# Dunedin City Council Land Information Memorandum

Issued in accordance with Section 44A of the Local Government Official Information and Meetings Act 1987

## Should you require further clarification of any of the information listed in this report, please phone our Customer Services Agency on 03 477 4000.

This Land Information Memoranda (LIM) has been prepared in accordance with Section 44A of the Local Government Official Information and Meetings Act 1987. It contains only information obtained from the records held by the Dunedin City Council as at **8 February 2024** 

The Dunedin City Council has not carried out an inspection of the land and/or buildings for the purposes of preparing this LIM. The Dunedin City Council records may not show illegal or unauthorised buildings or works on the land. Accordingly this report may not necessarily reflect the current status of the property. Examples of situations which affect the property but are not recorded in this report include: unauthorised work not known to Council and breaches of Consents or Licences that are not the subject of a formal Requisition or Notice.

The applicant is solely responsible for ensuring that the land or any building or works on the land is suitable for a particular purpose. The applicant should check the Records of Title as this report may not include information that is registered on the Records of Title. The Records of Title may record further information or obligations relating to the land.

Further information about this property may be available from other agencies such as the Otago Regional Council, Nova Gas, Telecom New Zealand (Chorus) or Delta Utility Services Limited.

## **PROPERTY ADDRESS**

## 48 Howorth Road Fairfield

LIM Applicant Print Date John McLeish Milnes 08-Feb-2024

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Property Details Rates Details Building, Plumbing and Drainage Site Hazards Hazardous Substances Environmental Health Licensing City Planning Transport Water Foul Sewer and Waste Water Appendix

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|--|-----------------------------------|--|--|
| Property ID<br>Address<br>Parcels  | 5050181<br>48 Howort<br>LOT 34 DP | h Road Fairfield<br>15177                            |  |
| Rubbish Day  | Thursday                          |  |  |
|  |                                   |  |  |
|  |                                   | RATES DETAILS  |  |
| Rate Account   |                                   | 2050181  |  |
| Address  |                                   | 48 Howorth Road Fairfield                            |  |
| Valuation Number   |                                   | 27851-56000  |  |
| <b>Latest Valuation Details</b><br>Capital Value<br>Land Value<br>Value of Improvements<br>Area (Hectares)<br>Units of Use   |                                   | \$750,000<br>\$345,000<br>\$405,000<br>0.1379HA<br>1 |  |
| <b>Current Rates</b><br>Current Rating Year Starting<br>Dunedin City Council Rates   |                                   | 01-Jul-2023<br>\$3,342.10                            |  |
| Rates Outstanding for Year   |                                   | \$1,671.08   |  |
| For further explanation on the rate account, or to enquire about information referred to on<br>this page, please contact Rates Staff between 8:30am and 5:00pm weekdays at the<br>enquiries counter on the Ground floor of the Civic Centre, 50 The Octagon, Dunedin, or by<br>phoning 477 4000. |                                   |  |  |
|  |                                   |  |  |

# BUILDING, PLUMBING AND DRAINAGE

#### **Minimum Floor Levels**

Clause E1.3.2 of the New Zealand Building Code requires that surface water, resulting from an event having a 2% probably of occurring annually, shall not enter buildings. This requirement applies to Housing, Communal Housing, Communal Residential and Communal non-residential buildings. For guidance when establishing minimum floor levels please refer to : <u>https://www.dunedin.govt.nz/services/building-services/minimum-floor-levels</u> and for links to specific areas: <u>https://www.dunedin.govt.nz/services/building-s</u>

#### Public Sewer sheets.

WARNING. Please note that public sewer reticulation sheets are scaled in either Imperial feet or Metric metres. Please check with the Duty Drainage Inspector if in doubt.

#### Dunedin City Council Private Drainage plans incomplete.

WARNING. The Dunedin City Council's private drainage records (plans) prior to 1 January 1993 may be incomplete or not clearly recorded. Owners therefore are advised to carry out work with due care to avoid damage to any private drain not detailed because of the lack of information filed in the Council's records.

#### **Building and Drainage Information**

#### **Council Stormwater & Foul Sewer Connections available.**

There is Council Stormwater outfalls and Foul Sewer Connections adjacent to this land, to which buildings within this land may connect. A plan of these is attached.

#### Private Stormwater Drains servicing existing buildings

There are Private Stormwater drains servicing existing buildings on this land.

Drainage plan indicates Private Stormwater Drain discharges to Watercourse in adjoining property.

#### Private Foul Drains servicing existing buildings

There are Private Foul drains servicing existing buildings on this land.

Drainage plan indicates Private Foul Drain connects to Council Foul Sewer in Section.

#### **Council Foul Sewers within land.**

There is Council Foul Sewers within this land. A plan of these is attached.

#### Private Foul drains servicing adjoining properties.

There is a Private Foul drain servicing 50 Howorth Road which connects to Council Foul Sewer in 48 Howorth Road.

#### **Building and Drainage Consents**

There are no records of any Building Consents for this property.

#### **Building and Drainage Permits**

Building Permits were issued prior to the introduction of the Building Act 1992. Code Compliance Certificates were not required or issued for permits.

#### <u>H-1991-111013</u> AAB19911940

3286 - Erect garage with games room and store room (Milnes). The permit was lodged on 31-Jul-1991.

#### H-1975-276933 AAS19750306

2691 - Plumbing and drainage for new dwelling (Milnes). The permit was lodged on 12-Nov-1975.

<u>H-1975-276934</u> AAS19750307 G53902 - Erect dwelling (Milnes). The permit was lodged on 13-May-1975.

H-1989-287613 AAS19890294

G004066 - Install Yunca heater (Milne). The permit was lodged on 10-Mar-1989.

<u>H-1992-1763</u> AAD1992

M1763 - Plumbing and drainage (Milnes). The permit was lodged on 04-Mar-1992.

For further explanation on the current status of any consent, or to enquire about information referred to on this page, please contact Building Control Staff between 8:30am and 5:00pm weekdays at the enquiries counter on the Ground floor of the Civic Centre, 50 The Octagon, Dunedin, or by phoning 477 4000.

## HAZARDS

## SITE HAZARDS

#### Fairfield Zone B

Properties in this zone are located over a former underground coal mining area. Properties in this area are capable of being affected by shallow trough subsidence and in exceptional circumstances, crown hole subsidence. Crown-holes take the form of relatively small (generally less than 4 metres in diameter but up to 10 metres) circular pits with vertical or overhanging sides. Trough subsidences are usually characterised by broad shallow troughs normally not more than 1 metre deep with differential settlement (and often fissuring) around the margins. The risk of such occurrences is considered to be low for shallow trough subsidence and for crown hole subsidence, extremely low.

It would be prudent for building and foundation design to take the possibility of these occurrences into account.

A copy of the map is available at <u>http://www.dunedin.govt.nz/council-online/pay-online/request-lim/hazard-information</u>

This property is identified in Green Island Coal Field - New Zealand Geological Survey - A.R Mutch Oct 1982, SubClass - Coal Mine.

The <u>Otago Regional Council</u> has produced a number of reports for the Dunedin City District which outline areas affected by natural hazards including slippage, flooding, subsidence and inundation.

These reports are publicly available and can be accessed here: <u>https://www.orc.govt.nz/plans-policies-reports/reports-and-publications/natural-hazards</u>

These reports do not provide property specific information, and may not describe all natural hazards that affect the land that is the subject of this LIM report. We recommend that in addition to reading these reports, that you seek independent advice about how this property may be affected by natural hazards including natural hazards that are not described in the reports produced by the Otago Regional Council.

#### **Otago Regional Council - Natural Hazards Database**

The characteristics of general natural hazards in the vicinity of this property are also available on the Otago Regional Council's Natural Hazards Database.

https://www.orc.govt.nz/managing-our-environment/natural-hazards/otago-naturalhazards-database

# HAZARDOUS SUBSTANCES

#### WARNING – Change in legislation and management of hazardous substances

On 1 April 2004, all Dunedin City Council Dangerous Goods Licences expired. From this date they became the responsibility of the Environmental Protection Authority (EPA) under the Hazardous Substances and New Organisms Act 1996. All new licences for hazardous substances were issued by independent Test Certifiers approved by the EPA. The Council no longer holds current information on the use of hazardous substances at these premises and hazardous substances may be present without the Council's knowledge. The Council was advised by the EPA in 2016 that Worksafe had taken over responsibility for managing Location Test certificates under the Hazardous Substances and New Organisms Act 1996. The EPA no longer hold any information in relation to Location Test Certificates If you have any questions, please contact Worksafe.

#### **Contaminated Site, Hazardous Substances and Dangerous Goods Information**

No information

## ENVIRONMENTAL HEALTH

No records were found of Environmental Health involvement with this property.

## LICENSING

#### **Health Licensing**

There are no records of any Health Licences for this property.

#### Liquor Licensing

There are no records of any Liquor Licences for this property.

## CITY PLANNING

The information provided with this LIM on District Plan requirements and resource consents has been verified by City Planning in relation to the subject property only. All information included in relation to other land surrounding the site is indicative.

#### **Accuracy of Boundaries**

Knowing the true location of the property boundaries on the ground is important in determining what can be carried out on the land under the District Plan and in determining whether the current activity complies with the District Plan or any resource consent. Please note that the Council's aerial photographs may not accurately depict the extent of the property. The Record of Title for the site should be checked in the first instance.

A surveyor may need to be consulted to establish the true location of the title boundaries on the ground.

#### Access to Site

The legality of any access to the site is important in determining what can be carried out on the land under the District Plan and in determining whether the current activity complies with the District Plan or any resource consent. It is recommended that the Record of Title and/or a lawyer be consulted regarding the legality of any legal and/or physical access to the site (and the maintenance thereof).

#### Heritage New Zealand Pouhere Taonga Act 2014

The Heritage New Zealand Pouhere Taonga Act 2014 applies in addition to any protection provided to a building or site by the District Plan. The Heritage New Zealand Pouhere Taonga Act 2014 makes it unlawful for any person to destroy, or modify the whole or any part of an archaeological site, whether or not the land on which the site is located is designated, or a resource or building consent has been issued, without the prior authority of Heritage New Zealand. The Heritage New Zealand Pouhere Taonga Act 2014 defines an archaeological site as a place associated with pre-1900 activity, where there may be evidence relating to the history of New Zealand. Pre-1900 buildings are considered archaeological sites under the Heritage New Zealand Pouhere Taonga Act 2014 and are also often associated with subsurface archaeological remains that provide evidence of pre-existing use of the site. Council records may not necessarily identify the precise date upon which an existing building was constructed. Contact the Dunedin office of Heritage New Zealand for further information: infodeepsouth@heritage.org.nz ; 03 477 9871.

# **Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011**

The Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011 came into force on 1 January 2012. The National Environmental Standard applies to any piece of land on which an activity or industry described in the current edition of the Hazardous Activities and Industries List (HAIL) is being undertaken, has been undertaken or is more likely than not to have been undertaken. (The current edition of the HAIL is available on the Ministry for the Environment website at <a href="https://www.mfe.govt.nz">www.mfe.govt.nz</a>.) Activities on HAIL sites may need to comply with permitted activity conditions specified in the National Environmental Standard and/or might require resource consent. (The Otago Regional Council should also be consulted for any rules in might have in regards to the use or development of contaminated sites.)

If a person wishes to establish whether a piece of land has had hazardous activities or industries conducted on it, and thus whether activities on that land are controlled by the National Environmental Standard, then the person must pay for a review of the information about the land held by the Council, or pay for a suitably qualified and experienced practitioner to undertake a preliminary site inspection. Formal confirmation from the Council that resource consent is not required under the National Environmental Standard can only be given through a certificate of compliance application.

#### **Consent Notices**

There are no Consent Notices recorded for this property. It is recommended that the applicant check the Record of Title for any notices or covenants that may affect the property.

#### **District Plan Information**

Dunedin currently has an Operative Dunedin City District Plan, and the Proposed Second Generation Dunedin City District Plan (2GP). Accordingly, both of these plans may affect the development potential of this site and surrounding properties.

As a general principle, rules in the 2GP must be considered along with the rules of the Operative District Plan until such time as the rules of the 2GP become operative, or are treated as operative. The policies and objectives of both plans should also be considered.

The 2GP was publicly notified on Saturday 26 September 2015. The submission period closed on Tuesday 24 November 2015. Decisions on the 2GP were released on Wednesday 7 November 2018. The appeal period closed on Wednesday 19 December 2018. The schedule of appeals can be viewed at <a href="https://www.dunedin.govt.nz/council/district-plan/2nd-generation-district-plan/appeals-received-on-the-2qp">https://www.dunedin.govt.nz/council/district-plan/appeals-received-on-the-2qp</a>.

You are advised to refer to our website to determine which rules in the 2GP have legal effect or are fully operative, and to determine which rules in the Operative District Plan are now inoperative.

The 2GP is subject to change at any time. Variation 2 (Additional Housing Capacity) to the 2GP was notified on Wednesday 3 February 2021. No rule changes proposed in Variation 2 had legal effect from the date of notification. Rules that did not have submissions in opposition to them are deemed operative.

Please refer to our website for more information on Variation 2 at <u>https://www.dunedin.govt.nz/council/district-plan/2nd-generation-district-plan/plan-change-dis-2021-1-variation-2</u>

Further rules will come into legal effect and/or become fully operative at the release of decisions and the resolution of appeals.

You should check with the Council whether any changes have occurred since the date this LIM report was issued. The information provided with this LIM on district plan requirements is applicable as at the date this LIM is issued: there may be changes to the district plan rules following the release of this LIM that may affect this site and surrounding properties.

You should ensure that you consult the information and relevant planning maps in the Operative District Plan which can be found on our website at <a href="https://www.dunedin.govt.nz/council/district-plan/district-plan-2006">https://www.dunedin.govt.nz/council/district-plan/district-plan-2006</a> and the 2GP which can be found on our website at <a href="https://www.dunedin.govt.nz/council/district-plan/2nd-generation-district-plan">https://www.dunedin.govt.nz/council/district-plan/2006</a> and the 2GP which can be found on our website at <a href="https://www.dunedin.govt.nz/council/district-plan/2nd-generation-district-plan">https://www.dunedin.govt.nz/council/district-plan/2006</a> and the 2GP which can be found on our website at <a href="https://www.dunedin.govt.nz/council/district-plan/2nd-generation-district-plan">https://www.dunedin.govt.nz/council/district-plan/2006</a> and the 2GP which can be found on our website at <a href="https://www.dunedin.govt.nz/council/district-plan/2nd-generation-district-plan">https://www.dunedin.govt.nz/council/district-plan/2nd-generation-district-plan</a> as well as at all Dunedin City Council service centres and libraries.

#### **OPERATIVE DISTRICT PLAN INFORMATION**

#### Zoning

This property is zoned as follows in the District Plan.

Zone

**RESIDENTIAL 1** 

#### Noise

This property is located in a Noise Area where the noise limits outlined below apply. Rule 21.5.1(i)(b) also specifies a maximum noise limit of 75 dBA Lmax between 9.00 pm on any night and 7.00 am the following day measured at the boundary of the site or within any other site. Note that some activities have a resource consent or existing use rights that allow these limits to be exceeded. Some activities are also exempted from noise limits. Furthermore, the actual limits that apply will also depend on whether this site adjoins a Noise Area Boundary and whether there are Special Audible Characteristics. Refer to Section 21.5 of the District Plan for further details. Every occupier of land is also under a general duty to adopt the best practicable option to ensure that the emission of noise from land does not exceed a reasonable level.

Noise Zone

50Dt/35Nt dBA, 45SP dBA

#### SECOND GENERATION PLAN INFORMATION

#### Zoning

General Residential 1 (refer Section 15, Residential) •

#### **Scheduled Items**

Nil

#### **Overlay Zones**

Hazard 2 (land instability) Overlay Zone

#### **Mapped Areas**

Nil

#### **Resource Consents**

The following Resource Consents are recorded for this property.

#### <u>RMA-1991-353217</u> Description

Decision

Resource Management Act (Historical Data) erect a garage accessory building Lodgement Date 01-Aug-1991 Granted Decision Date 12-Aug-1991 Current Status **Consent Issued** 

#### **RESOURCE CONSENTS WITHIN 50 METRES OF 48 HOWORTH ROAD FAIRFIELD** 2312 R Dunedin Southern Motorway(Sh1) Road Burnside

LUC-2008-449/A Land Use Consent variation of Condition 1 of LUC-2008-449, land use consent to install a new telecommunications facility. The outcome was s127 Upheld on 15/04/2016.

SUB-1960-353567 Subdivision Consent Saddle hill proposed subdivision. The outcome was Declined on 26/08/1960.

DIS-2011-1 District Plan Matters Notice of Requirement for alteration to designation - SH1 Caversham Valley safety improvements. The outcome was Granted on 20/04/2012.

S243-2011-2 s243 Cancellation of Easement section 243 cancellation of easement. The outcome was Granted on 01/07/2011.

OUT-2010-4 Outline Plan weigh bridge on State Highway 1. The outcome was Issued on 20/05/2010.

SUB-2010-8 Subdivision Consent Subdivide Section 1 SO 335604 into two lots. The outcome was Granted on 08/03/2010.

LUC-2008-449 Land Use Consent install a new telecommunications facility. The outcome was Granted on 03/02/2009.

RMA-2004-368446 Resource Management Act (Historical Data) ERECT A STONE CAIRN AT THE NORTHERN & SOUTHERN MOTORWAY ENTRANCES TO THE CITY. The outcome was Granted on 09/12/2004.

RMA-2000-364392 Resource Management Act (Historical Data) ALTERATION TO AN EXISTING DESIGNATION (MINOR MODIFICATIONS) D466 (Other). The outcome was Granted on 22/11/2000.

RMA-2005-369111 Resource Management Act (Historical Data) SECTION 226 FOR SECTION 14 SO335604 (Other). The outcome was Declined on 17/06/2005.

RMA-2004-368032 Resource Management Act (Historical Data) SEC 226 CERTIFICATE FOR SECTION 10 S.O. 313291 (Other). The outcome was Declined on 16/02/2005.

RMA-2004-368031 Resource Management Act (Historical Data) SEC 226 CERTIFICATE FOR SECTIONS 11 & 12 S.O. 313291 (Other). The outcome was Declined on 16/02/2005. RMA-1999-363455 Resource Management Act (Historical Data) OUTLINE PLAN OF WORKS FOR FAIRFIELD BYPASS MOTORWAY (Other). The outcome was Granted on 16/11/1999. RMA-2000-364243 Resource Management Act (Historical Data) AN OUTLINE PLAN APPROVAL FOR RE DESIGN OF FAIRFIELD BY-PASS (Other). The outcome was Granted on 08/09/2000.

<u>RMA-1992-355033</u> Resource Management Act (Historical Data) SUBDIVISION Ownr:TRANSIT NZ LTD / App: WORKS CONSULTANCY PRIVATE BAG DN (Non-Notified -Non Complying). The outcome was Granted on 21/05/1992.

POL-2005-350358 Planning Other Legislation REMOVE BUILDING LINE RESTRICTION (Other). The outcome was Granted on 10/10/2005.

#### 5050178 50 Howorth Road Fairfield

SUB-1976-353458 Subdivision Consent Subdivision of land. The outcome was Granted on 06/11/1976.

<u>RMA-1993-356129</u> Resource Management Act (Historical Data) ERECT GARAGE ADDITION TO DWELLING Owner: P W WEST / App: P W WEST 50 HOWORTH RD FAIRF. (Non-Notified - Non Complying). The outcome was Granted on 30/07/1993.

## 5050184 40 Howorth Road Fairfield

<u>RMA-1994-357076</u> Resource Management Act (Historical Data) ER GARAGE ON SITE Ownr:R A CAIN / App: R CAIN 40 HOWARTH RD (Non-Notified - Non Complying). The outcome was Granted on 28/11/1994.

#### 5050201 19 Bremner Street Fairfield

<u>LUC-1979-354112</u> Land Use Consent Construct tower for purpose of supporting antennae. The outcome was Granted on 08/09/1979.

### 5050205 27 Bremner Street Fairfield

<u>LUC-1988-354630</u> Land Use Consent Dispensation from height requirement. The outcome was Granted on 28/09/1988.

#### 5105941 39 Howorth Road Fairfield

<u>RMA-2001-365181</u> Resource Management Act (Historical Data) Section 127 request for change to condition of RMA93166 for reduction of width of Right of Way B in Stage 2 of subdivision - DP300725 (Other). The outcome was Granted on 16/11/2001.

<u>RMA-2001-365128</u> Resource Management Act (Historical Data) Section 127 request for change to conditions of RMA93166 to incorporate new Stage 2A (DP304278) in the development - to create recreation reserve and balance area (Other). The outcome was Granted on 14/04/2002.

<u>RMA-2000-364494</u> Resource Management Act (Historical Data) Section 127 request for change to condition of RMA 93166 - for installation of water pipe in stage 2 of subdivision - DP300725 (Other). The outcome was Granted on 21/02/2001.

<u>RMA-2000-364424</u> Resource Management Act (Historical Data) Section 127 request for variation of conditions of RMA93166 to allocate conditions on a stage by stage basis (Other). The outcome was Granted on 06/12/2000.

<u>RMA-1997-361578</u> Resource Management Act (Historical Data) ERECT TWO SIGNS WHICH EXCEED MAXIMUM AREA (Non-Notified - Restricted Discretionary). This consent has since Lapsed.

<u>RMA-1993-355803</u> Resource Management Act (Historical Data) Subdivision of CT OT13D/101 for development of 119 Residential sites in at least 6 stages (Sunninghurst Estate subdivision) - Applicant: LANDCORP PROPERTIES C/- BOX 1083 DN (Non-Notified - Non Complying). The outcome was Granted on 16/08/1993.

## 5106264 41 Howorth Road Fairfield

<u>RMA-2001-365181</u> Resource Management Act (Historical Data) Section 127 request for change to condition of RMA93166 for reduction of width of Right of Way B in Stage 2 of subdivision - DP300725 (Other). The outcome was Granted on 16/11/2001.

<u>RMA-2001-365128</u> Resource Management Act (Historical Data) Section 127 request for change to conditions of RMA93166 to incorporate new Stage 2A (DP304278) in the development - to create recreation reserve and balance area (Other). The outcome was Granted on 14/04/2002.

<u>RMA-2000-364494</u> Resource Management Act (Historical Data) Section 127 request for change to condition of RMA 93166 - for installation of water pipe in stage 2 of subdivision - DP300725 (Other). The outcome was Granted on 21/02/2001.

<u>RMA-2000-364424</u> Resource Management Act (Historical Data) Section 127 request for variation of conditions of RMA93166 to allocate conditions on a stage by stage basis (Other). The outcome was Granted on 06/12/2000.

<u>RMA-1993-355803</u> Resource Management Act (Historical Data) Subdivision of CT OT13D/101 for development of 119 Residential sites in at least 6 stages (Sunninghurst Estate subdivision) - Applicant: LANDCORP PROPERTIES C/- BOX 1083 DN (Non-Notified - Non Complying). The outcome was Granted on 16/08/1993.

#### 5106320 43 Howorth Road Fairfield

<u>LUC-2009-221</u> Land Use Consent alteration - installation of a kitchenette within an existing dwelling. The outcome was Granted on 03/07/2009.

<u>RMA-2001-365181</u> Resource Management Act (Historical Data) Section 127 request for change to condition of RMA93166 for reduction of width of Right of Way B in Stage 2 of subdivision - DP300725 (Other). The outcome was Granted on 16/11/2001.

<u>RMA-2001-365128</u> Resource Management Act (Historical Data) Section 127 request for change to conditions of RMA93166 to incorporate new Stage 2A (DP304278) in the development - to create recreation reserve and balance area (Other). The outcome was Granted on 14/04/2002.

<u>RMA-2000-364494</u> Resource Management Act (Historical Data) Section 127 request for change to condition of RMA 93166 - for installation of water pipe in stage 2 of subdivision - DP300725 (Other). The outcome was Granted on 21/02/2001.

<u>RMA-2000-364424</u> Resource Management Act (Historical Data) Section 127 request for variation of conditions of RMA93166 to allocate conditions on a stage by stage basis (Other). The outcome was Granted on 06/12/2000.

<u>RMA-1993-355803</u> Resource Management Act (Historical Data) Subdivision of CT OT13D/101 for development of 119 Residential sites in at least 6 stages (Sunninghurst Estate subdivision) - Applicant: LANDCORP PROPERTIES C/- BOX 1083 DN (Non-Notified -Non Complying). The outcome was Granted on 16/08/1993.

#### 5108604 8 Sunninghurst Drive Fairfield

<u>RMA-2001-365181</u> Resource Management Act (Historical Data) Section 127 request for change to condition of RMA93166 for reduction of width of Right of Way B in Stage 2 of subdivision - DP300725 (Other). The outcome was Granted on 16/11/2001.

<u>RMA-2001-365128</u> Resource Management Act (Historical Data) Section 127 request for change to conditions of RMA93166 to incorporate new Stage 2A (DP304278) in the development - to create recreation reserve and balance area (Other). The outcome was Granted on 14/04/2002.

<u>RMA-2000-364494</u> Resource Management Act (Historical Data) Section 127 request for change to condition of RMA 93166 - for installation of water pipe in stage 2 of subdivision - DP300725 (Other). The outcome was Granted on 21/02/2001.

<u>RMA-2000-364424</u> Resource Management Act (Historical Data) Section 127 request for variation of conditions of RMA93166 to allocate conditions on a stage by stage basis (Other). The outcome was Granted on 06/12/2000.

<u>RMA-1993-355803</u> Resource Management Act (Historical Data) Subdivision of CT OT13D/101 for development of 119 Residential sites in at least 6 stages (Sunninghurst Estate subdivision) - Applicant: LANDCORP PROPERTIES C/- BOX 1083 DN (Non-Notified -Non Complying). The outcome was Granted on 16/08/1993.

#### 5117720 47 Howorth Road Fairfield

<u>LUC-2019-112</u> Land Use Consent land use consent for the establishment of visitor accommodation catering for up to 13 guests. The outcome was Granted on 22/05/2019. <u>SUB-2011-103</u> Subdivision Consent boundary adjustment. The outcome was Granted on 09/09/2011.

<u>RMA-1996-359755</u> Resource Management Act (Historical Data) Subdivision - Consent Notice: variation approved 11.08.97. The outcome was Granted on 11/08/1997. **5120845 17 Awa Toru Drive Fairfield** 

SUB-2013-23/A Subdivision Consent s127 change of conditions to SUB-2013-23 to include land of Section 1 SO 335608. The outcome was s127 Upheld on 23/08/2017.

<u>LUC-2015-208</u> Land Use Consent Construct dwellings on 10 sites within an Urban Landscape Conservation Area. The outcome was Granted on 26/05/2015.

<u>LUC-2013-514</u> Land Use Consent land use consequential to a subdivision consent -

earthworks associated with access and bund formation, and for residential activity utilising a private access from Howorth Road serving a total of up to 17 residential units. The outcome was Granted on 20/12/2013.

<u>SUB-2013-107</u> Subdivision Consent subdivision creating 15 lots (reconfiguration of SUB-2011-126). The outcome was Granted on 20/12/2013.

<u>SUB-2013-23</u> Subdivision Consent subdivision creating 3 lots (incl ROW over what is now Lot 16 DP 478754). The outcome was Granted on 18/06/2013.

<u>LUC-2011-440</u> Land Use Consent land use as a consequence of a 14 lot residential 1 subdivision. The outcome was Granted on 27/10/2011.

<u>SUB-2011-126</u> Subdivision Consent subdivision creating 14 lots. This consent has since Lapsed.

<u>SUB-2011-103</u> Subdivision Consent boundary adjustment. The outcome was Granted on 09/09/2011.

<u>POL-2007-350544</u> Planning Other Legislation creation of right of way easement over Section 11 SO 313291 in favour of Sections 12 and 13 SO 313291 (consent lapsed 10 September 2010). This consent has since Lapsed.

#### 5120846 R Awa Toru Drive Fairfield

<u>SUB-2011-126</u> Subdivision Consent subdivision creating 14 lots. This consent has since Lapsed.

<u>SUB-2011-103</u> Subdivision Consent boundary adjustment. The outcome was Granted on 09/09/2011.

<u>POL-2007-350544</u> Planning Other Legislation creation of right of way easement over Section 11 SO 313291 in favour of Sections 12 and 13 SO 313291 (consent lapsed 10 September 2010). This consent has since Lapsed.

#### 5120847 19 Awa Toru Drive Fairfield

<u>SUB-2013-23/A</u> Subdivision Consent s127 change of conditions to SUB-2013-23 to include land of Section 1 SO 335608. The outcome was s127 Upheld on 23/08/2017.

<u>LUC-2015-208</u> Land Use Consent Construct dwellings on 10 sites within an Urban Landscape Conservation Area. The outcome was Granted on 26/05/2015.

<u>LUC-2013-514</u> Land Use Consent land use consequential to a subdivision consent earthworks associated with access and bund formation, and for residential activity utilising a private access from Howorth Road serving a total of up to 17 residential units. The outcome was Granted on 20/12/2013.

<u>SUB-2013-107</u> Subdivision Consent subdivision creating 15 lots (reconfiguration of SUB-2011-126). The outcome was Granted on 20/12/2013.

<u>SUB-2013-23</u> Subdivision Consent subdivision creating 3 lots (incl ROW over what is now Lot 16 DP 478754). The outcome was Granted on 18/06/2013.

<u>LUC-2011-440</u> Land Use Consent land use as a consequence of a 14 lot residential 1 subdivision. The outcome was Granted on 27/10/2011.

<u>SUB-2011-126</u> Subdivision Consent subdivision creating 14 lots. This consent has since Lapsed.

<u>SUB-2011-103</u> Subdivision Consent boundary adjustment. The outcome was Granted on 09/09/2011.

<u>POL-2007-350544</u> Planning Other Legislation creation of right of way easement over Section 11 SO 313291 in favour of Sections 12 and 13 SO 313291 (consent lapsed 10 September 2010). This consent has since Lapsed.

#### 5120848 21 Awa Toru Drive Fairfield

<u>SUB-2013-23/A</u> Subdivision Consent s127 change of conditions to SUB-2013-23 to include land of Section 1 SO 335608. The outcome was s127 Upheld on 23/08/2017.

<u>LUC-2016-101/A</u> Land Use Consent s357 objection to fees. The outcome was S357 Upheld on 13/07/2016.

<u>LUC-2016-101</u> Land Use Consent to establish a decorative feature wall in the side yard and height plane angle and retrospective consent for earthworks involving the retaining of fill in a UCLA. The outcome was Granted on 19/05/2016.

<u>LUC-2015-208</u> Land Use Consent Construct dwellings on 10 sites within an Urban Landscape Conservation Area. The outcome was Granted on 26/05/2015.

<u>LUC-2013-514</u> Land Use Consent land use consequential to a subdivision consent earthworks associated with access and bund formation, and for residential activity utilising a private access from Howorth Road serving a total of up to 17 residential units. The outcome was Granted on 20/12/2013. <u>SUB-2013-107</u> Subdivision Consent subdivision creating 15 lots (reconfiguration of SUB-2011-126). The outcome was Granted on 20/12/2013.

<u>SUB-2013-23</u> Subdivision Consent subdivision creating 3 lots (incl ROW over what is now Lot 16 DP 478754). The outcome was Granted on 18/06/2013.

<u>LUC-2011-440</u> Land Use Consent land use as a consequence of a 14 lot residential 1 subdivision. The outcome was Granted on 27/10/2011.

<u>SUB-2011-126</u> Subdivision Consent subdivision creating 14 lots. This consent has since Lapsed.

<u>SUB-2011-103</u> Subdivision Consent boundary adjustment. The outcome was Granted on 09/09/2011.

<u>POL-2007-350544</u> Planning Other Legislation creation of right of way easement over Section 11 SO 313291 in favour of Sections 12 and 13 SO 313291 (consent lapsed 10 September 2010). This consent has since Lapsed.

#### 5120849 23 Awa Toru Drive Fairfield

<u>SUB-2013-23/A</u> Subdivision Consent s127 change of conditions to SUB-2013-23 to include land of Section 1 SO 335608. The outcome was s127 Upheld on 23/08/2017. LUC-2015-208 Land Use Consent Construct dwellings on 10 sites within an Urban

Landscape Conservation Area. The outcome was Granted on 26/05/2015.

<u>LUC-2013-514</u> Land Use Consent land use consequential to a subdivision consent earthworks associated with access and bund formation, and for residential activity utilising a private access from Howorth Road serving a total of up to 17 residential units. The outcome was Granted on 20/12/2013.

<u>SUB-2013-107</u> Subdivision Consent subdivision creating 15 lots (reconfiguration of SUB-2011-126). The outcome was Granted on 20/12/2013.

<u>SUB-2013-23</u> Subdivision Consent subdivision creating 3 lots (incl ROW over what is now Lot 16 DP 478754). The outcome was Granted on 18/06/2013.

<u>LUC-2011-440</u> Land Use Consent land use as a consequence of a 14 lot residential 1 subdivision. The outcome was Granted on 27/10/2011.

<u>SUB-2011-126</u> Subdivision Consent subdivision creating 14 lots. This consent has since Lapsed.

<u>SUB-2011-103</u> Subdivision Consent boundary adjustment. The outcome was Granted on 09/09/2011.

<u>POL-2007-350544</u> Planning Other Legislation creation of right of way easement over Section 11 SO 313291 in favour of Sections 12 and 13 SO 313291 (consent lapsed 10 September 2010). This consent has since Lapsed.

#### 5120850 25 Awa Toru Drive Fairfield

<u>SUB-2013-23/A</u> Subdivision Consent s127 change of conditions to SUB-2013-23 to include land of Section 1 SO 335608. The outcome was s127 Upheld on 23/08/2017.

<u>LUC-2015-387</u> Land Use Consent to construct a garage on a vacant residential site. The outcome was Granted on 08/09/2015.

<u>LUC-2013-514</u> Land Use Consent land use consequential to a subdivision consent earthworks associated with access and bund formation, and for residential activity utilising a private access from Howorth Road serving a total of up to 17 residential units. The outcome was Granted on 20/12/2013.

<u>SUB-2013-107</u> Subdivision Consent subdivision creating 15 lots (reconfiguration of SUB-2011-126). The outcome was Granted on 20/12/2013.

<u>SUB-2013-23</u> Subdivision Consent subdivision creating 3 lots (incl ROW over what is now Lot 16 DP 478754). The outcome was Granted on 18/06/2013.

<u>LUC-2011-440</u> Land Use Consent land use as a consequence of a 14 lot residential 1 subdivision. The outcome was Granted on 27/10/2011.

<u>SUB-2011-126</u> Subdivision Consent subdivision creating 14 lots. This consent has since Lapsed.

<u>SUB-2011-103</u> Subdivision Consent boundary adjustment. The outcome was Granted on 09/09/2011.

<u>POL-2007-350544</u> Planning Other Legislation creation of right of way easement over Section 11 SO 313291 in favour of Sections 12 and 13 SO 313291 (consent lapsed 10 September 2010). This consent has since Lapsed. <u>RMA-1996-359755</u> Resource Management Act (Historical Data) Subdivision - Consent Notice: variation approved 11.08.97. The outcome was Granted on 11/08/1997. <u>5120851</u> **27 Awa Toru Drive Fairfield** 

SUB-2013-23/A Subdivision Consent s127 change of conditions to SUB-2013-23 to include land of Section 1 SO 335608. The outcome was s127 Upheld on 23/08/2017.

<u>LUC-2013-514</u> Land Use Consent land use consequential to a subdivision consent earthworks associated with access and bund formation, and for residential activity utilising a private access from Howorth Road serving a total of up to 17 residential units. The outcome was Granted on 20/12/2013.

<u>SUB-2013-107</u> Subdivision Consent subdivision creating 15 lots (reconfiguration of SUB-2011-126). The outcome was Granted on 20/12/2013.

<u>SUB-2013-23</u> Subdivision Consent subdivision creating 3 lots (incl ROW over what is now Lot 16 DP 478754). The outcome was Granted on 18/06/2013.

<u>LUC-2011-440</u> Land Use Consent land use as a consequence of a 14 lot residential 1 subdivision. The outcome was Granted on 27/10/2011.

<u>SUB-2011-126</u> Subdivision Consent subdivision creating 14 lots. This consent has since Lapsed.

<u>SUB-2011-103</u> Subdivision Consent boundary adjustment. The outcome was Granted on 09/09/2011.

<u>POL-2007-350544</u> Planning Other Legislation creation of right of way easement over Section 11 SO 313291 in favour of Sections 12 and 13 SO 313291 (consent lapsed 10 September 2010). This consent has since Lapsed.

<u>RMA-1996-359755</u> Resource Management Act (Historical Data) Subdivision - Consent Notice: variation approved 11.08.97. The outcome was Granted on 11/08/1997.

5120852 29 Awa Toru Drive Fairfield

<u>SUB-2013-23/A</u> Subdivision Consent s127 change of conditions to SUB-2013-23 to include land of Section 1 SO 335608. The outcome was s127 Upheld on 23/08/2017.

<u>LUC-2015-208</u> Land Use Consent Construct dwellings on 10 sites within an Urban Landscape Conservation Area. The outcome was Granted on 26/05/2015.

<u>LUC-2013-514</u> Land Use Consent land use consequential to a subdivision consent earthworks associated with access and bund formation, and for residential activity utilising a private access from Howorth Road serving a total of up to 17 residential units. The outcome was Granted on 20/12/2013.

<u>SUB-2013-107</u> Subdivision Consent subdivision creating 15 lots (reconfiguration of SUB-2011-126). The outcome was Granted on 20/12/2013.

<u>SUB-2013-23</u> Subdivision Consent subdivision creating 3 lots (incl ROW over what is now Lot 16 DP 478754). The outcome was Granted on 18/06/2013.

<u>LUC-2011-440</u> Land Use Consent land use as a consequence of a 14 lot residential 1 subdivision. The outcome was Granted on 27/10/2011.

<u>SUB-2011-126</u> Subdivision Consent subdivision creating 14 lots. This consent has since Lapsed.

<u>SUB-2011-103</u> Subdivision Consent boundary adjustment. The outcome was Granted on 09/09/2011.

<u>POL-2007-350544</u> Planning Other Legislation creation of right of way easement over Section 11 SO 313291 in favour of Sections 12 and 13 SO 313291 (consent lapsed 10 September 2010). This consent has since Lapsed.

<u>RMA-1996-359755</u> Resource Management Act (Historical Data) Subdivision - Consent Notice: variation approved 11.08.97. The outcome was Granted on 11/08/1997.

## 5120853 31 Awa Toru Drive Fairfield

<u>SUB-2013-23/A</u> Subdivision Consent s127 change of conditions to SUB-2013-23 to include land of Section 1 SO 335608. The outcome was s127 Upheld on 23/08/2017. LUC-2015-208 Land Use Consent Construct dwellings on 10 sites within an Urban

Landscape Conservation Area. The outcome was Granted on 26/05/2015.

<u>LUC-2013-514</u> Land Use Consent land use consequential to a subdivision consent earthworks associated with access and bund formation, and for residential activity utilising a private access from Howorth Road serving a total of up to 17 residential units. The outcome was Granted on 20/12/2013. <u>SUB-2013-107</u> Subdivision Consent subdivision creating 15 lots (reconfiguration of SUB-2011-126). The outcome was Granted on 20/12/2013.

<u>SUB-2013-23</u> Subdivision Consent subdivision creating 3 lots (incl ROW over what is now Lot 16 DP 478754). The outcome was Granted on 18/06/2013.

<u>LUC-2011-440</u> Land Use Consent land use as a consequence of a 14 lot residential 1 subdivision. The outcome was Granted on 27/10/2011.

<u>SUB-2011-126</u> Subdivision Consent subdivision creating 14 lots. This consent has since Lapsed.

<u>SUB-2011-103</u> Subdivision Consent boundary adjustment. The outcome was Granted on 09/09/2011.

<u>POL-2007-350544</u> Planning Other Legislation creation of right of way easement over Section 11 SO 313291 in favour of Sections 12 and 13 SO 313291 (consent lapsed 10 September 2010). This consent has since Lapsed.

#### 5120854 33 Awa Toru Drive Fairfield

<u>SUB-2013-23/A</u> Subdivision Consent s127 change of conditions to SUB-2013-23 to include land of Section 1 SO 335608. The outcome was s127 Upheld on 23/08/2017. LUC-2015-208 Land Use Consent Construct dwellings on 10 sites within an Urban

Landscape Conservation Area. The outcome was Granted on 26/05/2015.

<u>LUC-2013-514</u> Land Use Consent land use consequential to a subdivision consent earthworks associated with access and bund formation, and for residential activity utilising a private access from Howorth Road serving a total of up to 17 residential units. The outcome was Granted on 20/12/2013.

<u>SUB-2013-107</u> Subdivision Consent subdivision creating 15 lots (reconfiguration of SUB-2011-126). The outcome was Granted on 20/12/2013.

<u>SUB-2013-23</u> Subdivision Consent subdivision creating 3 lots (incl ROW over what is now Lot 16 DP 478754). The outcome was Granted on 18/06/2013.

<u>LUC-2011-440</u> Land Use Consent land use as a consequence of a 14 lot residential 1 subdivision. The outcome was Granted on 27/10/2011.

<u>SUB-2011-126</u> Subdivision Consent subdivision creating 14 lots. This consent has since Lapsed.

<u>SUB-2011-103</u> Subdivision Consent boundary adjustment. The outcome was Granted on 09/09/2011.

<u>POL-2007-350544</u> Planning Other Legislation creation of right of way easement over Section 11 SO 313291 in favour of Sections 12 and 13 SO 313291 (consent lapsed 10 September 2010). This consent has since Lapsed.

#### 5120855 35 Awa Toru Drive Fairfield

<u>SUB-2013-23/A</u> Subdivision Consent s127 change of conditions to SUB-2013-23 to include land of Section 1 SO 335608. The outcome was s127 Upheld on 23/08/2017.

<u>LUC-2015-208</u> Land Use Consent Construct dwellings on 10 sites within an Urban Landscape Conservation Area. The outcome was Granted on 26/05/2015.

<u>LUC-2013-514</u> Land Use Consent land use consequential to a subdivision consent earthworks associated with access and bund formation, and for residential activity utilising a private access from Howorth Road serving a total of up to 17 residential units. The outcome was Granted on 20/12/2013.

<u>SUB-2013-107</u> Subdivision Consent subdivision creating 15 lots (reconfiguration of SUB-2011-126). The outcome was Granted on 20/12/2013.

<u>SUB-2013-23</u> Subdivision Consent subdivision creating 3 lots (incl ROW over what is now Lot 16 DP 478754). The outcome was Granted on 18/06/2013.

<u>LUC-2011-440</u> Land Use Consent land use as a consequence of a 14 lot residential 1 subdivision. The outcome was Granted on 27/10/2011.

<u>SUB-2011-126</u> Subdivision Consent subdivision creating 14 lots. This consent has since Lapsed.

<u>SUB-2011-103</u> Subdivision Consent boundary adjustment. The outcome was Granted on 09/09/2011.

<u>POL-2007-350544</u> Planning Other Legislation creation of right of way easement over Section 11 SO 313291 in favour of Sections 12 and 13 SO 313291 (consent lapsed 10 September 2010). This consent has since Lapsed. <u>RMA-1996-359755</u> Resource Management Act (Historical Data) Subdivision - Consent Notice: variation approved 11.08.97. The outcome was Granted on 11/08/1997. <u>5120856</u> **37 Awa Toru Drive Fairfield** 

SUB-2013-23/A Subdivision Consent s127 change of conditions to SUB-2013-23 to include land of Section 1 SO 335608. The outcome was s127 Upheld on 23/08/2017.

<u>LUC-2016-633</u> Land Use Consent land use consent to carry out earthworks on the site. The outcome was Granted on 07/02/2017.

<u>LUC-2013-514</u> Land Use Consent land use consequential to a subdivision consent earthworks associated with access and bund formation, and for residential activity utilising a private access from Howorth Road serving a total of up to 17 residential units. The outcome was Granted on 20/12/2013.

<u>SUB-2013-107</u> Subdivision Consent subdivision creating 15 lots (reconfiguration of SUB-2011-126). The outcome was Granted on 20/12/2013.

<u>SUB-2013-23</u> Subdivision Consent subdivision creating 3 lots (incl ROW over what is now Lot 16 DP 478754). The outcome was Granted on 18/06/2013.

<u>LUC-2011-440</u> Land Use Consent land use as a consequence of a 14 lot residential 1 subdivision. The outcome was Granted on 27/10/2011.

<u>SUB-2011-126</u> Subdivision Consent subdivision creating 14 lots. This consent has since Lapsed.

<u>SUB-2011-103</u> Subdivision Consent boundary adjustment. The outcome was Granted on 09/09/2011.

<u>POL-2007-350544</u> Planning Other Legislation creation of right of way easement over Section 11 SO 313291 in favour of Sections 12 and 13 SO 313291 (consent lapsed 10 September 2010). This consent has since Lapsed.

<u>RMA-1996-359755</u> Resource Management Act (Historical Data) Subdivision - Consent Notice: variation approved 11.08.97. The outcome was Granted on 11/08/1997.

## 5120857 39 Awa Toru Drive Fairfield

<u>SUB-2013-23/A</u> Subdivision Consent s127 change of conditions to SUB-2013-23 to include land of Section 1 SO 335608. The outcome was s127 Upheld on 23/08/2017.

<u>LUC-2013-514</u> Land Use Consent land use consequential to a subdivision consent earthworks associated with access and bund formation, and for residential activity utilising a private access from Howorth Road serving a total of up to 17 residential units. The outcome was Granted on 20/12/2013.

<u>SUB-2013-107</u> Subdivision Consent subdivision creating 15 lots (reconfiguration of SUB-2011-126). The outcome was Granted on 20/12/2013.

<u>SUB-2013-23</u> Subdivision Consent subdivision creating 3 lots (incl ROW over what is now Lot 16 DP 478754). The outcome was Granted on 18/06/2013.

<u>LUC-2011-440</u> Land Use Consent land use as a consequence of a 14 lot residential 1 subdivision. The outcome was Granted on 27/10/2011.

<u>SUB-2011-126</u> Subdivision Consent subdivision creating 14 lots. This consent has since Lapsed.

<u>SUB-2011-103</u> Subdivision Consent boundary adjustment. The outcome was Granted on 09/09/2011.

<u>POL-2007-350544</u> Planning Other Legislation creation of right of way easement over Section 11 SO 313291 in favour of Sections 12 and 13 SO 313291 (consent lapsed 10 September 2010). This consent has since Lapsed.

<u>RMA-1996-359755</u> Resource Management Act (Historical Data) Subdivision - Consent Notice: variation approved 11.08.97. The outcome was Granted on 11/08/1997.

## 5120858 41 Awa Toru Drive Fairfield

<u>SUB-2013-23/A</u> Subdivision Consent s127 change of conditions to SUB-2013-23 to include land of Section 1 SO 335608. The outcome was s127 Upheld on 23/08/2017. LUC-2015-208 Land Use Consent Construct dwellings on 10 sites within an Urban

Landscape Conservation Area. The outcome was Granted on 26/05/2015.

<u>LUC-2013-514</u> Land Use Consent land use consequential to a subdivision consent earthworks associated with access and bund formation, and for residential activity utilising a private access from Howorth Road serving a total of up to 17 residential units. The outcome was Granted on 20/12/2013. <u>SUB-2013-107</u> Subdivision Consent subdivision creating 15 lots (reconfiguration of SUB-2011-126). The outcome was Granted on 20/12/2013.

<u>SUB-2013-23</u> Subdivision Consent subdivision creating 3 lots (incl ROW over what is now Lot 16 DP 478754). The outcome was Granted on 18/06/2013.

<u>LUC-2011-440</u> Land Use Consent land use as a consequence of a 14 lot residential 1 subdivision. The outcome was Granted on 27/10/2011.

<u>SUB-2011-126</u> Subdivision Consent subdivision creating 14 lots. This consent has since Lapsed.

<u>SUB-2011-103</u> Subdivision Consent boundary adjustment. The outcome was Granted on 09/09/2011.

<u>POL-2007-350544</u> Planning Other Legislation creation of right of way easement over Section 11 SO 313291 in favour of Sections 12 and 13 SO 313291 (consent lapsed 10 September 2010). This consent has since Lapsed.

<u>RMA-1996-359755</u> Resource Management Act (Historical Data) Subdivision - Consent Notice: variation approved 11.08.97. The outcome was Granted on 11/08/1997. **5120859 43 Awa Toru Drive Fairfield** 

<u>SUB-2013-23/A</u> Subdivision Consent s127 change of conditions to SUB-2013-23 to include land of Section 1 SO 335608. The outcome was s127 Upheld on 23/08/2017.

<u>LUC-2015-208</u> Land Use Consent Construct dwellings on 10 sites within an Urban Landscape Conservation Area. The outcome was Granted on 26/05/2015.

<u>LUC-2013-514</u> Land Use Consent land use consequential to a subdivision consent earthworks associated with access and bund formation, and for residential activity utilising a private access from Howorth Road serving a total of up to 17 residential units. The outcome was Granted on 20/12/2013.

<u>SUB-2013-107</u> Subdivision Consent subdivision creating 15 lots (reconfiguration of SUB-2011-126). The outcome was Granted on 20/12/2013.

<u>SUB-2013-23</u> Subdivision Consent subdivision creating 3 lots (incl ROW over what is now Lot 16 DP 478754). The outcome was Granted on 18/06/2013.

<u>LUC-2011-440</u> Land Use Consent land use as a consequence of a 14 lot residential 1 subdivision. The outcome was Granted on 27/10/2011.

<u>SUB-2011-126</u> Subdivision Consent subdivision creating 14 lots. This consent has since Lapsed.

<u>SUB-2011-103</u> Subdivision Consent boundary adjustment. The outcome was Granted on 09/09/2011.

<u>POL-2007-350544</u> Planning Other Legislation creation of right of way easement over Section 11 SO 313291 in favour of Sections 12 and 13 SO 313291 (consent lapsed 10 September 2010). This consent has since Lapsed.

#### 5125770 45 Howorth Road Fairfield

<u>LUC-2017-452</u> Land Use Consent to undertake earthworks breaching the volume threshold and the setback from boundary requirement. The outcome was Granted on 06/10/2017. <u>SUB-2013-95/A</u> Subdivision Consent s127 change by altering the layout of the subdivision. The outcome was s127 Upheld on 16/08/2017.

<u>LUC-2013-468/A</u> Land Use Consent s127 variation of LUC-2013=468 to reflect variation of SUB-2013-95 altering the layout of the subdivision. The variation of the land use consent is to refer to the new plan and lots. The outcome was s127 Upheld on 16/08/2017.

<u>SUB-2013-107</u> Subdivision Consent subdivision creating 15 lots (reconfiguration of SUB-2011-126). The outcome was Granted on 20/12/2013.

<u>LUC-2013-468</u> Land Use Consent underwidth access serving 4 lots in subdivision SUB-2013-95. The outcome was Granted on 31/01/2014.

<u>SUB-2013-95</u> Subdivision Consent subdivison creating 4 lots. The outcome was Granted on 31/01/2014.

<u>SUB-2011-103</u> Subdivision Consent boundary adjustment. The outcome was Granted on 09/09/2011.

<u>RMA-1996-359755</u> Resource Management Act (Historical Data) Subdivision - Consent Notice: variation approved 11.08.97. The outcome was Granted on 11/08/1997.

If you would like a copy of any Resource Consent decision or advice on the current status and relevance of any planning matter referred to in the LIM, enquiries may be made at the Planning Enquiries desk on the Ground Floor of the Civic Centre, 50 The Octagon, or by phoning 477 4000 and asking for the Duty Planner. Planners are available at the Planning Enquiries desk to answer your enquiries between 8:30am and 5:00pm weekdays.

## TRANSPORT

No Transport information was found for this property

As of the 24th April 2015, the Transport Group no longer inspects the site as part of a LIM. Only the electronic records since 2002 have been examined for Transport information in relation to the property.

For further explanations on property owner obligations in regard to local road encroachments, vehicle entrances, vegetation management or retaining structures please refer to the Dunedin City Council website at <a href="http://www.dunedin.govt.nz/services/roads-and-footpaths">http://www.dunedin.govt.nz/services/roads-and-footpaths</a> or contact Transport on 477 4000.

For properties abutting the state highway, Waka Kotahi NZ Transport Agency is the Road Controlling Authority.

## 3 WATERS

## WATER

#### Urban water supply area - Connected

This property is connected to the Dunedin City Council's urban (on-demand) water supply. Indicative water pressures are available to view at <u>www.dunedin.govt.nz/water-pressure</u>, and flows available to the property can be provided on request. Any change in water use (e.g. for a new commercial activity) requires a new application to be made to the Council. It is recommended that the applicant check the property for the location and suitability of the water service.

#### Terms and conditions of supply

All new and existing connections to the Dunedin City Council's water supply network are subject to the terms and conditions of the Dunedin City Council Water Bylaw 2011. The bylaw is available to view at <u>www.dunedin.govt.nz/water-bylaw</u>.

#### Water pressure

Indicative network water pressure to the property is shown on maps available at <u>www.dunedin.govt.nz/water-pressure</u>. Specific detail is available on request.

#### Water reticulation maps

A copy of the water reticulation map of Dunedin City Council infrastructure in the vicinity of the subject property is attached. These show the location of the water main in the road. It may or may not show the water service to the property. It is recommended that the applicant check the property

## FOUL SEWER AND WASTE WATER

#### Stormwater/Sewer Separation - Compliant

The Dunedin City Council requires the foul sewer and storm water being discharged from a property to be directed to the separate foul sewer and storm water networks, respectively. This property is in an area where inspections have been undertaken to ensure compliance with this requirement. This property was certified as complying with Council's requirements for storm water separation at the time of inspection on **2<sup>nd</sup> November 2000**.

No comment is made with regard to this property's compliance with the requirement for storm water separation after the date of inspection.

#### Drainage Reticulation Plans

A copy of the Dunedin City Council's drainage infrastructure in the vicinity of the subject property is attached. Public foul sewers are show in red and stormwater sewers in green. All public drainage services are available to receive connections from the property and limited flows of stormwater may also be discharged to the street channel or an approved outfall.

#### **Restrictions near Council infrastructure**

There is Dunedin City Council water infrastructure located within the boundaries of this property, as shown on the attached reticulation plans.

Relevant deposited plans, certificates of title and memoranda of transfer at Land Information New Zealand (<u>www.linz.govt.nz</u>) should be reviewed for information relating to any existing registered easements. However, as the Local Government Act 2002 (LGA) provides statutory rights for public infrastructure, easements are not always registered.

No building or structure shall be constructed within 2.5 metres of any Council-owned underground infrastructure, or as specified on any registered easement, without the written approval of the Council.

Infrastructure shall not be damaged or otherwise interfered with. Prior to commencing any works within the subject property, all Council-owned structures, mains and service pipes, and associated fittings are to be located on-site and, if necessary, protected.

The Council can enter the land to inspect, alter, renew, repair or clean its infrastructure under the LGA. For planned works, reasonable notice will be given.

Within new land subdivisions the Council requires an easement in gross over public water supply infrastructure. The easement in gross must be a minimum of 3 metres wide, centred on the as-built position, and made in accordance with the Dunedin Code of Subdivision and Development 2010: Section 6.3.10.3 (Water).

Planting near infrastructure should be avoided, particularly large trees or other species whose roots could cause damage.

#### **Information Regarding Watercourses**

The controlling authority for all water and waterbodies in Dunedin City is the Otago Regional Council. The Regional Plan: Water addresses water take and use, diversions, damming, discharges and bed alteration under the Resource Management Act 1991. They are also responsible for the Flood Protection Management Bylaw 2012.

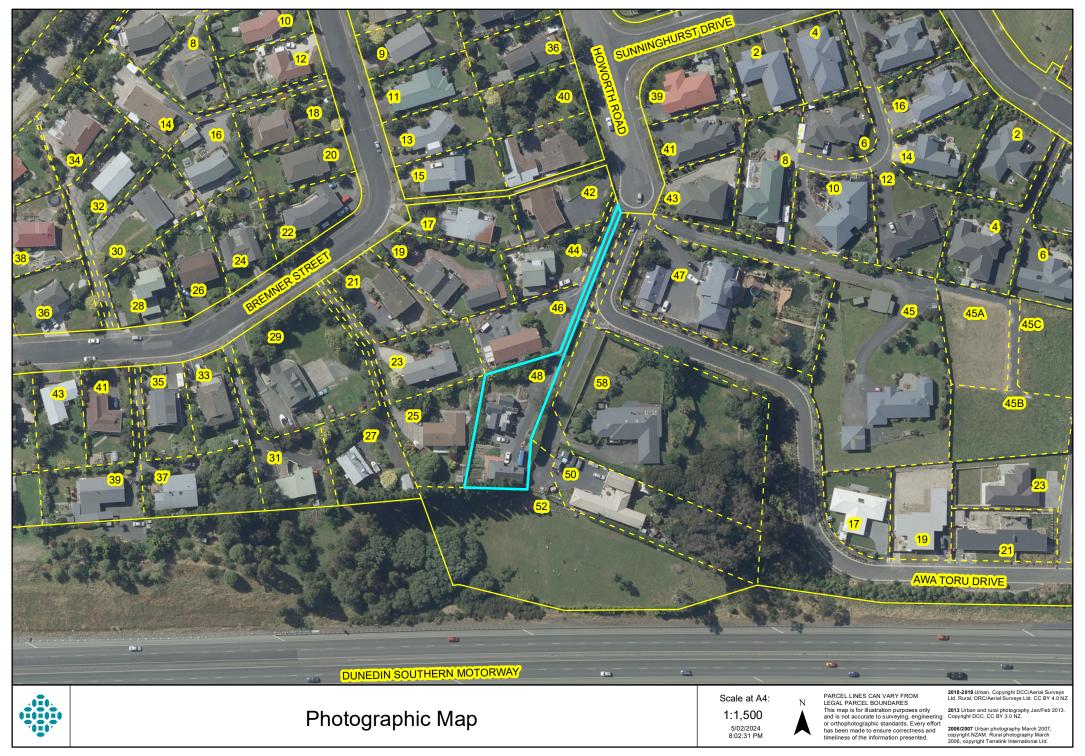
The controlling authority for watercourses in relation to stormwater drainage, and removal of obstructions in accordance with Local Government Act 1974 is the Dunedin City Council.

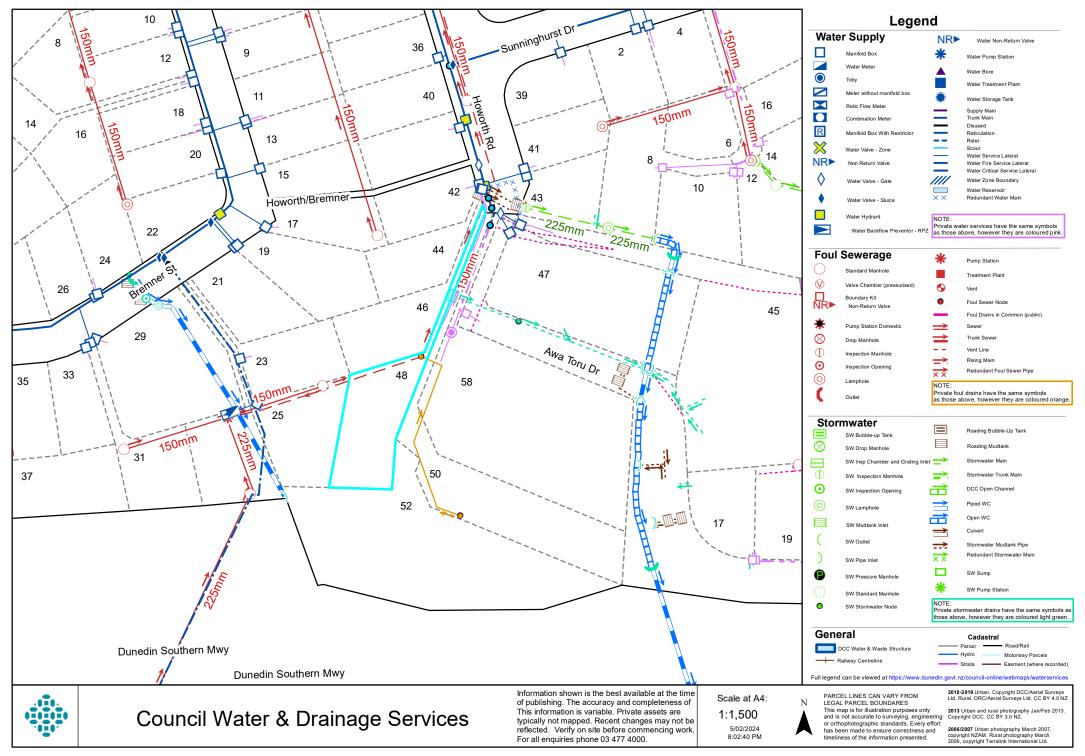
The Council also issues building and resource consents for certain works around watercourses.

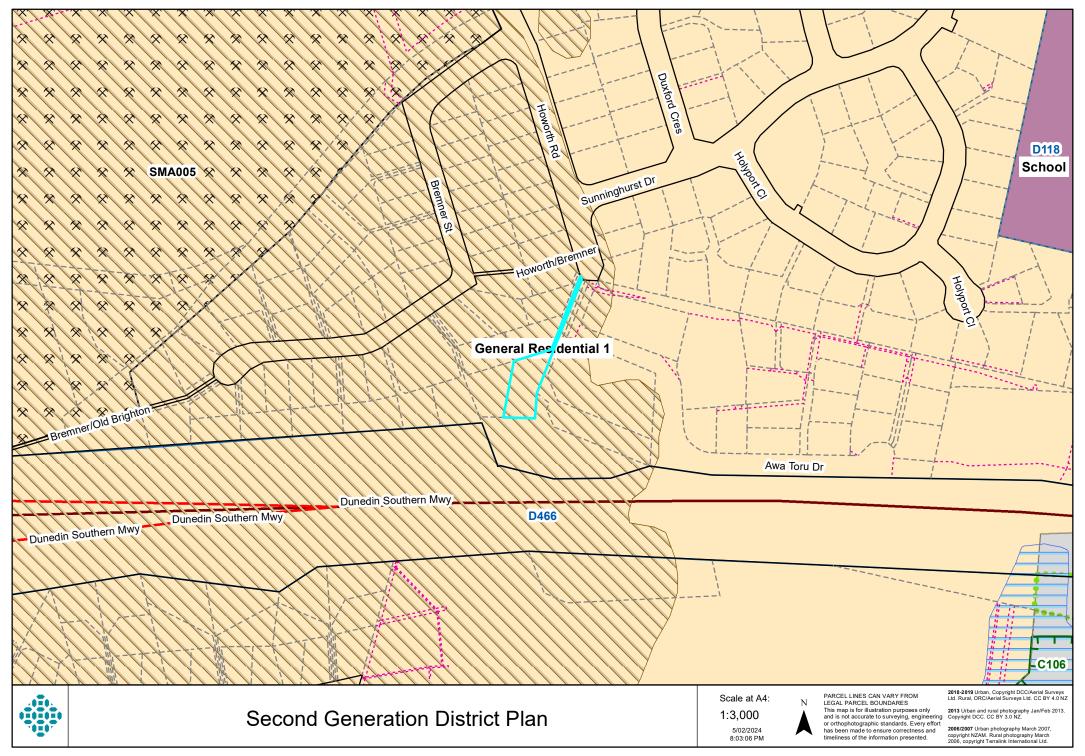
Not all watercourses within Dunedin City are recorded or known to the Council, therefore it is recommended that the applicant inspect the property for watercourses.

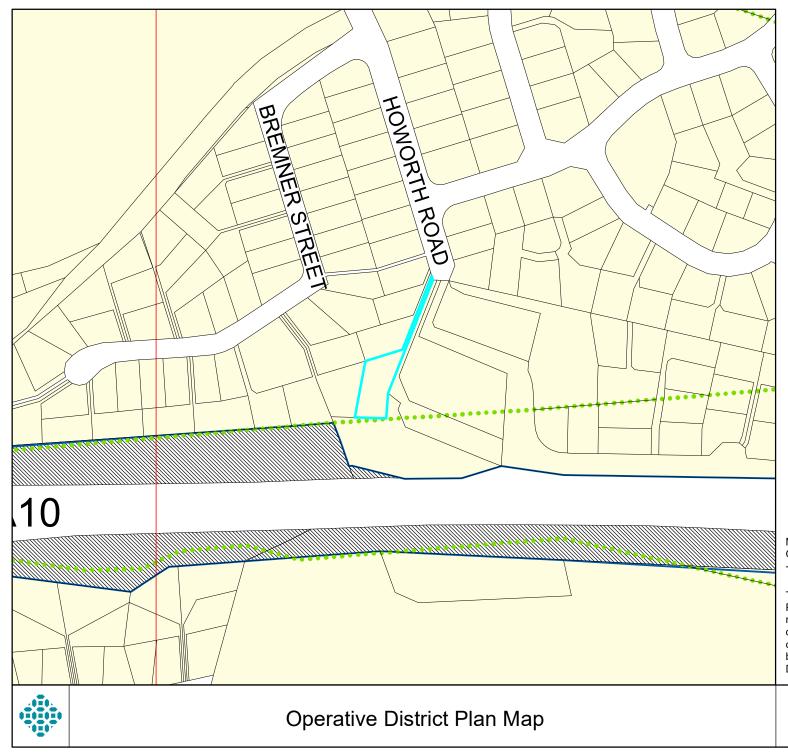
For further information on watercourses it is recommended the applicant read the Watercourse Information Sheet. A copy of this document is available on request or for download from the Dunedin City Council website <u>www.dunedin.govt.nz</u>

|        | APPENDIX   |
|--------|--|
| Glossa | ary of terms and abbreviations   |
|        | lowing are abbreviations and terms that may appear as a part of a LIM.   |
|        | nt, Permit, Licence & Complaint types                                    |
| •      | AAB DCC Building permit  |
| •      | AAD DCC Drainage permit  |
| •      | AAG Green Island drainage permit   |
| •      | AAH Hyde permit  |
| ٠      | AAK St Kilda permit  |
| •      | AAM Mosgiel permit   |
| •      | AAP Port Chalmers permit   |
| •      | AAS Silverpeaks permit   |
| •      | AAT Maniototo permit   |
| •      | ABA Application Building Act 1991<br>AMD Amendment to a Building Consent |
| •      | BC Building Consent  |
| •      | BCC Building Compliance Certificate - Sale of Liquor Act                 |
| •      | BCM Building Complaint   |
| •      | CER Certifier  |
| •      | COA Certificate of Acceptance  |
| •      | DGL Dangerous Goods Licensing  |
| •      | ENV Health complaint   |
| •      | HTH Health licence   |
| •      | LIQ Liquor licence   |
| •      | NTF Notice to Fix  |
| •      | NTR Notice to Rectify  |
| •      | PIM Project Information Memorandum                                       |
| ٠      | POL Planning Other Legislation   |
| •      | RMA Resource Management Act - Resource consent                           |
| •      | RMC Resource consent complaint   |
| •      | WOF Building Warrant of Fitness  |
|        | used in Permits & Consents   |
| •      | ALT Alteration   |
| •      | ADD Addition   |
| •      | BD D/C Board drain in common   |
| •      | BLD Building   |
| •      | BLDNG Building<br>BT Boundary trap                                       |
| •      | B/T Boiler tube  |
|        | CCC Code Compliance Certificate  |
| •      | DAP Drainage from adjacent property                                      |
| •      | DGE Drainage   |
| •      | DIC Drain in common  |
| •      | DR Drainage  |
| •      | DWG Dwelling   |
| •      | FS Foul sewer  |
| •      | HEA Heater   |
| •      | ICC Interim Code Compliance  |
| •      | MH Manhole   |
| •      | PL Plumbing  |
| ٠      | PLB Plumbing   |
| •      | PTE Private  |
| ٠      | SIS Sewer in section   |
| •      | WC Water course  |
| ٠      | WT Water table   |
| ٠      | SW Stormwater  |
| Gener  | al terms   |
| •      | RDMS Records and Document Management System                              |









# Legend

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#### Esplanade Requirement

\*\*\*\* Esplanade Reserve Required

\*\*\*\*\*\* Esplanade Strip Required

#### Landscape Management Boundary

outside boundary

boundary between areas

prominency boundary

#### Townscape

Townscape and Heritage Precinct Boundary - Internal

Townscape and Heritage Precinct Boundary

#### Pedestrian Frontage

Identified Pedestrian Crossing

Verandah Required

#### Areas of Significant Conservation Value boundary

ASCV Boundary

ASCV Boundary - Internal

Areas of Significant Conservation Value (Esturine edge)

ملك Areas of Significant Conservation Value (Wetland)

Most detail not shown at scales smaller than 1:25,000 Optimal scale range is 1:2000 - 1:5000

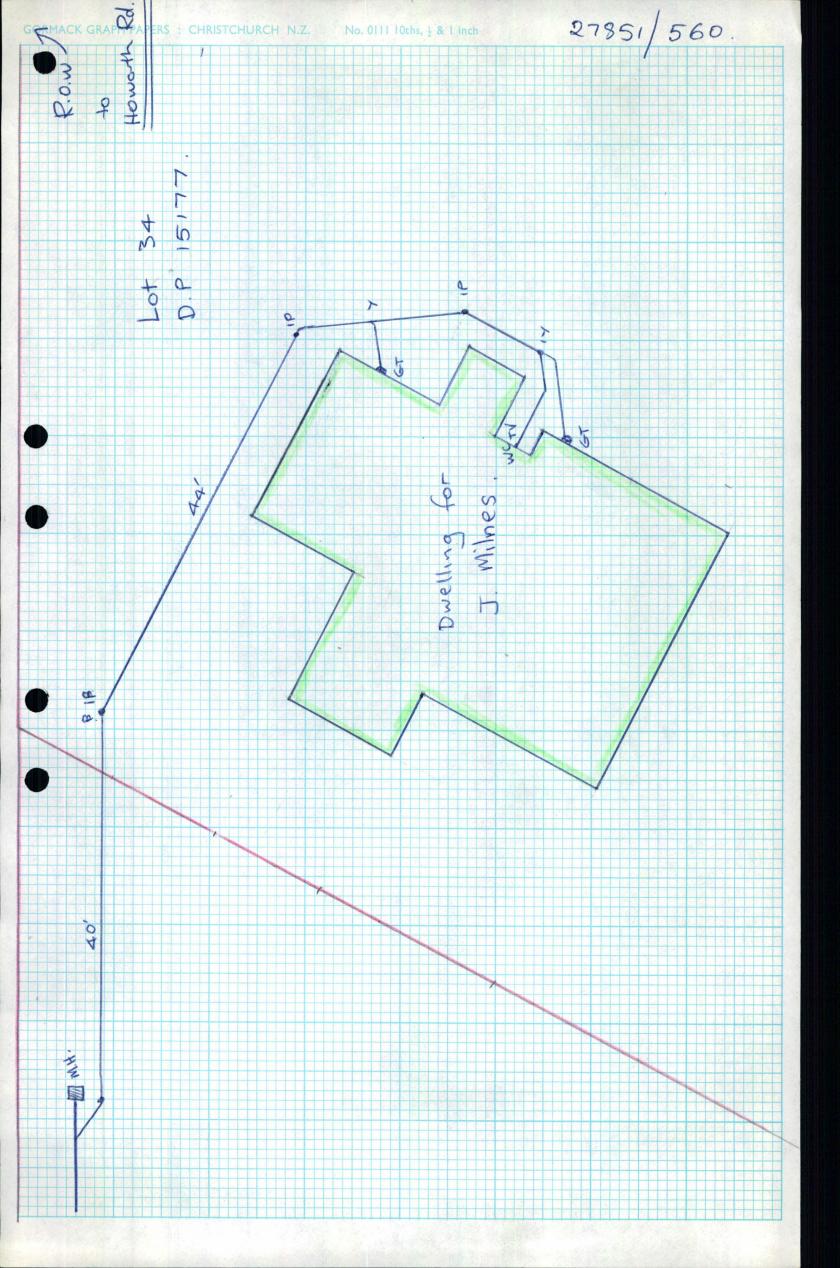
This Planning Map is indicative.

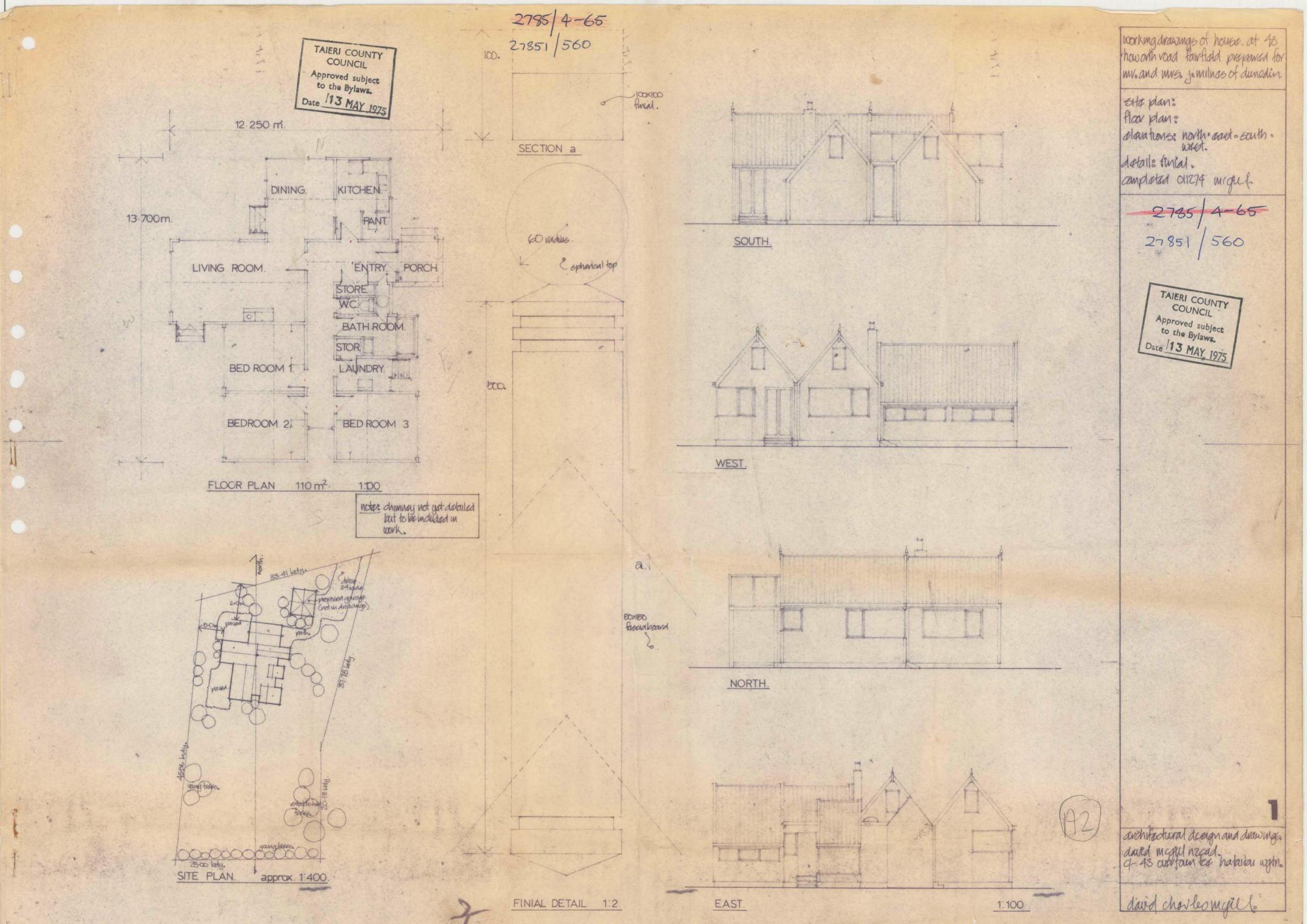
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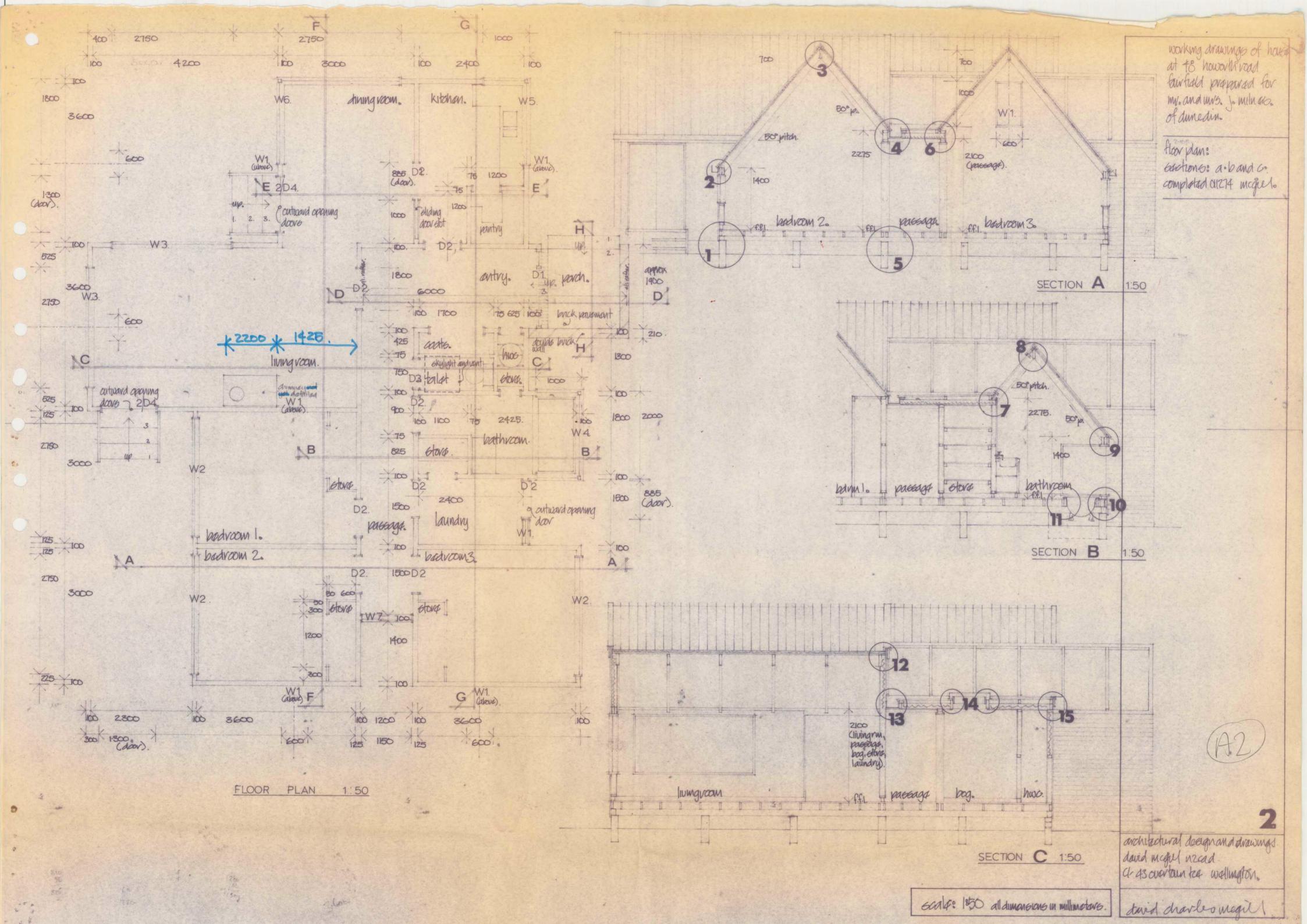
The official Planning Maps are compiled within the District Plan (Volume 2). This map is a representation of the official maps. However, due to the ability to display these maps at different scales, and the dynamic nature of the underlying cadastre, some inconsistencies or misalignment of data may be depicted which is not visible on the official maps. Consult Dunedin City Coucil for any clarification.

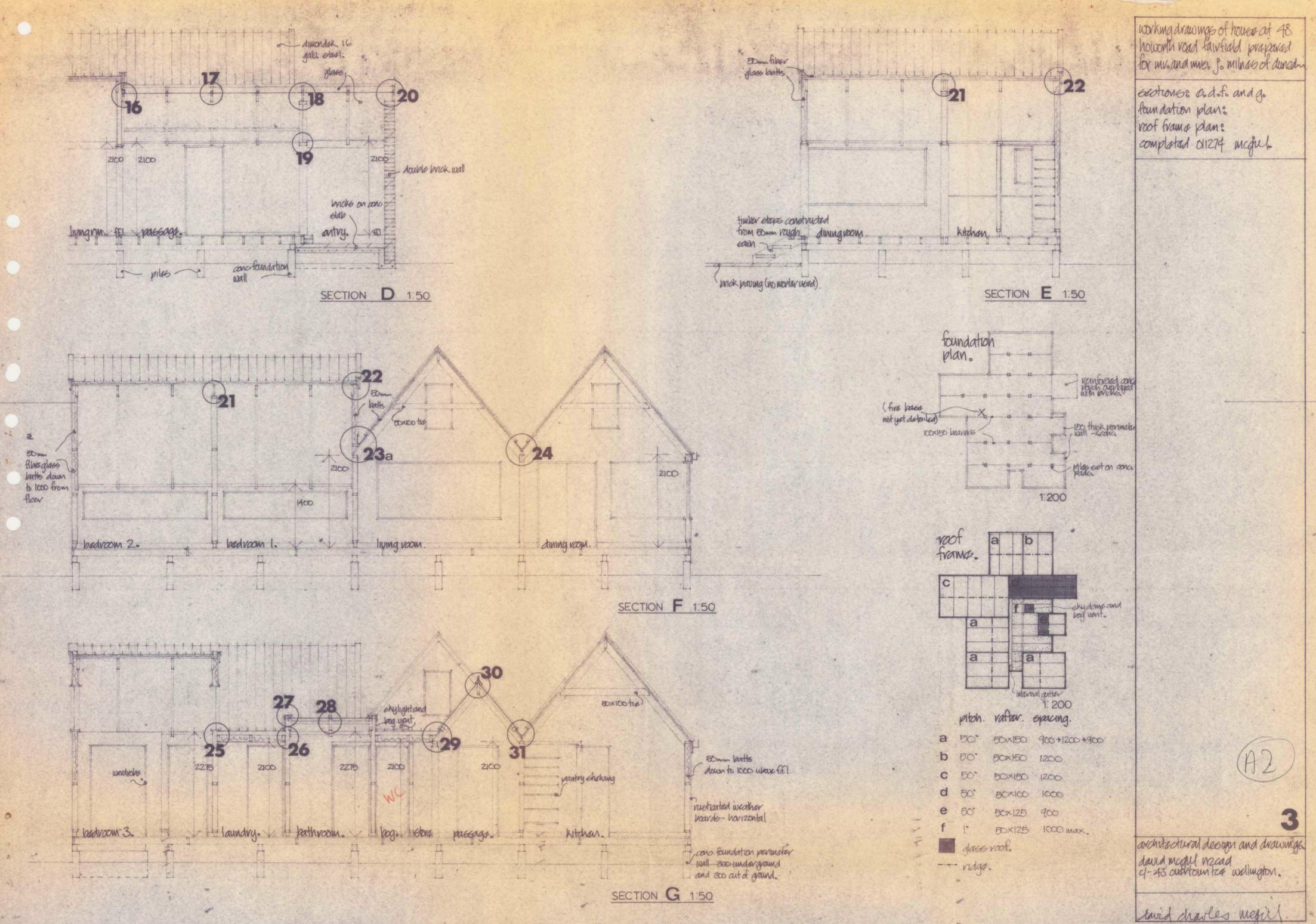
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PARCEL LINES CAN VARY FROM LEGAL PARCEL BOUNDARES This map is for illustration purposes only and is not accurate to surveying, engineering or orthophotographic standards. Every effor has been made to ensure correctness and timeliness of the information presented.

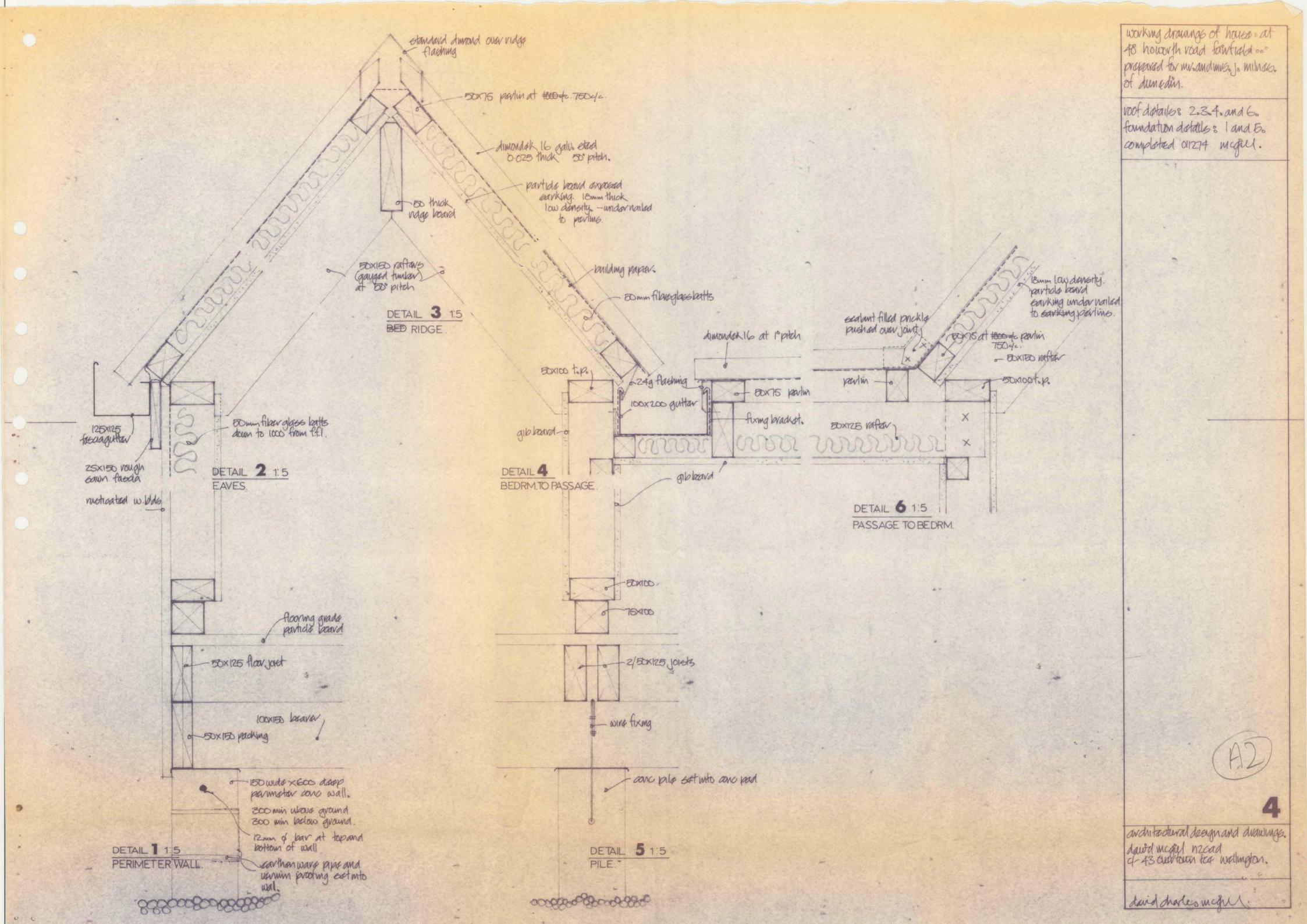


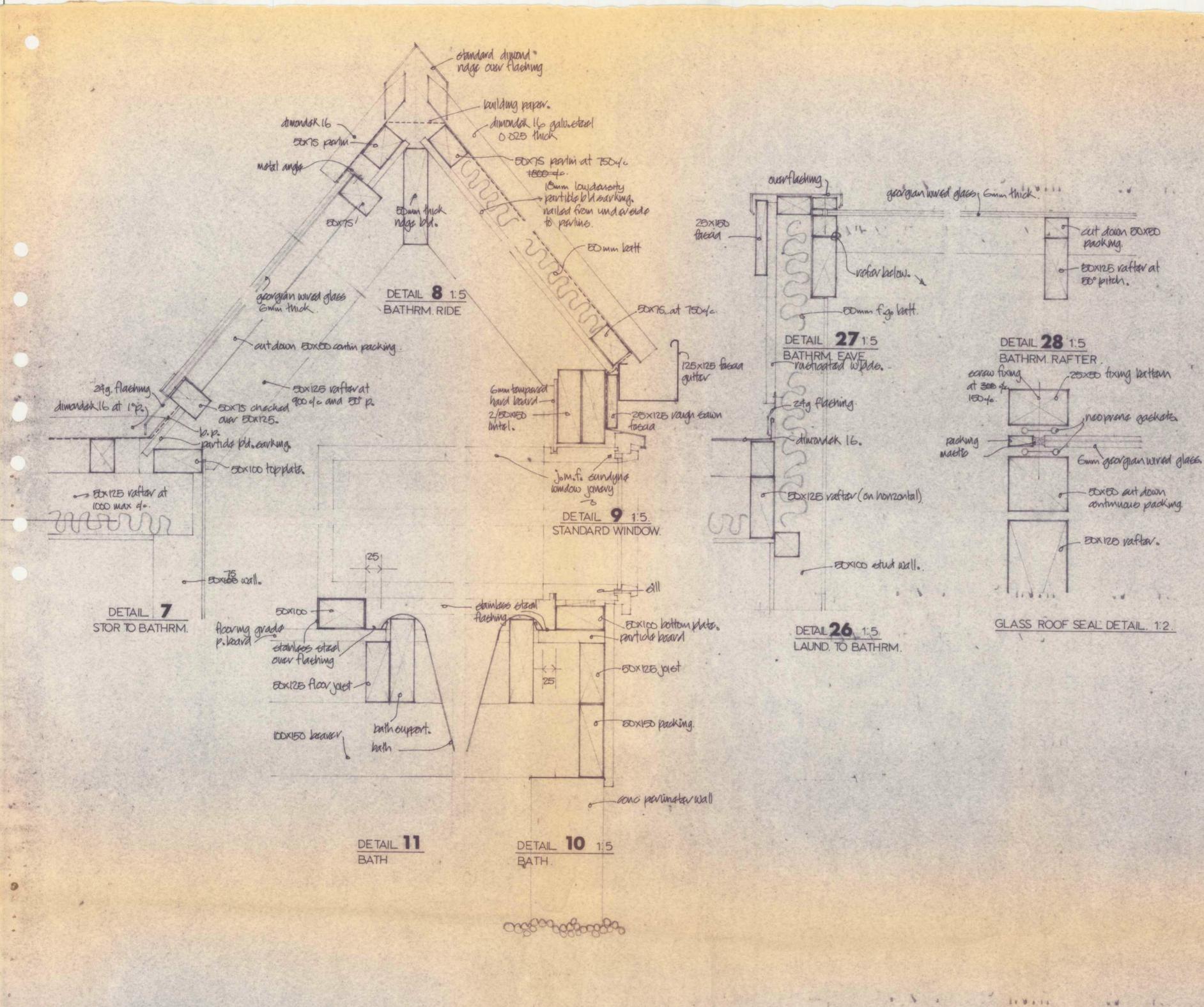


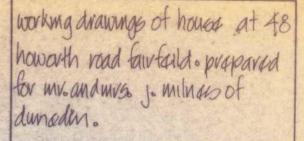




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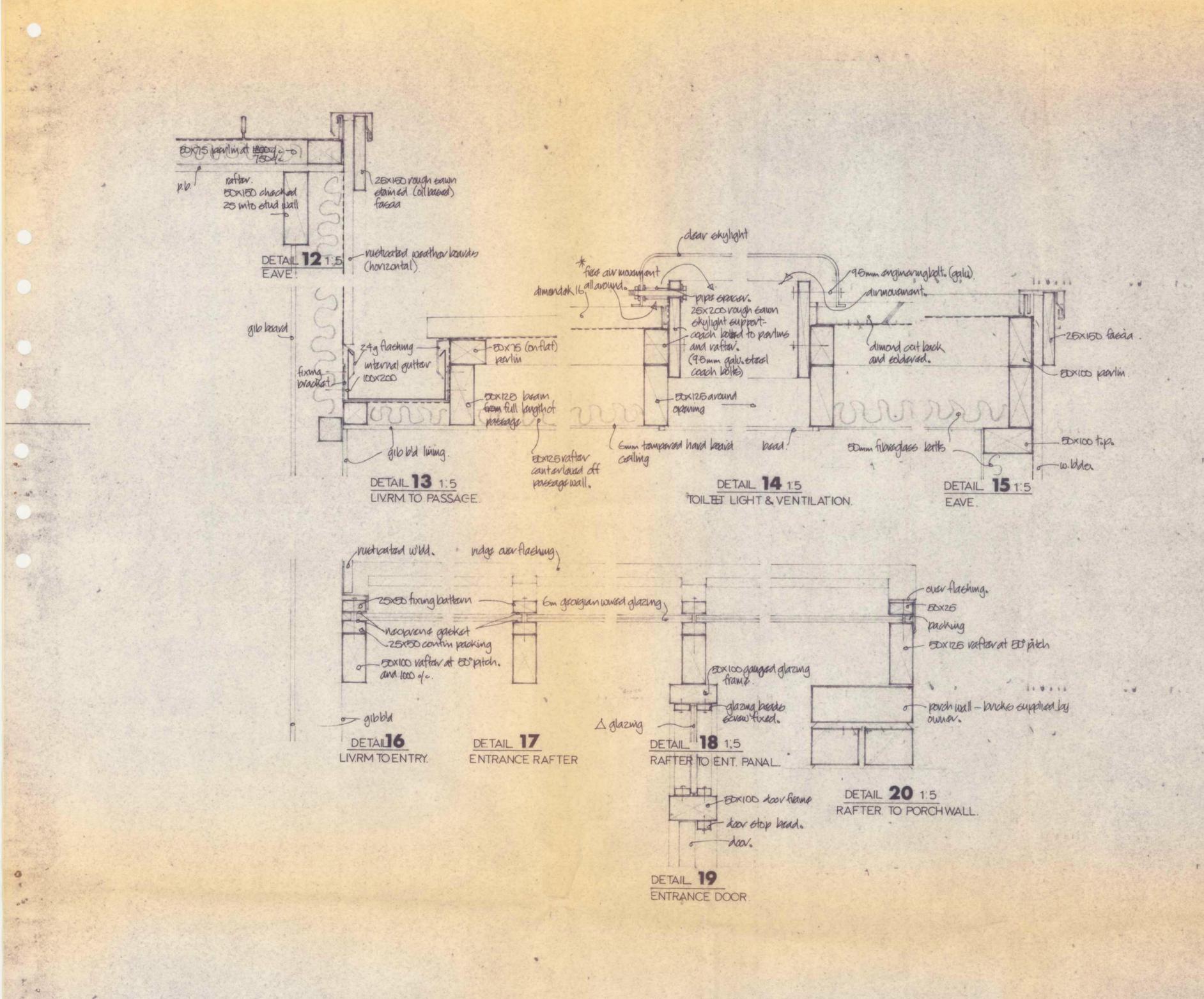
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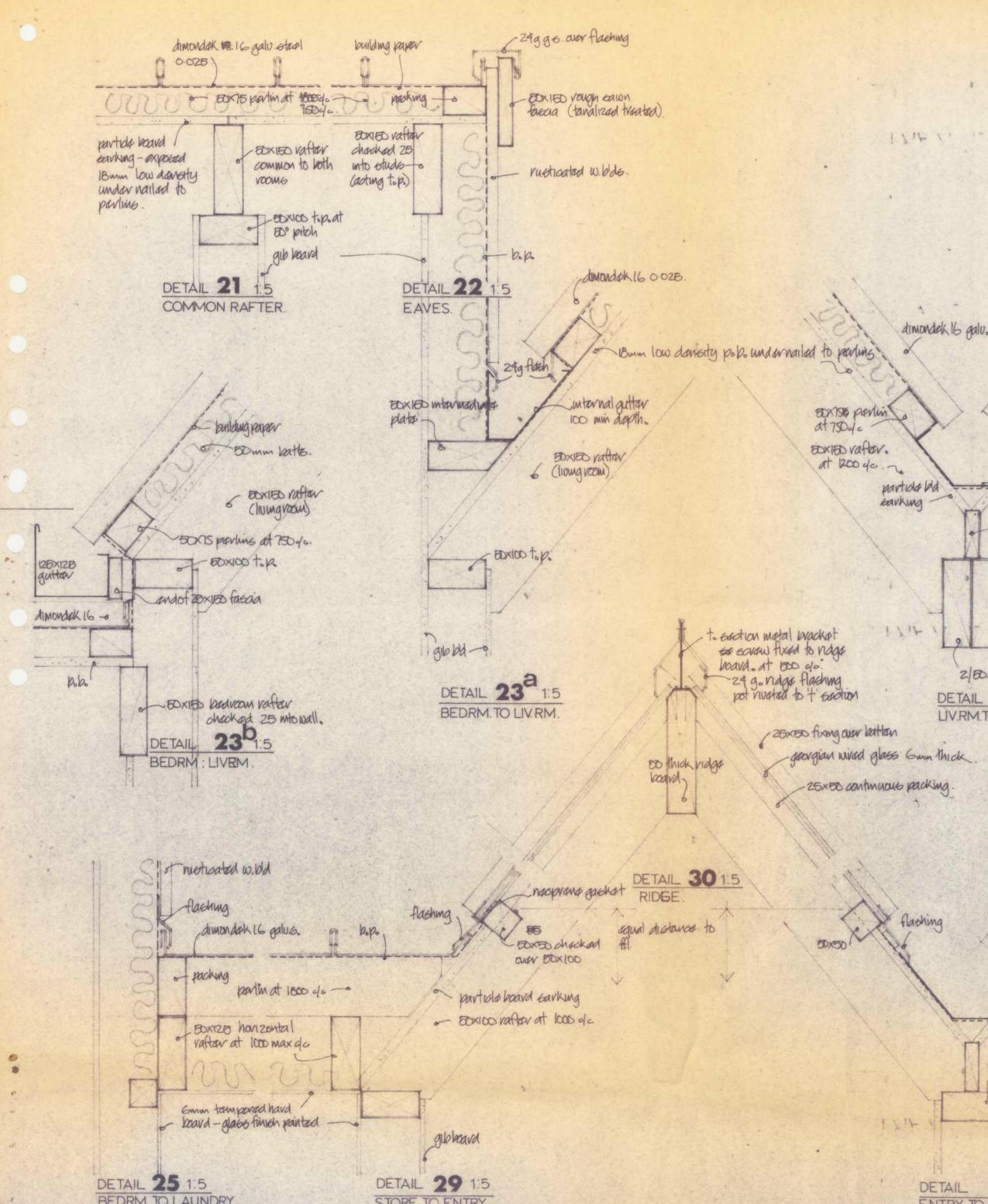


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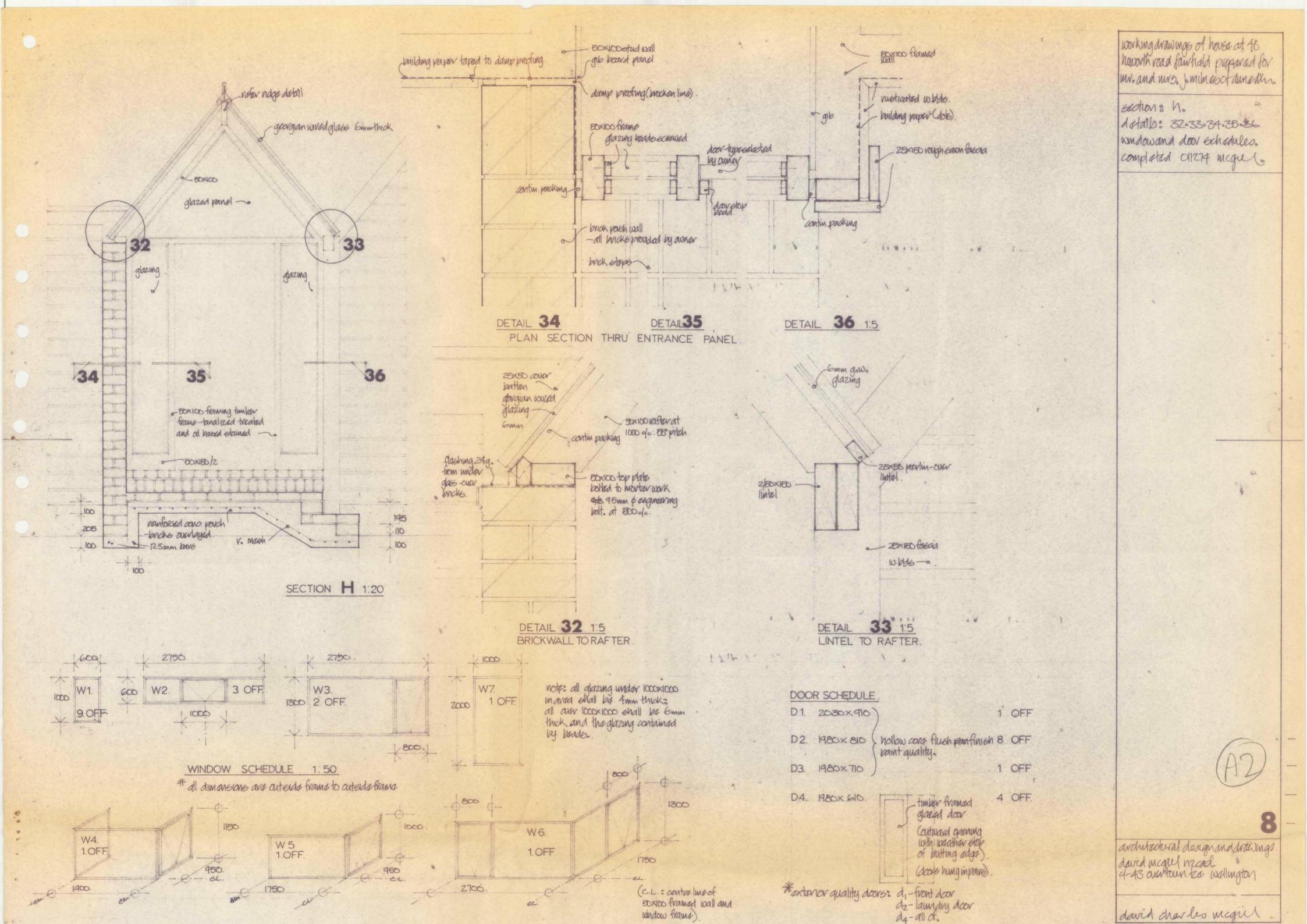
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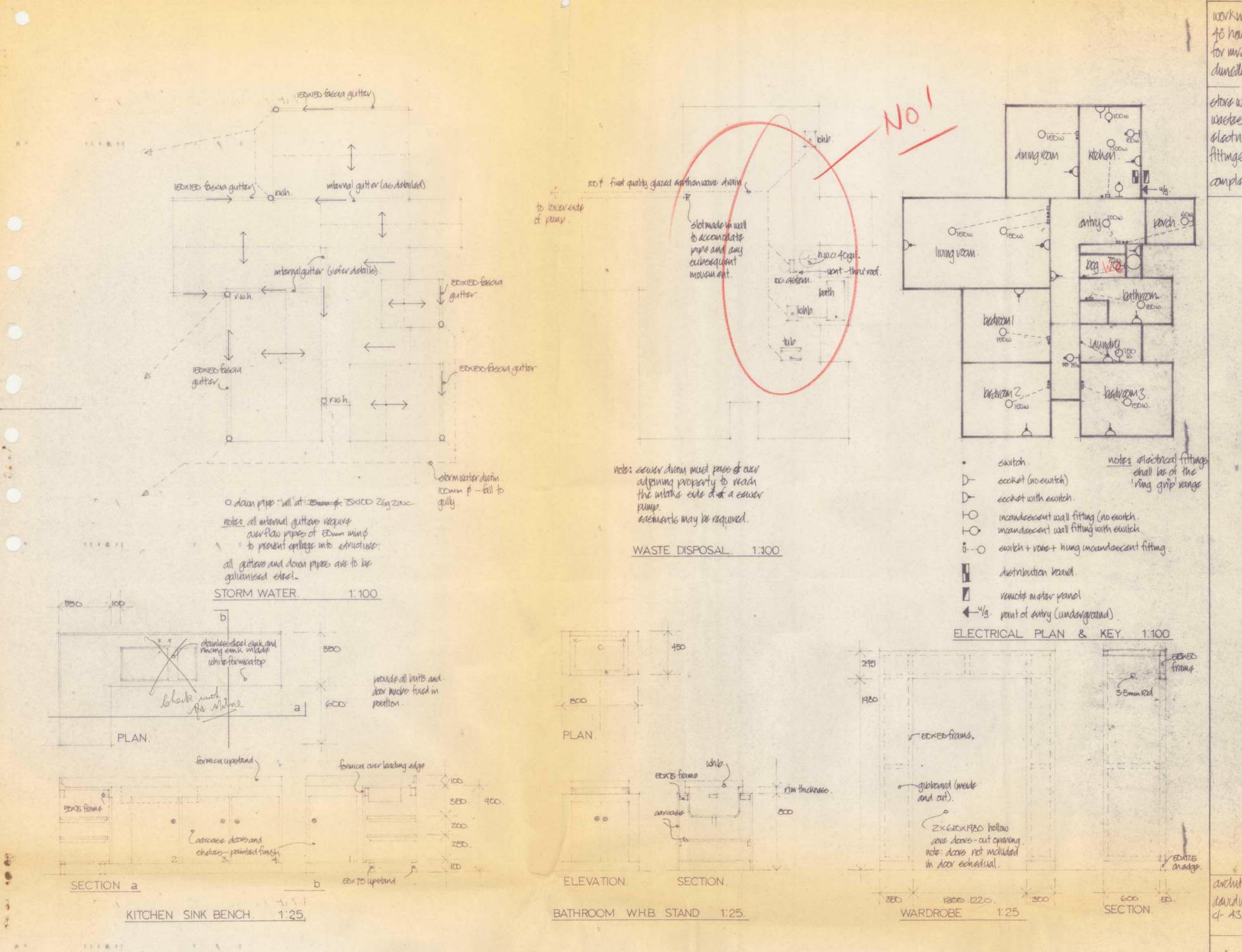
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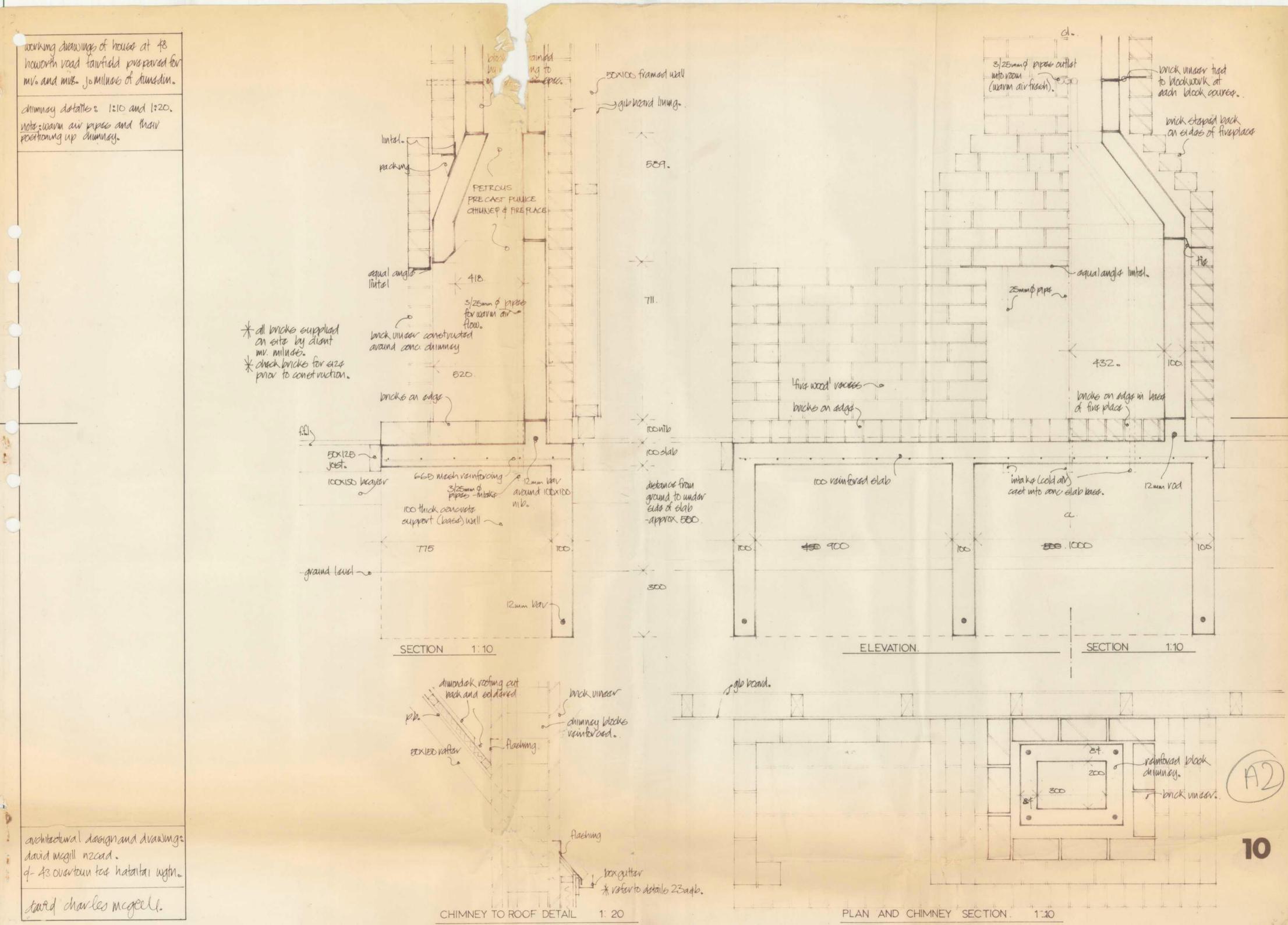
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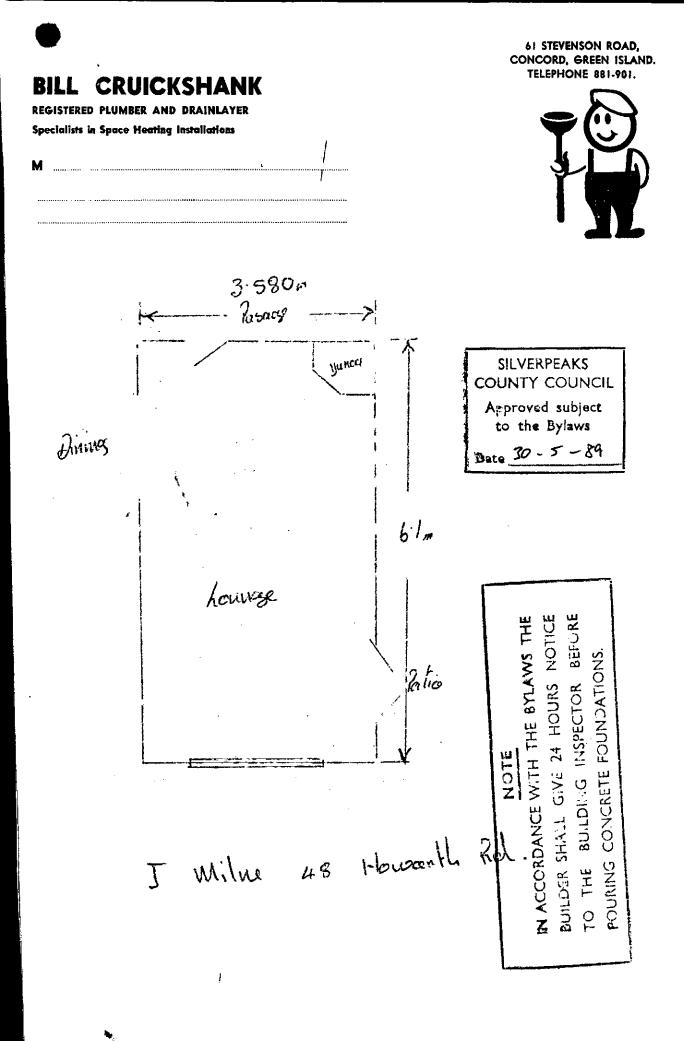
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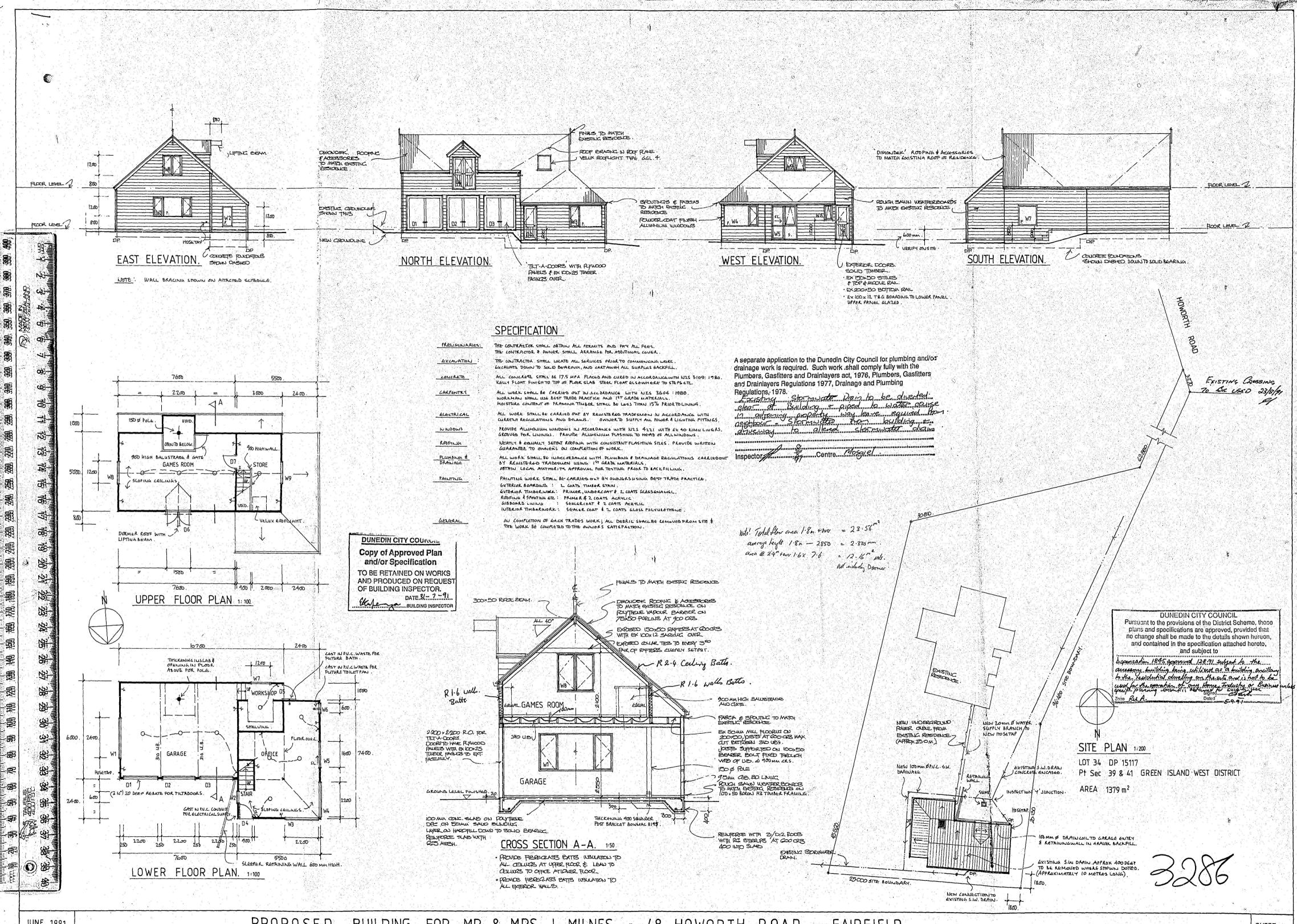
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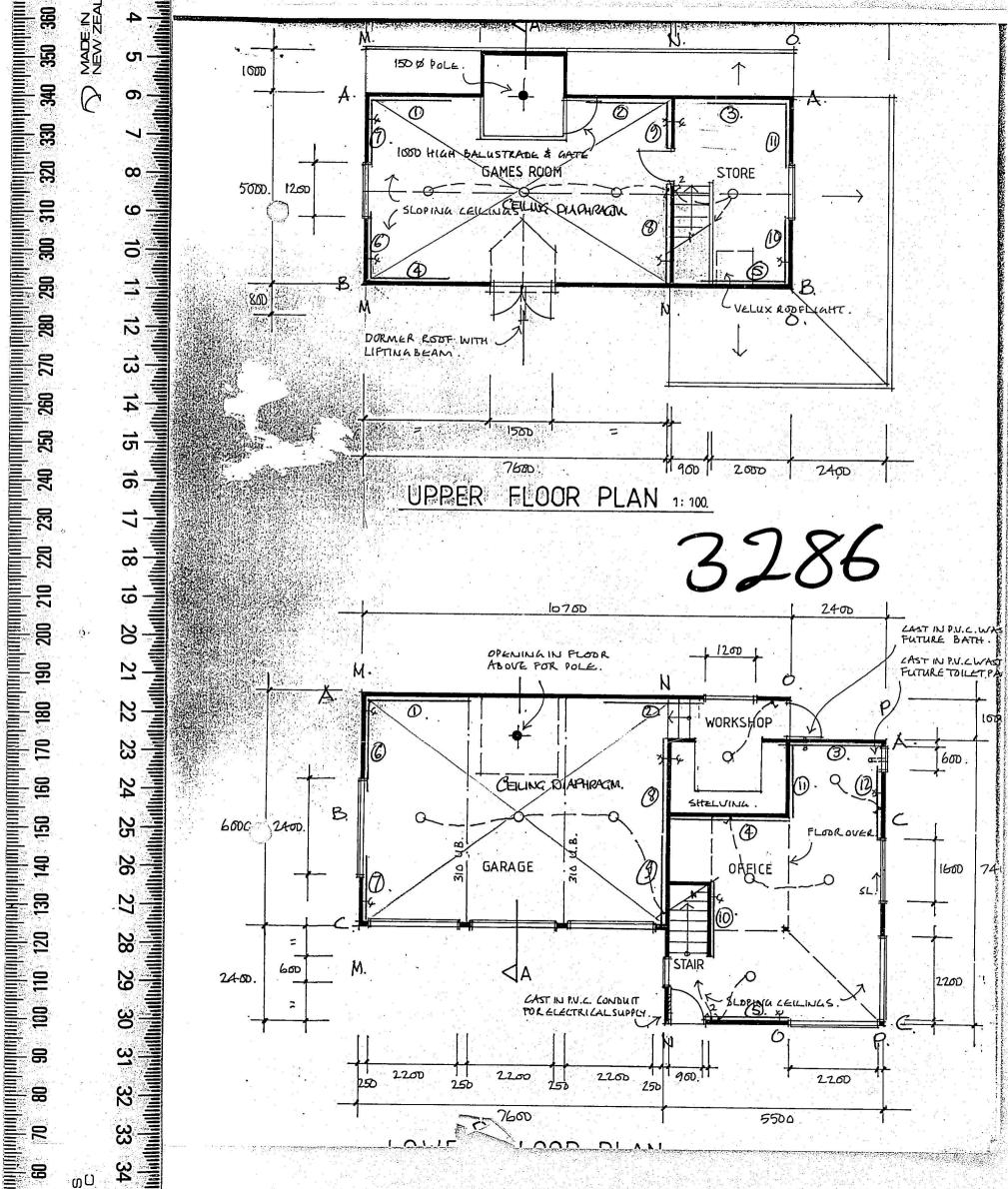




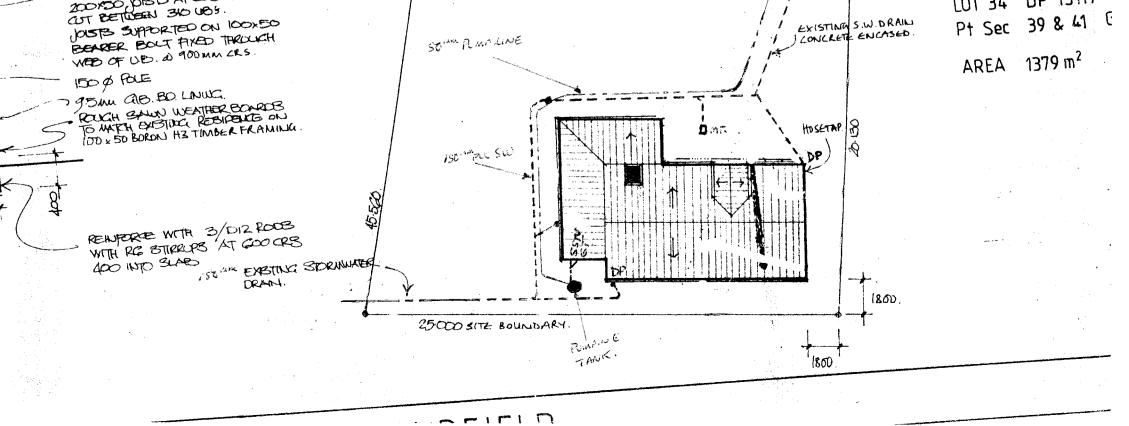


JUNE 1991

PROPOSED BUILDING FOR MR & MRS J. MILNES - 48 HOWORTH ROAD - FAIRFIELD



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## GREEN ISLAND COALFIELD

A.R. Mutch New Zealand Geological Survey, Dunedin

DATE: October 1982

Refer to this report as: NEW ZEALAND GEOLOGICAL SURVEY REPORT M126



# NEW ZEALAND GEOLOGICAL SURVEY

LOWER HUTT

# DEPARTMENT OF SCIENTIFIC AND INDUSTRIAL RESEARCH

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#### ABSTRACT

The Green Island Coalfield, worked continuously since 1861, lies south-west of Dunedin City and contains mainly medium-high sulphur, medium ash, brown lignite. Outcrop lignite has been almost worked out from the Chain Hills to Ocean View except for an area 1.5 km south-west of Saddle Hill. Urban development in the eastern and southern parts of the coalfield largely preclude the coal from old workings being recovered by opencast mining methods although two eastern localities are still unencumbered and occupied by working gravel pits. Only 0.614 million tonnes of Measured Recoverable opencast coal remain in the coalfield, and a further 6.24 million tonnes of Measured and Indicated coal could be recovered by present underground methods.

### KEYWORDS

Green Island Coalfield; geology; mining history; coal quality; coal quantity.

#### INTRODUCTION

The recent closure of the only working underground mine, the stripping of previously worked coal and the spread of urban development in the Green Island Coalfield has highlighted the need to reassess the coal reserves in this old established field. Benson (1968) indicated the limits of many abandoned underground workings, but did not show existing or former entrances to workings. This report updates data on the field, relating especially to abandoned workings.

### LOCATION

South-west of Dunedin City towards Brighton and Mosgiel Townships.

### HISTORY

Coal, first discovered in 1849 on the north flank of Saddle Hill (Hector 1872), determined the location of the old Main South Road, because the New Zealand Company built a "bullock dray" road from Dunedin to the locality that year. Although the coal was impersistent, it was widely used by the settlers about Saddle Hill (Healy 1974). The exposure was probably in a slump (grid ref. ! 05257515) behind (due south of) the old Hotel on the old Main South Road near the Chain Hills Saddle. Later in 1861, when coal was found on William Martin's property at Fairfield (Hutton 1875 and Healy 1974), two sufface mines were opened: Walton Park on Howarth 3119 property and the Lanarkshire Coal Company on Shand's (Hector 1872). They were situated on either side of the Fairfield Tavern (grid ref. I44/078757) and subsequently at least two, and probably four drives extended from them under the Main South Road, the present S.H. No.1 (T.A: Anderson, pers. comm.). By 1864 the opencasts and underground workings had extended beyond Flower Street on the northern side of the Main South Road (see Denniston 1877 and unsurveyed "ancient" workings noted on the south side of the main dip levels in Hodson's Mine Plan). Hector (1872) shows on his 1864 cross section from Chain Hills to Caversham, Dunedin, two shafts in the Fairfield area close to the outcrop. They are Doig's and presumably Pollock's further to the east (see also Walton Park Mine plan, dated 1901) from which 4000 tons were produced. The underground openings were necessarily large, for lump coal was transported to the surface by horse and dray from the working faces, and the stumps left were narrow. By 1871 the Walton Park Colliery Company had been formed, both mines on the Howarth and Shand properties being worked together from a common adit, (grid ref. 144/800755) at a lower level south of the Main South Road, near the site of Fulton and Hogan sand pit. This meant that all laden haulage within the mine was either level or downhill. This means of transport continued until the Walton Park Branch railway reached the adit in 1874 when most of the coal came up the nearby vertical haulage shaft. In the 1881 Mines Statements the eight producing underground mines recorded are Walton Park, Green Island or Samson's, Christies No.1 and

2, Otago, Abbotsroyd Nos 1 and 2 and Fernhill. All these mines were serviced by vertical haulage shafts except the last. Three persisted for over fifty years and one for sixty. In 1882 underground mining commenced at Creamery Road, Ocean View at the south-west margin of the field and three years later underground mining recommenced on the Mosgiel side of Saddle Hill (S163/m24). Mines in these two areas were opened mainly for local industrial use.

Early mining, utilising hand wedging to form narrow pillars (1-1.5 m wide) and black powder for explosives, recovered about two thirds of the coal. By the nineteen thirties though, modern explosives were being used and in thicker seams the amount extracted is believed to have dropped to about one third. Consequently only developed workings and those pillared after 1935 warranted investigation as possible opencast mines. Recently McSkimming Industries Ltd stripped part of the developed workings of the old Barclay section of the Loudon No.1 Mine (S163/m56) to provide industrial and domestic fuel. Altogether 53 underground mines and 5 opencasts have operated in the field; Loudon No.1 is the only mine still operating. Some 4,176,000 tonnes (4,110,000 tons) of coal has been produced from the underground mines and 66,000 tonnes (65,000 tons) from opencasts. The main markets have been for industrial use in Dunedin, Green Island and Mosgiel. The decline in production from the peak of 84,000 tonnes (83,000 tons) a year in 1907 is attributable to competition from the better coals from Kaitangata and Ohai, urban development and exhaustion of the seams (Willett 1965).

#### GEOLOGY

The upper Cretaceous Taratu Formation comprises quartzose coal measures and rests unconformably on a basement of Lower Mesozoic schist or, locally west of Saddle Hill, mid-Cretaceous Henley Breccia. The coal measures are 30-43 m thick (Grange 1921) and are unconformably overlain by an uppermost Cretaceous to mid-Tertiary marine sedimentary sequence (see Grange 1921, Ongley 1939, Benson 1968 and Webb 1973). The marine sequence laps on to the schist at Brighton and the coal seams are eroded on the south-east flank of Saddle Hill (see Maps 2 and 3).

Figure 1 shows correlations between a number of stratigraphic sections. Maps 2 and 3 show structure and isopachs on the main seam respectively.

Two major seams are generally persistent from Fairfield to Saddle Hill (Fig. 1). The lower or Main Seam averages 5 m and ranges from 0.6-9 m in thickness (Map 3). It is almost worked out along the outcrop, as is the upper seam at most places where it is not too dirty. Both seams are locally split by carbonaceous mudstone bands. Further south-east towards Brighton, splits are less common. Christies No.1 shaft (Fig. 1) penetrated through a third and fourth seam above the other two but both are somewhat dirty and impersistent (see also McSkimming Opencast, S163/m56, section).

Deformation of the sequence has resulted in a series of relatively open folds with dips commonly 5-6° (Map 2). The dominant fold is an anticline trending north-east and coincident with the coastal range separating the Taieri Plain from the sea. The anticline is bounded on its north-west flank by the major high-angle reverse Titri Fault, and crossed by the normal Fairfield-Chain Hills Fault. The latter branches from the Titri Fault at East Taieri and splay faults are associated with both, there and at the northern end of the Chain Hills. Some of the faults shown on Map 2 are interpreted from mine plans and do not always have a surface expression. Several normal north-west trending faults have been met in underground workings between Fairfield and Brighton. Of these, Auchmeddon Fault has the greatest vertical displacement, and has five associated subsidiary faults that trend either north or east. The faults dip from 25° to 75°. An arcuate fault situated north of Saddle Hill in the old underground workings of the East Taieri Mine (s163/m53) is unlikely to be tectonic in origin. It is probably a surface rupture associated with a major fossil slump that extends down to State Highway No.1. The low loess-covered ridge upon which the East Taieri Presbyterian Church now stands, between the highway and trunk railway, may

represent the plain alluvium-emergent top of a transverse ridge at the foot of the slump.

## MINE PLANS

Plans of most underground workings are available at the State Coal Mine Office, Mines Division, Ministry of Energy in Dunedin. However, some underground workings in the Green Island Coalfield pre-date the establishment of the former Mines Department and no plans are available

Although Hector (1872) had reported on the field in 1864 as Provincial Geologist under the Geological Survey of Otago, it was not until 1876 that Denniston (1877) first surveyed and produced working plans of the mines. A year later these were inspected and approved by S.H. Cox, NZ Geological Survey, Inspector of Coal Mines under the first Mines Act, 1874. Consequently, abandoned workings of the first mines at Fairfield on the Howarth and Shand properties are only outlined on Denniston's plan of the later Walton Park Colliery and Brickwork Co. workings (S163/ml).

Mines situated on freehold, owned by and managed for the freeholder were not always open to inspection and survey under the earlier Mining Acts. Thus old abandoned workings of the Otago Colliery (Samson's S163/m2) remained unsurveyed even in outline due to managements refusal of entry to the inspector. They subsequently collapsed, causing a major subsidence of the trunk railway formation in 1888 (Mines Statements 1889). The only clue as to the extent of these workings is provided by the position of a crossed pick symbol on Ongley's (1939) map, and an entry in the Mines Statements for 1885 recording that a new dip had replaced the old vertical haulage shaft by the trunk railway.

The abandoned workings between Auchmeddon Opencast (S163/m2O) and the Saddle Hill Road immediately north of it, lack plans for the same reason. Here the seam has been developed but not pillared, except for a level leading south-east from the opencast to the shaft, where subsidences are evident. Subsidences often of considerable extent, also provide a check on extensions not shown on plans, especially when mines are about to close, e.g. Willowbank No.2 mine (S163/m68).

## SURFACE SUBSIDENCE

Surface subsidence is evident in many places over mined areas in the Green Island Coalfield (Map 2). Subsidence occurs where initial openings driven in the coal seam are widened to extract pillar coal. When the roof eventually collapses, usually due to creep, the new void so produced can break rapidly or slope upward to the ground surface causing subsidence.

Subsidence is rare down dip from the basal boundary of the Saddle Hill Siltstone, only two being known for certain in the field, both above "plumps" or massive underground roof falls shown on the Walton Park (S163/ml) mine plan. Another pillared area is shown on the mine plan for the same deep dip workings but to the north of the main dip drive and opposite the deepest "plump" but no subsidence is visible at the ground surface above it.

Most subsidence has occurred between the main seam's basal boundary and the position of the 5:1 cover to coal thickness ratio line, which more or less coincides with basal boundary of the Saddle Hill Siltstone. A few are found beyond the 5:1 line and in some areas there is a tendency for them to cluster close to it. The clustering can be explained readily in terms of a real reduction in the thickness of the overlying strata. This is due to surface slumping along the northern flank of Saddle Hill, or an apparent reduction due to pillaring both splits of the main seam, or both the main and upper seams, e.g. south-east workings, Jubilee Mine (S163/m41) and Christies Horse Road Section, Walton Park Mine (S163/m41) adjoining Brighton Road at Fairfield. Subsidence could have been more prevalent over pillared workings to the east of the Christie's workings in the Fairfield and west Abbotsford areas but the Fairfield Sand, which overlies the coal, has apparently prevented the underground falls from reaching the surface. Perhaps the iron-cemented bands within the sand itself have provided sufficient increase in volume when broken in the void to support the overlying strata, or the thin bed of Taratu quartz conglomerate at the base of the sand may have been strong enough to prevent further caving. However, where the sand has been eroded, only loess (pillar clay), with sporadically occurring soliflual deposits at its base, now overlie the voids.

#### QUALITY 9

The coal is mainly lignite A in rank, with a few analyses showing specific energy values just high enough to classify coals as subbituminous C. Sulphur content is mainly medium to high, only partly as the result of thin marcasite films on bedding planes and joint faces. Proximate analyses of run-of-mine coal (Elphick 1956) in and various samples (Ongley 1939) range as follows:

|                |       |       | 1.5.4  |        |                 | 4 Sh Le | 11 B 6      |
|----------------|-------|-------|--------|--------|-----------------|---------|-------------|
| 1 2            | М     | A     | VM     | FC     | SpE             | S       | Cr Sw No    |
| Elphick (1956) | 26-27 | 7-9   | 34-35  | 31-33  | 18.82-<br>19.61 | 3-4     | 0           |
|                |       |       |        |        |                 |         | . all 1 2 2 |
| Ongley (1939)  | up to | 1-10- | 34.56- | 25.75- | 18.94-          | 0.40-   | 0           |
|                | 33.0  | 8.83  | 41.80* | 40.44* | 19.51           | 3.66    | 1 16 4      |

\*high ash and excessively dried samples rejected

#### QUANTITY

Free running or water saturated sand above, and heaving fireclay below the seam has hampered mining to such a degree, that normally only the middle 1.8 m of the average thickness of 4.9 m of the lower seam has been worked.

These hazards caused massive roof falls, often with attendant surface subsidence, when pillaring was attempted in the deep dip workings of the Walton Park Mine (S163/m1) under 70 m of cover. Earlier down-dip extension of the same mine was halted in 1896 after encountering

sea-water saturated, sandy sediments of Pleistocene age infilling the present Kaikourai Estuary. Consequently, it is considered unlikely that the coal could be mined, either underground or opencast, under more than 120 m of cover under present economic conditions.

Quantity estimates are for the main seam only and are based on the guidelines of Bowen (1978). Estimate areas are shown on Map 4. The estimates are presented in Table 1 and a summary is given in Table 2. Coal density is assumed to be 1.2 (12 000 tonnes/m ha). Estimate areas are bounded by the 1 m isopach of the main seam, limits of old workings except where there are extensive areas of coal left in pillars, faults, outcrop or the 120 m cover isopach.

Total coal-in-ground is estimated at 17.0 million tonnes, all Measured or Indicated. Of this, 6.9 m.t. is classified as Inaccessible because it is deeper than 120 m, is below sea level with less than 70 m of consolidated cover, has been extensively worked or is encumbered by urban development (Map 4). The balance of coal-in-ground consists of 0.702 m.t. opencastable and 10.4 m.t. that could be won by underground methods.

Total recoverable coal is estimated at 6.85 m.t. - 0.614 m.t. opencast and 6.24 m.t. underground, based on extraction percentages of 80% for opencast and 60% for underground mining (Inspector of Coal Mines, Dunedin, pers. comm.). Inaccessible coal is not considered.

## ACKNOWLEDGEMENTS

F.E. Bowen and A.M. Sherwood read and suggested improvements to the text and figures.

| Sector/<br>Area | (ha) / | Approx.<br>Average | KNESS<br>Range<br>Cover | Coal-in-<br>Ground  | Average<br>Extraction | Recoverable<br>Coal |
|-----------------|--------|--------------------|-------------------------|---------------------|-----------------------|---------------------|
|                 |        | Coal<br>(m)        | (m)                     | (10 <sup>6</sup> t) | %                     | Starte .            |
| B1              | 1.7    | 4.1                | 10-20                   | 0.836               | Meas60 <sup>u</sup>   | 0.502 <sup>t</sup>  |
| 0.0<br>B2       | 78.2   | 2.6                | 10-120                  | 2.44                | Ind60 <sup>u</sup>    | 1.46                |
| .) (S1)         | 50.9   | 4.7                | 5-120                   | 2.87                | Ind. 60 <sup>u</sup>  | 1.72                |
| S3 -            | 27.3   | 4.0                | 10-120                  | 1.31                | Ind. 60 <sup>u</sup>  | 0.79                |
| C1              | 2.4    | 4.8                | 5-10                    | 0.138               | Meas. 80 <sup>0</sup> | 0.110               |
| C2              | 42.1   | 3,5                | 20-120                  | 1.,77               | Ind                   | n: 1.06             |
| W3.             | 8.3    | 2.1                | 50-80                   | 0.21                | Ind. 60 <sup>u</sup>  | 0.12                |
| _M1             | 0.7    | 2.9                | 10-20                   | 0.024               | Meas. 80 <sup>0</sup> | 0.019               |
| (M2)            | 1.0 ż  | 2.5                | 10-20                   | 0.030               | Meas. 80 <sup>0</sup> | 0.024               |
| M3              | 34.2   | 2.4                | 30-120                  | 0.98                | Ind. 60 <sup>u</sup>  | 0.59                |
| F1              | 11.3   | 4.5                | 10-40                   | 0.610               | Meas. 80 <sup>0</sup> | 0.488               |
| В3              | 35.8   | 2.3                | 10-30                   | 0.99                | Ind. <sup>i</sup>     |                     |
| B4              | a 8.0  | 1.5                | 120+                    | 0.14                | Ind. i                |                     |
| M4              | 1.0    | 1.5                | 120+                    | 0.18                | Ind. <sup>i</sup>     |                     |
| W1              | 27.2   | 3.4                | 5-50                    | 1.11                | Meas. <sup>1</sup>    |                     |
| W2              | 2.9    | 2.3                | 20-30                   | 0.80                | Ind. <sup>i</sup>     |                     |
| F2              | 1.2    | 4.5                | 40-120                  | 0.65                | Ind. <sup>i</sup>     |                     |
| F3              | 9.6    | 2.5                | 40-120                  | 0.29                | Ind.                  |                     |
| S2              | 76.0   | 3.0                | 120+                    | 2.74                | Ind. <sup>1</sup>     |                     |

Table 1: Coal Estimates, Green Island Coalfield. (July, 1980).

- i = Inaccessible well encumbered by urban development or coal under more than 120 m of cover or upper part of seam already worked underground and lower part too deep for opencasting or submarine coal under less than 70 m consolidated cover. Extraction % nil and extractable coal nil.
- t = temporarily inaccessible mine closed but standing pillars gave access to undeveloped areas.
- u = underground
- o = opencast

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Table 2: Summary of Coal Estimates, Green Island Coalfield (July, 1980).

Summary of Coal-in-ground

| 50,1 |                             |        | с.<br>2. Ж. | Measured            | 3.<br> | Indicated | Total |
|------|-----------------------------|--------|-------------|---------------------|--------|-----------|-------|
|      | Opencast                    |        | - <u>19</u> | 0.702               |        |           | 0.702 |
|      | Underground                 |        |             | 0.836               |        | 9.58      | 10.4  |
|      | Inaccessible                | 9 - B) | X a c       | · 1.11              |        | 5.79      | 6.90  |
|      | 60 <sup>0</sup>             | .bo    |             | n : "*              | 0, b   | × 58      | 17.0  |
| 2    | <sup>г</sup> і 38           | .csəM  | 8.1.0       | ( <sup>11</sup> + C | 4      | 2,4       | 13    |
| a.,  | Summary of Recoverable Coal |        |             | $t_{2} = t_{2}$     | . !    | 1.1       | ) [   |
| 81   | 41<br>2                     |        |             | U' Measured         |        | Indicated | Tota] |
| nj.  | Opencast                    | 1      | 1           | 0.614               |        | - 1       | 0.614 |
| 30   | Underground                 | 1      |             | 0.502               |        | 5.74      | 6.24  |
|      | 6C 4                        | £ .    |             | 1.116               |        | 5.74      | 6,85  |
|      |                             | 2.1    | a 11        | . E                 |        |           | • •   |
|      |                             |        | -           |                     |        |           |       |

(N.B. In Tables 1 and 2, estimates of Indicated coal or totals including Indicated coal are not given to more than 3 significant figures)

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