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Geotechnics | Environment | Groundwater

Integrated Practical Solutions

Report on
Preliminary Site Investigation (Contamination)

Proposed Mixed Use Development
2 Wilson Street and 849-859 Pacific Highway,
Chatswood

Prepared for
853 Pacific Highway Pty Ltd ATF 2017 PHC Unit Trust

Project 99821.01
September 2020



Document History

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The undersigned, on behalf of Douglas Partners Pty Ltd, confirm that this document and all attached drawings, logs and test results have been checked and reviewed for errors, omissions and inaccuracies.

Signature	Date
Author 	29 September 2020
Reviewer pp 	29 September 2020



Douglas Partners Pty Ltd
 ABN 75 053 980 117
www.douglaspartners.com.au
 96 Hermitage Road
 West Ryde NSW 2114
 PO Box 472
 West Ryde NSW 1685
 Phone (02) 9809 0666

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Report on Preliminary Site Investigation (Contamination)

Proposed Mixed Use Development

2 Wilson Street and 849-859 Pacific Highway, Chatswood

1. Introduction

Douglas Partners Pty Ltd (DP) has been engaged by 853 Pacific Highway Pty Ltd ATF 2017 PHC Unit Trust to complete this Preliminary Site Investigation (Contamination) (PSI) undertaken for a proposed mixed use development for the site at 2 Wilson Street and 849-859 Pacific Highway, Chatswood (the site). The site is shown on Drawing 1, Appendix A. The investigation was undertaken in accordance with DP's proposal SYD200997.P.001.Rev1 dated 22 September 2020.

The objective of the PSI is to assess the potential for contamination at the site based on past and present land uses and to comment on the need for further investigation and / or management with regard to the proposed development. According to the Conceptual Design (19 August 2020), the proposed development includes:

- A 20-storey building with basement parking, commercial (retail) ground floor use and residential use above; and
- Dedication of the western fringe of the site for a future road widening along Pacific Highway.

It is understood that the report will be used to support a planning proposal.

This report must be read in conjunction with all appendices including the notes provided in Appendix B.

The following key guidelines were consulted in the preparation of this report:

- NEPC *National Environment Protection (Assessment of Site Contamination) Measure 1999 (as amended 2013)* [NEPM] (NEPC, 2013); and
- NSW EPA *Guidelines for Consultants Reporting on Contaminated Land* (NSW EPA, 2020).

2. Scope of Works

The scope of work for the investigation was as follows:

- Review of published geological, soil and topographical maps;
- Review historical aerial photographs;
- Review of a planning certificate for one of the land parcels at the site;
- Review of EPA databases for contaminated sites, Licences and Notices;
- Review of WaterNSW registered groundwater bore records; and
- A site walkover (limited to publicly accessible areas).

3. Site Information

According to NSW Spatial Services, SIX Maps, on 23 September 2020, the site comprises four adjacent land parcels in Chatswood, including (from north to south):

- Strata Plan 52947 (2 Wilson Street);
- Strata Plan 10110 (859 Pacific Highway);
- Strata Plan 60178 (853 Pacific Highway); and
- Strata Plan 1496 (849 Pacific Highway).

The site covers approximately 3166 m² and is bound by Pacific Highway to the west, Wilson Street to the north and O'Brien Street to the south.

Willoughby City Council is the local government authority. According to the NSW Planning Portal on 23 September 2020, the majority of the site is zoned R4 High Density Residential and the western fringe of the site which fronts Pacific Highway, is zoned SP2 Infrastructure. The adjacent property to the east is zoned SP2 Infrastructure as is the rail corridor which is alongside this property.

4. Environmental Setting

4.1 Topography

The site is situated on a ridge at approximately 106 m Australian Height Datum (AHD). Gentle slopes at the site are down to the south and south-east. The rail corridor, approximately 20 m to the east of the site, has been 'cut' into the ridge and lies approximately 5 m below adjacent land.

4.2 Site Geology

According to Sydney 1:100 000 Geology Sheet, the site is underlain by Ashfield Shale which comprises black to dark-grey shale and laminite.

According to the NSW Soil Landscapes Central Eastern NSW (v2) mapping, the site is within the Glenorie soil landscape where soils are predominately formed by erosion. The landscape comprises undulating to rolling hills; a local relief of 50-80 m; slopes of 5-20%; narrow ridges, hillcrests and valleys; and extensively cleared tall open-forest. Soils are shallow to moderately deep (<1 m) on crests; moderately deep (0.7 - 1.5 m) on upper slopes; and deep (> 2 m) along drainage lines. Dominant soil materials include: dark brown loam; brown clay loam; reddish-brown clay; mottled grey clay; and brownish-grey silty clay. Red ironstone nodules are often found in the deep subsoil.

4.3 Acid Sulphate Soils

According to NSW Acid Sulfate Soil Risk data, the site is not at an area, or in close proximity to an area, associated with a probability of occurrence of acid sulfate soils.

According to the Willoughby Local Environment Plan 2012 Acid Sulfate Soil Map, the site is located in Class 5 land. For Class 5 land, development consent is required for the carrying out of works within 500 m of adjacent Class 1, 2, 3 or 4 land that is below 5 m AHD and by which the water table is likely to be lowered below 1 m AHD on adjacent Class 1, 2, 3 or 4 land. According to the Acid Sulfate Soil Map, there is no Class 1, 2, 3 or 4 land within 500 m of the site. Given this, and that the site is approximately 100 m above any areas that are below 5 m AHD, it is considered that an acid sulfate soils management plan is not required for the proposed development.

4.4 Groundwater and Surface Water Body

The likely groundwater flow direction at the site is difficult to infer given that the site is on a ridge. Based on topography, the inferred groundwater flow direction is to the south-east, however, the rail corridor cutting may result in the groundwater flow direction being more towards the east. Groundwater may discharge into Scotts Creek, located approximately 1 km to the east of the site.

Rainwater at the site which does not penetrate permeable surfaces, is likely to runoff into the local stormwater system.

A search of the publicly available Water NSW registered groundwater bore database revealed that there are two registered groundwater bores (GW114837 and GW114838) within 500 m of the site. As shown on the map in Appendix C, the two bores are approximately 500 m to the north of the site. The bores were installed for monitoring purposes. GW114837 was drilled to a depth of 5 m and a standing water depth of 2.6 m was recorded. GW114838 was drilled to a depth of 9.7 m and a standing water depth of 5 m was recorded.

5. Site History

5.1 Historical Aerial Photography

Historical aerial photographs from the years 1930, 1943, 1961, 1970, 1978, 1986, 1991, 1994, 1995, 2000, 2003, 2012 and 2018 were obtained from public databases. Extracts of the aerial photographs are included in Appendix D.

The aerial photographs show that from 1930 to 1961, the site was occupied by four residential houses with yard space and backyard sheds. By 1970, two of the houses (at 849 Pacific Highway and 859 Pacific Highway) had been demolished and replaced by two apartment buildings. Between 1991 and 1994, the house at 2 Wilson Street had been demolished and then replaced by an apartment building in 1995. Between 1995 and 2000, the house at 853 Pacific Highway had been demolished and replaced by an apartment building. The site appears to have remained relatively unchanged since 2000.

Between 1930 and 1961, the neighbouring property to the east appears to have been vacant, apart from a possible small shed present in 1943. This property may have been used as a temporary storage yard for contractors working on the adjacent rail corridor. By 1970, a commercial building had been constructed at this neighbouring property and had been extended to the south by 1986. This property appeared to have been relatively unchanged since 1986.

In 1930, Wilson Street, Pacific Highway and O'Brien Street were present. Surrounding land uses to the north, west and south of the site were predominantly residential at that time. By the 1970s, this surrounding land had transitioned to a mix of residential and commercial uses. A property approximately 70 m to the north appears to have been used for a service station since (at least) 1961. Major redevelopment of land to the south of O'Brien Street occurred between the 1990s and 2012 with construction of towers as well as open space over the rail corridor.

5.2 EPA Registers

A search of the NSW EPA website on 24 September 2020 did not reveal any Environment Protection Licences, applications, Notices, audits or pollution studies and reduction programs pertaining to the site or nearby properties.

On 24 September 2020, a search of the list of sites notified to the EPA under Section 60 of the Contaminated Land Management Act 1997 revealed several listings for the suburb of Chatswood, but none pertaining to the site. The Coles Express Service Station at 877-879 Pacific Highway, Chatswood, located approximately 70 m to the north of the site, is on the list. Regulation of this notified site under the Contaminated Land Management Act 1997 was not required.

On 24 September 2020, a search of the EPA contaminated land public record revealed one property for the suburb of Chatswood, however, this property is not in close proximity to the site.

5.3 Planning Certificate

The Planning Certificate issued under Section 10.7(2&5) of the Environmental Planning and Assessment Act 1979 for Lot 9 in Strata Plan 1496 (9/849 Pacific Highway, Chatswood), dated 8 July 2019, does not provide any particular information pertaining to the contamination status of the property. It is stated that it is Council's policy to consider previous land uses to determine whether land may be affected by contamination which restricts or prohibits the carrying out of development on the land. Depending on the previous uses of the land, the applicant may be required to investigate possible site contamination and/or carry out remediation as part of any proposed development and the development potential of the site may be restricted or prohibited. This is assessed by the Council on a case-by-case basis.

A copy of the certificate is provided in Appendix E.

6. Site Walkover

A site walkover was undertaken by an environmental engineer on 25 September 2020 and was limited to publicly accessible areas. Observations are discussed below. Site photographs are provided in Appendix F.

The site comprises four apartment buildings of brick construction, either three or four storeys in height (as shown on Drawing 1, Appendix A). Basements for parking are present at 2 Wilson Street, with driveway access from Wilson Street, and 853 Pacific Highway, with driveway access via O'Brien Street at the east of the site. Garages are at ground level at 859 Pacific Highway and 849 Pacific Highway. Each building is surrounded by concrete pavements and minor garden space where grass, trees and shrubs appeared to be in good health.

The neighbouring two-storey commercial building to the east was occupied by 'Sunnyfield Disability Services'. Signage was present for the storage of hazardous chemicals. It is noted that this property is somewhat downgradient of the site. The adjacent railway line to the east lies approximately 5 m below the surrounding ground level.

Nearby properties to the south, east and west were used for a mix of residential purposes including mixed-use towers to the south, on the opposite side of O'Brien Street, and a 'puppy salon' on the northern side of Wilson Street.

The Coles Express (Shell) service station at 879 Pacific Highway, to the north of the site, is on the same ridge as the site and, therefore, is somewhat cross-gradient of the site.

7. Preliminary Conceptual Site Model

A Conceptual Site Model (CSM) is a representation of site-related information regarding contamination sources, receptors and exposure pathways between those sources and receptors. The CSM provides the framework for identifying how the site became contaminated and how potential receptors may be exposed to contamination either in the present or the future i.e., it enables an assessment of the potential source - pathway - receptor linkages (complete pathways).

Potential Sources

Based on the current investigation, the following potential sources of contamination and associated contaminants of potential concern (COPC) have been identified.

- S1: Imported fill used to form and level the site. COPC are various and may include metals, total recoverable hydrocarbons (TRH), benzene, toluene, ethylbenzene, xylene (BTEX), polycyclic aromatic hydrocarbons (PAH), polychlorinated biphenyls (PCB), organochlorine pesticides (OCP), phenols and asbestos.
- S2: Demolition of previous houses and sheds. COPC include asbestos, lead (in paint) and PCB.

The Coles Express (Shell) service station at 879 Pacific Highway has not been listed as a potential source of contamination given that any potential fuel-related groundwater contamination from the service station site is likely to migrate to the east or west (perpendicular to the ridgeline) and not in the direction of the site which is somewhat cross-gradient to the service station.

Potential chemical contamination from (possible) hazardous chemicals stored or previously stored at the neighbouring property at the east has not been listed as a potential source of contamination given that this property is somewhat downgradient of the site. Potential groundwater contamination at this property is considered likely to migrate to the east or south (away from the site).

Potential Receptors

The following potential receptors of contamination have been identified for the proposed development:

- R1: Future site users (residents, customers, visitors and workers);
- R2: Construction workers for the proposed development;
- R3: Maintenance workers (post-development);
- R4: Adjacent site users;
- R5: Surface water body;
- R6: Groundwater;
- R7: Terrestrial ecology; and
- R8: In ground structures.

Potential Pathways

The following potential pathways have been identified:

- P1: Ingestion and dermal contact;
- P2: Inhalation of dust;
- P3: Inhalation of vapours;
- P4: Surface water run-off;
- P5: Leaching of contaminants and vertical migration into groundwater;
- P6: Lateral migration of groundwater;
- P7: Contact with terrestrial ecology; and
- P8: Contact with in ground structures.

Summary of Potentially Complete Exposure Pathways

A 'source - pathway - receptor' approach has been used to assess the potential risks of harm being caused to human or environmental receptors from contamination sources on or in the vicinity of the site, via exposure pathways (potential complete pathways). The possible pathways between the above sources and receptors are provided in Table 1.

Table 1: Summary of Potentially Complete Exposure Pathways

Source	Transport Pathway	Receptor
S1: Imported Fill	P1: Ingestion and dermal contact	R1: Future site users
	P2: Inhalation of dust	R2: Construction workers
	P3: Inhalation of vapours	R3: Maintenance workers
	P2: Inhalation of dust	R4: Adjacent site users.
	P3: Inhalation of vapours	
	P4: Surface water run-off	R5: Surface water body
	P5: Leaching of contaminants and vertical migration into groundwater	
S2: Demolition	P6: Lateral migration of groundwater	
	P5: Leaching of contaminants and vertical migration into groundwater	R6: Groundwater
	P7: Contact with terrestrial ecology	R7: Terrestrial ecology
	P8: Contact with in ground structures	R8: In ground structures.
	P1: Ingestion and dermal contact	R1: Future site users
	P2: Inhalation of dust	R2: Construction workers
	P3: Inhalation of vapours	R3: Maintenance workers
S2: Demolition	P2: Inhalation of dust	R4: Adjacent site users.
	P4: Surface water run-off	
	P5: Leaching of contaminants and vertical migration into groundwater	R5: Surface water body
	P6: Lateral migration of groundwater	
	P5: Leaching of contaminants and vertical migration into groundwater	R6: Groundwater
	P7: Contact with terrestrial ecology	R7: Terrestrial ecology

8. Conclusions

The site has been used for residential purposes since (at least) 1930. Between 1961 and 2000, each of the four original houses (present in 1930) were demolished and replaced by the existing apartment buildings.

Potential sources of contamination include: demolition of previous buildings and sheds; and imported fill to form and level the site. Potential contamination from demolition is likely have been limited to surface soils. Similarly, it is noted that extensive fill was not observed at the site and two separate basements are present at the site, suggesting that any possible contaminated fill is likely to be localised. Overall, the potential for contamination is considered to be low. Given that basements are proposed and soils

at the site will, therefore, be in surplus, there will be opportunities to remove any contaminated surface or near-surface soil contamination as part of development of the site.

It is recommended that soil sampling be undertaken for waste classification and contamination assessment purposes. This sampling can be done post-demolition when the soil at the site is more accessible for sampling.

Prior to demolition, it is recommended that a hazardous building materials survey be completed for the site, with a particular focus on the apartment buildings at 849 and 859 Pacific Highway which were constructed in the 1960s.

Based on the above, it is considered that the site can be made suitable for the proposed development.

9. Limitations

Douglas Partners (DP) has prepared this report (or services) for this project at in accordance with DP's proposal SYD200997.P.001.Rev1 dated 22 September 2020 and acceptance received from 853 Pacific Highway Pty Ltd ATF 2017 PHC Unit Trust dated 22 September 2020. The work was carried out under DP's Conditions of Engagement. This report is provided for the exclusive use of 853 Pacific Highway Pty Ltd ATF 2017 PHC Unit Trust for this project only and for the purposes as described in the report. It should not be used by or relied upon for other projects or purposes on the same or other site or by a third party. Any party so relying upon this report beyond its exclusive use and purpose as stated above, and without the express written consent of DP, does so entirely at its own risk and without recourse to DP for any loss or damage. In preparing this report DP has necessarily relied upon information provided by the client and/or their agents.

DP's advice is based upon the conditions encountered during this investigation. The accuracy of the advice provided by DP in this report may be affected by undetected variations in ground conditions across the site. The advice may also be limited by budget constraints imposed by others or by site accessibility.

This report must be read in conjunction with all of the attached and should be kept in its entirety without separation of individual pages or sections. DP cannot be held responsible for interpretations or conclusions made by others unless they are supported by an expressed statement, interpretation, outcome or conclusion stated in this report.

This report, or sections from this report, should not be used as part of a specification for a project, without review and agreement by DP. This is because this report has been written as advice and opinion rather than instructions for construction.

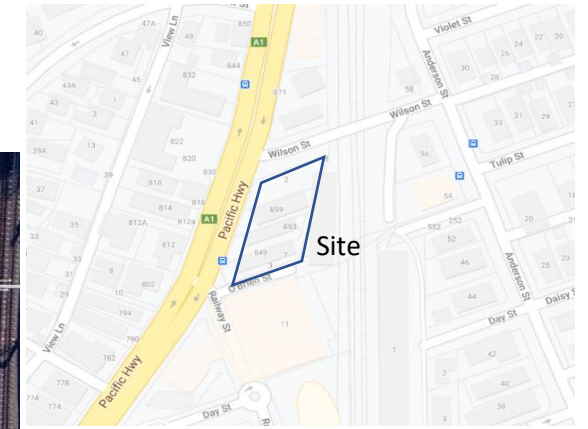
The contents of this report do not constitute formal design components such as are required, by the Health and Safety Legislation and Regulations, to be included in a Safety Report specifying the hazards likely to be encountered during construction and the controls required to mitigate risk. This design process requires risk assessment to be undertaken, with such assessment being dependent upon factors relating to likelihood of occurrence and consequences of damage to property and to life. This, in turn, requires project data and analysis presently beyond the knowledge and project role respectively of DP. DP may be able, however, to assist the client in carrying out a risk assessment of potential

hazards contained in the Comments section of this report, as an extension to the current scope of works, if so requested, and provided that suitable additional information is made available to DP. Any such risk assessment would, however, be necessarily restricted to the (geotechnical / environmental / groundwater) components set out in this report and to their application by the project designers to project design, construction, maintenance and demolition.

Douglas Partners Pty Ltd

Appendix A


Drawings



Site Location

Legend
— Site boundary

August 2020 image sourced from Nearmap

 Douglas Partners Geotechnics Environment Groundwater	CLIENT: 853 Pacific Highway Pty Ltd ATF 2017 PHC Unit Trust	Site and Site Location Proposed Mixed Use Development 853 Pacific Highway, Chatswood	PROJECT No: 99821.01
	OFFICE: Sydney		DWG No: 1
	DATE: 24 Sep 2020		REVISION: 0

Appendix B

About This Report

About this Report

Douglas Partners



Introduction

These notes have been provided to amplify DP's report in regard to classification methods, field procedures and the comments section. Not all are necessarily relevant to all reports.

DP's reports are based on information gained from limited subsurface excavations and sampling, supplemented by knowledge of local geology and experience. For this reason, they must be regarded as interpretive rather than factual documents, limited to some extent by the scope of information on which they rely.

Copyright

This report is the property of Douglas Partners Pty Ltd. The report may only be used for the purpose for which it was commissioned and in accordance with the Conditions of Engagement for the commission supplied at the time of proposal. Unauthorised use of this report in any form whatsoever is prohibited.

Borehole and Test Pit Logs

The borehole and test pit logs presented in this report are an engineering and/or geological interpretation of the subsurface conditions, and their reliability will depend to some extent on frequency of sampling and the method of drilling or excavation. Ideally, continuous undisturbed sampling or core drilling will provide the most reliable assessment, but this is not always practicable or possible to justify on economic grounds. In any case the boreholes and test pits represent only a very small sample of the total subsurface profile.

Interpretation of the information and its application to design and construction should therefore take into account the spacing of boreholes or pits, the frequency of sampling, and the possibility of other than 'straight line' variations between the test locations.

Groundwater

Where groundwater levels are measured in boreholes there are several potential problems, namely:

- In low permeability soils groundwater may enter the hole very slowly or perhaps not at all during the time the hole is left open;

- A localised, perched water table may lead to an erroneous indication of the true water table;
- Water table levels will vary from time to time with seasons or recent weather changes. They may not be the same at the time of construction as are indicated in the report; and
- The use of water or mud as a drilling fluid will mask any groundwater inflow. Water has to be blown out of the hole and drilling mud must first be washed out of the hole if water measurements are to be made.

More reliable measurements can be made by installing standpipes which are read at intervals over several days, or perhaps weeks for low permeability soils. Piezometers, sealed in a particular stratum, may be advisable in low permeability soils or where there may be interference from a perched water table.

Reports

The report has been prepared by qualified personnel, is based on the information obtained from field and laboratory testing, and has been undertaken to current engineering standards of interpretation and analysis. Where the report has been prepared for a specific design proposal, the information and interpretation may not be relevant if the design proposal is changed. If this happens, DP will be pleased to review the report and the sufficiency of the investigation work.

Every care is taken with the report as it relates to interpretation of subsurface conditions, discussion of geotechnical and environmental aspects, and recommendations or suggestions for design and construction. However, DP cannot always anticipate or assume responsibility for:

- Unexpected variations in ground conditions. The potential for this will depend partly on borehole or pit spacing and sampling frequency;
- Changes in policy or interpretations of policy by statutory authorities; or
- The actions of contractors responding to commercial pressures.

If these occur, DP will be pleased to assist with investigations or advice to resolve the matter.

About this Report

Site Anomalies

In the event that conditions encountered on site during construction appear to vary from those which were expected from the information contained in the report, DP requests that it be immediately notified. Most problems are much more readily resolved when conditions are exposed rather than at some later stage, well after the event.

Information for Contractual Purposes

Where information obtained from this report is provided for tendering purposes, it is recommended that all information, including the written report and discussion, be made available. In circumstances where the discussion or comments section is not relevant to the contractual situation, it may be appropriate to prepare a specially edited document. DP would be pleased to assist in this regard and/or to make additional report copies available for contract purposes at a nominal charge.

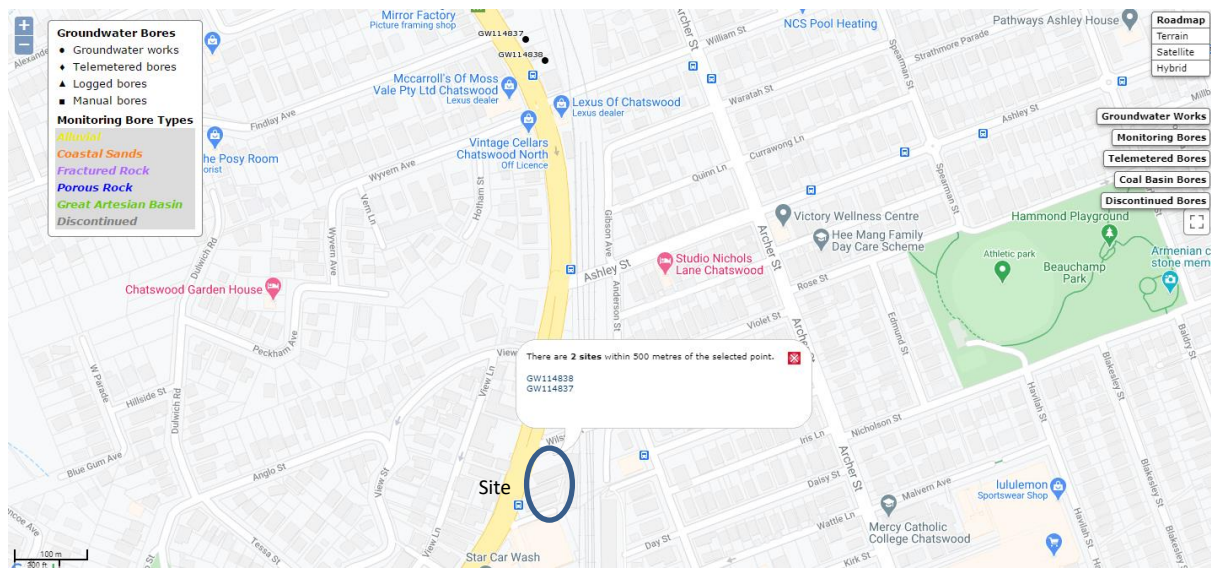
Site Inspection

The company will always be pleased to provide engineering inspection services for geotechnical and environmental aspects of work to which this report is related. This could range from a site visit to confirm that conditions exposed are as expected, to full time engineering presence on site.

Appendix C

Map of Registered Groundwater Bores

Map of Registered Groundwater Bores



<https://realtime.data.watersw.com.au/water.stm>

Appendix D

Historical Aerial Photographs



Legend

 Site Boundary

Source: NSW Spatial Services



1930 Aerial Photograph

**Proposed Mixed Use Development
2 Wilson Street and 849-859 Pacific
Highway, Chatswood**

CLIENT: 853 Pacific Highway Pty Ltd ATF 2017
PHC Unit Trust

PROJECT: 99821.01

PLATE No: D1

REV: 0

DATE: 23-Sep-20



Legend

 Site Boundary

Source: NSW Spatial Services



1943 Aerial Photograph

**Proposed Mixed Use Development
2 Wilson Street and 849-859 Pacific
Highway, Chatswood**

CLIENT: 853 Pacific Highway Pty Ltd ATF 2017
PHC Unit Trust

PROJECT: 99821.01

PLATE No: D2

REV: 0


DATE: 23-Sep-20

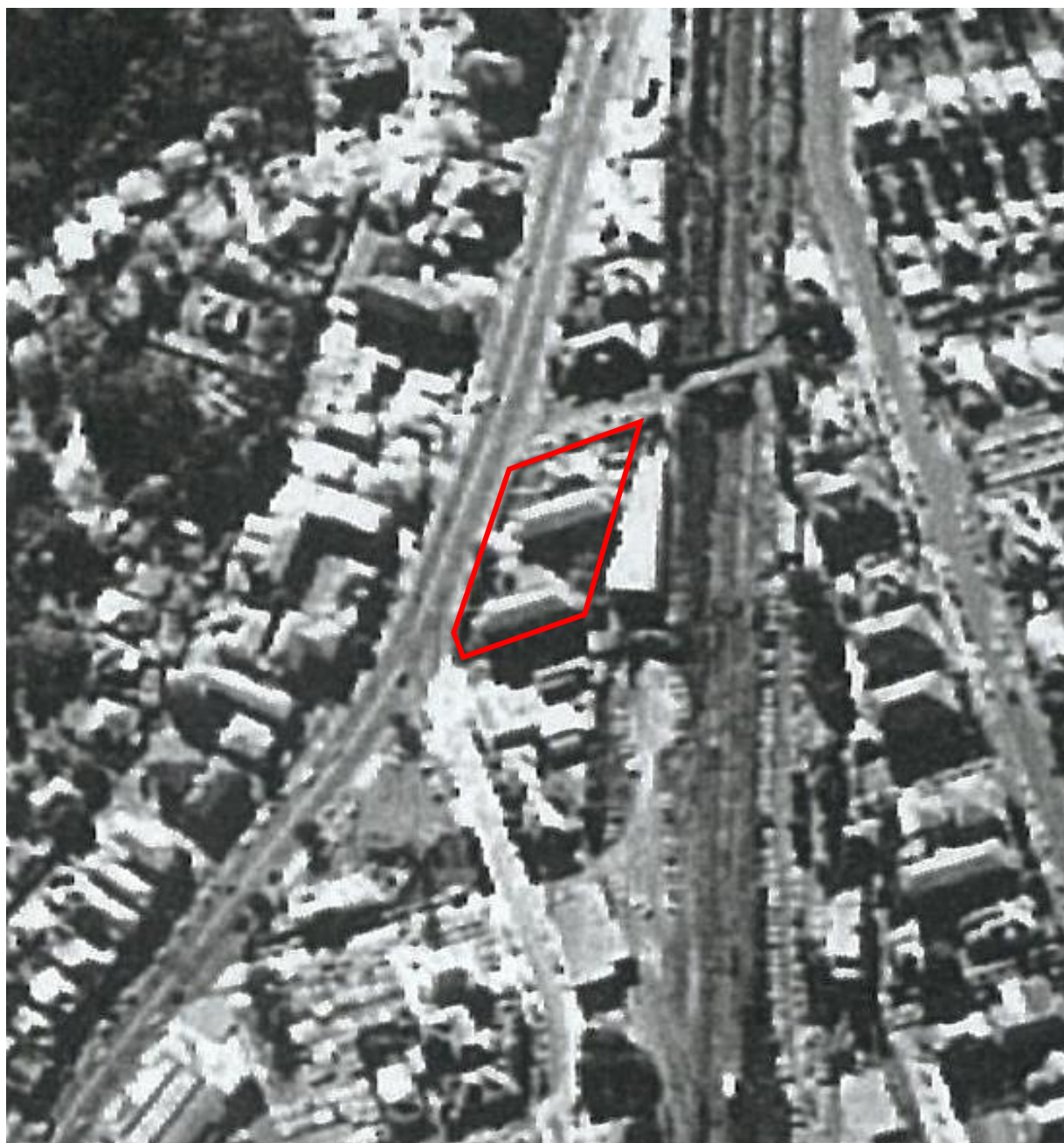


Legend

— Site Boundary

Source: NSW Spatial Services


	1961 Aerial Photograph Proposed Mixed Use Development 2 Wilson Street and 849-859 Pacific Highway, Chatswood CLIENT: 853 Pacific Highway Pty Ltd ATF 2017 PHC Unit Trust	PROJECT: 99821.01
		PLATE No: D3
		REV: 0
		DATE: 23-Sep-20



Legend

— Site Boundary

Source: NSW Spatial Services


	1970 Aerial Photograph	PROJECT: 99821.01
	Proposed Mixed Use Development	PLATE No: D4
	2 Wilson Street and 849-859 Pacific Highway, Chatswood	REV: 0
	CLIENT: 853 Pacific Highway Pty Ltd ATF 2017 PHC Unit Trust	DATE: 23-Sep-20



Legend

— Site Boundary

Source: Willoughby Maps


	1978 Aerial Photograph	PROJECT: 99821.01
	Proposed Mixed Use Development	PLATE No: D5
	2 Wilson Street and 849-859 Pacific Highway, Chatswood	REV: 0
	CLIENT: 853 Pacific Highway Pty Ltd ATF 2017 PHC Unit Trust	DATE: 23-Sep-20



Legend

— Site Boundary

Source: NSW Spatial Services


	1986 Aerial Photograph Proposed Mixed Use Development 2 Wilson Street and 849-859 Pacific Highway, Chatswood	PROJECT: 99821.01
		PLATE No: D6
		REV: 0
	CLIENT: 853 Pacific Highway Pty Ltd ATF 2017 PHC Unit Trust	DATE: 23-Sep-20



Legend

— Site Boundary

Source: NSW Spatial Services


	1991 Aerial Photograph Proposed Mixed Use Development 2 Wilson Street and 849-859 Pacific Highway, Chatswood CLIENT: 853 Pacific Highway Pty Ltd ATF 2017 PHC Unit Trust	PROJECT: 99821.01
		PLATE No: D7
		REV: 0
		DATE: 23-Sep-20



Legend


— Site Boundary

Source: NSW Spatial Services


	1994 Aerial Photograph	PROJECT: 99821.01
	Proposed Mixed Use Development	PLATE No: D8
	2 Wilson Street and 849-859 Pacific Highway, Chatswood	REV: 0
	CLIENT: 853 Pacific Highway Pty Ltd ATF 2017 PHC Unit Trust	DATE: 23-Sep-20



Legend

 Site Boundary

Source: Willoughby Maps

	1995 Aerial Photograph	PROJECT: 99821.01
	Proposed Mixed Use Development	PLATE No: D9
	2 Wilson Street and 849-859 Pacific Highway, Chatswood	REV: 0
	CLIENT: 853 Pacific Highway Pty Ltd ATF 2017 PHC Unit Trust	DATE: 23-Sep-20



Legend

— Site Boundary

Source: Willoughby Maps



2000 Aerial Photograph

**Proposed Mixed Use Development
2 Wilson Street and 849-859 Pacific
Highway, Chatswood**

CLIENT: 853 Pacific Highway Pty Ltd ATF 2017
PHC Unit Trust

PROJECT: 99821.01

PLATE No: D10

REV: 0


DATE: 23-Sep-20

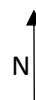


Legend

— Site Boundary

Source: Willoughby Maps

	2003 Aerial Photograph Proposed Mixed Use Development 2 Wilson Street and 849-859 Pacific Highway, Chatswood CLIENT: 853 Pacific Highway Pty Ltd ATF 2017 PHC Unit Trust	PROJECT: 99821.01
		PLATE No: D11
		REV: 0
		DATE: 23-Sep-20



Legend

— Site Boundary

Source: Willoughby Maps



2012 Aerial Photograph

**Proposed Mixed Use Development
2 Wilson Street and 849-859 Pacific
Highway, Chatswood**

CLIENT: 853 Pacific Highway Pty Ltd ATF 2017
PHC Unit Trust

PROJECT: 99821.01

PLATE No: D12

REV: 0


DATE: 23-Sep-20



Legend

— Site Boundary

Source: Willoughby Maps

	2018 Aerial Photograph Proposed Mixed Use Development 2 Wilson Street and 849-859 Pacific Highway, Chatswood CLIENT: 853 Pacific Highway Pty Ltd ATF 2017 PHC Unit Trust	PROJECT: 99821.01
		PLATE No: D13
		REV: 0
		DATE: 23-Sep-20

Appendix E

Planning Certificate



**PLANNING CERTIFICATE ISSUED UNDER SECTION 10.7(2&5)
ENVIRONMENT PLANNING AND ASSESSMENT ACT, 1979**

Certificate No: 43712
Receipt No: 2036203
Issue date: 08-Jul-2019
Customer Ref:

Massons
No. 5, The Upper Deck, 26-32 Pirrama Rd
PYRMONT NSW 2009

Property Location: 9/849 Pacific Highway, CHATSWOOD NSW 2067.
Legal Description: LOT 9 SP 1496

Disclaimer

1. *The information provided in this certificate has been obtained from Council's records. The Council advises that:*
 - (a) *other authorities may hold information in respect of the property not contained in the Council's records;*
 - and*
 - (b) *the Council's records themselves may not be complete or accurate in respect of the property.*
2. *The instrument(s) referred to in this certificate may contain other important information in respect to the property. In order to understand the effects of the instrument(s) on the property, the Council advises that the whole of each instrument(s) should be read and considered. This certificate cannot be used as a substitute for reading the whole of the instrument(s) referred to in the certificate.*
3. *It may be appropriate or necessary to obtain legal or other expert advice in respect of the matters contained in the certificate or the instruments referred to in the certificate.*
4. *The Council cannot and will not accept any liability in respect of any error, inaccuracy, or omission in this certificate.*

Debra Just
CHIEF EXECUTIVE OFFICER

(Computer printed copy – No signature required)

**PLANNING CERTIFICATE ISSUED UNDER SECTION 10.7(2&5)
ENVIRONMENT PLANNING AND ASSESSMENT ACT, 1979**

WILLOUGHBY
CITY COUNCIL

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Receipt No: 2036203
Issue date: 08-Jul-2019
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1. RELEVANT PLANNING INSTRUMENTS AND DEVELOPMENT CONTROL PLANS

(1) Environmental Planning Instruments

As at the date of this certificate the above mentioned land is affected by the following environmental planning instruments:

Willoughby Local Environmental Plan 2012

State Environmental Planning Policy No. 19 - Bushland in Urban Areas
State Environmental Planning Policy No. 21 - Caravan Parks
State Environmental Planning Policy No. 30 - Intensive Agriculture
State Environmental Planning Policy No. 32 - Urban Consolidation (Redevelopment of Urban Land)
State Environmental Planning Policy No. 33 - Hazardous and Offensive Development
State Environmental Planning Policy No. 50 - Canal Estate Development
State Environmental Planning Policy No. 55 - Remediation of Land
State Environmental Planning Policy No. 62 – Sustainable Aquaculture
State Environmental Planning Policy No. 64 - Advertising and Signage
State Environmental Planning Policy No. 65 - Design Quality of Residential Flat Development
State Environmental Planning Policy No. 70 - Affordable Housing (Revised Schemes)
State Environmental Planning Policy (Major Development) 2005
State Environmental Planning Policy (Infrastructure) 2007
State Environmental Planning Policy (Miscellaneous Consent Provisions) 2007
State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007
State Environmental Planning Policy (Exempt and Complying Development Codes) 2008
State Environmental Planning Policy (Affordable Rental Housing) 2009
State Environmental Planning Policy (State and Regional Development) 2011
State Environmental Planning Policy (Educational Establishments and Childcare Facilities) 2017
State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017
State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004
State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004
Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005

(2) Proposed Environmental Planning Instruments

As at the date of this certificate the above mentioned land is affected by the following proposed environmental planning instruments:

Draft State Environmental Planning Policy (Infrastructure) Amendment (Review) 2016

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(3) Development Control Plans

As at the date of this certificate the above mentioned land is affected by the following development control plans:

Development Control Plan 2005 - Sydney Foreshore and Waterways Area

The plan applies to all development proposals within the foreshores and waterways area identified in SREP (Sydney Harbour Catchment) 2005 - (Refer to the Foreshores and Waterways Area Map).

Willoughby Development Control Plan

2. ZONING AND LAND USE

(a) Zone Identity

R4 High Density Residential

SP2 Infrastructure

(b), (c), (d) (Development)

Zone R4 High Density Residential – under Willoughby Local Environmental Plan 2012

Objectives of zone

- *To provide for the housing needs of the community within a high density residential environment.*
- *To provide a variety of housing types within a high density residential environment.*
- *To enable other land uses that provide facilities or services to meet the day to day needs of residents.*
- *To allow for increased residential density in accessible locations, while minimising the potential for adverse impacts of such increased density on the efficiency and safety of the road network.*
- *To encourage innovative design in providing a comfortable and sustainable living environment that also has regard to solar access, privacy, noise, views, vehicular access, parking and landscaping.*

Permitted without consent

Nil

Permitted with consent

Boarding houses; Child care centres; Community facilities; Home businesses; Home occupations; Neighbourhood shops; Places of public worship; Recreation areas; Residential flat buildings; Respite day care centres; Roads; Shop top housing.

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Prohibited

Any development not specified in item 2 or 3.

Zone SP2 Infrastructure – under Willoughby Local Environmental Plan 2012

Objectives of zone

- To provide for infrastructure and related uses.
- To prevent development that is not compatible with or that may detract from the provision of infrastructure.
- To provide for classified roads.

Permitted without consent

Nil

Permitted with consent

Roads; The purpose shown on the Land Zoning Map, including any development that is ordinarily incidental or ancillary to development for that purpose.

Prohibited

Any development not specified in item 2 or 3.

NOTE: You are advised that in addition to the matters set out above, the instrument may make further provisions with respect to the purposes for which development may be carried out on the land without consent and with consent and the purposes for which development of the land is prohibited. Applicants are advised that they should read the whole of the instrument(s) in order to determine whether that instrument prohibits, restricts or otherwise relates to the development of the land.

(e) Development Standards applying to the land fixing minimum dimensions for the erection of a dwelling house?

No

(NB: the erection of a dwelling house on the land requires consent to be obtained which will require assessment of the particular application under provisions of the Act. The Council makes no representation that consent will be granted to any application.)

(f) Critical Habitat

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(g) Conservation Area

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(h) Heritage Item

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3. COMPLYING DEVELOPMENT

NOTE: This certificate only addresses matters raised in Clauses 1.17A (1) (c) to (e), (2), (3) and (4), 1.18 (1) (c3) and 1.19 of State Environmental Planning Policy (Exempt and Complying Development Codes) 2008. It is your responsibility to ensure that the development is permissible with consent in the land use zone and that you comply with any other requirements of the State Environmental Planning Policy (Exempt and Complying Development Codes) 2008 including Clauses 1.18 and 1.20 of that Policy, the Complying Development Codes in Parts 3 to 8 of that Policy, and the Willoughby Local Environmental Plan 2012. Failure to comply with these provisions may mean that a Complying Development Certificate issued under the provisions of the State Environmental Planning Policy (Exempt and Complying Development Codes) 2008 is invalid.

(a) General Housing Code and Rural Housing Code

Part of the land is land on which complying development may be carried out under these Codes. The land is affected by the following land exemption(s):

- part of the land is land that is reserved for a public purpose in an environmental planning instrument

(b) Housing Alterations Code and General Development Code

The land is land on which complying development may be carried out under these Codes.

(c) Commercial and Industrial Alterations Code

The land is land on which complying development may be carried out under this Code.

(d) Commercial and Industrial (New Buildings and Additions) Code

Part of the land is land on which complying development may be carried out under this Code. The land is affected by the following land exemption(s):

- part of the land is land that is reserved for a public purpose in an environmental planning instrument

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(e) Subdivisions Code

The land is land on which complying development may be carried out under this Code.

(f) Demolition Code

The land is land on which complying development may be carried out under this Code.

(g) Fire Safety Code

The land is land on which complying development may be carried out under this Code.

(h) Container Recycling Facilities Code

The land is land on which complying development may be carried out under this Code.

(i) Low Rise Medium Density Housing Code

The provisions of the Low Rise Medium Density Housing Code do not apply to the Willoughby Local Government Area. They have been deferred until 1 July 2019.

4. COASTAL PROTECTION (repealed)

4A. CERTAIN INFORMATION RELATING TO BEACHES AND COASTS (repealed)

4B. ANNUAL CHARGES UNDER LOCAL GOVERNMENT ACT 1993 FOR COASTAL PROTECTION SERVICES THAT RELATE TO EXISTING COASTAL PROTECTION WORKS.

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5. MINE SUBSIDENCE

The land is not within a proclaimed mine subsidence district under Section 15 of the Mine Subsidence Compensation Act, 1961.

6. ROAD WIDENING AND REALIGNMENT

The land is affected by road widening or road realignment under:-

- 1) Division 2 of Part 3 of the Roads Act 1993 - No.
- 2) An Environmental Planning Instrument - Yes.
- 3) A resolution of Council - No.

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7. COUNCIL AND OTHER PUBLIC AUTHORITY POLICIES ON HAZARD RISK

The land is not affected by a policy adopted by any other public authority and notified to the Council for the express purpose of its adoption by that authority being referred to in planning certificates issued by the Council, that restricts the development of the land because of the likelihood of land slip, bushfire, tidal inundation, subsidence, acid sulphate soils or any other risk (other than flooding).

It is the Council's policy to consider previous land uses to determine whether land may be affected by contamination which restricts or prohibits the carrying out of development on the land. Depending on the previous uses of the land, the applicant may be required to investigate possible site contamination and/or carry out remediation as part of any proposed development and the development potential of the site may be restricted or prohibited. This is assessed by the Council on a case-by-case basis.

The Council will have regard to Clause 6.1 Acid Sulfate Soils of Willoughby Local Environmental Plan 2012 and the Acid Sulfate Soils Map in assessing any development applications relating to the land.

7A. FLOOD RELATED DEVELOPMENT CONTROLS INFORMATION

- (1) Development on that land or part of the land for the purposes of dwelling houses, dual occupancies, multi-dwelling housing or residential flat buildings (not including development for the purposes of group homes or seniors housing) is not subject to flood related development controls
- (2) Development on that land or part of the land for any other purpose is not subject to flood related development controls

NB. This response does not imply that development for particular purposes is permissible on the land. Development is permissible in accordance with the zoning and landuse as set out in Question 2. ZONING AND LANDUSE of this Certificate.

Based on the information currently available from Council's flood maps, this land is not affected by overland flooding. However, Council reviews flood studies on an on-going basis and new information may become available in future which may alter the flood affectation status of the subject parcel of land.

It is important to note that in some circumstances, a piece of land may experience inundation as a result of the creation of stormwater detention basins, channels or flow paths after the development of the land. The applicant is therefore advised to engage the services of a suitably qualified engineer to investigate whether remedial measures should be adopted to minimise the effects of any such inundation.

8. LAND RESERVED FOR ACQUISITION

The land is affected by an environmental planning instrument, deemed environmental planning instrument or draft environmental planning instruments which provides for the acquisition of the land by a public authority, as referred to in section 3.15 of the Act.

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9. CONTRIBUTION PLANS

Willoughby Local Infrastructure Contributions Plan 2019.

9A. BIODIVERSITY CERTIFIED LAND

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10. BIODIVERSITY STEWARDSHIP SITES

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10A. NATIVE VEGETATION CLEARING SET ASIDES

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11. BUSH FIRE PRONE LAND

The land has not been identified as bush fire prone under the Rural Fires and Environmental Legislation Amendment Act 2002.

12. PROPERTY VEGETATION PLANS

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13. ORDERS UNDER TREES (DISPUTES BETWEEN NEIGHBOURS) ACT 2006

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14. DIRECTIONS UNDER PART 3A

--

15. SITE COMPATIBILITY CERTIFICATES AND CONDITIONS AFFECTING SENIORS HOUSING

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**16. SITE COMPATIBILITY CERTIFICATES FOR INFRASTRUCTURE OR SITE COMPATIBILITY
CERTIFICATE (SCHOOLS OR TAFE ESTABLISHMENTS)**

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17. SITE COMPATIBILITY CERTIFICATES AND CONDITIONS FOR AFFORDABLE RENTAL HOUSING

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18. PAPER SUBDIVISION INFORMATION

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19. SITE VERIFICATION CERTIFICATES

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20. LOOSE-FILL ASBESTOS INSULATION

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21. AFFECTED BUILDING NOTICES AND BUILDING PRODUCT RECTIFICATION ORDERS

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In addition to the information provided above, the following information is provided in respect of the
abovementioned land.

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NOTES:

Hand written or typed items appearing on this certificate at the time of issue are to be read as forming part of this
certificate.

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In accordance with Section 10.7(5) and subject to Section 10.7(6) of the Environmental Planning and Assessment Act 1979, the following additional information is provided in respect of the abovementioned land:

Under Clause 5.10 of Willoughby Local Environmental Plan 2012 the Council, before granting consent to development on land in the vicinity of a heritage item or a heritage conservation area, may require the assessment of the effect the proposed development has on the heritage significance of the heritage item or heritage conservation area concerned.

Information on the preservation of trees and vegetation can be obtained from Council and on Council's website.

Council is unaware of whether the current use is in accordance with an approval which may have been issued. You are advised to rely on your own enquiries.

Registers of Planning Consents and Subdivision Approvals may be inspected at the Council offices for particulars relating to Development Consents / Subdivision Approvals which may have been issued for use or development of the land.

Council has not received notification from the Heritage Council of New South Wales that the property is subject to a Conservation Order or notice under the Heritage Act, 1977.

Appendix F


Site Photographs



Photograph 1 - North of site (25/09/2020)



Photograph 2 - West of site (25/09/2020)

 Douglas Partners Geotechnics Environment Groundwater	Site Photographs Proposed Mixed Use Development 2 Wilson Street and 849-859 Pacific Highway, Chatswood CLIENT: 853 Pacific Highway Pty Ltd ATF 2017 PHC Unit Trust	PROJECT: 99821.01
		PLATE No: F1
		REV: 0
		DATE: 25-Sep-20



Photograph 3 - South of site (25/09/2020)



Photograph 4 - East of site (25/09/2020)



Site Photographs

**Proposed Mixed Use Development
2 Wilson Street and 849-859 Pacific
Highway, Chatswood**

CLIENT: 853 Pacific Highway Pty Ltd ATF 2017
PHC Unit Trust

PROJECT: 99821.01

PLATE No: F2

REV: 0

DATE: 25-Sep-20