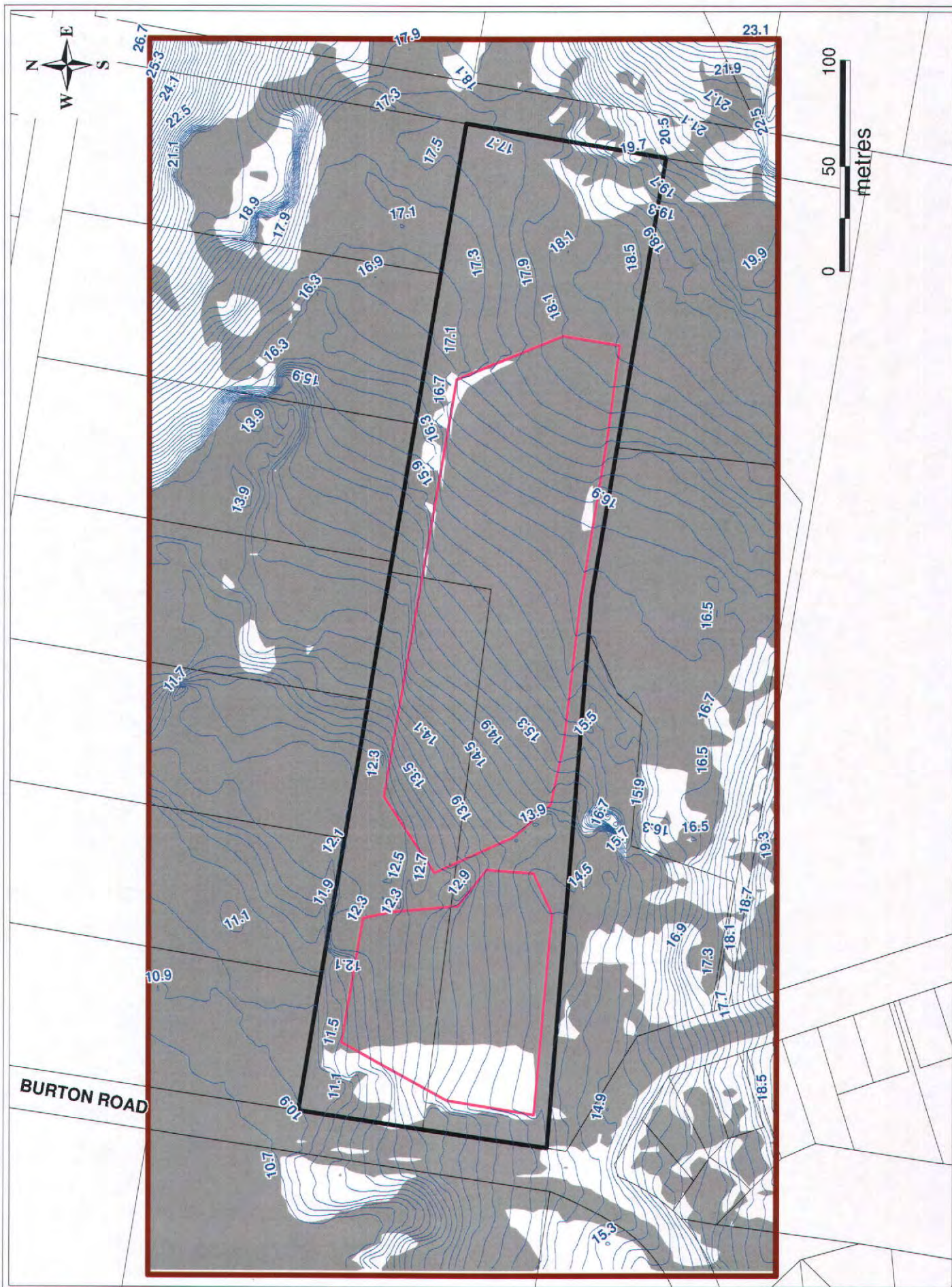
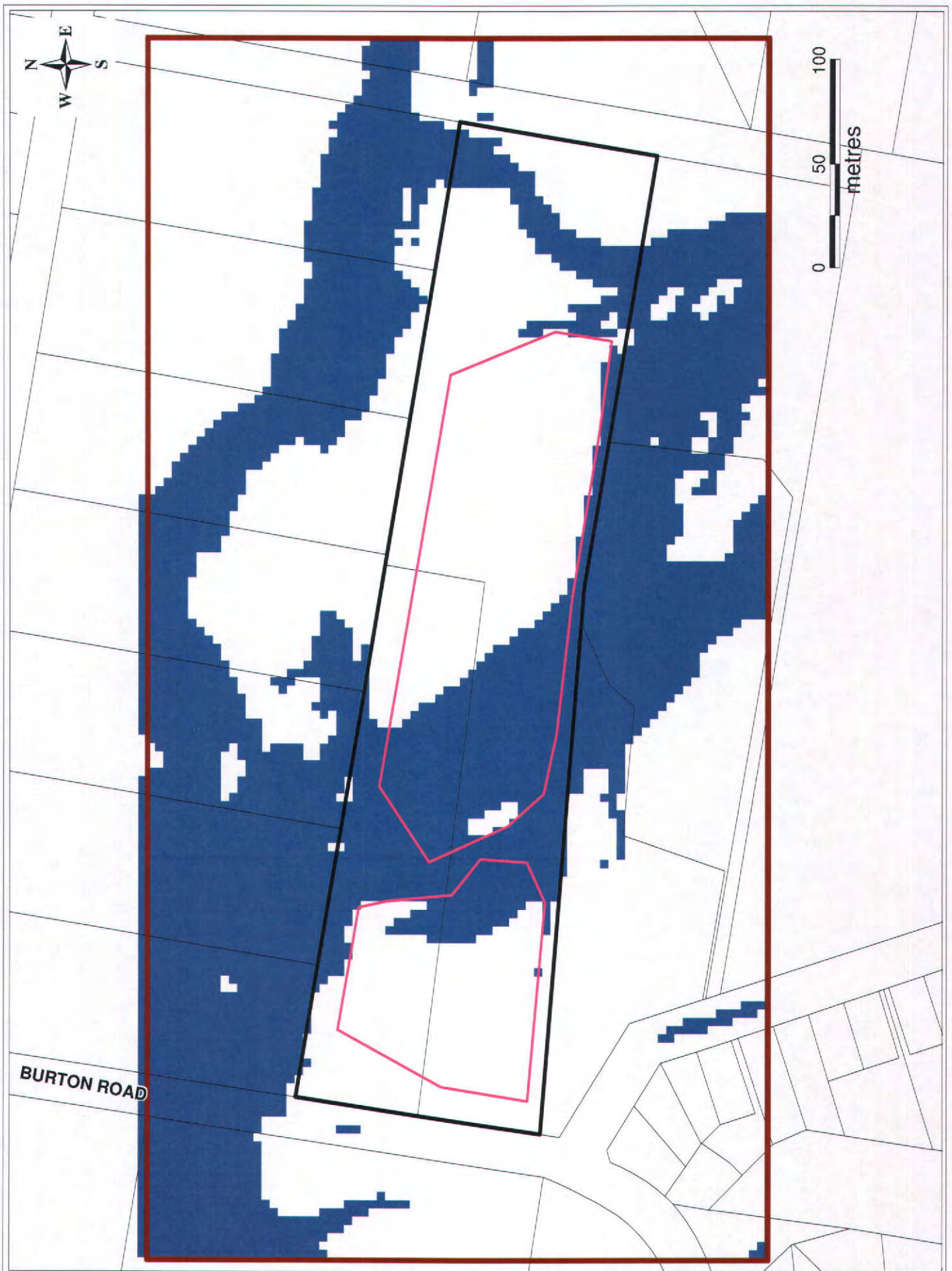


FIGURE 4_1
PROPOSED CASE - PMF Peak Depth







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ATTACHMENT No.7

SOCIAL IMPACT ASSESSMENT
Prepared by BBC Consulting Planners



**PROPOSED RETIREMENT VILLAGE,
"KENDEL PARK ENVIRONMENTAL VILLAGE"**

NO'S. 40-48 BURTON ROAD, MOUNT HUTTON

SOCIAL IMPACT ASSESSMENT

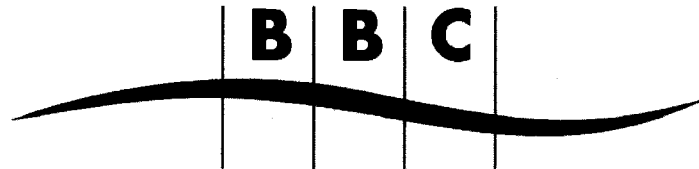
Prepared for

Ken & Helen Delforce

By

BBC Consulting Planners

Job No. 10-152
SIA MtHutton - Final.doc
December, 2010



CONSULTING PLANNERS
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APPENDICES

Appendix 1: Aged Services

1. INTRODUCTION

This Social Impact Assessment (SIA) has been prepared to accompany a Development Application (DA) to the City of Lake Macquarie Council (the 'LGA') for the construction of a retirement village in Burton Road, Mount Hutton ("the site") comprising 51 dwellings and associated amenities.

The SIA outlines details of the proposal and site, along with a demographic profile of the suburb and LGA in which the development is to be located. It identifies community services and facilities available to seniors and discusses the potential impacts to the social environment. This report concludes by identifying mitigating responses to address the potential impacts outlined in the SIA.

This SIA has been prepared in accordance with Section 2.2 of Development Control Plan No. 1 which addresses Social Impact. Our methodology utilises the principles of practice outlined in the Local Government and Shires Association and NSW Social Policy Directorate Handbook "Social Impact Assessment for Local Government" 1995, a widely recognised benchmark for social impact assessment (SIA) practice in NSW.

The DA has been lodged pursuant to c41 of the Lake Macquarie Local Environmental Plan 2004. The SIA has been assessed in accordance with Council's requirements under the LEP.

However, in recognition of the high standard of residential design required by seniors and those with a disability who will be serviced by this development, and due to the lack of appropriate design criteria within Council's local policy framework, reference is also made to the provisions of the *State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004* (the 'SEPP'), as the State policy guide for this form of development.

The proposed development provides for development that complies with, and in some aspects exceeds, the dwelling design standards of the SEPP and implements the objectives of the SEPP. **It is stressed that the DA has however not been lodged under the SEPP provisions.** It is noted that the SEPP is used for information purposes only, and non compliance is not grounds for refusal under the LEP. They are rather referred to as an example of good practice guidance in the provision of seniors housing.

2. DESCRIPTION OF THE PROPOSAL

The Development Application (the DA) proposes the construction of an integrated retirement village development (for people aged 55 years and over), on land known as No's 40-48 Burton Road, Mount Hutton. The project involves:

- The erection of a retirement village complex comprising 51 self contained dwellings, a Community Centre, a maintenance and a men's shed, associated roads and visitor parking areas.
- The provision of private and communal landscaped open spaces, including private courtyards to all dwellings, various pocket parks and two large areas of open space (one centrally located and the other located to the rear of the site).
- The provision of associated services, drainage infrastructure, etc.
- The rehabilitation of the riparian zone along the eastern boundary of the site.
- Each dwelling will be provided with a private garage and 5 units will include double car spaces. In addition, 24 visitor parking spaces will be provided.

This SIA focuses on the residential aspect of the DA, which comprises attached and semi-detached single storey dwellings built as a combination of unit groups across the site, which will contain a total of 51 units, as outlined in the table below -

Dwelling Unit Size	No. Units	
1 Bedroom +Study	28	(54.9%)
2 bedroom +Study	23	(45.1%)
3 bedroom	0	(0%)
Total units	51	

The design and layout of each residential unit will predominately comply with the provisions of the *SEPP*.

Various community facilities will be provided within the development to service the needs of residents. A Community Centre will be provided within the centre of the site to ensure maximum accessibility. The Community Centre will provide a multi-purpose space/ hall, lounge area, library, office, meeting rooms and kitchen. Other facilities noted include, caravan and boat storage areas, men's shed, children's playground and BBQ area. This facility will be easily accessed via the internal road network.

It is anticipated that the meeting rooms could also be made available on a commercial basis for use by visiting health providers (such as Doctors, Podiatrists, Massage therapists, Naturopathy services, Pharmacist, and Physiotherapists) and hairdressers. The frequency of such services would depend on resident demand.

The Community Centre will be provided in Stage 3 of the development. However, a temporary/ interim Community Facility will be housed within one of the proposed dwellings of Stage 1 to service the residents of the initial stages of the development.

In addition, extensive communal landscaped open spaces will be provided for residents. This will include various pocket parks, two large communal open spaces centrally located within the site (one being in the middle located adjacent to the community centre and the other toward the rear of the site as part of the riparian areas), landscaping around the dams and extensively landscaped setbacks. The pocket parks will be provided with picnic areas and seating facilities for use by residents and guests.

Pedestrian footpaths will also be provided through the development, separate from the road network. The proposal includes infrastructure and space for motorised carts to assist with navigation within the site. There will be parking areas located at destination points within the site and adequate space within the internal road network.

A bus stop is located directly out the front of the site and the service that uses this stop could be utilised by the residents.

There will be one vehicular access point to the retirement village, from Burton Road. A separate emergency access route is provided shortly after entering the site in order to reduce potential blockages.

It is important the development encourages residents to interact and in turn build social networks and a strong sense community spirit. It is recommended that this be achieved by providing support to a range of social and community building activities which encourage the residents to interact and build social networks and a mutually supportive community spirit.

The proposed facilities within the community centre provide the physical space within which a range of such resident driven activities can take place.

The social elements which will be established at the development will vary in reflection of the unique characteristics, desires and tastes of the residents who choose to live there. Activities would also vary over time, as residents alter or desires change.

However, the development provides the facilities and spaces which facilitate the *opportunity* for a wide variety of activities to occur, as would be desired by the future residential population.

Initial social activities have not yet been finalised and as such cannot be fully detailed. The flexible nature of the community facilities will facilitate the provision of social elements which reflect the unique characteristics, desires and tastes of residents. As a minimum, it is recommended that the following social programmes be implemented at the development.

Generally, the scope of these activities will be developed in conjunction with residents, in order to cater to their interests. However they could include -

- | | | |
|-----------------|-------------------------|--------------------------|
| • dances; | • art classes; | • small concerts; |
| • craft; | • map reading; | • fashion parades; |
| • pottery; | • movie nights; | • morning teas; |
| • gardening; | • luncheons; | • uniting merchandisers; |
| • carpet bowls; | • dinner dances; | • bridge/ cards; |
| • darts; | • social get togethers, | • badminton; and |
| • billiards; | entertainment and | • BBQ's. |
| • tai chi; | games afternoons; | |
| • yoga; | • fund raising events; | |

It is recommended that major activities and outings also be organised. Residents should be involved in this process to determine desired activities. This could include outings to art galleries, movies, theatre, Hunter wine & cheese tastings, open gardens, cruises, overnight stays around the countryside, picnics, and golf trips.

If a demand exists, as identified by the residents, informal or formal car pooling could also be organised to assist with transport.

Residents of the village will participate in the management of the village through a Residents Committee, formed under s70 of the Retirement Villages Act 1999. These committees meet regularly and act as a voice for the residents, representing them on issues relating to the operations of the village.

3. SITE AND LOCATION

The site is approximately 2.5 kilometres from the Mount Hutton Commercial precinct and approximately 6 kilometres from the regional hub of Charlestown.

The Mount Hutton Area Plan indicates the Mount Hutton area is a residential area supported by a large shopping precinct with two smaller local centres and a range of additional uses such as nurseries and aged care facilities. Mount Hutton is an area identified in the Lifestyle 2020 Strategy as a "Town Centre" and is within close proximity to Charlestown which is identified as regional centre in the Lower Hunter Regional Strategy.

Mount Hutton is surrounded by other neighbourhoods developed for residential purposes. The site is located within an area of other large lot housing, vegetated areas and land developed for standard residential purposes. There has been continuous growth within the area and surrounding suburbs for a number of years.

The general character of the site is discussed in the Landscape Design Report (SEE Appendix 7) and the Visual Impact Statement (SEE Appendix 8). The site presently accommodates two single dwellings, associated sheds and storage areas. In addition, the site includes farm dams, stables, associated outbuildings and feed areas for the thoroughbred horses currently kept.

The land to the north, zoned 1(2) Rural (Living), contains approximately 7 large lots developed with large dwellings of varying age and construction.

The land to the west of the site is zoned 1(2) Rural (Living) and includes residential dwellings similar to that on the subject site.

The eastern portion of the site and beyond is zoned 7(5) Environmental Living. This land is largely timbered, however accommodates a number of dwellings which gain access via Sanctuary Grove Road. These dwellings comprise a mix of dwellings that have been constructed over recent years.

Immediately to the south of the site, the land is zoned 1(2) living, with approval for a restaurant, function centre and accommodation (known as Ducks Crossing). Areas in close proximity to the south and west are zoned for residential purposes.