Assessment of Potential Wetlands at 111 Pound Road Industrial Development, Christchurch

Contract Report No. 7316c-i

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Wildlands

Assessment of Potential Wetland Areas at 111 Pound Road Industrial Development, Christchurch

Contract Report No. 7316c-i
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1.0 Introduction

NTP Development Holdings Limited (NPT) are seeking to develop land on Pound Road, Templeton, Christchurch for industrial activities. The land is located on the corner of Pound Road and Waterloo Road, south of Templeton Golf Course and is west of the Waterloo Business Park. It comprises of *c.*64.4 hectares over 14 properties and borders Pound Road, Waterloo Road, Barters Road and Hasketts Road. The proposal will seek to subdivide the application site to create 74 industrial lots, 2 lots to vest as Reserve, and associated road network and infrastructure. It is intended that the sites will be used for general industrial activities (Figure 1).

Wildland Consultants Ltd (Wildlands) previously prepared an assessment of the ecological values of the site to support the rezoning (Wildlands 2024) and assessment of ecological effects (AEE) for the proposed development (Wildlands 2025). During these assessments desktop analysis of aerial imagery identified potential wetlands within the property at 111 Pound Road, but they were not investigated due to access being constrained.

Access to the property at 111 Pound Road was granted on the 19th of September 2025 and it was surveyed for potential wetlands. This report summarises the findings of that survey and has been prepared as addendum to the AEE (Wildlands 2025) and should be read in conjunction with the AEE report.

2.0 Objectives and scope

The scope of the assessment was to survey potential wetlands on 111 Pound Road identified in aerial imagery and report on the findings.

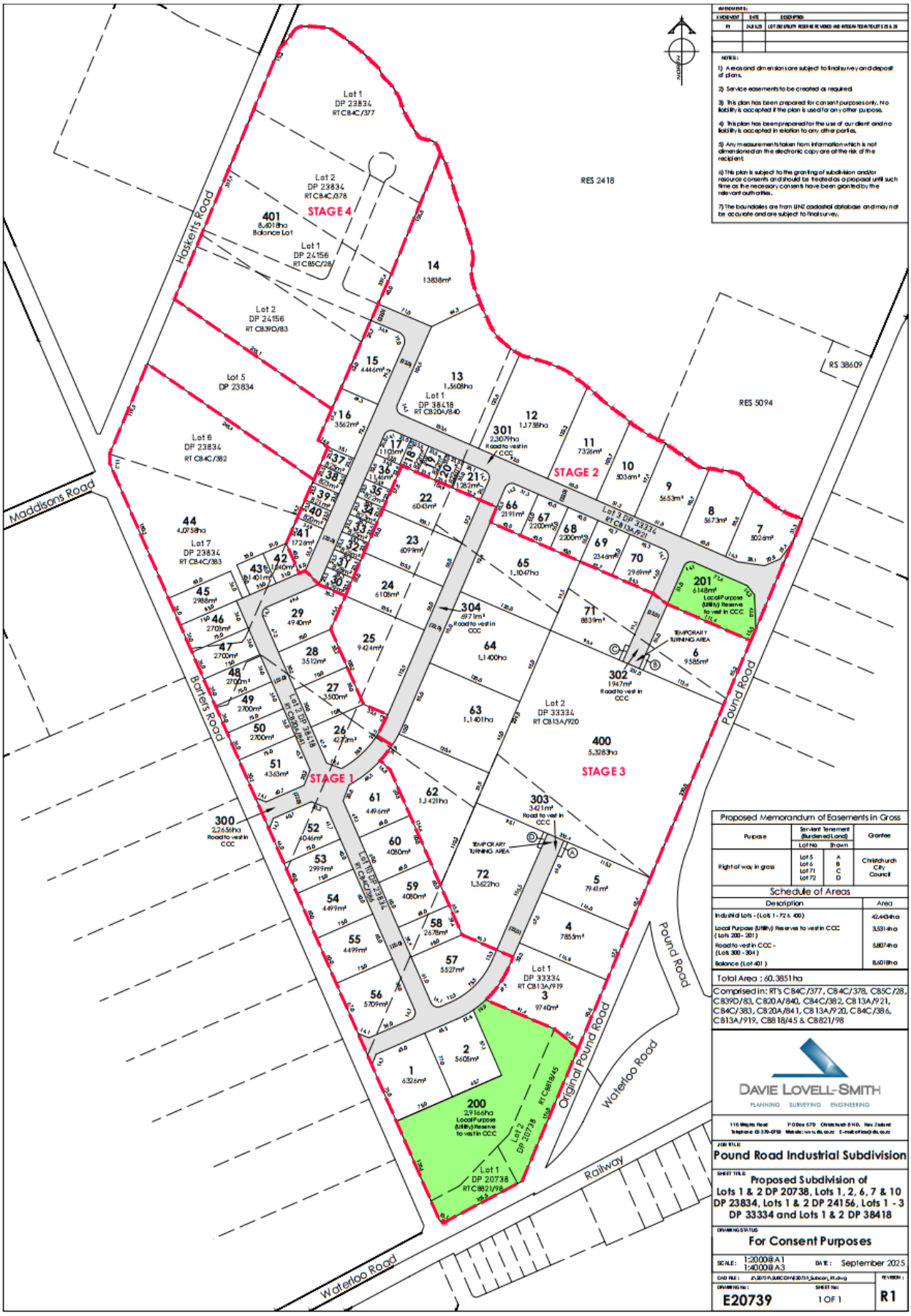

Figure 1 - Proposed industrial development plan for Pound Road, Templeton, Christchurch. 111 Pound Road is located in the Stage 3 development area (primarily Lots 63, 64, 65, & 400). Figure provided by Davie Lovell-Smith, 2025

3.0 Methods

3.1 Wetland survey

Desktop survey

A desktop survey of the site was undertaken to review historic survey maps (Canterbury black maps)[1], soil records[2], and DOC national wetland points, as well as, spring and other relevant data layers, which are available on Canterbury Maps[3]. Historic and contemporary aerial images[4], were also reviewed to identify potential wet areas within the site. These were identified based on visible surface water or saturation and other high level hydrological indicators as defined in the Ministry for the Environment (MfE) wetland delineation protocols (MfE, 2022a). Recent and historic waterway locations were also examined in relation to the site, as were site topography and geomorphic features.

Site survey

A walk over site survey was undertaken on the 19 September 2021 to identify and delineate any potential wetlands, as defined in the Resource Management Act 1991 (RMA), and methods and protocols set out in the National Policy Statement for Freshwater Management (NPS-FM; 2020), and supporting documents (Clarkson 2013, MfE, 2022b).

Areas with surface water, mud, sediment, or sparsely vegetated hollows and bare ground with surface soil cracks were inspected. During the site walkover, particular attention was paid to those potential wet areas identified during the desktop survey.

4.0 Results

4.1 Desktop Survey

The Canterbury black maps show the site was vegetated with 'fern and grass', in *c.*1850, with river lines to the north marked as an 'old river channel'. This is consistent with observations of aerial imagery (recent and historic) where river braid patterns can be seen, and observation on the site, where a historic river terrace, or channel line was observed on the development site's northern (Templeton golf course) boundary. No springs or wetlands were recorded on the site in these survey records or the Canterbury Map layers.

The review of the historic aerial imagery identified six areas with consistent surface water pooling and/or dry sparsely vegetated ground that could be potential wetlands on the site. The earliest aerial imagery of the site dates from the 1940s and there is no sign of any water ponding in these before 1990 with the water pooling becoming more pronounced from *c.*1990 onwards.

[1] https://mapviewer.canterburymaps.govt.nz/?webmap=0db87348adef4595a91994a3dc85cefe
[2] https://smap.landcareresearch.co.nz/
[3] https://mapviewer.canterburymaps.govt.nz/
[4] https://apps.canterburymaps.govt.nz/CanterburyHistoricAerialImagery/

The online soil data records show that the soils are 'Recent', well drained, silt and loam-based soils formed of Waimakariri and Rakaia sibling groups. The depth to ground water is indicated as been 15 metres, on Canterbury Maps.

4.2 Site Survey

The site survey found water pooling consistent with that seen in the aerial imagery. These pools are mostly next to fence lines and appear to be induced by livestock compaction and erosion. The site has been managed as a deer farm with high stocking rates for the last 30 years[1], and shape and form of the hollows, where the water pools is consistent with animals tracking along fence lines, hoofing the ground, and deer wallows (made during the rut, Appendix 1, Plates 1-4).

No hydrophytic (wetland) plant species were observed in or around any of the areas where water pooling was occurring. Areas that were not underwater, or bare/stoney ground were vegetated with pasture grass species and common pasture weeds. The species were difficult to determine due to the winter timing of the survey and the heavily grassed nature of the site, but included prairie grass (*Bromus* species), clover (*Trifolium* species), yarrow (*Achillea millefolium*), and mouse-ear chickweed (*Cerastium fontanum*).

The soil was hard, stoney and difficult to dig, and due to a lack of hydrophytic and known soil and site history a full investigation of soil was not deemed necessary.

The site is regularly irrigated by a ground water bore that the landowner Warrick Wright indicated was 16 metres deep (pers comm), in line with the depth to ground water records held on Canterbury Maps. Overtime, consistent and repeated water pooling in the same location can induce wetland habitats. However, this is not the case here and these areas are best described as areas of temporary water pooling.

5.0 Summary

Areas of livestock compaction and erosion over many years, primarily along fence lines, has resulted in depressions with consistent water pooling on the property. There is no hydrophytic wetland vegetation in or around the areas of water pooling. There is no history of any wetlands, springs or wetland soils on the site. Primary wetland hydrology indicators are limited to temporary surface water pooling and there are no wetlands present.

[1] Livestock density exceeds 25 Stock Units (SU) per hectare (Warwick Wright pers comm)

Acknowledgments

Thanks to Warrick Wright (landowner) and Dean Christie (NTP) for access and information on the site.

References

Clarkson B. 2013: *A vegetation tool for wetland delineation in New Zealand*. Manaaki Whenua Landcare Research Contract Report LC1793.

New Zealand Government 1991: Resource Management Act. Wellington.

New Zealand Government 2020: *National Policy Statement for Freshwater Management* (Amended February 2023). Wellington.

Ministry for the Environment. 2022a. *Wetland delineation protocols.* Wellington: Ministry for the Environment.

Ministry for the Environment. 2022b. *Pasture exclusion assessment methodology*. Wellington: Ministry for the Environment

Wildland Consultants (2024). *Ecological assessment of the proposed rezoning at Pound Road, Christchurch*. Wildland Consultants Contract Report No. 7136. Prepared for NTP Development Holdings Limited. 27pp.

Wildland Consultants (2025). *Assessment of Ecological Effects for Pound Road Industrial Development, Christchurch*. Wildland Consultants Contract Report No. 7316c. Prepared for NTP Development Holdings Limited. 41pp

Appendix 1

Site photos.

Plate 1 – Heavily tracked and rutted fence lines, as a result of livestock compaction/erosion, at 111 Pound Road, Islington, Christchurch.

Plate 2 – Deer hoofing marks resulting in deeply rutted ground, at 111 Pound Road, Islington, Christchurch.

Plate 3 – Surface water pooling and animal tracking marks, at 111 Pound Road, Islington, Christchurch

Plate 4 – Surface water pooling that appears to be the result of stag wallow, at 111 Pound Road, Islington, Christchurch.

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